FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA



FINANCIAL STATEMENT AUDIT FOR THE YEARS ENDED JUNE 30, 2017, AND 2016 ISSUED DECEMBER 12, 2017

LOUISIANA LEGISLATIVE AUDITOR 1600 NORTH THIRD STREET POST OFFICE BOX 94397 BATON ROUGE, LOUISIANA 70804-9397

LEGISLATIVE AUDITOR DARYL G. PURPERA, CPA, CFE

ASSISTANT LEGISLATIVE AUDITOR FOR STATE AUDIT SERVICES NICOLE B. EDMONSON, CIA, CGAP, MPA

DIRECTOR OF FINANCIAL AUDIT

ERNEST F. SUMMERVILLE, JR., CPA

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LETTER OF TRANSMITTAL

December 4, 2017

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, 2017. 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 retirees and beneficiaries of the plan. 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, 2017, 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 \$1.6 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 2017, FRS' investable assets experienced a 13.9% gain, net of fees, with three and five year averages of 3.4% and 6.3%, respectively. See the MD&A for a more detailed discussion of FRS' investment performance.

Last year FRS' investment portfolio experienced a -2.4% loss. The major asset classes that struggled in 2016, such as international and emerging market equities, rebounded in 2017 and the FRS portfolio experienced a 13.9% gain. Financial markets continue to face headwinds due to domestic and global policy uncertainty, the interest rate environment, and elevated levels of equity valuations. However, data such as unemployment levels and economic growth continue to support financial market trends. The improved investment performance in 2017 resulted in FRS' 5 year investment return of 6.3 % in fiscal year 2017, up from 2.7% in fiscal year 2016.

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, 2017:

| | Above Poverty | Below Poverty |
|--|---------------|---------------|
| Employee | 10.00% | 8.00% |
| Employer | 25.25% | 27.25% |
| For the fiscal year ended June 30, 2018: | | |

| | <u>Above Poverty</u> | Below Poverty |
|----------|----------------------|---------------|
| Employee | 10.00% | 8.00% |
| Employer | 26.50% | 28.50% |

The overwhelming majority of employees 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, 2017, FRS was 73.55% funded compared to 68.16% as of June 30, 2016. FRS' market value of assets increased by \$193.8 million; whereas, the net change in total pension liability increased by \$112.9 million. However, this resulted in a net increase of 5.4% in the System's funded status. Net assets held in trust to pay pension benefits at June 30, 2017 totaled \$1.6 billion.

Key Developments and Highlights

Our efforts are first and foremost for the benefit of our participating employee and employer members. Every department at FRS works together to provide the high quality service that our participants deserve. Key developments are summarized below.

- Considering the foregoing, FRS' total assets finished the year with a market value that attained the \$1.6 billion mark, up from \$1.4 billion in 2016.
- The 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. 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.
- FRS' investments outperformed the overall benchmark by 140 basis points, indicating that the investment managers selected by the board added significant value to the portfolio in 2017. Additionally, FRS ranked in the top quartile of its peers in 2017 according to the InvestorForce Public DB national database.
- During fiscal year 2015, target allocations to private equity and real estate were 8% and 7%, respectively. The FRS board of trustees decided to adopt a more conservative to moderate risk tolerance for these classes of investments and, during fiscal year 2016, private equity targets were trimmed in half to 4% and trimmed to 6% for real estate investments. This allocation shift increases the long term liquidity and flexibility as well as mitigates the unmeasurable risk associated with alternative investments.

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



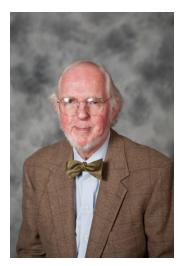
Stacy Birdwell Board Chairman PFFA Representative



Perry Jeselink Vice Chairman PFFA Representative



Mayor David Amrhein LMA Representative



Mayor Ron Roberts LMA Representative



Charlie Fredieu PFFA Representative

BOARD OF TRUSTEES



Honorable Ron Henson State Treasurer



Honorable Barry Ivey Chairman, House Retirement



Honorable Barrow Peacock Chairman, Senate Retirement



Jay Dardenne Division of Administration



Chief Jerry Tarleton Fire Chief Representative



December 4, 2017

Independent Auditor's Report

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Baton Rouge, Louisiana

Report on the Financial Statements

We have audited the accompanying financial statements of the Firefighters' Retirement System of Louisiana (System) as of and for the year ended June 30, 2017, 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 audit. We conducted our audit 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 audit 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, 2017, 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 \$2,166,881,556 as of June 30, 2017. 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, 2017, 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

Prior Period Financial Statements

The financial statements of the System as of June 30, 2016, were audited by other auditors whose report dated November 28, 2016, expressed an unmodified opinion on those statements and included an emphasis of matter paragraph on the actuarial assumptions used to determine the total pension liability.

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, and Schedule of Investment Returns on pages 53 through 56, 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 year ended June 30, 2017, 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 audit 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. For the years ended June 30, 2016, and 2015, the required supplementary information, as listed in the table of contents, was subjected to limited procedures applied in the June 30, 2016, audit of the basic financial statements by other auditors, who did not express an opinion or provide any assurance on the information because of the limited procedures.

Supplementary and Other Information

Our audit was 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 Per Diem Paid to Trustees, Schedule of Administrative Expenses, and Schedule of Compensation, Benefits and Other Payments to Agency Head or Chief Executive Officer, on pages 61 through 63, 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 supplementary information schedules 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. For the year ended June 30, 2017, 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 June 30, 2017, schedules are fairly stated in all material respects in relation to the basic financial statements taken as a whole. For the year ended June 30, 2016, the supplementary information schedules, as listed in the table of contents, were subjected to the auditing procedures applied in the June 30, 2016, audit of the basic financial statements by other auditors, whose report on such information stated that it was fairly stated in all material respects in relation to the June 30, 2016, financial statements as a whole.

The other information presented in the Introductory Section has not been subjected to the auditing procedures applied in the audit 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 4, 2017, 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 to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Respectfully submitted,

Jupera

Daryl G. Purpera, CPA, CFE Legislative Auditor

EBT:DM:BH:EFS:ch

FRS67-2017

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, 2017. 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 \$1.6 billion for fiscal year 2017 as compared to \$1.4 billion for fiscal year 2016 and \$1.4 billion for fiscal year 2015. This represents an increase of \$193.8 million, or 13.8%, for fiscal year 2017 over fiscal year 2016, and a decrease of \$19.2 million, or (1.4)%, for fiscal year 2016 over fiscal year 2015.
- The System employers' net pension liability for fiscal year 2017 was \$573.2 million as compared to \$654.1 million for fiscal year 2016, which represents an \$80.9 million decrease, or (12.4)%, in the pension liability.
- The rate of return on the estimated fair value of the System's investments, net of fees, was 13.9% for fiscal year 2017 as compared to (2.4)% for fiscal year 2016.
- The System experienced net investment gains of \$190.0 million in fiscal year 2017, as compared to net investment losses of \$32.4 million and \$3.2 million in fiscal years 2016 and 2015, respectively. The gains in 2017 were primarily due to gains in domestic, international, and global equities. The losses in 2016 were primarily due to losses in international equities, and losses in 2015 were primarily due to losses in international equities and emerging markets debt.
- Contributions to the System decreased by \$1.6 million, or (1.4)%, in fiscal year 2017 over fiscal year 2016 due to a 2% decrease in the employer contribution rate from the 27.25% rate used in fiscal year 2016 to 25.25% for fiscal year 2017. This decrease was partially offset by contributions for 67 additional active members in fiscal year 2017. Fiscal year 2016 contributions experienced an increase of \$2.1 million, or 1.9%, over fiscal year 2015 due to increased contributions for 170 additional active members, which was partially offset by a 2.0% decrease in the 29.25% employer contribution rate used in fiscal year 2015 to 27.25% for fiscal year 2016.
- Benefit and disability payments increased by \$8.7 million, or 9.2%, in fiscal year 2017 as compared to an increase of \$2.2 million, or 2.3%, in fiscal year 2016. In fiscal year 2017, retiree benefits increased approximately \$5.1 million due to an additional 76 retirees and increased Deferred Retirement Option Plan (DROP) withdrawals in the amount of \$3.6 million. For fiscal year 2016, retiree benefits increased approximately \$4.9 million due to an additional 74 retirees, which was partially offset by a decrease of DROP withdrawals in the amount of \$2.7 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:

- Statement of Fiduciary Net Position
- Statement of Changes in Fiduciary Net Position
- Notes to the 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, 2017, and 2016.

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.

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

FINANCIAL ANALYSIS

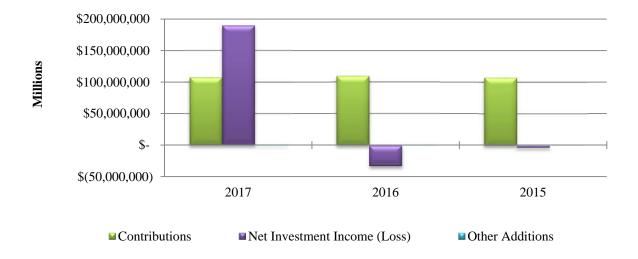
| | Fiscal Year 2017 | Fiscal Year 2016 (restated) | Fiscal Year 2015 (restated) |
|--------------------------------------|---------------------|-----------------------------------|-----------------------------------|
| Assets: | | | |
| Cash | \$9,938,516 | \$9,951,175 | \$7,742,050 |
| Receivables | 18,459,592 | 15,202,285 | 16,255,252 |
| Investments | 1,567,430,098 | 1,375,482,806 | 1,394,792,646 |
| Other assets | 684,491 | 693,148 | 1,520,007 |
| Total assets | 1,596,512,697 | 1,401,329,414 | 1,420,309,955 |
| Liabilities: | | | |
| Total liabilities | 2,816,049 | 1,437,202 | 1,171,186 |
| | | | |
| Net Position Restricted for Pensions | \$1,593,696,648 | \$1,399,892,212 | \$1,419,138,769 |

Comparative Statements of Fiduciary Net Position

| | Fiscal Year 2017 | Fiscal Year 2016 (restated) | Fiscal Year 2015 (restated) |
|----------------------------------|---------------------|-----------------------------------|-----------------------------------|
| Additions: | | | |
| Contributions | \$107,991,264 | \$109,543,041 | \$107,475,372 |
| Net Investment Income (Loss) | 189,996,993 | (32,437,641) | (3,170,963) |
| Other Additions | 1,523,947 | 550,557 | 284,350 |
| Total Additions | 299,512,204 | 77,655,957 | 104,588,759 |
| Deductions: | | | |
| Total Deductions | 105,707,768 | 96,902,514 | 95,757,187 |
| | | | |
| Change in Fiduciary Net Position | \$193,804,436 | (\$19,246,557) | \$8,831,572 |

Comparative Statements of Changes in Fiduciary Net Position

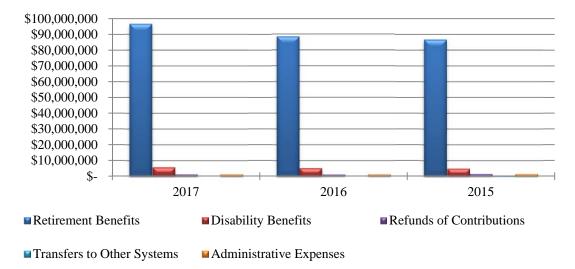
Changes in the System's fiduciary net position include member and employer contributions, an allocation from the insurance premium tax fund, net investment income (loss), deductions for payment of retiree benefits, refunds of contributions, and administrative expenses. The System experienced a gain of \$193.8 million for fiscal year 2017, a loss of \$19.3 million for fiscal year 2016, and a gain of \$8.8 million for fiscal year 2015.



Additions to Fiduciary Net Position

For the fiscal year 2017, total additions increased \$221.9 million, or 285.7%. The change in total additions is comprised of a net investment income increase of \$222.4 million in fiscal year 2017, primarily due to increased earnings from domestic, international, and global equity. These gains were partially offset by a \$1.6 million decrease in the amount of contributions received as a result of a 2.0% decrease from the prior years' employer contribution rate.

For the fiscal year 2016, total additions decreased by \$26.9 million, or (25.8)%. This decrease was due to \$29.3 million of net investment losses, which were primarily international equity investments. This loss was partially offset by a \$2.1 million increase in contributions.



Deductions from Fiduciary Net Position

For the fiscal year 2017, total deductions from fiduciary net position increased by \$8.8 million, or 9.1%. This increase was primarily due to increased benefits of \$5.1 million for 76 additional retirees plus increased Deferred Retirement Option Plan (DROP) withdrawals totaling \$3.6 million.

For the fiscal year 2016, deductions from fiduciary net position increased \$1.1 million, or 1.2%. This increase was due to increased benefits of \$4.9 million for 74 additional retirees, offset by a decrease in DROP withdrawals totaling \$2.7 million and a decrease of \$1.0 million in refunds, transfers, and administrative expenses.

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:

| | For the f | For the fiscal year ending June 30, | | |
|------------------------|-----------|-------------------------------------|--------|--|
| | 2017 | 2016 | 2015 | |
| | | | | |
| Domestic Equity | | | | |
| Large Cap | 17.9% | 3.9% | 7.4% | |
| SMID Cap | 13.3% | -8.7% | -9.0% | |
| International Equity | | | | |
| International Equity | 26.7% | -11.8% | -2.6% | |
| Emerging Market Equity | 25.9% | -12.2% | -8.1% | |
| <u>Global Equity</u> | | | | |
| Global Equity | 23.8% | -11.0% | 4.7% | |
| Fixed Income | | | | |
| Core | 1.2% | 4.6% | 0.6% | |
| Emerging Markets Debt | 6.4% | 0.1% | -16.9% | |
| Alternatives | | | | |
| Multi Asset Strategies | 7.8% | -1.6% | -0.5% | |
| Hedge Funds | NONE | NONE | -61.7% | |
| Private Equity | 8.0% | 3.3% | -11.0% | |
| Real Estate | 9.8% | 0.7% | 6.3% | |
| Total | 13.9% | -2.4% | -0.6% | |

Investment Returns Summary

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 <u>www.ffret.com</u> or contact the System Controller Layne McKinney, at 3100 Brentwood Drive, Baton Rouge, Louisiana 70809.

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Statements of Fiduciary Net Position June 30, 2017, and 2016

| | 2017 | (as restated, Note 11) 2016 |
|--|-----------------|------------------------------------|
| ASSETS: | | |
| Cash - operating | \$9,938,516 | \$9,951,175 |
| Receivables: | | |
| Member contributions | 2,124,241 | 1,911,817 |
| Employer contributions | 5,366,985 | 5,210,347 |
| Accrued interest and dividends | 6,787,458 | 3,071,975 |
| Investment receivable | 1,456,025 | 2,183,754 |
| Notes receivable - merged municipalities | 1,892,922 | 1,992,431 |
| Notes receivable - fire district | 831,961 | 831,961 |
| Total receivables | 18,459,592 | 15,202,285 |
| Investments at fair value: | | |
| Cash held in trust | 4,310,755 | 884,355 |
| Cash equivalents | 33,265,241 | 28,060,931 |
| Equities - domestic | 220,471,658 | 158,849,615 |
| Equities - foreign | 283,632,895 | 198,080,443 |
| Equity security funds | 373,693,850 | 376,903,660 |
| Corporate bonds - domestic | 45,746,753 | 45,905,363 |
| U.S. government agency bonds | 19,872,725 | 19,922,104 |
| Fixed income funds | 271,650,598 | 248,307,069 |
| Multi-asset strategies | 148,480,317 | 137,316,166 |
| Private equity | 46,780,469 | 45,696,756 |
| Real estate | 120,148,372 | 115,168,700 |
| Derivatives | (623,535) | 387,644 |
| Total investments at fair value | 1,567,430,098 | 1,375,482,806 |
| Other assets: | | |
| Capital assets, net of depreciation | 682,426 | 691,145 |
| Prepaid expenses and other | 2,065 | 2,003 |
| Total other assets | 684,491 | 693,148 |
| Total assets | 1,596,512,697 | 1,401,329,414 |
| LIABILITIES: | | |
| Accounts payable | 1,445,571 | 1,015,003 |
| Investment payable | 1,370,478 | 422,199 |
| Total liabilities | 2,816,049 | 1,437,202 |
| NET POSITION RESTRICTED FOR PENSIONS | \$1,593,696,648 | \$1,399,892,212 |

The accompanying notes are an integral part of these statements.

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Statements of Changes in Fiduciary Net Position For the Fiscal Years Ended June 30, 2017, and 2016

| | 2017 | (as restated, Note 11) 2016 |
|---|-----------------|------------------------------------|
| ADDITIONS: | | |
| Contributions: | | |
| Member contributions | \$23,433,443 | \$22,730,660 |
| Employer contributions | 59,247,174 | 61,986,860 |
| State appropriations from insurance premium taxes | 25,310,647 | 24,825,521 |
| Total contributions | 107,991,264 | 109,543,041 |
| Investment income (loss): | | |
| Net appreciation (depreciation) | | |
| in fair value of investments | 178,584,542 | (41,242,270) |
| Interest and dividends | 17,293,071 | 14,356,159 |
| Legal settlements | 1,672,704 | 624,266 |
| Less: investment expenses | (7,553,324) | (6,175,796) |
| Net investment income (loss) | 189,996,993 | (32,437,641) |
| Other additions: | | |
| Interest on notes receivable | 199,319 | 206,817 |
| Non-recurring income | 53,530 | - |
| Transfers from other systems – | | |
| employer, employee, and interest | 1,271,098 | 343,740 |
| Total other additions | 1,523,947 | 550,557 |
| Total additions | 299,512,204 | 77,655,957 |
| DEDUCTIONS: | | |
| Retirement benefits paid | 96,847,111 | 88,672,685 |
| Disability benefits paid | 5,921,571 | 5,405,974 |
| Refunds of contributions | 1,467,175 | 1,358,460 |
| Administrative expenses | 1,471,911 | 1,465,395 |
| Total deductions | 105,707,768 | 96,902,514 |
| NET INCREASE (DECREASE) | 193,804,436 | (19,246,557) |
| NET POSITION RESTRICTED FOR PENSIONS | | |
| Beginning of year | 1,399,892,212 | 1,419,138,769 |
| End of year | \$1,593,696,648 | \$1,399,892,212 |

The accompanying notes are an integral part of these 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. Membership in the System is a condition of employment for full-time firefighters or any person in a position as defined in the municipal fire and police civil service system that earns at least \$375 per month and is employed by any municipality, parish, or fire district of the State of Louisiana. 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 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 employees 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 tax collections from the State of Louisiana based upon actuarial valuations in accordance with R.S. 22:1419(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, 2017, FRS-LB, L.L.C's investments, totaling \$20,177,085, 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%. At June 30, 2016, FRS-LB, LLC's investments, totaling \$13,821,216, included three properties: one was owned 100%, by FRS-LB, L.L.C., another was owned 49.5%, and the third property was owned 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 taxes are recorded when received.

D. CASH AND INVESTMENTS

Cash

Cash, including cash held in trust, 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 fiscal year 2016, the System implemented 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 establishes 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.

H. ADOPTION OF NEW ACCOUNTING STANDARDS

GASB Statement No. 82, *Pension Issues*, was implemented by the System for the fiscal year ended June 30, 2017. The impact from this statement was limited to a change in terminology in the schedules from "covered-employee payroll," payroll of employees that are provided with pensions, to "covered payroll," payroll on which contributions are based.

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

| 2017 | 2016 |
|-------|--|
| | |
| 66 | 66 |
| 18 | 18 |
| 58 | 58 |
| 142 | 142 |
| | |
| | |
| | |
| 2,289 | 2,213 |
| | |
| 669 | 630 |
| 4,602 | 4,535 |
| 7,560 | 7,378 |
| | 66 18 58 142 2,289 669 4,602 |

Membership data at June 30, 2017, and 2016, is as follows:

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 employees 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 employees' lives in the form of a monthly annuity. An employee 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 employee's annuity account balance.
- 2. At death, their beneficiary will receive a life annuity equal to the employee'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 $\frac{1}{2}$ of the employee'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 employee'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 employee dies and is not eligible for retirement, his survivors shall be paid:

1. If the employee 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 employee'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 employee's average final compensation.

- 2. Unmarried children of deceased employees 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 employee 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 an employee, 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 rollover 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 .25% 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, 2017, and 2016, 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, 2017, and 2016, employer contributions were 25.25% and 27.25% of covered payroll above the poverty line and 27.25% and 29.25% of covered payroll below the poverty line, respectively.

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 corrections, 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.

| | 201 | .7 | 201 | 16 |
|-----------|--------------|--------------|--------------|--------------|
| | Member | Employer | Member | Employer |
| Regular | \$23,404,268 | \$59,091,498 | \$22,579,714 | \$61,537,449 |
| Irregular | 29,175 | 155,676 | 150,946 | 449,411 |
| Total | \$23,433,443 | \$59,247,174 | \$22,730,660 | \$61,986,860 |

According to state statute, the System receives insurance premium tax funds from the State of Louisiana. This additional source of income is used to offset the cost of past mergers and is reported as a nonemployer contribution. The total received from the State of Louisiana was \$25,310,647 and \$24,825,521 for the fiscal years ended June 30, 2017, and 2016, respectively. A portion of these contributions is used to finance administrative costs of the System.

Administrative costs are included in aggregate normal cost.

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, 2017, and 2016, was \$194,038,408 and \$181,603,967, respectively.

3. Pension Accumulation Fund

The Pension Accumulation Fund reserves consist of contributions paid by employers, insurance premium tax, 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, 2017, and 2016, was \$342,996,586 and \$219,542,897, 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, 2017, and 2016, was \$930,776,819 and \$880,908,631, 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.* The DROP Fund balance as of June 30, 2017, and 2016, was \$123,047,293 and \$114,788,182, 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 the same rate as the DROP account. The IBO account balance as of June 30, 2017, and 2016, was \$2,837,542 and \$3,048,535, 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, 2017, and 2016, 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, 2017, and June 30, 2016, are as follows:

| | 2017 | 2016 |
|---------------------------------------|-----------------|-----------------|
| Total pension liability | \$2,166,881,556 | \$2,053,982,618 |
| Less: Plan fiduciary net position | (1,593,696,648) | (1,399,892,212) |
| Employers' net pension liability | \$573,184,908 | \$654,090,406 |
| Plan fiduciary net position as a % of | | |
| the total pension liability | 73.55% | 68.16% |

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 54 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, 2017, and 2016, 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. Therefore, the assumed rate of return for the fiscal year 2017 valuation was set at 7.40%. In addition, the inflation rate will be reduced over the coming valuations. For 2017, an assumed rate of inflation of 2.775% was implicit in the assumed rate of return. The remaining actuarial assumptions utilized are based on the results of an actuarial experience study for the period July 1, 2009 to June 30, 2014, unless otherwise specified. Additional information on the actuarial methods and assumptions used in determining the total pension liability as of June 30, 2017, and 2016, are as follows:

| Valuation Date | June 30, 2017 | June 30, 2016 |
|------------------------|--------------------------------------|--------------------------------------|
| Actuarial Cost Method | Entry Age Normal | Entry Age Normal |
| Investment Rate of | 7.40% per annum, net of | 7.50% per annum, net of |
| Return (Discount Rate) | investment expenses, including | investment expenses, including |
| | inflation | inflation |
| Inflation Rate | 2.775% per annum | 2.875% per annum |
| Mortality Rate | Mortality assumptions were set | Mortality assumptions were set |
| | after reviewing an experience study | after reviewing an experience study |
| | performed on plan data for the | performed on plan data for the |
| | period July 1, 2009 through June 30, | period July 1, 2009 through June 30, |
| | 2014. The pre- and post-mortality | 2014. The pre- and post-mortality |
| | life expectancies of participants | life expectancies of participants |
| | based on the RP-2000 Combined | based on the RP-2000 Combined |
| | Healthy with Blue Collar | Healthy with Blue Collar |
| | Adjustment Sex Distinct Tables | Adjustment Sex Distinct Tables |
| | projected to 2031 using Scale AA | projected to 2031 using Scale AA |
| | for employee, annuitant, and | for employee, annuitant, and |
| | beneficiary mortality. The RP-2000 | beneficiary mortality. The RP-2000 |
| | Disabled Lives Mortality Table set | Disabled Lives Mortality Table set |
| | back 5 years for males and set | back 5 years for males and set |
| | back 3 years for females was | back 3 years for females was |
| | selected for disabled annuitants. | selected for disabled annuitants. |
| Expected Remaining | | |
| Service Lives | 7 years, over a closed period | 7 years, over a closed period |
| Cost of Living | For the purpose of determining the | For the purpose of determining the |
| Adjustments (COLAs) | present value of benefits, COLAs | present value of benefits, COLAs |
| | were deemed not to be | were deemed not to be |
| | substantively automatic and only | substantively automatic and only |
| | those COLAs previously granted | those COLAs previously granted |
| | were included. | were included. |
| Salary Increases | Vary from 15.00% in the first two | Vary from 15.00% in the first two |
| - | years of service to 4.75% with 25 | years of service to 4.75% with 25 |
| | or more years of service; includes | or more years of service; includes |
| | inflation and merit increases | inflation and merit increases |
| | | 1 |

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 8.29% and 8.23% as of June 30, 2017, and June 30, 2016, 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, 2017, and 2016, are summarized in the following table:

| | | Long-Term Expected | Long-Term Expected |
|--------------|----------------------------------|---------------------|---------------------|
| | | Real Rate of Return | Real Rate of Return |
| | Asset Type | 2017 | 2016 |
| | U.S. Equity | 6.15% | 6.15% |
| Equity | Non-U.S. Equity | 7.45% | 7.55% |
| | Global Equity | 6.85% | 6.78% |
| Fixed | Fixed Income | 2.04% | 1.85% |
| Alternatives | Real Estate | 4.62% | 4.62% |
| Alternatives | Private Equity | 8.73% | 8.73% |
| Multi-Asset | Global Tactical Asset Allocation | 4.40% | 4.43% |
| Strategies | Risk Parity | 4.79% | 4.17% |

The discount rate used to measure the total pension liability was 7.40% at June 30, 2017, and 7.50% at June 30, 2016. 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 Employees' 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, 2017, and June 30, 2016, 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, 2017 | | | | | |
|-----------------------|---|---------------|---------------|--|--|--|
| | Changes in Discount Rate | | | | | |
| | Current | | | | | |
| | 1.0% Decrease | Discount Rate | 1.0% Increase | | | |
| | 6.400% 7.400% 8.400% | | | | | |
| Net Pension Liability | \$823,644,569 \$573,184,908 \$362,637,555 | | | | | |

| | June 30, 2016 | | | | | |
|-----------------------|--------------------------|---|---------------|--|--|--|
| | Changes in Discount Rate | | | | | |
| | | Current | | | | |
| | 1.0% Decrease | 1.0% Decrease Discount Rate 1.0% Increase | | | | |
| | 6.500% 7.500% 8.500% | | | | | |
| Net Pension Liability | \$891,145,358 | \$654,090,406 | \$454,731,606 | | | |

5. CASH AND INVESTMENTS

The System had the following cash and investments at June 30, 2017, and June 30, 2016:

| | 2017 | 2016 |
|---------------------------------|-----------------|-----------------|
| Cash: | | |
| Cash - operating (bank balance) | \$10,221,677 | \$10,091,510 |
| Investments: | | |
| Cash held in trust | 4,310,755 | 884,355 |
| Cash equivalents | 33,265,241 | 28,060,931 |
| Investments | 1,529,854,102 | 1,346,537,520 |
| Total | \$1,577,651,775 | \$1,385,574,316 |

A. CASH AND CASH HELD IN TRUST

At June 30, 2017, and June 30, 2016, 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. Cash held in trust represents the balance of cash yet to be invested held in accounts at Bank of New York Mellon. These deposits were not covered by any pledged securities. At June 30, 2017, and June 30, 2016, cash held in trust balances of \$4,060,755 and \$635,355, respectively were exposed to custodial credit risk, as \$250,000 in deposits are covered by federal depository insurance.

B. CASH EQUIVALENTS

The System's short-term funds may be invested in cash equivalent securities, which the System defines as any fixed income investments with maturity of less than one year with rating by Moody's and S&P of A or better, money market funds, or custodial bank short-term investment funds.

At June 30, 2017, and June 30, 2016, the System held cash equivalents with a fair value of \$33,265,241 and \$28,060,931, respectively, of which \$4,408,908 and \$4,379,144, respectively, were rated AAAm and \$28,856,333 and \$23,681,787, respectively, were unrated.

The System invested \$4,408,908 and \$4,379,144 as of June 30, 2017, and June 30, 2016, 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 39 days (from LAMP's monthly Portfolio Holdings) as of June 30, 2017.
- *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 <u>http://lamppool.com</u>.

C. INVESTMENTS

1. Investment Policies

In accordance with R.S. 11:263, the System is authorized to invest under the prudentman 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 prudentman 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 in equities, so long as not more than 65% 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, 2017, and June 30, 2016:

| | Asset Type | Target Allocation 2017 | Target Allocation 2016 |
|--------------|----------------------------------|------------------------------|------------------------------|
| | U.S. Equity | 27.00% | 27.00% |
| Equity | Non-U.S. Equity | 20.00% | 21.00% |
| | Global Equity | 10.00% | 10.00% |
| Fixed Income | Fixed Income | 23.00% | 24.00% |
| Alternative | Real Estate | 6.00% | 4.00% |
| 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, 2017, and June 30, 2016, respectively:

| | - | | | |
|---|-----------------|------------------------------------|--|---------------------------------------|
| | | Fa | ir Value Hierarch | y |
| | | Quoted Prices in Active Markets | Significant Other Observable Inputs | Significant Unobservable Inputs |
| | 6/30/2017 | (Level 1) | (Level 2) | (Level 3) |
| Investments by Fair Value Level: | | | | |
| Debt Securities | | | | |
| U.S. Government Agency Bonds | \$19,872,725 | - | \$19,872,725 | - |
| Corporate Bonds - Domestic | 45,746,753 | - | 45,746,753 | - |
| Cash Equivalents | 1,539,449 | \$1,539,449 | - | - |
| Total Debt Securities | 67,158,927 | 1,539,449 | 65,619,478 | - |
| Preferred Securities (foreign) | | | | |
| Emerging Markets | 2,764,773 | 2,764,773 | - | |
| Total Preferred Securities (foreign) | 2,764,773 | 2,764,773 | - | - |
| Equity Securities | | | | |
| Domestic - Large Cap | 97,651,406 | 97,651,406 | - | - |
| Domestic - Small and Mid Cap | 122,820,252 | 122,820,252 | - | - |
| Foreign - Developed Markets | 245,557,751 | 245,557,751 | - | - |
| Foreign - Emerging Markets | 35,310,371 | 35,310,371 | - | |
| Total Equity Securities | 501,339,780 | 501,339,780 | - | - |
| Alternatives | | | | |
| Direct real estate | 20,177,085 | - | - | 20,177,085 |
| Total Alternatives | 20,177,085 | - | - | 20,177,085 |
| Total Investments by Fair Value Level | \$591,440,565 | \$505,644,002 | \$65,619,478 | \$20,177,085 |
| | | | | |
| Investments measured at the Net Asset Value (| (NAV): | | | |
| Cash Equivalents | \$31,725,792 | | | |
| Fixed Income Funds | 271,650,598 | | | |
| Equity Security Funds | 373,693,850 | | | |
| Multi-asset Strategies | 148,480,317 | | | |
| Alternative Investments | | | | |
| Real Estate | 99,971,287 | | | |
| Private Equity | 46,780,469 | | | |
| Total Investments measured at the NAV | \$972,302,313 | | | |
| | | | | |
| Total Investments measured at Fair Value | \$1,563,742,878 | | | |

Investments Reported at Fair Value at June 30, 2017

Investment Derivative Instruments (Note 6):

| Foreign Currency Forward Contracts | (\$623,535) | - | (\$623,535) | - |
|---|-------------|---|-------------|---|
| Total Investment Derivative Instruments | (\$623,535) | - | (\$623,535) | - |

\$387,644

\$387,644

| | | Fair | Value Hierarchy | |
|---|-----------------|------------------------------------|--|---------------------------------------|
| | | Quoted Prices in Active Markets | Significant Other Observable Inputs | Significant Unobservable Inputs |
| _ | 6/30/2016 | (Level 1) | (Level 2) | (Level 3) |
| Investments by Fair Value Level: | | | | |
| Debt Securities | | | | |
| U.S. Government Agency Bonds | \$19,922,104 | - | \$19,922,104 | - |
| Corporate Bonds - Domestic | 45,905,363 | - | 45,905,363 | - |
| Cash Equivalents | 704,453 | \$704,453 | - | |
| Total Debt Securities | 66,531,920 | 704,453 | 65,827,467 | - |
| Preferred Securities (foreign) | | | | |
| Emerging Markets | 732,514 | 732,514 | - | - |
| Total Preferred Securities (foreign) | 732,514 | 732,514 | - | - |
| Equity Securities | | | | |
| Domestic - Large Cap | 53,976,840 | 53,976,840 | - | - |
| Domestic - Small and Mid Cap | 104,872,775 | 104,872,775 | - | - |
| Foreign - Developed Markets | 172,685,204 | 172,685,204 | - | - |
| Foreign - Emerging Markets | 24,662,725 | 24,662,725 | - | - |
| Total Equity Securities | 356,197,544 | 356,197,544 | - | - |
| Alternatives | | | | |
| Direct real estate | 13,821,216 | - | - | 13,821,216 |
| Total Alternatives | 13,821,216 | - | - | 13,821,216 |
| Total Investments by Fair Value Level | \$437,283,194 | \$357,634,511 | \$65,827,467 | \$13,821,216 |
| Investments measured at the Net Asset Valu | e (NAV) | | | |
| Cash Equivalents | \$27,356,478 | | | |
| Fixed Income Funds | 248,307,069 | | | |
| Equity Security Funds | 376,903,660 | | | |
| Multi-asset Strategies | 137,316,166 | | | |
| Alternative Investments | | | | |
| Real Estate | 101,347,484 | | | |
| Private Equity | 45,696,756 | | | |
| Total Investments measured at the NAV | \$936,927,613 | | | |
| Total Investments measured at Fair Value | \$1,374,210,807 | | | |
| Investment Derivative Instruments (Note 6): | | | | |

Investments Reported at Fair Value at June 30, 2016

Valuation Techniques

Foreign Currency Forward Contracts

Total Investment Derivative Instruments

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.

\$387,644

\$387,644

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, 2017, are presented in the following table.

| | | Redemption | | | |
|-----------------------------------|---------------|--------------|---------------|---------------|--|
| | | | Frequency | | |
| | Fair Value | Unfunded | (if currently | Redemption | |
| Investment Type | 2017 | Commitments | eligible) | Notice Period | |
| Cash equivalents | \$31,725,792 | - | Daily | Same day | |
| Fixed income securities | 271,650,598 | - | Daily | 1-2 days | |
| Equity securities | 373,693,850 | - | Daily | 1-30 days | |
| Multi-asset strategies | 148,480,317 | - | Daily | 1-3 days | |
| Alternatives: | | | | | |
| Real-estate - open end | 76,986,516 | - | Quarterly | 30-90 days | |
| Real-estate - closed end | 22,984,771 | \$3,179,929 | N/A | N/A | |
| Private equity funds | 46,780,469 | 33,883,039 | N/A | N/A | |
| Total investments measured at NAV | \$972,302,313 | \$37,062,968 | | | |

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, 2016, are presented in the following table.

| | | | Redemption Frequency | |
|-----------------------------------|---------------|--------------|-------------------------|---------------|
| | Fair Value | Unfunded | (if currently | Redemption |
| Investment Type | 2016 | Commitments | eligible) | Notice Period |
| Cash equivalents | \$27,356,478 | - | Daily | Same day |
| Fixed income securities | 248,307,069 | - | Daily | 1-2 days |
| Equity securities | 376,903,660 | - | Daily | 1-30 days |
| Multi-asset strategies | 137,316,166 | - | Daily | 1-3 days |
| Alternatives: | | | | |
| Real-estate - open end | 73,567,715 | - | Quarterly | 30-90 days |
| Real-estate - closed end | 27,779,769 | \$3,179,929 | N/A | N/A |
| Private equity funds | 45,696,756 | 46,773,838 | N/A | N/A |
| Total investments measured at NAV | \$936,927,613 | \$49,953,767 | | |

<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 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 Barclays Aggregate bond index. The second strategy utilizes quantitative and fundamental analysis to construct a best ideas portfolio across the global fixed-income market. 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 three 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 mispricings and by exploiting relationships between global investment securities and markets. The other two strategies focus on risk-based allocation rather than traditional dollar allocation. The objective of these strategies 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.

<u>Real Estate Investments</u> - Real estate investments consist of four open-ended funds and four 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 11 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, 2017, and June 30, 2016, the System had the following debt investment securities and maturities:

Debt Investments as of June 30, 2017

| | | Investment Maturities (in years) | | | |
|------------------------------|---------------|----------------------------------|--------------|---------------|--------------|
| Investment Type | Fair Value | Less Than 1 | 1 to 5 | 5 to 10 | More Than 10 |
| Corporate Bonds - Domestic | \$45,746,753 | \$3,673,179 | \$11,878,404 | \$22,967,949 | \$7,227,221 |
| U.S. Government Agency Bonds | \$19,872,725 | - | \$2,549 | \$19,117 | \$19,851,059 |
| Fixed-Income Funds | \$271,650,598 | | - | \$271,650,598 | - |

Debt Investments as of June 30, 2016

| | | Investment Maturities (in years) | | | | |
|------------------------------|---------------|----------------------------------|--------------|---------------|--------------|--|
| Investment Type | Fair Value | Less Than 1 | 1 to 5 | 5 to 10 | More Than 10 | |
| Corporate Bonds - Domestic | \$45,905,363 | \$1,201,524 | \$13,821,863 | \$22,127,906 | \$8,754,070 | |
| U.S. Government Agency Bonds | \$19,922,104 | \$132 | \$4,597 | \$23,697 | \$19,893,678 | |
| Fixed-Income Funds | \$248,307,069 | - | - | \$248,307,069 | - | |

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 fixed income manager's portfolio be rated A 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 A or higher. The combined allocation to non-rated issues or issues below investment grade may not exceed 15% of each manager's portfolio. 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, 2017, and June 30, 2016, respectively.

| | Bond Ratings at June 30, 2017 | | | | |
|-----------------|-------------------------------|-----------------|---------------|--|--|
| | U.S. | | | | |
| Standard | Government | Corporate Bonds | Fixed Income | | |
| & Poor's Rating | Agency Bonds | (Domestic) | Funds* | | |
| AAA | - | \$1,493,895 | \$122,190,107 | | |
| AA+ | \$19,872,725 | - | - | | |
| AA | - | - | 10,652,815 | | |
| AA- | - | 3,153,630 | - | | |
| A+ | - | 1,374,282 | - | | |
| А | - | 8,700,263 | 46,662,790 | | |
| A- | - | 13,820,786 | - | | |
| BBB+ | - | 7,957,120 | - | | |
| BBB | - | 7,709,712 | 65,883,915 | | |
| BBB- | - | 1,537,065 | - | | |
| BB or below | - | - | 26,260,971 | | |
| Total | \$19,872,725 | \$45,746,753 | \$271,650,598 | | |

*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, 2016 | | | | |
|-----------------|-------------------------------|-----------------|---------------|--|--|
| | U.S. | | | | |
| Standard | Government | Corporate Bonds | Fixed Income | | |
| & Poor's Rating | Agency Bonds | (Domestic) | Funds* | | |
| AAA | - | \$1,544,848 | \$114,783,759 | | |
| AA+ | \$19,922,104 | 1,201,366 | - | | |
| AA | - | - | 10,773,718 | | |
| AA- | - | 1,348,289 | - | | |
| A+ | - | 1,120,163 | - | | |
| А | - | 9,451,325 | 42,115,241 | | |
| A- | - | 13,192,642 | - | | |
| BBB+ | - | 8,194,394 | - | | |
| BBB | - | 7,607,848 | 59,627,160 | | |
| BBB- | - | 2,244,488 | - | | |
| BB or below | | - | 21,007,191 | | |
| Total | \$19,922,104 | \$45,905,363 | \$248,307,069 | | |

*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 manager that exceeded the System's investment policy at June 30, 2017, and June 30, 2016, 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 investment that exceeded 5% at June 30, 2017, and June 30, 2016, respectively. The System has no formal investment policy regarding concentrations.

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, 2017, and June 30, 2016, are as follows:

| | Fair Value at June 30, 2017 | | Fair Value at | June 30, 2016 |
|--------------------|-----------------------------|---------------|---------------|---------------|
| Currency | Cash | Equities | Cash | Equities |
| Australian Dollar | \$73,589 | \$9,556,648 | \$134,451 | \$6,892,413 |
| Brazil Real | 166,681 | 3,557,496 | 113,427 | 2,942,004 |
| Canadian Dollar | 10,133 | 14,581,918 | 5,801 | 11,737,882 |
| Czeck Koruna | - | 173,823 | - | 169,991 |
| Danish Krone | 479 | 4,325,113 | - | 4,715,482 |
| Euro | 18,858 | 101,408,319 | (24,561) | 67,871,178 |
| Hong Kong Dollar | 108,723 | 19,049,898 | 31,123 | 16,678,431 |
| Hungarian Forint | 3,860 | 265,981 | 4,230 | 330,074 |
| Indonesian Rupiah | 45,503 | 2,729,194 | 38,499 | 1,824,218 |
| Israeli Shekel | 204,304 | - | 1,222 | 343,974 |
| Japanese Yen | 100,116 | 41,152,448 | 69,299 | 21,978,144 |
| Malaysian Ringgit | 26,010 | 502,006 | 12,952 | - |
| Mexican Peso | 215,357 | 1,192,961 | - | 1,020,718 |
| New Zealand Dollar | 2,825 | 448,716 | - | 468,689 |
| Norwegian Krone | 43,681 | 2,072,584 | 4,950 | 1,423,063 |
| Polish Zloty | - | - | 1 | 161,612 |
| Pound Sterling | 314,780 | 41,965,573 | 90,123 | 32,067,764 |
| Singapore Dollar | 17,562 | 1,214,108 | 13,820 | 1,271,717 |
| South African Rand | 8,348 | 1,445,444 | 149,097 | 1,262,070 |
| South Korean Won | 176,683 | 14,419,704 | 60,019 | 6,934,308 |
| Swedish Krona | - | 3,181,413 | - | 3,163,253 |
| Swiss Franc | (5,423) | 18,530,573 | - | 14,021,978 |
| Thailand Baht | 7,380 | 1,858,975 | | 801,480 |
| Total | \$1,539,449 | \$283,632,895 | \$704,453 | \$198,080,443 |

4. Other Disclosures

Money-Weighted Rate of Return

For the years ended June 30, 2017, and June 30, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 13.45% and (2.50%), 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, 2017, the System's investments (including those bought, sold, and held during the year) experienced an increase in value of \$178,584,542. This increase was comprised of \$29,658,609 in realized gains and \$148,925,933 in unrealized gains for the year ended June 30, 2017.

During the year ended June 30, 2016, the System's investments (including those bought, sold, and held during the year) experienced a decrease in value of \$41,242,270. This decrease was comprised of \$3,575,322 in realized gains offset by \$44,817,592 in unrealized losses for the year ended June 30, 2016.

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, 2017, and June 30, 2016, the System has the following derivative instruments categorized as investment derivatives:

| | | Fair Value | | Changes in Fair Value | |
|----------------------------|--------------------|-----------------------|-------------|-----------------------------|-------------|
| | Notional Amount | Classification Amount | | Classification | Amount |
| Forwards: | | | | | |
| Foreign Exchange Contracts | \$15,712,697 | Derivatives | (\$623,535) | Net App (Dep) in Fair Value | (\$623,535) |
| Total Derivatives | \$15,712,697 | | (\$623,535) | | (\$623,535) |

Investment Derivatives at June 30, 2017

| | | Fair Value | | Changes in Fair Value | |
|----------------------------|--------------|----------------|-----------|-----------------------------|-----------|
| | Notional | | | | |
| | Amount | Classification | Amount | Classification | Amount |
| Forwards: | | | | | |
| Foreign Exchange Contracts | \$17,785,270 | Derivatives | \$387,644 | Net App (Dep) in Fair Value | \$387,644 |
| Total Derivatives | \$17,785,270 | | \$387,644 | | \$387,644 |

Investment Derivatives at June 30, 2016

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.

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, 2017 | June 30, 2016 | | | |
| Australian Dollar | (\$15,806) | (\$14,809) | | | |
| Canadian Dollar | 23 | (8,322) | | | |
| Euro | (518,687) | 292,267 | | | |
| Japenese Yen | (44) | - | | | |
| Pound Sterling | (93,392) | 112,668 | | | |
| Swiss Franc | 4,371 | 5,840 | | | |
| Total | (\$623,535) | \$387,644 | | | |

7. NOTES RECEIVABLE FROM MERGED MUNICIPALITIES AND FIRE DISTRICT

Notes receivable from merged municipalities earn a 7% interest rate. The receivables at June 30, 2017, and June 30, 2016, consisted of the following:

| | Annual Payments | | Balance at |
|-----------------|----------------------|-------------------|---------------|
| Municipality | (including interest) | Final Payment Due | June 30, 2017 |
| Kenner | \$95,005 | March 1, 2029 | \$759,521 |
| Kenner Retirees | 142,697 | March 27, 2029 | 1,133,401 |
| Total | \$237,702 | | \$1,892,922 |

Notes receivable from merged municipalities was \$1,992,431 at June 30, 2016.

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, 2017, and June 30, 2016, consisted of the following:

| | Annual Payments | | Balance at |
|---------------|----------------------|-------------------|---------------|
| Fire District | (including interest) | Final Payment Due | June 30, 2017 |
| St. George | \$73,628 | July 1, 2042 | \$831,961 |
| Total | \$73,628 | | \$831,961 |

The fiscal year 2017 payment was recorded in fiscal year 2016 resulting in no activity for fiscal year 2017. The balance of the note receivable as of June 30, 2017, and 2016, is \$831,961 and \$831,961, respectively.

8. CAPITAL ASSETS

Changes in capital assets for the year ended June 30, 2017, are as follows:

| | Beginning Balance | | | Ending Balance |
|-----------------------------|----------------------|-----------|-----------|-------------------|
| Asset Class | July 1, 2016 | Additions | Deletions | June 30, 2017 |
| Land | \$260,107 | - | - | \$260,107 |
| Building | 734,720 | - | - | 734,720 |
| Equipment | 39,485 | \$28,217 | (\$6,821) | 60,881 |
| Furniture and Fixtures | 90,927 | - | - | 90,927 |
| Computer Equipment | 164,453 | 5,700 | (4,783) | 165,370 |
| Total Capital Assets, gross | 1,289,692 | 33,917 | (11,604) | 1,312,005 |
| Accumulated Depreciation | (598,547) | (42,636) | 11,604 | (629,579) |
| Total Capital Assets, net | \$691,145 | (\$8,719) | - | \$682,426 |

| Asset Class | Beginning Balance July 1, 2015 | Additions | Deletions | Ending Balance June 30, 2016 |
|-----------------------------|--------------------------------------|------------|------------|------------------------------------|
| Land | \$260,107 | - | - | \$260,107 |
| Building | 734,720 | - | - | 734,720 |
| Equipment | 38,280 | \$1,205 | - | 39,485 |
| Furniture and Fixtures | 90,083 | 844 | - | 90,927 |
| Computer Equipment | 200,422 | 10,992 | (\$46,961) | 164,453 |
| Total Capital Assets, gross | 1,323,612 | 13,041 | (46,961) | 1,289,692 |
| Accumulated Depreciation | (605,932) | (39,022) | 46,407 | (598,547) |
| Total Capital Assets, net | \$717,680 | (\$25,981) | (\$554) | \$691,145 |

Changes in capital assets for the year ended June 30, 2016, are as follows:

Depreciation expense for the years ended June 30, 2017, and 2016, was \$42,636 and \$39,022, respectively.

9. RISK MANAGEMENT

The System is 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

A. FLETCHER

In the Matter of the Companies Law (2011 Revision) and In the Matter of FIA Leveraged Fund, FSD No. 0013/2012, in the Grand Court of the Cayman Islands, Financial Services Division; and the same matter pending In the Court of Appeal of the Cayman Islands, Civil Appeal No. 6 of 2012.

In April 2008, FRS invested approximately \$45.0 million in a fund (FIAL) that was part of a four fund, master-feeder fund structure managed by Fletcher Asset Management (FAM). Upon request for redemption by FRS in March 2011, FAM responded in June 2011 with a purported in-kind distribution by attempting to assign FRS a 100% interest in a promissory note issued between two of the funds in the master-feeder fund structure. In January 2012, FRS countered by filing a petition to place FIAL into liquidation. The court held for FRS and appointed court officers to accomplish the liquidation. The liquidators were simultaneously taking action to bring two of the other FAM funds within their court-appointed authority. However, before the process could be completed, the liquidators reported that FAM transferred a significant sum of assets into the fourth (and as yet unliquidated) fund and placed that fund into bankruptcy. The bankruptcy court removed FAM as manager of that fund and authorized the U.S. Justice Department to appoint a trustee. The trustee is in the process of conducting all appropriate investigations and determining the location and value of assets to be distributed to FAM's investors, including FRS. The lawsuits involving liquidation of the three funds and bankruptcy of the fourth fund continued throughout the entirety of this fiscal year.

In December 2013, the Louisiana Attorney General (Consumer Protection Division) filed a Notice of R.S. 51:1401 Complaint pursuant to The Unfair Trade Practices and Consumer Protection Law. The Notice was given regarding Citco; Fletcher Asset Management, Inc.; Alphonse "Buddy" Fletcher; Denis Kiely; Duhallow Financial Services, LLC; and Consulting Services Group. Pursuant to this Notice, if the defendants are found by a court of competent jurisdiction to have violated The Unfair Trade Practices and Consumer Protection Law, then FRS may be entitled to treble (triple) damages in any recovery it receives, if any.

In February 2014, FRS filed its initial Petition for Damages in the 19th Judicial District Court, East Baton Rouge Parish, Louisiana (state court). This is hereafter referred to as the "primary lawsuit." The named defendants were Eisner Amper LLP and Eisner Amper Cayman LTD, the auditors of the Fletcher funds. The Petition was subsequently amended to add additional defendants, including Citco (*et al.*), Grant Thornton, Skadden Arps, CSG, Joe Meals, Alphonse "Buddy" Fletcher, Denis Kiely, and Duhallow Financial Services. The Petition seeks to recover substantial damages. Defendants jointly moved to remove the case from state court to the Federal District Court, Middle District, State of Louisiana (and eventually to New York Bankruptcy Court). The Magistrate Judge recommended that the case should be remanded back to state court and issued a report favoring FRS' arguments and position. The defendants appealed, but the District Court Judge affirmed the Magistrate's report and adopted the report as its own opinion. At that point the case was lodged in state court.

The defendants appealed to the federal 5th Circuit Court of Appeals. The 5th Circuit ruled in favor of the defendants by concluding that the issues should be litigated in federal court, and the case was lodged in the U.S. District Court for the Middle District of Louisiana. However, the 5th Circuit's decision was appealed to the U.S. Supreme Court.

In June 2015, FRS filed a separate lawsuit in the 19th Judicial District Court of Louisiana styled as *Firefighters' Retirement System, et al. v. Royal Bank of Scotland* (RBS). FRS alleges that RBS received a redemption of its shares from the FIAL fund, which was prejudicial to FRS and violated the terms of the Fletcher investment's governing documents.

In 2016, three significant events occurred. First, the U.S. Supreme Court declined to hear FRS' appeal of the ruling made by the federal 5th Circuit Court of Appeal. That action tacitly sustained the federal 5th Circuit's ruling that federal district court is the proper jurisdiction for the primary lawsuit. Consequently, the primary lawsuit continued in the

U.S. District Court for the Middle District of Louisiana throughout the entire 2016-17 fiscal year, where it is now lodged for disposition.

Second, a settlement was reached with the defendant "Skadden, Arps, Slate, Meagher & Flom LLP," which resulted in dismissal of this defendant from the primary lawsuit.

Third, lawsuits styled *Firefighters Retirement System et al. v. Royal Bank of Scotland* (RBS2) and *Firefighters Retirement System, et al. v. Swiss Re Financial Products Corporation* (Swiss Re) were filed in the Supreme Court of the State of New York. The claims made in the RBS2 and Swiss Re lawsuits are essentially the same as those made in the RBS lawsuit that was filed in 2015 in Louisiana but, in these cases, all costs of litigation are being paid by the Trustee of the Litigation Pool from the FILB/Leveraged Plan of Reorganization.

At this stage, in the primary lawsuit, the case against the remaining defendants has involved the motion practice and the case has not yet reached the point where it can be referred to a jury for a trial on the merits. The RBS, RBS2, and Swiss Re cases are all in the initial pleading stages and have not yet entered the discovery stage.

B. COMMONWEALTH

Joseph N. Broyles v. Cantor Fitzgerald & Co., et al., Civil Action No. 3:10-854-JJB-SCR, United States District Court, Middle District of Louisiana consolidated with Joseph N. Broyles, et al., versus Cantor Fitzgerald & Co. et al., Civil Action No. 3:10-857-JJB-SCR, United States District Court, Middle District of Louisiana; and In re Sand Spring Capital III, Case No. 11-13393, U.S. Bankruptcy Court, District of Delaware – A consolidation of five funds managed by Commonwealth Advisors.

In 2007, FRS invested approximately \$52.0 million in two funds managed by Commonwealth Advisors. The funds were primarily managed by an investment manager who was at the time a faculty professor of finance at Louisiana State University (LSU). As time passed, the overall fund devalued, including FRS' investment, and the manager placed the funds into bankruptcy. FRS objected to the liquidation schedule that was included in the reorganization plan filed in the bankruptcy court. Subsequently, the Securities and Exchange Commission issued a "Wells Notice" to the investment manager, and the manager has since been removed from management of the funds.

In November 2010, a third party (Dr. Broyles) filed a lawsuit versus Cantor Fitzgerald, Commonwealth Advisors, and Walter Morales alleging a variety of wrongs related to the same funds in which FRS was an investor. In December 2010, FRS, MERS, and ROVERS filed a Petition of Intervention into the Broyles lawsuit, alleging similar wrongs which caused substantial damages to FRS and the other retirement systems.

In September 2013, the U.S. Bankruptcy Court for the District of Delaware entered an order confirming a Plan of Reorganization which reserved the funds' right to assert all claims that the Debtors had immediately prior to the filing of the Petition. An

independent fiduciary was appointed by the bankruptcy court to liquidate the funds' assets and distribute the proceeds. FRS received \$6.8 million of funds from the bankruptcy estate and \$2.75 million directly from the Sand Springs Funds managed by Commonwealth Advisors. The Broyles/FRS *et al.* lawsuit continued throughout the entirety of the 2016-17 fiscal year.

C. SAIL

Firefighters' Retirement System and City of Austin Police Retirement System v. Sail Capital Partners, et al., Suit No. 15-2277, Civil District Court for the Parish of Orleans, State of Louisiana.

FRS filed this lawsuit alleging that the defendants, among other things, violated an investment's Offering Memorandum by failing to diversify the portfolio's investments and then released materially misleading financial statements. After the filing of the lawsuit, the principals of the Sail Management Company announced that there was a lack of working capital. FRS has preserved its right by continuing the lawsuit while simultaneously evaluating the cost of doing so along with the probability and amount of recovery, if any. The Sail lawsuit continued throughout the entirety of the 2016-17 fiscal year.

D. DUTY

Duty v. City of Natchitoches and Firefighters' Retirement System, Suit No. 81,283, 10th Judicial District Court, Natchitoches Parish. FRS is named as a defendant along with the City of Natchitoches in a lawsuit filed by a retired city firefighter. The lawsuit alleges that the city failed to include scheduled overtime in the earnable compensation that it reported to FRS, thus resulting in lower than expected retirement benefits. The plaintiff asks the court to grant an increase in the amount of his retirement benefits. The plaintiff requested certification of a statewide class, thereby making the lawsuit applicable to all similarly-situated firefighters in the State of Louisiana, if the class action is certified by the Court. The lawsuit has a potential class quantum of approximately \$50.0 million. If a class is certified, then the lawsuit may have a material impact on FRS assets by increasing the contributions and actuarial funding that the plaintiff firefighters and employers must pay to FRS to offset the cost of any increased benefits that FRS must pay. The lawsuit is in the motion and discovery stage but, at this point, the Court has ruled in such a way that assures FRS will be made actuarially whole if the plaintiff (or the class) prevails in the matter. The lawsuit continued throughout the entirety of the 2016-17 fiscal year.

11. RECLASSIFICATIONS AND RESTATEMENTS

Certain reclassifications have been made to the prior-year comparative information to conform to the current-year presentation. In addition, interest and credit risk disclosures were corrected for the 2016 fiscal year to include the System's fixed-income funds and the presentation of the foreign currency forward contracts was revised in the statements to present the net contracts' fair

values as derivative investments, as required by GASB, instead of presenting the forward contracts' receivables and payables at year-end. The reclassifications, additional disclosures, and restatement of the forward contracts had no impact on prior-year net position or the changes in net position.

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 | l Years Ended | |
|--|-----------------|-----------------|-----------------|-----------------|
| | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 |
| Total Pension Liability | | | | |
| Service cost | \$52,076,589 | \$49,088,056 | \$50,473,976 | \$49,390,618 |
| Interest | 154,171,843 | 147,115,926 | 139,476,413 | 133,417,234 |
| Changes of benefit terms | - | - | 17,767,886 | - |
| Differences between expected and actual experience | (13,331,207) | (6,578,348) | (18,187,590) | (12,708,035) |
| Changes of assumptions | 22,708,091 | - | 7,891,805 | (318,965) |
| Benefit payments | (102,768,682) | (94,078,659) | (91,920,483) | (86,647,146) |
| Refunds of member contributions | (1,467,175) | (1,358,460) | (1,746,315) | (2,026,345) |
| Other | 1,509,479 | 944,097 | (204,224) | 2,259,400 |
| Net change in total pension liability | 112,898,938 | 95,132,612 | 103,551,468 | 83,366,761 |
| Total pension liability - beginning | 2,053,982,618 | 1,958,850,006 | 1,855,298,538 | 1,771,931,777 |
| Total pension liability - ending (a) | \$2,166,881,556 | \$2,053,982,618 | \$1,958,850,006 | \$1,855,298,538 |
| Plan Fiduciary Net Position | | | | |
| Contributions - employer | \$59,091,498 | \$61,537,449 | \$62,252,947 | \$57,778,849 |
| Contributions - member | 23,404,268 | 22,579,714 | 21,286,015 | 20,465,095 |
| Contributions - non-employer contributing entity | 25,310,647 | 24,825,521 | 23,924,457 | 22,849,383 |
| Net investment income (loss) | 190,196,312 | (32,230,824) | (3,172,845) | 143,849,237 |
| Benefit payments | (102,768,682) | (94,078,659) | (91,920,483) | (86,647,146) |
| Refunds of member contributions | (1,467,175) | (1,358,460) | (1,746,315) | (2,026,345) |
| Administrative expenses | (1,471,911) | (1,465,395) | (1,587,980) | (1,434,359) |
| Other | 1,509,479 | 944,097 | (204,224) | 2,259,400 |
| Net change in plan fiduciary net position | 193,804,436 | (19,246,557) | 8,831,572 | 157,094,114 |
| Plan fiduciary net position - beginning | 1,399,892,212 | 1,419,138,769 | 1,410,307,197 | 1,253,213,083 |
| Plan fiduciary net position - ending (b) | 1,593,696,648 | 1,399,892,212 | 1,419,138,769 | 1,410,307,197 |
| Net pension liability - ending (a) - (b) | \$573,184,908 | \$654,090,406 | \$539,711,237 | \$444,991,341 |
| Plan fiduciary net position as a percentage | | | | |
| of total pension liability | 73.55% | 68.16% | 72.45% | 76.02% |
| Covered payroll | \$234,025,735 | \$225,825,501 | \$212,830,587 | \$204,526,899 |
| Net pension liability as a percentage of covered payroll | 244.92% | 289.64% | 253.59% | 217.57% |
| or covered payron | 244.9270 | 207.0470 | 255.5970 | 217.3770 |

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 Position as a | | | Employers' Net Pension Liability as | |
|-------------------------|-------------------------------|--|--|---|---|---------------------------------------|
| Fiscal Year Ended | Total Pension Liability | Plan Fiduciary Net Position | Employers' Net Pension Liability | Percentage of Total Pension Liability | Covered Payroll | a Percentage of Covered Payroll |
| 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, 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, 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.

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 nonemployer 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 taxes are considered to be support from a non-employer contributing entity.

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. ACTUARIAL ASSUMPTIONS

The information presented in the required supplementary schedules 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.

| Fiscal Year End | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 |
|---|--|---|--|---|
| Valuation Date | June 30, 2017 | June 30, 2016 | June 30, 2015 | June 30, 2014 |
| Actuarial Cost Method | No Change | No Change | No Change | Entry Age Normal |
| Amortization Method | No Change | No Change | No Change | Level dollar basis, closed |
| Remaining Amortization Period | 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. | 1 to 15 years for changes in actuarial funding methods and 9 to 27 years for gains and losses for mergers. |
| Asset Valuation Method | No Change | No Change | No Change | 5-year smoothed market as fully detailed below. |
| Inflation Rate | 2.775% | No Change | 2.880% | 3.000% |
| Investment Rate of Return (Discount Rate) | 7.400%, net | No Change | No Change | 7.500%, net |
| Salary Increases | 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. | Vary from 15.00% in the first two years of service to 5.50% after 14 years. |
| Mortality Rate | No Change | No Change | Based on the results of an actuarial experience study for the period of July 1, 2009 – 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 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. | 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 | No Change | No Change | No Change | 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. |

<u>Asset Valuation Method Details</u>: All assets are valued at market value adjusted to defer fourfifths 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.

SUPPLEMENTARY INFORMATION

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Supplementary Information Schedule of Per Diem Paid to Trustees For the Fiscal Years Ended June 30, 2017, and 2016

| | 2017 | | 2016 | |
|--|-----------|---------|-----------|---------|
| | Number of | | Number of | |
| Trustee | Meetings | Amount | Meetings | Amount |
| Stacy Birdwell | 11 | \$825 | 12 | \$825 |
| Perry Jeselink | 13 | 975 | 13 | 900 |
| Charlie Fredieu | 13 | 975 | 12 | 825 |
| Jerry Tarleton | 12 | - | 13 | - |
| Mayor David Amrhien | 10 | 750 | 10 | 750 |
| Mayor Ron Roberts | 11 | - | 11 | - |
| Treasurer or designee | 11 | - | 13 | - |
| Commissioner of Administration or designee | 13 | - | 11 | - |
| House Retirement Chairman or designee | 3 | - | - | - |
| Senate Retirement Chairman or designee | - | - | 1 | - |
| Totals | | \$3,525 | | \$3,300 |

There were a total of 13 board meetings held in both fiscal years ended June 30, 2017, and 2016. 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.

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Supplementary Information Schedule of Administrative Expenses For the Fiscal Years Ended June 30, 2017, and 2016

| | 2017 | 2016 |
|--|-------------|-------------|
| Human Resource: | | |
| Salaries | \$639,547 | \$631,943 |
| Payroll taxes | 9,266 | 10,230 |
| Employee retirement | 119,544 | 101,807 |
| Employee insurance | 92,054 | 68,189 |
| Staff training and continued education | 490 | 50 |
| Total human resource | 860,901 | 812,219 |
| Professional Services: | | |
| Actuarial | 92,551 | 68,743 |
| IT Support | 74,790 | 74,173 |
| Accounting | 78,460 | 68,095 |
| Legal fees | 92,103 | 125,361 |
| Investigative services | 2,100 | 698 |
| Medical exams | 13,903 | 16,378 |
| Contract services | 33,948 | 48,160 |
| Bank service charges | - | 7,660 |
| Total professional services | 387,855 | 409,268 |
| Communication: | | |
| Advertising | 385 | 3,460 |
| Printing | 4,598 | 5,424 |
| Postage | 31,882 | 32,888 |
| Supplies | 28,194 | 39,156 |
| Dues and subscriptions | 8,229 | 3,286 |
| Telephone | 3,540 | 7,191 |
| Total communication | 76,828 | 91,405 |
| Travel: | | |
| Board member per diem | 3,525 | 3,300 |
| Education seminars | 3,875 | 2,075 |
| Other travel | 37,419 | 32,893 |
| Total travel | 44,819 | 38,268 |
| Building and equipment: | | |
| Insurance - general | 6,502 | 5,350 |
| Utilities | 14,721 | 16,001 |
| Depreciation | 42,636 | 39,022 |
| Building and equipment maintenance | 37,649 | 53,350 |
| Loss on disposal of fixed assets | - | 512 |
| Total building and equipment | 101,508 | 114,235 |
| Total Administrative Expenses | \$1,471,911 | \$1,465,395 |

FIREFIGHTERS' RETIREMENT SYSTEM OF LOUISIANA

Supplementary Information Schedule of Compensation, Benefits, and Other Payments to Agency Head or Chief Executive Officer For the Fiscal Years Ended June 30, 2017, and 2016

Agency Head: Steven S. Stockstill

Positions: Executive Director, Attorney at Law, Notary Public,

| | 2017 | 2016 |
|--|-----------|-----------|
| Salary | \$169,500 | \$169,500 |
| Benefits - Health insurance | 15,087 | 12,515 |
| Benefits - DROP | 42,143 | 86,844 |
| Benefits - Employer retirement contributions | 20,741 | - |
| Continuing professional education fees | 490 | 50 |
| Cell phone | 1,616 | 2,120 |
| Total | \$249,577 | \$271,029 |

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.

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 4, 2017

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 OF LOUISIANA

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 statement of the fiduciary net position and the related statement of changes in fiduciary net position of the Firefighters' Retirement System of Louisiana (System), as of and for the year ended June 30, 2017, 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 4, 2017. Our report was modified to include emphasis of matter paragraphs regarding actuarial assumptions and investment valuations. Our report was also modified to include an other matters paragraph explaining that the financial statements of the System as of June 30, 2016, were audited by other auditors.

Internal Control over Financial Reporting

In planning and performing our audit 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 audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the 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

FRS67-2017