

# CAFR 2017

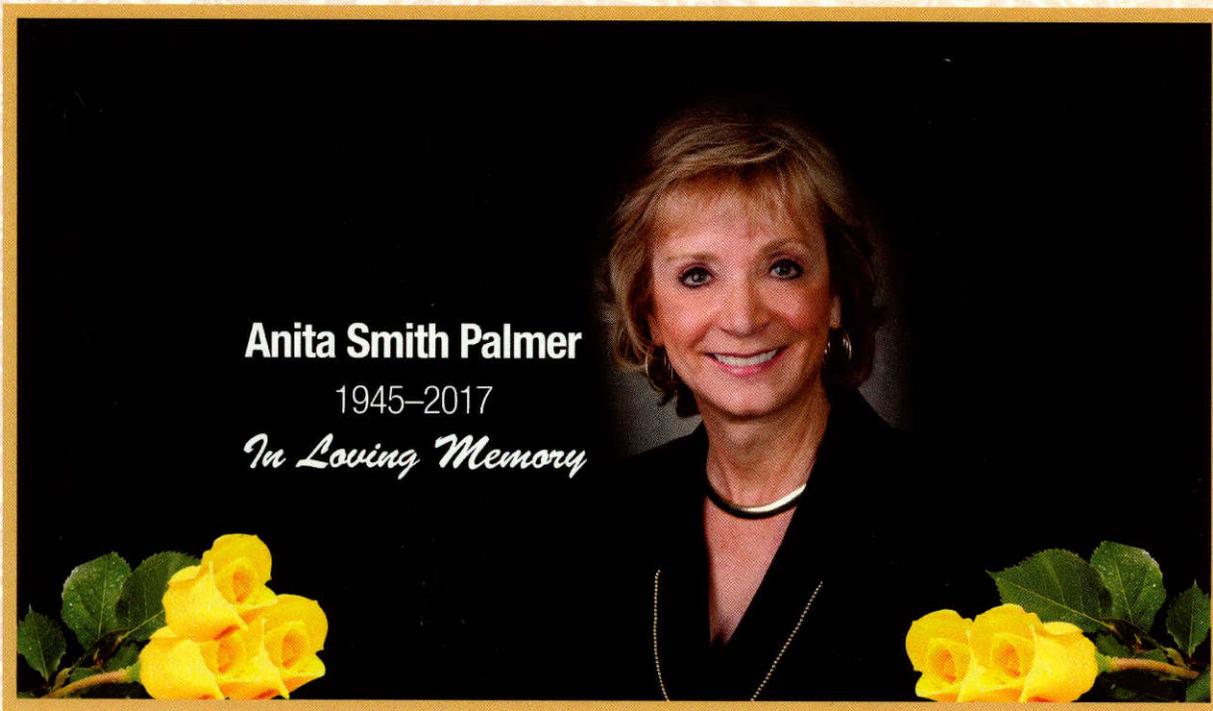
## Comprehensive Annual Financial Report

TEACHER RETIREMENT SYSTEM OF TEXAS



Anita Smith Palmer "The Storm," 2012

A Component Unit of the State of Texas  
Fiscal Year Ended August 31, 2017



***From TRS, with fondness and gratitude, we dedicate the  
FY 2017 TRS Comprehensive Annual Financial Report  
to former TRS Trustee, Anita Smith Palmer,  
featuring her beautiful artwork.***

Anita Smith Palmer of Jacksboro represented retired Texas teachers as a TRS trustee from September 2011 until her death in January of 2017. She was a community volunteer and retired educator with 30 years teaching and administrative experience, including 12 years of service in the Wichita Falls ISD.

Anita was also a published author and a truly gifted artist.

She was a Special Selected Member of Women Artists of the West, the National Association of Oil and Acrylic Painters, and the American Association of Equine Artists.

Anita served as director of the Faith Community Hospital Foundation of Jacksboro and was an active member of The Parish of Jacksboro.

Anita was an honorary life member of the National Parent Teacher Association, past district president of the Texas Retired Teachers Association (TRTA), and a former member of TRTA's State Retirement Education Committee.

Anita held eight state teaching certifications and served as an adjunct professor at Midwestern State University. She earned bachelor's and master's degrees in education from Southwestern Oklahoma State University.



# **TEACHER RETIREMENT SYSTEM OF TEXAS**

## **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

A Component Unit of the State of Texas

**FISCAL YEAR ENDED**  
August 31, 2017

Prepared by  
Teacher Retirement System of Texas  
1000 Red River Street  
Austin, Texas 78701-2698  
1-800-223-8778

Brian K. Guthrie  
Executive Director  
[www.trs.texas.gov](http://www.trs.texas.gov)



# Table of Contents

## INTRODUCTORY SECTION

- Board of Trustees..... 3
- Professional Awards..... 4
- Letter of Transmittal ..... 6
- Organization Chart..... 10
- Staff and Advisors ..... 11
- Membership ..... 12
- Communications..... 14

## FINANCIAL SECTION

- Independent Auditor’s Report ..... 21
- Management’s Discussion and Analysis..... 25
- Basic Financial Statements
  - Exhibit I - Statement of Fiduciary Net Position ..... 36
  - Exhibit II - Statement of Changes in Fiduciary Net Position..... 40
  - Exhibit III - Statement of Net Position - Proprietary Funds..... 44
  - Exhibit IV - Statement of Revenues, Expenses and Changes in  
Net Position - Proprietary Funds ..... 46
  - Exhibit V - Statement of Cash Flows - Proprietary Funds ..... 48
  - Notes to the Financial Statements..... 50
- Required Supplementary Information
  - Pension Trust Fund
    - Schedule of Changes in the Employers’ Net Pension Liability and Related Ratios ..... 94
    - Schedule of Employer and Non-Employer Contributing Entity Actuarially Determined  
Contributions (ADC)..... 96
    - Schedule of Investment Returns..... 97
  - TRS-Care
    - Schedule of Changes in the Employers’ Net OPEB Liability and Related Ratios ..... 98
- Supporting Schedules
  - Exhibit A - Statement of Changes in Assets and Liabilities - Agency Funds .....101
  - Schedule 1 - Comparative Schedule of Changes in Account Balance - Pension Trust Fund
    - Interest Account.....102
    - Member Savings Account.....103
    - State Contribution Account .....104
    - Retired Reserve Account .....105
    - Deferred Retirement Option Account.....106
    - Expense Account .....107
  - Schedule 2 - Schedule of Administrative and Investing Activity Expenses - All Funds .....108
  - Schedule 3 - Schedule of Professional and Consulting Fees - All Funds .....112



## Table of Contents

### INVESTMENT SECTION

Investment Overview.....	118
Report on Investment Activities .....	120

### ACTUARIAL SECTION

Pension Trust Fund	
Actuary's Certification Letter .....	134
Actuarial Present Value of Future Benefits.....	139
Actuarial Methods and Assumptions.....	140
TRS-Care	
Actuary's Certification Letter .....	147
Actuarial Present Value of Future Benefits.....	149
Actuarial Methods and Assumptions.....	150

### STATISTICAL SECTION

Statistical Section Overview .....	157
Financial Trends Information	
Ten-Year Summary of Changes in Fiduciary Net Position and Revenues, Expenses, and Changes in Net Position .....	158
Benefits and Refund Deductions from Net Position by Type .....	166
Operating Information	
Average Benefit Payments.....	168
Retired Members by Type of Benefit and Health Benefit Payments by Range.....	172
Principal Participating Employers .....	174
List of Participating Employers .....	176

### BENEFITS SECTION

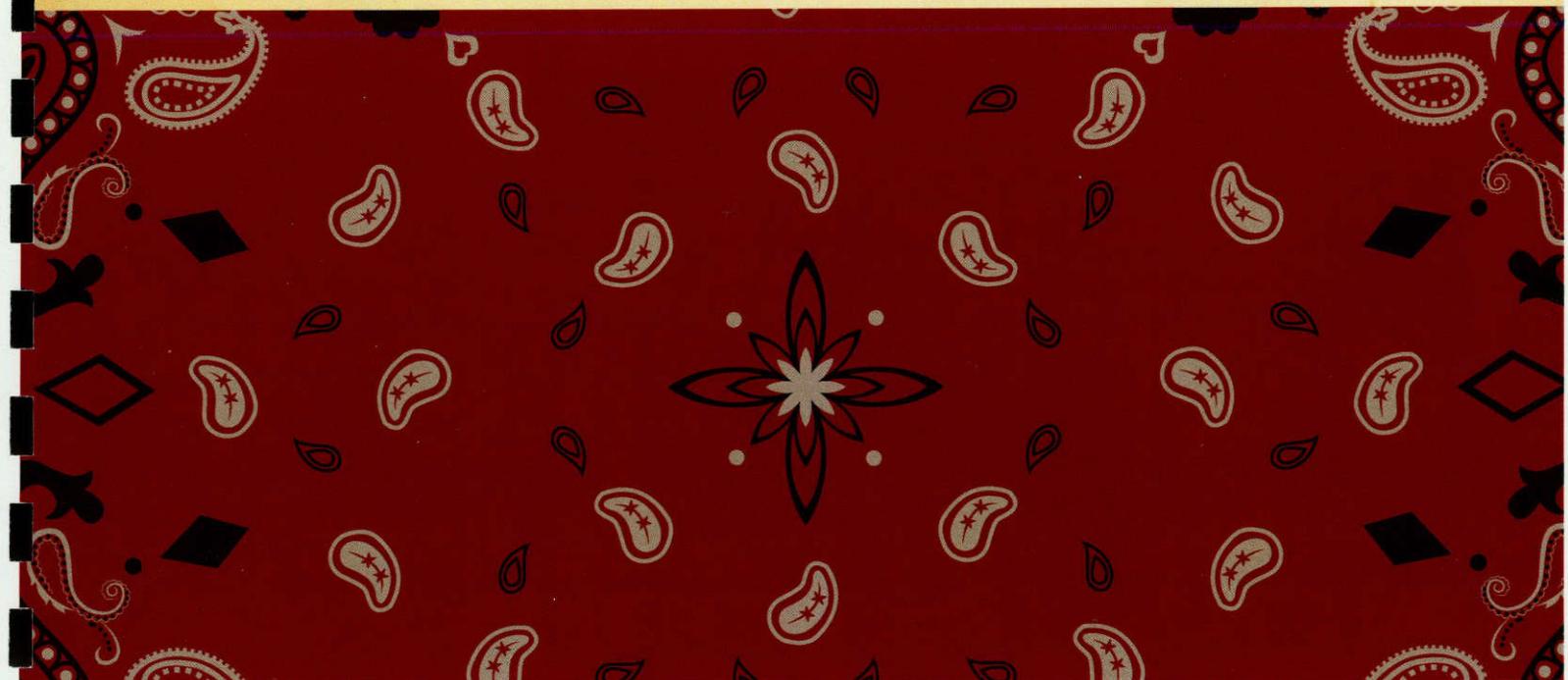
Changes in the Law.....	190
Summary of Benefits .....	198

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# INTRODUCTORY SECTION



Anita Smith Palmer "Me Too," 2006





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## Board of Trustees



**R. David Kelly, Chair**  
 Managing Partner  
 Straight Line Realty Partners  
 Plano  
 Direct appointment of the governor  
 Term expires 2017



**John Elliott**  
 Partner  
 Elliott Stratmann, PLLC  
 Austin  
 Direct appointment of the governor  
 Term expires 2021



**Dolores Ramirez, Vice Chair**  
 Teacher  
 San Benito CISD  
 San Benito  
 Active public education position  
 Term expires 2019



**Dr. Greg Gibson**  
 Superintendent  
 Schertz-Cibolo-Universal City ISD  
 Schertz  
 Active public education position  
 Term expires 2021



**Karen Charleston**  
 Former Space Management Assistant  
 Prairie View A&M University  
 Houston  
 Higher education position  
 Term expires 2017



**Christopher Moss**  
 President  
 Allendale, Inc. DBA The Advanced  
 Financial Group  
 Lufkin  
 Position nominated by the State  
 Board of Education  
 Term expires 2021



**Joe Colonna**  
 Private Investor  
 Dallas  
 Direct appointment of the governor  
 Term expires 2019



**Anita Smith Palmer**  
 Former Texas Public School Teacher,  
 Administrator and University  
 Adjunct Professor  
 Jacksboro  
 Retiree Position  
 Term expires 2017



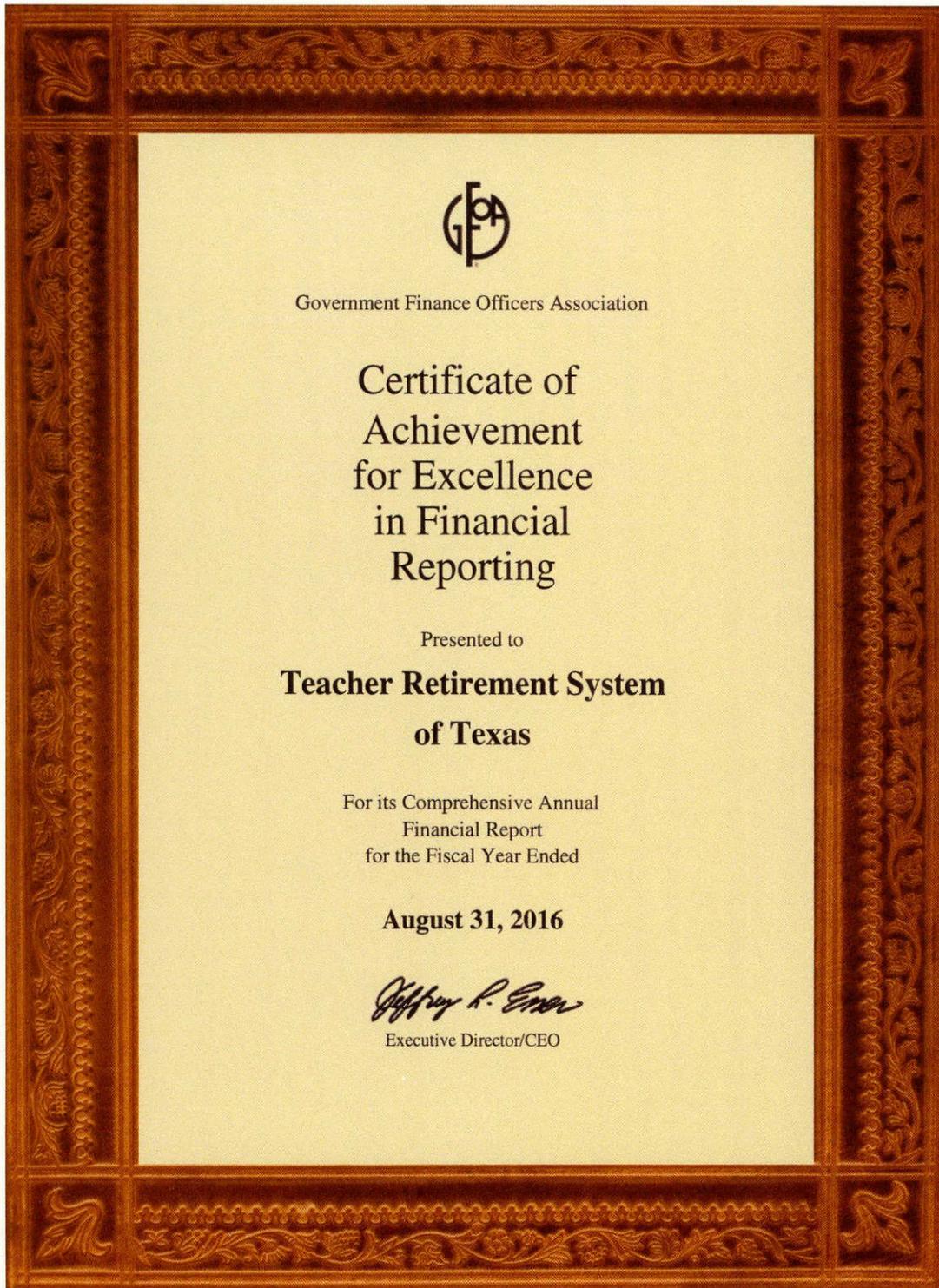
**David Corpus**  
 Senior Vice President  
 CommunityBank of Texas, N.A.  
 Humble  
 Position nominated by the State  
 Board of Education  
 Term expires 2019

*We regret to report the passing of Anita Smith Palmer on January 6, 2017. Thanks to her dedication to the students and public education employees of Texas, her contributions will live on to benefit others for years to come.*

*For information on the board election process and the higher education position, please refer to Note 1 in the Financial Section.*

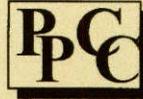


## Professional Awards





## Professional Awards



Public Pension Coordinating Council

**Public Pension Standards Award  
For Funding and Administration  
2016**

Presented to

**Teacher Retirement System of Texas**

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  
Program Administrator

## Letter of Transmittal



**Brian K. Guthrie**  
Executive Director

800.223.8778  
[www.trr.texas.gov](http://www.trr.texas.gov)

1000 Red River Street  
Austin, Texas 78701-2698

November 20, 2017

Honorable Greg Abbott, Governor  
Honorable Glenn Hegar, Texas Comptroller  
Ursula Parks, Director, Legislative Budget Board  
Lisa Collier, First Assistant State Auditor  
The Board of Trustees and Members of the Teacher Retirement System

Ladies and Gentlemen,

On behalf of the board of trustees, I am pleased to present the *Comprehensive Annual Financial Report* (CAFR) of the Teacher Retirement System of Texas (TRS or System) for the fiscal year ended August 31, 2017—the System’s 80<sup>th</sup> year of operation. During the past fiscal year, the System experienced modest growth as membership grew to 1,545,057 participants. The pension trust fund saw positive returns in the past year. The fund ended the 2017 fiscal year with a net position of \$147.4 billion compared to \$134.0 billion at the close of the 2016 fiscal year. TRS investment earnings, combined with contribution increases and benefit changes approved by the 85<sup>th</sup> Texas Legislature, are continuing to enable TRS to provide secure benefits for current and future retirees.

### MANAGEMENT RESPONSIBILITY

This report consists of management’s representations concerning TRS finances. Management assumes full responsibility for the completeness and reliability of all information presented in this report. To provide a reasonable basis for making these representations, management has established a comprehensive internal control framework that is designed both to protect the assets from loss, theft, or misuse and to compile sufficient, reliable information for the preparation of TRS financial statements in conformity with generally accepted accounting principles. The cost of controls should not exceed the benefits to be derived as the objective of the internal control framework is to provide reasonable rather than absolute assurance that the financial statements will be free from material misstatement. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

### CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada (GFOA) awarded TRS the Certificate of Achievement for Excellence in Financial Reporting for its *Comprehensive Annual Financial Report* for the previous fiscal year. To be awarded the certificate, a report must meet or exceed program standards and must satisfy both generally accepted accounting principles and applicable legal requirements. TRS has received a Certificate of Achievement for the last 27 years. We believe that the current report continues to meet program requirements, and it is being submitted to the GFOA for consideration again this year.

## Letter of Transmittal

### FINANCIAL INFORMATION

The basic financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis as promulgated by the Governmental Accounting Standards Board (GASB). The Management's Discussion and Analysis (MD&A) includes a narrative introduction, overview and analysis to accompany the basic financial statements. This transmittal letter is designed to complement the MD&A and should be read in conjunction with it. The MD&A can be found immediately following the report of the independent auditors.

During the past year, TRS also continued its program of auditing reports submitted by reporting entities to TRS in response to GASB accounting and American Institute of Certified Public Accounting (AICPA) auditing guidance. TRS Internal Audit staff have tested employer census data for active members. TRS is reviewing the following elements of the data: gender; dates of birth; dates of hire or years of service; eligible compensation; and termination or retirement dates. TRS auditors are also testing eligibility and compensation for accuracy, completeness, and compliance with *TRS Laws & Rules*.

### INVESTMENTS

For the 12-month period ending August 31, 2017, the total portfolio delivered investment returns of 12.6 percent, which is 1.6 percent above the fund's benchmark. By asset class, returns were 17.3 percent for Global Equity, -1.3 percent for Stable Value and 11.1 percent for Real Return. On a three-year annualized basis, the fund has returned 6.4 percent, which is 0.5 percent above its benchmark. As a result, the total investment value of the fund as of August 31 was \$146.1 billion, or \$12.7 billion more than this time last year, after contributions and benefit payouts. Annual rates of return for the five- and 10-year periods ending August 31, 2017, were 9.0 percent and 5.8 percent, respectively.

Investment risks are diversified over a very broad range of market sectors and securities. TRS' investment strategy is designed to address three different potential market scenarios and has an advantage in each of them by allocating 57 percent to Global Equities, 22 percent to Real Return, 16 percent to Stable Value, and 5 percent to Risk Parity, which has a balanced exposure to all three economic scenarios. This allocation is designed to minimize downside risk while capturing upside performance in any of the three scenarios. This strategy reduces portfolio risk from adverse developments in sectors and issuers experiencing unusual difficulties and offers opportunity to benefit from future markets.

### PENSION PLAN BENEFITS

For fiscal year 2017, TRS paid pension benefit payments to more than 407,000 retirees and their beneficiaries totaling \$9.9 billion. These benefits were funded from a combination of cumulative investment income, member contributions, and state and employer contributions.

### ACTUARIAL SOUNDNESS OF THE PENSION TRUST FUND

As of August 31, 2017, the System had a funded ratio of 80.5 percent with an Unfunded Actuarial Accrued Liability (UAAL) of \$35.5 billion. The unfunded actuarial liability was expected to increase from the prior year based on the deferral of investment losses from prior valuations. However, due to higher than expected investment performance and population growth of approximately two percent, the UAAL remained relatively unchanged compared to the previous fiscal year. Together, these gains decreased the UAAL by \$1.1 billion. This decrease was partially offset by a reversal of expected retirement patterns due to plan design changes made to TRS-Care.

The System earned a return of 12.9 percent on market value, compared to an assumed rate of 8.0 percent. These investment gains more than offset the prior year's deferred investment losses which resulted in a gain on the actuarial value of assets. As a result, the System is now deferring net investment

## Letter of Transmittal

gains of \$1.1 billion.

The period of time necessary to amortize the unfunded liability has decreased from 33.6 years to 32.2 years. Given that current contributions cannot amortize the unfunded liability in less than 31 years, the System does not meet the state's definition for actuarial soundness.

In 2013, the Legislature adopted Senate Bill 1458 that provided a stair-step increase in the member contribution rate from 6.4 percent in FY 2014 to 7.7 percent in FY 2017. The state contribution rate for FY 2017 was 6.8 percent and districts that do not participate in Social Security pay a 1.5 percent contribution rate to the System. It is estimated that the unfunded liability will increase over the next decade before beginning to decline.

TRS will be conducting an experience study over the coming months to ascertain if the assumption set, including the 8 percent return assumption, continues to be appropriate for the System. The impact of any change to the assumption set has yet to be determined.

### RETIREE HEALTH BENEFITS PROGRAM

TRS administers TRS-Care, a health benefits program for eligible retired public education employees and their eligible dependents that was established in 1985. TRS-Care is the source of health benefits coverage which almost all retired public education employees rely upon. Funding is provided by premium payments from retiree participants and contributions from the state, public schools, and active public education employees. TRS-Care also receives additional revenue from the Medicare Part D subsidy program.

An actuarial valuation for TRS-Care was conducted as of Aug. 31, 2017. The valuation results indicate that TRS-Care has a Net Other Post-Employment Benefit Liability of \$43.5 billion. The program was 0.91 percent funded as of the end of the fiscal year 2017. More detailed information about the valuation results is included in the Notes to the Financial Statements and the Required Supplementary Information.

Plan changes made by the TRS Board of Trustees decreased the liability slightly; however, a legislative directive prevented changes to retiree contributions. The current funding formula of 1.0 percent of public school payroll from the State, 0.55 percent from the participating employers and 0.65 percent from the active employees is insufficient to sustain the TRS-Care program. Funding from the 84<sup>th</sup> legislature infused \$768 million into the program to ensure solvency of the TRS-Care fund through the FY 16-17 Biennium. Even with the additional funding, projections for the TRS-Care balance showed a shortfall ranging from \$1.3 to \$1.6 billion for the 2018-19 biennium. The 85<sup>th</sup> Legislature, in regular and special sessions, contributed additional funding to address the current solvency and affordability of TRS-Care.

### ACTIVE MEMBER HEALTH BENEFITS PROGRAM

TRS-ActiveCare, initiated in 2002, is a self-funded health benefits program that offers options ranging from catastrophic coverage with reduced premiums to a comprehensive plan at higher premiums. TRS-ActiveCare covers eligible public education employees currently employed by public education employers that participate in the program, along with the employees' eligible dependents. TRS-ActiveCare receives funding from the state in the amount of \$75 per employee per month and participating entities are required to provide at least \$150 per employee per month. Active employees pay premiums established by TRS for the cost of the program. The TRS Board of Trustees approved a modest increase in premiums and plan design changes for fiscal year 2017. TRS worked with the 85<sup>th</sup> legislature on options to improve the affordability of TRS-ActiveCare.

## Letter of Transmittal

### AGENCY HIGHLIGHTS

During the past year, TRS continued progress on the TRS Enterprise Application Modernization (TEAM) Program. Phase 1 of the new Pension Line of Business System under the TEAM program launched on October 2, 2017 as planned. Phase 1 included the new Reporting Entity Portal and processes related to active membership. TRS continued to work on requirements for Phase 2 of the TEAM Program which will include Pension Benefit Payments and a newly developed Web Self Service Application for TRS members. A separate Health Insurance Line of Business project was started during 2017, and TRS began implementing the CAPPs Financial solution from the Office of the Comptroller in September 2017.

From September 2016 through May 2017, TRS released a 15-part financial awareness video series. The purpose of the series was to help current members learn even more about retirement self-sufficiency. The series included a live-action welcome video featuring the Executive Director and 14 animated whiteboard videos. A diverse cast of characters guided members through three important concepts: what they have – their TRS defined benefit plan; what they need – to save more; and how to get it – by saving smart. The series covered a variety of topics, including how to estimate your TRS benefit, understanding Social Security, the impact of inflation on your TRS benefit, and understanding 403(b) fees.

In fiscal year 2017, TRS began offering remote counseling sessions for members wanting appointments with a benefit counselor. Remote counseling allows members to communicate through the internet in the comfort of their home. Additional counseling options include communicating by phone, email, group presentations and field office visits.

Thanks to the hard work and dedication of its employees, TRS was named a “Top Workplace” by the *Austin American-Statesman* for the sixth year in a row.

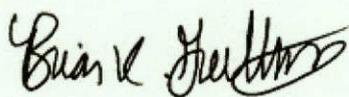
### ACKNOWLEDGMENTS

We wish to express our appreciation for the support of the Governor’s, Lieutenant Governor’s, and Speaker’s Offices, as well as members of the legislature, in maintaining a strong retirement system, which provides valuable benefits for public education employees and retirees.

We are grateful for the dedicated service of all of our trustees. Trustee willingness to accept the substantial responsibilities of directing system administration is a great service to the state and to the members served by TRS.

TRS trustees and staff are keenly focused on prudent pension trust fund portfolio management and efficient, service-oriented delivery of valuable retirement and related benefits for public education employees and retirees. We are pleased to report on operational results for the year and to acknowledge the substantial support of state leadership, trustees, members, interested associations, and TRS staff.

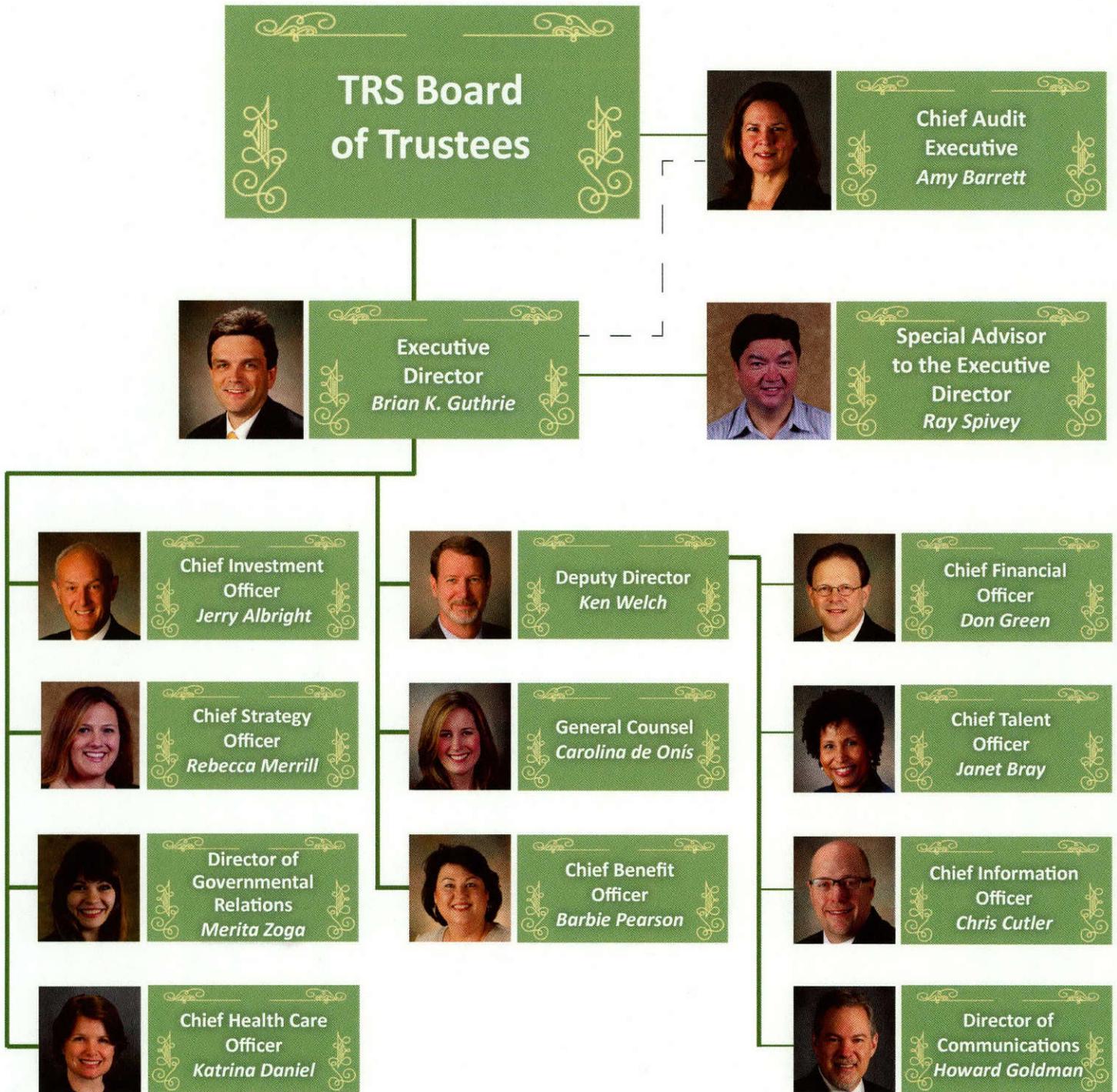
Respectfully submitted,



Brian K. Guthrie  
Executive Director



## Organization Chart



## Staff and Advisors

### EXECUTIVE ADMINISTRATIVE STAFF

Brian K. Guthrie, *Executive Director*  
 Ken Welch, *Deputy Director*  
 Jerry Albright, *Chief Investment Officer*  
 Carolina de Onís, *General Counsel*  
 Amy L. Barrett, *Chief Audit Executive*  
 Barbie Pearson, *Chief Benefit Officer*  
 Don Green, *Chief Financial Officer*  
 Katrina Daniel, *Chief Health Care Officer*  
 Chris Cutler, *Chief Information Officer*  
 Janet L. Bray, *Chief Talent Officer*  
 Rebecca K. Merrill, *Chief Strategy Officer*  
 Ray Spivey, *Special Advisor to the Executive Director*  
 Howard J. Goldman, *Director, Communications*  
 Merita Zoga, *Director, Governmental Relations*

### GENERAL INVESTMENT CONSULTANT

Aon Hewitt Investment Consulting, Inc., Chicago, IL

### CONSULTING ACTUARY

Gabriel, Roeder, Smith & Company, Dallas

### INTERNATIONAL TAX CONSULTING AND COMPLIANCE SERVICES

Ernst & Young, L.L.P., Austin and London, England

### INVESTMENT CONSULTANTS

Albourne America, L.L.C., San Francisco, CA  
 (Absolute Return)  
 BlackRock Investment Management, L.L.C.,  
 New York, NY (Private Equity Co-investments)  
 Grosvenor Capital Management, L.P., Chicago, IL  
 (Emerging Managers)  
 Hamilton Lane Advisors, L.L.C., San Francisco, CA  
 and Bala Cynwyd, PA (Private Equity)  
 LaSalle Investment Management, Inc., Chicago, IL  
 (Real Estate)  
 Lenox Park Advisory L.L.C., Austin  
 (Emerging Managers)  
 The Rock Creek Group, L.P., Washington, D.C.  
 (Emerging Managers)  
 The Townsend Group, Inc., Cleveland, OH  
 (Real Estate)

Tudor, Pickering, Holt & Co., L.L.C., Houston  
 (Energy and Natural Resources)  
 Valuation Research Corporation, New York, NY  
 (Private Investment Valuation)  
 W.D. Von Gonten & Co., Houston (Oil and Gas)

### INVESTMENT ADVISORS

Keith C. Brown, Ph.D., Austin

### AUDIT SERVICES

Texas State Auditor's Office, Austin

### FIDUCIARY COUNSEL

Reinhart Boerner Van Deuren, S.C., Milwaukee, WI

### MEDICAL BOARD

Dr. Alice Cox, Fredericksburg  
 Dr. James Reinartz, Austin  
 Dr. Larry D. Wilson, Austin

### TEXAS PUBLIC SCHOOL RETIRED EMPLOYEES GROUP INSURANCE PROGRAM ADVISORY COMMITTEE

Bill Barnes, Haslet  
 Marcia McNeil, Austin  
 Grace Mueller, McQueeney  
 Teresa Koehler, Houston  
 Dr. Celeste Cardenas, McAllen  
 Dr. H. John Fuller, Mineola  
 Dr. Bruce Gearing, Austin  
 Jesus H. Soto, San Antonio  
 Andrea Avery, Lancaster

### HEALTH CARE CONSULTANT

Gabriel, Roeder, Smith & Company, Dallas

### MASTER CUSTODIAN AND SECURITIES LENDING AGENT

State Street Bank and Trust Company, Boston, MA

### PERFORMANCE MEASUREMENT

State Street Bank and Trust Company, Boston, MA

*For a schedule of fees and commissions, please refer to the Investment Section.*

## Membership

### PENSION TRUST FUND

Membership of the Teacher Retirement System of Texas includes employees and retirees of state-supported educational institutions in Texas. At August 31, 2017, participating employers included the following:

Public School Districts	1,024
Charter Schools	170
Community and Junior Colleges	50
Senior Colleges and Universities	47
Regional Service Centers	20
Medical Schools	9
Other Education Districts	4
State Agencies	1
	1,325

Member Categories	Year Ended August 31,	
	2017	2016
<b>Current Members:</b>		
Active Contributing	864,233	847,631
Deferred Retirement Option	28	42
Inactive Non-vested	174,918	167,275
Inactive Vested	98,110	95,078
<b>Total Current Members</b>	<b>1,137,289</b>	<b>1,110,026</b>
<b>Retirement Recipients:</b>		
Service	379,765	370,761
Disability	11,802	9,650
Survivor *	16,201	13,503
<b>Total Retirement Recipients</b>	<b>407,768</b>	<b>393,914</b>
<b>TOTAL MEMBERSHIP</b>	<b>1,545,057</b>	<b>1,503,940</b>

\* Annuities Certain moved from Service to Survivor in 2017.

Population Changes	2017	2016
<b>Active Membership:</b>		
New Members	92,576	97,729
Members Withdrawing	(42,370)	(38,459)
Service Retirements	(20,986)	(20,833)
Disability Retirements	(791)	(791)
In-Service Deaths	(1,452)	(1,386)
Other Changes	286	(7,739)
<b>NET INCREASE</b>	<b>27,263</b>	<b>28,521</b>
<b>Retired Membership:</b>		
Retirements	21,777	21,624
Deaths After Retirement	(8,700)	(8,355)
Option Continuations	2,745	2,601
Other Changes	(1,968)	306
<b>NET INCREASE</b>	<b>13,854</b>	<b>16,176</b>

Active Member Profile	2017	2016
Average Annual Salary	\$47,330	\$46,343
Average Age	44.6	44.5
Average Years of Service	10.3	10.2

Annuitant and Beneficiary Profile	2017	2016
<b>Average Monthly Annuities</b>		
Life Annuities	\$2,060	\$2,035
Disability Annuities	\$1,178	\$1,231
Annuities Certain	\$1,125	\$1,108
<b>Average Age of Current Retirees</b>		
	71.2	70.9
<b>Average Age at Retirement</b>		
All Retirees	60.2	60.1
Current Year Retirees	61.9	61.8
<b>Average Years of Service</b>		
All Retirees	24.3	24.3
Current Year Retirees	23.1	23.4
<b>Average Salary at Retirement</b>		
All Retirees	\$44,527	\$43,800
Current Year Retirees	\$52,510	\$51,962
<b>Ratio of Current Members to Retirees</b>		
	2.8 to 1	2.8 to 1

### TEXAS PUBLIC SCHOOL RETIRED EMPLOYEES GROUP INSURANCE PROGRAM (TRS-CARE)

Participation for the Retired Plan is summarized below:

Member Categories	2017	2016
Retirees	204,987	200,231
Surviving Spouses	6,672	6,351
Surviving Children	125	106
Dependent Spouses and Children	56,643	54,840
<b>TOTAL</b>	<b>268,427</b>	<b>261,528</b>

There were 1,218 participating employers during fiscal year 2017.

### TEXAS ACTIVE SCHOOL EMPLOYEES UNIFORM GROUP BENEFITS PROGRAM (TRS-ACTIVECARE)

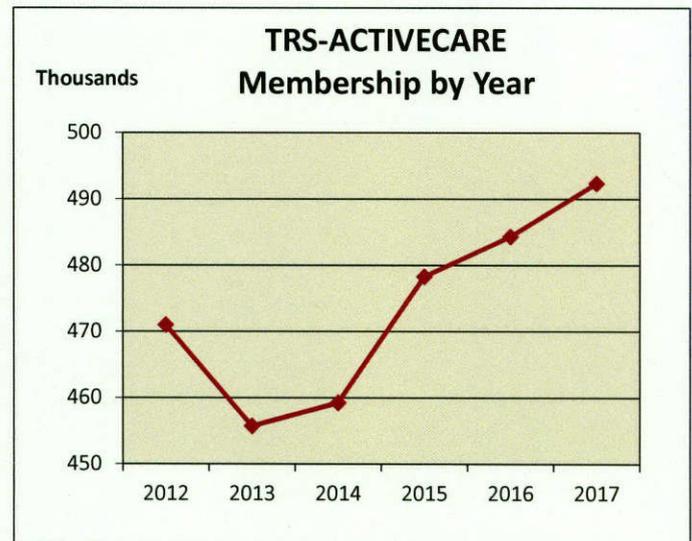
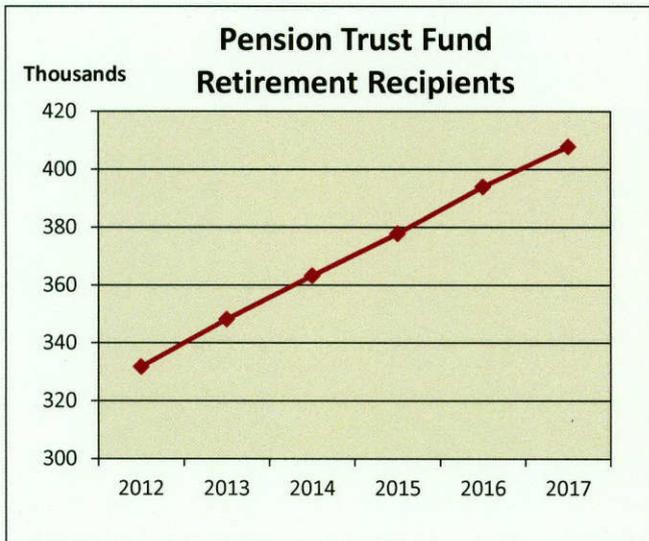
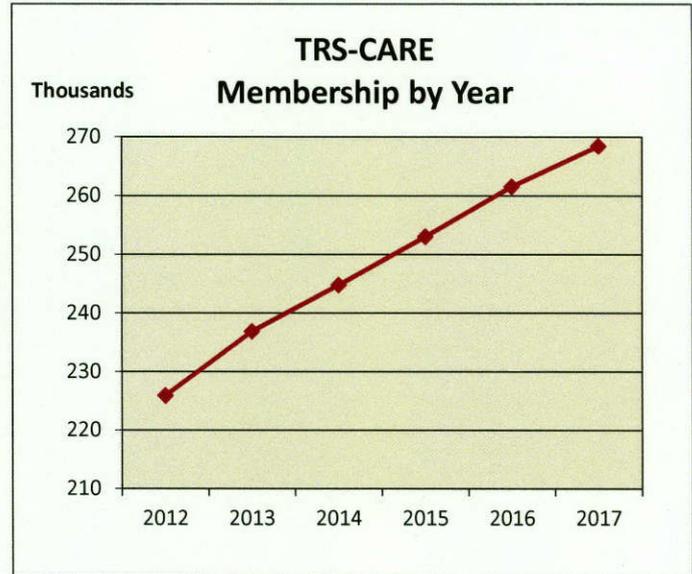
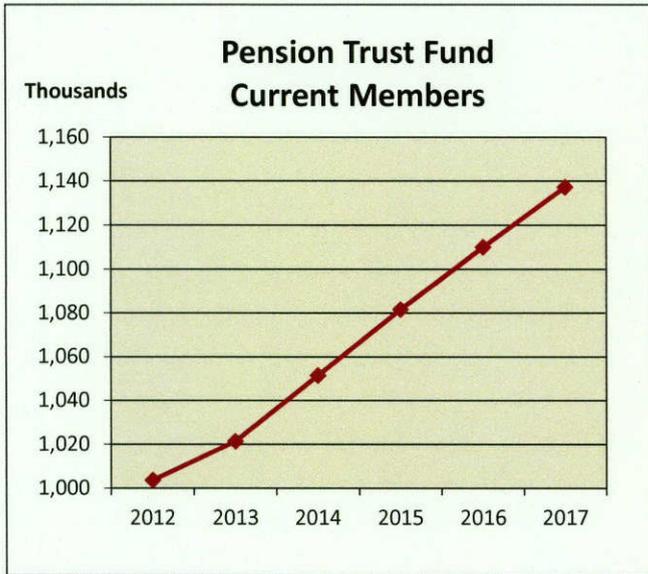
Participation for the Active Plan is summarized below:

Member Categories	2017	2016
Employees	305,234	296,523
Dependents	187,083	187,793
<b>TOTAL</b>	<b>492,317</b>	<b>484,316</b>

As of August 31, 2017 there were 1,093 participating employers.

## Membership

Using the data presented on the previous page, the following presents a graphical view of the growth of the system for Current Members, Retirement Recipients, TRS-Care and TRS-ActiveCare as of August 31, 2017.



## Communications

During fiscal year 2017, TRS communicated with members, retirees, participating employers, and the general public over the telephone as well as through group presentations, one-on-one meetings, print publications, webcasts, videos, social media, the agency's website, and email. TRS staff also spoke at conferences across the state to update members and retirees on their pension and health care benefits as well as TRS investment performance. Major communications from the past year are summarized below:

### PRINT PUBLICATIONS

During fiscal year 2017, TRS published three *TRS News* issues to provide members and retirees with important information relating to their benefits. Employers also received TRS-related information through 11 *Update* newsletters. Annual statements were distributed in October to all active members of the system. In early 2017, TRS published a high-level summary of its *Comprehensive Annual Financial Report*. TRS also published a number of other publications for members and retirees, including brochures and other materials related to TRS pension and health care benefits.

### THE INTERNET

In fiscal year 2017, TRS continued to seek improvements for the newly-redesigned external website. Enhancements scheduled for fall, 2017 include a responsive calendar, a "decision tree" function to improve search capabilities and a feature that allows website users to click on certain areas of charts and images to receive additional information. The site also offers improved access to persons with disabilities, reducing the need for those visitors to resize documents or scroll through multiple website pages to find the information they are seeking.

TRS also began using a new analytics tool to better track the activity on the website and continually improve the users' experience. Our statistics are from Oct, 2016 through August, 2017. During this time, analytics recorded 2,319,573 website visits with nearly 6 million page views. The number of unique users totaled 1,287,630.

*MyTRS*, the secure, member access portion of the website was promoted during the year through email, newsletter articles, social media, and the agency website. As of Aug. 31, 2016, 595,000 members and retirees had registered to participate in *MyTRS*, nearly 7.5% percent more than in the previous year.

### SOCIAL MEDIA

In fiscal year 2017, TRS broadened its engagement through social media with a growing number of members, retirees and others. TRS introduced a TRS\_Careers Instagram account featuring photos of TRS current employees and other content and expanded its use of LinkedIn to attract and recruit new employees. The agency recorded 11,778 Facebook likes. LinkedIn followers grew to 3,894 and Twitter followers numbered 3,429. In addition, TRS videos were viewed 134,072 times on YouTube.

### WEBCASTING OF BOARD MEETINGS

As part of its commitment to open and transparent communication, TRS continued to webcast board meetings during the past year. All board meetings are streamed live so members and others can watch the proceedings as they take place from anywhere in Texas or around the world. Each meeting is also recorded for on-demand playback. All TRS board meetings are archived on the TRS website where individual agenda items can be easily accessed through an online catalog.

## Communications

### ASSOCIATION MEETINGS

Early in the fiscal year, TRS continued its outreach to members and retirees through a series of Texas Retired Teacher Association meetings. TRS officials spoke to members and retirees at more than 30 conventions around the state and provided updates on TRS developments. These meetings provide an opportunity for TRS representatives to meet with members and retirees face-to-face and answer any questions they may have. Legislators or their representatives from the area also frequently attend the meetings.

### GROUP PRESENTATIONS AND INDIVIDUAL RETIREMENT COUNSELING SESSIONS

In September 2016, TRS successfully launched our remote counseling sessions conducted through the internet. Members have the option to schedule either a remote or in-person appointment with a TRS benefit counselor. Remote counseling allows members with a computer or tablet and an internet connection to meet with a benefit counselor without traveling to Austin.

In the past year, TRS made a number of group presentations to professional associations, employee and retiree groups and at regional education service centers. Presentations focused on retirement options, health care benefits for active and retired members, long-term care insurance, employment after retirement, and other TRS benefits. A total of 13,275 people attended 173 group presentations, and 15,400 people attended four conventions where TRS was represented.

In addition, 10,083 people visited in person with a TRS counselor – 9,534 of those in Austin, 129 people were helped via a remote counseling sessions, and 420 people were counseled in field office visit locations. Fiscal year 2017 was the eleventh year that one-on-one retirement counseling sessions were offered in limited field locations throughout Texas (450 available appointments in 10 cities).

### TELECOMMUNICATIONS

In fiscal year 2017, the agency's Benefit Counseling department handled a total of 550,865 calls. In addition, 212,326 calls were completed during the past year within the agency's automated telephone system.

TRS and its contractors also provided telephone assistance to a large number of participants seeking health care-related information. TRS-Care staff and contractors responded to 868,575 calls—a nearly 50 percent increase in call volume from the prior fiscal year. The first significant changes to TRS-Care in twelve years took effect on Jan. 1, 2017 and drove increased demand from participants for information from TRS and its vendors. In early 2017, TRS contracted with a third-party call center dedicated to TRS-Care participants to meet the growing demand and ensure low wait times. TRS-ActiveCare staff and contractors responded to 326,964 calls during the year, which reflected a decrease in call volume of 8 percent from the prior fiscal year likely due to modest plan changes and increased reliance on online tools and content.

### COORDINATION WITH REPORTING ENTITIES

The TRS Reporting and Query System (TRAQS), the agency's internet-based reporting system for employers, had 1,325 reporting entities submit monthly reports to TRS by year end. During the year, 10 professional association and software user group presentations were attended by 469 people. Three participating employers traveled to TRS for on-site training. Three live webinars were conducted in cooperation with an agency serving charter schools attended by 29 people and these webinars were then linked on the TRS website for viewing by any Reporting Entity

## Communications

contact who wished to do so. One presentation on Employment after Retirement and Surcharges was conducted for an ISD at the request of and in partnership with TRS Internal Audit that was attended by 17 people.

TRS engaged TRS-ActiveCare stakeholders in person, online, and over the phone during fiscal year 2017. TRS-ActiveCare contractors held 27 in-person trainings around the state and 8 live webinars for benefits administrators to prepare for 2017-2018 TRS-ActiveCare annual enrollment. In addition, TRS-ActiveCare contractors hosted an annual summit in April for third-party administrators (TPAs) that carry out enrollment and eligibility functions for certain TRS-ActiveCare districts. Thirty TPAs attended the summit, representing a majority of TRS-ActiveCare districts that contract with third parties for these functions.

Online tools continued to serve an important role as a means to communicate information to TRS-ActiveCare benefits administrators and plan participants. TRS-ActiveCare participants accessed on-demand webinars 4,353 times to learn about their benefits. Throughout the year, the TRS-ActiveCare website was viewed 292,237 times, and 60,418 visitors accessed coverage documents through the website. There were 27,260 total visits to ALEX, the online benefits counselor that provides an overview of plan options—a nearly 20 percent increase in visits since it ALEX was launched in fiscal year 2016.

TRS and its TRS-ActiveCare contractors released a new online toolkit for benefits administrators that provides in-depth training on important aspects of a benefits administrator's role. The toolkit was viewed 125 times from its release in July through the end of August 2017. TRS' contractors continued to provide ongoing support over the phone to benefit administrators through the BA Advocate Team and to TPAs throughout the year, holding more than 25 calls with TPAs to ensure the success of TRS-ActiveCare enrollment.

### FINANCIAL AWARENESS INITIATIVES

During the past fiscal year, TRS developed an outreach program to help members learn about retirement self-sufficiency through a series of financial awareness videos. Through these short, animated whiteboard videos, a cast of characters will guide viewers through three important concepts: "what you have – your TRS defined benefit plan;" "what you need – to save more;" and "how to get it – by saving smart." The series will cover a variety of topics, including how to estimate TRS benefits, understanding how TRS benefits may affect members' Social Security benefits, and the impact of inflation on their TRS benefits. Most videos will cover topics applicable to all members. However, some will target early- and mid-career members, and others will target members nearing retirement. TRS began releasing the videos in September 2016 and plans to continue releasing them through early 2017.

### HEALTH CARE COMMUNICATION INITIATIVES

TRS is dedicated to helping participants in its health plans get the most out of their health care coverage. Communication is key to this objective. In fiscal year 2017, the Health and Insurance Benefits Department (HIB) advanced important initiatives to help participants understand and use their benefits. These efforts to engage participants will help TRS inform and prepare them for plan changes passed by the 85<sup>th</sup> Texas Legislature that will take effect in 2018.

In May 2017, HIB launched *The Pulse*, a monthly email newsletter for TRS health plan participants. With distinct versions for retirees and active employees, *The Pulse* provides tailored information to these populations about their benefits. As of August 2017, there are 146,996 subscribers to the version for active employees and 44,227 subscribers to the version for retirees.

## Communications

*The Pulse* links to online articles on the new Health Care News section of the TRS website and drives users online where they can find new health care content specific to them. HIB's objective is to provide health care information relevant to an individual's circumstances. Consistent with this strategy, HIB reorganized its health care website content around three key groups—active employees, retirees who are not yet eligible for Medicare, and retirees who are eligible for Medicare—to deliver content specific to these populations that have different health benefits.

During the first quarter of fiscal year 2017, TRS held more than 100 in-person meetings with retirees to inform them of the change to Humana as the administrator for the TRS-Care Medicare Advantage plan and answer questions among retirees about the transition to the Medicare prescription drug plan as the sole option for drug coverage in 2017. TRS reached more than 18,000 retirees through that initiative.

Building on the success of the 2017 in-person meetings, TRS and its health plan administrators—including Humana, Aetna, and CVS Caremark—will hold more than 60 face-to-face meetings across the state in the first quarter of fiscal year 2018 to inform participants about the changes to retiree health plans that take effect Jan. 1, 2018.

TRS developed two videos—one announcing the TRS-ActiveCare plan changes and another introducing the TRS-Care changes that will take effect in 2018. HIB also tracked the most common questions about the 2018 plan changes and developed an online FAQ for participants. HIB plans to continue to provide information each month through *The Pulse* leading up to Jan. 1, 2018, expand online content, and refine its communication strategies as it receives feedback from participants and stakeholders.



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# FINANCIAL SECTION



Anita Smith Palmer "Morning Count," © 2000





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## Independent Auditor's Report

### Teacher Retirement System Board of Trustees

Mr. R. David Kelly, Chairman  
Ms. Dolores Ramirez, Vice Chair  
Ms. T. Karen Charleston  
Mr. Joe Colonna  
Mr. David Corpus  
Mr. John Elliott  
Dr. Greg Gibson  
Mr. Christopher Moss

### Report on the Financial Statements

We have audited the accompanying financial statements of the major enterprise fund and the aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the Teacher Retirement System (System), a component unit of the State of Texas, as of and for the year ended August 31, 2017, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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

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

### *Auditor's Responsibility*

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial

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SAO Report No. 18-305

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

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

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the major enterprise fund and aggregate remaining funds information, consisting of the fiduciary funds and the non-major enterprise fund of the System as of August 31, 2017, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matters***

#### ***Teacher Retirement System Financial Statements***

As discussed in Note 1, the financial statements of the System are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the major enterprise fund and the aggregate remaining funds information of the State that is attributable to the transactions of the System. They do not purport to, and do not, present fairly the financial position of the State of Texas as of August 31, 2017, the changes in its financial position, or where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

#### ***Investments with Values that are not Readily Determined***

As discussed in Note 1, the financial statements include investments valued at approximately \$59.0 billion as of August 31, 2017, whose fair values have been estimated by management in the absence of readily determinable fair values. Our opinion is not modified with respect to this matter.

*Implementation of Governmental Accounting Standards Board Statement 74*

As discussed in Note 1, the System adopted the provisions of Governmental Accounting Standards Board Statement 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, in fiscal year 2017. 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, Schedule of Changes in the Employers' Net Pension Liability and Related Ratios, Schedule of Employer and Non-Employer Contributing Entity Actuarially Determined Contributions (including the note to that schedule), Schedule of Investment Returns, and Schedule of Changes in the Employers' Net OPEB Liability and Related Ratios, 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. 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 opinions on the financial statements that collectively comprise the System's basic financial statements. The information in Exhibit A and Schedules 1 through 3, as listed in the table of contents is presented for purposes of additional analysis and are not a required part of the financial statements.

The information in Exhibit A and Schedules 1 through 3, as listed in the table of contents is the responsibility of management and was derived from and relates 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 information in Exhibit A and Schedules 1 through 3, as listed in the

table of contents is fairly stated in all material respects in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial, Statistical, and Benefits sections 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 it.

***Report on Summarized Comparative Information***

We have previously audited the System's fiscal year 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 17, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended August 31, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 20, 2017, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.



Lisa R. Collier, CPA, CFE, CIDA  
First Assistant State Auditor

November 20, 2017

## Management's Discussion and Analysis

The following is Management's Discussion and Analysis (MD&A) of the Teacher Retirement System's (TRS or system) financial performance for the fiscal year ended August 31, 2017. The information presented here should be considered in conjunction with other areas of the Financial Section as well as information presented in the Executive Director's Letter of Transmittal in the Introductory Section of the *TRS Comprehensive Annual Financial Report*.

### FINANCIAL HIGHLIGHTS

- The net position of the TRS Pension Trust Fund was \$147.4 billion as of August 31, 2017, an increase of 10 percent, in fiscal year 2017.
- As of August 31, 2017, the date of the most recent actuarial valuation, the net pension liability on a GAAP basis was \$32.0 billion, which is a decrease of \$5.8 billion from August 31, 2016 when the liability was \$37.8 billion. As of August 31, 2017, plan net position was 82.2 percent of the total pension liability.
- The annual rate of return on investments for the pension fund for the year ended August 31, 2017 was 12.6 percent. The rate of return for fiscal year 2016 was 7.4 percent.
- The net position of TRS-Care was \$399.5 million as of August 31, 2017, a decrease of \$242.0 million from fiscal year end 2016.
- As of August 31, 2017, the date of the most recent actuarial valuation which was calculated in conformity with GASB 74, TRS-Care trust fund's net Other Post-Employment Benefit (OPEB) liability on a GAAP basis was \$43.5 billion. The total liability decreased \$33.5 billion from the beginning of the year. The majority of the decrease is due to changes in plan benefit terms and changes in actuarial assumptions. As of August 31, 2017, plan net position was 0.91 percent of the total OPEB liability.
- TRS-ActiveCare had a net position of \$97.8 million as of August 31, 2017, an increase of \$44.3 million or 83 percent in fiscal year 2017.

### OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the TRS financial presentation, which consists of the following components:

- Fund financial statements
- Notes to the financial statements
- Required supplementary information
- Other supplementary schedules

Collectively, this information presents the net position available for pension and other post-employment benefits, health care benefits, and other purposes as of August 31, 2017, and summarizes any changes in net position for the year then ended. The information available in each of these sections is summarized as follows:

## *Management's Discussion and Analysis*

### **Fund Financial Statements**

Individual fund financial statements are presented for all fiduciary and proprietary funds as of August 31, 2017 and for the year then ended. Comparative data in total as of August 31, 2016, and for the year then ended has also been presented with the exception of agency funds. These financial statements reflect the resources available to pay benefits to retirees and other beneficiaries, to pay health care benefits for covered participants, and to administer the 403(b) Administrative Program. Fiduciary funds presented include the Pension Trust Fund, TRS-Care and Agency Funds. Fiduciary funds are used to account for resources held for the benefit of parties outside of TRS. Proprietary funds account for business-type activities and include the TRS-ActiveCare and the non-major 403(b) Administrative Program enterprise funds.

### **Notes to the Financial Statements**

The financial statement notes provide additional information that is essential to a full understanding of the data provided in the fund financial statements. Information available in the notes to the financial statements is described below:

- Note 1 provides a summary of significant accounting policies, including the basis of accounting, budgets and appropriations, explanations of major asset and liability classes, and legal reserve account information. Also included is a general description of TRS as well as a description of each of the funds administered by TRS.
- Note 2 provides information on capital assets.
- Note 3 describes deposits and investments, including investing authority, fair value measurements, and deposit and investment risk factors.
- Note 4 provides information on employee compensable leave.
- Note 5 provides information on the operating lease.
- Note 6 provides information on fringe benefits paid by the state and federal government on behalf of employees and participants of the health care plans.
- Note 7 describes deferred compensation plans available to TRS employees.
- Note 8 provides information on contingent liabilities such as TRS employees' accumulated sick leave, lump sum death benefits, incentive compensation, retiree benefits and any pending litigation.
- Note 9 addresses TRS' continuance subject to review under the Texas Sunset Act.
- Note 10 provides other post-employment health care benefits disclosure information for retired public school employees, including detailed data on the plan description, contributions, and the net Other Post-Employment Benefits (OPEB) liability.
- Note 11 provides other post-employment healthcare benefits disclosure information for TRS employees participation in the Employer's Retirement System (ERS) of Texas plan.

## Management's Discussion and Analysis

- Note 12 provides pension disclosure information including detailed data on the plan description, contributions, legal reserve balances and the net pension liability.
- Note 13 addresses risk management issues related to ActiveCare, the health benefits program for active school district employees.
- Note 14 provides information including description, criteria for inclusion, reporting method, fund type, fiscal year-end, and information about how to obtain the separate financial statements for each component unit.
- Note 15 provides information on subsequent events.

### Required Supplementary Information

Required supplementary information for the pension plan consists of schedules related to the net pension liability, contributions from employers and the non-employer contributing entity, and the annual money weighted rate of return on pension plan investments. RSI for Care, the other post-employment benefit plan (OPEB) administered by TRS, includes schedules related to the net OPEB liability and the contributions from the participating employers. Also included in this component is Management's Discussion and Analysis.

### Other Supplementary Schedules

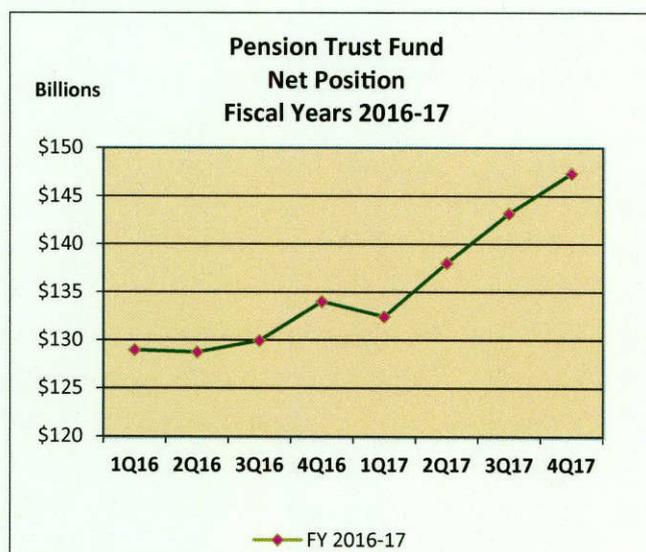
Other schedules include information on agency funds, changes in statutory reserve account balances, schedule of administrative and investing activity expenses, and payments to consultants.

## FINANCIAL ANALYSIS OF TRS FUNDS

### Pension and Other Employee Benefit Trust Funds

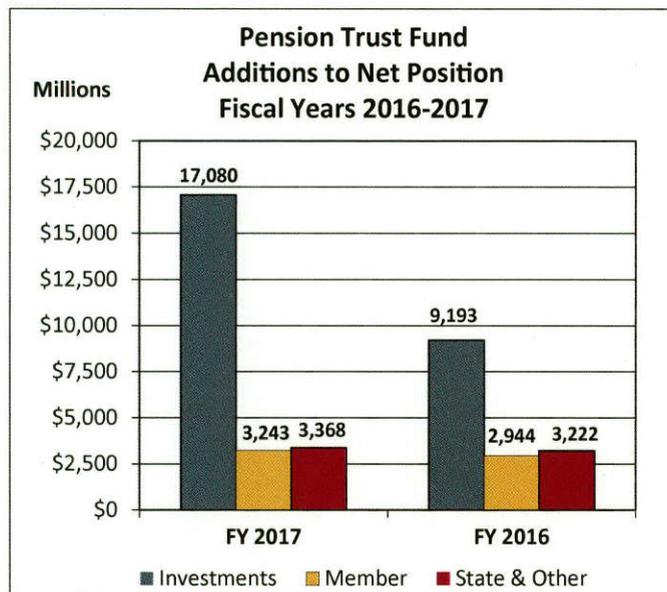
#### Pension Trust Fund

Net position held in trust for benefits at August 31, 2017 was \$147.4 billion, an increase of \$13.4 billion from the \$134.0 billion at August 31, 2016.



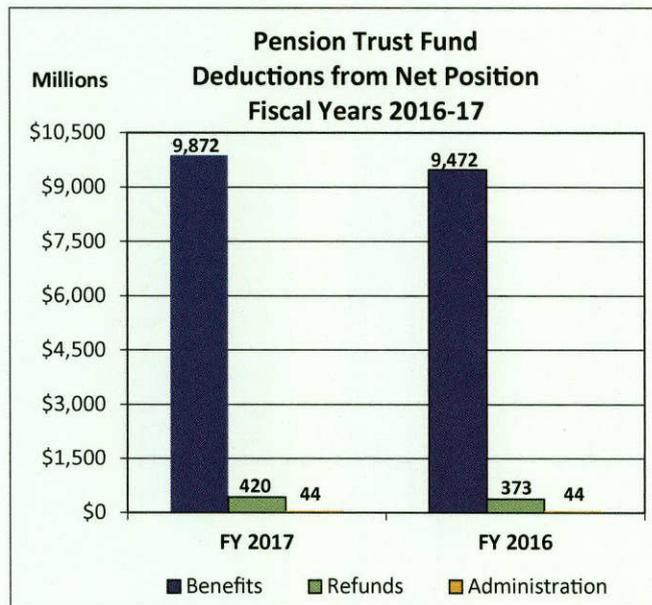
## Management’s Discussion and Analysis

Refer to the graph below for a graph of Additions to Net Position. Fiscal year 2017 investment gain was \$17.1 billion, an increase of \$7.9 billion over 2016. Net investment gain includes interest from investing activities, investment dividends, net increases (decreases) in the fair value of investments, and net income from securities lending activities. In fiscal year 2017, the fund experienced generally positive returns across most asset classes due to slower than expected growth and inflation, an ongoing tightening of monetary policy, a healthy market rally which was fueled by strong earnings, and an outperformance of emerging markets compared to developed markets. Current year additions from member contributions were \$3.2 billion while state contributions and other additions totaled \$3.4 billion. Total contributions and other additions increased \$444.2 million, or 7.2 percent, during fiscal year 2017. The member contribution rate increased from 7.2 percent in fiscal year 2016 to 7.7 percent in fiscal year 2017 and accounted for the increase in member contributions. Employer and state contributions increased 4.5 percent, a slight increase over 2016. The increase is attributable to normal payroll growth as the state contribution rate remained at 6.8 percent for fiscal year 2017, the fourth year in a row since the change in 2014.



Deductions from TRS net position held in trust for benefits are predominantly retirement, death, and survivor benefit payments. During fiscal year 2017, retirement benefits and other payments totaled \$9.9 billion, an increase of \$400.6 million, or 4.2 percent. Refunds of Contributions for fiscal year 2017 were \$420.4 million, an increase of \$47.0 million from fiscal year 2016. Administrative expenses were \$44.2 million compared to \$44.4 from fiscal year 2016. Administrative expenses, excluding investing activities expense, on a cost per member basis were \$28.60 for fiscal year 2017 as compared to \$29.52 in fiscal year 2016. Investment cost per member was \$141.17 for fiscal year 2017. Investment expense in basis points of net position was 15.50 for fiscal year 2017 and was calculated using average net asset value. Investment expense in basis points for fiscal year 2016 was 18.53.

## Management's Discussion and Analysis

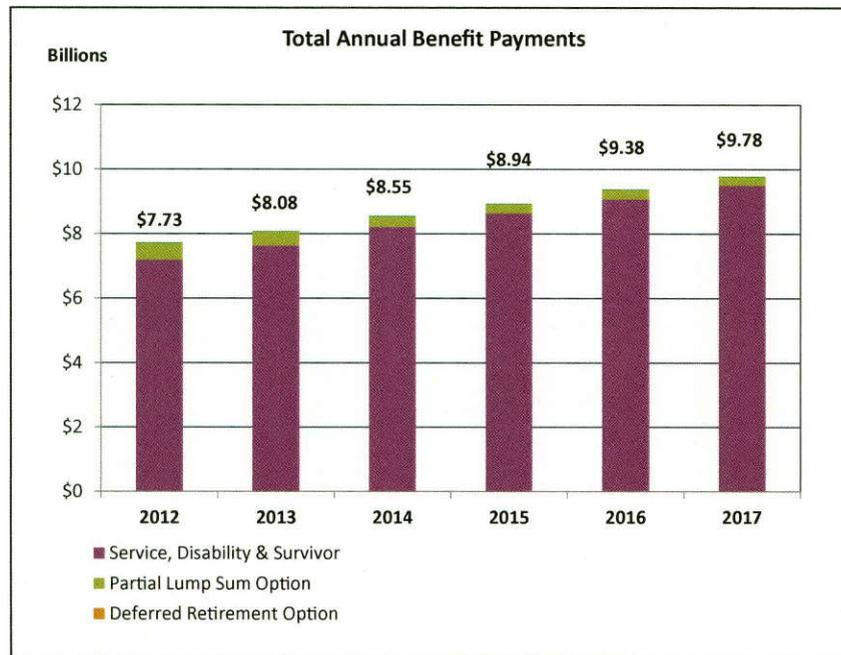


**Growth of the System** - As of August 2017, the monthly annuity payroll had grown to \$793 million, and TRS was paying benefits to 407,768 recipients. Refer to the graph on the following page for details on benefit payments by type of recipient.

Service recipients include retirees and beneficiaries receiving continuing monthly annuity payments. Disability recipients are disabled members who are receiving continuing monthly disability payments. Survivor recipients are beneficiaries who have elected to receive death benefits in the form of monthly benefits. The number of retiree accounts increased by 13,854 during fiscal year 2017.

Of the current TRS member accounts, 864,261 (active contributing and deferred retirement option participants) were employed during fiscal year 2017 and made contributions to the system. The remaining 273,028 members were no longer employed by TRS covered employers, but maintained their membership in TRS by leaving their contributions in the system. The number of current member accounts increased by 27,263 during fiscal year 2017.

## Management's Discussion and Analysis



**TRS Enterprise Application Modernization (TEAM)** is the name of the related projects that will modernize TRS technologies, allowing greater efficiency and flexibility in providing services to TRS membership. The Line of Business (LOB) project phase I was launched October 2, 2017 and will replace some of TRS' mainframe-based pension administration systems.

### Statement of Net Position - Pension Trust Fund (Dollars in Thousands)

	Fiscal Year 2017	Fiscal Year 2016	Dollar Change	Percentage Change
<b>Assets</b>				
Cash and Receivables	\$ 1,721,984	\$ 1,965,622	\$ (243,638)	(12.4) %
Investments	145,916,402	132,762,467	13,153,935	9.9
Invested Securities Lending Collateral	17,654,071	18,128,073	(474,002)	(2.6)
Capital Assets	86,885	69,485	17,400	25.0
<b>TOTAL ASSETS</b>	<b>\$ 165,379,342</b>	<b>\$ 152,925,647</b>	<b>\$ 12,453,695</b>	<b>8.1 %</b>
<b>Liabilities</b>				
Benefits Payable	\$ 128,998	\$ 138,542	\$ (9,544)	(6.9) %
Investments Purchased Payable/Securities				
Sold Short	801,219	615,627	185,592	30.1
Accounts Payable and Other	51,548	46,817	4,731	10.1
Collateral Obligations	17,035,655	18,116,023	(1,080,368)	(6.0)
<b>TOTAL LIABILITIES</b>	<b>\$ 18,017,420</b>	<b>\$ 18,917,009</b>	<b>\$ (899,589)</b>	<b>(4.8) %</b>
<b>Total Net Position Restricted for Pensions</b>	<b>\$ 147,361,922</b>	<b>\$ 134,008,638</b>	<b>\$ 13,353,284</b>	<b>10.0 %</b>

## Management's Discussion and Analysis

### Statement of Changes in Net Position - Pension Trust Fund (Dollars in Thousands)

	Fiscal Year 2017	Fiscal Year 2016	Dollar Change	Percentage Change
<b>Additions</b>				
Member Contributions	\$ 3,242,556	\$ 2,943,669	\$ 298,887	10.2 %
Non-Employer Contributing Entity Contributions	1,697,963	1,675,631	22,332	1.3
Participating Employers Contributions	1,588,309	1,483,389	104,920	7.1
Other Revenue	81,367	63,334	18,033	28.5
Investment Income	17,079,807	9,193,281	7,886,526	85.8
<b>TOTAL ADDITIONS</b>	<b>\$ 23,690,002</b>	<b>\$ 15,359,304</b>	<b>\$ 8,330,698</b>	<b>54.2 %</b>
<b>Deductions</b>				
Retirement Benefits and Other	\$ 9,872,107	\$ 9,471,551	\$ 400,556	4.2 %
Refunds of Contributions	420,421	373,419	47,002	12.6
Administrative Expenses	44,189	44,403	(214)	(0.5)
<b>TOTAL DEDUCTIONS</b>	<b>\$ 10,336,717</b>	<b>\$ 9,889,373</b>	<b>\$ 447,344</b>	<b>4.5 %</b>
<b>Change in Net Position</b>	<b>\$ 13,353,285</b>	<b>\$ 5,469,931</b>	<b>\$ 7,883,354</b>	<b>144.1 %</b>

## Management's Discussion and Analysis

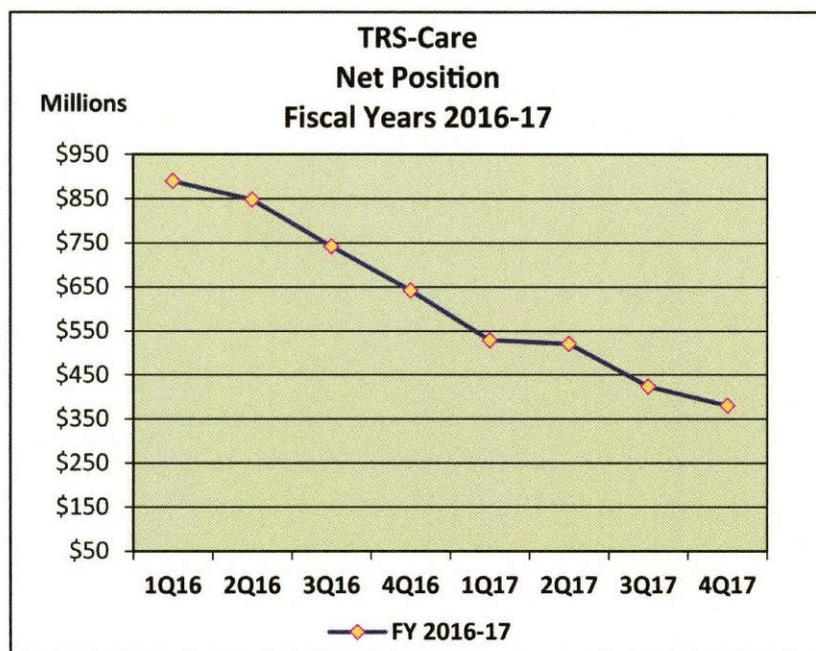
### TRS-Care

The net position of TRS-Care at August 31, 2017 was \$399.5 million, a decrease of \$242.0 million from the \$641.5 million at August 31, 2016.

Additions to net position include premium contributions received from retirees, active members, participating employers and the State, federal revenue and investment earnings. Total contributions of \$732.4 million increased by \$13.8 million from the \$718.6 million in fiscal year 2016 due to normal payroll growth. There was a supplemental appropriation from the State's General Fund in the amount of \$15.6 million.

Federal Revenue received in fiscal year 2017 includes Retiree Drug Subsidy (RDS) payments totaling \$5.3 million and Employee Group Waiver Plan (EGWP) subsidy payments totaling \$96.4 million. Rebates and discount income increased by \$72.7 million to \$291.7 million due to drug cost inflation. The remaining \$20.1 million is a result of Medicare Part D Coverage Gap payment increase as drug costs and utilization increased. Investment Income was \$4.7 million, which was a decline from 2016 and correlated to the decline in Cash in the State Treasury of \$274.5 million in fiscal year 2017.

Deductions from net position totaled \$1.4 billion during fiscal year 2017. This is a decrease of \$10.7 million over fiscal year 2016. The decrease was due primarily to an increase of \$29.3 million in health care premiums paid by retirees, which was considered a contra deduction in fiscal year 2017 due to the requirements of GASB 74. The Medicare Advantage premiums decreased \$7.4 million. Health care fees decreased by \$1.8 million because of the termination of the Affordable Care Act mandated Transitional Reinsurance Program for calendar year 2017. Administrative expenses were \$5.0 million, an increase of 5.4 percent from fiscal year 2016.



## Management's Discussion and Analysis

### Statement of Net Position - TRS-Care (Dollars in Thousands)

	Fiscal Year 2017	Fiscal Year 2016	Dollar Change	Percentage Change
<b>Assets</b>				
Cash, Receivables and Capital Assets	\$ 526,398	\$ 777,316	\$ (250,918)	(32.3) %
<b>TOTAL ASSETS</b>	<b>\$ 526,398</b>	<b>\$ 777,316</b>	<b>\$ (250,918)</b>	<b>(32.3) %</b>
<b>Liabilities</b>				
Accounts Payables and Other	\$ 926	\$ 915	\$ 11	1.2 %
Health Care Fees Payable	360	1,735	(1,375)	(79.3)
Health Care Claims Payables	125,576	133,180	(7,604)	(5.7)
<b>TOTAL LIABILITIES</b>	<b>\$ 126,862</b>	<b>\$ 135,830</b>	<b>\$ (8,968)</b>	<b>(6.6) %</b>
<b>Total Net Position</b>	<b>\$ 399,536</b>	<b>\$ 641,486</b>	<b>\$ (241,950)</b>	<b>(37.7) %</b>

### Statement of Changes in Net Position - TRS-Care (Dollars in Thousands)

	Fiscal Year 2017	Fiscal Year 2016	Dollar Change	Percentage Change
<b>Additions</b>				
Member Contributions	\$ 213,241	\$ 208,582	\$ 4,659	2.2 %
Non-Employer Contributing Entity Contributions	303,761	297,071	6,690	2.3
Participating Employers Contributions	215,360	212,936	2,424	1.1
Rebates and Discount Income	291,726	218,995	72,731	33.2
Federal Revenue	101,719	124,740	(23,021)	(18.5)
Other Revenue	529	89	440	494.4
Investment Income	4,697	5,422	(725)	(13.4)
Supplemental Appropriation from State's General Fund - Non-Employer Contributing Entity	15,559		15,559	0.0
<b>TOTAL ADDITIONS</b>	<b>\$ 1,146,592</b>	<b>\$ 1,067,835</b>	<b>\$ 78,757</b>	<b>7.4 %</b>
<b>Deductions</b>				
Health Care Claims	\$ 1,678,892	\$ 1,651,713	\$ 27,179	1.6 %
Less: Health Care Premiums Paid by Retirees	(404,028)	(374,736)	(29,292)	7.8
Health Care Claims Processing	45,873	45,485	388	0.9
Insurance Premium Payments	61,793	69,229	(7,436)	(10.7)
Health Care Fees	1,058	2,876	(1,818)	(63.2)
Administrative Expenses	4,954	4,701	253	5.4
<b>TOTAL DEDUCTIONS</b>	<b>\$ 1,388,542</b>	<b>\$ 1,399,268</b>	<b>\$ (10,726)</b>	<b>(0.8) %</b>
<b>Change in Net Position</b>	<b>\$ (241,950)</b>	<b>\$ (331,433)</b>	<b>\$ 89,483</b>	<b>27.0 %</b>

## Management's Discussion and Analysis

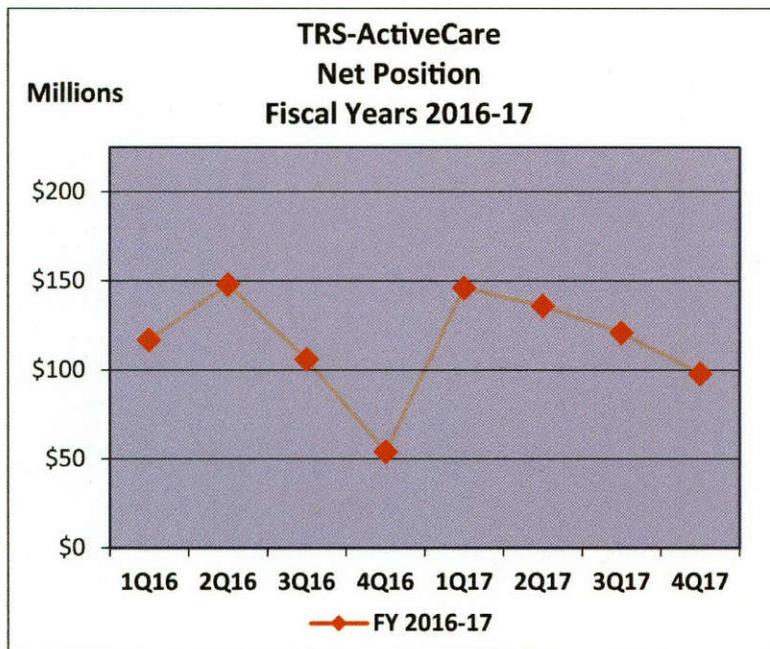
### Enterprise Funds

#### TRS-ActiveCare

The TRS-ActiveCare program operates under the authority of the Texas Insurance Code, Title 8, Subtitle H, Chapter 1579 and the Texas Administrative Code, Title 34, Part 3, Chapter 41, and began operations in fiscal year 2003. The Net Position of the plan was \$97.8 million at the end of fiscal year 2017, an increase of \$44.3 million or 82.6 percent from fiscal year 2016.

Operating revenues for fiscal year 2017 included \$2.2 billion from health care premiums, an increase of \$166 million, or 8.0 percent over fiscal year 2016. This was primarily due to premium rates and enrollment increases. Investment income for the year was \$4.7 million, an increase of \$1.6 million, or 51.6 percent from fiscal year 2016. Other revenues for 2017 totaled \$321 thousand, a decrease of \$35 thousand from fiscal year 2016.

Health care claims for fiscal year 2017 were \$1.85 billion, a \$78 million, or 4.4 percent increase over the \$1.77 billion in fiscal year 2016 due to health care cost inflation. Other expenses included claims processing costs of \$120 million, \$227.1 million for HMO premium payments, and \$3.3 million for administrative expenses. Health care fees mandated by the Affordable Care Act totaled \$4.2 million.



## Management's Discussion and Analysis

### Statement of Net Position - TRS-ActiveCare (Dollars in Thousands)

	Fiscal Year		Fiscal Year		Dollar	Percentage
	2017		2016		Change	Change
<b>Assets</b>						
Cash and Receivables	\$	373,677	\$	349,990	\$ 23,687	6.8 %
<b>TOTAL ASSETS</b>		373,677		349,990	23,687	6.8 %
<b>Liabilities</b>						
Accounts Payable and Other	\$	551	\$	347	\$ 204	58.8 %
Unearned Premium Revenue		402			402	
Premiums and Fees Payable		19,534		25,195	(5,661)	(22.5)
Health Care Claims Payable		255,385		270,897	(15,512)	(5.7)
<b>TOTAL LIABILITIES</b>	\$	275,872	\$	296,439	\$ (20,567)	(6.9) %
<b>Total Net Position</b>	\$	97,805	\$	53,551	\$ 44,254	82.6 %

### Statement of Revenues, Expenses, and Changes in Net Position - TRS-ActiveCare (Dollars in Thousands)

	Fiscal Year		Fiscal Year		Dollar	Percentage
	2017		2016		Change	Change
<b>Revenues (Operating and Non-Operating)</b>						
Health Care Premiums	\$	2,240,008	\$	2,073,564	\$ 166,444	8.0 %
Investment Income		4,669		3,079	1,590	51.6
Other Revenue		321		356	(35)	(9.8)
<b>TOTAL REVENUE</b>	\$	2,244,998	\$	2,076,999	\$ 167,999	8.1 %
<b>Operating Expenses</b>						
Health Care Claims	\$	1,846,526	\$	1,768,287	\$ 78,239	4.4 %
Health Care Claims Processing		119,584		111,988	7,596	6.8
Health Care Fees		4,200		13,814	(9,614)	(69.6)
Premium Payments to HMOs		227,089		214,529	12,560	5.9
Administrative Expenses		3,345		2,645	700	26.5
<b>TOTAL EXPENSES</b>	\$	2,200,744	\$	2,111,263	\$ 89,481	4.2 %
<b>Change in Net Position</b>	\$	44,254	\$	(34,264)	\$ 78,518	(229.2) %

#### REQUEST FOR INFORMATION

This financial report is designed to provide a general overview of the Teacher Retirement System for those with an interest in the system's finances.

Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Communications Department of the Teacher Retirement System, 1000 Red River Street, Austin, Texas 78701.

## Statement of Fiduciary Net Position

AS OF AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

ASSETS	Fiduciary Fund Types	
	Pension and Other Employee Benefit Trust Funds	
	Pension Trust Fund	TRS-Care
<b>Cash</b>		
Cash in State Treasury	\$ 303,574,622	\$ 221,723,009
Cash in Bank (Note 3B)	129,537,801	
Cash on Hand (Note 3B)	3,095,144	
TOTAL CASH	\$ 436,207,567	\$ 221,723,009
<b>Receivables</b>		
Sale of Investments	\$ 670,312,268	\$
Interest and Dividends	234,907,858	349,140
Member and Retiree	1,252,003	61,728,292
Service Credit Purchases	16,377,376	
Participating Employers	294,007,295	25,190,402
Due from State's General Fund	66,647,068	19,889,709
Due from Employees Retirement System of Texas	1,941,433	
Prepaid Expenses and Deposits	131,981	
Other	199,308	196,808,000
TOTAL RECEIVABLES	\$ 1,285,776,590	\$ 303,965,543
<b>Investments (Note 1F and 3)</b>		
Short-Term Investment Fund	\$ 3,910,166,490	\$
Short-Term Foreign Currency Contracts	(27,073)	
Equity Investments	49,791,863,021	
Fixed Income Investments	21,741,743,293	
Alternative Investments	59,008,168,730	
Derivative Investments	(27,791,460)	
Pooled Investments	11,492,278,916	
TOTAL INVESTMENTS	\$ 145,916,401,917	\$ 0
Invested Securities Lending Collateral	\$ 17,654,070,642	\$ 0
<b>Capital Assets (Note 2)</b>		
Intangible Assets	\$ 11,755,403	\$
Less Accumulated Amortization	(10,332,605)	
Depreciable Assets	57,348,438	
Less Accumulated Depreciation	(35,844,016)	
Non-Depreciable Assets	63,958,028	709,417
TOTAL CAPITAL ASSETS	\$ 86,885,248	\$ 709,417
<b>TOTAL ASSETS</b>	\$ 165,379,341,964	\$ 526,397,969



Fiduciary Fund Types			
Total Pension and Other Employee Benefit Trust Funds		Agency Funds Child Support Employee Deductions	
2017	2016		
\$ 525,297,631	\$ 810,059,891	\$	6,612
129,537,801	142,480,269		
3,095,144	1,994,151		
<u>\$ 657,930,576</u>	<u>\$ 954,534,311</u>	<u>\$</u>	<u>6,612</u>
\$ 670,312,268	\$ 943,213,488	\$	
235,256,998	219,150,693		
62,980,295	31,879,247		
16,377,376	10,311,624		
319,197,697	299,510,130		
86,536,777	77,682,267		
1,941,433	1,812,677		
131,981	69,608		
197,007,308	204,774,790		
<u>\$ 1,589,742,133</u>	<u>\$ 1,788,404,524</u>	<u>\$</u>	<u>0</u>
\$ 3,910,166,490	\$ 3,227,490,758	\$	
(27,073)	(14,948)		
49,791,863,021	47,785,677,843		
21,741,743,293	20,483,627,614		
59,008,168,730	52,120,428,956		
(27,791,460)	41,503,506		
11,492,278,916	9,103,753,601		
<u>\$ 145,916,401,917</u>	<u>\$ 132,762,467,330</u>	<u>\$</u>	<u>0</u>
<u>\$ 17,654,070,642</u>	<u>\$ 18,128,072,568</u>	<u>\$</u>	<u>0</u>
\$ 11,755,403	\$ 10,727,011	\$	
(10,332,605)	(9,920,670)		
57,348,438	56,513,102		
(35,844,016)	(33,114,122)		
64,667,445	45,279,732		
<u>\$ 87,594,665</u>	<u>\$ 69,485,053</u>	<u>\$</u>	<u>0</u>
<u>\$ 165,905,739,933</u>	<u>\$ 153,702,963,786</u>	<u>\$</u>	<u>6,612</u>

## Statement of Fiduciary Net Position

AS OF AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

	Fiduciary Fund Types	
	Pension and Other Employee Benefit Trust Funds	
	Pension Trust Fund	TRS-Care
<b>LIABILITIES (Note 1F)</b>		
Accounts Payable	\$ 6,679,651	\$ 228,976
Payroll Payable	5,198,506	308,746
External Manager Fees Payable	22,448,429	
Benefits Payable	128,997,802	
Health Care Claims Payable		125,576,406
Fees Payable		360,144
Investments Purchased Payable	619,004,590	
Securities Sold Short	182,214,448	
Collateral Obligations	17,035,654,924	
Due to State's General Fund	7,689	
Due to Employees Retirement System of Texas	8,093,936	
Employee Compensable Absences Payable (Note 4)	8,608,482	387,711
Unrealized Lease Incentives	269,662	
Other Liabilities	241,725	
Funds Held for Others		
<b>TOTAL LIABILITIES</b>	<b>\$ 18,017,419,844</b>	<b>\$ 126,861,983</b>
<b>NET POSITION</b>		
Net Investment in Capital Assets	\$ 86,885,248	\$ 709,417
Restricted for Pensions/Other Post Employment Benefits	147,275,036,872	398,826,569
<b>NET POSITION RESTRICTED FOR PENSIONS AND OTHER POST EMPLOYMENT BENEFITS</b>	<b>\$ 147,361,922,120</b>	<b>\$ 399,535,986</b>

The accompanying Notes to the Financial Statements are an integral part of this financial statement.

Exhibit I (concluded)



<b>Fiduciary Fund Types</b>			
<b>Total Pension and Other Employee Benefit Trust Funds</b>		<b>Agency Funds Child Support Employee Deductions</b>	
<b>2017</b>	<b>2016</b>		
\$ 6,908,627	\$ 8,077,851	\$	
5,507,252	5,312,265		
22,448,429	17,619,651		
128,997,802	138,541,977		
125,576,406	133,180,593		
360,144	1,734,759		
619,004,590	476,565,551		
182,214,448	139,061,759		
17,035,654,924	18,116,023,297		
7,689			
8,093,936	7,706,962		
8,996,193	8,606,280		
269,662	344,916		
241,725	64,299		
			6,612
<b>\$ 18,144,281,827</b>	<b>\$ 19,052,840,160</b>	<b>\$</b>	<b>6,612</b>
\$ 87,594,665	\$ 69,485,053	\$	
147,673,863,441	134,580,638,573		
<b>\$ 147,761,458,106</b>	<b>\$ 134,650,123,626</b>	<b>\$</b>	<b>0</b>

## Statement of Changes in Fiduciary Net Position

AS OF AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

	Fiduciary Fund Types	
	Pension and Other Employee Benefit Trust Funds	
	Pension Trust Fund	TRS-Care
<b>ADDITIONS</b>		
<b>Contributions</b>		
Member	\$ 3,242,556,261	\$ 213,241,179
State's General Fund - Non-Employer Contributing Entity Employer (Notes 10, 12)	1,697,962,608	303,760,632
State's General Fund	128,713,466	
Participating Employer Contributions	1,030,095,335	180,415,839
Participating Employer Contributions Paid at State Contribution Rate		24,302,720
Surcharges (Notes 10, 12)		
Employment after Retirement-Employee	11,480,134	
Employment after Retirement-Employer	9,315,673	10,641,961
Non-OASDI Participating Employers	408,704,737	
Supplemental Appropriation from State's General Fund - Non-Employer Contributing Entity		15,559,552
Purchase of Service Credit-Refundable	27,561,982	
Purchase of Service Credit - Non-Refundable	27,530,759	
State Contributions for 415 Excess Benefit Arrangement	2,930,399	
Employees Retirement System of Texas:		
For Service Contributions	21,965,490	
For 415 Excess Benefit Arrangement	78,439	
Federal Revenue (Note 6)		101,718,551
Rebate and Discount Income		291,725,635
<b>TOTAL CONTRIBUTIONS AND PREMIUMS</b>	<b>\$ 6,608,895,283</b>	<b>\$ 1,141,366,069</b>
<b>Investment Income</b>		
Investing Activities Income (Loss)	\$ 17,203,713,635	\$ 4,696,973
Less: Investing Activity Expenses (Schedule 2)	(218,119,912)	
<b>Net Income (Loss) from Investing Activities</b>	<b>\$ 16,985,593,723</b>	<b>\$ 4,696,973</b>
From Securities Lending Activities:		
Securities Lending Income	\$ 237,357,886	\$
Securities Lending Expenses	(143,144,262)	
<b>Net Income from Securities Lending Activities</b>	<b>\$ 94,213,624</b>	<b>\$ 0</b>
<b>TOTAL NET INVESTMENT INCOME</b>	<b>\$ 17,079,807,347</b>	<b>\$ 4,696,973</b>
<b>Other Additions</b>		
Miscellaneous Revenue	\$ 1,299,284	\$ 529,020
<b>TOTAL ADDITIONS</b>	<b>\$ 23,690,001,914</b>	<b>\$ 1,146,592,062</b>

Exhibit II

<b>Fiduciary Fund Types</b>	
<b>Total Pension and Other Employee Benefit Trust Funds</b>	
<b>2017</b>	<b>2016</b>
\$ 3,455,797,440	\$ 3,152,251,310
2,001,723,240	1,972,702,168
128,713,466	104,714,221
1,210,511,174	1,169,232,300
24,302,720	23,824,450
11,480,134	9,184,795
19,957,634	22,565,534
408,704,737	366,804,399
15,559,552	
27,561,982	18,818,999
27,530,759	18,570,535
2,930,399	3,482,186
21,965,490	20,376,732
78,439	91,960
101,718,551	124,739,649
291,725,635	218,995,436
<u>\$ 7,750,261,352</u>	<u>\$ 7,226,354,674</u>
\$ 17,208,410,608	\$ 9,343,664,650
(218,119,912)	(237,509,682)
<u>\$ 16,990,290,696</u>	<u>\$ 9,106,154,968</u>
\$ 237,357,886	\$ 165,668,053
(143,144,262)	(73,121,015)
<u>\$ 94,213,624</u>	<u>\$ 92,547,038</u>
<u>\$ 17,084,504,320</u>	<u>\$ 9,198,702,006</u>
\$ 1,828,304	\$ 2,082,417
<u>\$ 24,836,593,976</u>	<u>\$ 16,427,139,097</u>

(to next page)

## Statement of Changes in Fiduciary Net Position

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

	Fiduciary Fund Types	
	Pension and Other Employee Benefit Trust Funds	
	Pension Trust Fund	TRS-Care
<b>DEDUCTIONS</b>		
Benefits	\$ 9,775,775,472	\$
Refunds of Contributions - Active	414,049,308	
Refunds of Contributions - Death	6,371,748	
415 Excess Benefit Arrangement	2,721,567	
Benefits Paid to Employees Retirement System of Texas:		
For Service Contributions	93,321,903	
For 415 Excess Benefit Arrangement	287,271	
Health Care Claims		1,678,892,217
Less: Health Care Premiums Paid by Retirees (Note 1)		(404,027,710)
Health Care Claims Processing		45,873,396
Insurance Premium Payments		61,792,671
Patient-Centered Outcomes Research Institute Fee		367,838
Transitional Reinsurance Fee		690,325
Administrative Expenses, Excluding Investing Activity Expenses:		
Salaries and Wages	23,121,553	2,486,929
Payroll Related Costs	7,067,155	408,768
Professional Fees and Services	3,738,821	1,658,645
Travel	189,065	24,172
Materials and Supplies	2,406,577	158,914
Communications and Utilities	455,230	1,568
Repairs and Maintenance	2,140,019	57,427
Rentals and Leases	120,177	24,900
Printing and Reproduction	183,648	62,827
Depreciation Expense	2,706,732	
Amortization Expense	411,935	
Gain/Loss on Capital Asset		
Other Expense	1,649,086	69,342
<b>TOTAL DEDUCTIONS</b>	<b>\$ 10,336,717,267</b>	<b>\$ 1,388,542,229</b>
<b>Net Increase (Decrease) in Net Position</b>	<b>\$ 13,353,284,647</b>	<b>\$ (241,950,167)</b>
<b>NET POSITION RESTRICTED FOR PENSIONS AND OTHER POST EMPLOYMENT BENEFITS - BEGINNING OF YEAR</b>	<b>\$ 134,008,637,473</b>	<b>\$ 641,486,153</b>
<b>NET POSITION RESTRICTED FOR PENSIONS AND OTHER POST EMPLOYMENT BENEFITS - END OF YEAR</b>	<b>\$ 147,361,922,120</b>	<b>\$ 399,535,986</b>

The accompanying Notes to the Financial Statements are an integral part of this financial statement.

<b>Fiduciary Fund Types</b>	
<b>Total Pension and Other Employee Benefit Trust Funds</b>	
<b>2017</b>	<b>2016</b>
\$ 9,775,775,472	\$ 9,379,122,730
414,049,308	366,039,111
6,371,748	7,379,576
2,721,567	3,286,875
93,321,903	88,854,383
287,271	287,271
1,678,892,217	1,651,712,836
(404,027,710)	(374,736,269)
45,873,396	45,485,440
61,792,671	69,228,872
367,838	347,059
690,325	2,528,652
25,608,482	24,103,192
7,475,923	5,880,960
5,397,466	4,714,610
213,237	110,957
2,565,491	3,331,572
456,798	394,941
2,197,446	5,035,767
145,077	809,353
246,475	124,729
2,706,732	2,435,241
411,935	421,057
	832
1,718,428	1,741,176
<u>\$ 11,725,259,496</u>	<u>\$ 11,288,640,923</u>
\$ 13,111,334,480	\$ 5,138,498,174
<u>\$ 134,650,123,626</u>	<u>\$ 129,511,625,452</u>
<u>\$ 147,761,458,106</u>	<u>\$ 134,650,123,626</u>

## Statement of Net Position

### PROPRIETARY FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

ASSETS	Enterprise Funds	
	Major Fund	Non-Major Fund
	TRS-ActiveCare	403(b) Administrative Program
<b>ASSETS</b>		
<b>Current Assets</b>		
<b>Cash</b>		
Cash In State Treasury	\$ 339,043,170	\$ 309,520
Cash on Hand		12,000
<b>TOTAL CASH</b>	<b>\$ 339,043,170</b>	<b>\$ 321,520</b>
<b>Receivables</b>		
Interest	\$ 421,889	\$ 303
COBRA Premiums and Other	34,211,784	
<b>TOTAL RECEIVABLES</b>	<b>\$ 34,633,673</b>	<b>\$ 303</b>
<b>TOTAL ASSETS</b>	<b>\$ 373,676,843</b>	<b>\$ 321,823</b>
<b>LIABILITIES (Note 1F)</b>		
<b>Current Liabilities</b>		
Accounts Payable	\$ 215,494	\$ 55,609
Payroll Payable	159,315	6,585
Unearned Premium Revenue	401,536	
Fees Payable	996,244	
Premiums Payable to HMOs	18,537,633	
Health Care Claims Payable	255,385,246	
Employee Compensable Absences Payable (Note 4)	132,367	5,030
<b>TOTAL CURRENT LIABILITIES</b>	<b>\$ 275,827,835</b>	<b>\$ 67,224</b>
<b>Non-Current Liabilities</b>		
Employee Compensable Absences Payable (Note 4)	\$ 44,179	\$ 6
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>\$ 44,179</b>	<b>\$ 6</b>
<b>TOTAL LIABILITIES</b>	<b>\$ 275,872,014</b>	<b>\$ 67,230</b>
<b>NET POSITION</b>		
Restricted for Health Care Programs	\$ 97,804,829	\$
Restricted for Administrative Expenses		254,593
<b>TOTAL NET POSITION</b>	<b>\$ 97,804,829</b>	<b>\$ 254,593</b>

The accompanying Notes to the Financial Statements are an integral part of this financial statement.



**Total Enterprise Funds**

	2017	2016
\$	339,352,690	\$ 337,059,474
	12,000	
\$	339,364,690	\$ 337,059,474
\$	422,192	\$ 289,006
	34,211,784	12,988,010
\$	34,633,976	\$ 13,277,016
\$	373,998,666	\$ 350,336,490
\$	271,103	\$ 131,402
	165,900	125,668
	401,536	68,654
	996,244	7,535,944
	18,537,633	17,658,919
	255,385,246	270,897,392
	137,397	76,984
\$	275,895,059	\$ 296,494,963
\$	44,185	\$ 23,079
\$	44,185	\$ 23,079
\$	275,939,244	\$ 296,518,042
\$	97,804,829	\$ 53,550,894
	254,593	267,554
\$	98,059,422	\$ 53,818,448

## Statement of Revenues, Expenses and Changes in Net Position

### PROPRIETARY FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

	Enterprise Funds	
	Major Fund	Non-major Fund
	TRS-ActiveCare	403(b) Administrative Program
<b>OPERATING REVENUES</b>		
Health Care Premiums	\$ 2,119,959,039	\$
COBRA Premiums and Other	120,049,492	
Administrative Fees	145,792	
Certification Fees		135,000
Product Registration Fees		33,000
<b>TOTAL OPERATING REVENUES</b>	<b>\$ 2,240,154,323</b>	<b>\$ 168,000</b>
<b>OPERATING EXPENSES</b>		
Health Care Claims	\$ 1,846,526,430	\$
Health Care Claims Processing	119,583,574	
Premium Payments to HMOs	227,088,895	
Patient-Centered Outcomes Research Institute Fee	988,208	
Transitional Reinsurance Fee	3,211,965	
Administrative Expenses:		
Salaries and Wages	1,609,295	55,415
Payroll Related Costs	234,665	8,692
Professional Fees and Services	1,380,105	112,630
Travel	8,672	
Materials and Supplies	45,571	1,654
Communications and Utilities	79	
Repairs and Maintenance	14,412	2,556
Rentals and Leases	22,982	
Printing and Reproduction	5,708	167
Other Operating Expense	23,953	2,631
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 2,200,744,514</b>	<b>\$ 183,745</b>
<b>OPERATING INCOME (LOSS)</b>	<b>\$ 39,409,809</b>	<b>\$ (15,745)</b>
<b>NON-OPERATING REVENUE</b>		
Investment Income	\$ 4,668,888	\$ 2,784
Other Non-operating Revenue	175,238	
<b>TOTAL NON-OPERATING REVENUES</b>	<b>\$ 4,844,126</b>	<b>\$ 2,784</b>
<b>Change in Net Position</b>	<b>\$ 44,253,935</b>	<b>\$ (12,961)</b>
<b>TOTAL NET POSITION - BEGINNING OF YEAR</b>	<b>\$ 53,550,894</b>	<b>\$ 267,554</b>
<b>TOTAL NET POSITION - END OF YEAR</b>	<b>\$ 97,804,829</b>	<b>\$ 254,593</b>

The accompanying Notes to the Financial Statements are an integral part of this financial statement.



**Total Enterprise Funds**

2017		2016	
\$	2,119,959,039	\$	2,055,658,822
	120,049,492		17,904,885
	145,792		156,054
	135,000		12,000
	33,000		3,000
\$	2,240,322,323	\$	2,073,734,761
\$	1,846,526,430	\$	1,768,287,120
	119,583,574		111,987,718
	227,088,895		214,529,160
	988,208		683,288
	3,211,965		13,131,104
	1,664,710		1,211,277
	243,357		228,290
	1,492,735		1,190,957
	8,672		12,915
	47,225		3,175
	79		811
	16,968		
	22,982		41,599
	5,875		
	26,584		4,406
\$	2,200,928,259	\$	2,111,311,820
\$	39,394,064	\$	(37,577,059)
\$	4,671,672	\$	3,081,161
	175,238		200,000
\$	4,846,910	\$	3,281,161
\$	44,240,974	\$	(34,295,898)
\$	53,818,448	\$	88,114,346
\$	98,059,422	\$	53,818,448

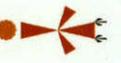
## Statement of Cash Flows

### PROPRIETARY FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

	Enterprise Funds	
	Major Fund	Non-major Fund
	TRS-ActiveCare	403(b) Administrative Program
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Receipts from Health Care Premiums	\$ 2,120,291,921	\$
Receipts from COBRA Premiums and Other	98,825,718	
Receipts from Long-Term Care Administrative Fees	145,792	
Receipts from Certification/Product Registration Fees		168,000
Payments for Administrative Expenses	(3,141,229)	(126,506)
Payments for Health Care Claims	(1,862,038,576)	
Payments for Health Care Claims Processing	(119,583,574)	
Payments for HMO Premiums	(226,210,181)	
Payments for Affordable Care Act Fees	(10,739,873)	
<b>NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES</b>	<b>\$ (2,450,002)</b>	<b>\$ 41,494</b>
<b>CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES</b>		
Proceeds from Other Non-Operating Revenue	\$ 175,238	\$
<b>NET CASH PROVIDED BY NON-CAPITAL FINANCING ACTIVITIES</b>	<b>\$ 175,238</b>	<b>\$ 0</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Interest Received	\$ 4,535,811	\$ 2,675
<b>NET CASH PROVIDED BY INVESTING ACTIVITIES</b>	<b>\$ 4,535,811</b>	<b>\$ 2,675</b>
Net Increase (Decrease) in Cash	\$ 2,261,047	\$ 44,169
CASH AND CASH EQUIVALENTS - SEPTEMBER 1	\$ 336,782,123	\$ 277,351
CASH AND CASH EQUIVALENTS - AUGUST 31	\$ 339,043,170	\$ 321,520
<b>RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES</b>		
Operating Income (Loss)	\$ 39,409,809	\$ (15,745)
Adjustments to Reconcile Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Changes in Assets & Liabilities:		
Increase (Decrease) in Unearned Health Care Premium Revenue	\$ 332,882	\$
(Increase) in COBRA Premiums and Other Receivable	(21,223,774)	
Increase in Premiums Payable to HMOs	878,714	
Increase in Health Care Claims Payable	(15,512,146)	
(Decrease) in Affordable Care Act Fees Payable	(6,539,700)	
Increase in Accounts Payable	84,092	55,609
Increase (Decrease) in Payroll Payable	38,985	1,247
Increase (Decrease) in Employee Compensable Absences Payable	81,136	383
Total Adjustments	\$ (41,859,811)	\$ 57,239
<b>NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES</b>	<b>\$ (2,450,002)</b>	<b>\$ 41,494</b>

The accompanying Notes to the Financial Statements are an integral part of this financial statement.



**Total Enterprise Funds**

2017		2016	
\$	2,120,291,921	\$	2,055,012,996
	98,825,718		4,916,875
	145,792		156,054
	168,000		15,000
	(3,267,735)		(2,606,218)
	(1,862,038,576)		(1,750,764,115)
	(119,583,574)		(111,987,718)
	(226,210,181)		(211,539,537)
	(10,739,873)		(19,786,448)
\$	(2,408,508)	\$	(36,583,111)
\$	175,238	\$	200,000
\$	175,238	\$	200,000
\$	4,538,486	\$	2,930,337
\$	4,538,486	\$	2,930,337
\$	2,305,216	\$	(33,452,774)
\$	337,059,474	\$	370,512,248
\$	339,364,690	\$	337,059,474
\$	39,394,064	\$	(37,577,059)
\$	332,882	\$	(919,887)
	(21,223,774)		(12,713,949)
	878,714		2,989,623
	(15,512,146)		17,523,005
	(6,539,700)		(5,972,056)
	139,701		129,537
	40,232		(1,006)
	81,519		(41,319)
\$	(41,802,572)	\$	993,948
\$	(2,408,508)	\$	(36,583,111)





## Notes to the Financial Statements

### TABLE OF CONTENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES .....	51
NOTE 2: CAPITAL ASSETS .....	59
NOTE 3: DEPOSITS AND INVESTMENTS .....	61
NOTE 4: EMPLOYEE COMPENSABLE LEAVE .....	76
NOTE 5: OPERATING LEASES.....	76
NOTE 6: FRINGE BENEFITS PAID BY THE STATE OF TEXAS AND THE FEDERAL GOVERNMENT.....	77
NOTE 7: DEFERRED COMPENSATION.....	77
NOTE 8: CONTINGENT LIABILITIES.....	77
NOTE 9: CONTINUANCE SUBJECT TO REVIEW .....	78
NOTE 10: OTHER POST-EMPLOYMENT BENEFITS .....	78
NOTE 11: OTHER POST-EMPLOYMENT BENEFITS - TRS EMPLOYEES.....	84
NOTE 12: PENSION DISCLOSURE .....	85
NOTE 13: RISK MANAGEMENT .....	91
NOTE 14: COMPONENT UNITS .....	91
NOTE 15: SUBSEQUENT EVENTS.....	92



## Notes to the Financial Statements

### NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### A. REPORTING ENTITY

The Teacher Retirement System of Texas (TRS or system) is a separate legal entity and considered a discrete component unit of the State of Texas. The system is governed by a nine member board of trustees which has significant independence in the operation and management of the system under the provisions of the state constitution and laws. The trustees serve staggered six-year terms that expire on August 31 of odd numbered years and are all appointed by the Governor. The trustees are appointed as follows:

- Three are direct appointments by the Governor.
- Two appointments are from a list nominated by the State Board of Education.
- Two appointments are from three public school district active members nominated by employees of public school districts.
- One appointment is from three higher education active members nominated by employees of institutions of higher education. Beginning with the 2017 board election, this position became an “open” seat which means retirees and active members from public or higher education are eligible for nomination.
- One appointment is from three retired member candidates nominated by TRS retirees.

The state legislature confirms trustees appointed by the governor, establishes laws with regard to structure, benefits and contributions, and authorizes Pension Trust Fund administrative expenses. State contributions and appropriations received by TRS are determined by the legislature.

This report includes all activities and programs for which TRS exercises fiscal control and responsibility and includes all funds that comprise the system’s legal entity.

TRS administers retirement and related benefits to employees and beneficiaries of employees of the public, state-supported, educational institutions of Texas. It operates primarily under the provisions of the Texas Constitution, Article XVI, Section 67 and Texas Government Code, Title 8, Subtitle C. The pension trust fund is a multiple-employer, cost-sharing, defined benefit pension plan with a special funding situation that is a qualified pension trust under Section 401(a) of the Internal Revenue Code.

The system administers the Texas Public School Retired Employees Group Insurance Program and the Texas Active School Employees Uniform Group Benefits Program. These programs provide two separate health care plans, TRS-Care and TRS-ActiveCare, respectively.

TRS-Care is considered an employee benefit trust fund and provides health care coverage for certain persons (and their dependents) who retire under TRS. The statutory authority for the program is Texas Insurance Code, Title 8, Subtitle H, Chapter 1575 and Texas Administrative Code, Title 34, Part 3, Chapter 41. The inception of the plan was fiscal year 1986.

TRS-ActiveCare provides health care coverage to employees (and their dependents) of participating public education entities. Optional life and long-term care insurance, which are provided to active

## Notes to the Financial Statements

members and retirees, are also accounted for in the fund. Authority for the plan can be found in the Texas Insurance Code, Title 8, Subtitle H, Chapter 1579 and in the Texas Administrative Code, Title 34, Part 3, Chapter 41. The plan began operations on September 1, 2002.

The system also administers a 403(b) Administrative Program in which companies must be certified by TRS to offer qualified investment products to public education employees through payroll deductions in accordance with Internal Revenue Code section 403(b). Authority for the program can be found in Vernon's Civil Statutes, Title 109, Article 6228a-5, Sections 4-8A and in the Texas Administrative Code, Title 34, Part 3, Chapter 53. The program began operations on September 1, 2001.

An Agency Fund is used to account for garnishments of salaries and wages for child support payments from TRS employees.

### **B. MEASUREMENT FOCUS, BASIS OF ACCOUNTING, AND BASIS OF PRESENTATION**

The system's accounts are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a self-balancing set of accounts that comprise its assets, liabilities, additions/revenues and deductions/expenses. The following fund types are used to reflect the system's transactions:

- *Fiduciary Funds* – include the Pension Trust Fund, TRS-Care (employee benefits trust fund) and the Agency Fund.
- *Proprietary Funds* – include TRS-ActiveCare and the 403(b) Administrative Program which are both Enterprise funds. TRS-ActiveCare is considered a major fund.

*Fiduciary* funds are used to report assets held in a trustee or agency capacity on behalf of others. The reporting focus is on net position and changes in net position. The pension and other employee benefit trust funds are used to report resources held in trust for the members and beneficiaries of the defined benefit pension plan and the other employee benefit plan. Agency funds are used to report resources held in a purely custodial capacity by the reporting government.

*Proprietary*, enterprise funds account for business-type activities or those for which a fee is charged to external users for goods or services. The reporting focus is on the determination of operating income, changes in net position, financial position, and cash flows. Proprietary funds distinguish operating activities from non-operating. Operating activities generally result from providing services and producing or delivering goods. Operating revenues for the system's proprietary funds are derived from self-insurance premiums and providing plan and product certification services to qualified 403(b) plans. Operating expenses include the costs of claims, costs of certification/product services and related administrative expenses. Non-operating revenues and expenses are those items that do not meet any of the above definitions.

Separate financial statements are provided for each fund. The fiduciary (excluding agency funds) and proprietary financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Additions are recognized when earned, and deductions are recognized when the liability is incurred, regardless of the timing of related cash flows. Contributions

## Notes to the Financial Statements

are recognized in the period in which amounts are due, pursuant to state law. Benefits and refunds of contributions are recognized when due and payable in accordance with the terms of the plan. All economic resources, including financial and capital assets, and related liabilities, both current and long-term, and the changes therein are reported in each funds' financial statements. Capital assets are depreciated or amortized on a straight-line basis, if appropriate.

Agency funds are custodial in nature and do not measure the results of operations. Assets and liabilities are recorded using the accrual basis of accounting. Agency funds are used to report assets collected and transferred to the state or other entities.

### C. NEW ACCOUNTING PRONOUNCEMENTS

The accompanying financial statements were prepared in conformity with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). GASB issued the following statements that relate to TRS.

GASB Statement No. 74, *Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans*, was issued June 2015 and is effective for fiscal years beginning after June 15, 2016. This statement replaces GASB Statement 43 and establishes standards for financial reporting and amends note disclosure and supplemental information requirements for other post-employment defined benefit plans administered through qualified trusts. The requirements of this statement were implemented by TRS this fiscal year.

GASB Statement No. 75, *Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions*, relates to governmental employers that provide post-employment benefits other than pensions and is effective for fiscal years beginning after June 15, 2017. TRS will work with plan auditors to provide the information necessary for employers to comply with this statement in the next fiscal year.

GASB Statement No. 80, *Blending Requirements for Certain Component Units*, amends the blending requirements for the financial statement presentation of component units of all state and local governments and is effective for fiscal years beginning after June 15, 2016.

GASB Statement No. 82, *Pension Issues*, amends certain pension reporting requirements of GASB Statements No. 67, No. 68, and No. 73 and is effective for fiscal years beginning after June 15, 2016.

### D. COMPARATIVE DATA IN TOTAL

The basic financial statements include certain prior year summarized comparative data in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the system's financial statements for the fiscal year ended August 31, 2016, from which the summarized information was derived.

Health Care Premiums (paid by retirees) have been moved from the "Additions" section of the Statement of Changes in Fiduciary Net Position to be a contra-expense item netted against Health Care Claims Expense in the "Deductions" section. This change was made due to the implementation

## Notes to the Financial Statements

of GASB Statement 74 *Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans*. The related amounts from the prior year's financial statements have been reclassified to conform to the presentation in the current year's financial statements.

### E. BUDGETS AND APPROPRIATIONS

The administrative costs and capital asset outlay for each of the system's funds and programs are controlled by annual budgets approved by the board of trustees.

The Pension Trust Fund receives state contributions for retirement benefits from general revenue appropriations. In fiscal years 2017 and 2016, contributions were made by the State of Texas to the retirement system at the rate of 6.8 percent of the aggregate compensation paid to active retirement system members for each year. Although appropriated by the legislature, administrative expenses and capital outlay for the Pension Trust Fund are paid from the fund's Expense Account, and not from the state's General Fund.

TRS-Care received contributions from the state's General Fund equal to 1.00 percent of salaries paid to public education employees in fiscal year 2017. Administrative expenses for this program are paid from the trust fund.

The two Enterprise Funds, TRS-ActiveCare and the 403(b) Administrative Program, are supported by fees and receive no appropriations from the state for administrative expenses.

Effective September 1, 1997, legislation authorized TRS to administer a governmental excess benefit arrangement under section 415(m) of the Internal Revenue Code of 1986 (26 U.S.C.). This legislation created a separate, nonqualified, unfunded excess benefit arrangement outside the trust fund of the retirement system. Contributions to this arrangement are made from the state's general revenue appropriations. These contributions are not held in trust and may not be commingled with other funds of the retirement system. They yield no net position; therefore, for reporting purposes only the contributions and benefits are reflected on Exhibit II, Statement of Changes in Fiduciary Net Position.

### F. ASSETS, LIABILITIES AND LEGAL RESERVES

#### Cash and Cash Equivalents

Investments with an original maturity of three months or less that are used for cash management instead of investing activities are considered cash equivalents. Highly liquid investments invested as part of a short-term investment fund are not considered cash equivalents.

#### Receivables

Receivables represent the amount of money owed to TRS for goods or services delivered or used that have not been received at fiscal year-end.

- *Sale of Investments* receivables occur when the trade date is before the fiscal year-end and the settlement date is in the next fiscal year.

## Notes to the Financial Statements

- *Interest and Dividend* receivables represent distributions of income made on bank accounts and other investments that TRS earned in the current fiscal year but did not receive until after fiscal year-end.
- *Member and Retiree* receivables represent contributions that are due from members for the current fiscal year but not received until after fiscal year-end.
- *Participating Employers* receivables represent contributions that are due from participating employers for the current fiscal year which are not received until after fiscal year-end.
- *Service Credit Purchase* receivables represent the outstanding balance due from members on service credit purchase installment contracts at fiscal year-end. Payments can be made on a monthly basis for up to five years for purchasing additional creditable service. Receivables are recognized when an agreement is signed.
- *Other* receivables represent amounts owed to TRS such as refund or annuity repayments due at fiscal year-end but not received until the next fiscal year.

### Investments

Investments are reported at fair value. Fair value is a market-based measurement, not an entity-specific measurement. It is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Measurement, recognition, or disclosure of an asset or liability depends on the aggregation or disaggregation of the unit of account of the asset or liability. TRS utilizes one or more of the following valuation techniques in order to measure fair value: the market approach, the cost approach, and the income approach.

Fair value maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs. A fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value, assigning the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Fair value inputs are categorized into the following three levels:

- Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the system's measurement date;
- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly;
- Level 3 – Unobservable inputs for an asset or liability.

For investments that do not have a readily determinable fair value and fall outside of the fair value hierarchy, the system establishes fair value by utilizing the Net Asset Value Per Share (NAVPS), or its equivalent, as a practical expedient, provided all of the following criteria are met:

- Fair value is not readily determinable;

## Notes to the Financial Statements

- The NAVPS is calculated consistently with the Financial Accounting Standards Board's measurement principles for investment companies (Accounting and Standards Codification Topic 946);
- The NAVPS represents a proportionate share of the net assets to which it is attributed;
- And the NAVPS is provided by the investee.

The system obtains the NAVPS from the most recent capital account statement or audited financial statement issued by a General Partner or Fund Administrator. If either statement's fiscal year end does not coincide with the system's fiscal year end, the NAVPS is adjusted for any distributions or contributions that occur subsequent to the statement's measurement date through the system's fiscal year end.

**Short-Term Investments** include Short-Term Commingled Funds, Short-Term Foreign Currency Contracts, and the Short-Term Investment Fund (STIF). The following fair value measurements determine the appropriate level within the fair value hierarchy:

- Short-Term Commingled Funds are valued at the NAVPS by the General Partner or Fund Administrator.
- Short-Term Foreign Currency Contracts are priced at the spot rate in active markets and valued at Level 1.
- The STIF is a 2a-7 like fund and is priced at the NAVPS by the custodian bank, State Street Bank and Trust Company.

**Equity Investments** include both Domestic and International Equity. The following fair value measurements determine the appropriate level within the fair value hierarchy:

- Equities priced at the last sale price in their respective active markets are valued at Level 1.
- Domestic Equities priced at a mean price by a third party are valued at Level 3.
- Domestic Equities priced by a third party that uses a guideline market multiples approach and a sum of parts valuation analyses are valued at Level 3.
- Equities that are not actively traded with a stale price as of the system's measurement date are valued at Level 3.

**Fixed Income Investments** include Asset and Mortgage Backed Bonds, Corporate Bonds, Sovereign Government Issues, U.S. Government Agency Bonds, U.S. Treasuries, U.S. Treasury STRIPS, and U.S. TIPS. The following fair value measurements determine the appropriate level within the fair value hierarchy:

- U.S. Treasuries priced at the last sale price of the primary exchange are valued at Level 1.

## Notes to the Financial Statements

- Fixed Income Investments priced using a bid evaluation matrix pricing technique that is based on their relationship to non-proprietary index market quotations, yields, maturities, call features, and ratings are valued at Level 2.

*Alternative Investments* include Absolute Return, Energy, Natural Resources & Infrastructure, Hedge Funds, Other Private Markets, Private Equity, Real Assets, and Risk Parity. The following fair value measurements determine the appropriate level within the fair value hierarchy:

- Other Private Markets priced by a third party that uses a guideline market multiples approach and a sum of parts valuation analyses is valued at Level 3.
- All other Alternative Investments are valued at the NAVPS by the General Partners or Fund Administrators.

*Derivative Investments* include Futures, Forwards, Options, Rights, Swaps, and Warrants, and they are either executed on an exchange or in a bilateral deal in an over-the-counter (OTC) market with an International Swaps and Derivatives Association (ISDA) counterparty as a broker. The following fair value measurements determine the appropriate level within the fair value hierarchy:

- Options priced at the mean and settle price, and Forwards, Rights, and Warrants priced at the last sale price in their respective active markets are valued at Level 1.
- Derivative Investments that are valued using a matrix pricing technique that are based on their relationship to benchmark quoted prices are valued at Level 2.

*Pooled Investments* include Commingled Equity, Commingled Fixed Income, and Mutual Funds and are priced at the NAVPS by the General Partners or Fund Administrators.

*Invested Securities Lending Collateral* is comprised of the reinvested cash collateral received from borrowers in the securities lending program, in addition to the operating costs of the program. The following fair value measurements of the reinvested cash collateral determine the appropriate level within the fair value hierarchy:

- Securities priced at the last sale price in their respective active markets are valued at Level 1.
- Securities priced using a bid evaluation matrix pricing technique that is based on their relationships to non-proprietary index market quotations, yields, maturities, call features, and ratings are valued at Level 2.

### Other Assets

Prepaid deposits and rent expense reflects payment for rental costs applicable to a future accounting period.

### Capital Assets

Capital assets associated with the funds' activities are included in the statement of net position. Purchases of capital assets by the fund are reported at cost on the acquisition date. Depreciation of all exhaustible capital assets is charged as an expense against the fund's operations. Depreciation

## Notes to the Financial Statements

is calculated using the straight-line method over the asset's useful life. Note 2 includes a table identifying the capitalization threshold and estimated useful life by asset type.

### Liabilities

- *Accounts Payable* represents the liability for assets or services received at fiscal year-end for which payment has not been made.
- *Benefits Payable* for the Pension Trust Fund represent the liability for retirement, disability, and death benefits due at fiscal year-end and payable within the next 30 days.
- *Health Care Claims Payable* for TRS-Care and TRS-ActiveCare include an estimate for health care claims incurred but not reported to the system at fiscal year-end.
- *Investments Purchased Payable* represent the liability for securities purchased prior to fiscal year-end for which payment has not been made. Foreign investments purchased payable is reported at current exchange rates.
- *Securities Sold Short* represent obligations to deliver securities which include Equities and Rights. These obligations are priced at fair value at the last sale price in their respective active markets and valued at Level 1 in the fair value hierarchy.
- *Collateral Obligations* are the cash collateral received from borrowers in the securities lending program.
- *Employee Compensable Absences Payable* represents the liability that becomes due upon the resignation, retirement and use of leave balances by employees. These obligations are normally paid from the same funding source from which each employee's salary or wage compensation was paid. Liabilities are reported separately as either current or non-current in the Statement of Net Position for enterprise funds, if appropriate.
- *Unrealized Lease Incentives* represent a reduction to rental expenses for the rent abatement and incentives received from the non-cancelable operating lease that are being amortized over the lease term.

### Interfund/Interagency Transactions and Balances

The Pension Trust Fund provides various administrative services to other TRS programs and accounts for these services as reciprocal interfund activity. These transactions are reported using the appropriate classification accounts for additions/revenues or deductions/expenses as if transacted with parties external to the state, i.e., they are not presented as transfers. The interfund receivables and payables related to reciprocal interfund activity are classified as receivables and accounts payable on the financial statements.

Interagency transactions have been classified using the above criteria for reciprocal inter-fund activity.

## Notes to the Financial Statements

### Legal Reserve Accounts

The Pension Trust Fund has five statutorily required reserves. The statutory accounts are a requirement of the Texas Government Code, Chapter 825, Sections 307-313.

- The *Member Savings Account* represents the accumulation of active member deposits plus interest.
- The *State Contribution Account* represents the reserves available to fund future active member retirement, death, and survivor benefits. Net investment gains or losses are accumulated in the Interest Account and transferred to the State Contribution Account together with any other balance remaining in the Interest Account.
- The *Retired Reserve Account* represents the reserves available to fund retirement, death, survivor benefits and post-retirement benefit increases.
- The *Deferred Retirement Option Account* represents the accumulation of participating member deposits plus interest less benefits paid out.
- The *Expense Account* represents the reserves to pay administrative expenses of the Pension Trust Fund that exceed the state's appropriations and that are required to perform the fiduciary duties of the board.

### NOTE 2: CAPITAL ASSETS

Capital assets are presented at historical cost or, if not purchased, at fair value at the date of acquisition. When appropriate, straight-line depreciation and amortization have been charged over the shorter of estimated useful lives of the assets or lease period. Capitalization thresholds for all capital asset classes and useful lives for depreciable assets are shown below:

Asset Class	Capitalization Threshold	Depreciable Life
Land and Land Improvements	\$ 0	N/A
Construction in Progress	0	N/A
Buildings and Building Improvements	100,000	10-50 years
Facilities and Other Improvements	100,000	10 years
Leasehold Improvements	100,000	22 years
Furniture and Equipment	5,000	5-10 years
Vehicles, Boats, and Aircraft	5,000	5-7 years
Internally Developed Computer Software	1,000,000	5 years
Computer Software	100,000	5 years
Other Capital Assets	Various	6 years

## Notes to the Financial Statements

Capital asset balances and current year transactions are presented in the following table:

Asset Class	Balance 09/01/2016	Reclasses & Completed CIP	Additions	Deletions	Balance 08/31/2017 (Exhibit I)
<b>Non-Depreciable Assets:</b>					
Land and Land Improvements	\$ 1,658,310	\$	\$	\$	\$ 1,658,310
Construction in Progress	43,497,286	(641,213)	20,028,926		62,884,999
Other Tangible Capital Assets	124,136				124,136
<b>Total Non-Depreciable Assets</b>	<b>\$ 45,279,732</b>	<b>\$ (641,213)</b>	<b>\$ 20,028,926</b>	<b>\$ 0</b>	<b>\$ 64,667,445</b>
<b>Depreciable Assets:</b>					
Buildings and Building Improvements	\$ 39,175,704	\$	\$	\$	\$ 39,175,704
Furniture and Equipment	13,369,698		830,161		14,199,859
Vehicle, Boats & Aircraft	76,363		5,175		81,538
Leasehold Improvements	3,547,715				3,547,715
Facilities and Other Improvements	343,622				343,622
<b>Total Depreciable Assets at Historical Costs</b>	<b>\$ 56,513,102</b>	<b>\$ 0</b>	<b>\$ 835,336</b>	<b>\$ 0</b>	<b>\$ 57,348,438</b>
<b>Less Accumulated Depreciation for:</b>					
Buildings and Building Improvements	\$ (20,853,215)	\$	\$ (1,353,671)	\$	\$ (22,206,886)
Furniture and Equipment	(8,904,810)		(1,314,977)		(10,219,787)
Vehicles, Boats & Aircraft	(52,897)		(6,361)		(59,258)
Leasehold Improvements	(3,118,424)		(20,523)		(3,138,947)
Facilities and Other Improvements	(184,776)		(34,362)		(219,138)
<b>Total Accumulated Depreciation</b>	<b>\$ (33,114,122)</b>	<b>\$ 0</b>	<b>\$ (2,729,894)</b>	<b>\$ 0</b>	<b>\$ (35,844,016)</b>
<b>Depreciable Assets, Net</b>	<b>\$ 23,398,980</b>	<b>\$ 0</b>	<b>\$ (1,894,558)</b>	<b>\$ 0</b>	<b>\$ 21,405,422</b>
<b>Amortizable Assets-Intangible:</b>					
Computer Software	\$ 10,727,011	\$ 641,213	\$ 387,179	\$	\$ 11,755,403
<b>Total Amortizable Assets at Historical Costs</b>	<b>\$ 10,727,011</b>	<b>\$ 641,213</b>	<b>\$ 387,179</b>	<b>\$ 0</b>	<b>\$ 11,755,403</b>
<b>Less Accumulated Amortization for:</b>					
Computer Software	\$ (9,920,670)	\$	\$ (411,935)	\$	\$ (10,332,605)
<b>Total Accumulated Amortization</b>	<b>\$ (9,920,670)</b>	<b>\$ 0</b>	<b>\$ (411,935)</b>	<b>\$ 0</b>	<b>\$ (10,332,605)</b>
<b>Amortizable Assets-Intangible, Net</b>	<b>\$ 806,341</b>	<b>\$ 641,213</b>	<b>\$ (24,756)</b>	<b>\$ 0</b>	<b>\$ 1,422,798</b>
<b>Capital Assets, Net</b>	<b>\$ 69,485,053</b>	<b>\$ 0</b>	<b>\$ 18,109,612</b>	<b>\$ 0</b>	<b>\$ 87,594,665</b>

## Notes to the Financial Statements

### NOTE 3: DEPOSITS AND INVESTMENTS

#### A. INVESTMENT POLICY AND TARGET ASSET ALLOCATION

The Board of Trustees has the primary fiduciary responsibility for investing TRS trust assets in accordance with Article XVI, Section 67 of the Texas Constitution and with applicable law. The Board adopts the Investment Policy Statement which establishes investment objectives and policy, obtains expert advice and assistance, and oversees the employment of a qualified and competent investment staff (Investment Management Division) and legal staff. The Board also monitors the actions of staff, consultants, and advisors to ensure compliance with its policies. The current Investment Policy Statement has been in effect since October 1, 2016, and there were no significant investment policy changes during the reporting period. For the fiscal year ended August 31, 2017, there were no significant violations of state statute, investment policy, or contractual provisions. The Statement in its entirety can be accessed at [www.trs.texas.gov](http://www.trs.texas.gov).

The total or overall investment portfolio includes all assets invested by TRS to provide retirement, death, health, and disability benefits administered by the system, and is structured and managed to achieve the following objectives:

- a. Control risk through proper diversification of asset classes and by establishing long-term risk and return expectations; and
- b. As applicable to the pension plan, achieve a long-term rate of return that:
  - i. Exceeds the assumed actuarial rate of return adopted by the Board;
  - ii. Exceeds the long-term rate of inflation by an annualized 5 percent; and
  - iii. Exceeds the return of the Fund Policy Benchmark.

Categories of permissible investments include cash equivalents, debt securities, private markets, derivatives, mutual funds, closed-end funds, publicly traded or Rule 144A assets, and commingled funds. The target asset allocation, long-term expected real rate of return, and expected contribution to long-term portfolio returns by asset class set forth in the Investment Policy Statement is shown in the table on the following page as of August 31, 2017.

## Notes to the Financial Statements

Asset Class	Target Allocation * %	Long-Term Expected Geometric Real Rate of Return	Expected Contribution to Long-Term Portfolio Returns**
<b>Global Equity</b>			
U.S.	18%	4.6%	1.0%
Non-U.S. Developed	13	5.1	0.8
Emerging Markets	9	5.9	0.7
Directional Hedge Funds	4	3.2	0.1
Private Equity	13	7.0	1.1
<b>Stable Value</b>			
U.S. Treasuries	11	0.7	0.1
Absolute Return	0	1.8	0.0
Stable Value Hedge Funds	4	3.0	0.1
Cash	1	-0.2	0.0
<b>Real Return</b>			
Global Inflation Linked Bonds	3	0.9	0.0
Real Assets	16	5.1	1.1
Energy and Natural Resources	3	6.6	0.2
Commodities	0	1.2	0.0
<b>Risk Parity</b>			
Risk Parity	5	6.7	0.3
Inflation Expectation			2.2%
Alpha			1.0
<b>Total</b>	<b>100%</b>		<b>8.7%</b>
<p>* Target allocations are based on the FY2014 policy model. Infrastructure was moved from Real Assets to Energy and Natural Resources in FY2017, but the reallocation does not affect the long-term expected geometric real rate of return or expected contribution to long-term portfolio returns.</p> <p>**The Expected Contribution to Long-Term Portfolio Returns incorporates the volatility drag resulting from the conversion between arithmetic and geometric mean returns.</p>			

For the fiscal year ended August 31, 2017, the annual money-weighted rate of return on pension plan investments was 12.98 percent. The annual money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

### B. CASH AND DEPOSITS

Cash and deposits of the system are maintained in bank accounts and in the State of Texas Treasury. The Treasury invests funds in time deposits, repurchase and reverse repurchase agreements, obligations of the United States government, and obligations of federal credit organizations. The Treasury has an arrangement with financial institutions to collateralize state deposits in excess of depository insurance. As of August 31, 2017, the carrying amount and bank balance of cash and deposits at the Treasury totaled \$303,574,622. The carrying amount of the system's bank accounts totaled \$129,537,801, the bank balance totaled \$129,497,864, and cash on hand totaled \$3,095,144.



## Notes to the Financial Statements

### C. INVESTMENTS

The system reports the following recurring fair value measurements as of August 31, 2017.

Investment Type	Fair Value				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value Per Share (NAVPS)	
<b>Investments</b>					
<b>Alternative Investments</b>					
Absolute Return	\$ -	\$ -	\$ -	\$ 1,769,495,081	\$ 1,769,495,081
Directional Hedge Funds	-	-	-	5,894,151,419	5,894,151,419
Domestic Energy, Natural Resources & Infrastructure	-	-	-	5,459,606,585	5,459,606,585
Domestic Private Equity	-	-	-	13,836,329,690	13,836,329,690
Domestic Real Assets	-	-	-	13,861,772,333	13,861,772,333
International Energy, Natural Resources & Infrastructure	-	-	-	80,840,724	80,840,724
International Private Equity	-	-	-	4,129,194,180	4,129,194,180
International Real Assets	-	-	-	3,654,258,498	3,654,258,498
Other Private Market	-	-	926,560,825	-	926,560,825
Risk Parity	-	-	-	3,754,033,129	3,754,033,129
Stable Value Hedge Funds	-	-	-	5,641,926,266	5,641,926,266
<b>Total Alternative Investments</b>	-	-	<b>926,560,825</b>	<b>58,081,607,905</b>	<b>59,008,168,730</b>
<b>Derivative Investments</b>					
Forwards	(52,603,444)	-	-	-	(52,603,444)
Futures	-	-	-	-	-
Options	387,431	(1,608,941)	-	-	(1,221,510)
Rights	147,256	-	-	-	147,256
Swaps	-	19,924,959	-	-	19,924,959
Warrants	2,485,140	3,476,139	-	-	5,961,279
<b>Total Derivative Investments</b>	<b>(49,583,617)</b>	<b>21,792,157</b>	-	-	<b>(27,791,460)</b>
<b>Equity Investments</b>					
Domestic Equity	21,153,070,563	-	91,762	-	21,153,162,325
International Equity	28,631,772,653	-	6,928,043	-	28,638,700,696
<b>Total Equity Investments</b>	<b>49,784,843,216</b>	-	<b>7,019,805</b>	-	<b>49,791,863,021</b>
<b>Fixed Income Investments</b>					
Asset and Mortgage Backed Bonds	-	132,860,923	-	-	132,860,923
Domestic Corporate Bonds	-	7,983,302	-	-	7,983,302
International Corporate Bonds	-	92,857	-	-	92,857
Sovereign Government Issue Bonds	-	900,937,012	-	-	900,937,012
U.S. Government Agency Bonds	-	8,595,392	-	-	8,595,392
U.S. Treasuries	14,440,953,938	-	-	-	14,440,953,938
U.S. Treasury STRIPS	-	12,401,754	-	-	12,401,754
U.S. TIPS	-	6,237,918,115	-	-	6,237,918,115
<b>Total Fixed Income Investments</b>	<b>14,440,953,938</b>	<b>7,300,789,355</b>	-	-	<b>21,741,743,293</b>
<b>Pooled Investments</b>					
Commingled Domestic Equity	-	-	-	5,577,504,284	5,577,504,284
Commingled Fixed Income	-	-	-	122,286,643	122,286,643
Commingled International Equity	-	-	-	5,282,722,514	5,282,722,514
Domestic Mutual Funds	-	-	-	392,737,522	392,737,522
International Mutual Funds	-	-	-	117,027,953	117,027,953
<b>Total Pooled Investments</b>	-	-	-	<b>11,492,278,916</b>	<b>11,492,278,916</b>
<b>Short-Term Investments</b>					
Short-Term Investment Fund	-	-	-	3,910,166,490	3,910,166,490
Short-Term Foreign Currency Contracts	(27,073)	-	-	-	(27,073)
<b>Total Short-Term Investments</b>	<b>(27,073)</b>	-	-	<b>3,910,166,490</b>	<b>3,910,139,417</b>
<b>Total Investments</b>	<b>\$ 64,176,186,464</b>	<b>\$ 7,322,581,512</b>	<b>\$ 933,580,630</b>	<b>\$ 73,484,053,311</b>	<b>\$ 145,916,401,917</b>
<b>Securities Lending</b>					
Invested Securities Lending Collateral*	5,905,046,000	11,734,848,840	-	-	17,639,894,840
<b>Total Securities Lending</b>	<b>\$ 5,905,046,000</b>	<b>\$ 11,734,848,840</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 17,639,894,840</b>
<b>Securities Sold Short</b>					
Securities Sold Short	(182,214,448)	-	-	-	(182,214,448)
<b>Total Securities Sold Short</b>	<b>\$ (182,214,448)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (182,214,448)</b>

\* Excludes receivables and payables related to the Securities Lending Pool.

## Notes to the Financial Statements

As of August 31, 2017, the system has no plans to sell investments for an amount different from the NAVPS (or its equivalent), and all investments to be sold have been identified.

The system achieves portfolio diversification by investing in a variety of strategies, geographies, and industry sectors. The significant investment strategies of the investees for investments reported at the NAVPS, as of August 31, 2017, are disclosed in the following table.

<b>Significant Investment Strategies</b>	
<b>Alternative Investments</b>	
<b>Absolute Return</b>	
US Investment Grade	Invests in US dollar-denominated investment-grade credit securities.
US High Yield	Invests in U.S. dollar-denominated, high-yield corporate bonds issued in the U.S.
US Securitized / Structured	Invests in bonds backed by securities.
Non-US Developed Fixed Income	Primarily invests in sovereign debt issued by developed countries outside of the US.
Emerging Market Debt	Invests in debt issued by corporations or governments in Emerging market countries.
Partnerships	Invests in fixed income related portfolios managed by strategic partners.
<b>Directional Hedge Funds</b>	
Event Driven	Seeks to exploit pricing inefficiencies that may occur before or after a corporate event, such as an earnings call, bankruptcy, merger, acquisition, or spinoff.
Fixed Income	Invests in fixed income strategies which typically involve some amount of credit exposure.
Long Short Equity	Involves buying long equities that are expected to increase in value and selling short equities that are expected to decrease in value.
Multi Strategy	Engages in a variety of investment strategies with the objective to smooth returns, reduce volatility, and decrease asset-class and single-strategy risks. Strategies adopted in a multi-strategy fund may include, but are not limited to, convertible bond arbitrage, equity long/short, statistical arbitrage and merger arbitrage.
Other	Trades in a broad range of instruments.
<b>Domestic/International Energy, Natural Resources &amp; Infrastructure</b>	
Energy Diversified	Invests in exploration, production, or distribution of oil, gas and other energy sources.
Infrastructure	Invests in infrastructure projects like roads, railways, ports, airports, telecommunications facilities, etc...
Natural Resources	Invests in companies engaged in extractive practices of commodities, including mining for coal, metallic ore, sand, gravel and oil shale; logging of naturally occurring trees; and drilling for oil and gas.
<b>Domestic/International Private Equity</b>	
Buyouts	Acquires shares of a company to gain a controlling interest.
Credit/Special Situations	Invests and trades in public and private debt obligations or equity securities or other indebtedness of companies undergoing financial distress, a turn-around in business operations, or companies which management believes are undervalued because of a discrete extraordinary event.
Emerging Managers	Trades in a broad range of instruments with emerging managers.
Venture/Growth Equity	Invests in companies with potential for significant growth.
<b>Domestic/International Real Assets</b>	
Core	Invests in stable, fully leased, multi-tenant properties typically within strong, diversified metropolitan markets.
Emerging Managers	Trades in a broad range of instruments with emerging managers.
Opportunistic	Targets underperforming and/or undermanaged properties, or properties that are temporarily depressed in value.
Other	Trades in a broad range of instruments.
REIT	Invests in companies that own or finance income-producing real estate.
Special Situations	Typically provides both equity and debt capital to distressed properties.
Value Added	Involves buying a property, improving it in some way, and selling it at an opportune time for gain. Properties are considered value added when they exhibit management or operational problems, require physical improvement, and/or suffer from capital constraints.
<b>Risk Parity</b>	
Risk Parity	Targets specific levels of risk to certain factors and/or assets in order to achieve increased portfolio diversification.
<b>Stable Value Hedge Funds</b>	
Commodities and Trends	Trades in a number of debt, equity, foreign exchange and commodity instruments and derivative contracts relating to those instruments, including swaps, indices, forwards, futures and option contracts.
Equity Market Neutral	Seeks to exploit differences in stock prices by being long and short in stocks within the same sector, industry, market capitalization, country, etc.
Fixed Income	Assumes opposing positions in fixed income products to take advantage of small price discrepancies while limiting interest rate risk.
Macro & Volatility	Invests in instruments whose prices fluctuate based on the changes in economic policies, along with the flow of capital around the globe.
Multi Strategy	Aims to deliver consistently positive returns regardless of the directional movement in equity, interest rate or currency markets.
Other	Trades in a broad range of instruments.
Reinsurance	Provides property catastrophe and specialty reinsurance coverages to insurers and reinsurers on a worldwide basis.
<b>Pooled Investments</b>	
<b>Commingled Domestic/International Equity, Commingled Fixed Income, and Mutual Funds</b>	
External Public Total Non-US Developed	Invests in long positions in equity securities as well as certain derivatives in non-US developed markets.
External Public Total USA	Invests in long positions in equity securities as well as certain derivatives in US markets.
External Public Total World Equity	Invests in equity securities in countries represented in the MSCI ACWI Value Index, as well as certain other global markets. Instruments used include but are not limited to ADRs, swaps, warrants, and other derivative instruments, money market instruments, and currency forwards and/or futures.
External Public Strategic Partnership	Allocations to strategic partners that have a broad mandate to invest in a variety of public markets.
External Public Total Emerging Markets	Invests mainly in equity and equity-related securities traded in the securities markets of newly industrializing countries and emerging markets.
<b>Short-Term Investments</b>	
<b>Short-Term Investment Fund</b>	Invests in highly liquid short-term ("cash-like") funds.

## Notes to the Financial Statements

The system manages unfunded capital commitments that it is legally obligated to fund when called by a General Partner. Funding of committed capital occurs over an extended time period and may take several years before the total allocation to each asset class is fully invested. Because an individual investment may begin to return capital to the system prior to the full funding of the system's commitment, the outstanding invested capital of the investment might at times be substantially less than the total commitment. The fair value of investments reported at the Net Asset Value Per Share (NAVPS) that have an unfunded capital commitment balance is presented in the following table as of August 31, 2017.

Investment Type	Investments Valued at the NAVPS	
	Fair Value	Unfunded Capital Commitment
Absolute Return	\$ 1,769,495,081	\$ 1,032,071,950
Directional Hedge Funds	5,894,151,419	165,000,000
Domestic Energy, Natural Resources & Infrastructure	5,459,606,585	3,860,954,718
Domestic Private Equity	13,836,329,690	9,719,361,198
Domestic Real Assets	13,861,772,333	6,415,920,946
International Energy, Natural Resources & Infrastructure	80,840,724	37,188,106
International Private Equity	4,129,194,180	2,924,946,468
International Real Assets	3,654,258,498	2,818,788,801
<b>Total</b>	<b>\$ 48,685,648,510</b>	<b>\$ 26,974,232,187</b>

Additionally, as of August 31, 2017, the system reported an unfunded capital commitment balance of \$385,373,470 that has not yet been allocated to a specific Alternative Investment type and an unfunded capital commitment balance of \$321,265,241 for externally managed funds that are not reported at the NAVPS.

The system's Directional Hedge Funds, Stable Value Hedge Funds, Commingled Domestic Equity, and Commingled International Equity are subject to redemption restrictions that constrain the system's ability to redeem these types of Alternative and Pooled Investments. The following table details the redemption frequency, redemption notice period, redemption restrictions, such as lockups and gates, and an estimate of the eventual lapse of those restrictions, or, if an estimate cannot be made, the fiscal year in which the restriction took place, by fair value as of August 31, 2017.



## Notes to the Financial Statement

Fair Value	Redemption Terms and Restrictions			
	Redemption Frequency	Redemption Notice Period	Redemption Restrictions	Redemption Restrictions Lapse
<b>Directional Hedge Funds</b>				
\$ 596,209,379	NA	NA	NA	NA
527,585,812	Monthly	30-90 Days	NA	NA
16,457,865	Monthly	60 Days	25% Investor Gate	No Estimate; Effective 2016
290,870,129	Monthly	90 Days	36 Months, 10% of Capital Lockup Period	Lapses 08/01/2019
11,522,456	Quarterly	30 Days	12 Month Lockup; 25% Investor Gate	Lockup Lapses 01/01/2017; Gate- No Estimate; Effective 2016
903,141,358	Quarterly	45-90 Days	NA	NA
320,301,393	Quarterly	45 Days	3 Year Lockup; 25% Fund Gate	Lockup Lapses 12/31/2019; Gate- No Estimate; Effective 2017
330,995,906	Quarterly	45 Days	3 Year Lockup	Lockup Lapses 01/01/2020
22,575,104	Quarterly	45 Days	3% Withdrawal Fee	12 months (soft) lockup
882,136,326	Quarterly	40-65 Days	10%-25% Fund Gate	No Estimate; Effective 2011-2017
2,372,200	Quarterly	60 Days	20% Quarterly Fund Gate	No Estimate; Effective 2010
688,918,986	Quarterly	60-90 Days	16.7%-25% Investor Gate	No Estimate; Effective 2012-2017
15,478,250	Quarterly	65 Days	25% Investor Gate	12 months (soft) lockup; 4% Withdrawal fee
37,262,414	Quarterly	65-90 Days	25% Quarterly Investor Gate	No Estimate; Effective 2014-2016
206,599,216	Quarterly	90 Days	25% Fund Gate; 3 Year Rolling Hard Lock	Lockup Lapses June 2019; Gate- No Estimate; Effective 2017
277,785,790	Quarterly	24 Months	35% Investor Gate	No Estimate; Effective 2014
440,307,366	Semi-Annual	95 Days	NA	NA
241,096,830	Semi-Annual	90 Days	20% Fund Gate	No Estimate; Effective 2010
74,898,987	Yearly	60 Days	NA	NA
7,635,652	Yearly	60 Days	20% Fund Gate	No Estimate; Effective 2012
<b>\$ 5,894,151,419</b>				
<b>Stable Value Hedge Funds</b>				
\$ 342,272,093	Daily	15 Days	NA	NA
305,339,390	Bi-Monthly	15 or 30 Day Notice	10% Fund Gate for 15 Day Notice	No estimate; Effective 2013
1,615,867,708	Monthly	2-60 Days	NA	NA
395,255,805	Monthly	45-90 Days	10%-20% Fund Gate	No estimate; Effective 2006-2012
280,849,515	Monthly	25-90 Days	20%-25% Investor Gate	No estimate; Effective 2010-2017
174,391,291	Monthly; Semi-Annual	Monthly, 20 Day Notice; Semi-Annual, 10/31 or 03/31 Notice	36 Month Lockup	Lapses January 1, 2018
391,015,982	Monthly, Quarterly, 12/31	Monthly- 45-90 Days; Quarterly- 45 Days; 12/31- 90 Days	24 Month Lockup; 1/6th Investor Gate	Lockup- Lapses October 1, 2016; Gate- No estimate; Effective 2014
339,991,758	Quarterly	45-90 Days	NA	NA
625,560,088	Quarterly	45-90 Days	15%-25% Fund Gate	No estimate; Effective 2007-2015
670,872,493	Quarterly	90 Days	25% Quarterly Investor Gate	No estimate; Effective 2014-2015
365,296,300	Semi-Annual	90 Days	16.67% Semi-Annual Investor Gate	No estimate; Effective 2013
135,213,843	Annual	03/01	Up to 50% can be redeemed at 25% Fund Gate. Redemption could also be gated if request exceeds the amount of capital required by law.	No estimate; Effective 2013
<b>\$ 5,641,926,266</b>				
<b>Commingled Domestic Equity</b>				
\$ 761,406,418	NA	NA	NA	NA
2,142,494,683	Daily	1-5 Days	NA	NA
508,735,750	Bi-Monthly	9 Days	30% Fund Gate	No Estimate; Effective 2017
1,342,657,245	Monthly	6-15 Days	NA	NA
(153,835)	Quarterly	95 Days	NA	NA
479,444,877	Quarterly	90 Days	2 Year Lockup; 50% Quarterly Investor Gate	Lockup Lapses 2018; Gate- No Estimate; Effective 2017.
342,919,146	Annual	90 Days	25% Fund Gate	No Estimate; Effective 2010
<b>\$ 5,577,504,284</b>				
<b>Commingled International Equity</b>				
\$ 1,245,008,666	NA	NA	NA	NA
110,881,312	Daily	3 Days	NA	NA
2,079,971,083	Monthly	5-30 Days	NA	NA
634,673,409	Monthly	90 Days	12, 36, 48 Month Lockup	No Estimate; Rolling 3 Year Lock Up Period
1,212,188,044	Quarterly	60 Days	NA	NA
<b>\$ 5,282,722,514</b>				



## Notes to the Financial Statements

The system receives distributions through the liquidation of the underlying assets of the investees for a majority of its Alternative Investment interests in Private Equity, Real Assets, and Energy, Natural Resources & Infrastructure since these investments can never be redeemed with the investees. The following table discloses the system's estimate of the period over which the underlying assets are expected to be liquidated by the investees as of August 31, 2017.

Alternative Investment Type	Liquidation Period					NA	Total
	Less than 1 Year	1-5 Years	6-10 Years	Greater than 10 Years			
Absolute Return	\$ -	\$ 30,063,020	\$ -	\$ -	\$ 1,739,432,061	\$ 1,769,495,081	
Domestic Private Equity	995,534,602	3,420,644,491	4,203,491,968	711,258,649	4,505,399,980	13,836,329,690	
Domestic Real Assets	205,568,699	2,608,532,334	3,492,679,569	5,185,710,584	2,369,281,147	13,861,772,333	
Domestic Energy, Natural Resources, and Infrastructure	97,970,872	1,142,294,174	2,598,355,302	644,615,913	976,370,324	5,459,606,585	
International Private Equity	785,622,733	1,132,553,642	1,211,934,103	37,990,633	961,093,069	4,129,194,180	
International Real Assets	257,164,836	843,668,164	1,758,829,278	157,008,802	637,587,418	3,654,258,498	
International Energy, Natural Resources, and Infrastructure	-	-	-	-	80,840,724	80,840,724	
Risk Parity	-	-	-	-	3,754,033,129	3,754,033,129	
<b>Total</b>	<b>\$ 2,341,861,742</b>	<b>\$ 9,177,755,825</b>	<b>\$ 13,265,290,220</b>	<b>\$ 6,736,584,581</b>	<b>\$ 15,024,037,852</b>	<b>\$ 46,545,530,220</b>	

### D. DERIVATIVE INVESTMENTS

Derivatives are used to efficiently manage and reduce the risk of the overall investment portfolio. Through the use of derivatives, the risks that are bound together in traditional cash market investments can be separated and managed independently. Derivative Investments are classified as Investments on the Statement of Fiduciary Net Position, and the changes in their fair value are classified as Investment Revenue on the Statement of Changes in Fiduciary Net Position. The fair value, changes in fair value, and notional value of the system's Derivative Investments, classified by derivative type, are displayed in the following table as of August 31, 2017.

## Notes to the Financial Statements

Fiduciary Funds Derivative Investments	Fair Value	Change in Fair Value Gain/(Loss)	Notional Value
<b>Forwards</b>			
FX Forwards	\$ (52,603,444)	\$ (54,562,538)	\$ (1,988,070,131)
<b>Total Forwards</b>	<b>(52,603,444)</b>	<b>(54,562,538)</b>	
<b>Futures</b>			
Commodity Futures	-	75,248,277	893,802,933
Fixed Income Futures	-	(100,912,388)	3,034,326,384
Foreign Currency Futures	-	(2,052,417)	(7,319,276)
Index Futures	-	369,015,524	2,519,409,519
<b>Total Futures</b>	<b>-</b>	<b>341,298,996</b>	
<b>Options</b>			
Equity Options	303,097	(10,477,684)	953,709
Futures Options	-	(115,143)	-
Index Options	(1,524,607)	32,212,661	(2,438,637)
<b>Total Options</b>	<b>(1,221,510)</b>	<b>21,619,834</b>	
<b>Rights</b>			
Rights	147,256	4,816,738	692,832
<b>Total Rights</b>	<b>147,256</b>	<b>4,816,738</b>	
<b>Swaps</b>			
Credit Default Swaps	20,909,308	18,183,388	482,055,330
Interest Rate Swaps	(581,472)	1,797,126	(422,648,637)
Total Return Swaps	(402,877)	(65,390,817)	(150,383,494)
<b>Total Swaps</b>	<b>19,924,959</b>	<b>(45,410,303)</b>	
<b>Warrants</b>			
Warrants	5,961,279	774,151	817,919
<b>Total Warrants</b>	<b>5,961,279</b>	<b>774,151</b>	
<b>Total</b>	<b>\$ (27,791,460)</b>	<b>\$ 268,536,878</b>	

The system's over-the counter (OTC) Derivative Investments include contingent features that require the system to post collateral in the event that the fair value surpasses a specified contractual threshold. The aggregate fair value of all Derivative Investments with these collateral posting provisions is \$(54,352,464). If the collateral posting requirements were triggered at August 31, 2017, the system would be required to post \$ 72,683,154 in collateral to its counterparties. As of August 31, 2017, the system has posted \$12,732,882 in collateral.

### E. SECURITIES LENDING

The system is authorized by Texas Government Code, Section 825.303 to contractually lend securities to borrowers in accordance with the Securities Lending Policy established by the Board of Trustees and as required by statute. The system's lending agent, State Street Global Advisors, administers its securities lending program for domestic and international equity and fixed income securities. TRS securities held by a prime broker are not eligible for securities lending by the prime broker. The current Policy has been in effect since January 1, 2017, and there were no significant securities lending policy changes during the reporting period. The Securities Lending Policy in its entirety can

## Notes to the Financial Statements

be accessed at [www.trs.texas.gov](http://www.trs.texas.gov). There were no significant policy violations during the fiscal year.

Collateral received from borrowers are delivered in the form of cash or government securities eligible for book entry in either the Federal Reserve system or the Participants Trust Company, or their respective successors. The initial collateral delivered to secure a loan of domestic securities must have a market value of at least 102 percent of the initial market value of the domestic loaned securities and at least 105 percent of the initial market value of the international loaned securities. Collateral is marked to market daily. If, while the loan is outstanding, the current market value of the collateral initially delivered is less than 100 percent or 105 percent of the current market value of the domestic or international securities, respectively, the securities lending agent must require the borrower to deliver additional collateral to restore the value to 102 percent or 105 percent of the current market value of the loaned securities for domestic or international securities, respectively. The system is authorized to invest cash collateral in the following types of instruments: U.S. government securities or U.S. government-sponsored enterprise (GSE) securities, money market instruments, repurchase agreements, fixed or floating rate debt obligations, and derivative instruments.

The securities lending contracts require the custodian to indemnify the system if the borrower fails to return the securities or income distributions made while the securities are on loan. Non-cash collateral cannot be pledged or sold unless the borrower defaults. All securities loans can be terminated on demand by the system or the borrower.

The par value, dollar-weighted average maturity of the collective cash collateral investment portfolio may not exceed 120 days. The expected final maturity of any individual fixed-rate instrument and individual floating-rate instrument may not exceed 36 months and seven years, respectively. As of August 31, 2017, the maturities of the investments made with cash collateral generally match the maturities of their securities loans, with the weighted average maturity of the invested cash collateral at 16 days, and the weighted average term of all securities on loan at 8 days.

As of August 31, 2017, the system reported \$17,654,070,642 worth of Invested Securities Lending Collateral. The system holds \$17,582,858,689 in cash collateral and \$431,287,122 in non-cash collateral. Securities on loan totaled \$17,698,026,554 and include investments in Domestic Corporate Bonds, Domestic Equities, International Equities, U.S. Government Agency Bonds, and U.S. Treasury Bonds.

### F. DEPOSIT AND INVESTMENT RISK FACTORS

#### Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the system will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the system will not be able to recover the value of investment or collateral securities that are in the possession of an outside party.

## Notes to the Financial Statements

### Deposits

The system does not have a formal deposit policy for custodial credit risk. Deposits held at the State of Texas Treasury are not subject to custodial credit risk since the Treasury holds collateral in the system's name in excess of depository insurance. Deposits held in bank accounts in excess of depository insurance are uninsured and uncollateralized. As of August 31, 2017, \$129,160,822 of the System's bank balance was uninsured and uncollateralized.

### Investments

The system has contracted with State Street Bank and Trust Company and Goldman Sachs to serve as custodians for the system's investments. The system does not have a formal investment policy for custodial credit risk. As of August 31, 2017, the Short-Term Investment Fund is held by the custodian in a 2a-7 like investment pool not evidenced by a security and is not exposed to custodial credit risk. These securities are held in the name of the system by the custodian. All other investments are registered in the name of the Teachers Retirement System of Texas or in the name of the system's custodian.

### Securities Lending

The system does not have a formal investment policy for custodial credit risk for its securities lending program. The system's reinvests all cash collateral received in an unrated cash collateral pool held by the system's securities lending agent and is, therefore, not exposed to custodial credit risk. Since non-cash collateral is not reported on the balance sheet, it is exposed to custodial credit risk, as is the related underlying securities on loan. The following table shows the underlying securities for the non-cash collateral loans, which are held by the counterparty, the securities lending agent, but not in the system's name and are not insured as of August 31, 2017.

Investment Type	Securities on Loan Fair Value	Non-Cash Collateral Value
Domestic Corporate Bonds	\$ 4,214	\$ 4,300
Domestic Equity	228,619,839	233,401,285
International Equity	149,942,567	160,542,949
U.S. Treasuries	36,749,321	37,338,588
<b>Total</b>	<b>\$ 415,315,941</b>	<b>\$ 431,287,122</b>

### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

## Notes to the Financial Statements

### Investments

The system does not have a formal credit risk policy for its investments. The S&P credit rating and fair value of the system's Short-Term Investment Fund and Fixed Income Investments as of August 31, 2017 is disclosed in the following table.

S&P Rating	Investment Type										Total
	Asset and Mortgage Backed Bonds	Domestic Corporate Bonds	International Corporate Bonds	Short-Term Investment Fund	Sovereign Government Issue Bonds	U.S. Government Agency Bonds <sup>1</sup>	U.S. Treasuries <sup>2</sup>	U.S. Treasury STRIPS <sup>2</sup>	U.S. TIPS <sup>2</sup>		
NA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,440,953,938	\$ 12,401,754	\$ 6,237,918,115	\$ -	\$ 20,691,273,807
AAA	1,394,008	-	-	-	497,164	-	-	-	-	-	1,891,172
AA+	23,648,218	-	-	-	3,362,408	3,601,847	-	-	-	-	30,612,473
AA	340,147	-	-	-	-	-	-	-	-	-	340,147
A+	-	-	-	-	4,189,206	-	-	-	-	-	4,189,206
A	525,883	-	-	-	-	-	-	-	-	-	525,883
A-	521,838	-	-	-	-	-	-	-	-	-	521,838
BBB+	1,576,233	-	-	-	9,663,382	-	-	-	-	-	11,239,615
BBB	708,569	-	-	-	-	-	-	-	-	-	708,569
BBB-	789,676	-	-	-	6,063,982	-	-	-	-	-	6,853,658
BB+	6,509,585	-	-	-	-	-	-	-	-	-	6,509,585
BB	1,508,948	-	-	-	21,722,704	-	-	-	-	-	23,231,652
BB-	4,241,427	-	-	-	-	-	-	-	-	-	4,241,427
B+	5,945,884	-	-	-	-	-	-	-	-	-	5,945,884
B	5,048,570	-	-	-	-	-	-	-	-	-	5,048,570
B-	19,856,799	139,219	-	-	22,684,574	-	-	-	-	-	42,680,592
CCC	29,778,078	-	-	-	-	-	-	-	-	-	29,778,078
CC	1,482,629	-	-	-	-	-	-	-	-	-	1,482,629
D	9,804,227	-	-	-	-	-	-	-	-	-	9,804,227
NR <sup>3</sup>	19,180,204	7,844,083	92,857	3,910,166,490	832,753,592	4,993,545	-	-	-	-	4,775,030,771
<b>Total</b>	<b>\$ 132,860,923</b>	<b>\$ 7,983,302</b>	<b>\$ 92,857</b>	<b>\$ 3,910,166,490</b>	<b>\$ 900,937,012</b>	<b>\$ 8,595,392</b>	<b>\$ 14,440,953,938</b>	<b>\$ 12,401,754</b>	<b>\$ 6,237,918,115</b>	<b>\$ -</b>	<b>\$ 25,651,909,783</b>

<sup>1</sup>U.S. Government Agency Bonds (FHLB, FNMA, FHLMC) are implicitly guaranteed by the U.S. Government.

<sup>2</sup>U.S. Treasuries, U.S. Treasury STRIPS, and U.S. TIPS are explicitly guaranteed by the U.S. Government.

<sup>3</sup>NR represents unrated securities.

### Derivative Investments

The maximum allowable unsecured counterparty exposure for over-the-counter (OTC) derivative transactions is \$500 million, based on the total net market value of all OTC positions held with each counterparty. The total counterparty exposure for each counterparty, including the collateralized portions of these agreements, may not exceed 5 percent of the system's total fund market value. The minimum credit rating, based on a Nationally Recognized Statistical Rating Organization (NRSRO), must be rated at least A- or better at the inception of the contract. For any counterparty that experiences deterioration in credit quality that results in a NRSRO rating below the A- level, subsequent to the inception of transaction, additional eligible collateral may be posted, or the transaction may be terminated.

All OTC derivatives must be governed by an International Swaps and Derivatives Association (ISDA) Master Agreement and Credit Support Annex or, if centrally cleared by clearing agreements, the close-out netting provisions and collateralization provisions must be included.

The counterparty limits for repurchase transactions and tri-party repurchase transactions may not exceed 5 percent of the system's total fund market value, unless the transactions are covered by a third-party indemnification agreement by an organization that bears a long-term NRSRO credit rating of A- or better and is enhanced by acceptable collateral. Each repurchase agreement will be entered into under the Public Securities Association (PSA) and International Securities Market Association

## Notes to the Financial Statements

(ISMA) Global Master Repurchase Agreement. Each ISDA Master Agreement must also include a table that delineates the excess purchased securities margin (haircut) required, based on the collateral type, duration, and credit quality.

The aggregate fair value of Derivative Investment instruments in asset positions as of August 31, 2017, was \$94,676,095, which represents the maximum amount of loss due to credit risk that would be recognized if all counterparties failed to perform as contracted. The exposure is reduced by \$2,730,000 of collateral held and \$76,345,405 of liabilities included in netting arrangements with those counterparties, resulting in a net exposure to credit risk of \$15,600,690. The following table discloses the net exposure to credit risk by counterparty and their corresponding credit rating by each of the Big Three credit rating agencies as of August 31, 2017.

Counterparty	Net Exposure	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody's Rating
Bank of America	\$ 5,527,384	35%	A+	A+	A1
Citibank	7,804,278	50%	A+	A+	A1
Morgan Stanley	2,269,028	15%	A+	A	A1
<b>Total</b>	<b>\$ 15,600,690</b>	<b>100%</b>			

The system's net exposure to credit risk is limited to 5% of the market value of the system's total fund value. As of August 31, 2017, significant concentrations of net exposure to credit risk existed at Bank of America (35%) and Citibank (50%), but the net exposure for each counterparty did not surpass 5% of the system's total fund market value.

### Securities Lending

Instruments having a maturity at the time of purchase of less than 13 months must be rated in one of the two highest short-term ratings categories of the following Nationally Recognized Statistical Ratings Organizations (NRSRO) – Moody's, Standard & Poor's, Fitch or DBRS – or be considered by the Board of Trustees to be of comparable quality. Instruments having a maturity at the time of purchase greater than 13 months must be rated at the time of purchase within the highest major, long-term rating category of an NRSRO (e.g., Moody's A3 or Standard & Poor's A-), or, if unrated, be determined to be of comparable quality by the Board of Trustees. As of August 31, 2017, there was no credit risk exposure because the amounts owed to borrowers exceeded the amounts owed to the system.

### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment.

## Notes to the Financial Statements

### Investments

The system does not have a formal interest rate risk policy for its investments. The following table presents the fair value and the weighted effective duration rate for the system's Fixed Income Investments that are subject to interest rate risk as of August 31, 2017.

Fixed Income Investment Type	Fair Value	Weighted Effective Duration Rate
Asset and Mortgage Backed Bonds	\$ 132,860,923	1.53
Domestic Corporate Bonds	7,983,302	0.03
International Corporate Bonds	92,857	7.37
Sovereign Government Issue Bonds	900,937,012	8.31
U.S. Government Agency Bonds	8,595,392	4.75
U.S. Treasuries	14,440,953,938	17.90
U.S. Treasury STRIPS	12,401,754	17.63
U.S. TIPS	6,237,918,115	5.44
<b>Total</b>	<b>\$ 21,741,743,293</b>	<b>13.82</b>

Asset and Mortgage Backed Bonds are based on cash flows from interest payments on underlying mortgages, which makes them highly sensitive to interest rate changes when mortgagees make prepayments in periods of declining interest rates.

### Derivative Investments

The system does not have a formal interest rate risk policy for its Derivative Investments. The system's investments in Swaps are highly sensitive to interest rate changes because they are based on fluctuating Interbank Offered Rates. As the Rates fluctuate, the total expected cash flows will fluctuate. The reference rates, embedded options, fair value, and notional value of the system's Interest Rate and Return Swaps that are exposed to interest rate risk, as of August 31, 2017, are presented in the following table.

## Notes to the Financial Statements

Reference Rate & Embedded Options	Fair Value	Investment Maturities (in Years)			Notional Value
		Less than 1	1-5	6-10	
<b>Interest Rate Swaps</b>					
Receive Variable 6-month EURIB, Pay Fixed 0.28200%	\$ 397,163	\$ -	\$ -	\$ 397,163	\$ (11,873,539)
Receive Variable 6-month EURIB, Pay Fixed 0.52200%	286,555	-	-	286,555	(27,557,501)
Receive Variable 6-month EURIB, Pay Fixed 0.55300%	198,951	-	-	198,951	(29,051,948)
Receive Variable 6-month EURIB, Pay Fixed 0.73100%	(110,235)	-	-	(110,235)	(57,019,619)
Receive Variable 6-month EURIB, Pay Fixed 0.73300%	43,675	-	-	43,675	(12,280,975)
Receive Variable 6-month EURIB, Pay Fixed 0.81450%	(106,711)	-	-	(106,711)	(12,780,669)
Receive Variable 6-month EURIB, Pay Fixed 0.83950%	(22,720)	-	-	(22,720)	(2,503,822)
Receive Variable 6-month EURIB, Pay Fixed 0.98500%	(1,537,471)	-	-	(1,537,471)	(75,151,287)
Receive Variable 6-month PRIBO, Pay Fixed 1.05500%	42,476	-	42,476	-	(12,978,028)
Receive Variable 6-month PRIBO, Pay Fixed 1.06000%	41,651	-	41,651	-	(12,931,866)
Receive Variable 6-month PRIBO, Pay Fixed 1.06750%	36,818	-	36,818	-	(12,931,794)
Receive Variable 6-month PRIBO, Pay Fixed 1.06800%	36,503	-	36,503	-	(12,931,794)
Receive Variable 6-month PRIBO, Pay Fixed 1.08500%	53,310	-	53,310	-	(26,637,655)
Receive Variable 6-month PRIBO, Pay Fixed 1.09900%	30,784	-	30,784	-	(26,079,286)
Receive Variable 6-month PRIBO, Pay Fixed 1.10000%	14,753	-	14,753	-	(13,039,643)
Receive Variable 6-month PRIBO, Pay Fixed 1.10500%	2,580	-	2,580	-	(5,348,657)
Receive Variable 6-month PRIBO, Pay Fixed 1.11500%	5,899	-	5,899	-	(58,510,910)
Receive Variable 6-month PRIBO, Pay Fixed 1.12000%	4,548	-	4,548	-	(13,039,643)
<b>Total Interest Rate Swaps</b>	<b>(581,471)</b>	<b>-</b>	<b>269,322</b>	<b>(850,793)</b>	
<b>Total Return Swaps</b>					
Receive Equity, Pay Variable 12-month FEDFU	(112,523)	(112,523)	-	-	4,929,100
Receive Equity, Pay Variable 1-month FEDFU	(2,165)	-	(2,165)	-	7,054,623
Receive Equity, Pay Variable 1-month FEDLO	262,731	-	262,731	-	10,990,663
Receive Equity, Pay Variable 1-month JPYIB	(128,914)	-	(128,914)	-	2,218,697
Receive Equity, Pay Variable 1-month LIBOR	898,440	808,800	89,640	-	32,277,840
Receive Equity, Pay Variable 3-month LIBOR	11,633,919	11,633,919	-	-	168,757,519
Receive Variable 12-month FEDFU, Pay Equity	(5,281,672)	(5,281,672)	-	-	(17,320,688)
Receive Variable 1-month FEDFU, Pay Equity	(152,943)	(152,943)	-	-	(7,039,979)
Receive Variable 1-month FEDLO, Pay Equity	(52,197)	-	(52,197)	-	(32,712,585)
Receive Variable 1-month OBFR, Pay Equity	(43,499)	(43,499)	-	-	(2,494,245)
Receive Variable 3-month LIBOR, Pay Equity	(3,802,844)	(3,711,578)	(91,266)	-	(247,809,020)
Receive Variable 1-month LIBOR, Pay Equity	(918,222)	(918,222)	-	-	(62,413,307)
<b>Total Return Swaps</b>	<b>3,218,333</b>	<b>3,140,504</b>	<b>77,829</b>	<b>-</b>	
<b>Total Swaps</b>	<b>\$ 1,718,640</b>	<b>\$ 2,222,282</b>	<b>\$ 347,151</b>	<b>\$ (850,793)</b>	

## Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of a deposit or an investment. The system does not have a formal deposit policy for foreign currency risk. The risk of holding investments in foreign currency is managed by applying currency hedge ratios to the system's public markets and private markets non-dollar exposures. Each currency hedge ratio is the percentage of aggregate, non-dollar currency exposure to be passively hedged, and the hedging horizon is intermediate (one to three years). The system's exposure to foreign currency risk as of August 31, 2017 is presented in the following table.

## Notes to the Financial Statements

Currency by Country	Cash	Alternative Investments	Derivative Investments	Equity Investments	Fixed Income Investments	Pooled Investments	Total
Australia Dollar	\$ 6,419,530	\$ -	\$ (7,378,408)	\$ 729,109,095	\$ 181,320,938	\$ -	\$ 909,471,155
Bangladesh Taka	75,350	-	-	8,991,342	-	-	9,066,692
Botswana Pula	44,676	-	-	3,010,190	-	-	3,054,866
Brazil Real	3,732,119	-	66,067	762,386,016	21,722,704	-	787,906,906
Canada Dollar	8,673,427	-	2,391,499	1,067,070,978	497,164	-	1,078,633,068
Chile Peso	96,876	-	(1,467,111)	78,064,748	-	-	76,694,513
China Yuan Renminbi Offshore	-	-	(128,902)	-	-	-	(128,902)
China Yuan Renminbi	-	-	383,693	-	-	-	383,693
Colombia Peso	98,338	-	(364,488)	19,516,947	-	-	19,250,797
Croatia Kuna	168,390	-	-	6,023,501	-	-	6,191,891
Czech Republic Koruna	248,986	-	12,003,828	35,227,003	-	-	47,479,817
Denmark Krone	70,572	-	(57,118)	383,228,758	-	-	383,242,212
Egypt Pound	157,049	-	-	27,235,147	-	-	27,392,196
Euro Member Countries	46,391,473	2,479,608,243	(42,654,040)	4,760,879,117	311,447,733	634,673,409	8,190,345,935
Ghana Cedi	159,557	-	-	2,129,315	-	-	2,288,872
Hong Kong Dollar	11,895,808	-	440,987	3,231,968,761	-	-	3,244,305,556
Hungary Forint	27,296	-	(324,607)	107,748,073	-	-	107,450,762
India Rupee	2,774,041	-	87,347	913,251,563	92,857	-	916,205,808
Indonesia Rupiah	156,845	-	(37,544)	371,680,887	-	-	371,800,188
Israel Shekel	132,695	-	(292,891)	31,119,409	-	-	30,959,213
Japan Yen	27,738,151	-	(428,088)	3,805,391,019	4,629,851	-	3,837,330,933
Jordan Dinar	51,863	-	-	5,217,924	-	-	5,269,787
Kenya Shilling	174,789	-	-	6,755,452	-	-	6,930,241
Korea (South) Won	925,191	-	660,859	1,609,559,330	-	-	1,611,145,380
Kuwait Dinar	117,295	-	-	15,471,677	-	-	15,588,972
Malaysia Ringgit	186,019	-	74,768	208,381,059	-	-	208,641,846
Mauritius Rupee	110,923	-	-	6,117,208	-	-	6,228,131
Mexico Peso	346,794	-	960,174	374,183,751	-	-	375,490,719
Morocco Dirham	157,888	-	2,127	5,811,345	-	-	5,971,360
New Zealand Dollar	268,856	-	(211,962)	17,144,477	3,362,408	-	20,563,779
Nigeria Naira	258,849	-	-	4,810,773	-	-	5,069,622
Norway Krone	77,656	-	912,980	342,237,701	-	-	343,228,337
Oman Rial	222,332	-	-	4,972,918	-	-	5,195,250
Pakistan Rupee	97,714	-	-	40,443,723	-	-	40,541,437
Peru Sol	74,879	-	-	2,891,239	-	-	2,966,118
Philippines Peso	170,496	-	(18,473)	86,542,165	-	-	86,694,188
Poland Zloty	383,289	-	110,856	161,953,013	-	-	162,447,158
Qatar Riyal	4,529	-	-	22,531,387	-	-	22,535,916
Romania New Leu	307,719	-	4,214	8,164,391	-	-	8,476,324
Russia Ruble	-	-	719,049	47,905,130	-	-	48,624,179
Singapore Dollar	708,272	-	(23,856)	90,052,951	-	-	90,737,367
South Africa Rand	889,144	-	(844,068)	717,375,077	6,063,982	-	723,484,135
Sri Lanka Rupee	64,483	-	-	5,083,315	-	-	5,147,798
Sweden Krona	165,858	-	1,221,461	207,196,118	-	-	208,583,437
Switzerland Franc	1,524,125	-	(741,589)	879,212,165	-	-	879,994,701
Taiwan New Dollar	4,702,750	-	(811,386)	1,007,814,930	-	-	1,011,706,294
Thailand Baht	602,290	-	(58,641)	238,591,734	-	-	239,135,383
Tunisia Dinar	72,987	-	6	2,296,717	-	-	2,369,710
Turkey Lira	137,423	-	4,627,438	220,855,630	-	-	225,620,491
United Arab Emirates Dirham	108,098	-	-	42,897,585	-	-	43,005,683
United Kingdom Pound	3,950,501	423,553,752	(3,210,702)	2,445,518,711	367,703,026	-	3,237,515,288
Viet Nam Dong	493,093	-	-	6,006,723	-	-	6,499,816
<b>Total Foreign Currency Risk</b>	<b>\$ 126,417,284</b>	<b>\$ 2,903,161,995</b>	<b>\$ (34,386,521)</b>	<b>\$ 25,178,028,188</b>	<b>\$ 896,840,663</b>	<b>\$ 634,673,409</b>	<b>\$ 29,704,735,018</b>

## Notes to the Financial Statements

### NOTE 4: EMPLOYEE COMPENSABLE LEAVE

Salary costs related to employees' rights to be compensated for leave balances are accrued as expenses in the period in which the services are rendered. Accumulated compensable leave liabilities are reported in the Statement of Fiduciary Net Position for the Pension and Other Employee Benefit Trust Funds and in the Statement of Net Position for the Proprietary Funds. The employees' compensable leave activity for fiscal year 2017 is shown in the table below:

Fund	Beginning Balance 09/01/16	Additions	Reductions	Ending Balance 08/31/17	Amounts Due Within One Year	Amounts Due Thereafter
<b>Fiduciary Funds:</b>						
Pension Trust Fund	\$8,280,209	\$8,608,827	(\$8,280,554)	\$8,608,482	\$6,004,008	\$2,604,474
TRS-Care	326,071	385,238	(323,598)	387,711	247,132	140,579
<b>Proprietary Funds:</b>						
TRS-ActiveCare	95,410	199,464	(118,328)	176,546	132,367	44,179
403(b) Administrative Program	4,652	9,853	(9,469)	5,036	5,030	6
<b>Total</b>	<b>\$8,706,342</b>	<b>\$9,203,382</b>	<b>(\$8,731,949)</b>	<b>\$9,177,775</b>	<b>\$6,388,537</b>	<b>\$2,789,238</b>

### NOTE 5: OPERATING LEASES

In fiscal year 2014, TRS entered into a non-cancelable operating lease agreement for building space which expires March 31, 2021. As part of the building lease, TRS received a construction allowance which is being amortized on a straight-line basis over the life of the lease as a reduction of rental expenses.

Rental expenses related to the lease for the fiscal year ended August 31, 2017 for the Pension Trust Fund were \$2,198,281 and includes an adjustment for amortization of unrealized lease incentives of \$75,254. Rental expenses related to Teacher Retirement Investment Company of Texas (TRICOT) located in London were \$306,453 for leases. Off-site storage fees for data security was \$15,562, copier rentals were \$367,763 and rental for a mail machine was \$91,065.

The future minimum lease payment for the next four years are as follows:

Fiscal Year	Amount
2018	1,820,193
2019	1,492,759
2020	1,534,447
2021	884,706
<b>Total</b>	<b>\$ 5,732,105</b>

## Notes to the Financial Statements

### NOTE 6: FRINGE BENEFITS PAID BY THE STATE OF TEXAS AND THE FEDERAL GOVERNMENT

The state has a joint contributory retirement plan for substantially all its employees. The employees of TRS participate in the same pension plan they administer (Note 12).

Federal legislation enacted in January 2006 established prescription drug coverage for Medicare beneficiaries known as Medicare Part D. One of the provisions of Medicare Part D provided retiree drug subsidy reimbursements to TRS-Care on behalf of certain plan participants totaling \$5,341,625 for the fiscal year ended August 31, 2017. Under TRS-Care's Employer Group Waiver Plan (EGWP) reimbursements totaled \$32,993,639 for Medicare Part D direct subsidies, \$55,793,940 for catastrophic reinsurance subsidies and \$7,589,347 for low income subsidies.

### NOTE 7: DEFERRED COMPENSATION

Employees of the system may elect to defer a portion of their earnings for income tax and investment purposes pursuant to authority granted in the Tex. Gov. Code Ann., Sec. 609.001. Two plans are available for employees. Both plans are administered by the Employees Retirement System. The system has no additional or unfunded liability for this program.

### NOTE 8: CONTINGENT LIABILITIES

Sick leave, the accumulation of which is unlimited, is earned at the rate of eight hours per month and is taken only in the event of illness or paid to the estate of an employee in the event of death. The maximum sick leave that may be paid to an employee's estate is one-half of the employee's accumulated entitlement or 336 hours, whichever is less. The system's policy is to recognize the cost of any sick leave when paid.

The system is contingently liable for benefits payable to retiring members who remain in a pending status longer than 30 days after fiscal year end. In addition, under Texas Insurance Code, Article 3.51-7, the system is contingently liable to pay a lump-sum death benefit not to exceed \$5,000 when added to the death benefit authorized under Texas Government Code, Title 8, Chapter 824, to the beneficiaries of deceased, retired employees.

A Performance Incentive Compensation Plan was adopted effective September 2007 and amended 2015, to enable the system to remain competitive in its efforts to attract, retain and motivate high caliber investment division staff. The purpose of the Plan is to provide the opportunity for investment division employees to earn performance incentive pay based on the fund's investment performance and the employee's job performance. The performance incentive pay is paid over the subsequent 2 years. For the incentive pay plan year ending September 30, 2017 the liability is estimated not to exceed \$12.8 million. Payments can only be earned following years in which the fund experiences a positive return, and employees must be employed by TRS on the designated dates in the Plan to earn and receive payment. The board of trustees may cancel or modify the Plan at any time.

An Executive Performance Incentive Plan was adopted effective July 1, 2016 in order to remain competitive in its efforts to attract and retain high caliber executives. The purpose of the plan is to provide an opportunity for select executive management to earn performance incentive pay based

## Notes to the Financial Statements

on the key objectives tied to the overall success of TRS. The performance incentive pay is paid over the subsequent 2 years. For the incentive pay plan year ending June 30, 2016 the remaining liability is estimated at \$4,775. For the incentive pay plan year ending June 30, 2017 the liability is estimated at \$16,372.

TRS is a defendant in litigation involving issues arising from its normal activities. The outcome of this litigation cannot be determined at this time. Based upon consultation with legal counsel, management believes there will be no material adverse effect on the basic financial statements as a result of the ultimate outcome of these matters.

### NOTE 9: CONTINUANCE SUBJECT TO REVIEW

As provided by Texas Government Code, Title 8, Section 825.006, "The board of trustees of the Teacher Retirement System of Texas is subject to review under Chapter 325 (Texas Sunset Act), but is not abolished under that chapter. The board shall be reviewed during the period in which state agencies abolished in 2025, and every 12<sup>th</sup> year after that year, are reviewed."

### NOTE 10: OTHER POST-EMPLOYMENT BENEFITS

#### A. PLAN DESCRIPTION

The Texas Public School Retired Employees Group Insurance Program (TRS-Care) is a multiple-employer, cost-sharing, defined benefit Other Post-Employment Benefit (OPEB) plan with a special funding situation. The TRS-Care program was established in 1986 by the Texas Legislature. The plan is administered through a trust and has the following characteristics:

- Contributions from employers and non-employer contributing entities to the OPEB plan and earnings on those contributions are irrevocable.
- OPEB plan assets are dedicated to providing OPEB to plan members in accordance with the benefit terms.
- OPEB plan assets are legally protected from the creditors of plan members, employers, non-employer contributing entities, and the OPEB plan administrator.

The Board of Trustees of TRS administers the TRS-Care program and the related fund in accordance with the Texas Insurance Code Chapter 1575. The Board of Trustees is granted the authority to establish basic and optional group insurance coverage for participants as well as to amend benefit terms as needed under Chapter 1575.052. The Board may adopt rules, plans, procedures and orders reasonably necessary to administer the program, including minimum benefits and financing standards. Information regarding the TRS-Care board and its composition can be found in the CAFR on the "Board of Trustees" page and in Note 1.

Contributors to the plan include active and retired members, employers, and the State of Texas as the only non-employer contributing entity. Employers include public schools, educational districts, regional education service centers and open-enrollment charter schools whose employees are members of the Teacher Retirement System of Texas. During fiscal 2017, the number of participating employers were as follows:

## Notes to the Financial Statements

Participating Employers	
Independent School Districts*	1,023
Open Enrollment Charter Schools	170
Regional Education Service Centers	20
Other Educational Districts	4
<b>Total</b>	<b>1,217</b>

\* Excludes Windham School District which is not covered by TRS-Care.

As of August 31, 2017, TRS-Care plan membership consisted of the following:

TRS-Care Plan Membership	
Active plan members	712,260
Inactive plan members currently receiving benefits	216,810
Inactive plan members entitled to but not yet receiving benefits	10,512
<b>Total</b>	<b>939,582</b>

The Average Expected Remaining Service Life (AERSL) of 8.5761 is based on the membership information as of the beginning of the fiscal year.

TRS-Care provides a basic health insurance coverage at no cost to all retirees from public schools, charter schools, regional education service centers and other educational districts who are members of the TRS Pension. Eligible non-Medicare retirees and their dependents may pay premiums to participate in one of the two standard insurance plans with more comprehensive benefits. Eligible Medicare retirees and dependents may pay premiums to participate in one of the two Medicare health plans. To qualify for TRS-Care coverage, a retiree must have at least 10 years of service credit in the TRS Pension system. For more information on TRS-Care eligibility and detailed information on TRS-Care, please refer to the Benefits section.

The premium rates for the optional health insurance are based on years of service of the member. The schedule on the following page shows the monthly rates for the average retiree with 20 to 29 years of service for the optional standard plan with Medicare Part A and Part B:

## Notes to the Financial Statements

TRS-Care Standard Plan Premium Rates			
Effective Sept. 1, 2016 - Dec. 31, 2017			
	TRS-Care 1	TRS-Care 2	TRS-Care 3
Retiree*	\$ 0	\$ 70	\$ 100
Retiree and Spouse	20	175	255
Retiree* and Children	41	132	182
Retiree and Family	61	237	337
Surviving Children only	28	62	82

\* Or surviving spouse

Other participants' premiums may be higher or lower depending upon the years of service of the member. The plan does not provide automatic cost of living adjustments (COLAs). During fiscal year 2017, deductibles were \$2,350 for those enrolled in Medicare Part A and eligible for Part B, \$3,900 for those not enrolled in Medicare Part A, but eligible for Part B, and \$5,250 for those not enrolled in Medicare.

The 85<sup>th</sup> Legislature, Regular Session, passed the following statutory changes in House Bill 3976 which became effective September 1, 2017:

- Creates the TRS-Standard plan that provides a zero cost for generic prescriptions for certain maintenance drugs, and provides a zero premium for disability retirees who retired as a disability retiree on or before January 1, 2017 and are not eligible to enroll in Medicare.
- Creates the TRS-Care Medicare Advantage Plan for Medicare-eligible participants which will maintain similar benefits as the current TRS-Care Medicare Advantage level 2 plan; and maintain Medicare Part D plan for prescription drug benefits.
- Eliminates the statutory requirement for TRS to provide a zero premium health benefit.

### B. CONTRIBUTIONS

Contribution rates for the TRS-Care plan are established in state statute by the Texas Legislature, and there is no continuing obligation to provide benefits beyond each fiscal year. The TRS-Care plan is currently funded on a pay-as-you-go basis and is subject to change based on available funding. Funding for TRS-Care is provided by retiree premium contributions and contributions from the state, active employees, and school districts based upon public school district payroll. The TRS Board does not have the authority to set or amend contribution rates.

At the inception of the plan, funding was projected to last 10 years through fiscal year 1995. The original funding was sufficient to maintain the solvency of the fund through fiscal year 2000. Since that time, appropriations and contributions have been established to be sufficient to provide benefits for each biennium.

Section 1575.202 of the Texas Insurance Code establishes the state's contribution rate which is 1.0% of the employee's salary. Section 1575.203 establishes the active employee rate which is 0.65% of

## Notes to the Financial Statements

pay. Section 1575.204 establishes a public school contribution of not less than 0.25 percent or not more than 0.75 percent of the salary of each active employee of the public school. The actual public school contribution rate is prescribed by the Legislature in the General Appropriations Act. Employers are also required to pay a surcharge of \$535 per month when employing a retiree of the TRS. The following table shows contributions to the TRS-Care plan by type of contributor.

2017 Contribution Rates		
Contributor	Rate	Amount
Active Employee	0.65%	\$ 213,241,179
Nonemployer Contributing Entity (State)	1.00	303,760,632
Participating Employers	0.55	180,415,839
Federal/Private Funding*	1.00	24,302,720
<b>Total</b>		<b>\$ 721,720,370</b>

\*Contributions from Federal Funds and Private Grants are remitted by the employer and paid at the State rate.

The following table shows past and future contribution rates:

Contribution Rates			
Year	Active Employee	State	Participating Employers
2013	0.65%	0.50%	0.55%
2014	0.65	1.00	0.55
2015	0.65	1.00	0.55
2016	0.65	1.00	0.55
2017	0.65	1.00	0.55
2018	0.65	1.25	0.75
2019	0.65	1.25	0.75

To alleviate a funding shortfall for the 2016-17 biennium, the 84<sup>th</sup> Texas Legislature appropriated \$768 million in supplemental funding with House Bill 2 that was paid in August 2015. An additional supplemental appropriation was received in 2017 for \$15.6 million, which was reappropriated from amounts received by the pension in excess of the state's actual obligation and then transferred to Care. Senate Bill 1, 85<sup>th</sup> Legislature, Regular Session provides for the following increases in contributions for fiscal years 2018-19:

- Increases the State contribution 0.25 percent of active employee payroll to 1.25 percent
- Increases the Employer contribution 0.20 percent of active employee payroll to 0.75 percent

## Notes to the Financial Statements

House Bill 3976 made the 0.25 percent increase in the State contribution a permanent and ongoing increase of state funding to the program. The 85th Texas Legislature, 1st Called Special Session, House Bill 30 provided an additional \$212 million in supplemental funding for the FY2018-19 biennium to continue to support the program.

### C. OPEB LIABILITY

Components of the Net OPEB Liability of the TRS-Care plan as of August 31, 2017 are as follows:

<b>Components of Liability</b>	<b>Amount</b>
Total OPEB Liability	\$43,885,784,621
Less: Plan Fiduciary Net Position	<u>399,535,986</u>
<b>Net OPEB Liability</b>	<b><u>\$43,486,248,635</u></b>
Net Position as a Percentage of Total OPEB Liability	0.91 %

### D. ACTUARIAL METHODS AND ASSUMPTIONS

The actuarial valuation of TRS-Care is similar to the actuarial valuations performed for the pension plan, except that the OPEB valuation is more complex. All of the demographic assumptions, including mortality, and most of the economic assumptions are identical to those which were adopted by the Board in 2015 and are based on the 2014 actuarial experience study of TRS.

The active mortality rates were based on 90 percent of the RP-2014 Employee Mortality Tables for males and females. The Post-retirement mortality rates were based on the 2015 TRS of Texas Healthy Pensioner Mortality Tables.

The following assumptions and other inputs used for members of TRS-Care are identical to the assumptions employed in the August 31, 2017 TRS annual pension actuarial valuation:

Rates of Mortality	General Inflation
Rates of Retirement	Wage Inflation
Rates of Termination	Expected Payroll Growth
Rates of Disability Incidence	

#### *Additional Actuarial Methods and Assumptions:*

Valuation Date	August 31, 2017
Actuarial Cost Method	Individual Entry Age Normal
Inflation	2.50%
Discount Rate *	3.42% *
Aging Factors	Based on plan specific experience
Expenses	Third-party administrative expenses related to the delivery of health care benefits are included in the age-adjusted claims costs.
Payroll Growth Rate	2.50%
Projected Salary Increases **	3.50% to 9.50% **
Healthcare Trend Rates ***	4.50% to 12.00%***

## Notes to the Financial Statements

Election Rates	Normal Retirement: 70% participation prior to age 65 and 75% participation after age 65
Ad hoc post-employment benefit changes	None

\* Source: Fixed Income municipal bonds with 20 years to maturity that include only federal tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of August 31, 2017.

\*\* Includes Inflation at 2.50%

\*\*\* Initial trend rates are 7.00% for non-Medicare retirees; 10.00% for Medicare retirees and 12.00% for prescriptions for all retirees. Initial trend rates decrease to an ultimate trend rate of 4.50% over a period of 10 years.

The following assumptions and other inputs which are specific to TRS-Care were updated from the prior year's report:

1. Significant plan changes were adopted during fiscal year ending August 31, 2017. Effective January 1, 2018, only one health plan option will exist (instead of three), and all retirees will be required to contribute monthly premiums for coverage. The health plan changes triggered changes to several of the assumptions, including participation rates, retirement rates, and spousal participation rates.
2. The August 31, 2016 valuation had assumed that the savings related to the Medicare Part D reimbursements would phase out by 2022. This assumption was removed for the August 31, 2017 valuation. Although there is uncertainty regarding these federal subsidies, the new assumption better reflects the current substantive plan. This change was unrelated to the plan amendment, and its impact was included as an assumption change in the reconciliation of the total OPEB liability. This change significantly lowered the OPEB liability.
3. The discount rate changed from 2.98 percent as of August 31, 2016 to 3.42 percent as of August 31, 2017. This change lowered the total OPEB liability.

In this valuation the impact of the Cadillac Tax has been calculated as a portion of the trend assumption. Assumptions and methods used to determine the impact of the Cadillac Tax include:

- 2018 thresholds of \$850/\$2,292 were indexed annually by 2.50 percent.
- Premium data submitted was not adjusted for permissible exclusions to the Cadillac Tax.
- There were no special adjustments to the dollar limit other than those permissible for non-Medicare retirees over 55.

Results indicate that the value of the excise tax would be reasonably represented by a 25 basis point addition to the long term trend rate assumption.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

**Discount Rate:** A Single Discount Rate of 3.42 percent was used to measure the total OPEB liability. There was a change of 0.44 percent in the discount rate since the previous year. Because the plan is essentially a "pay-as-you-go" plan, the Single Discount Rate is equal to the prevailing municipal bond rate.

## Notes to the Financial Statements

### Sensitivity of the Net OPEB Liability:

**Discount Rate** – The following presents the net OPEB liability of the plan using the discount rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one-percentage point lower (2.42%) or one-percentage point higher (4.42%) than the AA/Aa rate:

Sensitivity of the Net OPEB Liability to the Single Discount Rate Assumptions		
1% Decrease 2.42%	Current Single Discount Rate 3.42%	1% Increase 4.42%
\$51,324,568,976	\$43,486,248,635	\$37,186,006,400

**Healthcare Cost Trend Rates** – The following presents the net OPEB liability of the plan using the assumed healthcare cost trend rate, as well as what the net OPEB liability would be if it were calculated using a trend rate that is one-percentage point lower or one-percentage point higher than the assumed healthcare cost trend rate:

Sensitivity of the Net OPEB Liability to the Healthcare Cost Trend Rate Assumptions		
1% Decrease	Current Healthcare Cost Trend Rate	1% Increase
\$36,206,646,484	\$43,486,248,635	\$53,038,004,180

### NOTE 11: OTHER POST-EMPLOYMENT BENEFITS – TRS EMPLOYEES

Employees of the system who retire with 10 or more years of eligible service credit and meet the Rule of 80 or are at least 65 years of age continue to receive health care and basic life insurance benefits through the Texas Employees Group Benefits Program (GBP) of the State Retiree Health Plan (SRHP) in accordance with Texas Insurance Code, Chapter 1551. The SRHP is maintained and administered through the Employees Retirement System (ERS) of Texas and is considered a cost-sharing, multiple-employer, defined benefit post-employment health care plan with a special funding situation. ERS issues a publicly available financial report that includes financial statements and required supplementary information for the SRHP. That report may be obtained by visiting the ERS website at [www.ers.texas.gov](http://www.ers.texas.gov), by writing to the Finance Division of the Employees Retirement System of Texas at 200 East 18<sup>th</sup> Street, Austin, Texas 78701, or by calling 1-877-275-4377.

Benefits and contribution provisions of the SRHP are not actuarially determined, but are authorized by state law and may be amended by the Texas Legislature. For the year ended August 31, 2017, the system contributed up to a maximum monthly amount on a pay-as-you-go basis toward a retiree's health and basic life insurance premiums as follows:

## Notes to the Financial Statements

Type of Coverage	Employer Contribution Rates		
	Retiree Health and Basic Life Premium		
	For the Fiscal Year		
	2017	2016	2015
Member Only	\$ 617.30	\$ 576.54	\$ 537.66
Member & Spouse	970.98	906.78	845.54
Member & Children	854.10	797.66	743.80
Member & Family	1,207.78	1,127.90	1,051.68

The system covers 100 percent of a Member Only premium and 50 percent of the additional premium for family coverage. The basic plan includes up to \$2,500 for life insurance for the retiree. The retiree contributes any premium over and above the system's contribution for additional coverage. The board has adopted contributions based on rates set by the Texas Legislature on a biennial basis. At August 31, 2017, there were 283 TRS retirees and their beneficiaries receiving post-employment health care and basic life insurance benefits. Contractually required contributions to the SRHP are currently based on the annual pay-as-you-go expenses of the SRHP. The system has annually made 100 percent of its contractually required contributions to the SRHP.

### NOTE 12: PENSION DISCLOSURE

#### A. PLAN DESCRIPTION

The Teacher Retirement System of Texas is a public employee retirement system (PERS) that is a multiple-employer, cost-sharing, defined benefit pension plan with a special funding situation. The plan is administered through a trust and has the following characteristics:

- Contributions from employers and the non-employer contributing entity to the pension plan and earnings on the plan are irrevocable,
- Pension plan assets are dedicated to providing pensions to plan members in accordance with benefit terms, and
- Pension plan assets are legally protected from the creditors of employers, the non-employer contributing entity, and the pension plan administrator. Plan assets are also legally protected from creditors of the plan members.

Benefits are established or amended primarily under the authority of the provisions of the Texas Constitution, Article XVI, Section 67 and by the Legislature in the Texas Government Code, Title 8, Subtitle C. The pension's board of trustees does not have the authority to establish or amend benefits.

The normal service retirement is at age 65 with 5 years of credited service or when the sum of the member's age and years of credited service equals or exceeds 80 years. The benefit formula is 2.3 percent (multiplier) times the average of the five highest annual creditable salaries times years of credited service to equal the annual standard annuity. For members who are grandfathered, the three

## Notes to the Financial Statements

highest annual salaries are used. Reduced service retirement is at age 55 with 5 years of credited service and any age below 50 with 30 years of credited service. A member is fully vested after 5 years of creditable service and entitled to any benefit for which eligibility requirements have been met. The plan does not provide automatic cost of living adjustments (COLAs).

To be eligible for disability retirement, a member must have a physical or mental disability that precludes the member's continued performance of current duties, and the disability must be certified by the TRS Medical Board as probably permanent. Death and Survivor retirement benefits are available to the beneficiary of an active member. For more detail about benefits see the **Summary of Benefits** section in this report.

Contributors to the plan include members, employers and the State of Texas as the only non-employer contributing entity. The State is also the employer for senior colleges, medical schools and state agencies including TRS. In each respective role, the State contributes to the plan in accordance with state statutes and the General Appropriations Act.

All employees of public, state-supported educational institutions in Texas who are employed for one-half or more of the standard work load and who are not exempted from membership under Texas Government Code, Title 8, Section 822.002, are covered by the system.

The number of participating employers during fiscal year 2017 were as follows:

Participating Employers	
Independent School Districts	1,024
Charter Schools (open enrollment only)	170
Community and Junior Colleges	50
Senior Colleges and Universities	47
Regional Service Centers	20
Medical Schools	9
Educational Districts	4
State Agency	1
<b>Total</b>	<b>1,325</b>

## Notes to the Financial Statements

As of August 31, 2017, TRS Pension membership consisted of the following:

Pension Membership	
Retired plan members or beneficiaries currently receiving benefits	407,768
Inactive plan members entitled to but not yet receiving benefits	273,028
Active plan members	864,261
<b>Total</b>	<b>1,545,057</b>

The Average Expected Remaining Service Life (AERSL) of 6.7496 is based on the membership information as of the beginning of the fiscal year.

### B. CONTRIBUTIONS

Contribution requirements are established or amended pursuant to the following state laws: (1) Article 16, section 67 of the Texas Constitution requires the legislature to establish a member contribution rate of not less than 6 percent of the member's annual compensation and a state contribution rate of not less than 6 percent and not more than 10 percent of the aggregate annual compensation paid to members of the system during the fiscal year. Government Code section 821.006 prohibits benefit improvements, if as a result of the particular action, the time required to amortize TRS' unfunded actuarial liabilities would be increased to a period that exceeds 31 years, or, if the amortization period already exceeds 31 years, the period would be increased by such action. Actuarial implications of the funding provided in this manner are determined by the system's actuary.

As the non-employer contributing entity, the State of Texas contributes to the retirement system an amount equal to the current employer contribution rate times the aggregate annual compensation of all members of the pension trust fund during that fiscal year reduced by the amounts described below which are paid by the employers.

Employers (public school, junior college, other entities or the State of Texas as the employer for senior universities and medical schools) are required to pay the employer contribution rate in the following instances:

- On the portion of the member's salary that exceeds the statutory minimum for members entitled to the statutory minimum under Section 21.402 of the Texas Education Code.
- During a new member's first 90 days of employment.
- When any part or all of an employee's salary is paid by federal funding sources, a privately sponsored source, from non-educational and general, or local funds.
- When the employing district is a public junior college or junior college district, the employer shall contribute to the retirement system an amount equal to 50 percent of the state contribution rate for certain instructional or administrative employees; and 100 percent of the state contribution rate for all other employees.

## Notes to the Financial Statements

The following table shows contributions to the pension fund by type of contributor for Fiscal Year 2017:

Contributor	Contribution Rate	Amount
Member	7.7%	\$3,242,556,261
Non-Employer Contributing Entity (State)	6.8%	1,697,962,608
Employers	6.8%	1,158,808,801
<b>Total</b>		<b>\$6,099,327,670</b>

Employers are also required to pay surcharges in the following cases:

- When a school district or charter school does not contribute to the Federal Old-Age, Survivors and Disability Insurance (OASDI) Program for certain employees, they must contribute 1.5 percent of the applicable salary.
- When employing a retiree of the Teacher Retirement System, the employer shall pay an amount equal to the member contribution and the state contribution as an employment after retirement surcharge.

The following table shows the types of surcharges paid by the participating employers for Fiscal Year 2017:

Surcharge	Contribution Rate	Amount
Non-OASDI	1.5%	\$408,704,737
Employment after Retirement- Employer	6.8%	9,315,673
Employment after Retirement- Employee	7.7%	11,480,134
<b>Total</b>		<b>\$429,500,544</b>

Employee contribution rates are set in state statute, Texas Government Code 825.402. The 84<sup>th</sup> Texas Legislature, General Appropriations Act established the employer contribution rate for fiscal year 2017. Contribution rates for past and future years are as follows:

Year	Contribution Rates	
	Member	Employer
2014	6.4%	6.8%
2015	6.7%	6.8%
2016	7.2%	6.8%
2017	7.7%	6.8%
2018	7.7%	6.8%

## Notes to the Financial Statements

### C. LEGAL RESERVE ACCOUNT BALANCES

Section 825.309 of the Government Code requires that money in the Retired Reserve Account be used to pay all retirement annuities and all death or survivor benefits, including post-retirement benefit increases and other adjustments to annuities.

The balances in the statutory accounts as of August 31, 2017 were:

Member Savings Account	\$ 36,410,375,802
State Contribution Account	20,634,649,455
Retired Reserve Account	90,153,116,853
Deferred Retirement Option Account	13,174,533
Expense Account	150,400,760
<b>Total</b>	<b><u><u>\$ 147,361,717,403</u></u></b>

\* Does not include TRICOT Net Position

### D. DEFERRED RETIREMENT OPTION PROGRAM

The Deferred Retirement Option Plan (DROP) was closed to new members on December 31, 2005. It was a plan available for active members who were eligible for normal age service retirement and had at least 25 years of credited service. They could choose to participate in 12-month increments for up to five years. For detailed information on the plan, see the Summary of Benefits section. The remaining balance in the reserve account is shown in item C. above.

### E. PENSION LIABILITY

**Components of the Liability** – Components of the Net Pension Liability of the pension plan as of August 31, 2017 are as follows:

<u>Components of Liability</u>	<u>Amount</u>
Total Pension Liability	\$179,336,534,819
Less: Plan Fiduciary Net Position	147,361,922,120
Net Pension Liability	<b><u><u>\$ 31,974,612,699</u></u></b>
Net Position as a Percentage of Total Pension Liability	82.17 %

**Actuarial Assumptions** – The total pension liability is determined by an annual actuarial valuation. The actuarial methods and assumptions have been selected by the Board of Trustees based upon analysis and recommendations by the System's actuary. The Board of Trustees has sole authority to determine the actuarial assumptions used for the plan. The actuarial methods and assumptions are primarily based on a study of actual experience for the four year period ending August 31, 2014 and were adopted in September 2015.

The active mortality rates were based on 90 percent of the RP 2014 Employee Mortality Tables for males and females. The post-retirement mortality rates were based on the 2015 TRS of Texas Healthy Pensioner Mortality Tables.

## Notes to the Financial Statements

**Discount Rate** – A single discount rate of 8.0 percent was used to measure the total pension liability. There was no change in the discount rate since the previous fiscal year. This single discount rate was based on the expected rate of return on pension plan investments of 8.0 percent. The projection of cash flows used to determine this single discount rate assumed that contributions from plan members and those of the contributing employers and the non-employer contributing entity will be made at the rates set by the legislature during the 2013 legislative session.

Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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 with no cross-over point to a municipal bond rate.

The long-term expected rate of return on pension plan investments is 8.0 percent. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the Systems target asset allocation as of August 31, 2017 are summarized in Note 3.

The following assumptions were applied to this measurement period:

Valuation Date	August 31, 2017
Actuarial Cost Method	Individual Entry Age Normal
Asset Valuation Method	Market Value
Single Discount Rate	8.00%
Long-term Expected Rate	8.00%
Municipal Bond Rate	N/A*
Last year ending August 31 in 2017 to 2116	
Projection period (100 years)	2116
Inflation	2.50%
Salary Increases	3.50% to 9.50% including inflation
Ad hoc post-employment benefit changes	None

*\*If a municipal bond rate was to be used, the rate would be 3.42% as of August 2017 (i.e. the rate closest to but not later than the Measurement date). The source for the rate is the Fixed Income Market Data/Yield Curve/Data Municipal Bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index."*

## Notes to the Financial Statements

**Sensitivity of the Net Pension Liability** – The following presents the net pension liability of the plan using the discount rate of 8 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is one-percentage point lower (7%) or one-percentage point higher (9%) than the current rate:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumptions		
1% Decrease	Current Single Discount Rate	1% Increase
7%	8%	9%
\$53,902,879,534	\$31,974,612,699	\$13,715,771,590

**Trend Information** – The required schedule of changes in the employer’s net pension liability and related ratios immediately following the notes to the financial statements presents multi-year trend information about whether the net position of the plan is increasing or decreasing relative to the pension liability over time.

### NOTE 13: RISK MANAGEMENT

The 77th Texas Legislature enacted the Texas Active School Employees Uniform Group Benefits Act (H.B. 3343), establishing a new statewide health coverage program for public school employees and their dependents. TRS began administering this program, known as TRS-ActiveCare, September 1, 2002. The plan is available to all public school districts, charter schools with open enrollment, education service centers and certain other employers. The risk associated with this program is retained by the plan’s participants, and no risk is transferred to the plan’s administrators, to employers, or to the state.

### NOTE 14: COMPONENT UNITS

#### A. DESCRIPTION

Teacher Retirement Investment Company of Texas, Ltd. (TRICOT) is a private company limited by shares in the United Kingdom (UK) that began operating in November 2015. TRS is the sole shareholder of TRICOT. TRS formed TRICOT for the purpose of opening a London investment office to increase investment opportunities for the TRS portfolio. TRICOT is presented as a **Blended Component Unit** in the Pension Trust Fund fiduciary fund type of TRS with a year-end of August 31.

#### B. CRITERIA FOR INCLUSION AS A COMPONENT UNIT

TRICOT was determined to be a component unit according to GASB 14 as modified by GASB 39 and 61 based on the following criteria.

- TRICOT is considered a special-purpose government entity engaged only in fiduciary activities on behalf of TRS.
- TRICOT is a part of the System. TRS maintains complete control over TRICOT and all related assets. If TRICOT were dissolved, any remaining assets net of liabilities would revert back to TRS.

## *Notes to the Financial Statements*

- As a “private limited liability company” in the UK, TRICOT is legally separate according to GASB 14, paragraph 15.
- TRS’ executive director, as a shareholder representative, appoints the sole director of TRICOT.
- TRICOT is financially dependent upon TRS and has no other sources of funding.
- TRICOT provides services exclusively to TRS.
- It would be misleading to exclude TRICOT in the financial statements.

Written requests for the financial statements of the individual component unit (TRICOT) should be addressed to:

Communications Department  
Teacher Retirement System of Texas  
1000 Red River Street  
Austin, TX 78701  
1-800-223-8778

### **NOTE 15: SUBSEQUENT EVENTS**

In order to sustain TRS-Care for current and future retirees, the regular and special sessions of the 85th Texas Legislature passed legislation during the spring and summer of 2017 that changed TRS-Care’s benefit structure and provided additional funding to further support the program. The TRS Board of Trustees approved the new plan designs and premiums on September 1, 2017 to be effective January 1, 2018. The new plan designs and premium structures will likely reduce TRS-Care’s long term liability.



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## Required Supplementary Information

### PENSION TRUST FUND

FISCAL YEARS 2008 - 2017

#### SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

LAST TEN FISCAL YEARS

(DOLLAR AMOUNTS SHOWN IN THOUSANDS)

	2017	2016	2015	2014
<b>Total Pension Liability*</b>				
Service Cost	\$ 4,489,046	\$ 4,392,077	\$ 4,225,449	\$ 3,965,994
Interest on Net Pension Liability	13,515,486	12,896,571	12,555,646	11,813,446
Differences between Expected and Actual Experience	(969,831)	373,669	(1,588,619)	482,639
Changes of Actuarial Assumptions	700,880		(1,474,724)	2,028,541
Benefit Payments	(9,775,775)	(9,379,123)	(8,935,112)	(8,548,643)
Refunds of Member Accounts	(420,421)	(373,419)	(391,341)	(410,600)
<b>Net Change in Total Pension Liability</b>	<b>\$ 7,539,385</b>	<b>\$ 7,909,775</b>	<b>\$ 4,391,299</b>	<b>\$ 9,331,377</b>
Total Pension Liability--Beginning	171,797,150	163,887,375	159,496,076	150,164,699
<b>Total Pension Liability--Ending (a)</b>	<b>\$ 179,336,535</b>	<b>\$ 171,797,150</b>	<b>\$ 163,887,375</b>	<b>\$ 159,496,076</b>
<b>Plan Fiduciary Net Position</b>				
Contributions--Employer	\$ 1,588,309	\$ 1,483,390	\$ 1,377,973	\$ 984,552
Contributions--Member	3,242,556	2,943,669	2,576,024	2,357,686
Non-Employer Contributing Entity	1,697,963	1,675,631	1,591,483	1,530,624
Net Investment Income	17,079,807	9,193,281	(412,759)	19,434,430
Benefit Payments	(9,775,775)	(9,379,123)	(8,935,112)	(8,548,643)
Refunds of Member Accounts	(420,421)	(373,419)	(391,341)	(410,600)
Administrative Expense	(44,190)	(44,403)	(35,557)	(41,904)
Other	(14,964)	(29,095)	(11,248)	84,954
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 13,353,285</b>	<b>\$ 5,469,931</b>	<b>\$ (4,240,537)</b>	<b>\$ 15,391,099</b>
<b>Plan Fiduciary Net Position--Beginning</b>	<b>134,008,637</b>	<b>128,538,706</b>	<b>132,779,243</b>	<b>117,388,144</b>
<b>Plan Fiduciary Net Position--Ending (b)</b>	<b>\$ 147,361,922</b>	<b>\$ 134,008,637</b>	<b>\$ 128,538,706</b>	<b>\$ 132,779,243</b>
<b>Net Pension Liability--Ending (a)-(b)</b>	<b>\$ 31,974,613</b>	<b>\$ 37,788,513</b>	<b>\$ 35,348,669</b>	<b>\$ 26,716,833</b>
Plan Fiduciary Net Position as a Percentage of the total Pension Liability*	82.17%	78.00%	78.43%	83.25%
Covered Payroll*	42,111,120	40,742,826	38,448,124	36,654,291
Net Pension Liability as a percentage of Covered Payroll*	75.93%	92.75%	91.94%	72.89%

\*Total pension liability is presented on a prospective basis in accordance with GASB 67, paragraph 50.



## Required Supplementary Information

### PENSION TRUST FUND

FISCAL YEARS 2008 - 2017

2013	2012	2011	2010	2009	2008
\$	\$	\$	\$	\$	\$
0	0	0	0	0	0
\$ 150,164,699	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$ 925,694	\$ 760,838	\$ 856,220	\$ 835,605	\$ 791,450	\$ 703,723
2,252,095	2,188,020	2,243,955	2,205,017	2,107,058	1,998,139
1,337,215	1,299,078	1,484,286	1,461,035	1,378,304	1,352,243
9,834,136	7,847,298	14,636,935	9,411,447	(13,971,869)	(4,604,972)
(8,075,209)	(7,723,622)	(7,173,505)	(6,617,397)	(6,294,434)	(6,406,644)
(391,292)	(381,231)	(334,269)	(265,187)	(266,695)	(278,003)
(36,264)	(33,074)	(35,850)	(29,993)	(28,310)	(26,123)
91,882	71,793	54,610	34,906	26,970	43,335
\$ 5,938,257	\$ 4,029,100	\$ 11,732,382	\$ 7,035,433	\$ (16,257,526)	\$ (7,218,302)
111,449,887	107,420,787	95,688,405	88,652,972	104,910,498	112,128,800
\$ 117,388,144	\$ 111,449,887	\$ 107,420,787	\$ 95,688,405	\$ 88,652,972	\$ 104,910,498
\$ 32,776,555	\$	\$	\$	\$	\$

78.17%

35,188,983

93.14%

## Required Supplementary Information

### PENSION TRUST FUND

FISCAL YEARS 2008 - 2017

<b>SCHEDULE OF EMPLOYER AND NON-EMPLOYER CONTRIBUTING ENTITY ACTUARIALLY DETERMINED CONTRIBUTIONS (ADC)</b>					
Fiscal Year Ending August 31	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 3,177,927,012	\$ 2,515,176,220	\$ 662,750,792	\$ 36,654,290,800	6.86%
2015	3,171,970,234	2,969,455,641	202,514,593	38,448,124,045	7.72
2016	3,226,831,846	3,159,020,596	67,811,250	40,742,826,333	7.75
2017	3,343,622,950	3,286,271,953	57,350,997	42,111,120,273	7.80

*This schedule will ultimately contain 10 years of information. Additional years will be presented on a prospective basis in accordance with GASB 67, paragraph 50.*

Note 1: Actuarial Methods and Assumptions Used to Determine Contribution Rates - The information presented in the preceding table was used in the actuarial valuation for determining the actuarially determined contribution rate used for funding purposes. The methods and assumptions are as follows:

Valuation Date	August 31, 2017
Amortization Method	Level Percentage of Payroll, Floating
Actuarial Cost Method	Ultimate Entry Age Normal Method
Remaining Amortization Period	34 years
Asset Valuation Method	5 year smoothed market
Actuarial Assumptions:	
Investment Rate of Return	8.00%
Inflation	2.50%
Salary Increases	3.5% to 9.50% including inflation

\*\* Actuarially determined contribution rates are calculated as of August 31 of the preceding fiscal year. Members and employers are based upon statutorily fixed rates.



## Required Supplementary Information

### PENSION TRUST FUND

FISCAL YEARS 2008 - 2017

SCHEDULE OF INVESTMENT RETURNS							
Annual Money-Weighted Rate of Return, Net of Investment Expense							
2017	2016	2015	2014	2013	2012	2011	2010
12.98%	7.27%	(0.31%)	16.87%	9.01%	7.41%	15.60%	10.69%

*This schedule will ultimately contain 10 years of information. Additional years will be presented on a prospective basis in accordance with GASB 67, paragraph 50.*

## Required Supplementary Information

### TRS-CARE FUND

FISCAL YEARS 2008 - 2017

#### SCHEDULE OF CHANGES IN THE EMPLOYERS' NET OPEB LIABILITY AND RELATED RATIOS

LAST TEN FISCAL YEARS

(DOLLAR AMOUNTS SHOWN IN THOUSANDS)

	2017	2016	2015	2014
<b>Total OPEB Liability*</b>				
Service Cost	\$ 4,312,406	\$	\$	\$
Interest on the total OPEB Liability	2,354,931			
Changes of Benefit Terms	(18,610,363)			
Differences between Expected and Actual Experience	(929,821)			
Changes of Actuarial Assumptions	(19,563,767)			
Benefit Payments	(1,091,863)			
<b>Net Change in Total OPEB Liability</b>	<b>\$ (33,528,477)</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Total OPEB Liability--Beginning	\$ 77,414,262	\$	\$	\$
<b>Total OPEB Liability--Ending (a)</b>	<b>\$ 43,885,785</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Plan Fiduciary Net Position</b>				
Contributions--Employer	\$ 215,361	\$ 212,936	\$ 202,976	\$ 193,125
Contributions--Non-Employer Contributing Entity	319,320	297,071	1,049,199	303,556
Contributions--Member	213,241	208,582	198,196	189,004
Net Investment Income	4,697	5,421	1,496	2,062
Benefit Payments	(1,787,617)	(1,769,301)	(1,660,560)	(1,420,428)
Less: Health Care Premiums Paid by Retirees	404,028	374,736	369,066	363,631
Administrative Expense	(4,953)	(4,702)	(3,770)	(3,647)
Other	393,973	343,824	358,376	279,589
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ (241,950)</b>	<b>\$ (331,433)</b>	<b>\$ 514,979</b>	<b>\$ (93,108)</b>
<b>Plan Fiduciary Net Position--Beginning</b>	<b>\$ 641,486</b>	<b>\$ 972,919</b>	<b>\$ 457,940</b>	<b>\$ 551,048</b>
<b>Plan Fiduciary Net Position--Ending (b)</b>	<b>\$ 399,536</b>	<b>\$ 641,486</b>	<b>\$ 972,919</b>	<b>\$ 457,940</b>
<b>Net OPEB Liability--Ending (a)-(b)</b>	<b>\$ 43,486,249</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability*	0.91%			
Covered Payroll*	\$ 32,806,335	\$		
Net OPEB Liability as a percentage of Covered Payroll*	132.55%			

\*Total OPEB liability is presented on a prospective basis in accordance with GASB 74, paragraph 62.





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## Statement of Changes in Assets and Liabilities

### AGENCY FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

	Balances			Balances
	September 1, 2016	Additions	Deductions	August 31, 2017
<b>Child Support Employee Deductions</b>				
<b>Total Assets</b>				
Cash in State Treasury	\$ 6,337	\$ 87,548	\$ 87,273	\$ 6,612
<b>TOTAL ASSETS</b>	<b>\$ 6,337</b>	<b>\$ 87,548</b>	<b>\$ 87,273</b>	<b>\$ 6,612</b>
<b>Total Liabilities</b>				
Funds Held for Others	\$ 6,337	\$ 87,548	\$ 87,273	\$ 6,612
<b>TOTAL LIABILITIES</b>	<b>\$ 6,337</b>	<b>\$ 87,548</b>	<b>\$ 87,273</b>	<b>\$ 6,612</b>

Exhibit A

## Comparative Schedule of Changes in Account Balance

### PENSION TRUST FUND

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

INTEREST ACCOUNT	2017	2016
<b>Additions</b>		
Investing Activities Income (Loss)*	\$ 17,203,713,635	\$ 9,338,243,204
Securities Lending Program	94,213,624	92,547,038
Transfers In:		
Transfer from State Contribution Account for:		
Allocation of Interest	1,925,918,751	1,844,080,496
Investing Income		
Transfer from Deferred Retirement Option Account for Revokes		2,370,155
<b>TOTAL ADDITIONS</b>	<b>\$ 19,223,846,010</b>	<b>\$ 11,277,240,893</b>
<b>Deductions</b>		
Bank Fees	\$ 6,906,799	\$ 4,530,867
Research Fees	9,177,517	13,680,098
External Manager Fees	126,449,587	143,254,507
External Legal Fees	4,695,246	3,758,721
External Custodial Fees	22,000,000	22,000,000
Transfers Out:		
Allocation of Interest to:		
Member Savings Account	704,490,566	681,633,434
Retired Reserve Account	6,839,419,656	6,487,969,444
Deferred Retirement Option Account	321,959	403,677
Expense Account	118,080,810	117,033,476
Transfer to State Contribution Account for Investing Income	11,392,303,870	3,802,976,669
<b>TOTAL DEDUCTIONS</b>	<b>\$ 19,223,846,010</b>	<b>\$ 11,277,240,893</b>
<b>Net Change in Account Balance</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 0</b>	<b>\$ 0</b>

\*Investing Activities Income (Loss) includes Interest from Investing Activities, Investment Dividends and Net Increase (Decrease) in Fair Value of Investments.

**Comparative Schedule of Changes in Account Balance****PENSION TRUST FUND**

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

<b>MEMBER SAVINGS ACCOUNT</b>	<b>2017</b>	<b>2016</b>
<b>Additions</b>		
Contributions:		
Contributions Paid by Member	\$ 3,242,556,261	\$ 2,943,669,320
Purchase of Service Credit-Refundable	28,557,845	29,004,823
Transfers In:		
Allocation from Interest Account	704,490,566	681,633,434
<b>TOTAL ADDITIONS</b>	<b>\$ 3,975,604,672</b>	<b>\$ 3,654,307,577</b>
<b>Deductions</b>		
Refund of Contributions-Active	\$ 414,049,308	\$ 366,039,111
Transfers Out:		
Transfer to Retired Reserve Account:		
For Dormant Accounts	22,081,780	20,604,877
To Fund Benefits	2,000,522,873	2,319,697,385
Transfer to State Contribution Account		33,756,075
Transfer to Expense Account		24,926,487
<b>TOTAL DEDUCTIONS</b>	<b>\$ 2,436,653,961</b>	<b>\$ 2,765,023,935</b>
<b>Net Change in Account Balance</b>	<b>\$ 1,538,950,711</b>	<b>\$ 889,283,642</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 34,871,425,091</b>	<b>\$ 33,982,141,449</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 36,410,375,802</b>	<b>\$ 34,871,425,091</b>

## Comparative Schedule of Changes in Account Balance

### PENSION TRUST FUND

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

Schedule 1

STATE CONTRIBUTION ACCOUNT	2017	2016
<b>Additions</b>		
Contributions:		
State's General Fund - Non-Employer Contributing Entity	\$ 1,697,962,608	\$ 1,675,631,248
State's General Fund - Employer	128,713,466	104,714,221
Participating Employers	1,030,095,335	992,916,840
Surcharges:		
Employment after Retirement - Employee	11,480,134	9,184,795
Employment after Retirement - Employer	9,315,673	9,769,093
Non-OASDI Participating Employers	408,704,737	366,804,399
Purchase of Service Credit-Non-Refundable	28,699,815	31,337,547
Transfers In:		
Transfer from Interest Account for:		
Investing Income	11,392,303,870	3,802,976,669
Transfer from Member Savings Account		33,756,075
Transfer from Retired Reserve Account:		
For Retirement Benefits Forfeited While		
Member Returned to Teaching	1,174,488	1,102,206
For Retirement Benefits Waived by Member	27,516	26,205
<b>TOTAL ADDITIONS</b>	<b>\$ 14,708,477,642</b>	<b>\$ 7,028,219,298</b>
<b>Deductions</b>		
Transfers Out:		
Transfer to Interest Account for:		
Allocation of Interest	1,925,918,751	1,844,080,496
Transfer to Retired Reserve Account:		
To Fund Benefits	4,349,445,228	4,990,946,874
Based on Actuarial Valuation as of August 31	73,121,136	318,769,982
<b>TOTAL DEDUCTIONS</b>	<b>\$ 6,348,485,115</b>	<b>\$ 7,153,797,352</b>
<b>Net Change in Account Balance</b>	<b>\$ 8,359,992,527</b>	<b>\$ (125,578,054)</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 12,274,656,928</b>	<b>\$ 12,400,234,982</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 20,634,649,455</b>	<b>\$ 12,274,656,928</b>

## Comparative Schedule of Changes in Account Balance

### PENSION TRUST FUND

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

RETIRED RESERVE ACCOUNT	2017	2016
<b>Additions</b>		
Contributions Transferred in from Employees		
Retirement System of Texas	\$ 21,965,490	\$ 20,376,732
Transfers In:		
Allocation from Interest Account	6,839,419,656	6,487,969,444
Transfer from Member Savings Account:		
For Dormant Accounts	22,081,780	20,604,877
To Fund Benefits	2,000,522,873	2,319,697,385
Transfer from State Contribution Account:		
To Fund Benefits	4,349,445,228	4,990,946,874
Based on Actuarial Valuation as of August 31	73,121,136	318,769,982
Transfer from Deferred Retirement Option Account		
to Fund Benefits		4,073,970
<b>TOTAL ADDITIONS</b>	<b>\$ 13,306,556,163</b>	<b>\$ 14,162,439,264</b>
<b>Deductions</b>		
Benefits Paid:		
Service Retirement Annuities	\$ 9,059,855,790	\$ 8,633,505,859
Partial Lump Sums	263,705,342	300,420,702
Disability Retirement Annuities	177,627,306	173,464,936
Death and Survivor Benefits:		
Annual Salary	44,398,830	44,952,730
Survivor Annuities	109,519,771	108,509,074
Life Annuities	93,714,871	92,087,967
60 Monthly Payments	15,518,472	15,523,059
Remainder of Contributions	6,204,030	5,491,553
Refund of Contributions-Death	6,371,748	7,379,576
Benefits Transferred to		
Employees Retirement System of Texas	93,321,903	88,854,383
Retirement Benefits Forfeited:		
Member Returned to Teaching	1,174,488	1,102,206
For Retirement Benefits Waived by Member	27,516	26,205
<b>TOTAL DEDUCTIONS</b>	<b>\$ 9,871,440,067</b>	<b>\$ 9,471,318,250</b>
<b>Net Change in Account Balance</b>	<b>\$ 3,435,116,096</b>	<b>\$ 4,691,121,014</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 86,718,000,757</b>	<b>\$ 82,026,879,743</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 90,153,116,853</b>	<b>\$ 86,718,000,757</b>

## Comparative Schedule of Changes in Account Balance

### PENSION TRUST FUND

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

DEFERRED RETIREMENT OPTION ACCOUNT	2017	2016
<b>Additions</b>		
Transfers In:		
Allocation from Interest Account	\$ 321,959	\$ 403,677
Transfer from Expense Account		780
TOTAL ADDITIONS	\$ 321,959	\$ 404,457
<b>Deductions</b>		
Benefits Paid	\$ 5,231,060	\$ 5,166,851
Transfers Out:		
Transfer to Retired Reserve Account to Fund Benefits		4,073,970
Allocation to Interest Account for DROP Revokes		2,370,155
TOTAL DEDUCTIONS	\$ 5,231,060	\$ 11,610,976
<b>Net Change in Account Balance</b>	<b>\$ (4,909,101)</b>	<b>\$ (11,206,519)</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 18,083,634</b>	<b>\$ 29,290,153</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 13,174,533</b>	<b>\$ 18,083,634</b>



## Comparative Schedule of Changes in Account Balance

### PENSION TRUST FUND

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017 (With Comparative Data for August 31, 2016)

EXPENSE ACCOUNT	2017	2016
<b>Additions</b>		
Miscellaneous Revenues	\$ 1,299,284	\$ 1,993,029
Transfers In:		
Transfer from Member Savings		24,926,487
Allocation from Interest Account	118,080,810	117,033,476
Transfer in from Teacher Retirement Investment Company of Texas Ltd.	817	
<b>TOTAL ADDITIONS</b>	<b>\$ 119,380,911</b>	<b>\$ 143,952,992</b>
<b>Deductions</b>		
Service Credit Purchase:		
Refundable	\$ 995,863	\$ 10,185,824
Non-Refundable	1,169,056	12,767,012
Administrative Expenses:		
Salaries, Wages and Other Personnel Costs	68,991,054	67,409,307
Professional Fees and Services	4,348,743	4,131,185
Travel	836,068	1,092,461
Materials and Supplies	4,185,230	4,696,454
Communications and Utilities	613,900	866,937
Repairs and Maintenance	3,689,689	6,576,462
Rentals and Leases	2,567,422	2,659,054
Printing and Reproduction	316,636	184,958
Depreciation Expense	2,727,256	2,825,183
Amortization Expense	411,935	421,057
Gain/Loss on Capital Assets		832
Other Expense	2,843,216	2,673,564
Transfers Out:		
Transfer Out to Deferred Retirement Option Account		780
Transfer Out to Teacher Retirement Investment Company of Texas Ltd.	1,624,167	1,281,723
<b>TOTAL DEDUCTIONS</b>	<b>\$ 95,320,235</b>	<b>* \$ 117,772,793</b>
<b>Net Change in Account Balance</b>	<b>\$ 24,060,676</b>	<b>\$ 26,180,199</b>
<b>Account Balance - Beginning September 1</b>	<b>\$ 126,340,084</b>	<b>\$ 100,159,885</b>
<b>Account Balance - Ending August 31</b>	<b>\$ 150,400,760</b>	<b>\$ 126,340,084</b>

\*This amount includes investment related administrative expenses of \$47,341,151 and benefit related administrative expenses of \$44,189,998 (Schedule 2). Teacher Retirement Investment Company of Texas Ltd. administrative expenses are not included.

## Schedule of Administrative and Investing Activity Expenses

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Schedule 2

	Pension Trust Fund		
	Benefits	Investments	TRICOT
<b>Administrative Expenses</b>			
<b>Personnel Services:</b>			
Salaries and Wages:			
Salaries	\$ 22,757,833	\$ 32,625,855	\$
Longevity Pay	185,105	192,661	
Benefit Replacement Pay	21,178	22,042	
Employee Compensable Absences	157,437	170,836	
Payroll Related Costs:			
Employer FICA Contributions	1,012,592	1,053,922	
Employer Health Insurance Contributions	4,940,844	3,577,853	
Other Employee Benefits	1,113,719	1,159,177	
Seconded Employees and Other Services			789,573
<b>TOTAL PERSONNEL SERVICES</b>	<b>\$ 30,188,708</b>	<b>\$ 38,802,346</b>	<b>\$ 789,573</b>
<b>Professional Fees and Services</b>	<b>\$ 3,738,821</b>	<b>\$ 609,922</b>	<b>\$ 1,721</b>
<b>Other Operating Expenses:</b>			
Travel	\$ 189,065	\$ 647,003	\$ 26,725
Materials and Supplies:			
Consumable Supplies and Fuels	225,585	199,313	
Subscriptions and Reference Information	423,080	306,369	3,349
Postage, Mailing and Delivery Services	1,461,199	1,058,110	1,229
Furniture and Equipment - Expensed	296,713	214,861	5,048
Communications and Utilities	455,230	158,670	3,151
Repairs and Maintenance:			
Software Purchases and Maintenance	1,782,698	1,290,918	4,667
Computer Hardware Maintenance	344,685	249,601	
Maintenance - Buildings and Equipment	12,636	9,151	
Rentals and Leases	120,177	2,447,245	309,524
Printing and Reproduction	183,648	132,988	211
Depreciation Expense	2,732,732	20,524	2,638
Amortization Expense	411,935		
Taxes			385,709



TRC-Care	TRC-ActiveCare	403(b) Administrative Program	Total
\$ 2,399,252	\$ 1,518,712	\$ 54,504	\$ 59,356,156
23,842	8,930	488	411,026
2,195	517	39	45,971
61,640	81,136	384	471,433
1,666	50,186	2,187	2,120,553
196,490	106,734	4,231	8,826,152
210,612	77,745	2,274	2,563,527
			789,573
<b>\$ 2,895,697</b>	<b>\$ 1,843,960</b>	<b>\$ 64,107</b>	<b>\$ 74,584,391</b>
<b>\$ 1,658,645</b>	<b>\$ 1,380,105</b>	<b>\$ 112,630</b>	<b>\$ 7,501,844</b>
\$ 24,172	\$ 8,672	\$	\$ 895,637
1,607	1,041		427,546
8,711	3,650	288	745,447
139,409	37,364	1,066	2,698,377
9,187	3,516	300	529,625
1,568	79		618,698
46,010	11,516	2,053	3,137,862
11,147	2,790	497	608,720
270	106	6	22,169
24,900	22,982		2,924,828
62,827	5,708	167	385,549
			2,729,894
			411,935
			385,709
			(to next page)

Schedule 2

## Schedule of Administrative and Investing Activity Expenses

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Schedule 2

	Pension Trust Fund		
	Benefits	Investments	TRICOT
Other Expenses:			
Dues, Fees and Staff Development	358,377	259,513	4,021
Insurance Premiums	403,909	292,485	74
Other Miscellaneous Expenses	886,800	642,132	11,972
<b>TOTAL OTHER OPERATING EXPENSES</b>	<b>\$ 10,262,469</b>	<b>\$ 7,928,883</b>	<b>\$ 758,318</b>
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<b>\$ 44,189,998</b>	<b>\$ 47,341,151</b>	<b>\$ 1,549,612</b>
<b>Investment Fees</b>			
Bank Fees	\$	\$ 6,906,799	\$
Research Fees		9,177,517	
External Manager Fees*		126,449,587	
External Legal Fees		4,695,246	
External Custodial Fees		22,000,000	
<b>TOTAL INVESTMENT FEES</b>	<b>\$ 0</b>	<b>\$ 169,229,149</b>	<b>\$ 0</b>
<b>TOTAL ADMINISTRATIVE EXPENSES AND INVESTMENT FEES</b>	<b>\$ 44,189,998</b>	<b>\$ 216,570,300 **</b>	<b>\$ 1,549,612 **</b>

\* For more information on External Manager Fees, including fees that are netted against returns, please refer to the Investment Section.

\*\* Reported as Investing Activity Expenses under Investment Income on Exhibit II.



TRS-Care	TRS-ActiveCare	403(b) Administrative Program	Total
10,946	6,179	1,256	640,292
15,561	9,662	282	721,973
42,835	8,112	1,093	1,592,944
\$ 399,150	\$ 121,377	\$ 7,008	\$ 19,477,205
\$ 4,953,492	\$ 3,345,442	\$ 183,745	\$ 101,563,440
\$	\$	\$	\$ 6,906,799
			9,177,517
			126,449,587
			4,695,246
			22,000,000
\$ 0	\$ 0	\$ 0	\$ 169,229,149
\$ 4,953,492	\$ 3,345,442	\$ 183,745	\$ 270,792,589

## Schedule of Professional and Consulting Fees

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Individual or Firm	Nature of Service	Amount
Hewlett Packard	Consulting Services	\$ 13,000,000
Gabriel, Roeder, Smith, & Company	Legal Services	2,036,822
JP Morgan Securities	Investment Research	1,659,051
Jackson Walker	Legal Services	1,412,259
Credit Suisse	Investment Research	1,410,007
Hamilton Lane	Investment Consulting Services	1,400,000
Provaliant Holdings LLC	Consulting Services	1,326,405
Allied Consultants Inc	Investment Consulting Services	1,294,669
Macquarie Group Limited	Investment Research	1,016,554
AON Consulting Inc	Investment Consulting Services	1,000,000
Neos Consulting Group, LLC	IT Consulting Services	857,122
Norton Rose Fulbright	Legal Services	835,344
Seyfarth Shaw LLP	Legal Services	788,566
Access Sciences Corp	Other Professional Services	613,008
Ernst & Young LLP	Financial and Accounting Services	573,099
State Auditors Office	Financial and Accounting Services	563,000
The Townsend Group	Investment Consulting Services	550,000
Teksystems	Temporary Employment Services	501,062
Albourne America LLC	Investment Consulting Services	488,575
TIBH Industries Inc	Temporary Employment Services	460,894
Advanced Call Center Technologies, LLC	Other Professional Services	446,400
Rhyan Technology Services	Consulting Services	441,794
Ice Miller	Legal Services	416,884
GTS Technology Solutions, Inc	IT Consulting Services	352,699
Deutsche Bank AG	Investment Research	320,113
Bridgepoint Consulting LLC	Consulting Services	319,960
Jefferies & Company Inc	Investment Research	309,037
CLSA Limited	Investment Research	287,269
State Street Bank And Trust Company	Investment Consulting Services	280,000
Soal Technologies LLC	Temporary Employment Services	273,822
Katten Muchin Roseman LLP	Legal Services	272,005
Cornerstone Macro LP	Investment Research	264,130
Bank of America Merrill Lynch	Investment Research	254,808

Schedule 3

## Schedule of Professional and Consulting Fees

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Individual or Firm	Nature of Service	Amount
Citigroup Global Markets	Investment Research	252,920
Evercore ISI	Investment Research	250,959
NF Consulting Services	Consulting Services	245,388
Bernstein	Investment Research	225,756
Truven Health Analytics Inc	Consulting Services	223,275
Squire Patton Boggs LLP	Legal Services	211,097
IG Igloo Holdings Inc	Consulting Services	202,035
PricewaterhouseCoopers LLP	Financial and Accounting Services	200,870
Election-America Inc	Financial and Accounting Services	200,345
Nomura Group	Investment Research	197,757
Focus Consulting Group Inc	Consulting Services	190,200
Green Street Advisors LLC	Investment Research	185,000
Redburn Limited	Investment Research	182,365
Reinhart Boerner Van Deuren SC	Legal Services	178,606
Catapult Systems	IT Consulting Services	175,129
Cowen and Company	Investment Research	168,094
BMO Capital Markets	Investment Research	162,554
Wolfe Research LLC	Investment Research	162,214
Keefe, Bruyette & Woods Inc	Investment Research	153,539
Protiviti Inc	Consulting Services	149,590
HSBC Bank PLC	Investment Research	146,258
Coaching by Cornerstone	Other Professional Services	144,400
Langrand and Company LLC	Consulting Services	143,846
Empirical Research Partners	Investment Research	126,095
RBC Capital Markets	Investment Research	125,269
ISI Group	Investment Research	125,000
Sanford Bernstein	Investment Research	125,000
Foster Pepper PLLC	Legal Services	119,715
CEM Benchmarking Inc	Other Professional Services	115,000
SMBC Nikko Securities	Investment Research	114,795
IHS Herold Inc	Investment Research	110,018
Wood Mackenzie	Investment Research	105,000
Grant Thornton LLP	Legal Services	97,307

## Schedule of Professional and Consulting Fees

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Schedule 3

Individual or Firm	Nature of Service	Amount
Wells Fargo Securities	Investment Research	80,469
Brown, Keith C	Investment Consulting Services	80,000
Lenox Park Solutions Inc	Investment Research	75,000
BCA Research Publications	Investment Research	74,429
Tudor Pickering Holt & Co Inc	Investment Research	73,805
Customer Relationship Metrics LC	Other Professional Services	73,432
The Leuthold Group	Investment Research	64,000
Piper Jaffray & Co	Investment Research	62,597
Stifel Nicolaus & Co	Investment Research	57,322
Connecttel Inc	Temporary Employment Services	48,680
Zelman & Associates	Investment Research	48,423
UBM LLC	Consulting Services	46,975
Perryman Group	Consulting Services	44,800
LogicManager Inc	Consulting Services	41,250
Purrington Moody Weil	Legal Services	40,005
Reed Fire Protection Engineering LLC	Consulting Services	39,795
Munsch Hardt Kopf & Harr PC	Legal Services	39,641
Myers and Stauffer LC	Financial and Accounting Services	39,518
Scotia Capital	Investment Research	38,785
Cox, Alice Md	Medical Services	36,630
Reinarz, James Allen Md	Medical Services	36,630
Wilson, Larry Md	Medical Services	36,630
The Predictive Index LLC	Other Professional Services	35,123
Gardere Wynne Sewell	Legal Services	33,619
W.D. Von Gonten	Investment Research	31,456
Furey Research Partners LLC	Investment Research	30,000
Bespoke Investment Group LLC	Investment Research	25,000
Renaissance Macro Research	Investment Research	25,000
Yardeni Research Inc	Investment Research	25,000
Rosen Consulting Group	Investment Research	23,750
Rosen Consulting Group	Legal Services	23,750
Alexander Consulting	Consulting Services	22,500
Texas A&M University	Other Professional Services	20,545
Workers Assistance Program Inc	Consulting Services	20,312



## Schedule of Professional and Consulting Fees

### ALL FUNDS

FOR THE FISCAL YEAR ENDED AUGUST 31, 2017

Individual or Firm	Nature of Service	Amount
Unify Inc	IT Consulting Services	15,600
ImageNet Consulting	Financial and Accounting Services	15,453
Lyris Technologies	Other Professional Services	14,155
Benson Design Associates Inc	Other Professional Services	13,850
Merrill Lynch	Investment Research	12,500
Eversheds Sutherland LLP	Legal Services	11,000
Aggregate Payees less than \$10,000	Other Professional Services	74,398
		\$ 43,192,581
Prior Budget Year Expenditure Adjustment		(59,549)
<b>TOTAL PROFESSIONAL AND CONSULTING FEES</b>		<b>\$ 43,133,032</b>
METHOD OF FINANCE:		
Fiduciary Funds:		
Pension Trust Fund		\$ 35,562,446
TRS-Care		2,335,993
Total Fiduciary Funds		37,898,439
Proprietary Funds:		
TRS-ActiveCare		1,354,299
403(b) Administrative Program		112,630
Total Proprietary Funds		1,466,929
Commission Credits:		3,767,660
<b>TOTAL METHOD OF FINANCE</b>		<b>\$ 43,133,028</b>



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# INVESTMENT SECTION



Anita Smith Palmer "Roundup," 2001 Founders Award in Painting, American Academy of Equine Art



## Investment Overview

### STRATEGIC INITIATIVES

The Investment Management Division (IMD) completed a review of the TRS Pension Fund's (Trust) public global equity portfolio in the last fiscal year. The project compared TRS' approach to other industry participants and focused on areas such as the use of internal and external management, quantitative and fundamental strategies, the challenging environment for active management in the U.S. stock market, and the use of risk premium strategies. The review resulted in both organizational and portfolio changes aimed at improving our results and helping us achieve the goal of a 1 percent return above passive benchmarks. Consequently, the IMD created one unit to oversee the public equity portfolio. Within the portfolio, allocations to internally managed quantitative and passive strategies were increased and allocations to internally managed fundamental and externally managed strategies were decreased.

In 2016, the IMD developed and implemented a new fee philosophy within the hedge fund industry with a goal to retain 70 percent of value generated by its hedge fund partners. The fee structure is aimed at achieving a more consistent share of value across return environments relative to traditional fee structures. A majority of the IMD's invested managers have been converted to the new fee structures, and the IMD will continue to implement the strategy throughout the portfolio. After its successful launch, the IMD was endorsed by multiple influential industry partners for its market leading initiative.

The year 2017 marked the ninth anniversary of the TRS Public Strategic Partnership Network (SPN). At its outset, four managers (JP Morgan, Neuberger Berman, Morgan Stanley, and BlackRock) were funded with \$1 billion each to invest globally across the same public asset classes as the Trust. As of August 31, 2017, the total Public SPN is valued at \$7.7 billion. TRS also replicated the SPN concept in the private markets in 2012, establishing long-term partnerships with Apollo and KKR to manage assets in private equity, real assets and credit markets. As of August 31, 2017, the total Private SPN had a net asset value of \$3.9 billion, and commitments totaled \$8 billion. In early 2015, TRS committed another \$1 billion each to KKR and Apollo to be directed towards tactical opportunities, including non-traditional credit investments. As of August 31, 2017, the total Tactical Value SPN had a net asset value of \$1.2 billion and commitments totaled \$2 billion. Each year the SPN collaborates to produce several research projects used to benefit the Trust and to provide valuable insights into asset allocation. These strategic partnerships continue to add value to the Trust through beneficial investment returns and proprietary research projects.

The past year saw continued growth in the successful Principal Investments Program, which seeks to take advantage of TRS' competitive advantages as a large, long-term investor by initiating high-transparency, low-fee, alpha-producing investment arrangements with select investment partners. Since the program began in 2009, the fund has committed \$10.2 billion in more than 75 principal investments across Energy and Natural Resources, Private Equity and Real Assets. In addition, the IMD has committed another \$2.4 billion across more than 90 smaller



## *Investment Overview*

principal investments in separate dedicated vehicles managed by select general partners, as well as an even greater volume of principal investments in side-car vehicles.

The IMD opened TRS' first international office in London on November 1, 2015 to supplement TRS' Principal Investments Program internationally. TRS achieved its target to increase deal opportunities by 50 percent over the prior year. TRS will continue to build upon its reputation as a leading institutional investor and strengthen investment relationships with key players overseas. The principal investment effort has been highly accretive to the Trust's returns, producing an even greater level of high quality deal flow for TRS, which will continue to make principal investments a greater portion of the IMD's private market investments.

***Prepared by:***

***Investment Staff of the System***

## Report on Investment Activities

### A. INVESTMENT POLICY

The Board of Trustees has the primary fiduciary responsibility for investing TRS trust assets in accordance with Article XVI, Section 67 of the Texas Constitution and with applicable law. The Board establishes investment objectives and policy, obtains expert advice and assistance, and oversees the employment of a qualified and competent investment staff, the Investment Management Division (IMD), and legal staff. The Board also monitors the actions of staff, consultants and advisors to ensure compliance with its policies. The Board has a Policy Committee of the Board ("Policy Committee"), an Investment Management Committee of the Board ("IMD Committee") and a Risk Management Committee of the Board ("Risk Management Committee"), each of which is a standing committee of the Board charged with those responsibilities set forth in the Bylaws of the Board. The Board and the Investment Division are assisted by outside investment consultants and internal and external legal counsel.

The total or overall investment portfolio includes all assets invested by TRS to provide retirement, death, health, and disability benefits administered by the system, and is structured and managed to achieve the following objectives:

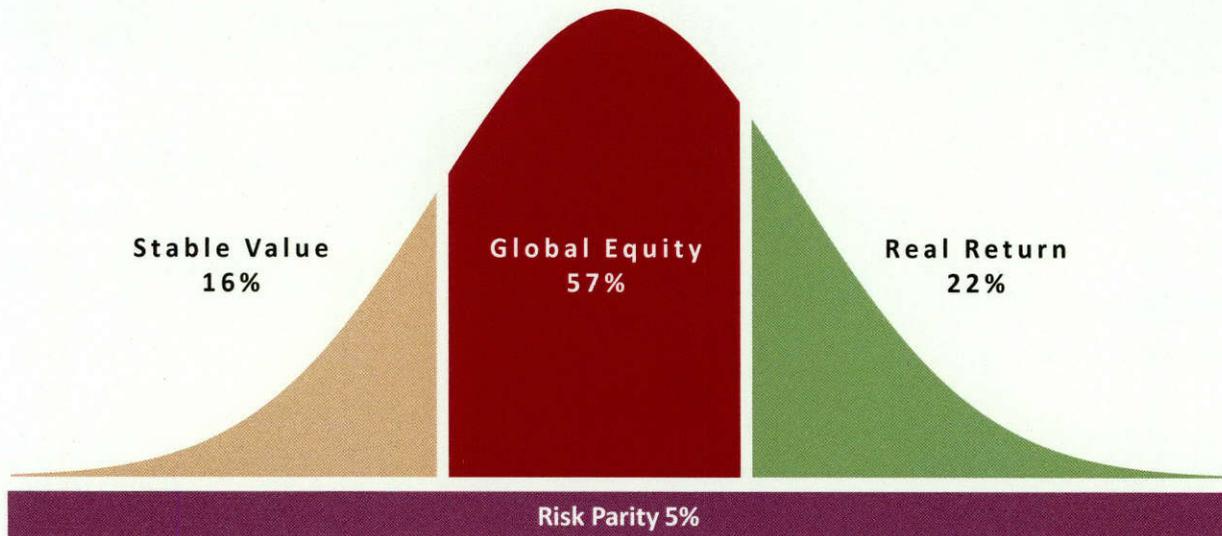
- a. Control risk through proper diversification of asset classes and by establishing long-term risk and return expectations; and
- b. As applicable to the pension plan, achieve a long-term rate of return that:
  - i. Exceeds the assumed actuarial rate of return adopted by the Board;
  - ii. Exceeds the long-term rate of inflation by an annualized 5%; and
  - iii. Exceeds the return of the Fund Policy Benchmark.

### B. PORTFOLIO STRUCTURE

TRS follows a diversified investment approach that focuses on the three most common economic scenarios. Scenario One is characterized by favorable Gross Domestic Product (GDP) growth and moderate inflation as measured by the Consumer Price Index (CPI), which has been the prevailing economic condition 68 percent of the time since 1948. Scenario Two is one of low GDP growth and high inflation, which has occurred 18 percent of the time. Finally, Scenario Three is characterized by stagnant GDP growth and low inflation, which has occurred 14 percent of the time. TRS is positioned to take advantage of any of these various market scenarios. TRS' long-term asset allocation target is 57 percent to Global Equity markets, which perform well under Scenario One, 22 percent to Real Return, which should perform well in Scenario Two, 16 percent to a Stable Value portfolio, which should perform well and minimize downside risk in Scenario Three, and 5 percent to the Risk Parity strategy, which has a balanced exposure to all three economic scenarios.



## Report on Investment Activities



### C. ASSET ALLOCATION

The normal portfolio mix represents the portfolio that is expected to meet the Board's actuarial return objectives for the pension plan within the risk tolerances specified in the Investment Policy Statement. Each asset class allocation percentage has a "long-term target" position within the overall portfolio and a maximum and minimum range around that target allocation. All percentages refer to market value.

Generally Accepted Accounting Principles (GAAP) and the Governmental Accounting Standards Board (GASB) require that investments be reported at **fair value** in the basic financial statements (Exhibit 1 and Note 3). However, TRS' asset allocation is based on **market value**, which includes investment-related cash, receivables, and payables and securities sold short. These items cannot be included as part of the fair value of investments under GAAP. Table 1 presents the asset allocation policy ranges and market values as of August 31, 2017. A reconciliation to fair value is provided following Table 1.

## Report on Investment Activities

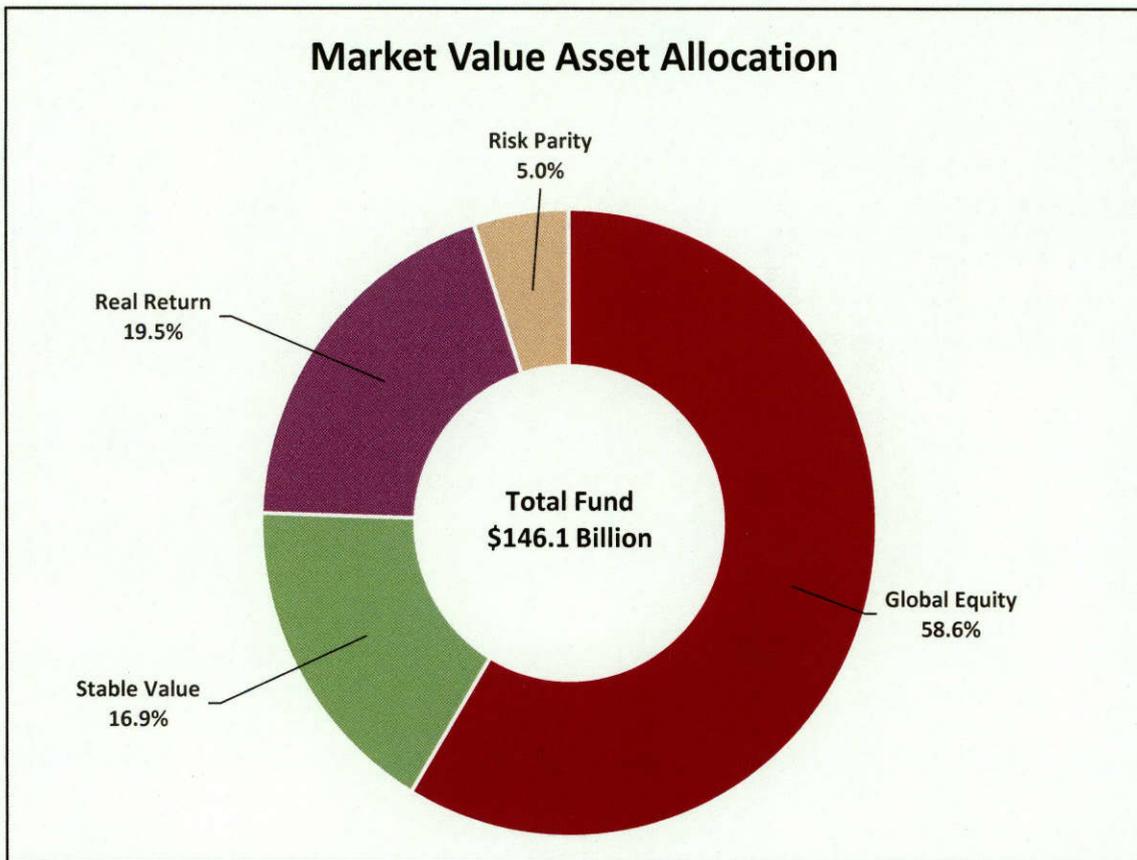
### Asset Allocation For the Fiscal Year Ended August 31, 2017

Table 1

Asset Class	Policy Ranges			Actual	
	Minimum Range	Maximum Range	Target	Market Value	% of Total Fund
<b>Global Equity</b>					
<i>Public Equity</i>					
USA	13%	23%	18%	\$ 27,403,618,462	18.8%
Non-US Developed	8%	18%	13%	19,655,343,375	13.5%
Emerging Markets	4%	14%	9%	14,230,593,057	9.7%
Directional Hedge Funds	0%	10%	4%	5,894,151,419	4.0%
<i>Total Public Equity</i>	39%	49%	44%	67,183,706,313	46.0%
Private Equity	8%	18%	13%	18,488,655,302	12.6%
<b>Total Global Equity</b>	<b>50%</b>	<b>64%</b>	<b>57%</b>	<b>85,672,361,615</b>	<b>58.6%</b>
<b>Stable Value</b>					
US Treasuries	0%	20%	11%	15,777,732,403	10.8%
Absolute Return	0%	20%	0%	2,349,039,082	1.6%
Stable Value Hedge Funds	0%	10%	4%	5,641,926,266	3.9%
Cash	11%	5%	1%	813,521,981	0.6%
<b>Total Stable Value</b>	<b>11%</b>	<b>21%</b>	<b>16%</b>	<b>24,582,219,732</b>	<b>16.9%</b>
<b>Real Return</b>					
Global Inflation Linked Bonds	0%	8%	3%	5,038,532,449	3.4%
Real Assets	9%	19%	14%	17,801,757,943	12.1%
Energy, Natural Resources & Infrastructure	0%	10%	5%	5,649,962,453	3.9%
Commodities	0%	5%	0%	75,097,113	0.1%
<b>Total Real Return</b>	<b>17%</b>	<b>27%</b>	<b>22%</b>	<b>28,565,349,958</b>	<b>19.5%</b>
<b>Total Risk Parity</b>	<b>0%</b>	<b>10%</b>	<b>5%</b>	<b>7,306,662,031</b>	<b>5.0%</b>
<b>Total Fund</b>			<b>100%</b>	<b>\$ 146,126,593,336</b>	<b>100.0%</b>



## Report on Investment Activities

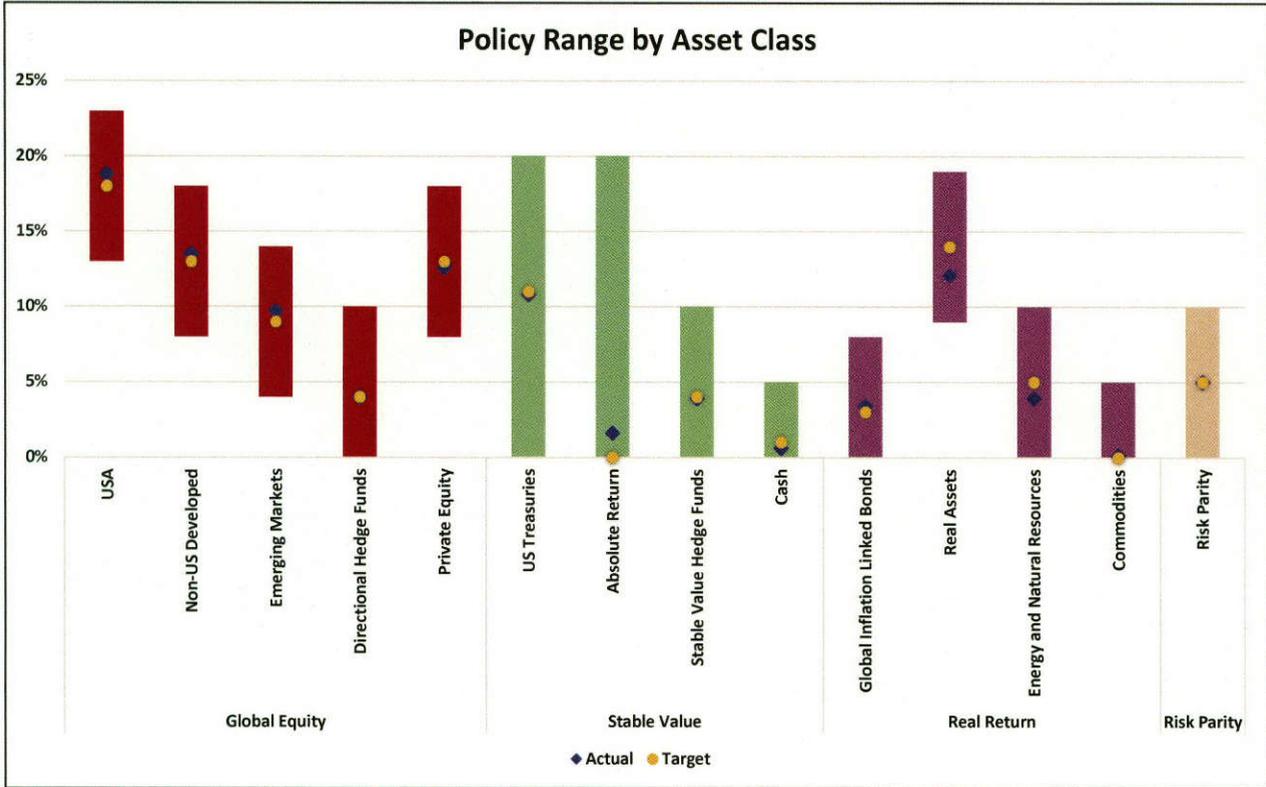


### Market Value to Fair Value Reconciliation For the Fiscal Year Ended August 31, 2017

<b>Market Value</b>	<b>\$ 146,126,593,336</b>
Investment-Related Cash	(129,410,821)
Investment-Related Receivables	(904,448,065)
Investment-Related Payables	641,453,019
Securities Sold Short	182,214,448
<b>Fair Value</b>	<b><u>\$ 145,916,401,917</u></b>



### Report on Investment Activities



## Report on Investment Activities

### D. LARGEST HOLDINGS

#### Fixed Income Investments

The ten largest fixed income investments held by TRS are all U.S. Treasury Bonds which represent 32.4 percent of all fixed income securities. The ten largest fixed income investments reported at GAAP fair value is displayed in Table 2. A complete list of fixed income investments is available by contacting the TRS Communications Department.

**LARGEST FIXED INCOME INVESTMENTS**  
For the Fiscal Year Ended August 31, 2017  
Table 2

Rank	Fixed Income Securities	Par Value	GAAP Fair Value	% of Total Fixed Income Investments
1	U.S. Treasury Bond 3.000% Due 11/15/2045	884,804,600	\$ 934,052,222	4.3%
2	U.S. Treasury Bond 3.625% Due 02/15/2044	765,610,000	902,340,351	4.2%
3	U.S. Treasury Bond 3.000% Due 05/15/2047	739,237,500	780,995,703	3.6%
4	U.S. Treasury Bond 2.875% Due 08/15/2045	667,900,000	688,415,744	3.2%
5	U.S. Treasury Bond 3.625% Due 08/15/2043	571,135,000	671,931,418	3.1%
6	U.S. Treasury Bond 3.000% Due 05/15/2045	624,880,000	660,073,798	3.0%
7	U.S. Treasury Bond 3.750% Due 11/15/2043	529,703,300	636,654,253	2.9%
8	U.S. Treasury Bond 3.375% Due 05/15/2044	534,600,000	604,648,558	2.8%
9	U.S. Treasury Bond 2.500% Due 02/15/2045	617,200,000	591,006,908	2.7%
10	U.S. Treasury Bond 2.875% Due 05/15/2043	549,065,000	567,688,198	2.6%
<b>Total Top Ten</b>		<b>6,484,135,400</b>	<b>7,037,807,153</b>	<b>32.4%</b>
<b>Total Fixed Income Securities</b>			<b>\$ 21,741,743,293</b>	

## Report on Investment Activities

### Equity Investments

Table 3 discloses TRS' ten largest equity investments reported at GAAP fair value which constitute 7.9 percent of the fund's total equity exposure. A complete list of equity investments is available by contacting the TRS Communications Department.

**LARGEST EQUITY INVESTMENTS**  
For the Fiscal Year Ended August 31, 2017

Table 3

Rank	Equity Holdings	Total Shares	GAAP Fair Value	% of Total Equity Investments
1	Apple Incorporated	3,790,981	\$ 621,720,884	1.2%
2	Tencent Holdings Limited	13,780,908	579,307,187	1.2%
3	Microsoft Corporation	5,877,225	439,440,113	0.9%
4	Samsung Electronics Company Limited	211,237	433,863,863	0.9%
5	Alibaba Group Holding Limited	2,339,910	401,856,143	0.8%
6	Facebook Incorporated	1,889,614	324,956,920	0.7%
7	Johnson & Johnson	2,405,651	318,436,023	0.6%
8	China Construction Bank	340,512,603	298,464,368	0.6%
9	JPMorgan Chase & Company	2,829,489	257,172,255	0.5%
10	Alphabet Incorporated	265,351	249,252,155	0.5%
<b>Total Top Ten</b>		<b>373,902,969</b>	<b>3,924,469,911</b>	<b>7.9%</b>
<b>Total Equity Holdings</b>			<b>\$ 49,791,863,021</b>	

### E. INVESTMENT RESULTS

#### Performance Reporting

Each asset class is described by an associated benchmark that describes, in general terms, the opportunity set and return characteristics associated with the asset class. For certain private or more complex asset classes, the benchmark serves as a proxy for expected returns rather than an approximation of the actual investments that will characterize that component of the portfolio. Those benchmarks are identified in Table 4 and are referred to as the "Policy Benchmarks."

## Report on Investment Activities

**Policy Benchmarks**  
**Table 4**

<b>Asset Class</b>	<b>Benchmark Portfolio</b>
<b>Global Equity</b>	
<i>USA</i>	MSCI USA Investable Market Index
<i>Non-US Developed</i>	MSCI EAFE + Canada Market Index
<i>Emerging Markets</i>	MSCI Emerging Markets Market Index
<i>Directional Hedge Funds</i>	Hedge Fund Research, Inc. (HFRI) Fund of Funds Composite
<i>Private Equity</i>	Equity Index - lagged one quarter State Street Private Equity Index (SSPEI)
<b>Stable Value</b>	
<i>US Treasuries</i>	Barclays Capital (BarCap) Long Treasury Index
<i>Absolute Return</i>	3 Month LIBOR + 2%
<i>Stable Value Hedge Funds</i>	Hedge Fund Research, Inc. (HFRI) Fund of Funds Composite
<i>Cash</i>	Citigroup 90-day US Treasury
<b>Real Return</b>	
<i>Global Inflation Linked Bonds</i>	Barclays Capital (BarCap) US Treasury TIPS Index
<i>Real Assets</i>	NCREIF ODCE Index - lagged one quarter
<i>Energy, Natural Resources &amp; Infrastructure</i>	40% Cambridge Associates Natural Resources/ 40% Cambridge Associates Infrastructure/ 20% quarterly Consumer Price Index - lagged one quarter
<i>Commodities</i>	Goldman Sachs Commodity Index
<b>Risk Parity</b>	Calculated using a group of risk parity managers

### Performance Results

Investment performance is calculated using a time-weighted rate of return. Returns are calculated by State Street Bank and Trust Company, TRS' custodian bank, independently and using industry best practices. The total time-weighted rates of return have been adjusted for cash flows and are calculated net of bank fees, external manager fees, external legal fees, and external custodial fees. Administrative expenses for the Investment Management Division (IMD) are not netted against or included in performance calculations.

For the fiscal year ending August 31, 2017, the TRS Pension Fund delivered investment returns of 12.6 percent, which is 1.6 percent above the fund's benchmark. By asset class, returns were 17.3 percent for Global Equity, -1.3 percent for Stable Value and 11.1 percent for Real Return. On a three-year annualized basis, the fund has returned 6.4 percent, which is 0.5 percent above its benchmark. As a result, the total investment value of the fund as of August 31, 2017 was \$146.1 billion, or \$12.7 billion more than this time last year, after contributions and benefit payouts.

Due to TRS' fiscal year ending on August 31, 2017, the most complete performance and benchmark information by asset class is available for periods ended June 30<sup>th</sup>, presented in Table 5. For a complete list of composite benchmark compositions, contact the TRS Communications Department.

## Report on Investment Activities

### TOTAL TIME WEIGHTED RETURNS

For Periods Ended June 30

Table 5

Asset Class	2017	3 Years	5 Years	10 Years
<b>TRS</b>	<b>12.9%</b>	<b>6.0%</b>	<b>8.8%</b>	<b>5.4%</b>
<b>Custom Benchmark</b>	<b>11.3%</b>	<b>5.6%</b>	<b>8.1%</b>	<b>5.2%</b>
<b>Global Equity</b>				
USA	19.0%	7.4%	13.3%	6.7%
USA Composite Benchmark	18.4%	9.2%	14.6%	0.0%
Non-US Developed	19.1%	2.2%	9.2%	0.0%
Non-US Developed Composite Benchmark	19.5%	0.7%	8.1%	1.0%
Emerging Markets	23.9%	2.1%	5.2%	0.0%
Emerging Markets Composite Benchmark	23.7%	1.1%	4.0%	1.9%
Directional Hedge Funds	11.7%	0.9%	4.9%	0.0%
Directional Hedge Fund Composite Benchmark	6.3%	1.5%	3.8%	0.9%
<i>Total Public Equity</i>	19.5%	4.3%	9.7%	3.6%
<i>Public Equity Composite Benchmark</i>	18.9%	4.4%	9.6%	3.5%
Private Equity	15.4%	10.8%	14.1%	10.1%
Private Equity Composite Benchmark	15.1%	9.1%	10.7%	7.1%
<b>Total Global Equity</b>	<b>18.6%</b>	<b>5.5%</b>	<b>10.5%</b>	<b>4.4%</b>
<b>Global Equity Composite Benchmark</b>	<b>18.1%</b>	<b>5.3%</b>	<b>9.8%</b>	<b>4.1%</b>
<b>Stable Value</b>				
US Treasuries	-7.6%	6.5%	3.4%	0.0%
US Treasuries Composite Benchmark	-7.2%	5.6%	2.8%	7.3%
Absolute Return	6.5%	8.7%	13.2%	0.0%
Absolute Return Composite Benchmark	3.0%	2.6%	2.5%	2.9%
Stable Value Hedge Funds	7.0%	4.9%	5.0%	2.2%
Stable Value Hedge Fund Composite Benchmark	5.3%	1.5%	3.7%	3.4%
Cash	2.1%	2.5%	2.4%	1.6%
Cash Composite Benchmark	0.5%	0.2%	0.2%	0.6%
<b>Total Stable Value</b>	<b>-2.1%</b>	<b>6.8%</b>	<b>4.7%</b>	<b>6.6%</b>
<b>Stable Value Composite Benchmark</b>	<b>-3.8%</b>	<b>4.5%</b>	<b>2.9%</b>	<b>6.0%</b>
<b>Real Return</b>				
Global Inflation Linked Bonds	-0.4%	0.8%	0.4%	0.0%
Global Inflation Linked Bonds Composite Benchmark	-0.6%	0.6%	0.3%	0.0%
Real Assets	10.9%	11.9%	11.9%	0.0%
Real Assets Composite Benchmark	7.4%	10.8%	10.9%	4.7%
Energy, Natural Resources & Infrastructure	N/A	N/A	N/A	N/A
Energy, Natural Resources & Infrastructure Composite Benchmark	N/A	N/A	N/A	N/A
Commodities	-4.5%	-20.6%	-14.3%	0.0%
Commodities Composite Benchmark	-9.0%	-24.8%	-13.7%	-9.7%
<b>Total Real Return</b>	<b>10.3%</b>	<b>7.9%</b>	<b>7.8%</b>	<b>6.3%</b>
<b>Real Return Composite Benchmark</b>	<b>6.8%</b>	<b>7.1%</b>	<b>7.4%</b>	<b>5.8%</b>
<b>Total Risk Parity</b>	<b>7.6%</b>	<b>2.6%</b>	<b>5.0%</b>	<b>0.0%</b>
<b>Risk Parity Benchmark</b>	<b>6.3%</b>	<b>2.6%</b>	<b>4.5%</b>	<b>0.0%</b>

## *Report on Investment Activities*

### **F. FEES AND COMMISSIONS**

#### **Investment Manager Fees**

Management and Performance Fees that are paid from the Pension Trust Fund are charged by the manager or general partner to cover normal operating costs and the expenses of administering the partnership. The manager or general partner usually receives an annual management fee paid in quarterly, but sometimes in semi-annual or annual installments, from the limited partners. Management Fees are typically 1.5 percent to 2 percent of the investment or the investment commitment during the investment period and are sometimes scaled down after the investment period. The management fee rate, basis for the calculation, and specific terms are agreed to in the Limited Partnership Agreement (LPA).

Performance Fees/Carried Interest are accrued and paid based on the amount of profit or returns in excess of a benchmark or hurdle rate established in the LPA. Certain other Management Fees are charged by investment partnerships and netted against the investment earnings of the partnership. For investments in Private Equity, Real Assets, Energy and Natural Resources, Performance Fees/Carried Interest represent the general partner's share of the partnership's profits, which is typically 20 percent, with 80 percent going to limited partners, such as TRS. Carried Interest is calculated and paid as partnership investments are realized, and Carried Interest on the unrealized investments is accrued over the life of the partnership based on the current valuation.

Fees paid from the pension trust fund are booked as expenses on the income statement. Fees netted against returns are charged by investment partnerships and netted against the investment earnings of the partnership. Generally, the information for fees netted against returns are requested and received from fund general partners on a quarterly basis. Due to the timing of information received from fund general partners, fees paid or accrued in conjunction with investment activities, along with the related market value of assets under management, is presented for the calendar year ended June 30, 2017 in Table 6.

## Report on Investment Activities

### Investment Manager Fees For the Calendar Year Ended June 30, 2017

Table 6

Asset Class	Market Value of Assets Under Management	Fees Paid from the Pension Trust Fund		Fees Netted Against Returns	
		Management Fees	Performance Fees	Management Fees	Performance Fees/Carried Interest
<b>Global Equity</b>					
<i>Public Equity</i>					
USA	\$ 26,085,799,934	\$ 30,610,647	\$ 8,581,379	\$ 10,850,512	\$ 7,889,700
Non-US Developed	22,128,097,098	15,706,904	20,353,613	16,862,277	5,662,864
Emerging Markets	13,951,080,872	32,455,477	11,124,433	5,362,186	1,107,653
Directional Hedge Funds	5,802,915,802	2,213,541	529,827	68,245,757	52,394,501
<i>Total Public Equity</i>	67,967,893,706	80,986,569	40,589,252	101,320,732	67,054,718
Private Equity	17,832,356,502	-	-	171,852,529	271,646,001
<b>Total Global Equity</b>	85,800,250,208	80,986,569	40,589,252	273,173,261	338,700,719
<b>Stable Value</b>					
US Treasuries	10,827,520,623	-	-	-	-
Absolute Return	3,971,463,355	-	-	6,635,833	3,724,997
Stable Value Hedge Funds	5,491,479,017	-	-	93,741,379	68,898,729
Cash	1,079,075,684	-	-	-	-
<b>Total Stable Value</b>	21,369,538,679	-	-	100,377,212	72,623,726
<b>Real Return</b>					
Global Inflation Linked Bonds	5,047,444,139	-	-	-	-
Real Assets	17,155,839,732	596,162	-	158,269,206	109,111,231
Energy, Natural Resources & Infrastructure	5,564,900,150	646,194	54,661	60,045,891	22,015,392
Commodities	104,192,694	-	-	-	-
<b>Total Real Return</b>	27,872,376,715	1,242,356	54,661	218,315,097	131,126,623
<b>Total Risk Parity</b>	6,996,931,342	1,586,159	-	11,448,072	1,175,430
<b>Total Fund</b>	\$ 142,039,096,944	\$ 83,815,084	\$ 40,643,913	\$ 603,313,642	\$ 543,626,498

The amount of fees paid from the pension trust fund and booked as expenses in Table 6 are for the calendar year ended June 30, 2017. The amount of fees paid from the pension trust fund and booked as expenses for the fiscal year ended August 31, 2017, which appear in Exhibit II and Schedule 2 as External Manager Fees, amounted to \$126,449,587, which includes \$83,925,746 in management fees and \$42,523,841 in performance fees.

## Report on Investment Activities

### Broker Commissions

Broker commissions are the incremental direct costs incurred to sell an asset or transfer a liability in the principal, or most advantageous, market for the asset or liability. Table 7 presents the commissions paid to brokers for the fiscal year ended August 31, 2017. Over 22 million shares were traded by 288 brokers, and commissions paid amounted to \$53.5 million.

Broker Commissions For the Fiscal Year Ended August 31, 2017 Table 7		
Brokerage Firm	Shares Traded	Commissions Paid*
Goldman Sachs Group, Inc.	7,072,176,165,754 \$	7,868,120
Merrill Lynch	237,401,036,301	4,039,431
Morgan Stanley	482,793,489,036	3,653,678
Credit Suisse Group	386,613,252,740	3,388,936
JPMorgan Chase	1,062,141,477,014	3,375,245
Citigroup	7,118,819,298,544	2,547,362
Nomura Group	191,149,433,153	1,799,694
UBS AG	2,070,110,403,484	1,759,873
Deutsche Bank AG	461,423,649,577	1,675,599
Macquarie	322,426,837,362	1,645,427
Summary of remaining 278 brokerage firms	3,192,386,238,902	21,794,714
<b>Total</b>	<b>22,597,441,281,867 \$</b>	<b>53,548,079</b>

\*Commissions paid per share is less than \$0.01.

For the fiscal year ended August 31, 2017, a portion of the total commissions was paid through various Commission Sharing Arrangements (CSA) and Commission Recapture Arrangements (CRA). CSA proceeds generated \$14,184,638 and were used in accordance with Section 28(e) of the Securities Exchange Act of 1934 to acquire research services from various investment-related firms, totaling \$14,179,340. CRA proceeds generated \$588,947 and were used to acquire services totaling \$389,065. Unspent CSA proceeds, totaling \$9,833,844, and unspent CRA proceeds, totaling \$839,555, were held by State Street Bank and Trust Company as the system's CSA and CRA Administrator.

Vendor paid expenses are legal arrangements that are used to acquire investment-related items other than those paid for with commission credit proceeds. Through contractual agreements with various firms, the system benefited from \$4,534,954 in vendor paid expenses and contractual allowances for the fiscal year ended August 31, 2017.



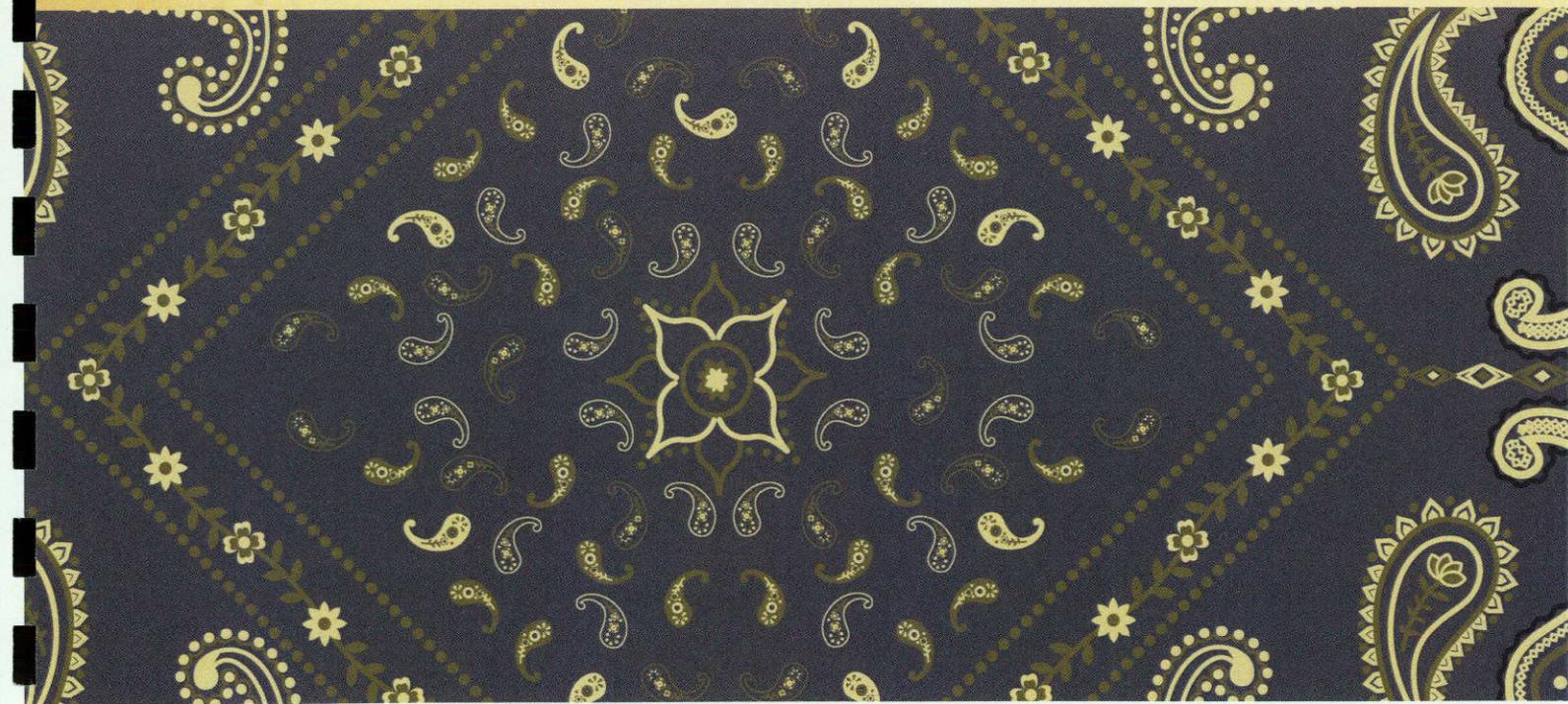
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# ACTUARIAL SECTION



Anita Smith Palmer "Barrel Racer," 2000



## Actuarial Information Pension Trust Fund

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October 27, 2017

Board of Trustees  
Teacher Retirement System of Texas  
1000 Red River Street  
Austin, TX 78701-2698

**Subject: Actuary's Certification of the Actuarial Valuation as of August 31, 2017**

We certify that the information included herein and contained in the 2017 Actuarial Valuation Report is accurate and fairly presents the actuarial position of the Teacher Retirement System of Texas (TRS) as of August 31, 2017. This report was prepared at the request of the Board and is intended for use by the TRS staff and those designated or approved by the Board. This report may be provided to parties other than TRS staff only in its entirety and only with the permission of the Board.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented comply with the requirements of the Texas statutes and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. Mr. Siblik and Mr. Newton are Enrolled Actuaries, members of the American Academy of Actuaries and are qualified to give a Statement of Opinion. All are experienced in performing valuations for large public retirement systems.

### ACTUARIAL VALUATIONS

The primary purpose of the valuation report is to determine the adequacy of the statutory contribution rates through measuring the resulting funding period, to describe the current financial condition of the System, and to analyze changes in the System's condition. In addition, the report provides various summaries of the data. This report may not be appropriate for other purposes. The information required by the System in connection with Governmental Accounting Standards Board Statement No. 67 (GASB No. 67) will be provided under separate cover.

Valuations are prepared annually, as of August 31 of each year, the last day of the System's plan and fiscal year.

### FINANCING OBJECTIVE OF THE PLAN

The employee, employer, and State contribution rates are established by Law that, over time, are intended to remain level as a percent of payroll and provide assets to cover benefits when due. The

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## Actuarial Information Pension Trust Fund

Board of Trustees  
October 27, 2017  
Page 2

actuarially determined employer contribution rates determined in this actuarial valuation are intended to provide for the normal cost plus the level percentage of payroll required to amortize the unfunded actuarial accrued liability over a period not in excess of 30 years.

### PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVE

The actuarial accrued liability, the unfunded actuarial accrued liability (UAAL), and the calculation of the resulting funding period illustrate the progress toward the realization of financing objectives. Based on this actuarial valuation as of August 31, 2017, the System's under-funded status has remained relatively unchanged at \$35.5 billion as of August 31, 2017 compared to \$35.5 billion as of August 31, 2016. The System's UAAL was expected to increase from the prior year based on the deferral of investment losses from prior valuations. However, due to higher than expected investment performance during the year, the System actually experienced a gain on the actuarial value of assets. In addition, the System also experienced a gain due to demographic experience. These two gains combined to decrease the UAAL by \$1.1 billion. However, there was also a legislative change to TRS-CARE which resulted in a change to the expected retirement patterns of TRS. The legislative change was a reversal of changes to the expected retirement behavior that were adopted following the 2013 session and increased the UAAL by \$0.7 billion.

This valuation shows a normal cost equal to 9.94% of pay plus an addition to the normal cost of 0.12% of pay to cover the annual cost of administrative expenses. The State began contributing the current contribution rate of 6.80% in fiscal year 2014 and it is assumed the rate will remain at that level. In addition, covered employers whose employees are not participating in Social Security began contributing 1.50% of salary (capped at the minimum salary schedule) in fiscal year 2015. Combined these contributions are assumed to approximate 7.70% of total payroll. The member contribution began increasing in fiscal year 2015 and reached its ultimate rate of 7.70% in fiscal year 2017. As a result, for FY2018 and thereafter, the System is expected to receive a total contribution rate of 15.40% of pay.

Hence, there is expected to be 5.34% of pay available to amortize the UAAL (15.40% less normal cost of 9.94% less administrative expenses of 0.12%). If payroll grows as expected (2.5% per year), the contributions provided by this portion of the contribution rate are sufficient to amortize the current unfunded actuarial accrued liabilities of the System over a period of 32.2 years based on the smoothed asset value as the valuation date. Therefore, the financing objectives of the System are not currently being met.

The actuarial valuation report as of August 31, 2017 reveals that the funded ratio (the ratio of actuarial assets to actuarial accrued liability) is 80.5%. The funded status is one of many metrics used to show trends and develop future expectations about the health of the System. The funded status measure itself is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations or assessing the need for or the amount of future contributions since it does not reflect normal cost contributions, the timing of amortization payments, or future experience other than expected.

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## Actuarial Information Pension Trust Fund

Board of Trustees  
October 27, 2017  
Page 3

The System earned more than the assumed rate of return during fiscal year 2017 (12.9% on market value compared to an assumed 8.0%). This return more than offset the prior year' deferred investment losses. In fact, the System experienced an actuarial gain on assets and is now deferring net investment gains of \$1.1 billion and the funded status using the market value of assets is 81.1%. If there are no significant investment losses or other actuarial losses over the next several years, the funded status of the System would be expected to increase towards this number. This \$1.1 billion in net deferred gains compares to the last valuation when the System was deferring \$4.8 billion in net deferred losses and had a 76.9% funded ratio based on the market value of assets.

As stated previously, the System's UAAL is relatively unchanged from the prior year. The UAAL had been expected to increase by \$0.4 billion without any gains or losses thus the UAAL decreased by \$0.4 billion more than expected during the year. The fiscal year 2017 investment return completely offset the prior years' deferred investment losses and resulted in a gain of \$0.3 billion on the actuarial value of assets. Therefore, the liabilities actually increased \$0.1 billion less than expected. This \$0.1 billion gain can split into the impact of the legislative change which increased the liabilities by \$0.7 billion and a liability experience gain of \$0.8 billion. This \$0.8 billion represents a gain of 0.46% of total liabilities and was due to the liabilities growing slower than expected due to salary increases being less than expected, more terminations than expected and fewer retirements than expected during the year.

Based on the actuarial (smoothed) value of assets, the number of years needed to amortize the UAAL will decrease annually if all assumptions are met. Please note that this annual decrease in the funding period will only occur if the currently scheduled contribution levels remain in place over the funding period. Any decrease in the contribution rates will result in higher funding periods. It should be noted that with the \$1.1 billion in deferred investment gains still to be recognized in the actuarial value of assets, future gains in the actuarial value of assets will result in a decrease in the funding period in future valuations until the gains are fully recognized.

Due to the current funding policy which utilizes level percentage of payroll amortization, the amortization payments will not be sufficient to cover all of the interest charges on the UAAL until the funding period reaches approximately 20 years. Table 11a provides a 10 year projection of various valuation results, including the UAAL, and that projection shows the UAAL is expected to increase to \$38.7 billion in 2027. Extending the projection further would show the UAAL starts to decrease in 2028 and is fully amortized 20 years after that (assuming 8% return on the market value of assets).

Please note these expectations are based on the current benefit provisions, assumptions, and contribution rates. Any additional benefit enhancements (ad hoc COLAs) granted without additional funding would increase the ultimate UAAL and extend the period before the funding status begins to improve. Thus, we continue to advise against any future benefit enhancements without additional sources of funding.





## Actuarial Information Pension Trust Fund

Board of Trustees  
October 27, 2017  
Page 4

### PLAN PROVISIONS

The plan provisions used in the actuarial valuation are described in Appendix 1 of the valuation report. There have been no changes to the benefit and contribution provisions of the System since the prior valuation.

### DISCLOSURE OF PENSION INFORMATION

Beginning with fiscal year 2014, the System began reporting financial information in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67. The disclosure information for GASB No. 67 is provided in a separate report and is not contained herein.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

### ACTUARIAL METHODS AND ASSUMPTIONS

The actuarial methods and assumptions have been selected by the Board of Trustees of the Teacher Retirement System of Texas based upon our analysis and recommendations. These assumptions and methods are detailed in Appendix 2 of the valuation report. The Board of Trustees has sole authority to determine the actuarial assumptions used for the plan. The actuarial methods and assumptions are primarily based on a study of actual experience for the four year period ending August 31, 2014 and adopted on September 24, 2015. The retirement rates for selected individuals were modified to reflect changes to TRS-CARE. No other changes in the actuarial assumptions or methods were made since the prior valuation. The next experience study is scheduled to be performed in the spring of 2018.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. To illustrate this point, on page 8 of this report we have shown illustrative results based on future investment experience deviating from the assumptions. Based on the scope of this engagement, we have not performed analysis on the potential range of future measurements based on other factors. The actuarial calculations are intended to provide information for rational decision making.

In our opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are internally consistent and reasonably related to the experience of the System and to reasonable expectations.

### Data

Member data for retired, active and inactive members was supplied as of August 31, 2017 by the TRS staff. The staff also supplied asset information as of August 31, 2017. We did not audit this

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## Actuarial Information Pension Trust Fund

Board of Trustees  
October 27, 2017  
Page 5

data, but we did apply a number of tests to the data and concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by TRS.

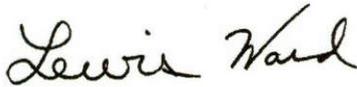
The following schedules in the Actuarial Section of the TRS CAFR were prepared by GRS:

- Actuarial Present Value of Future Benefits
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Funding Progress
- Post-Retirement Mortality
- Rates of Retirement
- Probability of Decrement due to Withdrawal
- Active Mortality

All other schedules shown in the actuarial section were prepared by TRS staff based upon our work. For further information please see the full actuarial valuation report.

This document and the PowerPoint presentation of the actuarial valuation results presented to the TRS Board on December 7, 2017 comprise the full actuarial report.

Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Lewis Ward  
Consultant



Daniel J. Siblik, ASA, EA, MAAA  
Consultant



Joseph P. Newton, FSA, EA, MAAA  
Pension Market Leader and Actuary

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## Actuarial Information Pension Trust Fund

### Actuarial Present Value of Future Benefits

From Actuarial Valuation as of August 31, 2017 (With Comparative Data for August 31, 2016)

	2017	2016
<b>Present Value of Benefits Presently Being Paid</b>		
Service Retirement Benefits	\$ 88,265,853,858	\$ 84,731,139,810
Disability Retirement Benefits	1,159,723,275	1,141,195,638
Death Benefits	878,484,700	867,637,073
Present Survivor Benefits	267,992,457	256,188,158
<b>TOTAL PRESENT VALUE OF BENEFITS PRESENTLY BEING PAID</b>	<b>\$ 90,572,054,290</b>	<b>\$ 86,996,160,679</b>
<b>Present Value of Benefits Payable in the Future to Present Active Members</b>		
Service Retirement Benefits	\$ 106,686,289,188	\$ 102,594,460,159
Disability Retirement Benefits	1,390,485,196	1,305,439,740
Termination Benefits	9,104,608,213	8,518,349,795
Death and Survivor Benefits	1,873,738,711	1,846,700,055
<b>TOTAL ACTIVE MEMBER LIABILITIES</b>	<b>\$ 119,055,121,308</b>	<b>\$ 114,264,949,749</b>
<b>Present Value of Benefits Payable in the Future to Present Inactive Members</b>		
Inactive Vested Participants	\$ 4,591,531,545	\$ 4,333,837,796
Refunds of Contributions to Inactive Non-vested Members	444,096,753	413,997,543
Future Survivor Benefits Payable On Behalf of Present Annuitants	1,462,466,211	1,401,763,178
<b>TOTAL INACTIVE LIABILITIES</b>	<b>\$ 6,498,094,509</b>	<b>\$ 6,149,598,517</b>
<b>TOTAL ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS</b>	<b>\$ 216,125,270,107</b>	<b>\$ 207,410,708,945</b>

### Summary of Cost Items

	2017	2016
Actuarial Present Value of Future Benefits	\$ 216,125,270,107	\$ 207,410,708,945
Present Value of Future Normal Costs	(34,372,473,392)	(33,171,982,143)
Actuarial Accrued Liability	\$ 181,752,796,715	\$ 174,238,726,802
Actuarial Value of Assets	(146,282,044,842)	(138,786,120,728)
<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>	<b>\$ 35,470,751,873</b>	<b>\$ 35,452,606,074</b>

## Actuarial Information Pension Trust Fund

**Financing Objective and Funding Policy:** The funding policy of the Teacher Retirement System (TRS) is established by the state legislature. Contribution rates may not be reduced or eliminated, or benefits may not be improved, if, as a result of the particular action, the time, as determined by an actuarial valuation, required to amortize the unfunded actuarial liabilities of the retirement system, would be increased to a period that exceeds 30 years by one or more years. For detailed information, see Note 1.

**Plan Provisions:** For plan provisions, see Note 12.

**Actuarial Methods and Assumptions:** The actuarial valuation for TRS was prepared by Gabriel, Roeder, Smith & Company (GRS). The actuary relied on membership data and asset information provided by TRS staff. While not verifying the data at their source, the actuary performed such tests for consistency and reasonableness as was deemed necessary to be satisfied with the appropriateness of using the data supplied.

The actuarial methods and assumptions have been selected by the Board of Trustees of the Teacher Retirement System of Texas based upon GRS analysis and recommendations. The Board of Trustees has sole authority to determine the actuarial assumptions used for the plan. The actuarial methods and assumptions are primarily based on a study of actual experience for the four year period ending August 31, 2014 and was adopted on September 24, 2015. The results of the actuarial valuation are dependent on the assumptions used. Actual results can and will differ as actual experience deviates from these assumptions. Seemingly minor changes in assumptions can materially change the liabilities, calculated contribution rates and funding periods. There have been no changes in the actuarial assumptions or methods since the prior valuation. Post-Retirement Mortality rates for current and future retirees are prepared in accordance with the Actuarial Standards of Practice No. 35 which advises actuaries to “*adjust mortality rates to reflect mortality improvement prior to the measurement date and to include an assumption as to the expected mortality improvement after the measurement date.*”

**Actuarial Methods:** The actuarial cost method used for *financial reporting purposes* was the Individual Entry Age Normal method as prescribed by GASB 67 and the method used for *funding purposes* was the Ultimate Entry Age Normal (EAN) method. The Ultimate EAN cost method is used because it creates the most level funding requirement across the generations of members and stakeholders. The difference between the two methods resides in the calculation of the normal cost for the members in the system. Under Individual EAN, the normal cost for each member is based on the benefit tier for that member while the Ultimate EAN method uses the normal cost for the tier new members are currently being hired into; which reflects the longer term normal cost.

### Actuarial Assumptions:

**1. Investment Return Rate:** 8.00% per annum, compounded annually, composed of an assumed 2.50% inflation rate and a 5.50% real rate of return, net of investment expenses.

**2. Post-Retirement Mortality, Assumed Retirement Age, Disability Retirement, Death, and Withdrawal from System:** Rates and scales developed in the actuarial investigation as of August 31, 2014, with values at specimen ages shown in the tables below:

## Actuarial Information Pension Trust Fund

### a. Post-Retirement Mortality:

Post-Retirement Mortality		
Age	Male Members	Female Members
40	0.001938	0.001585
50	0.004247	0.002791
60	0.005584	0.003882
70	0.015547	0.009613
80	0.053691	0.035591
90	0.162983	0.133727
100	0.407509	0.284047
110	0.500000	0.467915

### b. Assumed Retirement Age:

**For members hired after August 31, 2007 and who are vested as of August 31, 2014,** the retirement rates for members once they reach unreduced retirement eligibility at age 60 are increased 10% for each year the member is beyond the Rule of 80 (i.e. if the member reached the Rule of 80 at age 58 then the probability of retirement at age 60 is 120% of the rate shown below).

**For members hired after August 31, 2007 and who are not vested as of August 31, 2014, or, for members hired after August 31, 2014,** the retirement rates for members once they reach unreduced retirement eligibility at age 62 are increased 10% for each year the member is beyond the Rule of 80 (i.e. if the member reached the Rule of 80 at age 58 then the probability of retirement at age 62 is 140% of the rate shown below).

Assumed Retirement Age					
Normal Retirement			Early Retirement		
Age	Male	Female	Age	Male	Female
50	0.1300	0.3000	45-46	0.0100	0.0100
51	0.1300	0.1200	47	0.0100	0.0200
52	0.1300	0.1300	48	0.0200	0.0300
53	0.1300	0.1400	49	0.0300	0.0400
54	0.1400	0.1500	50-58	0.0100	0.0100
55	0.1500	0.1600	59	0.0100	0.0200
56	0.1600	0.1700	60-61	0.0200	0.0200
57	0.1700	0.1800	62	0.0500	0.0400
58	0.1800	0.1900	63	0.0500	0.0500
59	0.1800	0.2000	64	0.0600	0.0600
60	0.2200	0.2100	65	0.0500	0.0500
61	0.2000	0.2200			
62	0.2400	0.2300			
63-64	0.2000	0.2300			
65-74	0.2200	0.2300			
75	1.0000	1.0000			

## Actuarial Information Pension Trust Fund

c. *Disability Retirement:*

<b>Probability of Decrement Due to Disability</b>				
Age	<u>For Service <math>\geq</math> 10</u>		<u>For Service <math>&lt;</math> 10</u>	
	Male	Female	Male	Female
20	0.000184	0.000276	0.000037	0.000055
30	0.000184	0.000276	0.000037	0.000055
40	0.000430	0.000469	0.000086	0.000094
50	0.001993	0.001817	0.000399	0.000363
60	0.003505	0.002754	0.000701	0.000551

d. *Active Mortality:* RP-2014 Employee Mortality Tables for male and female multiplied by 90%, with full generational projection using Scale BB.

<b>Active Mortality</b>		
<u>Age</u>	<u>Male Members</u>	<u>Female Members</u>
20	0.000365	0.000146
30	0.000407	0.000196
40	0.000565	0.000356
50	0.001517	0.000992
60	0.004219	0.002198
70	0.012469	0.005678
80	0.034930	0.016542
90	0.123749	0.092945

e. *Withdrawal:*

<b>Probability of Decrement Due to Withdrawal</b>		
<u>Years of Service</u>	<u>Male Members</u>	<u>Female Members</u>
1	0.149027	0.143098
2	0.119756	0.117329
3	0.096637	0.097896
4	0.072275	0.076765
5	0.062453	0.068443
6	0.055556	0.060368
7	0.047176	0.049631
8	0.041464	0.043108
9	0.036978	0.038477
10	0.033777	0.035264

## Actuarial Information Pension Trust Fund

**3. Rates of Salary Increase:** The following table reflects an inflation rate of 2.50%, plus productivity component of 1.00%, plus step-rate/promotional component as shown.

<b>Rates of Salary Increase</b>			
<u>Merit, Promotion</u>			
<u>Years of Service</u>	<u>Longevity</u>	<u>General</u>	<u>Total</u>
1	6.00%	3.50%	9.50%
2	2.50	3.50	6.00
3	1.90	3.50	5.40
4	1.70	3.50	5.20
5	1.50	3.50	5.00
6	1.40	3.50	4.90
7	1.20	3.50	4.70
8-12	1.00	3.50	4.50
13	0.80	3.50	4.30
14	0.70	3.50	4.20
15	0.60	3.50	4.10
16-17	0.50	3.50	4.00
18	0.40	3.50	3.90
19-20	0.30	3.50	3.80
21-22	0.20	3.50	3.70
23-24	0.10	3.50	3.60
25 or more	0.00	3.50	3.50

**4. Actuarial Value of Assets:** The intent of the actuarial asset valuation method is to smooth out year-to-year fluctuations in market rates of return. The current asset method determines the expected actuarial value of assets and then recognizes at least 20% of the difference between that expected actuarial value of assets and the actual market value of assets. Each year a base is set up to reflect this difference. If the current year's base is of the opposite sign from the remaining deferred bases then it is offset against any prior deferred bases of the opposite sign. Any remaining bases are then recognized over the remaining number of years. This is intended to ensure the smoothed value of assets will converge towards the market value in a reasonable and finite amount of time.

This year's excess investment income of \$6.1 billion completely offset the prior years' remaining investment losses, with \$1.3 billion remaining. After recognizing 20% of this amount (\$270 million) in this year's actuarial assets, \$1.1 billion in deferred investment gains remain to be recognized in the future valuations. The actuarial value of assets is \$146.3 billion.

**5. Actuarial Cost Method:** The normal cost of the Retirement System is developed based on the valuation method known as the entry-age-normal actuarial cost method.

**Funding of Unfunded Actuarial Accrued Liability:** The Unfunded actuarial accrued liability (UAAL) is funded by the excess of future State and employer contributions required by law over the amount of such contributions required to fund the normal cost of benefits.

- a. The "normal cost" for the System is deemed to be equal to the average cost of benefits for newly hired participants. The normal cost to pay for the benefits earned under the Retirement System is 9.94% of payroll, this amount being inclusive of the amount contributed by the employees. An additional estimated 0.12% of payroll is used to pay for administrative expenses of the System, bringing the total normal cost to 10.06% (9.94% plus .12%) of pay.

## Actuarial Information Pension Trust Fund

- b. The "actuarial accrued liability" for benefits payable in the future to present active members is calculated as the present value of benefits payable in the future to present active members less the present value of future normal costs.

The State's contribution rate increased to 6.8% beginning in fiscal year 2014. Beginning in fiscal year 2015, covered employers whose employees are not participating in Social Security began contributing 1.5% of the minimum salary schedule. Combined with the State contribution, it is expected that these aggregate contributions will be approximately 7.7% of total payroll. Since the total State/employer contribution rate is 7.70%, this allows 5.34% of pay contributed by the State to be available to amortize any unfunded actuarial accrued liabilities.

As of the valuation as of August 31, 2017, these excess contributions of 5.34% of pay are sufficient to amortize the UAAL over a period of 32.2 years (assuming all actuarial assumptions are exactly met).

### 1. Schedule of Active Member Valuation Data:

Active Member Valuation Data					
Valuation Year	Active Members	Annualized Payroll in Thousands	Average Annual Salary	Annual % Increase in Average Salary	
2008	801,455	\$ 33,237,942	\$ 41,472	3.7%	
2009	817,537	35,096,863	42,930	3.5	
2010	834,060	36,628,579	43,916	2.3	
2011	828,919	36,797,372	44,392	1.1	
2012	815,155	36,309,449	44,543	0.3	
2013	831,302	37,104,333	44,634	0.2	
2014	857,342	39,195,104	45,717	2.4	
2015	828,851	37,121,750	44,787	(2.0)	
2016	847,631	39,281,763	46,343	3.5	
2017	864,233	40,904,148	47,330	2.1	

### 2. Schedule of Retirees, Beneficiaries, and Disabled Participants Added to and Removed from Rolls:

Valuation as of August 31	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase	
	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits	Average Annual Benefits	Average Annual Benefits
2008	17,727	\$ 391,920,863	7,806	\$ 135,160,090	275,228	\$ 5,743,921,279	20,870	4.7%
2009	17,326	392,452,923	7,940	136,537,511	284,614	5,999,836,691	21,081	4.5
2010	20,076	473,512,423	8,199	142,187,645	296,491	6,331,161,469	21,354	5.5
2011	24,688	620,038,676	8,499	147,985,004	312,680	6,803,215,141	21,758	7.5
2012	27,915	697,134,389	8,848	155,597,838	331,747	7,344,751,692	22,140	8.0
2013	25,825	743,998,946	9,344	165,231,795	348,228	7,923,518,843	22,754	7.9
2014	24,429	573,876,713	9,475	174,915,127	363,182	8,322,480,429	22,915	5.0
2015	25,134	604,436,264	10,578	191,966,951	377,738	8,734,949,742	23,124	5.0
2016	27,018	673,313,552	10,842	195,097,916	393,914	9,213,165,378	23,389	5.5
2017	24,739	613,145,920	10,885	203,792,399	407,768	9,622,518,899	23,598	4.4

## Actuarial Information Pension Trust Fund

### 3. Analysis of Financial Trends:

<b>Financial Experience</b>									
Changes in Unfunded Actuarial Accrued Liabilities (UAAL)*									
Resulting from Differences Between Assumed Experience and Actual Experience									
Increase/(Decrease) for Year (Billions)									
<u>As of</u> <u>August 31</u>	<u>Investment</u> <u>Gains/</u> <u>(Losses)</u>	<u>Contribution</u> <u>Experience</u>	<u>Assumption</u> <u>Changes</u>	<u>Liability</u> <u>Experience</u>	<u>Net Increase/</u> <u>(Decrease)</u>	<u>Beginning</u> <u>UAAL</u>	<u>Ending</u> <u>UAAL</u>		
2017	\$ 0.270	\$ 0.415	\$ (0.701)	\$ 0.828	\$ 0.018	\$ 35.453	\$ 35.471		
2016	(1.504)	0.525		(0.460)	2.485	32.968	35.453		
2015	(1.237)	0.912	0.682	(1.501)	1.330	31.638	32.968		
2014	1.095	1.157	2.282	0.358	2.702	28.936	31.638		
2013	(2.045)	1.911	0.708	(1.829)	2.835	26.101	28.936		
2012	(2.208)	1.258		(1.427)	2.039	24.062	26.101		
2011	(1.958)	0.826	(0.271)	(1.350)	1.163	22.899	24.062		
2010	(1.161)	0.797		(0.705)	1.253	21.646	22.899		
2009	(10.321)	0.149		(0.347)	10.123	11.523	21.646		
2008	1.232	0.228	0.676	(0.694)	(1.022)	12.545	11.523		

\*Calculated on a 5-year smoothed market basis

**Solvency Test:** A short-term solvency test is one means of checking a retirement system's progress under its funding program. The schedule below provides a historical illustration of a short-term solvency test for TRS wherein present assets are compared with:

- active member contributions on deposit
- the liabilities for future benefits to present annuitants (Retirees and Beneficiaries)
- the liabilities for active members under the entry age normal actuarial cost method including a projection of future salary increases and anticipated future service Active Members-State Financed Portion)

Under the level percent of payroll financing followed by TRS, liabilities for active member contributions on deposit and the liabilities for future benefits to present retirees and beneficiaries will be fully covered by present assets except in rare circumstances. In addition, liabilities for active member benefits earned or to be earned in the future will be partially covered by the remainder of present assets. Generally, if the system has been using level cost financing, the funded portion of active member benefits will increase over time.

## Actuarial Information Pension Trust Fund

The following table shows the solvency test:

Solvency Test								
(AMOUNTS SHOWN IN MILLIONS)								
Valuation as of August 31	Aggregate Actuarial Accrued Liabilities For				Valuation Assets	Portion of Aggregate Actuarial Accrued Liabilities Covered by Valuation Assets		
	Active Member Contributions (1) *	Retirees and Beneficiaries (2) *	Active Members (State Financed Portion) (3)	Active Member Contributions (1) *		Retirees and Beneficiaries (2) *	Active Members (State Financed Portion) (3)	
2008	\$ 23,928	\$ 53,243	\$ 44,585	\$ 110,233	100%	100%	74.2%	
2009	23,914	55,484	48,632	106,384	100	100	55.5	
2010	27,559	58,476	48,156	111,293	100	100	52.5	
2011	28,911	63,470	46,934	115,253	100	100	48.7	
2012	30,006	68,449	45,972	118,326	100	100	43.2	
2013	31,365	73,841	45,460	121,730	100	100	36.4	
2014	33,028	78,431	48,576	128,398	100	100	34.9	
2015	33,856	82,535	50,062	133,485	100	100	34.1	
2016	34,803	86,986	52,451	138,786	100	100	32.4	
2017	36,513	90,573	54,667	146,282	100	100	35.1	

\*Adjusted for pending transfers to retired reserve at August 31 for pending retirements.

**Schedule of Funding Progress:** Taking into account only the dollar amounts of aggregate actuarial accrued liabilities and unfunded actuarial accrued liabilities (UAAL) can be misleading. The dollar amounts of these two items can be increasing at a time when their actual substance may be decreasing. Dividing valuation asset dollars by aggregate actuarial accrued liability dollars and dividing UAAL dollars by active member payroll dollars provide clarifying indices. The larger the ratio of valuation assets to aggregate actuarial accrued liabilities, the stronger the system. Observation of these relative indices over a period of years will give an indication of whether the system is becoming stronger or weaker.

Schedule of Funding Progress						
(DOLLAR AMOUNTS SHOWN IN MILLIONS)						
[1]	[2]	[3]	[4]	[5]	[6]	[7]
Valuation as of August 31	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) (3)-(2)	Funded Ratio Assets as a % of AAL (2)/(3)	Projected Payroll	UAAL as a % of Covered Payroll (4)/(6)
2008	\$ 110,233	\$ 121,757	\$ 11,523	90.5%	\$ 33,238	34.7%
2009	106,384	128,029	21,645	83.1	35,097	61.7
2010	111,293	134,191	22,899	82.9	36,629	62.5
2011	115,253	139,315	24,062	82.7	36,797	65.4
2012	118,326	144,427	26,101	81.9	36,310	71.9
2013	121,730	150,666	28,936	80.8	37,104	78.0
2014	128,398	160,036	31,638	80.2	38,522	82.1
2015	133,485	166,453	32,968	80.2	39,620	83.2
2016	138,786	174,239	35,453	79.7	42,229	84.0
2017	146,282	181,753	35,471	80.5	43,164	82.2

The 10-year **Schedule of Actuarially Determined Contributions** is located in the Required Supplementary Information section.



## Actuarial Information TRS-Care

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November 9, 2017

Board of Trustees  
Teacher Retirement System of Texas  
1000 Red River Street  
Austin, TX 78701-2698

**Subject: GASB 74 Actuarial Valuation as of August 31, 2017 for TRS-Care**

Submitted in this report are the results of an Actuarial Valuation of the liabilities associated with the employer financed retiree health benefits provided through TRS-Care, a benefit program designed to provide post-retirement medical benefits for certain members of the Teacher Retirement System of Texas (TRS). The date of the valuation was August 31, 2017. This report was prepared at the request of TRS.

The actuarial calculations were prepared for purposes of complying with the requirements of Statement No. 74 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of this accounting standard. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of TRS-Care and participating employers may produce significantly different results. Actuarial valuations of the post-retirement benefits are performed annually.

The valuation was based upon information, furnished by TRS, concerning retiree health benefits, members' census, and financial data. Data was checked for internal consistency but was not otherwise audited. Certain demographic and economic assumptions are identical to the set of demographic and economic assumptions adopted by the Board based on the 2015 Experience Study of TRS. Assumptions applicable only to TRS-Care have changed since the prior report, and they are disclosed in the assumptions section of this report.

The following CAFR schedules were prepared by GRS and can be found in Sections E and D of this report:

1. Actuarial Present Value of Benefits
2. Schedule of Funding Progress
3. Schedule of Contributions from Employer(s) and Other Contributing Entities
4. Key actuarial assumptions and methods
5. Solvency Test
6. Analysis of Financial Experience
7. Schedule of Retirants and Beneficiaries Added and Removed from Rolls

GRS is not responsible for any trend data schedules not found in this report.

5605 North MacArthur Boulevard | Suite 870 | Irving, Texas 75038-2631

## Actuarial Information TRS-Care

Board of Trustees  
Teacher Retirement System of Texas  
November 9, 2017  
Page 2

The current objective is to fund the Trust in order to maintain benefits through individual biennial periods. There is no arrangement into which the participating employers would make contributions to advance-fund the obligation. However, a Trust does exist into which participating employers are making contributions based on the current funding policy.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. Joseph Newton and Mehdi Riazi are members of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein. The signing individuals are independent of the plan sponsor.

Respectfully submitted,



William J. Hickman  
Senior Consultant



Joseph P. Newton, FSA, MAAA  
Senior Consultant



Mehdi Riazi, FSA, MAAA  
Consultant

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## Actuarial Information TRS-Care

<u>Actuarial Present Value of Future Benefits</u>	
From Actuarial Valuation as of August 31, 2017	
Based on a 3.42% discount rate	
<u>2017</u>	
<b>Present Value of Benefits Being Paid</b>	
Future Medical Claims	\$ 10,611,169,258
Future Rx Claims	19,067,975,083
Retiree Premiums Collected	(14,017,887,963)
<b>NET PRESENT VALUE OF BENEFITS FOR CURRENT RETIREES</b>	<b>\$ 15,661,256,378</b>
<b>Present Value of Benefits Payable in the Future to Inactive Plan Members Entitled to But Not Yet Receiving Benefits*</b>	
Future Medical Claims	\$ 594,504,466
Future Rx Claims	1,102,652,469
Retiree Premiums Collected	(789,936,796)
<b>NET PRESENT VALUE OF FUTURE BENEFITS FOR INACTIVE MEMBERS</b>	<b>\$ 907,220,139</b>
<b>Present Value of Benefits Payable in the Future to Present Active Members</b>	
Future Medical Claims	\$ 39,097,342,487
Future Rx Claims	63,586,219,532
Retiree Premiums Collected	(46,185,732,525)
<b>NET PRESENT VALUE OF BENEFITS FOR FUTURE RETIREES</b>	<b>\$ 56,497,829,494</b>
<b>TOTAL ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS</b>	<b>\$ 73,066,306,011</b>

<u>Summary of Cost Items</u>	
<u>2017</u>	
Actuarial Present Value of Future Benefits	\$ 73,066,306,011
Present Value of Future Normal Costs	(29,180,521,390)
Total OPEB Liability	\$ 43,885,784,621
Plan Fiduciary Net Position	(399,535,986)
<b>NET OPEB LIABILITY</b>	<b>\$ 43,486,248,635</b>

*\* Comparative information is not presented for fiscal year 2016 due to changes between the funding approach used in fiscal year 2016 as compared to the approach used for GASB 74 in fiscal year 2017.*

## Actuarial Information TRS-Care

**Actuarial Methods and Assumptions:** The actuarial valuation of TRS-Care is prepared by Gabriel, Roeder, Smith & Company. The actuary relies on information concerning other post-employment benefits, membership and financial data provided by TRS staff. While not auditing the data, the actuary checks for internal consistency.

The calculation of the liability associated with other post-employment benefits (OPEB) was performed for the purpose of satisfying the requirements of GASB Statement No. 74. The calculation of the plan's liability is not applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 74 may produce significantly different results.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The actuarial valuation of TRS-Care is similar to the actuarial valuations performed for the pension plan, except that the OPEB valuation is more complex. All the demographic assumptions (rates of retirement, termination, and disability) and most of the economic assumptions (general inflation, salary increases, and general payroll growth) used in this OPEB Valuation are identical to those used in the respective annual pension actuarial valuation. The assumptions are based upon a recent actuarial experience study and are reasonable for this OPEB Valuation.

The following assumptions used for members of TRS-Care are identical to the assumptions employed in the August 31, 2017 TRS annual actuarial valuation:

- Rates of Mortality
- Rates of Retirement
- Rates of Termination
- Rates of Disability Incidence
- General Inflation
- Wage Inflation
- Expected Payroll Growth

The following assumptions and other inputs which are specific to TRS-Care were updated from the prior year's report:

- 1) Significant plan changes were adopted during fiscal year ending August 31, 2017. Effective January 1, 2018, only one health plan option will exist (instead of three), and all retirees will be required to contribute monthly premiums for coverage. These health plan changes triggered changes to several of the assumptions, including participation rates, retirement rates, and spousal participation rates.

## Actuarial Information TRS-Care

- 2) The August 31, 2016 valuation had assumed that the savings related to the Medicare Part D reimbursements would phase out by 2022. This assumption was removed for the August 31, 2017 valuation. Although there is uncertainty regarding these federal subsidies, the new assumption better reflects the current substantive plan. This change was unrelated to the plan amendment, and its impact was included as an assumption change in the reconciliation of the total OPEB liability. This change significantly lowered the OPEB liability.
- 3) The discount rate changed from 2.98% as of August 31, 2016 to 3.42% as of August 31, 2017. This change lowered the total OPEB liability.

**Actuarial Cost Method:** Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an Individual Entry Age Normal Actuarial Cost Method having the following characteristics:

- the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce/(increase) the Net OPEB Liability.

### Schedule of Retirees and Beneficiaries Added to and Removed from Rolls:

Valuation as of August 31	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase in Annual Allowances	Average Annual Allowances
	(2)	(3)	(4)	(5)	(6)	(7)		
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances *		
2009	12,158	\$ 54,271,769	8,192	\$ 19,365,868	202,934	\$ 694,017,558	14.5%	\$ 3,420
2010	14,996	71,136,696	7,924	21,837,784	210,006	757,979,912	9.2	3,609
2011	20,467	109,331,023	8,019	24,802,618	222,454	898,001,599	18.5	4,037
2012	19,407	92,279,848	8,220	28,700,248	233,641	768,682,199	(14.4)	3,290
2013	19,798	98,603,255	10,176	25,946,471	243,263	824,715,257	7.3	3,390
2014	18,916	97,956,524	10,656	27,648,497	251,523	933,885,969	13.2	3,713
2015	19,171	106,177,651	11,116	31,400,277	259,578	1,050,329,854	12.5	4,046
2016	20,883	120,035,127	12,250	48,462,388	268,211	1,132,169,358	7.8	4,221
2017	19,121	105,535,109	13,113	59,695,737	274,219	986,039,302	(12.9)	3,596

\* Expected employer provided claims and expenses (net of retiree premiums). Annual allowances in Column (7) include increases due to health care inflation and the impact of plan changes. As a result, the annual allowances are not equal to the beginning of year allowances plus the "Added to Rolls" allowances minus the "Removed from Rolls" allowances.

## Actuarial Information TRS-Care

### Analysis of Financial Experience:

<b>Analysis of Financial Experience</b>						
(AMOUNTS SHOWN IN MILLIONS)						
Valuation as of August 31	Asset Gain/(Loss)	Liability Gain/(Loss)	New Assumptions Gain/(Loss)	Benefit Changes Gain/(Loss)	Contributions Gain/(Loss)	Net Gain/(Loss)
2012	\$ (38)	\$ 2,148	\$ (1,302)	\$ 3,458	\$ (1,485)	\$ 2,781
2013	(31)	24	(1,699)	1,266	(1,458)	(1,898)
2014	(24)	(619)	(1,235)		(1,522)	(3,400)
2015	(36)	(3,369)	(6,232)		(1,004)	(10,641)
2016	(37)	1,517	(4,199)		(3,518)	(6,237)

\* Years presented ended in fiscal year 2016 due to implementation of GASB 74. Refer to Required Supplementary Information for future trend information.

### Solvency Test:

<b>Solvency Test</b>							
(AMOUNTS SHOWN IN MILLIONS)							
Valuation as of August 31	Aggregate Actuarial Accrued Liabilities For				Portion of Aggregate Actuarial Accrued Liabilities Covered by Valuation Assets		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Active Member Contributions*	Beneficiaries and Vested Terminations	Members (Employer Financed Portion)	Valuation Assets	Active Member Contributions (5)/(2)	Beneficiaries and Vested Terminations [(5)-(2)]/(3)	Members (Employer Financed Portion) [(5)-(2)-(3)]/(4)
2008	NA	\$ 9,318	\$ 12,994	\$ 729	NA	7.8%	0.0%
2009	NA	9,642	14,716	800	NA	8.3	0.0
2010	NA	10,918	14,889	815	NA	7.5	0.0
2011	NA	13,710	16,075	891	NA	6.5	0.0
2012	NA	12,676	14,866	741	NA	5.8	0.0
2013	NA	14,367	15,468	551	NA	3.8	0.0
2014	NA	16,307	17,411	458	NA	2.8	0.0
2015	NA	20,749	23,454	973	NA	4.7	0.0
2016	NA	23,260	26,938	641	NA	2.8	0.0

\*Active member contributions are non-refundable. Years presented ended in fiscal year 2016 due to implementation of GASB 74. Refer to Required Supplementary Information for future trend information.

## Actuarial Information TRS-Care

### Schedule of Funding Progress:

<b>SCHEDULE OF FUNDING PROGRESS</b>							
(DOLLAR AMOUNTS SHOWN IN MILLIONS)							
[1]	[2]	[3]	[4]	[5]	[6]	[7]	
Valuation as of August 31	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) (3)-(2)	Funded Ratio Assets as a % of AAL (2)/(3)	Annual Covered Payroll	UAAL as a % of Covered Payroll (4)/(6)	
2009	\$ 800	\$ 24,357	\$ 23,557	3.3%	\$ 29,490	80%	
2010	815	25,808	24,993	3.2	30,758	81	
2011	891	29,785	28,894	3.0	30,515	95	
2012	741	27,542	26,801	2.7	29,777	90	
2013	551	29,835	29,284	1.8	30,511	96	
2014	458	33,719	33,261	1.4	32,247	103	
2015	973	44,203	43,230	2.2	31,254	138	
2016	641	50,198	49,557	1.3	32,892	151	

\* Years presented ended in fiscal year 2016 due to implementation of GASB 74. Refer to Required Supplementary Information for future trend information.



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# STATISTICAL SECTION



Anita Smith Palmer "Boots & Rope," © 2000



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## Statistical Section Overview

The Statistical Section presents additional information to provide financial statement users with added historical perspective, context and detail to assist in using the information in the financial statements, notes to financial statements, and required supplementary information to understand and assess the system's financial condition. Information is presented for the Pension Trust Fund, TRS-Care, TRS-ActiveCare, and the 403(b) Administrative Program.

### FINANCIAL TRENDS INFORMATION

The schedules on the following pages show financial trends information that assists users in understanding and assessing how the system's financial position has changed over time. The financial trend schedules presented are:

- Changes in Fiduciary Net Position
- Revenues, Expenses and Changes in Net Position
- Benefit and Refund Deductions from Net Position by Type
- Benefit Deductions from Net Position by Type

### OPERATING INFORMATION

The schedules presented immediately following the Financial Trends Information contain contextual data about the system's benefit operations, resources and the benefit services it provides. The operating information schedules presented are:

- Average Benefit Payments – Pension Trust Fund
- Average Monthly Benefit – Pension Trust Fund
- Average Benefit Payments – Health Benefits
- Retired Members by Type of Benefit – Pension Trust Fund
- Health Benefit Payments by Range
- Principal Participating Employers

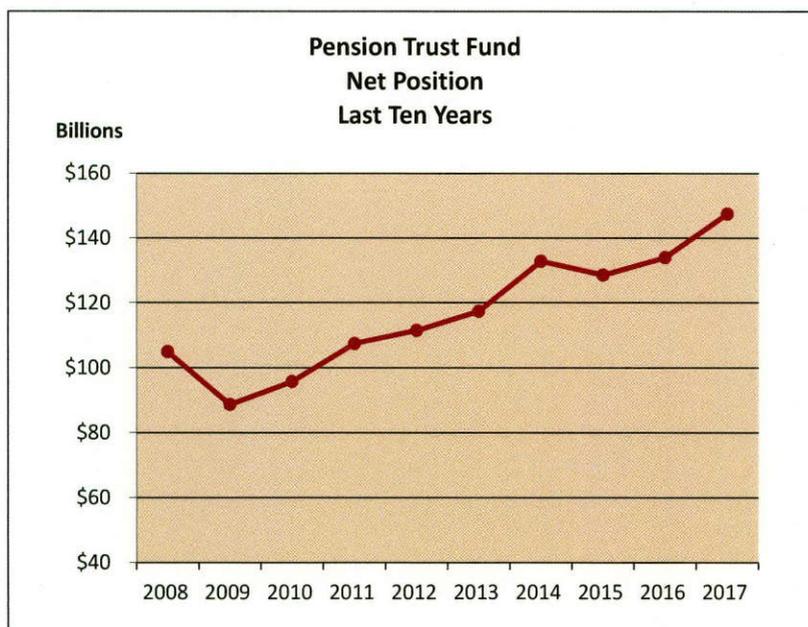
In addition, a complete listing of participating employers has been included. The information in this section was derived from internal sources and the CAFR for the relevant year.

## FINANCIAL TRENDS INFORMATION

### *Changes in Fiduciary Net Position*

PENSION TRUST FUND  
For the Fiscal Years Ended August 31

	2017	2016	2015	2014
<b>Additions</b>				
Member Contributions	\$ 3,242,556,261	\$ 2,943,669,320	\$ 2,576,024,311	\$ 2,357,686,000
Non-Employer Contributing Entity Contributions	1,697,962,608	1,675,631,248	1,591,482,988	1,530,623,829
Employer Contributions		104,714,221	93,079,033	120,206,921
Participating Employers Contributions	1,158,808,801	1,378,675,127	1,284,893,620	864,345,470
Purchase of Service Credit	55,092,741	37,389,534	50,089,106	143,534,091
415 Excess Benefit Arrangement	2,930,399	3,574,146	2,216,586	2,273,832
Service Contributions Transferred				
In from ERS	22,043,929	20,376,732	18,989,008	17,440,313
Net Investment Income	17,079,807,347	9,193,280,560	(412,759,100)	19,434,430,034
Other	430,799,828	1,993,029	3,733,133	4,143,449
<b>TOTAL ADDITIONS</b>	<b>\$ 23,690,001,914</b>	<b>\$ 15,359,303,917</b>	<b>\$ 5,207,748,685</b>	<b>\$ 24,474,683,939</b>
<b>Deductions</b>				
Benefits	\$ 9,775,775,472	\$ 9,379,122,730	\$ 8,935,111,459	\$ 8,548,642,525
Excess Benefits	2,721,567	3,574,146	2,216,586	2,273,832
Refunds of Contributions	420,421,056	373,418,687	391,341,181	410,600,319
Service Contributions Transferred to ERS	93,609,174	88,854,383	84,059,353	80,163,847
Administrative Expenses, Excluding Investing Activity Expenses	44,189,998	44,402,710	35,556,979	41,904,190
<b>TOTAL DEDUCTIONS</b>	<b>\$ 10,336,717,267</b>	<b>\$ 9,889,372,656</b>	<b>\$ 9,448,285,558</b>	<b>\$ 9,083,584,713</b>
<b>Net Increase (Decrease)</b>	<b>\$ 13,353,284,647</b>	<b>\$ 5,469,931,261</b>	<b>\$ (4,240,536,873)</b>	<b>\$ 15,391,099,226</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 134,008,637,473</b>	<b>\$ 128,538,706,212</b>	<b>\$ 132,779,243,085</b>	<b>\$ 117,388,143,859</b>
<b>Net Position - End of Year</b>	<b>\$ 147,361,922,120</b>	<b>\$ 134,008,637,473</b>	<b>\$ 128,538,706,212</b>	<b>\$ 132,779,243,085</b>





	2013	2012	2011	2010	2009	2008
\$	2,252,094,934	\$ 2,188,020,423	\$ 2,243,954,725	\$ 2,205,017,425	\$ 2,107,057,870	\$ 1,998,138,487
	1,337,214,693	1,299,077,635	1,484,285,519	1,461,034,870	1,378,304,342	1,352,243,134
	105,559,580	91,532,506	111,486,255	116,553,826	103,539,599	98,785,295
	820,134,412	669,305,127	744,733,236	719,051,333	687,910,583	604,937,605
	148,400,880	125,971,764	105,177,104	84,519,762	74,542,413	87,207,374
	2,520,830	2,483,369	1,750,588	1,504,510	1,553,381	1,646,494
	16,365,042	14,940,228	12,628,712	11,167,772	9,558,927	8,897,722
	9,834,136,005	7,847,298,290	14,636,935,228	9,411,446,873	(13,971,868,722)	(4,604,971,847)
	2,629,383	1,867,389	1,576,613	788,787	3,899	3,596
\$	14,519,055,759	\$ 12,240,496,731	\$ 19,342,527,980	\$ 14,011,085,158	\$ (9,609,397,708)	\$ (453,112,140)
\$	8,075,208,484	\$ 7,723,622,166	\$ 7,173,504,788	\$ 6,617,397,374	\$ 6,294,434,115	\$ 6,406,644,540
	2,520,830	2,483,369	1,750,588	1,504,510	1,553,381	1,646,494
	391,292,412	381,231,352	334,268,822	265,186,589	266,695,076	278,002,614
	75,513,146	70,985,963	64,772,079	61,570,750	57,135,135	52,773,854
\$	36,264,062	\$ 33,073,740	\$ 35,849,819	\$ 29,992,608	\$ 28,310,448	\$ 26,122,662
\$	8,580,798,934	\$ 8,211,396,590	\$ 7,610,146,096	\$ 6,975,651,831	\$ 6,648,128,155	\$ 6,765,190,164
\$	5,938,256,825	\$ 4,029,100,141	\$ 11,732,381,884	\$ 7,035,433,327	\$ (16,257,525,863)	\$ (7,218,302,304)
\$	111,449,887,034	\$ 107,420,786,893	\$ 95,688,405,009	\$ 88,652,971,682	\$ 104,910,497,545	\$ 112,128,799,849
\$	117,388,143,859	\$ 111,449,887,034	\$ 107,420,786,893	\$ 95,688,405,009	\$ 88,652,971,682	\$ 104,910,497,545

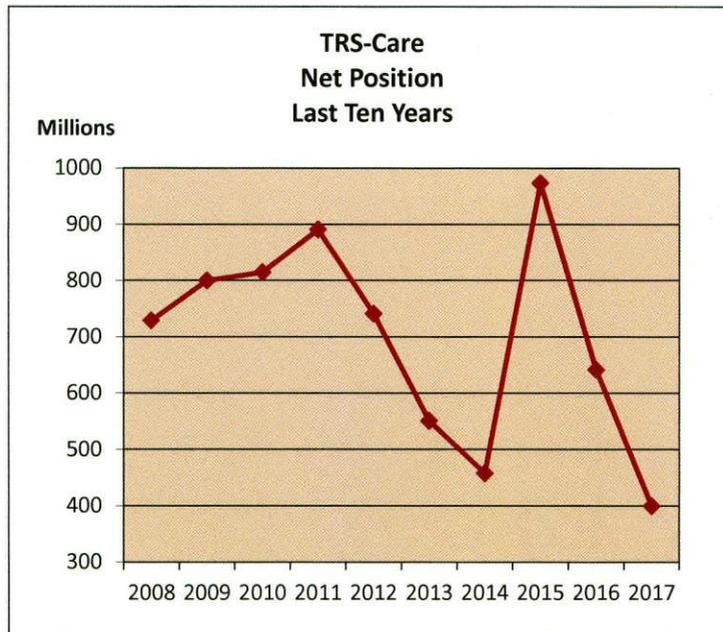
## FINANCIAL TRENDS INFORMATION

### Changes in Fiduciary Net Position

TRS-CARE  
For the Fiscal Years Ended August 31

	2017	2016	2015	2014
<b>Additions</b>				
Member Contributions	\$ 213,241,179	\$ 208,581,990	\$ 198,196,273	\$ 189,003,903
State's General Fund -				
Non-Employer Contributing Entity	303,760,632	297,070,920	281,098,358	267,497,910
Participating Employers	215,360,520	212,936,351	202,976,470	193,124,772
Fringe Benefits Paid by State's General Fund on Behalf of TRS Employees				139,422
Supplemental Appropriation From State's General Fund - Non-Employer Contributing Entity	15,559,552		768,100,754	36,058,148
Federal Revenue	101,718,551	124,739,649	126,806,652	78,589,415
Rebate and Discount Income*	291,725,635	218,995,436	231,569,472	200,859,859
Investment Income	4,696,973	5,421,446	1,495,680	2,061,745
Miscellaneous Revenue	529,020	89,388		
<b>TOTAL ADDITIONS</b>	<b>\$ 1,146,592,062</b>	<b>\$ 1,067,835,180</b>	<b>\$ 1,810,243,659</b>	<b>\$ 967,335,174</b>
<b>Deductions</b>				
Health Care Claims	\$ 1,678,892,217	\$ 1,651,712,836	\$ 1,554,181,197	\$ 1,347,532,839
Less: Health Care Premiums Paid by Retirees	(404,027,710)	(374,736,269)	(369,066,459)	(363,631,292)
Health Care Claims Processing and Other	46,931,559	48,361,151	47,380,407	45,387,769
Insurance Premium Payments	61,792,671	69,228,872	59,000,081	27,507,106
Administrative Expenses	4,953,492	4,701,677	3,769,680	3,646,546
<b>TOTAL DEDUCTIONS</b>	<b>\$ 1,388,542,229</b>	<b>\$ 1,399,268,267</b>	<b>\$ 1,295,264,906</b>	<b>\$ 1,060,442,968</b>
<b>Net Increase (Decrease)</b>	<b>\$ (241,950,167)</b>	<b>\$ (331,433,087)</b>	<b>\$ 514,978,753</b>	<b>\$ (93,107,794)</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 641,486,153</b>	<b>\$ 972,919,240</b>	<b>\$ 457,940,487</b>	<b>\$ 551,048,281</b>
<b>Net Position - End of Year</b>	<b>\$ 399,535,986</b>	<b>\$ 641,486,153</b>	<b>\$ 972,919,240</b>	<b>\$ 457,940,487</b>

\*Prior to fiscal year 2013, rebates were offset within health care claims.





	2013	2012	2011	2010	2009	2008
\$	180,824,523	\$ 176,751,407	\$ 183,808,580	\$ 181,512,856	\$ 173,856,344	\$ 165,569,413
	139,095,786	271,925,242	282,782,431	279,250,547	267,471,299	254,722,174
	160,952,396	154,607,926	158,724,010	155,918,241	149,562,613	141,672,630
	117,770	103,676	108,440	101,511	95,929	91,945
	102,363,704					
	74,511,473	68,633,946	136,887,805	70,795,686	61,530,735	59,486,239
	82,074,803					
	3,041,001	5,189,934	8,168,640	11,679,229	17,482,143	29,252,347
<b>\$</b>	<b>742,981,456</b>	<b>\$ 677,212,131</b>	<b>\$ 770,479,906</b>	<b>\$ 699,258,070</b>	<b>\$ 669,999,063</b>	<b>\$ 650,794,748</b>
\$	1,240,508,361	\$ 1,142,131,410	\$ 992,478,380	\$ 971,356,805	\$ 885,132,865	\$ 833,509,538
	(355,685,504)	(363,348,030)	(345,164,271)	(332,481,933)	(329,723,191)	(328,505,433)
	43,577,852	44,470,323	44,007,586	42,435,939	40,268,436	36,651,413
	1,148,013	101,060	108,286	99,662	95,627	96,297
	3,398,109	3,714,018	3,143,922	3,031,686	2,916,259	3,000,536
<b>\$</b>	<b>932,946,831</b>	<b>\$ 827,068,781</b>	<b>\$ 694,573,903</b>	<b>\$ 684,442,159</b>	<b>\$ 598,689,996</b>	<b>\$ 544,752,351</b>
<b>\$</b>	<b>(189,965,375)</b>	<b>\$ (149,856,650)</b>	<b>\$ 75,906,003</b>	<b>\$ 14,815,911</b>	<b>\$ 71,309,067</b>	<b>\$ 106,042,397</b>
\$	741,013,656	\$ 890,870,306	\$ 814,964,303	\$ 800,148,392	\$ 728,839,325	\$ 622,796,928
\$	551,048,281	\$ 741,013,656	\$ 890,870,306	\$ 814,964,303	\$ 800,148,392	\$ 728,839,325

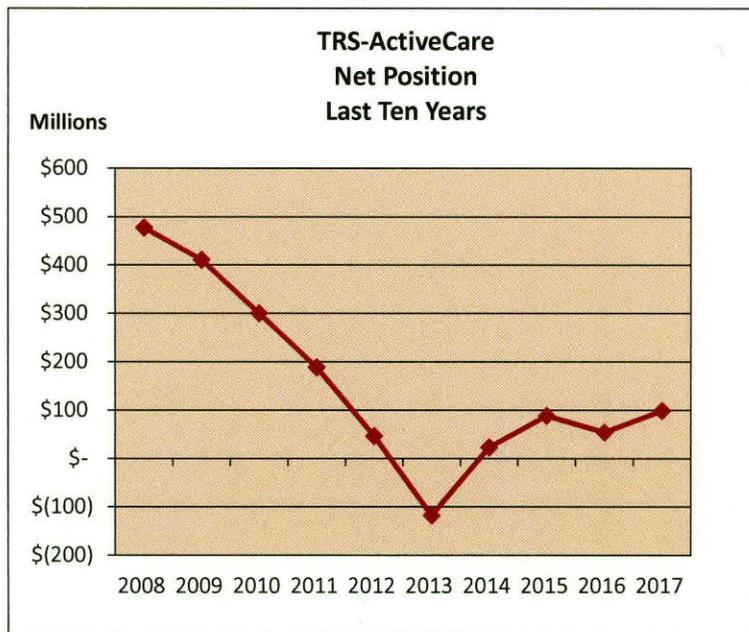
## FINANCIAL TRENDS INFORMATION

### *Revenues, Expenses, and Changes in Net Position*

TRS-ACTIVECARE  
For the Fiscal Years Ended August 31

	2017	2016	2015	2014
<b>Revenues</b>				
Health Care Premiums	\$ 2,119,959,039	\$ 2,055,658,822	\$ 1,938,621,262	\$ 1,919,557,855
COBRA Premiums and Other	120,049,492	17,904,885	5,328,003	9,337,610
Administrative Fees and Miscellaneous Revenue	321,030	356,054	236,749	139,608
Investment Income	4,668,888	3,079,039	1,537,408	940,022
Federal Revenue ARRA-COBRA Reimbursements				
Fringe Benefits Paid by State's General Fund on Behalf of TRS Employees				79,792
<b>TOTAL REVENUES</b>	<b>\$ 2,244,998,449</b>	<b>\$ 2,076,998,800</b>	<b>\$ 1,945,723,422</b>	<b>\$ 1,930,054,887</b>
<b>Expenses</b>				
Health Care Claims	\$ 1,846,526,430	\$ 1,768,287,120	\$ 1,565,255,957	\$ 1,521,834,989
Health Care Claims Processing and Other	123,783,747	125,802,110	135,073,416	109,925,954
Premium Payments to HMOs	227,088,895	214,529,160	178,192,468	154,913,859
Administrative Expenses	3,345,442	2,644,792	2,225,417	2,569,850
<b>TOTAL EXPENSES</b>	<b>\$ 2,200,744,514</b>	<b>\$ 2,111,263,182</b>	<b>\$ 1,880,747,258</b>	<b>\$ 1,789,244,652</b>
<b>Net Increase (Decrease)</b>	<b>\$ 44,253,935</b>	<b>\$ (34,264,382)</b>	<b>\$ 64,976,164</b>	<b>\$ 140,810,235</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 53,550,894</b>	<b>\$ 87,815,276</b>	<b>\$ 22,839,112</b>	<b>\$ (117,971,123)</b>
<b>Net Position - End of Year</b>	<b>\$ 97,804,829</b>	<b>\$ 53,550,894</b>	<b>\$ 87,815,276</b>	<b>\$ 22,839,112</b> *

\* For FY 2014 and fiscal years prior to FY 2013, Net Position balances were all restricted. In FY 2013 the unrestricted balance is \$(117,971,123) and restricted is zero.



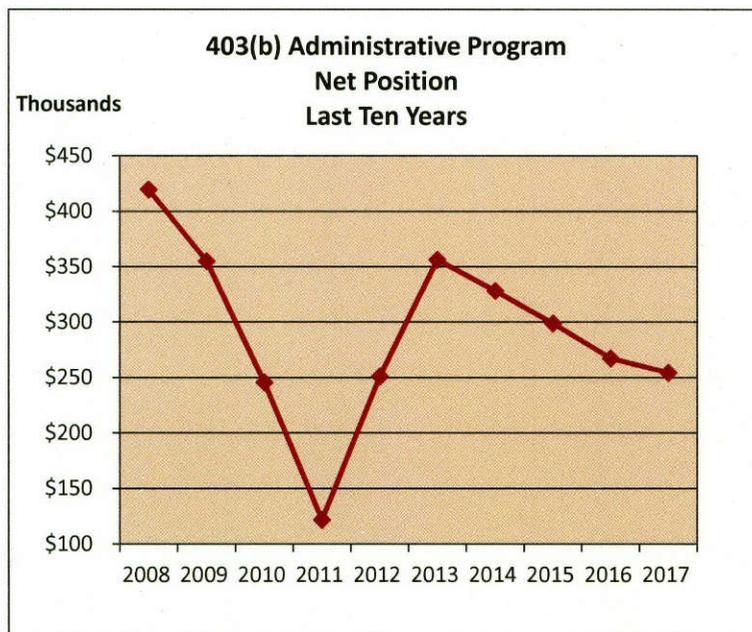


2013	2012	2011	2010	2009	2008
\$ 1,797,745,785	\$ 1,738,705,410	\$ 1,540,604,828	\$ 1,322,426,709	\$ 1,164,113,369	\$ 1,089,656,363
10,775,898	11,199,707	8,926,063	6,744,702	7,897,679	6,880,659
137,630	136,324	135,917	125,321	187,813	186,844
746,936	1,697,553	3,387,062	6,421,269	11,597,992	21,164,640
	29,706	667,746	1,225,158	170,219	
75,664	72,094	67,373	64,328	64,975	61,894
<u>\$ 1,809,481,913</u>	<u>\$ 1,751,840,794</u>	<u>\$ 1,553,788,989</u>	<u>\$ 1,337,007,487</u>	<u>\$ 1,184,032,047</u>	<u>\$ 1,117,950,400</u>
\$ 1,785,069,768	\$ 1,718,903,645	\$ 1,510,090,981	\$ 1,313,114,197	\$ 1,122,646,958	\$ 952,156,339
84,903,101	83,346,223	76,960,951	67,906,654	60,934,432	54,583,499
100,905,702	89,706,406	76,270,706	64,532,253	64,820,440	68,204,743
2,351,802	2,176,610	2,207,051	1,883,148	1,861,949	1,830,258
<u>\$ 1,973,230,373</u>	<u>\$ 1,894,132,884</u>	<u>\$ 1,665,529,689</u>	<u>\$ 1,447,436,252</u>	<u>\$ 1,250,263,779</u>	<u>\$ 1,076,774,839</u>
<u>\$ (163,748,460)</u>	<u>\$ (142,292,090)</u>	<u>\$ (111,740,700)</u>	<u>\$ (110,428,765)</u>	<u>\$ (66,231,732)</u>	<u>\$ 41,175,561</u>
\$ 45,777,337	\$ 188,069,427	\$ 299,810,127	\$ 410,238,892	\$ 476,470,624	\$ 435,295,063
<u>\$ (117,971,123)</u>	<u>\$ 45,777,337</u>	<u>\$ 188,069,427</u>	<u>\$ 299,810,127</u>	<u>\$ 410,238,892</u>	<u>\$ 476,470,624</u>

FINANCIAL TRENDS INFORMATION  
**Revenues, Expenses, and Changes in Net Position**

403(b) ADMINISTRATIVE PROGRAM  
 For the Fiscal Years Ended August 31

	2017	2016	2015	2014
<b>Revenues</b>				
Certification Fees	\$ 135,000	\$ 12,000	\$ 27,000	\$ 15,000
Product Registration Fees	33,000	3,000	21,000	15,000
Investment Income	2,784	2,122	1,360	1,324
Fringe Benefits Paid by State's General Fund on Behalf of TRS Employees				3,131
<b>TOTAL REVENUES</b>	<b>\$ 170,784</b>	<b>\$ 17,122</b>	<b>\$ 49,360</b>	<b>\$ 34,455</b>
<b>Expenses</b>				
Administrative Expenses	\$ 183,745	\$ 48,638	\$ 78,446	\$ 62,636
<b>TOTAL EXPENSES</b>	<b>\$ 183,745</b>	<b>\$ 48,638</b>	<b>\$ 78,446</b>	<b>\$ 62,636</b>
<b>Net Increase (Decrease)</b>	<b>\$ (12,961)</b>	<b>\$ (31,516)</b>	<b>\$ (29,086)</b>	<b>\$ (28,181)</b>
<b>Net Position - Beginning of Year</b>	<b>\$ 267,554</b>	<b>\$ 299,070</b>	<b>\$ 328,156</b>	<b>\$ 356,337</b>
<b>Net Position - End of Year</b>	<b>\$ 254,593</b>	<b>\$ 267,554</b>	<b>\$ 299,070</b>	<b>\$ 328,156</b>





2013	2012	2011	2010	2009	2008
\$ 60,000	\$ 114,000	\$ 12,000	\$ 30,000	\$ 6,000	\$ 30,000
81,000	63,000	3,000	21,000	9,000	180,000
1,333	707	1,801	4,318	8,558	19,337
2,890	2,772	7,898	8,034		
<u>\$ 145,223</u>	<u>\$ 180,479</u>	<u>\$ 24,699</u>	<u>\$ 63,352</u>	<u>\$ 23,558</u>	<u>\$ 229,337</u>
\$ 40,194	\$ 51,203	\$ 148,444	\$ 172,835	\$ 88,000	\$ 192,000
\$ 40,194	\$ 51,203	\$ 148,444	\$ 172,835	\$ 88,000	\$ 192,000
\$ 105,029	\$ 129,276	\$ (123,745)	\$ (109,483)	\$ (64,442)	\$ 37,337
\$ 251,308	\$ 122,032	\$ 245,777	\$ 355,260	\$ 419,702	\$ 382,365
<u>\$ 356,337</u>	<u>\$ 251,308</u>	<u>\$ 122,032</u>	<u>\$ 245,777</u>	<u>\$ 355,260</u>	<u>\$ 419,702</u>

## FINANCIAL TRENDS INFORMATION

**Benefits and Refund Deductions from Net Position by Type**PENSION TRUST FUND  
Last Ten Fiscal Years

	2017	2016	2015	2014
<b>Benefits</b>				
Service Retirements**	\$ 9,059,855,790	\$ 8,633,505,859	\$ 8,215,765,876	\$ 7,795,690,586
Deferred Retirement Option	5,231,060	5,166,851	9,643,121	14,974,505
Partial Lump Sum Option	263,705,342	300,420,702	288,923,266	322,033,388
Disability Retirements	177,627,306	173,464,936	169,318,064	164,299,506
Death and Survivor Benefits:				
Annual Salary	44,398,830	44,952,730	39,574,595	44,846,010
Survivor Annuities	109,519,771	108,509,074	100,150,048	97,822,817
Life Annuities	93,714,871	92,087,967	90,563,081	89,547,742
60 Monthly Payments	15,518,472	15,523,059	14,443,193	13,415,885
Remainder of Contributions	6,204,030	5,491,553	6,730,215	6,012,086
<b>TOTAL BENEFITS</b>	<b>\$ 9,775,775,472</b>	<b>\$ 9,379,122,731</b>	<b>\$ 8,935,111,459</b>	<b>\$ 8,548,642,525</b>
<b>Refunds</b>				
Death	\$ 6,371,748	\$ 7,379,576	\$ 5,474,475	\$ 5,455,829
Separation	414,049,308	366,039,111	385,866,706	405,144,490
<b>TOTAL REFUNDS</b>	<b>\$ 420,421,056</b>	<b>\$ 373,418,687</b>	<b>\$ 391,341,181</b>	<b>\$ 410,600,319</b>

\* A one-time supplemental payment that is capped at \$2,400 was distributed to eligible retirees in January 2008.

\*\* For fiscal years 2010 and prior, Service Retirements changed due to the reclassification of Transfers of Service Contributions with Employees Retirement System of Texas.

## FINANCIAL TRENDS INFORMATION

**Benefit Deductions from Net Position by Type**TRS-CARE  
Last Ten Fiscal Years

	2017	2016	2015	2014
<b>Claims</b>				
Medical Claims and Insurance Premiums	\$ 807,831,048	\$ 858,985,138	\$ 805,668,819	\$ 691,283,731
Prescription Drugs***	734,805,874	716,536,786	649,457,501	539,842,962
<b>TOTAL CLAIMS</b>	<b>\$ 1,542,636,922</b>	<b>\$ 1,575,521,924</b>	<b>\$ 1,455,126,320</b>	<b>\$ 1,231,126,693</b>

\*\*\* Note: For TRS-CARE, 2013 and 2014 Prescription claims numbers have been revised to reflect claims net of rebates. These two years were reported gross of rebates in 2013 and 2014.

## FINANCIAL TRENDS INFORMATION

**Benefit Deductions from Net Position by Type**TRS-ACTIVECARE  
Last Ten Fiscal Years

	2017	2016	2015	2014
<b>Claims</b>				
Medical Claims and Insurance Premiums	\$ 1,653,483,496	\$ 1,644,795,868	\$ 1,479,302,696	\$ 1,397,249,236
Prescription Drugs	306,703,364	325,475,512	264,145,729	279,499,612
<b>TOTAL CLAIMS</b>	<b>\$ 1,960,186,861</b>	<b>\$ 1,970,271,380</b>	<b>\$ 1,743,448,425</b>	<b>\$ 1,676,748,848</b>



2013	2012	2011	2010	2009	2008
\$ 7,251,369,740	\$ 6,808,592,209	\$ 6,241,946,655	\$ 5,841,963,927	\$ 5,565,925,090	\$ 5,649,308,335 *
17,223,523	22,361,937	27,822,115	22,607,290	23,272,668	26,757,772
410,323,790	501,152,157	524,925,790	385,555,126	348,261,100	363,668,944
156,308,471	150,238,202	144,865,109	141,396,837	138,569,650	146,907,654
41,219,707	46,859,444	47,295,194	45,698,147	43,235,232	42,216,290
94,563,001	92,126,049	86,898,720	82,574,358	79,951,723	78,862,569
87,044,328	85,816,402	84,893,007	83,238,898	81,764,240	85,576,098
12,659,471	11,816,313	11,564,275	10,824,948	10,180,012	10,169,530
4,496,453	4,659,453	3,293,923	3,537,843	3,274,400	3,177,348
<u>\$ 8,075,208,484</u>	<u>\$ 7,723,622,166</u>	<u>\$ 7,173,504,788</u>	<u>\$ 6,617,397,374</u>	<u>\$ 6,294,434,115</u>	<u>\$ 6,406,644,540</u>

\$ 4,705,228	\$ 5,294,006	\$ 3,984,340	\$ 3,710,941	\$ 3,084,718	\$ 2,520,283
386,587,184	375,937,346	330,284,482	261,475,648	263,610,358	275,482,331
<u>\$ 391,292,412</u>	<u>\$ 381,231,352</u>	<u>\$ 334,268,822</u>	<u>\$ 265,186,589</u>	<u>\$ 266,695,076</u>	<u>\$ 278,002,614</u>

2013	2012	2011	2010	2009	2008
\$ 687,469,016	\$ 687,987,585	\$ 608,461,321	\$ 575,539,788	\$ 531,239,020	\$ 498,767,038
496,229,923	454,143,825	384,017,059	395,817,017	353,893,845	334,742,500
<u>\$ 1,183,698,939</u>	<u>\$ 1,142,131,410</u>	<u>\$ 992,478,380</u>	<u>\$ 971,356,805</u>	<u>\$ 885,132,865</u>	<u>\$ 833,509,538</u>

2013	2012	2011	2010	2009	2008
\$ 1,613,167,792	\$ 1,450,574,875	\$ 1,242,673,156	\$ 1,092,107,916	\$ 934,733,927	\$ 788,240,087
272,807,678	268,328,770	267,417,825	221,006,281	187,913,031	163,916,252
<u>\$ 1,885,975,470</u>	<u>\$ 1,718,903,645</u>	<u>\$ 1,510,090,981</u>	<u>\$ 1,313,114,197</u>	<u>\$ 1,122,646,958</u>	<u>\$ 952,156,339</u>

OPERATING INFORMATION  
**Average Benefit Payments**

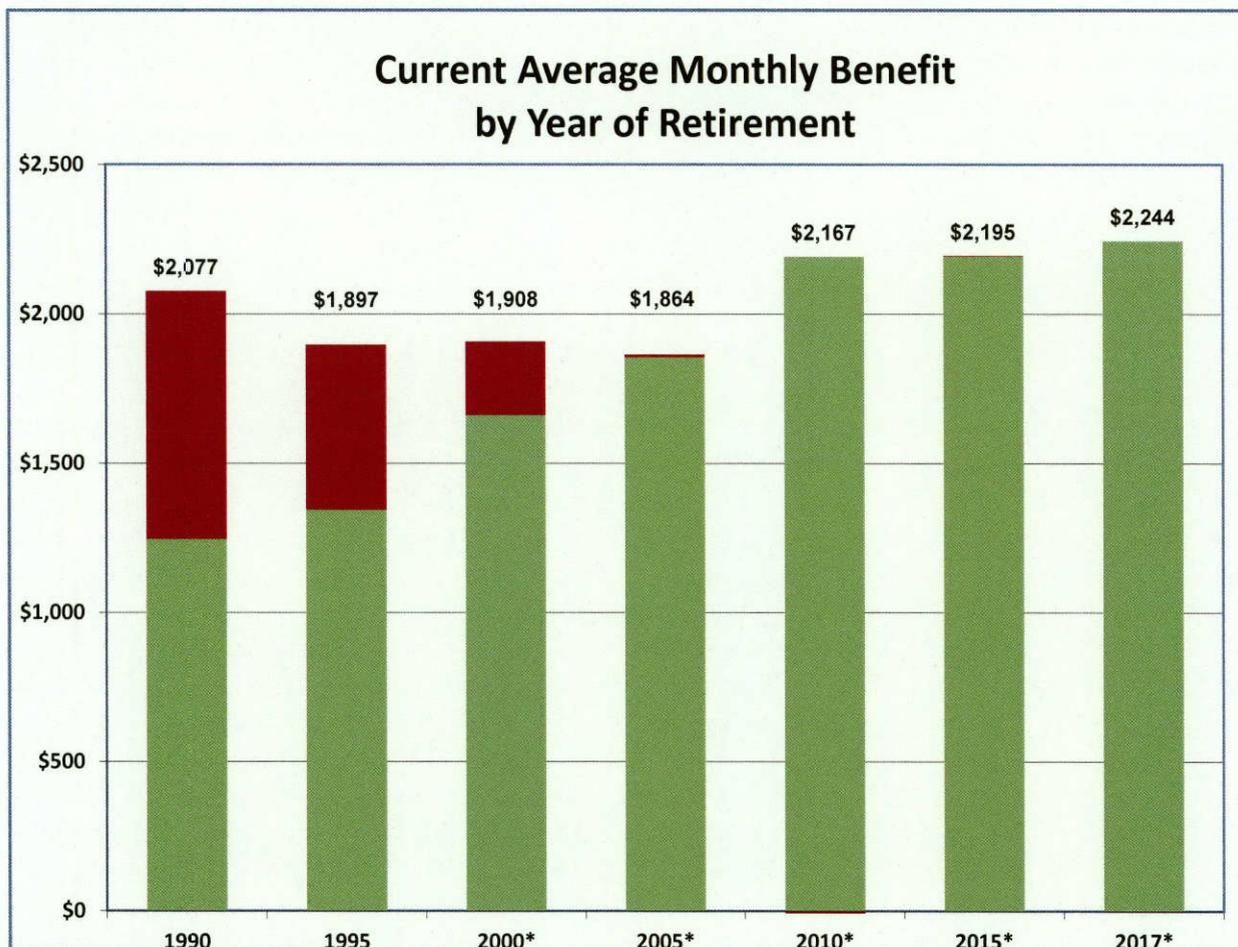
PENSION TRUST FUND  
 Last Ten Fiscal Years

Retirement Effective Dates	Years Credited Service					
	5-10	11-15	16-20	21-25	26-30	30+
<b>9-1-07 to 8-31-08</b>						
Average Monthly Benefit *	\$ 315	\$ 621	\$ 1,154	\$ 1,761	\$ 2,539	\$ 3,516
Average Final Average Salary	\$ 27,892	\$ 32,365	\$ 38,421	\$ 45,583	\$ 53,616	\$ 61,848
Number of Retirees	1,532	1,280	1,902	2,941	3,754	3,332
<b>9-1-08 to 8-31-09</b>						
Average Monthly Benefit *	\$ 351	\$ 659	\$ 1,220	\$ 1,775	\$ 2,614	\$ 3,639
Average Final Average Salary	\$ 29,747	\$ 33,093	\$ 40,368	\$ 45,670	\$ 54,752	\$ 63,080
Number of Retirees	1,462	1,377	1,918	2,878	3,361	3,229
<b>9-1-09 to 8-31-10</b>						
Average Monthly Benefit *	\$ 364	\$ 672	\$ 1,228	\$ 1,841	\$ 2,641	\$ 3,739
Average Final Average Salary	\$ 30,279	\$ 34,348	\$ 40,459	\$ 47,312	\$ 55,184	\$ 64,260
Number of Retirees	1,675	1,604	2,235	3,517	3,825	4,187
<b>9-1-10 to 8-31-11</b>						
Average Monthly Benefit *	\$ 389	\$ 711	\$ 1,267	\$ 1,871	\$ 2,669	\$ 3,775
Average Final Average Salary	\$ 32,134	\$ 35,562	\$ 42,122	\$ 48,196	\$ 55,191	\$ 64,951
Number of Retirees	2,092	2,045	2,873	4,545	4,983	6,394
<b>9-1-11 to 8-31-12</b>						
Average Monthly Benefit *	\$ 389	\$ 727	\$ 1,306	\$ 1,923	\$ 2,783	\$ 3,863
Average Final Average Salary	\$ 32,113	\$ 36,522	\$ 43,164	\$ 49,383	\$ 56,755	\$ 66,323
Number of Retirees	2,138	2,226	2,853	4,257	4,372	5,208
<b>9-1-12 to 8-31-13</b>						
Average Monthly Benefit *	\$ 389	\$ 742	\$ 1,290	\$ 1,937	\$ 2,798	\$ 3,863
Average Final Average Salary	\$ 31,582	\$ 37,083	\$ 43,047	\$ 49,217	\$ 56,455	\$ 65,472
Number of Retirees	2,234	2,381	3,069	4,388	4,676	4,952
<b>9-1-13 to 8-31-14</b>						
Average Monthly Benefit *	\$ 413	\$ 800	\$ 1,326	\$ 1,963	\$ 2,846	\$ 3,874
Average Final Average Salary	\$ 32,906	\$ 39,267	\$ 43,889	\$ 49,222	\$ 56,835	\$ 65,447
Number of Retirees	2,291	2,286	3,084	4,252	4,429	4,197
<b>9-1-14 to 8-31-15</b>						
Average Monthly Benefit *	\$ 424	\$ 824	\$ 1,344	\$ 2,007	\$ 2,850	\$ 3,989
Average Final Average Salary	\$ 33,580	\$ 40,064	\$ 44,613	\$ 49,606	\$ 56,892	\$ 66,598
Number of Retirees	2,274	2,234	3,101	4,131	4,392	4,413
<b>9-1-15 to 8-31-16</b>						
Average Monthly Benefit *	\$ 444	\$ 836	\$ 1,348	\$ 2,049	\$ 2,892	\$ 4,049
Average Final Average Salary	\$ 33,925	\$ 40,412	\$ 44,706	\$ 50,290	\$ 57,753	\$ 67,429
Number of Retirees	2,184	2,279	3,195	4,300	4,291	4,668
<b>9-1-16 to 8-31-17</b>						
Average Monthly Benefit *	\$ 441	\$ 862	\$ 1,408	\$ 2,071	\$ 2,962	\$ 4,069
Average Final Average Salary	\$ 34,292	\$ 41,423	\$ 45,931	\$ 50,501	\$ 58,860	\$ 67,855
Number of Retirees	1,917	2,136	3,007	3,786	3,960	3,949

\* Average monthly benefits have been reduced for Partial Lump Sum Option payments of \$363.7, \$348.3, \$385.6, \$524.9, \$501.2, \$410.3, \$322.0, \$288.9, \$300.4 and \$263.7 million in fiscal years 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 and 2017, respectively.

OPERATING INFORMATION  
**Average Monthly Benefits**  
 PENSION TRUST FUND

The following graph of service retiree accounts as of August 31, 2017 reflects benefit increases and decreases since retirement:



	1990	1995	2000*	2005*	2010*	2015*	2017*
Original Benefits	\$1,246	\$1,345	\$1,663	\$1,856	\$2,192	\$2,194	\$2,245
Increase (Decrease) Since Retirement	831	552	245	8	(25)	1	(1)
Current Benefits	\$2,077	\$1,897	\$1,908	\$1,864	\$2,167	\$2,195	\$2,244
Number of Retirees**	3,199	5,138	9,989	10,296	16,102	20,492	18,935

\* Before adjustment for the Partial Lump Sum Option, average original benefits were \$1,800, \$2,028, \$2,369, \$2,304 and \$2,343 for fiscal years 2000, 2005, 2010, 2015 and 2017, respectively.

\*\* For each of the retirement years shown, number of service retirees currently receiving benefits



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## OPERATING INFORMATION

**Average Benefit Payments**

TRS-CARE  
Last Ten Fiscal Years

<b>2017</b>		
Average Benefit Per Participant	\$	5,755
Benefit Payments	\$	1,542,636,922
Average Participants		268,066
<b>2016</b>		
Average Benefit Per Participant	\$	6,062
Benefit Payments	\$	1,575,521,924
Average Participants		259,889
<b>2015</b>		
Average Benefit Per Participant	\$	5,780
Benefit Payments	\$	1,455,126,320
Average Participants		251,758
<b>2014</b>		
Average Benefit Per Participant	\$	5,059 *
Benefit Payments	\$	1,231,126,693 *
Average Participants		243,336
<b>2013</b>		
Average Benefit Per Participant	\$	5,053 *
Benefit Payments	\$	1,183,698,939 *
Average Participants		234,277
<b>2012</b>		
Average Benefit Per Participant	\$	5,115
Benefit Payments	\$	1,142,131,410
Average Participants		223,287
<b>2011</b>		
Average Benefit Per Participant	\$	4,718
Benefit Payments	\$	992,478,380
Average Participants		210,353
<b>2010</b>		
Average Benefit Per Participant	\$	4,790
Benefit Payments	\$	971,356,805
Average Participants		202,778
<b>2009</b>		
Average Benefit Per Participant	\$	4,464
Benefit Payments	\$	885,132,865
Average Participants		198,282
<b>2008</b>		
Average Benefit Per Participant	\$	4,302
Benefit Payments	\$	833,509,538
Average Participants		193,733

**Average Benefit Payments**

TRS-ACTIVECARE  
Last Ten Fiscal Years

<b>2017</b>		
Average Benefit Per Participant	\$	3,932
Benefit Payments	\$	1,960,186,861
Average Participants		498,462
<b>2016</b>		
Average Benefit Per Participant	\$	4,053
Benefit Payments	\$	1,970,271,380
Average Participants		486,139
<b>2015</b>		
Average Benefit Per Participant	\$	3,607
Benefit Payments	\$	1,743,448,426
Average Participants		483,299
<b>2014</b>		
Average Benefit Per Participant	\$	3,603
Benefit Payments	\$	1,676,748,847
Average Participants		465,330
<b>2013</b>		
Average Benefit Per Participant	\$	3,966
Benefit Payments	\$	1,885,975,470
Average Participants		475,508
<b>2012</b>		
Average Benefit Per Participant	\$	3,868
Benefit Payments	\$	1,718,903,645
Average Participants		444,382
<b>2011</b>		
Average Benefit Per Participant	\$	3,662
Benefit Payments	\$	1,510,090,981
Average Participants		412,385
<b>2010</b>		
Average Benefit Per Participant	\$	3,509
Benefit Payments	\$	1,313,114,197
Average Participants		374,201
<b>2009</b>		
Average Benefit Per Participant	\$	3,324
Benefit Payments	\$	1,122,646,958
Average Participants		337,781
<b>2008</b>		
Average Benefit Per Participant	\$	3,060
Benefit Payments	\$	952,156,339
Average Participants		311,200

\*Note: For TRS-CARE, 2013 and 2014 Average Benefit Per Participant and Benefit Payments numbers have been revised to reflect prescription drug claims net of rebates. These two years were reported as gross numbers in previous years.

## OPERATING INFORMATION

*Retired Members by Type of Benefit*PENSION TRUST FUND  
Fiscal Year 2017

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement*						
		1	2	3	4	5	6	7
\$ 1-200	14,878	5,894	7,005	251	1,626	51	37	14
201-400	41,117	11,251	12,286	657	2,652	975	1,038	12,258
401-600	25,959	12,835	8,803	1,320	2,448	356	197	
601-800	23,770	14,239	5,552	1,316	2,003	433	227	
801-1,000	23,022	15,524	3,889	1,193	1,812	424	180	
1,001-1,200	20,630	14,982	2,656	915	1,600	341	136	
1,201-1,400	17,638	12,850	2,075	745	1,589	263	116	
1,401-1,600	17,889	13,078	2,301	675	1,483	273	79	
1,601-1,800	18,099	13,630	2,280	585	1,294	239	71	
1,801-2,000	19,017	15,249	1,915	510	1,085	214	44	
2,001-3,000	96,022	83,471	5,784	1,323	4,474	891	79	
3,001-4,000	57,175	53,227	1,198	195	2,151	395	9	
4,001-5,000	20,961	19,768	272	26	757	133	5	
over 5,000	11,591	10,972	100	5	429	84	1	
<b>Totals</b>	<b>407,768</b>	<b>296,970</b>	<b>56,116</b>	<b>9,716</b>	<b>25,403</b>	<b>5,072</b>	<b>2,219</b>	<b>12,272</b>

**\*Type of Retirement:**

- |   |   |
|---|---|
| 1 Normal Retirement of Age and Service      | 5 Survivor Payment, Death in Service            |
| 2 Early Retirement                          | 6 Survivor Payment, After Disability Retirement |
| 3 Disability Retirement                     | 7 Survivor Payment, After Service Retirement    |
| 4 Survivor Payment, Joint Life or Guarantee |   |

*Health Benefit Payments by Range*TRS-CARE  
Fiscal Year 2017

Benefit Range	Average Participants
\$ 0	14,592
1 - 5,000	198,294
5,001 - 10,000	26,759
10,001 - 20,000	13,833
20,001 - 30,000	4,706
30,001 - 40,000	2,353
40,001 - 50,000	1,546
50,001 - 100,000	3,781
over 100,000	2,202
<b>Totals</b>	<b>268,066</b>



Option Selected**					
1	2	3	4	5	6
6,486	5,182	1,474	566	1,128	42
12,104	8,807	2,896	1,272	2,147	13,891
11,760	7,862	3,244	1,231	1,862	
10,458	7,222	3,492	1,166	1,432	
10,226	6,819	3,586	1,155	1,236	
8,631	6,458	3,451	955	1,135	
6,876	5,890	3,209	770	893	
6,865	6,136	3,190	774	924	
6,893	6,186	3,342	729	949	
7,130	6,663	3,531	693	1,000	
34,445	35,316	18,050	3,294	4,917	
21,085	20,149	11,400	1,801	2,740	
8,037	6,959	4,552	593	820	
4,148	4,141	2,624	269	409	
<b>155,144</b>	<b>133,790</b>	<b>68,041</b>	<b>15,268</b>	<b>21,592</b>	<b>13,933</b>

**\*\*Option Selected:**

Option 1 - Life Annuity

Option 2 - Joint to Survivor

Option 3 - Joint to Survivor 50% / Joint to Survivor 75%

Option 4 - 5-year Guarantee

Option 5 - 10-year Guarantee

Option 6 - Survivor Benefit

### Health Benefit Payments by Range

TRS-ACTIVECARE  
Fiscal Year 2017

Benefit Range	Average Participants
\$ 0	59,054
1 - 5,000	379,413
5,001 - 10,000	25,526
10,001 - 20,000	17,330
20,001 - 30,000	5,795
30,001 - 40,000	2,978
40,001 - 50,000	1,914
50,001 - 100,000	3,937
over 100,000	2,515
<b>Totals</b>	<b>498,462</b>

OPERATING INFORMATION  
**Principal Participating Employers**

PENSION TRUST FUND  
 Current Fiscal Year and Nine Years Ago

Participating Reporting Entity	2017			2008		
	Covered Employees	Rank	Percentage of Total Covered Employment	Covered Employees	Rank	Percentage of Total Covered Employment
Houston ISD	23,811	1	2.81 %	23,957	1	3.10 %
Dallas ISD	19,856	2	2.34	20,777	2	2.69
UT MD Anderson Cancer Center	18,347	3	2.16	15,496	3	2.01
Cypress Fairbanks ISD	14,272	4	1.68	12,693	4	1.64
Northside ISD	13,594	5	1.60	11,829	6	1.53
Austin ISD	12,270	6	1.45	11,863	5	1.54
Fort Worth ISD	11,354	7	1.34	10,523	7	1.36
UT SW Medical Center-Dallas	10,496	8	1.24			
UT at Austin	9,946	9	1.17	9,836	9	1.27
UT Med BR at Galveston	9,689	10	1.14	10,132	8	1.31
El Paso ISD				8,971	10	1.16
All Other	704,450		83.07%	636,359		82.39%
<b>Total</b>	<b>848,085</b>		<b>100.00%</b>	<b>772,436</b>		<b>100.00%</b>

Source: May report month information submitted to the Teacher Retirement System by participating reporting entities.



OPERATING INFORMATION  
**Principal Participating Employers**

TRS-CARE  
 Current Fiscal Year and Nine Years Ago

Participating Reporting Entity	2017			2008		
	Covered OPEB Employees	Rank	Percentage of Total Covered OPEB Employment	Covered OPEB Employees	Rank	Percentage of Total Covered OPEB Employment
Houston ISD	23,811	1	3.41%	23,957	1	3.72%
Dallas ISD	19,856	2	2.84	20,777	2	3.22
Cypress Fairbanks ISD	14,272	3	2.05	12,693	3	1.97
Northside ISD	13,594	4	1.95	11,829	5	1.83
Austin ISD	12,270	5	1.76	11,863	4	1.84
Fort Worth ISD	11,354	6	1.62	10,523	6	1.63
Aldine ISD	9,264	7	1.32	8,429	9	1.31
North East ISD	9,248	8	1.32	8,694	8	1.35
Katy ISD	9,166	9	1.31			
Fort Bend ISD	8,589	10	1.23	8,414	10	1.30
El Paso ISD				8,971	7	1.39
ALL OTHERS	567,323		81.19%	518,625		80.44%
<b>Total</b>	<b>698,747</b>		<b>100.00%</b>	<b>644,775</b>		<b>100.00 %</b>

Source: May report month information submitted to the Teacher Retirement System by participating reporting entities.



### List of Participating Employers

**PUBLIC SCHOOLS**

- |                         |                              |                    |
|-------------------------|------------------------------|--------------------|
| Abbott ISD              | Arlington ISD                | Bishop Cons ISD    |
| Abernathy ISD           | Arp ISD                      | Blackwell ISD      |
| Abilene ISD             | Aspermont ISD                | Blanco ISD         |
| Academy ISD             | Athens ISD                   | Bland ISD          |
| Adrian ISD              | Atlanta ISD                  | Blanket ISD        |
| Agua Dulce ISD          | Aubrey ISD                   | Bloomburg ISD      |
| Alamo Heights ISD       | Austin ISD                   | Blooming Grove ISD |
| Alba Golden ISD         | Austwell Tivoli ISD          | Bloomington ISD    |
| Albany ISD              | Avalon ISD                   | Blue Ridge ISD     |
| Aldine ISD              | Avery ISD                    | Bluff Dale ISD     |
| Aledo ISD               | Avinger ISD                  | Blum ISD           |
| Alice ISD               | Axtell ISD                   | Boerne ISD         |
| Alief ISD               | Azle ISD                     | Boles ISD          |
| Allen ISD               | Baird ISD                    | Boling ISD         |
| Alpine ISD              | Ballinger ISD                | Bonham ISD         |
| Alto ISD                | Balmorhea ISD                | Booker ISD         |
| Alvarado ISD            | Bandera ISD                  | Borden County ISD  |
| Alvin ISD               | Bangs ISD                    | Borger ISD         |
| Alvord ISD              | Banquete ISD                 | Bosqueville ISD    |
| Amarillo ISD            | Barbers Hill ISD             | Bovina ISD         |
| Amherst ISD             | Bartlett ISD                 | Bowie ISD          |
| Anahuac ISD             | Bastrop ISD                  | Boyd ISD           |
| Anderson-Shiro Cons ISD | Bay City ISD                 | Boys Ranch ISD     |
| Andrews ISD             | Beaumont ISD                 | Brackett ISD       |
| Angleton ISD            | Beckville ISD                | Brady ISD          |
| Anna ISD                | Beeville ISD                 | Brazos ISD         |
| Anson ISD               | Bellevue ISD                 | Brazosport ISD     |
| Anthony ISD             | Bells ISD                    | Breckenridge ISD   |
| Anton ISD               | Bellville ISD                | Bremond ISD        |
| Apple Springs ISD       | Belton ISD                   | Brenham ISD        |
| Aquilla ISD             | Ben Bolt Palito ISD          | Bridge City ISD    |
| Aransas County ISD      | Benavides ISD                | Bridgeport ISD     |
| Aransas Pass ISD        | Benjamin ISD                 | Broadus ISD        |
| Archer City ISD         | Big Sandy ISD - Big Sandy    | Brock ISD          |
| Argyle ISD              | Big Sandy ISD - Dallarsville | Bronte ISD         |
|                         | Big Spring ISD               | Brookeland ISD     |
|                         | Birdville ISD                | Brookesmith ISD    |





## List of Participating Employers (Continued)

Brooks County ISD	Castleberry ISD	Coahoma ISD
Brownfield ISD	Cayuga ISD	Coldspring Oakhurst ISD
Brownsboro ISD	Cedar Hill ISD	Coleman ISD
Brownsville ISD	Celeste ISD	College Station ISD
Brownwood ISD	Celina ISD	Collinsville ISD
Bruceville-Eddy ISD	Center ISD	Colmesneil ISD
Bryan ISD	Center Point ISD	Colorado ISD
Bryson ISD	Centerville ISD - Centersville	Columbia Brazoria ISD
Buckholts ISD	Centerville ISD - Groveton	Columbus ISD
Buena Vista ISD	Central Heights ISD	Comal ISD
Buffalo ISD	Central ISD	Comanche ISD
Bullard ISD	Channelview ISD	Comfort ISD
Buna ISD	Channing ISD	Commerce ISD
Burkburnett ISD	Chapel Hill ISD - Mt. Pleasant	Community ISD
Burkeville ISD	Chapel Hill ISD - Tyler	Como Pickton ISD
Burleson ISD	Charlotte ISD	Comstock ISD
Burnet Cons ISD	Cherokee ISD	Connally Cons ISD
Burton ISD	Chester ISD	Conroe ISD
Bushland ISD	Chico ISD	Coolidge ISD
Bynum Cons ISD	Childress ISD	Cooper ISD
Caddo Mills ISD	Chillicothe ISD	Coppell ISD
Calallen ISD	Chilton ISD	Copperas Cove ISD
Caldwell ISD	China Spring ISD	Corpus Christi ISD
Calhoun County ISD	Chireno ISD	Corrigan Camden CISD
Callisburg ISD	Chisum ISD	Corsicana ISD
Calvert ISD	Christoval ISD	Cotton Center ISD
Cameron ISD	Cisco ISD	Cotulla ISD
Campbell ISD	City View ISD	Coupland ISD
Canadian ISD	Clarendon Cons ISD	Covington ISD
Canton ISD	Clarksville ISD	Crandall ISD
Canutillo ISD	Claude ISD	Crane ISD
Canyon ISD	Clear Creek ISD	Cranfills Gap ISD
Carlisle ISD	Cleburne ISD	Crawford ISD
Carrizo Springs CISD	Cleveland ISD	Crockett Cty School Dist
Carroll ISD	Clifton ISD	Crockett ISD
Carrollton Farmers Branch ISD	Clint ISD	Crosby ISD
Carthage ISD	Clyde ISD	Crosbyton Cons ISD

## List of Participating Employers (Continued)

Cross Plains ISD	Dilley ISD	Etoile ISD
Cross Roads ISD	Dime Box ISD	Eula ISD
Crowell Cons ISD	Dimmitt ISD	Eustace ISD
Crowley ISD	Divide ISD	Evadale ISD
Crystal City ISD	Dodd City ISD	Evant ISD
Cuero ISD	Donna ISD	Everman ISD
Culberson County-Allamoore ISD	Doss Cons ISD	Excelsior ISD
Cumby ISD	Douglass ISD	Ezzell ISD
Cushing ISD	Dripping Springs ISD	Fabens ISD
Cypress Fairbanks ISD	Driscoll ISD	Fairfield ISD
D'Hanis ISD	Dublin ISD	Falls City ISD
Daingerfield-Lone Star ISD	Dumas ISD	Fannindel ISD
Dalhart ISD	Duncanville ISD	Farmersville ISD
Dallas ISD	Eagle Mount Saginaw ISD	Farwell ISD
Damon ISD	Eagle Pass ISD	Fayetteville ISD
Danbury ISD	Eanes ISD	Ferris ISD
Darrouzett ISD	Early ISD	Flatonia ISD
Dawson ISD - Dawson	East Bernard ISD	Florence ISD
Dawson ISD - Welch	East Central ISD	Floresville ISD
Dayton ISD	East Chambers ISD	Flour Bluff ISD
De Kalb ISD	Eastland ISD	Floydada ISD
De Leon ISD	Ector Cty ISD	Follett ISD
De Soto ISD	Ector ISD	Forestburg ISD
Decatur ISD	Edcouch Elsa ISD	Forney ISD
Deer Park ISD	Eden CISD	Forsan ISD
Del Valle ISD	Edgewood ISD - Edgewood	Fort Bend ISD
Dell City ISD	Edgewood ISD - San Antonio	Fort Davis ISD
Denison ISD	Edinburg CISD	Fort Elliott Cons ISD
Denton ISD	Edna ISD	Fort Hancock ISD
Denver City ISD	El Campo ISD	Fort Sam Houston ISD
Detroit ISD	El Paso ISD	Fort Stockton ISD
Devers ISD	Electra ISD	Fort Worth ISD
Devine ISD	Elgin ISD	Franklin ISD
Dew ISD	Elkhart ISD	Frankston ISD
Deweyville ISD	Elysian Fields ISD	Fredericksburg ISD
Diboll ISD	Ennis ISD	Freer ISD
Dickinson ISD	Era ISD	Frenship ISD



## List of Participating Employers (Continued)

Friendswood ISD	Grand Saline ISD	Haskell CISD
Friona ISD	Grandfalls Royalty ISD	Hawkins ISD
Frisco ISD	Grandview Hopkins ISD	Hawley ISD
Frost ISD	Grandview ISD	Hays Cons ISD
Fruitvale ISD	Granger ISD	Hearne ISD
Gainesville ISD	Grape Creek ISD	Hedley ISD
Galena Park ISD	Grapeland ISD	Hemphill ISD
Galveston ISD	Grapevine-Colleyville ISD	Hempstead ISD
Ganado ISD	Greenville ISD	Henderson ISD
Garland ISD	Greenwood ISD	Henrietta ISD
Garner ISD	Gregory-Portland ISD	Hereford ISD
Garrison ISD	Groesbeck ISD	Hermleigh ISD
Gary ISD	Groom ISD	Hico ISD
Gatesville ISD	Groveton ISD	Hidalgo ISD
Gause ISD	Gruver ISD	Higgins ISD
George West ISD	Gunter ISD	High Island ISD
Georgetown ISD	Gustine ISD	Highland ISD
Gholson ISD	Guthrie CSD	Highland Park ISD - Amarillo
Giddings ISD	Hale Center ISD	Highland Park ISD - Dallas
Gilmer ISD	Hallettsville ISD	Hillsboro ISD
Gladewater County Line ISD	Hallsburg ISD	Hitchcock ISD
Glasscock County ISD	Hallsville ISD	Holland ISD
Glen Rose ISD	Hamilton ISD	Holliday ISD
Godley ISD	Hamlin ISD	Hondo ISD
Goldburg ISD	Hamshire Fannett ISD	Honey Grove ISD
Goldthwaite ISD	Happy ISD	Hooks ISD
Goliad ISD	Hardin ISD	Houston ISD
Gonzales ISD	Hardin-Jefferson ISD	Howe ISD
Goodrich ISD	Harlandale ISD	Hubbard ISD - Dekalb
Goose Creek CISD	Harleton ISD	Hubbard ISD - Hubbard
Gordon ISD	Harlingen CISD	Huckabay ISD
Gorman ISD	Harmony ISD	Hudson ISD
Grady ISD	Harper ISD	Huffman ISD
Graford ISD	Harrold ISD	Hughes Springs ISD
Graham ISD	Hart ISD	Hull Daisetta ISD
Granbury ISD	Hartley ISD	Humble ISD
Grand Prairie ISD	Harts Bluff ISD	Hunt ISD

## List of Participating Employers (Continued)

Huntington ISD	Keller ISD	Lamar Cons ISD
Huntsville ISD	Kelton ISD	Lamesa ISD
Hurst-Euless-Bedford ISD	Kemp ISD	Lampasas ISD
Hutto ISD	Kenedy County Wide CSD	Lancaster ISD
Idalou ISD	Kenedy ISD	Laneville ISD
Industrial ISD	Kennard ISD	Laredo ISD
Ingleside ISD	Kennedale ISD	Lasara ISD
Ingram ISD	Kerens ISD	Latexo ISD
Iola ISD	Kermit ISD	Lazbuddie ISD
Iowa Park Cons ISD	Kerrville ISD	Leakey ISD
Ira ISD	Kilgore ISD	Leander ISD
Iraan-Sheffield ISD	Killeen ISD	Leary ISD
Iredell ISD	Kingsville ISD	Lefors ISD
Irion County ISD	Kirbyville Cons ISD	Leggett ISD
Irving ISD	Klein ISD	Leon ISD
Italy ISD	Klondike ISD	Leonard ISD
Itasca ISD	Knippa ISD	Levelland ISD
Jacksboro ISD	Knox City Obrien Cisd	Leveretts Chapel ISD
Jacksonville ISD	Kopperl ISD	Lewisville ISD
Jarrell ISD	Kountze ISD	Lexington ISD
Jasper ISD	Kress ISD	Liberty Eylau ISD
Jayton Girard ISD	Krum ISD	Liberty Hill ISD
Jefferson ISD	La Feria ISD	Liberty ISD
Jim Hogg County ISD	La Gloria ISD	Lindale ISD
Jim Ned Cons ISD	La Grange ISD	Linden Kildare Cons ISD
Joaquin ISD	La Joya ISD	Lindsay ISD
Johnson City ISD	La Porte ISD	Lingleville ISD
Jonesboro ISD	La Poynor ISD	Lipan ISD
Joshua ISD	La Pryor ISD	Little Cypress-Mauriceville Cisd
Jourdanton ISD	La Vega ISD	Little Elm ISD
Judson ISD	La Vernia ISD	Littlefield ISD
Junction ISD	La Villa ISD	Livingston ISD
Karnack ISD	Lackland ISD	Llano ISD
Karnes City ISD	Lago Vista ISD	Lockhart ISD
Katy ISD	Lake Dallas ISD	Lockney ISD
Kaufman ISD	Lake Travis ISD	Lohn ISD
Keene ISD	Lake Worth ISD	Lometa ISD

## *List of Participating Employers*

*(Continued)*

London ISD	Matagorda ISD	Mineral Wells ISD
Lone Oak ISD	Mathis ISD	Mission Cons ISD
Longview ISD	Maud ISD	Monahans-Wickett-Pyote ISD
Loop ISD	May ISD	Montague ISD
Loraine ISD	Maypearl ISD	Monte Alto ISD
Lorena ISD	McAllen ISD	Montgomery ISD
Lorenzo Cons ISD	McCamey ISD	Moody ISD
Los Fresnos Cons ISD	McDade ISD	Moran ISD
Louise ISD	McGregor ISD	Morgan ISD
Lovejoy ISD	McKinney ISD	Morgan Mill ISD
Lovelady ISD	McLean ISD	Morton ISD
Lubbock Cooper ISD	McLeod ISD	Motley County ISD
Lubbock ISD	McMullen County ISD	Moulton ISD
Lueders-Avoca ISD	Meadow ISD	Mount Calm ISD
Lufkin ISD	Medina ISD	Mount Enterprise ISD
Luling ISD	Medina Valley ISD	Mount Pleasant ISD
Lumberton ISD	Melissa ISD	Mount Vernon ISD
Lyford Cons ISD	Memphis ISD	Muenster ISD
Lytle ISD	Menard ISD	Muleshoe ISD
Mabank ISD	Mercedes ISD	Mullin ISD
Madisonville Cons ISD	Meridian ISD	Mumford ISD
Magnolia ISD	Merkel ISD	Munday Consolidated ISD
Malakoff ISD	Mesquite ISD	Murchison ISD
Malone ISD	Mexia ISD	Nacogdoches ISD
Malta ISD	Meyersville ISD	Natalia ISD
Manor ISD	Miami ISD	Navarro ISD
Mansfield ISD	Midland ISD	Navasota ISD
Marathon ISD	Midlothian ISD	Nazareth ISD
Marble Falls ISD	Midway ISD - Henrietta	Neches ISD
Marfa ISD	Midway ISD - Waco	Nederland ISD
Marion ISD	Milano ISD	Needville ISD
Marlin ISD	Mildred ISD	New Boston ISD
Marshall ISD	Miles ISD	New Braunfels ISD
Mart ISD	Milford ISD	New Caney ISD
Martins Mill ISD	Miller Grove ISD	New Deal ISD
Martinsville ISD	Millsap ISD	New Diana ISD
Mason ISD	Mineola ISD	New Home ISD

## *List of Participating Employers*

*(Continued)*

New Summerfield ISD	Panhandle ISD	Poth Cons ISD
New Waverly ISD	Panther Creek Cons ISD	Pottsboro ISD
Newcastle ISD	Paradise ISD	Prairie Lea ISD
Newton ISD	Paris ISD	Prairie Valley ISD
Nixon Smiley CISD	Pasadena ISD	Prairiland ISD
Nocona ISD	Patton Springs ISD	Premont ISD
Nordheim ISD	Pawnee ISD	Presidio ISD
Normangee ISD	Pearland ISD	Priddy ISD
North East ISD	Pearsall ISD	Princeton ISD
North Hopkins ISD	Peaster ISD	Pringle-Morse Cons ISD
North Lamar ISD	Pecos Barstow Toyah ISD	Progreso ISD
North Zulch ISD	Penelope ISD	Prosper ISD
Northside ISD - San Antonio	Perrin Whitt Cons ISD	Quanah ISD
Northside ISD - Vernon	Perryton ISD	Queen City ISD
Northwest ISD	Petersburg ISD	Quinlan ISD
Nueces Canyon Cons ISD	Petrolia ISD	Quitman ISD
Nursery ISD	Pettus ISD	Rains ISD
O Donnell ISD	Pewitt Cons ISD	Ralls ISD
Oakwood ISD	Pflugerville ISD	Ramirez Common SD
Odem-Edroy ISD	Pharr-San Juan-Alamo ISD	Randolph Field ISD
Oglesby ISD	Pilot Point ISD	Ranger ISD
Olfen ISD	Pine Tree ISD	Rankin ISD
Olney ISD	Pittsburg ISD	Raymondville ISD
Olton ISD	Plains ISD	Reagan County ISD
Onalaska ISD	Plainview ISD	Red Lick ISD
Orange Grove ISD	Plano ISD	Red Oak ISD
Orangefield ISD	Pleasant Grove ISD	Redwater ISD
Ore City ISD	Pleasanton ISD	Refugio ISD
Overton ISD	Plemons-Stinnett-Phillips CISD	Ricardo ISD
Paducah ISD	Point Isabel ISD	Rice Cons ISD
Paint Creek ISD	Ponder ISD	Rice ISD
Paint Rock ISD	Poolville ISD	Richards ISD
Palacios ISD	Port Aransas ISD	Richardson ISD
Palestine ISD	Port Arthur ISD	Richland Springs ISD
Palmer ISD	Port Neches-Groves ISD	Riesel ISD
Palo Pinto ISD	Post ISD	Rio Grande City CISD
Pampa ISD	Poteet ISD	Rio Hondo ISD



## List of Participating Employers (Continued)

Rio Vista ISD	San Antonio ISD	Shiner ISD
Rising Star ISD	San Augustine ISD	Sidney ISD
River Road ISD	San Benito Cons ISD	Sierra Blanca ISD
Rivercrest ISD	San Diego ISD	Silsbee ISD
Riviera ISD	San Elizario ISD	Silverton ISD
Robert Lee ISD	San Felipe Del Rio CISD	Simms ISD
Robinson ISD	San Isidro ISD	Sinton ISD
Robstown ISD	San Marcos Cons ISD	Sivells Bend ISD
Roby CISD	San Perlita ISD	Skidmore Tynan ISD
Rochelle ISD	San Saba ISD	Slaton ISD
Rockdale ISD	San Vicente ISD	Slidell ISD
Rocksprings ISD	Sands Cons ISD	Slocum ISD
Rockwall ISD	Sanford-Fritch ISD	Smithville ISD
Rogers ISD	Sanger ISD	Smyer ISD
Roma ISD	Santa Anna ISD	Snook ISD
Roosevelt ISD	Santa Fe ISD	Snyder ISD
Ropes ISD	Santa Gertrudis ISD	Socorro ISD
Roscoe ISD	Santa Maria ISD	Somerset ISD
Rosebud-Lott Cons ISD	Santa Rosa ISD	Somerville ISD
Rotan ISD	Santo ISD	Sonora ISD
Round Rock ISD	Savoy ISD	South San Antonio ISD
Round Top Carmine ISD	Schertz-Cibolo-Universal City ISD	South Texas ISD
Roxton ISD	Schleicher Cty ISD	Southland ISD
Royal ISD	Schulenburg ISD	Southside ISD
Royse City ISD	Scurry Rosser ISD	Southwest ISD
Rule ISD	Seagraves ISD	Spearman ISD
Runge ISD	Sealy ISD	Splendora ISD
Rusk ISD	Seguin ISD	Spring Branch ISD
S & S Cons ISD	Seminole Public Schools	Spring Creek ISD
Sabinal ISD	Seymour ISD	Spring Hill ISD
Sabine ISD	Shallowater ISD	Spring ISD
Sabine Pass ISD	Shamrock ISD	Springlake-Earth ISD
Saint Jo ISD	Sharyland ISD	Springtown ISD
Salado ISD	Shelbyville ISD	Spur ISD
Saltillo ISD	Sheldon ISD	Spurger ISD
Sam Rayburn Cons ISD	Shepherd ISD	Stafford Muncpl Sch Dist
San Angelo ISD	Sherman ISD	Stamford ISD

## *List of Participating Employers*

*(Continued)*

Stanton ISD	Tioga ISD	Wall ISD
Stephenville ISD	Tolar ISD	Waller ISD
Sterling City ISD	Tom Bean ISD	Walnut Bend ISD
Stockdale ISD	Tomball ISD	Walnut Springs ISD
Stratford ISD	Tornillo ISD	Warren ISD
Strawn ISD	Trent ISD	Waskom ISD
Sudan ISD	Trenton ISD	Water Valley ISD
Sulphur Bluff ISD	Trinidad ISD	Waxahachie ISD
Sulphur Springs ISD	Trinity ISD	Weatherford ISD
Sundown ISD	Troup ISD	Webb CISD
Sunnyvale ISD	Troy ISD	Weimar ISD
Sunray ISD	Tulia ISD	Wellington ISD
Sweeny ISD	Tuloso-Midway ISD	Wellman-Union ISD
Sweet Home ISD	Turkey Quitaque CISD	Wells ISD
Sweetwater ISD	Tyler ISD	Weslaco ISD
Taft ISD	Union Grove ISD	West Hardin County CISD
Tahoka ISD	Union Hill ISD	West ISD
Tarkington ISD	United ISD	West Orange-Cove CISD
Tatum ISD	Utopia ISD	West Osó ISD
Taylor ISD	Uvalde Cons ISD	West Rusk Cty Cons ISD
Teague ISD	Valentine ISD	West Sabine ISD
Temple ISD	Valley Mills ISD	Westbrook ISD
Tenaha ISD	Valley View ISD - Pharr	Westhoff ISD
Terlingua CSD	Valley View ISD - Valley View	Westphalia ISD
Terrell County ISD	Van Alstyne ISD	Westwood ISD
Terrell ISD	Van ISD	Wharton ISD
Texarkana ISD	Van Vleck ISD	Wheeler ISD
Texas City ISD	Vega ISD	White Deer ISD
Texhoma ISD	Venus ISD	White Oak ISD
Texline ISD	Veribest ISD	White Settlement ISD
Thorndale ISD	Vernon Cons ISD	Whiteface ISD
Thrall ISD	Victoria ISD	Whitehouse ISD
Three Rivers ISD	Vidor ISD	Whitesboro ISD
Three Way ISD	Vysehrad ISD	Whitewright ISD
Throckmorton ISD	Waco ISD	Whitharral ISD
Tidehaven ISD	Waelder ISD	Whitney ISD
Timpson ISD	Walcott ISD	Wichita Falls ISD

## List of Participating Employers (Continued)

Wildorado ISD	Alpha Charter School	Eden Park Academy
Willis ISD	Ambassadors Preparatory Academy	Education Center Int Academy
Wills Point ISD	Amigos Por Vida-Friends For Life Charter	El Paso Academy East
Wilson ISD	Aristoi Classical Academy	El Paso Leadership Academy
Wimberley ISD	Arlington Classics Academy	Eleanor Kolitz Hebrew Lang Academy
Windham School District	Arrow Academy	Erath Excels! Academy
Windthorst ISD	Austin Achieve Public Schools	Evolution Academy Charter School
Winfield ISD	Austin Discovery School	Excellence In Leadership Academy
Wink-Loving Cons ISD	Basis San Antonio	Faith Fam Acad Waxahachie
Winnsboro ISD	Beatrice Mayes Institute	Focus Learning Academy
Winona ISD	Beta Academy	Ft Worth Acad Fine Arts
Winters ISD	Bexar County Academy	Gateway Academy
Woden ISD	Big Springs Charter School	Gateway Charter Academy
Wolfe City ISD	Bob Hope School	George Gervin Academy
Woodsboro ISD	Brazos River Charter School	George I Sanchez Charter
Woodson ISD	Brazos School For Inquiry & Creativity	Global Learning Academy
Woodville ISD	Brooks Academy of Science & Eng	Golden Rule Charter School
Wortham ISD	Burnham Wood Charter School	Goodwater Montessori School
Wylie ISD - Abilene	Calvin Nelms Charter	Great Hearts Academy -San Antonio
Wylie ISD - Wylie	Carpe Diem Schools	Gulf Coast Trades Center
Yantis ISD	Cedars International Academy	Harmony School of Excel - Houston
Yoakum ISD	Chaparral Star Academy	Harmony School of Science- Houston
Yorktown ISD	Chapel Hill Academy	Harmony Science Academy - Austin
Ysleta ISD	Cityscape Schools Inc	Harmony Science Academy El Paso
Zapata County ISD	Compass Academy	Harmony Science Academy Houston
Zavalla ISD	Compass Rose Education	Harmony Science Acad San Antonio
Zephyr ISD	Comquest Academy	Harmony Science Academy Waco
	Core Academy	Henry Ford Academy - San Antonio
	Corpus Christi Montessori School	High Point Academy
	Crosstimbers Academy	Houston Gateway Charter School
	Cumberland Academy	Houston Heights High School
	Dallas Comm Charter School	Houston Hghts Learning Academy
	Dr M L Garza-Gonzalez Charter	Idea Public Schools
	Draw Academy	Inspired Vision Academy
	Eagle Advantage School	International Leadership of Texas
	East Fort Worth Montessori School	Jean Massieu Academy
	East Texas Charter School	John H Wood Charter School
<b><u>CHARTER SCHOOLS</u></b>		
A Plus Academy		
A W Brown Flwshp Charter School		
A+ Unlimited Potential		
Academy of Accelerated Learning		
Academy of Dallas		
Accelerated Intermediate Academy		
Alief Montessori School		

## *List of Participating Employers*

*(Continued)*

Jubilee Academic Center	Radiance Acad of Learning	Trivium Academy
Katherine Anne Porter School	Ranch Academy	Two Dimensions Prep Academy
Kauffman Leadership Academy	Rapoport Academy	UME Preparatory Academy
Ki Charter Academy	Raul Yzaguirre School	Universal Academy
KIPP Aspire Academy	Richard Milburn - Killeen	Uplift Education
KIPP Austin College Prep	Rise Academy	Vanguard Academy
KIPP Inc Charter	San Antonio School Inquiry	Varnett Charter School
KIPP Truth Academy	School of Excellence In Education	Village Tech Schools
La Academia De Estrellas	School of Science & Tech-Discovery	Vista Del Futuro Charter School
La Fe Preparatory School	School of Science & Technology	Waco Charter School
Leadership Prep School	Seashore Middle Academy	Walipp Academy
Legacy Preparatory	Ser-Ninos Charter School	Westlake Academy
Life School	South Plains Academy	Winfree Academy Charter Schools
Lighthouse Charter School	South Texas Educational Tech Inc	Yes Prep Public Schools
Manara Academy	Southwest High School	Zoe Learning Academy
Meadowland Charter School	Southwest Preparatory School	
Meridian World School	St Anthony School	<b><u>COMMUNITY AND JUNIOR COLLEGES</u></b>
Meyerpark Elementary Charter	St Marys Charter School	Alamo Community College District
Midland Academy Charter School	Stepping Stones Charter Elementary	Alvin Community College
Mid-Valley Academy	Tekoa Academy	Amarillo College
Montessori For All	Temple Education Center	Angelina College
New Frontiers Charter School	Texans Can Academy	Austin Community College
Newman International Academy	Texas College Preparatory Academies	Blinn College
North Texas Elementary School of Arts	Texas Education Center	Brazosport College
Nova Charter School	Texas Empowerment Academy	Central Texas College
Nova Charter Southeast	Texas Preparatory School	Cisco Junior College
NYOS Charter School	Texas Serenity Academy	Clarendon College
Odyssey Academy	The East Austin College Prep Academy	Coastal Bend College
Orenda Charter School	The Ehrhart School	College of The Mainland
Panola Charter School	The Excel Center	Collin County Comm College
Paso Del Norte Academy	The Pro-Vision Academy	Dallas County Comm College Dist
Pegasus School of Liberal Arts & Science	The Rhodes School	Del Mar College
Pineywoods Academy	TLC Academy	El Paso Community College
Pioneer Technology & Arts Academy	Treetops INTERNATIONAL	Frank Phillips College
Por Vida Academy	Trinity Basin Preparatory	Galveston College
Premier High Schools	Trinity Charter School	Grayson County College
Promise Community School	Trinity Environmental Academy	



## List of Participating Employers (Continued)

Hill College  
Houston Comm College System  
Howard County Jr College Dist  
Kilgore College  
Laredo Community College  
Lee College  
Lone Star College System  
McLennan Community College  
Midland College  
Navarro College  
North Central TX College  
Northeast TX Community College  
Odessa College  
Panola College  
Paris Junior College  
Ranger Junior College  
San Jacinto College District  
South Plains College  
South Texas College  
Southwest TX Jr College  
Tarrant County College District  
Temple College  
Texarkana College  
Texas Southmost College  
Trinity Valley Jr College  
Tyler Junior College  
Vernon College  
Victoria College  
Weatherford College  
Western Texas College  
Wharton County Jr College

### UNIVERSITIES

Angelo State University  
Lamar Inst of Technology  
Lamar State College - Orange

Lamar State College - Port Arthur  
Lamar University - Beaumont  
Midwestern State University  
Prairie View A & M University  
Sam Houston State University  
Stephen F Austin State University  
Sul Ross State University  
Tarleton State University  
Texas A&M - Agrilife Extension Servi  
Texas A&M - Agrilife Research  
Texas A&M - Eng Exp Station  
Texas A&M - Eng Ext Service  
Texas A&M - Forest Service  
Texas A&M - International University  
Texas A&M - Transportation Inst  
Texas A&M University  
Texas A&M University - Central TX  
Texas A&M University - Commerce  
Texas A&M University -Corpus Christi  
Texas A&M University - Galveston  
Texas A&M University - Kingsville  
Texas A&M University - San Antonio  
Texas A&M University - Systems Off  
Texas A&M University - Texarkana  
Texas Southern University  
Texas State Tech College  
Texas State University - San Marcos  
Texas State University System  
Texas Tech University  
Texas Woman's University  
U of N Texas System Admin  
Univ of TX - Arlington  
Univ of TX - Austin  
Univ of TX - Dallas  
Univ of TX - El Paso  
Univ of TX - Permian Basin  
Univ of TX - Rio Grande Valley

Univ of TX - San Antonio  
Univ of TX - Tyler  
University of Houston  
University of North TX  
University of Texas System  
UNT at Dallas  
West Texas A & M University

### MEDICAL SCHOOLS

Texas A&M - University System HSC  
Texas A&M - Vet Medical Diag Lab  
U N T HSC at Fort Worth  
UT Health Ctr at Tyler  
UT HSC at Houston  
UT HSC at San Antonio  
UT Med Anderson Cancer Center  
UT Med Br at Galveston  
UT SW Medical Center

### REGIONAL SERVICE CENTERS

Region 01 Educ Service Center  
Region 02 Educ Service Center  
Region 03 Educ Service Center  
Region 04 Educ Service Center  
Region 05 Educ Service Center  
Region 06 Educ Service Center  
Region 07 Educ Service Center  
Region 08 Educ Service Center  
Region 09 Educ Service Center  
Region 10 Educ Service Center  
Region 11 Educ Service Center  
Region 12 Educ Service Center  
Region 13 Educ Service Center  
Region 14 Educ Service Center  
Region 15 Educ Service Center



## *List of Participating Employers*

(Continued)

Region 16 Educ Service Center  
Region 17 Educ Service Center  
Region 18 Educ Service Center  
Region 19 Educ Service Center  
Region 20 Educ Service Center

### **OTHER EDUCATIONAL DISTRICTS**

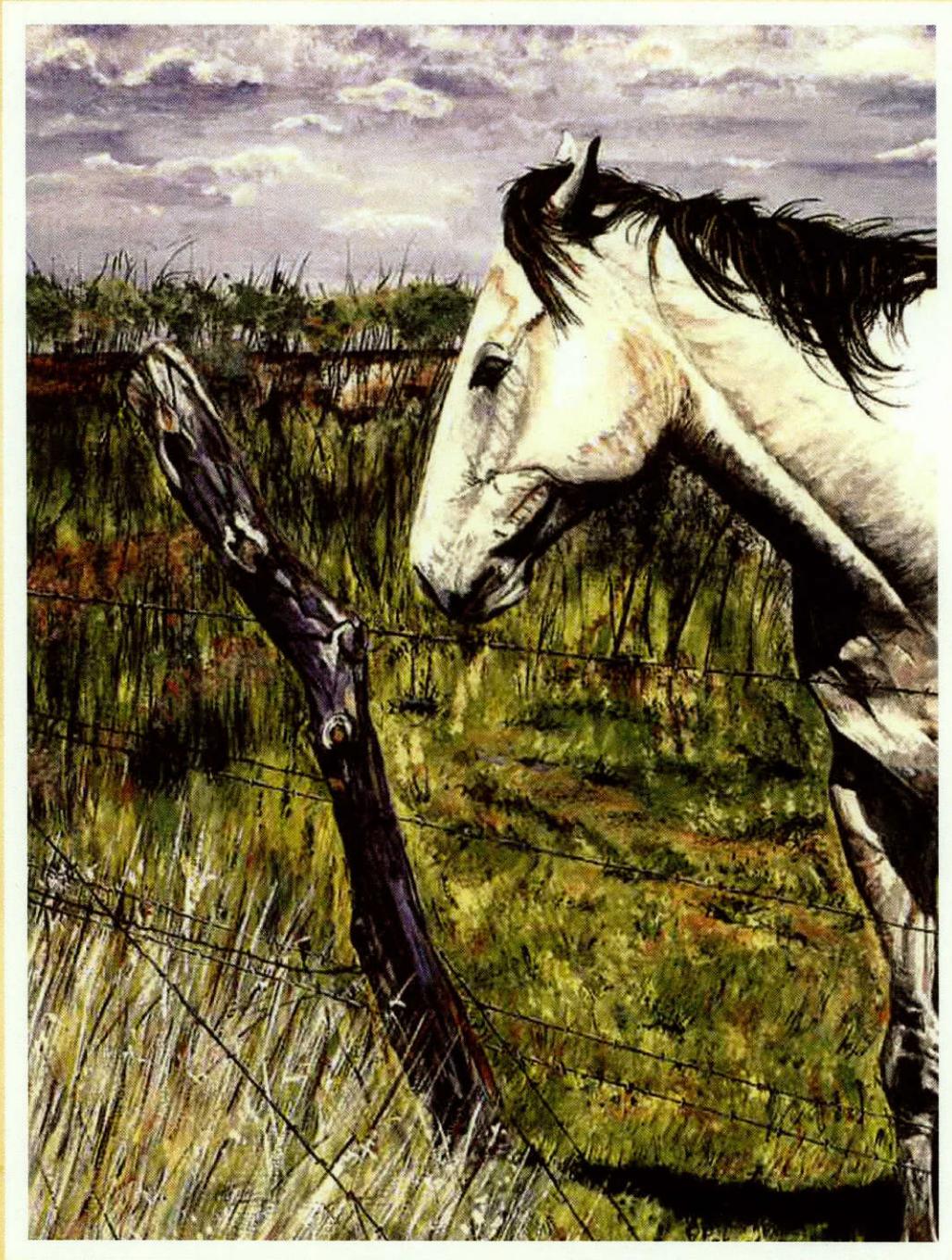
Anderson City Spc Ed Co Op  
Bowie County Sch Dist  
Dallas County School Dist  
Harris City Dept Education

### **OTHER ENTITIES**

Teacher Retirement System



# BENEFITS SECTION



Anita Smith Palmer "Lonely," © 2000



## Changes in the Law

**STATE:** The Legislature met in fiscal year 2017. Several noteworthy state law developments affecting TRS occurred during the fiscal year.

**FEDERAL:** On the federal level, several reportable developments occurred.

### State

**Legislation related to limitations on Investments** – The Legislature in SB 1665 eliminated sunset dates on both the use of derivatives to efficiently manage and reduce the risk of the overall investment portfolio and the use of external managers that had been set for September 1, 2019. The Legislature also revised the definition of “security” to clarify that it includes derivatives and any instrument commonly used by institutional investors to manage institutional investment portfolios.

In addition, the Legislature passed HB 89 and SB 253, which became effective September 1, 2017, that require TRS to divest securities of companies identified by the Texas Comptroller that boycott Israel or are doing business with a foreign terrorist organization. Such divestment requirements follow a similar divestment schedule and reporting framework as those currently in Texas Government Code Chapter 806 and 807 for Sudan and Iran, respectively.

### **Legislation related to administration, procurements, and contracting:**

**Sunset review** – SB 1663 extended the date for the next sunset review of TRS from 2019 to 2025.

**Protection from disclosure of personal financial information** – SB 1663 clarified that personal financial disclosures of employees of TRS are confidential and excepted from disclosure under the Public Information Law.

**Matters authorized for discussion in executive session clarified** – SB 1663 clarified that the TRS Board of Trustees does not have to meet in open session to discuss investment transactions or potential investment transactions if the board concludes in open session that deliberating or conferring in open session would have a detrimental effect on the position of TRS in negotiations with third parties or put TRS at a competitive disadvantage in the market.

**Procurements and contracts** – As it applies to TRS, Senate Bill 533 (85th Leg., R.S., 2017) changes certain ethics provisions involving procurement and contracts. Under SB 533, former TRS trustees and employees may not go to work for a person with whom they participated in a procurement or contract negotiation until two years after the contract was signed or the procurement was terminated or withdrawn. Trustees and employees previously had to wait two years after leaving office or terminating employment with TRS before they could go to work for a vendor involved in a procurement or contract in which they participated. The bill also enhances conflict-of-interest disclosure requirements for TRS trustees and employees with regard to claims-administration procurements and contracts for the TRS-Care, TRS-ActiveCare, and long-term care programs.

## Changes in the Law

### **Legislation related to pension matters:**

**Employment eligible for participation in TRS** – SB 1663 removed student employment from membership eligible employment effective September 1, 2017. Student employment is employment that requires enrollment as a student at an institution of higher education as a condition of employment. Currently, student employment is eligible only if the person is also employed in other membership eligible employment. The change in the law also precludes compensation earned in student employment from being used in benefit calculations but does not affect compensation or service credited on eligible student prior to September 1, 2017.

**Changing retirement plan or beneficiaries of a joint and survivor annuity after retirement** – SB 1663 clarified that the consent of a spouse or a court order from a court with jurisdiction over the marriage of the retiree and the beneficiary is required to change the retirement plan if the beneficiary was the retiree's spouse at the time the designation was made. The bill also provided that a determination by the executive director that the order is not sufficient to authorize the change of retirement plan or beneficiary of the Option 1, 2, or 5 joint and survivor annuity plans may be appealed to the Board of Trustees unless the board by rule waives the requirement for the appeal to the board. The bill also clarified that a retiree who designated a trust as beneficiary of a joint and survivor annuity at the time of retirement may later change the beneficiary to the individual who is the sole beneficiary of that trust and the annuity may be paid for the remainder of the beneficiary's life rather than for the remaining life expectancy of the beneficiary as was previously required.

**Calculation of the amount of joint and survivor annuity payable at the death of an active member** – SB 1663 changed the manner of calculating the amount of joint and survivor benefit payable as a death benefit on behalf of an active member who died with at least five years of service credit. Under the new law, which affects death benefits payable on behalf of a member who dies on or after September 1, 2017 or who died before September 1, 2017 but the death benefits payable by TRS have not commenced on September 1, 2017, TRS determines whether the benefit amount is reduced for early age and the amount of the reduction after including five additional years of service credit on the last day of the month preceding the month in which the member died. The five additional years of service credit is not used in determining whether the joint and survivor benefit is payable or the amount of the standard annuity used in calculating the benefit.

**Return of excess contributions provided for beneficiary of disability retiree with less than 10 years of service credit** – SB 1663 extended a benefit to the beneficiaries of a disability retiree with less than 10 years of service credit that has been available for disability retirees with 10 years of service credit or more as well as service retirees. The change allows the beneficiary of a disability retiree with less than 10 years of service credit who dies while receiving retirement benefits to receive a return of the excess accumulated contributions that represent the amount of member contributions plus interest that exceed the amount of annuities paid on behalf of

## Changes in the Law

the member before death, in addition to other benefits payable at death.

**Additional employment arrangements included in limits on employment after retirement** – SB 1663 provided that retirees involved in certain employment-like relationships in the first 12 calendar months following retirement are considered employment for purposes of employment after retirement that is limited, interrupts the required 12 full, consecutive-calendar-month break in service, and must be reported to TRS. The arrangement must be reported to TRS if the retirees are performing duties or providing services that employees of the institution would otherwise perform. These relationships include:

- Independent contractors;
- Working but waiving, deferring, or foregoing compensation; or
- Volunteering but performing duties or providing services that the retiree performed immediately before retirement and has an agreement to perform those same services after the 12 consecutive calendar month break in service required before full-time employment.

These changes apply to retirees who retire after September 1, 2017 and those who are within the first 12 calendar months following their effective date of retirement on September 1, 2017.

**Authority to charge late fees for late reports filed by TRS-covered employers** – SB 1663 authorized TRS to charge a late fee for late reports and change the report date for reporting the employment of a retiree. The late fee cannot exceed \$1,000 per business day that the report is late and caps the total late fees for a month at \$25,000. The bill also shifts the due date for the employment of retirement members report to before the 11<sup>th</sup> day after the end of the calendar month for which the report is due. The due date for the August report was kept the same to facilitate year-end closing.

**Removal of prohibition on using installment purchase plan within three years of receipt of refund of purchase payments** – SB 1663 removed the statutory prohibition on purchasing the same type of service credit using an installment method of payment if the member received a refund of installment payments or payroll deduction payments within the last three years.

**Authority to provide certain information electronically** – SB 1663 clarified that TRS may provide non-confidential information to participants required by Chapter 802, Government Code to an email address provided by their employer. TRS may provide confidential information to participants using an email address specified by the participant. TRS may also meet the statutory requirement to provide non-confidential information by giving written or electronic notice and directing the participant to an internet website address to access the information.

**Confirmation of test for independent contractor** – SB 1664 confirmed that the test used by TRS to determine the status of an individual as an employee vs independent contractor is the common law test.

## Changes in the Law

**Time period to purchase service credit at retirement** – SB 1664 provided a period of two calendar months from the later of the member's effective retirement date or the last day of the month in which TRS receives the retirement application to complete the purchase of service credit and that the purchase must be completed before TRS makes the first annuity payment. If the purchase cannot be completed in the time period provided, the member can revoke retirement and establish a new retirement date that allows sufficient time to complete the purchase or decline to purchase the service credit and retain the effective date of retirement. The bill also provided a period of 90 days after the date the retirement system issues a cost statement for the member to complete the purchase of state sick and/or personal leave service credit. The additional time was needed because state sick and/or personal leave service credit can only be purchased at the time of retirement. The member can request a one-time extension of 30 days to complete the purchase using a rollover of funds or a direct trustee-to-trustee transfer. If the purchase cannot be completed in the time period provided, the member can revoke retirement and establish a new retirement date that allows sufficient time to complete the purchase or decline to purchase the service credit and retain the effective date of retirement.

**Amounts to be deposited in the member savings account** – SB 1664 clarified that the portion of cost representing member deposits used to purchase USERRA, developmental leave, state sick and/or personal leave, membership waiting period, and SCPO service credit are credited to the member savings account. This update in the law comports with TRS practice.

**Accounts to which an eligible rollover distribution may be made** – SB 1664 authorizes TRS to make an eligible rollover distribution to a qualified plan described in Section 401(a) of the Internal Revenue Code if the plan agrees to separately account for the amounts transferred and earnings on the amounts transferred and the portion of the distribution that is includable in gross income and the portion that is not includable in gross income.

**Election period for the Optional Retirement Program (ORP)** – SB 1954 provides a defined time period that a person may elect ORP when the employer does not notify the person on the first day of eligibility for ORP. If the person is notified before the end of the first 90 days after becoming eligible, the person must elect before the later of the 91<sup>st</sup> day after becoming eligible or the 31<sup>st</sup> day after being notified of eligibility. If the person is notified after the 90<sup>th</sup> day after becoming eligible but before the 151<sup>st</sup> day, the person must elect before the later of the 151<sup>st</sup> day after becoming eligible or the 31<sup>st</sup> day after being notified of the opportunity to participate. If the person is not notified before the 151<sup>st</sup> day of eligibility, the person may not elect ORP and must remain in TRS.

**Correction of reporting errors when a person is mistakenly reported to TRS instead of ORP** – SB 1954 provides a correction method that requires a person who is mistakenly reported to TRS as a member after electing ORP and vesting in participation in ORP to be restored to ORP. The bill allows TRS to transfer certain member contributions equal to the participant contributions that should have been made to ORP plus 4 percent earnings to the person's ORP account. It also

## Changes in the Law

provides a process for employers to recoup from TRS any employer contributions made in lieu of state contributions but no earnings using the employer reporting system. The State Comptroller is authorized to transfer the state's contributions plus 4 percent earnings to the employer for deposit in the person's ORP account. The bill also provides for the employer to make applicable contributions to the person's ORP account plus a rate of earnings determined by the employer in accordance with applicable IRC correction requirements. The bill also authorizes TRS to return contributions in excess of the amount that should have been contributed to the ORP account directly to the member without earnings as well as any amounts paid to purchase service credit while the person was not eligible to participate in TRS.

**Forfeiture of annuities when convicted of certain felonies involving an educator and a student** – SB 7 requires that an annuitant forfeits the right to receive an annuity when convicted of certain crimes involving a student. The bill applies only to crimes committed by an employee of a public school and those in which each and every element of the crime is committed after the effective date of rules adopted by TRS; the bill requires TRS to adopt rules to implement the law by December 31, 2017. There are provisions in the bill for the payment of a portion of the benefit to the spouse or former spouse of the participant under the terms of a QDRO and for the refund of contributions to the participant if an annuity cannot be paid. Restoration of the annuity is authorized if the conviction is overturned provided certain requirements are met.

**Legislation related to TRS-Care** – During its Regular Session, the 85<sup>th</sup> Legislature took the following action concerning TRS-Care:

**SB 1** – The Legislature increased the public school contribution from 0.55 percent to 0.75 percent of the salary of each active employee of the public school.

**SB 1 and HB 3976** – The Legislature increased the state contribution from 1 percent to 1.25 percent of the salary of each active employee of public schools.

**SB 507** – The Legislature expanded, beginning January 1, 2018, the mandatory mediation program under Chapter 1467 of the Texas Insurance Code to apply to TRS-Care.

**HB 3976** – The Legislature: (i) eliminated free coverage under TRS-Care, except with regard to certain disability retirees enrolled during Plan Year 2018 through Plan Year 2021; (ii) directed the creation of a high deductible health plan for enrollees who are not eligible to enroll in Medicare; (iii) directed the creation of a Medicare Advantage plan and Medicare prescription drug plan for enrollees eligible to enroll in Medicare; (iv) granted the right to make available other appropriate health benefit plans to address the needs of enrollees eligible to enroll in Medicare; and (v) established the right of eligible retirees and their eligible dependents to enroll in TRS-Care when the retiree reaches 65 years of age.

During its Special Session, using identically worded language in both HB 21 and HB 30, the 85<sup>th</sup> Legislature provided \$212,000,000 in additional funding for TRS-Care. TRS-Care may use these

## Changes in the Law

monies to: (1) decrease the premiums and deductibles that would otherwise be paid during the 2018 and 2019 plan years; and (2) reduce costs for an enrolled adult child with a mental disability or a physical incapacity during the 2018 and 2019 plan years.

**Legislation related to TRS-ActiveCare** – During its Regular Session, the 85<sup>th</sup> Legislature took the following action concerning TRS-ActiveCare:

**SB 507** – The Legislature expanded, beginning January 1, 2018, the mandatory mediation program under Chapter 1467 of the Texas Insurance Code to apply to TRS-ActiveCare.

### Federal

#### INVESTMENTS

**Implementation of Rulemaking under the Dodd–Frank Wall Street Reform and Consumer Protection Act (2010) (Dodd–Frank)** – During this fiscal year, TRS amended all of its ISDA documentation to take into account margin requirements for uncleared swaps recently issued by the Commodities Futures Trading Commission (CFTC) and the U.S. Prudential Regulators. Those amendments, which represent implementation of the first phase of the new regulations, addressed the treatment of variation margin, for example shortening the transfer timing and removing thresholds for movements of margin and providing maximum valuation percentages for non-cash collateral. The second implementation phase of the new margin requirements will address initial margin, for example requiring two-way posting and segregation of initial margin. While the initial-margin regulations should not apply to TRS for another two or three years, TRS will again amend its ISDA agreements to account for the new requirements in advance of their application. Finally, TRS anticipates additional rule making from the CFTC in the coming fiscal year now that the U.S. Senate has voted to confirm the appointment of additional Commissioners.

#### BENEFITS

##### Health Care

**Federal Patient Protection and Affordable Care Act of 2010 (PPACA)** – During this fiscal year, TRS continued to monitor regulations issued with regard to the PPACA and implemented various provisions of the PPACA that impact the health benefit plans administered by TRS. TRS continued to implement regulations under Section 1557, which prohibit discrimination on the basis of race, color, national origin, sex, age, or disability in certain health programs or activities. TRS continues to allow certain school districts, charter schools, and other entities participating in TRS-ActiveCare to designate TRS, acting in its capacity as trustee of TRS-ActiveCare, to fulfill the reporting requirements under Internal Revenue Code Section 6055 for months of enrollment in calendar year 2017. Section 6055 addresses the reporting of health care coverage selected by active employees and COBRA qualified beneficiaries (and their dependents) who are enrolled in one of the PPO plans offered under TRS-ActiveCare.

## Changes in the Law

### PENSION

#### Tax Laws, Regulations and Guidance

**Normal Retirement Age Regulations** – In January 2016, the IRS and the U.S. Treasury Department issued a Notice of Proposed Rulemaking for governmental plans regarding pension distributions upon attainment of “normal-retirement age” (NRA). The guidance provides that a NRA under a governmental plan must satisfy the pre-ERISA vesting rules. A governmental plan is permitted to use a period of service to determine NRA if the period of service used is reasonable and uniformly applicable and the other pre-ERISA rules relating to NRA are satisfied. A governmental plan is allowed to specify a NRA that is less than age 65 if the lower age is an age that is reasonably representative of the typical retirement age for the industry in which the covered workforce is employed. The guidance also distinguishes between governmental plans that allow “in-service distributions” and those that do not. In the case of a governmental plan that allows “in-service” distributions before age 62, the plan’s NRA must meet the reasonably representative requirement, which may be satisfied by meeting one of the safe harbors set forth in the guidance. In the case of a governmental plan that does not allow “in-service” distributions before age 62, the plan is not required to define NRA or comply with the reasonably representative requirement or the safe harbors, but the plan’s NRA must satisfy the pre-ERISA vesting rules.

Safe harbors for governmental plans provided in the IRS’ Notice of Proposed Rulemaking that are deemed to satisfy the reasonably representative requirement include the following: (1) the NRA is at least age 62 or the later of age 62 or another specified date, such as five years of service; (2) the NRA is the later of age 60 or the age at which the participant has been credited with at least five years of service; (3) the NRA is the later of age 55 or the age at which the participant has been credited with at least 10 years of service; (4) the NRA is the participant’s age if the sum of the participant’s age plus the number of years of service credited to the participant equals 80 or more; and (5) the NRA is based on a combination of any of the other safe harbors (except for the qualified public safety employee safe harbors) with 25 years of service, so that the NRA is the participant’s age when the number of years of service that have been credited to the participant equals 25 if that age is earlier than what the participant’s NRA would be under the other safe harbors. The guidance also includes three safe harbors specifically for qualified public safety employees: (1) the NRA is age 50 or later; (2) the NRA is based on a combination of the participant’s age plus the number of years of service credited to the participant that equals 70 or more; and (3) the NRA is the participant’s age when the number of years of service that have been credited to the participant equals 20 or more.

In addition, the Notice of Proposed Rulemaking provides that the use of different NRAs based on different classifications of employees or benefit structures in a single plan would not fail to satisfy the pre-ERISA rules. Additionally, the use of one NRA for employees hired before a certain date and another NRA for employees hired on or after that date generally would not fail to satisfy the pre-ERISA rules. The guidance further provides that a NRA in a governmental plan

## Changes in the Law

that does not satisfy any of the safe harbors could still satisfy the reasonably representative requirement based on all of the relevant facts and circumstances. TRS will continue to monitor developments with respect to these anticipated changes in federal regulations.

**Advance Notice of Proposed Rulemaking Regarding the Determination of Governmental Plan Status** – In November 2011, the IRS issued advance notice of proposed rulemaking indicating that the IRS and the U.S. Treasury Department intend to issue regulations to define the term “governmental plan” under Section 414(d) of the Internal Revenue Code. The preliminary guidance defines a “governmental plan” as “a plan established and maintained for its employees by the Government of the United States, by the government of any state or political subdivision thereof, or by any agency or instrumentality of the foregoing.” The IRS received over 2,000 comments from the public charter school community regarding the draft proposed regulations contained in the preliminary guidance. In February 2015, the IRS issued Notice 2015-07 indicating that the IRS anticipates issuing proposed regulations that provide that a state or local retirement system that covers public charter school employees will not fail to be a governmental plan under Section 414(d) if certain requirements are satisfied. The IRS and the U.S. Treasury Department anticipate that the final regulations under Section 414(d) will apply prospectively and will include a delayed effective date. In addition, the IRS and the U.S. Treasury Department anticipate that the final regulations will contain certain transition relief. The IRS and the U.S. Treasury Department will also continue to review other comments received in response to the 2011 advance notice of proposed rulemaking. TRS will continue to monitor developments.

### Other Developments

#### **OFAC Iran Sanctions**

On Jan. 20, 2016, the Governor of Texas issued a directive that Texas will continue to enforce the investment restrictions in Texas Government Code Chapter 807, and the revocation in January 2016 of some of the economic and trade sanctions against Iran, administered by the Office of Foreign Assets Control (OFAC) of the U.S. Treasury Department, did not trigger the revocation of the Texas sanctions. Further, in July 2017, OFAC added certain additional sanctions against Iran-linked individuals and entities.

TRS will continue to monitor developments.

## Summary of Benefits

The Teacher Retirement System of Texas (TRS) administers a defined benefit retirement plan that is a qualified pension trust under Section 401(a) of the Internal Revenue Code. The pension trust fund provides service retirement; disability retirement; death benefits; and survivor benefits on behalf of eligible employees of public and higher education in Texas. The TRS Benefits Handbook, a general information booklet, is available to TRS members, annuitants and the public on the TRS website, [www.trs.texas.gov](http://www.trs.texas.gov). Retirement benefits are financed by member, state, and employer contributions, along with earnings from pension trust fund investments.

TRS also administers two separate trust funds related to health care. First, TRS administers TRS-ActiveCare, the statewide health benefits program for eligible public education employees of participating entities and their eligible dependents. The program is mainly financed by plan participant premium payments. In addition to TRS-ActiveCare, TRS administers TRS-Care, a separate statewide health benefits program for eligible retired public education employees and their eligible dependents. This program is financed by contributions from the state, active public school employees, reporting entities (employers), premium payments from plan participants, and subsidy revenue from the Medicare Part D program.

In addition to the three trust funds, TRS also administers an optional long-term care insurance program for eligible retirees, and eligible public school employees, their eligible dependents, and certain other eligible family members. The plan is available on an enrollee-pay-all-basis.

### Retirement Plan Benefits

This summary of benefits is based on statutory provisions of the plan effective for fiscal year 2017.

The major retirement plan benefits are:

#### **SERVICE RETIREMENT**

##### **Normal Retirement Eligibility**

For members whose membership began prior to Sept. 1, 2007, who had at least five years of service credit as of Aug. 31, 2014, and who maintained membership until retirement:

- Age 65 with at least five years of credited service, or
- The sum of member's age and years of credited service equals or exceeds 80 with at least five years of credited service.

For members whose membership began on or after Sept. 1, 2007 but prior to Sept. 1, 2014, who had at least five years of service credit as of Aug. 31, 2014, and who maintained membership until retirement:

- Age 65 with at least five years of credited service, or
- Age 60 and the sum of member's age and years of credited service equals or exceeds 80 with at least five years of credited service.

## Summary of Benefits

For members who did not have at least five years of service credit as of Aug. 31, 2014, who established TRS membership on or after Sept. 1, 2014, or who had at least five years of service credit as of Aug. 31, 2014 but terminated membership in TRS by withdrawal of accumulated contributions and later resumed TRS membership:

- Age 65 with at least five years of credited service, or
- Age 62 and the sum of member's age and years of credited service equals or exceeds 80 with at least five years of credited service.

**Standard Annuity** - A monthly benefit payable at retirement throughout the retiree's lifetime and calculated according to the statutory benefit formula.

**Benefit Formula** - 2.3 percent (multiplier) times the average of the five highest annual creditable salaries times years of credited service equals an annual standard annuity. For members who are grandfathered, the three highest annual salaries are used.

**Minimum Benefit** - \$150 per month less any reduction for early age retirement or optional annuity selection.

### Early Age Retirement Eligibility

For members whose membership began prior to Sept. 1, 2007, who had at least five years of service credit as of Aug. 31, 2014, and who maintained membership until retirement:

- At least 55 with five or more years of service credit, but the sum of the member's age and years of service credit total less than 80, or
- 30 or more years of service credit, but the sum of the member's age and years of service credit total less than 80.

For members whose membership began on or after Sept. 1, 2007 but prior to Sept. 1, 2014, who had at least five years of service credit as of Aug. 31, 2014, and who maintained membership until retirement:

- At least 55 with five or more years of service credit, but the sum of the member's age and years of service credit total less than 80, or
- 30 or more years of service credit, but the sum of the member's age and years of service credit total less than 80, and the member is less than age 60, or
- The sum of the member's age and years of service credit total at least 80, but the member is less than age 60.

For members who met the requirements to be grandfathered before Sept. 1, 2005, there is no reduction to their benefit based on actuarial tables if they are at least age 55, the sum of their age and years of service credit total at least 80, and they are below age 60; however, these members are still considered early-age retirees.

For members who did not have at least five years of service credit as of Aug. 31, 2014, who

## Summary of Benefits

established TRS membership on or after Sept. 1, 2014, or who had at least five years of service credit as of Aug. 31, 2014 but terminated membership in TRS by withdrawal of accumulated contributions and later resumed TRS membership:

- At least 55 with five or more years of service credit, but the sum of the member's age and years of service credit total less than 80, or
- 30 or more years of service credit, but the sum of the member's age and years of service credit total less than 80, and the member is less than age 62, or
- The sum of the member's age and years of service credit total at least 80, but the member is less than age 62.

For members who met the requirements to be grandfathered before Sept. 1, 2005, there is no reduction to their benefit based on actuarial tables if they are at least age 55, have at least 20 years of service credit, the sum of their age and years of service credit total at least 80, and they are below age 62; however, these members are still considered early-age retirees.

**Early Age Retirement Benefit** - The standard annuity amount calculated under the benefit formula (or the minimum benefit, if applicable) and used to determine the amount of any optional retirement annuity is reduced for early age retirement. The amount of the reduction varies depending on age, years of service credit, and whether a member is grandfathered.

### DISABILITY RETIREMENT

**Eligibility** - Physical or mental disability precludes the member's continued performance of current duties and the disability is probably permanent, as certified by the TRS Medical Board.

**Benefit** - For disabled members with at least 10 years of credited service, the greater of the standard annuity unreduced for early age or \$150 per month minimum benefit, less any reduction for the selection of an optional annuity. For disabled members with fewer than 10 years of credited service, \$150 per month. The minimum benefit amounts are subject to reduction for the selection of an optional retirement annuity.

**Duration** - For retirees with 10 or more years of credited service, payments continue for as long as the disability continues. For those with fewer than 10 years of credited service, payments continue for the life of the retiree, the duration of the disability, or the number of months of credited service, whichever is shorter.

**Earnings Limit** - Disability retirees who applied and retired after Aug. 31, 2007 are subject to an annual limit on earnings from any employment. The current limit is the greater of the highest annual salary before retirement or \$40,000. Excess earnings will cause benefits to be forfeited until such time as the excess earnings cease or are reduced to an allowable amount.

### ANNUITY PAYMENT OPTIONS

All service and eligible disability retirees may select an optional form of payment that reduces the stan-

## Summary of Benefits

standard annuity by application of actuarial reduction factors in order to continue payment to a beneficiary after the retiree's death. Actuarial factors for disability retirees are different from those for service retirees because of different assumptions about life expectancy for the two groups. The available options include 100, 75, and 50 percent joint and survivor annuities, and five- and 10-year guaranteed period annuities. Selection of a 100 or 75 percent joint and survivor annuity and a five- or 10-year guaranteed period annuity may not be allowed in certain situations based on the minimum distribution provisions of federal tax law.

### THE POP-UP PROVISION

If a designated beneficiary under any of the joint and survivor options dies while the retiree is still living, the retiree's future monthly payment increases to the amount of the standard annuity.

### PARTIAL LUMP SUM OPTION

Under the Partial Lump Sum Option (PLSO), available for election at the time of retirement, eligible members may elect to receive an actuarially reduced service retirement annuity plus a lump sum distribution.

Members may elect to receive a PLSO if they are eligible for service retirement, meet the Rule of 90 (age and years of service credit equal at least 90), are not participating in the Deferred Retirement Option Plan (DROP), and are not retiring with disability retirement benefits. Grandfathered members may elect PLSO at retirement if they are eligible for normal age service retirement under the pre-Sept. 1, 2005 law (age 65 with at least five years of credited service, or the sum of the member's age and years of credited service equals or exceeds 80 with at least five years of credited service), are not participating in DROP, and are not retiring with disability retirement benefits. Members retiring under the proportionate retirement program are not eligible to elect the PLSO.

Partial lump sum distributions equal to 12, 24, or 36 months of a standard service retirement annuity may be selected. When a member selects this option, the monthly annuity is actuarially reduced to reflect the lump sum distribution. Flexible annual distribution options are available, including rollovers to another eligible retirement plan.

### DEFERRED RETIREMENT OPTION PLAN

The TRS plan permitted eligible members to participate in a Deferred Retirement Option Plan (DROP) by enrolling no later than Dec. 31, 2005. DROP participants continued employment while accumulating a portion of their standard retirement annuity in a special account that is disbursed beginning at the time of their retirement or death. Any eligible member who wanted to participate in DROP must have done so by Dec. 31, 2005.

Members who elected DROP chose to participate in 12-month increments for up to five years. During DROP participation, the member did not accrue additional service credit, nor is any compensation earned during DROP participation considered in calculating the standard annuity. Also, during DROP participation, the member's statutory contributions to TRS continue; however, contributions were not credited to the member's contribution account and are not subject to refund.

## Summary of Benefits

Interest on the DROP account balance prior to September 1, 20014 was computed at a rate of five percent per year. Interest on the DROP account balance is currently computed at a rate of two percent per year.

Members who participated in DROP but continued working in membership eligible employment after the close of their participation period earn post-DROP retirement benefits based solely on creditable compensation received and service credit earned after their DROP participation period ended. Post-DROP benefits are distributed with the retirement and DROP benefits.

### MINIMUM SERVICE CREDIT REQUIRED FOR SERVICE RETIREMENT BENEFITS

Under current law, a member who has completed at least five years of credited service has earned a right to service retirement benefits after reaching eligible retirement age, provided that the member's accumulated contributions are not withdrawn from the system. Service credited in another retirement system that participates in the Proportionate Retirement Program may be combined with TRS service credit to determine eligibility for TRS service retirement benefits. Any qualifying USERRA military service, up to a maximum of five years, may also be counted in determining eligibility for TRS service retirement benefits. The USERRA service and/or compensation credit may also be purchased to increase the amount of the retirement benefit or may simply be verified and used to establish eligibility. An eligible member must apply for benefits and meet other requirements, such as termination of Texas public education employment, in order to begin receiving benefits.

### DEATH AND SURVIVOR BENEFITS

**Active Members** - The beneficiary of an active member may elect to receive one of the following benefits in the event of the member's death before retirement, if the member dies during a school year in which the member performed service or if the member was absent from service because of sickness, accident or another reason TRS determines is involuntary or in furtherance of the objectives or welfare of the public school system. Active member death benefits are also payable if the member dies when eligible to retire or would have become eligible without further service before the fifth anniversary of the members last day of service as a member or if the member dies while performing qualified military service as defined by applicable federal law. These benefits also are available due to death when the member is absent from service as described by law, such as when the absence is due to sickness, accident, or other involuntary cause or when the member is within five years of being eligible to retire when leaving employment:

1. A lump sum payment equal to twice the member's annual rate of compensation or \$80,000, whichever is less.
2. Sixty monthly payments equal to the member's standard annuity without reduction for early age, provided the member had at least five years of service credit at the time of death.
3. Lifetime payments equal to a 100 percent joint and survivor annuity, provided the member had at least five years of service credit, and is subject to any reduction applicable for early age. This benefit is only available when there is a sole beneficiary.



## Summary of Benefits

4. An amount equal to a return of the member's contributions with accumulated interest.
5. Survivor benefits of \$2,500 lump sum payment plus a monthly benefit to eligible beneficiaries. For example, \$350 per month to a beneficiary spouse with minor children, continuing until the youngest child reaches age 18. When the spouse turns age 65, or when the youngest child reaches age 18, whichever is later, the spouse would begin receiving \$250 per month for life.

In addition to these five options, a lump sum death benefit of \$160,000 is available if the active member is employed in a TRS-covered position and dies as the result of a physical assault during the performance of the employee's regular job duties.

Also, the beneficiary of a DROP participant will receive the accumulated DROP account balance, payable as a lump sum or in periodic installments.

**Retirees** - In addition to any joint and survivor or guaranteed period annuity that may be payable under an optional form of payment a retiree elected, the beneficiary of a service or disability retiree is entitled to a \$10,000 lump sum payment. Eligible survivors may select alternate payment options in lieu of the lump sum benefit. The alternate payment options include a lump sum payment of \$2,500 plus an applicable monthly survivor benefit.

If total payments made before death to a retiree and, when applicable, to a beneficiary for an optional service retirement annuity, are less than accumulated contributions at retirement, an amount equal to the remainder of the balance of accumulated contributions is paid to the beneficiary or as otherwise provided by law. Should a retiree die prior to receiving all PLSO payments that are due, TRS will pay any remaining PLSO payments in a single lump sum payment to the beneficiary. If the retiree participated in DROP and died before receiving all DROP distributions, any unpaid DROP payments are paid to the beneficiary designated by the retiree.

### GRANDFATHERED PROVISIONS

- A person who, as a member, met any one of the following criteria on or before Aug. 31, 2005, is grandfathered under plan provisions repealed with respect to non-grandfathered members:
  - the member was at least 50 years old,
  - the member's age and years of service credit equaled at least 70 ("Rule of 70"), or
  - the member had at least 25 years of service credit.
- Members who are grandfathered will have their benefits determined in the following manner:
  - Final Average Salary at retirement will be determined by the highest three years (instead of five years) of salary.
  - Preservation of certain retirement reduction factors means that members age 55 or older with 20 to 24 years of credited service who take early retirement will receive a lesser

## Summary of Benefits

reduction to their annuities than those members who are not grandfathered.

- Partial Lump Sum Option eligibility will require either age 65 with at least five years of service credit, or a combined age plus years of credited service that equals at least 80 (“Rule of 80”) instead of 90.

### Health Benefits

**The major health benefits and long-term care provisions are:**

#### **HEALTH BENEFITS FOR ACTIVE PUBLIC SCHOOL EMPLOYEES**

TRS-ActiveCare, the statewide health benefits program for eligible full-time and part-time employees of participating school districts, open enrollment charter schools, regional education service centers, and other educational districts, went into effect on Sept. 1, 2002. The program initially focused on smaller districts, where affordable health coverage was often harder to find, and later expanded to include larger school districts. In fiscal year 2017, 1,093 entities participated in the program. Employees can choose from three PPO plans and, in certain areas, employees also have the option of enrolling in a health maintenance organization.

#### **RETIREE HEALTH COVERAGE**

TRS administers TRS-Care, a health benefits program for eligible retired public education employees and their eligible dependents that was established in 1985. TRS-Care is the source of health benefits coverage which almost all retired public education employees rely upon. Funding is provided by premium payments from retiree participants and contributions from the state, public schools, and active public education employees. TRS-Care also receives additional revenue from the Retiree Drug Subsidy (RDS) program.

For information on TRS-Care eligibility, please refer to the TRS website.

#### **LONG-TERM CARE INSURANCE PROGRAM**

Eligible retirees and eligible public school employees, their eligible dependents, and certain other family members may participate in the TRS long-term care insurance program. The plan pays benefits if the participant becomes unable to perform at least two activities of daily living without substantial assistance from another person. The plan also pays benefits as a result of a severe cognitive impairment that requires supervision or verbal direction from another person in order to protect the member or others from serious injury.



## TRS Mission Statement

The mission of the  
Teacher Retirement System of Texas is:

*Improving the retirement security  
of Texas educators by prudently  
investing and managing trust assets  
and delivering benefits  
that make a positive difference in  
members' lives.*



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