



CITY OF MIAMI

FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST



2018 Annual Report





ADMINISTRATOR
Dania L. Orta

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

May 20, 2019

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, 2018.

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, BDO, concluded that there was a reasonable basis for rendering an unqualified opinion that the financial statements for the fiscal year ended September 30, 2018, were fairly stated in conformity with US generally accepted accounting principles.

Sincerely,

Dania L. Orta
Administrator

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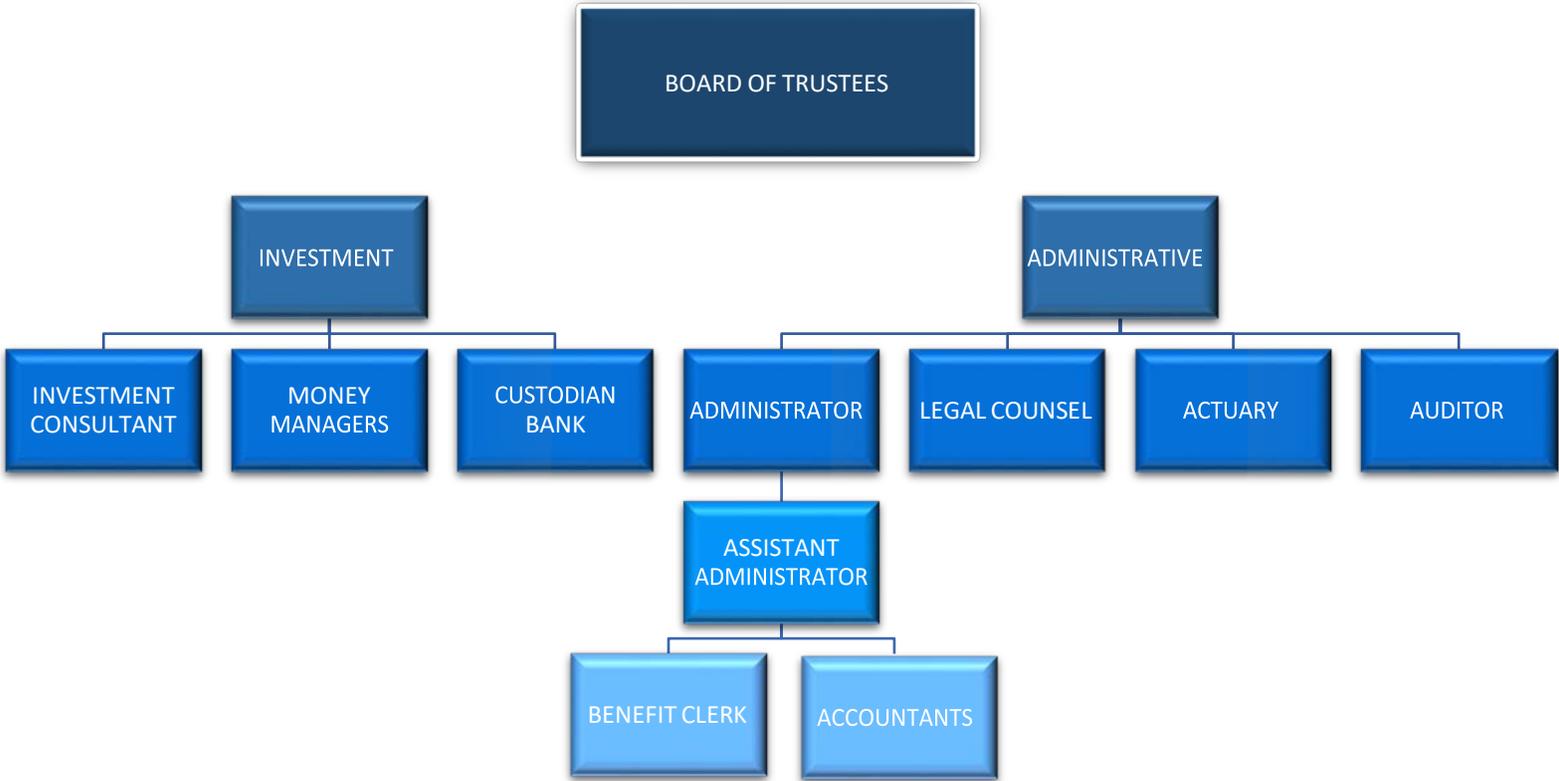
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I Introductory Section



Organizational Chart



BOARD OF TRUSTEES
AND
PERSONNEL OF THE RETIREMENT TRUST

AS OF SEPTEMBER 30, 2018

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

Vacant Position
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
BDO

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
Dodge & Cox
Copper Rock Capital

Eagle Asset Management
First Eagle
J. P. Morgan
Lexington Partners
Pacific Asset
Pantheon
S. L. Capital
Victory Capital
Wellington Management
BNP Pribas
Standard Life

Consultant
William Cottle, CFA, Milliman, Inc.

Custodian
Northern Trust Company



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

On September 30, 2018, the City of Miami Fire Fighters' and Police Officers' Retirement Trust completed its seventy ninth year of operation.

Retirement benefits granted during the year represent annual benefits of \$3,165,907 and are as follows:

6	Service Retirements with annual benefits of	408,942
30	DROP Service Retirements with annual benefits of	2,616,503
133	Benefit Adjustments with annual benefits of	65,767
1	Service Incurred Disability with annual benefits of	51,943
1	Ordinary Death Early Retirement with annual benefits of	22,752

During the year, 68 pensioners of the Retirement Trust died. Of these, 45 had selected a pension which terminated at their death and 23 selected an option that will continue to a beneficiary representing yearly benefits of \$382,238.

During the year ending September 30, 2018, the pension payroll totaled \$130,598,647, which is a decrease of 0.38% when compared to the previous year's total payroll, and is broken down as follows:

<u>ANNUAL BENEFITS</u>		
1672	Service Retirements	116,994,858
83	DROP Service Retirements	6,348,825
36	Early Service Retirements	469,023
7	Ordinary Disability Retirements	95,876
123	Service/Accidental Disability Retirements	3,000,225
7	Accidental Death Retirements	184,133
8	Ordinary Death Early	240,206
243	Continuances	<u>3,265,500</u>
		130,598,647

Securities' gains and losses, Miscellaneous Income	68,625,914
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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





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100 SE 2nd Street
Miami Tower - 17th Floor
Miami, FL 33131

Independent Auditor's Report

Board of Trustees
City of Miami Fire Fighters' and Police Officers' Retirement Trust
Miami, Florida

Report on the Financial Statements

We have audited the accompanying financial statements of the City of Miami Fire Fighters' and Police Officers' Retirement Trust (the "Trust"), which comprise the statements of fiduciary net position as of September 30, 2018 and 2017, respectively, the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Governmental Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the City of Miami Fire Fighters' and Police Officers' Retirement Trust as of September 30, 2018 and 2017, respectively, and the related changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 5 to the financial statements, the financial statements as of and for the year ended September 30, 2017 were restated. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that "Management's Discussion and Analysis" and the "Required Supplementary Information" listed in the Table of Contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying supplemental schedules of investment expenses and administrative expenses as listed in the accompanying table of contents are presented for purposes of additional analysis and are not a required part of the financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audits of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.





Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 26, 2019 on our consideration of the Trust's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Trust's internal control over financial reporting and compliance.

Miami, Florida
March 26, 2019

BDO USA, LLP

Certified Public Accountants





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Management's Discussion and Analysis (Required Supplementary Information - Unaudited)

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, 2018 and 2017. 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 years ended 2018 and 2017 by \$1,566.7 million and \$1,551.4 million (as restated), respectively (reported as net position restricted for pensions). The Trust's net position is held in trust to meet future benefit payments. The increase of \$15.3 million and \$49.3 million in fiduciary net position, of the respective years, has resulted primarily from the changes in the fair value of the Trust's investments, due to volatile financial markets.

The October 1, 2016 beginning net position restricted for pensions was restated as it was determined that, although the Trust had Fiduciary oversight over the Deferred Retirement Option Program (DROP), DROP investments that were previously reported as part of the Trust's assets are titled and held outside of the Trust and therefore should not be included as Trust assets. As a result of the correction of an error to the DROP assets, the opening net position restricted for pensions was restated for the removal of the DROP investments and the revenue and expense transactions related to those investments. The restatement does not impact the City's net pension liability or the actuarially determined contribution, nor does it impact the benefits paid to the members of the Plan, nor does it have any effect on the calculation of the actuarial obligation for the Plan.

- For the fiscal year ended September 30, 2018 the Trust's total additions were \$173.5 million which were comprised of contributions of \$71.3 million and net investment income of \$102.3 million.

For the fiscal year ended September 30, 2017 the Trust's total additions were \$202.8 million (as restated) which were comprised of contributions of \$66.4 million and net investment income of \$136.4 million.

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



Management's Discussion and Analysis (Required Supplementary Information - Unaudited)

For the fiscal year ended September 30, 2017 the Trust's deductions (as restated), increased over the prior year from \$151.8 million to \$153.5 million or 1.2%. Most of this increase is attributable to increase pension benefits paid and distributions to retirees.

- For the year ending September 30, 2018, the total return of the portfolio was 7.4%. Actual net investment income was \$102.3 million in 2018 compared with \$136.4 million (as restated) in 2017.

For the year ending September 30, 2017, the total return of the portfolio was 9.6%. Actual net investment income was \$136.4 million (as restated) in 2017 compared with \$120.6 million in 2016.

Overview of the Financial Statements

The basic financial statements include the Statements 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 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 ***Statements of Fiduciary Net Position*** present 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 ***Statements of Changes in Fiduciary Net Position*** report 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 employers (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.



Management's Discussion and Analysis (Required Supplementary Information - Unaudited)

Additional information is presented as part of *Other Supplemental Schedules*. 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, 2018, were \$1,717.8 million and were mostly comprised of cash and cash equivalents, investments and security lending collateral. Total assets increased \$33.6 million or 2.0%.

Trust's total assets as of September 30, 2017, were \$1,684.1 million (as restated) and were mostly comprised of cash and cash equivalents, investments and security lending collateral. Total assets increased \$21.7 million or 1.3%.

- 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 increased \$18.3 million or 13.8% from the prior year primarily due to an increase in obligations under securities lending.

Total liabilities as of September 30, 2017 were \$132.8 million and were mostly comprised of obligations under securities lending and payables for securities purchased. Total liabilities decreased \$27.6 million or 17.2% 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, 2018 by \$1,566.7 million. Total fiduciary net position restricted for pensions increased \$15.3 million or 1.0% from the previous year.

Trust assets exceeded its liabilities at the close of fiscal year ended September 30, 2017 by \$1,551.3 million (as restated). Total fiduciary net position restricted for pensions increased \$49.3 million or 3.3% from the previous year.

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Management's Discussion and Analysis
(Required Supplementary Information - Unaudited)

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

	2018	2017 *	Increase (decrease) Amount	Total Percentage Change
Assets:				
Cash and cash equivalents	\$ 51,916	\$ 43,120	\$ 8,796	20.4%
Receivables	4,446	3,840	606	15.8
Investments	1,515,955	1,505,482	10,473	0.7
Security lending collateral - invested	143,721	129,909	13,812	10.6
Property and equipment, net	1,744	1,786	(42)	(2.4)
Total assets	1,717,782	1,684,137	33,645	2.0
Liabilities:				
Payables for securities purchased	6,128	2,132	3,996	187.4
Accounts payable and other liabilities	1,251	746	505	67.7
Obligations under securities lending	143,721	129,909	13,812	10.6
Total liabilities	151,100	132,787	18,313	13.8
Net position restricted for pensions	\$ 1,566,682	\$ 1,551,350	\$ 15,332	1.0%

Restated for removal of DROP assets, See Note 5.

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

	2017*	2016**	Increase (Decrease) Amount	Total Percentage Change
Assets:				
Cash and cash equivalents	\$ 43,120	\$ 61,262	\$ (18,142)	(29.6)%
Receivables	3,840	15,604	(11,764)	(75.4)
Investments	1,505,482	1,437,079	68,403	4.8
Security lending collateral - invested	129,909	146,627	(16,718)	(11.4)
Property and equipment, net	1,786	1,829	(43)	(2.4)
Total assets	1,684,137	1,662,401	21,736	1.3
Liabilities:				
Payables for securities purchased	2,132	13,329	(11,197)	(84.0)
Accounts payable and other liabilities	746	439	307	69.9
Obligations under securities lending	129,909	146,627	(16,718)	(11.4)
Total liabilities	132,787	160,395	(27,608)	(17.2)
Net position restricted for pensions	\$ 1,551,350	\$ 1,502,006	\$ 49,344	3.3%

*Restated for removal of DROP assets, See Note 5.

**Restated for removal of DROP asset for comparability purposes.



Management's Discussion and Analysis
(Required Supplementary Information - Unaudited)

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 2018 and 2017 totaled \$173.6 million and \$202.8 million (as restated), respectively.

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, due primarily to a decrease in net appreciation in fair value investments.

Actual results were:

- City contributions increased from the previous year by approximately \$3.7 million or 7.0% based on the actuarial valuation.
- Member contributions increased from the previous year by approximately \$1.1 million or 8.0%. This increase is primarily due to an increase in the number of active members.
- Net investment income decreased from the previous year by \$34.1 million or 25.0% as the funds performed less favorable compared to prior year due to market conditions.

For the fiscal year ended September 30, 2017 restated total additions to plan fiduciary net position increased by \$21.4 million or 11.8% from those of the prior year, due primarily to an increase in net appreciation in fair value of investments.

Actual results were:

- City contributions increased from the previous year by approximately \$4.5 million or 9.4% based on the actuarial valuation.
- Member contributions increased from the previous year by approximately \$1.1 million or 9.3%. This increase is primarily due to an increase in the number of active members.
- Net investment income increased from the previous year by \$15.8 million or 13.1% as the funds performed favorable compared to prior year due to market conditions.

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

	2018	2017 *	Increase (decrease) Amount	Total Percentage Change
City contribution	\$ 57,000	\$ 53,264	\$ 3,736	7.0%
Member contributions	14,258	13,206	1,052	8.0
Net investment income	102,296	136,351	(34,055)	(25.0)
Total additions	\$ 173,554	\$ 202,821	\$ (29,267)	(14.4%)

*Restated for removal of DROP activity, See Note 5.



Management's Discussion and Analysis
(Required Supplementary Information - Unaudited)

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

	2017*	2016**	Increase Amount	Total Percentage Change
City contribution	\$ 53,264	\$ 48,673	\$ 4,591	9.4%
Member contributions	13,206	12,082	1,124	9.3
Net investment income	136,351	120,595	15,756	13.1
Total additions	\$ 202,821	\$ 181,350	\$ 21,471	11.8%

*Restated for removal of DROP activity, See Note 5.

**Restated for removal of DROP activity for comparative purposes.

Deductions from Fiduciary Net Position

The primary expenses of the Trust include the payment of pension benefits to members and beneficiaries, refund of contributions to former members, distributions (COLA) to retirees, and administrative expenses and depreciation. Total deductions for fiscal years ended 2018 and 2017 were \$158.2 million and \$153.5 million (as restated), an increase of 3.1% and 1.2%, over years 2017 and 2016 deductions, respectively.

For the fiscal years ended September 30, 2018 and 2017, the payment of pension benefits to retirees, refund of contributions and distributions to retirees increased by \$4.7 million and \$1.7 million or 3.1% and 1.2%, respectively, from the previous year from increased pension benefits paid and distributions to retirees.

For the fiscal years ended September 30, 2018 and 2017, administrative expenses and depreciation increased by approximately \$27,000 and \$30,000 or 1.3% and 1.4%, respectively, from the previous year due to an increase in repairs in the building.

Deductions from Fiduciary Net Position
Years Ended September 30,
(In Thousands)

	2018	2017 *	Increase (decrease) Amount	Total Percentage Change
Pension benefits paid	\$ 130,598	\$ 125,721	\$ 4,877	3.9%
Refund of contributions	215	772	(557)	(72.2)
Distributions to retirees	25,280	24,882	398	1.6
Administrative expenses and depreciation	2,129	2,102	27	1.3
Total deductions	\$ 158,222	\$ 153,477	\$ 4,745	3.1%

*Restated for removal of DROP activity, See Note 5.



Management's Discussion and Analysis
(Required Supplementary Information - Unaudited)

Deductions from Fiduciary Net Position
Years Ended September 30,
(In Thousands)

	2017*	2016**	Increase (Decrease) Amount	Total Percentage Change
Pension benefits paid	\$ 125,701	\$ 124,929	\$ 792	0.6%
Refund of contributions	772	384	388	101.0
Distributions to retirees	24,882	24,345	537	2.2
Administrative expenses and depreciation	2,102	2,072	30	1.4
Total deductions	\$ 153,457	\$ 151,730	\$ 1,747	1.2%

*Restated for removal of DROP activity, See Note 5.

**Restated for removal for DROP activity for comparability purposes.

Capital Assets

As of September 30, 2018, and 2017, the Trust's investment in capital assets totaled \$1.74 million and \$1.79 million, respectively (net of accumulated depreciation). This investment in capital assets includes land and building for administrative use. The appraised value is \$3,500,000 and \$3,150,000 at September 30, 2018 and 2017, respectively.

Retirement System as a Whole

The Trust's fiduciary net position has increased from that of fiscal year ended 2017 and increased from that of fiscal year ended 2016. Management believes, and actuarial studies concur, that the Trust is in a financial position to meet its current obligations.

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. If you have any questions about this report or need additional financial information, contact the 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
Statements of Fiduciary Net Position
September 30, 2018 and 2017

	2018				2017 Restated				Total
	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	\$ 37,819,941	\$ 2,332,810	\$ 11,763,170	\$ 51,915,921	\$ 31,430,673	\$ 1,853,152	\$ 9,835,882	\$	43,119,707
Investments, at fair value:									
Debt securities, domestic	246,377,392	15,197,052	76,630,980	338,205,424	276,317,423	16,290,621	86,470,480		379,078,524
Debt securities, international	22,155,737	1,366,400	6,891,369	30,413,506	21,844,156	1,288,987	6,835,887		29,969,030
Equity investments, domestic	348,351,782	21,483,726	108,352,099	478,187,607	260,421,368	15,146,175	80,390,572		355,958,115
Equity investments, international	187,960,779	11,592,011	58,463,732	258,016,522	185,710,489	11,157,758	59,221,459		256,089,706
Private equity	114,254,657	7,046,370	35,538,019	156,839,046	101,490,755	5,983,895	31,760,410		139,235,060
Real estate	130,602,146	8,054,561	40,622,777	179,279,484	123,742,880	7,295,880	38,723,965		169,762,725
Absolute return	54,646,312	3,370,694	16,996,691	75,013,697	127,844,037	7,537,681	40,007,380		175,389,098
Total investments	1,104,348,805	68,110,814	343,495,667	1,515,955,286	1,097,371,108	64,700,997	343,410,153		1,505,482,258
Security lending cash collateral - invested	104,698,329	6,457,008	32,565,597	143,720,934	94,692,508	5,583,070	29,632,973		129,908,551
Receivables:									
Proceeds from securities sold	1,132,406	-	-	1,132,406	620,106	-	-		620,106
Accrued interest	3,313,626	-	-	3,313,626	3,220,395	-	-		3,220,395
Total receivables	4,446,032	-	-	4,446,032	3,840,501	-	-		3,840,501
Property and equipment, net	1,270,155	78,346	395,057	1,743,558	1,302,052	76,769	407,463		1,786,284
Total assets	1,252,583,262	76,978,978	388,219,491	1,717,781,731	1,228,636,842	72,213,988	383,286,471		1,684,137,301
Liabilities:									
Payable for securities purchased	6,127,819	-	-	6,127,819	2,132,306	-	-		2,132,306
Accounts payable and other liabilities	1,250,602	-	-	1,250,602	745,983	-	-		745,983
Obligations under securities lending	104,698,329	6,457,008	32,565,597	143,720,934	94,692,508	5,583,070	29,632,973		129,908,551
Total liabilities	112,076,750	6,457,008	32,565,597	151,099,355	97,570,797	5,583,070	29,632,973		132,786,840
Net position restricted for pensions	\$ 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

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Statements of Changes in Fiduciary Net Position
For the Years Ended September 30, 2018 and 2017

	2018			2017 Restated				
	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	\$ 50,591,605	\$ -	\$ 6,408,261	\$ 56,999,866	\$ 47,102,220	\$ -	\$ 6,161,789	\$ 53,264,009
Members	14,258,763	-	-	14,258,763	13,206,378	-	-	13,206,378
Total contributions	64,850,368	-	6,408,261	71,258,629	60,308,598	-	6,161,789	66,470,387
Investment income:								
Net appreciation in fair value of investments	62,628,032	3,252,999	16,810,944	82,691,975	86,015,146	4,154,464	22,673,181	112,842,791
Interest	12,669,865	647,483	3,368,136	16,685,484	13,497,122	648,748	3,557,102	17,702,972
Dividends	7,276,134	372,642	1,935,952	9,584,728	7,619,782	366,505	2,008,280	9,994,567
Other	177,749	9,082	47,149	233,980	255,372	12,325	67,411	335,108
	82,751,780	4,282,206	22,162,181	109,196,167	107,387,422	5,182,042	28,305,974	140,875,438
Less investment expenses	(5,597,556)	(288,411)	(1,499,152)	(7,385,119)	(3,850,715)	(184,631)	(1,017,295)	(5,052,641)
Net investment income from investing activities	77,154,224	3,993,795	20,663,029	101,811,048	103,536,707	4,997,411	27,288,679	135,822,797
Security lending activities:								
Security lending income	490,847	25,108	130,512	646,467	537,277	25,730	141,388	704,395
Security lending fees	(122,629)	(6,273)	(32,606)	(161,508)	(134,229)	(6,428)	(35,323)	(175,980)
Net income from security lending activities	368,218	18,835	97,906	484,959	403,048	19,302	106,065	528,415
Total net investment income	77,522,442	4,012,630	20,760,935	102,296,007	103,939,755	5,016,713	27,394,744	136,351,212
Total additions	142,372,810	4,012,630	27,169,196	173,554,636	164,248,353	5,016,713	33,556,533	202,821,599
Deductions:								
Pension benefits paid	130,598,647	-	-	130,598,647	125,720,923	-	-	125,720,923
Refund of contributions	214,654	-	-	214,654	772,000	-	-	772,000
Distributions to retirees	-	119,866	25,160,119	25,279,985	-	133,538	24,748,915	24,882,453
Depreciation expense	32,333	1,712	8,681	42,726	32,479	1,617	8,630	42,726
Administrative expenses	2,086,709	-	-	2,086,709	2,058,797	-	-	2,058,797
Total deductions	132,932,343	121,578	25,168,800	158,222,721	128,584,199	135,155	24,757,545	153,476,899
Net increase	9,440,467	3,891,052	2,000,396	15,331,915	35,664,154	4,881,558	8,798,988	49,344,700
Net position restricted for pensions								
Beginning of year as restated	1,131,066,045	66,630,918	353,653,498	1,551,350,461	1,095,401,891	61,749,360	344,854,510	1,502,005,761
End 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

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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 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's 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:

	2018	2017
Inactive plan members:		
Or their beneficiaries currently receiving benefits	2,188	2,205
Entitled to but not yet receiving benefits	16	15
Total inactive plan members	2,204	2,220
Active plan members:		
Vested	762	722
Non-vested	1,181	1,147
Total active plan members	1,943	1,869

Member Contributions

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 10% 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).

Effective the first full pay period following October 1, 2012, the member contribution for police officers hired prior to October 1, 2012 shall be 10% of earnable compensation; and effective 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



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

October 1, 2012 shall be 3% of earnable compensation greater than the member contribution for police officer members hired prior to October 1, 2012.

Effective the first full pay period following October 1, 2012, the member contribution for firefighters shall be 10% of earnable compensation. On September 30, 2014, the member contribution for firefighters shall be 7% of earnable compensation. The member contribution for firefighters hired on or after October 1, 2014, shall be 10% of earnable compensation.

During the years ended September 30, 2018 and 2017, approximately \$475,000 and \$302,000 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 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.

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.

A member entitled to a normal retirement benefit shall receive a retirement allowance equal to 3% of the member's average final compensation (as defined in the City Code section 40-191), multiplied by years of creditable service for the first 15 years of such creditable service, plus a retirement allowance equal to 3% (3½% for members who retired prior to October 1, 2010) of member's average



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

final compensation multiplied by the years of creditable service in excess of 15 years, paid in monthly installments.

Effective September 30, 2010, for members who retire or terminate employment with ten or more years of creditable service on or after October 1, 2010, member retirement allowances 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: provided, in no event shall the benefit limitation be less than the lesser of 100% of the member's average final compensation or the member's accrued benefit as of September 30, 2010, determined in accordance with the provisions in effect on September 29, 2010, and based on the normal form of benefit in effect on that date.

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

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.
- 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 \$2.5 million, increasing by 4% compounded



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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, 2018 and 2017, approximately \$6,408,000 and \$6,162,000, 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 retirement 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. As stated in Note 5, the DROP assets are not a part of the Trust's Financial Statements.

The DROP balances were \$154,440,850 and \$181,181,304 as of September 30, 2018 and 2017 respectively.

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 maturities, typically less than three months, to be cash equivalents.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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 gains and losses are presented as net appreciation in fair value of investments on the statement of changes in fiduciary net position along with gains and losses realized on sales of investments. 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.

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 statements 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 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

Subsequent Events

On March 6, 2019, the Board adopted a new Administrative Policy addressing the accounting treatment of the DROP Asset and related activity.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

Management has evaluated subsequent events through March 26, 2019, the date which the financial statements were available for issue.

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:

	2018	2017
(Managed overdraft) deposits	\$ (231,190)	\$ (323,604)
Invested cash and currency	23,586,335	23,847,159
Short-term investment	28,560,776	19,596,152
Total	\$ 51,915,921	\$ 43,119,707

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 REIT 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) of the Trust's total asset value. Investments in stocks of foreign companies shall be limited to 16.8% of the value of the Trust's portfolio.

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



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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.

Types of Investments

Florida statutes and Trust 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:

	2018		2017	
	Target % of Portfolio	Actual % of Portfolio	Target % of Portfolio	Actual of Portfolio
Authorized Investments				
Cash and cash equivalents	0.0%	4.2%	0.0%	2.8%
Domestic equities	25.9	26.8	25.9	22.7
Core domestic fixed income	29.2	26.1	29.2	31.5
International equities	16.8	18.7	16.8	16.5
Global Real estate	11.1	12.6	11.1	11.0
Absolute return	13.0	6.8	13.0	6.5
Private equity	4.0	4.8	4.0	9.0
	100.0%	100.0%	100.0%	100.0%

Rate of Return

For the years ended September 30, 2018 and 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 9.58% and 9.22%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

Investments

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

	2018	2017*
Debt securities, domestic:		
U.S. treasuries	\$ 42,785,559	\$ 40,797,723
U.S. agencies	77,387,186	57,565,368
Corporate bonds	115,780,448	138,998,552
Asset backed securities	8,375,154	7,015,590
Mortgage backed securities	2,046,114	2,587,559
Guaranteed fixed income	91,830,963	132,113,732
	338,205,424	379,078,524
Debt securities, international:		
International government bonds	2,913,326	2,261,050
Corporate bonds	27,500,180	27,707,980
	30,413,506	29,969,030
Equity securities, domestic		
Equity securities, international	478,187,607	355,958,115
Private equity	258,016,522	256,089,706
Real estate equity	156,839,046	139,235,060
Absolute return funds	179,279,484	169,762,725
	75,013,697	175,389,098
Total	\$ 1,515,955,286	\$ 1,505,482,258

*The investments as of September 30, 2017 were restated as a result of a prior period adjustment. See Note 5.

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.

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	2018 Investment Maturities (in years)			
		Less than 1	1 to 5	6 to 10	More than 10
U.S. treasuries	\$ 42,785,559	\$ 482,519	\$ 30,687,534	\$ 4,857,405	\$ 6,758,101
U.S. agencies	77,387,186	10	548,964	4,108,634	72,729,578
Domestic fixed income	218,032,679	7,396,175	54,300,346	133,905,382	22,430,776
International fixed income	30,413,506	2,275,545	15,110,398	9,200,293	3,827,270
	\$368,618,930	\$10,154,249	\$100,647,242	\$ 152,071,714	\$105,745,725
% of fixed income portfolio	100.0%	2.75%	27.30%	41.25%	28.70%



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

2017					
Investment Maturities (in years)					
Investment Type	Fair Value	Less than 1	1 to 5	6 to 10	More than 10
U.S. treasuries	\$ 40,797,723	\$ 10,373,462	\$ 18,590,877	\$ 6,736,734	\$ 5,096,650
U.S. agencies	57,565,368	435,446	163,811	3,188,791	53,777,320
Domestic fixed income	280,715,433	6,160,558	63,861,838	185,222,747	25,470,290
International fixed Income	29,969,030	2,863,487	11,512,580	11,908,585	3,684,378
	\$ 409,047,554	\$ 19,832,953	\$ 94,129,106	\$ 207,056,857	\$ 88,028,638
 % of fixed income portfolio	 100.00%	 4.85%	 23.01%	 50.62%	 21.52%

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.

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

2018		
	Fair Value	Percentage of Portfolio
U.S. government guaranteed*	\$ 120,172,745	32.60%
Credit risk debt securities:		
AAA	2,472,840	0.67
AA+	7,366,395	2.00
AA	2,579,625	0.70
AA-	6,032,533	1.64
A+	10,643,930	2.89
A	14,109,867	3.83
A-	26,509,745	7.19
BBB+	40,500,746	10.99
BBB	27,934,652	7.58
BBB-	13,123,756	3.56
BB+	712,250	0.19
Not rated	96,459,846	26.17
Total credit risk debt securities	248,446,185	67.40
Total fixed income securities	\$ 368,618,930	100.00%

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City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

	2017	
	Fair Value	Percentage of Portfolio
U.S. government guaranteed*	\$ 98,363,091	24.05%
Credit risk debt securities:		
AAA	4,935,106	1.21
AA+	1,127,762	0.28
AA	1,836,738	0.45
AA-	3,431,913	0.84
A+	3,614,111	0.88
A	11,019,726	2.69
A-	144,959,014	35.44
BBB+	30,658,129	7.50
BBB	17,451,883	4.27
BBB-	14,060,034	3.44
BB+ and lower	70,754,219	17.30
Not rated	6,835,830	1.67
Total credit risk debt securities	310,684,463	75.95
Total fixed income securities	\$ 409,047,554	100.00%

*Obligations of the U.S. government or obligations explicitly or implicitly guaranteed by the U.S. government are not considered to have credit risk and do not have purchase limitations.

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 market value of the portfolio at September 30, 2018 and 2017.

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.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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.

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

2018					
Currency	Cash and cash equivalents	Equity	Fixed Income	Private Equity	Total
Australian Dollar	\$ -	\$ 5,296,435	\$ -	\$ -	\$ 5,296,435
Brazilian Real	39,982	842,472	-	-	882,454
British Pound Sterling	4	32,251,914	-	-	32,251,918
Canadian Dollar	15	6,278,629	-	-	6,278,644
Danish Krone	-	629,421	-	-	629,421
Euro	-	50,185,768	-	7,443,353	57,629,121
Hong Kong Dollar	3,194	18,419,931	-	-	18,423,125
Indonesian Rupiah	-	-	221,885	-	221,885
Japanese Yen	-	31,708,430	-	-	31,708,430
Mexican Peso	-	318,125	1,068,883	-	1,387,008
Norwegian Krone	-	837,806	-	-	837,806
Singapore Dollar	-	4,160,045	557,922	-	4,717,967
South Korean Won	-	4,237,706	-	-	4,237,706
Swedish Krona	-	5,631,487	-	-	5,631,487
Swiss Franc	1	14,763,775	-	-	14,763,776
Taiwan Dollar	-	4,970,142	-	-	4,970,142
Other	1	3,372,873	344,786	-	3,717,660
Total	\$ 43,197	\$ 183,904,959	\$ 2,193,476	\$ 7,443,353	\$ 193,584,985

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City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

2017

Currency	Cash and cash equivalents	Equity	Fixed Income	Real Estate	Total
Australian Dollar	\$ -	\$ 8,212,820	\$ -	\$ -	\$ 8,212,820
Brazilian Real	14,232	779,791	-	-	794,023
British Pound Sterling	-	19,051,816	-	-	19,051,816
Canadian Dollar	-	5,828,890	-	-	5,828,890
Danish Krone	-	4,008,561	-	-	4,008,561
Euro	-	45,136,051	-	7,518,422	52,654,473
Hong Kong Dollar	-	12,999,333	-	-	12,999,333
Indonesian Rupiah	-	3,676,000	101,183	-	3,777,183
Japanese Yen	-	34,649,617	-	-	34,649,617
Mexican Peso	-	459,627	982,977	-	1,442,604
Norwegian Krone	-	2,340,895	-	-	2,340,895
Singapore Dollar	26,513	3,911,133	825,881	-	4,763,527
South Korean Won	-	7,257,403	-	-	7,257,403
Swedish Krona	-	1,810,011	-	-	1,810,011
Swiss Franc	-	17,348,228	-	-	17,348,228
Taiwan Dollar	314,527	5,876,864	-	-	6,191,391
Other	-	1,476,880	351,010	-	1,827,890
Total	\$ 355,272	\$ 174,823,920	\$ 2,261,051	\$ 7,518,422	\$ 184,958,665

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 56 and 67 days, respectively, as of September 30, 2018 and 2017. The custodial bank and its affiliates are prohibited from borrowing the Trust's securities.

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, 2018 and 2017, the pool had a weighted average term to maturity of 31 and 30 days, respectively.

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.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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

2018			
Securities Lent:	Market Value of Securities on Loan for Cash	Fair Value of Cash Collateral Invested	Fair Value of Liabilities to Borrowers
Global Equities	\$ 1,589,186	\$ 1,677,025	\$ 1,677,025
U.S. government and agency obligations	28,963,383	29,586,357	29,586,357
Domestic corporate stocks	85,440,031	87,610,361	87,610,361
Domestic corporate bonds	24,212,495	24,847,191	24,847,191
Total securities lent	\$ 140,205,095	\$ 143,720,934	\$ 143,720,934

2017			
Securities Lent:	Market Value of Securities on Loan for Cash	Fair Value of Cash Collateral Invested	Fair Value of Liabilities to Borrowers
Global Equities	\$ 1,727,180	\$ 1,762,909	\$ 1,762,909
U.S. government and agency obligations	31,055,510	31,707,036	31,707,036
Domestic corporate stocks	73,865,209	75,399,422	75,399,422
Domestic corporate bonds	20,585,436	21,039,184	21,039,184
Total securities lent	\$ 127,233,335	\$ 129,908,551	\$ 129,908,551

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 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 quoted prices or for which fair value can be measured from actively 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.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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.

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.

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City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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:

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Assets September 30, 2018 (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Investments by fair value level				
Debt securities				
Government and agency obligations	\$ 44,979,035	\$ -	\$ 44,979,035	\$ -
Municipal/provincial obligations	78,107,036	-	78,107,036	-
Asset backed securities	8,375,154	-	8,375,154	-
Mortgage backed securities	2,046,114	-	2,046,114	-
Corporate bonds	143,280,628	-	143,280,628	-
Total debt securities	276,787,967	-	276,787,967	-
Equity securities				
Domestic equities	306,330,276	306,330,276	-	-
International equities	229,254,654	229,254,654	-	-
Total equity securities	535,584,930	535,584,930	-	-
Alternative investments				
Private equity	156,839,046	-	-	156,839,046
Real estate equity	179,279,484	-	-	179,279,484
Total alternative investments	336,118,530	-	-	336,118,530
Total investments by fair value level	1,148,491,427	\$535,584,930	\$276,787,967	\$336,118,530

Investments measured at the net asset value ("NAV")

Commingled domestic fixed income funds	91,830,963
Commingled international equity funds	28,761,868
Commingled domestic equity funds	171,857,331
Absolute return funds	75,013,697
Total investments measured at the NAV	367,463,859
Total investments	\$1,515,955,286



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

	Fair Value Measurements Using			
	September 30, 2017*	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Debt securities				
Government and agency obligations	\$ 43,058,773	\$ -	\$ 43,058,773	\$ -
Municipal/provincial obligations	57,565,368	-	57,565,368	-
Asset backed securities	7,015,590	-	7,015,590	-
Mortgage backed securities	2,587,559	-	2,587,559	-
Corporate bonds	166,706,532	-	166,706,532	-
Total debt securities	276,933,822	-	276,933,822	-
Equity securities				
Domestic equities	262,430,378	262,430,378	-	-
International equities	227,224,011	227,224,011	-	-
Total equity securities	489,654,389	489,654,389	-	-
Alternative investments				
Private equity	139,235,060	-	-	139,235,060
Real estate equity	169,762,725	-	-	169,762,725
Total alternative investments	308,997,785	-	-	308,997,785
Total investments by fair value level	1,075,585,996	\$489,654,389	\$276,933,822	\$308,997,785
Investments measured at the net asset value ("NAV")				
Commingled domestic fixed income funds				
	132,113,732			
Commingled international equity funds	28,865,695			
Commingled domestic equity funds	93,527,737			
Absolute return funds	175,389,098			
Total investments measured at the NAV	429,896,262			
Total investments	\$1,505,482,258			

*The investments as of September 30, 2017 were restated as a result of a prior period adjustment. See Note 5.

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.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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, 2018 and 2017. 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.

Alternative investments: These investments include private equity and real estate equity investments 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, 2018 and 2017. The estimated fair value of these investments may differ from values that would have been used had a ready market existed.

The following tables summarize investments as of September 30, 2018 and 2017 for which fair value is measuring using the net asset value per share, including their related unfunded commitments and redemption restrictions.

2018				
Investments Measured at the NAV				
		Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled domestic fixed income funds (1)	\$ 91,830,963	\$ -	Daily	Same Day
Absolute return funds (2)	75,013,697	-	Quarterly	30 Days
Commingled international equity funds (3)	28,761,868	-	Daily	Same Day
Commingled domestic equity funds (4)	171,857,331	-	Daily	Same Day
Total investments measured at the NAV	\$ 367,463,859	\$ -		

2017				
Investments Measured at the NAV				
		Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled domestic fixed income funds (1)	\$ 132,113,732	\$ -	Daily	Same Day
Absolute return funds (2)	175,389,098	-	Quarterly	30 Days
Commingled international equity funds (3)	28,865,695	-	Daily	Same Day
Commingled domestic equity funds (4)	93,527,737	-	Daily	Same Day
Total investments measured at the NAV	\$ 429,896,262	\$ -		

- (1) Commingled domestic fixed income funds consist of two commingled investment vehicles which primarily invest in publicly traded domestic commercial mortgage backed securities. The investment is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.
- (2) Absolute return funds aim to provide positive investment returns in all market conditions over the medium to long term. The funds are actively managed, with a wide investment remit to target a level of return over rolling three-year periods equivalent to cash plus five percent a year, gross of fees. They exploit market inefficiencies through active allocation to a diverse range of market positions. The funds use a combination of traditional assets (such as equities and bonds) and investment strategies based on advanced derivative techniques, resulting in a highly diversified portfolio. The funds can take long and short positions in markets, securities and groups of securities through derivative contracts.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

- (3) Commingled international equity funds consist of a commingled investment vehicles which invest primarily in publicly traded global equity securities. The funds are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.
- (4) Commingled domestic equity funds consist of three comingled investment vehicle which invests primarily in publicly traded equity securities. The funds are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

4. Net Pension Liability of the City

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

	2018	2017*
Total pension liability	\$ 2,120,924,585	\$ 2,184,102,526
Plan fiduciary net position	(1,566,682,376)	(1,551,350,461)
City net pension liability	\$ 554,242,209	\$ 632,752,065

*Restated for removal of DROP assets, See Note 5.

Plan fiduciary net position as a percentage of total pension liability	73.87%	71.03%
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Actuarial Assumptions

The total pension liability at September 30, 2018 was determined using an actuarial valuation as of October 1, 2017. 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.

The actuarial assumptions used in the October 1, 2017 valuation was based on the results of an actuarial experience study for the period October 1, 2014 to September 30, 2017.

The long-term expected rate of return on pension plan investments was determined in accordance with Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*. ASOP No. 27 provides guidance on the selection of an appropriate assumed investment rate of return. Consideration was given to expected future real rates of return (expected returns, net of pension Trust investment expense and inflation) for each major asset class as well as historical investment data and Trust performance.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

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, (see the discussion of the Trust's investment policy) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return*	
	2018	2017
Domestic Fixed Income	2.99%	3.03%
Foreign Fixed Income	0.00	0.00
Domestic Equities	7.08	3.13
International Equities	6.35	3.62
Real Estate	5.57	3.13
Private Equity	6.65	5.08
Cash	0.00	0.18

*Real rates of return are net of the long-term inflation assumption of 3.25% for 2018 and 2017.

Discount Rate

The discount rate used to measure the total pension liability was 7.34% and 7.42%, for 2018 and 2017, respectively. 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% and 7.42% for 2018 and 2017, respectively, 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:

	City Net Pension Liability - 2018		
	1% Decrease (6.34%)	Current Discount Rate (7.34%)	1% Increase (8.34%)
September 30, 2018	\$ 782,938,042	\$ 554,242,209	\$ 361,854,373

	City Net Pension Liability - 2017		
	1% Decrease (6.42%)	Current Discount Rate (7.42%)	1% Increase (8.42%)
September 30, 2017	\$ 876,145,726	\$ 632,752,065	\$ 412,067,410



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

5. Restatement of Financial Statements

The October 1, 2016 beginning net position restricted for pensions was restated as it was determined that, although the Trust has Fiduciary oversight over the Deferred Retirement Option Program (DROP), DROP investments that were previously reported as part of the Trust's assets are titled and held outside of the Trust and therefore should not be included as Trust assets. Therefore, those assets were not available to pay pension benefits as they were already paid into the DROP accounts. As a result of the correction of an error to the DROP assets, the opening net position restricted for pensions was restated for the removal of the DROP investments and the addition and deduction transactions related to the DROP Program.

The restatement of net position restricted for pensions is as follows:

	October 1, 2016
Net position restricted for pensions as previously stated	\$ 1,700,098,500
Restatement	(198,092,739)
Net position restricted for pensions, as restated	\$ 1,502,005,761

The change in net position for the year ended September 30, 2017 is as follows:

	September 30, 2017 Amount Previously Reported	Restatement Adjustment	September 30, 2017 As Restated
Net Increase	\$ 32,433,265	\$ -	\$ 32,433,265
Additions	-	(14,405,549)	(14,405,549)
Deductions	-	31,316,984	31,316,984
Net increase	\$ 32,443,265	\$ 16,911,435	\$ 49,344,700

The effect of the above restatement on the change in net position for the fiscal years ended September 30, 2017 was an increase of \$16,911,435.

The restatement does not impact the City's net pension liability or the actuarially determined contribution, nor does it have any effect on the calculation of the actuarial obligation for the Plan, nor does it impact the benefits paid to the members of the Plan.

6. Property and Equipment

Property and equipment consist of the following at September 30:

	Estimated Useful Life	2018	2017
Land	N/A	\$ 760,865	\$ 760,865
Building	39 years	1,666,306	1,666,306
Total cost		2,427,171	2,427,171
Less: accumulated depreciation		683,613	640,887
Net		\$ 1,743,558	\$ 1,786,284



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

Depreciation expense for both years ended September 30, 2018 and 2017 was \$42,726.

7. Administrative Expenses Reimbursement

For the fiscal years ended September 30, 2018 and 2017 administrative costs (in the amounts of \$2,086,709 and \$2,058,797, respectively) of the Trust 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 attached statement of changes in fiduciary net position.

8. 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 future financial commitments outstanding for private equity investments at September 30, 2018 and 2017 were, respectively, approximately \$80,259,599 and \$77,813,676.

9. 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 for the staff of the Trust. The quarterly contribution to the plan is based on a specified percentage of the eligible employees' compensation. The employees' contribution is 7% of compensation for all employees. The Trust is to contribute such amounts as necessary to provide the Plan with assets sufficient to meet the benefits to be paid to the participants. Retirement contributions for the fiscal years ended September 30, 2018 and 2017 were \$52,273 and \$46,081, respectively.

The Trust's contributions to the Plan were \$23,753 and \$30,566 for the fiscal years ending September 30, 2018 and 2017 respectively.

10. Legal Matters

Following the end of the September 30, 2017 fiscal year, the Florida Public Employees Relations Commission (PERC) determined in an unfair labor practice proceeding between the City and the Fraternal Order of Police (FOP), the union representing police members of the System, that the 2010 pension ordinance was invalid as a result of the decision of the Florida Supreme Court in *Walter E. Headley Jr. Miami Lodge 20, FOP v. City of Miami*, 215 So.3d 1 (Fla. 2015). The PERC also stated the amount of back wages owed could not be determined without an evidentiary hearing which occurred in February 27, 2018. In advance of this hearing, the board of Miami FIPO, unanimously directed its staff to calculate the effect of reinstating the benefit formulas considering the effect of the Headley case on the 2010 ordinance. This occurred on November 2, 2017 in a meeting of the Board of Trustee for Miami FIPO and was reiterated at the December 2017 Board meeting as well.

The Board deferred any action on the long-term actuarial effect and deferred action on the effect of back wages until the PERC proceedings were concluded. After some legal proceedings between the City and the pension trust, Miami FIPO made payments in January 2018 in accordance with the results of the aforementioned proceedings impacting 131 retired police officers and fire retirees.



City of Miami Fire Fighters' and Police Officers' Retirement Trust

Notes to Financial Statements

The recalculated benefit portion included a one-time retroactive payment of \$3.3 million and a forward-looking addition of \$66,000 to the monthly benefit payments of approximately \$12.5 million.

Despite the events above, the City had appealed the January 2018 order to the Third District Court of Appeals and had requested the court to order the additional benefit payments to cease. On February 2, 2018, the Third District Court of Appeals denied the City's request for injunctive relief and further noted that the matter in the trial court was abated pursuant to Chapter 164, Florida Statutes. The appeal of the denial of the injunction by the trial court remains pending. Following the appeal, the Third District Court of Appeal in June 2018 ruled that the Board must wait for a final order from PERC to treat the ordinance as invalid, but further held the litigation should be abated. During this period, the unions and the City were negotiating a resolution to the unfair labor practice damage cases. As part of that negotiation, the parties entered into a stand-still agreement keeping the Miami FIPO Board's December 2017 actions in place. The unions and the City reached agreement in October 2018 which included reinstating the pre-2010 pension ordinances. PERC approved the settlement in November 2018 which had the effect of vacating the earlier injunction and the litigation between the Board and the City ended as part of that settlement.

In 2013, a class action was filed in federal court by a purported class of several hundred employees claiming they had entered DROP or retired following the City of Miami's declaration of financial urgency in September 2010 based on what they alleged was bad advice from the City and the Pension Fund. After various motions to dismiss the federal case was dismissed in its entirety. After the federal claims were dismissed, the same suit was filed in state court, without the federal law allegations. Two employees of the trust and the former city Manager were named as defendants along with the Board, the Fund, and the City. Over the next several years, plaintiffs dropped off, new plaintiffs joined but no class was ever certified. The lawsuit was dismissed repeatedly but with leave to amend. Based on Florida's sovereign immunity law, all of the tort claims were dismissed with prejudice and the individual defendants were dropped. By 2018, all but one of claims was dismissed with prejudice. The remaining count, breach of contract, is currently on appeal in the Third District Court of Appeal on sovereign immunity grounds. The Fund argued that the breach of contract allegations are actually a tort claim and the court has already ruled none of the tort claims may proceed. That case was argued in mid-November and remains pending. The Fund believes that none of claims by the remaining 50 plaintiffs has merit and that a large percentage of the plaintiffs are subject to summary judgment based on statute of limitations. The Fund's insurance carrier has tendered a defense and has approved of the strategy employed on behalf of the Board. The Plaintiffs claim that the case has a multi-million-dollar value, a matter noted in our initial disclosure in 2013, but since it remains unclear what the allegations are against the Fund and what damages are alleged against the Fund, it is impossible at this stage to give the case any reasonable range for potential loss.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Schedule of Changes in the City's Net Pension Liability (Unaudited)
Last Five Fiscal Years

	2018	2017(restated)**	2016	2015	2014
Total pension liability					
Service cost	\$ 27,965,925	\$ 26,279,333	\$ 21,625,163	\$ 19,203,823	\$ 17,233,272
Interest	149,244,425	146,548,443	156,265,650	156,479,438	155,338,970
Changes of benefit terms		122,641,436	-	9,453,429	-
Differences between expected and actual experience	21,728,074	15,553,948	12,725,721	(16,970,540)	(6,638,755)
Changes of assumptions	16,618,357	-	30,651,781	14,895,466	-
Benefit payments, including refunds of member contributions	(156,093,286)	(151,375,376)	(166,203,470)	(165,535,327)	(139,860,276)
Net change in total pension liability	59,463,495	159,647,784	55,064,845	17,526,289	26,073,211
Total pension liability - beginning	2,184,102,526	2,222,547,481	2,167,482,636	2,149,956,347	2,123,883,136
Restatement		(198,092,739)			
Changes in benefit terms (1)	(122,641,436)				
Total pension liability - ending	2,120,924,585	2,184,102,526	2,222,547,481	2,167,482,636	2,149,956,347
Plan fiduciary net position					
Contributions - employer	56,999,866	53,264,009	48,672,615	48,616,677	47,535,499
Contributions - member	14,258,763	13,206,378	12,082,805	9,317,231	9,462,569
Net investment income	102,296,007	136,351,212	132,946,827	35,844,550	132,696,604
Benefit payments, including refunds of member contributions	(156,093,286)	(151,375,376)	(166,203,470)	(165,537,888)	(139,860,276)
Administrative expenses	(2,086,709)	(2,058,797)	(2,029,168)	(2,222,561)	(2,086,240)
Other	(42,726)	(42,726)	(42,726)	(42,726)	989,372
Net change in plan fiduciary net position	15,331,915	49,344,700	25,426,883	(74,024,717)	48,737,528
Plan fiduciary net position - beginning (Reported)	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	\$ 1,566,682,376	\$ 1,551,350,461	\$ 1,700,098,500	\$ 1,674,671,617	\$ 1,748,696,334
City's net pension liability	\$ 554,242,209	\$ 632,752,065	\$ 522,448,981	\$ 492,811,019	\$ 401,260,013

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

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

(1) See Plan Changes 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.

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Schedule of Changes in the City's Net Pension Liability (Unaudited) - continued
Last Five Fiscal Years

	2018	2017 (restated)	2016	2015	2014
Total pension liability	\$ 2,120,924,585	\$ 2,184,102,526	\$ 2,222,547,481	\$ 2,167,482,636	\$ 2,149,956,347
Plan fiduciary net position (restated)	(1,566,682,376)	(1,551,350,461)	(1,700,098,500)	(1,674,671,617)	(1,748,696,334)
City's net pension liability	\$ 554,242,209	\$ 632,752,065	\$ 522,448,981	\$ 492,811,019	\$ 401,260,013
Plan fiduciary net position as a percentage of the total pension liability	73.87%	71.03%	76.49%	77.26%	81.34%
Covered - employee payroll	\$ 141,497,840	\$ 133,083,231	\$ 106,278,378	\$ 93,705,765	\$ 85,222,842
City's net pension liability as a percentage of covered - employee payroll	391.70%	475.46%	491.59%	525.91%	470.84%
Total employee payroll including DROP	\$ 159,787,486	\$ 153,785,532	\$ 133,966,173	\$ 127,786,644	\$ 124,563,050

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

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Schedule of Contributions by Employer (Unaudited)
Last Ten Fiscal Years

	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 56,999,866	\$ 53,264,009	\$ 48,672,615	\$ 48,616,677	\$ 47,305,679
Contributions in relation to the actuarially determined contribution	56,999,866	53,264,009	48,672,615	48,616,677	47,305,679
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 148,949,683	\$ 141,497,840	\$ 133,083,231	\$ 106,278,378	\$ 93,705,765
Contributions as a percentage of covered-employee payroll	40.28%	37.64%	36.57%	45.74%	50.48%
	2013	2012	2011	2010	2009
Actuarially determined contribution	\$ 45,412,248	\$ 47,418,316	\$ 47,156,797	\$ 59,025,379	\$ 36,993,395
Contributions in relation to the actuarially determined contribution	45,412,248	47,418,316	47,156,797	59,025,379	36,993,395
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 85,222,842	\$ 82,205,838	\$ 82,164,617	\$ 80,152,355	\$ 122,212,346
Contributions as a percentage of covered-employee payroll	53.29%	57.68%	54.68%	73.65%	30.27%

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Schedule of Investment Returns (Unaudited)

<i>For the Years Ended September 30,</i>	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	9.58%	9.22%	9.70%	1.84%	8.60%

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

See accompanying independent auditor's report and notes to required supplementary information.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Notes to Required Supplementary Information (Unaudited)

Plan Changes. In the prior year GASB Statement No. 67 and No. 68 report, the actuary included the impact of the full restoration of benefits under the 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. For further detail regarding the Supreme Court Ruling, see Note 10 to the financial statements.

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.

Actuarial cost method	Aggregate Cost Method
Asset valuation method	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).
Interest Rates	7.34% net of investment expenses
Inflation	3.25%
Projected salary increases	1.5% for promotions plus salary merit scale
Expense and or Contingency Loading	
Mortality Rates:	
Healthy	Florida Retirement System special risk mortality projected generationally with scale BB
Disabled	Florida Retirement System disabled mortality not projected
	100% of the assumed deaths are expected to be ordinary deaths

See accompanying independent auditor's report.



City of Miami Fire Fighters' and Police Officers' Retirement Trust
Required Supplementary Information
Notes to Required Supplementary Information (Unaudited) - continued

Retirement Rates: 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.

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

<u>Age</u>	<u>Rates</u>
35	0.285%
40	0.390%
45	0.800%
50	1.210%

Withdrawal Rates:

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

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.



**City of Miami Fire Fighters' and Police Officers'
Retirement Trust
Schedules of Investment Expenses**

<i>For the Years Ended September 30,</i>	2018	2017
Financial management expenses		
Equities		
Barrow Hanley	\$ 447,525	\$ 254,520
BGI/Black Rock	7,356	5,485
Boston Partners	376,913	236,218
Champlain Investments	518,947	422,517
Copper Rock	266,775	162,911
Jackson Square Partners	75,120	344,257
Eagle Asset Management	362,512	151,297
First Eagle	1,136,768	647,542
Center Square Partners	432,035	279,437
Total	3,623,951	2,504,184
Fixed Income		
AXA U.S. High Yield	264,313	370,468
Barrow Hanley	345,756	207,861
Dodge & Cox	275,817	218,509
Munder Capital	139,655	103,360
Wellington International	1,013,976	660,503
Total	2,039,517	1,560,701
Real Estate		
Proxy Voting	10,000	6,000
J.P. Morgan	1,705,836	975,512
Total	1,715,836	981,512
Other		
	5,816	6,244
Total	5,816	6,244
Total investment expenses	\$ 7,385,119	\$ 5,052,641



**City of Miami Fire Fighters' and Police Officers'
Retirement Trust
Schedules of Administrative Expenses**

<i>For the Years Ended September 30,</i>	2018	2017
Personnel services		
Salaries and payroll taxes	\$ 488,142	\$ 465,907
Fringe benefits	99,495	103,165
Total personnel services	587,637	569,072
Professional services		
Actuarial	177,405	105,577
Audit	46,672	44,847
Consultant and custodial	494,265	608,372
Medical	6,254	
Legal	188,171	53,315
Total professional services	912,766	812,111
Other		
Education and travel	31,023	23,229
Insurance	126,705	114,590
Office expense	179,257	223,143
Repair and maintenance	169,073	234,648
Retirement contribution	58,542	58,542
Utilities	21,706	23,462
Total other	586,306	677,614
Total administrative expenses	\$ 2,086,709	\$ 2,058,797



Independent Auditor's 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*

Board of Trustees
City of Miami Fire Fighters' and Police Officers' Retirement Trust
Miami, Florida

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 comprise the statement of fiduciary net position as of September 30, 2018, and the related statements 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 March 26, 2019.

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 and therefore, material weaknesses or significant deficiencies may exist that have not been identified. We did identify a certain deficiency in internal control, related to the Deferred Retirement Option Program assets, which is presented as item 2018-001 that we consider to be a material weakness.





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 grant 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*.

The Trusts Response to the Finding

The Trust's response to the finding identified in our audit is described in the accompanying schedule of findings and questioned costs. The Trust's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

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.

Miami, Florida
March 26, 2019

BDO USA, LLP

Certified Public Accountants



City of Miami Firefighters and Police Officers' Retirement Trust
Schedule of Findings and Questioned Costs
Year Ended September 30, 2018

2018-001 Prior Period Adjustment from Elimination of DROP Asset from Financial Statement

Criteria:

Governmental Accounting Standards Board (GASB) Statement No. 67- Glossary Section Paragraph.51 defines a Deferred Retirement Option Program (DROP) as a program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member (if the plan member had retired and not entered the DROP) are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. The GASB has further stated that since the individual member accounts pursuant to the DROP are held within the defined benefit plan, the assets associated with the DROP should be included in the net position reported by the defined benefit pension plan.

Condition:

Miami Fire and Police Officer's Retirement Trust (Trust) is a Public Employee Retirement System designed for the benefit of managing retirement funds for Police and Fire Fighters that retire from the City of Miami. As part of the Trust, the financial statements have historically reported DROP assets as part of the Trust's assets. However, upon further review and evaluation in the current year, although the Trust has Fiduciary oversight over the DROP, it was determined that the DROP assets should not be reported on the financial statements of the Trust, since the assets are held outside the Trust, and unlike most DROP's, the Trust does not maintain control of the asset. DROP participants are paid in the same manner as any other retiree, except that the DROP payments are sent to a 3rd party custodian. Once paid to the 3rd party custodian, the DROP assets are entirely within the control of the individual members who self-direct investments thru an individual IRA account among a family of mutual funds offered. The removal of the DROP assets from the financial statements resulted in a reduction of investments and net position restricted for pensions of approximately \$198 million as of October 1, 2016 which was recorded as a prior period adjustment.

Cause:

The Trust's Plan Documents and Financial Reporting policies did not identify any references that the DROP assets were not assets of the Trust and therefore should not be included within the financial statements.

Effect:

An overstatement of investments and net position restricted for pensions for approximately \$198 million at October 1, 2016 and a correlating overstatement of investment income and pension benefits paid for the year then ended.

Recommendation:

We recommended, and management has processed the prior period adjustment to correct the accounting records and financial statements for these items. We further recommend that management adopt appropriate policies and procedures for all significant accounting and financial reporting matters impacting the Trust's financial statements. We further recommend that these policies and procedures be reviewed and approved by Governance.



City of Miami Firefighters and Police Officers' Retirement Trust

Schedule of Findings and Questioned Costs

Year Ended September 30, 2018

Management's Corrective Action Plan

Views of Responsible Officials and Planned Corrective Actions:

Management disagrees with the finding of a material weakness.

From inception thru 2013, the Deferred Retirement Option Program (DROP) was shown in the City of Miami Fire Fighters' and Police Officers' Retirement Trust's (FIPO) financials as an asset that was offset by a liability with no effect on the Trust's assets. Beginning in 2014, GASB 67 called for the removal of the DROP liability. The Auditors informed Management of this new requirement and Management accepted the recommended reporting changes.

After in-depth research and review of the uniqueness of the Miami DROP, the reporting was determined to be incorrect. The issue presented has been corrected through the restatement. Management acknowledged the absence of a written Policy to address the DROP financial reporting. A written policy has since been adopted.

Note, in the modern history of the Fund, dating from the settlement of the Gates litigation in 1985, there has never been a finding of a material weakness in any internal control. In place there are three levels of controls, managerial, functioning committee and governance. No deficiency has ever been identified nor has there ever been any recommendations to Management on any level. A material weakness is reflective of a pervasive matter and the issue here is not a pervasive issue but instead is a single issue which, as noted, has been resolved.



III

Investment Section



INVESTMENT ANALYSIS
YEAR ENDED SEPTEMBER 30, 2018

	GENERAL FUND	COLA I	COLA II
BALANCE AS OF 10/01/2017	1,266,379,382	66,630,919	353,496
Additions: Purchases			
Short Term Investment	4.00		
Other Money Market	2.82		
Other Liabilities	0.00		
Mutual Funds	17,504,425.40		
Private Equity	31,306,952.04		
Private Equity International	1,445,506.36		
Commercial Paper	16,506.79		
Commodity Ex Traded Fund International	1,690,028.76		
US Treasury Bills	0.00		
US Treasury Bonds	35,569,944.60		
US Treasury Bonds International	783,909.34		
US Treasury Notes	27,347,138.18		
Corporate Bonds	19,452,848.54		
Corporate Bonds International	5,302,614.20		
Domestic Equity	240,297,560.47		
International Equity	54,738,339.81		
Share of Assets Transferred	0	4,010,917	27,163,807
Share of Securities Transferred to COLA II	3,290		
	435,459,071	4,010,917	27,163,807
Deductions: Redemptions & Sale			
Short Term Investment	0.00		
Other Money Market	2.82		
Other Liabilities	0.00		
Mutual Funds	107,710,263.79		
Private Equity	13,627,896.04		
Private Equity International	1,520,575.77		
Commercial Paper	549,025.16		
Commodity Ex Traded Fund International	1,171,092.90		
US Treasury Bills	0.00		
US Treasury Bonds	18,535,553.61		
US Treasury Bonds International	877,735.39		
US Treasury Notes	27,020,754.06		
Corporate Bonds	77,808,064.89		
Corporate Bonds International	4,763,256.80		
Domestic Equity	114,535,700.37		
International Equity	56,862,828.55		
Drop Asset	181,181,304.12		
Share of Securities Transferred To COLA I	3,891,051	119,866	
Share of Securities Transferred To COLA II	2,003,688		25,163,409
	<u>612,058,793</u>	<u>119,866</u>	<u>25,163,409</u>
BALANCE AS OF 09/30/2018	<u>1,089,779,660</u>	<u>70,521,970</u>	<u>2,353,894</u>



As Of September 30, 2018

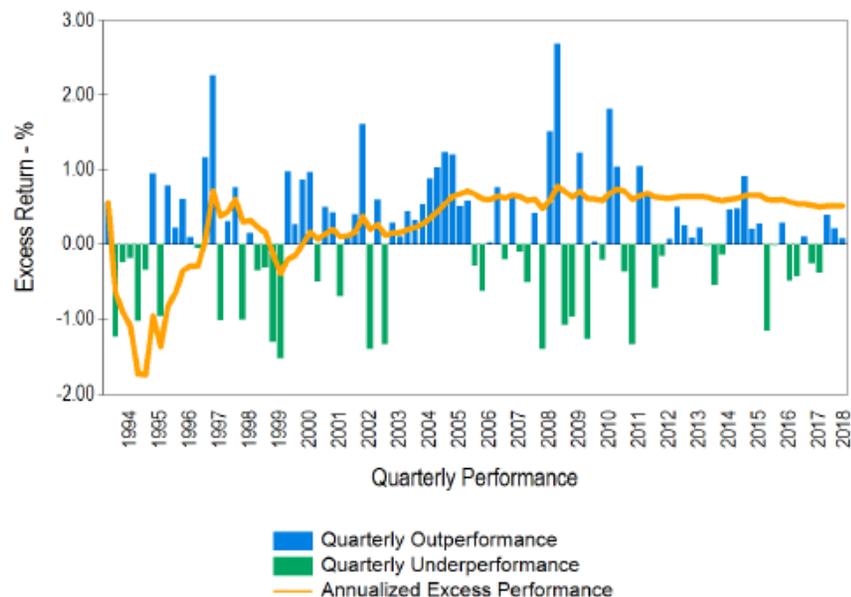
(in thousands)	Total Market Value	% of Portfolio	US Equity	Non-US Equity	US Fixed Income	Alternatives	Real Estate	Cash
Domestic Equity								
Large Cap Equity								
Barrow Hanley Large Value	\$140,367	9.0%	\$140,367					
BlackRock R1000 Growth Index	\$107,050	6.9%	\$107,050					
Mid Capitalization Equity								
Boston Partners	\$49,181	3.2%	\$49,181					
Champlain Mid Cap	\$22,724	1.5%	\$22,724					
Small Capitalization Equity								
Champlain Small Cap	\$65,191	4.2%	\$65,191					
Eagle Asset Management	\$33,191	2.1%	\$33,191					
International Equity								
BlackRock EAFE Index Fund	\$115	0.0%		\$115				
First Eagle	\$120,588	7.7%		\$120,588				
Wellington IQG	\$141,639	9.1%		\$141,639				
Copper Rock	\$28,762	1.8%		\$28,762				
Core Fixed Income								
Barrow Hanley Opportunistic Credit	\$97,826	6.3%			\$97,826			
Dodge & Cox	\$97,405	6.2%			\$97,405			
Victory Capital	\$96,977	6.2%			\$96,977			
Absolute Return Fixed Income								
BNP Paribas	\$76,004	4.9%			\$76,004			
Bank Loans								
Pacific Asset Management	\$36,306	2.3%			\$36,306			
High Yield								
AXA High Yield	\$78,403	5.0%			\$78,403			
Real Estate								
JP Morgan Real Estate								
JP Morgan SPF	\$94,760	6.1%					\$94,760	
JP Morgan SSPF	\$30,459	2.0%					\$30,459	
Centersquare	\$54,060	3.5%					\$54,060	
Centersquare Value Fund III	\$13,888	0.9%					\$13,888	
Retirement Office	\$3,150	0.2%					\$3,150	



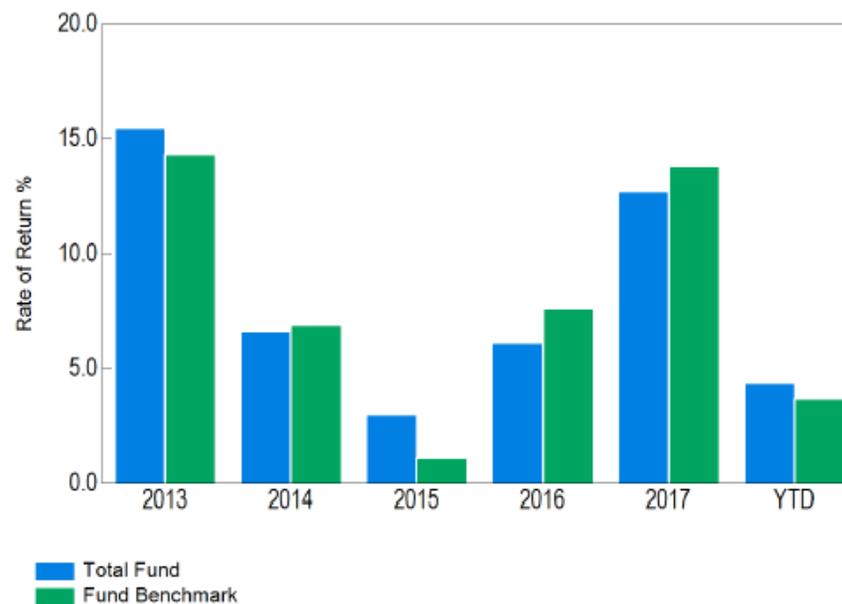
(in thousands)	Total Market Value	% of Portfolio	US Equity	Non-US Equity	US Fixed Income	Alternatives	Real Estate	Cash
Private Equity								
Adams Street 2012 GF	\$11,873	0.8%				\$11,873		
Adams Street VIF	\$412	0.0%				\$412		
Catalyst III	\$6,020	0.4%				\$6,020		
Catalyst IV	\$5,617	0.4%				\$5,617		
Coller Fund V	\$1,750	0.1%				\$1,750		
Coller Fund VI	\$6,280	0.4%				\$6,280		
Coller Fund VII	\$4,010	0.3%				\$4,010		
JP Morgan Private Equity	\$5,936	0.4%				\$5,936		
JP Morgan Global Fund V	\$9,009	0.6%				\$9,009		
JP Morgan Global Fund VI	\$2,861	0.2%				\$2,861		
Lexington Capital Partners	\$1,934	0.1%				\$1,934		
Lexington VIII	\$7,651	0.5%				\$7,651		
Pantheon Global	\$6,806	0.4%				\$6,806		
SL Capital	\$5,308	0.3%				\$5,308		
Infrastructure								
BlackRock GRPF II	\$12,020	0.8%				\$12,020		
BlackRock NTR	\$18,487	1.2%				\$18,487		
Cash & Cash Alternatives								
BlackRock Liquid Policy Portfolio	\$64,692	4.1%						\$64,692
Main Account	\$1,840	0.1%						\$1,840
Total	\$1,560,554	100.0%	\$417,704	\$291,104	\$482,921	\$105,975	\$196,317	\$66,533
Percent of Total			26.8%	18.7%	30.9%	6.8%	12.6%	4.3%



Annualized Excess Performance



Return Summary
Ending September 30, 2018



Cumulative Performance Results Ending September 30, 2018

	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	2 Yrs	Rank	3 Yrs	Rank	4 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank	Inception	Inception Date
Total Fund	2.7%	49	7.4%	42	7.4%	42	8.5%	69	8.8%	72	7.1%	43	7.5%	51	9.6%	45	8.1%	35	8.2%	Jan-94
<i>Fund Benchmark</i>	2.6%	51	7.1%	47	7.1%	47	8.9%	61	9.3%	59	7.0%	49	7.4%	52	9.3%	52	7.5%	59	7.7%	Jan-94

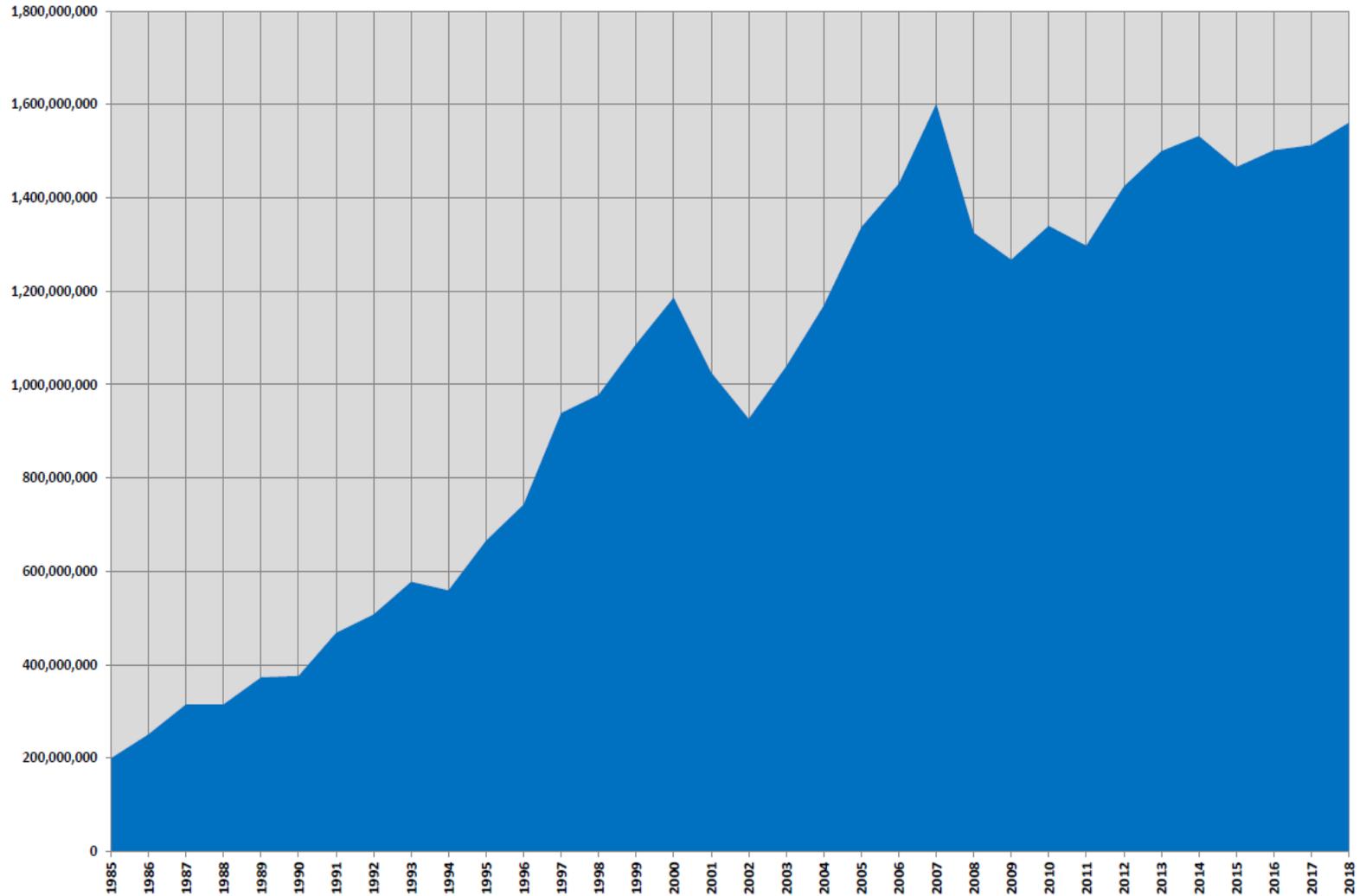
Calendar Year Performance

	2017	Rank	2016	Rank	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	2010	Rank	2009	Rank
Total Fund	12.7%	84	6.1%	85	3.0%	6	6.6%	49	15.5%	45	12.6%	48	3.1%	29	12.1%	67	20.4%	42
<i>Fund Benchmark</i>	13.8%	73	7.6%	53	1.1%	21	6.9%	44	14.3%	55	12.7%	46	3.0%	30	11.7%	71	17.8%	57



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



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, 2018. 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, 2019 through September 30, 2020.

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.

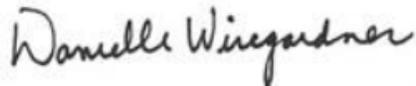


With respect to reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best 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.

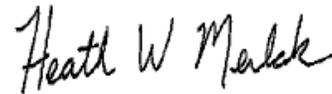
Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the 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. 17-08260



Heath W. Merlak, FSA, EA, MAAA
Enrolled Actuary No. 17-05967

May 1, 2019
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

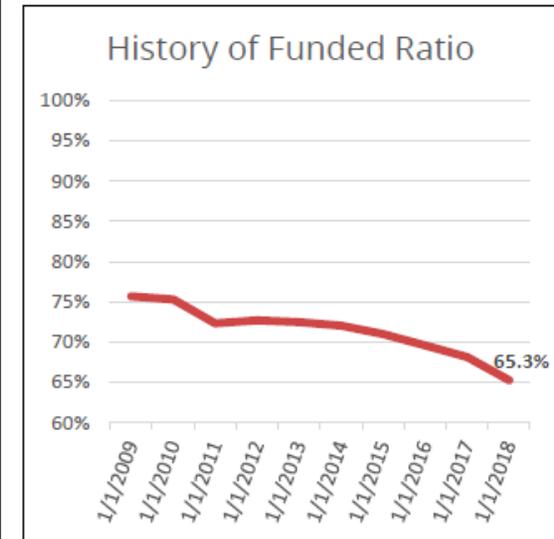
Mr. Keith Brinkman
Bureau Chief, Bureau of Local Retirement Systems
Florida Department of Management Services
Division of Retirement
Department of Management Services
P. O. Box 9000
Tallahassee, FL 32315-9000



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, 2017	October 1, 2018
Funded Status Measures		
Accrued Liability	\$1,705,061,093	\$1,796,349,619
Actuarial Value of Assets	1,161,585,161	1,172,416,575
Unfunded Accrued Liability	\$543,475,932	\$623,933,044
Funded Percentage (AVA)	68.1%	65.3%
Funded percentage (MVA)	66.3%	63.5%
Cost Measures		
Recommended Contribution For Next Fiscal Year	\$56,030,260	\$61,668,247 ¹
Recommended Contribution (as a percentage of payroll)	39.6%	37.0%
Asset Performance		
Market Value of Assets (MVA)	\$1,131,066,046	\$1,140,506,121
Actuarial Value of Assets (AVA)	\$1,161,585,161	\$1,172,416,575
Actuarial Value/Market Value	102.70%	102.80%
Participant Information		
Active Members	1,943	1,998
Terminated Vested Members	16	15
Terminated Members, due a Refund of Employee Contributions	97	111
Retirees, Beneficiaries, and Disabled Members	2,059	2,120
DROP Participants	129	83
Total	4,244	4,327
Valuation Payroll	\$141,497,840	\$166,670,939
Total Payroll	\$159,787,486	\$176,975,203



¹Recommended contribution includes \$1,035,008 contribution to the Pension Stabilization Fund.



Changes Since Prior Valuation and Key Notes

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.

This change results in an increase in the Present Value of Future Benefits and the recommended contribution.

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.

The administrative expense has increased to \$2,210,096 from the prior year.



Asset Information (continued)

Plan Assets are used to develop funded percentages and contribution requirements

October 1, 2018

1.	Expected actuarial value of assets	
	(a) Actuarial value of assets – beginning of prior year	\$1,161,585,161
	(b) City Contributions	50,591,605
	(c) Member Contributions	14,258,763
	(d) Benefits payments and refunds	(130,813,301)
	(e) Expected return	84,771,961
	(f) Expected actuarial value of assets – beginning of current year	\$1,180,394,189
2.	Market value of assets – beginning of current year	\$1,140,506,121
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)]	\$1,140,506,121
5.	Amount subject to phase in [(4)-(1f)]	(\$39,888,068)
6.	Phase in of asset gain loss [(5)x20%]	(\$7,977,614)
7.	Preliminary actuarial value of assets – beginning of current year [(1f)+(6)]	\$1,172,416,575
8.	80% of Market value of assets	\$912,404,897
9.	120% of Market value of assets	\$1,368,607,345
10.	Adjusted actuarial value of assets	\$1,172,416,575
11.	Contribution surplus account balance	\$0
12.	Final actuarial value of assets – beginning of current year [(10)-(11)]	\$1,172,416,575
13.	Return on actuarial value of assets	6.66%



Reconciliation of Gain/Loss

October 1, 2018

Liability (gain)/loss

Present value of future benefits	\$2,072,629,507
Present value of employee contributions	(174,504,339)
Expected employee contribution	11,838,874
Benefit payments	(130,813,301)
Interest	135,475,516
Expected liability	<u>\$1,914,626,257</u>
Plan Change	63,084,010
Assumption change	<u>(15,769,976)</u>
Expected after changes	\$1,961,940,291
Actual liability	\$1,989,362,931
Liability (gain)/loss	\$27,422,640

Asset (gain)/loss

Actuarial value of assets, beginning of prior year	\$1,161,585,161
Contributions	64,850,368
Benefit payments and expenses	(130,813,301)
Expected Investment return	84,771,961
Expected actuarial value of assets, beginning of current year	<u>\$1,180,394,189</u>
Actual actuarial value of assets, beginning of current year	\$1,172,416,575
Asset (gain)/loss	\$7,977,614

Total (gain)/loss

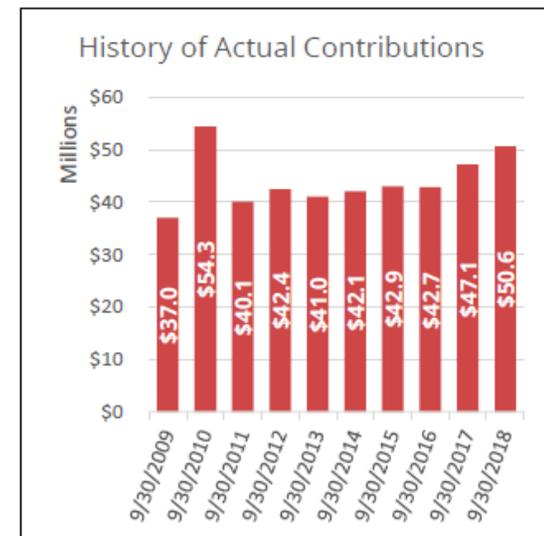
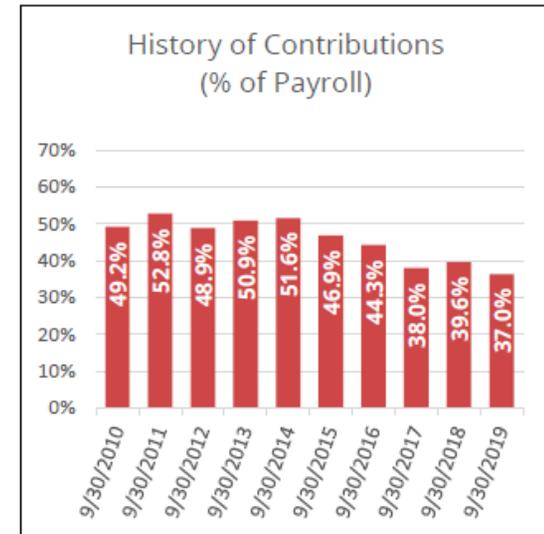
\$35,400,254



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, 2018
1. Present value of future benefits	\$2,203,102,647
2. Actuarial value of assets	1,172,416,575
3. Present value of future member contributions	213,739,716
4. Present value of future normal Cost [(1)-(2)-(3)]	\$816,946,356
5. Present value of future payroll	\$2,508,636,036
6. Normal cost accrual rate [(4)/(5)]	32.57%
7. Administrative expenses	\$2,210,096
8. Valuation payroll	\$166,670,939
9. Applicable interest	7.34%
10. Normal cost	\$56,487,087
11. Interest to estimated payment date	\$4,146,152
12. Total recommended contribution as of end of year [(10)+(11)]	\$60,633,239
13. As a percentage of valuation payroll	36.38%
14. As a percentage of total payroll	34.26%
15. Pension Stabilization Fund Contribution	\$1,035,008
16. Total recommended contribution as of end of year	\$61,668,247
17. As a percentage of valuation payroll	37.00%



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)

\$2,210,096



Mortality Rates (CO)

Pre-Retirement: RP2000 Generational, Females, 100% Combined Healthy White Collar Scale BB, Males, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB

Post-Retirement: RP2000 Generational, Females, 100% Annuitant White Collar, Scale BB, Males, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disability: RP2000, Females, 60% Disabled set forward two years, 40% Annuitant White Collar, no projection scale, Males, 60% Disabled setback four years, 40% Annuitant White Collar, no projection scale

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

Age	<2	Between 2 to 5	5+
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 increased to \$2,210,096.

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

The mortality rate assumptions were changed in accordance with the Florida Retirement System Valuation report dated October 2016.

FE indicates an assumption representing an estimate of future experience.

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

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



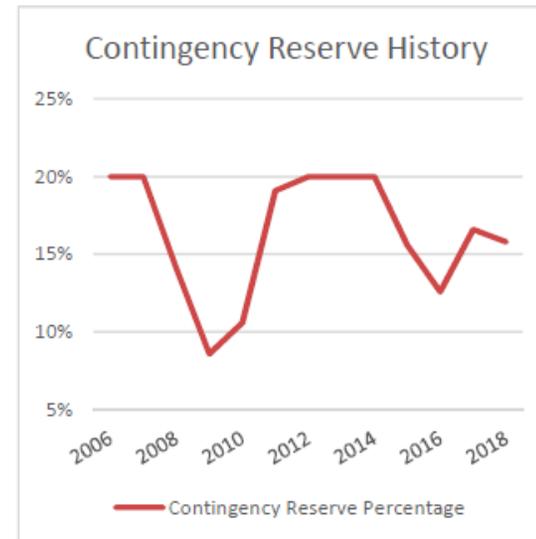
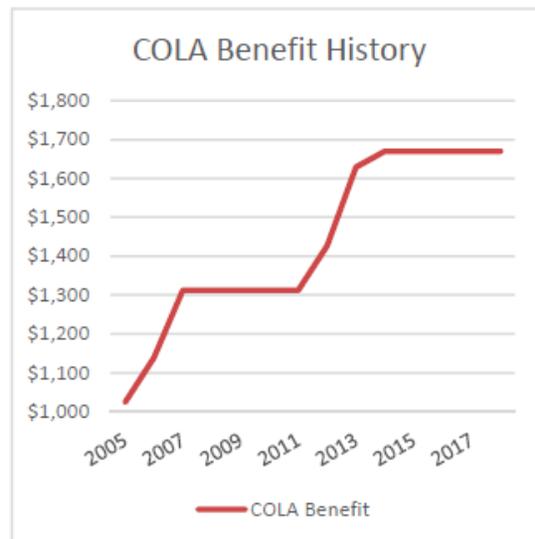
Key Notes

We recommend maintaining the COLA table at its current level (i.e. \$1,670) as of January 1, 2019. The contingency reserve is 15.8%, a decrease from the prior year's 16.6%. A ten-year historical graph of the COLA table level and contingency reserve amount are below.

The prior year numbers were revised from the January 1, 2018 COLA report to reflect the following:

- Audited assets which shifted \$14.6M from the Membership and Benefits Account to the COLA Accounts compared to the original, un-audited assets used for the January 1, 2018 COLA report.
- Plan liabilities have been revised to not reflect the restoration of plan benefits and eligibilities for the Miami Firefighters' and Police Officers' Retirement Trust that existed prior to 10/1/2010. The current year numbers also do not reflect the restoration of plan benefits and eligibilities.

To better reflect anticipated experience, the interest rate assumption was reduced from 7.42% to 7.34%.



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, 2018		
	Membership and Benefit Accounts	COLA I Account	COLA II Account
1. Market value – beginning of prior year	\$1,131,066,046	\$66,630,918	\$353,653,497
2. Book value – beginning of prior year	\$993,901,213	\$59,946,723	\$292,031,090
3. Income			
(a) City contributions	\$50,591,605	\$0	\$6,408,261
(b) Member contributions	14,258,763	0	0
(c) Other contributions	0	0	0
(d) Interest and dividends	20,272,270	1,042,919	4,955,023
(e) Net realized gains (losses)	43,953,509	2,259,076	10,754,512
(f) Securities lending income	498,878	25,670	121,919
(g) Rental and other income	180,669	9,284	44,027
(h) Income transfer	0	0	0
(i) Total	\$129,755,694	\$3,336,949	\$22,283,742
4. Disbursements			
(a) Benefit payments and refunds	\$130,813,301	\$119,866	\$25,160,119
(b) Custodial and investment expenses	5,739,653	297,678	1,413,941
(c) Administrative expense	2,086,709	0	0
(d) Other expense	0	0	0
(e) Securities lending fees	124,636	6,413	30,459
(f) Building depreciation	32,867	1,758	8,101
(g) Total	\$138,797,166	\$425,715	\$26,612,620
5. Book value – beginning of current year [(2)+(3i)-(4g)]	\$984,859,741	\$62,857,957	\$287,702,212
6. Net change in unrealized gains (losses)	\$18,481,547	\$976,919	\$6,332,565
7. Unrealized gains (losses)	\$155,646,380	\$7,661,114	\$67,954,972
8. Market value – beginning of current year [(1)+(3i)-(4g)+(6)]	\$1,140,506,121	\$70,519,071	\$355,657,184
9. Current year allocation to COLA II (discounted)	\$0	N/A	\$0
10. Net market value – beginning of current year	\$1,140,506,121	\$70,519,071	\$355,657,184



Membership and Benefits Cost-Of-Living Adjustment Account Summary

		September 30, 2018	
		Market	Book
1.	Investments		
	(a) Bill, bonds, notes	\$441,580,206	\$430,845,515
	(b) Domestic stocks	478,187,606	375,807,717
	(c) International stocks	249,053,003	208,437,363
	(d) Private equity	156,839,046	140,680,308
	(e) Money market fund and time deposit	11,016,179	12,249,592
	(f) Mutual fund	179,279,484	116,672,563
	(g) Real estate	1,743,558	1,743,558
	(h) Securities lending adjustment	0	0
	(i) Total investment	\$1,517,699,082	\$1,286,436,616
2.	Cash	\$51,915,682	\$51,915,682
3.	Receivables		
	(a) City contributions	\$0	\$0
	(b) Member contributions	0	0
	(c) Accounts receivable	5,952	5,952
	(d) Accrued interest and dividend	3,307,674	3,307,674
	(e) Securities sold	1,132,406	1,132,406
	(f) Total receivables	\$4,446,032	\$4,446,032
4.	Payables:		
	(a) Budget advance	\$0	\$0
	(b) Accrual expense	421,618	421,618
	(c) Transfer	0	0
	(d) Tax withheld	19,769	19,769
	(e) Accounts payable	809,214	809,214
	(f) Securities purchased	6,127,819	6,127,819
	(g) Total payables	\$7,378,420	\$7,378,420
5.	Total [(1i)+(2)+(3f)-(4g)]	\$1,566,682,376	\$1,335,419,910
6.	COLA I account	\$70,519,071	\$62,857,957
7.	COLA II account	\$355,657,184	\$287,702,212
8.	Current year COLA II transfer	\$0	\$0
9.	Membership & benefits account [(5)-(6)-(7)-(8)]	\$1,140,506,121	\$984,859,741



Investment Results - Membership and Benefits Accounts

September 30, 2018

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
<u>Membership and Benefits Accounts</u>			
Interest	\$12,877,132	1.1%	1.3%
Dividends	7,395,137	0.7%	0.8%
Rental and Other Income, less Depreciation	147,802	0.0%	0.0%
Realized Gains	43,953,509	3.9%	4.6%
Securities Lending (Net)	374,242	0.0%	0.0%
Increase in Unrealized Gains	18,481,547	1.6%	1.9%
Custodial and Investment Expenses	(5,739,653)	(0.4%)	(0.5%)
	<u>\$77,489,716</u>	<u>6.9%</u>	<u>8.1%</u>



Investment Results – COLA I and II Accounts

September 30, 2018

COLA I Account

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$661,884	1.0%	1.1%
Dividends	381,035	0.6%	0.6%
Rental and Other Income, less Depreciation	7,526	0.0%	0.0%
Realized Gains	2,259,076	3.4%	3.8%
Securities Lending (Net)	19,257	0.0%	0.0%
Increase in Unrealized Gains	976,919	1.5%	1.6%
Custodial and Investment Expenses	(297,678)	(0.5%)	(0.4%)
	<u>\$4,008,019</u>	<u>6.0%</u>	<u>6.7%</u>

COLA II Account

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$3,146,468	0.9%	1.1%
Dividends	1,808,556	0.5%	0.6%
Rental and Other Income, less Depreciation	35,926	0.0%	0.0%
Realized Gains	10,754,512	3.1%	3.8%
Securities Lending (Net)	91,460	0.0%	0.0%
Increase in Unrealized Gains	6,332,565	1.8%	2.2%
Custodial and Investment Expenses	(1,413,941)	(0.3%)	(0.4%)
	<u>\$20,755,546</u>	<u>6.0%</u>	<u>7.3%</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)
	(\$)	(\$)	(%)	(\$)	(\$)	(%)
2009	296.3	290.0	102	(6.3)	122.2	(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

⁽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 (\$)	
	2009	0	0	
2010	0	4,682,453	18,493,888	23,176,341
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

Expenses by Type

Fiscal Year	Expenses by Type			Total (\$)
	Benefits (\$)	Administrative Expenses (\$)	Refunds (\$)	
2009	16,925,422	867,083	0	17,795,505
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



V

Statistical Section



STATISTICAL DATA OF VARIOUS ACCOUNTS
THROUGH SEPTEMBER 30, 2018

	GENERAL FUND	COLA I	COLA II
MEMERSHIP ACCOUNT			
ADD:			
Members' Contributions			
After Tax	67,219,839	0	0
Pre Tax	290,531,530	11,814,941	0
After Tax from G & S	17,210	0	0
Interest			
From Benefit Acct	121,763,478	0	0
From Withdrawals	385,365	0	0
Transfers from G & S	153,332	0	0
	480,070,754	11,814,941	0
DEDUCT:			
Refunds -			
Leaving Service	21,288,036	944,800	0
Additional Contributions	171,226	0	0
Accidental Death	548,075	22,039	0
Accidental Disability	1,982,443	0	0
Option 6A	571,814	0	0
Ordinary Death	2,083,210	62,320	0
Transfers -			
After Tax from G & S	4,412,189	0	0
Benefit Account	306,888,553	10,497,042	0
Transfers to Acct Payable	480,131	0	0
Interest withheld	364,152	0	0
Interest	2,357,733	0	0
	341,145,363	11,526,201	0
BALANCE AS OF 9/30/18	138,925,391	288,740	0
BENEFIT ACCOUNT:			
ADD:			
Contributions -			
City of Miami	996,756,788	2,042,899	62,749,951
Police Relief & Pension Fund	52,342	0	0
Fire Relief & Pension Fund	28,473	0	0
Members	697,822	0	0
Transfers from Membership Acct	306,899,477	10,497,042	0
Amortization of Discounts	10,319,476	249,134	0
Dividends Received	263,122,162	5,819,016	37,978,219
Securities Lending Income	10,523,422	372,529	2,254,655
Excess Interest Transfer	0	0	288,194,062
Interest Income	676,339,971	17,467,737	71,778,641
Other Income	2,594,510	38,037	200,943
Corporate Action	3,475,712	115,294	714,867
Commission Recapture	598,966	19,198	119,348
Profit on Sale of Investments	1,262,222,500	38,008,461	198,277,457
Unrealized Profit on Sales of Inv	250,427,875	13,273,323	66,205,347
Unrealized Profit on Sec Lending Collateral	1,960,433	71,299	525,304
Rental Income	1,929,140	60,665	402,608
Share of Earnings Income	0	1,170,581	0
	3,787,949,069	89,205,215	729,401,402
DEDUCT:			
Pensions Paid			
Fire	1,082,015,312	0	0
Police	1,033,951,881	0	0
General	7,034,700	0	0
Former Gen assumed by Trust	276,624	0	0
Pension Payments Prior 1966	989,022	0	0
Distributions	0	12,404,621	316,325,945
Lump Sum Payments to Beneficiaries	128,540	0	0
Death Benefits	1,272,666	0	0
Amortization of Premium	4,876,744	0	0
Corrections to Control	17,163,054	0	0
Income Expenses	92,618,171	2,826,048	16,631,382
Building Depreciation	539,965	20,500	126,148
Administrative Expense	17,011,319	0	0
Stiff Short Term Investment Fee	318,123	14,398	88,552
Securities Lending Fees	2,797,622	96,870	583,952
Other Expenses	0	45,256	0
Loss on Sale of Investments	41,652,910	1,068,210	7,163,861
Unrealized Profit on Sales of Inv	61,838,567	2,718,374	32,827,667
Vested Rights Withdrawals	954,289	0	0
Transfers -			
Excess Interest Earnings	288,194,062	0	0
G & S Benefit Account	5,378,420	0	0
G & S Share of Earnings	5,251,212	0	0
Interest to Membership Acct	121,828,466	0	0
Interest on VR Withdrawals	275,509	0	0
Overpayments (uncollectible)	769	0	0
	2,786,367,948	19,194,275	373,747,508
BALANCE AS OF 9/30/18	1,001,581,121	70,010,940	355,653,894



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.

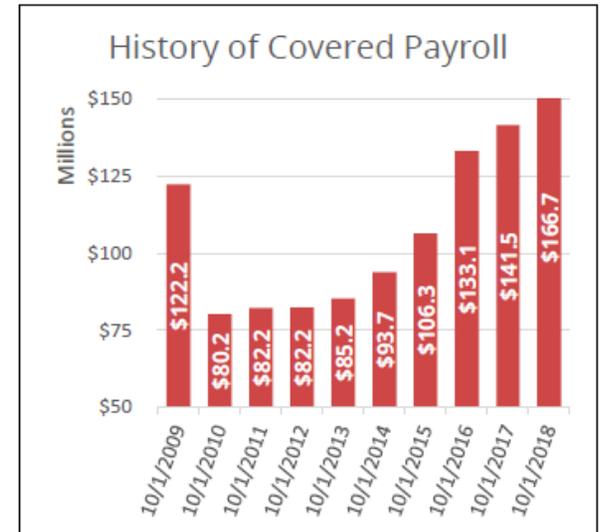
October 1, 2018

Member Counts

Active Members	1,998
Retired Members	1,711
Beneficiaries	279
Disabled Members	130
Terminated Vested Members, due a Monthly Benefit	15
Terminated Members, Due a Refund of Employee Contributions	111
DROP Members	83
Total	4,327

Active Participant Demographics

Average Age	36.35
Average Service	9.40
Average Compensation	\$74,549
Valuation Payroll	\$166,670,939
Total Payroll	\$176,975,203



Demographic Information (continued)

	October 1, 2018
Retired Member Statistics	
Average Age	65.32
Average Monthly Benefit	\$5,576
Beneficiary Statistics	
Average Age	77.72
Average Monthly Benefit	\$1,149
Disabled Member Statistics	
Average Age	71.85
Average Monthly Benefit	\$1,975
Terminated Member Statistics	
Average Age	38.11
Average Monthly Benefit for Participants due Monthly Benefit	\$2,566
Average Remaining Contributions for Participants Due a Refund	\$9,926
DROP Member Statistics	
Average Age	50.69
Average Monthly Benefit	\$6,383
Payroll	\$10,304,264



Participant Reconciliation

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
Prior Year	1,943	113	136	1,795	257	4,244
Active						
To Terminated Vested	(1)	1				
To Retired	(34)			34		
To Disabled	(1)		1			
To Refund	(18)					(18)
To Due Refund	(22)	22				
Terminated Vested						
To Retired		(2)		2		
To Refund		(4)				(4)
To Active	4	(4)				
Disabled						
To Death			(7)			(7)
Retired						
To Death				(37)		(37)
Survivor						
To Death						
Additions	128				23	151
Removed	(1)				(1)	(2)
Current Year	1,998	126	130	1,794	279	4,327



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 2017/2018

DATE

ORDINANCE NUMBER

None

