



# COMPREHENSIVE ANNUAL FINANCIAL REPORT

## FOR FISCAL YEARS ENDED JUNE 30, 2018 & 2017

A COMPONENT UNIT OF THE STATE OF LOUISIANA

# PREPARED BY THE ACCOUNTING, INVESTMENT, AND PUBLIC INFORMATION DEPARTMENTS OF THE TEACHERS' RETIREMENT SYSTEM OF LOUISIANA

## Dana L. Vicknair, Director

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Facebook: www.facebook.com/TRSLonline

Twitter: @TRSLonline

TRSL is an equal opportunity employer and complies with the Americans with Disabilities Act.

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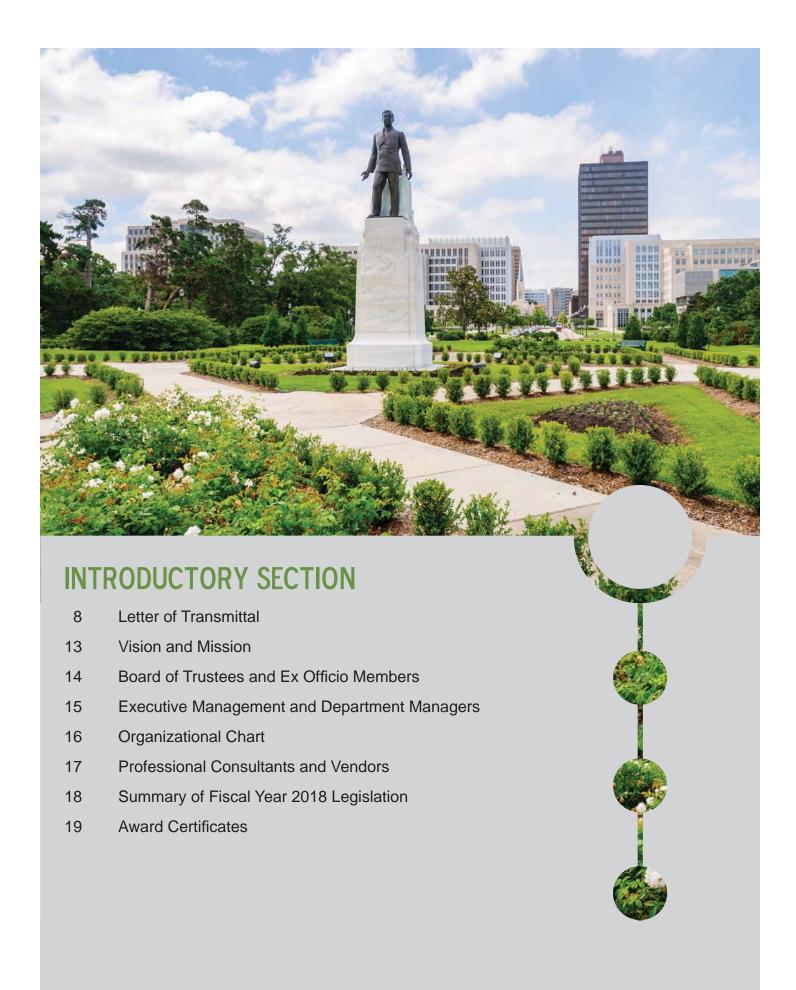
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October 15, 2018

Board of Trustees Teachers' Retirement System of Louisiana Post Office Box 94123 Baton Rouge, LA 70804-9123

#### Dear Board Members:

In my first year as System director, I am pleased to present the 2018 Comprehensive Annual Financial Report (CAFR) for the Teachers' Retirement System of Louisiana (TRSL). This report represents the combined efforts of the TRSL staff and its advisors, and includes a full account of TRSL activities and operations, including our financial position, investment performance, statutory compliance, demographic makeup, and fund stewardship for the fiscal year ended June 30, 2018.

I would first like to draw your attention to our investments. I am happy to report that the retirement system continues to achieve outstanding investment returns. TRSL ended Fiscal Year 2018 with an 11.56% investment return (net of fees), making us #1 in the country among all public pension plans with assets greater than \$1 billion. Additionally, our strong investment performance resulted in the System's market value of assets setting a new all-time high of \$21.0 billion.

Understandably, the good news about our investment performance often takes center stage. Still, at fiscal year-end there was welcome news in other areas. Thanks to our strong market performance, the System's funded status increased to 65.8%, and principal and interest on the unfunded accrued liability (UAL) debt have now been paid for the sixth consecutive year.

Taken together, these financial and funding achievements lay the foundation for a sustainable pension plan that is capable of providing retirement security to members and their beneficiaries for years to come.

In the area of operations, we continue to be recognized for our responsible and prudent stewardship of System resources. Since 2003, TRSL has participated in a benchmarking analysis that compares our administrative and operational performance and costs with similarly sized U.S. public pension plans (peers).

The latest results show that we continue to outperform our peers. According to CEM Benchmarking, of Toronto, TRSL's administrative costs are \$90 per active member and annuitant compared to the peer average of \$112. The analysis also shows that we scored better than our peers on important customer service metrics, such as shorter call wait times and faster benefit processing.

It is all of this work—the financial, administrative, and operational—that our members entrust us to do well. And, I am grateful for the skilled and professional TRSL staff who every day show their commitment and dedication to serving not only our members but also the state of Louisiana.

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Teachers' Retirement System of Louisiana is an equal opportunity employer and complies with Americans with Disabilities Act.

#### 2018 Regular and Special Legislative Sessions

The legislative season this year was a marathon, covering roughly four months. In addition to the regular session, the Legislature held three special sessions to address budget shortfalls.

In the Regular Session, lawmakers approved more changes to the state's return-to-work law. Collectively, Acts 492 and 613 expanded the criteria under which TRSL retirees can return to work under critical shortage or 25% earnings limit provisions.

- Act 492 allows full-time interpreters, educational transliterators, or educators of the deaf or hard of hearing and full- or part-time PreK teachers to return to work in certified critical shortage situations.
- Act 613 allows presenters of professional development and tutors for any PreK-12 student to return to work under a 25% earnings limit. The law also clarified that retirees can return to work as "classroom teachers" employed in a temporary capacity to proctor tests under the earnings limit; and echoed the provisions of Act 492 allowing full- or part-time PreK teachers to return to work under critical shortage provisions.

The remainder of legislation affecting the retirement system can be found on page 18.

#### Profile of TRSL

TRSL is a multiple-employer, cost-sharing defined benefit pension plan established by the Legislature in 1936. Its assets are held in trust to provide retirement benefits for retired members and their beneficiaries.

TRSL is the largest public retirement system in the state with a membership of 195,463. In Fiscal Year 2018, actively employed members increased slightly to 85,045 from 84,228 in the previous fiscal year. The number of annuitants also increased to 78,423 from 77,258 in Fiscal Year 2017.

TRSL is governed by a Board of Trustees whose primary responsibility is to manage and safeguard assets held in trust for the membership. The TRSL Board has 12 elected members, a member of the House retirement committee who is appointed by the Speaker of the House, and four ex officio members who hold their positions by virtue of their state office. Trustees and executive management staff perform all duties in accordance with their fiduciary responsibilities.

In addition to its board meetings, TRSL trustees are required by statute to complete continuing education hours in investments, actuarial science, law, and ethics. Board members must complete a total of 16 hours of trustee education each year.

#### Investments

TRSL manages an investment program that seeks to invest System assets in a manner that is consistent with applicable laws and a clearly defined investment policy. As a long-term investor, retaining a broadly diversified portfolio of global assets in both public and private investments, TRSL maintains a core set of values and fundamental investment beliefs that form the basis for all investment decisions. These include (1) developing a long-term, strategic asset class allocation defined by the Board of Trustees that allows rebalancing to set allocations within specific ranges; (2) using mature time frames and appropriate benchmarks to fairly evaluate active manager performance; (3) seeking investment implementation that is cost effective; and (4) utilizing active investment management in asset classes and strategies where evidence of favorable value-added potential exists.

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At the end of Fiscal Year 2018, TRSL earned a 12.1% return on investments (gross of fees) with investment assets totaling \$21.05 billion. This return makes the System #1 (first percentile) among public pension plans with assets greater than \$1 billion, according to the Wilshire Trust Universe Comparison Service (TUCS). Also, looking at the last nine consecutive rolling years, the System has been the top-performing fund (first percentile) with annualized 11.53% (gross of fees).

Public market assets achieved returns above the corresponding benchmark by 261 basis points, returning 10.60% versus the benchmark of 7.99%. Active management within both U.S. equity and developed international equity contributed to this outperformance. Not unlike public market assets, the System's private asset allocations contributed positive absolute and relative returns for the fiscal year, returning 13.38% versus 12.20% for the benchmark. In this space, venture capital and corporate finance portfolios were the strongest performers within private assets returning 25.58% and 16.66%, respectively.

Over the long term, the System's investment returns continue to outpace those of its peers—achieving a ranking in the top (best) 7% for the 15-year period among public pension funds with assets greater than \$1 billion according to TUCS.

#### Funding

TRSL administers a defined benefit retirement plan. The plan is funded through investment earnings and contributions from employees and employers. Regular Plan members, the System's largest membership, contribute 8.0% of salary toward their retirement benefits. In TRSL's two plans for school food service personnel—Plan A and Plan B—members contribute 9.1% and 5.0% of salary, respectively. Plan B members also contribute to Social Security.

A single employer contribution rate is calculated for the K-12 Regular Plan and School Lunch Plans A and B. A separate contribution rate is calculated for Higher Education Regular Plan employers. All employer rates are based on two factors: (1) the normal cost of funding retirement benefits for the current year, and (2) the amortization of the retirement system's unfunded accrued liability (UAL). The TRSL actuary uses these factors to calculate and recommend employer contribution rates, which are converted to a percentage of total payroll of all active members for each sub-plan. The recommendation must be approved by the TRSL Board of Trustees and adopted by the Public Retirement Systems' Actuarial Committee (PRSAC).

TRSL's actuarial funded ratio for Fiscal Year 2018 increased to 65.8% from 64.5% in Fiscal Year 2017. Additionally, the System's actuarial value of assets increased to \$20.3 billion, up from \$19.2 billion in Fiscal Year 2017 and \$18.3 billion in Fiscal Year 2016.

#### Accomplishments

We are continually looking for opportunities to enhance services and achieve efficiencies. A few of our notable accomplishments this past fiscal year included our continued educational efforts and awareness of cyber security protocols. In this area, the System worked with a third-party vendor to develop a rubric for ongoing staff training on cyber security awareness and data protection related to member data.

We also launched a new member service called TRSL in Your Neighborhood, in which we set up a temporary "satellite office" outside the Baton Rouge area over the course of several days to provide one-on-one member counseling. Members within two years of retirement or DROP eligibility are invited to schedule a 30-minute counseling session where they receive a benefit estimate and the opportunity to talk face-to-face with a TRSL staff member without having to travel to the TRSL office in Baton Rouge. The response was overwhelmingly positive. Going forward, TRSL will continue with this event in other areas of the state.

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Operationally, we have updated our weekly automated testing of death files from the state Department of Health and Hospitals to include the identification of deceased beneficiaries. This helps TRSL more quickly adjust the retirement benefits of retirees who chose to have those benefits increase upon the death of their named beneficiary.

#### Report structure and oversight

TRSL prepares its annual report to meet all requirements in Louisiana Revised Statute 11:832(B), and has been prepared according to the generally accepted accounting principles established by the Governmental Accounting Standards Board (GASB).

The management of TRSL assumes full responsibility for not only the contents of the annual report, but also the internal accounting controls that are designed to provide reasonable assurances regarding the reliability of all financial statements and disclosures in this report. The concept of reasonable assurance recognizes the relationship between the cost of a control and the benefit likely to be derived, based on the judgment of management. Furthermore, the object is to provide reasonable, not absolute, assurance that the financial statements are free of any material errors. To the best of our knowledge, the internal accounting controls currently in place meet the purposes for which they are intended—specifically assuring that the financial statements in this report, including supporting schedules and statistical tables, are presented fairly in all material aspects.

Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

This report consists of the following sections:

Introductory General information regarding TRSL operations

Financial Management's discussion and analysis and financial statements

Investment Summary of investments and performance information

Actuarial Results from actuarial valuation and other actuarial information

Statistical General statistical information about TRSL finances and members

The TRSL Board of Trustees and its executive management have a fiduciary responsibility to act in the best interest of the System—not any particular constituency. Concerning these trustees and staff, there can be no conflicts of interest associated with their positions; they must meet the highest of ethical standards; manage assets in accordance with the goals and statutory requirements of the System; and employ the requisite legal and financial expertise to invest System funds. TRSL also maintains a system of internal controls to reasonably assure member data and financial information are secure and assets and resources are safeguarded and utilized appropriately.

TRSL is also subject to a substantial degree of legislative oversight, which adds another layer of accountability. The Legislature reviews and approves the System's annual operating budget and enacts legislation related to TRSL's administration, benefit structure, investments, and funding. The legislative auditor is responsible for the procurement of audits for TRSL and is authorized to contract with a licensed CPA for each audit. Additionally, PRSAC reviews and adopts TRSL's valuation report, including its actuarial assumptions, each year.

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On behalf of the Louisiana Legislative Auditor's Office, the independent certified public accounting firm of Duplantier, Hrapmann, Hogan, and Maher, L.L.P., located in New Orleans, La., performed the annual financial and compliance audit of TRSL for the years ended June 30, 2018, and 2017. The audits of our financial statements were performed in accordance with generally accepted auditing standards and *Government Auditing Standards* as issued by the Comptroller General of the United States. It is the opinion of the independent auditors that all financial statements contained in this report fairly present, in all material respects, the financial position of TRSL as of June 30, 2018, and 2017.

#### Awards and Recognition

This was the 27th consecutive year that the Government Finance Officers Association (GFOA) presented TRSL with the Certificate of Achievement for Excellence in Financial Reporting for our 2017 Comprehensive Annual Financial Report. TRSL also received the GFOA award for our Popular Annual Financial Report, marking 16 consecutive years of achieving this distinction.

These awards acknowledge state and local governments that exceed the minimum requirements of generally accepted accounting principles to prepare financial reports that reflect the spirit of transparency and full disclosure.

TRSL also received the *Public Pension Standards Award for Funding and Administration* from the Public Pension Coordinating Council (PPCC), a coalition of three national associations that represents more than 500 of the largest U.S. pension plans. Public Pension Standards are a benchmark to measure public defined benefit plans in the areas of retirement system management, administration, and funding.

#### Acknowledgments

With sincere appreciation, we want to thank you, the board members, for your unwavering commitment to the oversight of the System and full support of the TRSL staff. We would also like to acknowledge those members of the staff who prepared this report; their work and dedication to the timely and accurate preparation of this report are commendable.

Respectfully submitted,

Dana L. Dichnain

Dana L. Vicknair

Director

Charlene T. Wilson Chief Financial Officer

Charlese L. Wilson

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## **VISION & MISSION STATEMENT**

## **VISION**

Retirement security in a changing world

## **MISSION**

Manage the Teachers' Retirement System of Louisiana in a manner that creates the highest degree of confidence in our integrity, efficiency, fairness, and financial responsibility

## **VALUES & GOALS**

#### We are here to serve our customers.

Every customer will be provided timely, accurate, and courteous service.

#### We are committed to our role as fiduciaries of the trust.

We will manage the fund's assets with unwavering integrity and discipline to provide retirement benefits and achieve long-term, optimal results.

## We believe in the value of public service and quality education for all Louisiana citizens.

We will foster an environment where innovation, initiative, and accountability are expected and supported.

## We know that with an entrepreneurial spirit and team work, we can accomplish any task.

We will utilize quality principles, leading technology, and partnerships with our stakeholders to improve our products and services.

#### Ultimately, our performance comes from our people.

We value and support employees through open communication, professional development, recognition, and by creating a sense of community.

## **BOARD OF TRUSTEES AND EX OFFICIO MEMBERS**



Board Chair
Retired Members
Term expires 12/31/21

Jerry J. Baudin, Ph.D.



Board Vice Chair
7th District
Term expires 12/31/18

Sheryl R. Abshire,

Ph.D.



Britt L. Colon

1st District
Term expires 12/31/18



John G. Parauka

2nd District

Term expires 12/31/19



3rd District
Term expires 12/31/19

Tia T. Mills, Ed.D.



David A. Hennigan
4th District
Term expires 12/31/19



Holly Bridges Gildig

5th District

Term expires 12/31/20



6th District
Term expires 12/31/20

Ricky Julien, Sr.



Kelly Thompson

School Food Service
Employees
Term expires 12/31/21



Paul E. Nelson, Ph.D.
Superintendents
Term expires 12/31/18



James A. Taylor, Sr., J.D., Ph.D. Retired Members

Term expires 12/31/18



Colleges & Universities
Term expires 12/31/18

**Robert Lawyer** 



Honorable Barrow Peacock

Chair, Senate Retirement Committee Ex officio



Honorable J. Kevin Pearson

Chair, House Retirement Committee Appointed



John M. Schroder
State Treasurer

Ex officio



John White

State Superintendent of Education Ex officio



Jay Dardenne

Commissioner, Division of Administration Ex officio

## **EXECUTIVE MANAGEMENT**



Dana L. Vicknair

Director



Katherine Whitney
Deputy Director



Jeff LaCour
Assistant Director
of Operations



Douglas Swenson

Executive Counsel



Philip Griffith
Chief Investment Officer

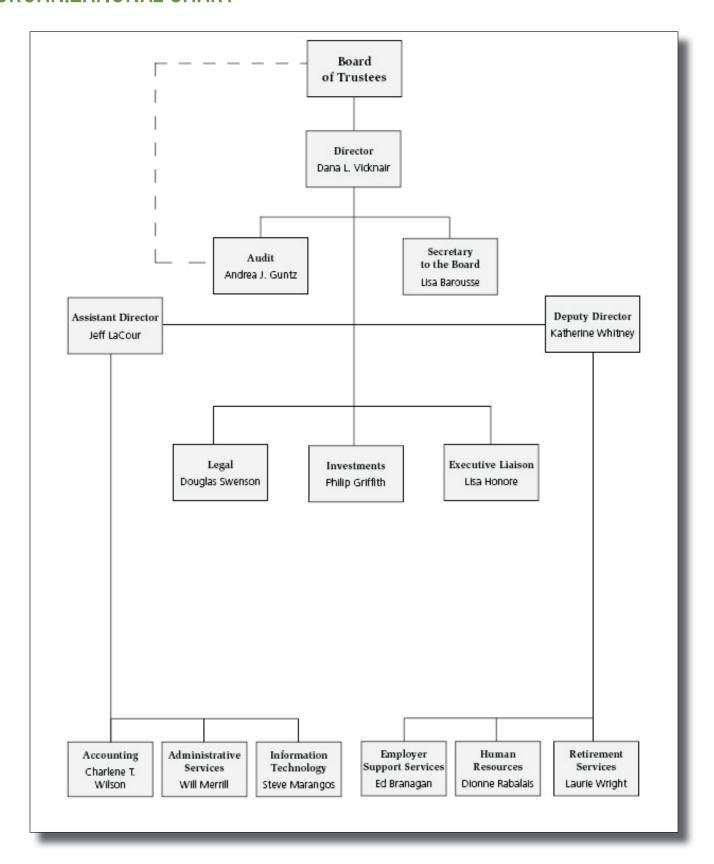
## DEPARTMENT MANAGERS



Front row: Steve Marangos, Information Technology Director; Laurie Wright, Retirement Benefits Administrator; Charlene T. Wilson, Chief Financial Officer; Andrea J. Guntz, Audit Director; Matt Tessier, Deputy General Counsel Back row: Dana Brown, Investment Director of Public Markets: Davorio Stevenson, Investments Operations Director

<u>Back row</u>: **Dana Brown**, Investment Director of Public Markets; **Davorio Stevenson**, Investments Operations Director; **Adam Averite**, Private Assets Manager; **Lisa Honoré**, Executive Liaison Officer; **Dionne Rabalais**, Human Resources Director; **Will Merrill**, Administrative Program Director; **Ed Branagan**, Employer Services Director; **Maurice Coleman**, Deputy Chief Investment Officer

## **ORGANIZATIONAL CHART**



## PROFESSIONAL CONSULTANTS AND VENDORS

#### **Actuaries**

Cavanaugh Macdonald Consulting, L.L.C.

Foster & Foster Consulting Actuaries, Inc.

#### **Auditors & Accountant**

Duplantier, Hrapmann, Hogan & Maher, L.L.P.

Postlethwaite & Netterville

#### **Custodian Bank and Securities Lending Vendor**

**BNY Mellon Asset Servicing** 

#### **Information Technology and Other Consultants**

Bowen ECM Solutions, L.L.C.

CEM Benchmarking, Inc.

Everyone Counts, Inc.

Hunt Telecommunications, Inc.

Investor Responsibility Support Services, Inc.

Modiphy, Inc.

Pro Source Technical Services, L.L.C.

**RMJ Consulting** 

Scope Solutions Group Holdings, Inc.

Sign Language Services International

#### Investment Advisors<sup>1</sup>

Alliance Bernstein, L.P.

Artisan Partners Limited Partnership

Baillie Gifford Overseas Limited

The Boston Company Asset Management, L.L.C.

Brandywine Global Investment Management, Inc.

Brookfield Investment Management, Inc.

**Brown Investment Incorporated Advisory** 

Dimensional Fund Advisors, L.P.

Hamilton Lane Advisors, L.L.C.

J.P. Morgan Investment Management, Inc.

Loomis, Sayles & Co.

LSV Asset Management

Macquarie Investment Management

Mesirow Financial Investment Management

MFS Institutional Advisors, Inc.

Mondrian Investment Partners

#### Investment Advisors1—cont'd

Morgan Stanley Investment Management, Inc.

Pacific Investment Management Co.

Parametric Portfolio Associates

Prudential Fixed Income

Prudential Real Estate Investors

Quantitative Management Associates, LLS

Rhumbline Advisors

T. Rowe Price

Vontobel Asset Management, Inc.

Voya Investment Management

Wedge Capital Management, L.L.P.

Western Asset Management Co.

Westwood Management Corp.

William Blair Investment Management, L.L.C.

#### **Investment Consultants**

Aon Hewitt Investment Consulting, Inc.

Mercer Investment Consulting, L.L.C.

#### **Legal Consultants**

Avant & Falcon

Ice Miller, L.L.P.

Kean Miller, L.L.P.

Klausner, Kaufman, Jensen & Levinson

#### **Medical Examiners**

Jose Artecona, M.D.

Thad S. Broussard, M.D.

Stephen Etheredge, M.D.

Brian C. Gremillion, M.D.

Sheldon Hersh, M.D.

Integrated Behavioral Health

Anthony Ioppolo, M.D.

W. J. Laughlin, M.D.

Michael W. Yorek, M.D.

<sup>&</sup>lt;sup>1</sup>Schedule of Commissions Paid to Brokers is located on page 106 in the Investment Section of this report.

## SUMMARY OF FISCAL YEAR 2018 LEGISLATION

#### Return to work

- Act 613 (Rep. Miller) adds presenter of professional development training and tutor for any PreK-12 student to the list of "re-employment eligible positions" allowing retirees to return to work and continue to receive a benefit payment after the required waiting period, subject to a 25% earnings limit; clarifies that "classroom teachers" can be re-employed in a temporary capacity to proctor tests, also subject to the waiting period and 25% earnings limit. Act 613 also adds full- or part-time PreK teachers to the list of retirees eligible to return to work in critical shortage situations as outlined below in Act 492.
- Act 492 (Rep. Smith) adds full-time interpreter, educational transliterator, or educator of the deaf or hard of hearing and full- or part-time PreK teachers to the list of "re-employment eligible critical shortage positions" allowing retirees to return to work without a reduction of benefits, after the required waiting period and certification of shortage by the employer.

#### Investments

• Act 45 (Rep. Pearson) allows state and statewide retirement systems the option to allocate a portion of their investments to a terror-free fund rather than a terror-free index fund as previously required by law.

#### **Board actuary duties**

• Act 347 (Sen. Peacock) restricts the duties of board-appointed actuaries to actuarial matters and reaffirms the ability of state and statewide retirement systems to appoint independent actuaries.

#### Membership

Act 342 (Sen. Peacock) prohibits a TRSL member with at least five years of TRSL service credit from
retaining membership in TRSL if they move to a position covered by the Clerks' of Court Retirement and
Relief Fund.

#### **Public Retirement Systems' Actuarial Committee (PRSAC)**

 Act 399 (Sen. Peacock) removes the Public Retirement Systems' Actuarial Committee (PRSAC) from the state Department of Treasury and restricts chair and vice-chair duties on PRSAC to the Senate President and House Speaker or their designees.

#### Military service credit

• Act 225 (Sen. Peacock) creates consistency among state and statewide retirement systems in the application of state and federal law related to military service credit purchases.

**Senate Resolution 248** (Sen. Morrish) requests the State Board of Elementary and Secondary Education to explain how the minimum foundation program is calculated to ensure funding of the unfunded accrued liability.

## **AWARD CERTIFICATES**



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Teachers' Retirement System of Louisiana

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2017

Presented to

#### Teachers' Retirement System of Louisiana

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

Alan H. Winkle

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## Duplantier Hrapmann Hogan & Maher, LLP

September 27, 2018

William G. Stamm, CPA Lindsay J. Calub, CPA, LLC Guy L. Duplantier, CPA Michelle H. Cunningham, CPA Dennis W. Dillon, CPA Grady C. Lloyd, III CPA

Heather M. Jovanovich, CPA Terri L. Kitto, CPA

Michael J. O'Rourke, CPA David A. Burgard, CPA Clifford J. Giffin, Jr., CPA

A.J. Duplantier, Jr., CPA (1919-1985)

Felix J. Hrapmann, Jr., CPA (1919-1990)

William R. Hogan, Jr., CPA (1920-1996)

James Maher, Jr., CPA (1921-1999)

#### New Orleans

1615 Poydras Street, Suite 2100 New Orleans, LA 70112 Phone: (504) 586-8866 Fax: (504) 525-5888

#### Northshore

1290 Seventh Street Slidell, LA 70458 Phone: (985) 641-1272 Fax: (985) 781-6497

#### Houma

247 Corporate Drive Houma, LA 70360 Phone: (985) 868-2630 Fax: (985) 872-3833

#### Napoleonville

5047 Highway 1 P.O. Box 830 Napoleonville, LA 70390 Phone: (985) 369-6003 Fax: (985) 369-9941 To the Board of Trustees Teachers' Retirement System of Louisiana Baton Rouge, Louisiana

We have audited the accompanying financial statements of the Teachers' Retirement System of Louisiana (TRSL), a component unit of the State of Louisiana, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Teachers' Retirement System of Louisiana's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### Auditor's Responsibility

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

www.dhhmcpa.com

Members American Institute of Certified Public Accountants Society of LA CPAs 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 TRSL'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 TRSL'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 respective fiduciary net position of the Teachers' Retirement System of Louisiana as of June 30, 2018 and 2017 and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Emphasis of Matter**

As disclosed in Note A to the financial statements, the total pension liability for TRSL was \$30.9 billion and \$29.8 billion at June 30, 2018 and 2017, respectively. The actuarial valuations were based on various assumptions made by TRSL'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, 2018 and 2017 could be understated or overstated.

As disclosed in Note D 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 and investments in real assets. Such investments totaled \$6.5 billion and \$5.6 billion (24% and 23%, respectively, of total assets) at June 30, 2018 and 2017, respectively. Where a publicly listed price is not available, the management of TRSL uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of investments. Our opinion is not modified with respect to this matter.

#### **Other Matters**

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic

financial statements in an appropriate operational, economic, or historical context. For the years ended June 30, 2018 and 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.

#### Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Teachers' Retirement System of Louisiana's basic financial statements. The supporting schedules, introductory section, investment section, actuarial section, and statistical section, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting 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. 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 supplementary schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory section, investment section, actuarial section and statistical section have 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 them.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated September 27, 2018 on our consideration of TRSL's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering TRSL's internal control over financial reporting and compliance.

Duplantier, Hrapmann, Hogan & Maher, LLP

New Orleans, Louisiana



Duplantier Hrapmann Hogan & Maher, LLP

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5047 Highway 1 P.O. Box 830 Napoleonville, LA 70390 Phone: (985) 369-6003 Fax: (985) 369-9941 INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

September 27, 2018

To the Board of Trustees Teachers' 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 statements of the Teachers' Retirement System of Louisiana as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Teachers' Retirement System of Louisiana's basic financial statements, and have issued our report thereon dated September 27, 2018.

#### Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Teachers' Retirement System of Louisiana's internal control over financial reporting 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 Teachers' Retirement System of Louisiana's internal control. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of Louisiana's internal control.

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

Our consideration of internal control over financial reporting 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 Teachers' Retirement System of Louisiana's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

#### Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Teachers' Retirement System of Louisiana'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 Teachers' Retirement System of Louisiana's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Duplantier, Hrapmann, Hogan & Maher, LLP

New Orleans, Louisiana

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Management is pleased to provide this overview and analysis of TRSL's financial performance. This narrative overview and analysis assists in interpreting the key elements of the financial statements, notes to the financial statements, required supplementary information, and supporting schedules for 2018 and 2017. We encourage readers to consider the information and data presented here in conjunction with information provided in other areas of the financial section.

## **Financial Highlights**

- The net position restricted for pensions was \$21 billion in 2018 compared to \$19.5 billion in 2017 and \$17.5 billion in 2016.
- The market rate of return on the System's investments was 12.1% (gross of fees) for 2018 compared to 16.5% for 2017 and 1.6% for 2016.
- TRSL had a net pension liability of \$9.8 billion for 2018 compared to \$10.3 billion for 2017 and \$11.7 billion for 2016.
- Benefit payments were \$2.2 billion in 2018, \$2.1 billion in 2017, and \$2.0 billion in 2016.

#### **Overview of the Financial Statements**

TRSL's basic financial statements include the following:

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

This report also contains required supplementary information in addition to the basic financial statements.

The Statements of Fiduciary Net Position report the System's assets, liabilities, and resultant net position restricted for pensions. It discloses the financial position of the System as of June 30, 2018 and 2017.

The Statements of Changes in Fiduciary Net Position report the results of the System's operations during the years, disclosing the additions to and deductions from the fiduciary net position. It supports the change that has occurred to the prior year's net position on the statement of fiduciary net position.

The *Notes to the Financial Statements* provide additional information and insight that are essential to gain a full understanding of the data provided in the statements.

- Note A provides a general description of TRSL, information regarding employer and membership participation, net pension liability of employers, actuarial methods and assumptions, eligibility, benefits, information regarding legally required reserves, and excess benefit plan.
- Note B provides a summary of significant accounting policies and plan asset matters including the reporting entity, basis of accounting, estimates, methods used to value investments, property and equipment and accumulated leave requirements.
- Note C provides information regarding member and employer contribution requirements.
- Note D categorizes TRSL's investments by fair value measurements, the level of fair value hierarchy, and valuation techniques established by generally accepted accounting principles. It also discloses information regarding certain investments that calculate net asset value per share and provides a description of related asset classes.
- **Note E** provides information regarding TRSL's cash and cash equivalents and risk disclosures.
- Note F provides information on TRSL's investments including the investment policy, domestic equity, developed international equity, investment grade core fixed income, core plus fixed income, global fixed income, high yield fixed income, emerging markets debt, emerging markets equity, alternative assets, real estate, asset allocation, and moneyweighted rate of return.
- Note G provides information regarding securities lending program.
- Note H describes the various types of derivative investments in which TRSL is invested.
- Note I provides information on contingent liabilities.

- Note J provides information on other post-employment benefits, including information on the plan benefits
  provided, contributions, liabilities, expense, deferred inflows, deferred outflows, actuarial assumptions,
  sensitivity of change in discount rate, and healthcare cost trend rate.
- **Note K** provides information on participation in a defined benefit plan, including information on the plan benefits provided, contributions, pension liabilities, pension expense, deferred inflows, deferred outflows, actuarial assumptions, and sensitivity of change in discount rate.
- Note L provides information on subsequent events.
- Note M provides information on reclassifications made to 2017 comparative information.

Required supplementary information consists of schedules and related notes concerning the net pension liability and other post-employment benefits liability of TRSL. It includes the Schedules of Changes in Employers' Net Pension Liability, Schedules of Employer Contributions, Schedules of Money-Weighted Rate of Return, Schedules of the System's Proportionate Share of the Collective Total OPEB Liability, Schedule of TRSL's Proportionate Share of the Net Pension Liability in the Louisiana State Employees' Retirement System, and Schedule of TRSL's Contributions to the Louisiana State Employees' Retirement System.

Supporting schedules include information on administrative expenses, investment expenses, securities lending expenses, board compensation, and payments to non-investment related consultants and vendors.

## **TRSL Financial Analysis**

TRSL provides retirement benefits to all eligible teachers, administrative support staff and school food service personnel of elementary and secondary public education and unclassified staff of institutions of higher education. Member contributions, employer contributions, and earnings on investments fund these benefits. Total net position restricted for pensions at June 30, 2018 was \$21 billion compared to \$19.5 billion at June 30, 2017 and \$17.5 billion at June 30, 2016.

## **Condensed Comparative Statements of Fiduciary Net Position**

	2018	2017	2016
Assets			
Cash and cash equivalents	\$ 277,091,189	\$ 216,603,032	\$ 5,279,450
Receivables	2,557,576,110	2,418,120,216	1,679,296,945
Investments (fair value)	21,149,602,929	19,469,595,134	17,658,310,565
Securities lending collateral	3,266,109,201	2,484,644,788	2,553,584,462
Property and equipment, at cost (net)	3,402,044	3,430,912	3,710,875
Total assets	27,253,781,473	24,592,394,082	21,900,182,297
Deferred outflows of resources	3,024,033	4,095,824	2,395,528
Liabilities			
Accounts payable and other liabilities	2,941,945,310	2,598,187,043	1,810,828,801
Securities lending collateral	3,266,109,201	2,484,644,788	2,553,584,462
Total liabilities	6,208,054,511	5,082,831,831	4,364,413,263
Deferred inflows of resources	2,048,830	312,400	213,607
Net position restricted for pensions	<u>\$ 21,046,702,165</u>	<u>\$ 19,513,345,675</u>	<u>\$ 17,537,950,955</u>

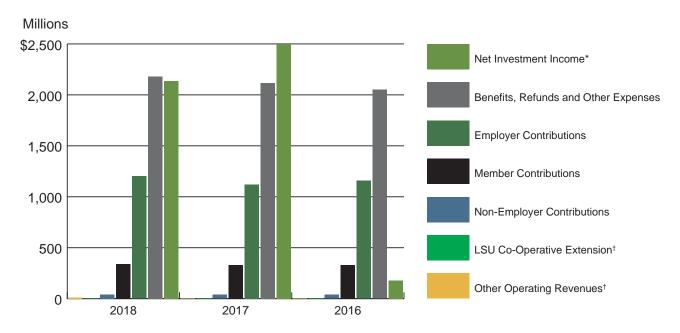
## **Changes in Fiduciary Net Position**

For June 30, 2018, additions to TRSL's net position were derived from investment income and member and employer contributions. For 2018, investment income was \$2,137,872,033 compared to \$2,612,535,238 for 2017, and \$177,640,776 for 2016. For 2018, member contributions increased by \$9,387,512 (2.9%) and employer contributions increased by \$79,551,791 (7.1%). For 2017, member contributions decreased by \$2,232,075 (-0.7%) and employer contributions decreased by \$35,623,561 (-3.1%). The System's actuary and the Public Retirement Systems' Actuarial Committee (PRSAC) adjust employer contribution rates annually.

### **Condensed Comparative Statements of Changes in Fiduciary Net Position**

	2018	2017	2016
Additions			
Member contributions	\$ 337,928,752	\$ 328,541,240	\$ 330,773,315
Employer contributions	1,201,829,353	1,122,277,562	1,157,901,123
Non-employer contributions	39,550,321	38,762,968	38,193,328
LSU Co-Operative Extension	1,873,303	1,754,855	1,830,995
Other operating revenues	11,411,104	2,972,517	2,951,433
Net investment income	2,137,872,033	2,612,535,238	<u>177,640,776</u>
Total additions	3,730,464,866	4,106,844,380	1,709,290,970
Deductions			
Benefits, refunds, and other	2,180,642,976	2,114,653,462	2,050,906,604
LSU Co-Operative Extension	2,017,909	1,995,075	1,873,303
Administrative expenses	14,046,725	14,368,885	14,532,681
Depreciation expense	400,766	432,238	407,105
Total deductions	2,197,108,376	2,131,449,660	2,067,719,693
Net increase (decrease)	<u>1,533,356,490</u>	1,975,394,720	(358,428,723)
Net position restricted for pensions beginning of year	<u> 19,513,345,675</u>	<u> 17,537,950,955</u>	17,896,379,678
Net position restricted for pensions end of year	<u>\$ 21,046,702,165</u>	<u>\$ 19,513,345,675</u>	<u>\$ 17,537,950,955</u>

# Chart for Condensed Comparative Statements of Changes in Fiduciary Net Position (see page 29)



<sup>\*</sup>Values exceed capacity of chart. Refer to table on page 29.

## **Financial Section**

Deductions from plan net assets totaled \$2,197,108,376 in fiscal year 2018, an increase of \$65,658,716 (3.1%) over fiscal year 2017. Deductions from plan net assets total \$2,131,449,660 in fiscal year 2017, an increase of \$63,729,967 (3.1%) over fiscal year 2016. Benefits, refunds, and other payments continue to be the major reason for this increase. For fiscal year 2018, these payments increased by 3.1% compared to 3.1% in 2017 and 2.0% in 2016.

#### Investments

As the state's largest public retirement system, TRSL is responsible for the prudent management of funds held in trust for the exclusive benefit of members. Funds are invested to achieve maximum returns and minimize risk.

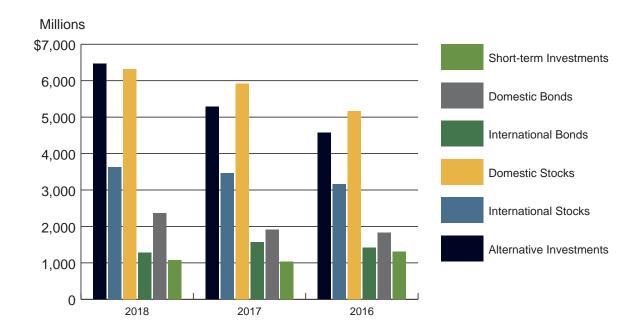
Total investments at June 30, 2018 was \$21.1 billion compared to \$19.5 billion at June 30, 2017 and \$17.7 billion at June 30, 2016. For 2018, the investment increase is due in large part to TRSL's domestic and international stock returns, and returns on alternative investments. During 2018, TRSL experienced a total net investment income of \$2.1 billion compared to \$2.6 billion in 2017 and \$178 million in 2016.

TRSL's market rate of return is 12.1% (gross of fees) for fiscal year ended 2018. TRSL has sustained annualized returns over the past three years of 9.9%. When compared to other public plans with assets greater than \$1 billion, this gives TRSL a top 1st percentile ranking, according to the Wilshire Trust Universe Comparison Service (TUCS).

<sup>&</sup>lt;sup>†</sup>Values do not appear on chart. Refer to table on page 29.

#### **Investments at Fair Value**

	2018	2017	2016
Short-term investments	\$ 1,076,810,833	\$ 1,034,891,991	\$ 1,307,428,499
Domestic bonds	2,371,403,311	1,913,773,495	1,828,132,715
International bonds	1,278,291,190	1,568,570,862	1,413,994,202
Domestic stocks	6,321,369,477	5,927,969,405	5,161,381,152
International stocks	3,635,793,802	3,465,254,946	3,166,197,700
Alternative investments	6,465,934,316	<u>5,559,134,435</u>	4,781,176,297
Total investments	<u>\$ 21,149,602,929</u>	<u>\$ 19,469,595,134</u>	<u>\$ 17,658,310,565</u>



## **Requests for Information**

Questions concerning any of the information provided herein, or requests for additional financial information should be addressed to:

Charlene T. Wilson

**Chief Financial Officer** 

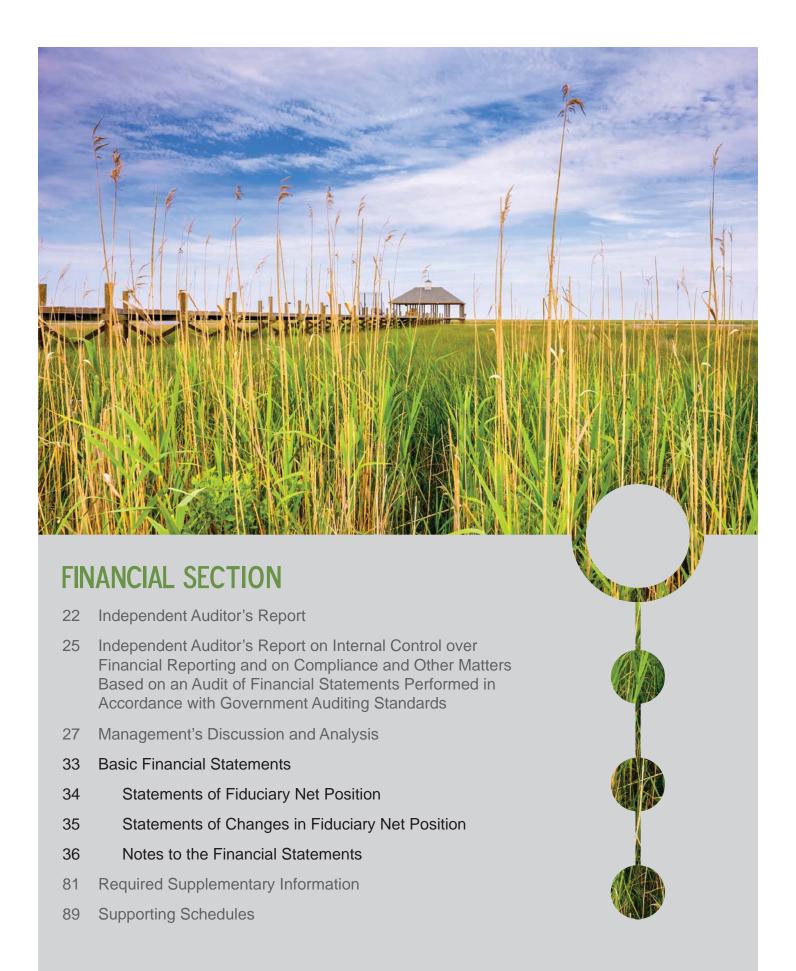
Teachers' Retirement System of Louisiana

P. O. Box 94123

Baton Rouge, LA 70804-9123

cfo@trsl.org

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## Statements of Fiduciary Net Position June 30, 2018, and 2017

	2018	2017
Assets		
Cash and cash equivalents	\$ 277,091,189	\$ 216,603,032
Receivables		
Member contributions	59,496,715	58,060,121
Employer contributions	193,087,813	173,362,583
Pending trades	2,247,597,469	2,134,140,296
Accrued interest and dividends	42,970,791	42,821,700
Other receivables	14,423,322	9,735,516
Total receivables	2,557,576,110	2,418,120,216
Investments, at fair value		
Domestic and international short-term investments	1,076,810,833	1,034,891,991
Domestic bonds	2,371,403,311	1,913,773,495
International bonds	1,278,291,190	1,568,570,862
Domestic common and preferred stocks	6,321,369,477	5,927,969,405
International common and preferred stocks	3,635,793,802	3,465,254,946
Alternative investments	6,465,934,316	5,559,134,435
Total investments	21,149,602,929	19,469,595,134
Invested securities lending collateral		
Collateral held under domestic securities lending program	2,630,972,028	2,156,728,805
Collateral held under international securities lending program	635,137,173	327,915,983
Total securities lending collateral	3,266,109,201	2,484,644,788
Property and equipment (at cost) - net	3,402,044	3,430,912
Total assets	27,253,781,473	24,592,394,082
Deferred outflows of resources	3,024,033	4,095,824
Liabilities		
Accounts payable and other liabilities		
Accounts payable	11,464,680	11,582,174
Benefits payable	4,827,193	7,440,005
Refunds payable	5,976,741	5,740,675
Net Pension Liability - LASERS	16,580,526	18,765,871
Pending trades payable	2,875,472,381	2,539,703,619
OPEB payable	26,099,592	13,398,227
Other liabilities	1,524,197	1,556,472
Total accounts payable and other liabilities	2,941,945,310	2,598,187,043
Securities lending collateral		
Obligations under domestic securities lending program	2,630,972,028	2,156,728,805
Obligations under international securities lending program	635,137,173	327,915,983
Total securities lending collateral	3,266,109,201	2,484,644,788
Total liabilities	6,208,054,511	5,082,831,831
Deferred inflows of resources	2,048,830	312,400
Net position restricted for pensions	\$ 21,046,702,165	\$ 19,513,345,675

See accompanying notes to financial statements.

## Statements of Changes in Fiduciary Net Position for the years ended June 30, 2018, and 2017

	2018	2017
Additions		
Contributions		
Member contributions	\$ 337,928,752	\$ 328,541,240
Employer contributions	1,201,829,353	1,122,277,562
Non-employer contributions	39,550,321	38,762,968
LSU Co-Operative contributions	1,873,303	1,754,855
Total contributions	1,581,181,729	1,491,336,625
Investment income:		
From investment activities		
Net appreciation in fair value of domestic investments	1,828,605,441	1,649,692,124
Net appreciation (depreciation) in fair value of international investments	182,913,088	676,118,342
Domestic interest	81,045,267	69,034,555
International interest	74,180,773	66,844,833
Domestic dividends	91,712,222	93,267,913
International dividends	88,992,825	69,533,456
Alternative investment income (loss)	(109,345,698)	77,452,088
Miscellaneous investment income (loss)	(5,921)	7,710
Total investment income	2,238,097,997	2,701,951,021
Investment activity expenses:		2,701,931,021
International investment expenses	(6,882,036)	(4,523,225)
		(59,492,256)
Alternative investment expenses	(63,314,796)	( , , ,
Investment administrative expenses  Custodian fees	(1,576,523)	(1,522,922)
	(374,584)	(350,933)
Performance consultant fees  Advisor fees	(868,992)	(894,303)
	(37,287,214)	(34,883,417)
Total investment expenses	(110,304,145)	(101,667,056)
Net income from investing activities	2,127,793,852	2,600,283,965
From securities lending activities	00,000,400	00.404.004
Securities lending income	36,862,489	23,131,994
Securities lending expenses:	(0.004.700)	(4.070.404)
Fixed	(8,281,733)	(4,073,161)
Equity	(19,701,898)	(7,708,889)
International	1,199,323	901,329
Total securities lending activities expenses	(26,784,308)	(10,880,721)
Net income from securities lending activities	10,078,181	12,251,273
Total investment income	2,137,872,033	2,612,535,238
Other operating revenues	11,411,104	2,972,517
Total additions	3,730,464,866	4,106,844,380
Deductions		
Retirement benefits	2,116,953,537	2,061,454,295
LSU Co-Operative Extension	2,017,909	1,995,075
Refunds of contributions & other	48,671,220	49,805,920
TRSL employee health & life expense	13,633,156	586,167
Pension expense	1,385,063	2,807,080
Administrative expenses	14,046,725	14,368,885
Depreciation expense	400,766	432,238
Total deductions	2,197,108,376	2,131,449,660
Net increase in net position	1,533,356,490	1,975,394,720
Not world an action of the desired for the second s	40 540 045 055	47 507 656 655
Net position restricted for pensions - beginning of year	19,513,345,675	17,537,950,955
Net position restricted for pensions - end of year	<u>\$ 21,046,702,165</u>	<u>\$ 19,513,345,675</u>

See accompanying notes to financial statements.

## NOTES TO THE FINANCIAL STATEMENTS

## A. Plan Description

#### 1. General

The Teachers' Retirement System of Louisiana (TRSL or the System) is the administrator of a cost-sharing, multiple-employer defined benefit pension plan. It was established and provided for within Title 11, Chapter 2, of the Louisiana Revised Statutes to provide benefits to members and their dependents at retirement or in the event of death, disability, or termination of employment. The System is a component unit of the State of Louisiana and is included in the State's Comprehensive Annual Financial Report (CAFR) as a pension trust fund.

In accordance with Louisiana Revised Statutes, the System is subject to certain elements of oversight:

- The operating budget of the System is subject to budgetary review and approval by the Legislature.
- Annual sworn statements on all financial transactions and the actuarial valuation of the System must be furnished to the Legislature at least 30 days before the beginning of each regular session.
- The legislative auditor is responsible for the procurement of the audit for the System and is authorized to contract with a licensed CPA.
- Actuarial calculations and results are reviewed by the Public Retirement Systems' Actuarial Committee (PRSAC) annually.
- The Louisiana Legislature enacts legislation pertaining to the System, including administration, benefits, investments, and funding. All proposed retirement legislation is considered by the House and/or Senate Committees on Retirement. The legislative actuary prepares actuarial notes identifying the costs or savings related to such legislation.

## 2. Membership

At June 30, 2018 and 2017, the number of participating employers was:

	2018	2017
School boards	69	69
Colleges and universities	25	25
Laboratory schools	5	5
State agencies	51	51
Charter schools	35	35
Other	19	18
Total	204	203

Membership consisted of the following at June 30, 2018 and 2017, the dates of the latest actuarial valuations:

	2018	2017
Retirees and beneficiaries receiving benefits	78,423	77,258
Deferred Retirement Option Plan participants	2,420	2,478
Terminated vested employees entitled to but not yet receiving benefits	7,211	6,941
Terminated nonvested employees who have not withdrawn contributions	22,364	20,980
Current active employees:		
Vested	54,921	54,569
Nonvested	27,840	27,202
Post Deferred Retirement Option Plan participants	2,284	2,457
Total	195,463	191,885

# 3. Net Pension Liability of Employers

The Schedules of Employers' Net Pension Liability presents information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. The net pension liability, which was calculated in accordance with GASB 67 as of June 30, 2018 and 2017, is shown below.

# Schedules of Employers' Net Pension Liability

	2018	2017
Total pension liability	\$ 30,871,936,837	\$ 29,762,623,913
Plan fiduciary net position <sup>1</sup>	21,043,916,901	19,510,746,776
Employers' net pension liability <sup>2</sup>	9,828,019,936	10,251,877,137
Plan fiduciary net position as a percentage of total pension liability	68.2%	65.6%

<sup>&</sup>lt;sup>1</sup>Plan fiduciary net position excludes side-fund assets held for the LSU Agricultural and Extension Service.

Actuarial valuation of the ongoing System involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

<sup>&</sup>lt;sup>2</sup>Based on fair value of assets

## 4. Actuarial Methods and Assumptions

The actuarial methods and assumptions used in determining the total pension liability as of June 30, 2018 and 2017 are as follows

Valuation date	June 30, 2018 and 2017
Actuarial cost method	Entry Age Normal
Amortization approach	Closed
Expected remaining service lives	5 years
Investment rate of return	7.65% and 7.70%, respectively, net of investment expenses
Inflation rate	2.5% per annum
Projected salary increases	3.3% - 4.8% varies depending on duration of service
Cost-of-living adjustments	1.5% for the year ended June 30, 2017
Mortality	Active members – RP-2014 White Collar Employee tables, adjusted by 1.010 for males and by 0.997 for females. Non-Disabled retiree/inactive members – RP-2014 White Collar Healthy Annuitant tables, adjusted by 1.366 for males and by 1.189 for females. Disability retiree mortality – RP-2014 Disability tables, adjusted by 1.111 for males and by 1.134 for females. These base tables are adjusted from 2014 to 2018 using the MP-2017 generational improvement table, with continued future mortality improvement projected using the MP-2017 generational mortality improvement tables.
Termination and disability	Termination, disability, and retirement assumptions were projected based on a 5-year (July 1, 2012 – June 30, 2017) experience study of the System's members.

The 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 expenses, 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 and an adjustment for the effect of rebalancing/diversification. The resulting long-term geometric nominal expected rates of return are 8.07% for 2018 and 8.33% for 2017. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2018 and 2017 are summarized in the following table:

	Expected Long-Term Real Rate of Return			
Asset Class	2018 2017			
Domestic equity	4.01%	4.28%		
International equity	4.90%	4.96%		
Domestic fixed income	1.36%	1.98%		
International fixed income	2.35%	2.75%		
Private equity	8.39%	8.47%		
Other private assets	3.57%	3.51%		

The discount rate used to measure the total pension liability at June 30, 2018 and 2017 was 7.65% and 7.70%, respectively. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan'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.

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

In accordance with GASB 67, the following presents the net pension liability calculated using the discount rate of 7.65% for the year ended June 30, 2018 and 7.70% for the year ended June 30, 2017, and what the net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher.

	1% Decrease	Current Discount Rate	1% Increase
	6.65%	7.65%	8.65%
Employers' net pension liability June 30, 2018	\$13,019,747,254	\$9,828,019,936	\$7,135,631,690

	1% Decrease	Current Discount Rate	1% Increase
	6.70%	7.70%	8.70%
Employers' net pension liability June 30, 2017	\$13,209,777,658	\$10,251,877,137	\$7,735,662,651

## 5. Eligibility

TRSL was established for the purpose of providing retirement allowances and other benefits as stated under the provisions of La. R.S. 11:700-999, as amended, for eligible teachers, employees, and their beneficiaries. The projection of benefit payments in the calculation of the total pension liability includes all benefits to be provided to current active and inactive employees through the System in accordance with the benefit terms and any additional legal agreements to provide benefits that are in force at the measurement date.

The System consists of three membership plans that require mandatory enrollment for all employees who meet the following eligibility requirements:

- TRSL Regular Plan employees that meet the legal definition of a "teacher" in accordance with Louisiana Revised Statute 11:701(33)(a).
- TRSL Plan A employees paid with school food service funds in which the parish has withdrawn from Social Security coverage.
- TRSL Plan B employees paid with school food service funds in which the parish has not withdrawn from Social Security coverage.

These three membership plans are considered one pension plan for financial reporting purposes. All assets accumulated for the payment of benefits may legally be used to pay benefits to any of the plan members or beneficiaries. TRSL provides retirement, disability, and survivor benefits.

#### 6. Benefits

The following is a description of the plan and its benefits, and is provided for general information purposes only. Participants should refer to the appropriate statutes for more complete information.

#### **Service Retirement**

Members hired prior to July 1, 1999

Service retirement benefits are established and amended by state statutes and are payable to members who have terminated covered employment and meet both age and service eligibility requirements. All members retire under one of three plans – Regular Plan, Plan A, or Plan B. Eligibility for each plan is determined by the date the member joined TRSL as follows:

Regular Plan - Eligibility for retirement is determined by the date the member joined TRSL.

moniboro imod prior to car	, .,		
2.0% benefit factor	•	At least age 60 with at least 5 years of service credit, or	
2.0% benefit factor	•	Any age with at least 20 years of service credit	
	•	At least age 65 with at least 20 years of service credit, or	
2.5% benefit factor	•	At least age 55 with at least 25 years of service credit, or	
	•	Any age with at least 30 years of service credit	
Members joining system between July 1, 1999 and December 31, 2010			
	•	At least age 60 with at least 5 years of service credit, or	
2.5% benefit factor	•	At least age 55 with at least 25 years of service credit, or	
2.5% benefit factor	•	Any age with at least 20 years of service credit (actuarially reduced), or	
	•	Any age with at least 30 years of service credit	
Members first eligible to joi	in aı	nd hired between January 1, 2011 and June 30, 2015	
2.5% benefit factor	•	At least age 60 with at least 5 years of service credit, or	

Any age with at least 20 years of service credit (actuarially reduced)

Any age with at least 20 years of service credit (actuarially reduced)

# Plan A - Plan A is closed to new entrants.

2.5% benefit factor

Members hired before July 1, 2015

Members first eligible to join and hired on or after July 1, 2015

All Plan A members		
	•	At least age 60 with at least 5 years of service credit, or
3.0% benefit factor	•	At least age 55 with at least 25 years of service credit, or
	•	Any age with at least 30 years of service credit

At least age 62 with at least 5 years of service credit, or

#### Plan B

2.0% benefit factor		At least age 60 with at least 5 years of service credit, or	
		At least age 55 with at least 30 years of service credit	
Members first eligible to join and hired on or after July 1, 2015			
2 00/ hanafit factor	•	At least age 62 with at least 5 years of service credit, or	
2.0% benefit factor		Any age with at least 20 years of service credit (actuarially reduced)	

#### **Benefit Formula**

For all plans, retirement benefits are based on a formula which multiplies the final average compensation by the applicable accrual rate and by the years of creditable service. For Regular Plan and Plan B members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011, final average compensation is defined as the highest average 60-month period. For all other members, final average compensation is defined as the highest average 36-month period.

# **Payment Options**

A retiring member is entitled to receive the maximum monthly benefit payable until the member's death. In lieu of the maximum monthly benefit, the member can elect to receive a reduced monthly benefit payable in the form of a Joint and Survivor Option, or a reduced monthly benefit (maximum or reduced Joint and Survivor Option) with a lump sum that cannot exceed 36 months of the member's maximum monthly benefit amount.

Effective July 1, 2009, members can make an irrevocable election at retirement to receive an actuarially reduced benefit which increases 2.5% annually, beginning on the first retirement anniversary date, but not before age 55 or before the retiree would have attained age 55 in the case of a surviving spouse. This option can be chosen in combination with the above options.

# **Disability Retirement Benefits**

Active members whose first employment makes them eligible for membership in a Louisiana state retirement system before January 1, 2011, and who have 5 or more years of service credit are eligible for disability retirement benefits if certified by the State Medical Disability Board (SMDB) to be disabled from performing their job. All other members must have at least 10 years of service to be eligible for a disability benefit. Calculation of the disability benefit as well as the availability of a minor child benefit is determined by the plan to which the member belongs and the date on which the member's first employment made them eligible for membership in a Louisiana state retirement system.

#### **Survivor Benefits**

A surviving spouse with minor children of an active member with at least 5 years of creditable service (2 years immediately prior to death) or 20 years of creditable service is entitled to a benefit equal to the greater of (a) \$600 per month, or (b) 50% of the member's benefit calculated at the 2.5% accrual rate for all creditable service. When a minor child(ren) is no longer eligible to receive survivor benefits, and the deceased member had at least 10 years of creditable service, the spouse's benefit reverts to a survivor benefit in accordance with the provisions for a surviving spouse with no minor child(ren). Benefits for the minor child(ren) cease when he/she is no longer eligible.

Each minor child (maximum of 2) shall receive an amount equal to the greater of (a) 50% of the spouse's benefit, or (b) \$300 (up to 2 eligible children). Benefits to minors cease at attainment of age 21, marriage, or age 23 if enrolled in an approved institution of higher education.

A surviving spouse without minor children of an active member with at least 10 years of creditable service (2 years immediately prior to death) is entitled to a benefit equal to the greater of (a) \$600 per month, or (b) the option 2 equivalent of the benefit calculated at the 2.5% accrual rate for all creditable service.

# Permanent Benefit Increases/Cost-of-Living Adjustments

As fully described in Title 11 of the Louisiana Revised Statutes, the System allows for the payment of ad hoc permanent benefit increases (PBIs), also known as cost-of-living adjustments (COLAs) that are funded through investment earnings when recommended by the Board of Trustees and approved by the State Legislature. Fifty percent of any excess return above \$200 million (indexed to positive changes in the actuarial value of assets, beginning June 30, 2015) will be credited to the Experience Account, subject to the restrictions provided in Act 399 of 2014. The Experience Account is used to fund permanent benefit increases for retirees. The Experience Account balance as of June 30, 2018 and 2017 was \$85,129,775 and \$37,154,395, respectively.

## **Optional Retirement Plan (ORP)**

The Optional Retirement Plan (ORP) was established in 1989 for academic employees of public institutions of higher education who are eligible for membership in TRSL. This plan was designed to provide certain academic and unclassified employees of public institutions of higher education an optional method of funding for their retirement. Employees in eligible positions of higher education can make an irrevocable election to participate in the ORP rather than TRSL. Participant and employer contributions are pooled and invested by their designated ORP carrier in the investment options of their choosing.

The ORP is a defined contribution pension plan which provides for portability of assets and full and immediate vesting of all contributions submitted on behalf of the participating employees to the approved providers. These providers are selected by TRSL's Board of Trustees. Monthly employer and employee contributions are invested as directed by the employee to provide the employee with future retirement benefits. The amount of these benefits is entirely dependent upon the total contributions and investment returns accumulated during the employee's working lifetime.

	2018	2017
Employees joining ORP consisted of:		
Members of TRSL joining ORP	86	53
New employees joining ORP	<u>629</u>	540
Total members joining ORP	<u>715</u>	<u>593</u>
Total actively contributing participants	7,131	7,183
Amounts transferred to ORP:		
Amounts previously held in TRSL reserves	\$ 361,386	\$ 283,938
Contributions	81,533,455	77,910,309
Total	<u>\$81,894,841</u>	<u>\$78,194,247</u>
Number of ORP employers	118	116
Participant contribution rates:		
Participant contribution rate (applicable for ORP transfers)	7.95%	7.95%
Participant contribution rate (administrative fee - TRSL)	0.05%	0.05%
Total employee contribution rate	<u>8.00%</u>	<u>8.00%</u>

Act 607 of the 2014 Regular Legislative Session required each higher education board created by Article VIII of the Louisiana Constitution to establish, by resolution, the portion of the employer contribution to be transferred to the ORP participants' accounts (transfer amount). If TRSL did not receive a resolution containing a transfer amount by June 1 of the previous fiscal year, the ORP law sets the transfer amount as the most recent contribution amount paid by the higher education board. This amount would be the transfer amount paid the previous year as a percentage of pay.

For all employers that are not a higher education board created by Article VIII of the Louisiana Constitution or an employer institution not under the supervision and control of such a board, the transfer amount will be the greater of the normal cost for a member of TRSL's regular retirement plan or 6.2%. The amount must be set as a percentage of pay.

Effective for fiscal year of 2018 - 2019 and thereafter, the transfer amount will be the greater of the normal cost for a member of TRSL's regular retirement plan or 6.2% for all employers who have employees participating in the ORP. The amount must be set as a percentage of pay.

The following tables display the total employer contribution amount (transfer amount and shared UAL) for employers that report ORP participants for the years ending June 30, 2018 and 2017 for both higher education and non-higher education institutions. The transfer amount along with the participant's contributions, less the administrative fee, are transferred to their selected ORP provider and invested. The shared UAL portion is retained by TRSL.

# Higher Education Employers: ORP Contribution Rates for fiscal year ended June 30, 2018

	Employer Rate (ER)			
Management Board	Transfer Amount	Shared UAL	Total ER	
Board of Regents	5.945900%	22.2000%	28.1000%	
Board of Supervisors of Louisiana State University	5.945900%	22.2000%	28.1000%	
Board of Supervisors of Southern University	5.945975%	22.2000%	28.1000%	
Southern Lab School	5.945975%	22.2000%	28.1000%	
Board of Supervisors of the University of Louisiana System	5.750000%	22.2000%	28.0000%	
Board of Supervisors of Community & Technical Colleges	5.945975%	22.2000%	28.1000%	

# Higher Education Employers: ORP Contribution Rates for fiscal year ended June 30, 2017

	Employer Rate (ER)			
Management Board	Transfer Amount	Shared UAL	Total ER	
Board of Regents	5.6919%	21.2000%	26.9000%	
Board of Supervisors of Louisiana State University	5.6919%	21.2000%	26.9000%	
Board of Supervisors of Southern University	5.6919%	21.2000%	26.9000%	
Southern Lab School	5.6919%	21.2000%	26.9000%	
Board of Supervisors of the University of Louisiana System	5.2545%	21.2000%	26.5000%	
Board of Supervisors of Community & Technical Colleges	5.6919%	21.2000%	26.9000%	

# Non-Higher Education Employers: ORP Contribution Rates

		Employer Rate (ER)	
Fiscal Year	Transfer Amount	Shared UAL	Total ER
2018	6.2000%	22.2000%	28.4000%
2017	6.2000%	21.2000%	27.4000%

## 7. Legally Required Reserves

# **Deferred Retirement Option Plan (DROP)**

DROP was implemented on July 1, 1992, with the passage of Louisiana Revised Statutes 11:786 by the Legislature. When a member enters DROP, his status changes from an active member to a retiree, even though he continues to work at his regular job and draws his regular salary. In the original DROP, participation in the program could not exceed two years; however, DROP was modified on January 1, 1994 to allow for a three-year period of participation. During the DROP participation period, the retiree's retirement benefits are paid into a special account. The election is irrevocable once participation begins. For members eligible to enter DROP prior to January 1, 2004 interest will be earned at a rate equal to the actuarial realized rate of return on the System's portfolio for that plan year as certified by the System's actuary in their actuarial report, less one-half of one percent after participation ends.

For members eligible to enter DROP on or after January 1, 2004, interest will be earned at the liquid asset money market rate, less one quarter of one percent administrative fee. Interest is posted monthly to the accounts and will be based on the balance in the account for that month. At the time of retirement, the member must choose among available alternatives for the distribution of benefits which have accumulated in the DROP account.

Upon termination of DROP participation, the member can continue employment and earn additional benefit accruals to be added to the fixed pre-DROP benefit.

Upon termination of employment, the member is entitled to the fixed benefit, an additional benefit based on post-DROP service (if any), and the individual DROP account balance which can be paid in a lump sum or as an additional annuity based upon the account balance.

## **Initial Lump-Sum Benefit (ILSB)**

Effective January 1, 1996, the Legislature authorized TRSL to establish an Initial Lump-Sum Benefit (ILSB) program. The ILSB is available to members who have not participated in DROP and who elect the maximum benefit, option 2 benefit, option 2A benefit, option 3 benefit, option 3A benefit, option 4 benefit, or option 4A benefit. The ILSB program provides both a one-time, single sum payment of up to 36 months of the maximum regular monthly retirement benefit and a reduced monthly retirement benefit for life. Interest credited and payments from the ILSB account are made in accordance with Louisiana Revised Statutes 11:789(A)(I).

Membership, disbursements, and reserve balances for the DROP and ILSB programs for the fiscal years ended June 30, 2018 and 2017 are as follows:

## For members who became eligible to participate before January 1, 2004:

	2018	2017
DROP		
Members entering DROP	0	0
Disbursements	\$ 49,605,445	\$ 51,362,470
DROP reserves at June 30	\$ 565,433,752	\$ 563,895,514
ILSB		
Members choosing ILSB	0	0
Disbursements	\$ 385,239	\$ 691,250
ILSB reserves at June 30	\$ 4,749,406	\$ 4,711,174

## For members who became eligible to participate on or after January 1, 2004

	2018	2017
DROP		
Members entering DROP	874	999
Disbursements	\$ 93,501,586	\$ 84,841,546
DROP reserves at June 30	\$ 473,530,750	\$ 483,029,284
ILSB		
Members choosing ILSB	215	162
Disbursements	\$ 9,423,538	\$ 7,279,492
ILSB reserves at June 30	\$ 2,382,792	\$ 1,628,953

## Interest rates for the DROP and ILSB programs over the past 10 years are as follows:

#### **DROP/ILSB Account Interest Rates**

	Interest Rate			
Fiscal Year Ending June 30	For members who became eligible to participate <i>before</i> January 1, 2004	For members who became eligible to participate on or after January 1, 2004		
2009	0.00%*	1.3200%		
2010	0.00%*	.0100%		
2011	5.94%	.0050%		
2012	4.55%	.0001%		
2013	12.91%	.0000%		
2014	12.64%	.0000%		
2015	10.76%	.0000%		
2016	6.17%	.0595%		
2017	8.65%	.2214%		
2018 <sup>†</sup>	8.98%	.9538%		

<sup>\*</sup>An attorney general opinion in 2002 ruled that DROP/ILSB accounts could not be debited. If not for this ruling, DROP/ILSB account interest rates would have been reduced by 1.39% for 2010 and 12.81% for 2009.

#### 8. Excess Benefit Plan

Louisiana Revised Statute 11:945 established the Excess Benefit Plan as a separate, unfunded, nonqualified plan under the provisions set forth in Louisiana Revised Statute 11:946, and also as a qualified governmental excess benefit arrangement as defined in Section 415(m)(3) of the United States Internal Revenue Code.

Effective July 1, 1999, an excess benefit participant who is receiving a benefit from this System is entitled to a monthly benefit under this plan in an amount equal to the lesser of either the participant's unrestricted benefit as defined in Louisiana Revised Statute 11:701, less the maximum benefit, or the amount by which the participant's monthly benefit from this System has been reduced by the limitations of Louisiana Revised Statute 11:784.1. A benefit payable under this plan is paid in the form and at the time it would have been paid as a monthly pension except for the limitations under Louisiana Revised Statute 11:784.1 and Section 415 of the United States Internal Revenue Code.

<sup>†</sup>Upon Public Retirement Systems' Actuarial Committee (PRSAC) approval of fiscal year valuation.

Contributions may not be accumulated under the Excess Benefit Plan to pay future retirement benefits. Instead, monthly contributions made by the employer are reduced by the amount necessary to pay that month's excess retirement benefits. Employer contributions made to fund the Excess Benefit Plan are not commingled with the monies of the pension plan or any other qualified plan. Also, the Excess Benefit Plan may never receive a transfer of assets from the pension plan. The number of benefit recipients and the total benefits for the years ended June 30, 2018 and 2017 is as follows:

	2018	2017
Number of Excess Benefit Plan recipients	46	49
Total benefits	\$1,079,730	\$1,076,932

# B. Summary of Significant Accounting Policies and Plan Asset Matters

# 1. Reporting Entity

TRSL (the "System") is a component unit of the State of Louisiana. A 17-member Board of Trustees (composed of 10 active members, two retired members, and five ex officio members) governs TRSL. The Board of Trustees appoints the director, who is the System's managing officer.

During 2018, the System adopted GASB 75, *Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions*. GASB 75 improves accounting and financial reporting for post-employment benefits other than pensions (OPEB). It also improves information provided by state and local government employers about financial support for OPEB that is provided by other entities. The standard required the System to record its proportionate share of OPEB amounts related to the participation in a multi-employer defined OPEB plan using specific guidelines outlined in the standard. The implementation resulted in the recognition of the adjusted OPEB amount of \$13,190,993, which is included with employee health and life expense on the Statements of Changes in Fiduciary Net Position.

# 2. Basis of Accounting

TRSL's financial statements are prepared in conformity with accounting principles generally accepted in the United States of America 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. Member and employer contributions are recognized when due, pursuant to formal commitments as well as statutory or contractual requirements. State appropriations are recognized in the period appropriated. Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on the accrual basis.

Administrative costs are funded through investment earnings and are subject to budgetary control by the Board of Trustees and approval of the Joint Legislative Committee on the Budget. Benefits and refunds are recognized when due and payable in accordance with the terms of the System.

#### 3. Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of additions to and deductions from plan net assets during the reporting period. Actual results could differ from those estimates. The System utilizes various investment instruments, which, by nature, are exposed to a variety of risk levels and risk types, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term, and such changes could materially affect the amounts reported in the Statements of Fiduciary Net Position.

#### 4. Method Used to Value Investments

GASB Statement No. 72 (GASB 72) was implemented for fiscal year ended June 30, 2016. As required by GASB 72, investments are reported at fair value which is described as an exit price. This statement requires a government to use valuation techniques that are appropriate under the circumstances and for which sufficient data is available to measure fair value. 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. That hierarchy has three levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. 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 D.

Short-term investments are reported at market value when published prices are available, or at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at the current exchange rate.

All derivative financial instruments are reported at fair value in the Statements of Fiduciary Net Position. 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 nature and use of derivative instruments is discussed in Note H.

The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value (such as private equity, real estate, and tangible assets) has been recorded based on the investment's capital account balance which is reported at fair value, at the closest available reporting period, and adjusted for subsequent contributions, distributions, and management fees.

Investments that do not have an established market are reported at estimated fair value. Unrealized gains and losses are included as investment earnings in the Statements of Changes in Fiduciary Net Position.

Because of the inherent uncertainties in estimating fair values, it is at least reasonably possible that the estimates will change in the near term.

### 5. Property and Equipment

Land, building, equipment, and furniture are carried at historical cost. Depreciation for the building is computed using the straight-line method based upon a useful life of 40 years. Depreciation for office equipment and furniture with a purchase price of at least \$1,000 is computed using the straight-line method based upon a useful life of three to ten years. Items with a purchase price of less than \$1,000 and more than \$250 are computed using the straight-line method with a useful life of three years. Items with a purchase price of less than \$250 are expensed in the current year.

TRSL and the Louisiana State Employees' Retirement System (LASERS) share a 50/50 joint ownership of the Louisiana Retirement Systems building, equipment, and related land.

The following is a summary of the changes in property and equipment for the years ended June 30, 2018 and 2017:

	Jun	e 30, 2017	Ad	ditions	De	letions	Jun	e 30, 2018
Asset Class (at Cost)								
Land	\$	858,390	\$	0	\$	0	\$	858,390
Building		6,172,134		243,226		0		6,415,360
Equipment, furniture, fixtures		5,372,940		167,291	_	(3,084,674)		2,455,557
Total Property and Equipment		12,403,464		410,517		(3,084,674)		9,729,307
Accumulated Depreciation								
Building		(4,278,112)		(203,019)		0		(4,481,131)
Equipment, furniture, fixtures		(4,694,440)		(197,747)		3,046,055		(1,846,132)
<b>Total Accumulated Depreciation</b>	_	(8,972,552)		(400,766)	_	3,046,055	_	(6,327,263)
Total Property and Equipment — Net	<u>\$</u>	3,430,912	<u>\$</u>	9,751	<u>\$</u>	<u>(38,619</u> )	<u>\$</u>	3,402,044
	Jun	e 30, 2016	Ad	ditions	De	letions	Jun	e 30, 2017
Asset Class (at Cost)								
	1							
Land	\$	858,390	\$	0	\$	0	\$	858,390
Land Building	\$	858,390 6,170,609	\$	0 1,525	\$	0	\$	858,390 6,172,134
	\$	,	\$		\$	-	\$	
Building	\$ 	6,170,609	\$	1,525	\$	0	\$	6,172,134
Building Equipment, furniture, fixtures	\$	6,170,609 5,222,190	\$	1,525 150,750	\$	0 (0)	\$	6,172,134 5,372,940
Building Equipment, furniture, fixtures	\$	6,170,609 5,222,190	\$	1,525 150,750	\$ 	0 (0)	\$	6,172,134 5,372,940
Building Equipment, furniture, fixtures Total Property and Equipment	\$ 	6,170,609 5,222,190	\$	1,525 150,750	\$ 	0 (0)	\$ 	6,172,134 5,372,940
Building Equipment, furniture, fixtures Total Property and Equipment Accumulated Depreciation	\$	6,170,609 5,222,190 12,251,189	\$ 	1,525 150,750 152,275	\$ 	(0) (0)	\$ 	6,172,134 5,372,940 <b>12,403,464</b>
Building Equipment, furniture, fixtures Total Property and Equipment  Accumulated Depreciation Building	\$ 	6,170,609 5,222,190 12,251,189 (4,038,224)	\$	1,525 150,750 152,275 (239,888)	\$ 	(O) (O)	\$ 	6,172,134 5,372,940 12,403,464 (4,278,112)
Building Equipment, furniture, fixtures  Total Property and Equipment  Accumulated Depreciation  Building Equipment, furniture, fixtures	\$	6,170,609 5,222,190 12,251,189 (4,038,224) (4,502,090)	\$ 	1,525 150,750 152,275 (239,888) (192,350)	\$	0 (0) (0)	\$ 	6,172,134 5,372,940 12,403,464 (4,278,112) (4,694,440)

#### 6. Accumulated Leave

The employees of the System accumulate annual and sick leave at varying rates as established by state regulations. Upon resignation or retirement, unused annual leave of up to 300 hours is paid to employees at the employee's current rate of pay. The liability for accrued annual leave of up to 300 hours is included in other liabilities on the Statement of Fiduciary Net Position. Upon retirement, unused annual leave in excess of 300 hours and sick leave may be converted to service credit subject to restrictions of the retirement system to which the employee belongs.

# C. Member and Employer Contributions

Member contribution rates for the System are established by La. R.S. 11:62. The employer contribution rate is established annually under La. R.S. 11:101-11:104 by the Public Retirement Systems' Actuarial Committee (PRSAC), taking into consideration the recommendation of the System's actuary. Each subplan pays a separate actuarially determined employer contribution rate. However, all assets of TRSL are used for the payment of benefits for all classes of members, regardless of their plan.

The normal cost portion of each plan's employer contribution rate varies based upon that plan's benefits, member demographics, and the rate contributed by employees. The unfunded accrued liability (UAL) contribution rate is determined in aggregate for all plans. The UAL established due to a specific plan or group of plans because of legislation will be allocated entirely to that plan or those plans.

Employee and employer contribution rates for each plan for the years ended June 30, 2018 and 2017 are as follows:

	Employee		Employer	
Fiscal Year 2018	Normal Cost Rate	Normal Cost Rate	Shared UAL Rate	Total Contribution Rate*
Regular Plan (K-12 Teachers)	8.0%	4.3642%	22.2%	26.6%
Regular Plan (Higher Ed)	8.0%	3.2194%	22.2%	25.4%
Lunch Plan A	9.1%	4.3642%	22.2%	26.6%
Lunch Plan B	5.0%	4.3642%	22.2%	26.6%

	Employee	loyee Employer				
Fiscal Year 2017	Normal Cost Rate	Normal Cost Rate	Shared UAL Rate	Total Contribution Rate*		
Regular Plan (K-12 Teachers)	8.0%	4.3127%	21.2%	25.5%		
Regular Plan (Higher Ed)	8.0%	3.2272%	21.2%	24.4%		
Lunch Plan A	9.1%	9.5044%	21.2%	30.7%		
Lunch Plan B	5.0%	6.9670%	21.2%	28.2%		

<sup>\*</sup>Rounded.

NOTE: In accordance with state statute, the System receives ad valorem taxes and state revenue-sharing funds. These additional sources of income are used as employer contributions and are considered support from non-employer contributing entities, but are not considered special funding situations.

# D. Fair Value Disclosures

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The System has the following recurring fair value measurements as of June 30, 2018 and 2017, respectively:

June 30, 2018		Fai	r Value Measurement U	sing
	Fair Value	Quoted Prices in Active Markets	Significant Other Observable Markets	Significant Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
Investments by Fair Value Level				
Debt Investments:				
U.S. Treasury and Government Obligation	\$ 1,246,921,747	\$ 650,116,230	\$ 596,805,517	\$ 0
Corporate Bonds	488,513,526	5,796,078	468,858,864	13,858,584
Miscellaneous	635,968,038	5,700,691	630,267,347	0
International Bonds	1,278,291,190	796,760	1,276,263,990	1,230,440
Domestic & International Short-Term Investments	1,076,810,833	434,882,263	138,110,652	503,817,918
Total Debt Securities	<u>\$ 4,726,505,334</u>	<u>\$ 1,097,292,022</u>	<u>\$ 3,110,306,370</u>	\$ 518,906,942
Equity Securities:				
Large Cap	3,503,554,252	3,503,554,252	0	0
Mid Cap	924,551,230	924,551,230	0	0
Small Cap	1,568,624,816	1,568,624,816	0	0
International Equities	2,493,967,493	2,493,967,493	0	0
Global REIT	146,945,943	146,945,943	0	0
Domestic Fixed Income	2,462,760	0	2,462,760	0
Other	36,925,098	10,316,603	26,608,495	0
Total Equity Securities	\$ 8,677,031,592	\$ 8,647,960,337	\$ 29,071,255	\$ 0
Alternative Assets and Real Estate:				
Private Equity Investments	\$ 4,785,375,893	\$ 24,648,940	\$ 0	4,760,726,953
Real Estate Investments	654,225,956	0	0	654,225,956
Total Alternative Assets and Real Estate	\$ 5,439,601,849	\$ 24,648,940	\$ 0	\$ 5,414,952,909
Total Investments at Fair Value Level	\$ 18,843,138,775	\$ 9,769,901,299	<u>\$ 3,139,377,625</u>	<u>\$ 5,933,859,851</u>
Investments measured at Net Asset Value (NAV)	\$ 2,322,838,531	\$ 0	\$ 0	<u>\$</u> 0
Investment Derivatives:				
Foreign Exchange Contracts	(16,374,377)	0	(16,374,377)	0
Total Investments at Fair Value	<u>\$ 21,149,602,929</u>			
Investment Derivatives:				
Futures Payable	\$ (16,973,742)	\$ (16,973,742)	\$ 0	\$ 0
Short Cash & Cash Equivalent and Fixed Income and Written Options Payable	(408,032,718)	(220,274)	(407,812,444)	0

June 30, 2017		Fai	r Value Measurement Us	sing
	Fair Value	Quoted Prices in Active Markets	Significant Other Observable Markets	Significant Unobservable Inputs
		(Level 1)	(Level 2)	(Level 3)
Investments by Fair Value Level				
Debt Investments:				
U.S. Treasury and Government Obligation	\$ 1,106,219,115	\$ 586,852,636	\$ 519,366,479	\$ 0
Corporate Bonds	525,401,081	0	512,541,819	12,859,262
Miscellaneous	282,153,299	6,035,329	276,117,970	0
International Bonds	1,568,570,862	1,610,707	1,565,412,873	1,547,282
Domestic & International Short-Term Investments	1,034,891,992	477,503,238	138,408,232	418,980,522
Total Debt Securities	<u>\$ 4,517,236,349</u>	<u>\$ 1,072,001,910</u>	<u>\$ 3,011,847,373</u>	<u>\$ 433,387,066</u>
Equity Securities:				
Large Cap	3,475,310,542	3,475,310,542	0	0
Mid Cap	879,135,360	879,135,360	0	0
Small Cap	1,371,560,131	1,371,560,131	0	0
International Equities	2,382,144,758	2,382,144,758	0	0
Other	39,396,360	12,253,043	27,143,317	0
Total Equity Securities	<u>\$ 8,147,547,151</u>	\$ 8,120,403,834	\$ 27,143,317	<u>\$</u> 0
Alternative Assets and Real Estate:				
Private Equity Investments	\$ 3,460,029,238	\$ 30,850,762	\$ 0	\$ 3,429,178,476
Real Estate Investments	642,520,359	0	0	642,520,359
Mezzanine Financing Investments	<u>555,766,680</u>	0	0	555,766,680
Total Alternative Assets and Real Estate	<u>\$ 4,658,316,277</u>	\$ 30,850,762	<u>\$</u> 0	<u>\$ 4,627,465,515</u>
Total Investments at Fair Value Level	<u>\$ 17,323,099,777</u>	\$ 9,223,256,506	\$ 3,038,990,690	<u>\$ 5,060,852,581</u>
Investments measured at Net Asset Value (NAV)	<u>\$ 2,140,377,658</u>	\$ 0	<u>\$</u> 0	<u>\$</u> 0
Investment Derivatives:				
Foreign Exchange Contracts	6,117,699	0	6,117,699	0
Total Investments at Fair Value	<u>\$ 19,469,595,134</u>			
Investment Derivatives:				
Futures Payable	\$ (1,770,527)	\$ (1,770,527)	\$ 0	\$ 0
Short Cash & Cash Equivalent and Fixed Income and Written Options Payable	(262,710,000)	(35,340)	(262,674,660)	0

Securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Securities classified in Levels 2 and 3 of the fair value hierarchy are valued using a proprietary matrix based on asset class (e.g. 'sector code,' 'firm code,' or 'asset type code'). Matrix pricing relies on the securities' relationship to other benchmark quoted securities.

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

		2018 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
JP Morgan Strategic Property Fund	(1)	\$ 472,886,037	0	Quarterly	45 days prior to quarter end
MetLife Core Property Fund	(2)	296,979,018	0	Quarterly	60 days prior to quarter end
Prudential Real Estate	(3)	256,467,412	0	Quarterly	1 quarter prior to the quarter the redemption is required
Dimensional Funds-Emerging Markets Value Portfolio	(4)	534,056,402	0	Daily	N/A
Dimensional Funds-International Small Co. Portfolio	(5)	361,417,699	0	Daily	N/A
Harding Loevner Emerging Market Collective Investment Fund	(6)	401,031,963	0	Daily	Same day notice
Total		\$ 2,322,838,531			

The unfunded commitments and redemption terms 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.

		2017 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
JP Morgan Strategic Property Fund	(1)	\$ 441,683,853	0	Quarterly	45 days prior to quarter end
MetLife Core Property Fund	(2)	221,903,473	0	Quarterly	60 days prior to quarter end
Prudential Real Estate	(3)	237,230,831	0	Quarterly	1 quarter prior to the quarter the redemption is required
Dimensional Funds-Emerging Markets Value Portfolio	(4)	505,062,329	0	Daily	N/A
Dimensional Funds-International Small Co. Portfolio	(5)	363,552,526	0	Daily	N/A
Harding Loevner Emerging Market Collective Investment Fund	(6)	370,944,646	0	Daily	Same day notice
Total		\$ 2,140,377,658			

- 1. JP Morgan Strategic Property Fund: Strategic Property Fund is an actively managed diversified, pure core, open-end commingled pension trust fund. It invests in high-quality stabilized office, retail, residential, and industrial assets with dominant competitive characteristics in primary markets throughout the United States. Properties are well-leased, generating significant operating cash flow, and a high income return. Broad diversification, both geographically and by sector, have contributed to strong risk-adjusted returns of 9.8% gross of fees (8.7 % net of highest applicable fees) since the Fund's inception in January 1998. The Fund's size, quality, consistent pure core strategy, high occupancy, low lease rollover, solid income, conservative leverage, and staggered debt maturities position the Fund well to execute on its strategy. Investments in the Fund are valued at the current day closing net asset value per share. As part of the Trustee's valuation process, properties are externally appraised generally on an annual basis, by reputable, independent appraisal firms, and signed by appraisers that are members of the Appraisal Institute, with the professional MAI designation. In addition, the Trustee may cause additional appraisals to be performed as warranted by specific asset or market conditions. All external appraisals are performed in accordance with the Uniform Standards of Professional Appraisal Practices "USPAP." To the extent that redemption requests exceed available cash, distributions are pro-rated based on the participant's interest in the Fund. All withdrawals will be treated equally forever whether for fees, benefit payments, plan termination, or asset allocation. Available cash is defined as excess cash after provision for outstanding future capital commitments and other operating reserves. The Fund's redemption notice period is 45 days; therefore, any sales price could differ from the net asset value because of the 45day notice period.
- 2. MetLife Core Property Fund (MCPF): The strategy of the MetLife Core Property Fund (MCPF) is to create and actively manage a diversified portfolio of core institutional real estate assets that offer the potential to deliver attractive returns through a combination of current income and capital appreciation. As a core open-ended fund, the strategy is to invest in property types that have both deep institutional quality stock and deep institutional investor bases. The Fund

limits its investments in non-core properties to 10% of the Fund GAV (plus unfunded capital commitments). Geographically, the Fund invests in U.S. real estate assets and focuses on primary markets; the Fund's strategy does not include a major focus on secondary and tertiary markets

Specific investment characteristics of targeted investments for the Fund include:

- Stabilized investments with high-quality physical improvements.
- Attractive locations within supply-constrained metropolitan areas and with superior competitive market positions.
- Favorable long-term economic, demographic, and fundamental real estate trends.
- Well-leased properties with diversified rent roll and manageable lease rollover.
- Minimal need for near-term capital expenditures.
- Stable, predictable income stream, which constitutes a significant portion of the expected total return over the hold period.
- Readily marketable assets that enable an efficient exit.

Investors may request that the General Partner redeem all or any portion of their shares on quarterly basis with 60 days written notice prior to the end of the quarter for which the request is to be effective; however, the Fund will not be obligated to sell assets, borrow funds, or alter investment or capital improvement plans to meet redemption requests. Units will be redeemed in cash at a price that reflects the Fund's NAV as of the last day of the calendar quarter immediately preceding the effective date of the redemption, as adjusted for additional contributions and distributions.

If liquid assets are insufficient to redeem all Fund redemption requests, a pro-rata portion of the outstanding Fund redemption interests pursuant to such requests based upon the relative Fund percentage interests as of such redemption date of the Fund investors who are being redeemed (regardless of the redemption effective date of the redemption notices), will be redeemed to the extent that liquid assets are available, and in each case within 10 days after the Fund's NAV for the end of a calendar quarter has been determined.

- 3. Prudential Real Estate: The Fund's investment objective is to produce a total return each year that outperforms the NCREIF Fund Index Open-End Diversified Core Equity (NFI-ODCE) on a total-return basis, while maintaining the benefits of a broadly diversified, core portfolio. Investors may request a withdrawal from PRISA at any time. Redemptions are paid only on valuation dates, on the last business day of a calendar quarter. All written requests received by PRISA at least a quarter prior to the valuation date will be eligible for payment. For example, a written request received during the first calendar quarter will be eligible to be paid on the last business day of June. PRISA may, in its discretion, waive the notice requirement. Redemption payments are subject to available cash as determined by PRISA after all contractual obligations are met and appropriate reserves are maintained to meet anticipated future portfolio operating requirements. If eligible redemption requests exceed available cash in a given quarter, an exit queue will be established. Investment in the Fund is valued at the current day closing net asset value per share. A unit value is the value of a single unit or "share" in an investment account on the specified day. The unit value changes depending on the investment results of the investment account and reflects realized and unrealized capital gains/ losses, investment income, and may include fees/expenses. The estimate of fair value for real estate is based on the conventional approaches to value, all of which require the exercise of subjective judgment. The three approaches are: (1) current cost of reproducing the real estate less deterioration and functional and economic obsolescence; (2) discounting a series of income streams and reversion at a specific yield or by directly capitalizing a single year income estimate by an appropriate factor; and (3) value indicated by recent sales of comparable real estate in the market. In the reconciliation of these three approaches, the independent appraiser uses one or a combination of them, to come up with the approximated value for the type of real estate in the market. The Fund's redemption notice period must be at least 90 days; therefore, any sales price could differ from the net asset value because of the 90-day notice period.
- 4. Dimensional Funds Emerging Markets Value Portfolio: The investment objective of the Emerging Markets Value Portfolio is to achieve long-term capital appreciation. The Emerging Markets Value Portfolio is a Feeder Portfolio and pursues its objective by investing substantially all of its assets in its corresponding Master Fund, the Dimensional Emerging Markets Value Fund (the "Emerging Markets Value Fund"), which has the same investment objective and policies as the Portfolio. Securities held by the Fund, including over-the-counter securities, are valued at the last quoted sale price at the close of the exchanges on which they are principally traded (official closing price).
- 5. Dimensional Funds International Small Company Portfolio: The investment objective of the International Small Company Portfolio is to achieve long-term capital appreciation. The International Small Company Portfolio is a "fund of funds," which means the Portfolio generally allocates its assets among other funds managed by Dimensional Fund Advisors LP (the "Advisor") (the "Underlying Funds"), although it has the ability to invest directly in securities and derivatives. The International Small Company Portfolio seeks to achieve its investment objective of providing investors with access to securities portfolios consisting of a broad range of equity securities of primarily small Canadian, Japanese, United Kingdom, European, and Asia Pacific companies. The International Small Company Portfolio also may have some exposure to small cap equity securities associated with other countries or regions. The International Small Company Portfolio pursues its investment objective by investing substantially all of its assets in the following Underlying Funds: the Canadian Small Company Series, Japanese Small Company Series, Asia Pacific Small Company Series, United Kingdom Small Company Series, and Continental Small Company Series of The DFA Investment Trust Company. The International Small Company Portfolio (a feeder fund) value reflects its proportionate interest in the net assets of the corresponding Master Fund. Investors may purchase or redeem shares of the International Small Company Portfolio on each day that the NYSE is scheduled to be open for business by first contacting the Portfolio's transfer agent.

6. Harding Loevner Emerging Markets Collective Investment Fund: The investment objective of the Emerging Markets Collective Investment Fund (the Fund) is to seek long-term capital appreciation through investments in equity securities of companies based in emerging markets. The fund invests primarily in companies that are based in emerging and frontier markets. To reduce its volatility, the Fund is diversified across dimensions of geography, industry, and currency. The Fund normally holds investments across at least 15 countries. Normally, at least 65% of the Fund's total assets will be denominated in at least three currencies other than the U.S. dollar. The Fund also normally invests at least 65% of its total assets in common stocks, preferred stocks, rights, and warrants issued by companies that are based in emerging or frontier markets, securities convertible into such securities (including depositary receipts), and trust and other entities that invest in the types of securities in which the Fund would normally invest. No more than 15% of the Fund's total assets will be invested in securities of U.S. companies. Securities held by the Fund, including over-the-counter securities, are valued at the last quoted sale price at the close of the exchanges on which they are principally traded (official closing price).

# E. Deposits and Risk Disclosures

## 1. Cash and Cash Equivalents

Cash and cash equivalents include cash deposited in banks and short-term repurchase agreements. Cash is insured by the Federal Deposit Insurance Corporation up to \$250,000 and cash equivalents are collateralized by the pledge of government securities held by the agents in TRSL's name.

#### 2. Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a bank failure, the System's deposits may not be returned to them. At June 30, 2018 and 2017, all deposits were insured by FDIC insurance and pledged collateral held in joint custody.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the System's trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either a counterparty or by the counterparty's trust department or agent but not in the System's name. It is the System's policy to contract with the custodian to provide safeguarding of deposits and securities. Assets held by financial institutions in their capacity as trustee or custodian are not considered to be assets of that institution as a corporate entity for insolvency purposes. These assets are segregated from the corporate assets of the financial institution and are accounted for separately on the institution's general ledger. As a result of this segregation, assets held in a custodial capacity should not be affected if the custodial institution were placed into receivership by its regulators. Investments in external investment pools and in open-end mutual funds are not exposed to custodial credit risks because their existence is not evidenced by securities that exist in physical or book entry form.

As of June 30, 2018 and 2017, TRSL has \$3,266,109,201 and \$2,484,644,788, respectively, in collateral held under the securities lending program that is exposed to custodial credit risk.

#### 3. Credit Risk

Credit risk is defined as the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The System's investment policy requires investments in core fixed income portfolios to be rated Baa3 or BBB-or higher by Moody's or Standard & Poor's, respectively. High-yield investment portfolios shall be invested in securities rated from Ba-I to Caa or BB+ to CCC as rated by Moody's and Standard & Poor's, respectively. Non-rated securities and securities rated below Caa or CCC shall not exceed 20% of the market value of the portfolio.

The System's exposure to credit risk at June 30, 2018 was as follows:

Moody's Rating	Total	Domestic	International
A1	\$ 100,943,234	\$ 36,078,021	\$ 64,865,213
A2	84,614,167	51,935,575	32,678,592
A3	301,971,609	97,470,437	204,501,172
AA1	27,808,733	9,059,253	18,749,480
AA2	95,863,868	6,489,360	89,374,508
AA3	82,432,149	38,234,150	44,197,999
AAA	1,160,556,977	1,036,069,082	124,487,895
B1	54,301,302	34,718,082	19,583,220
B2	58,850,895	27,227,963	31,622,932
B3	50,075,263	27,767,536	22,307,727
BA1	65,851,158	25,100,139	40,751,019
BA2	115,717,181	19,011,785	96,705,396
BA3	54,375,156	32,084,549	22,290,607
BAA1	103,266,737	66,117,384	37,149,353
BAA2	194,567,990	91,203,368	103,364,622
BAA3	180,347,701	69,491,158	110,856,543
С	782,491	2,667	779,824
CA	482,981	482,981	0
CAA1	25,089,190	16,881,807	8,207,383
CAA2	20,241,553	13,289,491	6,952,062
CAA3	4,249,095	4,249,095	0
NR	1,935,080,754	1,634,854,596	300,226,158
WR	9,035,150	<u>8,547,006</u>	488,144
Total credit risk debt securities	\$ 4,726,505,334	\$ 3,346,365,485	<u>\$ 1,380,139,849</u>

# The System's exposure to credit risk at June 30, 2017 was as follows:

Moody's Rating	Total	Domestic	International	
A1	\$ 94,560,520	\$ 18,698,028	\$ 75,862,492	
A2	121,592,081	47,586,591	74,005,490	
A3	308,095,491	94,597,185	213,498,306	
AA1	100,049,242	23,714,701	76,334,541	
AA2	33,333,793	6,074,497	27,259,296	
AA3	62,432,121	18,858,609	43,573,512	
AAA	1,112,620,586	944,666,704	167,953,882	
B1	69,123,161	31,864,001	37,259,160	
B2	40,682,458	24,169,625	16,512,833	
В3	73,279,796	31,242,953	42,036,843	
BA1	94,589,666	26,919,197	67,670,469	
BA2	122,542,438	20,496,897	102,045,541	
BA3	42,446,195	26,550,479	15,895,716	
BAA1	112,959,358	80,751,189	32,208,169	
BAA2	143,531,830	86,934,389	56,597,441	
BAA3	213,903,308	73,197,549	140,705,759	
С	311,128	1,130	309,998	
CA	1,231,229	1,231,229	0	
CAA1	28,374,604	21,997,804	6,376,800	
CAA2	19,942,158	13,732,602	6,209,556	
CAA3	8,076,508	3,084,355	4,992,153	
NR	1,699,946,502	1,230,965,546	468,980,956	
WR	13,612,175	5,429,244	8,182,931	
Total credit risk debt securities	<u>\$ 4,517,236,348</u>	<u>\$ 2,832,764,504</u>	<u>\$ 1,684,471,844</u>	

## 4. 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.

At June 30, 2018 the System's maturities for debt securities is as follows:

# **Investment Maturities (in years)**

Investment Type	Fair Value	Less than 1	1 - 5	5 - 10	More than 10
U.S. Treasury & government agency	\$ 1,190,405,866	\$ 108,071,583	\$ 316,944,667	\$ 206,396,066	\$ 558,993,550
Collateralized mortgage obligations	62,934,439	15,603	9,675,444	5,298,874	47,944,518
Corporate bonds	489,062,467	15,850,972	248,281,640	116,309,635	108,620,220
Other	636,459,322	5,399,717	449,827,343	87,795,065	93,437,197
Foreign corporate bonds	244,469,346	9,596,199	98,466,966	54,064,371	82,341,810
Foreign government bonds	741,677,500	72,350,134	180,239,603	203,980,230	285,107,533
Foreign treasuries	72,139,419	12,476,503	12,782,166	5,995,132	40,885,618
Foreign other	212,546,142	12,565,242	91,300,919	80,571,332	28,108,649
Short-term investments	1,076,810,833	1,076,810,833	0	0	0
Total	<u>\$ 4,726,505,334</u>	<u>\$ 1,313,136,786</u>	<u>\$ 1,407,518,748</u>	<u>\$ 760,410,705</u>	<u>\$ 1,245,439,095</u>

At June 30, 2017 the System's maturities for debt securities is as follows:

# **Investment Maturities (in years)**

Investment Type	Fair Value	Less than 1	1 - 5	5 - 10	More than 10
U.S. Treasury & government agency	\$ 1,191,171,403	\$ 33,648,568	\$ 401,983,322	\$ 218,594,308	\$ 536,945,205
Collateralized mortgage obligations	66,653,698	0	8,329,922	8,248,988	50,074,788
Corporate bonds	646,358,722	11,372,703	289,000,078	191,818,548	154,167,393
Other	481,957,162	7,642,552	187,039,081	170,436,971	116,838,558
Foreign corporate bonds	114,095,247	5,472,674	31,983,973	26,005,285	50,633,315
Foreign government bonds	714,794,907	2,321,615	186,223,071	253,199,129	273,051,092
Foreign treasuries	50,903,435	0	2,266,474	22,907,325	25,729,636
Foreign other	216,409,783	24,173	187,547,507	7,807,612	21,030,491
Short-term investments	1,034,891,991	1,034,891,991	0	0	0
Total	\$ 4,517,236,348	\$ 1,095,374,276	\$ 1,294,373,428	<u>\$ 899,018,166</u>	\$ 1,228,470,478

TRSL, as expressed in its Investment Policy Statement, expects its fixed income managers to approximate the portfolio's duration (a measure of a debt investment's exposure to fair value changes arising from changing interest rates) to its benchmark.

# 5. 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 or a deposit. Investment risk and foreign currency risk as measured by tracking error has been reduced by the use of the overlay program. The System's asset allocation plan adopted in its Investment Policy Statement includes a maximum of 40% for international equities and fixed income.

At June 30, 2018 the System's foreign currency risk is as follows:

Currency	%	Total	Bonds	Preferred Stock	Stocks	Short-Term Investments	Private Equity
Argentina Peso	0.41%	\$ 15,685,378	\$ 14,616,645	\$ 0	\$ 0	\$ 1,068,733	\$ 0
Australian Dollar	3.07%	117,134,869	47,773,159	0	68,570,856	790,854	0
Brazil Real	2.28%	86,996,863	67,427,681	10,597,614	6,267,233	2,704,335	0
Canadian Dollar	2.90%	110,615,507	17,688,750	3,410,100	90,373,689	(857,032)	0
Chilean Peso	0.16%	6,046,709	6,046,709	0	0	0	0
Chinese Yuan	0.03%	1,031,028	0	0	1,015,717	15,311	0
Colombian Peso	0.81%	31,040,862	30,515,143	0	0	525,719	0
Czech Koruna	0.00%	43	0	0	0	43	0
Danish Krone	1.38%	52,689,707	20,124,431	0	32,331,136	234,140	0
Dominican Rep Peso	0.05%	1,990,043	1,990,043	0	0	0	0
Egyptian Pound	0.10%	3,740,872	0	0	0	3,740,872	0
Euro Currency Unit	39.07%	1,492,383,994	92,362,010	26,313,077	780,925,970	7,144,292	585,638,645
Ghanaian Cedi	0.04%	1,549,511	1,422,668	0	0	126,843	0
Hong Kong Dollar	4.79%	183,068,316	0	0	182,035,642	1,032,674	0
Hungarian Forint	0.20%	7,448,895	4,143,052	0	3,178,138	127,705	0
Indonesian Rupiah	2.09%	79,956,557	73,141,805	0	5,500,869	1,313,883	0
Israeli Shekel	0.11%	4,237,979	0	0	4,204,575	33,404	0
Japanese Yen	12.95%	494,647,824	22,052,214	0	374,227,013	98,368,597	0
Malaysian Ringgit	1.31%	50,040,720	45,811,878	0	3,737,083	491,759	0
Mexican New Peso	3.55%	135,422,649	134,728,418	0	478,944	215,287	0
New Zealand Dollar	0.39%	14,981,331	209,991	0	14,781,157	(9,817)	0
Nigerian Naira	0.08%	3,167,019	0	0	0	3,167,019	0
Norwegian Krone	0.76%	29,193,630	422,086	0	28,346,826	424,718	0
Peruvian Sol	0.20%	7,700,755	7,422,590	0	0	278,165	0
Philippines Peso	0.03%	1,039,078	1,028,950	0	0	10,128	0
Polish Zloty	0.36%	13,722,209	12,569,624	0	1,049,139	103,446	0
Pound Sterling	10.80%	412,597,104	91,925,548	461,316	299,945,689	1,906,654	18,357,897
Romanian Leu	0.08%	2,913,809	2,912,998	0	0	811	0
Russian Ruble (New)	0.73%	27,744,746	27,447,454	0	0	297,292	0
Singapore Dollar	0.75%	28,627,411	0	0	28,438,282	189,129	0
S African Comm Rand	1.67%	63,671,575	57,625,108	0	5,202,894	843,573	0
South Korean Won	1.27%	48,473,123	196,373	0	46,531,912	1,744,838	0
Swedish Krona	2.81%	107,144,269	31,156,397	0	75,906,591	81,281	0
Swiss Franc	3.58%	136,585,848	908,354	0	135,401,741	275,753	0
Thailand Baht	0.42%	16,002,632	7,998,566	0	8,004,066	0	0
Turkish Lira	0.61%	23,212,533	16,947,632	0	5,063,495	1,201,406	0
Uruguayan Peso	0.19%	7,079,531	7,079,531	0	0	0	0
Total	100.00%	<u>\$3,819,584,929</u>	<u>\$ 845,695,808</u>	<u>\$40,782,107</u>	<u>\$2,201,518,657</u>	<u>\$127,591,815</u>	<u>\$603,996,542</u>

At June 30, 2017 the System's foreign currency risk is as follows:

Currency	%	Total	Bonds	Preferred Stock	Stocks	Short-Term Investments	Private Equity
Argentina Peso	0.44%	\$ 16,489,085	\$ 16,234,697	\$ 0	\$ 0	\$ 254,388	\$ 0
Australian Dollar	3.06%	113,859,902	43,971,174	0	69,288,147	600,581	0
Brazil Real	2.74%	102,040,582	90,232,682	5,552,530	5,245,248	1,010,122	0
Canadian Dollar	3.76%	139,797,313	67,426,355	2,796,828	69,266,266	307,864	0
Chilean Peso	0.08%	2,840,065	2,840,065	0	0	0	0
Colombian Peso	0.51%	18,924,657	18,565,332	0	0	359,325	0
Czech Koruna	0.10%	3,744,178	0	0	1,227,191	2,516,987	0
Danish Krone	2.02%	75,024,302	36,871,437	0	38,060,238	92,627	0
Dominican Rep Peso	0.07%	2,708,317	2,708,317	0	0	0	0
Egyptian Pound	0.05%	1,808,857	0	0	0	1,808,857	0
Euro Currency Unit	34.06%	1,266,527,772	100,090,475	16,766,216	685,588,525	6,391,399	457,691,157
Hong Kong Dollar	4.26%	158,442,524	0	0	154,466,835	3,975,689	0
Hungarian Forint	0.11%	4,064,454	0	0	3,590,029	474,425	0
Indonesian Rupiah	1.59%	59,247,052	52,528,561	0	5,606,482	1,112,009	0
Israeli Shekel	0.13%	4,793,881	0	0	4,670,639	123,242	0
Japanese Yen	13.85%	515,153,748	34,802,382	0	365,840,726	114,510,640	0
Malaysian Ringgit	1.27%	47,194,289	43,526,297	0	3,374,706	293,286	0
Mexican New Peso	4.22%	156,820,623	151,847,611	0	2,382,822	2,590,190	0
New Zealand Dollar	0.54%	20,134,270	449,676	0	19,674,363	10,231	0
Norwegian Krone	0.43%	16,159,455	422,862	0	15,427,084	309,509	0
Peruvian Sol	0.25%	9,390,768	9,221,181	0	0	169,587	0
Philippines Peso	0.03%	1,163,975	1,153,264	0	0	10,711	0
Polish Zloty	1.80%	66,820,571	65,304,022	0	1,362,504	154,045	0
Pound Sterling	11.10%	412,853,362	155,007,463	0	254,088,347	3,757,552	0
Romanian Leu	0.00%	810	0	0	0	810	0
Russian Ruble (New)	0.65%	24,185,169	24,030,208	0	0	154,961	0
Singapore Dollar	1.03%	38,271,259	0	0	37,896,355	374,904	0
S African Comm Rand	1.57%	58,269,282	50,761,781	0	7,511,532	(4,031)	0
South Korean Won	1.64%	60,873,703	0	0	59,849,152	1,024,551	0
Swedish Krona	3.26%	121,389,337	33,791,257	0	87,126,501	471,579	0
Swiss Franc	3.57%	132,910,633	0	0	131,516,192	1,394,441	0
Thailand Baht	0.47%	17,542,899	9,557,008	0	7,985,891	0	0
Turkish Lira	1.17%	43,354,614	37,923,223	0	5,422,475	8,916	0
Uruguayan Peso	0.15%	5,457,113	5,457,113	0	0	0	0
Total	100.00%	\$3,718,258,821	<u>\$1,054,724,443</u>	\$25,115,574	<u>\$2,036,468,250</u>	\$144,259,397	\$457,691,157

#### Concentration of Credit Risk

Concentration of credit risk is defined as the risk of loss attributed to the magnitude of the System's investments. TRSL's investment policy states that for each manager no more than 10% of the total portfolio value at market may be invested in any one organization. Exposure to any economic sector shall not exceed 50% of each manager's portfolio or 40% in any one country for international equity managers. Fixed income managers investments are limited to 20% of securities of foreign entities denominated in U.S. dollars.

For the years ended June 30, 2018 and 2017, the System has no investments in any single organization (other than those issued or guaranteed by the U. S. Government) that represents 5% percent or more of the System's net plan assets, nor does the System hold more than 5% percent of any corporation's stock.

## F. Investments

#### 1. General

Louisiana Revised Statute 11:263 authorized the Board of Trustees to invest under the "Prudent-Man" Rule. The "Prudent-Man" Rule establishes a standard that a fiduciary shall exercise the judgment and care under the circumstances, then prevailing, which 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.

The Board of Trustees has adopted certain investment policies, objectives, rules, and guidelines that are intended to protect the System's assets in real terms such that assets are preserved to provide benefits to participants and their beneficiaries; achieve investment returns sufficient to meet the actuarial assumption necessary to improve the future soundness of the System; and maximize the total rate of return on investments within prudent parameters of risk for a retirement system of similar size and type.

The Board of Trustees' desired investment objective is a long-term compound rate of return on the System's assets and is the greater of:

- 3.9% above the CPI-U seasonally adjusted, or
- the actuarial rate 7.65% for FY 2018 and 7.70% for FY 2017.

The System expects the domestic and international securities investment managers to maintain diversified portfolios by sector and by issuer using the following guidelines

## 2. Domestic Equity:

In accordance with Louisiana Revised Statutes 11:263, the System may invest up to 65% of its total assets in equities provided that the System invests an amount equal to at least 10% of total stock in equity indexing. The index portfolio(s) shall be invested in indices that seek either to replicate or to enhance a particular index. The index portfolio(s) may be invested in a variety of equity capitalization ranges and could be invested in either domestic or international equity.

The following guidelines shall apply to the domestic equity investment managers:

- Common stock securities, including ADRs, shall be marketable securities listed or traded on a national securities exchange. ADR securities may be traded over the counter. U.S. stocks must be registered with the Securities and Exchange Commission.
- The use of Exchange Traded Funds (ETFs) and derivatives (such as options, warrants, and futures) to establish unleveraged long positions in equity markets are permissible. Convertible securities shall be considered as part of the equity portfolio.
- Equity holdings in a single company (including common stock and convertible securities) should not exceed 10% of the manager's portfolio measured at market value without prior Board approval.
- A minimum of 25 individual stocks should be held in the portfolio at all times.

- Equity holdings should represent at least 95% of the portfolio at all times. It is highly desirable for equity portfolios to remain as fully invested as practical.
- Equity holdings in any one GIC sector (as defined by the Standard & Poors Global Industry Classification Standard) should not exceed 50%.
- Short-term fixed income holdings or money market securities shall be readily liquid securities and be of high quality typically rated at least A-1, P-1, or of equivalent quality.
- For an indexed equity portfolio, the investment manager may utilize either a full replication approach or sampling techniques to create a portfolio with portfolio characteristics similar to the benchmark, while not investing in all stocks in the benchmark. Also, an index manager may use options and futures in attempting to track the benchmark, but not in a manner which leverages the portfolio.
- Equity managers (growth or value) hired for the small cap investment category are expected to maintain the capitalization of the portfolio within the small capitalization region with similar characteristics versus the benchmark.
- Equity managers (growth or value) hired for the mid cap investment category are expected to maintain the capitalization of the portfolio within the mid capitalization region with similar characteristics versus the benchmark.
- Equity managers (growth or value) hired in the small/mid (SMID) cap investment category are expected to maintain the capitalization of the portfolio within the SMID capitalization region with similar characteristics versus the benchmark.

# 3. Developed International Equity:

The following guidelines shall apply to the developed international equity investment managers:

- Marketable common stocks, preferred stocks convertible into common stocks, and fixed income securities convertible into common stocks are permissible equity investments.
- The use of Exchange Traded Funds (ETFs) and derivatives (such as options, warrants, and futures) to establish unleveraged long positions in equity markets are permissible.
- Equity holdings in a single company (including)

- common stock and convertible securities) should not exceed 10% of the manager's portfolio measured at market value without prior Board approval.
- A minimum of 25 individual stocks should be held in the portfolio at all times.
- Equity holdings should represent at least 95% of the portfolio at all times. It is highly desirable for equity portfolios to remain as fully invested as practical.
- Equity holdings in any one country should not exceed 40% without prior Board approval.
- Short-term fixed income holdings or money market securities shall be readily liquid securities and be of high quality typically rated at least A-1, P-1, or of equivalent quality.
- For an indexed equity portfolio, the investment manager may utilize either a full replication approach or sampling techniques to create a portfolio with portfolio characteristics similar to the mandate's benchmark, while not investing in all stocks in the benchmark. Also, an index manager may use options and futures in attempting to track the benchmark, but not in a manner which leverages the portfolio.
- For investment managers benchmarked to the MSCI All Country World Index ex U.S., the portfolio should not exceed 40% in emerging market equities without prior Board approval.
- For investment managers benchmarked to the MSCI EAFE Index, the portfolio should not exceed 20% in emerging market equities without prior Board approval.
- Currency hedging decisions are at the discretion of the investment manager.

# 4. Investment Grade Core Fixed Income Investment:

The following guidelines shall apply to the investment grade core fixed income investment managers:

 The fixed income securities should be invested in investment grade rated U.S. dollar denominated fixed income securities and cash equivalents, including but not limited to U.S. Treasuries and Agencies, passthrough mortgages, Collateralized Mortgage Obligations (CMOs), corporates, municipals, asset-backed, Commercial Mortgage Backed

Securities (CMBS), and inflation-linked securities. Investment grade bonds are those in the four highest rating categories, as rated by Moody's Investor Service, Standard & Poor's Corporation, or Fitch. TBA securities issued by Federal Agency and mortgage dollar rolls may be used. Securities convertible into common stocks are prohibited. Securities that are liquid and readily marketable are preferred. Securities that have strong price volatility are not preferred.

- The benchmark for performance evaluation is the Barclays Aggregate Index.
- The duration of the fixed income portfolio should be targeted to that of the Barclays Aggregate Index. The duration may range from 1.5 years of the duration of the Barclays Aggregate Index.
- Fixed income holdings in a single company (excluding obligations of the United States Government and its agencies) should be limited to 5% of the manager's portfolio measured at market value.
- Below investment grade fixed income securities are limited to 5% of the fixed income portfolio. Splitrated securities will be considered as investment grade related securities. Orderly liquidation should occur for securities that fall below investment grade ratings and are greater than 5% of the fixed income portfolio. Such liquidation should occur within one year.
- Fixed income securities of foreign (non-U.S.)
  entities denominated in U.S. dollars are limited
  to 20% of the manager's portfolio, measured
  at market value. Securities denominated in
  currencies other than the U.S. dollar are not
  permissible.
- Bond purchases should be limited to readily marketable securities. Private placements are not permissible investments except, Rule 144(a) securities may be included in the portfolio up to 20% of the total portfolio value.

#### 5. Core Plus Fixed Income Investment:

The following guidelines shall apply to the core plus fixed income investment managers:

 The fixed income securities can be invested in investment grade rated U.S. dollar denominated fixed income securities and cash equivalents, including but not limited to U.S. Treasuries and Agencies, pass-through mortgages, CMOs, corporates, municipals, asset-backed, CMBS, and inflation-linked securities. Investment grade bonds are those in the four highest rating categories, as rated by Moody's Investor Service, Standard & Poor's Corporation, or Fitch. TBA securities issued by Federal Agency and mortgage dollar rolls may be used. Fixed income convertible securities may be used. Securities that are liquid and readily marketable are preferred. Securities that have strong price volatility are not preferred.

- The benchmark for performance evaluation is the Barclays Aggregate Index.
- The duration of the fixed income portfolio should be targeted to that of the Barclays Aggregate Index. The duration may range from two years of the duration of the Barclays Aggregate Index.
- Fixed income holdings in a single company (excluding obligations of the United States Government and its agencies) should be limited to 5% of the manager's portfolio measured at market value.
- Below investment grade fixed income securities are limited to 25% of the fixed income portfolio.
   Below investment grade securities are defined as fixed income securities below the four highest rating categories (i.e., below BBB- or Baa3). Splitrated securities will be considered as investment grade related securities.
- Fixed income securities of foreign (non-U.S.) entities are limited to 25% of the manager's portfolio, measured at market value. Within the maximum limitation of the non-U.S. fixed income exposure, the total portfolio's investment in emerging markets is limited to 10%.
- Bond purchases should be limited to readily marketable securities. Private placements are not permissible investments except, Rule 144(a) securities may be included in the portfolio up to 20% of the total portfolio value.
- Short-term holdings shall be readily liquid securities and be rated at least A-1, P-1, or of equivalent quality.
- Fixed income core plus portfolios may invest in derivatives, including but not limited to futures, options, and swaps. Derivatives, futures, options, and swaps may only be used for the following purposes:

- » To adjust dollar-weighted duration and term structure of the portfolio,
- » To protect against the downside on credit defaults.
- » To dampen volatility,
- » To create synthetic exposures not otherwise prohibited by these guidelines, and
- » To take advantage of periodic pricing anomalies.
- Long futures and swaps contracts must be fully backed with cash or liquid holdings.

### 6. Global Fixed Income Investment:

The following guidelines shall apply to the global fixed income investment managers:

- The portfolio will be invested in marketable fixed income instruments, notes, and debentures issued by sovereign or corporate issuers, denominated in U.S. dollars and non-U.S. dollar currencies. Securities permissible for investment include, but are not limited to: U.S. Treasuries and Agencies, sovereign (non-U.S.) governments, sovereign agencies, pass-through mortgages, non-agency mortgages, CMOs, U.S. and non-U.S. corporates, municipals, asset-backed, CMBS, and inflation-linked securities.
- It is anticipated that the portfolio will be invested in investment grade and below investment grade rated securities. Investment grade bonds are those in the four highest rating categories, as rated by Moody's Investor Service, Standard & Poor's Corporation, or Fitch. TBA securities issued by Federal Agency and mortgage dollar rolls may be used. Fixed income convertible securities may be used. Securities that are liquid and readily marketable are preferred.
- The benchmark for performance evaluation is the Barclays Global Aggregate Index (unhedged).
- The duration of the fixed income portfolio may range from four years of the duration of the Barclays Global Aggregate Index (unhedged).
- Fixed income holdings in a single company (defined as any one corporate bond issuer) should be limited to 5% of the manager's portfolio measured at market value.
- Below investment grade fixed income securities are limited to 35% of the total fixed income

- portfolio. Below investment grade securities are defined as fixed income securities rated below the four highest rating categories (i.e., below BBB- or Baa3). Split-rated securities will be considered as investment grade related securities.
- The portfolio's investment in emerging markets debt is limited to 35%. Emerging Market Countries are defined as: (i) included in the JP Morgan EMBI Global Index, the JP Morgan CEMBI Broad Index, or the JP Morgan GBI-EM Global Diversified Index or; (ii) classified by the World Bank as low or middle income in its annual classification of national incomes or; (iii) classified by the World Bank as high income in its annual classification of national income, but is not an Organization for Economic Co-operation and Development (OECD) member.
- Bond purchases should be limited to readily marketable securities. Private placements are not permissible investments, except Rule 144(a) securities may be included in the portfolio up to 20% of the total fixed income portfolio.
- Short-term holdings (i.e., less than one year in maturity) shall be readily liquid securities and be rated at least A-1, P-1, or of equivalent quality.
- Currency decisions are at the discretion of the investment manager. Non-dollar securities may be held on a currency hedged or unhedged basis. The portfolio may invest in currency exchange transactions on a spot or forward basis. Both long and short currency exposures are permissible.
- Global fixed income portfolios may invest in derivatives, including but not limited to futures, options, and swaps. Derivatives, futures, options, and swaps may only be used for the following purposes:
  - » To adjust dollar-weighted duration and term structure of the portfolio,
  - » To protect against the downside on credit defaults,
  - » To dampen volatility,
  - » To create synthetic exposures not otherwise prohibited by these guidelines, and
  - » To take advantage of periodic pricing anomalies.

 Long futures and swaps contracts must be fully backed with cash or liquid holdings.

# 7. High Yield Fixed Income Investment:

The following guidelines shall apply to the high yield fixed income investment managers:

- The fixed income securities can be invested in below investment grade rated U.S. dollar denominated fixed income securities and cash equivalents, including but not limited to U.S. Treasuries and Agencies, corporates, municipals, asset-backed, bank loans, and convertible securities. Below investment grade securities are defined as fixed income securities below Baa3 or BBB-, rated by Moody's Investor Service, Standard & Poor's Corporation, or Fitch.
- The benchmark for performance evaluation is the Bank of America Merrill Lynch U.S. High Yield Master II Index.
- Fixed income holdings in a single company (excluding obligations of the United States Government and its agencies) should be limited to 5% of the manager's portfolio measured at market value.
- Below investment grade fixed income securities which are rated below B3 or B- by Moody's Investor Service, Standard & Poor's Corporation, or Fitch are limited to 15%.
- Fixed income securities of foreign (non-U.S.) entities are limited to 15% of the manager's portfolio, measured at market value.
- The investment manager should consider the liquidity and marketability of securities prior to investment. Private placements are not permissible investments except, Rule 144(a) securities may be included in the portfolio up to 25% of the total portfolio value.
- Short-term holdings (i.e., less than one year in maturity) shall be readily liquid securities and be rated at least A-1, P-1, or of equivalent quality.

# 8. Emerging Markets Debt Investment:

The following guidelines shall apply to the emerging markets debt investment managers:

 The portfolio will be invested primarily in marketable fixed income instruments, notes, and debentures issued by emerging market sovereign or corporate issuers, denominated in U.S. dollars and non-U.S. dollar currencies. Securities permissible for investment include, but are not limited to: obligations of foreign governments (or their subdivisions or agencies), international agencies and supranational entities, and obligations of foreign corporations such as corporate bonds. Securities that are liquid and readily marketable, at time of purchase, are preferred.

- Emerging Market Countries are defined as: (i) included in the JP Morgan EMBI Global Index, the JP Morgan CEMBI Broad Index, or the JP Morgan GBI-EM Global Diversified Index or; (ii) classified by the World Bank as low or middle income in its annual classification of national incomes or; (iii) classified by the World Bank as high income in its annual classification of national income, but is not an Organization for Economic Co-operation and Development (OECD) member.
- The benchmark for performance evaluation is the JP Morgan GBI-EM Global Diversified Index.
- The duration of the fixed income portfolio may range from two years of the duration of the JP Morgan GBI-EM Global Diversified Index.
- Fixed income holdings in a single company should be limited to 3% of the manager's portfolio measured at market value.
- Below investment grade fixed income securities are limited to 40% of the fixed income portfolio.
   Below investment grade securities are defined as fixed income securities below the four highest rating categories (i.e., below BBB- or BAA3). Splitrated securities will be considered as investment grade related securities.
- Rule 144(a) securities may be included in the portfolio up to 40% of the total portfolio value.
- Short-term holdings (i.e., less than one year in maturity) shall be readily liquid securities and be rated at least A-1, P-1, or of equivalent quality.
- Currency decisions are at the discretion of the investment manager. Non-dollar securities may be held on a currency hedged or unhedged basis. The portfolio may invest in currency exchange transactions on a spot or forward basis. Both long and short currency exposures are permissible.
- Emerging markets debt portfolio(s) may invest in derivatives, including but not limited to futures, options, and swaps. Derivatives, futures, options, and swaps may only be used for the following purposes:

- » To adjust dollar-weighted duration and term structure of the portfolio,
- » To protect against the downside on credit defaults,
- » To dampen volatility,
- » To create synthetic exposures not otherwise prohibited by these guidelines, and
- » To take advantage of periodic pricing anomalies.
- Long futures and swaps contracts must be fully backed with cash, cash equivalents, offsetting derivative contracts, or other liquid holdings.

## 9. Emerging Markets Equities:

The following guidelines shall apply to the emerging markets equities managers with separate accounts. For emerging market equities managers utilizing mutual funds or commingled funds, it is expected that the portfolio will generally, not necessarily, conform to these guidelines, but will fully comply with the prospectus and/or private placement memorandum.

- The benchmark for performance evaluation is the MSCI Emerging Markets Index (Net Dividends).
- Securities permissible for investment include, but are not limited to: marketable common stocks, preferred stocks convertible into common stocks, fixed income securities convertible into common stocks, American Depositary Receipts (ADRs), and Global Depositary Receipts (GDRs) in emerging markets are permissible equity investments.
- The use of Exchange Traded Funds (ETFs) and derivatives (such as options, warrants, and futures) to establish unleveraged long positions in emerging markets are permissible.
- Equity holdings in a single company (including common stock and convertible securities) should not exceed 10% of the manager's portfolio measured at market value without prior Board approval.
- A minimum of 25 individual stocks should be held in the portfolio at all times.
- Equity holdings should represent at least 95% of the portfolio at all times. It is highly desirable for equity portfolios to remain as fully invested as practical.
- Equity holdings in any one country should not exceed 40% without prior Board approval.

- Short-term fixed income holdings or money market securities shall be readily liquid securities and be of high quality typically rated at least A-1, P-1, or of equivalent quality.
- Currency hedging decisions are at the discretion of the investment manager.

#### 10. Alternative Assets Investment:

The following guidelines provide a general framework for selecting, building, and managing the System's investments in private equity, venture capital, private market debt, infrastructure, and commodities.

- The benchmarks for performance evaluation of the Alternative Asset classes net of all fees and expenses are as follows:
  - Private Equity & Venture Capital: Russell 3000 +300 basis points,
  - » Private Market Debt: Merrill Lynch U.S. High Yield Master II +200 basis points,
  - » Commodities: Dow Jones UBS Commodities Index, and
  - » Infrastructure: Consumer Price Index + 500 basis points.
  - » Farmland NCREIF Farmland Index
- The System will invest primarily in limited partnership interests of pooled vehicles including funds, co-investments, separate accounts and secondary investments.
- The maximum investment in any single partnership shall be no greater than 1% of the System's total assets at the time of commitment.
- The System's commitment to any given partnership, for funds targeting \$500 million or less of total commitments, shall not exceed 20% of that partnership's total commitments. An exemption to this guideline may be granted for separate accounts, subject to prior Board approval.
- The System's commitment to any given partnership, for funds targeting more than \$500 million of total commitments, shall not exceed 10% of that partnership's total commitments. An exemption to this guideline may be granted for separate accounts, subject to prior Board approval.
- The System should diversify the sources of risk in the portfolio, specifically:

- » No more than 15% of the Alternative Assets total exposure (costs plus unfunded commitments) may be attributable to partnerships by the same manager at the time the commitment is made.
- » The System shall diversify the portfolio across vintage years.
- The System will be mindful of overconcentration to any one industry, investment strategy and/or geography. Should the Investment Manager deem the Portfolio to be overly concentrated to any industry, investment strategy or geography, the System shall attempt to reduce this exposure by limiting future commitments to partnerships focused on the over-concentrated segment.
- » The System shall use separate accounts to obtain below prevailing market rates on management fees or carried interest or to gain access to certain strategies which are difficult for the System to directly access (e.g., venture capital).
- » The System shall seek co-investments only where the System is an existing limited partner.
- » The System should seek to obtain a limited partner advisory board seat for each partnership investment.

The table below shows the cumulative commitments and cumulative cash flow totals since inception for the last two years.

# TRSL Alternative Assets and Real Estate (in blns)

	June 30, 2018	June 30, 2017
Commitments	\$ 18.0	\$ 16.2
Calls for funding	13.3	12.1
Unfunded commitments	5.6	4.9
Distributions	12.6	11.5

## 11. Real Estate Investment:

The following sets forth guidelines that provide a general framework for selecting, building, and managing of the System's real estate portfolio. The System's underlying real estate investments shall be classified under two primary strategies: Core and Opportunistic.

- The benchmark for performance evaluation of the real estate strategies is as follows:
  - » Core: NCREIF Property Index, and
  - » Opportunistic: NCREIF Property Index +200 basis points.
- The System will invest primarily in limited partnership interests of pooled vehicles including funds, co-investments, separate accounts and secondary investments.
- The System shall use separate accounts to obtain below prevailing market rates on management fees or carried interest.

#### **Core Real Estate:**

- The Investment Manager shall choose Core Real Estate Investments which, in aggregate, consist of a well-diversified portfolio of property types and geographies.
- Core Real Estate shall include, but not be limited to the following property types: warehouses, industrial, apartments, offices, storage, land development, single family homes, parking garages, hotels and retail.
- Core Real Estate investment funds shall target no more than 35% debt (leverage).

## **Opportunistic Real Estate:**

- The maximum investment in any single partnership shall be no greater than 1% of the System's total assets at the time of commitment.
- The Investment Manager shall choose Opportunistic Real Estate investments which, in aggregate, consist of a well-diversified portfolio of property types, geographies and risk profiles. Should the Investment Manager deem the Portfolio to be overly concentrated to any geography or property type, the System shall attempt to reduce this exposure by limiting future commitments to partnerships focused on the over-concentrated segment.
- The System's commitment to any given partnership, for funds targeting \$500 million or less of total commitments, shall not exceed 20% of that partnership's total commitments. An exemption to this guideline will be given for separate accounts.

- The System's commitment to any given partnership, for funds targeting more than \$500 million of total commitments, shall not exceed 10% of that partnership's total commitments. An exemption to this guideline will be given for separate accounts.
- Opportunistic Real Estate investment funds shall target no more than 80% debt (leverage).
- The System shall diversify the portfolio across vintage years.

#### 12. Asset Allocation:

TRSL invests in a diverse mix of alternative investments, such as mezzanine, infrastructure, and commodities, private equity, and real estate. The fair market value of alternative assets and real estate totaled \$6.5 billion for June 30, 2018 and \$5.6 billion for June 30, 2017.

The System's target asset allocation policy as of June 30, 2018 and 2017 is as follows:

Asset Class	Target Allocation 2018	Target Allocation 2017
Domestic equity	27.0%	27.0%
International equity	19.0%	19.0%
Domestic fixed income	13.0%	13.0%
International fixed income	5.5%	5.5%
Alternative assets*	35.5%	<u>35.5%</u>
Total fund	<u>100.0%</u>	<u>100.0%</u>

<sup>\*</sup>Alternative assets include corporate finance/buyout, venture capital, mezzanine, distressed debt, infrastructure, commodities, farmland, opportunistic, and real estate.

# 13. Money-Weighted Rate of Return

For the years ended June 30, 2018 and 2017, the annual money-weighted rate of return, net of investment expense, was 11.61% and 15.87%, respectively. The money-weighted return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

# G. Securities Lending Transactions

State statutes and Board of Trustees' policies permit the System to use the assets of the System to enter into securities lending transactions. The System loans its securities to broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. The System's domestic managers lend the System's securities for cash collateral of 100% or other securities collateral of 102%. The System's global managers lend the System's securities for cash collateral or other securities collateral of 105%. Securities lent for securities collateral are classified according to the category for the collateral. At year-end, the System has no credit risk exposure to borrowers because the amounts the System owes the borrowers exceed the amounts the borrowers owe the System.

All securities' loans can be terminated on demand by either the System or the borrower. The System cannot pledge or sell securities' collateral unless the borrower defaults. The reinvestment of cash collateral is done on an overnight basis or to term. In instances where a loan is for term, the reinvestment of the cash is matched to the maturity of the loan. Such matching existed at year end. When investing in repurchase agreements, the collateral received will be a minimum of 102% of the cash invested. Collateral reported in the Statements of Fiduciary Net Position is investments purchased with cash collateral.

The following table presents the fair values of securities on loan and the collateral held by the System at June 30, 2018 and 2017:

Security Type		Fair Value of Securities on Loan 2018	Fair Value of ateral Held 2018		Fair Value of Securities on Loan 2017	Fair Value of ateral Held 2017
U.S. Government & agency	\$	521,096,361	\$ 539,973,798	\$	298,639,504	\$ 305,182,293
U.S. fixed income		141,334,544	145,098,642		156,860,293	160,881,833
U.S. equity		1,892,310,116	1,945,899,588		1,649,360,004	1,690,664,679
International fixed income		19,411,174	20,766,297		7,900,423	8,219,385
International equity		535,462,662	 614,370,876		291,353,761	 319,696,598
Total	<u>\$</u>	3,109,614,857	\$ 3,266,109,201	<u>\$</u>	2,404,113,985	\$ 2,484,644,788

Securities on loan at June 30, 2018 and 2017 are collateralized by cash collateral in the amount of \$3,266,109,201 and \$2,484,644,788, and noncash collateral in the amount of \$550,259,061 and \$225,475,946, for total amount of collateral held in the amount of \$3,816,368,262 and \$2,710,120,734, respectively.

## H. Derivatives

TRSL invests in asset/liability derivatives such as interest-only strips, principal-only strips, collateralized mortgage obligations (forms of mortgage-backed securities), options on futures, forward foreign exchange contracts, futures, short sales, and written options. TRSL reviews market values of all securities on a monthly basis, and prices are obtained from recognized pricing sources. Derivative securities are held in part to maximize yields and in part to hedge against a rise in interest rates. TRSL was invested in a futures based overlay program, foreign exchange contracts, and short sales, and written options at June 30, 2018 and 2017, which allows TRSL to implement policy target allocation adjustments in an efficient, liquid, and cost effective manner. Interest rate risk, credit rate risk, and foreign currency risk associated with derivatives are included on their respective tables in Note E, Deposits and Risk Disclosures.

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2018 and 2017 classified by type, and the changes in fair value of such derivative instruments for the years then ended as reported in the financial statements are as follows:

2018	Changes in F	air Value	Fair Valu	Notional	
Investment derivatives:	Classification	Amount	Classification	Amount	Notional
Futures based overlay program	Net app/(depr)	\$ (15,203,215)	Pending trades payable	\$ (16,973,742)	\$ 456,214,625
Foreign exchange contracts	Net app/(depr)	\$ (22,492,076)	International common and preferred stock	\$ (16,374,377)	\$ 1,971,748,162
Short positions	Net app/(depr)	\$(145,322,718)	Pending trades payable	\$(408,032,718)	N/A

2017	Changes in Fair Value		Fair Valu	Notional	
Investment derivatives:	Classification	Amount	Classification	Amount	Notional
Futures based overlay program	Net app/(depr)	\$ (18,654,115)	Pending trades payable	\$ (1,770,527)	\$ 475,165,281
Foreign exchange contracts	Net app/(depr)	\$ 7,276,339	International common and preferred stock	\$ 6,117,699	\$ 1,747,554,695
Short positions	Net app/(depr)	\$ (54,575,179)	Pending trades payable	\$(262,710,000)	N/A

Derivatives, such as futures, options, and swaps, may be used for the following purposes: (1) to adjust dollar-weighted duration and term structure of the portfolio; (2) to protect against the downside on credit defaults; (3) to dampen volatility; (4) to create synthetic exposures not otherwise prohibited by investment policy guidelines; and (5) to take advantage of periodic pricing anomalies.

TRSL was invested in the following derivatives throughout the year:

## 1. Interest-Only Strips and Principal-Only Strips

Interest-only (IO) and principal-only (PO) strips are transactions that involve the separation of the interest and principal components of a security. Interest-only strips are based on cash flows from interest payments on underlying mortgages. Therefore, they are sensitive to prepayments of mortgages, which may result from a decline in interest rates. For example, if interest rates decline and homeowners refinance mortgages, thereby prepaying the mortgages underlying these securities, the cash flows from interest payments are reduced, and the value of these securities declines. Likewise, if homeowners pay on mortgages longer than anticipated, the cash flows are greater, and the return on the initial investment would be higher than anticipated.

Principal-only strips receive principal cash flows from the underlying mortgages. In periods of rising interest rates, homeowners tend to make fewer mortgage prepayments. If actual prepayment rates are lower than anticipated, the time remaining until the return of principal is increased. The later principal is paid, the lower the present value of the security. Conversely, higher prepayment rates return principal faster causing the PO to appreciate in market value.

# 2. Collateralized Mortgage Obligations

Collateralized mortgage obligations (CMOs) are bonds that are collateralized by mortgages, mortgage pass-through securities, or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes or tranches in accordance with that CMO's established payment order. Some CMO tranches have more stable cash flows relative to changes in interest rates than others that can be significantly sensitive to interest rate fluctuations. In a declining interest rate environment, some CMOs may be subject to a reduction in interest payments as a result of prepayments of mortgages which make up the collateral pool. Reduction in interest payments causes a decline in cash flows and, thus, a decline in market value of the CMO security. Rising interest rates may cause an increase in interest payments, thus an increase in the value of the security.

## 3. Option on Futures

This is an option contract, the exercise of which results in the holder and writer of the option exchanging futures position. The buyer of a call or put option has unlimited profit potential with the risk limited to the premium paid for the option. The option seller accepts potentially unlimited risk in return for the option premium received. The option seller or buyer can terminate such exposure in a closing transaction. A position is offset by completing the opposite transaction with the same option. The option contracts may also be repurchased or closed by the System, at which time the asset or liability is removed, a realized gain or loss is recognized, and cash is paid on the amount repurchased or received on closing a contract.

# 4. Forward Foreign Exchange Contracts

A currency forward is a contractual agreement between two parties to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. Forward commitments are not standardized and carry counterparty risk. Forwards are usually transacted over the counter. These transactions are entered into in order to hedge risks from exposure to foreign currency rate fluctuation. They are entered into with the foreign exchange department of a bank located in a major money market. 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. Prior to termination of the contract, the System records the unrealized translation gain or loss.

#### 5. Futures

A futures contract is an agreement for delayed delivery of securities, currency, commodities, or money market instruments in which the seller agrees to make delivery at a specified future date of a specified instrument, at a specific price or yield. Upon entering into a futures contract, the System is required to pledge to the broker an amount of cash equal to a certain percentage of the contract amount. The amount is known as the "initial margin." Subsequent payments, known as "variation margin," are made by the System each day, depending on the daily fluctuations in the value of the underlying security. Such variation margin is recorded as a realized gain or loss for financial statement purposes.

## 6. Short Sales and Written Options

A short sale is the sale of a security or commodity futures contract that is not owned by the seller. It is a technique used to take advantage of an anticipated decline in the price or to protect a profit in a long position. In general, options are a right to buy or sell property that are granted in exchange for an agreed upon sum. If the right is not exercised after a specified period, the option expires and the option buyer forfeits the money.

# I. Contingent Liabilities

The System is a litigant in several lawsuits. System management, on the advice of legal counsel, believes that such proceedings and contingencies will not have a material effect on the System.

# J. Other Post-Employment Benefits

Substantially all employees become eligible for post-employment health care and life insurance benefits if they reach normal retirement age while working for the System. These benefits for retirees and similar benefits for active employees are provided through a self-insured/self-funded plan. At June 30, 2018, the number of retirees receiving post-employment benefits was 83.

# 1. Plan Description

Employees may participate in the State of Louisiana's Other Post-employment Benefit Plan (OPEB Plan), a multiple-employer defined benefit OPEB Plan that provides medical and life insurance to eligible active employees, retirees, and their beneficiaries. The State administers the plan through the Office of Group Benefits (OGB). LRS 42:801-883 assigns the authority to establish and amend benefit provisions of the plan. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Governmental Accounting Standards Board (GASB) Statement No. 75 to pay related benefits.

## 2. Benefits Provided

The OPEB Plan provides benefits such as: death benefits, life insurance, disability, and long-term care that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment. The OPEB plan does not provide termination benefits or termination payments for sick leave.

#### 3. Contributions

The contribution requirements of plan members and the System are established and may be amended by LRS 42:801-883. The OPEB Plan is currently funded on a pay-as-you-go basis through a combination of retiree and System contributions. Employees do not contribute to their post-employment benefits cost until they become retirees and begin receiving post-employment benefits. The retirees contribute to the cost of their post-employment benefits based on a service schedule. Contribution amounts vary depending on what healthcare provider is selected from the plan and if the member has Medicare coverage. Contributions to the OPEB Plan from the System were \$603,105 for the year ended June 30, 2018.

Employer contributions are based on plan premiums and the employer contribution percentage. This percentage is based on the date of participation in an OGB plan (before or after January 1, 2002) and employee years of service at retirement. Employees who began participation or rejoined the plan before January 1, 2002, pay

approximately 25% of the cost of coverage (except single retirees under age 65 who pay approximately 25% of the active employee cost). For those beginning participation or rejoining on or after January 1, 2002, the percentage of premiums contributed by the employer is based on the following schedule:

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

In addition to healthcare benefits, retirees may elect to receive life insurance benefits. Basic and supplemental life insurance is available for the individual retiree and spouses of retirees, subject to maximum values. The retiree pays \$.54 monthly for each \$1,000 of life insurance. The retiree pays \$.98 monthly for each \$1,000 of spouse life insurance. The employer pays the remaining amount.

# 4. OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflow of Resources Related to OPEB

At June 30, 2018, the System reported a liability of \$26,099,592 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of July 1, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The System's proportion of the net OPEB liability was based on a projection of the System's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. As of July 1, 2017, the System's proportion was 0.3003%.

For the year ended June 30, 2018, the System recognized OPEB expense of \$1,045,269. As of June 30, 2018, the System reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

June 30, 2018	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ —	\$ —
Changes in assumptions	-	1,379,209
Changes in proportion and differences between employer contributions and proportionate share of contributions	_	155,687
Employer contributions subsequent to the measurement date	603,105	
Total	<u>\$ 603,105</u>	<u>\$ 1,534,896</u>

Deferred outflows of resources related to OPEB resulting from employer contributions subsequent to the measurement date of \$603,105 will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2019. Other amounts reported as deferred inflows of resources related to OPEB will be recognized in OPEB expense (benefit) as follows:

Year ended June 30:		
2019	\$ 441,062	
2020	441,062	
2021	441,062	
2022	211,710	
	<u>\$ 1,534,896</u>	

### 5. Actuarial Assumptions

The total OPEB liability in the July 1, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.8%
Salary Increases	Consistent with the pension valuation assumptions
Investment Rate of Return	3.13%, based on the S&P Municipal Bond 20-Year High Grade Rate Index
Healthcare Cost Trend	7% - 4.5%
Mortality Rates	For healthy lives the RP-2014 Combined Healthy Mortality Table, projected on a fully generational basis by Mortality Improvement Scale MP-2017 For existing disabled lives, the RP-2014 Disabled Retiree Mortality Table, projected on a fully generational basis by Mortality Improvement Scale MP-2017.

The actuarial assumptions used in the July 1, 2017 valuation were based on the results of an actuarial experience study for the period January 1, 2016 to December 31, 2017. As a result of the 2017 actuarial experience study, the expectation of life after disability was adjusted in the July 1, 2017 actuarial valuation to more closely reflect actual experience.

#### 6. Discount Rate

The discount rate used to measure the total OPEB liability was 3.13%. The projection of cash flows used to determine the discount rate assumed that contributions from employers will be made at contractually required rates. Based on this assumption and as the OPEB plan is unfunded, the OPEB plan's fiduciary net position was not projected to be available to make all projected OPEB payments for current active and inactive employees. Therefore, the long-term expected rate of return on OPEB plan investments was determined using a discount rate that reflects the 20-year tax-exempt municipal bond yield or index rate.

The discount rate used to measure the total OPEB liability was increased to 3.13% in the July 1, 2017 valuation from 2.71% as of July 1, 2016. The discount rate in the current valuation reflects that the Bond Buyers' 20-Year General Obligation Municipal Bond Index rate was unchanged from the prior year.

## 7. Sensitivity of the System's Proportionate Share of the Collective Total OPEB Liability to Changes in the Discount Rate

The following presents the System's proportionate share of the collective total OPEB liability, as well as what the System's proportionate share of the collective total OPEB liability would be if it were calculated using a discount rate that is 1% lower (2.13%) or 1% higher (4.13%) than the current discount rate:

	1.0% Decrease 2.13%	Current Discount Rate 3.13%	1.0% Increase 4.13%
Proportionate Share of the Collective Total OPEB Liability	<u>\$ 30,646,170</u>	<u>\$ 26,099,592</u>	\$ 22,512,829

## 8. Sensitivity of the System's Proportionate Share of the Collective Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the System's proportionate share of the collective total OPEB liability, as well as what the System's proportionate share of the collective total OPEB liability would be if it were calculated using a healthcare cost trend rates that are 1% lower or 1% higher than the current healthcare cost trend rates:

Net Pension Liability	1.0% Decrease	Current Trend Rate	1.0% Increase
Proportionate Share of the Collective Total OPEB Liability	<u>\$ 22,495,198</u>	<u>\$ 26,099,592</u>	<u>\$ 30,717,646</u>

#### 9. Payables to the OPEB Plan

As of June 30, 2018, the System reported a payable of \$0 for the outstanding amount of contributions to the OPEB plan required for the year ended June 30, 2018.

#### K. Defined Benefit Pension Plan:

### 1. Plan Description

All full-time TRSL employees who do not participate in TRSL participate in Louisiana State Employees Retirement System (LASERS). LASERS is a cost-sharing multiple-employer defined benefit plan administered by the Louisiana State Employees' Retirement System (LASERS). Section 401 of Title 11 of the Louisiana Revised Statutes (La. R.S. 11:401) grants to LASERS Board of Trustees and the Louisiana Legislature the authority to review administration, benefit terms, investments, and funding of the plan.

LASERS provides retirement, deferred retirement option (DROP), disability, and survivor's benefits. The following is a brief description of the plan and its benefits. Participants should refer to the appropriate statutes for more complete information.

#### 2. Retirement Benefits

The age and years of creditable service required in order for a member to retire with full benefits are established by statute and vary depending on the member's hire date, employer, and job classification. The substantial majority of members may retire with full benefits at any age upon completing 30 years of creditable service and at age 60 upon completing ten years of creditable service. Additionally, members may choose to retire with 20 years of service at any age with an actuarially reduced benefit. The basic annual retirement benefit for members is equal to 2.5% to 3.5% of average compensation multiplied by the number of years of creditable service.

Average compensation is defined as the member's average annual earned compensation for the highest 36 consecutive months of employment for members employed prior to July 1, 2006. For members hired July 1, 2006 or later, average compensation is based on the member's average annual earned compensation for the highest 60 consecutive months of employment. The maximum annual retirement benefit cannot exceed the lesser of 100% of average compensation or a certain specified dollar amount of actuarially determined monetary limits, which vary depending upon the member's age at retirement. Judges, court officers, and certain elected officials receive an additional annual retirement benefit equal to 1.0% of average compensation multiplied by the number of years of creditable service in their respective capacity. As an alternative to the basic retirement benefits, a member may elect to receive their retirement benefits under any one of six different options providing for reduced retirement benefits payable throughout their life, with certain benefits being paid to their designated beneficiary after their death.

Act 992 of the 2010 Louisiana Regular Legislative Session changed the benefit structure for LASERS members hired on or after January 1, 2011. This resulted in three new plans: regular, hazardous duty, and judges. The new regular plan includes regular members and those members who were formerly eligible to participate in specialty plans, excluding hazardous duty and judges. Regular members and judges are eligible to retire at age 60 after 5 years of creditable service and may also retire at any age, with a reduced benefit, after 20 years of creditable service. Hazardous duty members are eligible to retire with 12 years of creditable service at age 55, 25 years of creditable service at any age or with a reduced benefit after 20 years of creditable service. Average compensation will be based on the member's average annual earned compensation for the highest 60 consecutive months of employment for all three new plans. Members in the regular plan will receive a 2.5% accrual rate, hazardous duty plan a 3.3% accrual rate, and judges a 3.5% accrual rate. The extra 1.0% accrual rate for each year of service for court officers, the governor, lieutenant governor, legislators, House Clerk, Sergeants-at-Arms, or Senate secretary employed after January 1, 2011 was eliminated by Act 992. Specialty plan and regular members hired prior to January 1, 2011, who are hazardous duty employees have the option to transition to the new hazardous duty plan.

A member leaving employment before attaining minimum retirement age, but after completing certain minimum service requirements, becomes eligible for a benefit, provided the member lives to the minimum service retirement age, and does not withdraw their accumulated contributions. The minimum service requirement for benefits varies depending upon the member's employer and service classification but generally is 10 years of service.

#### 3. Deferred Retirement Benefits

The State Legislature authorized LASERS to establish a Deferred Retirement Option Plan (DROP). When a member enters DROP, their status changes from active member to retiree even though they continue to work and draw their salary for a period of up to three years. The election is irrevocable once participation begins. During DROP participation, accumulated retirement benefits that would have been paid to each retiree are separately tracked. For members who entered DROP prior to January 1, 2004, interest at a rate of 0.5% less than LASERS's realized return on its portfolio (not to be less than zero) will be credited to the retiree after participation ends. At that time, the member must choose among available alternatives for the distribution of benefits that have accumulated in the DROP account.

Members who enter DROP on or after January 1, 2004 are required to participate in LASERS's Self-Directed Plan (SDP), which is administered by a third-party provider. The SDP allows DROP participants to choose from a menu of investment options for the allocation of their DROP balances. Participants may diversify their investments by choosing from an approved list of mutual funds with different holdings, management styles, and risk factors.

### 4. Initial Benefit Options

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. For members who selected the IBO option prior to January 1, 2004, such amount may be withdrawn or remain in the IBO account earning interest at a rate of 0.5% less than LASERS's realized return on its portfolio (not to be less than zero). Those members who select the IBO on or after January 1, 2004 are required to enter the SDP as described above.

### 5. Disability Benefits

All members with 10 or more years of credited service who become disabled may receive a maximum disability retirement benefit equivalent to the regular retirement formula without reduction by reason of age.

Upon reaching age 60, the disability retirement recipient may receive a regular retirement benefit by making application to the Board of Trustees.

For injuries sustained in the line of duty, hazardous duty personnel in the Hazardous Duty Services Plan will receive a disability benefit equal to 75% of final average compensation.

#### 6. Survivor Benefits

Certain eligible surviving dependents receive benefits based on the deceased member's compensation and their relationship to the deceased. The deceased member who was in state service at the time of death must have a minimum of five years of service credit, at least two of which were earned immediately prior to death, or who had a minimum of 20 years of service credit regardless of when earned in order for a benefit to be paid to a minor or handicapped child. Benefits are payable to an unmarried child until age 18, or age 23 if the child remains a full-time student. The aforementioned minimum service credit requirement is 10 years for a surviving spouse with no minor children, and benefits are to be paid for life to the spouse or qualified handicapped child.

#### 7. Contributions

Contribution requirements of active employees are governed by Section 401 of Title 11 of the Louisiana Revised Statutes (La. R.S. 11:401) and may be amended by the Louisiana Legislature. Members are required by state statute to contribute 7.5% of their annual covered salaries if hired before July 1, 2006 and 8.0% of their annual covered salaries if hired after July 1, 2006. The System is required to make employer contributions based on an actuarially determined rate. The employer contribution rate for the fiscal years ended June 30, 2018 and 2017 was 37.9% and 35.8% of annual covered payroll, respectively. The System's contribution to LASERS for the fiscal years ended June 30, 2018 and 2017 was \$1,693,978 and \$1,547,889, respectively.

### 8. Significant Accounting Policy

For purposes of measuring the net pension liability, deferred outflows of resources, and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the Louisiana State Employees' Retirement System (LASERS) and changes in LASERS's fiduciary net position have been determined on the same basis as they are reported by LASERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

## 9. Pension Liabilities, Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

As of June 30, 2018 and 2017, the System reported a liability of \$16,580,526 and \$18,765,871, respectively, for its proportionate share of LASERS's net pension liability. The net pension liability was measured as of June 30, 2017 and June 30, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of these dates. The System's proportion of the net pension liability was based on a projection of the System's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. As of June 30, 2018, the System's proportion was 0.23556%, which is a decrease of 0.00342% from its proportion measured as of June 30, 2017, which was 0.23898%.

For the fiscal years ended June 30, 2018 and 2017, the System recognized pension expense in the amount of \$1,385,063 and \$2,807,080, respectively. At June 30, 2018 and 2017, the System reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

June 30, 2018	Deferred Outflows of Resources	Deferred Inflows of Resources	
Differences between expected and actual experience	\$ —	\$ 304,233	
Net difference between projected and actual earnings on pension plan investments	539,167	_	
Changes in proportion and differences between employer contributions and proportionate share of contributions	122,279	209,701	
Changes in assumptions	65,504	_	
Employer contributions subsequent to the measurement date	1,693,978	<u>_</u>	
Total	\$ 2,420,928	\$ 513,93 <u>4</u>	

June 30, 2017	Deferred Outflows of Resources	Deferred Inflows of Resources	
Differences between expected and actual experience	\$ 10,864	\$ 174,046	
Net difference between projected and actual earnings on pension plan investments	2,337,322	_	
Changes in proportion and differences between employer contributions and proportionate share of contributions	199,749	138,354	
Employer contributions subsequent to the measurement date	1,547,889		
Total	<u>\$ 4,095,824</u>	<u>\$ 312,400</u>	

Deferred outflows of sources related to pensions resulting from employer contributions subsequent to the measurement date of \$1,693,978, will be recognized as a reduction of the net pension liability in the year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense (benefit) as follows:

Year ended June 30:		
2019	\$ (60,346)	
2020	391,402	
2021	215,765	
2022	(333,805)	
	<u>\$ 213,016</u>	

### 10. Actuarial Assumptions

The total pension liability in the June 30, 2017 and June 30, 2016 actuarial valuations was determined using the following actuarial assumptions and applied to all periods included in the measurement. The significant methods and assumptions used in calculating the actuarially determined contributions are as follows:

Valuation date	June 30, 2017 and 2016
Actuarial cost method	Entry age normal
Amortization approach	Closed
Expected remaining service lives	3 years
Investment rate of return	7.70% and 7.75% net of investment expenses, respectively
Inflation rate	2.75 and 3.0%, respectively
Projected salary increases service	2.8% - 14.3% varies depending on duration of service
Cost-of-living adjustments	1.5% for the year ended June 30, 2017
Mortality	Non-disabled members - Mortality rates were projected based on the RP-2000 Combined Health Mortality Table with mortality improvement projected to 2015.
mortanty	Disabled members - Mortality rates based on the RP- 2000 Disabled Retiree Mortality Table, with no projection for mortality improvement.
Termination and disability	Termination, disability, and retirement assumptions were projected based on a five-year (2008-2013) experience study of the System's members.

The actuarial assumptions used in the June 30, 2017 and June 30, 2016 valuations were based on the results of an actuarial experience study for the period July 1, 2009 and ending June 30, 2013.

The 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 and an adjustment for the effect of rebalancing/diversification. The target allocation and best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2017 and June 30, 2016 are summarized in the following tables:

2017 Asset Class	2017 Target Allocations	2017 Long-Term Expected Real Rate of Return
Cash	0%	(0.24%)
Domestic equity	25%	4.31%
International equity	32%	5.35%
Domestic fixed income	8%	1.73%
International fixed income	6%	2.49%
Alternative investments	22%	7.41%
Global tactical asset allocation	7%	2.84%
Total	<u>100%</u>	

2016 Asset Class	2016 Target Allocations	2016 Long-Term Expected Real Rate of Return
Cash	0%	(0.24%)
Domestic equity	25%	4.31%
International equity	32%	5.48%
Domestic fixed income	8%	1.63%
International fixed income	6%	2.47%
Alternative investments	22%	7.42%
Global tactical asset allocation	7%	2.92%
Total	100%	

The discount rate used to measure the total pension liability at June 30, 2017 and 2016 was 7.70% and 7.75%, respectively. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that employer contributions from participating employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive 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.

## 11. Sensitivity of the System's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the System's proportionate share of the net pension liability using the discount rate, as well as what the employer's proportionate share of the 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:

Net Pension Liability	1.0% Decrease 6.70%	Current Discount Rate 7.70%	1.0% Increase 8.70%
June 30, 2018	<u>\$ 20,814,971</u>	<u>\$ 16,580,526</u>	<u>\$ 12,980,245</u>
Net Pension Liability	1.0% Decrease 6.75%	Current Discount Rate 7.75%	1.0% Increase 8.75%
June 30, 2017	<u>\$ 23,055,610</u>	<u>\$ 18,765,871</u>	<u>\$ 15,120,938</u>

### 12. Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued Louisiana State Employees' Retirement System 2017 Comprehensive Annual Financial Report at www.lasersonline.org.

### 13. Payables to the Pension Plan

As of June 30, 2018 and 2017, TRSL reported a payable of \$62,269 and \$58,200, respectively, for the outstanding amount of contributions to LASERS.

## L. Subsequent Events

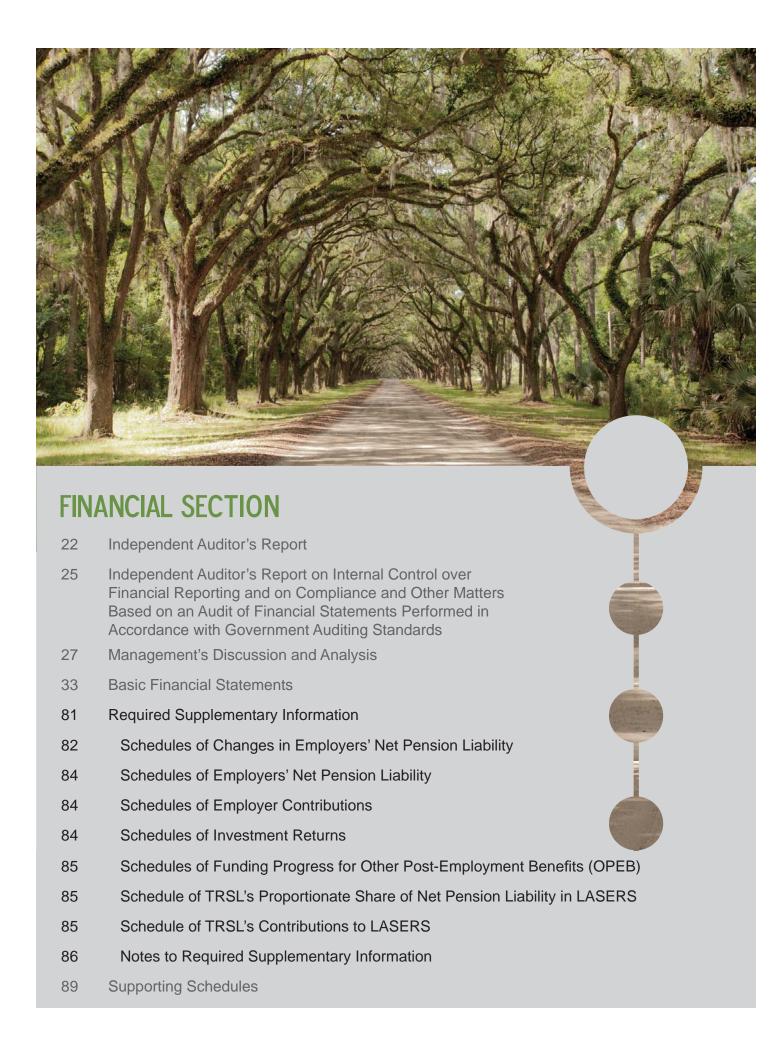
Management has performed an analysis of the activities and transactions subsequent to June 30, 2018 to determine the need for any adjustments to and for disclosures within the financial statements for the year ended June 30, 2018. Management has performed this analysis through September 27, 2018, which is the date the financial statements were available to be issued.

### M. Reclassifications

Certain reclassifications have been made to the 2017 comparative information to conform to the 2018 presentation. Such reclassifications had no effect on the change in net assets.



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# Schedules of Changes in Employers' Net Pension Liability for the five years ended June 30, 2018

	2018	2017
Total pension liability		
Service cost	\$ 473,025,011	\$ 466,591,480
Interest	2,244,768,414	2,222,960,660
Changes of benefit terms	0	0
Differences between expected and actual experience	(130,859,239)	(223,202,835)
Changes of assumptions	688,003,495	135,132,845
Retirement benefits	(2,116,953,537)	(2,061,454,295)
Refunds and transfers of member contributions	(48,671,220)	(49,805,920)
Net change in total pension liability	1,109,312,924	490,221,935
Total pension liability - beginning	29,762,623,913	29,272,401,978
Total pension liability - ending (a)	<u>\$ 30,871,936,837</u>	<u>\$ 29,762,623,913</u>
Plan fiduciary net position		
Employer contributions <sup>1</sup>	1,201,829,353	1,122,277,562
Non-employer Contributions	39,550,321 38,762,968	
Employee contributions	337,928,752 328,541,240	
Net investment income <sup>1</sup>	2,137,541,062 2,612,231,923	
Other income	11,411,104 2,972,51	
Retirement benefits <sup>1</sup>	(2,116,953,537)	(2,061,454,295)
Refunds and transfers of member contributions	(48,671,220)	(49,805,920)
Administrative expense	(15,431,788)	(17,175,965)
Other post-employment benefit expenses	(13,633,156)	(586,167)
Depreciation and amortization expenses	(400,766)	(432,238)
Accounting principle change	0	0
Net change in plan fiduciary net position	1,533,170,125	1,975,331,625
Plan fiduciary net position - beginning	<u>19,510,746,776</u>	<u>17,535,415,151</u>
Plan fiduciary net position - ending (b) <sup>1, 2</sup>	<u>\$ 21,043,916,901</u>	<u>\$ 19,510,746,776</u>
Net pension liability - ending (a) - (b)	<u>\$ 9,828,019,936</u>	<u>\$ 10,251,877,137</u>
Plan fiduciary net position as a percentage of the total pension liability	68.2%	65.6%
Covered payroll	\$ 3,998,051,313	\$ 3,901,627,792
Net pension liability as a percentage of covered payroll	245.8%	262.8%

<sup>&</sup>lt;sup>1</sup>Amounts shown exclude side-fund assets held for the LSU Agriculture and Extension Service and associated contributions and benefits.

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

<sup>&</sup>lt;sup>2</sup>Fair value of assets.

# Schedules of Changes in Employers' Net Pension Liability for the five years ended June 30, 2018 (cont'd)

	2016	2015	2014
Total pension liability			
Service cost	\$ 463,783,246	\$ 459,658,120	\$ 462,730,192
Interest	2,176,626,375	2,137,096,756	2,086,494,384
Changes of benefit terms	216,473,124	0	200,806,602
Differences between expected and actual experience	(181,620,615)	(62,489,198)	(122,326,978)
Changes of assumptions	0	0	0
Retirement benefits	(1,999,272,395)	(1,955,102,582)	(1,877,113,903)
Refunds and transfers of member contributions	<u>(49,884,654</u> )	(52,402,762)	(58,777,337)
Net change in total pension liability	626,105,081	526,760,334	691,812,960
Total pension liability - beginning	28,646,296,897	28,119,536,563	27,427,723,603
Total pension liability - ending (a)	\$ 29,272,401,978	<u>\$ 28,646,296,897</u>	<u>\$ 28,119,536,563</u>
Plan fiduciary net position			
Employer contributions <sup>1</sup>	1,157,901,123	1,217,466,676	1,176,569,685
Non-employer Contributions	38,193,328	37,425,629	35,927,881
Employee contributions	330,773,316	324,920,644	326,007,091
Net investment income <sup>1</sup>	177,422,752	443,034,317	2,815,090,995
Other income	2,951,433	13,866,589	7,880,853
Retirement benefits <sup>1</sup>	(1,999,272,395)	(1,955,102,582)	(1,877,113,903)
Refunds and transfers of member contributions	(49,884,654)	(52,402,762)	(58,777,337)
Administrative expense	(16,306,240)	(18,023,794)	(15,026,969)
Other post-employment benefit expenses	24,005	(1,685,836)	(1,047,832)
Depreciation and amortization expenses	(407,105)	(384,426)	(322,881)
Accounting principle change	0	(13,197,268)	0
Net change in plan fiduciary net position	(358,604,437)	(4,082,813)	2,409,187,583
Plan fiduciary net position - beginning	<u>17,894,019,588</u>	<u>17,898,102,401</u>	<u>15,488,914,818</u>
Plan fiduciary net position - ending (b) <sup>1, 2</sup>	<u>\$ 17,535,415,151</u>	<u>\$ 17,894,019,588</u>	<u>\$ 17,898,102,401</u>
Net pension liability - ending (a) - (b)	<u>\$ 11,736,986,827</u>	<u>\$ 10,752,277,309</u>	<u>\$ 10,221,434,162</u>
Plan fiduciary net position as a percentage of the total pension liability	59.9%	62.5%	63.7%
Covered payroll	\$ 3,869,730,024	\$ 3,815,648,662	\$ 3,764,954,727
Net pension liability as a percentage of covered payroll	303.3%	281.8%	271.5%

<sup>&</sup>lt;sup>1</sup>Amounts shown exclude side-fund assets held for the LSU Agriculture and Extension Service and associated contributions and benefits.

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

<sup>&</sup>lt;sup>2</sup>Fair value of assets.

## Schedules of Employers' Net Pension Liability for the six years ended June 30, 2018

Fiscal Year	Total Pension Liability	Plan Fiduciary Net Position¹	Employers' Net Pension Liability	Plan Fiduciary Net Position as a Percentage of Total Pension Liability	Covered Payroll	Net Pension Liability as a Percentage of Covered Payroll
2013	\$ 27,427,723,603	\$ 15,488,914,818	\$ 11,938,808,785	56.5%	\$3,726,325,750	320.4%
2014	\$ 28,119,536,563	\$ 17,898,102,401	\$ 10,221,434,162	63.7%	\$3,764,954,727	271.5%
2015	\$ 28,646,296,897	\$ 17,894,019,588	\$ 10,752,277,309	62.5%	\$3,815,648,662	281.8%
2016	\$ 29,272,401,978	\$ 17,535,415,151	\$ 11,736,986,827	59.9%	\$3,869,730,024	303.3%
2017	\$ 29,762,623,913	\$ 19,510,746,776	\$ 10,251,877,137	65.6%	\$3,901,627,792	262.8%
2018	\$ 30,871,936,837	\$ 21,043,916,901	\$ 9,828,019,936	68.2%	\$3,998,051,313	245.8%

<sup>&</sup>lt;sup>1</sup>Plan fiduciary net position excludes side-fund assets held for the LSU Agricultural and Extension Service.

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

## Schedules of Employer Contributions for the ten years ended June 30, 2018

Fiscal Year	Actuarial Determined Contribution	Contributions in Relation to Actuarial Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2009	\$ 697,190,561	\$ 741,595,487	\$ (44,404,926)	\$ 3,912,326,326	19.0%
2010	904,382,657	755,446,587	148,936,070	3,977,819,262	19.0%
2011	1,086,319,774	980,393,924	105,925,850	3,902,646,534	25.1%
2012	1,120,095,898	1,127,265,199	(7,169,301)	3,808,760,594	29.6%
2013	1,149,134,132	1,137,733,532	11,400,600	3,726,325,750	30.5%
2014	1,218,397,771	1,258,687,418	(40,289,647)	3,764,954,727	33.4%
2015	1,212,285,929	1,303,570,582	(91,284,653)	3,815,648,662	34.2%
2016	1,177,993,580	1,242,445,786	(64,452,206)	3,869,730,024	32.1%
2017	1,188,962,275	1,204,634,319	(15,672,044)	3,901,627,792	30.9%
2018	1,227,397,115	1,288,863,851	(61,466,736)	3,998,051,313	32.2%

## Schedules of Money-Weighted Rate of Return for the five years ended June 30, 2018

	2018	2017	2016	2015	2014
Annual money-weighted rate of return	11.61%	15.87%	0.97%	2.71%	19.46%

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

## Schedule of TRSL's Proportionate Share of the Collective Total Other Post-Employment Benefits (OPEB) Liability for the year ended June 30, 2018

Fiscal Year	Percentage of the Collective Total OPEB Liability	System's Proportionate Share of the Collective Total OPEB Liability	Employer's Covered Payroll	Proportionate Share of the Collective Total OPEB Liability as a % of Covered Payroll
2018	0.3003%	\$ 26,099,592	\$ 8,752,282	298.20%

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

## Schedules of TRSL's Proportionate Share of the Net Pension Liability in LASERS for the four years ended June 30, 2018

	2018	2017	2016	2015
TRSL's proportion of the net pension liability	0.23556%	0.23898%	0.23385%	0.23911%
TRSL's proportionate share of the net pension liability	\$16,580,526	\$18,765,871	\$15,905,194	\$14,951,289
TRSL's covered - payroll	\$ 4,391,837	\$ 4,493,154	\$ 4,476,486	\$ 4,243,320
TRSL's proportionate share of the net pension liability as a percentage of its covered payroll	377.53%	417.65%	355.31%	352.35%
Plan fiduciary net position as a percentage of the total pension liability	62.5%	57.7%	62.7%	65.0%

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

## Schedules of TRSL's Contributions to LASERS for the four years ended June 30, 2018

	2018	2017	2016	2015
Statutorily required contribution	\$1,693,978	\$1,547,889	\$1,665,310	\$1,656,300
Contributions in relation to the statutorily required contribution	1,693,978	1,547,889	<u>1,665,310</u>	1,660,791
Contribution deficiency (excess)	<u>\$</u> 0	<u>\$</u> 0	<u>\$</u> 0	<u>\$ (4,491)</u>
TRSL's covered - payroll	\$4,469,599	\$4,323,905	\$4,651,703	\$4,476,486
Contributions as a percentage of covered - payroll	37.90%	35.80%	35.80%	37.10%

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

The amount presented for the fiscal year were determined as of the prior fiscal year ended.

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

## 1. Schedules of Changes in Employers' Net Pension Liability

The total pension liability contained in this schedule was provided by the System's actuary, Foster & Foster Consulting Actuaries, Inc. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the System.

## 2. Schedules of Employers' Net Pension Liability

The schedule of employers' net pension liability shows the percentage of TRSL employers' net pension liability as a percentage of covered payroll. The employers' net pension liability is the liability of contributing employers to members for benefits provided through TRSL. Covered payroll is compensation to active employees on which the employer bases contributions to the plan.

## 3. Schedules of Employer Contributions

The difference between actuarially determined employer contributions and employer contributions received, and the percentage of employer contributions received to covered payroll is presented in this schedule.

#### 4. Schedules of Investment Returns

The annual money-weighted rate of return is shown in this schedule. 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 investment performance adjusted for the changing amounts actually invested throughout the year, measured on daily inputs with expenses measured on an accrual basis.

## 5. Actuarial Assumptions for TRSL's Net Pension Liability

Valuation date	June 30, 2018 and 2017
Actuarial cost method	Entry Age Normal
Amortization approach	Closed
Investment rate of return	7.65% and 7.70%, respectively, net of investment expenses
Inflation rate	2.5%
Projected salary increases	3.3% - 4.8% varies depending on duration of service
Cost-of-living adjustments	1.5% for the year ended June 30, 2017
Mortality	Active members – RP-2014 White Collar Employee tables, adjusted by 1.010 for males and by 0.997 for females. Non-Disabled retiree/inactive members – RP-2014 White Collar Healthy Annuitant tables, adjusted by 1.366 for males and by 1.189 for females. Disability retiree mortality – RP-2014 Disability tables, adjusted by 1.111 for males and by 1.134 for females. These base tables are adjusted from 2014 to 2018 using the MP-2017 generational improvement table, with continued future mortality improvement projected using the MP-2017 generational mortality improvement tables.
Termination and disability	Termination, disability, and retirement assumptions were projected based on a 5-year (July 1, 2012 – June 30, 2017) experience study of the System's members.

# 6. Schedules of TRSL's Proportionate Share of the Collective Total OPEB Liability

No assets are accumulated in a trust that meets the criteria in paragraph 4 of Governmental Accounting Standards Board (GASB) Statement No. 75 to pay related benefits. There were no changes of benefit terms for the OPEB Plan during any of the years presented. The discount rate increased to 3.13% in the July 1, 2017 valuation from 2.71% as of July 1, 2016.

## 7. Schedule of TRSL's Proportionate Share of the Net Pension Liability in LASERS

This schedule reflects the participation of TRSL employees in LASERS and its proportionate share of the net pension liability, the proportionate share of the net pension liability as a percentage of its covered payroll, and the plan fiduciary net position as a percentage of the total pension liability.

#### 8. Schedule of TRSL's Contributions to LASERS

This schedule represents the employer contributions subsequent to the measurement date and recognized as a reduction of the net pension liability in future years.

## 9. Changes in Benefit Terms

#### Pension Plan

During the reporting period 2017, a cost-of-living-adjustment (COLA) was granted by LASERS of 1.5%.

#### **OPEB Plan**

There were no changes in benefit terms for the State of Louisiana OPEB Plan.

## 10. Changes in Assumptions

#### Pension Plan

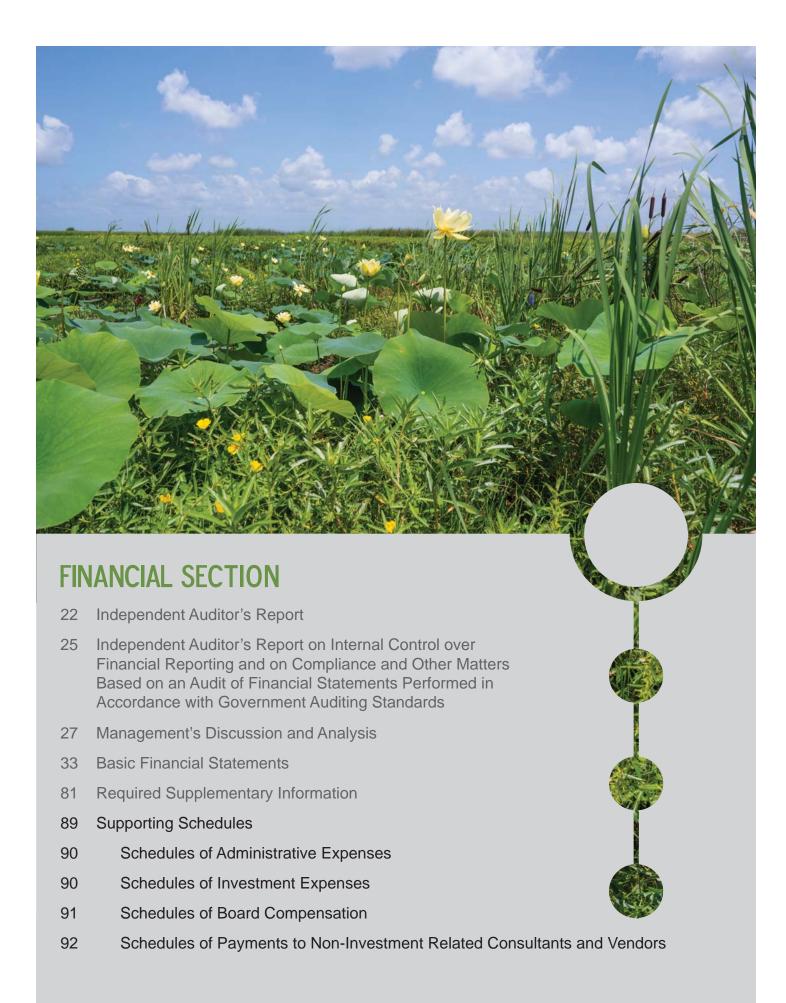
Amounts reported in the actuary valuation dated June 30, 2017 for LASERS reflect an adjustment in the discount rate, inflation rate, and salary increases used to value the projected benefit payments attributed to past periods of service. The discount rate for LASERS was decreased by 0.05% to 7.70% in 2017. Other changes were as follows:

Valuation date	June 30, 2017	June 30, 2016
Inflation Rate	2.75%	3.00%
Projected Salary Increases	2.80% - 14.30%	3.00% - 14.50%

#### **OPEB Plan**

The discount rate changed from 2.71% as of July 1, 2016 to 3.13% as of July 1, 2017, for the State of Louisiana OPEB Plan.

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## Schedules of Administrative Expenses for the Years Ended June 30, 2018 and 2017

	2018	2017
Administrative Expenses:		
Salaries and related benefits	\$ 12,752,309	\$ 12,908,406
Travel expenses	66,604	54,760
Operating expenses	1,788,259	2,205,850
Professional services	789,965	640,852
Other charges & interagency transfers	75,639	81,307
Acquisitions	267,927	25,599
Pension- LASERS members	(1,693,978)	(1,547,889)
Total administrative expenses	<u>\$ 14,046,725</u>	<u>\$ 14,368,885</u>

# Schedules of Investment and Securities Lending Expenses for the Years Ended June 30, 2018 and 2017

	2018	2017
Investment activities expenses:		
International investment expenses	\$ 6,882,036	\$ 4,523,225
Alternative investment expenses*	63,314,796	59,492,256
Investment administrative expenses <sup>†</sup>	1,576,523	1,522,922
Custodian fees	374,584	350,933
Investment monitoring and compliance	306,492	309,303
Performance consultant fees	562,500	585,000
Advisor fees	37,287,214	34,883,417
Total investment activities expenses	<u>\$ 110,304,145</u>	<u>\$ 101,667,056</u>
Securities lending expenses: <sup>‡</sup>		
Fixed	\$ 8,281,733	\$ 4,073,161
Equity	19,701,898	7,708,889
International	(1,199,323)	<u>(901,329</u> )
Total securities lending expenses	<u>\$ 26,784,308</u>	<u>\$ 10,880,721</u>

<sup>\*</sup>Investment fees and expenses of alternative funds are rebated to TRSL by the general partner as gains are realized. These rebates are accounted for as return of capital.

<sup>&</sup>lt;sup>†</sup>GASB 67 requires the separate display of investment administrative expenses and is no longer included in general administrative expenses.

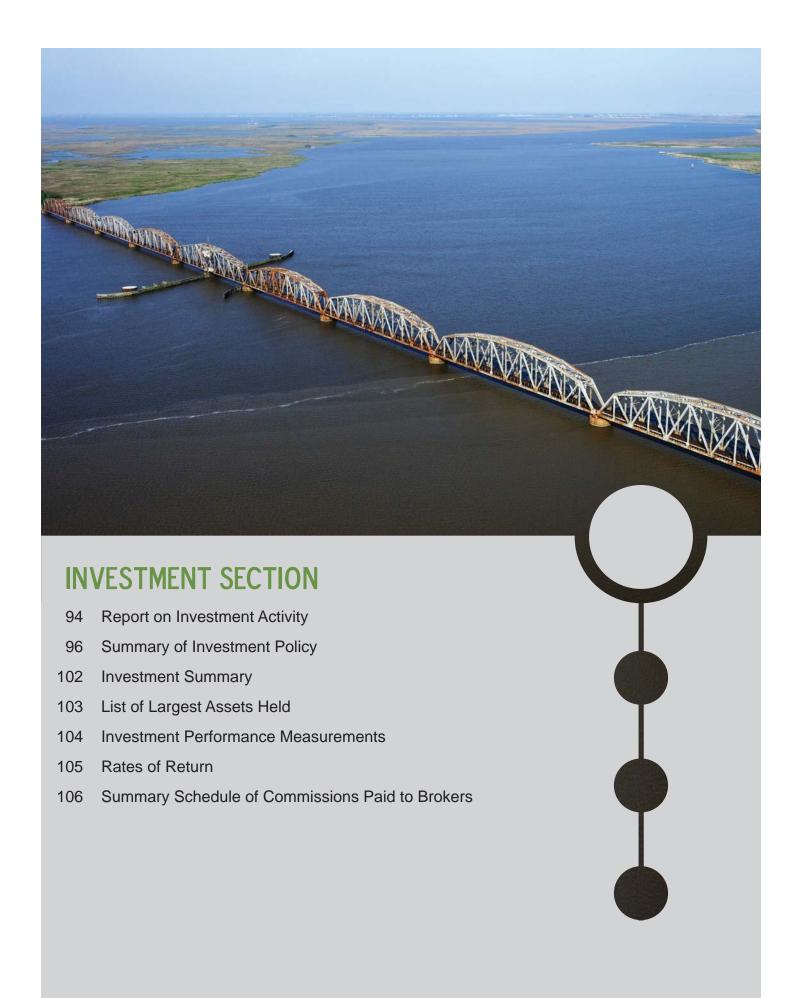
<sup>&</sup>lt;sup>‡</sup>Amounts are netted with securities lending income on the statements of changes in fiduciary net position. Net securities lending income for 2018 and 2017 was \$10,078,181 and \$12,251,273, respectively.

## Schedules of Board Compensation for the Years Ended June 30, 2018 and 2017

	2	018	20	017
Board Member	Number of Meetings	Amount	Number of Meetings	Amount
Sheryl R. Abshire, Ph.D.	11	\$ 825	10	\$ 750
Jerry J. Baudin, Ph.D.	17	1,275	18	1,350
Britton L. Colon	12	900		
Kimberly Flair			2	150
Holly Bridges Gildig	11	825	14	1,050
Joyce P. Haynes			9	675
David A. Hennigan	16	1,200	18	1,350
Ricky Julien, Sr.	17	1,275	9	675
Robert Lawyer	18	1,350	18	1,350
Kathy A. Manning	8	600	16	1,200
Tia T. Mills, Ed.D.	13	975	15	1,125
Paul E. Nelson, Ph.D.	11	825		
Neshelle S. Nogess	6	450	13	975
John G. Parauka	15	1,125	16	1,200
Carlos Sam	3	225	9	675
James A. Taylor, Sr., J.D., Ph.D.	18	1,350	17	1,275
Kelly Thompson	8	600		
Total compensation		<u>\$ 13,800</u>		<u>\$ 13,800</u>

# Schedules of Payments to Non-Investment Related Consultants and Vendors for the Years Ended June 30, 2018 and 2017

	2018	2017
Actuaries	\$ 220,925	\$ 168,580
Cavanaugh Macdonald Consulting, L.L.C.		
Foster & Foster Actuaries & Consultants		
Auditor/Accountant	108,156	118,880
Louisiana Legislative Auditor/Duplantier, Hrapman, Hogan & Maher, L.L.P.		
Postlethwaite & Netterville		
Information Technology and Other Consultants	309,188	213,178
Bowen ECM Solutions, L.L.C.		
CEM Benchmarking, Inc.		
Equifax/LexisNexis		
Everyone Counts, Inc.		
Hunt Telecommunications, L.L.C.		
Investor Responsibility Support Services, Inc.		
Modiphy, Inc.		
Pension Benefit Information		
Pro Source Technical Services, L.L.C.		
RMJ Consulting		
RN Expertise		
Scope Solutions Group, Inc.		
Sign Language Services International		
Trace Security		
Other		
Legal	73,321	54,464
Avant & Falcon		
Ice Miller, L.L.P.		
Kean Miller, L.L.P.		
Klausner, Kaufman, Jensen & Levinson		
Other		
Medical		
Examiners	<u>78,375</u>	<u>85,750</u>
Total	<u>\$ 789,965</u>	<u>\$ 640,852</u>





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October 15, 2018

Board of Trustees Teachers' Retirement System of Louisiana Post Office Box 94123 Baton Rouge, LA 70804-9123

Dear Board Members:

The Teachers' Retirement System of Louisiana (System) earned a 12.1% return on investments (gross of fees using a time-weighted compound return) for the fiscal year ended June 30, 2018. This return places the System as the top-performing fund over this time period with a first percentile ranking according to the Wilshire Trust Universe Comparison Service (TUCS). In fact, according to (TUCS), the System has been the top-performing fund (first percentile rank) for the last nine consecutive rolling years, returning an annualized 11.53% (gross of fees).

The fiscal year once again captured several market impactful events: The U.S. Federal Open Market Committee (FOMC) raised the federal funds rate by 75 basis points as the U.S. unemployment rate fell to 3.9%—sustained by strong job growth with more than 2.3 million jobs created during the fiscal year. In addition, federal legislation overhauled the tax code, establishing a single corporate tax rate of 21%. Capital market performance for the year was balanced between measuring the impact of rising interest rates and gauging the growth trajectory of the U.S. economy. While the 10-year U.S. Treasury yield rose over 50 basis points during the year, corporate profits surged as investors gravitated to return-seeking assets. For the fiscal year, U.S. equity and fixed income markets returned 14.78% and -0.40% as measured by the Russell 3000 Index and the Bloomberg Barclays U.S. Capital Aggregate Bond Index.

Outside the United States, global central banks signaled to investors that the extraordinarily accommodative monetary policies that have been in place will begin to diminish. The European Central Bank (ECB) articulated that its bond buying program was coming to an end, pledging that interest rates would not be raised until the summer of 2019. In unison, The Bank of England raised its benchmark borrowing rate by 25 basis points—the first United Kingdom interest rate increase in 10 years. The introduction of tariffs and trade negotiations, between the United States and its developed and emerging trade partners also raised investor angst in the market as currencies and capital markets were jostled. In spite of these elements, investors looked past these potential headwinds pushing both developed and emerging market equities higher. The international equity markets as measured by the MSCI EAFE Index returned 6.84%, the MSCI Emerging Markets Index returned 8.20% and global fixed income as measured by the Bloomberg Barclays Global Aggregate Index returned 1.36%.

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Teachers' Retirement System of Louisiana is an equal opportunity employer and complies with Americans with Disabilities Act.

The System's public market assets generated returns above its corresponding benchmark by 261 basis points, returning 10.60% versus 7.99% for the benchmark. Active management within both U.S. equity and developed international equity contributed to the public market relative outperformance.

Analogous to the public market assets, the System's private asset allocations contributed positive absolute and relative returns for the fiscal year. The private market assets returned 13.38% versus 12.20% for the benchmark, outpacing the benchmark by 118 basis points. The venture capital and corporate finance portfolios were the strongest performers within private assets returning 25.58% and 16.66%, respectively. The private market debt portfolio also had a strong year as the mezzanine portfolio returned 8.97% and the distressed debt portfolio returned 10.29%.

Long term, the System's investment returns continue to outpace peer returns. The System's investment returns rank in the top (best) seven percent of public pension funds with assets greater than \$1 billion for the 15-year period according to TUCS.

Sincerely,

Philip M. Griffith, CFA, CAIA Chief Investment Officer

# SUMMARY OF INVESTMENT POLICY

## **Purpose**

The Teachers' Retirement System of Louisiana ("System") was created under the management of the Board of Trustees ("Board") for the purpose of providing retirement allowances and other benefits for teachers of the state of Louisiana, all as provided by law.

The Board is responsible for investing the assets of the System in a prudent manner. The Board, in carrying out these duties, adheres to the Prudent-Man Rule, as defined in Louisiana law.

This Policy defines the investment objectives, policies and procedures that have been established by the Board. The objectives, policies and procedures outlined in this Policy were created as a framework for the management of the Plan. This Policy is intended to:

- Provide a mechanism to establish and review the Plan's investment objectives;
- Set forth an investment "structure" for managing assets. This structure includes various asset classes and investment styles that, in aggregate, are expected to produce a prudent level of diversification and investment return over time;
- Provide a single document identifying the roles of those responsible for selecting, monitoring, and reviewing the Plan's investments;
- Identify the criteria that may be used for selecting the investment funds (a collective reference as to investment managers, pooled investment funds and investment fund organizations);
- Establish measurement standards and monitoring procedures to be used in evaluating the performance of investment funds; and
- Establish procedures for evaluating investment funds.

## **Investment Philosophy**

This Policy provides a structure for investing the System's assets to achieve defined investment

objectives consistent with applicable law, and for managing the investments of the Plan. The System is a long-term investor retaining a broadly diversified portfolio of global assets in both public and private investments.

These statements describe the core values and fundamental investment beliefs that will form the basis for investment decisions.

- One of the most important decisions that the Board makes is to determine the long-term asset allocation;
- The Board will define a long-term strategic asset class allocation and rebalance to those allocations within specific ranges; the Board may express a medium-term view that may be different from target allocation, but within allowed ranges;
- The achievement of long-term investment goals is the result of sound strategic decisions and consistency in implementation;
- It is necessary to use long time frames and appropriate benchmarks to fairly evaluate active manager performance. Performance differences in asset classes, strategies, styles, and market capitalizations will have multi-year cycles. Therefore, even the most capable investment managers may have periods of under- and outperformance relative to their benchmarks;
- Investment implementation should be cost effective; and
- Active investment management should be applied in asset classes and strategies where evidence of favorable value added potential exists.

## **Investment Objectives**

The investment objectives of the System have been established in conjunction with a comprehensive review of the current and projected financial requirements. The Board's investment objectives are to:

 Protect the System's assets in real terms such that assets are preserved to provide benefits to participants and their beneficiaries. Real terms shall be a measurement in current dollars that discounts inflationary increases in value as measured by the Consumer Price Index (CPI-U) seasonally adjusted.

Achieve investment returns sufficient to meet the actuarial rate necessary to improve the future soundness
of the System. This is defined as an investment return (current income plus realized and nonrealized gains
and losses) that is greater than the actuarial rate.

The desired investment objective is a long-term compound rate of return on the System's assets of 3.9% above the CPI-U seasonally adjusted or the actuarial rate (7.65%, effective July 1, 2018, with a 0.05% reduction annually thereafter until the rate is 7.50%), whichever is higher. The Board realizes that market performance varies and that this return objective may not be meaningful during some periods.

While there can be no complete assurance that these objectives will be realized, this Policy is believed to provide a sound basis to successfully achieve System objectives.

#### **Asset Allocation Guidelines**

The System has established a target allocation for each asset class below, effective June 3, 2016. It shall be the policy of the System to invest the assets within the minimum and maximum range for each asset class, as stated below:

Asset Class	Minimum	Target	Maximum
Large/Mid Cap U.S. Equity	15.0%	20.0%	25.0%
Small Cap US Equity	2.0%	5.0%	8.0%
REITs	0.0%	2.0%	4.0%
International (Non-U.S.) Equity	7.0%	11.0%	15.0%
Emerging Markets Equity	4.0%	8.0%	12.0%
Core U.S. Fixed Income*	7.0%	9.0%	13.0%
High Yield Bonds	2.0%	4.0%	6.0%
Non-U.S. Developed Bonds	0.0%	2.0%	4.0%
Emerging Market Bonds	0.0%	3.5%	6.0%
Core Real Estate	0.0%	5.0%	9.0%
Non-Core Real Estate	0.0%	5.0%	9.0%
Corporate Finance/Buyouts	6.0%	11.0%	16.0%
Venture Capital	0.0%	3.0%	6.0%
Mezzanine	2.0%	5.0%	8.0%
Distressed Debt	0.0%	3.0%	5.0%
Infrastructure	0.0%	1.5%	4.0%
Commodities	0.0%	1.0%	3.0%
Farmland	0.0%	1.0%	3.0%
Opportunistic	0.0%	0.0%	5.0%
Total Portfolio		100.0%	

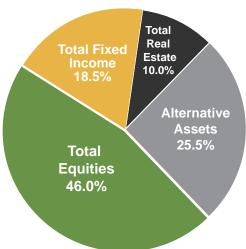
Asset Class	Minimum	Target	Maximum
Total Equities (including REITs)	34.0%	46.0%	58.0%
Total Fixed Income	10.0%	18.5%	28.0%
Total Private Assets <sup>†</sup>	10.0%	25.5%	35.0%
Total Real Estate (ex REITs)	5.0%	10.0%	15.0%
Total Portfolio		100.0%	

Changes in the investment asset allocation may take up to two years from June 3, 2016 to implement. In the interim, the System may be temporarily outside policy ranges due to the timing of investment manager searches and placement.

<sup>\*</sup>Core U.S. Fixed Income includes the U.S. portion of the Global Fixed Income allocation.

<sup>†</sup>Private assets include corporate finance/buyouts, venture capital, mezzanine, distressed debt, infrastructure, commodities, and farmland. To determine the asset allocation for the total private assets class, only the actual amount invested is applicable.





The asset allocation ranges established by this investment policy represent a long-term perspective. As such, rapid unanticipated market shifts may cause the asset mix to fall outside the policy range. Any divergence from this allocation should be of a short-term nature. The Chief Investment Officer ("CIO") and Staff are responsible for ensuring that any such divergence is as brief as possible. Staff will report any out-of-range condition and/or rebalancing decision to the Board at the Investment Committee meeting.

Investment managers will be evaluated on the performance of the total portfolio that they manage.

It is expected that all assets of the System will be managed in accordance with the Louisiana Revised Statutes. The index portfolio(s) shall seek either to replicate or to enhance a particular index. The index portfolio(s) may be invested in a variety of equity capitalization ranges and could be invested in domestic, global or international equity.

#### **Investment Guidelines**

The following general guidelines apply for the overall plan assets of the System.

- Investments shall possess value and quality corroborated by accepted investment techniques and standards of fundamental or systematic economic, financial and security analysis.
- Securities transactions shall be executed by the investment managers and the managers shall seek to achieve best price and best execution transaction(s).

- The following categories are restricted for the System's investments (pertains to non-alternative investments):
  - » Short sales of securities
  - Direct loans or extending lines of credit to any interested party
  - » Letter stock
  - » Unregistered securities (except 144A securities).
- Investments shall be diversified with the intent to minimize the risk of large losses to the System. The total portfolio will be constructed and maintained to provide prudent diversification through various asset categories.
- The System expects the investment manager's cash position to adhere to the following:
  - » Equity investment manager's cash shall not constitute more than 5% of the market value of the manager's portfolio without prior Board approval.
  - » Short-Term Investment Fund ('STIF") deposit accounts shall not be maintained at foreign sub-custodian banks, except those such accounts maintained by managers of global or international funds.
  - » The manager's cash will be swept daily into a STIF account by the custodian.
- The System may engage in the lending of securities subject to the following guidelines:
  - » Collateral on loans of domestic securities is set at a minimum 102% of the market value of the security plus accrued interest.
  - » Collateral on loans of international securities is set at a minimum 105% of the market value of the security plus accrued interest.
  - » Securities of the System are not released until the Custodian Bank receives payment for the book-entry withdrawal of the loaned security.
  - » Funds from the lending of securities accrue to the System's account and not to investment managers since they would not be involved in the process.

# Selection and Monitoring of Investment Options

Selection criteria will be established for each manager search undertaken on behalf of the System, and will be tailored to the specific needs of the search. The search process will be completed by an investment manager submitting a Solicitation for Proposal ("SFP"). There may be circumstances where the SFP would not be required as approved by the Board.

Each investment manager selected shall have a reasonable fee level within their peer group. Performance should be analyzed relative to the risk undertaken and should be used to evaluate the manager's potential to add value on a risk-adjusted basis, net of all fees. Further, the continuity of the manager's organization and its staff should be evaluated relative to the continuation of the performance being analyzed. The organizational structure should demonstrate that the manager's interests are aligned closely with those of investors. The firm and its staff should be reputable and any outstanding litigation in which the firm is engaged should be carefully reviewed.

In general, the minimum due diligence process for an investment manager's selection shall include, but not be limited to:

- Regulatory oversight: Each investment manager should be a regulated bank, an insurance company, a mutual fund organization, or a registered investment advisor.
- Assets under management: The product should have an appropriate asset base.
- Performance relative to assumed risk:
   Competitive returns of investment vehicles compared to appropriate benchmark(s) at an acceptable level of volatility.
- Consistency of holdings with style: History of consistent adherence to investment strategy.
- Stability of the organization: Established investment firm (significant experience and high quality reputation).
- Performance relative to peer groups: The product's performance should be evaluated against the peer group's returns for the trailing 1-, 3-, 5- year or longer annualized periods; past performance should not, however, be the sole basis for selecting investment managers.

The Board, with the aid of Staff and Consultant, will monitor the performance of each manager at least quarterly and meet each active manager annually while retaining a long-term focus. Monitoring the monthly performance relative to benchmarks will be an ongoing activity. The focus of the ongoing evaluation shall include:

- Assets under management (tracking substantial changes in total assets)
- Manager adherence to the Policy, guidelines and objectives
- Performance relative to appropriate benchmark comparison
- Performance relative to peer group(s)
- Portfolio holdings that are consistent with style or strategy
- Stability of the organization and key investment personnel turnover

The Board retains the discretion to place on the watch list or terminate an investment manager for any reason. Grounds for investment manager termination may include, but are not limited to:

- Failure to comply with stated Policy or investment guidelines
- Significant deviation from the manager's stated investment philosophy or process
- Loss of key investment personnel
- Evidence of illegal or unethical behavior by the investment management firm
- Loss of confidence by the Board in the investment manager
- Failure to achieve performance objectives specified in the manager's guidelines over reasonable measurement periods
- A change in the Board's asset allocation policy that necessitates a shift of assets to a different asset category or investment style

## **Roles and Responsibilities**

#### **Chief Investment Officer**

The Chief Investment Officer ("CIO") administers the investment program of the System. The duties of the CIO include:

- Responsible for all functions of the System's investment department.
- Oversee all System investments and investment managers.
- Meet with the Investment Committee/Board to review investments and policies.
- Monitor existing limited partnerships and review future partnerships.
- Monitor investment portfolios to ensure they are within the Policy established by the Board.
- Research new investment vehicles and present viable investments to the Board for possible inclusion to the Policy.
- Consider newly established asset categories, market conditions and transaction costs when determining the most cost-effective process to rebalance the portfolio.
- Responsible for effectively implementing the Policy.
- Implement asset allocation shifts to maintain portfolio allocations within approved Policy ranges.
- Direct the activities of the System's consultants for the best interest of the System and to leverage the activities of the Staff.
- Make recommendations concerning the hiring/ terminating of investment managers/advisors/ consultants.
- Represent the System at limited partnership meetings and Advisory Committee meetings, or delegate such duties to Staff or other agent(s) as necessary and appropriate.
- Assist the Director with legislative issues.
- During exigent circumstances, after consultation with and the concurrence of the Director, if practicable, and the Chairperson of the Investment Committee and/or the Chairperson of the Board, take such actions necessary to preserve and protect the assets and interests of the System.

#### **Investment Consultant**

The Consultant will advise the Board on the management of the Plan's assets. All Consultant(s) will be evaluated on an annual basis. The duties and responsibilities of the Consultant include, but are not limited to:

- Recommending appropriate strategic policy and implementation structure.
- Conducting manager due-diligence.
- Assisting with manager searches and selection.
- Providing quarterly compliance reports.
- Aiding the Board and Staff in monitoring the guidelines of the Policy and making recommendations regarding changes should they need to be made.
- Providing timely information, written and/or oral, on investment strategies, instruments, managers and other related issues, as requested by the Board, the Director, or the CIO.

### **Investment Managers**

Investment managers have the responsibility for managing the underlying assets by making reasonable investment decisions consistent with its stated approach, and reporting investment results. The duties and responsibilities of the investment managers include, but are not limited to:

- Investing the assets of the Plan with the care, skill, prudence, and diligence that a prudent professional investment manager, familiar with such matters and acting in like capacity, would use in the investment of such assets.
- Adhering to the investment policies and guidelines prescribed by the Board; additionally, all separately managed account managers will provide a quarterly report indicating adherence to policies and guidelines.
- Initiating written communication with the Board whenever the investment manager believes the guidelines should be changed. The Board recognizes that such changes may be necessary from time to time given the dynamic nature of capital markets.

- Informing the CIO or Consultant, as applicable, regarding all significant matters pertaining to the investment of the Plan's assets in a timely manner (no greater than 30 days). These matters include, but are not limited to:
  - » Substantive changes in investment strategy or portfolio structure; and
  - » Significant changes in the ownership, affiliations, organizational structure, financial condition, and professional staffing of the investment management organization.
- Submitting at least monthly reports describing portfolio holdings, performance results, and transactions activities. The manager should inform the Board quarterly of the turnover within the portfolio and be prepared to document rationale for significant changes in portfolio turnover.
- Voting all proxies after careful assessment of the issues involved. The managers should pay particular attention to items that may reduce the economic value of stockholders' rights of ownership and thereby impact adversely the performance of the Plan's assets. Nevertheless, each investment manager is required to advise the Board on any issues that should require special consideration. Staff will report to the Board annually summarizing the proxies that were voted by the investment managers.
- Adhering to the ethical standards of practice of the CFA Institute.
- The Board expects to review the performance of the active (publicly traded) investment managers at least annually. Newly hired managers and managers whose presence is recommended by Staff and the consultant will be required to appear before the Board for any scheduled review. During such meetings, the managers will be expected to explain their current investment strategies, comment on performance, and discuss any changes at the firm.

#### **Custodian Bank**

The Board recognizes that accurate and timely completion of custodial functions is necessary to effectively monitor investment management activity. The custodian's primary function will be to hold in custody all the securities that each of the investment managers manage in their portfolios, except for commingled funds or mutual funds, which may be held

elsewhere. The Custodian Bank will be evaluated by Staff on an annual basis.

The Custodian Bank is a fiduciary as to the assets placed with it by the System. The Custodian Bank is responsible for performing the following functions, among others designated by its contract:

- Providing safekeeping of securities, collecting dividends and interest earned, making disbursements and receiving cash flows as directed, and providing an annual SAS 70 Report.
- Providing complete and accurate accounting records including each transaction, income flow and cash flow by asset class, investment manager, and total fund.
- Monitoring and reconciling all trading activity.
- Issuing monthly reports of holdings and transactions priced in accordance with industry standards.
- Meeting periodically with Staff to report on the activity of the System's assets and bank organizational issues.
- Providing periodic reporting to Staff including:
  - » Estimated market value and cash flow report.
  - » Master trust reporting by total fund, asset class and plan account.
  - » Monthly custody account reconciliations.
  - » Limited partnership and commingled account reconciliations.
  - » Monthly report filing of claims and class actions.
  - » Monthly report brokerage activity.
  - » Handling securities lending and related functions.

## Investment Summary as of June 30, 2018

	June 30, 2018				
	Fair Value	% Total Fair Value			
Global Debt Securities	\$ 3,649,694,501	17.257%			
Global Equity Securities	9,957,163,279	47.080%			
Short-term Investments	1,076,810,833	5.091%			
Alternative Assets	4,785,375,894	22.626%			
Real Estate	1,680,558,422	<u>7.946%</u>			
Total Investments	<u>\$21,149,602,929</u>	<u>100.000%</u>			

## Investment Summary as of June 30, 2017

	June 30, 2017				
	Fair Value	% Total Fair Value			
Global Debt Securities	\$ 3,482,344,357	17.886%			
Global Equity Securities	9,393,224,351	48.246%			
Short-term Investments	1,034,891,991	5.315%			
Alternative Assets	4,015,795,919	20.626%			
Real Estate	1,543,338,516	7.927%			
Total Investments	<u>\$19,469,595,134</u>	<u>100.000%</u>			

## **List of Largest Assets Held**

Largest Equity Holdings		
Shares	Stock Description	Fair Value
74,560	Amazon.com, Inc.	\$ 126,737,088
425,849	Apple, Inc.	78,828,908
382,514	Facebook, Inc.	74,330,120
638,404	Microsoft Corp.	62,953,018
53,446	Alphabet, Inc.	59,627,030
271,672	Alibaba Group Holding Ltd.	50,403,306
1,307,833	Pfizer, Inc.	47,448,181
904,500	Tencent Holdings, LTD.	45,401,105
887,523	Intel Corp.	44,118,768
1,017,374	Cisco Systems, Inc.	43,777,603
Largest Debt Holdings		
Par Value	Bond Description	Fair Value
426,018,600	U.S. Treasury Notes	\$ 420,682,271
147,310,000	Commit To Purchase FNMA Single-Family Mortgages	147,919,302
481,600,000	CCP_IRS. P USD-LIBOR-BBA 3M CM	135,451,467
2,570,869,500	Mexican Bonos	132,400,384
73,485,400	U.S. Treasury Bonds	78,445,717
96,073,000	U.S. Treasury Bond Coupon Strips	77,183,358
73,781,639	U.S. Treasury, CPI Inflation	73,804,885
170,800,000	CCP_IRS. R USD-LIBOR-BBA 3M CM	61,906,463
		== 0.44 00.4
984,379,729	Republic of South Africa Government	57,841,931

Largest Alternative and Real Estate Investment Holdings					
Description	Fair Value				
JP Morgan Invst Mgmt	\$ 472,886,037				
Met Life Core Property Fund, L.P.	296,979,018				
Prudential R E	256,467,412				
Apollo Investment Fund VIII	112,313,232				
CVC Capital Partners VI, LP	103,215,553				
Energy Capital Partners III, LP	98,006,196				
Kelso Investment Associates IX L.P.	97,884,379				
Castlelake IV, LP	93,466,420				
Abraaj Separate Account 2014	86,086,566				
Blackstone Tactical Opportunities Fund II, LP	83,528,661				

The list of largest holdings excludes commingled funds. A complete list of portfolio holdings is available upon request.

## Investment Performance Measurements<sup>1</sup> – Year Ended June 30, 2018

	Rate of Return <sup>1</sup>	Percentile <sup>2</sup>
Comparative rates of return on total fund		
Teachers' Retirement System of Louisiana	12.1%	1
Comparison Index:		
Median Return for Public Funds Greater than \$1.0 billion	8.7%	50
Comparative rates of return on domestic equities		
Teachers' Retirement System of Louisiana	17.1%	5
Comparison Indices:		
Median Return for U.S. Equity of Public Funds Greater than \$1.0 billion	14.7%	50
Russell 3000 Index	14.8%	49
Comparative rates of return on domestic bonds		
Teachers' Retirement System of Louisiana	0.3%	67
Comparison Indices:		
Median Return for U.S. Fixed Income of Public Funds Greater than \$1.0 billion	0.7%	50
Barclays Capital Aggregate Bond Index	-0.4%	96
Comparative rates of return on international equities		
Teachers' Retirement System of Louisiana	11.1%	9
Comparison Indices:		
Median Return for Non-U.S. Equity of Public Funds Greater than \$1.0 billion	7.9%	50
MSCI EAFE Net Dividend Index	6.8%	82
Comparative rates of return on global bonds		
Teachers' Retirement System of Louisiana	1.1%	N/A
Comparison Indices:		
Median Return for Global Bonds of Public Funds Greater than \$1.0 billion <sup>3</sup>	N/A	N/A
Barclays Capital Global Aggregate Bond Index	1.4%	N/A
Comparative rates of return on alternative assets and real estate		
Teachers' Retirement System of Louisiana	14.5%	N/A
Comparison Indices:		
Median Return for Alternative Assets and Real Estate <sup>4</sup>	N/A	N/A
TRSL Private Asset Benchmark	12.2%	N/A

## Total Fund performance is compared to Public Funds greater than \$1.0 billion in assets as follows:

	Rate of Return <sup>1</sup>	Percentile <sup>5</sup>
One-year period ended June 30, 2018	12.1%	1
Three-year period ended June 30, 2018	9.9%	1
Five-year period ended June 30, 2018	10.4%	1
Seven-year period ended June 30, 2018	9.4%	1
10-year period ended June 30, 2018	7.6%	7
15-year period ended June 30, 2018	8.8%	7

<sup>&</sup>lt;sup>1</sup>Investment return calculations were prepared with time-weighted return methodology using market values and cash flows gross of fees. <sup>2</sup>The BNY Mellon Financial Universe (PARis) consists of public funds with assets greater than \$1.0 billion.

<sup>&</sup>lt;sup>3</sup>BNY Mellon Financial does not provide a universe for global bonds.

<sup>&</sup>lt;sup>4</sup>BNY Mellon Financial does not provide a universe for alternative assets and real estate.

<sup>&</sup>lt;sup>5</sup>The Wilshire Trust Universe Comparison Service (TUCS) consists of public funds with assets greater than \$1.0 billion.

### Rates of Return<sup>1</sup>

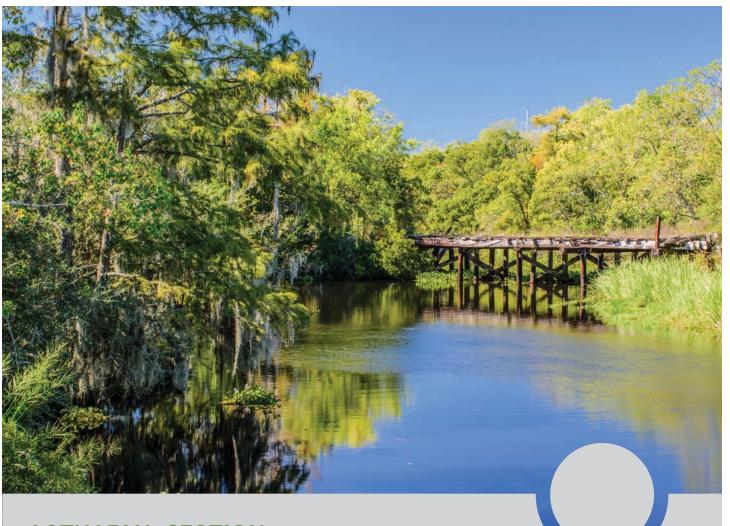
		Annual Years Ending June 30			Annu	alized	
	2018	2017	2016	2015	2014	3 Yrs	5 Yrs
Total Fund							
Teachers' Retirement System of Louisiana	12.1%	16.5%	1.6%	3.1%	19.9%	9.9%	10.4%
Median Large Fund Returns <sup>2</sup>	8.7%	12.6%	0.4%	3.2%	17.1%	7.2%	8.1%
Inflation (US Consumer Price Index)	2.9%	1.6%	1.0%	0.1%	2.1%	1.8%	1.5%
Domestic Equities							
Teachers' Retirement System of Louisiana	17.1%	18.5%	-0.6%	7.7%	25.7%	11.3%	13.3%
Median Return for US Equity Segment <sup>2</sup>	14.7%	18.6%	0.6%	7.7%	25.7%	11.2%	12.9%
Russell 3000 Index	14.7%	18.5%	2.1%	7.2%	25.2%	11.6%	13.3%
Russell 3000 Ilidex	14.0%	16.5%	2.170	7.3%	25.2%	11.0%	13.3%
Domestic Bonds							
Teachers' Retirement System of Louisiana	0.3%	1.1%	5.9%	1.8%	5.7%	2.4%	2.9%
Median Bond Return for US Bonds Segment <sup>2</sup>	0.7%	1.8%	5.3%	1.6%	6.2%	2.5%	3.0%
Barclays Capital Aggregate Bond Index	-0.4%	-0.3%	6.0%	1.9%	4.4%	1.7%	2.3%
International Equities							
Teachers' Retirement System of Louisiana	11.1%	23.2%	-6.6%	-2.7%	22.7%	8.5%	8.8%
Median Return for Non-US Equity Segment <sup>2</sup>	7.9%	20.7%	-8.6%	-2.7%	22.3%	6.2%	7.3%
MSCI EAFE Net Dividend Index	6.8%	20.3%	-10.2%	-4.2%	23.6%	4.9%	6.4%
Global Bonds							
Teachers' Retirement System of Louisiana	1.1%	5.3%	5.5%	-5.4%	8.5%	4.0%	2.9%
Median Return for Non-US Fixed Segment <sup>3</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barclays Capital Global Aggregate Bond Index	1.4%	-2.2%	8.9%	-7.1%	7.4%	2.6%	1.5%
Alternative Assets and Real Estate							
Teachers' Retirement System of Louisiana	14.5%	17.7%	7.3%	7.2%	22.0%	13.1%	13.6%
Median Return for Alternative Segment <sup>4</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRSL Private Asset Benchmark	12.2%	14.3%	5.5%	6.4%	19.1%	10.6%	11.4%

<sup>&</sup>lt;sup>1</sup>Investment return calculations were prepared with time-weighted return methodology using market values and cash flows gross of fees. <sup>2</sup>The BNY Mellon Financial Universe (PARis) consists of public funds with assets greater than \$1.0 billion. <sup>3</sup>BNY Mellon Financial does not provide a universe for global bonds.

<sup>&</sup>lt;sup>4</sup>BNY Mellon Financial does not provide a universe for alternative assets and real estate.

## Summary Schedule of Commissions Paid to Brokers for the Year Ended June 30, 2018

Summary Schedule of Commission	is I ald to brokers		
Brokerage Firm	Commissions	Shares Traded	Average Commission Per Share
BARCLAYS CAPITAL LE, NEW YORK	\$ 1,084,719	13,313,429	\$ 0.081
MORGAN STANLEY & CO INC, NY	288,967	70,410,278	0.004
BAIRD, ROBERT W & CO INC, MILWAUKEE	243,141	6,994,492	0.035
GOLDMAN SACHS & CO, NY	231,075	22,288,915	0.010
STIFEL NICOLAUS	230,316	7,214,113	0.032
BARCLAYS CAPITAL INC./LE, NEW JERSEY	181,770	2,925,610	0.062
MERRILL LYNCH PIERCE FENNER SMITH INC NY	181,284	12,770,125	0.014
CREDIT SUISSE, NEW YORK (CSUS)	147,866	19,132,234	0.008
PERSHING LLC, JERSEY CITY	102,082	4,261,915	0.024
JEFFERIES & CO INC, NEW YORK	99,424	5,215,981	0.019
J.P MORGAN SECURITIES INC, NEW YORK	91,941	3,364,483	0.027
UBS SECURITIES LLC, STAMFORD	88,380	4,301,703	0.021
DEUTSCHE BK SECS INC, NY (NWSCUS33)	85,269	3,246,406	0.026
CITIGROUP GBL MKTS INC, NEW YORK	80,804	5,646,724	0.014
LIQUIDNET INC, NEW YORK	65,041	3,264,020	0.020
ITG INC, NEW YORK	64,182	2,218,814	0.029
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	63,482	2,764,451	0.023
J.P. MORGAN CLEARING CORP, NEW YORK	63,194	2,302,718	0.027
NATIONAL FINL SVCS CORP, NEW YORK	54,584	2,226,921	0.025
BERNSTEIN SANFORD C & CO, NEW YORK	48,623	2,471,762	0.020
INSTINET EUROPE LIMITED, LONDON	47,054	5,131,840	0.009
INSTINET CORP, NEW YORK	46,001	2,919,740	0.016
J P MORGAN SECS LTD, LONDON	45,026	2,696,846	0.017
RBC CAPITAL MARKETS LLC, NEW YORK	44,556	2,737,065	0.016
MERRILL LYNCH INTL LONDON EQUITIES	43,789	6,942,113	0.006
UBS WARBURG, LONDON	38,511	3,409,878	0.011
CREDIT SUISSE (EUROPE), LONDON	38,356	2,915,133	0.013
INSTINET CLEARING SER INC, NEW YORK	35,265		0.004
		8,664,256	0.004
STEPHENS INC, LITTLE ROCK	32,413	983,819	0.003
CITIGROUP GBL MKTS/SALOMON, NEW YORK	31,179	10,982,515	
JONESTRADING INST SVCS LLC, NEW YORK	24,771	1,552,071	0.016 0.020
WEEDEN & CO, NEW YORK	24,232	1,218,811	
CANTOR FITZGERALD & CO INC, NEW YORK	22,935	1,092,749	0.021
BMO CAPITAL MARKETS CORP, NEW YORK	22,476	757,626	0.030
COWEN AND CO LLC, NEW YORK	20,349	1,331,925	0.015
INVESTMENT TECH GROUP INC, NEW YORK	19,431	916,897	0.021
SOCIETE GENERALE LONDON BRANCH, LONDON	19,161	2,173,813	0.009
CITIGROUP GLOBAL MARKETS LTD, LONDON	18,452	1,987,468	0.009
BARCLAYS CAPITAL, LONDON (BARCGB33)	17,420	1,812,522	0.010
KEYBANC CAPITAL MARKETS INC, NEW YORK	17,261	550,346	0.031
KEEFE BRUYETTE + WOODS INC, NEW YORK	16,697	498,222	0.034
EXANE, PARIS (EXANFRPP)	16,250	798,886	0.020
ISI GROUP INC, NEW YORK	16,098	515,717	0.031
WELLS FARGO SECURITIES, LLC, NEW YORK	15,796	540,642	0.029
CITATION GROUP BCC CLRG, NEW YORK	14,253	905,121	0.016
INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	13,900	1,311,281	0.011
HSBC BANK PLC (MIDLAND BK)(JAC), LONDON	13,485	2,743,177	0.005
OPPENHEIMER & CO INC, NEW YORK	12,742	410,546	0.031
WELLS FARGO SECURITIES LLC, CHARLOTTE	12,409	422,958	0.029
ICBC FINCL SVCS, NEW YORK	11,528	497,654	0.023
GOLDMAN SACHS INTL, LONDON (GSILGB2X)	11,454	871,131	0.013
VIRTU AMERICAS LLC, JERSEY CITY	11,423	286,804	0.040
JEFFERIES & CO LTD, LONDON	11,186	2,147,845	0.005
BERENBERG GOSSLER & CIE, HAMBURG	10,402	229,028	0.045
Other Commissions less than \$10,000	314,127	346,806,500	<u>0.001</u>
Total Commissions	<u>\$ 4,606,531</u>	616,098,039	<u>\$ 0.007</u>



## **ACTUARIAL SECTION**

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October 4, 2018

Board of Trustees Teachers' Retirement System of Louisiana Post Office Box 94123 Baton Rouge, Louisiana 70804-9123

#### Dear Board Members:

Pursuant to your request, we have completed the annual valuation of the Teachers' Retirement System of Louisiana (TRSL) as of June 30, 2018. The valuation was prepared using data submitted by the Retirement System, the actuarial assumptions adopted by the Board of Trustees, and reflects the plan provisions in effect on the valuation date. The primary purpose of the actuarial valuation is to determine the funding requirements of the members and participating employers, to describe the current financial condition of the System, and to analyze changes in the System's funding condition since the prior valuation. In addition, the report provides various summaries of data. The report may not be appropriate for other purposes. The financial reporting requirements of the Governmental Accounting Standards Board (GASB) Statements No. 67/68 in total for the plan are included in the June 30, 2018 Actuarial Valuation Report.

#### **Funding Objective**

The funding objective of the Retirement System was established by Constitutional Amendment Number 3 during the 1987 Legislative Session, which requires the current normal cost, determined in accordance with the prescribed statutory funding method, to be fully funded, and requires the unfunded accrued liability as of June 30, 1988, to be fully liquidated by 2029. Subsequent changes in unfunded liabilities are amortized as specified by Louisiana statutes.

#### Progress Toward Meeting Funding Objective

The employer contributions determined by the June 30, 2018 actuarial valuation and the member contributions, paid as a percentage of payroll, are expected to be sufficient to achieve the funding objective set forth above. The progress toward achieving the intended funding objectives can be measured by funding level, determined as the ratio of actuarial assets to the actuarial accrued liabilities. The current funded ratio is 65.8%. If the experience develops as assumed, and if contribution requirements are met, this ratio is expected to increase over time and the unfunded accrued liabilities will be paid off according to the constitutional and statutory funding objectives of the plan.

The results of the current valuation indicate that the aggregate employer contribution rate payable for the plan year commencing July 1, 2018 is 26.4% of payroll, which is a slight reduction from the 26.5% rate set by the Public Retirement Systems' Actuarial Committee. Aggregate payroll for the period is projected to increase by an amount less than expected, which increases the rate for this period, but the increase is nearly offset by the amortization of an experience gain, for investments and other actuarial assumptions.

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The actuarial value of assets is determined as the market value of assets adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a five-year period in 20% increments. The adjusted asset value is subject to corridor limits of 80% to 120% of the market value of assets. The objective of the asset valuation method is to smooth the volatility which might otherwise occur due to market conditions on the measurement date. The actuarial value of assets for the plan year ending on June 30, 2018, is \$20,407,476,271. After adjusting for the Experience Account balance of \$85,129,775, and for the Louisiana State University Agriculture and Extension Service Supplement of \$2,784,912, the valuation assets used for funding purposes are \$20,319,561,584.

#### Data

In performing the June 30, 2018 valuation, we have relied upon the employee data and financial information provided by the administrative staff of the Teachers' Retirement System of Louisiana. Participant data was not audited but was reviewed for reasonableness and consistency relative to data used for prior year valuations. Plan assets were compared with information furnished for the prior year's valuation and reviewed for consistency.

#### Actuarial Assumptions and Methods

The present values shown in the June 30, 2018 actuarial valuation and supporting statistical schedules of this certification, which comprise all the schedules of the Actuarial Section in the annual Financial Report, have been prepared in accordance with the actuarial methods specified in Louisiana Revised Statutes Title 11 Section 22(13) and assumptions which are appropriate for the purposes of this valuation. Valuation results presented in this report are based on the Entry Age Normal cost method, as prescribed by state law.

The Board adopted a plan to gradually reduce the discount rate from 7.75% to 7.50% in .05% annual increments, beginning July 1, 2017. Therefore, the discount rate was reduced from 7.70% to 7.65% for the July 1, 2018 valuation. A 7.60% discount rate was used to determine the projected contribution requirements for Fiscal Year 2019/2020.

Following the completion of an experience study for the period July 1, 2012 through June 30, 2017, the Board adopted a revised set of actuarial assumptions to better project plan experience based on the results of the study. The following actuarial assumptions were revised: retirement/DROP rates, salary increases, withdrawal rates, disability incidence rates, and mortality rates. Sample rates from the revised assumption tables are included in the supporting schedules.

The contribution requirements beginning with Fiscal Year 2018/2019 include direct funding of administrative expenses, rather than a reduction in the assumed rate of return, per Act 94 of 2016.

The assumptions and methods used for funding, financial reporting, and the development of the schedules listed below for the Financial Section in this report are in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with the paraments set forth by the Government Accounting Standards Board (GASB) Statement No. 67.

#### Supporting Schedules

The following supporting schedules were prepared by the system's actuary for the Comprehensive Annual Financial Report:

#### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- · Actuarial Valuation Balance Sheet
- · Summary of Unfunded Actuarial Liabilities/Solvency Test
- · Summary of Actuarial and Unfunded Actuarial Liabilities
- · Reconciliation of Unfunded Actuarial Liabilities
- · Amortization of Unfunded Actuarial Accrued Liability
- Membership Data
- Summary of Plan Provisions

#### **Financial Section**

- · Schedule of Changes in Employers' Net Pension Liability
- · Schedule of Employers' Net Pension Liability
- Schedule of Employer Contributions

We certify that, to the best of our knowledge, the methods and assumptions comply with generally recognized and accepted actuarial principles and practices set forth by the American Academy of Actuaries, are reasonable and represent our best estimates of the funding requirement to achieve the Retirement System's Funding Objectives, unless otherwise noted. Shelley is an Associate in the Society of Actuaries and Pat is a Fellow in the Society of Actuaries. Shelley and Pat are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

FOSTER & FOSTER INC.

Shelley R. Johnson, ASA, MAAA

Shelley R. Johnson

D. Patrick McDonald, FSA, EA, MAAA, FCA

D. Patrick M. Droll

# SUMMARY OF ACTUARIAL ASSUMPTIONS

The following assumptions were adopted by the Board of Trustees of the Teachers' Retirement System of Louisiana (TRSL), effective June 30, 2018, based on the recommendations presented to the Board following the completion of the 2013-2017 actuarial experience study.

#### 1. General Actuarial Method

# Actuarial Cost Method/Amortization of Changes in UAL

The Entry Age Normal actuarial cost method is used to value plan normal cost and liabilities, as prescribed in Section 22 of Title 11 of the LA revised statutes. Non-investment actuarial gains and losses and investment experience losses are amortized over 30 years with level payments. Investment gains up to the statutory threshold are allocated to the Original Amortization Base and Experience Account Amortization Base. Any remaining gains are amortized over 30 years with level payments. One-half of the gain is then amortized as a loss over a ten-year amortization period and the funds are allocated to the Experience Account to fund future permanent benefit increases that have not yet been granted. Further details are provided below.

#### **Historical Treatment of Changes in UAL:**

The unfunded accrued liability on June 30, 1988, also referred to as the initial unfunded accrued liability, was amortized over a forty-year period commencing in 1989. The amortization payment originally reflected a 4% increase for the first five years, reducing by 0.5% at the end of each five-year period, but has subsequently been revised by Acts of the Louisiana Legislature as described below. Changes in unfunded accrued liabilities occurring after June 30, 1988 were originally amortized as a level dollar amount as follows:

	Act 81 Effective 6/30/88	As Amended Act 257 Effective 6/30/92				
Experience Gains/Losses	15 years	Later of 2029 or 15 years				
Actuarial Assumptions	30 years	Later of 2029 or 30 years				
Actuarial Methods	30 years	Later of 2029 or 30 years				
Benefit Changes	Determined by enabling statute					

Act 257 of 1992 amended the amortization schedule to reflect a 4.5% payment increase over the remaining amortization period.

Act 588 of 2004 re-amortized changes in liabilities occurring from 1993 through 2000 as a level dollar payment to 2029. Amortization periods for changes in liabilities beginning with 2001 through 2003 were extended to a thirty-year period from the date of occurrence. Amortization periods for changes in liabilities beginning with 2004 are extended to a thirty-year period from the date of occurrence, paid as a level dollar amount.

Act 484 of 2007 and resulting Constitutional Amendment require increases in UAL due to altered benefit provisions by legislative enactment to be amortized over a ten-year period with level payments.

Act 497 of 2009 consolidates the outstanding balance of all amortization schedules established on or before July 1, 2008, into two amortization schedules. the Original Amortization Base (OAB) and the Experience Account Amortization Base (EAAB). The consolidation was effective July 1, 2010. The outstanding balance of the OAB was credited with funds from the Initial UAL fund, excluding the subaccount of this fund, and the Employer Credit Account. The OAB will be paid off by plan year ending June 30, 2029. The EAAB was credited with funds from the Initial UAL subaccount, which were transferred from the Experience Account on June 30, 2009. The EAAB will be paid off by plan year ending June 30, 2040. Future payments to the OAB will increase by 2.0% per year. Payments are level for all other schedules.

Additionally, Act 497 changed the amortization of investment gains relative to the discount rate. Previously, one-half of any investment gain was amortized over a thirty-year period with level payments and one-half was credited to the Experience Account. Act 497 specifies that the first \$200 million of any investment experience gain will be credited to the OAB and EAAB, with re-amortization of these schedules. One-half of the remaining gain would be credited to the Experience Account, up to the maximum limit of this account and any remaining gain would be amortized over a thirty-year period with level payments.

Employer contribution requirements for normal costs and amortization of the unfunded accrued liabilities are determined as a projected percentage of payroll. The discrepancy between dollars generated by percentage of payroll versus the required dollar

amount is treated as a short-fall credit/debit. The debit/ credit is amortized over a five-year period with level amortization payments, except as provided by Act 497, and is applied to the following year's contribution requirement. Act 497 changed the amortization of contribution variance credits. Beginning with Fiscal Year 2009/2010 through Fiscal Year 2039/2040, any overpayment will be credited to the EAAB. The EAAB will then be re-amortized according to the new payment schedule.

Act 399 of 2014 changed the allocation of investment gains to existing schedules and to the Experience Account and changes the amortization of any remaining investment gains. Act 95 of 2016 modified the provisions of Act 399. Investment gains are first allocated to the OAB and EAAB, without reamortization, up to the \$200 million threshold amounts, indexed beginning June 30, 2016. By not re-amortizing, the gains applied to these schedules result in earlier pay-off of these schedules. One-half of any remaining gains are credited to the Experience Account up to the statutory cap. Any remaining gains are then amortized over thirty years with level payments. Beginning in 2016, the full investment gain remaining after the allocation to the OAB and EAAB will be amortized over thirty years, and any gains credited to the Experience Account will be amortized as an offsetting loss over a ten-year period. the system attains a 70% funded ratio, all future gains and losses will be amortized over twenty years. The OAB will be re-amortized with level-dollar payments to 2029 in Fiscal Year 2020/2021 or later, when such re-amortization results in annual payments that are not more than the next annual payment otherwise required. If the System is less than 80% funded, the net remaining liability of the OAB and EAAB shall be re-amortized after application of the "threshold allocations" in Fiscal Year 2019/2020 and in every fifth fiscal year thereafter. After attaining a funded ratio of 80%, the OAB and EAAB will be re-amortized following allocations of "threshold allocations" or contribution variance surpluses. Act 399 extended the application of the threshold after the OAB and EAAB are paid off and provides for the allocation of funds.

Statutory provisions pertaining to TRSL provide for the automatic transfer of a portion of excess investment earnings to the Experience Account to potentially fund future post-retirement benefit increases. Since the law does not provide for automatic post-retirement benefit increases, the liabilities do not explicitly include liabilities for future retiree benefit increases.

However, since a portion of investment earnings will be used to fund potential future ad hoc benefit increases, the accrued benefits are discounted using a net discount rate. The net discount rate is determined as the expected long-term return net of investment expenses, less the expected return used to provide for future retiree benefit increases. Since the discount rate for funding purposes reflects TRSL's specific gain sharing provisions, the assumptions recognize that investment earnings will be diverted to fund the ad hoc increases.

#### **Asset Valuation Method**

The actuarial value of assets is determined as the market value of assets adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a five-year period in 20% increments, and is subject to Corridor Limits of 80% to 120% of the market value of assets.

#### **Valuation Data**

The administrative staff of TRSL furnishes the actuary with demographic data relating to the active life membership and retired life members. Retired life members included inactive members who are entitled to a deferred reciprocal or vested benefit. The book value and market value of system assets are provided by the administrative staff of TRSL. All data is reviewed for reasonableness and consistency from year to year but is not audited by the actuary.

## 2. Economic Assumptions

### **Actuarially Assumed Rate of Return**

The June 30, 2018 valuations for funding and GASB purposes were prepared with a discount rate of 7.65%. The Board of Trustees adopted a discount rate of 7.65% net of investment and administrative expenses and expected gain sharing, effective June 30, 2018 for purposes of the funding valuation and a discount rate of 7.65% net of investment expenses for purposes of GASB reporting. The Board adopted a plan to reduce the discount rate in 0.05% increments beginning July 1, 2017. Therefore, the projected contribution requirements for Fiscal Year 2019/2020 were determined using a discount rate of 7.60%.

All amortization schedules existing prior to June 30, 2018, were re-amortized on June 30, 2018 using the 7.65% discount rate. The schedules were re-amortized using a discount rate of 7.60% to determine the Fiscal Year 2019/2020 projected contribution requirements.

The discount rate for both funding and GASB reporting is net of investment manager fees. Additionally, the discount rate for funding purposes is net of administrative expenses and net of investment gains expected to be deferred to the Experience Account to fund permanent benefit increases. Based on a historical review of investment earnings, with modifications for the current statutory provisions regarding transfers to the Experience Account and future allowable benefit increases, it is expected that a long-term average of approximately 40 basis points will be transferred to the Experience Account to fund future permanent benefit increases. By excluding investment returns to be used to fund permanent benefit increases, the discount rate represents the expected return on investments to be used to fund regular plan benefits. The assumed long-term geometric average nominal rate of return inherent in the funding valuation is 8.05%.

#### **Employee Salary Increases**

Incorporated within the salary scales (shown for periodic durations but representing full range of assumptions) is an explicit 2.5% inflation assumption. The following salary scale is based upon years of service:

<b>Duration (Years)</b>	Regular Teachers	Higher Education	School Lunch
1	4.80%	4.80%	4.60%
5	3.90%	3.90%	3.30%
10	3.70%	3.60%	3.30%
15	3.40%	3.60%	3.30%
20	3.40%	3.30%	3.30%
25	3.40%	3.30%	3.30%
30	3.40%	3.30%	3.30%

#### **Administrative Expenses**

Prior to fiscal year 2018/2019, administrative expenses were funded in accordance with R.S. 11 Section 102, which by omission of language regarding the funding of administrative expenses precluded funding by a direct allocation through the employer contribution rate. Per Act 94 of 2016, noninvestment-related administrative expenses will be directly funded with employer contributions as a percentage of projected payroll beginning fiscal year 2018/2019.

## 3. Demographic Assumptions

### **Mortality Assumption**

Pre-retirement deaths and post-retirement life expectancies are projected in accordance with the following tables, based on the 2013-2017 experience study.

Active Members Mortality Table: RP-2014 White Collar Employee tables for males and females, adjusted by 1.010 for males and by 0.997 for females.

Non-Disabled Retiree/Inactive Members: RP-2014 White Collar Healthy Annuitant tables for males and females, adjusted by 1.366 for males and by 1.189 for females.

Disability Retiree Mortality: RP-2014 Disability tables for males and females, adjusted by factors of 1.111 for males and by 1.134 for females.

The base tables for active members, non-disabled retirees, and disabled retirees are adjusted from 2014 to 2018 using the MP-2017 generational improvement table, with continued future mortality improvement projected using the MP-2017 generational mortality improvement tables.

## **Disability Retirement Recipient Assumption**

Rates of total and permanent disability were projected by age in accordance with the 2013-2017 disability experience of the Retirement System. Rates were projected separately for Regular Teachers, and Higher Education Teachers. Rates for School Lunch Plan A and School Lunch Plan B Employees were combined. Mortality rates after disability are based on the RP-2000 Disabled Retiree mortality table with no projection.

Rates of total and permanent disability are as follows:

Age	Regular Teachers	Higher Education	School Lunch
25	0.01%	0.00%	0.00%
30	0.03%	0.01%	0.00%
35	0.07%	0.02%	0.01%
40	0.12%	0.03%	0.11%
45	0.19%	0.07%	0.37%
50	0.30%	0.08%	0.74%
55	0.50%	0.08%	1.00%

#### **Retirement/DROP Assumption**

Retirement rates were projected based upon the 2013-2017 experience study. Sample rates illustrated below are the probability that a member will retire or begin DROP participation.

Age	Regular Teachers			Higher	School Lunch B		
	< 25 Yrs	25-29 Yrs	30+ Yrs	< 25 Yrs	25-29 Yrs	30+ Yrs	All Yrs
50	3.5%	4.5%	45.0%	3.3%	5.0%	40.0%	50.0%
55	18.0%	76.0%	27.0%	12.5%	50.0%	15.5%	70.0%
60	23.5%	25.0%	23.0%	20.0%	18.0%	15.5%	43.0%
65	25.0%	23.5%	27.0%	18.0%	16.5%	15.5%	28.0%
70	20.0%	22.0%	22.5%	14.0%	16.0%	15.5%	24.0%

#### **Termination Assumption**

Voluntary withdrawal rates are derived from the 2013-2017 experience study. Sample rates are illustrated by employment classification below. For members terminating with vested benefits, it is assumed that 80% will not withdraw their accumulated employee contribution and will receive a benefit beginning at age 60.

A ===		Regular Teachers			Higher Education Teachers				
Age	<1 Yr	1-2 Yrs	2-3 Yrs	4+ Yrs	<1 Yr	1-2 Yrs	2-3 Yrs	4+ Yrs	
25	18.0%	13.5%	16.5%	9.0%	23.0%	25.0%	17.0%	25.0%	
30	18.0%	13.5%	11.3%	7.0%	23.0%	21.0%	20.5%	12.0%	
35	16.5%	13.0%	9.8%	5.0%	21.0%	18.0%	18.0%	10.0%	
40	16.5%	12.0%	9.0%	4.2%	19.5%	18.0%	15.5%	8.0%	
45	15.0%	12.0%	9.0%	4.2%	19.5%	20.0%	14.5%	8.0%	
50	15.0%	12.0%	9.0%	4.2%	19.5%	15.0%	13.5%	8.0%	
55	15.0%	12.0%	9.0%	4.2%	19.5%	14.0%	12.5%	8.0%	
60	15.0%	12.0%	9.0%	10.0%	19.5%	14.0%	11.5%	8.0%	

School Lunch
7.5%
4.5%
4.5%
4.5%
4.5%
4.5%
4.5%
4.5%

## Actuarial Valuation Balance Sheet (June 30, 2018 and 2017)

	2018	2017
Assets		
Present Assets Creditable To:		
Members' Savings Account	\$ 2,842,738,131	\$ 2,771,367,954
Annuity Reserve Account	17,476,823,453	16,439,057,050
Total Present Assets	20,319,516,584	19,210,425,004
Present Value Of Prospective Contributions Payable To:		
Members' Savings Account	2,385,897,282	2,534,325,919
Annuity Reserve Account		
Normal	901,038,005	1,314,363,305
Accrued Liability	10,448,929,844	10,409,661,062
Total Prospective Contributions	13,735,865,131	14,258,350,286
Total Assets	<u>\$ 34,055,426,715</u>	<u>\$ 33,468,775,290</u>
Liabilities		
Present Value Of Prospective Benefits Payable On Account Of:		
Current Retiree Members	\$ 21,801,292,074	\$ 20,975,374,922
Current Active Members	11,729,131,113	12,030,826,348
Deferred Vested & Reciprocal Members	525,003,528	462,574,020
Total Liabilities	<u>\$ 34,055,426,715</u>	<u>\$ 33,468,775,290</u>

## Summary of Unfunded Actuarial Liabilities/Solvency Test (Dollar amounts in millions)

Valuation	tion   Active Member   Retirees Term   Active Members   Valuat		Actuarial Valuation		of Actuarial s Covered b		
Date	Contribution	Vested Inactive	Employer Fin. Portion	Assets	(1)	(2)	(3)
2009	\$ 2,227.5	\$ 15,823.1	\$ 4,788.8	\$ 13,500.8	100%	71%	0%
2010	2,340.7	16,504.0	4,830.1	12,868.5	100%	64%	0%
2011	2,432.6	16,998.8	4,665.4	13,286.3	100%	64%	0%
2012	2,487.8	17,510.4	4,541.9	13,584.4	100%	63%	0%
2013	2,518.0	19,074.2	4,425.5	14,669.2	100%	64%	0%
2014	2,560.9	20,013.7	5,544.9	16,145.8	100%	68%	0%
2015	2,622.6	20,498.0	5,525.7	17,457.2	100%	72%	0%
2016	2,702.5	21,017.4	5,552.5	18,254.3	100%	74%	0%
2017	2,771.4	21,437.9	5,553.3	19,210.4	100%	77%	0%
2018	2,842.7	22,326.3	5,702.9	20,319.6	100%	78%	0%

## Summary of Actuarial and Unfunded Actuarial Liabilities (Dollar amounts in millions)

Valuation Date	Actuarial Accrued Liabilities	Actuarial Valuation Assets	Ratio of Assets To AAL	Unfunded AAL	Active Member Payroll	Unfunded AAL As a Percent of Active Payroll
2009	\$ 22,839.4	\$ 13,500.8	59.1%	\$ 9,338.6	\$ 3,912.3	238.7%
2010	23,674.8	12,868.5	54.4%	10,806.3	3,977.8	271.7%
2011	24,096.8	13,286.3	55.1%	10,810.5	3,902.6	277.0%
2012	24,540.1	13,584.4	55.4%	10,955.7	3,808.8	287.6%
2013	26,017.7	14,669.2	56.4%	11,348.5	3,726.3	304.6%
2014	28,119.5	16,145.8	57.4%	11,973.7	3,765.0	318.0%
2015	28,646.3	17,457.2	60.9%	11,189.1	3,815.6	293.2%
2016	29,272.4	18,254.3	62.4%	11,018.1	3,869.7	284.7%
2017	29,762.6	19,210.4	64.5%	10,552.2	3,901.6	270.5%
2018	30,871.9	20,319.6	65.8%	10,552.3	3,998.1	263.9%

## Reconciliation of Unfunded Actuarial Liabilities (Dollar amounts in thousands)

	Fiscal Year Ending						
	2018	2017	2016	2015			
Unfunded Actuarial Liability at Beginning of Fiscal Year (7/1)	\$ 10,552,199	\$ 11,018,081	\$ 11,189,053	\$ 11,973,764			
Interest on Unfunded Liability	812,519	853,901	867,152	927,967			
Investment Experience (gains) decrease UAL	(319,679)	(237,472)	184,298	(539,621)			
Plan Experience (gains) decrease UAL	(109,432)	(197,209)	(157,686)	(37,106)			
Employer Amortization Payments (payments) decrease UAL	(1,045,692)	(1,014,455)	(1,000,284)	(1,034,281)			
Employer Contribution Variance (excess contributions) decrease UAL	(61,467)	(15,672)	(64,452)	(91,285)			
Experience Account Allocation (allocations) decrease UAL	44,452	9,892	0	0			
Actuarial cost method change	0	0	0	0			
Other - Miscellaneous gains and losses from transfers or Acts of the Legislature	679,418	135,133	0	(10,385)			
Unfunded Actuarial Liability at End of Fiscal Year (6/30)	<u>\$ 10,552,318</u>	<u>\$ 10,552,199</u>	<u>\$ 11,018,081</u>	<u>\$ 11,189,053</u>			

#### Amortization of Unfunded Actuarial Accrued Liability (June 30, 2018)

Date	Description	Notes	Amtz. Period	Initial Liability	Years Remain	Remaining Balance	Mid-Year Payment
2018	OAB	Note 1	11	\$ 1,865,658,900	11	\$ 1,865,658,900	\$ 282,605,097
2018	EAAB	Note 2,3	22	3,212,415,138	22	3,212,415,138	364,395,689
2018	2009 Experience G/L		21	2,649,671,932	21	2,649,671,932	248,135,823
2018	2010 Experience G/L		22	1,041,795,143	22	1,041,795,143	95,724,314
2018	2011 Experience G/L		23	(161,187,360)	23	(161,187,360)	(14,555,880)
2018	2012 Experience G/L		24	117,430,241	24	117,430,241	10,437,714
2018	2013 Experience G/L		25	(235,227,303)	25	(235,227,303)	(20,607,080)
2018	2013 Assump/Method Chg		25	800,613,800	25	800,613,800	70,137,746
2018	2014 Investment Experience		1	(97,884,609)	1	(97,884,609)	(101,559,704)
2018	2014 Assump/Method Change		26	1,391,743	26	1,391,743	120,314,857
2018	2014 Other Experience G/L		26	(155,613,842)	26	(155,613,842)	(13,452,667)
2018	2015 Experience G/L		27	(365,419,456)	27	(365,419,456)	(31,207,645)
2018	2016 Experience G/L		28	26,099,311	28	26,099,311	2,204,147
2018	2017 DR Change		29	133,872,677	29	133,872,677	11,190,233
2018	2017 Experience G/L		29	(214,968,532)	29	(214,968,532)	(17,968,924)
2018	2017 Experience Acct Allocation		9	9,198,905	9	9,198,905	1,398,683
2018	2018 DR Change		30	137,980,715	30	137,980,715	11,425,078
2018	2018 Assump Change		30	550,022,780	30	550,022,780	45,542,980
2018	2018 Change in Liability		30	(198,334,922)	30	(198,334,922)	(16,422,526)
2018	2018 Experience Acct Allocation		10	44,4551,679	10	44,4551,679	6,284,458
	Total Outstanding Balance	Note 3				\$ 10,552,318,323	\$ 1,054,022,393
	Total Credit Balance					\$ 0	\$ 0
	Total Unfunded Actuarial Accrued Liability					\$ 10,552,318,323	\$ 1,054,022,393

Note 1: Act 497 of 2009 created the Original Amortization Base, effective July 1, 2010, which combined the following schedules: 1993-1996, 1998-2000, and 2005-2008. The combined balance was reduced by applying funds from the IUAL Fund, excluding the subaccount of this fund. In addition to regular payments and contribution variance credits, the schedule was reduced by investment gains up to the annual "thresholds" created by Act 497 of 2009 and Act 399 of 2014. The schedule was credited appropriations from Act 55 of 2014, Act 56 of 2015 and Act 59 of 2018. Future payments will increase by 2.0% until paid off in or before 2029.

Note 2: Act 497 of 2009 created the Experience Account Amortization Base, which combined the following schedules: 1997, 2001-2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The combined balance was reduced by applying funds from the subaccount of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. In addition to regular payments and contribution variance credits, the schedule was reduced by investment gains up to the annual "thresholds" created by Act 497 of 2009 and Act 399 of 2014. Future payments will be level until paid off in or before 2040.

Note 3: The 2012 contribution variance surplus of \$7,169,301 was used to reduce and re-amortize the EAAB, per Act 497 of 2009. The 2014, 2015, 2016, 2017, and 2018 contribution variance surpluses of \$40,289,648, \$91,284,653, \$64,452,206, \$15,672,044, and \$61,466,736 respectively, were used to reduce the EAAB.

DROP

Total

## **Membership Data**

Data regarding the membership of the System for valuation were furnished by the System.

2,420

80,843

	2018		2017		
Active Members	Census	Avg. Sal.	Census	Avg. Sal.	
Regular Teachers	71,986	\$ 45,043	71,458	\$ 44,531	
Higher Education	9,633	62,883	9,186	61,466	
School Lunch A	4	24,320	6	24,731	
School Lunch B	1,138	19,612	1,121	18,898	
Active After DROP	2,284	<u>55,784</u>	<u>2,457</u>	<u>54,376</u>	
Total	<u>85,045</u>	<u>\$ 47,011</u>	<u>84,228</u>	<u>\$ 46,332</u>	
Males (%)		18.5%		18.2%	
Females (%)		81.5%		81.8%	
Non-vested active members		27,840	2	27,202	
Vested active members		<u>54,921</u>	<u>54,569</u>		
Total		<u>82,761</u>	<u>81,771</u>		
Valuation Salaries	\$ 3,998,0	51,313	\$ 3,901,62	27,792	
Inactive Members		_		_	
Due Refunds	22,364			20,980	
Vested & Reciprocals		7,211	6,941		
				-	
	2018		20	17	
Annuitants and Survivors	Census	Avg. Ben.	Census	Avg. Ben.	
Retirees	66,760	\$ 26,757	65,749	\$ 26,548	
Disabilities	4,248	12,871	4,280	12,758	
Survivors	7,415	19,611	7,229	19,308	

35,575

**\$ 25,636** 

2,478

79,736

34,489

25,398

# **Historical Membership Data**

History of Active Membership Data								
Year Ended 6/30	Number of Active Members	Percentage Change In Membership	Annual Active Annual Active Mem Member Payroll * Average Payroll		Percentage Change In Payroll			
2009	88,206	2.59%	\$ 3,912,326	\$ 44,354	6.46%			
2010	88,783	0.65%	3,977,819	44,804	1.67%			
2011	86,742	-2.30%	3,902,647	44,991	-1.89%			
2012	84,513	-2.57%	3,808,761	45,067	-2.41%			
2013	82,910	-1.90%	3,726,326	44,944	-2.16%			
2014	82,886	-0.03%	3,764,955	45,423	1.04%			
2015	83,602	0.86%	3,815,649	45,651	1.35%			
2016	84,068	0.55%	3,869,730	46,031	1.42%			
2017	84,228	0.19%	3,901,628	46,322	0.82%			
2018	85,045	0.97%	3,998,051	47,011	2.47%			

History of Annuitants and Survivor Annuitant Membership									
Year Ending	Total Members		Members Added		Members Removed		Average	Percentage Change in	
6/30	No.	Amount*	No.	Amount*	No.	Amount*	Annuity	Annuity	
2009	62,417	\$ 1,356,439	2,556	\$ 65,723	1,209	\$ 15,560	\$ 21,732	3.9%	
2010	63,940	1,411,613	2,733	72,079	1,210	16,905	22,077	4.1%	
2011	65,512	1,471,714	2,804	74,719	1,232	14,618	22,465	4.3%	
2012	67,657	1,548,632	3,250	89,195	1,105	12,277	22,889	5.2%	
2013	71,031	1,644,238	4,442	106,246	1,068	10,641	23,148	6.2%	
2014	73,195	1,744,088	4,025	94,294	1,861	20,219	23,828	6.1%	
2015	75,259	1,820,202	3,315	92,905	1,251	16,791	24,186	4.4%	
2016	75,828	1,887,454	2,936	80,224	2,367	40,865	24,891	3.7%	
2017	77,258	1,939,661	3,006	82,056	1,576	29,849	25,106	2.8%	
2018	78,423	1,986,400	2,987	83,147	1,822	36,408	25,329	2.4%	

<sup>\*</sup> Dollar amounts in thousands

## SUMMARY OF PLAN PROVISIONS

The Teachers' Retirement System of Louisiana (TRSL) was enacted by Act No. 83 in 1936. Initially, the plan covered classroom teachers (Regular Plan), but membership has expanded to participating agencies, and the merger of School Lunch Employees. Employees of school food services that have not terminated their agreement with the Department of Health, Education and Welfare participate in Plan A. Food service programs of schools without agreements enroll employees in Plan B.

The purpose of the plan is to provide benefits to members and their dependents at retirement or in the event of death, disability or termination of employment. TRSL is a defined benefit plan and is funded on an actuarial reserve basis as prescribed by law.

#### Administration

The plan is governed by Title 11 Sections 700-999 of the Louisiana Revised Statutes. The Board of Trustees is composed of seventeen members; one elected member from each of seven membership districts, one elected member from colleges and universities, one elected member from parish and city superintendents of schools, one elected school food services member. two elected retired members, four ex officio members, and one member appointed by Speaker of the House. Elected members serve staggered four year terms. The Treasurer, Chairman of the Senate Retirement Committee, State Commissioner of Administration and State Superintendent of Public Education serve as ex officio members. The Board of Trustees appoints an Executive Director who is responsible for the operation of the system. The Board also retains other consultants as deemed necessary. Administrative expenses are paid entirely from investment earnings.

## **Member Contributions**

Members contribute a percentage of their gross compensation, depending on plan of participation:

Regular Plan	Plan A	Plan B		
8.0%	9.1%	5.0%		

Member contributions have been tax-deferred for federal income tax purposes since July 1, 1988. Therefore, contributions after the effective date are not considered as income for federal income tax purposes until withdrawn through refund or through payment of benefits.

## **Employer Contributions**

All participating employers, regardless of plan of participation, contribute a percentage of their total gross payroll to the system. The employer percentage is actuarially determined and is sufficient to pay annual accruals plus an amortization charge which liquidates the system's unfunded liability as required by law. The employer rate is subject to a statutory minimum of 15.5% per Act 588 of 2004. The rate is determined annually and recommended by the Public Retirement System's Actuarial Committee to the State Legislature.

#### **Termination**

A member who terminates covered employment, regardless of plan membership, may request a refund of the member's contributions without interest. All service credit will be forfeited. Upon re-employment, a member may reinstate the service credit by repaying the refunded contributions plus interest. A member who terminates covered employment with at least five years of service may, in lieu of a refund of contributions, elect to receive a monthly annuity upon attainment of the age of retirement eligibility.

#### **Retirement Benefits**

Service retirement benefits are payable to members who have terminated covered employment and met both age and service eligibility requirements.

#### Normal Retirement

**Regular Plan** - In the TRSL Regular Plan, eligibility for retirement is determined by the date the member joined TRSL.

Members hired prior to July 1, 1999							
2.0% benefit	At least age 60 with at least 5 years of service credit, or						
factor	Any age with at least 20 years of service credit						
2.5%	At least age 65 with at least 20 years of service credit, or						
benefit factor	At least age 55 with at least 25 years of service credit, or						
	Any age with at least 30 years of service credit						

#### Regular Plan—cont'd

# Members joining system between July 1, 1999 and December 31, 2010

#### 2.5% benefit factor

- At least age 60 with at least 5 years of service credit, or
- At least age 55 with at least 25 years of service credit, or
- Any age with at least 20 years of service credit (actuarially reduced), or
- Any age with at least 30 years of service credit

# Members first eligible to join and hired between January 1, 2011 and June 30, 2015

#### 2.5% benefit factor

- At least age 60 with at least 5 years of service credit, or
- Any age with at least 20 years of service credit (actuarially reduced)

# Members first eligible to join and hired on or after July 1, 2015

#### 2.5% benefit factor

- At least age 62 with at least 5 years of service credit, or
- Any age with at least 20 years of service credit (actuarially reduced)

#### Plan A - Plan A is closed to new entrants.

#### All Plan A members

#### 3.0% benefit factor

- At least age 60 with at least 5 years of service credit, or
- At least age 55 with at least 25 years of service credit, or
- Any age with at least 30 years of service credit

#### Plan B

#### Members hired before July 1, 2015

#### 2.0% benefit factor

- At least age 60 with at least 5 years of service credit, or
- At least age 55 with at least 30 years of service credit

# Members first eligible to join and hired on or after July 1, 2015

#### 2.0% benefit factor

- At least age 62 with at least 5 years of service credit, or
- Any age with at least 20 years of service credit (actuarially reduced)

#### **Benefit Formula**

For all plans, retirement benefits are based on a formula which multiplies the final average compensation (FAC) by the applicable accrual rate, and by the years of creditable service. For regular teachers and Lunch Plan B members whose first employment makes them eligible for membership in a Louisiana state retirement system on or after January 1, 2011, FAC is defined as the highest average 60-month period. For all other members, FAC is defined as the highest average 36-month period.

#### **Payment Options**

A retiring member is entitled to receive the maximum benefit payable until the member's death. In lieu of the maximum benefit, the member may elect to receive a reduced benefit payable in the form of a Joint and Survivor Option, or a reduced benefit with a lump sum payment which cannot exceed 36 monthly benefit payments. Effective July 1, 2009, members may make an irrevocable election at retirement to receive an actuarially reduced benefit which increases 2.5% annually, beginning on the first retirement anniversary date, but not before age 55 or before the retiree would have attained age 55 in the case of a surviving spouse. This option can be chosen in combination with the above options.

# Deferred Retirement Option Plan (DROP)

In lieu of terminating employment and accepting a service retirement, an eligible member may begin participation on the first retirement eligibility date for a period not to exceed the third anniversary of retirement eligibility. Delayed participation reduces the three year participation period. During participation, benefits otherwise payable are fixed, and deposited in an individual DROP account.

Upon termination of DROP, the member may continue employment and earn additional accruals to be added to the fixed pre-DROP benefit.

Upon termination of employment, the member is entitled to the fixed benefit plus an additional benefit based on post-DROP service, plus the individual DROP account balance which can be paid in a lump sum, or an additional annuity based upon the account balance.

### **Disability Retirement Benefits**

Active members whose first employment makes them eligible for membership in a Louisiana state retirement system before January 1, 2011 and who have five or more years of service credit are eligible for disability retirement benefits if certified by the medical board to be disabled from performing their job. All other members must have at least 10 years of service to be eligible for a disability benefit.

Regular Plan: An eligible member who first joined a Louisiana public retirement system before January 1, 2011, shall be entitled to a pension equal to 2.5% of average compensation; however, in no event shall the disability benefit be less than the lesser of (a) 40% of the state minimum salary for a beginning teacher with a bachelor's degree, or (b) 75% of average compensation. An eligible member who first joined a Louisiana public retirement system on or after January 1, 2011, shall be entitled to a pension equal to 2.5% of average compensation.

**Plan A:** An eligible member shall be entitled to a service retirement benefit, but not less than 60%, nor more than 100% of final average compensation.

**Plan B:** An eligible member shall be entitled to a service retirement benefit, but not less than 30%, nor more than 75% of final average compensation.

#### **Survivor Benefits**

A surviving spouse with minor children of an active member with five years of creditable service (two years immediately prior to death) or 20 years of creditable service is entitled to a benefit equal to the greater of (a) \$600 per month, or (b) 50% of the member's benefit calculated at the 2.5% accrual rate for all creditable service. When a minor child(ren) is no longer eligible to receive survivor benefits, the spouse's benefit reverts to a survivor benefit in accordance with the provisions for a surviving spouse with no minor child(ren). Benefits for the minor child(ren) cease when he/she is no longer eligible.

Each minor child (maximum of two) shall receive an amount equal to the greater of (a) 50% of the spouses benefit, or (b) \$300 (up to two eligible children). Benefits to minors cease at attainment of age 18, marriage or age 23 if enrolled in an approved institution of higher education.

A surviving spouse without minor children of an active member with 10 years of creditable service (two years

immediately prior to death) or 20 years of creditable service is entitled to a benefit equal to the greater of (a) \$600 per month, or (b) the option 2 equivalent of the benefit calculated at the 2.5% accrual rate for all creditable service.

### **Permanent Benefit Increases**

Provisions regarding future Permanent Benefit Increases (PBIs) were substantially changed by Act 399 of 2014. PBIs may be granted, if requested by the Board and approved with a two-thirds vote of both houses of the legislature, provided there are sufficient funds in the Experience Account to fully fund the increase on an actuarial basis.

### **Experience Account Credits/Debits**

After allocation of the first \$200,000,000 of investment experience gains to the Unfunded Accrued Liability, the Experience Account is credited with up to 50% of the remaining excess investment income, up to a maximum balance as described below. The \$200,000,000 threshold is indexed based upon the increase in the actuarial value of assets. Excess investment income is investment income for the prior fiscal year in excess of the expected income based on the actuarial valuation rate for that fiscal year. Balances in the Experience Account accrue interest at the actuarial rate of return during the prior year, however, all credits are limited as follows:

If the system's funded ratio is less than 80%, the Experience Account is limited to the reserve necessary to grant one PBI. If the funded ratio is at least 80%, the Experience Account is limited to the reserve necessary to fund two PBI's. The Experience Account is debited for the increase in actuarial accrued liability resulting from the increases.

#### **Permanent Benefit Increases**

No increase can be granted if the legislature granted an increase in the preceding fiscal year, unless the system is 85% funded or greater. Additionally, PBI's are limited to the lesser of the increase in the CPI-U for the twelve month period ending on the system's valuation date, or an amount determined by the system's funded ratio:

Funded	PBI Increase
< 55%	0%
55% to <65%	1.5%
65% to <75%	2.0%
75% to <80%	2.5%
80% +	3.0%

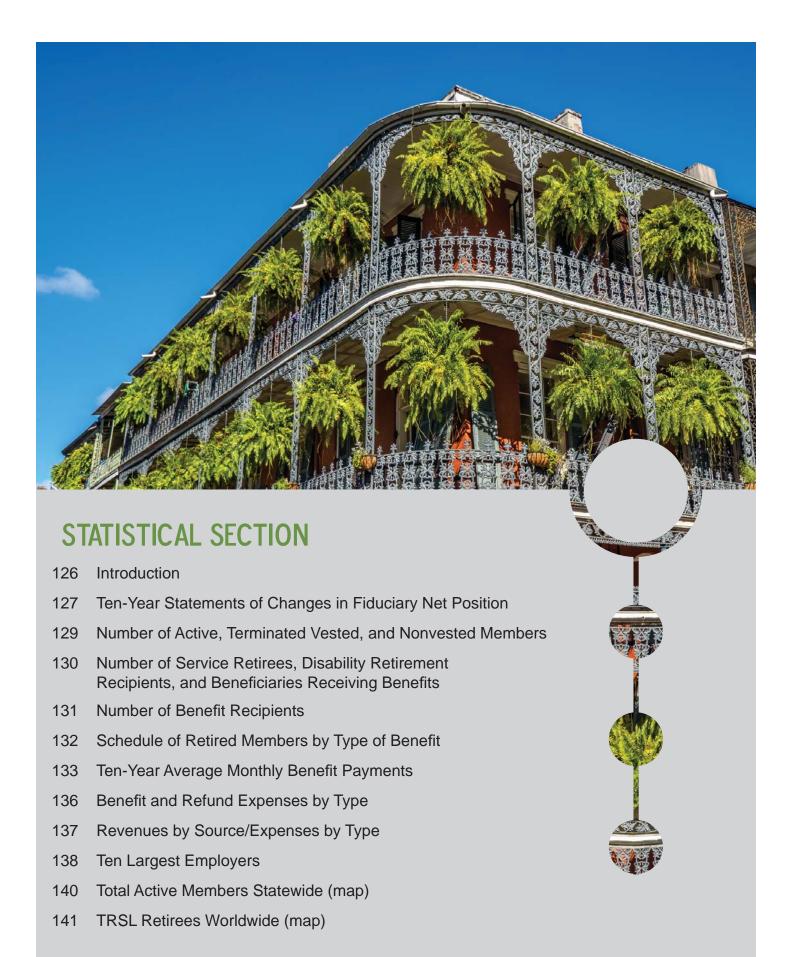
Beginning July 1, 2015, any increase is limited to the first \$60,000 of a retiree's annual benefit, increased annually by the CPI-U for the 12 month period ending in June. If the actuarial rate of return for the prior plan year is less than 8.25%, regardless of the discount rate, the increase is limited to the lesser of 2% or the amount described above.

### **Eligibility Requirements**

Benefits are restricted to those retirees who have attained the age of 60 and have been retired for at least one year. The minimum age 60 for the receipt of a benefit increase does not apply to disability retirement recipients.



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## **INTRODUCTION**

The objective of the statistical section is to add historical perspective, context, and detail to the financial statements and the notes to the financial statements so that users can better understand and assess TRSL's economic condition.

Contents Pages

Financial Trends 127-128

These schedules show financial trend information that helps users in understanding and assessing how TRSL's financial position has changed over time. The financial trend schedules presented are:

Ten-Year Statements of Changes in Fiduciary Net Position

#### **Demographic Information**

129-132

This information is intended to assist users in understanding the environment in which TRSL operates, and to provide information that facilitates comparisons of financial statement information over time and among governments. The demographic information includes:

- Number of Active, Terminated Vested, and Nonvested Members
- Number of Service Retirees, Disability Retirement Recipients, and Beneficiaries Receiving Benefits
- Number of Benefit Recipients
- Schedule of Retired Members by Type of Benefit

#### **Operating Information**

133-141

These schedules are intended to provide contextual information about TRSL's operation to assist in using financial statement data. The operating information shown includes:

- Ten-Year Average Monthly Benefit Payments
- Benefit and Refund Expenses by Type
- Revenues by Source/Expenses by Type
- Ten Largest Employers
- Total Active Members Statewide (map)
- TRSL Retirees Worldwide (map)

# Ten-Year Statements of Changes in Fiduciary Net Position (2018-2009)

	2018	2017	2016	2015	2014
Additions					
Contributions					
Member contributions	\$ 337,928,752	\$ 328,541,240	\$ 330,773,315	\$ 324,920,644	\$ 326,007,091
Employer contributions	1,201,829,353	1,122,277,562	1,157,901,123	1,217,466,676	1,174,540,866
Non-employer contributions	39,550,321	38,762,968	38,193,328	37,425,629	35,927,881
LSU Co-Operative contributions	1,873,303	1,754,855	1,830,995	1,851,985	2,028,819
Investment income:					
From investment activities					
Net investment income	2,137,872,033	2,612,535,238	177,640,776	443,364,220	2,815,090,995
Other income	11,411,104	2,972,517	2,951,433	12,180,753	8,491,868
Total additions to Fiduciary Net Position	3,730,464,866	4,106,844,380	1,709,290,970	2,037,209,907	4,362,087,520
Deductions					
Retirement benefits	2,116,953,537	2,061,454,295	1,999,272,396	1,955,102,582	1,875,366,921
LSU Co-Operative benefits	2,017,909	1,995,075	1,873,303	1,754,855	1,746,982
Refunds of contributions & other	48,671,220	49,805,920	49,884,654	52,402,762	58,777,337
TRSL employee health & life expense	13,633,156	586,167	(24,005)	1,685,836	1,047,832
Pension expense	1,385,063	2,807,080	1,773,559	2,078,530	0
Administrative expenses	14,046,725	14,368,885	14,532,681	14,259,428	15,026,969
Depreciation expense	400,766	432,238	407,105	384,426	322,881
Total deductions to Fiduciary Net Position	2,197,108,376	2,131,449,660	2,067,719,693	2,027,668,419	1,952,288,922
Net change in Fiduciary Net Position	1,533,356,490	1,975,394,720	(358,428,723)	9,541,488	2,409,798,598
Net position restricted for pensions					
Beginning of year, before restatement	19,513,345,675	17,537,950,955	17,896,379,678	17,900,035,458	15,490,236,860
Cumulative effect of change in accounting principle	0	0	0	(13,197,268)	0
Beginning of year, after restatement	19,513,345,675	17,537,950,955	17,896,379,678	17,886,838,190	15,490,236,860
End of year	<u>\$ 21,046,702,165</u>	<u>\$ 19,513,345,675</u>	<u>\$ 17,537,950,955</u>	<u>\$ 17,896,379,678</u>	\$ 17,900,035,458

## Ten-Year Statements of Changes in Fiduciary Net Position (2018-2009)—cont'd

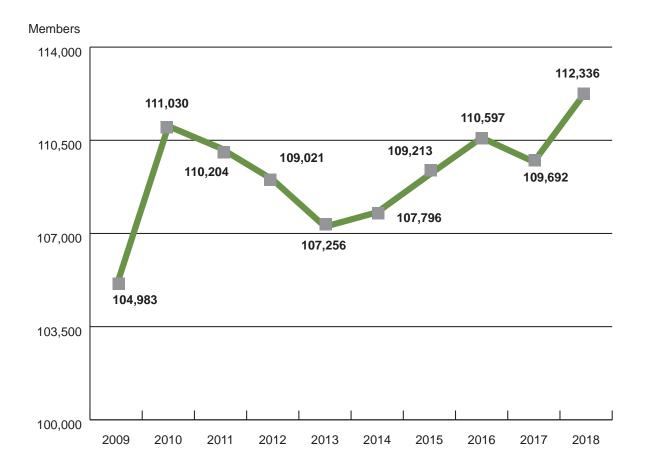
	2013	2012	2011	2010	2009
Additions					
Contributions					
Member contributions	\$ 327,767,936	\$ 333,908,454	\$ 342,323,329	\$ 347,114,632	\$ 344,547,871
Employer contributions	1,058,995,111	1,084,589,881	943,678,941	726,559,462	714,691,946
Non-employer contributions	34,425,127	0*	0*	0*	0*
LSU Co-Operative contributions	2,059,554	0*	0*	0*	0*
Investment income:					
From investment activities					
Net investment income	1,750,935,396	(58,458,258)	2,942,693,424	1,285,742,297	(3,292,248,484)
Other income	4,051,269	2,265,262	3,299,671	3,605,633	4,407,243
Total additions to Fiduciary Net Position (reductions)	3,178,234,393	1,362,305,339	4,231,995,365	2,363,022,024	(2,228,601,424)
Deductions					
Retirement benefits	1,798,533,650	1,682,528,254	1,615,778,191	1,532,526,141	1,464,106,312
LSU Co-Operative benefits	1,633,154	0†	0†	0†	O <sup>†</sup>
Refunds of contributions & other	59,712,975	50,195,898	43,005,926	40,834,543	34,418,885
TRSL employee health & life expense	974,145	1,050,097	1,477,395	1,813,334	2,502,048
Pension expense	0	0	0	0	0
Administrative expenses	15,750,180	16,317,659	15,417,596	16,154,823	15,799,028
Depreciation expense	377,150	440,291	537,060	543,096	540,725
Total deductions to Fiduciary Net Position	1,876,981,254	1,750,532,199	1,676,216,168	1,591,871,937	1,517,366,998
Net change in Fiduciary Net Position (decrease)	1,301,253,139	(388,226,860)	2,555,779,197	771,150,087	(3,745,968,422)
Net position restricted for pensions					
Beginning of year, before restatement	14,188,983,721	14,577,210,581	12,021,431,384	11,250,281,297	14,996,249,719
Cumulative effect of change in accounting principle	0	0	0	0	0
Beginning of year, after restatement	14,188,983,721	14,577,210,581	12,021,431,384	11,250,281,297	14,996,249,719
End of year	<u>\$ 15,490,236,860</u>	<u>\$ 14,188,983,721</u>	<u>\$ 14,577,210,581</u>	<u>\$ 12,021,431,384</u>	\$ 11,250,281,297

<sup>\*</sup>Included in "Employer contributions" prior to 2013.

<sup>†</sup>Included in "Retirement benefits" prior to 2013.

## **Number of Active, Terminated Vested, and Nonvested Members**

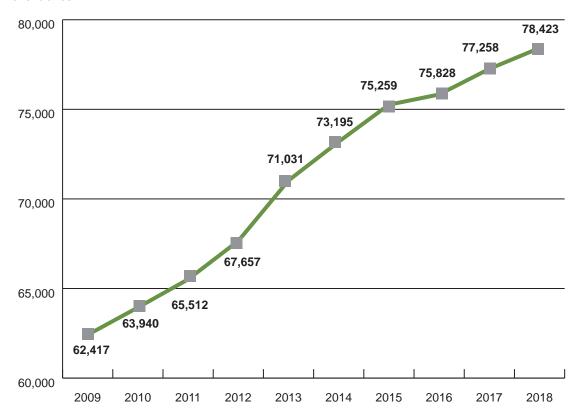
Fiscal Year	Members	% Change Each Year
2008-2009	104,983	2.3%
2009-2010	111,030	5.8%
2010-2011	110,204	-0.7%
2011-2012	109,021	-1.1%
2012-2013	107,256	-1.6%
2013-2014	107,796	0.5%
2014-2015	109,213	1.3%
2015-2016	110,597	1.3%
2016-2017	109,692	-0.8%
2017-2018	112,336	2.5%



# Number of Service Retirees, Disability Retirement Recipients, and Beneficiaries Receiving Benefits

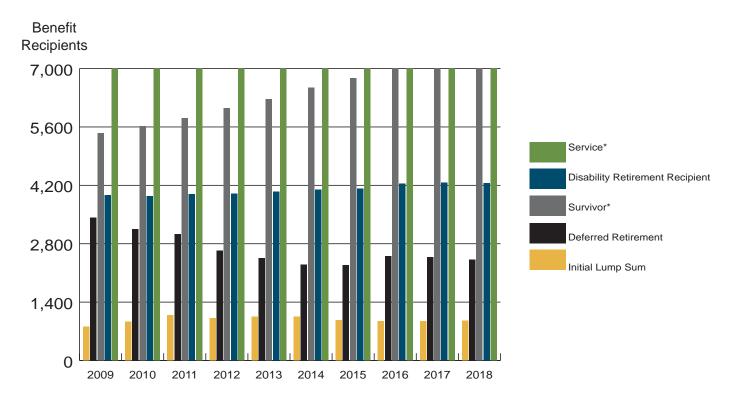
Fiscal Year	Retirees and Beneficiaries	% Change Each Year
2008-2009	62,417	2.2%
2009-2010	63,940	2.4%
2010-2011	65,512	2.5%
2011-2012	67,657	3.3%
2012-2013	71,031	5.0%
2013-2014	73,195	3.1%
2014-2015	75,259	4.2%
2015-2016	75,828	0.8%
2016-2017	77,258	1.9%
2017-2018	78,423	1.5%

#### Retirees/ Beneficiaries



## **Number of Benefit Recipients**

Fiscal Year	Service	Disability Retirement Recipient	Survivor	Deferred Retirement	Initial Lump Sum	Total
2008-2009	53,009	3,959	5,449	3,421	815	66,653
2009-2010	54,381	3,943	5,616	3,148	934	68,022
2010-2011	55,723	3,983	5,806	3,032	1,085	69,629
2011-2012	57,619	3,993	6,045	2,637	1,010	71,304
2012-2013	60,714	4,049	6,268	2,451	1,051	74,533
2013-2014	62,564	4,089	6,542	2,291	1,044	76,530
2014-2015	64,366	4,121	6,772	2,283	967	78,509
2015-2016	64,593	4,238	6,997	2,504	946	79,278
2016-2017	65,673	4,266	7,319	2,478	937	80,673
2017-2018	66,760	4,248	7,415	2,420	953	81,796



<sup>\*</sup>Some values exceed capacity of chart. Refer to table above.

# Schedule of Retired Members by Type of Benefit as of June 30, 2018 (Data include all plans)

Amount of Monthly Benefit	Service Retiree	Disability Retirement Recipient	Beneficiary/ Survivor	Total
\$ 0 - \$ 299.99	1,419	87	535	2,041
\$ 300 - \$ 599.99	5,020	568	1,080	6,668
\$ 600 - \$ 899.99	5,632	1,258	1,147	8,037
\$ 900 - \$ 1,199.99	6,463	1,075	920	8,458
\$ 1,200 - \$ 1,499.99	5,374	524	739	6,637
\$ 1,500 - \$ 1,799.99	4,712	265	507	5,484
\$ 1,800 - \$ 2,099.99	4,132	209	420	4,761
\$ 2,100 - \$ 2,399.99	4,806	107	413	5,326
\$ 2,400 - \$ 2,699.99	5,822	54	402	6,278
\$ 2,700 - \$ 2,999.99	5,837	38	320	6,195
\$ 3,000 - \$ 3,299.99	4,950	34	248	5,232
\$ 3,300 - \$ 3,599.99	3,771	11	186	3,968
\$ 3,600 - \$ 3,899.99	3,594	9	186	3,789
\$ 3,900 - \$ 4,199.99	701	3	38	742
\$ 4,200 - \$ 4,499.99	1,274	2	76	1,352
\$ 4,500 and above	3,253	4	198	3,455
TOTALS FOR ALL PLANS	<u>66,760</u>	<u>4,248</u>	<u>7,415</u>	<u>78,423</u>

# Ten-Year Average Monthly Benefit Payments for Service Retirees

Fiscal	Status	Years of Service Credit							All		
Year	Туре	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	Members
2009	Avg Benefit	\$ 323	\$ 536	\$ 654	\$ 1,179	\$ 1,878	\$ 2,750	\$ 3,272	\$ 4,049	\$ 5,270	\$ 2,371
2009	Avg Comp	\$ 2,865	\$ 3,141	\$ 2,788	\$ 3,308	\$ 3,715	\$ 4,141	\$ 4,632	\$ 5,879	\$ 7,695	\$ 4,052
2009	Retiree Count	12	103	179	229	487	809	519	104	29	2,471
2010	Avg Benefit	1,176	546	712	1,134	1,971	2,818	3,312	4,012	4,323	2,408
2010	Avg Comp	3,583	3,238	2,969	3,281	3,915	4,225	4,722	6,066	6,330	4,147
2010	Retiree Count	16	126	201	262	493	881	595	126	22	2,722
2011	Avg Benefit	473	633	772	1,204	1,993	2,832	3,361	4,262	4,403	2,443
2011	Avg Comp	2,688	2,706	2,810	2,963	3,386	3,979	4,471	5,085	5,476	3,790
2011	Retiree Count	9	142	208	268	506	857	582	135	35	2,742
2012	Avg Benefit	548	662	858	1,268	2,112	2,917	3,530	4,180	4,499	2,460
2012	Avg Comp	2,157	3,634	3,348	3,468	4,112	4,321	4,558	4,459	5,101	4,114
2012	Retiree Count	17	178	249	356	597	899	599	145	40	3,080
2013	Avg Benefit	573	681	942	1,363	2,137	3,071	3,454	4,425	4,421	2,482
2013	Avg Comp	2,918	3,664	3,609	3,675	4,153	4,565	4,497	4,989	4,632	4,233
2013	Retiree Count	34	177	295	412	781	945	622	167	43	3,476
2014	Avg Benefit	539	703	954	1,417	2,153	3,076	3,615	4,443	5,307	2,452
2014	Avg Comp	3,324	3,729	3,592	3,801	4,154	4,588	4,676	4,879	5,520	4,267
2014	Retiree Count	27	195	271	391	712	805	467	140	32	3,040
2015	Avg Benefit	432	749	904	1,321	2,081	3,115	3,720	4,430	4,133	2,458
2015	Avg Comp	2,334	3,920	3,354	3,617	4,015	4,657	4,818	4,902	4,272	4,235
2015	Retiree Count	16	182	223	314	621	716	366	146	36	2,620
2016	Avg Benefit	745	744	1,019	1,406	2,112	3,055	3,802	4,447	4,625	2,422
2016	Avg Comp	4,967	4,083	3,597	3,764	4,075	4,579	4,964	5,194	5,135	4,312
2016	Retiree Count	16	193	242	338	599	688	281	157	36	2,550
2017	Avg Benefit	588	779	1,030	1,417	2,089	2,989	3,711	4,609	4,174	2,414
2017	Avg Comp	3,293	4,036	3,677	3,764	4,008	4,515	4,822	5,104	4,129	4,240
2017	Retiree Count	18	165	237	363	568	672	336	130	39	2,528
2018	Avg Benefit	445	700	961	1,485	2,061	3,054	3,913	4,499	5,261	2,460
2018	Avg Comp	2,209	3,693	3,494	3,850	4,036	4,586	5,108	4,932	5,803	4,278
2018	Retiree Count	15	156	271	323	604	748	288	151	34	2,590

# Ten-Year Average Monthly Benefit Payments for Disability Retirement Recipients

		Years of Service Credit									
Fiscal Year	Status Type	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	All Members
2009	Avg Benefit	\$ 869	\$ 801	\$ 948	\$ 1,287	\$ 1,201	\$ 1,266	\$ 0	\$ 0	\$ 0	\$ 1,029
2009	Avg Comp	\$ 2,068	\$ 2,193	\$ 2,595	\$ 2,916	\$ 2,488	\$ 2,543	\$ 0	\$ 0	\$ 0	\$ 2,513
2009	Retiree Count	3	50	28	38	18	5	0	0	0	142
										-	
2010	Avg Benefit	903	841	1,059	1,408	1,636	1,357	832	0	0	1,207
2010	Avg Comp	2,838	2,130	2,868	3,163	3,359	2,536	1,365	0	0	2,847
2010	Retiree Count	2	35	39	52	20	3	1	0	0	152
2011	A D C:	000	00.4	4 000	4.540	4 477	4.000	2		0	4.000
2011	Avg Benefit	862	904	1,036	1,548	1,477	1,820	0	0	0	1,220
2011	Avg Comp	1,158	2,180	2,102	2,442	2,824	4,062	0	0	0	2,341
2011	Retiree Count	3	41	44	44	23	3	0	0	0	158
2012	Avg Benefit	1,054	948	1,098	1,424	0	0	0	0	0	1,148
2012	Avg Comp	3,205	2,704	2,899	3,022	0	0	0	0	0	2,880
2012	Retiree Count	3	30	24	27	0	0	0	0	0	84
2012	retiree oount	0	- 00		21			0		0	01
2013	Avg Benefit	1,129	986	1,046	1,584	833	0	0	0	0	1,215
2013	Avg Comp	2,446	3,163	2,750	3,467	1,899	0	0	0	0	3,069
2013	Retiree Count	2	27	43	40	3	0	0	0	0	115
2014	Avg Benefit	0	959	1,143	1,616	0	845	0	0	0	1,244
2014	Avg Comp	0	2,450	3,003	3,514	0	1,427	0	0	0	3,006
2014	Retiree Count	0	28	42	34	0	1	0	0	0	105
2015	Avg Benefit	943	906	1,064	1,477	2,807	0	0	0	0	1,224
2015	Avg Comp	2,846	2,598	2,775	3,259	4,416	0	0	0	0	2,949
2015	Retiree Count	2	41	31	36	6	0	0	0	0	116
2016	Avg Benefit	943	961	1,055	1,386	2,250	0	0	0	0	1,181
2016	Avg Comp	3,434	2,335	2,598	2,990	3,510	0	0	0	0	2,704
2016	Retiree Count	2	43	38	56	3	0	0	0	0	142
2017	Avg Benefit	1,415	953	1,129	1,528	837	0	0	0	0	1,201
2017	Avg Comp	0	2,797	2,805	3,370	1,936	0	0	0	0	2,942
2017	Retiree Count	1	38	44	41	3	0	0	0	0	127
2018	Avg Benefit	0	903	1,102	1,525	579	0	0	0	0	1,196
2018	Avg Comp	0	2,264	2,499	3,296	1,451	0	0	0	0	2,704
2018	Retiree Count	0	18	39	29	1	0	0	0	0	87

# Ten-Year Average Monthly Benefit Payments for Beneficiaries/Survivors

Fiscal	Status	Years of Service Credit							All		
Year	Type	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	Over 40	Members
2009	Avg Benefit	\$ 371	\$ 386	\$ 504	\$ 843	\$ 1,114	\$ 1,759	\$ 1,983	\$ 1,959	\$ 2,481	\$ 1,334
2009	Avg Comp	\$ 4,206	\$ 1,797	\$ 1,802	\$ 2,136	\$ 1,939	\$ 2,335	\$ 1,857	\$ 1,883	\$ 1,526	\$ 2,004
2009	Retiree Count	1	43	65	72	113	126	109	38	7	574
2010	Avg Benefit	263	439	606	846	1,261	1,593	1,753	2,119	1,543	1,292
2010	Avg Comp	2,996	2,494	2,078	1,913	2,382	1,978	1,575	1,990	580	1,999
2010	Retiree Count	4	44	77	70	93	133	121	38	5	585
2011	Avg Benefit	710	350	471	659	1,099	1,492	1,856	2,372	1,829	1,267
2011	Avg Comp	2,861	2,042	1,822	1,053	1,879	1,934	1,883	1,663	3,245	1,797
2011	Retiree Count	5	25	51	75	112	139	113	27	6	553
2012	Avg Benefit	337	387	523	744	1,072	1,728	2,123	3,291	2,515	1,458
2012	Avg Comp	3,333	2,879	2,485	3,158	2,411	3,006	3,367	3,960	5,000	3,033
2012	Retiree Count	5	20	59	61	80	124	92	27	12	480
2013	Avg Benefit	278	432	488	752	1,248	1,709	2,344	2,638	2,689	1,447
2013	Avg Comp	1,274	3,888	3,209	3,234	2,813	3,043	3,507	3,259	4,020	3,258
2013	Retiree Count	2	59	56	60	73	127	96	35	9	517
2014	Avg Benefit	593	453	660	788	1,298	1,925	2,068	3,203	4,008	1,622
2014	Avg Comp	1,241	4,648	2,572	2,498	2,919	3,242	3,137	4,573	6,434	3,278
2014	Retiree Count	1	47	45	51	100	145	124	40	5	558
2015	Avg Benefit	300	456	513	783	1,249	1,875	2,221	2,728	3,714	1,599
2015	Avg Comp	3,608	2,773	2,854	3,102	3,259	3,101	3,172	3,896	5,368	3,199
2015	Retiree Count	1	24	54	66	86	142	117	30	12	532
2016	Avg Benefit	349	409	621	725	1,155	1,906	2,208	3,057	4,480	1,600
2016	Avg Comp	3,759	2,799	2,610	2,535	3,080	3,350	3,274	4,506	6,264	3,253
2016	Retiree Count	3	48	62	66	106	133	115	40	20	593
2017	Avg Benefit	145	460	627	1,000	1,278	1,886	2,449	3,153	3,193	1,667
2017	Avg Comp	3,565	3,231	3,118	3,291	3,189	3,554	3,582	4,462	4,795	3,476
2017	Retiree Count	5	45	49	67	120	148	132	33	13	612
2018	Avg Benefit	372	496	588	905	1,239	1,933	2,645	3,080	3,202	1,669
2018	Avg Comp	3,352	3,550	3,002	2,633	3,334	3,554	4,002	4,442	3,946	3,483
2018	Retiree Count	2	35	69	71	108	161	108	35	14	603

# Benefit and Refund Expenses by Type (2018-2009)

	2018	2017	2016	2015	2014
Benefits					
Service	\$ 1,806,914,712	\$ 1,763,897,174	\$ 1,695,606,753	\$ 1,641,986,132	\$ 1,556,120,285
LSU Co-Op Extension	2,017,909	1,995,075	1,873,303	1,754,855	1,746,982
Disability retirement recipient	98,201,886	95,863,977	92,152,541	89,333,749	84,666,700
Beneficiary/survivors	58,921,132	57,518,386	55,291,525	53,600,250	50,800,020
Deferred retirement	143,107,030	136,204,016	148,722,257	162,935,965	176,823,394
Initial lump sum	9,808,777	7,970,742	7,499,319	7,246,486	6,956,522
Total benefits	<u>\$ 2,118,971,446</u>	<u>\$ 2,063,449,370</u>	<u>\$ 2,001,145,698</u>	<u>\$ 1,956,857,437</u>	<u>\$ 1,877,113,903</u>
Refunds					
Separation	\$ 33,192,850	\$ 33,119,473	\$ 32,606,034	\$ 33,295,983	\$ 38,027,953
Death	6,519,149	5,061,945	5,794,154	6,262,363	5,908,530
Return-to-work	10,343,450	<u>10,806,765</u>	10,741,387	<u>11,987,416</u>	<u>13,715,641</u>
Total refunds	\$ 50,055,449	<u>\$ 48,988,183</u>	<u>\$ 49,141,575</u>	<u>\$ 51,545,762</u>	<u>\$ 57,652,124</u>
Other	(1,384,229)	<u>817,737</u>	<u>743,079</u>	<u>857,000</u>	1,125,213
Total refunds & other	<u>\$ 48,671,220</u>	<u>\$ 49,805,920</u>	<u>\$ 49,884,654</u>	<u>\$ 52,402,762</u>	<u>\$ 58,777,337</u>
	2013	2012	2011	2010	2009
Benefits	2013	2012	2011	2010	2009
Benefits Service	<b>2013</b> \$ 1,477,250,306	<b>2012</b> \$ 1,386,433,318	<b>2011</b> \$ 1,330,518,072	<b>2010</b> \$ 1,273,969,481	<b>2009</b> \$ 1,226,455,421
Service	\$ 1,477,250,306	\$ 1,386,433,318	\$ 1,330,518,072	\$ 1,273,969,481	\$ 1,226,455,421
Service LSU Co-Op Extension Disability retirement	\$ 1,477,250,306 1,633,154	\$ 1,386,433,318 0*	\$ 1,330,518,072 0*	\$ 1,273,969,481 0*	\$ 1,226,455,421 0*
Service LSU Co-Op Extension Disability retirement recipient	\$ 1,477,250,306 1,633,154 80,374,101	\$ 1,386,433,318 0* 75,349,637	\$ 1,330,518,072 0* 72,310,765	\$ 1,273,969,481 0* 69,237,472	\$ 1,226,455,421 0* 66,655,186
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461	\$ 1,386,433,318 0* 75,349,637 45,209,782	\$ 1,330,518,072 0* 72,310,765 43,386,458	\$ 1,273,969,481 0* 69,237,472 41,542,483	\$ 1,226,455,421 0* 66,655,186 39,993,112
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914	\$ 1,273,969,481 0* 69,237,472 41,542,483 141,897,005	\$ 1,226,455,421 0* 66,655,186 39,993,112 125,779,104
Service  LSU Co-Op Extension  Disability retirement recipient  Beneficiary/survivors  Deferred retirement  Initial lump sum  Total benefits	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982	\$ 1,273,969,481 0* 69,237,472 41,542,483 141,897,005 5,879,700	\$ 1,226,455,421 0* 66,655,186 39,993,112 125,779,104 5,223,489
Service  LSU Co-Op Extension  Disability retirement recipient  Beneficiary/survivors  Deferred retirement  Initial lump sum	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982	\$ 1,273,969,481 0* 69,237,472 41,542,483 141,897,005 5,879,700	\$ 1,226,455,421 0* 66,655,186 39,993,112 125,779,104 5,223,489
Service  LSU Co-Op Extension  Disability retirement recipient  Beneficiary/survivors  Deferred retirement  Initial lump sum  Total benefits	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982	\$ 1,273,969,481 0* 69,237,472 41,542,483 141,897,005 5,879,700	\$ 1,226,455,421 0* 66,655,186 39,993,112 125,779,104 5,223,489
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692 \$ 1,800,166,804	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221 \$ 1,682,528,254	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982 \$ 1,615,778,191	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141	\$ 1,226,455,421 0* 66,655,186 39,993,112 125,779,104 5,223,489 \$ 1,464,106,312
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds Separation	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692 \$ 1,800,166,804 \$ 38,215,111	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221 \$ 1,682,528,254 \$ 31,596,812	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982 \$ 1,615,778,191 \$ 26,372,462	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141  \$ 24,607,616	\$ 1,226,455,421  0*  66,655,186  39,993,112  125,779,104  5,223,489  \$ 1,464,106,312  \$ 21,555,743
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds Separation Death	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7.867,692 \$ 1,800,166,804 \$ 38,215,111 5,087,304	\$ 1,386,433,318 0* 75,349,637 45,209,782 171,044,296 4,491,221 \$ 1,682,528,254 \$ 31,596,812 4,432,955	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982 \$ 1,615,778,191 \$ 26,372,462 4,062,653	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141  \$ 24,607,616  4,010,028	\$ 1,226,455,421  0*  66,655,186  39,993,112  125,779,104  5,223,489  \$ 1,464,106,312  \$ 21,555,743  2,851,075
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds Separation Death Return-to-work	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692 \$ 1,800,166,804 \$ 38,215,111 5,087,304 15,850,066	\$ 1,386,433,318  0*  75,349,637  45,209,782  171,044,296  4,491,221  \$ 1,682,528,254  \$ 31,596,812  4,432,955  13,109,261	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982 \$ 1,615,778,191 \$ 26,372,462 4,062,653 11,813,372	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141  \$ 24,607,616  4,010,028  11,592,533	\$ 1,226,455,421  0*  66,655,186  39,993,112  125,779,104  5,223,489  \$ 1,464,106,312  \$ 21,555,743  2,851,075  9,032,619
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds Separation Death Return-to-work	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692 \$ 1,800,166,804 \$ 38,215,111 5,087,304 15,850,066	\$ 1,386,433,318  0*  75,349,637  45,209,782  171,044,296  4,491,221  \$ 1,682,528,254  \$ 31,596,812  4,432,955  13,109,261	\$ 1,330,518,072 0* 72,310,765 43,386,458 165,109,914 4,452,982 \$ 1,615,778,191 \$ 26,372,462 4,062,653 11,813,372	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141  \$ 24,607,616  4,010,028  11,592,533	\$ 1,226,455,421  0*  66,655,186  39,993,112  125,779,104  5,223,489  \$ 1,464,106,312  \$ 21,555,743  2,851,075  9,032,619
Service LSU Co-Op Extension Disability retirement recipient Beneficiary/survivors Deferred retirement Initial lump sum Total benefits  Refunds Separation Death Return-to-work Total refunds	\$ 1,477,250,306 1,633,154 80,374,101 48,224,461 184,817,090 7,867,692 \$ 1,800,166,804 \$ 38,215,111 5,087,304 15,850,066 \$ 59,152,481	\$ 1,386,433,318  0*  75,349,637  45,209,782  171,044,296  4,491,221  \$ 1,682,528,254  \$ 31,596,812  4,432,955  13,109,261  \$ 49,139,028	\$ 1,330,518,072 0*  72,310,765  43,386,458  165,109,914  4,452,982  \$ 1,615,778,191  \$ 26,372,462  4,062,653  11,813,372  \$ 42,248,487	\$ 1,273,969,481  0*  69,237,472  41,542,483  141,897,005  5,879,700  \$ 1,532,526,141  \$ 24,607,616  4,010,028  11,592,533  \$ 40,210,177	\$ 1,226,455,421  0*  66,655,186  39,993,112  125,779,104  5,223,489  \$ 1,464,106,312  \$ 21,555,743  2,851,075  9,032,619  \$ 33,439,437

<sup>\*</sup>Included in "Service" benefits prior to 2013.

## **Revenues by Source**

Fiscal Year	Member	Employer	Non- Employer*	Appropriations Acts	Net Investment Income (Loss)	Other Operating Revenues	Total
2008-2009	\$344,547,871	\$ 714,691,946			\$(3,292,248,484)	\$ 4,407,243	\$(2,228,601,424)
2009-2010	347,114,632	726,559,462			1,285,742,297	3,605,633	2,363,022,024
2010-2011	342,323,329	943,678,941			2,942,693,424	3,299,671	4,231,995,365
2011-2012	333,908,454	1,084,589,881			(58,458,258)	2,265,262	1,362,305,339
2012-2013	327,767,936	1,058,995,111	\$ 36,484,681		1,750,935,396	4,051,269	3,178,234,393
2013-2014	326,007,091	1,174,540,866	37,956,700	\$ 5,578,791†	2,815,090,995	2,913,077	4,362,087,520
2014-2015	324,920,644	1,217,466,676	39,277,614	10,384,806‡	443,364,220	1,795,947	2,037,209,907
2015-2016	330,773,315	1,157,901,123	40,024,323		177,640,776	2,951,433	1,709,290,970
2016-2017	328,541,240	1,122,277,562	40,517,823		2,612,535,238	2,972,517	4,106,844,380
2017-2018	337,928,752	1,201,829,353	41,423,624	8,585,163§	2,137,872,033	2,825,941	3,730,464,866

<sup>\*</sup>Refers to the sheriff tax collections and LSU Co-Op Extension.

## **Expenses by Type**

Fiscal Year	Benefits*	Pension Expense	Refunds/ Other	Administrative Expenses	Depreciation Expense	Total
2008-2009	\$ 1,466,608,360		\$ 34,418,885	\$ 15,799,028	\$ 540,725	\$ 1,517,366,998
2009-2010	1,534,339,475		40,834,543	16,154,823	543,096	1,591,871,937
2010-2011	1,617,255,586		43,005,926	15,417,596	537,060	1,676,216,168
2011-2012	1,683,578,351		50,195,898	16,317,659	440,291	1,750,532,199
2012-2013	1,801,140,949		59,712,975	15,750,180	377,150	1,876,981,254
2013-2014	1,878,161,735		58,777,337	15,026,969 <sup>†</sup>	322,881	1,952,288,922
2014-2015	1,958,543,273	\$ 2,078,530	52,402,762	14,259,428 <sup>†</sup>	384,426	2,027,668,419
2015-2016	2,001,121,694	1,773,559	49,884,654	14,532,681 <sup>†</sup>	407,105	2,067,719,693
2016-2017	2,064,035,537	2,807,080	49,805,920	14,368,885 <sup>†</sup>	432,238	2,131,449,660
2017-2018	2,132,604,602	1,385,063	48,671,220	14,046,725 <sup>†</sup>	400,766	2,197,108,376

<sup>\*</sup>Includes Other Post-Employment Benefits (OPEB) expense and LSU Co-Op Extension.

<sup>†</sup>Act 55 of 2014.

<sup>‡</sup>Act 55 of 2014 and Act 56 of 2015.

<sup>§</sup>Act 59 of 2018.

<sup>†</sup>Investment administrative expenses are excluded from this total in accordance with GASB 67.

# Ten Largest Employers (Statistical)

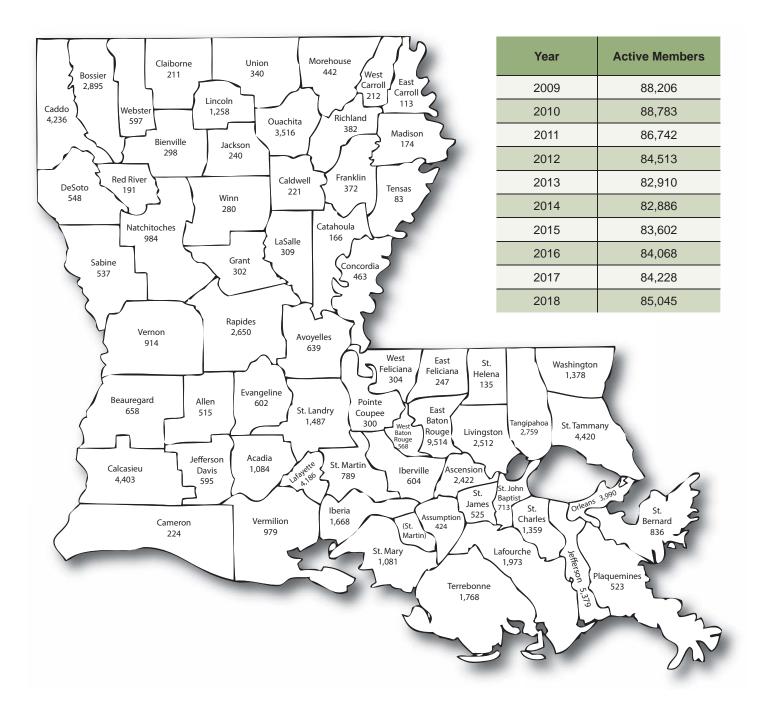
	# of Employees	% of Total Employees		# of Employees	% of Total Employees
2018			2017		
Jefferson Parish School Board	5,305	7%	EBR Parish School Board	4,903	6%
EBR Parish School Board	4,936	6%	Jefferson Parish School Board	4,869	6%
St. Tammany Parish School Board	4,418	6%	St. Tammany Parish School Board	4,366	5%
Caddo Parish School Board	4,175	5%	Caddo Parish School Board	4,202	5%
Calcasieu Parish School Board	4,005	5%	Calcasieu Parish School Board	3,955	5%
Lafayette Parish School Board	3,358	4%	Lafayette Parish School Board	3,304	4%
Rapides Parish School Board	2,605	3%	Livingston Parish School Board	2,564	3%
Livingston Parish School Board	2,512	3%	Rapides Parish School Board	2,557	3%
Ascension Parish School Board	2,365	3%	Ascension Parish School Board	2,321	3%
Bossier Parish School Board	2,299	3%	Bossier Parish School Board	2,270	3%
2016			2015		
EBR Parish School Board	4,868	6%	EBR Parish School Board	4,859	6%
Jefferson Parish School Board	4,862	6%	Jefferson Parish School Board	4,602	6%
Caddo Parish School Board	4,312	5%	Caddo Parish School Board	4,429	5%
St. Tammany Parish School Board	4,308	5%	St. Tammany Parish School Board	4,216	5%
Calcasieu Parish School Board	3,894	5%	Calcasieu Parish School Board	3,870	5%
Lafayette Parish School Board	3,321	4%	Lafayette Parish School Board	3,324	4%
Rapides Parish School Board	2,612	3%	Rapides Parish School Board	2,621	3%
Livingston Parish School Board	2,554	3%	Livingston Parish School Board	2,524	3%
Ascension Parish School Board	2,290	3%	Ascension Parish School Board	2,272	3%
Bossier Parish School Board	2,270	3%	Bossier Parish School Board	2,210	3%
2014			2013		
EBR Parish School Board	4,635	6%	Caddo Parish School Board	4,700	6%
Jefferson Parish School Board	4,567	5%	EBR Parish School Board	4,597	5%
Caddo Parish School Board	4,449	5%	Jefferson Parish School Board	4,487	5%
St. Tammany Parish School Board	4,115	5%	St. Tammany Parish School Board	4,063	5%
Calcasieu Parish School Board	3,888	5%	Calcasieu Parish School Board	3,878	5%
Lafayette Parish School Board	3,350	4%	Lafayette Parish School Board	3,345	4%
Rapides Parish School Board	2,636	3%	Rapides Parish School Board	2,664	3%
Livingston Parish School Board	2,522	3%	Livingston Parish School Board	2,473	3%
Ascension Parish School Board	2,229	3%	Bossier Parish School Board	2,212	3%
Bossier Parish School Board	2,143	3%	Ascension Parish School Board	2,152	3%

# Ten Largest Employers (Statistical)—cont'd

	# of Employees	% of Total Employees		# of Employees	% of Total Employees
2012			2011		
Caddo Parish School Board	4,872	6%	Caddo Parish School Board	5,204	6%
EBR Parish School Board	4,697	6%	EBR Parish School Board	4,877	6%
Jefferson Parish School Board	4,680	5%	Jefferson Parish School Board	4,854	6%
St. Tammany Parish School Board	4,105	5%	St. Tammany Parish School Board	4,134	5%
Calcasieu Parish School Board	3,852	5%	Calcasieu Parish School Board	3,914	4%
Lafayette Parish School Board	3,300	4%	Lafayette Parish School Board	3,404	4%
Rapides Parish School Board	2,637	3%	Rapides Parish School Board	2,648	3%
Livingston Parish School Board	2,479	3%	Livingston Parish School Board	2,629	3%
Ouachita Parish School Board	2,217	3%	Ouachita Parish School Board	2,239	3%
Bossier Parish School Board	2,188	3%	Ascension Parish School Board	2,197	3%
2010			2009		
Caddo Parish School Board	5,201	6%	Jefferson Parish School Board	5,193	6%
EBR Parish School Board	5,160	6%	Caddo Parish School Board	5,189	6%
Jefferson Parish School Board	5,145	6%	EBR Parish School Board	5,107	6%
St. Tammany Parish School Board	4,237	5%	St. Tammany Parish School Board	4,249	5%
Calcasieu Parish School Board	4,066	5%	Calcasieu Parish School Board	4,026	5%
Lafayette Parish School Board	3,408	4%	Lafayette Parish School Board	3,394	4%
Rapides Parish School Board	2,694	3%	Rapides Parish School Board	2,685	3%
Livingston Parish School Board	2,599	3%	Livingston Parish School Board	2,562	3%
Ascension Parish School Board	2,212	3%	Ouachita Parish School Board	2,177	2%
Ouachita Parish School Board	2,210	3%	Terrebonne Parish School Board	2,140	2%

## TOTAL ACTIVE MEMBERS STATEWIDE

Total number of members – 85,045 (includes all employing agencies located within each parish)



# TRSL RETIREES WORLDWIDE

## Total number of retirees - 78,423



United	mbia	78,372					
	5						
		U.S. Possess	ions:	2			
Guam	1	Puerto Rico	1				
	Foreign Countries:						
Argentina	1	Mexico	1				
Australia	4	New Zealand	1				
Belgium	1	Pakistan	1				
Canada	11	Philippines	1				
Costa Rica	2	Poland	1				
Czech Republic	2	Portugal	1				
Finland	1	Switzerland	2				
France	2	Thailand	1				
Germany	8	United Kingdom	2				
Italy	1						
		TO	OTAL	78,423			

Year	Retirees
2009	62,417
2010	63,940
2011	65,512
2012	67,657
2013	71,031
2014	73,195
2015	75,259
2016	75,828
2017	77,258
2018	78,423

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