FIREFIGHTERS' RETIREMENT SYSTEM



FINANCIAL STATEMENT AUDIT
FOR THE YEARS ENDED JUNE 30, 2019, AND 2018
ISSUED DECEMBER 10, 2019

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LETTER OF TRANSMITTAL

December 9, 2019

Board of Trustees Firefighters' Retirement System 3100 Brentwood Drive Baton Rouge, LA 70809



I am pleased to present the Financial Report of Firefighters' Retirement System (FRS) for the fiscal year ended June 30, 2019. My office is responsible for the management of FRS, which was established on January 1, 1980 by Act. No. 434 of 1979. All invested funds, cash, and property are held in the name of FRS for the sole benefit of membership.

This report was prepared to conform with the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board (GASB). Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the management of FRS. In addition, management is responsible for maintaining a system of adequate internal controls. The controls are designed to serve the following purposes: (1) To provide reasonable assurance that transactions are recorded as necessary, (2) To maintain the accountability for assets, and (3) To permit the preparation of financial statements in accordance with generally accepted accounting principles.

Plan Characteristics

FRS is a cost sharing, multi-employer, governmental defined benefit pension plan, established by the state legislature on January 1, 1980, to provide retirement and other benefits for Louisiana firefighters. A ten member board of trustees governs FRS.

Controls

In accordance with the board's and management's goals and policies, FRS maintains a system of internal controls to reasonably assure that assets are properly safeguarded, resources are effectively and economically employed, and financial information is reliable and accurate. To achieve those objectives, FRS uses advanced computer technology, continuing education for staff, and numerous checks and balances within the control environment. An operating budget for administrative expenses is prepared each year by the staff to address member and employer needs while keeping costs reasonable. The board of trustees must review and approve the annual budget and any changes during the year. In addition to the trustees' approval, the budget must be reviewed by the Joint Legislative Committee on the Budget. An independent certified public accounting firm must audit the financial statements to ensure that they conform to the U.S. Generally Accepted Accounting Principles (GAAP) in all material respects. For the fiscal year ended June 30, 2019, FRS selected the Louisiana Legislative Auditor to perform its audit.

Management's Discussion and Analysis

Management's discussion and analysis (MD&A) begins on page 11 and provides an overview and analysis of FRS' basic financial statements. This letter of transmittal complements the MD&A and should be read in conjunction with it.

Investments

FRS is responsible for the prudent management of an investment portfolio with a market value of \$1.8 billion. Diversification to reduce risk is evident in the allocation of invested assets. FRS holds a wide range of investments such as domestic and international stocks, investment grade and international bonds, and holdings in real estate and private equity. In addition to asset allocation, FRS obtains diversification through various management styles including growth and value, market capitalization, and sector exposures. For fiscal 2019, FRS' investable assets experienced a 4.2% gain, net of fees, with three- and five-year averages of 8.2% and 4.2%, respectively. See the MD&A for a more detailed discussion of FRS' investment performance.

Last year FRS' investment portfolio experienced a 6.8% gain. Equity markets in 2019 continued an upward trend from 2018, albeit at a slower pace. Bond markets outperformed in 2019 compared to the previous fiscal year. Financial markets continue to face headwinds due to domestic and global policy uncertainty including risks from trade wars and Eurozone membership, interest rate path uncertainty including negative interest rates in many countries, and a shift in global central bank policy. However, data such as unemployment levels and economic growth continue to support financial market trends. The lower investment performance in 2019 compared to 2018 resulted in FRS' five-year investment return of 4.2 % in fiscal year 2019, down from 5.8% in fiscal year 2018.

Funding

The actuary determines the annual funding requirements needed to meet current and future benefit obligations. Calculations of contributions are based on FRS' normal cost and amortization of the unfunded accrued liability. The actuary's recommended employer rates were accepted by the FRS board of trustees' and approved by the Public Retirement Systems' Actuarial Committee (PRSAC) as follows:

For the fiscal year ended June 30, 2019:

For the fiscal year ended Ju	me 50, 2019.		
		Above Poverty	Below Poverty
	Employee	10.00%	8.00%
	Employer	26.50%	28.50%
For the fiscal year ended Ju	ine 30, 2020:		
		Above Poverty	Below Poverty
	Employee	10.00%	8.00%
	Employer	27.75%	29.75%

The overwhelming majority of plan participants are paid a salary that exceeds the poverty rate; therefore, most employers are paying the above poverty rates for current and future periods.

On a market value of assets basis, as of June 30, 2019, FRS was 73.96% funded compared to 74.76% as of June 30, 2018. FRS' market value of assets increased by \$74.9 million; whereas, the net change in net pension liability increased by \$51.0 million. However, this resulted in a net decrease of 0.8% in the system's funded status. Net assets held in trust to pay pension benefits at June 30, 2019 totaled \$1.8 billion.

Key Developments and Highlights

Our efforts are first and foremost for the benefit of our participating employee and employer members. All FRS departments work together to provide the high-quality service that our participants deserve. Key developments are summarized below.

- FRS' total assets finished the year with a market value that attained the \$1.8 billion mark, up from \$1.7 billion in 2018. This fiscal year 2019 asset value is the highest fiscal year-end value in FRS history.
- The FRS board of trustees enacted a plan to decrease the actuarially assumed rate of return from 7.5% in fiscal year 2017 to 7.0% over the next five years in recognition of lower expected long-term investment returns. The actuarily assumed rate of return was 7.15% in fiscal year 2019. This risk reducing design change lessens the reliance on asset returns to pay benefits and decreases the probability of the System failing to reach its investment target.
- In fiscal year 2019, the FRS board of trustees continued to reduce risk exposures in the investment portfolio by trimming equity exposure from 54% to 49% and increasing fixed income exposure from 26% to 31%.
- At the end of fiscal year 2019, FRS' board of trustees voted to partner with Pension Technology Group (PTG), a pension software vendor, to update its pension program. The implementation of the new software will enable members and employers to access their personal benefit related information and make updates to their individual file via a web portal in real time, on a 24/7 basis. FRS expects this implementation will be more efficient and convenient for all stakeholders in the system. FRS expects the completion of the transition during fiscal year 2021.
- Based upon the board of trustees' request, the legislature enacted HB #40 of the 2018 Regular Session which became effective during 2019. This bill allows current and future retirees to make a one-time election to split their DROP or IBO accounts into a combination of the money market fund return, portfolio return, and/or annuity. This allows our members to be more flexible in their DROP or IBO benefit election to better suit their personal retirement needs.

Acknowledgements and Considerations

The commitment to hard work demonstrated by FRS' staff made the preparation of this report possible. The FRS staff and I would like to thank the board of trustees for its support and dedication.

Steven Stockstill Executive Director

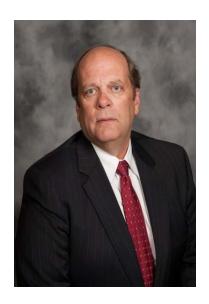
BOARD OF TRUSTEES



Stacy Birdwell Board Chairman Retirees' Representative



Perry Jeselink Vice Chairman PFFA Representative



Mayor David Amrhein LMA Representative



Mayor Ronny Walker LMA Representative



Louis Romero PFFA Representative

BOARD OF TRUSTEES



Honorable John M. Schroder State Treasurer



Honorable Barry Ivey House Retirement Designee



Honorable Barrow Peacock Chairman, Senate Retirement



Jay Dardenne Division of Administration



Chief Jerry Tarleton Fire Chief Representative



December 9, 2019

Independent Auditor's Report

FIREFIGHTERS' RETIREMENT SYSTEM

Baton Rouge, Louisiana

Report on the Financial Statements

We have audited the accompanying financial statements of the Firefighters' Retirement System (System) as of and for the years ended June 30, 2019, and June 30, 2018, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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 *Government 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 System as of June 30, 2019, and June 30, 2018, and the 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 Matters

As disclosed in note 4 to the financial statements, the total pension liability for the System was \$2,405,122,324 and \$2,279,256,967 as of June 30, 2019, and June 30, 2018, respectively. The actuarial valuations were based on various assumptions made by the System's actuary. Because actual experience may differ from the assumptions used in the actuarial valuation, there is a risk that the total pension liability at June 30, 2019, and June 30, 2018, could be understated or overstated. Our opinion is not modified with respect to this matter.

As disclosed in note 5 to the financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include private equities, multi-asset strategies, and investments in real assets. Where a publicly-listed price is not available, the management of the System uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of investments. 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 on pages 11 through 15 and the Schedule of Changes in Net Pension Liability, Schedule of Employers' Net Pension Liability, Schedule of Contributions – Employer and Nonemployer Contributing Entity, Schedule of Investment Returns, and Schedule of Changes in the System's Total OPEB Liability and Related Ratios on pages 56 through 67, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or

historical context. For the years ended June 30, 2019, and June 30, 2018, 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 basic financial statements, and other knowledge we obtained during our audits of the basic 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.

Supplementary and Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The supplementary information, including the Schedule of Administrative Expenses; Schedule of Compensation, Benefits, and Other Payments to Agency Head or Chief Executive Officer; and Schedule of Per Diem Paid to Trustees on pages 69 through 71, and the other information presented in the Introductory Section, including the Letter of Transmittal and Board of Trustees chart, on pages 2 through 6, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Administrative Expenses; Schedule of Compensation, Benefits, and Other Payments to Agency Head or Chief Executive Officer; and Schedule of Per Diem Paid to Trustees are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses; Schedule of Compensation, Benefits, and Other Payments to Agency Head or Chief Executive Officer; and Schedule of Per Diem Paid to Trustees are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

The other information presented in the Introductory Section has not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 9, 2019, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is solely 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 the effectiveness of the System's 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 System's internal control over financial reporting and compliance.

Respectfully submitted,

Daryl G. Purpera, CPA, CFE

Legislative Auditor

EBT:DM:BH:EFS:ch

FRS67-2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following is management's discussion and analysis of the financial performance of Firefighters' Retirement System (System). This narrative provides an overview of the financial activities and funding conditions for the fiscal year ended June 30, 2019. Please review it in conjunction with the financial statements, which begin on page 16.

FINANCIAL HIGHLIGHTS

- The System's net position restricted for pensions was \$1.8 billion for fiscal year 2019, as compared to \$1.7 billion for fiscal year 2018 and \$1.6 billion for fiscal year 2017. This represents an increase of \$74.9 million, or 4.4%, for fiscal year 2019 over fiscal year 2018 and an increase of \$110.9 million, or 6.9%, for fiscal year 2018 over fiscal year 2017.
- The employers' net pension liability for fiscal year 2019 was \$626.2 million, as compared to \$575.2 million for fiscal year 2018, which represents a \$51.0 million increase, or 8.9%, in the pension liability.
- The rate of return on the estimated fair value of the System's investments, net of fees, was 4.2% for fiscal year 2019, as compared to 6.8% for fiscal year 2018.
- The System experienced net investment gains of \$74.1 million in fiscal year 2019, which represents a (29.0%) decrease over fiscal year 2018. The decrease in gains is attributable to lower earnings in the various equity markets than in 2018 despite an increase in bond returns. In 2019, the fixed income returns exceeded the equity returns in the System's portfolio. The System experienced net investment gains of \$104.3 million in fiscal year 2018, which represents a (45.1%) decrease over net investment gains in fiscal year 2017, primarily due to positive but lower returns in international and emerging markets equities.
- Contributions to the System increased by \$1.9 million, or 1.7%, in fiscal year 2019 over fiscal year 2018 due primarily to an increase of 22 new members and pay increases for active members in 2019. The contribution rates for 2019 did not change from the 2018 rates. Contributions to the System increased by \$5.8 million, or 5.3%, in fiscal year 2018 over fiscal year 2017 due primarily to a 1.25% increase in the 25.25% employer contribution rate used in fiscal year 2017 to 26.50% in fiscal year 2018.
- Benefit and disability payments experienced a net increase of \$7.1 million, or 6.8%, in fiscal year 2019 over fiscal year 2018. Benefit payments for 80 additional retirees resulted in an increase of \$4.5 million and Deferred Retirement Option Plan (DROP) withdrawals increase of \$2.6 million. Benefit and disability payments increased by \$1.5 million, or 1.5%, in fiscal year 2018 over fiscal year 2017. In fiscal year 2018, benefit payments for 38 additional retirees resulted in an increase of \$3.4 million, which was partially offset by decreased DROP withdrawals in the amount of \$1.9 million.

OVERVIEW OF THE FINANCIAL STATEMENTS

The discussion and analysis is intended to serve as an introduction to the System's basic financial statements, which are comprised of three components:

- Statements of Fiduciary Net Position
- Statements of Changes in Fiduciary Net Position
- Notes to the Financial Statements

The report also contains required supplemental information in addition to the basic financial statements.

The Statements of Fiduciary Net Position report the pension fund's assets, liabilities, and resulting net position restricted for pension benefits. They disclose the financial position of the System as of June 30, 2019, and 2018.

The Statements of Changes in Fiduciary Net Position report the results of the pension fund operations during the year, disclosing the additions to and deductions from the fiduciary net position.

The notes to the financial statements provide additional information and insight that is essential to gaining a full understanding of the data provided in the statements.

FINANCIAL ANALYSIS

Comparative Statements of Fiduciary Net Position

	Fiscal Year	Fiscal Year	Fiscal Year
	2019	2018	2017
Assets:			
Cash	\$10,478,895	\$9,195,745	\$9,938,516
Receivables	19,854,807	15,818,253	18,459,592
Investments	1,750,811,924	1,683,236,931	1,567,430,098
Other assets	665,177	670,622	684,491
Total assets	1,781,810,803	1,708,921,551	1,596,512,697
Liabilities:			
Total liabilities	2,788,853	4,831,303	2,816,049
Deferred inflows of resources - OPEB:			
Total deferred inflows of resources	90,636	41,080	-
Net Position Restricted for Pensions	\$1,778,931,314	\$1,704,049,168	\$1,593,696,648

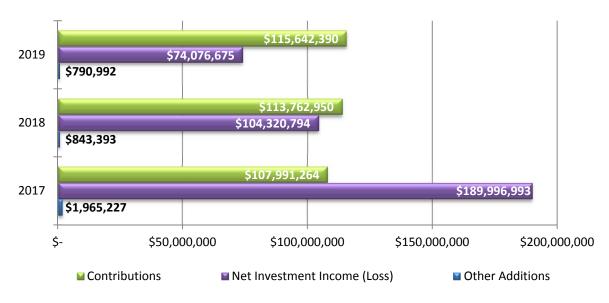
Comparative	Statements	of Changes i	n Fiduciary	Net Position

	Fiscal Year	Fiscal Year	Fiscal Year
Additions:	2019	2018	2017
Contributions	\$115,642,390	\$113,762,950	\$107,991,264
Net Investment Income	74,076,675	104,320,794	189,996,993
Other Additions	790,992	843,393	1,965,227
Total Additions	190,510,057	218,927,137	299,953,484
Deductions:			
Total Deductions	115,627,911	108,011,412	106,149,048
Change in Fiduciary Net Position	\$74,882,146	\$110,915,725	\$193,804,436
Net position restricted for pensions			
- beginning of year	\$1,704,049,168	\$1,593,696,648	\$1,399,892,212
Cumulative effect of change in			
accounting principle ¹	_	(563,205)	_
accounting principle		(303,203)	
Net position restricted for pensions			
- end of year	\$1,778,931,314	\$1,704,049,168	\$1,593,696,648

¹ **Change in accounting principle**: The System adopted the provisions of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, during the fiscal year ending June 30, 2018.

Changes in the System's fiduciary net position include member and employer contributions, an allocation from the insurance premium assessment, net investment income (loss), deductions for payment of retiree benefits, refunds of contributions, and administrative expenses. The System experienced a gain of \$74.9 million for fiscal year 2019, a gain of \$110.9 million for fiscal year 2018, and a gain of \$193.8 million for fiscal year 2017.

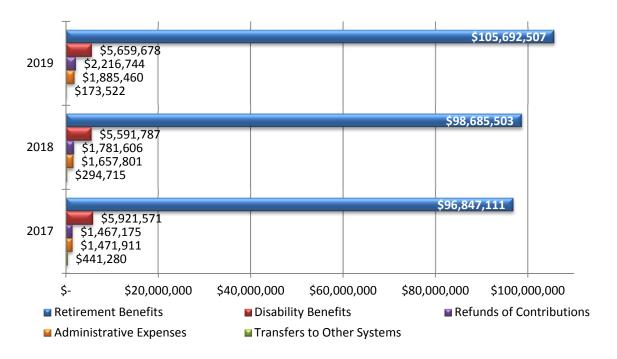
ADDITIONS TO FIDUCIARY NET POSITION



For the fiscal year 2019, total additions decreased \$28.4 million, or (13.0%), from fiscal year 2018. The change in total additions is comprised of a net investment income decrease of \$30.2 million in fiscal year 2019, primarily due to decreased earnings from equity markets.

For the fiscal year 2018, total additions decreased \$81.0 million, or (27.0%), from fiscal year 2017. The change in total additions is comprised of a net investment income decrease of \$85.7 million in fiscal year 2018, primarily due to decreased earnings from international and emerging markets compared to 2017, and a decrease of \$1.1 million in other additions due to fewer transfers in from other systems. These decreases were partially offset by a \$5.8 million increase in the amount of contributions received as a result of a 1.25% increase from the prior year's employer contribution rate.

DEDUCTIONS FROM FIDUCIARY NET POSITION



For the fiscal year 2019, total deductions from fiduciary net position increased by \$7.6 million, or 7.1%. This increase was primarily due to increased benefits of \$4.5 million for 80 additional retirees, an increase of \$2.6 million for increased Deferred Retirement Option Plan (DROP) payments, and a \$.5 million increase in refunds, transfers to other systems, and administrative expenses.

For the fiscal year 2018, total deductions from fiduciary net position increased by \$1.9 million, or 1.8%. This increase was primarily due to increased benefits of \$3.4 million for 38 additional retirees, and an increase of \$.4 million for non-benefits deductions, and decreased DROP withdrawals totaling (\$1.9) million.

INVESTMENTS

The System is responsible for the prudent management of funds held in trust for the exclusive benefit of its members. The primary long-term objectives of the System are to achieve a return equal to or greater than the actuarial return assumption and to maintain asset growth above the rate of inflation. Preservation of capital, capital appreciation, and funding ratio stability are important to the System. The long-term investment horizon of the System enables it to tolerate short-term fluctuations in value. Because investment income is vital to the System's current and continued financial stability, trustees have a fiduciary responsibility to act with the care, skill, prudence, and diligence under the circumstances prevailing that a prudent institutional investor acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims when making investment decisions.

The following table summarizes the approximate investment return by asset class:

Investment Returns Summary

	For the f	For the fiscal year ending June 30,		
	2019	2018	2017	
<u>Equities</u>				
Domestic - Large Cap	10.4%	14.4%	17.9%	
Domestic - SMID Cap	-2.1%	11.7%	13.3%	
Emerging Market Equity	-0.5%	6.6%	25.9%	
International Equity	0.9%	4.3%	26.7%	
Global Equity	-2.8%	5.4%	23.8%	
Fixed Income				
Core	8.0%	3.3%	1.2%	
US TIPS	5.8%			
Emerging Markets Debt	6.9%	-4.5%	6.4%	
<u>Alternatives</u>				
Multi Asset Strategies	5.1%	7.1%	7.8%	
Private Equity	4.9%	11.2%	8.0%	
Real Estate	4.3%	4.1%	9.8%	
Total	4.2%	6.8%	13.9%	

CONTACTING THE PLAN'S FINANCIAL MANAGEMENT

This financial report is designed to provide citizens, taxpayers, and System members with an overview of the System's finances and the prudent exercise of the Board's oversight. If you have any questions regarding this report or need financial information, please either visit our website at www.ffret.com or contact the System Controller Layne McKinney, at 3100 Brentwood Drive, Baton Rouge, Louisiana 70809.

FIREFIGHTERS' RETIREMENT SYSTEM

Statements of Fiduciary Net Position June 30, 2019, and 2018

	2019	2018
ASSETS:		
Cash - operating	\$10,478,895	\$9,195,745
Receivables:		
Member contributions	2,158,455	2,081,716
Employer contributions	5,721,035	5,517,918
Accrued interest and dividends	8,902,096	4,255,864
Investment receivable	592,368	1,355,670
Notes receivable - merged municipalities	1,672,230	1,786,355
Notes receivable - fire district	808,623	820,730
Total receivables	19,854,807	15,818,253
Investments at fair value:		
Cash equivalents	45,086,310	66,015,292
Equities - domestic	200,802,956	227,901,662
Equities - foreign	249,284,776	290,804,405
Equity security funds	383,197,615	416,092,940
Corporate bonds - domestic	49,930,347	42,604,398
U.S. government treasury bonds	2,462,284	-
U.S. government agency bonds	35,394,702	23,308,812
Fixed income funds	429,287,457	280,900,636
Multi-asset strategies	168,013,876	159,322,814
Private equity	66,160,569	56,647,480
Real estate	121,217,001	119,239,051
Derivatives	(25,969)	399,441
Total investments at fair value	1,750,811,924	1,683,236,931
Other assets:		
Capital assets, net of depreciation	642,415	647,997
Prepaid expenses and other	22,762	22,625
Total other assets	665,177	670,622
Total assets	1,781,810,803	1,708,921,551
LIABILITIES:		
Accounts payable	1,266,641	1,797,974
Investment payable	955,257	2,455,906
Total OPEB liability	566,955	577,423
Total liabilities	2,788,853	4,831,303
DEFERRED INFLOWS OF RESOURCES:		
Deferred inflows of resources related to OPEB	90,636	41,080
Total deferred inflows of resources	90,636	41,080
NET POSITION RESTRICTED FOR PENSIONS	\$1,778,931,314	\$1,704,049,168

The accompanying notes are an integral part of these statements.

FIREFIGHTERS' RETIREMENT SYSTEM

Statements of Changes in Fiduciary Net Position For the Fiscal Years Ended June 30, 2019, and 2018

	2019	2018
ADDITIONS:		
Contributions:		
Member contributions	\$24,320,124	\$23,995,052
Employer contributions	64,514,635	63,813,909
State appropriations from insurance premium assessments	26,807,631	25,953,989
Total contributions	115,642,390	113,762,950
Investment income:		
Net appreciation in fair value of investments	55,066,870	81,122,151
Interest and dividends	23,621,829	22,820,478
Legal settlements	5,381,951	10,220,647
Less: investment expenses	(9,993,975)	(9,842,482)
Net investment income	74,076,675	104,320,794
Other additions:		
Interest on notes receivable	183,058	187,151
Non-recurring income	380,811	51,917
Transfers from other systems –		
employer, employee, and interest	227,123	604,325
Total other additions	790,992	843,393
Total additions	190,510,057	218,927,137
DEDUCTIONS:		
Retirement benefits paid	105,692,507	98,685,503
Disability benefits paid	5,659,678	5,591,787
Refunds of contributions	2,216,744	1,781,606
Administrative expenses	1,885,460	1,657,801
Transfers to other systems –		
employer, employee, and interest	173,522	294,715
Total deductions	115,627,911	108,011,412
NET INCREASE	74,882,146	110,915,725
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year before restatement	1,704,049,168	1,593,696,648
Cumulative effect of change in accounting principle (GASB 75, note 11)	-	(563,205)
Beginning of year after restatement	-	1,593,133,443
End of year	\$1,778,931,314	\$1,704,049,168
•		

The accompanying notes are an integral part of these statements.

NOTES TO THE FINANCIAL STATEMENTS

INTRODUCTION

The Firefighters' Retirement System (FRS, or System) was created January 1, 1980, under the provisions of Louisiana Revised Statutes (R.S.) 11:2251 – 11:2272 and is a tax qualified plan as determined by the Internal Revenue Service [IRS Code Section 401(a)]. The System is a costsharing, multiple-employer governmental defined benefit pension plan. Members in the System consist of full-time firefighters, eligible employees of the retirement system, or any person in a position as defined in the municipal fire and police civil service system that earns at least \$375 per month, excluding supplemental pay, and is employed by a fire department of any municipality, parish, or fire district of the state of Louisiana, except for Orleans Parish and the City of Baton Rouge. The System is governed by a 10-member Board of Trustees (the Board). The Board is responsible for administering the assets of the System and for making policy decisions regarding investments. Two of the Trustees are elected by the officers of the Professional Firefighters Association, one Trustee is elected by the fire chiefs, and one Trustee is a retired firefighter. Two of the Trustees are mayors appointed by the Louisiana Municipal Association. The remaining membership of the Board consists of one member from the State Treasurer's office, one member from the Division of Administration, the chairman of the Senate Retirement Committee, and one member of the House Retirement Committee.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. BASIS OF PRESENTATION

The financial statements of the System are prepared in accordance with the standards established by the Governmental Accounting Standards Board (GASB).

In addition, these financial statements include the provisions of GASB Statement No. 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments and GASB Statement No. 67, Financial Reporting for Pension Plans – An Amendment of GASB Statement No. 25, and related standards. These standards provide for the inclusion of a management discussion and analysis section and for supplementary information.

B. REPORTING ENTITY

Under GASB Statement No. 39, *Determining Whether Certain Organizations Are Component Units* (an amendment of GASB 14, *The Financial Reporting Entity*), as amended, the definition of the reporting entity is based primarily on the concept of financial accountability. In determining its component unit status, the System administrators considered the following:

- The System exists for the benefit of current and former employees who are members of the System;
- Four of the 10 Board members are elected by the members who participate in the System;
- The System is funded by the investment of contributions from the members and member employers who are obligated to make the contributions to the System based upon actuarial valuations. The System receives additional funding from insurance premium assessment collections from the state of Louisiana based upon actuarial valuations in accordance with R.S. 22:1476(A)(3).

The System is not a component unit of the state of Louisiana, but the System has one blended component unit as defined under GASB 39. The System wholly owns FRS-LB, L.L.C., a limited liability company formed for the purpose of investing in direct real estate. At June 30, 2019, and 2018, FRS-LB, L.L.C.'s investments, totaling \$20,059,698, and \$20,132,911, respectively, included three properties, two of which are owned 100% by FRS-LB, L.L.C., and the third in which FRS-LB, L.L.C. owns 40.91%. The accompanying financial statements reflect the activity of the System and its component unit.

C. BASIS OF ACCOUNTING

The financial statements are prepared in conformity with standards established by GASB, using the accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred.

- Contributions are recognized in the period in which the employee is compensated for services.
- Benefits and refunds are recognized when due and payable.
- Investment purchases and sales are recorded as of their trade date.
- Dividends are recorded on the dividend date.
- State appropriations from insurance premium assessments are recorded when received.

D. CASH AND INVESTMENTS

Cash

Cash represents amounts on deposit with the custodian fiscal agent banks. Under R.S. 11:2261, the System may deposit funds within a fiscal agent bank organized under the laws of the state of Louisiana or of the United States, provided that the bank is a fiscal agent of the state and approved by the Board of Trustees.

Investments

The System's permissible investments are set forth in R.S. 11:262-263 and are further limited in accordance with investment guidelines promulgated by the Board of Trustees.

The System's investments are reported at fair value in accordance with GASB Statement No. 72, Fair Value Measurement and Application, which requires investments to be valued at fair value, described as an exit price, using valuation techniques that are appropriate under the circumstances and for which sufficient data is available. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. This statement established a hierarchy of inputs to valuation techniques used to measure fair value, which includes three levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date. Level 2 inputs are inputs – other than quoted prices – included within Level 1 that are observable for the asset or liability, whether directly or indirectly. Finally, Level 3 inputs are unobservable inputs, such as management's assumption of the default rate among underlying mortgages of a mortgage-backed security. This statement requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. These disclosures are organized by type of asset or liability. GASB 72 also requires additional disclosures regarding investments in certain entities that calculate net asset value per share (or its equivalent). These disclosures are located in Note 5.

Short-term investments (cash equivalents) are reported at market value when published prices are available, or cost which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. All derivative financial instruments are reported at fair value in the Statements of Fiduciary Net Position with valuation changes recognized in income. Gains and losses are reported in the Statements of Changes in Fiduciary Net Position as net appreciation (depreciation) in fair value of investments during the period the instruments are held, and when the instruments are sold or expire. The value of investments that have no readily available market or are not traded on an exchange may not have a readily ascertainable fair value (such as private equity and real estate). The fair values of these investments have been determined using the net asset value (NAV) per share of the System's ownership interest in partners' capital at the closest available reporting period, adjusted for subsequent contributions, distributions, and management fees. Because of inherent uncertainties in estimating fair value, it is at least reasonably possible that the estimates will change in the near term.

E. CAPITAL ASSETS

Capital assets include property and equipment stated at historical cost less an allowance for depreciation. Depreciation is computed by the straight-line method over the estimated useful lives of 40 years for buildings and three to 15 years for equipment and furniture. Expenses for major renewals and betterments that extend the useful lives of

property and equipment are capitalized. Expenses for maintenance and repairs are charged to expense as incurred.

F. COMPENSATED ABSENCES

The employees of the System accumulate unlimited amounts of annual and sick leave at varying rates as established by Board policy. Upon resignation or retirement, unused annual leave of up to 300 hours can be paid to an employee at the employee's rate of pay at the time of separation. The liability for accrued annual leave up to 300 hours is included in accounts payable. Additionally, pursuant to R.S 11:2254.1, employees who retire from the System administrative office are allowed to convert any unused accrued leave to service credit.

G. USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues, expenses, and disclosures at the date of the financial statements. Actual results could differ significantly from those estimates.

2. PLAN DESCRIPTION

The following brief description of the System membership and benefits is provided for general information purposes only. Participants should refer to the appropriate statutes for more information.

A. PLAN MEMBERSHIP

Membership data at June 30, 2019, and 2018, is as follows:

	2019	2018		
Participating Employers:				
Cities	67	67		
Parishes	18	18		
Special districts	58	58		
Total Participating Employers	143	143		
Participants:				
Inactive plan members or beneficiaries				
currently receiving benefits	2,407	2,327		
Inactive plan members entitled to but				
not yet receiving benefits	755	732		
Active plan members & DROP Participants	4,654	4,616		
Total Participants	7,816	7,675		

B. PLAN BENEFITS

Employees with 20 or more years of service who have attained age 50, or employees who have 12 years of service who have attained age 55, or 25 years of service at any age are entitled to annual pension benefits equal to 3.333% of their average final compensation based on the 36 consecutive months of highest pay multiplied by their total years of service, not to exceed 100%. Employees may elect to receive their pension benefits in the form of a joint and survivor annuity.

If members terminate before rendering 12 years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to their employer's contributions.

Benefits are payable over the retirees' lives in the form of a monthly annuity. A member may elect an unreduced benefit or any of seven options at retirement. The options are as follows:

- 1. At death, their beneficiary will receive a lump-sum payment based on the present value of the member's annuity account balance.
- 2. At death, their beneficiary will receive a life annuity equal to the member's reduced retirement balance. The named beneficiary may not be changed after the retirement (or DROP) effective date with the exception that any retiree may remove a former spouse as a beneficiary of any benefits paid or payable to the former spouse from this system, provided the former spouse consents to such removal and the consent is evidenced by a certified court order issued in connection with a divorce proceeding relative to the retiree and former spouse.

- 3. At death, their beneficiary will receive a life annuity equal to ½ of the member's reduced retirement balance. The named beneficiary may not be changed after the retirement (or DROP) effective date with the exception that any retiree may remove a former spouse as a beneficiary of any benefits paid or payable to the former spouse from this system, provided the former spouse consents to such removal and the consent is evidenced by a certified court order issued in connection with a divorce proceeding relative to the retiree and former spouse.
- 4. Any other benefit certified by the actuary and approved by the Board of Trustees that will be equivalent in value to the member's retirement allowance. This option limits the beneficiary to a spouse and/or minor children or handicapped children.
- 5. The member can select a reduced option 2 benefit. However, if the beneficiary predeceases the retiree, the benefit will convert to the maximum. This option limits the beneficiary to a spouse and/or minor children or handicapped children.
- 6. The member can select a reduced option 3 benefit. However, if the beneficiary predeceases the retiree, the benefit will convert to the maximum. This option limits the beneficiary to a spouse and/or minor children or handicapped children.
- 7. The member can select to receive a guaranteed 2.5% COLA (cost of living adjustment) every year beginning when the member reaches age 55. In exchange for this COLA, the member takes an actuarially-reduced benefit upon retirement.

C. DEATH BENEFITS

If an active member dies and is not eligible for retirement, his survivors shall be paid:

- 1. If the member is not eligible to retire and dies in the line of duty, their spouse will receive, monthly, an annual benefit equal to 66.667% of the member's average final compensation. If death is not in the line of duty, the spouse will receive, monthly, an annual benefit equal to 3.0% of the member's average final compensation multiplied by his total years of service; however, the benefit shall not be less than 40.0%, or more than 60.0% of the member's average final compensation.
- 2. Unmarried children of deceased members will receive the greater of \$200 or 10.0% of the member's final average compensation per month until reaching the age of 18 or until the age of 22 if enrolled full-time in an institution of higher education. Any unmarried surviving child of a deceased member that has a total physical disability or an intellectual

- disability, regardless of age, shall receive the benefits as long as they are dependent on the surviving spouse or other legal guardian.
- 3. If a member, who is eligible to retire, dies before retiring, the designated beneficiary shall be paid under option 2, survivor benefit equal to member's benefit.

D. DISABILITY BENEFITS

If an eligible member is officially certified as disabled by the State Medical Disability Board, he shall receive the greater retirement, if eligible for disability, as follows:

- 1. Any member totally disabled from injury received in the line of duty shall be paid, on a monthly basis, an annual pension of 60.0% of the average final compensation being received at the time of the disability.
- 2. Any member of the System who has become disabled or incapacitated because of continued illness or as a result of any injury received, even though not in the line of duty, and who has five years of creditable service but is not eligible for retirement under the provisions of R.S. 11:2256 may apply for retirement under the provisions of R.S. 11:2258 and shall be retired on 75.0% of the retirement salary to which he would be entitled under R.S. 11:2256 if he were otherwise eligible thereunder or 25.0% of the member's average salary, whichever is greater.
- 3. Any retired member or DROP plan participant who becomes disabled for any reason provided for by law shall be permitted to apply for conversion of a service retirement to a service connected disability retirement under R.S. 11:2258(B)(1)(e).
- 4. Should a member who is on disability retirement die and leave a surviving spouse, the surviving spouse shall receive a benefit of \$200 per month. When the member takes disability retirement, he may, in addition, take an actuarially reduced benefit in which case the member's surviving spouse shall receive 50.0% of the disability benefit being paid immediately prior to the death of the disabled retiree.

E. DEFERRED RETIREMENT OPTION PLAN

After completing 20 years of creditable service and attaining the age of 50 years, or 25 years at any age, a member may elect to participate in the deferred retirement option plan (DROP) for up to 36 months.

Upon commencement of participation in the DROP, employer and employee contributions to the System cease. The monthly retirement benefit that would have been payable is paid into a member's DROP account. Upon termination of employment, a

participant in the program has several options to receive their DROP benefit. A member may (1) elect to roll over all or a portion of their DROP balance into another eligible qualified plan, (2) receive a lump-sum payment from the account, (3) receive single withdrawals at the discretion of the member, (4) receive monthly or annual withdrawals, or (5) receive an annuity based on the DROP account balance. These withdrawals are in addition to their regular monthly benefit.

If employment is not terminated at the end of the 36 months, the participant resumes regular contributions to the System. No withdrawals may be made from the DROP account until the participant retires.

F. INITIAL BENEFIT OPTION

Effective June 16, 1999, members eligible to retire and who do not choose to participate in DROP may elect to receive, at the time of retirement, an initial benefit option (IBO) in an amount up to 36 months of benefits, with an actuarial reduction of their future benefits. Such amounts may be withdrawn or remain in the IBO account earning interest at the same rate as a DROP account.

3. CONTRIBUTIONS AND RESERVES

A. CONTRIBUTIONS

The contribution rate for any member whose earnable compensation is less than or equal to the most recently issued poverty guidelines issued by the United States Department of Health and Human Services according to the size of the member's family unit shall be 8.0%. For all members whose earnable compensation is more than the most recently issued poverty guidelines, the contribution rates are established by R.S. 11:62 at a rate between 8.0% and 10.0%. The statute contains a table of combined employer plus member contribution rates that start at 25.0% and increment by .75% up to a rate of 30.26% or above. This table reflects the member contribution rate associated with each level of combined employer plus member rates. The member contribution rate in the table starts at 8.0% and is incremented by .25% up to 10.0%. For the fiscal years ended June 30, 2019, and 2018, the member's rate for earnable compensation above the poverty line was 10.0%. The contributions are deducted from the member's salary and remitted by the participating employer to the System.

According to state statute, employer contributions are actuarially-determined each year. For the years ended June 30, 2019, and 2018, employer contributions were 26.50% of covered payroll above the poverty line and 28.50% of covered payroll below the poverty line.

Contributions reported on the Statement of Changes in Fiduciary Net Position consist of regular contributions, as described above, and irregular contributions. Irregular contributions consist of prior-year collections, interest on delinquent contributions, and

payments for the conversion of unused leave (as prescribed by R.S. 11:2254.1). The breakdown of contributions is detailed in the table below.

	2019			2018		
	Member	Employer		Member	Employer	
Regular	\$24,230,606	\$64,205,763	_	\$23,860,402	\$63,243,874	
Irregular	89,518	308,872		134,650	570,035	
Total	\$24,320,124	\$64,514,635		\$23,995,052	\$63,813,909	

According to state statute, the System receives insurance premium assessments from the State of Louisiana. This additional source of income is used to offset the cost of past mergers and is reported as a non-employer contribution. The total received from the State of Louisiana was \$26,807,631 and \$25,953,989 for the fiscal years ended June 30, 2019, and 2018, respectively. A portion of these contributions is used to finance administrative costs of the System.

B. RESERVES

Use of the term "reserve" by the System indicates that a portion of the net assets (net position) is legally restricted for specific future use. The nature and purpose of these reserves are explained below:

1. Expense Fund

The Expense Fund reserves provide for general and administrative expenses of the System and those expenses not funded through other specific legislative appropriations. Funding consists of transfers from the Pension Accumulation Fund reserve and is made as needed.

2. Annuity Savings Fund

The Annuity Savings Fund reserves consist of contributions made by members of the System. When a member terminates his service or upon his death before qualifying for a benefit, the refund of his contributions is made from this reserve. If a member dies and there is a survivor who is eligible for a benefit, the amount of the member's accumulated contributions is transferred from the Annuity Savings Fund to the Annuity Reserve Fund to provide part of the benefits. When a member retires, the amount of his accumulated contribution is transferred to the Annuity Reserve Fund to provide part of his benefits. The Annuity Savings Fund balance as of June 30, 2019, and 2018, was \$213,085,321 and \$205,567,564, respectively.

3. Pension Accumulation Fund

The Pension Accumulation Fund reserves consist of contributions paid by employers, insurance premium assessments, income earned on investments, and

any other income not covered by other accounts. This reserve account is charged annually with an amount, determined by the actuary, to be transferred to the Annuity Reserve Fund to fund retirement benefits for existing recipients. It is also charged when expenses are not covered by other accounts. The Pension Accumulation Fund balance as of June 30, 2019, and 2018, was \$393,369,619 and \$398,886,897, respectively.

4. Annuity Reserve Fund

The Annuity Reserve Fund consists of the reserves for all pensions, excluding COLAs, granted to retired members and is the reserve account from which such pensions and annuities are paid. Survivors of deceased members or retirees also receive benefits from this reserve account. The Annuity Reserve Fund balance as of June 30, 2019, and 2018, was \$1,041,418,785 and \$969,632,733, respectively.

5. Deferred Retirement Option Plan Fund

The DROP Fund consists of the reserves for all members who, upon retirement eligibility, elect to deposit into this account an amount equal to the member's monthly benefit if he had retired. A member can only participate in the program for up to 36 months, and upon termination of employment may receive this benefit in a number of ways as fully described in Note 2, *Plan Description – Deferred Retirement Option Plan*. Such amounts may be withdrawn or remain in the DROP account earning interest at either the money market rate of return or the portfolio rate of return based upon the irrevocable election made by the member at the end of their DROP period. The DROP Fund balance as of June 30, 2019, and 2018, was \$127,832,117 and \$126,581,561, respectively.

6. Initial Benefit Option Plan Account

The Initial Benefit Option Plan (IBO) Account consists of the reserves for all members who, upon retirement eligibility elect to deposit into this account an amount up to 36 months of benefits, with an actuarial reduction of their future benefits. Such amounts may be withdrawn or remain in the IBO account earning interest at either the money market rate of return or the portfolio rate of return based upon the irrevocable election made by the member at the date of retirement. The IBO account balance as of June 30, 2019, and 2018, was \$3,225,472 and \$3,380,413, respectively.

7. Funding Deposit Account

If the contribution rate is set above the minimum recommended rate pursuant to R.S. 11:107, the surplus contributions collected, if any, are credited to the Funding Deposit Account defined in R.S. 11:107.1. For any fiscal year ending on or after December 31 of the year immediately preceding the date the account is established, in which the Board of Trustees elects or previously elected to set the

net direct employer contribution rate higher than the minimum recommended rate, all surplus funds collected by the system are credited to the System's funding deposit account. The funds in the account earn interest annually at the Boardapproved actuarial valuation interest rate, and such interest is credited to the account at least once a year. The Board of Trustees may in any fiscal year direct that funds from the account be charged for the following purposes: (1) to reduce the unfunded accrued liability; (2) to reduce the present value of future normal costs for systems using an aggregate funding method; and (3) to pay all or a portion of any future net direct employer contributions. In no event shall the funds charged from the account exceed the outstanding account balance. If the Board of Trustees of the System elects to utilize funds from the funding deposit account to pay all or a portion of any future net direct employer contributions, the percent reduction in the minimum recommended employer contribution rate otherwise applicable is determined by dividing the interest-adjusted value of the charges from the funding deposit account by the projected payroll for the fiscal year for which the contribution rate is to be reduced. For funding purposes, any asset value utilized in the calculation of the actuarial value of assets of a system excludes the funding deposit account balance as of the asset determination date for such calculation. For all purposes other than funding, the funds in the account are considered assets of the system. The Funding Deposit Account balance as of June 30, 2019, and 2018, was \$0 and \$0, respectively.

4. NET PENSION LIABILITY OF EMPLOYERS

The components of the net pension liability of the System's employers determined in accordance with GASB No. 67 as of June 30, 2019, and June 30, 2018, are as follows:

	2019	2018
Total pension liability	\$2,405,122,324	\$2,279,256,967
Less: Plan fiduciary net position	(1,778,931,314)	(1,704,049,168)
Employers' net pension liability	\$626,191,010	\$575,207,799
Plan fiduciary net position as a %		
of the total pension liability	73.96%	74.76%

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Actuarially-determined amounts regarding the net pension liability are subject to continual revision as actual results are compared to past expectations, and new estimates are made about the future.

The required Schedule of Employers' Net Pension Liability on page 58 presents multi-year trend information regarding whether the plan fiduciary net position is increasing or decreasing over time relative to the total pension liability. The total pension liability as of June 30, 2019, and 2018, is based on actuarial valuations for the same periods, updated using generally accepted actuarial procedures.

In February of 2017, the Board of Trustees adopted a recommendation to reduce the long-term rate of return assumption. The recommendation was formed after an analysis of the System's portfolio along with expected long-term rates of return, standard deviations of return, and correlations between asset classes collected from a number of investment consulting firms in addition to the System's investment consultants, New England Pension Consultants. Based on this analysis and after discussions with the Board, a plan was approved to reduce the 7.50% valuation interest rate in effect for the fiscal year 2016 actuarial valuation to 7.00% over the coming five actuarial valuations with reductions of 0.10% each year.

The fiscal 2019 actuarial valuation was scheduled to be run at a 7.20% valuation interest rate. However, prior to the completion of this valuation, a review of the valuation interest rate for Fiscal 2019 was performed based upon an update to the G. S. Curran & Company Consultant Average Capital Market Assumptions for 2019 and an update to the actuary's reasonable range for the assumed rate of return. To determine the reasonable range, the actuary computed an expected long-term portfolio return and standard deviation based upon the system's target asset allocation and a thirty-year time horizon. Based upon the results of this study, ten thousand stochastic trials were run to determine a reasonable range around the plan's expected long-term portfolio rate of return. The review found that the scheduled rate of 7.20% was no longer inside the reasonable range. Therefore, the assumed rate of return for the Fiscal 2019 valuation was further reduced to 7.15%, which was found to lie within the actuary's reasonable range.

The system's reductions in the valuation interest rate have been in part based upon a reduction in the expected long-term inflation rate. Therefore, the assumed long-term inflation rate has also been reduced over the same period. For 2019, an assumed rate of inflation of 2.50% was implicit in the assumed rate of return. After reviewing the cumulative reductions in the valuation interest rate over the past three years (i.e., 0.35%) and considering the recommendation that the Fiscal 2019 actuarial valuation be run at a valuation interest rate lower than the Board's original reduction schedule, a decision was made to perform an interim review of the plan's salary scale assumption. Based upon this review, it was determined that it would be appropriate to reduce the plan's salary scale by 0.25% at each duration until a complete review is performed in the system's next experience study scheduled for the upcoming fiscal year. The remaining actuarial assumptions utilized for this report are based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014, unless otherwise specified in this report. Additional details are given in the actuary's complete Experience Report for fiscal years 2010 through 2014. Additional information on the actuarial methods and assumptions used in determining the total pension liability as of June 30, 2019, and 2018, are as follows:

Valuation Date	June 30, 2019	June 30, 2018
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Investment Rate of	7.15% per annum, net of investment	7.30% per annum, net of investment
Return (Discount Rate)	expenses, including inflation	expenses, including inflation
Inflation Rate	2.500% per annum	2.700% per annum
Mortality Rate	Mortality assumptions were set after reviewing an experience study performed on plan data for the period July 1, 2009 through June 30, 2014. The pre- and post-mortality life expectancies of participants based on the RP-2000 Combined Healthy with Blue Collar Adjustment Sex Distinct Tables projected to 2031 using Scale AA were selected for employee, annuitant, and beneficiary mortality. The RP-2000 Disabled Lives Mortality Table set back 5 years for males and set back 3 years for	Mortality assumptions were set after reviewing an experience study performed on plan data for the period July 1, 2009 through June 30, 2014. The pre- and post-mortality life expectancies of participants based on the RP-2000 Combined Healthy with Blue Collar Adjustment Sex Distinct Tables projected to 2031 using Scale AA were selected for employee, annuitant, and beneficiary mortality. The RP-2000 Disabled Lives Mortality Table set back 5 years for males and set back 3 years for
	females was selected for disabled annuitants.	females was selected for disabled annuitants.
Expected Remaining		
Service Lives	7 years, over a closed period	7 years, over a closed period
Cost of Living Adjustments (COLAs)	For the purpose of determining the present value of benefits, COLAs were deemed not to be substantively automatic and only those COLAs previously granted were included.	For the purpose of determining the present value of benefits, COLAs were deemed not to be substantively automatic and only those COLAs previously granted were included.
Salary Increases	Vary from 14.75% in the first two years of service to 4.50% with 25 or more years of service; includes inflation and merit increases	Vary from 15.00% in the first two years of service to 4.75% with 25 or more years of service; includes inflation and merit increases

The estimated long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation, 2.75%. The resulting long-term expected arithmetic nominal rates of return were 7.94% and 8.09% as of June 30, 2019, and June 30, 2018, respectively.

Best estimates of arithmetic real rates of return for each major asset class included in the System's target asset allocation as of June 30, 2019, and 2018, are summarized in the following table:

		Long-Term Expected Real Rate of Return	Long-Term Expected Real Rate of Return
	Asset Type	2019	2018
	U.S. Equity	5.98%	6.14%
Equity	Non-U.S. Equity	7.52%	7.46%
	Global Equity	6.59%	6.74%
Fixed Income	Fixed Income	2.17%	1.76%
Alternatives	Real Estate	4.14%	4.38%
Alternatives	Private Equity	10.52%	8.73%
Multi-Asset	Global Tactical Asset Allocation	4.37%	4.31%
Strategies	Risk Parity	4.67%	4.89%

The discount rate used to measure the total pension liability was 7.15% at June 30, 2019, and 7.30% at June 30, 2018. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates, and that contributions from participating employers and nonemployer contributing entities will be made at the actuarially-determined rates approved by the Board of Trustees and by the Public Retirement Systems Actuarial Committee, taking into consideration the recommendation of the System's actuary. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

In accordance with GASB 67, regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following presents the net pension liability of the participating employers calculated using the current discount rate for June 30, 2019, and June 30, 2018, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate.

	June 30, 2019				
	Changes in Discount Rate				
	Current				
	1.0% Decrease Discount Rate 1.0% Increase				
	6.150% 7.150% 8.150%				
Net Pension Liability	\$906,766,948	\$626,191,010	\$390,696,924		

	June 30, 2018				
	Changes in Discount Rate				
	Current				
	1.0% Decrease	Discount Rate	1.0% Increase		
	6.300% 7.300% 8.300%				
Net Pension Liability	\$839,364,163 \$575,207,799 \$353,225,538				

5. CASH AND INVESTMENTS

A. CASH

At June 30, 2019, and June 30, 2018, the System's operating cash deposits were entirely covered by federal depository insurance and by pledged securities. The pledged securities were held at the Bank of New York Mellon in joint custody.

B. CASH EQUIVALENTS

The System's short-term funds may be invested in cash equivalent securities defined as short-term highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Eligible investments include Treasury bills, commercial paper, money market funds, stable NAV investment pools, and custodial bank short-term investment funds.

At June 30, 2019, and June 30, 2018, the System held cash equivalents with a fair value of \$45,086,310 and \$66,015,292, respectively, of which \$4,574,500 and \$4,470,256 respectively, were rated AAAm and \$40,511,810 and \$61,545,036, respectively, were unrated.

The System invested \$4,574,500 and \$4,470,256 as of June 30, 2019, and June 30, 2018, in the Louisiana Asset Management Pool (LAMP), Inc., a local government investment pool. LAMP is administered by LAMP, Inc., a nonprofit corporation organized under the laws of the state of Louisiana. Only local government entities having contracted to participate in LAMP have an investment interest in its pool of assets. The primary objective of LAMP is to provide a safe environment for the placement of public funds in short-term, high-quality investments. The LAMP portfolio includes only securities and other obligations in which local governments in Louisiana are authorized to invest in accordance with R.S. 33:2955.

GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, as amended, requires disclosure of credit risk, custodial credit risk, concentration of credit risk, interest rate risk, and foreign currency risk for all public entity investments.

LAMP is an investment pool that, to the extent practical, invests in a manner consistent with GASB Statement No. 79. The following facts are relevant for this investment pool:

- *Credit risk:* LAMP is rated AAAm by Standard & Poor's.
- Custodial credit risk: LAMP participants' investments in the pool are evidenced by shares of the pool. Investments in pools should be disclosed, but not categorized because they are not evidenced by securities that exist in physical or book-entry form. The System's investment is with the pool, not the securities that make up the pool; therefore, no disclosure is required.
- *Concentration of credit risk:* Pooled investments are excluded from the five percent disclosure requirement.
- Interest Rate Risk: LAMP is designed to be highly liquid to give its participants immediate access to their account balances. LAMP prepares its own interest rate risk disclosure using the weighted average maturity (WAM) method. The WAM of LAMP assets is restricted to not more than 90 days and consists of no securities with a maturity in excess of 397 days or 762 days for U.S. Government floating/variable rate investments. The WAM for LAMP's total investments is 33 days (from LAMP's monthly Portfolio Holdings) as of June 30, 2019.
- Foreign currency risk: Not applicable.

The investments in LAMP are stated at fair value. The fair value is determined on a weekly basis by LAMP, and the value of the position in the external investment pools is the same as the net asset value of the pool shares.

LAMP, Inc. is subject to the regulatory oversight of the State Treasurer and the Board of Directors. LAMP is not registered with the SEC as an investment company. LAMP issues annual financial reports, which can be found on the LAMP website at http://lamppool.com.

C. INVESTMENTS

1. Investment Policies

In accordance with R.S. 11:263, the System is authorized to invest under the prudent-man rule. The prudent-man rule means that, in investing, the governing authorities of the System "shall exercise the judgment and care under the circumstances then prevailing that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation but in regard to the permanent disposition of funds considering probable safety of capital as well as probable income." Notwithstanding the prudent-man rule, the System shall not invest more than 55% of the total portfolio in equity investments, except the governing authority of any system may invest more than 55% of the total portfolio is

invested in equities and at least 10% of the total equity portfolio is invested in one or more index funds which seek to replicate the performance of the chosen index or indices.

The System's policy regarding the allocation of invested assets is established and amended by the Board of Trustees. The System shall be managed at all times in accordance with Louisiana statutes and any other applicable law. The policy states that the investment of the System's assets shall be for the exclusive purpose of providing benefits for the participants and their beneficiaries, and paying the System's administrative expenses. The System's investments shall be prudently selected and properly diversified, so as to minimize the risk of large losses.

The following was the System's asset allocation policy as of June 30, 2019, and June 30, 2018:

		Target Allocation	Target Allocation
	Asset Type	2019	2018
	U.S. Equity	21.50%	22.00%
Equity	Non-U.S. Equity	17.50%	22.00%
	Global Equity	10.00%	10.00%
Fixed Income	Fixed Income	31.00%	26.00%
Alternative	Real Estate	6.00%	6.00%
Alternative	Private Equity	4.00%	4.00%
Multi-Asset	Global Tactical Asset Allocation	5.00%	5.00%
Strategies	Risk Parity	5.00%	5.00%
	Total	100.00%	100.00%

2. Investment Valuation and Fair Value Disclosures

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles as described in Note 1. The System has the following recurring fair value measurements as of June 30, 2019, and June 30, 2018, respectively:

Investments Reported at Fair Value at June 30, 2019

		I	Fair Value Hierarchy	
		Quoted Prices in	Significant Other	Significant
		Active Markets	Observable Inputs	Unobservable
	6/30/2019	(Level 1)	(Level 2)	(Level 3)
Investments by Fair Value Level:				
<u>Debt Securities</u>				
U.S. Government Treasury Bonds	\$2,462,284	-	\$2,462,284	-
U.S. Government Agency Bonds	35,394,702	-	35,394,702	-
Corporate Bonds - Domestic	49,930,347	-	49,930,347	-
Cash Equivalents	2,140,962	\$2,140,962	_	
Total Debt Securities	89,928,295	2,140,962	87,787,333	_
Preferred Securities (foreign)				
Developed Markets	-	-	-	-
Emerging Markets	1,336,225	1,336,225		-
Total Preferred Securities (foreign)	1,336,225	1,336,225	-	-
Equity Securities				
Domestic - Large Cap	101,423,679	101,423,679	-	_
Domestic - Small and Mid Cap	99,379,277	99,379,277	-	-
Foreign - Developed Markets	216,790,159	216,790,159	-	-
Foreign - Emerging Markets	31,158,392	31,158,392		-
Total Equity Securities	448,751,507	448,751,507	-	-
Alternatives				
Direct real estate	20,059,698	-	-	\$20,059,698
Total Alternatives	20,059,698	-	-	20,059,698
Total Investments by Fair Value Level	\$560,075,725	\$452,228,694	\$87,787,333	\$20,059,698
Investments measured at the Net Asset Value	(NAV):			
Cash Equivalents	\$42,945,348			
Fixed Income Funds	429,287,457			
Equity Security Funds	383,197,615			
Multi-asset Strategies	168,013,876			
Alternative Investments				
Real Estate	101,157,303			
Private Equity	66,160,569			
Total Investments measured at the NAV	\$1,190,762,168			
Total Investments measured at Fair Value	\$1,750,837,893			
Investment Derivative Instruments (Note 6):				
Foreign Currency Forward Contracts	(\$25,969)	-	(\$25,969)	
Total Investment Derivative Instruments	(\$25,969)	-	(\$25,969)	

Investments Reported at Fair Value at June 30, 2018

		Fair Value Hierarchy		
		Quoted Prices in	Significant Other	Significant
		Active Markets	Observable Inputs	Unobservable
	6/30/2018	(Level 1)	(Level 2)	(Level 3)
Investments by Fair Value Level:				
<u>Debt Securities</u>				
U.S. Government Treasury Bonds	-	-	-	-
U.S. Government Agency Bonds	\$23,308,812	-	\$23,308,812	-
Corporate Bonds - Domestic	42,604,398	-	42,604,398	-
Cash Equivalents	1,980,988	\$1,980,988		
Total Debt Securities	67,894,198	1,980,988	65,913,210	
Preferred Securities (foreign)				
Developed Markets	641,945	641,945	-	-
Emerging Markets	919,839	919,839		
Total Preferred Securities (foreign)	1,561,784	1,561,784	-	-
Equity Securities				
Domestic - Large Cap	119,341,266	119,341,266	-	-
Domestic - Small and Mid Cap	108,560,396	108,560,396	-	-
Foreign - Developed Markets	252,615,586	252,615,586	-	-
Foreign - Emerging Markets	36,627,035	36,627,035	-	-
Total Equity Securities	517,144,283	517,144,283	-	-
<u>Alternatives</u>				
Direct real estate	20,132,911	-	-	\$20,132,911
Total Alternatives	20,132,911	-	-	20,132,911
Total Investments by Fair Value Level	\$606,733,176	\$520,687,055	\$65,913,210	\$20,132,911
Investments measured at the Net Asset Value	(NAV):			
Cash Equivalents	\$64,034,304			
Fixed Income Funds	280,900,636			
Equity Security Funds	416,092,940			
Multi-asset Strategies	159,322,814			
Alternative Investments				
Real Estate	99,106,140			
Private Equity	56,647,480			
Total Investments measured at the NAV	\$1,076,104,313			
Total Investments measured at Fair Value	\$1,682,837,490			
Investment Derivative Instruments (Note 6):				
Foreign Currency Forward Contracts	\$399,441		\$399,441	
Total Investment Derivative Instruments	\$399,441	-	\$399,441	-

Valuation Techniques

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique and inputs such as yield curves and indices. Matrix pricing is used to value securities based on the securities' relationship to benchmark quote prices. Derivative instruments classified in Level 2 are valued using a market approach that considers benchmark interest rates and foreign exchange rates. Investments classified in Level 3 of the fair value hierarchy are valued using unobservable inputs and are not directly corroborated with market data.

The unfunded commitments and redemption terms, if applicable, for investments measured at the net asset value (NAV) per share (or its equivalent) as of June 30, 2019, are presented in the following table.

			Redemption Frequency	Redemption
	Fair Value	Unfunded	(if currently	Notice
Investment Type	2019	Commitments	eligible)	Period
Cash equivalents	\$42,945,348	-	Daily	Same day
Fixed income securities	429,287,457	-	Daily	1-2 days
Equity securities	383,197,615	-	Daily	1-30 days
Multi-asset strategies	168,013,876	-	Daily	1-3 days
Alternatives:				
Real-estate - open end	84,083,055	-	Quarterly	30-90 days
Real-estate - closed end	17,074,248	\$2,371,442	N/A	N/A
Private equity funds	66,160,569	78,078,160	N/A	N/A
Total investments				
measured at NAV	\$1,190,762,168	\$80,449,602		

The unfunded commitments and redemption terms, if applicable, for investments measured at the net asset value (NAV) per share (or its equivalent) as of June 30, 2018, are presented in the following table.

	Fair Value	Unfunded	Redemption Frequency (if currently	Redemption Notice
Investment Type	2018	Commitments	eligible)	Period
Cash equivalents	\$64,034,304	-	Daily	Same day
Fixed income securities	280,900,636	-	Daily	1-2 days
Equity securities	416,092,940	-	Daily	1-30 days
Multi-asset strategies	159,322,814	-	Daily	1-3 days
Alternatives:				
Real-estate - open end	80,854,744	-	Quarterly	30-90 days
Real-estate - closed end	18,251,396	\$2,371,438	N/A	N/A
Private equity funds	56,647,480	19,580,204	N/A	N/A
Total investments				
measured at NAV	\$1,076,104,314	\$21,951,642		
	\$1,076,104,314	\$21,951,642		

<u>Cash Equivalents</u> - Cash equivalent investments consist of two funds. The largest fund invests principally in securities or other obligations issued by or guaranteed by the United States Government or agencies. The second fund invests in U.S. Government agency securities, repurchase agreements, commercial paper, and other highly-liquid, short-term securities. These funds are used as a source of liquidity to meet capital commitments, settle trades, or pay normal investment-related expenses. The fair value of the investments in the largest fund has been determined using the NAV per share (or equivalent) of the investments. Units are valued daily at \$1 per share, and redemption of units can be made on a same-day basis. The fair value of the investment in the second fund has been determined using the NAV per share (or equivalent) of the investments. Units are valued weekly, and redemption of units can be made on a same-day basis.

<u>Fixed-Income Securities</u> - Fixed-income investments consist of three separate strategies. The largest strategy replicates the Bloomberg Barclays Aggregate bond index. The second strategy replicates the Bloomberg Barclays U.S. Treasury Inflation-Linked Bond Index. The final strategy invests in sovereign debt of emerging market countries in their respective local currency to benefit from improving credit quality and economic growth in excess of developed markets. The fair value of the investments in these funds has been determined using the NAV per share (or equivalent) of the investments. Units are valued daily, and redemption of units requires advance notice of one to two days. Any amount redeemed will be paid within two trading days.

<u>Equity Securities</u> - Equity investments consist of three strategies. The largest strategy replicates the S&P 500 index. The final two strategies utilize quantitative and fundamental analysis to invest in equity of companies domiciled, listed, and/or traded on the securities exchanges of emerging market countries to benefit from economic growth in excess of developed markets. The fair value of the investments in these funds has been determined using the NAV per share (or equivalent) of the investments. Units are valued

daily, and redemption of units requirements range from advance notice of one to thirty days. Any amount redeemed will be paid within three trading days.

Multi-Asset Strategies - Multi-asset investments consist of two strategies. The first strategy is designed to provide diversified exposure to a broad range of asset classes (including, but not limited to, stocks, bonds, real assets, and commodities) within one portfolio. These strategies combine asset class selection, portfolio construction, and risk management techniques. Global Tactical Asset Allocation (GTAA) strategies tactically weight asset classes in an effort to add value above static, strategic allocations by taking advantage of mis-pricings and by exploiting relationships between global investment securities and markets. The other strategy focuses on risk-based allocation rather than traditional dollar allocation. The objective of this strategy is to seek total return and improve risk-adjusted returns relative to traditional portfolio construction. Risk parity strategies may diversify across asset classes according to their sensitivities to risk factors such as equity risk, interest rate risk, and inflation risk. The resulting portfolio tactically weights these risk exposures through the use of derivatives to achieve a target volatility level. The fair value of the investments in these funds has been determined using the NAV per share (or equivalent) of the investments. Units are valued daily, and redemption of units requirements range from advance notice of one to three days. Any amount redeemed will be paid within two trading days.

Real Estate Investments - Real estate investments consist of four open-ended funds and three closed-end funds. These funds invest in well located, institutional-quality assets in markets mostly throughout the United States to benefit from durable income streams, partial inflation hedge, and appreciation over the mid to long term. The funds are diversified by property type (office, industrial, apartment, retail), economic exposure, and geography. The fair value of the investments in these funds has been determined using the NAV per share (or equivalent) of the Plan's ownership interest in partners' capital. With respect to the open-ended funds, unit valuation is quarterly and redemption of units requirements range from advance notice of 30 to 90 days. Any amount redeemed will be paid 45 days to 27 months after the beginning of the following quarter. Investments in closed-end funds are not eligible for redemptions; however, distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated between 10 to 15 years from the commencement of the fund.

<u>Private Equity Investments</u> - Private equity investments consist of twelve funds. These funds invest in the equity and debt securities of companies that are privately held, rather than publicly traded on a stock exchange. These funds employ a combination of strategies (venture capital, buyout, mezzanine, fund of funds) to achieve returns levels in excess of public market returns. The fair value of the investments in these funds has been determined using the NAV per share (or equivalent) of the Plan's ownership interest in partners' capital. These investments are not eligible for redemptions; however, distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated between 10 to 15 years from the commencement of the fund.

3. Risk Disclosures

Risks and Uncertainties

Investment securities, in general, are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the System's account balances and the amounts reported in the financial statements.

Interest Rate Risk

Interest rate risk is defined as the risk that changes in interest rates will adversely affect the fair value of an investment. The risk is applicable to debt investments with fair values that are sensitive to changes in interest rates. One indicator of the measure of interest rate risk is the dispersion of maturity dates for debt instruments. The System's investment policy states that the overall duration (interest rate sensitivity) of each domestic, global, and emerging market fixed-income manager's portfolio shall not differ from that manager's passive benchmark by more than two years. The duration of a security is the weighted average maturity of all future cash flows paid by a security, in which the weights are the present value of these cash flows as a fraction of the bond's price. As of June 30, 2019, and June 30, 2018, the System had the following debt investment securities and maturities:

Debt Investments as of June 30, 2019

		Investment Maturities (in years)			
Investment Type	Fair Value	Less Than 1	1 to 5	5 to 10	More Than 10
				-	
Corporate Bonds - Domestic	\$49,930,347	\$4,509,315	\$8,869,470	\$21,231,720	\$15,319,842
U.S. Government Treasury Bonds	\$2,462,284				\$2,462,284
U.S. Government Agency Bonds	\$35,394,702	\$1	\$589	\$54,395	\$35,339,717
Fixed-Income Funds	\$429,287,457			\$429,287,457	

Debt Investments as of June 30, 2018

		Investment Maturities (in years)			
Investment Type	Fair Value	Less Than 1	1 to 5	5 to 10	More Than 10
Corporate Bonds - Domestic	\$42,604,398	_	\$16,200,930	\$17,823,990	\$8,579,478
U.S. Government Treasury Bonds		_	_	_	_
U.S. Government Agency Bonds	\$23,308,812		\$973	\$15,347	\$23,292,492
Fixed-Income Funds	\$280,900,636			\$280,900,636	

Custodial Credit Risk

Custodial credit risk is defined as the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party.

Exposure to custodial credit risk arises when securities are uninsured or are not registered in the name of the System and are held by either the counterparty or the counterparty's trust department or agent, but not in the System's name. In the event of a bank failure, the System's cash held in trust may not be returned to it. Investments held in a trust in the name of the System, mutual funds, or investments held in external investment pools are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form. The System has no formal investment policy regarding custodial credit risk.

Credit Risk

Credit risk is defined as the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The standardized ratings systems are a good tool with which to assess credit risk on debt obligations. The System's investment policy requires that the average quality of each domestic and global fixed income manager's portfolio be rated A or higher and non-rated issues or issues below investment grade (below BBB) may be purchased, provided that in the judgment of the manager they are of a quality sufficient to maintain the average overall portfolio quality of A or higher. The combined allocation to non-rated issues or issues below investment grade may not exceed 15% of each manager's portfolio. The overall average quality of each emerging market fixed income investment manager's portfolio shall be rated investment grade (BBB) or higher. Nonrated issues or issues below investment grade (below BBB) may be purchased, provided that in the judgment of the manager, they are of a quality sufficient to maintain the average overall portfolio quality of investment grade (BBB) or higher. Given that the investments may be made via commingled vehicles, the System recognizes that the commingled portfolio holdings cannot be customized or altered for any one investor. Accordingly, investments in each commingled fund will be governed by terms of the System manager's Investment Management Agreement and the spirit and intent of the Investment Policy. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk.

Below is a schedule of bonds and bond funds with their applicable ratings and exposure to credit risk as of June 30, 2019, and June 30, 2018, respectively.

	Bond Ratings at June 30, 2019				
Standard	U.S.	U.S.	Corporate		
& Poor's	Government	Government	Bonds	Fixed Income	
Rating	Treasury Bonds	Agency Bonds	(Domestic)	Funds*	
AAA		-	\$2,702,100	\$211,725,558	
AA+	\$2,462,284	\$35,394,702	-	53,502,426	
AA		-	-	15,667,266	
AA-		-	2,691,100	-	
A+		-	-	-	
A		-	9,533,597	59,617,475	
A-		-	18,375,515	-	
BBB+		-	5,559,315	-	
BBB		-	11,068,720	68,903,948	
BBB-		-	-	-	
BB or below		-	-	19,870,784	
Total	\$2,462,284	\$35,394,702	\$49,930,347	\$429,287,457	

^{*}The fixed income funds are in commingled vehicles in which the investment managers utilize nationally-recognized statistical rating organizations to develop an average credit quality risk rating for its commingled investments. Therefore, ratings for investments within these commingled vehicles may or may not be rated by Standard & Poor's.

	Bond Ratings at June 30, 2018				
Standard	U.S.	U.S.	Corporate		
& Poor's	Government	Government	Bonds	Fixed Income	
Rating	Treasury Bonds	Agency Bonds	(Domestic)	Funds*	
AAA	-	-	\$1,449,285	\$155,232,790	
AA+	-	\$23,308,812	-	-	
AA	-	-	-	6,493,524	
AA-	-	-	1,530,435	-	
A+	-	-	-	-	
A	-	-	7,587,540	43,020,595	
A-	-	-	15,867,888	-	
BBB+	-	-	7,106,730	-	
BBB	-	-	9,062,520	56,967,509	
BBB-	-	-	-	-	
BB or below	-		-	19,186,218	
Total		\$23,308,812	\$42,604,398	\$280,900,636	

^{*}The fixed income funds are in commingled vehicles in which the investment managers utilize nationally- recognized statistical rating organizations to develop an average credit quality risk rating for its commingled investments. Therefore, ratings for investments within these commingled vehicles may or may not be rated by Standard & Poor's.

Concentration of Credit Risk

Concentration of credit risk is defined as the risk of loss attributed to the magnitude of an investment in a single issuer. The risk is the inability to recover the value of deposits, investments, or collateral securities in the possession of an outside party caused by lack of diversification. The System's investment policy states that no single holding may account for more than 5% of any domestic fixed-income manager's portfolio. No more than 10% of any domestic fixed-income manager's portfolio may be invested in any one issuer. Obligations of the U.S. Government or of a U.S. Government agency may be held without limitation. There were no holdings in any single issuer that exceeded the System's investment policy at June 30, 2019, and June 30, 2018, respectively.

Concentrations

GASB Statement No. 67 requires the System to disclose investments in any one organization, other than those issued or explicitly guaranteed by the U.S. Government, that represent 5% or more of the System's fiduciary net position. There were no holdings in any single organization that exceeded 5% at June 30, 2019, and June 30, 2018, respectively. The System adopted the GASB Statement No. 67 concentration language as part of the formal investment policy statement. The investment policy statement defines the term "organization" as an individual security rather than a manager, mutual fund, partnership, or commingled vehicle.

Foreign Currency Risk

Foreign currency risk is defined as the risk that changes in exchange rates will adversely affect the fair value of an investment. The System has no formal policy regarding foreign currency risk. Foreign currency risk for derivatives is disclosed in Note 6. The System's foreign currency exposures for the remaining investments in its cash and investment portfolio for the years ended June 30, 2019, and June 30, 2018, are as follows:

	Fair Value at June 30, 2019		Fair Value at	June 30, 2018
Currency	Cash	Equities	Cash	Equities
Australian Dollar	\$199,092	\$9,365,223	\$83,704	\$11,566,577
Brazil Real	30,207	2,646,148	244,733	1,937,705
Canadian Dollar	194,919	10,624,152	33,403	14,769,537
Czeck Koruna	-	-	21,914	-
Danish Krone	6,726	6,201,938	908	4,395,896
Euro	303,586	90,915,023	155,282	104,456,682
Hong Kong Dollar	133,347	25,133,313	155,540	25,142,883
Hungarian Forint	2,649	573,460	23,523	133,366
Indonesian Rupiah	33,797	2,772,117	59,329	2,292,634
Israeli Shekel	-	-	(181)	-
Japanese Yen	293,642	33,097,935	259,755	40,317,682
Malaysian Ringgit	12,636	339,526	52,318	552,330
Mexican Peso	7,091	415,233	28,218	1,208,187
New Zealand Dollar	-	-	52,800	-
Norwegian Krone	38,770	2,690,239	79,512	3,828,634
Polish Zloty	-	505,696	-	-
Pound Sterling	354,528	36,958,003	138,306	42,892,966
Singapore Dollar	14,036	404,861	33,759	411,787
South African Rand	30,845	1,379,173	7,407	1,664,056
South Korean Won	163,524	10,170,989	425,331	13,478,487
Swedish Krona	9,827	3,384,665	13,706	3,360,533
Swiss Franc	269,983	10,468,138	111,854	16,471,926
Thailand Baht	42,055	1,238,944		1,922,537
Total	\$2,141,260	\$249,284,776	\$1,981,121	\$290,804,405

4. Other Disclosures

Money-Weighted Rate of Return

For the years ended June 30, 2019, and June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 3.87% and 5.77%, respectively. The money-weighted return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

Realized and Unrealized Gains and Losses

During the year ended June 30, 2019, the System's investments (including those bought, sold, and held during the year) experienced an increase in value of \$55,066,870. This increase was comprised of \$33,492,821 in realized gains and \$21,574,049 in unrealized gains for the year ended June 30, 2019.

During the year ended June 30, 2018, the System's investments (including those bought, sold, and held during the year) experienced an increase in value of \$81,122,151. This increase was comprised of \$37,207,478 in realized gains and \$43,914,673 in unrealized gains for the year ended June 30, 2018.

The calculation of net appreciation or depreciation of investments is independent of realized gains and losses. Realized gains or losses on investments that had been held in more than one fiscal year and sold in the current year were included as a net change in the fair value of investments reported in the prior year and current year.

6. DERIVATIVES

The System's investment derivative instruments include foreign currency forward contracts whereby the System agrees to receive and deliver a fixed quantity of foreign currency for an agreed-upon price on an agreed future date. These contracts were entered into with the foreign exchange department of a bank located in a major money market for the purpose of hedging cash flows due to changes in foreign currency rates associated with investments that are recorded at fair value. These contracts are valued daily. Recognition of realized gain or loss depends on whether the currency exchange rate has moved favorably or unfavorably to the contract holder upon termination of the contract.

The fair values of the foreign currency forward contracts were estimated based on the present value of their estimated future cash flows. At June 30, 2019, and June 30, 2018, the System has the following derivative instruments categorized as investment derivatives:

Investment Derivatives at June 30, 2019

		Fair V	alue	Changes in Fair Va	lue
	Notional Amount	Classification	Amount	Classification	Amount
Forwards:					
Foreign Exchange Contracts	\$8,248,130	Derivatives	(\$25,969)	Net App (Dep) in Fair Value	(\$25,969)
Total Derivatives	\$8,248,130		(\$25,969)		(\$25,969)

Investment Derivatives at June 30, 2018

		Fair V	alue	Changes in Fair Va	lue
	Notional Amount	Classification	Amount	Classification	Amount
Forwards:					
Foreign Exchange Contracts	\$13,053,458	Derivatives	\$399,441	Net App (Dep) in Fair Value	\$399,441
Total Derivatives	\$13,053,458		\$399,441		\$399,441

Risk Disclosures

Credit risk – The System is exposed to credit risk on its foreign currency forward contracts in the event that the counterparty to one of the contracts does not fulfill its obligations. The System's investment policy requires managers to measure and monitor exposure to counter party credit risk resulting from over-the-counter derivatives activities. Managers are required to submit a report to the System semi-annually. The report must contain (1) each instance of exposure that represents greater than 5% of the manager's total portfolio value, (2) the specific legal entity that is counterparty to the transaction, and (3) the nature of the relationship with the counterparty. At June 30, 2019, and June 30, 2018, the System was exposed to counterparty credit risk in the amount of \$0 and \$399,441, respectively.

Foreign currency risk – The System is exposed to foreign currency risk on its foreign currency forward contracts that are denominated in foreign currency. The System has no formal policy regarding foreign currency risk. The fair values of the contracts by currency are as follows:

Currency	U.S. Dollar		
Denomination	June 30, 2019	June 30, 2018	
Australian Dollar	\$3,291	\$15,447	
Canadian Dollar	(30)	-	
Euro	(58,682)	227,065	
Hong Kong Dollar	-	21	
Japenese Yen	(48)	284	
Pound Sterling	29,499	154,345	
Swiss Franc	-	2,279	
Total	(\$25,969)	\$399,441	

7. NOTES RECEIVABLE FROM MERGED MUNICIPALITIES AND FIRE DISTRICT

Notes receivable from merged municipalities earn a 7% interest rate. The receivables at June 30, 2019, and June 30, 2018, consisted of the following:

	Annual Payments		Balance at
Municipality	(including interest)	Final Payment Due	June 30, 2019
Kenner	\$95,005	March 1, 2029	\$669,983
Kenner Retirees	142,697	March 27, 2029	1,002,247
Total	\$237,702		\$1,672,230

Notes receivable from merged municipalities was \$1,786,355 at June 30, 2018. The merged municipalities paid the outstanding balance of these notes in full subsequent to June 30, 2019.

The System and St. George Fire Protection District entered into a note receivable as of June 30, 2013. The note represents the increase in the present value of future benefits of the St. George Fire Protection District employees as of December 1, 2013. The initial amount due was \$961,141 and matures July 1, 2042. The note is being amortized over 30 years with interest computed at 7.5%. The receivable at June 30, 2019, and June 30, 2018, consisted of the following:

	Annual Payments		Balance at
Fire District	(including interest)	Final Payment Due	June 30, 2019
St. George	\$73,628	July 1, 2042	\$808,623
Total	\$73,628		\$808,623

The balance of the note receivable was \$820,730 at June 30, 2018.

8. CAPITAL ASSETS

Changes in capital assets for the year ended June 30, 2019, are as follows:

Asset Class	Beginning Balance July 1, 2018	Additions	Deletions	Ending Balance June 30, 2019
Land	\$260,107	-		\$260,107
Building	734,720	-	-	734,720
Equipment	64,356	\$12,440	-	76,796
Furniture and Fixtures	90,757	7,500	-	98,257
Computer Equipment	165,576	14,407		179,983
Total Capital Assets, gross	1,315,516	34,347	-	1,349,863
Accumulated Depreciation	(667,519)	(39,929)		(707,448)
Total Capital Assets, net	\$647,997	(\$5,582)		\$642,415

Changes in capital assets for the year ended June 30, 2018, are as follows:

	Beginning Balance			Ending Balance
Asset Class	July 1, 2017	Additions	Deletions	June 30, 2018
Land	\$260,107	-	-	\$260,107
Building	734,720	-	-	734,720
Equipment	60,881	\$3,475	-	64,356
Furniture and Fixtures	90,927	-	(\$170)	90,757
Computer Equipment	165,370	3,000	(2,764)	165,576
Total Capital Assets, gross	1,312,005	6,475	(2,964)	1,315,516
Accumulated Depreciation	(629,579)	(40,904)	2,964	(667,519)
Total Capital Assets, net	\$682,426	(\$34,429)	-	\$647,997

Depreciation expense for the years ended June 30, 2019, and 2018, was \$39,929 and \$40,904, respectively.

9. RISK MANAGEMENT

Risks related to net pension liability and investments are discussed in Notes 4, 5, and 6 above. The System is also exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters for which the System carries insurance through the state of Louisiana, Office of Risk Management at levels which management believes are adequate to protect the System. Settled claims resulting from these risks have not exceeded insurance coverage in any of the past three fiscal years.

10. PENDING OR THREATENED LITIGATION, CLAIMS, AND ASSESSMENTS

Duty v. City of Natchitoches and Firefighters' Retirement System, Suit No. 81,283, 10th Judicial District Court, Natchitoches Parish. FRS was named as a defendant along with the City of Natchitoches in a lawsuit alleging that the city failed to include scheduled overtime in the plaintiff's earnable compensation, resulting in lower than expected retirement benefits. The plaintiff asked the court to grant an increase in the amount of his retirement benefits. The plaintiff had requested certification of a statewide class action, which the court rejected, thereby reducing the lawsuit to a single plaintiff, i.e., Jack Duty. On February 6, 2019, the court entered a Judgment dismissing the lawsuit as to all parties, including FRS, and ordered the City of Natchitoches to pay the costs for the proceeding.

11. OTHER POSTEMPLOYMENT BENEFITS

General Information about the OPEB Plan

Plan Description and Benefits Provided

The Office of Group Benefits (OGB) administers the state of Louisiana Post-Retirement Benefits Plan – a defined-benefit, multiple-employer other post-employment benefit plan. The plan

provides medical, prescription drug, and life insurance benefits to retirees, disabled retirees, and their eligible beneficiaries through premium subsidies. Current employees, who participate in an OGB health plan while active, are eligible for plan benefits if they are enrolled in the OGB health plan immediately before the date of retirement and retire under one of the state sponsored retirement systems (Louisiana State Employees' Retirement System, Teachers' Retirement System of Louisiana, Louisiana School Employees' Retirement System, or Louisiana State Police Retirement System) or they retire from a participating employer that meets the qualifications in Louisiana Administrative Code 32:3.303. Benefit provisions are established under R.S. 42:851 for health insurance benefits and R.S. 42:821 for life insurance benefits. The obligations of the plan members, employers, and other contributing entities to contribute to the plan are established or may be amended under the authority of R.S. 42:802.

There are no assets accumulated in a trust that meets the criteria of paragraph 4 of GASB Statement 75. The plan is funded on a "pay-as-you-go basis" under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments become due.

Employer contributions are based on plan premiums and the employer contribution percentage. Premium amounts vary depending on the health plan selected and if the retired member has Medicare coverage. OGB offers retirees the following plans:

Plans available to all retirees -

- Blue Cross Blue Shield (BCBS) Magnolia Open Access (self-insured)
- BCBS Magnolia Local (self-insured)
- BCBS Magnolia Local Plus (self-insured)
- BCBS Pelican HRA 1000 (self-insured)
- Vantage Medical Home HMO plan (fully-insured)

Plans available to retirees with Medicare Part A and B -

- Peoples Health HMO-POS
- Vantage Premium
- Vantage Standard
- Vantage Basic
- Blue Advantage HMO (effective January 1, 2019)
- Humana HMO (effective January 1, 2019)
- Via Benefits Individual Medicare Market Exchange HRA

The employer contribution percentage is based on the date of participation in an OGB plan and employee years of service at retirement. Employees who begin participation or rejoin the plan before January 1, 2002, pay approximately 25% of the cost of coverage (except single retirees under age 65, who pay approximately 25% of the active employee cost). For those beginning participation or rejoining on or after January 1, 2002, the percentage of premiums contributed by the employer and retiree is based on the following schedule:

	Employer	Retiree
OGB Participation	Share	Share
Under 10 years	19%	81%
10 - 14 years	38%	62%
15 - 19 years	56%	44%
20+ years	75%	25%

In addition to healthcare benefits, retirees may elect to receive life insurance benefits. Basic and supplemental life insurance is available for the individual retirees and spouses of retirees subject to maximum values. Employers pay approximately 50% of monthly premiums for individual retirees. The retiree is responsible for 100% of the premium for dependents. Effective January 1, 2018, the total monthly premium for retirees in the basic or supplemental life insurance plan varies according to age group.

Employees Covered by Benefit Terms

	Valuation	on Date
	July 1, 2018	July 1, 2017
Inactive employees or beneficiaries currently receiving benefit payments	-	-
Inactive employees entitled to but not yet receiving benefit payments	-	-
Active employees	7	8
Total	7	8

Total OPEB Liability

In fiscal year 2018, the System implemented GASB 75, which resulted in a restatement of the OPEB liability at June 30, 2017, to \$563,205. The System's restated total OPEB liability at June 30, 2017, was determined using a roll back of the same valuation to July 1, 2016, using the discount rate applicable on that date, and assuming no experience gains or losses.

At June 30, 2019, and 2018, the System reported a total OPEB liability of \$566,955 and \$577,423, respectively. The total OPEB liability was measured as of July 1, 2018, and 2017, respectively, and was determined by an actuarial valuation as of that date. The total OPEB liability in the actuarial valuation was determined using the following actuarial methods, assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

- Actuarial cost method Entry Age Normal, level percentage of pay
- <u>Estimated remaining service lives</u> 4.8 years for the July 1, 2018 valuation and 5.44 years for the July 1, 2017 valuation
- Inflation rate Consumer Price Index (CPI) 2.8%

- Salary increase rate 3.75% to 12.75%
- <u>Discount rate</u> 2.98% for the July 1, 2018 valuation based on the June 29, 2018, Standard & Poor's 20-year municipal bond index rate, and 3.13% for the July 1, 2017 valuation based on the June 30, 2017, Standard & Poor's 20-year municipal bond index rate
- Mortality rates –based on the RP-2014 Combined Healthy Mortality Table, or RP-2014 Disabled Retiree Mortality Table; both tables projected on a fully generational basis by Mortality Improvement Scale MP-2018 for the July 1, 2018 valuation, and by Mortality Improvement Scale MP-2017 for the July 1, 2017 valuation
- <u>Healthcare cost trend rates</u> 7% for pre-Medicare eligible employees grading down by .25% each year, beginning in 2020-2021, to an ultimate rate of 4.5% in 2029; 5.5% for post-Medicare eligible employees grading down by .25% each year, beginning in 2020-2021, to an ultimate rate of 4.5% in 2023-2024 and thereafter; the initial trend was developed using the National Health Care Trend Survey; the ultimate trend was developed using a building block approach, which considers CPI, Gross Domestic Product, and technology growth.
- Healthcare claim cost Per capita costs for the self-insured plans in the July 1, 2018 and July 1, 2017 valuations were based on medical and prescription claims for calendar year 2018, and 2017, respectively, trended to the valuation date, and adjusted for incurred but not reported claims using completion factors based on prior year data. Per capita costs for fully-insured plans in the July 1, 2018 and July 1, 2017 valuations were based on calendar year 2019, and 2018, premiums adjusted to the valuation date using the trend assumptions above. Per capita costs were adjusted for expected age-related differences in morbidity, where applicable. In addition, the expected impact from the increase in Coverage Gap Brand Discounts from 50% to 70% was incorporated in the costs.
- Participation rates The percentage of employees and their dependents eligible for early retiree benefits that will participate in the retiree medical plan is outlined in the table below. Active participants who have been covered continuously under the plan since before January 1, 2002 are assumed to participate at a rate of 88%. This rate assumes that a one-time irrevocable election to participate is made at the time of retirement.

	July 1, 2018	July 1, 2017
Years of Service	Valuation	Valuation
Under 10 years	52%	56%
10 - 14 years	73%	78%
15 - 19 years	84%	90%
20+ years	88%	93%

Changes in Total OPEB Liability

	Total OPEB Liability	
	2019	2018
Beginning Balance	\$577,423	-
Restatement		\$563,205
Beginning Balance, restated		\$563,205
Changes for the year:		
Service Cost	45,402	49,036
Interest	19,478	16,577
Changes of benefit terms	-	-
Differences between expected and actual experience	(46,229)	-
Changes in assumptions or other inputs	(28,055)	(50,332)
Benefit payments	(1,064)	(1,063)
Net Changes	(10,468)	14,218
Ending Balance	\$566,955	\$577,423

Changes of assumptions and other inputs in the table above include the following:

- Changes in the discount rate from 2.71% as of July 1, 2016, to 3.13% as of July 1, 2017, to 2.98% as of July 1, 2018.
- The July 1, 2018, valuation reflects updates in the health care claims costs assumptions. Baseline per capita costs were adjusted to reflect 2018 claims and enrollment, retiree contributions were updated based on 2019 premiums, and the impact of the High Cost Excise Tax was revisited reflecting updated plan premiums.
- The July 1, 2018, valuation reflects updates in the participation rate assumptions. The percentage of future retirees assumed to elect medical coverage was adjusted based on recent plan experience.
- The July 1, 2018, valuation reflects updates in the mortality assumptions which were updated using projection scale MP-2018 based on information released by the Society of Actuaries in October 2018.

Sensitivity of the total OPEB liability to changes in the discount rate

The following presents the System's total OPEB liability using the current discount rate as well as what the System's total OPEB liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current rate:

	June 30, 2019				
		Current			
	1.0% Decrease	Discount Rate	1.0% Increase		
	(1.98%)	(2.98%)	(3.98%)		
Total OPEB Liability	\$683,937	\$566,955	\$475,726		
		June 30, 2018			
		Current			
	1.0% Decrease	Discount Rate	1.0% Increase		
	(2.13%)	(3.13%)	(4.13%)		
Total OPEB Liability	\$707,267	\$577,423	\$477,435		

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates

The following presents the System's total OPEB liability using the current healthcare cost trend rates as well as what the System's total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage-point lower or one percentage-point higher than the current rates:

	June 30, 2019				
		Current			
		Healthcare Cost			
	1.0% Decrease	Trend Rates	1.0% Increase		
Pre-65 Rates	6.0% decreasing to 3.5%	7.0% decreasing to 4.5%	8.0% decreasing to 5.5%		
Post-65 Rates	4.5% decreasing to 3.5%	5.5% decreasing to 4.5%	6.5% decreasing to 5.5%		
Total OPEB Liability	\$466,742	\$566,955	\$698,837		
•					
		June 30, 2018			
		Current			
		Healthcare Cost			
	1.0% Decrease	Trend Rates	1.0% Increase		
Pre-65 Rates	6.0% decreasing to 3.5%	7.0% decreasing to 4.5%	8.0% decreasing to 5.5%		
Post-65 Rates	4.5% decreasing to 3.5%	5.5% decreasing to 4.5%	6.5% decreasing to 5.5%		
Total OPEB Liability	\$463,736	\$577,423	\$731,272		

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2019, and 2018, the System recognized OPEB expense of \$40,152 and \$56,361, respectively. At June 30, 2019, and 2018, the System reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	June 30, 2019		June 30	0, 2018
	Deferred Deferred		Deferred	Deferred
	Outflows	Inflows	Outflows	Inflows
	of Resources	of Resources	of Resources	of Resources
Differences between expected and actual experience	-	(\$36,598)	-	_
Changes of assumptions or other inputs	-	(54,038)	-	(\$41,080)
Amounts paid by the employer for OPEB subsequent to the measurement date				
measurement date	-	-	-	-
Amounts incurred by the employer for OPEB administrative expenses subsequent to the measurement date	_	-	_	_
Total	-	(\$90,636)	-	(\$41,080)

GASB requires deferred outflows of resources related to OPEB resulting from the System's benefit payments subsequent to the measurement date to be recognized as a reduction of the total OPEB liability in the year ended June 30, 2020, and 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

	Net Amount
Year Ended	Recognized in
June 30:	OPEB Expense
2020	(\$24,728)
2021	(\$24,728)
2022	(\$24,728)
2023	(\$16,452)
	(\$90,636)

REQUIRED SUPPLEMENTARY INFORMATION

Required Supplementary Information Schedule of Changes in Net Pension Liability

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

	June 30, 2019	June 30, 2018	the Fiscal Years En June 30, 2017	June 30, 2016	June 30, 2015
Total Pension Liability	Julic 30, 2017	Julic 30, 2016	Julie 30, 2017	Julie 30, 2010	Julie 30, 2013
Service cost	\$57,145,057	\$55,066,112	\$52,076,589	\$49,088,056	\$50,473,976
Interest	166,514,953	160,608,723	154,171,843	147,115,926	139,476,413
Changes of benefit terms	100,514,755	100,000,723	-	-	17,767,886
Differences between expected					17,707,000
and actual experience	(13,797,929)	(22,251,660)	(13,331,207)	(6,578,348)	(18,187,590
Changes of assumptions	28,739,403	23,944,920	22,708,091	(0,570,540)	7,891,805
Benefit payments	(111,352,185)	(104,277,290)	(102,768,682)	(94,078,659)	(91,920,483
Refunds of member contributions	(2,216,744)	(1,781,606)	(1,467,175)	(1,358,460)	(1,746,315
Other	832,802	1,066,212	1,509,479	944,097	(204,224
Net change in total pension liability	125,865,357	112,375,411	112,898,938	95,132,612	103,551,468
Total pension liability - beginning	2,279,256,967	2,166,881,556	2,053,982,618	1,958,850,006	1,855,298,538
Total pension liability - ending (a)	\$2,405,122,324	\$2,279,256,967	\$2,166,881,556	\$2,053,982,618	\$1,958,850,006
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Plan Fiduciary Net Position					
Contributions - employer	\$64,205,763	\$63,243,874	\$59,091,498	\$61,537,449	\$62,252,947
Contributions - member	24,230,606	23,860,402	23,404,268	22,579,714	21,286,015
Contributions - non-employer					
contributing entity	26,807,631	25,953,989	25,310,647	24,825,521	23,924,457
Net investment income (loss)	74,259,733	104,507,945	190,196,312	(32,230,824)	(3,172,845
Benefit payments	(111,352,185)	(104,277,290)	(102,768,682)	(94,078,659)	(91,920,483
Refunds of member contributions	(2,216,744)	(1,781,606)	(1,467,175)	(1,358,460)	(1,746,315
Administrative expenses	(1,885,460)	(1,657,801)	(1,471,911)	(1,465,395)	(1,587,980
Other	832,802	1,066,212	1,509,479	944,097	(204,224
Net change in plan fiduciary net position	74,882,146	110,915,725	193,804,436	(19,246,557)	8,831,572
Plan fiduciary net position - beginning	1,704,049,168	1,593,696,648	1,399,892,212	1,419,138,769	1,410,307,197
Plan fiduciary net position - restatement	-	(563,205) A		-	-
Plan fiduciary net position - ending (b)	1,778,931,314	1,704,049,168	1,593,696,648	1,399,892,212	1,419,138,769
Net pension liability - ending (a) - (b)	\$626,191,010	\$575,207,799	\$573,184,908	\$654,090,406	\$539,711,237
					-
Plan fiduciary net position as a					
percentage of total pension liability	73.96%	74.76%	73.55%	68.16%	72.45%
Covered payroll	\$242,285,898	\$238,656,128	\$234,025,735	\$225,825,501	\$212,830,587
Net pension liability as a					
percentage of covered payroll	258.45%	241.02%	244.92%	289.64%	253.599

Note A - 2018 beginning balance contains \$563,205 in prior period adjustments for the cumulative effect of a change in accounting principle for GASB 75 implementation in fiscal year 2018.

Required Supplementary Information Schedule of Changes in Net Pension Liability

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

	For the Fiscal
	Years Ended
	June 30, 2014
Total Pension Liability	
Service cost	\$49,390,618
Interest	133,417,234
Changes of benefit terms	-
Differences between expected	
and actual experience	(12,708,035)
Changes of assumptions	(318,965)
Benefit payments	(86,647,146)
Refunds of member contributions	(2,026,345)
Other	2,259,400
Net change in total pension liability	83,366,761
Total pension liability - beginning	1,771,931,777
Total pension liability - ending (a)	\$1,855,298,538
Plan Fiduciary Net Position	
Contributions - employer	\$57,778,849
Contributions - member	20,465,095
Contributions - non-employer	
contributing entity	22,849,383
Net investment income (loss)	143,849,237
Benefit payments	(86,647,146)
Refunds of member contributions	(2,026,345)
Administrative expenses	(1,434,359)
Other	2,259,400
Net change in plan fiduciary net position	157,094,114
Plan fiduciary net position - beginning	1,253,213,083
Plan fiduciary net position - restatement	_
Plan fiduciary net position - ending (b)	1,410,307,197
Net pension liability - ending (a) - (b)	\$444,991,341
Plan fiduciary net position as a	
percentage of total pension liability	76.02%
1	
Covered payroll	\$204,526,899
Net pension liability as a	
percentage of covered payroll	217.57%

Required Supplementary Information Schedule of Employers' Net Pension Liability

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

				Plan Fiduciary Net		Employers' Net Pension
				Position as a		Liability as
Fiscal	Total	Plan	Employers'	Percentage of		a Percentage
Year	Pension	Fiduciary	Net Pension	Total Pension	Covered	of Covered
Ended	Liability	Net Position	Liability	Liability	Payroll	Payroll
June 30, 2019	\$2,405,122,324	\$1,778,931,314	\$626,191,010	73.96%	\$242,285,898	258.45%
June 30, 2018	\$2,279,256,967	\$1,704,049,168	\$575,207,799	74.76%	\$238,656,128	241.02%
June 30, 2017	\$2,166,881,556	\$1,593,696,648	\$573,184,908	73.55%	\$234,025,735	244.92%
June 30, 2016	\$2,053,982,618	\$1,399,892,212	\$654,090,406	68.16%	\$225,825,501	289.64%
June 30, 2015	\$1,958,850,006	\$1,419,138,769	\$539,711,237	72.45%	\$212,830,587	253.59%
June 30, 2014	\$1,855,298,538	\$1,410,307,197	\$444,991,341	76.02%	\$204,526,899	217.57%

Required Supplementary Information Schedule of Contributions -

Employer and Nonemployer Contributing Entity

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

		(b)			
		Contributions			
	(a)	in Relation to	(b-a)		Contributions
Fiscal	Actuarially	the Actuarially	Contribution		as a Percentage
Year	Determined	Determined	Excess	Covered	of Covered
Ended	Contribution	Liability	(Deficiency)	Payroll	Payroll
June 30, 2019	\$90,407,679	\$91,013,394	\$605,715	\$242,285,898	37.56%
June 30, 2018	\$89,197,863	\$89,197,863	-	\$238,656,128	37.38%
June 30, 2017	\$84,402,145	\$84,402,145	-	\$234,025,735	36.07%
June 30, 2016	\$86,362,970	\$86,362,970	-	\$225,825,501	38.24%
June 30, 2015	\$86,177,404	\$86,177,404	-	\$212,830,587	40.49%
June 30, 2014	\$80,628,232	\$80,628,232	-	\$204,526,899	39.42%

Required Supplementary Information Schedule of Investment Returns

Schedule is intended to show information for 10 years.

Additional years will be presented as they become available.

	Annual
Fiscal	Money-Weighted
Year-End	Rate of Return *
June 30, 2019	3.87%
June 30, 2018	5.77%
June 30, 2017	13.45%
June 30, 2016	-2.50%
June 30, 2015	-1.50%
June 30, 2014	11.22%

^{*} Annual money-weighted rates of return are presented net of investment expense.

Required Supplementary Information Schedule of Changes in the System's Total OPEB Liability and Related Ratios

Schedule is intended to show information for 10 years.

Additional years will be presented as they become available.

	For the Fiscal Year Ended*		
	June 30, 2019	June 30, 2018	
Total OPEB Liability			
Service cost	\$45,402	\$49,036	
Interest	19,478	16,577	
Changes of benefit terms	-	-	
Differences between expected and actual experience	(46,229)	-	
Changes of assumptions or other inputs	(28,055)	(50,332)	
Benefit payments	(1,064)	(1,063)	
Net change in total OPEB liability	(10,648)	14,218	
Total OPEB liability - beginning	577,423	563,205 A	
Total OPEB liability - ending	\$566,955	\$577,423	
Covered-employee payroll	\$679,536	\$632,333	
Total OPEB liability as a percentage of covered-employee payroll	83.43%	91.32%	

^{*} Amounts presented were determined as of the beginning of the fiscal year (on the measurement date).

Note A - 2018 beginning balance contains \$563,205 in prior period adjustments for the cumulative effect of a change in accounting principle for GASB 75 implementation in fiscal year 2018.

NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION

1. SCHEDULE OF CHANGES IN NET PENSION LIABILITY

The total pension liability contained in this schedule was provided by the System's actuary, G.S. Curran and Company. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

2. SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY

The schedule shows the System's employers' net pension liability in relation to covered payroll. The employers' net pension liability is the liability of the contributing employers to members for benefits provided through the System. Covered payroll is the payroll of all employees that are contributing to the plan.

3. SCHEDULE OF CONTRIBUTIONS – EMPLOYER AND NONEMPLOYER CONTRIBUTING ENTITY

The difference between the actuarially-determined contributions for employers and a non-employer contributing entity and the contributions reported for employers and a non-employer contributing entity, and the percentage of contributions received to covered payroll is presented in this schedule. Insurance premium assessments are considered to be support from a non-employer contributing entity. The actuarially-determined contributions for employers are the contributions determined by the actuary's funding valuation to be the minimum recommended contributions applicable to the fiscal year. For fiscal year 2019, the Board of Trustees elected to set the net direct employer contribution rate higher than the minimum recommended rate pursuant to R.S. 11:107(B) resulting in excess contributions.

4. SCHEDULE OF INVESTMENT RETURNS

The money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. This expresses the investment performance adjusted for changing amounts actually invested throughout the year, measured using monthly inputs with expenses measured on an accrual basis.

5. SCHEDULE OF CHANGES IN THE SYSTEM'S TOTAL OPEB LIABILITY AND RELATED RATIOS

The OPEB liability is funded on a "pay-as-you-go" basis. There are no assets accumulated in a trust that meets the requirements in paragraph 4 of GASB Statement No. 75 to pay related benefits. Changes of assumptions and other inputs used in the July 1, 2018 valuation and July 1, 2017 valuation are:

• Changes in the discount rate from 2.71% as of July 1, 2016, to 3.13% as of July 1, 2017, to 2.98% as of July 1, 2018.

- The July 1, 2018, valuation reflects updates in the health care claims costs assumptions. Baseline per capita costs were adjusted to reflect 2018 claims and enrollment, retiree contributions were updated based on 2019 premiums, and the impact of the High Cost Excise Tax was revisited reflecting updated plan premiums.
- The July 1, 2018, valuation reflects updates in the participation rate assumptions. The percentage of future retirees assumed to elect medical coverage was adjusted based on recent plan experience.
- The July 1, 2018, valuation reflects updates in the mortality assumptions which were updated using projection scale MP-2018 based on information released by the Society of Actuaries in October 2018.

6. ACTUARIAL ASSUMPTIONS FOR PENSION SCHEDULES

The pension information presented in the required supplementary schedules (schedules 1 - 3) was used in the actuarial valuation for purposes of determining the actuarially-determined contribution rate. The actuarially-determined contribution rates in the schedule of contributions are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported. The assumptions and methods used for the actuarial valuation were recommended by the actuary and adopted by the Board.

Asset Valuation Method Details: All assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

Actuarial Assumptions for Pension Schedules (continued)

Fiscal Year End	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
Valuation Date	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
Actuarial Cost Method	No Change				
Amortization Method	No Change				
Remaining Amortization Period	1 to 15 years for changes in actuarial funding methods and 4 to 22 years for gains and losses for mergers.	1 to 15 years for changes in actuarial funding methods and 5 to 23 years for gains and losses for mergers.	1 to 15 years for changes in actuarial funding methods and 6 to 24 years for gains and losses for mergers.	1 to 15 years for changes in actuarial funding methods and 7 to 25 years for gains and losses for mergers.	1 to 15 years for changes in actuarial funding methods and 8 to 26 years for gains and losses for mergers.
Asset Valuation Method	No Change				
Inflation Rate	2.500%	2.700%	2.775%	No Change	2.880%
Investment Rate of Return (Discount Rate)	7.150%, net of investment expenses, including inflation	7.300%, net of investment expenses, including inflation	7.400%, net of investment expenses, including inflation	No Change	No Change
Salary Increases	Vary from 14.75% in the first two years of service to 4.50% with 25 or more years of service.	No Change	No Change	No Change	Vary from 15.00% in the first two years of service to 4.75% with 25 or more years of service.

Actuarial Assumptions for Pension Schedules (continued)

Fiscal Year End	June 30, 2014
Valuation Date	June 30, 2014
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar basis, closed
Remaining Amortization Period	1 to 15 years for changes in actuarial funding methods and 9 to 27 years for gains and losses for mergers.
Asset Valuation Method	5-year smoothed market as fully detailed on page 63.
Inflation Rate	3.000%
Investment Rate of Return (Discount Rate) Salary Increases	7.500%, net of investment expenses, including inflation Vary from 15.00% in the first two years
	of service to 5.50% after 14 years.

Actuarial Assumptions for Pension Schedules (continued)

Fiscal Year End	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
Mortality Rate	No Change	No Change	No Change	No Change	Based on the results of an actuarial experience study for the period of July 1, 2009 – June 30, 2014. The preand postmortality life expectancies of participants based on the RP-2000 Combined Healthy with Blue Collar Adjustment Sex Distinct Tables projected to 2031 using Scale AA for employee, annuitant, and beneficiary mortality. The RP-2000 Disabled Lives Mortality Table set back 5 years for males and set back 3 years for females was selected for disabled annuitants.
Cost of Living Adjustments	No Change				

Actuarial Assumptions for Pension Schedules (concluded)

Fiscal Year	June 30, 2014
End	
Mortality Rate	Based on the
	results of an
	actuarial
	experience study
	for the period of
	July 1, 2004 –
	June 30, 2009.
	The pre- and post-
	mortality life
	expectancies of
	participants based
	on the RP-2000
	Combined
	Healthy with Blue
	Collar Adjustment Sex Distinct
	Tables projected to 2031 using
	Scale AA for
	employee,
	annuitant, and
	beneficiary
	mortality. The
	RP-2000 Disabled
	Lives Mortality
	Table set back 5
	years for males
	and set back 3
	years for females
	was selected for
	disabled
	annuitants.
Cost of Living	Not substantively
Adjustments	automatic. The
	present value of
	future retirement
	benefits is based
	on benefits
	currently being
	paid by the
	System and
	includes
	previously
	granted cost of living
	adjustments.
	aujustinents.

SUPPLEMENTARY INFORMATION

Supplementary Information Schedule of Administrative Expenses For the Fiscal Years Ended June 30, 2019, and 2018

	2019	2018
Human Resource:		
Salaries, including accrued leave (Note 1F)	\$822,990	\$622,168
Payroll taxes	11,420	11,010
Employee retirement	166,156	159,598
Employee insurance, including OPEB (Note 11)	124,554	149,263
Staff training and continued education	2,943	8,756
Total human resource	1,128,063	950,795
Professional Services:		
Actuarial	75,813	68,688
IT Support	91,736	93,434
Accounting	91,390	93,065
Legal fees	183,566	173,019
Investigative services	2,100	2,100
Medical exams	13,775	10,413
Contract services	19,503	32,700
Bank service charges	92	-
Total professional services	477,975	473,419
Communication:		
Advertising	714	3,541
Printing	2,594	6,670
Postage	23,861	36,369
Supplies	31,412	34,586
Dues and subscriptions	4,155	4,677
Telephone	4,391	5,218
Total communication	67,127	91,061
Travel:		
Board member per diem	4,125	3,075
Education seminars	8,415	3,950
Other travel	60,303	32,712
Total travel	72,843	39,737
Building and equipment:		
General liability insurance	6,303	6,727
Utilities	15,508	14,591
Depreciation	39,929	40,904
Building and equipment maintenance	77,712	40,567
Total building and equipment	139,452	102,789
Total Administrative Expenses	\$1,885,460	\$1,657,801

Supplementary Information
Schedule of Compensation, Benefits, and Other Payments
to Agency Head or Chief Executive Officer
For the Fiscal Years Ended June 30, 2019, and 2018

Agency Head: Steven S. Stockstill

Positions: Executive Director, Attorney at Law, Notary Public, Legislative Liaison, and Public/Media Relations Officer

	2019	2018
Salary	\$176,019	\$169,500
Benefits - Health insurance	15,648	15,648
Benefits - Employer retirement contributions	46,645	44,918
Continuing professional education fees	518	1,219
Cell phone	1,257	1,389
Total	\$240,087	\$232,674

As required by R.S. 24:513A(3), the supplemental report includes the total compensation, reimbursements, and benefits of an agency head or political subdivision head or chief executive officer related to the position, including but not limited to travel, housing, unvouchered expenses, per diem, and registration fees.

Supplementary Information Schedule of Per Diem Paid to Trustees For the Fiscal Years Ended June 30, 2019, and 2018

	2019		20)18
	Number of		Number of	
Trustee	Meetings	Amount	Meetings	Amount
Stacy Birdwell	13	\$900	11	\$825
Perry Jeselink	14	975	10	750
Charlie Fredieu	-	-	6	450
Louis Romero	14	975	4	300
Jerry Tarleton	14	-	11	-
Mayor David Amrhien	9	525	7	525
Mayor Ron Roberts	-	-	4	-
Mayor Ronny Walker	10	750	3	225
Treasurer or designee	13	-	11	-
Commissioner of Administration or designee	14	-	12	-
House Retirement Chairman or designee	1	-	1	-
Senate Retirement Chairman or designee	-		-	_
Totals		\$4,125		\$3,075

There were a total of 14 and 12 board meetings held in fiscal years ended June 30, 2019, and 2018, respectively. Board members can receive \$75 per diem for each meeting attended, not to exceed 15 meetings per year. Some members do not accept per diem or are paid by other entities.

OTHER REPORT REQUIRED BY GOVERNMENT AUDITING STANDARDS

Exhibit A

The following pages contain a report on internal control over financial reporting and on compliance with laws, regulations, and other matters as required by *Government Auditing Standards*, issued by the Comptroller General of the United States. This report is based solely on the audit of the financial statements and includes, where appropriate, any significant deficiencies and/or material weaknesses in internal control or compliance and other matters that would be material to the presented financial statements.



December 9, 2019

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

Independent Auditor's Report

FIREFIGHTERS' RETIREMENT SYSTEM

Baton Rouge, Louisiana

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 the fiduciary net position and the related statements of changes in fiduciary net position of the Firefighters' Retirement System (System), as of and for the years ended June 30, 2019, and June 30, 2018, and the related notes to the financial statements, which collectively comprise the System's basic financial statements, and have issued our report thereon dated December 9, 2019. Our report was modified to include emphasis of matter paragraphs regarding actuarial assumptions and investment valuations.

Internal Control over Financial Reporting

In planning and performing our audits of the financial statements, we considered the System'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 System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System'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 combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a

combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, and contracts, 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 audits, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result 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 System's internal control and compliance. Accordingly, this report is not suitable for any other purpose. Under Louisiana Revised Statute 24:513, this report is distributed by the Legislative Auditor as a public document.

Respectfully submitted,

Daryl G. Purpera, CPA, CFE

Legislative Auditor

EBT:DM:BH:EFS:ch

FRS67-2019