# **2017** Comprehensive Annual Financial Report



Employees Retirement System of Texas | A Component Unit of the State of Texas Fiscal Year Ended August 31, 2017



The mission of the Employees Retirement System of Texas is to support the state workforce by offering competitive benefits at a reasonable cost.

# 2017 Comprehensive Annual Financial Report

Porter Wilson, Executive Director

Prepared by: Finance Division



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

### Table of Contents

Executive Director's Message	
Letter of Transmittal	6
Certificate of Achievement	9
Public Pension Standards Award	10
Organizational Chart and Data	11
Consultants and Advisors	12
Summary of Plan Provisions	13
Financial Section	~ ~ ~
Independent Auditor's Report	
Management's Discussion and Analysis	25
Basic Financial Statements – Exhibits:	
Government-Wide Financial Statements:	
I Statement of Net Position	
II Statement of Activities	31
Fund Financial Statements:	
III Balance Sheet – Governmental Funds	
IV Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds	
V Statement of Net Position – Proprietary Fund	
VI Statement of Revenues, Expenses and Changes in Net Position – Proprietary Fund	
VII Statement of Cash Flows – Proprietary Fund	
VIII Statement of Fiduciary Net Position	
IX Statement of Changes in Fiduciary Net Position	
Notes to the Basic Financial Statements	45
Required Supplementary Information:	
Schedule of Changes in Net Pension Liability and Related Ratios – Defined Benefit Plans	
Schedule of Employer Contributions – Defined Benefit Plans	
Schedule of Changes in Net OPEB Liability and Related Ratios	78
Schedule of Contributions from Employers and Non-employer Contributing Entities	
– Other Postemployment Benefit Plan	78
Schedule of Investment Returns	
<ul> <li>Annual Money-Weighted Rate of Return, Net of Investment Expense</li> </ul>	79
Notes to the Required Supplementary Information	80
Other Supplementary Information	
Fiduciary Funds:	
Combining Financial Statements	
Agency Funds	
A-1 Combining Statement of Net Position	82
A-2 Combining Statement of Changes in Assets and Liabilities	
Supporting Schedules:	
Revenues, Expenses and Changes in Statutory Account Balances (Non-GAAP Presentation):	
1 Employees Retirement Fund	84
2 Law Enforcement and Custodial Officer Supplemental Retirement Fund	
3 Judicial Retirement System Plan Two Fund	
Other Supplementary Schedules	
4 Administrative and Investment Expenses/Expenditures –	
Statutory Administrative Funds and Accounts	87
5 Professional and Consulting Fees	
-	

## Table of Contents (Concluded)

Investment Section	
Report on Investment Activity	
Outline of Investment Policies	
Time-Weighted Rates of Return and Asset Allocations	
Broker Commissions	
Management Fees and Profit Share for Alternative Investments	
Investment Advisory and Service Fees	
List of Largest Assets Held	
Investment Summary at Fair Value	107

#### Actuarial Section

Pension Plans:	
Actuary's Certification Letter	111
Actuarial Balance Sheet – Employees Retirement Fund1	116
Actuarial Balance Sheet - Law Enforcement and Custodial Officers Supplemental Retirement Fund1	117
Actuarial Balance Sheet – Judicial Retirement System of Texas Plan Two Fund	
Summary of Actuarial Methods and Assumptions	119
Active Member Valuation Data1	123
Retirees and Beneficiaries Added to and Removed from the Annuity Payrolls	124
Schedule of Funding Progress – Defined Benefit Plans1	125
Solvency Test1	
Analysis of Financial Experience1	
Effects of Changes in Actuarial Assumptions1	128
State Retiree Health Plan:	
Actuary's Certification Letter1	129
Actuarial Valuation Results1	130
Summary of Actuarial Methods and Assumptions1	131
Active Member Valuation Data1	134
Retirees and Nominees Added to and Removed1	134
Schedule of Funding Progress – State Retiree Health Plan1	134

#### Statistical Section

Summary of Statistical Section	137
Governmental Activities:	
Net Position	138
Changes in Net Position	138
Governmental Funds:	
Fund Balances	
Changes in Fund Balances	139
Changes in Net Position:	
Proprietary Fund	140
Defined Benefit Plans	141
Deferred Compensation Plans and Cafeteria Plan	143
Benefit and Refund Payments – Defined Benefit Plans	144
Average Benefit Payments – Employee Class	146
Retired Members by Type of Benefit	147
Contribution Rates	148
Statistical Information:	
Defined Benefit Plans	149
Other Programs	150
List of Participating Reporting Entities for State Retiree Health Plan	151



# INTRODUCTORY SECTION

Highlights of Retirement Programs Executive Director's Message Letter of Transmittal

Certificate of Achievement

Public Pension Standards Award

Organizational Chart and Data

Consultants and Advisors

Summary of Plan Provisions



## **Highlights of Retirement Programs**

As of August 31, 2017

	ERS (Note A)	LECOS (Note A)	JRS II
Retirement Census Data Active Members Terminated Employees Entitled to Benefits Total Retirement Accounts	141,629 112,192 <b>253,821</b>	38,206 17,100 <b>55,306</b>	557 158 <b>715</b>
Retirees and Beneficiaries	107,530	12,248	378
Service Retirements Disability Retirements <b>Total Retirements During the Fiscal Year</b>	5,908 58 <b>5,966</b>	876 0 <b>876</b>	48 0 <b>48</b>
Funded Ratios (Note B)	70.1%	66.0%	90.8%
Plan Fiduciary Net Position as a Percentage of Total Pension Liability (Note C)	54.7%	42.7%	90.8%
Results of Investments - Pension Trust FundsInterest, Dividends & Securities Lending IncomeNet Appreciation in Fair Value of Investments	588,638,391 2,275,734,476	\$ 20,660,459 79,793,860	\$ 9,294,295 36,014,931
Other Transactions SummaryMember ContributionsState Retirement ContributionsRetirement BenefitsMember Contributions WithdrawnAdministrative ExpensesInvestment Expenses	685,461,587 700,142,188 2,238,918,269 120,943,785 23,095,408 33,674,310	\$ 9,583,045 26,583,162 66,817,980 2,938,337 1,811,110 1,179,918	\$ 6,016,757 12,494,828 22,987,686 373,691 294,991 463,758
Money-Weighted Rates of Return	11.84%	11.80%	11.88%
Time Weighted Rates of Return Investment Pool Trust Fund	<b>1-Year</b> 12.15%	<b>3-Year</b> 5.88%	<b>5-Year</b> 8.43%

ERS - Employees Retirement Fund

LECOS - Law Enforcement and Custodial Officer Supplemental Retirement Fund

JRS II - Judicial Retirement System Plan Two

- Note A: The members of the LECOS are also members of the ERS.
- Note B: Funded Ratios are based on actuary calculations for funding purposes. The actuarial accrued liability used in the Funded Ratio calculation for ERS and LECOS is based on a total liability, which is based on the benefit provisions in effect for each active member and a normal cost rate based on the benefits in effect for members hired after August 31, 2013.

Note C: This calculation reflects market value, changes in single discount rate application, and other adjustments as required by GASB Statement No. 67.

### Executive Director's Message



200 E. 18TH STREET AUSTIN, TEXAS 78701 | P. O. BOX 13207, AUSTIN, TEXAS 78701-3207 | (512) 867-7711 | (877) 275-4377 TOLL-FREE | WWW.ERS.STATE.TX.US

December 20, 2017

Porter Wilson Executive Director

Doug Danzeiser Chair

Cydney C. Donnell Vice-Chair

BOARD OF TRUSTEES Ilesa Daniels I. Craig Hester Catherine Melvin Jeanie Wyatt The Honorable Governor Abbott and Members of the Texas Legislature:

I am pleased to present the Employees Retirement System of Texas (ERS) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended August 31, 2017 . The Legislature's ongoing support of ERS' retirement and health insurance programs, positive investment returns and cost saving activities in our health plans made it a successful year overall.

The retirement benefits and health coverage offered through ERS are an investment in Texas, funded jointly by both members and taxpayers. Such benefits play an integral role in ensuring Texas has the workforce necessary to serve its citizens, providing critical services Texans rely on daily. ERS contributes to fair compensation for these employees through valuable benefits programs, increasing the state's competitiveness in the employer marketplace. Benefits, including the state's contributions toward health insurance and retirement, account for more than a third of total compensation for the average state employee.

The 85<sup>th</sup> Texas Legislature continued to help protect the long-term health of state retirement funds by maintaining state and member contributions for Fiscal Years 2018-19. During Fiscal Year 2017, ERS paid approximately \$2.48 billion in retirement annuities to more than 100,000 retirees and beneficiaries. Investment income accounts for about two-thirds of the Trust's revenue. The ERS Retirement Trust Fund netted 12.11%, or \$3 billion, in investment earnings. The Trust Fund invests in Texas businesses, and retirees spend the vast majority of their retirement income in Texas, further supporting the state's economy.

ERS investments are highly diversified and designed to withstand market fluctuations. To support appropriate diversification, ERS regularly reviews its full investment portfolio and actively manages assets to achieve the highest risk-adjusted return possible within existing market conditions. During Fiscal Year 2017, ERS undertook an asset allocation study and updated the Trust's asset mix and return rate goals to reflect the current market. In addition, ERS conducted an experience study, and the Board adopted revised assumptions and methods for the actuarial valuation at its August 2017 meeting.

ERS continues to respond effectively to the ongoing nationwide challenge of rising health costs. Our initiatives in the Texas Employees Group Benefits Program have helped maintain lower-than average cost increases while upholding our commitment to high-quality care and service. These efforts included rebidding the pharmacy benefits manager and the HealthSelect<sup>SM</sup> of Texas third party administrator contracts, and expanding the well-received patient-centered medical home program. As a result of these and other initiatives, ERS was able to achieve an average health insurance premium increase of less than 1% for Fiscal Year 2018, with only a minor change in plan design. In addition, we were able to eliminate the copay for HealthSelect<sup>SM</sup> of Texas virtual visits that provide convenient, 24/7 consultation with doctors via computer or mobile device, for which we have received positive feedback from members.

We saw increased enrollment in the Consumer Directed HealthSelect<sup>SM</sup> high-deductible health plan, which ERS began offering September 1, 2016 as an alternative to the HealthSelect<sup>SM</sup> point-of service plan and the health maintenance organizations. Consumer Directed HealthSelect<sup>SM</sup> allows participants to have greater control of their health care expenses and to realize the tax benefits of a health savings account.

Thank you for your ongoing support. ERS is proud of its role in supporting this great state, its leadership, and its employees and retirees.

Sincerely,

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Porter Wilson Executive Director

### Letter of Transmittal



200 E. 18TH STREET AUSTIN, TEXAS 78701 | P. O. BOX 13207, AUSTIN, TEXAS 78701-3207 | (512) 867-7711 | (877) 275-4377 TOLL-FREE | WWW.ERS.STATE.TX.US

December 20, 2017

PORTER WILSON To: The Board of Trustees and Members of the Employees Retirement System of Texas **EXECUTIVE DIRECTOR** Ladies and Gentlemen: Doug Danzeiser CHAIR I am pleased to submit the Comprehensive Annual Financial Report of the Employees Retirement System of Texas (System) for the year ended August 31, 2017, in Cydney C. Donnell compliance with TEX . GOVT CODE ANN Sec. 2101.011 and in accordance with the VICE-CHAIR requirements established by the Texas Comptroller of Public Accounts. The System's Financial Staff prepared this report in accordance with generally accepted **BOARD OF TRUSTEES** accounting principles applied on a consistent basis as promulgated by the Governmental ILESA DANIELS Accounting Standards Board (GASB). Its purpose is to provide information as a basis for I. CRAIG HESTER making management decisions, to determine compliance with legal provisions, and to CATHERINE MELVIN determine responsible stewardship over the assets contributed by the members and the Jeanie Wyatt state. The report has been audited by the State Auditor's Office of Texas. For information regarding the scope of the audit, please see the Independent Auditor's Report in the Financial Section. The responsibility for the accuracy, completeness, and fair presentation of the information, including all disclosures, rests with the management of the System. We believe that the System's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions . Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets and the reliability of financial records. Please refer to the Management's Discussion and Analysis in the Financial Section for an overview of the financial activities of the current and prior fiscal years. SYSTEM'S STRUCTURE AND SERVICES For financial reporting purposes, the System is considered a Retirement System of the State of Texas. The System's financial activities will be included in the annual financial report for the State of Texas for the fiscal year ended August 31, 2017. The Employees Retirement Plan was established in 1947 by the Texas Constitution to provide benefits for officers and employees of the state. The System administers retirement and disability annuities and death and survivor benefits for employees of the State of Texas and their beneficiaries and proportional retirement benefits for members of the Proportionate Retirement Program. The Law Enforcement and Custodial Officer Supplemental (LECOS) Retirement Plan

The Law Enforcement and Custodial Officer Supplemental (LECOS) Retirement Plan was established in 1979 and is governed by Title 8, Subtitle B of the Texas Government Code. The program provides supplemental retirement benefits to certain certified peace officers or custodial officers specified in statute. Upon retirement, the individual receives an annuity from both plans.

The Judicial Retirement Plan I and Plan II were established to provide benefits for judges. Both Plans were created under Article XVI, Section 67 of the Texas Constitution and governed by Title 8, Subtitle E of the Texas Government Code. Plan I was established in 1949 as a pay-as-you-go pension plan. The Judicial Retirement Plan II

is governed by Sections 840.103 and 840.106, Texas Government Code, and was established as a new plan of actuarially funded retirement benefits for judges becoming members of the Judicial Retirement System after August 31, 1985. Although the Texas Judicial Retirement Systems are separate legal entities, the Employees Retirement System of Texas and the Texas Judicial Retirement Systems are a single accounting entity because they are governed by the same Board of Trustees (the Board), directed by the same management, part of the ERS goal of administering comprehensive and actuarially sound retirement programs and supports the objective of retaining proper funding and investment growth for the programs.

Accountability for all fiscal and budgetary matters is the responsibility of the Board. Operating administrative expenses, including capital items, are budgeted annually. The Board must approve any subsequent increases in the budget. Budgetary control is maintained in the financial system with automated edits, and through processes and procedures for approvals, encumbrances, and reporting.

#### **FINANCIAL CONDITION**

During FY 2017, the System conducted asset allocation and experience studies. At the August 2017 meeting, the Board adopted new assumptions regarding inflation, investment return, and mortality which have been incorporated into the 2017 valuations. Major differences in assumptions include:

- Reducing the nominal long-term investment return assumption to 7.5%
- Decreasing core inflation assumption to 2.5%
- · Updating mortality tables for continued future mortality improvement

#### **Investment Performance**

The investment portfolio closed the fiscal year with a fair value of \$27.6 billion, and had a gross return of 12.15% for the year. The time weighted rate of return for three and five years were 5.88% and 8.43% respectively.

The System's management remains confident in the financial markets and maintains a long term approach to investing the System's assets. The System's investments are highly diversified and are designed to withstand market fluctuations. The System maintains a professional and diversified investment program optimizing the mix of internal management and external advisors, continuing to expand asset classes and reduce investment risk through additional portfolio management tools. Please refer to the Investment Section for additional information on investment policies, strategies, and safeguards.

#### **Funding Status**

The Employees Retirement Fund actuarial valuation as of the August 31, 2017 shows that the ratio of the actuarial value of assets to the actuarial accrued liability was 70.1% for funding purposes. The decrease is primarily due to lowering the long-term expected rate of return from 8.0% to 7.5%. The 85th Texas Legislature contributions at 10% and 9.5% respectively. The LECOS Retirement Plan actuarial valuation as of the August 31, 2017 shows that the ratio of the actuarial value of assets to the actuarial valuation as of the August 31, 2017 shows that the ratio of the actuarial value of assets to the actuarial accrued liability was 66.0% for funding purposes. The JRS II Retirement Plan actuarial valuation as of the August 31, 2017 shows that the ratio of the actuarial accrued liability was 90.8% for funding purposes. The System is committed to working with the Legislature to return the retirement plans to an actuarially sound status. Additional information on funding status and progress toward achieving funding goals is presented in the Financial and the Actuarial Sections.

In FY 2017, the System implemented new reporting standards in accordance with the statements issued by the Governmental Accounting Standards Board. These standards modify the requirements for note disclosures and required supplementary information related to the measurement of other-post employment benefit liabilities held in trust and amend reporting requirements related to these benefits. Additional information on reporting changes is presented in the Financial Section.

#### **MAJOR INITIATIVES**

The System continues to analyze and design innovative approaches to provide a quality health care plan and other benefits at a reasonable cost. The System implemented contracts with new third party administrators for the prescription drug program and HealthSelect<sup>SM</sup> plans with hundreds of millions of dollars in expected savings each year. In addition during FY 2017, the System implemented a new optional vision plan and added a no-copay feature for HealthSelect<sup>SM</sup> of Texas virtual visits improving access to members while reducing costs to both the members and the plan.

The System worked with the 85th Legislature to continue funding for state employee's pension and health care programs. This resulted in no reductions to pension benefits and limited benefit design changes to healthcare with a less than 1% increase in dependent premium rates.

The System continued to educate members on the importance of a well-rounded plan for retirement including personal savings. New members are automatically placed in a 401(k) plan unless they chose to "opt-out." Through this program and continued education, the fair market value of Texa\$aver 401(k)/457 program grew to more than \$2.95 billion as of August 31, 2017.

The System redesigned its public website for a better user experience and implemented a "virtual callback" feature to support members during long wait periods, typically associated with enrollment periods. The System implemented other efficiency measures as well as implementing many of the Sunset Advisory Commission's recommendations to enhance agency performance and accountability.

#### AWARDS

#### Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association (GFOA) of the United States and Canada awarded the Certificate of Achievement for Excellence in Financial Reporting to the System for its Comprehensive Annual Financial Report for the fiscal year ended August 31, 2016. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents meet or exceed program standards and satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for one year. The System has received a Certificate of Achievement for each of the last 28 years. We believe the current report continues to meet the Certificate of Achievement program requirements and it is being submitted it to the GFOA for consideration again this year.

#### Public Pension Standards Award for Funding and Administration

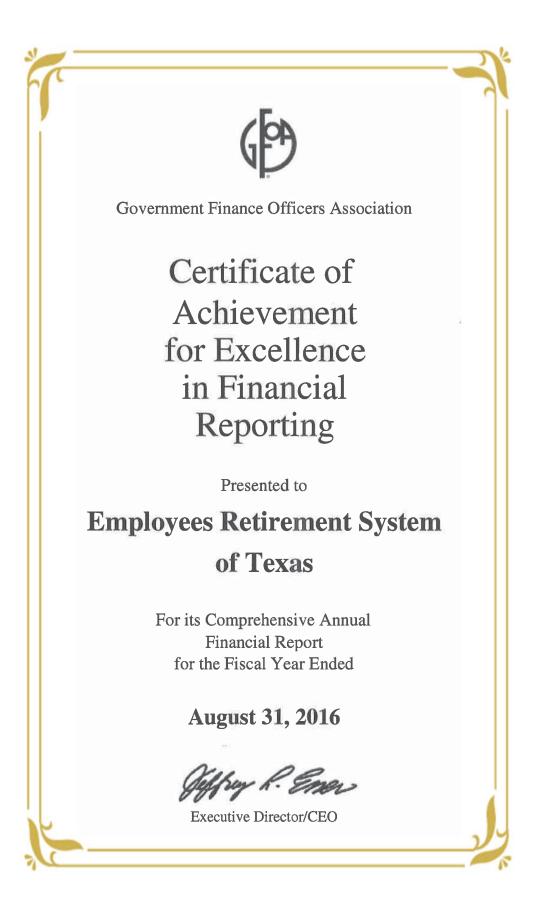
The Public Pension Coordinating Council (PPCC) gave the 2017 Public Pension Standards Award for Administration to the System in recognition of meeting professional standards for plan administration as set forth in the Public Pension Standards.

#### ACKNOWLEDGMENTS

The preparation of this report on a timely basis was accomplished with the efficient and dedicated service of the Finance staff and other employees of the System. I would like to express my appreciation for management's support in preparing this report and to all the employees of the System who contributed to its preparation.

Meril

Machelle Pharr, CPA Chief Financial Officer





# Public Pension Coordinating Council

# Recognition Award for Administration 2017

Presented to

# **Employees Retirement System of Texas**

In recognition of meeting professional standards for plan 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 Helinple

Alan H. Winkle Program Administrator

# Organizational Chart and Data As of August 31, 2017



### **Consultants and Advisors**

As of August 31, 2017

#### **Consulting Actuaries**

Philip S. Dial, FSA Rudd and Wisdom, Inc. Ryan Falls, FSA, FCA, EA, MAAA Gabriel, Roeder, Smith & Company Joseph Newton, FSA, FCA, EA, MAAA Gabriel, Roeder, Smith & Company Dana Woolfrey, FSA, FCA, EA, MAAA Gabriel, Roeder, Smith & Company

#### **Investment Advisory Committee**

Caroline Cooley, Chair *CIO-Diversified Funds, Crestline Investors. Inc.* Bob Alley, CFA, Vice-Chair James Hille, CFA, CAIA *Texas Christian University Endowment* Ken D. Mindell *Senior Vice-President, Rosewood Management Corp.* Gene L. Needles, Jr. *Chairman, President and CEO, American Beacon Advisors* Laura T. Starks, Ph.D. *The University of Texas at Austin* Lenore Sullivan Margaret Weinblatt, Ph.D., CFA

#### **Investment Consultants**

Albourne Partners Aon Hewitt Investment Consulting Pavilion Financial Corporation

#### **External Investment Advisors**

**Domestic Equity** Barrow, Hanley, Mewhinney & Strauss, LLC Brandywine Global Investment Management, LLC

#### **International Equity**

BlackRock, Inc. Fisher Investments Institutional Group Franklin Templeton Institutional, LLC Lazard Asset Management

#### Manager of Emerging Managers

Legato Capital Management, L.L.C

#### **Global Custodian**

BNY Mellon Asset Servicing

#### **Medical Board**

Ace Alsup, M.D. John A. Genung, M.D. William P. Taylor, M.D. William M. Loving, M.D

Please refer to the Investment Section for a schedule of fees and commissions.

## Summary of Plan Provisions

Effective since September 1, 2009 (Except as noted below)

The Employees Retirement System of Texas was created by the Texas Legislature in 1947 and is administered in accordance with the Texas Constitution. The System provides a retirement and disability pension system for State employees, law enforcement and custodial officers, elected state officials and two classes of judges. The System administers the trust funds, with a fiduciary obligation to the members and retirees of the System who are its beneficiaries.

The retirement programs complement the Social Security and Medicare programs by providing a retirement annuity

with service, disability and survivorship benefits. The Employees Retirement System of Texas Plan (ERS), the Law Enforcement and Custodial Officer Supplemental Retirement Plan (LECOS), and Judicial Retirement System of Texas Plan Two (JRS II) are single employer defined benefit pension plans.

For a complete description of the provision of the law that describes the Retirement Plans, see Vernon's Texas Statutes and Codes Annotated (V.T.S.C.A.), Texas Government Code, Title 8. The following is a summary of the various plan provisions.

#### ERS

#### Membership:

Employee Class Only:

• Employees and appointed officers of every department, commission, board, agency, or institution of the State except those who are included in the coverage of Teacher Retirement System of Texas, JRS I, and JRS II.

Elected Class Only:

- Persons who hold State offices that are normally filled by statewide election and that are not included in the coverage of JRS I and JRS II.
- Members of the Legislature.
- District and criminal district attorneys.

#### Service Retirement Eligibility without Reduced Benefits:

Employee Class Only:

Hire date prior to 9-1-2009:

- Age 60 with at least five years of service credit, or
- Rule-of-80 with at least five years of service credit, or
- Age 55 with at least 10 years of service credit as a certified peace officer or custodial officer.

Hire date on or after 9-1-2009 and prior to 9-1-2013:

- Age 65 with 10 years of service
- Rule-of-80, with at least 10 years of service at age 60.
- Hire date on or after 9-1-2013:
- Age 65 with 10 years of service.
- Rule-of-80, with at least 10 years of service at age 62.

#### Elected Class Only:

- Age 60 with eight years of service credit.
- Age 50 with 12 years of service credit.

 Law enforcement officers recognized as commissioned law enforcement officers by the Commission on Law Enforcement Officer Standards and Education and employed at an agency defined by statute.

LECOS

 Custodial officers certified in accordance with the statutory requirements as having a normal job assignment that requires frequent or infrequent planned contact with inmates of that institution and employed at an agency defined by statute

20 years of service credit as a

certified peace officer/custodial

officer and the member's age is the

earlier of either the age of 50 or the

age at which the sum of age and

years of service credit equals or

Hire date on or after 9-1-2009 and prior

certified peace officer/custodial

20 years of service credit as a

officer at or over age 55.

exceeds the number 80.

to 9-1-2013:

Hire date prior to 9-1-2009:

 Judges, justices and commissioners of the Supreme Court, the Court of Criminal Appeals, the Court of Appeals, District Courts, and certain commissions to a court who commenced service after August 31, 1985.

**JRS II** 

t or infrequent planned with inmates of that on and employed at an defined by statute

> Age 65 with at least 10 years of service credit and currently holding a judicial office, or

- Age 65 with at least 12 years of service if not holding office, or
- 20 years of service at any age, regardless of whether the member currently holds a judicial office, or
- The sum of age and years of service credit equals or exceeds the number 70 and served at least 12 years on an appellate court, regardless of whether the member currently holds a judicial office.
- Hire date on or after 9-1-2013:
  20 years of service credit as a certified peace officer/custodial officer at or over age 57.

#### ERS

#### LECOS

#### Early Service Retirement Eligibility with Reduced Benefits:

Hire date on or after 9-1-2009 and prior to 9-1-2013:

- Rule-of-80, with at least 10 years of service. (5% annuity reduction for each year retired under age 60, up to 25%)
- Age 55 with at least 10 years of service credit as a certified peace officer or custodial officer. (5% annuity reduction for each year retired under age 60, up to 25%)

Hire date on or after 9-1-2013:

- Rule-of-80, with at least 10 years of service. (5% annuity reduction for each year retired under age 62, no cap)
- Age 55 with at least 10 years of service credit as a certified peace officer or custodial officer. (5% annuity reduction for each year retired under age 62, no cap)

#### Standard Service Retirement without Reduced Benefits:

#### Employee Class Only:

- Standard monthly annuity is equal to 2.3% of average monthly compensation multiplied by the number of years of service credit.
- The average monthly compensation for those hired prior to 9-1-2009 is the average of the highest 36 months of compensation.
- The average monthly compensation for those hired on or after 9-1-2009 and prior to 9-1-2013 is the average of the highest 48 months of compensation.
- The average monthly compensation for those hired on or after 9-1-2013 is the average of the highest 60 months of compensation.
- Minimum standard annuity is \$150 per month.
- Maximum standard annuity is 100% of the average monthly compensation.

#### Elected Class Only:

- Standard monthly annuity is 2.3% of the current State salary of a district judge multiplied by the number of years of service credit.
- Retirement benefits are automatically adjusted should State judicial salaries change.
- Maximum standard annuity is 100% of the State salary being paid to a district judge.

Hire date prior to 09-01-2009:

• 20 years of service credit as a certified peace officer/custodial officer, under the age of 50. Actuarial reduction for those who retire prior to age 50.

Hire date on or after 9-1-2009 and prior to 9-1-2013:

- 20 years of service credit as a certified peace officer/custodial officer (5% annuity reduction for each year retired under age 55, up to 25%)
- Hire date on or after 9-1-2013:
- 20 years of service credit as a certified peace officer/custodial officer (5% annuity reduction for each year retired under age 57,no cap). Additional actuarial reduction for those that retire prior to age 50.
- Standard monthly annuity is equal to 2.8% of average monthly compensation multiplied by the number of years of service credit.
- The average monthly compensation for those hired prior to 9-1-2009 is the average of the highest 36 months of compensation.
- The average monthly compensation for those hired on or after 9-1-2009 and prior to 9-1-2013 is the average of the highest 48 months of compensation.
- The average monthly compensation for those hired on or after 9-1-2013 is the average of the highest 60 months of compensation.
- Minimum standard annuity is \$150 per month.
- Maximum standard annuity is 100% of the average monthly compensation.

- Age 60 with 10 years of service credit and currently holding judicial office, or
- Age 60 with 12 years of service credit, if not holding office.

- Standard monthly annuity is equal to 50% of the salary for the last position from which the retiring member was elected or appointed.
- An additional 10% is paid when a member retires within one year of leaving office or within one year of last assignment as a visiting judge.
- The monthly annuity of a member who elects to make contributions after 20 years of service would be based on 50% of the State salary plus 2.3% for each subsequent year with the total, including the additional 10%, not to exceed 90%.
- The monthly annuity of a member who elects to make contributions after reaching the Rule of 70 with at least 12 years on an appellate court would be based on 50% of the State salary plus 2.3% for each subsequent year with the total, including the additional 10%, not to exceed 90%.

#### **Optional Annuity Plans:** Employee Class and Elected Class: Same as ERS. Same as ERS except for the onetime partial lump sum. Members can choose one of the following beneficiary options at retirement. Annuity is reduced for life and is actuarially reduced based on age of member and beneficiary at time of retirement. · Lifetime with 100% to surviving beneficiary; ٠ Lifetime with 75% to surviving beneficiary; Lifetime with 50% to surviving beneficiary; · Lifetime with five years certain to surviving beneficiary; · Lifetime with 10 years certain to surviving beneficiary; and • One-time partial lump sum of up to three years of standard annuity at retirement (annuity is reduced for life and the reduced annuity is in addition to the calculation of the six beneficiary options listed above). • If beneficiary predeceases member, the annuity paid to the retired member who selected one of the lifetime survivor benefits is increased to the standard amount. **Vesting Requirement:** Hire date prior to 09-01-2009: 20 or more years of service credit • 12 or more years of service credit. · Five or more years of service credit as a certified peace officer/custodial for Employee Class. officer. Hire date on or after 09-01-2009 and prior to 9-1-2013: • 10 or more years of service credit for Employee Class. Hire date on or after 09-01-2013: • 10 or more years of service credit for Employee Class. Elected Class Only: · Eight or more years of service credit. Vested Benefits after Termination of Employment: Member is entitled to a deferred • Same as ERS. • Same as ERS. retirement benefit based on service and compensation prior to termination. Member must leave accumulated contributions in the System to which the member contributed.

LECOS

**JRS II** 

• Upon or after leaving State employment, member may apply for a refund of contributions plus accrued interest. A refund cancels membership, terminates the member's rights to benefits, and forfeits their retirement group should they return to state employment.

ERS

#### **Disability Retirement Eligibility:**

#### Employee Class Only:

- For occupational disability, the member must have at least one month of service and they must make a retirement contribution in the month they become permanently disabled.
- For non-occupational disability, at least 10 years of Employee Class service credit, which may include up to five years of purchased military service credit, and be a contributing member at the time of disability.

#### Elected Class Only:

- For occupational disability, no age or length of service requirement. Also one must be a contributing member at the time of permanent disability.
- For non-occupational disability, eight years of Elected Class service (exclusive of military service) or six years of Elected Class service plus two years of military service if purchased before January 1, 1978, and be a contributing member at the time of permanent disability.

#### **Disability Retirement Benefits:**

#### Employee Class Only:

- For occupational disability, the benefits are the same as those under the standard service retirement, except the standard annuity is equal to not less than 35% of the average monthly compensation regardless of the years of service credit or age.
- For non-occupational disability, the retirement benefits are actuarially reduced from normal retirement eligibility based on age and length of service.
- The optional annuity plans available are the same as those under a service retirement except there is no partial lump-sum option.

#### Elected Class Only:

- For non-occupational retirement is calculated in the same manner as the standard retirement annuity, and is not reduced because of age.
- For occupational disability, the amount of a monthly annuity is 18.4% of the state salary of a district judge or 2.3% of the state salary of a district judge times the years of elected service, whichever is greater.
- Optional annuity plans available are the same as those under a service retirement except for the partial lump-sum option.

- For occupational disability, the standard annuity is a minimum of 50% of the average monthly compensation regardless of the years of service credit or age.
- The standard annuity is increased to 100% of the average monthly compensation if the retired member can prove that their occupational disability makes them incapable of substantial gainful activity solely because of the occupational disability and they are considered totally disabled under federal social security law due to the same condition that qualified them for occupational benefits.
- For non-occupational disability, the retirement benefits are actuarially reduced from normal retirement eligibility based on age and length of service.
- The optional annuity plans available are the same as those under a service retirement except for the partial lump-sum option.

• Same as standard service retirement benefits without reduction for age.

- No age requirement.
  - Seven years of judicial service and currently holding a judicial office.

#### JRS II

Same as ERS.

#### LECOS

#### Death Benefits:

Employee Class and Elected Class:

ERS

- A contributing member with a minimum of 10 years of service credit may select a death benefit plan or the designated beneficiary can elect a lifetime monthly payment, a 10-year guaranteed monthly payment or a one-time refund of the members retirement account balance at the time of the members death. If the member was age 60 with 5 or more years of service and less than 10 years, and the beneficiary is either the spouse or a minor child, they may eligible to a death benefit plan.
- For a contributing member that had less than 10 years of service the designated beneficiary of the active account will receive a one-time refund of the member's retirement account balance at the time of the member's death and The beneficiary(ies) may be eligible for an Additional Death Benefit (ADB). This is an additional 5% of the member's retirement account balance for each full year of state service. The maximum is 100% of the member's retirement account balance.
- If an active state employee dies and the death is determined to be an occupational death, the surviving spouse or minor children may be eligible for a one-time death benefit equal to one year of the member's salary. If there is not a surviving spouse or minor children, this occupational death benefit is not payable to anyone else.
- If a retired member selected a standard annuity and dies after retiring from the state, the designated beneficiary will receive a one-time refund of the member's retirement account balance if there is any money left in the account.
- If a member selected an optional service retirement, and dies, the beneficiary will receive a monthly payment based on the option chosen.
- If the member was retired, the designated beneficiary is eligible for a one-time Retiree Lump Sum Death Benefit in the amount of \$5,000.

- Members with 10 or more years of certified peace officer/custodial officer service, the death benefits are the same as the Employee Class.
- Members with at least 20 years of certified peace officer/custodial officer service, under age of 50 at the time of death, the designated beneficiary is eligible for a lifetime monthly payment, a 10-year guaranteed monthly payment, or a one-time refund of the member's retirement account balance. The designated beneficiary is not eligible for the Partial Lump Sum Option (PLSO) if the deceased member had at least 20 years of certified peace officer/custodial officer service and was under age 50 at the time of death.

A member with at least 10 years of service credit:

 May select a death benefit plan or the designated beneficiary can elect either a lifetime annuity payment, a 10-year guaranteed monthly payment or a one-time refund of the retirement account balance at the time of the members death. JRS members are not eligible for a Partial Lump Sum Option (PLSO).

A member with less than 10 years of service credit:

- The beneficiary is not eligible for a death benefit plan. The beneficiary is eligible for a one-time refund payment of the retirement account balance.
- If a member is retired, the designated beneficiary(ies) is eligible for a one-time Retiree Lump Sum Death Benefit in the amount of \$5000.

#### ERS

Elected Class Only:

- For members with less than 8 years of service credit at the time of death, the designated beneficiary will receive a one-time refund of the member's retirement account balance. If contributing: The beneficiary may be eligible for an Additional Death Benefit (ADB). This is an additional 5% of the member's retirement account balance for each full year of state service. The maximum is 100% of the member's retirement account balance.
- For a contributing member with at least 8 years of service credit and is age 60 or above, at the time of death, the surviving spouse if designated as the beneficiary may be eligible for a lifetime monthly payment, a 10-year guaranteed monthly payment, or a one-time refund of the member's retirement account balance. If there is no surviving spouse, and the surviving minor child(ren) is designated as the beneficiary(ies) they may be eligible for a lifetime monthly payment, a 10-year guaranteed monthly payment, or a one-time refund of the member's retirement account balance. If the surviving spouse/minor child selects the onetime refund, they are eligible for the ADB. This option is not available if they select a monthly payment. If there is no surviving spouse/ minor child, the beneficiary may be eligible for a refund of the member's retirement account balance plus the ADB.
- A contributing or non-contributing member with at least 8 years of state service but less than 10 years of state service, the surviving spouse is eligible to receive a monthly payment that is one-half of the monthly standard annuity the member would have received at age 60. This annuity cannot be paid if there is no surviving spouse. The beneficiary would then be eligible for a refund of the member's retirement account balance plus the ADB if contributing.
- If a member is retired, the designated beneficiary(ies) is eligible for a one-time Retiree Lump Sum Death Benefit in the amount of \$5,000.

**LECOS** 

# FINANCIAL SECTION

Independent Auditor's Report

Management's Discussion and Analysis

**Basic Financial Statements** 

Required Supplementary Information

Other Supplementary Information



#### **Independent Auditor's Report**



Employees Retirement System's Board of Trustees Mr. Doug Danzeiser, Chair Ms. Cydney Donnell, Vice-Chair Ms. Ilesa Daniels Mr. I. Craig Hester Ms. Catherine Melvin Ms. Jeanie Wyatt

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the governmental activities and the aggregate remaining fund information of the Employees 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 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

SAO Report No. 18-312

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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.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and the aggregate remaining fund information of the System, a component unit of the State of Texas, 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 Matter**

#### **Opinions Issued on Prior Years Financial Statements**

As discussed in Note 9 to the System's financial statements, in fiscal year 2017 the System corrected a material misstatement due to an accounting error in prior fiscal years, which resulted in a restatement to the beginning net position for the Employees Life, Accident, and Health Insurance and Benefits (proprietary fund) and the State Retiree Health Plan (fiduciary fund) financial statements. The opinions issued on the basic financial statements for the years ended August 31, 2014, through August 31, 2016, may be relied upon with the exception of the proprietary fund. Additionally, this misstatement affects the comparability of prior year financial statements to fiscal year 2017. Our opinion for the fiscal year 2017 financial statements is not modified with respect to this matter.

#### The System's Financial Statements

As discussed in Note 1, the financial statements of the System, a component unit of the State of Texas, are intended to present the financial position, the changes in financial position and, where applicable, cash flows of only that portion of the governmental activities, and the aggregate remaining fund information of the State of Texas 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 2.A, figure 8, the financial statements include investments valued at approximately \$7.746 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 No. 74

As discussed in Note 1, the System adopted the provisions of Governmental Accounting Standards Board Statement No. 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 Net Pension Liability and Related Ratios-Defined Benefit Plans, Schedule of Employer Contributions-Defined Benefit Plans, Schedule of Changes in Net OPEB Liability and Related Ratios, Schedule of Contributions from Employers and Non-employer Contributing Entities-Other Postemployment Benefit Plan, Schedule of Investment Returns-Annual Money-Weighted Rate of Return, Net of Investment Expense, and Notes to the Required Supplementary Information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which 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 the combining financial statements, supporting schedules, and other supplementary schedules are presented for purposes of additional analysis and are not a required part of the financial statements.

The information in the combining financial statements, supporting schedules, and other supplementary schedules, as listed in the table of contents are 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 combining financial statements, supporting schedules, and other supplementary schedules, as listed in the table of contents are fairly stated in all material respects in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial, and Statistical 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 them.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 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 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.

Aira R. Callier

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

December 20, 2017

### Management's Discussion and Analysis

Year Ended August 31, 2017

We are pleased to provide this overview of the financial activities of the Employees Retirement System of Texas (the System) for the year ended August 31, 2017. Please read it in conjunction with the Basic Financial Statements, which begin after this discussion.

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

This discussion and analysis is intended to serve as an introduction to the System's financial statements. The Financial Section includes the following exhibits in the Basic Financial Statements Section.

- Exhibits I and II are the government-wide statements of governmental net position and activities. These exhibits exclude the Fiduciary Fund activities and balances.
- Exhibits III and IV are Special Revenue Funds statements for four of the programs presented in the government-wide statements.
- Exhibits V and VI are the Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position for the Employees Life, Accident and Health Insurance and Benefits Fund (Group Benefits Program). Highlights are presented under the heading Financial Analysis on Government-wide Statements below.
- Exhibit VII is a required Statement of Cash Flows for the Proprietary Fund under which the Employees Life, Accident and Health Insurance and Benefits Fund (Group Benefits Program) is reported. This statement reports the transactions for the year on a cash basis. It is similar to Exhibit VI, the Statement of Revenues, Expenses, and Changes in Net Position, except that the focus of this statement is on the change to cash balances with accrued income and expense items eliminated.
- Exhibits VIII and IX, the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position, report activities of the defined benefit plans, including the retiree insurance plan. These exhibits also report the cafeteria plan and other deferred compensation plans.

# Financial Analysis on Government-wide Statements

The government-wide activities of the System are comprised of five programs:

- · Social Security Administration,
- Death Benefits for Public Safety Officers,

- Compensation to Victims of Crime,
- · Death Benefits for Retirees, and
- Employees Life, Accident and Health Insurance and Benefits

The Employees Life, Accident and Health Insurance and Benefits in Exhibits I and II had significant changes from the prior year. Exhibits V and VI provide additional information on the Employees Life, Accident and Health Insurance and Benefits. The changes in the program are summarized in millions as follows:

	2017	2016	Changes
	\$	\$	%
Net Position	87.94	498.87	(82.37)
Current Liabilities	986.52	639.45	54.28
Member and Employer			
Contributions	2,525.53	2,513.58	0.48
Benefit Payments	2,434.70	2,455.03	(0.83)

The change in Net Position is primarily due to a restatement to the beginning fund balances of the Employees Life, Accident and Health Insurance and Benefits, which is reported In Exhibit VI. See the Restatement section for detailed description of the restatement.

#### **Financial Highlights – Fiduciary Funds**

- Net position of the Fiduciary Funds administered by the System totaled \$28.45 billion as of August 31, 2017, compared with \$25.72 billion as of August 31, 2016. The investment portfolio returned 12.15% for the year. The majority of the increase resulted primarily from improvement in market conditions. The time weighted rate of return for three and five years were 5.88% and 8.43%, respectively.
- The one year money-weighted rates of return for the Fiduciary Funds are summarized as follows:

Fund Name	Rate (%)
Employees Retirement System Fund	11.84
Law Enforcement and Custodial Officer Supplemental Retirement Fund	11.80
Judicial Retirement System Plan Two Fund	11.88
Overall	11.84

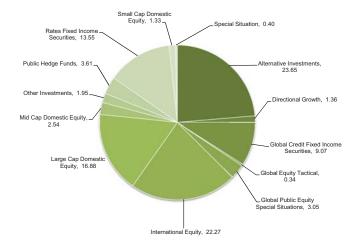
 The System's management has confidence in the financial markets and maintains a long term approach to investing the System's assets. The System's investments are highly diversified and are designed to withstand market fluctuations.

### Management's Discussion and Analysis (Continued)

Year Ended August 31, 2017

#### **Asset Allocation**

Asset Class	%
Alternative Investments	23.65
Directional Growth	1.36
Global Credit Fixed Income Securities	9.07
Global Equity Tactical	0.34
Global Public Equity Special Situations	3.05
International Equity	22.27
Large Cap Domestic Equity	16.88
Mid Cap Domestic Equity	2.54
Other Investments	1.95
Public Hedge Funds	3.61
Rates Fixed Income Securities	13.55
Small Cap Domestic Equity	1.33
Special Situation	0.40



For additional details, please see the *Report on Investment Activity* in the Investment Section.

 Changes in contributions and benefit payments in the Defined Benefit Plans are summarized in millions as follows:

		2017	2016	Changes
	\$		\$	%
Contributions:				
Retirement & Other	1	,533.60	1,505.53	1.87
Insurance	1	,204.10	916.46	31.38
Total (Exh. IX)	2	2,737.70	2,421.99	13.04
Benefit Payments:				
Retirement & Other	2	2,475.61	2,322.19	6.61
Insurance		995.82	912.89	9.08
Total (Exh. IX)	3	8,471.43	3,235.08	7.31

• The increase in insurance contributions is primarily due to a restatement of contributions reported in

previous fiscal year. The increase in retirement benefit payment is primarily due to an increase in the retiree population. The most recent actuarial valuations of the funded defined benefit plans were completed as of August 31, 2017. The funded ratios are as follows:

Plans	2017	2016
	%	%
Employees Retirement System	70.1	75.2
Law Enforcement and Custodial Officer Supplemental Retirement Fund	66.0	71.1
Judicial Retirement System of Texas Plan Two	90.8	92.9

See Exhibits VIII and IX for more information regarding each of the defined benefit plans and the deferred compensation and cafeteria plans.

#### **Fiduciary Net Position**

The amount of changes in fiduciary net position (in millions) were as follows:

	2017		2016	Changes
	\$		\$	%
Changes in Fiduciary				
Net Position (Exh. IX)	2	,226.34	498.31	346.78
Total Net Position	28	,446.06	25,717.46	10.61

The increase in changes in Fiduciary Net Position is due primarily to conditions in the financial markets. The gross time weighted rate of return was 12.15%, which was higher than the previous year return of 5.32%.

#### **Additions**

Retirement benefits are financed through the collection of member and State retirement contributions, investment income, legislative appropriations, and contributions transferred from the Teacher Retirement System. Additions in Fiduciary Net Position have been extracted from Exhibit IX, Statement of Changes in Fiduciary Net Position. The additions in millions were as follows:

	2017	2016	Changes
	\$	\$	%
Member Contributions	974.82	952.97	2.29
Employer Contributions	1,629.96	1,390.70	17.20
Non-Employer Contributing			
Entity Contributions	44.43	N/A	N/A
Net Investment Income	2,981.41	1,339.27	122.61
Other Additions	 170.84	168.62	1.32
Total Additions (Exh. IX)	 5,801.46	3,851.56	50.63

# Management's Discussion and Analysis (Continued)

Year Ended August 31, 2017

For the Employees Retirement Fund, member and State retirement contribution rates for fiscal year 2017 were 9.5% and 10.0% respectively. For the Law Enforcement and Custodial Officer Supplemental Retirement Fund (LECOS), both the State and member contributed 0.5% of the covered payroll. For the Judicial Retirement Plan II Fund, member and State retirement contribution rates were 7.5% and 15.663% respectively.

Net investment income is comprised of interest income, dividend income, securities lending income and related fees, and net appreciation or depreciation in fair value of investments, and is net of investment expenses.

#### **Deductions**

Benefit payments are the primary expense of a retirement system. Total deductions are comprised of benefit payments, refunds of contributions to members or beneficiaries for reasons of separation from service or death, other death benefit payments, contributions transferred to the Teacher Retirement System, and the cost of administering the System. Deductions in Net Position have been extracted from Exhibit IX, Statement of Changes in Fiduciary Net Position. Changes in deductions are summarized in millions as

	2017	2016	Changes
	\$	\$	%
Retirement Benefits and			
Refunds	3,541.24	3,316.31	6.78
Administrative Expenses	33.27	36.52	(8.90)
Other Deductions	0.61	0.42	45.24
Total Deductions (Exh. IX)	3,575.12	3,353.25	6.62

#### follows: Assets

Investments, both short-term and long-term, are the primary asset of the System's pension and other employee benefit trust funds as shown in the following table. Asset information has been extracted from Exhibit VIII. Changes in assets are summarized in

	2017	2016	Changes
	\$	\$	%
Cash and Cash			
Equivalents	96.99	75.24	28.91
Securities Lending			
Collateral	526.56	175.15	200.63
Investments	27,487.91	25,764.73	6.69
Receivables	810.95	759.87	6.72
Due From Other Funds/			
Agencies	339.95	17.50	1,842.57
Capital Assets	6.40	7.59	(15.68)
Total Assets (Exh. VIII)	29,268.76	26,800.08	9.21

# millions as follows: Liabilities

The condensed liabilities have been extracted from Exhibit VIII, Statement of Fiduciary Net Position. Changes in liabilities are summarized in millions as

	2017	2016	Changes
	\$	\$	%
Accounts Payable	289.27	393.44	(26.48)
Due To Other Funds/Agencies	5.19	510.27	(98.98)
Compensable Leave	3.21	3.07	4.56
Securities Lending Obligations	524.21	174.84	199.82
Other Liabilities	 0.83	1.00	(17.00)
Total Liabilities (Exh. VIII)	822.71	1,082.62	(24.01)

#### follows: Funding Status and Progress

Assets derived from investment asset appreciation and pension contributions in excess of pension benefit payments are accumulated by the System in order to meet future pension benefit obligations. Soundness in the funding of the System is sought through maintaining suitable reserves in the retirement annuity reserve account and the employee savings and state accumulation reserve accounts.

For funding purposes, the latest annual actuarial valuation of the System, as of August 31, 2017, (compared to the August 31, 2016 actuarial valuation) is summarized in millions as follows:

	Unfunded Accrued Actuarial Liability		
Plans		2017	2016
	\$		\$
Employees Retirement System		(11,258.0)	(8,746.0)
Law Enforcement and Custodial Officer Supplemental Retirement			
Fund		(475.9)	(378.9)
Judicial Retirement System of Texas Plan Two		(42.8)	(30.4)

For the Employees Retirement System Fund, the August 31, 2017 actuarial valuation shows an unfunded accrued liability of \$11.3 billion. The funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability, is 70.1% as of August 31, 2017. The valuation shows that the total normal cost is 13.95% of payroll and total contributions are 19.5% of payroll. The total contribution rate exceeds the normal cost by 5.55% of payroll, which is not sufficient to amortize the unfunded accrued liability over a finite period of time. The total contribution to fund the normal cost plus amortize the net liability balance over 31

# Management's Discussion and Analysis (Concluded)

Year Ended August 31, 2017

years is 23.21% of payroll. The actuarial net liability will need to be met over the coming years through improved investment performance, increased contributions, or plan design changes.

The August 31, 2017 actuarial valuation for the Law Enforcement and Custodial Officer Supplemental Retirement Fund shows that the total normal cost rate for fiscal year 2017 is 2.11% of payroll. At August 31, 2017, the unfunded accrued liability is \$475.9 million, and the funded ratio is 66.0%. Total contributions are 1.0% of payroll. The total contribution rate is below the normal cost for the current fiscal year by 0.02% and it is not sufficient to amortize the unfunded accrued liability over a finite period of time. For fiscal year 2017, the total contribution rate to fund the normal cost plus amortize the net liability balance over 31 years as a level percentage of payroll is 2.87% of payroll.

For the Judicial Retirement System of Texas Plan II, the August 31, 2017 actuarial valuation shows that the total normal cost is 20.57% of payroll and unfunded accrued liability is \$42.8 million. The funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability is 90.8% as of August 31, 2017. Total contributions are 23.093% of payroll. The total contribution rate exceeds the normal cost by 2.523% of payroll for the current fiscal year, which is sufficient to amortize the unfunded accrued liability in 63 years. The rate needed to fund normal cost plus amortize the unfunded accrued liability over 31 years is 23.85%.

The State Retiree Health Plan is currently funded on a pay-as-you-go basis. For the State Retiree Health Plan, the August 31, 2017 actuarial valuation shows an unfunded accrued liability of \$34 billion. The funded ratio is 2.04%. The valuation shows that the total normal cost is 12.7% of payroll. The Actuarially Determined Contribution (ADC) as of August 31, 2017 is 23.1% of payroll. Total contributions are 34.5% of the Actuarially Determined Contribution.

Contributions include health care premiums, State and member contributions, and retiree drug subsidy payments. Retiree premiums were \$195.8 million. Contributions from employers and non-employer contributing entities were \$890.7 million and \$44.4 million, respectively. The Medicare Prescription Drug Improvement and Modernization Act of 2003, which was effective January 1, 2006, established prescription drug coverage for Medicare beneficiaries known as Medicare Part D. One of the provisions of Medicare Part D entitled ERS to receive retiree drug subsidy payments from the federal government to offset pharmacy claims paid by ERS on behalf of certain plan participants. The plan received payments in 2017 totaling \$73.1 million. The above amounts, along with other additions of \$0.4 million plus net investment income of \$4.5 million resulted in additions of \$1.21 billion. These were offset entirely by \$996 million in benefit payments and \$5.6 million in administrative expense. The net plan position is \$709.8 million.

#### Restatement

The Texas Group Benefit Program (GBP) is a single trust plan for both active and retired members and their dependents. The Employees Life, Accident and Health Insurance and Benefits Fund, an internal service fund, is set up to account for the active members portion of the GBP. The State Retiree Health Plan (SRHP) Fund, a fiduciary fund, was created in fiscal year 2007 to account for the retired members portion of the GBP in order to report other post-employment benefits in accordance with the Governmental Accounting Standard Board Statement 43. The SRHP is a costsharing multiple employer plan and funded on a pay-asyou go basis, which the System interpreted should not have an ending fund balance. Therefore, the System reported the ending fund balance of the SRHP Fund in the Employees Life Accident and Health Insurance and Benefits Fund. In fiscal year 2017, the System received clarification that the balances should be reflected in each of the individual funds. As a result, the financial statements reflect a restatement of the beginning fund balance in each of the funds (Exhibits VI and IX). The health of the overall GBP should be viewed in totality.

#### **Contacting the System's Financial Management**

This financial report is designed to provide a general overview of the System's finances. If you have questions about this report or need additional financial information, please contact Machelle Pharr, Chief Financial Officer at Machelle.Pharr@ers.texas.gov or Eddie Chan, Assistant Director of Finance at Eddie. Chan@ers.texas.gov.



#### Exhibit I Statement of Net Position August 31, 2017

	Governmental Activities
Assets	\$
Current Assets:	
Cash and Cash Equivalents:	
Cash in State Treasury	20,912,695
Total Cash and Cash Equivalents	20,912,695
Securities Lending Collateral	18,348,382
Short-Term Investments	296,632,706
Legislative Appropriations	500
Receivables	216,155,887
Due from Fiduciary Funds	2,813,957
Due from Other Agencies	40,665
Total Current Assets	554,904,792
Non-Current Assets:	
Public Equities	246,680
Fixed Income	496,323,834
Alternative Investments	23,009,599
Total Non-Current Assets	519,580,113
Total Assets	1,074,484,905
Liabilities	
Current Liabilities:	
Payables	635,857,387
Due to Fiduciary Funds	331,421,439
Unearned Revenue	629,982
Obligations Under Securities Lending	18,627,435
Total Current Liabilities	986,536,243
Total Liabilities	986,536,243
Net Position	
Restricted for:	
Employee Benefits - Employees Life, Accident and	
Health Insurance and Benefits	87,944,721
Unrestricted	3,941
Total Net Position (Exh. II & III)	87,948,662
	· · · · · · · · · · · · · · · · · · ·

The accompanying Notes to the Basic Financial Statements are an integral part of this exhibit.

_	Prog	ram Revenues	
			Position
Expenses	Changes for Services	Operating Grants and Contributions	Governmental Activities
\$	5	\$	\$
151,728	69,938		(81,790)
8,826,024	8,826,024		
3,500,000	3,500,000		
10,892,633	10,892,633		
2,449,674,279	2,525,652,068	15,351,658	91,329,447
2,473,044,664	2,548,940,663	15,351,658	91,247,657
2	151,728 8,826,024 3,500,000 10,892,633 ,449,674,279	ExpensesServices151,72869,9388,826,0248,826,0243,500,0003,500,00010,892,63310,892,633,449,674,2792,525,652,068	Expenses         Services         Contributions           \$         \$         \$         \$           151,728         69,938         \$         \$           151,728         69,938         \$         \$           151,728         69,938         \$         \$           3,826,024         8,826,024         \$         \$           3,500,000         3,500,000         \$         \$           10,892,633         10,892,633         \$         \$           ,449,674,279         2,525,652,068         15,351,658

	General Revenues:	
	Transfers	64,000
	Total General Revenues	64,000
C	Change in Net Position (Exh. IV)	91,311,657
	<b>Net Position - Beginning</b>	498,895,664
	Restatement (Note 9)	(502,258,659)
Net Pos	sition - Beginning, as Restated	(3,362,995)
	Net Position - Ending (Exh. I)	87,948,662

# Exhibit III

## Balance Sheet – Governmental Funds

August 31, 2017

	Non-major Special Revenue Funds Totals (Note 1.E)
Assets	\$
Current Assets:	
Cash and Cash Equivalents:	
Cash in State Treasury	5,773
Total Cash and Cash Equivalents	5,773
Legislative Appropriations	500
Accounts Receivable	3,274
Due From Other Funds (Note 5.A)	12,000
Total Current Assets	21,547
Total Assets	21,547
Liabilities & Fund Balances	
Current Liabilities:	
Payables:	
Voucher/Accounts Payable	500
Due To Other Funds (Note 5.A)	17,064
Unearned Revenues	42
Total Current Liabilities	17,606
Total Liabilities	17,606
Fund Balances:	
Committed	3,941
Total Fund Balances (Exh. IV)	3,941
Total Liabilities & Fund Balances	21,547
Total Fund Balances - Governmental Funds (above):	3,941
Amounts reported for 'Governmental Activities' in the Statement of Net Position	
(Exhibit I) are different because:	
An Internal Service Fund is used by the System to account for the assets and liabilities associated with the Group Benefits Program for State employees and	
employees of certain institutions of higher education.	
The Net Position of the Internal Service Fund (Exhibit V) are included with	
'Governmental Activities' in the Statement of Net Position.	87,944,721
Net Position of Governmental Activities (Exh. I)	87,948,662

Exhibit IV

Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds Year Ended August 31, 2017

	Non-major Special Revenue Funds Totals (Note 1.E)
Revenues	\$
Legislative Appropriations Out of the State's General Revenue Fund:	
Appropriation Revenue:	
For Death Benefits Peace Officers, Etc.	8,826,024
For Victims of Crime	3,500,000
For Death Benefits-Retirees	10,892,633
Total Appropriation Revenue	23,218,657
Administration Fees for Social Security Administration	69,938
Total Revenues	23,288,595_
Expenditures	
Current:	
Death Benefits	23,218,657
Administrative Expenditures:	20,210,001
Salaries & Wages	96,786
Payroll Related Costs	34,453
Professional Fees & Services	4,621
Travel	1,229
Materials & Supplies	3,888
Communications & Utilities	1,957
Repairs & Maintenance	2,160
Rentals & Leases	1,049
Printing & Reproduction	89
Other Expenditures	5,496
Total Administrative Expenditures	151,728
Total Expenditures	23,370,385_
Deficiency of Revenues Under Expenditures	(81,790)
Other Finance Sources	
Transfers In-Retirement Membership Fees (Note 5.B)	64,000
Excess (Deficiency) of Revenues Over (Under)	(17,790)
Fund Palanaga Baginning	04 704
Fund Balances - Beginning Fund Balances - Ending (Exh. III)	<u> </u>
Net Change in Fund Balances - Governmental Funds:	(17,790)
Amounts reported for 'Governmental Activities' in the Statement of Activities (Exhibit II) are different because:	91,329,447
An Internal Service Fund is used by the System to account for the revenues	
and expenses associated with the Group Benefits Program for State	
employees and employees of certain institutions of higher education.	
The net revenue (expense) of the Internal Service Fund (Exhibit VI) is	
included in 'Governmental Activities' in the Statement of Activities.	

## Change in Net Position of Governmental Activities (Exh. II)

91,311,657

## Exhibit V

# Statement of Net Position – Proprietary Fund

August 31, 2017

#### **Internal Service Fund Employees Life, Accident and** Health Insurance and Benefits Fund (0973) (U/F 0973) Assets \$ Current Assets: Cash and Cash Equivalents: Cash on Hand Cash in State Treasury 20,906,922 Total Cash and Cash Equivalents 20,906,922 Securities Lending Collateral 18,348,382 Short-Term Investments 296,632,706 Receivables: Interest Receivable 3,158,455 Accounts Receivable 212,994,158 Total Receivables 216,152,613 Due From Other Funds (Note 5.A) 2,801,957 Due From Other Agencies (Note 1.G) 40,665 Total Current Assets 554,883,245 Non-Current Assets: Investments: (Note 2.A) **Public Equities** 246,680 **Fixed Income** 496,323,834 Alternative Investments 23,009,599 Total Non-Current Assets 519,580,113 **Total Assets** 1,074,463,358 Liabilities Current Liabilities: Payables: Claims Payable: Incurred, Self-Funded 7,842,134 Incurred But Not Reported, Self-Funded 608,052,866 Total Claims Payable 615,895,000 Premiums Payable 13,307,296 Administrative Fees and Other Payable 6,654,591 Total Payables 635,856,887 Due To Other Funds (Note 5.A) : Depository Interest Payable to Retiree Insurance Plan 1,909,640 Other Interfunds Payable 329,494,735 Total Due To Other Funds 331,404,375 Due to Other Agencies Unearned Revenue 629,940 **Obligations Under Securities Lending** 18,627,435 Total Current Liabilities 986,518,637 **Total Liabilities** 986,518,637 **Net Position Restricted For:** Employee Benefits - Employees Life, Accident and Health 87,944,721 **Insurance and Benefits** Total Net Position (Exh. VI) 87,944,721

## Exhibit VI Statement of Revenues, Expenses and Changes in Net Position – Proprietary Fund Year Ended August 31, 2017

	Internal Service Fund Employees Life, Accident and Health Insurance and Benefits Fund (0973) (U/F 0973)
Operating Revenues	\$
Contributions to Insurance Program:	
From Employers	1,963,387,637
From Members:	
For Employees	555,925,040
For COBRA	6,214,899
Total Contributions from Members	562,139,939
Total Contributions to Insurance Program	2,525,527,576
Other Operating Revenues:	
COBRA 2% Administration Fee:	124,492
Warrants Voided by Statute of Limitations	240
Penalty Assessed to Insurance Carrier	1,377,118
Miscellaneous Operating Revenue	403,214
Total Other Operating Revenues	1,905,064
Total Operating Revenues	2,527,432,640
Operating Expenses	
Employee Benefit Payments:	
For Employees <sup>1</sup>	2,408,452,105
For COBRA	25,972,196
For Health Savings Accounts	272,880
Total Employee Benefit Payments	2,434,697,181
Administrative Expenses:	
Salaries & Wages	6,748,434
Payroll Related Costs	2,441,369
Professional Fees & Services	923,744
Travel	54,918
Materials & Supplies	594,770
Communications & Utilities	365,342
Repairs & Maintenance	462,714
Rentals & Leases	156,539
Printing & Reproduction	15,302
Other Operating Expenses	3,297,151
Total Administrative Expenses	15,060,283
Total Operating Expenses	2,449,757,464
Operating Income	77,675,176
Non-Operating Revenues (Expenses)	
Net Decrease in Fair Value of Investments	(830,323
Interest Revenue	14,306,078
Securities Lending Activities:	
Loan Premium on Securities Lending	93,510
Broker Rebates	103,593
Less: Agent Fees	(19,710
Net Securities Lending Activity	177,393
Settlement Revenue	1,821
Commission on Futures Contracts	(698
Total Non-Operating Revenues	13,654,271
Change in Net Position	91,329,447
Net Position - Beginning	498,873,933
Restatement (Note 9)	(502,258,659)
Net Position - Beginning, as Restated	(3,384,726)
Net Position - Ending (Exh. V)	87,944,721

<sup>1</sup> The benefit payments is reported net of \$292,339,428 pharmacy rebates.



## Exhibit VII Statement of Cash Flows – Proprietary Fund Year Ended August 31, 2017

	Internal Service Fund Employees Life, Accident and Health Insurance and Benefits Fund (0973)/(U/F 0973)
Cash Flows from Operating Activities:	\$
Cash Received from Members	559,671,806
Cash Received from Employers and Non-employer Contributing Enti	
Cash Payments to Insurance Carriers and Third Party Administrators	
Cash Payments to Employees for Services	(12,701,339)
Cash Payments for Goods and Services	(3,902,175)
Other Cash Received	1,116,915
Net Cash Provided by Operating Activities	115,148,328
Cash Flows from Investing Activities:	
Net Purchases of Short-Term Investment Fund	(374,294,624)
Interest on Deposit in State Treasury	599,814
Net Cash Used by Investing Activities	(373,694,810)
Cash Flows from Non-capital Financing Activities:	
Loan from Fiduciary Fund (Note 5.A)	250,000,000
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents	(8,546,482)
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents:	250,000,000 (8,546,482)
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents	250,000,000
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year	250,000,000 (8,546,482) 29,453,404 20,906,922
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities:
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue Restatement (Note 9)	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities:	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659)
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949)
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable Decrease in Due From Other Agencies	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949) 135,287
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provide Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable Decrease in Due From Other Agencies Decrease in Due From Other Funds	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949) 135,287 503,985,425
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provided by Ope Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable Decrease in Due From Other Agencies Decrease in Accounts Payable Increase in Accounts Payable Increase in Due To Other Funds Decrease in Due To Other Agencies	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949) 135,287 503,985,425 24,689,895
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provided Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable Decrease in Due From Other Agencies Decrease in Due From Other Funds Increase in Accounts Payable Increase in Due To Other Funds	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949) 135,287 503,985,425 24,689,895 73,568,667
Net Cash Provided by Non-capital Financing Activities Net Decrease in Cash and Cash Equivalents Cash and Cash Equivalents: Beginning of Year End of Year Reconciliation of Operating Income to Net Cash Provided by Ope Operating Income Adjustments to Reconcile Operating Income to Net Cash Provided by Ope Settlement Revenue Restatement (Note 9) Change in Assets and Liabilities: Increase in Accounts Receivable Decrease in Due From Other Agencies Decrease in Accounts Payable Increase in Accounts Payable Increase in Due To Other Funds Decrease in Due To Other Agencies	250,000,000 (8,546,482) 29,453,404 20,906,922 erating Activities: 77,675,176 ed by Operating Activities: 1,821 (502,258,659) (57,675,949) 135,287 503,985,425 24,689,895 73,568,667 (4,939,825)

#### Non-Cash Investing Activities:

Net Depreciation in Fair Value of Non-Cash Equivalent Investments

The accompanying Notes to the Basic Financial Statements are an integral part of this exhibit.

(830,323)

## Exhibit VIII

## Statement of Fiduciary Net Position

August 31, 2017

	Employees Retirement Fund (0955)	Law Enforcement and Custodial Officer Supplemental Fund (0977)	Judicial Retirement System Plan II (0993)	Excess Benefit Arrangement (5039)
Assets	\$	\$	\$	\$
Cash and Short-Term Investments:		·		•
Cash and Cash Equivalents:				
Cash on Hand '	393,159	10,805	2,934	
Cash in Bank	23,000		· ·	
Cash in State Treasury	47,447,302	2,634,199	1,203,999	
Total Cash and Cash Equivalents	47,863,461	2,645,004	1,206,933	-
Securities Lending Collateral	500,985,793		7,991,362	
Short-Term Investments	331,868,190		5,242,897	
Total Cash and Short-Term Investments	880,717,444		14,441,192	-
Legislative Appropriations		0.,000,000	, ,	
Investments: (Note 1.G)				
Public Equities	12,678,706,164	445,121,427	202,340,459	
Derivatives	(87,459)	(3,070)	(1,396)	
Fixed Income	5,461,816,803		87,167,654	
Alternative Investments	7,347,818,206		117,267,219	
Total Investments	25,488,253,714		406,773,936	-
Receivables:	20,100,200,711	001,001,101	100,110,000	
Federal Receivable				
Interest and Dividends Receivable	77,853,358	2,732,942	1.242.403	
Contributions/Accounts Receivable	108,772,779	1,475,824	1,511,861	
Unsettled Sales-Investment Receivables	419,365,351	14,722,831	6,692,846	
Total Receivables	605,991,488		9,447,110	
Due From Other Funds (Note 5.A)	2,262,499		0,117,110	
Due From Other Agencies (Note 1.G)	8,093,935			
Capital Assets:	0,000,000			
Non-Depreciable:				
Land and Land Improvements	874,888			
Depreciable, Net of Accumulated	074,000			
Depreciation/Amortization of \$20,454,264				
Building	4,744,780			
Furniture and Equipment	551,682			
Computer Software	232,237			
Total Capital Assets	6,403,587			
Total Assets	26,991,722,667	945,616,441	430,662,238	
10101 A33613	20,331,722,007	343,010,441	430,002,230	
Liabilities				
Payables:				
Voucher/Accounts Payable	23,213,615	590,063	324,931	
Unsettled Purchases-Investment Payables	92,388,725		1,474,474	
Total Payables	115,602,340		1,799,405	
Due To Other Funds (Note 5.A)	28,367		50,051	
Due To Other Agencies (Note 1.G)	1,941,433	-	50,051	
Unearned Revenue	366,180		2,934	
Employees Compensable Leave	3,214,221	54,070	2,304	
Obligations Under Securities Lending	498,742,828	17,509,570	7,959,667	
Funds Held for Others	430,742,020	17,509,570	7,959,007	
Total Liabilities	619,895,369	21,626,861	9,812,057	
	019,095,309	21,020,001	5,012,057	-
Net Position Restricted for				
Pension and Other Employee Benefits	26,371,827,298	923,989,580	420,850,181	_
	20,011,021,200	520,000,000	120,000,101	

USAS Funds (U/F) are:

Fund 0955: 0955, 8955; Fund 0977: 0977, 8977; Fund 0993: 0993, 8993; Fund 5039: 5039; Fund 3973: 0973, 3973; Fund 0946: 0946, 8946; Fund 0945: 0945, 8945; Fund 3944: 0973,3944; Fund 0943: 0943, 8943. Fund 0001:1001; Fund 0001: 2001; Fund 8070: 8070; Fund 0980: 0980, Fund 0973: 4973

State Retiree Health Plan (3973)	Total Defined Benefit Plans	Texa\$aver 401(k) Trust Fund (0946)	Texa\$aver 457 Trust Fund (0945)	Spending Account Fund (3944)	Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds	Total Agency Funds
\$	\$	\$	\$		\$	\$	\$
45,232	452,130					452,130	
	23,000	46,802	18,588			88,390	
36,953,576	<u>88,239,076</u> 88,714,206	1,796,522	2,433,534	440,410	3,539,209	96,448,751	57,056
36,998,808	526,562,479	1,843,324	2,452,122	440,410	3,539,209	<u>96,989,271</u> 526,562,479	57,056
337,816,492	686,550,601			14,090	11,489,756	698,054,447	
374,815,300	1,301,827,286	1,843,324	2,452,122	454,500	15,028,965	1,321,606,197	57,056
	-					-	266,408
	13,326,168,050					13,326,168,050	
	(91,925)					(91,925)	
	5,740,734,711 7,723,048,308					5,740,734,711 7,723,048,308	
	26,789,859,144	_		-	-	26,789,859,144	-
144,146,736	144,146,736	2.000	0.007	540	14.050	144,146,736	
329,643 26,128,182	82,158,346 137,888,646	2,069 90,113	2,607 118,097	512 6,237	14,052 5,740,689	82,177,586 143,843,782	3,555
20,120,102	440,781,028	00,110	110,007	0,201	0,7 10,000	440,781,028	0,000
170,604,561	804,974,756	92,182	120,704	6,749	5,754,741	810,949,132	3,555
329,588,737	331,851,236 8,093,935				3,410	331,851,236 8,097,345	
	0,030,300				5,410	0,007,040	
	874,888					874,888	
	4,744,780					4,744,780	
	551,682					551,682	
	<u>232,237</u> 6,403,587		_			232,237 6,403,587	
875,008,598	29,243,009,944	1,935,506	2,572,826	461,249	20,787,116	29,268,766,641	327,019
							,
162,014,997	186,143,606	47,882	21,261	409	5,944,927	192,158,085	266,408
	97,106,728				, ,	97,106,728	,
162,014,997	283,250,334	47,882	21,261	409	5,944,927	289,264,813	266,408
2,786,361	3,113,800 1,941,433	53,942	22,679	8,194	45,139	3,243,754 1,941,433	
424,480	828,272		4,911			833,183	
	3,214,221					3,214,221	
	524,212,065					524,212,065	60,611
165,225,838	816,560,125	101,824	48,851	8,603	5,990,066	822,709,469	327,019
			·				
709,782,760	28,426,449,819	1,833,682	2,523,975	452,646	14,797,050	28,446,057,172	_
103,102,100	20,420,443,013	1,033,002	2,523,315	432,040	14,131,030	20,440,007,172	

# Exhibit IX

Statement of Changes in Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds

Year Ended August 31, 2017

	Employees Retirement Fund (0955)	Law Enforcement and Custodial Officer Supplemental Fund (0977)	Judicial Retirement System Plan II (0993)	Excess Benefit Arrangement (5039)
Additions	\$	\$	\$	\$
Contributions:	Ť	Ŧ	•	Ŧ
Member	685,461,587	9,583,045	6,016,757	
Employer	700,142,188	26,583,162	12,494,828	
Non-Employer Contributing Entity	,,	,,	,,	
Service Contributions Transferred from				
Teacher Retirement System (Note 1.G)	93,321,903			
Federal Revenues	00,021,000			
Other Contributions - Forfeitures				
Total Contributions	1,478,925,678	36,166,207	18,511,585	-
Investment Income:	.,,,	00,100,201		
From Investing Activities:				
Net Appreciation in				
Fair Value of Investments	2,275,734,476	79,793,860	36,014,931	
Interest and Dividends	583,522,790	20,481,024	9,213,405	
Class Action Settlements	1,895,276	66,425	29,988	
Total Investing Activity Income	2,861,152,542	100,341,309	45,258,324	
Less: Investment Expense	(33,674,310)	(1,179,918)	(463,758)	
Net Income, Investing Activities	2,827,478,232	99,161,391	44,794,566	
From Securities Lending Activities:	2,027,170,202	00,101,001	11,701,000	
Loan Premium on Securities Lending	2,765,952	96,973	43,801	
Broker Rebates	2,917,912	102,394	46,074	
Less: Agent Fees	(568,263)	(19,932)	(8,985)	
Net Income, Securities Lending Activities	5,115,601	179,435	80,890	-
Net Investment Income	2,832,593,833	99,340,826	44,875,456	-
Other Additions:	_,,,	,,	, ,	
Other Revenue:				
Warrants Voided by Statute of Limitations	140,110	751		
Reimbursements - Third Party	3,000			
Settlement Revenue	-,			
Rental Income	41,418			
Miscellaneous Revenue	214			
Administration Fees Revenue				
Total Other Revenue	184,742	751	-	_
Transfer In:	· - · , · · <b>-</b>			
Interfund Transfers In (Note 1.G):				459,258
Interagency Transfers In (Note 5.C):				287,270
Total Transfers In	_	-	_	746,528
Total Other Additions	184,742	751	-	746,528
Total Additions	4,311,704,253	135,507,784	63,387,041	746,528

USAS Funds (U/F) are:

Fund 0955: 0955, 8955; Fund 0977: 0977, 8977; Fund 0993: 0993, 8993; Fund 5039: 5039; Fund 3973: 0973, 3973; Fund 0946: 0946, 8946; Fund 0945: 0945, 8945; Fund 3944: 0973,3944; Fund 0943: 0943, 8943.

State Retiree Health Plan (3973)	Total Defined Benefit Plans	Texa\$aver 401(k) Trust Fund (0946)	Texa\$aver 457 Trust Fund (0945)	Commuter Spending Account Fund (3944)	State Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds
\$	\$	\$	\$		\$	\$
195,806,162 890,735,173 44,433,743	896,867,551 1,629,955,351 44,433,743			128,934	77,823,683	974,820,168 1,629,955,351 44,433,743
73,120,123	93,321,903 73,120,123				1,735,088	93,321,903 73,120,123 1,735,088
1,204,095,201	2,737,698,671	-	-	128,934	79,558,771	2,817,386,376
4,516,817	2,391,543,267 617,734,036 1,991,689	46,859	40,638	5,318	78,884	2,391,543,267 617,905,735 1,991,689
4,516,817	3,011,268,992	46,859	40,638	5,318	78,884	3,011,440,691
.,,	(35,317,986)	(54,266)	(22,221)	(1,310)	(7,188)	(35,402,971)
4,516,817	2,975,951,006	(7,407)	18,417	4,008	71,696	2,976,037,720
	2,906,726 3,066,380 (597,180) 5,375,926					2,906,726 3,066,380 (597,180) 5,375,926
4,516,817	2,981,326,932	(7,407)	18,417	4,008	71,696	2,981,413,646
6,487	147,348	(,,,,,)	,	.,	118	147,466
295,000 55,088	298,000 55,088 41,418 214	(703)			35,126	355,348 54,385 41,418 35,340
		566,358	718,573		,	1,284,931
356,575	542,068	565,655	718,573	-	92,592	1,918,888
	459,258 287,270 746,528					459,258 287,270 746,528
356,575	<u>1,288,596</u>	- 565,655	718,573	-	92,592	2,665,416
1,208,968,593	5,720,314,199	558,248	736,990	132,942	79,723,059	5,801,465,438

- to next page

Exhibit IX (Concluded) Statement of Changes in Fiduciary Net Position –

Pension and Other Employee Benefit Trust Funds

Year Ended August 31, 2017

	Employees Retirement Fund (0955)	Law Enforcement and Custodial Officer Supplemental Fund (0977)	Judicial Retirement System Plan II (0993)	Excess Benefit Arrangement (5039)
Deductions	\$	\$	\$	\$
Benefits:				
Benefits <sup>1</sup>	2,238,918,269	66,817,980	22,987,686	668,089
Refunds of Contributions	120,943,785	2,938,337	373,691	
Service Contributions Transferred to				
Teacher Retirement System (Note 1.G)	21,965,490			
Total Benefits	2,381,827,544	69,756,317	23,361,377	668,089
Administrative Expenses:				
Salaries & Wages	9,813,515	979,515	139,550	
Payroll Related Costs	3,064,404	394,124	51,715	
Professional Fees & Services	4,799,395	155,691	57,967	
Travel	59,558	2,957	558	
Materials & Supplies	1,153,815	87,435	15,396	
Communications & Utilities	536,196	62,778	7,378	
Repairs & Maintenance	689,782	46,142	9,676	
Rentals & Leases	348,828		4,395	
Printing & Reproduction	30,188		352	
Depreciation	1,003,482			
Amortization	464,472			
Other Operating Expenses	1,131,773	55,663	8,004	
Total Administrative Expenses	23,095,408	1,811,110	294,991	-
Other Deductions:				
Loss on Sale of Capital Assets	10,869			
Interfund Transfers Out (Note 1.G):				
Membership Fees	64,000			
Other Transfers	459,258			
Interagency Transfers Out (Note 5.C):				78,439
Total Transfers Out	523,258	-	-	78,439
Total Other Deductions	534,127		-	78,439
Total Deductions	2,405,457,079	71,567,427	23,656,368	746,528
Net Increase/(Decrease)	1,906,247,174	63,940,357	39,730,673	-
Net Position Restricted for				
Pension and Other Employee Benefits:				
Beginning of Year	24,465,580,124	860,049,223	381,119,508	
Restatement (Note 9)	,,, <b>-</b> -		,,	
Beginning of Year, as Restated	24,465,580,124	860,049,223	381,119,508	-
End of Year (Exh. VIII)	26,371,827,298		420,850,181	-

<sup>1</sup>The benefit payments in the State Retiree Health Plan is reported net of \$419,504,116 pharmacy rebates.

	State Retiree Health Plan (3973)	Total Defined Benefit Plans	Texa\$aver 401(k) Trust Fund (0946)	Texa\$aver 457 Trust Fund (0945)	Commuter Spending Account Fund (3944)	State Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds
\$		\$	\$	\$		\$	\$
	995,815,803	3,325,207,827 124,255,813			113,567	69,697,319	3,395,018,713 124,255,813
	995,815,803	21,965,490 3,471,429,130			113,567	69,697,319	21,965,490 3,541,240,016
	333,013,003	5,471,425,150	-	-	115,507	03,037,313	5,541,240,010
	2,968,380 1,076,811 399,439 24,187 261,573 160,805 204,190 68,684 6,708 457,912 <b>5,628,689</b>	13,900,960 4,587,054 5,412,492 87,260 1,518,219 767,157 949,790 446,199 39,761 1,003,482 464,472 1,653,352 <b>30,830,198</b>	291,368 108,415 5,472 2,571 15,276 10,476 8,394 4,134 508 32,519 <b>479,133</b>	136,760 50,899 2,139 1,335 7,070 4,431 3,770 1,892 244 60,053 <b>268,593</b>	45,651 16,736 866 680 2,453 818 1,798 767 53 2,682 72,504	192,145 76,646 6,333 952 19,939 11,443 18,972 5,504 353 1,286,806 <b>1,619,093</b>	14,566,884 4,839,750 5,427,302 92,798 1,562,957 794,325 982,724 458,496 40,919 1,003,482 464,472 <u>3,035,412</u> 33,269,521
		10,869 64,000 459,258 78,439 601,697 <b>612,566</b>	-	-	-	<u> </u>	10,869 64,000 459,258 78,439 601,697 <b>612,566</b>
1	,001,444,492	3,502,871,894	479,133	268,593	186,071	71,316,412	3,575,122,103
	207,524,101	2,217,442,305	79,115	468,397	(53,129)	8,406,647	2,226,343,335
	502,258,659	<b>25,706,748,855</b> 502,258,659	1,754,567	2,055,578	505,775	6,390,403	<b>25,717,455,178</b> 502,258,659
	502,258,659	26,209,007,514	1,754,567	2,055,578	505,775	6,390,403	26,219,713,837
	709,782,760	28,426,449,819	1,833,682	2,523,975	452,646	14,797,050	28,446,057,172



## Index

#### Note

1. Sumn	nary of Significant Accounting Policies	
	e Reporting Entity	
	ew Accounting Pronouncements	
	asic Financial Statements	
	easurement Focus - Basis of Accounting	
	asis of Presentation	
	udgets sets, Liabilities, Fund Balances and Net Position	
G. AS	ssets, Liabilities, Fund Balances and Net Position	
	I Disclosures on Funds	
	eposits, Investments and Repurchase Agreements	
	Ind Equity	
	erivative Instruments	
D. Lea	ases	63
	ed Benefit Plans	
	an Descriptions and Contributions	
	Inded Status and Funding Progress	
	etirement Systems Membership	
E. His	storical Trend Information	
	r Postemployment Benefits Plan	
	an Descriptions and Contributions	
	Inded Status and Funding Progress	
	ate Retiree Health Plan Membership	
	eserves storical Trend Information	
E. HIS	storical frend information	
5. Interfu	und Activities and Transactions	69
	terfund Receivables and Payables	
	terfund Transfers	
C. Inte	teragency Transfers	70
6. Conti	ngent Liability	70
A. Liti	igation	70
B. Sic	ck Leave	70
7. Risk I	Management	70
	sk Exposure	
	sk Financing	
C. Lia	abilities	70
8. Termi	ination Benefits	71
9. Resta	atement	71



# Notes to the Basic Financial Statements

August 31, 2017

# 1. Summary of Significant Accounting Policies

The financial statements have been prepared in conformity with generally accepted accounting principles (GAAP) as established by the Governmental Accounting Standards Board (GASB).

#### 1.A The Reporting Entity (In accordance with GASB Statement 14)

The Texas Constitution under Article XVI, Section 67 authorized the Texas Legislature to establish by law an Employees Retirement System of Texas (the System) to provide benefits for officers and employees of the State. The System was established in 1947 and operates primarily under Vernon's Texas Codes Annotated (V.T.C.A.), Texas Government Code, Title 8, Subtitle B.

The System has the powers, privileges and immunities of a corporation. The System is governed by a Board of Trustees, which is made up of six members responsible for the general administration and operations of the System. The six-member board is composed of three elected members and three members who are appointed respectively by the Governor, the Speaker of the Texas House of Representatives, and the Chief Justice of the Supreme Court of Texas. The Board appoints a person other than a member of the Board to serve at the Board's will as Executive Director to manage a staff of over 300 people to provide benefits to State and higher education employees, retirees, and beneficiaries. The Texas Legislature has the authority to set the contribution rates for both employee and employer retirement contributions.

Although the Employees Retirement System is a separate legal entity and by statute must prepare a separate annual financial report, it is also a retirement system of the State of Texas financial reporting entity and is included in the State's annual financial report as a blended component unit.

## **1.B New Accounting Pronouncements**

On September 1, 2016, the System adopted GASB Statement No. 74, *Financial reporting for Postemployment Benefit Plans Other Than Pension Plans*. This Statement replaces Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans,* as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-employer Plans. The scope of this Statement addresses reporting by Other Postemployment Benefit (OPEB) plans that administer benefits on behalf of governments. This statement modifies the requirements for note disclosures and Required Supplementary Information related to the measurement of the OPEB liabilities for which assets have been accumulated. In addition, it requires disclosure about the annual money-weighted rate of return on plan investments.

On September 1, 2016, the System also implemented GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73.* This Statement addresses issues regarding (1) the presentation of payroll related measures in Required Supplementary Information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. This Statement also requires that payments made by an employer on behalf of employees should be classified in a manner consistent with the pension plan terms.

#### 1.C Basic Financial Statements (In accordance with GASB Statement 34)

The Basic Financial Statements consist of:

- · Government-wide Financial Statements;
- Fund Financial Statements and Combining Financial Statements of the Defined Benefit Plans; and
- Notes to the Basic Financial Statements.

Government-wide financial statements report all assets, liabilities and net position of the System's Governmental Funds and Internal Service Fund. Governmental activities are generally financed through intergovernmental revenues and other non-exchange revenues. Fiduciary activities are excluded from the government-wide financial statements.

Fund financial statements are presented immediately after the government-wide financial statements. These statements present information for Governmental Funds, the Internal Service Fund, and the Fiduciary Funds. Fund financial statements have been prepared using the measurement focus appropriate for each type of fund.

## 1.D Measurement Focus – Basis of Accounting

(In accordance with GASB Statement 34)

*Measurement focus* refers to the definition of the resource flows measured. Basis of accounting refers to when revenues and expenses are recognized in the accounts and reported in the financial statements. The government-wide Statement of Net Position and Statement of Activities use the economic resources measurement focus and the accrual basis of accounting.

The government-wide Statement of Activities presents the System's governmental activities by function and distinguishes between program revenues and general revenues. Program revenues are further broken down into charges for services, and operating grants and contributions.

Program revenues of the governmental activities are: appropriations from the State's General Revenue Fund for law enforcement and peace officer death benefits, lump sum retiree death benefits, benefits for victims of crime, insurance premiums received by the Internal Service Fund from employees and the State of Texas, and all investment income deposited or credited to the Internal Service Fund.

Program expenses of the governmental activities are: death benefit expenses of the appropriated Special Revenue Funds, claims expenses, premium payments of the Internal Service Fund, and all administrative expenses. All other revenues and expenses of the governmental activities are considered to be general revenues/expenses.

Special Revenue Funds are accounted for under the modified accrual basis of accounting and current financial resources measurement focus. Under this combination, the financial statements focus on current assets and current liabilities and the changes in net current assets. All revenues reported are recognized based on the criteria of measurability and availability. Special Revenue Funds to be available if the revenues are due at year end and collected within 60 days thereafter. Amounts are defined as measurable if they can be estimated or otherwise determined. Expenditures are recognized when the related liability is incurred. Benefit payments to participants are recorded upon distribution.

Pension and Other Employee Benefit Trust Funds, and Internal Service Funds are maintained on the full accrual basis of accounting and the economic resources measurement focus. All economic

resources, including financial and capital assets and related liabilities, both current and long-term, and the changes therein are reported in the fund's financial statements. Additions are recognized when earned, and deductions are recognized when the liability is incurred, regardless of the timing of related cash flows. Contributions are recognized when due, pursuant to state law. Benefits and refunds of contributions are recognized when due and payable in accordance with the terms of the plan. Capital assets are depreciated. Agency Funds are used to report resources held by the System in a purely custodial capacity. Assets and offsetting liabilities are accounted for using the full accrual basis. Agency Funds have no revenues, expenditures, expenses, or fund balance and typically involve only the receipt and remittance of resources to individuals, the state or other governments.

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses/expenditures during the reporting period. Actual results could differ from those estimates.

#### 1.E Basis of Presentation (In accordance with GASB Statement 34)

#### Fund Structure

The fund financial statements are organized on the basis of funds, each of which is considered to be a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts. These accounts are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with applicable statutory guidelines or restrictions.

The System's funds fall under three fund categories: Governmental Funds, Proprietary Funds, and Fiduciary Funds. Following is a brief description of each fund category and fund type used by the System.

#### **Governmental Fund Category**

Governmental Fund reporting focuses primarily on the sources, uses, and balances of current financial resources and whether current-year revenues were sufficient to pay for current-year services.

For fiscal year 2017, the System continues to report the governmental funds as nonmajor funds. The reporting is based on a statement on page 58 of

August 31, 2017

GASB Statement No. 34, published in June of 1999, "The provisions of this statement need not be applied to immaterial items." The total assets, liabilities, revenues, or expenditures/expenses of the individual governmental funds displayed in Exhibits III and IV are much less than 5% of the funds managed by the System, and the activities in these funds are not the core of the System's business, which is pension and group benefits. Therefore, the System is reporting the governmental funds on Exhibits III and IV as nonmajor funds for fiscal year 2017.

#### **Special Revenue Funds**

Special Revenue Funds are used to account for the proceeds from specific revenue sources that are legally restricted to expenditures for specific purposes. The System displays General Revenue Funds/Accounts of the State of Texas as Special Revenue Funds, except for the Judicial Retirement System Plan One Fund, which is a pension plan not administered through a trust and, therefore, reported as an Agency Fund.

- Social Security Administration Fund This fund accounts for the expenditures of administration of the Social Security Program.
- Death Benefits Program for Commissioned Peace Officers, Firemen, etc. Fund (General Revenue Fund) – This fund accounts for payments of death benefits and administrative fees, which are funded by an appropriation from the State's General Revenue Fund. Established by V.T.C.A., Texas Government Code, Title 6, Chapter 615.
- Compensation to Victims of Crime This fund accounts for payments of death benefits to the beneficiaries of victims of crime. It is funded by an appropriation from the Victims of Crime Fund 0469, which was established by Texas Criminal Procedure Code, Article 56.54.
- Lump Sum Retiree Death Benefit Fund (General Revenue Fund) – This fund accounts for the payments of the \$5,000 lump sum benefit, which is an additional benefit provided by the System to the beneficiaries of retirees who die while still receiving a retirement annuity.

#### **Proprietary Fund Category**

Proprietary Fund reporting focuses on the determination of operating income, changes in net position, financial position, and cash flows.

#### Internal Service Fund

Internal Service Funds are used to report any activity that provides goods or services, on a cost-reimbursement basis, to other funds, departments, agencies of the reporting entity, or other governments.

Employees Life, Accident and Health Insurance and Benefits Fund – This fund accounts for the services provided to State of Texas agencies and higher education institutions that participate in the Texas Employees Group Benefits Program. Established by Chapter 1551, Texas Insurance Code.

#### **Fiduciary Fund Category**

The fiduciary funds are not part of the government-wide financial statements.

# Pension and Other Employee Benefit Trust Funds

Pension and Other Employee Benefit Trust Funds (Pension Trust Funds) report the resources that are required to be held in trust for the members and beneficiaries of defined benefit pension plans, deferred compensation plans, and other employee benefit plans.

- Employees Retirement System Fund (ERS) This fund is established by V.T.C.A., Texas Government Code, Title 8, Subtitle B and is used to account for the accumulation of resources for pension benefit payments to qualified State employees or beneficiaries.
- Law Enforcement and Custodial Officer Supplemental Retirement Fund (LECOS) – This fund is established by V.T.C.A., Texas Government Code, Title 8, Subtitle B and is used to account for the payments of benefits as provided by the Commissioned Law Enforcement and Custodial Officer Supplemental Retirement Benefit Act.
- Judicial Retirement System Plan Two Fund (JRS II) – This fund is established by V.T.C.A., Texas Government Code, Title 8, Subtitle E and is used to account for the accumulation of resources for pension benefit payments to eligible judicial employees who commenced service after August 31, 1985.
- Excess Benefit Arrangement (EBA) This fund is established by V.T.C.A., Texas Government Code, Title 8, Subtitle B and is used to account for the payments of annuities otherwise payable from the Employees Retirement Fund that exceed the limitations on benefits imposed by Internal Revenue Code (IRC) Section 415(b).
- State Retiree Health Plan (SRHP) The System provides postemployment health care, life and dental insurance benefits through the Group Benefits Program in accordance with Chapter 1551. The State Retiree Health Plan (SHRP) is a costsharing multiple-employer postemployment health care plan that covers retired employees of the State, and other entities as specified by the state legislature.

August 31, 2017

- Texa\$aver 401(k) Trust Fund This fund is established by V.T.C.A., Article 6252-3g and is used to account for the costs of administering the IRC Section 401(k) deferred compensation plan.
- Texa\$aver 457 Trust Fund This fund is established by V.T.C.A., Article 6252-3g and is used to account for tax-deferred portions of salaries of State employees in accordance with the provisions of IRC Section 457 and the costs of administering the program.
- Commuter Spending Account Fund This fund is a qualified transportation benefits plan authorized under Section 132 of the Internal Revenue Code. The Commuter Benefits program offers State employees pre-tax deduction for qualified parking expenses or mass transit expenses.
- State Employees Cafeteria Plan Trust Fund (TexFlex) – This fund is established by Chapter 1551, Texas Insurance Code and is used to account for before-tax salary reduction contributions from State employees and employees of higher education institutions, reimbursements for health care and dependent care, and the costs of administering the program.

## **Agency Funds**

Agency Funds are used to account for assets held by a governmental unit in a purely custodial capacity for individuals, other governmental entities, or private organizations. Agency Funds report only the balances of assets and liabilities and do not measure results of operations.

- Judicial Retirement System Plan One Fund (JRS I) (General Revenue Fund) – This fund is established by V.T.C.A., Texas Government Code, Title 8, Subtitle D and is used to account for appropriations received from the State's General Revenue Fund for annuity and refund payments to eligible judicial employees who commenced service prior to September 1, 1985.
- Unappropriated Receipts (General Revenue Fund)

   This fund accounts for member contributions received from the Judicial Retirement System Plan One Fund.
- Child Support Employee Deductions Offset Account – This fund accounts for monies withheld in compliance with state and federal law for child support orders. The orders received by employers require that child support payments be deducted from the paychecks of employees. Texas enacted a statute mandating electronic submittal of child support payments deducted from non-custodial parent payrolls, effective September 1, 2009. This process allows all child support payments from an

agency to be paid to the State Disbursement Unit (SDU). Once received by the SDU, the payment is sent to the custodial parent in compliance with the order.

- Direct Deposit Correction Account This fund accounts for monies which had been transmitted for direct deposit but were returned because problems prevented credit from being given to individual depositors. The System transfers the funds back to the original issuing fund.
- Health Savings Account This fund accounts for the employee and employer contributions to the Health Savings Account that the System has received and pending to be deposited to the bank who administers the employees' Health Savings Account.

## 1.F Budgets

## Appropriated Budgets

The Texas Legislature appropriates monies out of the State's General Revenue Fund for benefit payments of the Judicial Retirement System Plan One Fund and all Special Revenue Funds other than the Social Security Administration Fund on an 'estimated to be' basis. This type of appropriation means that the System has the authority to increase the appropriations as needed during the time period that the appropriation is allowed to remain open. For benefit payments, expenditures in excess of appropriations received are not a violation of budgetary authority.

The System is required to lapse all unencumbered appropriations by November 1 of each year.

#### **Non-appropriated Budget**

The Texas Legislature does not appropriate monies to the System for administrative expenses. A nonappropriated budget for administrative expenses, including capital outlay, is prepared annually and approved by the System's Board of Trustees at the lineitem level. The System's management must approve any transfers between line items, and the Board must approve any amendments to the approved budget. Administrative expenses are budgeted in and paid primarily from the Employees Retirement Fund. Expenses are allocated monthly to the other funds based on percentages determined by time sheets and resource requirements used to administer each fund within each division. Expenses are limited by a statutory provision that no expense can be made for more than the State of Texas pays for similar services. Non-appropriated budgets are not lapsed at year-end.

## 1.G Assets, Liabilities, Fund Balances and Net Position

(In accordance with GASB Statement 34)

#### **Cash and Short-Term Investments**

Cash and Cash Equivalents (in accordance with GASB Statement 9), as reported in the Statement of Cash Flows for the Internal Service Fund, are composed of cash on hand, cash in local banks, cash in the State Treasury, and cash equivalents. Cash in local banks is held by Fiduciary Funds. Cash balances of most state funds are pooled and invested by the Treasury Operations Division at the Comptroller's office. Interest earned is deposited in the specified funds designated by law.

The Statement of Cash Flows for proprietary fund shows the change in cash and cash equivalents during the fiscal year. Both Cash Equivalents and Short-Term Investments are defined as short-term, highly liquid investments that are both (a) readily convertible to known amounts of cash and (b) so near maturity they present insignificant risk of changes in value due to changes in interest rates. Investments with an original maturity of three months or less and that are used for cash management rather than investing activities are considered cash equivalents. Restricted securities held as collateral for Securities Lending are not included as cash equivalents on the Statement of Cash Flows. The petty cash and travel advance accounts, and the Texa\$aver and State Employees Cafeteria Plan accounts (Cash in Bank) are maintained at a local commercial bank.

#### Valuation

Cash Equivalents and Short-Term Investments are reported at fair value.

#### Investments

Investments of the Employees Retirement System Fund, the Law Enforcement and Custodian Officer Supplemental Retirement Fund, the Judicial Retirement System Plan Two Fund, and the long-term portion of the Employees Life, Accidental and Health Insurance and Benefits Fund are consolidated in the Investments pool Fund. See also *Investment Unit Trust Accounting*.

#### Valuation

Investments of the Pension Trust Funds and Internal Service Fund are reported at fair value in accordance with GASB Statement 72, respectively. Fair value is defined as 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.

#### **Public Equities and Fixed Income**

The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available. Many factors are considered in arriving at that value. In general, however, corporate bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings. Public real estate are listed securities (Real Estate Investment Trusts or "REITs" and Real Estate Operating Companies or "REOCs") traded in the public exchange. Public Equities include one commingled equity limited partnership priced at the net asset value per share by the general partner.

#### **Derivative Investments**

Derivative investments are either executed on an exchange or in a bilateral deal in an over-the-counter (OTC) market. Options are priced at the mean and settle price and Forwards priced at the last sale price in their respective active markets.

#### Alternative Investments

For alternative investments, the System has established a Valuation Committee that periodically reviews and approves the fair value of these investments. Certain foreign alternative investments in the inception year are reported at cost, which approximates fair value. Fair value at fiscal year-end is based on the fair value of net assets reported in the partnership's most recent capital account statements from the general partner or administrator of the fund, adjusted for any cash flows and material changes in fair value, according to the Valuation Committee guidelines, between the reporting date of partnership's most recent capital account statements and the System's fiscal year end date. The System's alternative investments include private equity, private real estate, private infrastructure, private fixed income and hedge funds.

The general nature of the System's private equity funds is that distributions are received through the liquidation of the underlying assets of the funds. Private equity partnerships have an expected life of approximately seven to fifteen years and are not liquid in nature. The fair value of the net assets is estimated using recent observable information for similar investments, such as discounted cash flows, earning multiples and company comparables.

The System's private real estate investments are limited partnerships. The partnerships participate in both closed-ended and open-ended commingled funds. The System does not directly own buildings. Closedended funds typically have a pre-determined life of seven to twelve years (plus possible extensions) and are illiquid in nature. Open-ended funds do not have

August 31, 2017

a pre-determined liquidation date and the System has the ability to sell its interests periodically. The fair value of private real estate is based on the set asset values of limited partner interests in the commingled funds. Each commingled fund is audited annually and the underlying investments may be periodically appraised by an independent third party. Valuation assumptions can be subjective and are based on market and property specific inputs.

The System's hedge fund investments represent ownership interest in limited partnerships or limited liability companies. These types of investments consist of private comingled investment vehicles that issues securities to accredited investors or qualified purchasers. The fair values of hedge funds are based on the net assets of the limited partnerships. These funds' valuations are appraised by an independent administrator and reconciled annually to the audited financial statements. In general, the System's hedge funds are categorized into the following strategies:

- Equity Long/Short hedge funds This strategy includes long and short investments made primarily in developed market common stocks. Management of each hedge fund has the ability to shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long to a net short position.
- Event-Driven hedge funds These types of investments include hedge funds that aim to profit from a catalyst. In many instances, these catalysts can be associated with economic, political, corporate, and government-driven events. A majority of these investments are targeted at corporate actions.
- Macro hedge funds These types of investments include hedge funds that invest in a range of strategies which are based on movements in macroeconomic variables. Management of each hedge fund can use a variety of instruments including fixed income, currency, commodity, or equity securities.
- Multi-Strategy hedge funds These investments include hedge funds that pursue multiple strategies aimed at diversifying risks and reducing volatility. The System defines multi-strategy funds as having 50% of the funds' exposure to event-driven strategies and the other 50% to relative value strategies.
- Opportunistic hedge funds These include investments in hedge funds that provide niche and often uncorrelated exposures. Management of such funds can use a variety of instruments including credit, equity, and derivative securities; some of which may be less-liquid in nature.
- Relative Value hedge funds This strategy seeks to capitalize on the mispricing of related securities or financial instruments.

Private fixed income funds are ownership in limited partnerships which consists of private investment funds

that are either comingled or separate. These funds are classified as predominately "credit" instruments that may be liquid or illiquid. The System will utilize a process similar to that of private equity funds in assessing the fair value of the fund. The expected life of the funds is approximately three to ten years, with the option of two one-year extensions. The valuations are reviewed at the end of each reporting period as financial statements or cash flow information becomes available.

The System's private infrastructure investments are in large-scale public systems, services and facilities that are necessary for economic activity. These types of relatively illiquid investments are often made in essential services with high barriers to entry and predictable cash flows and have expected life from ten to twelve years, with the option of one to three-year extension. The fair value of the net assets is estimated using a variety of approaches, which may involve using recent information from comparable companies, replacement cost analysis, and discounted cash flows. Each investment is typically audited annually and appraised periodically by an independent third party.

If the System has investments where no readily ascertainable market value exists, the System's management, in consultation with their investment advisors and the Master Trust Custodian, will determine the fair values for those investments.

#### **Short-Term Investments**

The System's short-term investment is Short-Term Investment Fund, which is a 2a-7 like fund and is priced at the Net Asset Value per Share by the custodian bank.

#### **Invested Securities Lending Collateral**

The cash collateral from the borrowers in the securities lending program that the System reinvested are valued according to the types of those reinvestments.

#### **Permissible Investments**

Eligible securities are as follows:

- Domestic equities, screened to eliminate against any known bankruptcy proceedings, lawsuits, or breach of corporate ethics that might jeopardize the company's economic future or existence.
- Equities of companies domiciled in countries outside of the United States.
- Global fixed income securities, subject to a minimum credit rating of "CCC-, Caa3," or their equivalent as rated by two Nationally Recognized Securities Rating Organizations, as included in the Barclays Capital Universal Index or successor index. Fixed income and short-term securities that downgrade to below the acceptable rating described above will be exchanged or sold within one year, but special exceptions may be

August 31, 2017

permitted and reported to the Board of Trustees.

- Interests in private securities exempted from registration under federal and state securities laws, including certain limited liability securities and vehicles, such as limited partner interests in limited partnerships, trusts and limited liability corporations as deemed appropriate by the System.
- Private equity and private real estate investments must be institutional in quality and meet the parameters specified in the System's investment policy.
- Global publicly traded real estate equities subject to the quality standards set forth in the investment policy.
- Foreign currencies transactions and foreign currency derivatives are permitted as necessary to facilitate the settlement of foreign security transactions, consistent with industry best practices. These transactions are also permitted to settle private market transactions, meet capital calls or exchange distributions back into U.S. dollars.
- Forward, futures and options, subject to the restrictions set forth in the investment policy.

#### **Investment Asset Allocation**

The System's policy in regard to the allocation of investment assets is established and may be amended by the Board of Trustees. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plans (See Figure 14 in Note 3.B for the most recent target asset allocation).

#### **Investment Unit Trust Accounting**

In order to provide flexibility of asset allocation and effectively invest in a diversified manner, the Board of Trustees directed that investment unit trust accounting be implemented. The pension funds began the unit trust accounting on September 1, 2006 and the long term portion of the Employees Life, Accident and Health Insurance and Benefits Fund on January 1, 2009. Unit trust accounting involved assigning units to each fund based on the share of the funds' investment fair value to the total fair value of the consolidated investments. The custodian bank prepares consolidated bank statements and fund statements that show the unit trust accounting activity. Investment earnings and appreciation increase the per unit value of all participating funds. Deposits and withdrawals for each fund change the number of units held by each fund. These changes are recorded at the unit value of the transaction date. Investment earnings or losses and fees for the total consolidated fund are allocated to each of the participating funds on a daily basis using the pro rata fair value share.

#### **Capital Assets**

Pension Trust Funds are accounted for on a cost of service measurement focus. This means that all capital assets associated with the funds' activities are included in their statements of net position. Purchases of capital assets by these funds are reported at cost or, if donated, at fair market value on the acquisition date. Depreciation of all exhaustible capital assets is charged as an expense against the funds' operations. Accumulated depreciation is reported on the statements of net position.

Depreciation has been provided over the estimated useful lives, using the straight-line method. The capitalization thresholds and estimated useful lives are shown in Figure 1.

#### Figure 1 Capitalization Thresholds and Useful Lives

Asset Category	Capitalization Threshold	Estimated Useful Life (in Years)
	\$	
Land	0	N/A
Building and Improvements	100,000	40
Computer Software	100,000	5 - 6
Furniture and Equipment	5,000	3 - 10
Motor Vehicles	5,000	7
Internally Generated Computer Software	1,000,000	5 - 6

#### **Accounts Payable**

Accounts Payable under the Internal Service Fund include claims incurred but not reported by the participants prior to fiscal year end and payable in future years as estimated by the System's actuary.

#### **Employees Compensable Leave**

Under Section 661.062 of Texas Government Code Chapter 661, a State employee is entitled to be paid for all unused vacation time accrued, in the event of the employee's resignation, dismissal, or separation from State employment, provided the employee has had continuous employment with the State for six months.

In Fiduciary Fund types, salary costs related to employees' rights to be compensated for vacation time are accrued as expenses of the period in which the services were rendered. Accumulated compensable leave liabilities are reported in the Statement of Fiduciary Net Position for the Employees Retirement Fund.

August 31, 2017

No liability is recorded for non-vesting accumulating rights to receive sick leave benefits.

#### Fund Balances – Governmental Funds

Fund balance is the difference between fund assets and liabilities on the governmental fund statements. Committed fund balance reports an amount that has spending limitations that are internally imposed by formal action of the government's highest level of decision-making authority (e.g., legislature). These committed fund balance amounts usually cannot be redeployed for other purposes unless the same decision makers reverse or modify the imposed restrictions by the same type of formal action that was originally used to create the restriction.

#### Net Position – Restricted for Pension Benefits

The net position of the retirement trust funds consists of up to five reserve accounts, depending on the particular fund.

- The Employee Savings Account represents the accumulation of active and inactive member deposits plus interest.
- The State Accumulation Account represents reserves available to fund the future active member retirement, death, and survivor benefits.
- The Retirement Annuity Reserve Account represents reserves to pay retirement, death, and survivor benefits and post-retirement benefit increases for current retirees.
- The Interest Account represents the interest, dividends, securities lending income, and net appreciation or depreciation received and accrued on the invested assets of the fund. All investment income is transferred to the Employee Savings, State Accumulation, and Retirement Annuity Reserve accounts based on applicable Texas statutes.
- The Expense Account represents reserves to pay all administration and maintenance expenses of the retirement trust funds.

See Note 3.D for the balances of each funded plans' legally required reserves.

#### **Restricted Net Position – Proprietary Fund** (In accordance with GASB Statement 34)

Chapter 1551 of the Texas Insurance Code requires that the System estimate funds needed for an average 60-day period, considering projected claims and administrative expenses for a contingency reserve fund for self-funded coverage. The System is further required to include this amount in its legislative appropriations request. Subject to adequate appropriation from the legislature, the estimated amount must be placed in the contingency reserve fund along with interest on, earnings of, and proceeds from the sale of investments of assets in the contingency reserve fund. This reserve amount is reported as 'Restricted Net Position' in both the government-wide and the proprietary fund Statement of Net Position.

#### **Interfund Activity and Balances**

#### (In accordance with GASB Statement 34)

Activities between the System and agencies of the State of Texas, and activities between the System's funds have been analyzed and classified in accordance with the following criteria.

#### Interfund Services Provided and Used

This activity represents transactions that would be treated as revenues, expenditures or expenses if they involved organizations external to State government. They are accounted for as revenues by the recipient fund and as expenditures or expenses by the disbursing fund. Contributions for retirement and insurance from other funds within the State of Texas reporting entity are reported as Interfund Services Provided and Used. The accrual of Interfund Services Provided and Used is classified as Accounts Receivable and Accounts Payable on the government-wide and the fund financial statements.

#### **Interfund Reimbursements**

This activity represents expenditures or expenses applicable to a particular fund but paid from another fund. The transactions are reported as expenditures or expenses in the reimbursing fund and a reduction of corresponding amounts in the reimbursed fund. Administrative expenses paid by the Employees Retirement System Fund and subsequently reimbursed by the System's other funds are reported as Interfund Reimbursements in the financial statements. The accrual of Interfund Reimbursements is reported on the government-wide Statement of Net Position as Due From External Parties or Due To External Parties and on the fund financial statements as Due From Other Funds or Due To Other Funds.

#### Interfund Transfers

This activity represents routine transfers of resources. Interfund transfers are reported in the Other Financing Sources (Uses) section for Governmental Funds and as Other Additions or Other Deductions in the Pension Trust Fund financial statements. The accrual of Interfund Transfers is reported on the government-wide Statement of Net Position as Due From External Parties or Due To External Parties and on the fund financial statements as Due From Other Funds or Due To Other Funds. Retirement Membership Fees received by the Employees Retirement

August 31, 2017

System Fund and transferred to other funds of the System are reported as Interfund Transfers. See Note 5.B Interfund Transfers.

#### Interagency Activity and Balances

(In accordance with GASB Statement 34)

This activity represents routine transfers of funds between the System and other agencies and institutions within the State of Texas financial reporting entity.

At year end, the accrual of transfers from or to the funds of the System are reported as Due To Other Agencies or Due From Other Agencies on the Statements of Net Position. See Note 5.C Interagency Transfers.

#### Reclassifications

Certain items from the prior year's financial statements have been reclassified for comparative purposes. Such reclassifications had no effect on previously reported net position.

#### **Change in Accounting Estimate**

The pharmacy benefit management company periodically pays the System pharmacy rebates on the prescription drug expenses that the System pays for the active members and retirees in the Texas Group Benefits Program (GBP).

In previous years, the System estimated that the rebates should be allocated evenly to the Employees Life, Accident and Health Insurance and Benefits Fund, which is an internal service fund set up for reporting the active members portion of GBP, and the State Retiree Health Plan Fund, which in an other postemployment employee benefit trust fund set up for reporting the retirees portion of GBP.

In fiscal year 2017, the System performed a thorough review on the estimated allocation percentage and determined that 80% of the rebates should be allocated to the Employees Life, Accident and Health Insurance and Benefits Fund and 20% to the State Retiree Health Plan Fund, effective September 1, 2016.

# 2. Detail Disclosures on Funds

(In accordance with GASB Statements 3, 28, 40, 67, and 72)

## 2.A Deposits, Investments, and Repurchase Agreements

#### **Deposits**

As of August 31, 2017, the total carrying amount of Deposits was \$10,744,457 as presented in Figure 2. The deposits in investment components are temporary deposits related to unsettled trade or income transactions.

#### Figure 2 Deposits of Cash in Bank

Deposits	Carrying Value	Bank Balance
	\$	\$
Fiduciary Funds:		
Cash in Bank (Exh. VIII)	88,390	87,413
Deposits with Custodian Bank	10,656,067	10,656,067
Totals	10,744,457	10,743,480

#### **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. The System does not have a deposit policy for custodial credit risk. The \$10,656,067 balance of deposits with custodian bank as of August 31, 2017 represents amounts held in foreign currency and cash balance not yet invested. These deposits were uninsured and uncollateralized and subject to custodial credit risk.

## Investments

#### **Policy of Asset Allocation**

In its investment policy, the System categorizes investment assets into principal components that align with investment strategies. The System's investment strategies are domestic equities, international securities, global credit, rates, public real estate, and alternative investments. A principal component may include one or more investment asset classes, depending on the investment strategy.

The majority of the investments in the domestic equities component are equity securities that are issued in the United States. Real Estate Investment Trust (REITs), Exchange Traded Funds (ETFs), and international securities are also included in this component to provide liquidity. The International securities component invests in equity securities that are mainly issued overseas. It also includes other investments classes similar to those of the domestic equities component. The rates component invests in domestic and international fixed income securities that have a relatively low risk of default. The global credit component invests in securities that have high risk and long maturity. It also invests in ETFs and hedge funds to provide liquidity and absolute returns. The public real estate component invests mainly in REITs. It also includes domestic and international equities and may include hedge funds to provide liquidity, diversification, and high returns to the component.

August 31, 2017

Alternative Investments include private equity, private real estate, private infrastructure, private fixed income and hedge funds. The majority of the System's alternative investments are in limited partnerships. The private real estate investments specialize in real estate. Private Infrastructure investments are based on event-driven strategies (e.g., tender offers, mergers, and acquisitions etc.). Hedge fund investments are also based on strategies (e.g., equity long/short, opportunistic, relative value, etc.). Private fixed income funds invest in foreign and domestic fixed income securities.

#### **Fair Value Measurement**

The System uses the following valuation techniques to measure fair value of investments:

Market Approach:	Prices and other relevant information generated by market transactions involving identical or similar assets, liabilities, or group of assets and liabilities are used to measure fair value.
Cost Approach:	The amount that would be required currently to replace the present service capacity of an asset is used to measure fair value.
Income Approach:	Future amounts (for example, cash flows, or revenues and expenses) are converted to a single current amount to determine fair value.

The System categorizes their fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and gives the highest priority (Level 1) to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority (Level 3) to unobservable inputs.

- Level 1: Unadjusted quoted prices for identical instruments in active markets.
- Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3: Valuations derived from valuation techniques in which significant inputs are unobservable. Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

U.S. treasury securities, equity securities, Real Estate Investment Trusts, and Exchange Traded Funds classified in Level 1 are valued using prices quoted in active markets for those securities. Debt and debt derivative securities classified in Level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price feed by the applicable day's Index Ratio.

Level 2 debt securities also have non-proprietary information from multiple independent sources that were readily available to market participants who are known to be actively involved in the market. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities.

Level 3 debt securities use proprietary information or single source pricing. Value of equity securities classified in Level 3 is based on last trade data that is 30 days or more before the fiscal year end. Real assets, if any, classified in Level 3 are real estate investments generally valued using the income approach by internal manager reviews or independent external appraisers.

The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. When inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation.

The fair values of alternative investments are measured at net asset value (NAV) per share (or its equivalent). The valuation method using NAV per share (or its equivalent) is consistent with the Financial Accounting Standards Board's measurement principles for an investment company. The System's investments are summarized in Figure 3.

#### **Custodial Credit Risk**

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The System's investment policy limits holding of securities by counterparties to those involved with securities lending and those used as collateral for futures contracts. The System has contracted with The BNY Mellon Asset Servicing to serve as the custodian for the System's investments. Investments are registered in the name of the System or in the name of the System's custodian and are held in the name of the System by the custodian.

Fai	Figure 3 ir Value of Invest	tments			
Fide des Freder	Level 1	Level 2	Level 3	NAV	Total
Fiduciary Funds: Investments:					
Public Equities:					
Domestic Equities	5,836,178,089		25,748		5,836,203,837
Commingled Equities	-,, -,		-, -	183,336,334	183,336,334
International Equities	6,110,792,048				6,110,792,048
Exchange Traded Funds (ETFs)	221,166,884				221,166,884
Real Estate Investment Trust (REITs)	974,668,947				974,668,947
Total Public Equities Derivatives:	13,142,805,968	-	25,748	183,336,334	13,326,168,050
Options	(91,925)				(91,925)
Fixed Income:	(01,020)				(01,020)
Exchange Traded Funds (ETFs)	428,748,898				428,748,898
Real Estate Investment Trust (REITs)		37,055,848			37,055,848
U.S. Treasury Securities	3,055,021,355	4 470 040 000	500 070		3,055,021,355
Corporate Obligations Corporate Asset and Mortgage Backed Securities		1,173,013,066 119,288,962	560,872		1,173,573,938 119,288,962
U.S. Government Agency Obligations		537,172,731			537,172,731
International Obligations		389,872,979			389,872,979
Total Fixed Income	3,483,770,253		560,872	-	5,740,734,711
Investments Measured at the Net Asset Value (NAV):				EZ4 470 004	574 470 004
Equity Long/Short Event Driven				574,479,004 226,515,962	574,479,004 226,515,962
Macro				122,230,151	122,230,151
Multi-Strategies				212,261,004	212,261,004
Opportunistic				214,689,977	214,689,977
Private Equity				3,400,905,326	3,400,905,326
Private Real Estate Private Infrastructure				1,930,818,443 463,806,871	1,930,818,443 463,806,871
Private Fixed Income				270,118,047	270,118,047
Relative Value				307,223,523	307,223,523
Total Investments Measured at the NAV:	-	-	-	7,723,048,308	7,723,048,308
Total Investments	16,626,484,296	2,256,403,586	586,620	7,906,384,642	
Securities Londing Colleterals					(Exh. VIII)
Securities Lending Collateral: Government Repurchase Agreements	526,562,479				526,562,479
Total Securities Lending Collateral	526,562,479				526,562,479
<b>3</b>					
					(Exh. VIII)
Short-Term Investments:					(Exh. VIII)
U.S. Treasury Securities	233,440,095				233,440,095
U.S. Treasury Securities Money Market and Bond Funds				451,444,903	233,440,095 451,444,903
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash	2,513,382			451,444,903	233,440,095 451,444,903 2,513,382
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits	2,513,382 10,656,067				233,440,095 451,444,903 2,513,382 10,656,067
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash	2,513,382			451,444,903 <b>451,444,903</b>	233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b>
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits	2,513,382 10,656,067				233,440,095 451,444,903 2,513,382 10,656,067
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund:	2,513,382 10,656,067				233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b>
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments:	2,513,382 10,656,067	<u> </u>	<u> </u>		233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b>
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities:	2,513,382 10,656,067 <b>246,609,544</b>	<u> </u>	-		233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII)
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities	2,513,382 10,656,067		- 469		233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b>
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income:	2,513,382 10,656,067 <b>246,609,544</b> 246,211	<u> </u>	- 469		233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities	2,513,382 10,656,067 <b>246,609,544</b>	-	- 469		233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII)
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities	2,513,382 10,656,067 <b>246,609,544</b> 246,211	-	- 469		233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680 22,343,102
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102	61,607,871	- 469 29,228		233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b> (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102	61,607,871 12,366,498			233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b> (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102	61,607,871 12,366,498 56,485,159			233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b> (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102 321,243,723	61,607,871 12,366,498 56,485,159 20,317,187	29,228		233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b> (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159 20,317,187
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations International Obligations	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102	61,607,871 12,366,498 56,485,159			233,440,095 451,444,903 2,513,382 10,656,067 <b>698,054,447</b> (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations International Obligations Total Fixed Income Investments Measured at the Net Asset Value (NAV): Opportunistic	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102 321,243,723	61,607,871 12,366,498 56,485,159 20,317,187	29,228	451,444,903 - 8,933,120	233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159 20,317,187 496,323,834 8,933,120
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations International Obligations Total Fixed Income Investments Measured at the Net Asset Value (NAV): Opportunistic Private Fixed Income	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102 321,243,723	61,607,871 12,366,498 56,485,159 20,317,187	29,228	451,444,903 451,444,903 451,444,903 45,903 8,933,120 14,076,479	233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159 20,317,187 496,323,834 8,933,120 14,076,479
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities: Domestic Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations International Obligations Total Fixed Income Investments Measured at the Net Asset Value (NAV): Opportunistic Private Fixed Income Total Investments Measured at the NAV	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102 321,243,723 <b>343,586,825</b>	61,607,871 12,366,498 56,485,159 20,317,187 <b>152,707,781</b>	29,228 <b>29,228</b>	451,444,903 451,444,903 - 8,933,120 14,076,479 23,009,599	233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159 20,317,187 496,323,834 8,933,120 14,076,479 23,009,599
U.S. Treasury Securities Money Market and Bond Funds Investment in Pool Cash Deposits Total Short-Term Investments Proprietary Fund: Investments: Public Equities Fixed Income: Exchange Traded Funds (ETFs) Real Estate Investment Trust (REITs) U.S. Treasury Securities Corporate Obligations Corporate Asset and Mortgage Backed Securities U.S. Government Agency Obligations International Obligations Total Fixed Income Investments Measured at the Net Asset Value (NAV): Opportunistic Private Fixed Income	2,513,382 10,656,067 <b>246,609,544</b> 246,211 22,343,102 321,243,723	61,607,871 12,366,498 56,485,159 20,317,187	29,228	451,444,903 451,444,903 451,444,903 45,903 8,933,120 14,076,479	233,440,095 451,444,903 2,513,382 10,656,067 698,054,447 (Exh. VIII) 246,680 22,343,102 1,931,066 321,243,723 61,637,099 12,366,498 56,485,159 20,317,187 496,323,834 8,933,120 14,076,479

- to next page

#### Figure 3 Fair Value of Investments (Concluded)

	Level 1	Level 2	Level 3	NAV	Total
Securities Lending Collateral:					
Government Repurchase Agreements	18,348,382				18,348,382
Total Securities Lending Collateral	18,348,382				18,348,382
	· · · · · · · · · · · · · · · · · · ·				(Exh. V)
Short-Term Investments:					
U.S. Treasury Securities	27,675				27,675
Money Market and Bond Funds				296,605,031	296,605,031
Total Short-Term Investments	27,675	-	-	296,605,031	296,632,706
					(Exh. V)

#### **Foreign Currency Risk**

Foreign currency risk for investments and deposits is the risk that changes in exchange rates will adversely affect the investments and deposits. The System does not have a policy for managing foreign currency risk. The System's investment and deposit exposure to foreign currency risk as of August 31, 2017 is summarized in Figure 4.

#### **Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The general investment policies of the System require that non-cash interest paying securities in the high yield bond portfolios may not exceed 15% of the market value of the portfolio. Credit risk is managed through diversification and by operating within defined parameters versus a benchmark index. Excluding those securities *issued* by or *explicitly guaranteed* by the U.S. Government, which are not considered to have credit risk, the System's credit quality distribution for securities with credit risk exposure as of August 31, 2017 is summarized in Figure 5. The securities were rated and categorized according to Standard & Poor's rating standards.

The System earns failed interest on monies held at the custodial agent bank overnight when a security purchase transaction fails to be completed due to the broker not delivering the purchased security on settlement date. When this occurs, the System's money is invested overnight in a Common Trust Fund at the custodial agent bank. The System had no failed securities either during the fiscal year or at August 31, 2017.

#### **Concentration Risk**

Concentration risk is the risk of loss attributable to the magnitude of investment in a single issuer. The System's investment policies stipulate that investments in the securities of any one corporation may not exceed 3% of the market value of the total fund. As of August 31, 2017, the System was not exposed to any concentration risk.

#### Figure 4 Foreign Currency Risk

	Public Equities	Alternative Investments	Total
Fiduciem, Funder	(USD)	(USD)	(USD)
Fiduciary Funds: Investments:	\$	\$	\$
Australian Dollar	179,611,870	29,370,217	208,982,087
Brazilian Real	93,423,239	20,010,211	93,423,239
Canadian Dollar	360,511,524		360,511,524
Chilean Peso	3,084,285		3,084,285
Colombian Peso	7,075,449		7,075,449
Czech Koruna	4,003,510		4,003,510
Danish Krone	83,610,615		83,610,615
Egyptian Pound	7,131,753		7,131,753
Euro	1,606,185,735	425,031,840	2,031,217,575
Hong Kong Dollar	465,159,519		465,159,519
Hungarian Forint	10,041,933		10,041,933
Indian Rupee	149,295,146		149,295,146
Indonesian Rupiah	51,800,774		51,800,774
Israeli Shekel	8,501,834		8,501,834
Japanese Yen	937,004,779		937,004,779
Malaysian Ringgit	4,312,469		4,312,469
Mexican Peso	37,835,776		37,835,776
New Taiwan Dollar	126,398,112		126,398,112
New Zealand Dollar	9,445,197		9,445,197
Norwegian Krone	56,932,978		56,932,978
Philippine Peso	18,355,306		18,355,306
Polish Zloty	3,434,880		3,434,880
Pound Sterling	781,232,451	80,600,478	861,832,929
Singapore Dollar	74,014,681		74,014,681
South African Rand	42,089,347		42,089,347
South Korean Won	197,058,471		197,058,471
Swedish Krona	80,086,630		80,086,630
Swiss Franc	260,087,431		260,087,431
Thai Baht	30,354,829		30,354,829
Turkish Lira	24,931,971	525 002 525	24,931,971
Investment Totals	5,713,012,494	535,002,535	6,248,015,029
Short-term Investmen	nts:		
Deposits:			4 000 400
Australian Dollar			1,000,103
Canadian Dollar			26,409
Euro			3,707,673
Hong Kong Dollar			305,635
Mexican Peso			5,833
New Taiwan Dollar			384,114
Pound Sterling			20,101
Singapore Dollar		-	14,779
Deposits Total			5,464,647

S & P Rating	U. S Treasury Securities	U.S. Government Agency Obligations	Corporate Obligations	Securities		Real Estate Investment Trust (REITs)	Exchange Traded Funds (ETFs)	Money Market and Bond Fund	Total
	\$\$	; \$	\$	; \$	; \$	5	\$	\$	\$
Fiduciary Funds									
Investments:									
A-			5,027,838						5,027,838
A+				2,890,213			252,634,622		255,524,835
AA				4,669,449					4,669,449
AA+	3,055,021,355	537,172,731							3,592,194,086
AAA				32,873,121					32,873,121
В			135,251,854		21,055,400				156,307,254
B-			99,333,794		40,317,620				139,651,414
B+			157,030,665		48,373,846				205,404,511
BB			158,189,914	866,682	25,787,515				184,844,111
BB-			300,525,368		86,732,816	6,867,185			394,125,369
BB+			135,608,347		75,864,207	30,188,663			241,661,217
BBB			9,038,118						9,038,118
BBB-			63,890,694	2,471,146	11,457,707				77,819,547
BBB+			11,699,290		5,278,172				16,977,462
С			1,404,650						1,404,650
CCC			15,588,065						15,588,065
CCC+			24,321,075		37,600,514				61,921,589
Not Rated			56,664,266	75,518,351	37,405,182		176,114,276		345,702,075
Investments Totals	3,055,021,355	537,172,731	1,173,573,938	119,288,962	389,872,979	37,055,848	428,748,898	-	5,740,734,711
Short-Term Investme	nts: 233,440,095								233,440,095
Not Rated Short-Term								451,444,903	451.444.903
Investments Total:	233,440,095		-	-	-	-	-	451,444,903	684,884,998
Proprietary Fund Investments:									
A-			262,012						262,012
A+			202,012	303,914			13,165,378		13,469,292
AA				491,005			,,		491,005
AA+	321,243,723	56,485,159		- ,					377,728,882
AAA	, ,	, ,		3,456,697					3,456,697
В			7,048,288		1,097,246				8,145,534
B-			5,176,515		2,101,045				7,277,560
			8,183,233		2,520,874				10,704,107
BB			8,243,644	45,165	1,343,847				9,632,656
BB-			15,661,124	, ,	4,519,849	357,865			20,538,838
BB+			7,066,866		3,953,460	1,573,201			12,593,527
BBB			950,382						950,382
BBB-			3,329,493	128,777	597,088				4,055,358
BBB+			609,677		275,058				884,735
С			73,200						73,200
CCC			812,330						812,330
CCC+			1,267,428		1,959,450				3,226,878
Not Rated			2,952,907	7,940,940	1,949,270		9,177,724		22,020,841
Investments Totals	321,243,723	56,485,159	61,637,099	12,366,498	20,317,187	1,931,066	22,343,102	-	496,323,834
Short Torm Investme	nte								
Short-Term Investme AA+									27,675
	27,675								
Not Rated								296,605,031	296,605,031

#### Figure 5 Investment Credit Risk

August 31, 2017

#### **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As of August 31, 2017, the System invested \$131,655,460 in asset backed and mortgage backed obligations, which are subject to early principal payment in a period of declining interest rates and could reduce or eliminate the stream of income that would have been received. As a result, the fair value of these investments is highly sensitive to interest rate changes. The System does not have a policy for interest rate risk management. However, interest rate risk is managed through duration, by operating within defined risk parameters versus a benchmark index. As of August 31, 2017, the System's exposure to interest rate risk is summarized in Figure 6.

#### **Securities Lending**

Securities lending transactions are governed by the Texas Government Code Section 815.303. The System participates in a securities lending program, administered by the securities lending agent bank, whereby certain securities are transferred to an approved independent broker/dealer (borrower) with a simultaneous agreement to return the collateral for the same securities in the future. The contract with the System's securities lending agent bank requires the bank to indemnify the System for certain losses. In addition, the contract limits the total amount of securities that can be lent to 25% of holdings.

The System is permitted to loan securities under 1) open loans which are generally overnight loans, and 2) term loans with specified expected termination dates. Securities lent include fixed income securities and domestic and international equities. The System's securities lending agent bank lends the securities for initial collateralization in the form of cash or U.S. Government or Agency securities of 102% for domestic securities and 105% for international securities. Cash collateral is invested in repurchase agreements. The policy is to ensure that the difference in maturities between the cash collateral investments and the loan tenor is no more than five days.

The System cannot pledge or sell collateral securities received unless the borrower defaults and, therefore, the System does not establish an asset and a corresponding liability in the balance sheet for the collateral value of securities received. No significant violations of legal or contractual provisions and no borrower or lending agent default losses were reported in fiscal year 2017. The System received net securities lending income totaling \$5,553,319 for the fiscal year ended August 31, 2017. The collateral information as of August 31, 2017 is summarized in Figure 7.

Figure 7 Securities Lending Collateral Summary

Investment Type	Underlying Securities Fair Value	Cash Collateral Fair Value
	\$	\$
Fiduciary Funds:		
Real Estate Investment Trust		
(REITs)	952,850	978,116
Domestic Equities	46,994,215	48,400,542
International Equities	31,282,512	32,536,452
Corporate Obligations	72,347,187	74,321,204
Exchange Traded Funds (ETFs)	322,950,138	331,645,789
International Obligations	37,230,151	38,240,751
Corporate Asset and Mortgage		
Backed Securities	426,220	439,625
Totals	512,183,273	526,562,479
		Exh.VIII
Proprietary Fund:		
Domestic Equities	19,780	20,613
Corporate Obligations	3,770,180	3,798,000
Exchange Traded Funds (ETFs)	12,473,229	12,553,104
International Obligations	1,940,150	1,954,199
Corporate Asset and Mortgage		
Backed Securities	22,211	22,466
Totals	18,225,550	18,348,382
		Exh. V

Figure 6
Investment Interest Rate Risk (Note A)

	Fiduciary Fur	nds	Proprietary Fund			
		Modified		Modified		
Investment Type	Fair Value	Duration	Fair Value	Duration		
	\$		\$			
U.S. Treasury Securities	3,288,461,450	3.68	321,271,398	3.94		
U.S. Government Agency Obligations	537,172,731	4.26	56,485,159	4.26		
Corporate Obligations	1,173,573,938	4.62	61,637,099	4.58		
Corporate Asset and Mortgage Backed Securities	119,288,962	2.68	12,366,498	2.71		
International Obligations	389,872,979	4.21	20,317,187	4.21		
Real Estate Investment Trusts (REITs)	37,055,848	5.47	1,931,066	5.47		
Money Market and Bond Funds	451,444,903	0.08	296,605,031	0.08		
Totals	5,996,870,811	3.67	770,613,438	2.52		

Note A: \$451,092,000 in fixed income exchange traded funds, which are also sensitive to interest rate changes, were not included in this figure because a duration calculation for these funds was not available from the custodian bank.

August 31, 2017

#### **Repurchase Agreements**

During the fiscal year 2017, the System invested the cash collaterals from the securities lending program in repurchase agreements. As of August 31, 2017, the System had \$544,910,861 balance in these assets.

#### **Alternative Investments**

The System makes contingent commitments to investments in entities that manage private equity, private real estate, private infrastructure, private fixed income, and hedge fund portfolios. The unfunded commitments and redemption restrictions of these investments as of August 31, 2017 are summarized in Figure 8.

#### Figure 8 Alternative Investments (Note A)

	No. of		Remaining	Adjusted Funded		Redemption	Redemption	Redemption
Currency	Funds	Commitment	Commitment	Amount	Fair Value	Frequency	Notice	Restrictions
		\$	\$	\$	\$			
Private Equity:								
US Dollar	95	5,538,440,704	2,297,057,466	3,241,383,238	3,102,227,214	N/A	N/A	N/A
Euro Dollar	11	427,613,834	143,942,103	283,671,731	258,522,954	N/A	N/A	N/A
British Pound	2	90,198,500	62,224,894	27,973,606	40,155,158	N/A	N/A	N/A
Sub-total	108	6,056,253,038	2,503,224,463	3,553,028,575	3,400,905,326	-		
Private Real Esta								
US Dollar	44	2,616,375,814	645,282,614	1,971,093,200	1,736,780,607	N/A, Monthly/ Quarterly	N/A, 45-90 Days	N/A
Euro Dollar	4	268,691,400	84,233,862	184,457,538	166,508,887	N/A, Monthly/ Quarterly	N/A, 45-90 Days	N/A
British Pound	1	57,984,750	23,683,573	34,301,177	27,528,949	N/A	N/A	N/A
Sub-total	49	2,943,051,964	753,200,049	2,189,851,915	1,930,818,443	-		
Private Infrastruc	ture:					-		
US Dollar	18	827,528,261	337,781,099	489,747,162	421,520,282	N/A	N/A	N/A
Australian Dollar	2	67,417,750	37,789,076	29,628,674	29,370,218	N/A	N/A	N/A
British Pound	1	9,019,850	-	9,019,850	12,916,371	N/A	N/A	N/A
Sub-total	21	903,965,861	375,570,175	528,395,686	463,806,871	-		
<b>Private Fixed Inco</b>	ome:					-		
US Dollar	6	575,000,000	318,216,976	256,783,024	284,194,526	N/A	N/A, 90 Days	N/A
Hedge Funds:								
Equity Long/Sho	ort:							
US Dollar	2	310,000,000		310,000,000	461,330,256	Monthly/Quarterly	30-90 Days	N/A
US Dollar	1	100,000,000		100,000,000	113,148,748	Monthly/Quarterly	30-90 Days	25% Investor Gate, 12 Month Lockup
Event Driven								
US Dollar	1	109,554,176		109,554,176	123,924,981	Monthly/Quarterly or 3 Yr	30-90 Days	N/A
US Dollar	1	80,000,000		80,000,000	102,590,981	Monthly/Quarterly or 3 Yr	30-90 Days	12 Month Lockup
Macro								
US Dollar	1	30,000,000		30,000,000	36,945,557	Daily/Quarterly	2-30 Days	N/A
US Dollar	1	80,000,000		80,000,000	85,284,594	Daily/Quarterly	60 Days	25% Fund Gate, 24 Month Lockup
Multi-Strategies								
US Dollar	1	80,000,000		80,000,000	89,383,224	Quarterly	45 Days	20% Fund Gate
US Dollar	1	120,000,000		120,000,000	122,877,780	Quarterly	180 Days	12.5% Fund Gate, 12 Month Lockup
Opportunistic	4	100 000 000	07 600 045	40.074.005	10 000 000	Approxilie	NI/A	26 Month Lealur
US Dollar US Dollar	1 1	100,000,000 150,000,000	87,628,315	12,371,685 150,000,000	12,636,268 170,857,017	Annually Quarterly/3 Yr or 5 Yr	N/A 60 Days	36 Month Lockup 33% Investor
	0	240,000,000	67 400 404	170 500 000	20,022,020	Liquidation	Liquidation	Gate
US Dollar	3 1	240,000,000	67,493,164	172,506,836	30,633,233	Liquidating	Liquidating	Liquidating
US Dollar Bolativo Value	I	50,000,000	15,000,000	35,000,000	9,496,579	Quarterly/3 Yr or 5 Yr	60 Days	N/A
Relative Value US Dollar	2	200,000,000		200,000,000	215 729 200	Monthly/Quarterly/	45.00 Davis	N/A
		200,000,000		200,000,000	215,738,280	Monthly/Quarterly/ Semiannually	45-90 Days	
US Dollar	1	100,000,000		100,000,000	91,485,243	Monthly/Quarterly/ Semiannually	45-90 Days	12.5% Investor Gate
Sub-total	18	1,749,554,176	170,121,479	1,579,432,697	1,666,332,741	-		
Total	202	12,227,825,039	4,120,333,142	8,107,491,897	7,746,057,907			

Note A: Commitment, Remaining Commitment, Adjusted Funded Amount, and Fair Value are reported in US Dollar.

August 31, 2017

## 2.B Fund Equity

#### Fiduciary Net Position Held in Trust for Pension Benefits and Other Purposes

A summary of pension plan and other employee benefit fiduciary net position at August 31, 2017 and 2016 is presented in Figure 9.

## 2.C Derivative Investment

Derivatives are generally defined as contracts or securities whose value depends on, or derives from, the value of an underlying asset, reference rate, or index.

#### **Futures Contracts**

The System purchases and sells futures contracts as a means of adjusting the portfolio mix and as a lower transaction cost substitute for transactions which would otherwise occur in the underlying portfolios.

A futures contract is a contract to buy or sell units of an index or financial instrument at a specified future date at a price agreed upon when the contract is originated. Upon entering into a futures contract, the System pledges to the broker cash or U.S. government securities equal to the minimum "initial margin" requirement of the futures exchange.

The System could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. The System's investment

managers seek to control this risk through counterparty credit requirements and the use of Commodity Futures Trading Commission approved futures and exchange traded options. The System anticipates that the counterparties will be able to satisfy their obligations under the contracts.

The System receives or pays a daily "variation margin," which is an amount of cash equal to the daily fluctuation in value of the contract. The accumulated value of the variation margin is the fair value of the futures contract. The System had no outstanding futures contracts on August 31, 2017.

#### **Options**

An option is a contract that gives buyers the right, but not the obligations, to buy (call) or sell (put) an asset at a specified future date at a price agreed upon when the option is originated. The option's price is usually a small percentage of the underlying asset's value.

As a writer of financial options, the System receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the System pays a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As of August 31, 2017, the outstanding options are summarized in Figure 10.

#### Figure 9 Net Position - Fiduciary Fund

Fund Type	2017	2016
	\$	\$
Defined Benefit Plans (Note A)	28,426,449,819	25,706,748,855
Deferred Compensation Plans and Cafeteria Plan:		
Administration - Deferred Compensation Plans	4,357,657	3,810,145
Administration - State Employees Cafeteria Plan	14,797,050	6,390,403
Total Deferred Compensation Plans and Cafeteria Plan	 19,154,707	10,200,548
Commuter Spending Account Fund	452,646	505,775
Net Position Restricted for Pension and Other Benefits	 28,446,057,172	25,717,455,178
	 Exh. VIII	

Note A: See Note 3.D Reserves for details of the statutorily required reserve balances of the Defined Benefit Plans.

#### Figure 10 Summary of Outstanding Options

		No. of	Put/	Change in Fair Value Fair Value		Change in Fair Value Fair Val		Notional
Options	Expiration Date	Options	Call	Classification	Amount	Classification	Amount	Amount
Equity	9/15/2017	50	Put	Investment Revenue	(2,892)	Investments	(11,500)	(8,608)
Equity	10/20/2017	350	Put	Investment Revenue	21,961	Investments	(61,625)	(83,586)
Equity	11/17/2017	80	Put	Investment Revenue	2,216	Investments	(18,800)	(21,016)
Total		480			21,285		(91,925)	(113,210)

August 31, 2017

#### **Forward Contracts**

The System enters into forward contracts to minimize the short-term impact of foreign exchange rate fluctuations on the asset and liability positions of international equities. The System had no outstanding forward contracts on August 31, 2017.

## 2.D Leases

#### (In accordance with GASB Statement 38)

Included in rental expenses/expenditures are assets leased on a long-term basis that have been classified operating leases. Current year expenses for these leased assets totaled \$584,996. In addition, included in rental income are assets leased on a long-term basis that have been classified as operating leases. Current year revenue for these leased assets totaled \$41,418. A schedule of future minimum lease payments and rental income on non-cancelable operating leases as of August 31, 2017 is presented in Figure 11.

#### Figure 11 Non-Cancelable Operating Leases

Fiscal Year	Future Minimum Lease Rental Payments	Future Minimum Lease Rental Revenues
	\$	\$
2018	611,120	41,418
2019	581,631	41,418
2020	458,282	41,418
2021	265,510	41,418
2022	232,655	45,980
Total	2,149,198	211,652

## 3. Defined Benefit Plans

(In accordance with GASB Statements 67 and 73)

The Employees Retirement System of Texas Plan (ERS), the Law Enforcement and Custodial Officer Supplemental Retirement Plan (LECOS), and

Judicial Retirement System of Texas Plan Two (JRS II) are single employer defined benefit pension plans. ERS, LECOS, and JRS II are administered through trust. Each plan provides service retirement, death and disability benefits. Benefit and contribution provisions of each plan are authorized by State law and may be amended by the Texas Legislature.

Member contribution rates of the ERS, LECOS, and JRS II and State contribution rates of the ERS, LECOS, and JRS II are set by State law. The law prohibits any amendment to the plan that would cause the period required to amortize any unfunded actuarial accrued liability to equal or exceed 31 years. Administrative expenses of the ERS, LECOS and JRS II are financed through investment earnings. A description of the benefits, including the key elements of pension formulas is provided in the Summary of Plan Provisions under the Introductory Section of this report.

## 3.A Plan Descriptions and Contributions

#### **Employees Retirement Plan**

#### **Plan Description**

There are two classes of membership within this retirement plan: (1) the elected class and (2) the employee class.

Membership in the elected class is limited to persons who hold State offices that are normally filled by statewide election (including legislators) and excludes officials covered by the Judicial Retirement System of Texas Plan Two.

Membership in the employee class includes all employees and appointed officers of the State and excludes independent contractors and their employees and employees covered by the Teacher Retirement System of Texas.

#### **System Employees**

System employees are members of the Employees Retirement Plan.

#### Contributions

Employees are required to contribute a percentage of their monthly gross compensation, including base salary, longevity pay, hazardous duty pay, and benefit replacement pay and excluding overtime pay and emoluments other than housing and utilities. The contribution rate was 9.5% for fiscal year 2017. Legislators and other elected class members are required to contribute 9.5% of their compensation to the System.

For fiscal year 2017 the State contributed 10% of the payroll of members for both the employee class, legislators, and for other elected class members. See Note 3.B Funded Status and Funding Progress.

#### Law Enforcement and Custodial Officer Supplemental Retirement Plan

#### **Plan Description**

The plan covers custodial officers who are certified in accordance with the statutory requirements as having a normal job assignment that requires frequent or infrequent regularly planned contact with inmates managed by the hiring institutions. The plan also covers law enforcement officers who have been commissioned and recognized

August 31, 2017

as commissioned law enforcement officers by the Commission on Law Enforcement Officer Standards and Education.

The monthly benefit amount payable from this fund is equal to the excess of the total benefit over the regular benefit payable to the member from the Employees Retirement System Fund.

#### Contributions

For fiscal year 2017, both employee members and the State contributed 0.5% of the covered payroll for LECOS members. An additional amount equivalent to 1.1% of payroll was contributed by the State from dedicated court fees. See Note 3.B Funded Status and Funding Progress.

#### Judicial Retirement System of Texas Plan Two

#### **Plan Description**

The plan covers judges, justices and commissioners of the Supreme Court, the Court of Criminal Appeals, the Court of Appeals, District Courts and certain commissions to a court who first become members after August 31, 1985. Members of the Judicial Retirement System of Texas Plan One are excluded from this plan.

#### Contributions

Members are required to contribute 7.5% of their compensation to the System during fiscal year 2017.

Members who accrue 20 years of service credit in the retirement system cease making contributions, but are considered contributing members for all other purposes; however, the State contribution continues.

For the fiscal year ended August 31, 2017 the State contributed 15.663% of the payroll of members. See Note 3.B Funded Status and Funding Progress.

## 3.B Funded Status and Funding Progress

#### **Summary of Actuarial Assumptions**

The actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The assumptions are presented in Figure 12.

See Note 1.D, Summary of Significant Accounting Policies, Basis of Accounting, for the System's policies regarding recognition of contributions, benefits paid and refunds paid. See Note 1.G, Summary of Significant Accounting Policies, Assets, Liabilities, Fund Balances and Net Position, for the System's policies regarding investment valuation. See note to the Required Supplementary Information for a summary of the recent changes in the actuarial assumptions.

Figure 12					
<b>Actuarial Assumptions - Defined Benefit Plans</b>					

	Employees Retirement Fund	Law Enforcement and Custodial Officer Supplemental Fund	Judicial Retirement System Plan II
	(In acco	rdance with GASB Statement	No. 67)
Valuation Date		August 31, 2017	
Actuarial Cost Method		Entry Age Normal	
Amortization Method		Level Percent of Payroll, Open	
Remaining Amortization Period		31 Years	
Asset Valuation Method	The actuarial value of assets is base investment return in	ed on the market value of assets excess of (less than) expected	
Investment Rate of Return		7.5%	
Projected Salary Increases	2.5% – 9.3%	4.5% – 9.5%	3.00%
Inflation Rate		2.50%	
Last Experience Study	5-year period	from September 1,2011 to Aug	ust 31, 2016
Mortality Rate	The mortality rates for active members Mortality Tables with generational me based on the most recent Ultimate N	ortality improvements projected	
	The mortality rates for service retired Texas Mortality Tables with generati is based on the most recent Ultimate are set forward one year.	onal mortality improvements pro	pjected from the year 2017, which
Ad hoc Postemployment Benefit Changes		None	

August 31, 2017

#### **Net Pension Liability**

#### (In accordance with GASB Statement 67)

Based on the actuarial assumptions listed in Figure 12, the components of the net pension liability as of August 31, 2017 are determined and summarized in Figure 13. The projected cash flows from the employer are based on contributions for the most recent five year period, modified on consideration of subsequent events. The legislature passed House Bill No. 9 in the 84th legislative session during fiscal year 2015 to increase the State contributions for fiscal years 2016 and 2017 and maintained the changes made by the 83rd legislature session in Senate Bill No. 1459, which established proportional decreases to the employee contribution if the State contribution was decreased. The passage of this bill is an indicator that the legislature is committed to increase the funding levels for the pension funds. Projected employer contributions are based on fiscal year 2017 funding levels. See Note 3.A for descriptions of member and State contributions. As of August 31, 2017, the System did not have any investments that represents five percent or more of the pension plan's fiduciary net position. See Note 2.A for the System's policy on concentration risk.

The long-term expected rate of return on the System's pension plan investments was determined using a building-block method in which best estimated 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 adding expected inflation. Best estimates of rates of return for each major asset class included in the System's target allocation as of August 31, 2017 are summarized in the Figure 14.

In August 2017, the System Board of Trustees adopted a long-term rate of return assumption of 7.5% after considering 1) the long-term expected return from the

#### Figure 14 Target Allocations

Asset Class	Target Allocation	Real Return Arithmetic Basis	Long-term Expected Portfolio Real Rate of Return					
	%		%					
Global Equity	55.00	8.31	4.57					
Global Credit	10.00	2.94	0.29					
Intermediate								
Treasuries	15.00	2.23	0.33					
Real Estate	10.00	5.33	0.53					
Infrastructure	4.00	7.21	0.29					
Hedge Funds	5.00	8.03	0.40					
Cash	1.00	0.00	0.00					
Totals	100.00	_	6.41					
Inflation	··		2.50					
<b>Expected Arithmeti</b>	Expected Arithmetic Nominal Rate of							
Return		_	8.91					

building block method; 2) an analysis of long term-term expected return performed by the System investment consultant; and 3) analyses and recommendations of the System pension actuary.

A single discount rate was used to measure the total pension liability as of August 31, 2017. This single discount rate was based on an expected rate of return on pension plan investments and a municipal bond rate, if applicable. Based on the stated assumptions and the projection of cash flows, if the pension plan's fiduciary net position and future contributions were not sufficient to finance the benefit; the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the fiscal year before the fiduciary net position is depleted, and the municipal bond rate was applied to all benefit payments after that fiscal year. The single discount rate, the municipal bond rates, and the year when the fiduciary net positions that

#### Figure 13 Net Pension Liability ( \$ in Millions) (In accordance with GASB Statement No. 67)

	ERS	LECOS	JRS II
	\$	\$	\$
Total Pension Liability	48,236.43	2,163.74	463.60
Plan Fiduciary Net Position	26,371.83	923.99	420.85
Net Pension Liability	21,864.60	1,239.75	42.75
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	54.67%	42.70%	90.78%

projected to be depleted are summarized in Figure 15. The sensitivity of the net pension liability to one

#### Figure 15 Assumptions for Single Discount Rate

	ERS	LECOS	JRS II		
Expected investment rate of					
return	7.50%	7.50%	7.50%		
Municipal bond rate (Note A)	3.42%	3.42%	N/A		
Year fiduciary net position					
depleted	2047	2036	N/A		
Single Discount Rate	5.36%	4.21%	7.50%		
Note A: The source of the municipal bond rate is the rate for Fixed Income					
Market Data/Yield Curve/Data Municipal bon include only federally tax-exempt municipal b					

Index's "20-Year Municipal GO AA Index."

percentage point increase or decrease to the single discount rate is summarized in Figure 16.

Figure 16					
Sensitivity of Net Pension Liability (in Millions)					

	1% Decrease	Single Discount Rate	1% Increase
ERS:	4.36%	5.36%	6.36%
Net Pension Liability	\$28,497.05	\$21,864.60	\$15,972.79
LECOS:	3.21%	4.21%	5.21%
Net Pension Liability	\$1,603.95	\$1,239.75	\$949.63
JRS II:	6.50%	7.50%	8.50%
Net Pension Liability	\$88.23	\$42.75	\$3.6

#### **Money-Weighted Rate of Return**

The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. For the year ended August 31, 2017, the annual money-weighted rate of return on the defined benefit plans was 11.84%. See Schedule of Investment Returns – Defined Benefit Plans in the Required Supplementary Information section for details.

## 3.C Retirement Systems Membership

The membership of the retirement plans as of August 31, 2017 is summarized in Figure 17. The System's actuary includes members who retired on August 31 and received their first annuity in September as retirees in the actuarial valuation.

## 3.D Reserves

The balances of legally required reserves in each funded retirement plan as of August 31, 2017 and 2016 are presented in Figure 18. See Note 1.G, Net Position - Restricted for Pension Benefits, for a description of each reserve account.

## 3.E Historical Trend Information

Historical trend information is designed to provide information about the ERS, LECOS, and JRS II's progress made in accumulating sufficient assets to pay benefits when due. This information is presented in the Required Supplementary Information immediately after the Notes to the Basic Financial Statements.

#### Figure 17 Retirement Systems Membership

	ERS			
	Employee Class	Elected Class	LECOS	JRS II
Retirees and Beneficiaries Currently Receiving Benefits	106,798	732	12,248	378
Terminated Employees Entitled to But Not Yet Receiving Benefits	112,075	117	17,100	158
Active Employees	141,303	326	38,206	557
Totals	360,176	1,175	67,554	1,093
Note: Estimated based on actuarial valuation as of August 31, 2017				

#### Figure 18 Reserves

				Totals - August 31,	
	ERS	LECOS	JRS II	2017	2016
Net Plan Assets Reserved For:	\$	\$	\$	\$	\$
Employee Savings	5,709,094,713	47,025,982	72,977,421	5,829,098,116	5,624,359,069
State Accumulation	(716,027,157)	174,037,413	106,558,711	(435,431,033)	248,644,819
Annuity Reserves	21,378,759,742	702,926,185	241,314,049	22,322,999,976	19,833,744,967
Total Net Plan Assets Reserved	26,371,827,298	923,989,580	420,850,181	27,716,667,059	25,706,748,855
	(Exh. VIII)	(Exh. VIII)	(Exh. VIII)		

August 31, 2017

#### 4. Other Postemployment Benefit Plan (OPEB)

(In accordance with GASB Statement 74)

#### 4.A Plan Descriptions and Contributions

#### State Retiree Health Plan

#### **Plan Description**

In addition to the pension benefits described in Note 3, the System provides postemployment health care, life and dental insurance benefits through the Group Benefits Program in accordance with Chapter 1551, Texas Insurance Code. This Program is governed by the same Board of Trustees who are also responsible for the System's defined benefit pension plans. See Note 1.A for structure of the Board of Trustees.

The State Retiree Health Plan (SRHP) is a cost-sharing multiple-employer postemployment health care plan with a special funding situation. This plan covers retired employees of the State, and other entities as specified by the State legislature. Benefit and contribution provisions of the State Retiree Health Plan are authorized by State law and may be amended by the Texas Legislature. Participating entities are listed in Figure 19. The principal participating employer is the state of Texas. State agencies and universities employ 185,760 which is 80.7% of the employees covered by the State Retiree Health Plan.

#### Figure 19 **Participating Reporting Entities** for the State Retiree Health Plan

	September 1, 2016
State Agencies	116
Universities	27
Junior and Community Colleges	50
Other Entities	8
Total Participating Entities	201

#### Contributions

Figure 20 summarizes the maximum monthly employer contribution toward eligible retirees' health and basic life premium. Retirees pay any premium over and above the employer contribution. The employer does not contribute toward dental or optional life insurance. Surviving spouses and their dependents do not receive any employer contribution. As the non-employer contributing entity, the State of Texas pays part of the premiums for the junior and community college.

#### Figure 20 Employer Contribution Rates -Retiree Health and Basic Life Premium -Fiscal Year 2017

	September 1, 2016	
	\$	
Retiree Only	617.30	
Retiree & Spouse	970.98	
Retiree & Children	854.10	
Retiree & Family	1,207.78	

Figure 21 summarizes premium contributions by source and claims expenses on a pay-as-you-go basis for the current and prior fiscal years. The System's actuaries have estimated certain health, life, accidental death and dismemberment, and indemnity administrative fees.

Figure 21
Contributions by Source and Claims Expenses - Retirees

		2017	2016
	\$		\$
Contributions:			
Employers		890,735,173	663,986,538
Non-Employer Contributing			
Entities		44,433,743	N/A
Members		195,806,162	183,284,339
Federal Revenues:			
Medicare Part D		1,658,573	2,149,125
Direct Subsidy		22,350,780	27,365,813
Low Income Premium			
Subsidy		392,423	384,061
Low Income Cost Sharing		3,272,497	3,486,204
Catastrophe Reinsurance		45,445,850	37,642,080
Utilization Management			(1,841,725)
Total Federal Revenues		73,120,123	69,185,558
Total Contributions	1,	,204,095,201	916,456,435
Claims Expenses		995,815,803	912,885,686

#### 4.B Funded Status and Funding Progress

#### Summary of Actuarial Assumptions

The actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The assumptions are presented in Figure 22 on next page.

August 31, 2017

Figure 22				
<b>Actuarial Assumptions - State Retiree Health Plan</b>				

	State Retiree Health Plan
Valuation Date	August 31, 2017
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of
	Pay, Open
Remaining Amortization Period	30 Years
Asset Valuation Method	Not applicable
Actuarial Assumptions:	
Discount Rate	3.51%
Projected Annual Salary Increase	2.50% to 9.50%
Annual Healthcare Trend Rate	8.50% for FY
	2019, decreasing
	0.5% per year
	to 4.50% for FY
	2027 and later
	years
Inflation Assumption Rate	2.50%
Ad hoc Postemployment Benefit Changes	None

#### Net OPEB Liability

Figure 23 shows the System's net OPEB liability for the State Retiree Health Plan as of August 31, 2017. Calculations are based on the benefit provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of cost between the employer and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effect of legal or contractual funding limitations on the pattern of cost sharing between the employer and plan members in the future.

#### Figure 23 Net OPEB Liability (\$ in Millions)

	Amount
	\$
Total OPEB Liability	34,782.79
Plan Fiduciary Net Position	709.78
Net OPEB Liability	 34,073.01
Plan Fiduciary Net Position as a	
Percentage of the Total OPEB Liability	2.04%

The actuarial calculations reflect a long term

perspective. Consistent with that perspective, actuarial methods and assumptions used include techniques that are designed to reduce short term volatility in actuarial accrued liabilities and the actuarial value of assets. The required Schedule of Changes in Net OPEB Liability and Related Ratios immediately following the notes to the financial statements presents the information about the actuarial value of plan assets and the actuarial accrued liability for benefits in fiscal year 2017. Multiyear trend information will be presented when it becomes available.

#### **Investment Policy**

The State Retiree Health Plan is a pay-as-you-go plan and does not accumulate funds in advance of retirement. The System's Board of Trustees adopted the amendment to the investment policy in August 2017 to require that all fund in this plan be invested in short-term fixed income securities and specify that the expected rate of return on these investments is 2.4%.

#### **Discount Rate**

Because the State Retiree Health Plan does not accumulate funds in advance of retirement, the discount rate that was used to measure the total OPEB liability is the municipal bond rates. The assumption of the discount rate is summarized in Figure 24.

Figure 24 Assumptions for Single Discount Rate - State Retiree Health Plan

	SRHP	
Expected investment rate of	Not applicable because	
return	the plan operates on a	
	pay-as-you-go basis.	
Municipal bond rate (Note A)	3.51%	
Year fiduciary net position	2018	
depleted		
Single Discount Rate	3.51%	
Note A: The source of the municipal bon	d rate is the Bond Buyer Index	
of general obligation bonds with 20 years to maturity and mixed credit		
quality. The bonds' average credit quality is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s		
AA.	ind Standard & POOLS COIP. S	

The sensitivity of the net OPEB liability to one percentage point increase or decrease to the discount rate is summarized in Figure 25.

#### Figure 25 Sensitivity of Net OPEB Liability to Changes in Discount Rate (in Millions) - State Retiree Health Plan

	1% Decrease	Single Discount Rate	1% Increase
Rate	2.51%	3.51%	4.51%
Net OPEB Liability	\$40,673.22	\$34,073.01	\$28,960.56

The initial healthcare trend rate is 8.5% and the ultimate rate is 4.5%. The sensitivity of the net OPEB liability to the changes in the discount rate and healthcare trend rate is summarized in Figure 26 on the next page.

August 31, 2017

#### Figure 26 Sensitivity of Net OPEB Liability to Changes in Discount and Healthcare Trend Rates (in Millions) - State Retiree Health Plan

	Decrease (7.50%	Current Healthcare Cost Trend Rates (8.50% decreasing to 4.50%)	1% Increase (9.50% decreasing to 5.50%)
Net OPEB Liability	,	\$34,073.01	,

#### Money-Weighted Rate of Return

The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. For the year ended August 31, 2017, the annual moneyweighted rate of return on the State Retiree Health Plan was 1.03%.

#### 4.C State Retiree Health Plan Membership

The membership of the State Retiree Health Plan includes retirees who retired with at least 10 years of service to eligible entities. These retirees must meet certain age requirements. Surviving spouses and dependents of these retirees are also covered.

The System's actuary includes members who retired on August 31 and received their first annuity in September as retirees in the actuarial valuation. The membership of the State Retiree Health Plan as of August 31, 2017 is summarized in Figure 27.

#### Figure 27 State Retiree Health Plan Membership

Active Members	230,199
Inactive Members Currently	
Receiving Benefit Payments	117,880
Inactive Members Entitled to But Not	
Yet Receiving Benefit Payments	11,557
Total	359,636

Note: Estimated based on actuarial valuation as of August 31, 2017

#### 4.D Reserves

The State Retiree Health Plan is a pay-as-you-go plan and has no reserves.

#### 4.E Historical Trend Information

The historical trend information is designed to provide funding progress in the State Retiree Health

Plan. This information is presented in the Required Supplementary Information immediately after the Notes to the Basic Financial Statements.

#### 5. Interfund Activity and Transactions

#### 5.A Interfund Receivables and Payables (In accordance with GASB Statement 38)

At year-end, accruals related to interfund transfers and interfund reimbursements between the System's funds, are reported as Due From Other Funds or Due To Other Funds in the fund financial statements (See Note 1.G). Figure 28 presents individual interfund receivable

#### Figure 28 Interfund Receivables and Payables

	Due From Other Funds	Due to Other Funds
Governmental Activities:	\$	\$
Governmental Funds	12,000	17,064
Employees Life, Accident		
& Health Insurance and		
Benefits Fund	2,801,957	331,404,375
<b>Total Governmental Activities</b>	2,813,957	331,421,439
Fiduciary Funds:		
Pension & Other Employee		
Benefit Trust Funds	331,851,236	3,243,754
Total - Interfund Receivables		
& Payables	334,665,193	334,665,193

and interfund payable balances at August 31, 2017. In January 2017, the State Retiree Health Plan, an other postemployment benefit trust fund, granted a \$250,000,000 loan to the Employee Life, Accident and Health Insurance and Benefits Fund, a proprietary fund, for one year at the interest rate that is equal to the depository interest rate set forth by the Texas State Treasury.

#### 5.B Interfund Transfers

(In accordance with GASB Statement 38) Interfund Transfers include transfers of membership fees from the Employees Retirement Fund to other funds of the System and transfers between the Employees Retirement Fund and the Excess Benefit Arrangement Fund for retirement benefit payments (See Note 1.G).

Interfund Transfers between governmental activities and fiduciary funds are reclassified to revenues and expenses in the government-wide Statement of Activities. Figure 29 on the next page presents interfund transfers for the year ended August 31, 2017.

August 31, 2017

Figure 29 Interfund Transfers						
	Transf	ers <sup>-</sup> In	Transfers Out			
	\$	\$	Out			
Governmental Activities:						
Non-Major Governmental						
Fund:						
Social Security Administration						
(Agency 327, Fund 0955)	64,0	000				
<b>Total Governmental Activities</b>	64,0	000	-			
Fiduciary Funds:						
Pension and Other Employee						
Benefit Trust Funds	459,2	258	523,258			
<b>Total - Interfund Transfers</b>	523,2	258	523,258			

#### 5.C Interagency Transfers

Interagency Transfers include transfers between the System's funds and other funds of the State of Texas reporting entity that are for payment of benefits from the Compensation to Victims of Crime fund that are funded by the Office of the Attorney General. (See Note 1.G). Also included in this category is the amount transferred to the Teacher Retirement System for service established in the Employees Retirement Fund and payable from the Excess Benefit Arrangement Fund.

Interagency Transfers between Governmental Activities and other funds of the State are reclassified to revenues and expenses in the government-wide Statement of Activities.

### 6. Contingent Liability

#### 6.A Litigation

The System is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the System's attorneys, the resolution of these matters will not have a material adverse effect on the financial condition of the System.

#### 6.B Sick Leave

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. In the event of an employee's death, a payment is made to the employee's estate for one-half of the accumulated leave or 336 hours, whichever is less. Such payments are recognized as expenses/ expenditures when paid.

Service credit is given upon retirement at the rate of one month of service for each 160 hours of an employee's accumulated sick leave balance. Additional fractions of 160 hours are counted as full months of service credit. Effective August 28, 1995, accumulated sick leave may also be used to meet service requirements to qualify for retirement at a rate of one month of service for each 160 hours of accrued unused sick leave for employees hired before September 1, 2009. Employees hired after September 1, 2009 will not be able to use accumulated sick leave to meet retirement eligibility. The additional contingent liability for future compensation of sick leave, based on accumulated sick leave balances as of August 31 was not considered material.

#### 7. Risk Management

(In accordance with GASB Statement 10)

#### 7.A Risk Exposure

The System is exposed to the following types of claims for risk of loss:

- Health insurance
- Life insurance
- Accidental death and dismemberment (AD & D) insurance
- Disability insurance
- Dental insurance
- Property and casualty
- Unemployment
- · Workers' compensation

#### 7.B Risk Financing

Claims for health, life, accidental death and dismemberment (AD & D), disability, and dental insurance coverages are recorded in the Employees Life, Accident and Health Insurance and Benefits Fund under the Texas Employees Group Benefits Program (GBP). These coverages are provided through a combination of insurance contracts, a self-funded health plan, a self-funded dental indemnity plan, health maintenance organization (HMO) contracts, and dental discount plan.

The System purchases commercial insurance to cover the risk of loss related to general liability; theft of, damage to, and destruction of assets; and natural disasters. Claims for unemployment and workers compensation are funded by the System on a pay-as-you-go basis, and they are paid out of the Employees Retirement System Fund. These claim expenses are allocated periodically to other funds based on percentages determined by a study of each fund's usage. The risk financing for different coverages is summarized in Figure 30 on the next page.

#### 7.C Liabilities

For self-funded coverages of the Internal Service Fund, the System's liabilities are reported when it is both probable that a loss has occurred and the amount of that loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported.

August 31, 2017

Based on the estimates provided by the System's insurance actuary (Rudd and Wisdom, Inc.), liabilities are reevaluated to consider current settlements, frequency of claims, past experience and economic factors. Changes in the balances of the self-funded claims liabilities for the current and prior fiscal years are presented in Figure 31.

Figure 31				
Changes in Self-Funded Claims Liabilities				

	2017	2016
	\$	\$
Beginning Balance Current-Year Claims and Changes in	579,594,000	541,074,000
Estimates	2,254,053,910	2,281,835,418
Claim Payments	(2,217,752,910)	(2,243,315,418)
Ending Balance	615,895,000	579,594,000

For coverages that are insured (not self-funded), no significant reductions in insurance coverage occurred in the past year. For both self-funded and insured coverages of the Internal Service Fund, the balance of claims that have been incurred but not reported as of August 31, 2017 is \$608,052,866.

#### 8. Termination Benefits

#### (In accordance with GASB Statement 47)

Termination benefits in the form of healthcare continuation under Consolidated Omnibus Budget Reconciliation Act (COBRA) are provided for both voluntary and involuntary terminations under the Group Benefits Program. The System maintains the COBRA membership in the Group Benefits Program as part of a group without designating the entity where the members worked prior to being eligible for COBRA benefits. The Group Benefits Program has 723 COBRA participants.

The COBRA members are eligible to remain in the Group Benefits Program for 18 months, 29 months if disabled, and their dependents are eligible to remain in the program for 36 months. The premium rates are set annually, and are based on the experience of the group.

#### 9. Restatement

Subsequent to the issuance of the Comprehensive Annual Financial Report for the fiscal year ended August 31, 2016, the System's management discovered that \$502,258,659 balances in the Due to Other Funds account in the State Retiree Health Plan Fund and the corresponding Due From Other Funds account in the Employees Life, Accident and Health Insurance and Benefits Fund should be eliminated.

The balances in these accounts were established in previous fiscal years to recognize the implicit rate subsidies between these two funds. The System performed additional analysis in fiscal year 2017 and determined that the implicit rate subsidies recorded in previous fiscal years were not recognized in accordance with the reporting requirement established by the Governmental Accounting Standard Board. As a result, the System reversed the implicit rate subsidies and restate the beginning fund balance in both funds by \$502,258,659. The changes to the financial statements as of August 31, 2016 are summarized in Figure 32 on the next page.

Type of Coverage	Plan Name	Self-Funded	<b>Risk Retained with</b>
	<ul> <li>HealthSelect</li> </ul>	Yes	System
Health	• HMOs	No	Insurance Carrier
	Prescription Drug	Yes	System
Life	N/A	No	Insurance Carrier
Accidental Death and Dismemberment	N/A	No	Insurance Carrier
Disability	N/A	Yes	System
	DHMOs	No	Insurance Carrier
Dental	<ul> <li>Dental Indemnity Plan</li> </ul>	Yes	System
	Dental Discount Plan	No	Insurance Carrier
Property and Casualty	N/A	No	Insurance Carrier
Unemployment	N/A	Yes	System
Workers' Compensation	N/A	Yes	System

#### Figure 30 Summary of Risk Financing

August 31, 2017

#### Figure 32 Summary of Restatement

Financial Statement Une Item     Reported)     (As Restated)       Statement of Net Position (Exhibit I)     Asset:     Due from Other Funds     506,799,882     4,541,223       Total Acests     751,181,8716     249,560,057     508,144,569       Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits     498,473,933     (3,384,726)       Statement of Activities (Exhibit II)     498,473,933     (3,384,726)       Statement of Activities (Exhibit II)     Assets:     498,473,933     (3,384,726)       Balance Sheet - Governmental Activities in the Statement of Net Position     498,473,933     (3,384,726)       Statement of Net Position - Covernmental Activities in the Statement of Net Position     58,407,888     (443,850,771)       Statement of Net Position - Proprietary Fund (Exhibit V)     Assets:     506,787,382     4,528,723       Due from Other Funds     506,787,382     4,228,723     (3,384,726)       Statement of Net Position - Proprietary Fund (Exhibit V)     Assets:     1,138,323,466     630,064,827       Due from Other Funds     506,787,382     4,528,723     (3,384,726)       Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)     59,407,884     (43,880,771)       Operating Revenues     1,992,219,546     1,489,60,887     (3,384,726)       Statement of Revenues, Expenses and		2016 (As Previously	2016
Assets:         506,799,882         4,541,223           Total Current Asset         751,818,716         229,650,057           Total Assets         751,818,716         229,650,057           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,394,726)           Statement of Activities (Exhibit II)         498,895,664         (3,362,995)           Statement of Activities (Exhibit III)         498,895,664         (3,362,995)           Statement of Activities (Exhibit III)         498,895,664         (3,362,995)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV)         54,407,888         (443,860,771)           Amounts reported for "Governmental Activities" in the Statement of Net Position         59,407,888         (43,860,771)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit V)         59,407,888         (443,860,771)           Assets:         1,338,234,860         566,787,382         4,528,723           Total Assets         7,517,38,974         244,460,315           Total Activitaes of Employee Benefits - Employees Life, Accident and Health Insurance and         498,873,933         (3,384,726)           Statement of Revenues:         Contributions to Insurance Program         2,515,580,604         2,011,321		Reported)	(As Restated)
Total Current Asset         751 818 716         249.560 057           Total Assets         1138.040.3228         636.144.669           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498.895.664         (3.384.726)           Statement of Activities (Exhibit II)         498.895.664         (3.362.995)           Balance Sheet - Governmental Funds (Exhibit III)         498.895.664         (3.362.995)           Statement of Activities (Exhibit III)         498.895.664         (3.362.995)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV)         Amounts reported for "Governmental Activities" in the Statement of Net Position         58.407.888         (443.850.771)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit V)         Sastement of Net Position - Proprietary Fund (Exhibit V)         Sastement of Net Position - Statement of Net Position         58.407.888         (443.850.771)           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)         Operating Revenues         1.38.323.486         636.064.827           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and 498.873.933         (3.384.726)         1.489.90.807           Statement of Revenues.         Expenses         1.992.219.546         1.489.90.807         1.138.321.405			
Total Assets         1,138,403,228         636,144,569           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,384,726)           Total Net Position         498,873,933         (3,384,726)           Statement of Activities (Exhibit II) Announts reported for "Governmental Activities" in the Statement of Net Position         498,873,933         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit VI) Announts reported for "Governmental Activities" in the Statement of Net Position         58,407,888         (443,850,771)           Statement of Net Position - Proprietary Fund (Exhibit VI) Assets:         58,407,888         4,528,723         (43,850,771)           Statement of Net Position - Proprietary Fund (Exhibit VI) Assets:         75,738,974         249,480,315         (3,384,726)           Statement of Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenues:         2,513,580,064         2,011,321,405           Total Assets         1,383,423,833         (3,384,726)         (3,84,726)           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenues:         2,513,580,064         2,011,321,405	Due from Other Funds	506,799,882	4,541,223
Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,384,726)           Statement of Activities (Exhibit II) Net Position - Ending         498,895,664         (3,362,995)           Balance Sheet - Governmental Funds (Exhibit II) Amounts reported for "Covernmental Activities" in the Statement of Net Position         498,873,933         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV) Amounts reported for "Covernmental Activities" in the Statement of Net Position         58,407,888         (443,850,771)           Statement of Net Position - Proprietary Fund (Exhibit V) Assets: Due from Other Funds Total Current Assets         506,787,382         4,528,723           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,384,726)           Statement of Revenues: Contributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,480,960,887           Total Overlaing Revenue         2,513,580,064         2,011,321,405         2,011,321,405           Operating Revenue         2,513,580,064         2,012,811,81         2,011,321,405           Operating Income Contributions to Insurance Program         5,8407,888         (443,850,771)           Net Position         498,873,933         (3,384,726)           Deat one from Steme Program </td <td></td> <td></td> <td></td>			
Benefits498,873,933(3.384,726)Statement of Activities (Exhibit II)498,895,664(3.362,995)Statement of Activities (Exhibit II)498,895,664(3.362,995)Balance Sheet - Governmental Funds (Exhibit III)498,873,933(3.384,726)Amounts reported for "Covernmental Activities" in the Statement of Net Position498,873,933(3.384,726)Statement of Revenues, Expenses and Changes in Not Position - Governmental Funds (Exhibit IV)Amounts reported for "Covernmental Activities" in the Statement of Net Position58,407,888Assets:506,787,3824,528,723Due from Other Funds751,738,974244,803,15Total Current Assets751,738,974244,903,15Total Current Assets751,738,974244,903,15Total Assets1,138,323,486636,064,827Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits498,873,933(3.384,726)Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Overaing Revenues:2,515,580,0442,011,321,405Contributions to Insurance Program2,515,080,0402,012,301,321,405Operating Income40,640,774(461,617,885)Change in Net Position498,873,933(3,384,726)Destion - Ending40,640,774(461,617,885)Change in Net Position (Cashibit VII)498,873,933(3,384,726)Operating Income40,640,774(461,617,885)Change in Net Position (Exhibit VII)40,640,774 <td< td=""><td>Total Assets</td><td>1,138,403,228</td><td>636,144,569</td></td<>	Total Assets	1,138,403,228	636,144,569
Total Net Position498,895,664(3,362,995)Statement of Activities (Exhibit II) Amounts reported for "Governmental Activities" in the Statement of Net Position498,895,864(3,342,995)Balance Sheet - Governmental Activities " in the Statement of Net Position498,873,933(3,384,726)Statement of Revenues, Expenses and Changes In Net Position - Governmental Funds (Exhibit IV) Amounts reported for "Governmental Activities" in the Statement of Net Position58,407,888(443,850,771)Statement of Net Position - Proprietary Fund (Exhibit V) Assets:58,407,8824,528,723Due from Other Funds56,787,3824,528,723Total Current Assets751,738,974249,400,315Total Current Assets751,738,974249,400,315Total Assets751,738,974249,400,315Total Assets751,738,974249,400,315Contribution Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits498,873,933(3,384,726)Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenue2,515,060,0402,011,321,405Contributions to Insurance Program2,516,060,0402,011,321,4052,012,801,381Total Operating Revenue2,515,060,0402,012,801,381Operating Income Increase in Due From Other Funds(186,531,016)-Net Position - Ending40,640,774(461,617,885)Change in Net Position (Exhibit VII) Operating Revenue(186,531,016)-Operating Revenue(186,531,016)-Change in	Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and		
Statement of Activities (Exhibit II) Net Position - Ending         498,895,664         (3,362,995)           Balance Sheet - Governmental Funds (Exhibit III) Amounts reported for "Governmental Activities" in the Statement of Net Position         498,873,933         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV) Amounts reported for "Governmental Activities" in the Statement of Net Position         58,407,888         (443,850,771)           Statement of Net Position - Proprietary Fund (Exhibit V) Assets:         506,787,382         4,528,723           Total Current Assets         1,138,323,486         636,064,827.33         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenues: Contributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Cortributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,487           Total Cortributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Cortributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Operating Revenue         2,515,660,040         2,011,321,405         1,489,960,887           Operating Income         4,064,07,74         (461,617,885)         1,4			
Net Position - Ending498,895,664(3,362,995)Balance Sheet - Governmental Funds (Exhibit III) Amounts reported for "Governmental Activities" in the Statement of Net Position498,873,933(3,384,726)Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV) Amounts reported for "Governmental Activities" in the Statement of Net Position58,407,888(443,850,771)Statement of Net Position - Proprietary Fund (Exhibit V) Assets:506,787,3824,528,723Total Current Assets1,138,323,486636,064,827.33Total Assets1,138,323,486636,064,827.33Statement of Revenues, Expenses and Changes In Net Position - Proprietary Fund (Exhibit VI) Operating Revenues:998,873,933(3,384,726)Statement of Revenues: Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,487Total Contributions to Insurance Program - From the State of Texas for Employees1,992,419,4401,443,450,771Operating Revenue2,515,860,0402,011,321,4051,489,960,487Total Operating Revenue5,64,778(461,617,885)Increase in Due From Other Funds40,640,774(461,617,885)Increase in Due From Other Funds1,66,531,016-Decrease in Due From Other Funds1,66,531,016-Decrease in Due From Other Funds506,780,3644,521,705Due to Other Funds - Total Defined Benefit Pians506,780,3644,521,705<	Total Net Position	498,895,664	(3,362,995)
Balance Sheet - Governmental Funds (Exhibit III) Amounts reported for "Governmental Activities" in the Statement of Net Position         498,873,933         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV) Amounts reported for "Governmental Activities" in the Statement of Net Position         58,407,888         (443,850,771)           Statement of Net Position - Proprietary Fund (Exhibit V) Assets:         506,787,382         4,528,723           Due from Other Funds         506,787,382         4,528,723           Total Current Assets         751,738,973         (3,384,726)           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)         596,787,382         4,528,723           Total Current Assets         751,738,974         249,480,315         536,064,827           Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)         592,219,546         1,489,960,887           Contributions to Insurance Program - From the State of Texas for Employees         1,92,219,546         2,011,321,405           Total Operating Revenues:         2,515,060,040         2,011,321,405         2,012,801,881           Operating Income         40,640,774         (461,617,885)         (443,850,771)           Net Position - Ending         498,873,933         (3,347,726)         315,727,433           Statement of Ca	Statement of Activities (Exhibit II)	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••
Amounts reported for "Governmental Activities" in the Statement of Net Position       498,873,933       (3,384,726)         Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV)       58,407,88       (443,850,771)         Statement of Net Position - Proprietary Fund (Exhibit V)       Assets:       506,787,382       4,528,723         Total Current Assets       761,738,974       249,400,315       636,064,827         Total Assets       1,138,323,486       636,064,827         Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits       98,873,933       (3,384,726)         Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit V)       Operating Revenues:       1,992,219,546       1,489,960,887         Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887       1,489,960,887         Total Contribution to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887       1,489,960,887         Change in Net Position       58,407,888       (443,850,771)       1,489,960,887       1,489,960,887         Operating Income       40,640,774       (461,617,885)       1,489,960,887       1,489,960,887       1,489,960,887       1,489,960,887       1,489,960,887       1,387,2763       3,57,27,643	Net Position - Ending	498,895,664	(3,362,995)
Amounts reported for "Governmental Activities" in the Statement of Net Position       498,873,933       (3,384,726)         Statement of Revenues, Expenses and Changes in Net Position - Governmental Funds (Exhibit IV)       58,407,88       (443,850,771)         Statement of Net Position - Proprietary Fund (Exhibit V)       Assets:       506,787,382       4,528,723         Total Current Assets       761,738,974       249,400,315       636,064,827         Total Assets       1,138,323,486       636,064,827         Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits       98,873,933       (3,384,726)         Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit V)       Operating Revenues:       1,992,219,546       1,489,960,887         Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887       1,489,960,887         Total Contribution to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887       1,489,960,887         Change in Net Position       58,407,888       (443,850,771)       1,489,960,887       1,489,960,887         Operating Income       40,640,774       (461,617,885)       1,489,960,887       1,489,960,887       1,489,960,887       1,489,960,887       1,489,960,887       1,387,2763       3,57,27,643	Balance Sheet - Governmental Funds (Exhibit III)	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••
Amounts reported for "Governmental Activities" in the Statement of Net Position       58,407,888       (443,850,771)         Statement of Net Position - Proprietary Fund (Exhibit V)       Assets:       506,787,382       4,528,723         Total Current Assets       751,738,974       249,480,315       506,684,227         Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits       498,873,933       (3,384,726)         Statement of Revenues:       Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887         Total Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       2,011,321,405         Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       2,011,321,405         Operating Revenue       2,513,580,064       2,011,321,405       2,012,801,381         Operating Income       40,640,774       (461,617,885)       (443,850,771)         Net Position - Ending       498,873,933       (3,384,726)       315,727,643         Statement of Floucary Net Position (Exhibit VII)       40,640,774       (461,617,885)       (461,617,885)         Increase in Due From Other Funds       157,872,818       315,727,643       315,727,643       315,727,643       315,727,643       315,727,643       315,727,643		498,873,933	(3,384,726)
Amounts reported for "Governmental Activities" in the Statement of Net Position       58,407,888       (443,850,771)         Statement of Net Position - Proprietary Fund (Exhibit V)       Assets:       506,787,382       4,528,723         Total Current Assets       751,738,974       249,480,315       506,684,227         Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits       498,873,933       (3,384,726)         Statement of Revenues:       Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       1,489,960,887         Total Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       2,011,321,405         Contributions to Insurance Program - From the State of Texas for Employees       1,992,219,546       2,011,321,405         Operating Revenue       2,513,580,064       2,011,321,405       2,012,801,381         Operating Income       40,640,774       (461,617,885)       (443,850,771)         Net Position - Ending       498,873,933       (3,384,726)       315,727,643         Statement of Floucary Net Position (Exhibit VII)       40,640,774       (461,617,885)       (461,617,885)         Increase in Due From Other Funds       157,872,818       315,727,643       315,727,643       315,727,643       315,727,643       315,727,643       315,727,643	Statement of Devenues, Evidences and Changes in Nat Desition - Covernmental Evide (Evidibit I		
Statement of Net Position - Proprietary Fund (Exhibit V)           Assets:         Due from Other Funds         506,787,382         4,528,723           Total Current Assets         751,738,974         249,480,315           Total Current Assets         1,138,323,486         636,064,827           Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits         498,873,933         (3,384,726)           Statement of Revenues:         Contributions to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Contribution to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Contribution to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Total Contribution to Insurance Program - From the State of Texas for Employees         1,992,219,546         1,489,960,887           Charge in Net Position         58,407,888         (441,617,885)         (443,850,771)           Net Position - Ending         498,873,933         (3,384,726)           Decrease in Due From Other Funds         (186,531,016)         -         -           Increase in Due From Other Funds         15,727,643         315,727,643         -         315,727,643           Due to Other Funds - State Retiree			(443.850.771)
Assets:       Due from Other Funds       506,787,382       4,528,723         Total Current Assets       751,738,974       249,480,315         Total Assets       1,138,323,486       636,064,827         Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits       498,873,933       (3,384,726)         Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)       Operating Revenues:       2,513,580,064       2,011,321,405         Total Contributions to Insurance Program       2,513,680,064       2,011,321,405       2,012,801,381         Operating Revenue       2,515,060,040       2,012,801,381       0,404,774       (461,617,885)         Change in Net Position       58,407,888       (443,850,771)       498,873,933       (3,384,726)         Statement of Cash Flows - Proprietary Fund (Exhibit VII)       0       2,012,801,381       0         Operating Income       40,640,774       (461,617,885)       1,727,643         Increase in Due From Other Funds       157,72,818       344,385,841         Decrease in Due From Other Funds       315,727,643       344,385,841         Det o Other Funds - State Retiree Health Plan       506,780,364       4,521,705         Due to Other Funds - State Retiree Health Plan       600,744,175       178,485,513	· · · · ·	•••••••••••••••••••••••••••••••••••••••	
Due from Other Funds506,787,3824,528,723Total Current Assets751,738,974249,480,315Total Assets1,138,323,486636,064,827Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits498,873,933(3,384,726)Statement of Revenues; Expenses and Changes In Net Position - Proprietary Fund (Exhibit VI) Operating Revenues:Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contributions to Insurance Program2,513,580,0642,011,321,405Total Operating Revenue2,515,060,0402,012,801,381Operating Income40,640,774(461,617,885)Change in Net Position58,407,788(443,850,771)Net Position - Ending49,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)Decrease in Due From Other Funds(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities:Due to Other Funds - Total Perinein and Other Employee Benefit Trust Funds506,780,3644,521,705 178,485,541Due to Other Funds - Total Perinein and Other Employee Benefit Trust Funds680,744,175178,485,541Statement of Fiduciary Net Position (Exhibit VIII) Liabilities - Total Defined Benefit Plans506,780,3644,521,705 178,485,541Due to Other Funds - Total Pension and Other Employee Benef			
Total Current Assets751,738,974249,480,315Total Assets1,138,323,486638,064,827Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits498,873,933(3,384,726)Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenues: Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contribution to Insurance Program2,513,580,0642,011,321,405Total Contribution to Insurance Program2,515,060,0402,012,801,381Operating Income40,640,774(461,617,885)Change in Net Position58,407,888(443,850,771)Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Increase in Due From Other Funds(17,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities:506,780,3644,521,705Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans508,456,5306,197,871Due to Other Funds - Total Defined Benefit Trust Funds508,456,5306,197,871Due to Other Funds - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Due to Other Funds - State Retiree Health Plan </td <td></td> <td>506,787,382</td> <td>4,528,723</td>		506,787,382	4,528,723
Net Position Restricted for Employee Benefits - Employees Life, Accident and Health Insurance and Benefits498,873,933(3,384,726)Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI) Operating Revenues: Contributions to Insurance Program - From the State of Texas for Employees Total Contribution to Insurance Program 2,513,580,0641,489,960,887 2,011,321,405Operating Revenue Operating Revenue2,515,060,0402,011,321,405Operating Income Change in Net Position40,640,774 58,407,888(461,617,885) (443,850,771)Net Position - Ending40,640,774 40,640,774(461,617,885)Operating Income Increase in Due From Other Funds Decrease in Due From Other Funds (186,531,016) Decrease in Due From Other Funds Total Adjustments40,640,774 40,640,774(461,617,885) 44,640,774Statement of Fiduciary Net Position (Exhibit VII) Liabilities: Due to Other Funds - State Retiree Health Plan Due to Other Funds - State Retiree Health Plan Due to Other Funds - Total Defined Benefit Plans Due to Other Funds - Total Defined Benefit Plans Total Liabilities - State Retiree Health Plan Due to Other Funds - Total Defined Benefit Plans Total Liabilities - Total Pension and Other Employee Benefit Trust Funds506,780,364 1,821,562,500,66545,91,347 561,312,662 	Total Current Assets		
Benefits         Statement of Revenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)         Operating Revenues:       1,992,219,546       1,489,960,887         Contributions to Insurance Program       2,513,580,064       2,011,321,405         Total Operating Revenue       2,515,060,040       2,012,801,381         Operating Income       40,640,774       (461,617,885)         Change in Net Position       58,407,888       (443,850,771)         Net Position - Ending       498,873,933       (3,384,726)         Statement of Cash Flows - Proprietary Fund (Exhibit VII)       40,640,774       (461,617,885)         Operating Income       40,640,774       (461,617,885)         Increase in Due From Other Funds       40,640,774       (461,617,885)         Decrease in Due From Other Funds       1,78,72,818       344,385,841         Statement of Fiduciary Net Position (Exhibit VIII)         Liabilities:       506,780,364       4,521,705         Due to Other Funds - State Retiree Health Plan       506,780,364       4,521,705         Due to Other Funds - Total Defined Benefit Plans       508,746,530       6,197,871         Due to Other Funds - Total Defined Benefit Plans       1,063,571,321       561,312,662         Total Liabilities - Total Defined Benefit Plans	Total Assets	1,138,323,486	636,064,827
Operating Revenues: Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contribution to Insurance Program2,513,580,0642,011,321,405Total Operating Revenue2,515,060,0402,011,321,405Operating Income40,640,774(461,617,885)Change in Net Position58,407,888(443,850,771)Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds157,727,643315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities: Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - State Retiree Health Plan508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,083,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit		498,873,933	(3,384,726)
Operating Revenues: Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contribution to Insurance Program2,513,580,0642,011,321,405Total Operating Revenue2,515,060,0402,011,321,405Operating Income40,640,774(461,617,885)Change in Net Position58,407,888(443,850,771)Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds-315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities: Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - State Retiree Health Plan508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans <t< td=""><td>Statement of Peyenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)</td><td>•••••••••••••••••••••••••••••••••••••••</td><td></td></t<>	Statement of Peyenues, Expenses and Changes in Net Position - Proprietary Fund (Exhibit VI)	•••••••••••••••••••••••••••••••••••••••	
Contributions to Insurance Program - From the State of Texas for Employees1,992,219,5461,489,960,887Total Contribution to Insurance Program2,513,580,0642,011,321,405Total Operating Revenue2,515,060,0402,012,801,381Operating Income40,640,774(461,617,885)Change in Net Position498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII)498,873,933(3,384,726)Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VII)506,780,3644,521,705Liabilities:Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Defined Benefit Plans508,456,5306,197,871Total Liabilities - Total Defined Benefit Plans508,456,5306,197,871Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659 <td></td> <td></td> <td></td>			
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Operating Income40,640,774(461,617,885)Change in Net Position58,407,888(443,850,771)Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII)Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643344,385,841Statement of Fiduciary Net Position (Exhibit VIII)Liabilities:315,727,643344,385,841Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Defined Benefit Plans508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans502,258,65926,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit P	Total Contribution to Insurance Program	2,513,580,064	2,011,321,405
Change in Net Position58,407,888(443,850,771)Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities: Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Defined Benefit Plans508,744,175178,485,516Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321551,312,662Total Liabilities - Total Defined Benefit Plans1,063,571,321551,312,662Total Liabilities - Total Defined Benefit Plans1,083,571,321551,312,662Total Liabilities - Total Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514	Total Operating Revenue	2,515,060,040	2,012,801,381
Net Position - Ending498,873,933(3,384,726)Statement of Cash Flows - Proprietary Fund (Exhibit VII) Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII)Liabilities:Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Total Liabilities - State Retiree Health Plan508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514	Operating Income	40,640,774	(461,617,885)
Statement of Cash Flows - Proprietary Fund (Exhibit VII)Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII)Liabilities:Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan1,063,571,321561,312,662Total Liabilities - State Retiree Health Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,51426,209,007,514	Change in Net Position	58,407,888	(443,850,771)
Statement of Cash Flows - Proprietary Fund (Exhibit VII)Operating Income40,640,774(461,617,885)Increase in Due From Other Funds(186,531,016)-Decrease in Due From Other Funds315,727,643Total Adjustments(157,872,818)344,385,841Statement of Fiduciary Net Position (Exhibit VIII)Liabilities:Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - State Retiree Health Plan1,063,571,321561,312,662Total Liabilities - State Retiree Health Plans1,063,571,321561,312,662Total Liabilities - Total Defined Benefit Plans1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,51426,209,007,514	Net Position - Ending	498,873,933	(3,384,726)
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Increase in Due From Other Funds Decrease in Due From Other Funds Total Adjustments (186,531,016) - 315,727,643 (157,872,818) 344,385,841 <b>Statement of Fiduciary Net Position (Exhibit VIII)</b> Liabilities: Due to Other Funds - State Retiree Health Plan Due to Other Funds - Total Defined Benefit Plans Due to Other Funds - Total Defined Benefit Plans Total Liabilities - State Retiree Health Plan Total Liabilities - Total Defined Benefit Plans Total Liabilities - Total Pension and Other Employee Benefit Trust Funds Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other Employee Benefits - Total Pension and Other Employee Benefits - Total Pension and Other		40 640 774	(461 617 885)
Decrease in Due From Other Funds Total Adjustments-315,727,643 344,385,841Statement of Fiduciary Net Position (Exhibit VIII) Liabilities: Due to Other Funds - State Retiree Health Plan506,780,364 507,850,0064,521,705 507,850,006Due to Other Funds - Total Defined Benefit Plans507,850,006 507,850,0065,591,347 508,456,5306,197,871 178,485,516Due to Other Funds - Total Defined Benefit Plans508,456,530 6,197,8716,197,871 178,485,516508,456,530 1,063,571,3216,197,871 178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321 1,063,571,321561,312,662 580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans 25,706,748,855502,258,659 26,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,855 26,209,007,514	1 0	, ,	
Statement of Fiduciary Net Position (Exhibit VIII)Liabilities:Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,65926,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,65926,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514	Decrease in Due From Other Funds	-	315,727,643
Liabilities:506,780,3644,521,705Due to Other Funds - State Retiree Health Plans507,850,0065,591,347Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514	Total Adjustments	(157,872,818)	344,385,841
Due to Other Funds - State Retiree Health Plan506,780,3644,521,705Due to Other Funds - Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds - Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514		•••••••	
Due to Other Funds -Total Defined Benefit Plans507,850,0065,591,347Due to Other Funds -Total Pension and Other Employee Benefit Trust Funds508,456,5306,197,871Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities -Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities -Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514		506,780.364	4,521,705
Total Liabilities - State Retiree Health Plan680,744,175178,485,516Total Liabilities - Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities - Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514			, ,
Total Liabilities -Total Defined Benefit Plans1,063,571,321561,312,662Total Liabilities -Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514		, ,	6,197,871
Total Liabilities -Total Pension and Other Employee Benefit Trust Funds1,082,620,743580,362,084Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan-502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514			
Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan502,258,659Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514			
Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans25,706,748,85526,209,007,514Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other25,706,748,85526,209,007,514	Iotal Liabilities - Iotal Pension and Other Employee Benefit Trust Funds	1,082,620,743	580,362,084
Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other		-	
		25,706,748,855	26,209,007,514
20,717,400,170 20,218,710,007		25 717 455 178	26 219 713 837
- to next page		20,111,100,110	

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# Notes to the Basic Financial Statements (Concluded) August 31, 2017

	2016	
	(As Previously	2016
Financial Statement Line Item	Reported)	As Restated)
Statement of Changes in Fiduciary Net Position (Exhibit IX)	. ,	
Additions:		
Employer Contribution - State Retiree Health Plan	663,986,538	1,166,245,197
Employer Contribution - Total Defined Benefit Plans	1,390,698,889	1,892,957,548
Employer Contribution - Total Pension and Other Employee Benefit Trust Funds	1,390,698,889	1,892,957,548
Total Contribution - State Retiree Health Plan	916,456,435	1,418,715,094
Total Contribution - Total Defined Benefit Plans	2,421,994,062	2,924,252,721
Total Contribution - Total Pension and Other Employee Benefit Trust Funds	2,503,020,176	3,005,278,835
Total Additions - State Retiree Health Plan	923,554,259	1,425,812,918
Total Additions - Total Defined Benefit Plans	3,767,881,956	4,270,140,615
Total Additions - Total Pension and Other Employee Benefit Trust Funds	3,851,560,110	4,353,818,769
Net Increase - State Retiree Health Plan		502,258,659
Net Increase - Total Defined Benefit Plans	499,612,114	1,001,870,773
Net Increase - Total Pension and Other Employee Benefit Trust Funds	498,311,162	1,000,569,821
Net Position Restricted for Pension and Other Employee Benefits - State Retiree Health Plan		502,258,659
Net Position Restricted for Pension and Other Employee Benefits - Total Defined Benefit Plans	25,706,748,855	26,209,007,514
Net Position Restricted for Pension and Other Employee Benefits - Total Pension and Other		
Employee Benefit Trust Funds	25,717,455,178	26,219,713,837

## Schedule of Changes in Net Pension Liability and Related Ratios – Defined Benefit Plans $_{(in\ 000's)}$

	2014	2015	2016	2017
	\$	\$	\$	\$
Employees Retirement Fund (Note A)				
Total Pension Liability				
Service Cost	1,139,451	1,231,203	1,146,791	1,457,263
Interest	2,324,180	2,373,849	2,522,626	2,510,128
Changes of Benefit Terms	-	(87,835)	-	-
Difference between Expected and Actual Experience	(252,967)	(284,751)	133,557	115,632
Changes of Assumptions	1,199,067	(3,429,167)	5,301,965	2,219,672
Benefit Payments and Refunds	(1,963,481)	(2,049,291)	(2,147,307)	(2,288,825)
Net Change in Total Pension Liability	2,446,250	(2,245,992)	6,957,632	4,013,870
Total Pension Liability - Beginning	37,064,667	39,510,917	37,264,925	44,222,557
Total Pension Liability - Ending	39,510,917	37,264,925	44,222,557	48,236,427
Plan Fiduciary Net Position				
Contributions - Employer	482,239	500,395	686,763	700,078
Contributions - Member	430,595	462,159	674,678	685,461
Pension Plan Net Investment Income	3,252,417	56,941	1,273,414	2,832,628
Benefit Payments and Refunds	(1,963,481)	(2,049,291)	(2,147,307)	(2,288,825)
Pension Plan Administrative Expense	(20,195)	(21,840)	(20,449)	(23,095)
Net Change in Plan Fiduciary Net Position	2,181,575	(1,051,636)	467,099	1,906,247
Plan Fiduciary Net Position - Beginning	22,868,542	25,050,117	23,998,481	24,465,580
Plan Fiduciary Net Position - Ending	25,050,117	23,998,481	24,465,580	26,371,827
Net Pension Liability - Ending	14,460,800	13,266,444	19,756,977	21,864,600
Plan Fiduciary Net Position as a Percentage of				
Total Pension Liability	63.40%	64.40%	55.32%	54.67%
Covered Payroll (Note B)	5,955,461	6,150,195	6,742,143	6,859,707
Net Pension Liability as a Percentage of Covered	242 820/	045 740/	202.040/	240 740/
Payroll	242.82%	215.71%	293.04%	318.74%

- to next page

## **Required Supplementary Information**

## Schedule of Changes in Net Pension Liability and Related Ratios – Defined Benefit Plans (Continued) (in 000's)

2014	2015	2016	2017
\$	\$	\$	\$
al Fund (Note A)			
54,528	57,459	71,429	99,390
88,025	87,224	88,410	82,236
-	-	-	-
(76,585)	(9,640)	(21,657)	(17,532)
68,228	148,114	375,371	(144,398)
(57,147)	(61,344)	(64,542)	(69,756)
77,049	221,813	449,011	(50,060)
1,465,929	1,542,978	1,764,791	2,213,802
1,542,978	1,764,791	2,213,802	2,163,742
27 758	26 728	27 497	26,583
	•	•	9,583
		•	99,341
			(69,756)
· · · · · ·			(1,811)
		· · · · · · · · · · · · · · · · · · ·	63,940
	• • •	•	860,049
			923,989
673,100	920,646	1,353,753	1,239,753
56.38%	47.83%	38.85%	42.70%
1,496,013	1,506,028	1,725,880	1,746,349
	\$ al Fund (Note A) 54,528 88,025 (76,585) 68,228 (57,147) 77,049 1,465,929 1,542,978 27,758 8,180 111,741 (57,147) (1,324) 89,208 780,670 869,878 673,100	\$ shal Fund (Note A) 54,528 57,459 88,025 87,224 (76,585) (9,640) 68,228 148,114 (57,147) (61,344) 77,049 221,813 1,465,929 1,542,978 1,542,978 1,764,791 27,758 26,728 8,180 8,376 111,741 1,918 (57,147) (61,344) (1,324) (1,411) 89,208 (25,733) 780,670 869,878 869,878 844,145 673,100 920,646	\$         \$         \$           \$al Fund (Note A)         \$           54,528         57,459         71,429           88,025         87,224         88,410           (76,585)         (9,640)         (21,657)           68,228         148,114         375,371           (57,147)         (61,344)         (64,542)           77,049         221,813         449,011           1,465,929         1,542,978         1,764,791           1,542,978         1,764,791         2,213,802           27,758         26,728         27,497           8,180         8,376         9,539           111,741         1,918         44,831           (57,147)         (61,344)         (64,542)           (1,324)         (1,411)         (1,421)           89,208         (25,733)         15,904           780,670         869,878         844,145           869,878         844,145         860,049           673,100         920,646         1,353,753           56.38%         47.83%         38.85%

- to next page

## **Required Supplementary Information**

## Schedule of Changes in Net Pension Liability and Related Ratios – Defined Benefit Plans (Concluded)

(in 000's)

	2014	2015	2016	2017
	\$	\$	\$	\$
Judicial Retirement System Plan II (Note A)				
Total Pension Liability				
Service Cost	17,805	16,244	19,429	20,420
Interest	28,004	30,785	30,980	31,671
Difference between Expected and Actual Experience	(640)	(10,066)	(5,833)	5,091
Changes of Assumptions	(25,924)	35,653	23,397	(56,699)
Benefit Payments and Refunds	(16,420)	(19,238)	(21,155)	(23,361)
Net Change in Total Pension Liability	2,825	53,378	46,818	(22,878)
Total Pension Liability - Beginning	383,461	386,286	439,664	486,482
Total Pension Liability - Ending	386,286	439,664	486,482	463,604
Dian Fiduciany Nat Desition				
Plan Fiduciary Net Position Contributions - Employer	12,211	10 /57	10 07/	12 /05
Contributions - Employer		12,457 5.465	12,374 5.754	12,495
Pension Plan Net Investment Income	5,195 46,186	5,465	19,862	6,017 44,875
Benefit Payments and Refunds		(19,238)	(21,155)	
Pension Plan Administrative Expense	(16,420) (267)		,	(23,361)
Net Change in Plan Fiduciary Net Position	46,905	(284)	(226) <b>16,609</b>	(295) <b>39,731</b>
Plan Fiduciary Net Position - Beginning	318,385	365,290	364,510	39,731
Plan Fiduciary Net Position - Ending	365,290	365,290	381,119	420,850
Fian Flutciary Net Fosition - Enumy		504,510	501,119	420,050
Net Pension Liability - Ending	20,996	75,154	105,363	42,754
Plan Fiduciary Net Position as a Percentage of	04 500/	00.04%	70.04%	00 70%
Total Pension Liability	94.56%	82.91%	78.34%	90.78%
Covered Payroll (Note B)	77,441	77,501	78,261	78,190
Net Pension Liability as a Percentage of Covered				
Payroll	27.11%	96.97%	134.63%	54.68%

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

Note B: The covered payroll is the annual payroll for the fiscal year as reported by the System. The change in the Total Pension Liability due to the change in the Single Discount Rate is included as an assumption change.

## **Required Supplementary Information**

Fiscal Year (Note A)	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency/(Excess)	Cover Payroll	Actual Contribution as a % of Covered Payroll
	\$	\$	\$	\$	%
Employee	Retirement Fund				
2014	727,892,157	482,239,018	245,653,139	5,955,460,705	8.10
2015	737,111,059	500,394,986	236,716,073	6,150,194,660	8.14
2016	679,806,017	686,763,354	(6,957,337)	6,742,143,036	10.19
2017	713,527,832	700,078,188	13,449,644	6,859,706,582	10.21
Law Enfor	cement and Custodi	al Officer Suppleme	ntal Fund		
2014	40,205,389	27,757,980	12,447,409	1,496,012,750	1.86
2015	38,131,404	26,728,318	11,403,086	1,506,027,764	1.77
2016	43,167,243	27,497,297	15,669,946	1,725,879,688	1.59
2017	45,332,090	26,583,162	18,748,928	1,746,349,412	1.52
Judicial Re	etirement System Pla	an II			
2014	13,448,473	12,210,663	1,237,810	77,441,466	15.77
2015	13,107,449	12,457,095	650,354	77,500,736	16.07
2016	12,895,678	12,374,200	521,478	78,260,550	15.81
2017	12,444,384	12,494,828	(50,444)	78,189,668	15.98

#### Schedule of Employer Contributions - Defined Benefit Plans

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

Note A: Percentage contributions on the Schedule of Employer Contributions includes both employer (State) and federal contributions.

Schedule of Changes in Net OPEB Liability and Related Ratios (in 000's)

	2017
State Retiree Health Plan (Note A)	\$
Total ODER Linkility	
Total OPEB Liability Service Cost	1 100 005
Interest	1,122,825 1,554,317
	1,554,517
Changes of Benefit Terms Difference between Expected and Actual Experience	-
Changes of Assumptions	(495,958) 6,244,415
Benefit Payments and Refunds	(734,177)
Net Change in Total OPEB Liability	7,691,422
Total OPEB Liability - Beginning	27,091,372
Total OPEB Liability - Ending	34,782,794
Total of ED Elability - Enaling	04,702,704
Plan Fiduciary Net Position	
Contributions - Employer	892,393
Contributions - Non-employer Contributing Entity	44,434
Contributions - Member	195,806
Pension Plan Net Investment Income	4,517
Benefit Payments and Refunds	(995,816)
Pension Plan Administrative Expense	(5,628)
Other (Federal Revenues and Other Additions)	71,818
Net Change in Plan Fiduciary Net Position	207,524
Plan Fiduciary Net Position - Beginning	502,259
Plan Fiduciary Net Position - Ending	709,783
Net OPEB Liability - Ending	34,073,011
Dian Fiducian Nat Desition as a Demonstrate of	
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	2.0%
	2.070
Covered Payroll	11,745,310
Net OPEB Liability as a Percentage of Covered	
Payroll	290.1%

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

## Schedule of Contributions from Employers and Non-employer Contributing Entities – Other Postemployment Benefit Plan

Fiscal Year (Note A)	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency/(Excess)	Cover Payroll	Actual Contribution as a % of Covered Payroll
	\$	\$	\$	\$	%
State Retir	ee Health Plan				
2017	2,714,958,093	936,827,489	1,778,130,604	11,745,310,057	7.98

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

#### Schedule of Investment Returns

- Annual Money-Weighted Rate of Return, Net of Investment Expense (Note A)

	2014	2015	2016	2017
	%	%	%	%
Defined Benefit Plans:				
Employees Retirement Fund	14.58	0.23	5.40	11.84
Law Enforcement and Custodial Officer Supplemental Fund	14.55	0.22	5.39	11.80
Judicial Retirement System Plan II	14.55	0.23	5.47	11.88
Overall	14.58	0.23	5.40	11.84
Other Postemployment Benefit Plan:				
State Retiree Health Plan	N/A	N/A	N/A	1.03

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

#### Notes to The Required Supplementary Information

#### **Defined Benefit Plans**

The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the Board of Trustees. Additional information on the actuarial assumptions as of the latest actuarial valuation is summarized in Figure 1.

The total pension liability reported in the Schedule of Changes in Net Pension Liability and Related Ratios was provided by the System's actuary. Based on the assumptions summarized in Figure 12 in Note 3, the net pension liability is measured as the total pension liability less the amount of fiduciary net position of the pension plans

The actuarially determined contributions for the Employees Retirement Fund, the Law Enforcement and

Custodial Supplemental Fund, and Judicial Retirement Plan II are calculated as of August 31, 2017, based on the actuarial assumptions described in Figure 1. These contributions are reported in the Schedule of Employer's Contribution – Defined Benefit Plans.

Changes in the assumptions since the previous are described as follows:

- Decrease the investment return assumption from 8.00% to 7.50%;
- Decrease the inflation assumption from 3.50% to • 2.50%;
- . No change to the salary scales above inflation for regular State employees. For LECO members, the merit component was increased by 0.50%, and thus when combined with the decrease in inflation, the nominal assumption is 0.50% lower than the

Summary of Actuarial Assumptions - Defined Benefit Plans							
	Employees Retirement Fund	Law Enforcement and Custodial Officer Supplemental Fund	Judicial Retirement System Plan II				
	(In acco	rdance with GASB Statemen	t No. 67)				
Valuation Date	August 31, 2017	August 31, 2017	August 31, 2017				
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal				
Amortization Method	Level Percent Open	Level Percent Open	Level Dollar Open				
Remaining Amortization Period	31	31	31				
Asset Valuation Method	20% of market plus 80% of expected actuarial value	20% of market plus 80% of expected actuarial value	20% of market plus 80% of expected actuarial value				
Actuarial Assumptions:	•••••••••••••••••••••••••••••••••••••••	•	•				
Investment Rate of Return	8.0%	8.0%	8.0%				
Projected Salary Increases	0.0% – 11.5%	5.0% – 11.5%	3.50%				
Inflation Rate	3.50%	3.50%	3.50%				
Cost-of-living Adjustments	None – Employee 3.5% – Elected	None	None				

Figure 1
Summary of Actuarial Assumptions - Defined Benefit Plans

#### Notes to The Required Supplementary Information (Concluded)

previous assumption. Additionally, the step rates for LECO members were extended from 10 years of service to 19 years of service;

- Establish a general wage inflation assumption of 0.50% above inflation, or 3.00%;
- Mortality Assumptions updated from 1994 Group Annuity Mortality table to most recently published national tables, RP-2014 Mortality Tables for employees and disability retirees;
- Modified the application of Entry Age Normal (EAN) actuarial cost method from Ultimate EAN, the normal cost rate based on the benefits payable to a new member and the entry age characteristics of the current active membership, to Individual EAN which bases the normal cost rate on benefits payable to each individual active member.

#### Other Postemployment Benefit Plan

The assumptions and methods used for this actuarial valuation were recommended by the actuary and adopted by the Board of Trustees. Additional information on the actuarial assumptions as of the latest actuarial valuation is summarized in Figure 2.

Changes in the assumptions since the previous Other Postemployment Benefits (OPEB) valuation are described as follows:

- Additional demographic assumptions (aggregate payroll increases and rate of general inflation) to reflect an experience study;
- The percentage of current and future retirees and retirees spouses not yet eligible to participate in the HealthSelect Medicare Advantage plan who will elect to participate at the earliest date at which coverage can commence has been updated to reflect recent plan experience and expected trends;
- Assumptions for administrative expenses, assumed per Capita Health Benefit Costs, Health Benefit Cost and Retiree Contribution trends to reflect recent health plan experience;
- Effects in short-term expectations and revised assumed rate of general inflation.

The following benefit revisions have been adopted since the prior valuation: (a) an increase in the out-ofpocket cost applicable to services obtained at a freestanding emergency facility, (b) an elimination of the copayment for virtual visits, (c) a copay reduction for Airrosti and for out-of-state participants (d) elimination of the deductible for in-network services and application of a copayment rather than coinsurance to certain services like primary care and specialist visits. These minor benefit changes have been reflected in the fiscal year 2018 Assumed Per Capita Health Benefit Costs.

Figure 2
Summary of Actuarial Assumptions - Other Postemployment Benefit Plan

	State Retiree Health Plan (In accordance with GASB Statement No. 74)
Valuation Date	August 31, 2017
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll, Open
Amortization Period	30 Years
Asset Valuation Method	Not applicable
Actuarial Assumptions:	
Discount Rate	3.51%
Projected Salary Increases	2.5% to 9.5%, including inflation
Inflation Rate	2.50%
Healthcare Cost and Trend Rate	8.50% for FY 2019, decreasing 0.5% per year to 4.50% for FY 2027 and later years



# Other Supplementary Information - Schedule A-1 Combining Statement of Net Position - Agency Funds

August 31, 2017

	Unap	Revenue Fund	Sy	Judicial Retirement /stem Plan I Fund (Note A)	Ded	Offset Account	Direct Deposit Correction Account	Health Savings Account	
		(0001) (U/F 1001)		(0001) (U/F 2001)	(L	(0807) J/F 8070)	(0980) (U/F 0980)	(0973) (U/F 4973)	Totals
Assets	\$		\$		\$		\$	\$	\$
Current Assets:									
Cash and Cash Equivalents:									
Cash in State Treasury						1,276		55,780	57,056
Total Cash and Cash Equivalents		-		-		1,276	-	55,780	57,056
Legislative Appropriation				266,408					266,408
Receivables:									
Accounts Receivable		3,555							3,555
Total Current Assets		3,555		266,408		-	-	-	269,963
Total Assets		3,555		266,408		1,276	-	55,780	 327,019
Liabilities									
Current Liabilities:									
Accounts Payable				266,408					266,408
Funds Held For Others		3,555				1,276		55,780	60,611
Total Current Liabilities		3,555		266,408		1,276	-	55,780	327,019
Total Liabilities		3,555		266,408		1,276	-	55,780	327,019

Note A: Judicial Retirement System Plan I Fund (JRSI) is used to account for appropriations received from the State's General Revenue Fund for annuity and refund payments to eligible judicial employees who commenced service prior to September 1, 1985. Unappropriated Receipts General Revenue Fund accounts for member contributions received from the JRSI Fund.

### Other Supplementary Information – Schedule A-2

Combining Statement of Changes in Assets and Liabilities - Agency Funds Year Ended August 31, 2017

	Beginning Balances	Additions	Deductions	Ending Balances
\$	Salances	\$		Dalances
Unappropriated Receipts General Revenue Fund (0001) (U/F 1001)				
Assets		50 440	50 440	
Cash in State Treasury Accounts Receivable	- 4,663	56,112	56,112 1,108	- 3,555
Due from Other Funds (Note 5.A)	7,840	-	7,840	
Total Assets	12,503	56,112	65,060	3,555
Liabilities	10 500		10 502	
Accounts Payable Fund Held for Others	12,503	- 48,272	12,503 44,717	- 3,555
Total Liabilities	12.503	48.272	57.220	3,555
	· · · · · · · · · · · · · · · · · · ·	•	·	
Judicial Retirement System Plan I Fund (Note A) (0001) (U/F 2001)				
Assets Legislative Appropriations	280.859	26,570,213	26,584,664	266,408
Total Assets	280,859	26,570,213	26.584.664	266,408
		, ,	, ,	,
Liabilities				
Accounts Payable Funds Held For Others	280,859	27,597,327 12,355	27,611,778 12,355	266,408
Total Liabilities	280,859	27,609,682	27,624,133	266,408
Child Support Employee Deductions - Offset Account (0807) (U/F 8070)				
Assets	4 505	44.405	44 704	4.070
Cash in State Treasury Total Assets	1,525 <b>1.525</b>	11,485 <b>11.485</b>	<u>11,734</u> <b>11,734</b>	<u>1,276</u> <b>1,276</b>
	1,020	11,400	11,704	1,270
Liabilities				
Vouchers Payable		10,210	10,210	-
Funds Held For Others Total Liabilities	1,525	11,485	<u>11,734</u> <b>21,944</b>	1,276
	1,525	21,695	21,344	1,276
Correction Account for Direct Deposit (0980) (U/F 0980)				
Assets				
Cash in State Treasury Total Assets	-	667,777 667.777	<u> </u>	-
Iotal Assets		001,111		
Liabilities				
Funds Held For Others	-	667,777	667,777	
Total Liabilities	-	667,777	667,777	<u> </u>
Health Savings Account (0973) (U/F 4973)				
Assets				
Cash in State Treasury	-	836,785	781,005	55,780
Total Assets	-	836,785	781,005	55,780
Liabilities				
Vouchers Payable	-	774,944	774,944	-
Funds Held For Others	-	733,262	677,482	55,780
Total Liabilities	-	1,508,206	1,452,426	55,780
All Agency Funds				
Assets				
Cash in State Treasury	1,525	1,572,159	1,516,628	57,056
Legislative Appropriations	280,859	26,570,213	26,584,664	266,408
Accounts Receivable	4,663	-	1,108	3,555
Due from Other Funds (Note 5.A) Total Assets	7,840 <b>294,887</b>	- 28,142,372	7,840 <b>28,110,240</b>	327,019
10/01/100019	<u></u>	<u> </u>	<u> </u>	<u>961,013</u>
Liabilities				
Vouchers Payable	-	10,210	10,210	-
Accounts Payable	293,362	27,597,327	27,624,281	266,408
Funds Held For Others Total Liabilities	1,525 <b>294,887</b>	1,473,151 <b>29,080,688</b>	1,414,065 29,048,556	60,611 <b>327,019</b>
		20,000,000	<u> </u>	

Note A: Judicial Retirement System Plan I Fund (JRSI) is used to account for appropriations received from the State's General Revenue Fund for annuity and refund payments to eligible judicial employees who commenced service prior to September 1, 1985. Unappropriated Receipts General Revenue Fund accounts for member contributions received from the JRSI Fund.

### Other Supplementary Information – Schedule 1

Revenues, Expenses and Changes in Statutory Account Balances

(Non-GAAP Presentation) - Employees Retirement Fund

Year Ended August 31, 2017

	Employee Savings Account	State Accumulation Account	Retirement Annuity Reserve Account	Interest	Expense Account	Totals
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	677,425,456					677,425,456
Employer Contributions	, ,	699,641,992				699,641,992
Service Contributions from						
Teacher Retirement System			93,321,903			93,321,903
Membership Fees					500,196	500,196
Penalty Interest		8,036,131				8,036,131
Investment Income:						
Net Appreciation in Fair Value of Investments				2,275,734,476		2,275,734,476
Interest and Dividends				588,638,391		588,638,391
Class Action Settlements				1,895,276		1,895,276
Rental Income					41,418	41,418
Warrants Voided By Statute of Limitations		140,110				140,110
Reimbursement - Third Party					3,000	3,000
Miscellaneous					214	214
Total Operating Revenues	677,425,456	707,818,233	93,321,903	2,866,268,143	544,828	4,345,378,563
Operating Expenses						
Retirement System Benefits Paid:						
Retirement Benefits			2,235,255,661			2,235,255,661
Death Benefits:		0 000 550				0 000 550
Active Members		2,096,550	4 507 500			2,096,550
Retirees	400 040 705		1,567,500			1,567,500
Member Contributions Withdrawn Service Contributions to	120,943,785					120,943,785
Teacher Retirement System			21,965,490			21,965,490
Re-Issue Warrants Voided		(1,442)	21,905,490			(1,442)
Administrative Expenses		(1,442)			55,301,764	55,301,764
Depreciation Expense					1,467,954	1,467,954
Total Operating Expenses	120,943,785	2,095,108	2,258,788,651	-		2,438,597,262
	120,010,100	2,000,100	1,200,700,00		00,100,110	2,100,001,202
Income (Loss) Before Non-Operating						
Expenses and Operating Transfers	556,481,671	705,723,125	(2,165,466,748)	2,866,268,143	(56,224,890)	1,906,781,301
Non-Operating Revenues (Expenses)						
Loss on Disposal of Fixed Assets					(10,869)	(10,869)
Income (Loss) Before Operating Transfers	556,481,671	705,723,125	(2,165,466,748)	2,866,268,143	(56,235,759)	1,906,770,432
Operating Transfers In (Out)						
Distribution of Interest	106,947,503	1,289,786,875	1,412,774,748	(2,809,509,126)		
Establishment of Benefit Reserves	(460,595,518)	(2,652,878,314)	3,113,473,832			
Distribution of Interest for				/		
Administrative Expenses	10 1	· · · - · · ·		(56,759,017)	56,759,017	
Member Accounts-Escheated	(3,167,228)	3,167,228			(0.1.000)	101 00-1
Membership Fees Transferred Out					(64,000)	(64,000)
Excess Benefit Arrangement Transfers		(4.050.004.044)	4 500 0 40 500	(0.000.000.4.(2))	(459,258)	(459,258)
Net Operating Transfers	(356,815,243)	(1,359,924,211)	4,526,248,580		56,235,759	(523,258)
Net Income (Loss)	199,666,428	(654,201,086)	2,360,781,832		-	1,906,247,174
Account Balances - Beginning Account Balances - Ending	5,509,428,285 5,709,094,713	(61,826,071) (716,027,157)	19,017,977,910 21,378,759,742			24,465,580,124 26,371,827,298
	3,103,034,113	(110,021,137)	21,310,135,142	-	-	20,311,021,290

Note A: As required by Texas Government Code Chapter 815.322, the System moved funds from the State Accountlation Account to the Retirement Annuity Reserve Account based on the actuarial determined present value of future benefits to be paid to retirees. Fund balance is sufficient to pay the future annuities to the current population of retirees.

## Other Supplementary Information – Schedule 2

#### Revenues, Expenses and Changes in Statutory Account Balances

(Non-GAAP Presentation) - Law Enforcement and Custodial Officer Supplemental Retirement Fund Year Ended August 31, 2017

	Employee	State	Retirement Annuity			
	Savings	Accumulation	Reserve	Interest	Expense	
	Account	Account	Account	Account	Account	Totals
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	9,583,003					9,583,003
State Retirement Contributions		26,583,162				26,583,162
Penalty Interest		41				41
Investment Income:						
Net Appreciation in Fair Value of Investments				79,793,860		79,793,860
Interest and Dividends				20,660,459		20,660,459
Class Action Settlements				66,425		66,425
Warrants Voided By Statute of Limitations		751				751
Total Operating Revenues	9,583,003	26,583,954	-	100,520,744	-	136,687,701
Oncerting Evenence						
Operating Expenses Retirement System Benefits Paid:						
Retirement Benefits			66,800,217			66,800,217
Refunds of Retirement Contributions	2,938,337		00,000,217			2,938,337
Death Benefits:	2,930,337					2,930,337
Active Members		17,763				17,763
Administrative Expenses		17,705			2,991,027	2,991,027
Total Operating Expenses	2,938,337	17,763	66,800,217		2,991,027	72,747,344
Income (Loss) Before Operating Transfers	6,644,666	,	(66,800,217)	100,520,744	(2,991,027)	63,940,357
Operating Transfers In (Out)						
Distribution of Interest	919,716	, ,	47,783,716	(97,529,717)		
Establishment of Benefit Reserves	(2,018,794)	(100,936,122)	102,954,916			
Distribution of Interest for						
Administrative Expenses				(2,991,027)	2,991,027	
Net Operating Transfers	(1,099,078)	,	150,738,632	(100,520,744)	2,991,027	-
Net Income (Loss)	5,545,588	,	83,938,415	-	-	63,940,357
Account Balances - Beginning	41,480,394	, ,	618,987,770	-	-	000,0 .0,220
Account Balances - Ending	47,025,982	174,037,413	702,926,185	-	-	923,989,580

## Other Supplementary Information – Schedule 3

Revenues, Expenses and Changes in Statutory Account Balances

(Non-GAAP Presentation) - Judicial Retirement System Plan Two Fund Year Ended August 31, 2017

	Employee	State	Retirement Annuity			
	Savings		Reserve		Expense	
	Account		Account		Account	Totals
	Account	Account	Account	Account	Account	10(013
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	5,932,854					5,932,854
Employer Contributions		12,494,828				12,494,828
Penalty Interest		83,903				83,903
Investment Income:						
Net Appreciation in Fair Value of Investments				36,014,931		36,014,931
Interest and Dividends				9,294,295		9,294,295
Class Action Settlements				29,988		29,988
Total Operating Revenues	5,932,854	12,578,731	-	45,339,214	-	63,850,799
Operating Expenses						
Retirement System Benefits Paid:						
Retirement Benefits			22,987,686			22,987,686
Member Contributions Withdrawn	373,691					373,691
Administrative Expenses					758,749	758,749
Total Operating Expenses	373,691	-	22,987,686	-	758,749	24,120,126
Income (Loss) Before Operating Transfers	5,559,163	12,578,731	(22,987,686)	45,339,214	(758,749)	39,730,673
Operating Transfers In (Out)						
Distribution of Interest	1,279,637	, ,	15,256,716	( , , , ,		
Establishment of Benefit Reserves	(7,311,769)	(44,953,963)	52,265,732			
Distribution of Interest for						
Administrative Expenses				(758,749)	758,749	
Net Operating Transfers	(6,032,132)	(16,909,851)	67,522,448		758,749	-
Net Income (Loss)	(472,969)	(4,331,120)	44,534,762		-	39,730,673
Account Balances - Beginning	73,450,390	, ,	196,779,287			381,119,508
Account Balances - Ending	72,977,421	106,558,711	241,314,049	-	-	420,850,181

# Other Supplementary Information – Schedule 4 Administrative and Investment Expenses/Expenditures

#### Statutory Administrative Funds and Accounts

Year Ended August 31, 2017

	Administrative Expenses		
	Non-Investment	Investment	
Personnel Services	\$	\$	
Salaries and Wages	21,163,931	13,215,162	
Payroll Related Costs:			
Retirement Contributions	1,996,444	1,000,111	
Retirement Membership Fees	882	231	
Employees Insurance Contributions	2,442,065	714,042	
Retirees Insurance Contributions	1,248,584	292,635	
Social Security Contributions	1,555,101	682,197	
Unemployment Compensation	18,965	4,446	
Total Payroll Related Costs	7,262,041	2,693,662	
Total Personnel Services	28,425,972	15,908,824	
Professional Fees and Services			
Actuarial Services	1,099,152		
Audit Services	495,235		
Investment Consulting Fees	490,200	1,924,733	
Investment Advisors		9,157,107	
Medical Board Member Fees	38,900	9,137,107	
Architectural Services	36,900		
		1 024 469	
Legal Services	106,648	1,034,468	
Computer Programming Services	4,076,362	267,945	
Other Professional Services Total Professional Fees and Services	<u>459,232</u> <b>6,310,283</b>	231,428 12,615,681	
	0,010,200	12,013,001	
Other Services and Charges			
Travel	140,477	470,580	
Materials and Supplies:			
Postage	583,914		
General Office and Other Supplies	210,301	329	
Subscriptions	24,171	16,420	
Furniture and Equipment	498,393	77,425	
Computer Software	842,935	44,751	
Total Materials and Supplies	2,159,714	138,925	
Communications and Utilities:			
Electricity, Gas and Water	236,569		
Telephone and Telegraph	668,983	1,199	
Electronic Communication Services	157,297	5,371,156	
Total Communications and Utilities	1,062,849	5,372,355	
Repairs and Maintenance:			
Land and Building	141,008		
Furniture and Equipment	23,358		
Computer Software and Equipment	1,283,232	3,669	
Total Repairs and Maintenance	1,447,598	3,669	
Rentals and Leases:			
Computer Software and Equipment	282,919		
Office Equipment	306,123		
Space	27,042		
Total Rentals and Leases	616,084	-	
Printing and Reproduction Services	56,310		
Depreciation	1,467,954		
Depreciation			

- to next page

# Other Supplementary Information – Schedule 4 Administrative and Investment Expenses/Expenditures

Statutory Administrative Funds and Accounts (Concluded)

Year Ended August 31, 2017

	Adminis	trative Expenses
	Non-Investment	Investment
Other Services and Charges (continued)	\$	\$
Other Operating Expenses/Expenditures:		
Membership Fees	39,740	56,543
Employee Training	181,359	91,309
Insurance - Building and Vehicle	28,604	
Fees and Other Charges	1,065,869	29,549
Investment Banking		993,930
Tenure Awards	7,578	13
Witness Fees	50	
Temporary Employment Agencies	462,017	171,604
Cleaning Services	132,161	
Advertising Services	5,001	2,434
Freight/Delivery Services	6,726	
Purchased Contracted Services	1,192,605	4,533
Prompt Payment Interest	364	
SORM Assessment	26,555	6,234
Third Party Administrator Fee - Cafeteria Plan	1,272,810	
Total Other Operating Expenses/Expenditures	4,421,439	1,356,149
Total Other Services and Charges	13,282,065	7,341,678
Total Expenses/Expenditures	48,018,320	35,866,183
Method of Finance:		
State Employees Retirement System (S.E.R.S.) Trust Account ( 0955)	23,095,408	33,674,310
Law Enforcement and Custodial Officer Supplement Retirement Trust Fund (0977)	1,811,110	1,179,918
Judicial Retirement System Plan Two Trust Fund (0993)	294,991	463,758
Texa\$aver 401(k) Trust Fund (0946)	479,133	54,266
Texa\$aver 457 Trust Fund (0945)	268,593	22,221
Commuter Spending Account Fund (3944)	72,504	1,310
State Employees Cafeteria Plan Trust Fund (0943)	1,619,093	7,188
State Retiree Health Plan (3973)	5,628,689	
Total Fiduciary Funds	33,269,521	35,402,971
Employees Life, Accident, Health Insurance and Benefits Trust Account (0973)	14,597,071	463,212
Total Proprietary Fund	14,597,071	463,212
Social Security Administration Trust Account (0929)	151,728	
Total Governmental Funds	151,728	-
Total Method of Finance	48,018,320	35,866,183

Note A: \$91,830,399 management fees for Alternative Investments were accrued during fiscal year 2017. The unpaid balances were reported as part of the fair value of Investments. Details of the management fees are listed in the Investment Section.

# Other Supplementary Information – Schedule 5 Professional and Consulting Fees

Year Ended August 31, 2017

Nature of Service	Totals
	\$
Actuarial Services - Retirement	418,277
Actuarial Services - Insurance	680,875
Audit Fees - Financial	258,351
Audit Fees - Insurance Carrier	178,264
Audit Fees - Other	58,620
Investment Consulting Fees	1,924,733
Investment Advisors	9,157,107
Medical Board	38,900
Legal Services	1,141,116
Computer Programming Services	4,344,307
Educational Services	136,487
Architectural Services	34,754
Other Professional Services	451,024
Other Consulting Services	103,149
Total Professional and Consulting Fees	18,925,964
Mathed of Finance	
Method of Finance:	40 770 000
State Employees Retirement System (S.E.R.S.) Trust Account ( 0955)	16,772,893
Law Enforcement and Custodial Officer Supplement Retirement Trust Fund (0977)	570,309
Judicial Retirement System Plan Two Trust Fund (0993)	239,323
Texa\$aver 401(k) Trust Fund (0946)	5,988
Texa\$aver 457 Trust Fund (0945)	2,373
Commuter Spending Account Fund (3944)	879
State Employees Cafeteria Plan Trust Fund (0943)	6,395
State Retiree Health Plan (3973)	399,439
Total Fiduciary Funds	17,997,599
Employees Life, Accident, Health Insurance and Benefits Trust Account (0973)	923,744
Total Proprietary Fund	923,744
Social Security Administration Fund (0929)	4,621
Total Governmental Funds	4,621
Total Method of Finance	18,925,964



## INVESTMENT SECTION

Report on Investment Activity

**Outline of Investment Policies** 

Time-weighted Rates of Return and Asset Allocations

**Broker Commissions** 

Management Fees and Profit Share for Alternative Investments

Investment Advisory and Service Fees

List of Largest Assets Held

Investment Summary at Fair Value



#### **Report on Investment Activity**

Fiscal Year 2017

#### Overview

The System's investment portfolio for the pooled pension trust fund closed the fiscal year with a fair value of \$27.6 billion, and received a net return of 12.11% for the year compared to the global policy benchmark return of 11.08%. Over the longer term, the fund returned 8.34% for the 5 years ended August 31, 2017, compared to the policy benchmark of 8.23%. For the 10 years ended August 31, 2017, the fund returned 5.54%, outperforming the policy benchmark of 5.31%. The fiscal year-end asset allocation stood at 22.6% fixed-income, 47.8% global public equity, 9.6% global real estate, 12.3% in private equity, infrastructure of 1.7%, 3.6% in absolute return funds, special situation of 0.4% and 2.0% in cash.

During fiscal year 2017, the Investments Division ("Division") continued to work with the Executive Director, Board of Trustees, Investment Advisory Committee and other divisions within the System to build a premier and competitive investment organization in the best interest of the trust funds and their beneficiaries. The Division increased economies of scale, reduced investment management costs and pursued new sources of investment return, and completed the asset allocation study.

The Division staff collaborated with Benefit Contracts Division by co-sponsoring the investment product line up with regard to the investment program portion for the Texa\$aver platform. The Division supported the Operations Services Division in the request for proposal process of the System's Space Planning Project. The Division also supported legislative initiatives and actively participated in the System's Sunset review.

The Division and the Teachers Retirement System hosted the Annual Emerging Manager's Conference and the Real Estate Emerging Managers (REEM) Conference. The Division staff also co-sponsored two educational events for trustee training to build upon our internal educational initiatives.

Leaders of the Division remain committed to developing a career path program and to attracting and retaining excellent investment professionals by succession planning and career growth opportunities. This was demonstrated this year with the promotion of two staff members into the Director of Hedge Funds and Director of Infrastructure. In addition, the Division continued to expand the internship program to include outreach to diversity candidates along with active collaboration with Texas university graduate programs, and the University of Washington. Management continues to recognize the importance of optimizing the mix of internally managed and externally advised portfolios. The Division staff refreshed the select pool and initiated searches to refine the mix of internal and external management and at the same time leveraged external relationships for stronger resources. The Division staff also incorporated quantitative tools and framework into the System's internal strategies.

The Division adjusted the portfolio from a strategy perspective to further align the portfolio's investment objectives to the future market environment. Investments refocused the Public Equities Emerging Manager mandate for a more concentrated, higher conviction portfolio with enhanced fee alignment.

Numerous Investments team members were the recipients of industry awards this year. Institutional Investor awarded the Woman of the Year in Investment Management to Sharmila Kassam at their roundtable for Public Funds in April of 2017. The award is in recognition for her insight to peers and leadership in managing the System's assets. The Fixed Income team seeded the 2016 winner of the best new U.S. fixed income Exchange Traded Fund (ETF) – Deutsch E trackers U.S. Dollar High Yield Corporate Bond ETF (HYLB) awarded by ETF.com. This ETF was awarded to the most important fixed income ETF launched in 2016 for its lower fees. HYLB's expense ratio is ground breaking because it is half the fee charged by the largest high yield bond ETF.

#### **Domestic Equity**

Fiscal year 2017 was all about earnings and expectations. The year began with a notable increase in volatility compared to the final two months of fiscal year 2016. Concerns over how the economy would handle both the expected Federal Reserve interest rate increases and the continuation of current economic policies by the assumed President Clinton combined to send the market lower through September and October. This continued into early November, where on the Friday before the election the S&P 500 bottomed at 2,085.18 – 3.95% below where it had begun the fiscal year just over two months earlier.

This all changed the day after the election when the US awoke to discover that instead of electing a President Clinton, we had elected a President Trump along with his pro-business agenda of tax reform and a greatly reduced regulatory burden. Expectations for the economy then changed dramatically, and the market was off to the races. Led by the Healthcare and

### Report on Investment Activity (Continued)

Fiscal Year 2017

Industrial sectors, up 15.4% and 9.9%, respectively, the S&P 500 gained 5.45% from the low on November 4th to the end of the month, setting a new all-time closing high along the way. This was repeated multiple times throughout the rest of the fiscal year as governmental policy expectations were combined with decent economic news and increasingly robust corporate earnings. These positive drivers were tempered a bit through the year as the Federal Reserve announced 0.25% increases in the discount rate in December of 2016, and then March and June of 2017. Nevertheless, the S&P 500 shrugged this off to hit new all-time highs in every remaining month of the fiscal year, excepting April. It hit its final peak of 2,480.91 on August 7th, then pulled back a bit to close the year at 2,471.65 for a fiscal year's price appreciation gain of 13.85%. Similarly, the Dow Jones Industrial Average, NASDAQ Composite, and S&P 600 Smallcap index all hit multiple new highs and then sold off somewhat in August to finish the year up 19.28%, 23.31%, and 11.60%, respectively. On a total return basis, reinvesting dividends back into the index, the S&P 500 finished the year with a gain of 16.23%.

Seven of the now eleven S&P 500 economic sectors finished the fiscal year with positive returns. On a relative basis, Information Technology, Financials, and Industrials were the top performers, while Telecom Services, Energy, and Real Estate were the laggards with negative returns.

#### **International Equity**

In fiscal year 2017, global markets had a strong year, with ACWI ex US returning 13.7%, MSCI Europe returning 16.2%, MSCI Pacific returning 12.4%, and MSCI Emerging Markets returning 21.7% (all on U.S. Dollar basis). One of the defining themes of the year was the election of Donald Trump to the presidency of the United States, which lifted markets globally on the promise of tax reform, infrastructure spending, and a looser regulatory environment.

Emerging markets emerged relatively unscathed after a difficult fiscal year 2016. In India, the elimination of small bills underscored Prime Minister Modi's efforts to bring a large part of the cash economy into the formal markets. News flow for the rest of the year from China was relatively quiet, as the state continued to spend on infrastructure and internal industry development to keep up with its growth targets, as it prepares for an once-every-5-year party congress in the fall. The Korean peninsula dominated the news flow on the back half of the year, as North Korea sent missiles over Japan and tested its arsenal. Japan closed out the year with a series of excellent economic indicators, and a very strong earnings season. However, the specter of North Korea hung on markets, as did Prime Minister Abe's relatively lower approval ratings. Improvements in corporate governance slowed and share buy-backs were disappointingly low as the Japanese fiscal year closed out in March.

Europe spent the beginning of the year digesting the implications of Brexit and then turned towards the election of political newcomer Emmanuel Macron in France. Macron formed a new political party and won convincingly, followed by a sweep of the legislative body. Perceived to be a market-friendly globalist, European markets rose to their highest level in the weeks preceding his election and tapered off since then.

The Euro drove returns to a lot of asset managers' positions in Europe as it appreciated 6.5% over the course of the fiscal year. The biggest moves in currencies were in the yen, which weakened (6.33%). Information technology was the best performer (as it was last year) at the sector level, returning 34.5%. Heavyweights Tencent, Samsung, Alibaba, and TSMC all had a solid year. Nine of the top 25 performers are semiconductor related names, followed by 7 in electrical components and equipment. The worst performer was telecom services, returning only 2.9%, likely to be expected given the global pause between 4G and 5G deployment is likely to last for a couple years.

#### **Real Estate**

Following a strong return for the fiscal year 2016 (+18.4%), the global real estate equity markets as measured by the FTSE EPRA/NAREIT Developed Index posted a flat return of +0.9% for the fiscal year 2017 ending August 31, 2017, significantly underperforming the broader equities market (MSCI World Index) return of 16.9% in U.S. Dollar term. In a rising interest rate environment, global bond yields have overall risen during the period. While real estate yields relative to bond yields remain wider than the historical average, global real estate securities underperformed in a perceived late stage property cycle. During fiscal year 2016, the global central banks remained accommodative and expectation of global economic recovery helped support share prices. Going into fiscal year 2017, the themes have shifted from rising interest rates to a wide range of concerns from quantitative easing tapering in the

#### Report on Investment Activity (Continued) Fiscal Year 2017

Eurozone, unwinding of the US Fed's balance sheet, uncertainties in Presidential elections in the U.S., France, Netherlands and Germany, to escalating global geopolitical tension in the Middle East and North Korea, increasing terrorism attacks and natural disasters. Real estate regional performance was mixed with Middle East (+34.8%) being the best performer, followed by Continental Europe (+8.8%), Asia (+4.6%) and UK (+2.6%). North America (-2.6%) was the worst performer.

The fiscal year 2017 had a tough start as market sentiment turned bearish. While the shocking UK Brexit vote in June 2016 continued to overhang the market, investors began to worry about rising interest rates, Quantitative easing tapering and upcoming elections. Global real estate securities declined for four consecutive months beginning in August. After its first rate hike in December 2015, U.S. Fed raised interest rates again in December 2016, March and June 2017.

In the Asia market, Singapore was the top performer, increasing by 21.3% for the fiscal year helped by the perception of the bottoming out of rents and better relative value in this country compared to others. The government easing of policy measures toward the residential sector was also a significant contributor. Hong Kong also performed well during the period, up 21.2%. Despite the U.S. Fed interest being raised rates multiple times, HIBOR remains historically low driven by abundant bank liquidity. Hong Kong's residential market remained robust with Centa-City Leading Index reaching an all-time high, despite the government's multiple rounds of tightening measures. Mainland Chinese buying interest of Hong Kong property was strong anticipating further Renminbi depreciation. The commercial investment market was also surprisingly strong with several high profile deals transacted at a significant premium to book value. Chinese government tightened rules over capital outflows toward the end of the fiscal year. Australia was down 2.7% in U.S. Dollar term, local return was down 7.8%, affected by concerns of rising bond yields and a perceived peaking housing cycle. Sentiment toward retail turned more negative on concerns of Amazon entering the country, threatening the "brick & mortar" retailing. Japan was down 5.4% in U.S. Dollar term but the local return was up 0.7%. The returns were dragged down by the J-REITs which lost over 10%.

After the shocking Brexit vote, the UK government cut interest rate by 25 bps in late August 2016 to an historical low of 0.25%. The UK economic data initially showed some signs of encouraging growth but could not sustain it. UK Prime Minister May called an early

general election in June and the market was surprised by the election results where the ruling Conservative Party lost its majority. Concerns of a potential "hard Brexit" and perceived peaking of property cycle continued to negatively impact the market. UK gained 4.3% in local term and 2.6% in U.S. Dollar term. In Continental Europe, market sentiment turned negative anticipating a less accommodative European Central Bank and quantitative easing tapering as well as the uncertainties on elections in various countries. Later in the fiscal year, market sentiment turned positive on the victory of Emmanuel Macron in the French Presidential Election, perceived as market friendly, and the incumbent Prime Minister Mark Rutte defeated a populist anti-EU candidate in the Netherlands. Eurozone economic data and company earnings results were overall encouraging.

Following an exceptionally strong year of returns for the fiscal year 2016 (+25.6%), the US as measured by the FTSE EPRA / NAREIT United States Index posted a lackluster return of -3.1% for the fiscal year 2017 ending August 31, 2017, significantly underperforming the broader equities market (MSCI World Index) return of +16.9% in U.S. Dollar terms. After the November 2016 election, market expectations for meaningful tax reform and economic growth caused a spike in bond yields and an aggressive rotation out of long duration and interest rate sensitive subsectors that had outperformed in the prior fiscal year. Over the course of the fiscal year investors seemed to stick with what worked earlier in the fiscal year despite a volatile geopolitical backdrop, decreased foreign commercial real estate investment, and thus far lackluster progress on the President's legislative agenda. Along these lines, the short duration and cyclical subsectors led the way as Industrials (+21.9%), Residential (+11.9%), Lodging/ Resorts (+6.7%), and the Diversified subsector led by the Data Center REITs (+6.2%), outperformed the market.

Lastly, underwhelming leasing results and decreased foreign capital investment in the 2017 fiscal year negatively impacted the Office subsector's (-3.4%) performance. Furthermore, despite a lower 10-year bond yield than initial expectations at the beginning of the calendar year, strong corporate earnings and positive economic data points caused investors to rotate out of the more defensive subsectors which caused Healthcare (-3.7%) to underperform. Self-Storage (-4.9%), underperformed on decelerating fundamentals due to an unfavorable supply outlook. Retail (-23.3%) was by far the most challenged subsector despite posting relatively stable earnings growth. A combination of factors from retailer

#### Report on Investment Activity (Continued) Fiscal Year 2017

bankruptcies and elevated store closures to the continued concern about e-commerce questioned how much physical real estate was needed.

Despite relatively stable quarterly earnings results from REITs overall, late cycle fears, decreased foreign investment, instability on Capitol Hill, and geo-political concerns served to create volatility in the REIT space at many points throughout the fiscal year.

#### **Private Real Estate**

During the fiscal year 2017, the System committed \$215 million across four non-core investments all of which were "re-ups" with managers to whom the System already has investments. These commitments exceeded the commitment target of \$0, but were below the upper range of \$250 million set forth in the fiscal year 2017 tactical plan. All of these commitments were committed to domestic U.S. focused funds.

Co-investments typically have focused investments, lower management fees and stronger governance structures. The System's team expects to make additional co-investments in 2018 as opportunities become available that meet risk and return parameters together with a strong "hands on" property management that can drive performance and create value for the System and complement the existing portfolio of investments.

As of August 31, 2017, private real estate commitments totaled \$2.94 billion to 47 funds and 2 co-investments. The System continues to play an active role in monitoring and steering each investment and the System is on the Advisory Board on all but five fund investments. The net asset value of the System's private real estate portfolio stands at \$1.9 billion and since inception; \$2.6 billion in capital has been called. The System has also received back approximately \$1.7 billion as income or a return of principal. In fiscal year 2017, approximately \$400 million in equity capital was called for the System's portfolio and \$465 million was returned as income or a return of principal. The System's staff is carefully monitoring the pace of capital calls and distributions from all of the System's investments.

The portfolio is at its steady state and represents 7% of the overall Trust assets, which matches the target weight of 7%. The portfolio has generated a net internal rate of return of 13% since inception. The program will continue to be selective in committing capital but the investments made at the early part of the program are being returned.

#### **Private Equity**

For fiscal year 2017, Private Equity closed on three existing funds and 22 new deals, including nine coinvestments, with a commitment totaling \$866.3 million versus a goal of \$750 million and a range of \$563 - \$938 million. All of the 12 primary fund investments were "re-ups"; nine were new co-investments primarily in the U.S., and one secondary purchase.

As of August 31, 2017, the Private Equity portfolio Net Asset Value was \$3.4 billion, representing 12.3% of the trust assets, compared to \$2.57 billion at fiscal year-ending August 31, 2016. Since inception Private Equity has closed on 87 funds and 33 co-investments with commitments totaling \$7.0 billion (adjusted for currency exchange rates). Capital calls have totaled approximately \$4.0 billion. The System has also received \$3.3 billion from distributions. During fiscal year 2017, the program had \$926 million in capital calls and \$584 million in distributions. Currently, the Private Equity Staff is reviewing the program's tactical plan for fiscal year 2018 and is diligently monitoring the pace of the portfolio's capital contributions and distributions.

In addition, The System has obtained LP Advisory Committee seats on 55 active funds and two fund LP Advisory Observer seats.

In terms of performance, the portfolio has generated a net internal rate of return of 12.30% and a net total value to paid in of 1.32x since inception, this is an increase of 87bps and a 0.04x from last year respectively. For fiscal year 2018, the Staff anticipates to have a similar allocation, either increase or maintain their exposure to co-investments, and include two to three new relationships with top performing managers.

#### **Fixed Income**

The U.S. economy continues to expand at a moderate pace. The labor market continues to improve while household spending and business fixed investment continue to expand as well. The unemployment rate has continued to decline from 4.9% to 4.3% year over year. While the labor market appears tight, we continue to see people re-entering the labor market, which may indicate that we still have a little ways to go in order to reach full employment. Although the labor market has tightened, wage growth remains relatively frustrating for economists. Currently wage growth is at just 2.5% year over year. Inflation also remains stubbornly low. Core Personal Consumption Expenditures Price Index, the Fed's preferred measure of inflation, is currently only 1.4%, significantly below the Fed's stated 2% target.

## Report on Investment Activity (Continued)

Fiscal Year 2017

#### **Interest Rates**

The Federal Reserve raised the Fed Funds rate three times within fiscal year 2017 by 75 bps in total, bringing the target rate to 100 – 125 bps. Following the election of Donald Trump in November 2016 the market began pricing in increased economic growth and increased inflation, driven by several legislative initiatives such as tax reform and healthcare reform. The U.S. Treasury 10 year reached a high of 2.63% in March on this optimism. Since coming into office, President Trump has found it difficult to push through much of his legislative agenda and now investors have become impatient with the delays. Many investors have lost confidence that anything significant on his agenda will be achieved either this year or next year, especially as the 2018 mid-term elections inch closer. The U.S. Treasury 10 year has since declined to 2.12%; this still represents a yield widening of 55 bps year over year. Currently the market is not pricing in a greater than 50% chance of another Federal Funds rate increase until June of 2018. In the coming months, we do expect to receive additional details on the timing and size of the Fed's balance sheet reduction plan, which will certainly have an impact on rates.

#### Index Performance

High yield was the top performer in fiscal year 2017, returning 8.62%. The strong performance in High Yield was driven by significant spread compression; the high yield index tightened 112 bps to close the year at 378 bps, near historical tights. While High Yield was the outperformer for the fiscal year, Emerging Markets is currently the hottest sector of the fixed income market; calendar year to date Emerging Markets has returned 7.44% compared to 6.05% for High Yield. Given the overall widening of the yield curve during fiscal year 2017, longer duration rates underperformed; the longer duration U.S. Treasury Index underperformed Intermediate Treasuries by 98 bps for the year. While long duration underperformed fiscal year to date, in the past several months it has outperformed as rates have rallied amid decreased investor optimism in the economy. Rates sensitive U.S. Investment Grade Corporates have posted a strong 5.37% return calendar year to date while Treasuries have reversed their negative returns as investors flock to safety.

#### Private Infrastructure

For fiscal year 2017, Private Infrastructure closed on eight deals (6 fund investments and 2 co-investments), with commitments totaling \$347.4 million. The total commitment target for fiscal year was \$250 million with a commitment range of +/- 50% (\$125-\$375 million).

Since inception, Private Infrastructure has closed on twelve co-investments and nine funds with commitments totaling \$904 million (adjusted for currency exchange rates). The System holds an LP Advisory Committee seat on eight funds and an observer seat on one fund. As of August 31, 2017 the Infrastructure portfolio Net Asset Value was \$463.8 million, or 1.7% of system assets, compared to \$345.5 million at fiscal year-ending August 31, 2016.

#### **Hedge Funds**

Hedge Funds experienced a positive year of performance in fiscal year 2017. The Absolute Return Portfolio ended the year up +5.19% while the benchmark's return over the same period was +6.89%. Performance for the year was driven by a number of macro-economic factors including U.S. and French Presidential elections, central bank monetary policy actions, and a challenging situation on the Korean peninsula. These factors coupled with a historically low Volatility Index, a steady increase in the Federal Reserve's Fed Fund's rate, and a somewhat persistent upward trend in U.S. equity indices led to challenging conditions for a number of hedge fund strategies.

The start of fiscal year 2017 saw a continuation of favorable market conditions that persisted from the prior fiscal year. Entering into August of 2016, Federal Reserve commentary initially forecasted a September rate hike. While the hike never transpired, the resulting move in the U.S. Dollar and U.S. fixed income markets provided favorable trading conditions. This was most prevalent for Global Macro strategies.

The fourth guarter of 2016 was an interesting period for investors. Some of the more notable events included: a U.S. Presidential election, a pending U.S. Fed Funds rate hike, and uncertainty regarding the European Central Bank's quantitative easing program. Post the U.S. Presidential election, U.S. equity indices rallied significantly higher ("Trump Trade") as investor's risk appetite increased due to expectations of decreased regulation, tax cuts (individual and corporate), and infrastructure investment. Outside of a U.S. equity market rally, the U.S. Dollar strengthened along with higher U.S. Treasury rates. The higher economic growth outlook for President Trump's agenda/policies also increased inflation expectations. In turn, the U.S. Federal Reserve elected to raise the U.S. Fed Funds rate in December of 2016, the first increase in 12 months.

Discretionary Global Macro strategies navigated these challenging conditions well, but exposure to systematic strategies within Global Macro continued

## Report on Investment Activity (Continued)

Fiscal Year 2017

to underperform as markets swooned given a highly politically charged environment. The bulk of the positive performance experienced by the Absolute Return Portfolio occurred in Event Driven and Opportunistic strategies.

Within Event Driven strategies, both merger arbitrage and credit selection/exposure did particularly well. Within Opportunistic strategies, mature portfolios of liquidations came to fruition and delivered above average returns. The largest detractor to the portfolio was exposure to Equity Long/Short strategies. In aggregate, 2017 was a challenging year for Equity Long/Short strategies. In particular, one allocation within the Absolute Return Portfolio suffered through the year, with performance further deteriorating after the U.S. Presidential election. This particular manager had a significant amount of emerging market equity exposure which was not hedged well. As a reminder, emerging markets broadly declined post the U.S. election given expectations for a stronger U.S. Dollar, higher U.S. interest rates, and a protectionist stance to U.S. business.

Volatility continued to grind lower into the start of calendar year 2017. Global equity markets seemed to ebb and flow based on sentiment regarding President Trump's policies. Early in the year, optimism persisted on his plans of tax cuts, decreased regulation, and fiscal stimulus. However, questions began to arise during the first quarter of 2017 regarding the pace of these reforms, as well as his protectionist policies relating to immigration and trade. U.S. economic data fluctuated in the first quarter of 2017, but strong U.S. employment figures aided in the Federal Reserve's decision to raise the U.S. Fed Funds rate again in March of 2017.

Hedge fund performance was strong during the first quarter of 2017, but underlying performance by strategy varied depending on the month. Event Driven strategies were the one notable outlier for the Absolute Return Portfolio and were additive to performance in all three months of the quarter. Exposure to Event Driven strategies delivered half of the return for the first quarter of 2017, while the next biggest driver was from Relative Value strategies. The largest contributor was from a low net/market neutral emerging markets debt hedge fund manager. Emerging market debt had a strong 2016 and the rally continued into early 2017. In addition, less liquid credit strategies that reside within Relative Value also did well. Opportunistic strategies continued to deliver strong performance as positions were marked higher and cash was realized from various underlying investments.

U.S. military action in Syria and tensions on the Korean peninsula dominated the headlines in April of 2017. These actions initially led to a flight to quality movement in U.S. Treasury markets and a sell-off in U.S. equities. However, hawkish comments by the U.S. Federal Reserve reversed these moves. In European markets, uncertainty eased as Emmanuel Macron, the presumed favorite, won the first round of French elections.

European equity markets rallied as a result. Strong performance persisted for both U.S. and European equity markets as near term political risks subsided. On the political front, Mr. Macron went on to win the French election on May 7th of 2017. Entering into June, positive equity market performance continued in the US. In Europe, the ECB raised its growth outlook, but remained cautious on inflation. European equities chopped around for most of the month, before experiencing a late month sell-off which was led by the banking sector.

During the early part of summer, the U.S. Federal Reserve continued its policy of clearly indicating its intended actions for further increasing the U.S. Fed Funds rate in June of 2017. The persistent increase in the U.S. Fed Funds rate is noteworthy, as it has caused a sizable increase to the Absolute Return Portfolio's underlying benchmark during fiscal year 2017. The underlying monthly benchmark has increased over 50% on a year over year basis based on the Trust's fiscal year-end. As a reminder, the benchmark is T-Bills + 400 bps. During the final week of June, Canadian and European central banks surprised the markets by sharing the Federal Reserve's hawkish tone. Yields within the U.S., Canada, and Europe subsequently increased.

During the second quarter of 2017, performance was led by Event Driven strategies. Positive performance came from exposure to merger arbitrage, but the largest contributor was a core multi-strategy manager within Event Driven strategies. Continued geopolitical actions caused challenging market conditions for most Global Macro managers. Negative performance from Global Macro exposure primarily came from an allocation to a CTA (commodity trading advisor). Equity Long/Short was the second largest positive contributor during the quarter as political risk subsided within Europe. At the time of this writing, the Absolute Return Portfolio has only one dedicated manager within Equity Long/Short. This particular manager is primarily focused on European equities.

July of 2017 began on a positive note as a strong U.S. jobs report was combined with a favorable start

## Report on Investment Activity (Concluded)

Fiscal Year 2017

to the U.S. corporate earnings season. Most global equity index markets rose during the month. However, tensions arose yet again between the U.S. and North Korea in early August. Equity markets declined on the news, but were able to recover by month-end. Separately, due to heightened political uncertainty and dovish comments by the U.S. Federal Reserve, the U.S. Dollar continued its path of weakness. Measured by the U.S. Dollar Index, the U.S. Dollar has weakened -9.34% on a calendar year-to-date basis through August 2017 month-end. Global Macro strategies navigated the markets well, and were the main contributors to performance within the Absolute Return Portfolio during July and August of 2017.

In summary, despite underperforming the benchmark, the Absolute Return Portfolio posted strong

performance during fiscal year 2017. The portfolio remains focused on maintaining a low volatility and beta to the Trust. The portfolio remains focused on Relative Value and Event Driven strategies (70-75%). An underweight to Global Macro was addressed during the year, but expectations are for a further increase to the strategy.

#### **Key Portfolio Statistics**

	2017	2016
Contributions to Pool	1,210,700,000	1,181,700,000
Withdrawals from Pool	(2,203,800,000)	(2,065,300,000)
Interest and Dividends	613,217,219	613,975,416
Net Securities Lending Income	5,375,926	3,076,782
Net Appreciation in Fair Value	2,391,543,267	755,566,481

Basis of Presentation: Master custodian and the System's financial records. The time weighted method is used to calculate the rates of return.

### **Outline of Investment Policies**

Fiscal Year 2017

#### Background

The Board of Trustees' investment policies are governed by the Texas Government Code and the Texas State Constitution. As fiduciaries of the System's funds, the Board of Trustees practices the following duties of care:

- Manage the assets for the exclusive benefit of the Plan Beneficiaries;
- Establish prudent investment policies defining investment objectives and strategies;
- Seek to maximize investment returns while maintaining the safety of principal;
- · Diversify the assets to reduce risk of loss;
- Monitor investment performance;
- Efficiently manage the costs associated with implementation of its investment
- program; and
- Establish committees as necessary and prudent to fulfill its duties to the funds.

Investments shall be made in securities that are considered prudent investments, exercising the judgment and care, under the circumstances prevailing at the time of the investment, that persons of ordinary prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income from the disposition and the probable safety of their capital. However, the Board of Trustees shall not participate in individual investment selections unless it is specifically provided for herein because that responsibility has been delegated to the Executive Director and the System's investment staff, with oversight by the Board of Trustees.

Every investment will be subject to strict due diligence. Notwithstanding the performance of such due diligence, the determination of whether prudence has been exercised with respect to an investment decision shall be made by taking into consideration the investment of all the assets of the trust or all the assets of the collective investment vehicle, as applicable, over which the Board of Trustees has management and control, rather than considering the prudence of a single investment of the trust or collective vehicle, as applicable.

A staff of trained professional personnel in accordance with Trustee policies and Constitutional and Statutory regulations invests State contributions, member contributions, and investment income. To assist the staff with investment recommendations and decisions, the Trustees have employed nationally recognized investment managers and have appointed an Investment Advisory Committee composed of prominent members of the financial and business community of Texas. In addition, the System retains an independent consultant to evaluate and analyze the investment results of the System.

The System's Executive Director is authorized to approve from time to time variances from the policies set forth herein in furtherance of such compliance or in the best interest of the System and consistent with both the System's fiduciary responsibilities and the purpose and scope of this policy.

#### **Diversification**

The assets of the System's funds will be broadly diversified in order to minimize the risk of large losses in individual investments. Investments are restricted by the Texas Constitution to securities such as, but not limited to, cash equivalents, bonds, common stocks, and limited partner interests. The System's funds will have beneficial ownership of:

- No more than 3% of the Funds' assets at market value in the securities of any one corporation;
- No more than 5% of any class of voting securities of any one public corporation; and
- No more than 15% of an advisor's high yield bond portfolio based on market values, in combined Deferred Interest, Contingent Interest and Pay-In-Kind bonds.

#### **Permissible Investments**

The Board of Trustees will consider investment instruments appropriate for the System's funds and deemed to be prudent based on:

- Their consistency with investment policy and portfolio objectives;
- Their application to the portfolio's diversification;
- Staff and/or advisor competency in evaluating and trading the securities;
- Consideration of their liquidity within the portfolio; and
- The cost of including them in the program.

#### **Eligible Securities**

• Except as described in the Fixed Income Policies and Procedures for the credit portfolio, global fixed income securities, subject to a minimum credit rating of "CCC-, Caa3," or their equivalent

## Outline of Investment Policies (Concluded)

Fiscal Year 2017

as rated by two Nationally Recognized Securities Rating Organizations, and included in the Barclays Capital Universal Index or successor index. Fixed income and short-term securities that downgrade to below the acceptable rating described above will be exchanged or sold within one year, but special exceptions may be permitted and reported to the Board of Trustees.

- Cash and Cash equivalents as set forth in the Eligible Securities List for Cash and Cash Equivalents.
- Interests in private securities exempted from registration under federal and state securities laws, including certain limited liability securities and vehicles, such as limited partner interests in limited partnerships, trusts and limited liability corporations as deemed appropriate by The System's Investments and Legal staff.
- Private equity and private real estate investments must be institutional in quality and meet the parameters specified in the System's investment policy.

- Global publicly traded real estate equities subject to the quality standards set forth in the investment policy.
- Foreign currencies transactions and foreign currency derivatives are permitted as necessary to facilitate the settlement of foreign security transactions, consistent with industry best practices. These transactions are also permitted to settle private market transactions, meet capital calls or exchange distributions back into U.S. dollars.
- Forwards, futures and options, subject to the restrictions set forth in the investment policy.

#### **Proxies and Bond Indenture Changes**

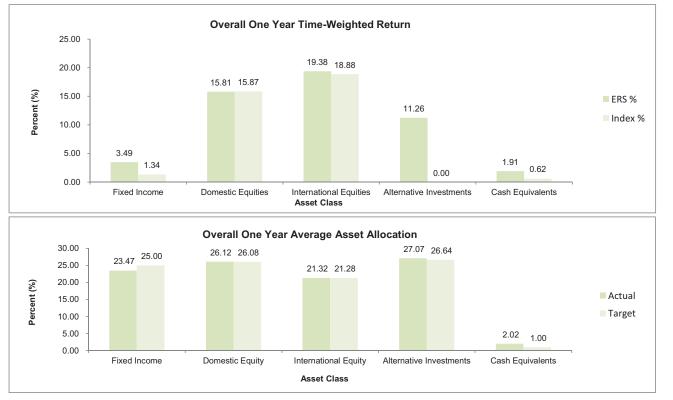
All proxies and bond exchanges shall be voted to consider only those factors that relate to the economic value of the System's investment, and such votes should be cast in accordance with the System's best interest and investment objectives for the funds.

## Time-Weighted Rates of Return and Asset Allocations

Investment Pool

August 31, 2017

	Time-Weighted Rates of Return (Note A)						
			Ŭ		`	´ 3 Year	5 Year
	2013	2014	2015	2016	2017	(2015-2017)	(2013-2017)
	%	%	%	%	%	%	%
Fixed Income							
ERS	(1.45)	3.85	1.29	5.14	3.49	3.30	2.44
Index	(1.69)	6.28	1.13	6.50	1.34	2.96	2.66
Domestic Equities							
ERS	19.27	24.34	1.55	8.48	15.81	8.46	13.60
Index	19.38	24.86	0.49	12.54	15.87	9.43	14.33
International Equities							
ERS	13.97	16.28	(9.86)	1.44	19.38	2.97	7.67
Index	12.98	17.75	(12.35)	2.92	18.88	2.36	7.36
Alternative Investments			( )				
ERS	13.43	15.70	7.89	6.76	11.26	8.62	10.96
Index	NA	NA	NA	NA	NA	NA	NA
Cash Equivalents							
ERS	(4.15)	0.61	2.71	0.76	1.91	1.79	0.34
Index	<b>`</b> 0.11	0.05	0.03	0.23	0.62	0.29	0.20
ERS Overall							
ERS	10.07	14.70	0.49	5.32	12.15	5.88	8.43
Index	9.52	15.00	(1.03)	7.23	11.08	5.64	8.23
			. ,				
Change in CPI	1.96	2.00	0.21	0.88	1.73	0.92	1.32
	1.50	2.00	0.21	0.00	1.75	0.52	1.02



Note A: The Time-Weighted Rate of Return measures the gross of fees performance of the total investment portfolio, considering income and market impact, including realized and unrealized gains, and eliminates the effect of timing of cash flows due to contributions and withdrawals which are not controllable by the investment managers. The 5-year return is used to smooth market swings and to maintain consistency with the long-term nature of the fund. The Time-Weighted Rate of Return is calculated as follows:

Ending Market Value / (Beginning Market Value + Net Cash Flows)

The indices used for comparison are net of fees. The names of the index are listed as follows:

Fixed Income Securities Portfolio:	Barclays Capital Universal and Floating Fixed Income
Domestic Equities Portfolio:	S&P 1500/ S&P 1500 Blend
International Equities Portfolio:	MSCI EAFE/MSCI ACWI ex US Blended Index
	(i.e., Europe, Australia and Far East Index excluding securities unavailable to foreign investors)
Cash Equivalents Portfolio:	91-Day U.S. Treasury Bill

Basis of Presentation: Master custodian records.

Year Ended August 31, 2017

#### **Domestic Equity**

Brokerage Firm	No. of Shares Traded	Commissions	Commission Per Share
		\$	\$
Baird, Robert W & Co., Inc.	5,019,400	100,338	0.020
Barclays Capital	9,783,878	192,436	0.020
Bloomberg Tradebook, LLC	2,709,067	54,181	0.020
BMO Capital Markets Corp.	5,620,189	112,404	0.020
BNP Paribus	114,034	646	0.006
BNY Mellon Clearing	7,387,511	180,363	0.024
Cantor Fitzgerald	1,216,433	24,329	0.020
Citigroup Global Markets, Inc.	7,306,520	128,934	0.018
Cowen & Co., LLC	612,262	12,245	0.020
Credit Suisse	15,951,205	317,291	0.020
Deutsche Bank	7,876,981	94,605	0.012
Euroclear Bank SA	13,557	1,466	0.108
Goldman Sachs	7,121,276	127,990	0.018
ICBC Financial Services LLC	2,185,210	109,261	0.050
Instinet LLC	9,700	97	0.010
Investment Technology Group, Inc.	15,000	150	0.010
ITG, Inc.	719,400	7,194	0.010
Jefferies & Co, Inc.	21,522,319	430,441	0.020
JP Morgan Securities, LLC	6,302,641	124,540	0.020
Macquarie Securities (USA), Inc.	4,802,716	96,054	0.020
Merrill Lynch & Co., Inc.	16,009,550	311,173	0.019
Morgan Stanley Dean Witter & Co.	6,100,607	122,012	0.020
National Financial Services, LLC.	13,847,095	276,942	0.020
Piper Jaffray	1,737,415	34,748	0.020
Raymond James & Associates, Inc.	3,701,771	111,053	0.030
RBC Capital Markets	6,035,217	120,704	0.020
Sanford C Bernstein & Co., Inc.	2,502,916	50,058	0.020
Societe Generale	71,495	319	0.004
State Street Brokerage Services	1,613,310	16,133	0.010
Stifel, Nicolaus & Co., Inc.	7,530,559	150,611	0.020
TMX CDS	20,100	302	0.015
UBS	7,614,967	150,617	0.020
Wells Fargo Securities, LLC	5,909,869	118,197	0.020
	178,984,170	3,577,834	0.020

- to next page

## Broker Commissions (Concluded) Year Ended August 31, 2017

#### **International Equity**

Brokerage Firm	No. of Shares Traded	Commissions	Commission Per Share
		\$	\$
Banesto Banco de Emisiones, SA	174,500	4,444	0.025
Barclays Capital	51,479,168	236,474	0.005
BBVA Corredores de Bolsa Limitada	18,098,000	4,628	0.000
BMO Nesbitt Burns	273,700	4,275	0.016
BNP Paribus	6,890,837	223,411	0.032
BNY Mellon Clearing	8,331,198	69,988	0.008
Bradesco SA	1,297,300	8,861	0.007
Caceis Bank	2,210,990	69,512	0.031
Citigroup Global Markets, Inc.	164,347,196	347,831	0.002
Clearstream Banking AG	384,720	41,695	0.108
CLSA Singapore PTE Ltd.	26,213,963	201,049	0.008
Credicorp Capital Colombia SA	63,000	314	0.005
Credit Lyonnais Securities	217,812,242	483,348	0.002
Credit Suisse	37,914,910	354,287	0.009
Daiwa Securities	108,716,153	544,884	0.005
Deutsche Bank	83,750,456	141,949	0.002
Euroclear Bank SA	2,563,028	701	0.000
Fidelity Clearing Canada	583,000	8,709	0.015
Goldman Sachs	1,207,710	15,058	0.012
HSBC	150,325,063	257,170	0.002
IM Trust SA Corredores de Bolsa	66,000	3,275	0.050
Investec Securities Limited	3,161,035	24,311	0.008
Investment Technology Group, Inc.	2,793,986	12,411	0.004
ITG, Inc.	279,200	4,205	0.015
Jefferies & Co., Inc.	30,294,718	358,224	0.012
JP Morgan Securities, LLC	202,974,274	597,214	0.003
KEB Salomon Smith Barney Securities	500,534	24,252	0.048
Kepler Cheuvreux	18,052,697	161,865	0.009
Larrain Vial	454,252	111	0.000
Macquarie Capital Securities PT	2,538,900	1,882	0.001
Macquarie Securities (USA), Inc.	80,999,394	479,551	0.006
Merrill Lynch & Co., Inc.	62,319,968	278,688	0.004
Mitsubishi Securities	7,434,581	190,060	0.026
Morgan Stanley Dean Witter & Co.	47,531,037	232,987	0.005
Nordea Bank	67,710	1,291	0.019
Parel	5,119,607	91,286	0.018
Redburn Partners, LLP	14,249,288	84,176	0.006
Sanford C Bernstein & Co., Inc.	11,502,618	111,945	0.010
SG SEC (London) LTD, London	762,496	3,114	0.004
Societe Generale	12,624,650	90,250	0.007
TEB	766,034	2,042	0.003
The Depository Trust Company	17,100	270	0.016
UBS	60,441,351	315,825	0.005
XP Investimentos	646,600	6,012	0.009
	1,448,235,164	6,093,835	0.004

Basis of Presentation: Master custodian records.

## Management Fees and Profit Share for Alternative Investments

Year Ended August 31, 2017

Investment Type	Management Fees (Note A)	Profit Share (Note B)
	\$	\$
Private Equity	46,297,948	12,608,854
Private Real Estate	23,636,941	22,717,685
Private Infrastructure	5,461,889	443,985
Hedge Funds	 16,433,621	26,263,803
Grand Total	 91,830,399	62,034,327

Note A: These amounts are management fees that the System paid to external entities in the current fiscal year. Any unpaid accruals of management fees as of August 31, 2017 were reported as part of the fair value of Investments.

Note B: These amounts are the profit that the System shared with, and were paid to, external entities in the current fiscal year when the target investment returns of the underlying investments were surpassed.

## Investment Advisory and Service Fees

Year Ended August 31, 2017

Advisory Service	Asset Value	Fees	Basis Points	Other Investment Services	Fees
Domestic Equity Advisors International Equity Advisors <b>Total</b>	\$ \$ 726,951,735 2,172,299,785 <b>2,899,951,520</b>	5 1,568,381 7,569,549 <b>9,137,930</b>	21.57 34.83 <b>31.51</b>	Custodian Fees Security Lending Agent Fees Investment Consultant Fees	\$ 952,604 616,892 1,924,733
				Investment Banking Fees: Total	42,025 <b>3,536,254</b>

#### **Directed Commissions**

Consistent with the System's Investment Policy as adopted by the Board of Trustees, and in order to maximize the System's resources including commission dollars generated through trade activity, directed commissions are sometimes used to fund a portion of budgeted investment program expenses. Trade activity in excess of the level required to support research products used by the System's investment staff is directed toward the payment of budgeted items. Directed Commissions totaled \$420,287 during fiscal year 2017.

Basis of Presentation: Master custodian records.

## List of Largest Assets Held (Note A) Year Ended August 31, 2017

#### **Ten Largest Stock Holdings**

No. of Shares	Description	Fair Value
1,092,500	Apple, Inc.	179,170,000
1,962,900	Microsoft Corporation	146,766,033
2,219,400	Tencent Holdings, LTD	93,296,782
95,076	Amazon.com, Inc.	93,231,526
1,778,000	WisdomTree Japan Hedged Equity Fund	92,562,680
528,442	Facebook, Inc.	90,876,171
937,600	JP Morgan Chase & Company	85,218,464
569,400	Johnson & Johnson	75,371,478
79,349	Alphabet, Inc Class C	74,534,896
3,001,500	Bank of America Corporation	71,705,835

#### Ten Largest Fixed Income Security Holdings

Par Value	Description	Fair Value
3,000,000	IShares Iboxx \$ High Yield Corporate Bond ETF	265,800,000
2,700,000	Deutsche X-Trackers USD High Yield Corporate Bond ETF	138,456,000
126,280,000	U.S. Treasury Note 3.375% due on 11/15/2019, Rating AA+	131,830,084
94,000,000	U.S. Treasury Note 2.375% due on 08/15/2024, Rating AA+	96,654,306
90,000,000	U.S. Treasury Note 2.500% due on 05/15/2024, Rating AA+	93,290,193
67,556,000	U.S. Treasury Note 3.125% due on 05/15/2019, Rating AA+	69,620,565
65,000,000	U.S. Treasury Note 2.250% due on 07/31/2021, Rating AA+	66,604,757
60,000,000	U.S. Treasury Note 2.125% due on 08/31/2020, Rating AA+	61,198,055
60,000,000	U.S. Treasury Note 2.000% due on 09/30/2020, Rating AA+	60,968,296
55,975,000	U.S. Treasury Note 2.625% due on 11/15/2020, Rating AA+	57,963,390

Note A: The investment portfolio listing is available for review at the System's office or the listing will be mailed upon request.

Basis of Presentation: System's financial records.

## Investment Summary at Fair Value

August 31, 2017

	Pooled Pens	ion Trust Funds (	Note A)	Investment Pool		
	Fund 0955	Fund 0977	Fund 0993	Fair Value	% Total	
Type of Investment	\$\$	5 \$		\$		
Fixed Income:						
Global Credit	1,925,235,610	67,590,040	30,725,724	2,023,551,374	7.46%	
Rates	3,536,581,193	124,160,214	56,441,930	3,717,183,337	13.70%	
Total Fixed Income Securities	5,461,816,803	191,750,254	87,167,654	5,740,734,711	21.16%	
Derivatives:						
Options	(87,459)	(3,070)	(1,396)	(91,925)	0.00%	
Public Equities:						
Large Cap Domestic Equities	4,624,609,996	162,358,090	73,806,284	4,860,774,370	17.91%	
Small Cap Domestic Equities	999,532,631	35,091,004	15,952,002	1,050,575,637	3.87%	
Global Public Equities	653,575,843	22,945,357	10,430,718	686,951,918	2.53%	
Public Real Estate	673,980,434	23,666,570	10,751,506	708,398,510	2.61%	
International Equities	5,727,007,260	201,060,406	91,399,949	6,019,467,615	22.18%	
Total Public Equities	12,678,706,164	445,121,427	202,340,459	13,326,168,050	49.10%	
Alternative Investments:						
Private Equity	3,234,250,077	113,546,151	51,616,889	3,399,413,117	12.53%	
Private Fixed Income	420,086,042	14,748,134	6,704,347	441,538,523	1.63%	
Private Real Estate	1,838,427,889	64,542,446	29,340,318	1,932,310,653	7.12%	
Private Infrastructure	441,272,466	15,491,934	7,042,471	463,806,871	1.71%	
Hedge Fund	1,054,277,331	37,012,949	16,825,698	1,108,115,978	4.08%	
Directional Growth	359,504,401	12,621,269	5,737,496	377,863,166	1.39%	
Total Alternative Investments	7,347,818,206	257,962,883	117,267,219	7,723,048,308	28.46%	
Short-term Investments:						
Investment in Pool Cash	2,468,856	63,524	(18,998)	2,513,382	0.01%	
Other Short-term Investments	329,399,334	11,559,498	5,261,895	346,220,727	1.27%	
Total Short-term Investments	331,868,190	11,623,022	5,242,897	348,734,109	1.28%	
Total Before Securities Lending Collateral						
(Notes B & C)	25,820,121,904	906,454,516	412,016,833	27,138,593,253	100.00%	
Securities Lending Collateral	500,985,793	17,585,324	7,991,362	526,562,479		
Total Pension Investment Pool						
Trust Fund (0888)	26,321,107,697	924,039,840	420,008,195	27,665,155,732		
Cash Equivalents:						
Cash in State Treasury-Pension Funds	47,447,302	2,634,199	1,203,999			
Total Investments	26,368,554,999	926,674,039	421,212,194			

Note A: The Pension Investment Pool Trust Fund (Fund 0888) includes the Employees Retirement Fund (Fund 0955), the Law Enforcement and Custodial Officer Supplemental Retirement Fund (Fund 0977), and the Judicial Retirement System Plan Two Fund (Fund 0993). Not reported in the above table are the \$519,580,113 long-term investments from the Employees Life, Accident and Health Insurance and Benefits Fund (Fund 0973), which are also pooled into Fund 0888.

Note B: Fair value of investments adjusted to comply with the CFA Institute Standards:

Fair Value				
	Fund 0955	Fund 0977	Fund 0993	Total
\$	\$	\$	\$	
	25,820,121,904	906,454,516	412,016,833	27, 138, 593, 253
	419,365,351	14,722,831	6,692,846	440,781,028
	(92,388,725)	(3,243,529)	(1,474,474)	(97,106,728)
	77,749,436	2,729,581	1,240,839	81,719,856
	(1,912,356)	(67,138)	(30,520)	(2,010,014)
_	26,222,935,610	920,596,261	418,445,524	27,561,977,395
	\$	\$ 25,820,121,904 419,365,351 (92,388,725) 77,749,436 (1,912,356)	Fund 0955         Fund 0977           \$         \$         \$           \$25,820,121,904         906,454,516           419,365,351         14,722,831           (92,388,725)         (3,243,529)           77,749,436         2,729,581           (1,912,356)         (67,138)	Fund 0955         Fund 0977         Fund 0993           \$         \$         \$         \$           \$25,820,121,904         906,454,516         412,016,833           419,365,351         14,722,831         6,692,846           (92,388,725)         (3,243,529)         (1,474,474)           77,749,436         2,729,581         1,240,839           (1,912,356)         (67,138)         (30,520)

Note C: The investment portfolio listing is available for review at the System's office or the listing will be mailed upon request.

Basis of Presentation: System's financial records in accordance with the CFA Institute Standards.



## ACTUARIAL SECTION

#### **Pension Plans:**

Actuary's Certification Letter Actuarial Balance Sheets Summary of Actuarial Methods and Assumptions Active Member Valuation Data Retirees and Beneficiaries Added to and Removed from the Annuity Payrolls Schedule of Funding Progress — Defined Benefit Plans Solvency Test Analysis of Financial Experience Effects of Changes in Actuarial Assumptions

#### **State Retirees Health Plan:**

Actuary's Certification Letter Actuarial Valuation Results Summary of Actuarial Methods and Assumptions Active Member Valuation Data Retirees and Nominees Added to and Removed Schedule of Funding Progress — State Retiree Health Plan



### Actuary's Certification Letter - Pension Plans



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November 21, 2017

Board of Trustees Employees Retirement System of Texas 200 East 18th Street Austin, TX 78701

#### Subject: Actuarial Certification for Funded Programs as of August 31, 2017

#### Members of the Board,

At the request of the Employees Retirement System of Texas (ERS), Gabriel Roeder Smith & Company (GRS) has performed the actuarial valuations of the Employees Retirement Fund (ERF), including separate actuarial valuations of the Law Enforcement and Custodial Officer Supplemental Retirement Fund (LECOSRF) and the Judicial Retirement System of Texas Plan Two (JRS-2). The information in the Actuarial Section is based on our annual actuarial valuation reports for the three programs, with the most recent valuations conducted as of August 31, 2017, and is intended to be used in conjunction with the full reports.

This letter and the schedules listed below represent GRS' certification of the funded status as required for the financial report for the fiscal year ended August 31, 2017 for ERF, LECOSRF and JRS-2. GRS prepared the *Actuarial Balance Sheets* and the supporting schedules in the Actuarial Section. GRS prepared the *Schedule of Changes in the Employers' Net Pension Liability and Related Ratios* and the *Schedule of Employer Contributions* of the Required Supplementary Information and the *Notes to the Required Supplementary Information* presented in the Financial Section. Full actuarial valuation reports have also been provided to ERS.

#### Data

The valuation was based upon information as of August 31, 2017, furnished by ERS staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by ERS staff.

#### **Actuarial Assumptions and Methods**

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on August 23, 2017 based on the experience investigation that covered the five-year period from September 1, 2011 through August 31, 2016. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERF, LECOSRF and JRS2, and meet the parameters set by Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuarial assumptions and methods used to develop the *Schedules of Changes in the Employers' Net Pension Liability and Related Ratios* and the *Schedule of Employer Contributions*, noted above, meet the parameters set forth in the disclosures presented in the Financial Section by Government Accounting Standards Board Statement No. 67.

A detailed account of the revised actuarial assumptions and methods can be found in our Actuarial Experience Study report dated June 28, 2017. A summary of key changes in assumptions and methods is highlighted below:

#### Economic Assumptions

- Decrease the investment return assumption from 8.00% to 7.50%
- Decrease the inflation assumption from 3.50% to 2.50%
- No change to the salary scales above inflation for regular State employees. For LECO members, the merit component was increased by 0.50%, and thus when combined with the decrease in inflation, the nominal assumption is 0.50% lower than the previous assumption. Additionally, the step rates for LECO members were extended from 10 years of service to 19 years of service.
- The merit component for the Judicial Class was increased from 0.00% to 0.50%, and thus when combined with the decrease in inflation, the nominal assumption is 0.50% lower than the previous assumption.
- Establish a general wage inflation assumption of 0.50% above inflation, or 3.00%.

#### Mortality Assumptions

- The post-retirement mortality tables for non-disabled retirees are based on recent ERS experience. A
  one year set-forward is applied to male LECO members. Fully generational mortality improvements
  are assumed using the ultimate rates from the scale most recently published by Retirement Plans
  Experience Committee of the Society of Actuaries ("Scale U-MP").
- The post-retirement mortality tables for disabled retirees is based on the most recently published national tables, the RP-2014 tables for disabled lives. Fully generational mortality improvements are assumed using Scale U-MP.
- The pre-retirement mortality tables for active employees are based on the most recently published national tables, the RP-2014 tables for employees. Fully generational mortality improvements are assumed using Scale U-MP.

#### Other Demographic Assumptions

- Modifications to the methodologies used to project termination patterns for members, with small
  adjustments in the overall rates consistent with experience and future expectations.
- Modifications to the methodologies used to project retirement patterns for members, with small
  adjustments in the overall rates consistent with experience and future expectations and to better
  reflect expected differences among the benefit groups.
- Small decreases to the disability patterns for members consistent with experience and future expectations.
- For LECO members that retire in the future, 40% of males are assumed to choose a 100% joint and survivor annuity option.

#### Actuarial Methods and Policies

- Change in the asset smoothing method to a method that recognizes each year's gain or loss over a closed five-year period. However, the method will continue to allow direct offsetting of gains and losses. The actuarial (smoothed) value of assets was set to equal to market value (mark to market) as of August 31, 2017, with the smoothing method to be applied prospectively.
- Modified the application of the Entry Age Normal (EAN) actuarial cost method to base the normal cost
  rate on the benefits payable to each individual active member, generally referred to as "individual"
  EAN. Previously, the normal cost rate was based on the benefits payable to a new member and the
  entry age characteristics of the current active membership, generally referred to as "ultimate" EAN. As
  a result of this change, the funding period and Actuarially Sound Contribution (ASC) rate will be
  determined based on an open group projection.

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The actuarial valuation as of August 31, 2017 incorporates the significant across-the-board pay increases budgeted by the State Legislature when they are granted for the current biennium. Specifically, employees were assumed to receive no across-the-board increase on September 1, 2017 or September 1, 2018.

For financial reporting purposes, a blended discount rate, calculated under the methods prescribed by GASB Statement No. 67, was used to determine the actuarial present value of projected benefit payments. For ERF and LECOSRF, the blended discount rate differs from the discount rate used for funding purposes.

Other than the difference in the discount rate, all actuarial methods and assumptions are the same for both funding and financial reporting purposes.

The results of the actuarial valuation are dependent upon 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. A review of the impact of a different set of assumptions on the funded status of ERF, LECOSRF and JRS-2 are is outside the scope of this actuarial valuation.

The current actuarial assumptions are outlined in the section titled "Summary of Actuarial Methods and Assumptions."

#### **Benefits**

There were no changes to the plan provisions of ERF, LECOSRF or JRS-2 during the past year. The current benefit provisions are outlined in the section titled "Summary of Plan Provisions."

#### Funding Policy and Objectives – Employees Retirement Fund

The funding objective of ERF is to fund the sum of the normal cost and the amount necessary to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. Contribution rates should be established which, over time, will remain level as a percent of payroll.

The member contribution rates are established by State statute and the State contribution rate is set by State statute and legislative appropriation. Members contribute 9.50% of payroll and the State is scheduled to contribute 10.00% of payroll (9.50% from statewide appropriations and 0.50% from agency appropriations) for each year in the future based on appropriations for the current biennium and expectations regarding future biennia. The long-term State contribution rates are subject to future legislative appropriations.

The unfunded actuarial accrued liability (UAAL) of ERF increased from \$8.7 billion as of August 31, 2016 to \$11.3 billion as of August 31, 2017. Additionally, the funded ratio of ERF—actuarial value of assets divided by the actuarial accrued liability—decreased from 75.2% to 70.1% as of August 31, 2017. This decrease was primarily due to the changes in actuarial assumptions and methods adopted by the Board in August 2017. The funded status is one of many metrics used to show trends and develop future expectations about the health of a retirement 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.

The valuation shows that the total normal cost for funding purposes is 13.95% of payroll. The total contribution rate is currently 19.50% of payroll. Thus, the total contribution rate for the current fiscal year exceeds the normal cost by 5.55% of payroll which will be available to amortize the unfunded liability. As the number of members eligible for the newest benefit provisions increases over time, the normal cost rate is expected to decrease, and the amount available to amortize the unfunded liability will increase as a percentage of payroll. However, the projected contributions are not expected to be sufficient to eliminate the unfunded liability over a finite period of time. As a result, the UAAL is expected to grow indefinitely and the funding objective is not currently being realized.

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Section 811.006 of the Texas Government Code limits the modifications to ERF that would, essentially, increase benefits or lower contributions to the trust unless the current level of benefits and contributions are considered actuarially sound. Section 811.006 defines actuarially sound as a retirement system that is receiving a total contribution rate sufficient to cover the normal cost, administrative expenses, and amortize the UAAL over a period of 31 years, or less. Based on the actuarial valuation as of August 31, 2017, the Actuarially Sound Contribution (ASC) rate for ERS is 23.21% of payroll.

As noted, the ASC is currently calculated based on a 31-year open amortization period. This means that the ASC will always be calculated with the same 31-year period and the UAAL would never completely be eliminated. Even though the contributions to ERF are not based on this ASC, the Board may want to consider adopting a funding policy that includes an ultimate goal of eliminating the UAAL by a certain date. This type of funding policy will allow the Board to better assess the level of contributions received from the employers and the State.

**Funding Policy and Objectives – Law Enforcement and Custodial Officer Supplemental Retirement Fund** The funding objective of LECOSRF is to fund the sum of the normal cost and the amount necessary to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. Contribution rates should be established which, over time, will remain level as a percent of payroll.

The member contribution rates are established by State statute and the State contribution rate is set by State statute and legislative appropriation. For the fiscal year beginning September 1, 2017, members contribute 0.50% of payroll and the State contributes 0.50% of payroll. LECOSRF also receives a portion of the court fees collected under Section 133.102 of the Local Government Code. The contribution from this source is expected to be approximately \$18.8 million for fiscal year 2018 and all subsequent years based on a four-year average of the actual contributions. It should be noted that level dollar contributions from court fees in future years will result in total contributions that are not expected to remain level as a percent of payroll over time. For fiscal year 2018, the contribution from court fees is expected to be approximately 1.09% of payroll.

The unfunded actuarial accrued liability (UAAL) of LECOSRF increased from \$379 million as of August 31, 2016 to \$476 million as of August 31, 2017. Additionally, the funded ratio of LECOSRF—actuarial value of assets divided by the actuarial accrued liability—decreased from 71.1% to 66.0% as of August 31, 2017. This decrease was primarily due to the changes in actuarial assumptions and methods adopted by the Board in August 2017.

The valuation shows that the total normal cost for funding purposes is 2.11% of payroll. The approximate total contribution rate is currently 2.09% of payroll. Thus, the total contribution rate for the current fiscal year is less than the normal cost by 0.02% of payroll and no payment will be available to amortize the unfunded liability. As the number of members eligible for the newest benefit provisions increases over time, the normal cost rate is expected to decrease. However, the projected contributions are not expected to exceed the normal cost in any year and will not be sufficient to eliminate the unfunded liability over a finite period of time. **As a result, the UAAL is expected to grow indefinitely and the funding objective is not currently being realized.** 

Section 811.006 of the Texas Government Code limits the modifications to LECOSRF that would, essentially, increase benefits or lower contributions to the trust unless the current level of benefits and contributions are considered actuarially sound. Section 811.006 defines actuarially sound as a retirement system that is receiving a total contribution rate sufficient to cover the normal cost, administrative expenses, and amortize the UAAL over a period of 31 years, or less. Based on the actuarial valuation as of August 31, 2017, the actuarially sound contribution (ASC) rate for LECOSRF is 2.87% of payroll in addition to the expected annual contributions from court fees of \$18.8 million.

#### Funding Policy and Objectives – Judicial Retirement System Plan Two

The funding objective of JRS-2 is to fund the sum of the normal cost and the amount necessary to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. Contribution rates should be established which, over time, will remain level as a percent of payroll.

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The member contribution rates are established by State statute and the State contribution rate is set by State statute and legislative appropriation. For the fiscal year beginning September 1, 2017, members accruing benefits contribute 7.50% of payroll and the State contributes 15.663% of payroll. Since some active JRS-2 members have elected to cease contributing to the plan as well as cease accruing additional benefits, the effective member contribution rate for the fiscal year beginning September 1, 2017 is 7.43% of payroll. This State contribution rate is subject to future legislative appropriations.

The unfunded actuarial accrued liability (UAAL) of JRS-2 increased from \$30.4 million as of August 31, 2016 to \$42.8 million as of August 31, 2017. Additionally, the funded ratio of JRS-2—actuarial value of assets divided by the actuarial accrued liability—decreased from 92.9% to 90.8% as of August 31, 2017. This decrease was primarily due to the changes in actuarial assumptions and methods adopted by the Board in August 2017.

The valuation shows that the total normal cost for funding purposes is 20.57% of payroll. The total contribution rate is 23.093% of payroll for the current fiscal year. The total contribution rate for the current fiscal year exceeds the normal cost by 2.523% of payroll, which is sufficient to amortize the UAAL over 63 years on an actuarial value of assets basis. As a result, the current contribution rates are expected to eliminate the UAAL for JRS-2 in 63 years based on the current benefit provisions and actuarial assumptions.

Section 840.106 of the Texas Government Code limits the modifications to JRS-2 that would, essentially, increase benefits or lower contributions to the trust unless the current level of benefits and contributions are considered actuarially sound. Section 840.106 defines actuarially sound as a retirement system that is receiving a total contribution rate sufficient to cover the normal cost, administrative expenses, and amortize the UAAL over a period of 31 years, or less. Based on the actuarial valuation as of August 31, 2017, the actuarially sound contribution (ASC) rate for JRS-2 is 23.85% of payroll.

#### Certification

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Governmental Accounting Standards Board, the Internal Revenue Code and ERISA.

The signing actuaries are independent of the plan sponsor. They are all Enrolled Actuaries, Fellows of the Society of Actuaries, and Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries. Finally, each of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

R. Ryan Falls, FSA, EA, MAAA Senior Consultant & Actuary

Dana Woolfrey, FSA, EA, MAAA Consultant & Actuary

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

### Actuarial Balance Sheet -

#### **Employees Retirement Fund**

August 31, 2017 (With Comparative Totals at August 31, 2016)

ACTUARIAL BALANCE SHEET	-	August 31, 2017	-	August 31, 2016
Assets: Actuarial Value Assets Present Value of Future Normal Cost (Note A)	\$	26,371,827,298	\$	26,557,130,705
Member		4,506,215,731		4,300,601,742
Employer		1,791,941,399		1,129,275,319
Total	-	6,298,157,130	-	5,429,877,061
Total	\$	32,669,984,428	\$	31,987,007,766
Liabilities:				
Present Value of Benefits				
Active Members				
- service retirement	\$	18,996,374,108	\$	18,497,623,991
- disability		159,942,672		289,378,636
- death before retirement		241,281,528		305,729,174
- termination		1,560,128,128		1,214,952,519
Total	_	20,957,726,436	_	20,307,684,320
Inactive Members	_	1,591,456,326	_	1,407,380,193
Annuitants	_	21,378,759,742	_	19,017,977,910
Total	\$_	43,927,942,504	\$_	40,733,042,423
Unfunded Accrued Liability (UAL) (Note B)	\$ _	11,257,958,076	\$ _	8,746,034,657
SUMMARY OF ACTUARIAL VALUATION RESULTS				
Total Contribution Rate		19.50%		19.50%
Normal Cost (Note A)				
- dollars	\$	948,073,569	\$	835,832,959
- percent of payroll		13.95%		12.28%
Contribution Available to Amortize UAL		5.55%		7.22%
Accrued Liability (Note B)	\$	37,629,785,374	\$	35,303,165,362
Amortization Period in Years		Never		35
Funded Ratio		70.1%		75.2%
Valuation Payroll	\$	6,796,226,304	\$	6,806,457,317
Active Members		141,629		146,390

Note A: For 2017, the normal cost is based on the benefits in effect for each individual participant. For 2016, the normal cost is based on the benefits in effect for members hired after August 31, 2013.

Note B: For 2016, the actuarial accrued liability along with the resulting amortization period and funded ratio are based on a total liability which is based on the benefit provisions in effect for each active member and a normal cost rate which is based on the benefits in effect for members hired after August 31, 2013.

### Actuarial Balance Sheet -

### Law Enforcement and Custodial Officers Supplemental Retirement Fund

August 31, 2017 (With Comparative Totals at August 31, 2016)

ACTUARIAL BALANCE SHEET	_	August 31, 2017	_	August 31, 2016
Assets: Actuarial Value Assets	\$	923,989,580	\$	933,534,062
Present Value of Future Normal Cost (Note A)				
Member		59,641,277		57,998,260
Employer		189,085,908		140,523,140
Total	-	248,727,185	_	198,521,400
Total	\$	1,172,716,765	\$	1,132,055,462
Liabilities:				
Present Value of Benefits				
Active Members				
- service retirement	\$	908,044,629	\$	853,320,981
- occupational disability		5,111,458		9,032,240
- death benefit plan		6,857,252		7,297,649
- termination		13,590,041		12,791,181
Total	_	933,603,380	_	882,442,051
Inactive Members		12,074,277		9,484,080
Annuitants	_	702,926,185	_	618,987,770
Total	\$_	1,648,603,842	\$_	1,510,913,901
Unfunded Accrued Liability (UAL)	\$ _	475,887,077	\$ <sub>=</sub>	378,858,439
SUMMARY OF ACTUARIAL VALUATION RESULTS				
Total Contribution Rate		1.00%		1.00%
Estimated Contribution from Court Fees	\$	18,800,000	\$	19,200,000
Normal Cost (Note A)				
- dollars	\$	36,299,648	\$	31,560,590
- percent of payroll		2.11%		1.81%
Contribution Available to Amortize UAL		-0.02%		0.29%
Accrued Liability (Note B)	\$	1,399,876,657	\$	1,312,392,501
Amortization Period in Years		Never		Never
Funded Ratio		66.0%		71.1%
Valuation Payroll	\$	1,720,362,464	\$	1,743,679,004
Active Members		38,206		39,066

Note A: For 2017, the normal cost is based on the benefits in effect for each individual participant. For 2016, the normal cost is based on the benefits in effect for members hired after August 31, 2013.

Note B: For 2016, the actuarial accrued liability along with the resulting amortization period and funded ratio are based on a total liability which is based on the benefit provisions in effect for each active member and a normal cost rate which is based on the benefits in effect for members hired after August 31, 2013.

## Actuarial Balance Sheet -

#### Judicial Retirement System of Texas Plan Two Fund

August 31, 2017 (With Comparative Totals at August 31, 2016)

ACTUARIAL BALANCE SHEET	 August 31, 2017	 ugust 31, 2016
Assets: Actuarial Value Assets Present Value of Future Normal Cost	\$ 420,850,181	\$ 395,457,335
Member	30,666,801	29,815,732
Employer	49,992,889	52,705,161
Total	80,659,690	82,520,893
Total	\$ 501,509,871	\$ 477,978,228
Liabilities:		
Present Value of Benefits		
Active Members		
- service retirement	\$ 246,762,309	\$ 273,908,650
- disability	2,811,567	3,610,321
- death before retirement	30,209,524	10,766,912
- termination	 11,742,954	 11,896,756
Total	291,526,354	300,182,639
Inactive Members	11,422,977	11,424,274
Annuitants	 241,314,049	 196,779,287
Total	\$ 544,263,380	\$ 508,386,200
Unfunded Accrued Liability (UAL)	\$ 42,753,509	\$ 30,407,972
SUMMARY OF ACTUARIAL VALUATION RESULTS		
Total Contribution Rate Normal Cost	23.093%	23.103%
- dollars	\$ 16,318,181	\$ 16,570,808
- percent of payroll	20.57%	21.18%
Contribution Available to Amortize UAL	2.523%	1.923%
Accrued Liability	\$ 463,603,690	\$ 425,865,307
Amortization Period in Years	63	49
Funded Ratio	90.8%	92.9%
Valuation Payroll	\$ 79,330,000	\$ 78,238,000
Active Members	557	548

## Summary of Actuarial Methods and Assumptions – Pension Plans

In August 2017, the Board of Trustees of the System adopted the actuarial methods and assumptions for the Employees Retirement System (ERS), the Law Enforcement and Custodial Officer Supplemental Retirement Fund (LECOSRF), and the Judicial Retirement Plan II Fund (JRS II) with assistance from the System's actuary and based on the actuarial experience study that covered the fiscal years from 2012 to 2016. This actuarial valuation also incorporates the most significant across-the-board pay increases budgeted by the State Legislature when they are granted for the current biennium.

The System relies on the services of qualified actuaries to perform periodic valuations of the assets and liabilities of the pension funds. Gabriel, Roeder, Smith and Company has been the pension actuary for the System since June 2013. The actuarial methods used for the three funds are summarized in Figure 1.

#### **Actuarial Cost Method**

The Entry Age Normal Actuarial Cost Method was used for the actuarial valuation. Actuarial gains and losses resulting from differences between actual and assumed experience are recognized as they occur each year. These gains or losses increase or decrease the unfunded actuarial accrued liability.

The normal cost rate is based on the benefits payable to each individual member. As the number of members eligible for the newest benefit provisions increases over time, the normal cost rate is expected to decrease, and the amount available to amortize the unfunded liability will increase as a percentage of payroll. The calculation of the years required to amortize the unfunded actuarial accrued liability uses an open group projection. The total contribution rate is set by statute; the variable from year to year is the funding period.

#### **Actuarial Valuation of Assets**

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original time frame. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of investment-related expenses. The actuarial value of assets as of August 31, 2017 and the new method will be applied prospectively.

For actuarial assumptions, the members of the System are segregated into four groups – Regular State Employees, Law Enforcement and Custodial Officer (LECO) Members, Elected Class, and Judicial Class. The economic assumptions for these groups are summarized in Figure 1.

#### Pension Liability for GASB Statement 67 Reporting

The calculation of the liability associated with the benefits to satisfy the reporting requirements of GASB Statement No. 67 is not applicable for purposes of funding the plan. A calculation of the plan's liability for other purposes may produce significantly different results. The Schedule of Employer Contribution in the Required Supplementary Information section provides a comparison of the actuarial determined contribution to actual contribution.

	Employee Class & Supplemental Benefits for CPO/CO's Elected Class		Judicial Class		
Investment Rate of Return	7.	5% per year, compounded annually.			
Administrative Expenses (As a percentage of payroll per year, compounded annually)	ERS Fund: 0.33% LECOS Fund: 0.08%	0.33%	0.33%		
Salary Increase:	<ul> <li>Include 2.5% annual increase for inflation plus increases for merit, promotion and longevity.</li> <li>See Table 1 on next page for rates of salary increase for sample ages.</li> </ul>	<ul> <li>Includes 2.5% annually for inflation plus 0.50% for real wage growth (productivity).</li> <li>No salary increase for legislators.</li> </ul>	<ul> <li>Includes 2.5% annually for inflation plus 0.50% for real wage growth (productivity).</li> </ul>		
Payroll Growth	3.0% per year, compounded annually.				
Post-retirement Increase	N/A	2.75% per year, compounded annually	N/A		

Figure 1 Economic Assumptions for Employee Classes

## Summary of Actuarial Methods and Assumptions – Pension Plans

# Table 1 Economic Assumption – Rates of Merit, Promotion and Longevity Salary Increases For Regular State Employees and LECO Members, Male and Female (Note A)

		Years of Service – Non-CPO/CO							Years of Service – CPO/CO				
Age	0	1	2-4	5-9	10-14	15-19	20+	0	1	2-4	5-8	9-17	18+
20	6.80%	5.25%	4.75%	4.30%				7.0%	5.0%	3.5%	2.5%	2.25%	2.0%
30	5.90	5.25	4.75	3.00	2.50%	2.00%		7.0	5.0	3.5	2.5	2.25	2.0
40	4.90	4.75	4.00	3.00	2.50	1.90	1.80%	7.0	5.0	3.5	2.5	2.25	2.0
50	3.90	3.70	3.20	2.70	2.20	1.70	1.60	7.0	5.0	3.5	2.5	2.25	2.0
60	2.90	2.70	2.30	2.00	1.60	1.40	1.30	7.0	5.0	3.5	2.5	2.25	2.0

Note A: No salary increases are assumed where no rates are shown.

The demographic assumptions are summarized in Tables 2 to 8.

## Table 2 Demographic Assumption – Annual Rates of Termination from Active Employment before Retirement (Note B)

	Male and Female Regula	r State Employees		<u>Male and</u> Female LECO <u>Members</u>
Eligibility Service	Entry age 35 or younger	Entry age over 35	Eligibility Service	All entry ages
0	25.25%	19.63%	0	23.00%
5	10.86	8.16	5	8.81
10	5.67	5.11	10	4.96
15	3.64	3.29	15	2.90
20	1.92	1.00	19+	0.00
25+	0.85	1.00		

Elected and Judicial Class: 4 per 100 members not eligible for service retirement

Note B: Entry age is the determined as a member's current age minus their current years of State service, which is generally the age at which the member was hired with the State.

#### Table 3 Demographic Assumption – Mortality Rates for Active Members (Notes C & D)

Age	Females	Males
20	0.0162%	0.0406%
30	0.0218	0.0452
40	0.0396	0.0628
50	0.1102	0.1686
60	0.2442	0.4688
65	0.3696	0.8277

- Note C: It is assumed that 1.0% of Regular State Employee and LECO Member deaths are occupational. It is also assumed that there are no occupational deaths of members in the Elected and Judicial Classes
- Note D: The base rates indicated above are based on the RP-2014 Active Member Mortality Tables. Additionally, generational mortality improvements are projected from the year 2014 based on the Ultimate MP scale.

### Summary of Actuarial Methods and Assumptions – Pension Plans

#### Table 4 Demographic Assumption – Mortality Rates for Service Retirees and Beneficiaries (Note E)

#### Table 5 Demographic Assumption – Mortality Rates for Disability Retirees (Note F)

		Males (Non-				
Age	Females (All)	LECO)	Males (LECO)	Age	Females	Males
50	0.1215%	0.1825%	0.2035%	50	1.1907%	2.0395%
55	0.2150	0.3145	0.3507	55	1.4479	2.3369
60	0.3804	0.5421	0.6045	60	1.6999	2.6604
65	0.6730	0.9344	1.0418	65	2.0860	3.1685
70	1.1908	1.6105	1.7957	70	2.8203	4.0346
75	2.1069	2.7757	3.0950	75	4.1045	5.4287
80	3.7277	4.7842	5.3345	80	6.1036	7.6616

Note E: The base rates indicated above are based on the 2017 State Retirees of Texas Mortality Tables. Rates shown for male LECO Members are based on the same base rates with ages set forward one year. Additionally, generational mortality improvements are projected from the year 2017 based on the Ultimate MP scale.

Note F: The base rates indicated above are based on the RP-2014 Disabled Retiree Mortality Tables. Additionally, generational mortality improvements are projected from the year 2014 based on the Ultimate MP scale.

#### Table 6 Demographic Assumption – Disability Retirement Rates (Note G)

		mployees, Elected Judicial Class	LECO Members
Age	Females	Males	Females & Males
30	0.0275%	0.0135%	0.0092%
40	0.0749	0.0896	0.0586
50	0.1484	0.2072	0.1774
60	0.3740	0.5583	0.3150

Note G: It is assumed that 99% of Regular State Employee disability retirements are non-occupational and 1% of Regular State Employee disability retirements are occupational. Similarly, it is assumed that 95% of LECO Member disability retirements are non-occupational, 4.5% of LECO Member disability retirements are non-total occupational, and 0.5% of LECO Member disability retirements are total occupational. It is also assumed that there are no occupational disability retirements in the Elected and Judicial Classes. The rates do not apply before the member is eligible for the benefit.

## Summary of Actuarial Methods and Assumptions - Pension Plans

	Optior	Selection Perc	entage_
	Standard	Option 1	Option 4
Male			
Disability	50%	50%	0%
Service Retirement			
Non-LECO Members	100%	0%	0%
LECO Members	60%	40%	0%
Death Benefit Plan	0%	85%	15%
Female Member			
Disability	75%	25%	0%
Service Retirement	100%	0%	0%
Death Benefit Plan	0%	70%	30%

## Table 7 Demographic Assumption – Percentage of Members Electing Various Benefit Options (Notes H & I)

Note H: Descriptions of Options 1 and 4 are presented in the Summary of Plan Provisions in the Introductory Section. Note I: Males are assumed to be two years older than females

#### Table 8 Demographic Assumption – Service Retirement Rate (Note J and K)

Regi	<u>ular State Em</u> Males & Fem									
Age	<u>Eligibility A</u> Rule of 80	<u>Eligibility B</u> Other Age/ Service		Age	<u>Eligibil</u> 20 yrs CF		Age	Eligibility D Age 55 & 10 y CPO/CO		
<50	50%			<48	3%					
50	40			48	4		55	20%		
51	35			49	5		56	18		
52	30			50	60		57	16		
53	28			51-61	33		58-61	14		
54	27			62-74	50		62-74	27		
55	26			75	100		75	100		
56	25			10	100	,	10	100		
57	24									
58	23		Elec	ted Clas	s		<u>Judicial Class (Note M)</u>			
59	22									
60	21	18%	Age	Male 8	Female			Male &	<u>Female</u>	
61	20	12	50-61	1	0%	Ag	ge 🛛	Unreduced	Red	
62	33	20	62-74		20	50-	-64	20%	1	
63-64	27	18	75	1	00	65	-69	20	٢	
65-74	27	27				70-	-74	25	Ν	
75	100	100				7	5	100	١	

Note J: No service retirements are assumed where no rates are shown.

Note K: Service retirement rates are determined by the first set of eligibility requirements satisfied. Adjustments are made to individuals depending on their age of first eligibility.

Eligibility A: Age plus eligibility service is greater than or equal to 80 ("Rule of 80")

Eligibility B: Regular State Employee retirement eligibility other than Rule of 80

Eligibility C: 20 years of CPO/CO service

Degular State Employees

Eligibility D: Age 55 and 10 years of CPO/CO service

Note L: LECO Members are assumed to follow retirement patterns for Eligibility A or B if either is satisfied prior to satisfying Eligibility C or D. Note M: Judicial Class members are assumed to retire when they have accrued a standard retirement annuity of 90% of salary.

d

## Active Member Valuation Data

Valuation Year August 31,	Number (Note A)	Actual Annual Payroll	Average Pay (Note B)	% Change in Average Pay							
August 51,	(Note A)	\$	(Note B)	m Average Pay %							
Employees Retirement	t Fund:	φ	φ	70							
2008	134,626	5,278,395,514	39,468	3.6							
2009	141,223	5,603,756,283	40,202	1.9							
2010	142,490	5,878,680,811	41,022	2.0							
2010	137,293	5,926,331,865	41,620	1.5							
2012	132,669	5,720,722,855	42,188	1.0							
2012	133,669	5,713,759,137	42,564	0.9							
2014	134,162	5,955,460,705	44,374	4.3							
2015	142,409	6,150,194,660	44,990	1.4							
2016	146,390	6,742,143,036	46,495	3.3							
2017	141,629	6,859,706,582	47,986	3.2							
Law Enforcement and	Law Enforcement and Custodial Officer Supplemental Retirement Fund:										
2008	33,642	1,271,120,340	37,021	5.6							
2009	37,819	1,379,532,687	36,687	(0.9)							
2003	39,052	1,494,510,816	37,979	3.5							
2010	36,806	1,520,864,574	39,454	3.9							
2012	37,404	1,457,492,314	39,444	0.0							
2012	37,415	1,429,059,562	39,469	0.1							
2014	37,084	1,496,012,750	41,584	5.4							
2015	38,526	1,506,027,764	41,957	0.9							
2016	39,066	1,725,879,688	44,634	6.4							
2017	38,206	1,746,349,412	45,029	0.9							
Judicial Retirement Pla	an Two Fund <sup>.</sup>										
2008	518	66,180,701	127,625	1.7							
2009	533	66,463,534	127,519	(0.1)							
2010	539	67,204,906	127,560	0.0							
2011	546	67,927,624	127,573	0.0							
2012	541	68,373,289	127,130	(0.3)							
2013	545	68,781,009	127,550	0.3							
2014	554	77,441,466	142,820	12.0							
2015	563	77,500,736	142,721	(0.1)							
2016	548	78,260,550	142,770	0.0							
2017	557	78,189,668	142,424	(0.2)							

Note A: Number of active contributing members as of August 31, excluding those who retired August 31 because they were included as retirees in the actuarial valuation.

Note B: The average rate of salary is based on the salary for the month of August

# Retirees and Beneficiaries Added to and Removed from the Annuity Payrolls

	1	Added to Rolls	Remove	d from Rolls	Other E	Beneficiaries	Ro	lls end of Year	% Increase	Average	
Valuation										<u></u>	
Year August,		Annual		Annual		Annual		Annual	Annual	Annual	
31	No.	Benefits	No.	Benefits	No.	Benefits	No.	Benefits	Benefits	Benefit	
	\$			\$	:	\$		\$	%	\$	
Employees Re			0.000	04 540 004	<b>5</b> 44	0.000.000	70.070	4 044 000 400	5.0	10.001	
2008 2009	4,560	87,588,408	2,033	31,548,984	544	9,960,320	,	1,314,069,192	5.3	18,081	
	4,433	85,551,288	1,849	30,235,704	460	8,045,532	,	1,377,430,308	4.8	18,191	
2010	4,870	100,938,168	1,828	30,584,136	547	9,281,208		1,457,065,548	5.8	18,372	
2011	5,808	123,585,132	2,237	35,797,140	548	8,145,660	,	1,552,999,200	6.6	18,614	
2012	5,928	124,604,412	2,128	35,049,012	569	7,965,072		1,650,519,672	6.3	18,799	
2013	5,287	108,395,484	2,418	36,921,000	699	8,999,592	,	1,730,993,748	4.9	18,946	
2014	6,231	132,027,948	2,331	38,751,696	573	11,250,312	,	1,835,520,312	6.0	19,152	
2015	6,042	134,725,212	2,506	40,066,764	627	10,129,440		1,940,308,200	5.7	19,402	
2016	5,668	132,332,424	2,555	42,411,504	642	10,458,660	,	2,040,687,780	5.2	19,668	
2017	5,967	141,001,272	2,869	48,060,288	674	11,351,772	107,530	2,144,980,536	5.1	19,948	
Law Enforcem	Law Enforcement and Custodial Officer Supplemental Retirement Fund:										
2008	637	4,446,372	141	1,071,480	40	(130,654)	6,204	35,177,112	10.2	5,670	
2009	561	3,954,780	169	1,361,916	51	44,760	6,647	37,814,736	7.5	5,689	
2010	635	3,604,140	147	1,163,112	40	(120,456)	7,175	40,135,308	6.1	5,594	
2011	695	3,915,084	186	1,536,500	44	22,352	7,728	42,536,244	6.0	5,504	
2012	895	5,069,712	195	1,439,820	49	202,200	8,477	46,368,336	9.0	5,470	
2012	744	3,771,816	183	1,336,200	51	230,952	9,089	49,034,904	5.8	5,395	
2014	1,071	5,376,924	194	1,238,712	58	225,252	10,024	53,398,368	8.9	5,327	
2015	959	4,989,900	197	1,336,440	59	332,088	10,845	57,383,916	7.5	5,291	
2016	803	4,540,728	205	1,149,108	72	305,328	11,515	61,080,864	6.4	5,304	
2017	876	5,132,832	214	1,106,412	71	310,464	12,248	65,417,748	7.1	5,341	
Judicial Retire											
2008	6	292,899	2	129,975	2	129,975	117	6,710,789	4.6	57,357	
2009	36	2,220,108	1	70,656	0	16,308	152	8,876,549	32.3	58,398	
2010	12	737,508	2	119,556	2	122,491	164	9,616,992	8.3	58,640	
2011	43	2,792,244	1	29,580	2	152,880	208	12,532,536	30.3	60,253	
2012	8	441,948	4	250,680	3	167,892	215	12,891,696	2.9	59,961	
2013	43	2,571,696	5	278,964	1	68,580	254	15,253,008	18.3	60,051	
2014	14	1,024,752	7	348,120	6	249,000	267	16,178,640	6.1	60,594	
2015	57	4,365,012	9	467,832	7	403,020	322	20,478,840	26.6	63,599	
2016	10	555,060	5	319,908	4	289,548	331	21,003,540	2.6	63,455	
2017	48	3,177,144	8	448,908	7	383,532	378	24,115,308	14.8	63,797	

## Schedule of Funding Progress – Defined Benefit Plans

		[Note A]	(c)	<i>a</i> ,		(f)
Astustial	(a)	(b)	(Overfunded)	(b)	Diate Di	UAAL As A
Actuarial Valuation Date	Actuarial Value of	Actuarial Accrued Liability	Unfunded AAL (UAAL)	Funded Ratio	[Note B] (e)	Percentage Of Covered Payroll
August 31	Assets	(AAL)	(b) - (a)	(a)/(b)	Covered Payroll	(c)/(e)
August 51	(000's)	(000's)	(000's)	(a)/(b) %	(000's)	(c)/(e) %
	(0003)	(000 3)	(0003)	70	(0003)	70
Employees Retireme	nt Fund:					
2007	22,938,947	23,987,165	1,048,218	95.6	5,253,723	20.0
2008	23,511,918	25,403,280	1,891,362	92.6	5,379,527	35.2
2009	23,509,622	26,191,650	2,682,028	89.8	5,814,417	46.1
2010	23,628,567	27,668,876	4,040,309	85.4	5,930,141	68.1
2011	23,997,445	28,398,213	4,400,768	84.5	5,795,185	75.9
2012	24,272,514	29,377,069	5,104,555	82.6	5,676,509	89.9
2013	24,667,639	31,886,026	7,218,387	77.4	5,959,473	121.1
2014	25,431,922	32,924,737	7,492,815	77.2	6,171,443	121.4
2015	25,850,542	33,868,360	8,017,818	76.3	6,659,647	120.4
2016	26,557,130	35,303,165	8,746,035	75.2	6,806,457	128.5
2017	26,371,827	37,629,785	11,257,958	70.1	6,796,226	165.7
		icer Supplemental Ret				
2006	720,307	708,437	(11,870)	101.7	1,279,463	(0.9)
2007	747,765	762,666	14,901	98.0	1,360,819	1.1
2008	774,509	842,135	67,626	92.0	1,242,122	5.4
2009	780,808	870,179	89,371	89.7	1,464,483	6.1
2010	802,897	930,747	127,850	86.3	1,507,950	8.5
2011	830,522	960,953	130,431	86.4	1,475,432	8.8
2012	832,451	1,015,668	183,217	82.0	1,498,979	12.2
2013	843,017	1,197,164	354,147	70.4	1,627,699	21.8
2014	883,595	1,206,770	323,175	73.2	1,609,491	20.1
2015	909,249	1,262,311	353,062	72.0	1,750,709	20.2
2016	933,534	1,312,392	378,858	71.1	1,743,679	21.7
2017	923,990	1,399,877	475,887	66.0	1,720,362	27.7
Indiaial Definement (	Ductom Diam Tu	. Fronde				
Judicial Retirement \$ 2007	•		0.051	95.9	C4 CE4	13.8
2007	211,933 232,891	220,884 239,098	8,951 6,207	95.9 97.4	64,654 66,110	9.4
2008	248,279	255,569	7,290	97.4 97.1	67,968	9.4 10.7
2009	264,515	281,760	17,245	97.1	68,755	25.1
2010	283,936	300,163	16,227	93.9 94.6	69,655	23.3
2011	300,433	315,199	14,766	94.0 95.3	68,778	23.3
2012	318,026	359,059	41,033	95.3 88.6	77,854	52.7
2013	348,431	386,286	37,855	90.2	79,123	47.8
2014	372,615	404,011	31,396	90.2	80,352	39.1
2015	395,457	404,011	30,408	92.2	78,238	38.9
2010	420,850	463,604	42,754	92.9	79,330	53.9
2017	720,000	+00,004	72,104	50.0	10,000	00.0

Note A: For ERS and LECOS, the actuarial accrued liability along with funded ratio are based on a total liability, which is based on the benefit provisions in effect for each active member and a normal cost rate that is based on the benefits in effect for new members after plan changes in August 31, 2009 and August 31, 2013.

Note B: Covered payroll is the expected payroll for the fiscal year following the valuation date.

#### **Funding Objective**

The System's funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due – the ultimate test of financial soundness.

#### **Evaluation of Funding Objective**

A short-term solvency test is one way of evaluating a system's progress under its funding program. In a short-term solvency test, the plan's present assets are compared with:

1. Active member contributions on deposit;

- 2. The liabilities for future benefits to present retirees; and
- 3. The liabilities for service already rendered by active members.

In a system that has been following the level contribution rate of payroll financing principle, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retirees (liability 2) will be fully covered by present assets except in rare circumstances. In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. Generally, if the system has been using level contribution rate financing, the funded portion of liability 3 will increase over time. Following is a summary of the solvency test:

	Aggre	egate Accrued Liabili	_									
	(1)	(2)	(3)			Portion of	Accrued					
Valuation	Active		Active Members			Liabilities	Covered					
Year	Member	Retirees and	(Employer Financed	Valuation			y Assets					
August 31,	Contributions	Beneficiaries	Portion)	Assets	(1)	(2)	(3)					
	\$\$		\$	\$	%	%	%					
	etirement Fund (Note A	,										
2009	4,460,644,477	12,648,155,181	9,798,979,599	23,509,621,791	100	100	65.3					
2010	4,719,703,277	13,407,823,189	10,284,288,042	23,628,566,500	100	100	53.5					
2011	4,943,684,166	14,325,177,797	9,781,265,638	23,997,444,804	100	100	48.3					
2012	5,075,213,967	15,243,956,208	9,657,986,616	24,272,514,483	100	100	40.9					
2013	5,201,006,487	16,148,245,090	10,536,774,798	24,667,639,104	100	100	31.5					
2014	5,213,640,470	17,113,870,539	10,597,226,202	25,431,922,496	100	100	29.3					
2015	5,235,063,313	18,080,000,823	10,553,295,814	25,850,542,024	100	100	24.0					
2016	5,509,428,282	19,017,977,910	10,775,759,170	26,557,130,705	100	100	18.8					
2017	5,709,094,713	21,378,759,742	10,541,930,919	26,371,827,298	100	96.7	0.0					
	nent and Custodial Of		etirement Fund (Note A)									
2009	-	334,638,616	572,463,018	780,807,727	-	100	77.9					
2010	7,315,238	367,991,489	591,296,971	802,897,017	100	100	72.3					
2011	13,897,600	400,877,467	578,021,779	830,522,385	100	100	71.9					
2012	19,540,552	447,451,269	577,263,635	832,451,079	100	100	63.3					
2013	24,432,912	482,687,108	690,043,817	843,016,798	100	100	48.7					
2014	29,508,062	533,252,341	644,009,518	883,594,932	100	100	49.8					
2015	34,455,599	578,926,025	648,929,765	909,249,614	100	100	45.6					
2016	41,480,394	618,987,770	651,924,337	933,534,062	100	100	41.9					
2017	47,025,982	702,926,185	649,924,490	923,989,580	100	100	26.8					
	ement Plan Two Fund:											
2009	51,733,112	85,844,874	117,990,788	248,279,312	100	100	93.8					
2010	57,347,421	92,253,133	132,159,921	264,515,185	100	100	87.0					
2011	57,768,713	120,798,133	121,595,978	283,935,401	100	100	86.7					
2012	63,677,503	122,570,887	128,950,762	300,433,111	100	100	88.5					
2013	64,435,226	147,052,378	147,571,031	318,025,658	100	100	72.2					
2014	69,364,268	153,382,909	163,539,195	348,430,575	100	100	76.9					
2015	67,427,634	194,524,402	142,058,536	372,615,005	100	100	77.9					
2016	73,450,388	196,779,287	155,635,632	395,457,335	100	100	80.5					
2017	72,977,421	241,314,049	149,312,220	420,850,181	100	100	71.4					

Note A: The actuarial accrued liability for ERS and LECOS is based on a total liability which is based on the benefit provisions in effect for each active member and a normal cost rate which is based on the benefits in effect for members hired after August 31, 2013. Note B: Ten years of data will be developed prospectively.

## Analysis of Financial Experience

Actual financial experience will not coincide exactly with assumed financial experience because the future cannot be predicted with 100 percent precision. The assumed experience should be changed to reflect observed reality when an actuarial investigation reveals that the difference between actual and assumed experience in the various risk areas to be material and persistent.

If the differences between actual and assumed experience is financially favorable or unfavorable, such differences are called actuarial gains or losses. In the actuarial valuation of the System, actuarial gains and losses are recognized immediately, with actuarial gains decreasing the unfunded actuarial accrued liability and actuarial losses increasing the unfunded actuarial accrued liability. A general description of actuarial gains and losses for age and service retirements, disability retirements, death-in-service benefits, and withdrawal from employment is summarized as follows:

#### Age and Service Retirement:

If members retire at younger (older) ages or with final average pay that is higher (lower) than assumed, there is a loss (gain).

#### **Disability Retirement:**

If disability claims are more (less) than assumed, there is a loss (gain).

#### **Death-in-Service Benefit:**

If survivor claims are more (less) more than assumed, there is a loss (gain).

#### Withdrawal from Employment:

If withdrawals are less (more) less than assumed, there is a loss (gain).

The gains and losses in actuarial accrued liabilities resulting from differences between assumed experience and actual experience are summarized as follows:

	Increase/(Decrease) in Unfunded Accrued Liability for Year (in							
	ER	S	LEC	OS	JR	S II		
Type of Activity	2017	2016	2017	2016	2017	2016		
Contribution Income and Interest on Unfunded Actuarial Accrued Liability If contributions are received in excess of both the normal cost and interest on the unfunded actuarial accrued liability, there is a decrease. If less, an increase.	359.8	120.6	35.2	22.5	1.3	1.4		
Components of (Gain)/Loss								
Investment Income If there is greater investment income than assumed on the actuarial value of assets, there is a gain. If less income, a loss.	1,216.0	522.9	42.8	18.4	(1.1)	3.6		
Active Member Demographics Combined (gain)/loss from age and service retirements, disability retirements, death-in-service benefits, and withdrawal from employment	20.9	(9.1)	(9.8)	(12.5)	3.4	(7.8)		
Pay Increases		(- )	()			( - )		
If there are smaller pay increases than assumed, there is a gain. If greater increases occur, a loss.	98.2	39.1	0.9	(4.0)	0.0	0.0		
<u>Death After Retirement</u> If retirees live longer than assumed, there is a loss. If not as long, a gain.	(35.7)	19.6	(2.7)	0.2	0.7	0.9		
<u>Other</u> Miscellaneous (gains)/losses resulting from data								
adjustments, timing of financial transactions, valuation methods, etc.	(4.4)	35.1	3.3	1.2	1.4	0.9		
Increase/(Decrease) in Unfunded Accrued Liability During Year from Financial Experience	1,654.8	728.2	69.7	25.8	5.7	(1.0)		
Non-Recurring Items Adjustments for plan amendments, changes in actuarial								
assumptions, increase in Service Retirement Formula, legislative action, etc.	857.1	0.0	27.3	0.0	6.6	0.0		
Composite Increase/(Decrease) During Year	2,511.9	728.2	97.0	25.8	12.3	(1.0)		

## Effect of Changes in Actuarial Assumptions

Following is a summary of key results of the August 31, 2017 actuarial valuation under both the old and new actuarial assumptions.

	ER	S	LEC	OS	JRS II		
	After Before		After	Before	After	Before	
Key Result	Changes	Changes	Changes	Changes	Changes	Changes	
Normal Cost							
Dollars	\$948,073,569	\$834,576,590	\$36,299,648	\$31,138,561	\$16,318,181	\$16,905,223	
Percent of Payroll	13.95%	12.28%	2.11%	1.81%	20.57%	21.31%	
Actuarial Accrued Liability	\$37,629,785,374	\$35,974,105,106	\$1,399,876,657	\$1,335,912,567	\$463,603,690	\$442,472,057	
Unfunded Actuarial Accrued Liability	\$11,257,958,076	\$8,525,127,228	\$475,887,077	\$373,994,413	\$42,753,509	\$20,907,343	
Actuarial Value of Assets	\$26,371,827,298	\$27,448,977,878	\$923,989,580	\$961,918,154	\$420,850,181	\$421,564,714	
Funded Ratio	70.1%	76.3%	66.0%	72.0%	90.8%	95.3%	
Amortization Period in Years	Infinite	36	Infinite	Infinite	63	26	

## Actuary's Certification Letter – State Retiree Health Plan



Employees Retirement System of Texas Group Benefits Program FY17 GASB No.74 Actuarial Valuation

#### Section I - Certification of GASB No. 74 Actuarial Valuation

At the request of the Employees Retirement System of Texas (ERS), we have performed an actuarial valuation of the Other Post-Employment Benefits provided under the Texas Employees Group Benefits Program (GBP) for the twelve-month period ending August 31, 2017 (GBP OPEB). The purpose of this report is to present the results of our valuation and provide the information necessary to determine financial statement entries consistent with the Governmental Accounting Standards Board Statement No. 74 Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB No. 74).

Actuarial computations under GASB No. 74 are for purposes of fulfilling governmental plan financial accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of GASB No. 74 and the GBP. The information presented in this report is solely for purposes of compliance with GASB No. 74. This report does not provide any advice with respect to the manner in which the benefits are funded (i.e., pay-as-you go funding as opposed to prefunding the benefits).

We have based our valuation on current and former employee data as of August 31, 2017 provided by ERS and the Teachers Retirement System (TRS) and plan provisions provided by ERS. We have used the actuarial methods and assumptions described in Section VIII of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section IX.

To the best of our knowledge, all current active and retired employees eligible to participate in the plan as of the valuation date and all other individuals who have a vested benefit under the plan have been included in the valuation. Furthermore, to the best of our knowledge and belief, all plan benefits have been considered in the development of costs.

ERS and TRS remain solely responsible for the accuracy and comprehensiveness of the respective data provided. However, to the best of our knowledge, no material biases exist with respect to any imperfections in the data provided by these sources. To the extent that any imperfections exist in the data records, we have relied on best estimates provided by ERS and TRS. We have not audited the data provided, but have reviewed it for reasonableness and consistency relative to previously provided information.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion, each of the assumptions used is reasonably related to the experience of the plan and to reasonable expectations and represents our best estimate of anticipated experience under the plan solely with respect to that individual assumption. All of our work conforms to generally accepted actuarial principles and practices and to the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Rudd and Wisdom, Inc. prepared and presented in Sections V and VI of this report the information that is required to be included in the notes to the Financial Statements and the Required Supplementary Information.

The undersigned individuals are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained

herein

Mitchell I. Bilbe, F.S.A. Member of American Academy of Actuaries

Christopher S. Johnson, F.S.A. Member of American Academy of Actuaries

RUDD AND WISDOM, INC.

Philip S. Dial, F.S.A. Member of American Academy of Actuaries

I-1

NOVEMBER 2017

## Actuarial Valuation Results – State Retiree Health Plan



Employees Retirement System of Texas Group Benefits Program FY17 GASB No.74 Actuarial Valuation

#### Summary of Results for FY 2017

Actuarial Valuation Results as of August	31, 2017	
	(\$ thousands)	As a % of Payroll
<ol> <li>Number of Members (actual count, not in thousands)         <ul> <li>a. Actives</li> </ul> </li> </ol>	230,199	
b. Deferred Vesteds	11,557	
c. Retirees and Nominees	117,880	
d. Total Number of Members	359,636	
2. Payroll of Active Members for FY 2017	\$11,745,310	
3. Actuarial Present Value of Projected Benefit Payments		
a. Actives	\$36,982,172	
b. Deferred Vesteds	1,990,603	
c. Retirees and Nominees	14,000,892	
d. Total	\$52,973,666	451.0%
4. Total OPEB Liability		
a. Actives	\$18,791,300	
b. Deferred Vesteds	1,990,603	
c. Retirees and Nominees	14,000,892	
d. Total	\$34,782,794	296.1%
5. Fiduciary Net Position	\$709,783	6.0%
6. Net OPEB Liability [4.d. – 5.]	\$34,073,012 <sup>1</sup>	290.1%
7. Actuarially Determined Contribution for FYE August 31, 2017		
a. Normal Cost	\$1,495,979	12.7%
b. Amortization of Net OPEB Liability	1,218,979	10.4%
c. Total ADC for FYE August 31, 2017	\$2,714,958	23.1%

Adjusted due to rounding error caused by rounding individual components.

RUDD AND WISDOM, INC.

1

## Summary of Actuarial Methods and Assumptions – State Retiree Health Plan

## Consistency with Assumptions Used for Retirement Plan Valuations

Most of the employees and retirees covered by the Group Benefits Program are also covered by either the System or Teacher Retirement System (TRS) retirement plans that are subject to periodic actuarial valuations. Where appropriate, assumptions were utilized that were previously adopted by the System and TRS Boards for use in performing the retirement plan valuations. However, certain aspects of the OPEB valuation process require the use of assumptions that are unique to OPEB; for example, the discount rate assumption and the health benefit cost trend assumption as discussed below.

#### **Changes in Actuarial Assumptions**

Since the last valuation was prepared for this plan, demographic assumptions (including rates of retirement, disability, termination, and mortality, assumed salary increases and assumed age differences for future retirees and their spouses for select classes of State Agency employees), assumed aggregate payroll increases and the assumed rate of general inflation have been updated to reflect assumptions recently adopted by the System's Trustees. These new assumptions were adopted to reflect an experience study on the System's retirement plan performed by the System's retirement plan actuary.

In addition, assumed Expenses, assumed Per Capita Health Benefit Costs and assumed Health Benefit Cost, Retiree Contribution and Expense trends have been updated to reflect recent experience and its effects on our short-term expectations and the revised assumed rate of general inflation. Furthermore, the percentage of current retirees and their spouses not yet eligible to participate in the HealthSelect Medicare Advantage Plan and future retirees and their spouses who will elect to participate in the plan at the earliest date at which coverage can commence, the proportion of future retirees covering dependent children and the percentage of future retirees assumed to be married and electing coverage for their spouse have been updated to reflect recent plan experience and expected trends.

Lastly, the discount rate assumption was lowered as a result of requirements by GASB No. 74 to utilize the yield or index rate for 20-year, tax-exempt general obligation municipal bonds rated AA/Aa (or equivalent) or higher.

#### **Discount Rate Assumptions**

In accordance with Paragraph No. 48 of GASB No. 74,

the discount rate should be the single rate that reflects the following:

- (a) the long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that (i) the OPEB plan's fiduciary net position (i.e., plan assets) is projected to be sufficient to make projected benefit payments and (ii) OPEB plan assets are expected to be invested using a strategy to achieve that return, and
- (b) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale), to the extent that the conditions in (a) are not met.

For each future period, if the amount of the OPEB plan's fiduciary net position is projected to be greater than or equal to the benefit payments that are projected to be made in that period and OPEB plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, the actuarial present value of benefit payments projected to be made in the period should be determined using the long-term expected rate of return on those investments. Per Paragraph No. 52 of GASB No. 74, the long-term expected rate of return should be based on the nature and mix of current and expected OPEB plan investments over a period representative of the expected length of time between (1) the point at which a plan member begins to provide service to the employer and (2) the point at which all benefits to the plan member have been paid. For this purpose, the long-term expected rate of return should be determined net of OPEB plan investment expense but without reduction for OPEB plan administrative expense. The municipal bond rate discussed in (b) above should be used to calculate the actuarial present value of all other benefit payments. The discount rate is the single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the actuarial present values determined using the long-term rate of return and the municipal bond rate applied to the appropriate periods as described above.

For this plan, the amount that the participating employers contribute to the OPEB plan each year is limited to the anticipated cost of providing benefits incurred during that year. As a result, the GBP is not expected to accumulate funds. (Although there are some accumulated funds as of August 31, 2017, such funds provide less than a full year's benefit payments and are expected to be depleted shortly.) Since no plan

## Summary of Actuarial Methods and Assumptions – State Retiree Health Plan (Continued)

assets are expected to accumulate, the discount rate assumption must be based solely on the municipal bond rate discussed in (b) above. The assumed discount rate for the fiscal year ending August 31, 2017 is 3.51% based upon the Bond Buyer Index of general obligation bonds with 20 years to maturity with an average credit quality that is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA rating.

#### **Health Benefit Cost Trend**

For purposes of this valuation, the health benefit cost trend represents the expected annual rate of increase in health benefit costs, excluding the effects of changes in demographics and changes in plan provisions.

The health benefit cost trend has exceeded the rate of price increases in the general economy, as measured by changes in the Consumer Price Index (CPI), for many decades. Although this pattern is expected to continue for the foreseeable future, many economists anticipate that the degree to which the health benefit cost trend exceeds general inflation will eventually abate. These economists believe that the health benefit cost trend will reach an ultimate level that still exceeds general inflation, but not by as wide a margin as in past decades.

The health benefit cost trend assumption used in this report begins with our short term expectations of expected health benefit cost increases in the next year and gradually declines to a rate that exceeds the assumed rate of general price inflation by 2.0%.

#### **Changes in Plan Provisions**

Under Q/A #4.107 of GASB's Implementation Guide No. 2017-2, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, any plan changes that have been adopted and communicated to plan members by the time the valuation is prepared must be included in the valuation. Accordingly, this valuation reflects the benefit changes that became effective September 1, 2017, since these changes were communicated to plan members in advance of the preparation of this report. The benefit changes for HealthSelect retirees and dependents for whom Medicare is not primary include:

- an increase in the out-of-pocket cost applicable to services obtained at a free-standing emergency facility;
- · elimination of the copayment for virtual visits;
- · a reduction in the copayment for Airrosti; and

 for out-of-state participants, (i) elimination of the deductible for in-network services and (ii) application of a copayment rather than coinsurance to certain services like primary care and specialist office visits.

These minor benefit changes are provided for in the fiscal year 2018 Assumed Per Capita Health Benefit Costs. There are no benefit changes for HealthSelect retirees and dependents for whom Medicare is Primary.

#### **High-Cost Plan Excise Tax**

Consistent with the prior valuation, the effects of the High-Cost Plan Excise Tax imposed by the ACA under Internal Revenue Code Section 4980I (sometimes referred to as the "Cadillac Tax") have been included in this valuation. The Excise Tax becomes effective in 2020, but the plan is not expected to be subject to the tax until 2060 based on current plan provisions, assumptions and participant demographics. The Net OPEB Liability is increased by the \$521 million present value of the estimated Excise Taxes in future years, and the associated increase to the ADC is \$19 million..

#### **Medicare Part D**

The Medicare Prescription Drug Improvement and Modernization Act of 2003 introduced a prescription drug benefit under Medicare (Medicare Part D) as well as a federal subsidy to sponsors of retiree healthcare benefit plans that provide a prescription drug benefit that is at least actuarially equivalent to the basic coverage provided under Medicare Part D (the Retiree Drug Subsidy).

For purposes of GASB No. 74, the valuation of future OPEB may not reflect the anticipated receipt of future federal government subsidy payments under the Medicare Part D Prescription Drug Program as required under GASB Technical Bulletin No. 2006-1. The Bulletin requires that Retiree Drug Subsidy payments to an employer be reported by the employer as revenue, rather than being netted against the employer's OPEB cost for prescription drug coverage.

ERS implemented an Employer Group Waiver Plan plus Commercial Wrap (EGWP plus Wrap) on January 1, 2013 in order to provide the plan with the benefit of increased subsidies and discounts available under such an arrangement. The Retiree Drug Subsidy has been significantly reduced as a result of the implementation of the EGWP plus Wrap. The Retiree Drug Subsidies are excluded from this valuation in accordance with GASB Technical Bulletin No. 2006-1.

## Summary of Actuarial Methods and Assumptions – State Retiree Health Plan (Concluded)

The projected cost of the EGWP plus Wrap reflects the subsidies which are expected to be provided by the Federal government under Medicare Part D and the discounts expected to be provided by drug manufacturers as required under the ACA.

#### Economic Assumptions Administrative Expenses

The expenses to administer the GBP health benefits are (i) \$189.24 (\$180.24 for medical plus \$9.00 for prescription drugs) per year per covered member for external HealthSelect administrative expenses for fiscal year 2018 and (ii) approximately \$55.78 per year per covered member for internal administrative expenses for fiscal year 2018 (including the ACA Patient-Centered Outcomes Research Institute (PCORI) fee). The external and internal administrative expenses per covered member are the same regardless of whether the member covers dependents.

#### Stop-loss Reinsurance

Stop-loss reinsurance is not purchased for the Group Benefits Program.

#### **Discount Rate**

Equal to the municipal bond rate of 3.51%.

#### **Health Benefit Cost Trend**

The Annual Rate of Increase in Per Capita Health Benefit Cost assumptions are shown below.

Fiscal Year	Annual Rate of Increase
	%
2019	8.50
2020	8.00
2021	7.50
2022	7.00
2023	6.50
2024	6.00
2025	5.50
2026	5.00
2027 and beyond	4.50

#### **Trend Rate for Retiree Contributions**

The portions of retiree contributions attributable to non-life insurance benefits for both HealthSelect and HealthSelect Medicare Advantage Plan are assumed to increase from their amounts in FY 2018 at the rates shown below.

Annual Rate of Increase
%
0.75
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50

#### **Expense Trend Rate**

Internal and external administrative expenses are assumed to increase 2.50% per annum.

#### Trend Rate for the Opt-Out Credit

The monthly benefit of \$60 in fiscal year 2018 is not assumed to increase in the future.

#### Health Coverage by Governmental Plans

There has been no consideration of anticipated changes in laws concerning health costs covered by governmental programs. However, presently enacted changes in the law that take effect in future periods that will affect future benefit coverages are considered. The proportion of health benefits which are currently covered by governmental programs has been assumed to remain constant in the future.

## Active Member Valuation Data

Valuation Year August 31,	Number (Note A)	Actual Annual Payroll	Average Pay	% Change in Average Pay
	\$	\$		%
State Retiree Health Plan				
2011	227,786	10,376,487,000	45,554	2.2%
2012	225,075	10,268,696,000	45,623	0.2%
2013	226,181	10,478,117,000	46,326	1.5%
2014	228,805	10,963,773,000	47,918	3.4%
2015	230,023	11,176,584,000	48,589	1.4%
2016	235,108	11,786,869,000	50,134	3.2%
2017	230,199	11,745,310,000	51,022	1.8%

Note A: Includes return-to-work retirees and employees who have not yet satisfied the 90-day waiting period.

## Retirees and Nominees Added and Removed

Valuation	Add	ed to Rolls	Removed	from Rolls	Rolls E	nd of Year	Increase	Average
Year August 31,	No.	Annual Benefits	No.	Annual Benefits	No. (Note A)	Annual Benefits	Annual Benefits	Annual Benefit
		\$		\$		\$	%	\$
State Retiree H	lealth Plan							
2011	6,882	4,711,974	2,780	1,903,413	90,213	646,197,287	0.4	7,163
2012	7,869	76,049,400	2,707	26,161,612	95,375	696,085,075	7.7	7,298
2013	7,790	47,110,385	3,111	18,813,916	100,054	724,381,544	4.1	7,240
2014	7,950	150,776,296	3,234	61,334,659	104,770	813,823,181	12.3	7,768
2015	7,880	86,944,401	3,339	36,841,035	109,311	863,926,547	6.2	7,903
2016	7,431	88,326,138	3,312	39,366,999	113,430	912,885,686	5.7	8,048
2017	8,046	149,945,106	3,596	67,014,989	117,880	995,815,803	9.1	8,448

Note A: Includes retirees who receive the Opt-Out Credit in lieu of health benefits.

## Schedule of Funding Progress – State Retiree Health Plan

Actuarial Valuation Date August 31	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL)	(c) (Overfunded) Unfunded AAL (UAAL) (b) - (a)	(b) Funded Ratio (a)/(b)	(e) Covered Payroll	(f) UAAL As A Percentage Of Covered Payroll (c)/(e)
	(000's)	(000's)	(000's)	%	(000's)	%
2007 2008 2009 2010 2011 2012 2013 2014 2015	0 0 0 0 0 0 0 0	17,675,000 20,131,000 21,992,356 22,329,556 21,502,434 20,823,410 23,030,469 24,701,904 25,740,698	17,675,000 20,131,000 21,992,356 22,329,556 21,502,434 20,823,410 23,030,469 24,701,904 25,740,698 27,001,270	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	8,836,000 9,373,000 10,045,849 10,437,333 10,376,487 10,268,696 10,478,117 10,963,773 11,176,584	200.0 214.8 218.9 213.9 207.2 202.8 219.8 225.3 230.3
2016 2017	0 709,783	27,091,372 34,782,794	27,091,372 34,073,011	0.00 2.04	11,786,869 11,745,310	229.8 290.1

## STATISTICAL SECTION

#### **Summary of Statistical Section**

#### **Governmental Activities:**

Net Position Changes in Net Position

#### **Governmental Funds:**

Fund Balances Changes in Fund Balances

#### **Changes in Net Position:**

Proprietary Fund Defined Benefit Plans Deferred Compensation Plan and Cafeteria Plan Benefit and Refund Payments — Defined Benefit Plans Average Benefit Payments — Employee Class Retired Members by Type of Benefit Contribution Rates

#### **Other Statistical Information:**

Defined Benefit Plans

Other Programs

List of Participating Reporting Entities for State Retiree Health Plan



## Summary of Statistical Section

This section contains additional historical perspective, context, and detail to assist financial statement users in understanding the System's economic condition and benefit offerings.

#### **Financial Trends**

The following statistical information provides trends to assist in understanding changes over time in financial performance of the benefit offerings:

- Net Position Governmental Activities
- Changes in Net Position Governmental Activities
- Fund Balances Governmental Funds
- Changes in Fund Balances Governmental Funds
- Changes in Net Position Proprietary Fund
- Changes in Net Position Defined Benefit Plans
- Changes in Net Position Deferred Compensation Plans and Cafeteria Plan

#### **Operating Information**

The following statistical information provides benefit and member data to assist in understanding of the System's operations and benefit offerings:

- Benefit and Refund Payments Defined Benefit Plans
- Average Benefit Payments Employee Class
- Retired Members by Type of Benefit
- Contribution Rates
- Other Information: Defined Benefit Plans
- Other Information: Other Programs
- List of Participating Reporting Entities for State Retiree Health Plan

### Net Position – Governmental Activities

Last Ten Fiscal Years (in 000's) (Accrual Basis of Accounting)

This schedule provides ten year trend information for restricted and unrestricted assets. The information source of this schedule is Exhibit I.

		Fiscal Year								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Governmental Activities:	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Restricted	384,892	282,484	136,599	227,985	284,814	325,412	379,311	440,466	498,874	87,945
Unrestricted	56	59	45	8	18		5	17	22	4
Total Governmental Activities	384,948	282,543	136,644	227,993	284,832	325,412	379,316	440,483	498,896	87,949

## Changes in Net Position – Governmental Activities

Last Ten Fiscal Years (in 000's) (Accrual Basis of Accounting)

This schedule provides trend information for the last ten fiscal years for expenses, program revenues, general revenues, and net revenues. The information source of this schedule is Exhibits II and VI.

	Fiscal Year									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Expenses	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Governmental Activities:										
Social Security Administration	54	61	101	102	105	92	156	178	139	152
Death Benefits:										
Peace Officers, Firemen, etc.	3,423	1,866	4,164	2,784	2,141	5,444	5,738	2,162	7,281	8,826
Compensation to Victims of Crime	2,250	2,000	1,250	1,750	1,000	2,000	1,625	1,000	2,000	3,500
Retiree \$5,000 Lump Sum	6,902	7,367	7,910	7,885	8,628	9,108	8,846	9,286	10,080	10,893
Employees Life, Accident and Health										
Insurance and Benefits::										
Claims Expenses	1,460,527	1,632,962	1,828,422	1,776,296	1,826,996	1,934,325	2,047,749	2,242,195	2,455,030	2,434,697
Administration	8,323	9,062	8,118	9,437	9,401	9,356	24,535	36,692	19,390	14,977
Total Expenses	1,481,479	1,653,318	1,849,965	1,798,254	1,848,271	1,960,325	2,088,649	2,291,513	2,493,920	2,473,045
Program Revenues										
Governmental Activities:										
Charges for Services:										
Administration Fees	65	64	85	66	74	75	70	71	71	70
Appropriations:										
Administration	28	28								
Death Benefits:										
Peace Officers, Firemen, etc.	3,395	1,838	4,164	2,784	2,141	5,444	5,738	2,162	7,281	8,826
Compensation to Victims of Crime	2,250	2,000	1,250	1,750	1,000	2,000	1,625	1,000	2,000	3,500
Retiree \$5,000 Lump Sum	6,902	7,367	7,911	7,885	8,628	9,108	8,846	9,289	10,075	10,893
Insurance Contributions:										
Employer	1,075,354	1,108,150	1,233,781	1,414,732	1,434,186	1,527,002	1,631,916	1,834,956	1,992,220	1,963,388
Member	364,278	381,820	416,690	444,731	444,786	460,944	482,566	495,723	521,361	562,140
Other	163	161	157	209	192	179	141	121	120	125
Operating Grants and Contributions:										
Membership Fee Revenue										
Investment Income	42,513	48,100	36,671	12,758	13,188	(5,885)	10,913	6,298	19,492	13,569
Other	1,521	1,385	3,357	4,688	875	2,039	647	2,945	1,386	1,782
Total Program Revenues	1,496,469	1,550,913	1,704,066	1,889,603	1,905,070	2,000,906	2,142,462	2,352,565	2,554,006	2,564,293
General Revenues										
Transfers					40		90	-	(1,673)	64
Total General Revenues					40	-	90	115	(1,673)	64
Net Revenue Governmental Activities	14,990	(102,405)	(145,899)	91,349	56,839	40,581	53,903	61,167	58,413	91,312

### Fund Balances – Governmental Funds

Last Ten Fiscal Years (in 000's) (Modified Accrual Basis of Accounting)

This schedule provides information on the modified accrual basis of accounting for the last ten fiscal years for committed Social Security Administration Funds and Total Governmental Funds. The information source of this schedule is Exhibit III. Please see Note 1.D for the System's descriptions for modified accrual basis of accounting.

					Fiscal Ye	ear				
	 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Governmental Funds:	\$ \$	\$	\$	\$	\$	\$	\$	\$	\$	
Committed:										
Social Security Administration Fund	56	59	45	8	18		5	17	22	4
Total Governmental Funds	56	59	45	8	18	-	5	17	22	4

## Changes in Fund Balances – Governmental Funds

Last Ten Fiscal Years (in 000's)

(Modified Accrual Basis of Accounting)

This schedule provides trend information on the modified accrual basis of accounting for Revenues, Expenditures, and net change in Fund Balances. This information is obtained from Exhibit IV. Please see Note 1.D for the System's descriptions for modified accrual basis of accounting.

					Fisca	I Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenues	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Appropriations for (Note A):										
Administration	28	28								
Death Benefits:										
Public Employee Survivors	3,395	1,838	4,164	2,784	2,141	5,444	5,738	2,162	7,281	8,826
Victims of Crime	2,250	2,000	1,250	1,750	1,000	2,000	1,625	1,000	2,000	3,500
Retiree \$5,000 Lump Sum	6,902	7,367	7,911	7,885	8,628	9,108	8,847	9,289	10,075	10,893
Administration Fees	65	64	85	66	74	75	70	71	71	70
Total Revenues	12,640	11,297	13,410	12,485	11,843	16,627	16,280	12,522	19,427	23,289
Expenditures										
Death Benefits:										
Public Employee Survivors	3,423	1,866	4,164	2,784	2,141	5,444	5,738	2,162	7,281	8,826
Victims of Crime	2,250	2,000	1,250	1,750	1,000	2,000	1,625	1,000	2,000	3,500
Retiree \$5,000 Lump Sum	6,902	7,367	7,910	7,885	8,628	9,108	8,846	9,286	10,080	10,893
Administrative Expenditures	54	61	101	102	105	92	156	178	139	152
Total Expenditures	12,629	11,294	13,425	12,521	11,874	16,644	16,365	12,626	19,500	23,371
Excess of Revenues Over (Under)										
Expenditures	11	3	(15)	(36)	(31)	(17)	(85)	(104)	(72)	(82)
Other Financing Sources (Uses)										
Transfers In - Retirement Membership Fees					40		90	115	77	64
Net Change in Fund Balances	11	3	(15)	(36)	9	(17)	5	11	5	(18)

Note A: Include lapsed appropriations.

# Changes in Net Position – Proprietary Fund Last Ten Fiscal Years (in 000's)

This schedule provides trend information on Operating Revenues, Operating Expenses and the resulting Operating Income or Loss. It also provides non-operating revenue and expense information and the resulting change in net position. The information source of this schedule is Exhibit VI.

					Fisca	l Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Operating Revenues										
Insurance Contributions:										
Employer	1,075,354	1,108,150	1,233,781	1,414,731	1,434,186	1,527,002	1,631,916	1,834,956	1,992,220	1,963,388
Member	364,278	381,820	416,690	444,731	444,786	460,944	482,566	495,723	521,360	562,140
Federal Revenues-COBRA Stimulus			2,268	1,312	27					
Other	1,543	1,254	1,087	3,089	835	2,199	604	1,856	1,480	1,905
Total Operating Revenues	1,441,175	1,491,224	1,653,826	1,863,863	1,879,834	1,990,145	2,115,086	2,332,535	2,515,060	2,527,433
Operating Expenses										
Benefit Payments:										
Employee	1.437.632	1.609.991	1.797.659	1.743.897	1,792,645	1.900.026	2.017.586	2.213.193	2.428.066	2,408,452
COBRA	22,895	22,971	30,763	32,398	34,351	34,299	30,163	29,003	26,963	25,972
Health Savings Account	,	,	,	,	,	,	,	,	,	273
Administrative and Other Expenses	8.323	9.062	8.118	9.437	9.401	9,356	24.535	36.692	19.390	15.060
Total Operating Expenses	1,468,850	1,642,024	1,836,540	1,785,732	1,836,397	,	2,072,284	2,278,888	2,474,419	2,449,757
Operating Income (Loss)	(27,675)	(150,800)	(182,714)	78,131	43,437	46,464	42,802	53,647	40,641	77,676
Non-Operating Revenues (Expenses)										
Net Appreciation (Depreciation)										
in Fair Value of Investments	4,943	20,359	20,789	4,273	5,395	(17,215)	1,284	(3,195)	7,771	(830)
Investment Income	37,569	27,741	15.882	8,485	7,794	11,331	9,629	9,493	11,721	14,482
Other	141	292	158	496	204	18	184	1,210	25	, 1
Total Non-Operating Revenues								, -		
(Expenses)	42,653	48,392	36,829	13,254	13,393	(5,866)	11,097	7,508	19,517	13,653
Transfer Out									(1,750)	
Change in Net Position	14,978	(102,408)	(145,885)	91,385	56,830	40,598	53,899	61,155	58,408	91,329

# Changes in Net Position – Defined Benefit Plans Last Ten Fiscal Years (in 000's)

This schedule provides summarized trend information on additions and deductions for each of the defined benefit plans. This information source of this schedule is Exhibit IX.

\$ Employees Retirement Fund (ERS)	2008	2009 \$	2010	2011	2012	2013	2014	2015	2016	2017
	;	¢								
Employees Retirement Fund (ERS)		φ	\$	\$	\$	\$	\$	\$	\$	\$
Additions										
Additions Member Contributions	337,040	353,299	410,134	425,811	411,066	422,588	430,595	462,160	674,678	685,462
Employer Contributions	342,092	363,023	400,252	423,811	347,121	375,737	430,393	500,510	686,841	700,142
Investment Income (Net of Expenses) (1	,	(1,616,258)	1,203,796	2,414,830	1,614,670	2,097,577	3,252,362	56,905	1,273,373	
Other Additions	52,941	57,329	61,741	64,970	71,255	75,637	80,324	84,203	89,035	2,032,394 93,506
	(561,990)	(842,607)	2,075,923	3,319,695	2,444,112	2,971,539	4,245,610	1,103,778	2,723,927	4,311,704
	(301,330)	(042,007)	2,073,323	3,313,035	2,777,112	2,371,333	4,245,010	1,103,770	2,123,321	4,311,704
Deductions										
	1,360,380	1,433,011	1,505,585	1,593,537	1,712,821	1,819,779	1,933,694	2,041,389	2,146,522	2.257.219
Death Benefits	1,802	2,224	3,086	4,142	3,654	3,283	3,053	4,730	5,082	3,664
Refunds	74,504	70,958	65,334	79,535	88,060	86,668	106,809	87,167	84,445	120,944
Administrative and Other Expenses	16,730	17,690	19,083	19,000	18,024	18,911	20,480	22,127	20,779	23,630
	1,453,416	1,523,883	1,593,088	1,696,214	1,822,559	1,928,641	2,064,036	2,155,413	2,256,828	2,405,457
	2,015,406)	(2,366,490)	482,835	1,623,481	621,553	1,042,898	2,181,574	(1,051,635)	467,099	1,906,247
Law Enforcement and Custodial Officer	<sup>r</sup> Suppleme	ental Retireme	nt Fund (LE	COS)						
Additions										
Member Contributions			7,473	7,604	7,287	7,185	8,180	8,377	9,539	9,583
Employer Contributions	20,191	20,657	27,799	24,228	(3)	7,117	27,758	26,728	27,497	26,583
Investment Income (Net of Expenses)	(42,917)	(51,743)	40,054	81,881	51,909	71,885	111,741	1,919	44,831	99,341
Other Additions	(00 - 00)	(0.1.000)	6	2	1			4	4	1
Total Additions	(22,726)	(31,086)	75,332	113,715	59,194	86,187	147,679	37,028	81,871	135,508
Deductions										
Retirement Benefits	34,908	38,641	41,001	42,914	46,868	50,848	55,222	59,211	62,698	66,800
Death Benefits	34,900	30,041	41,001	42,914	40,000	50,646	55,222	59,211	02,090	18
Refunds			162	694	1,220	1,531	1,919	2,128	1,826	2,938
Administrative and Other Expenses	366	434	595	937	844	805	1,313	1,412	1,020	1,811
Total Deductions	35,274	39,075	41,758	44,651	48,938	53,190	58,471	62,760	65,967	71,567
Change in Net Position	(58,000)	(70.161)	33.574	69.064	10,256	32.997	89.208	(25,732)	15,904	63,941
	(00,000)	(/0,101)	00,014	00,004	10,200	02,001	00,200	(10,101)	10,004	
Judicial Retirement System of Texas Pla	an Two (JR	II)								
-										
Additions										
Member Contributions	3,964	4,223	4,121	4,291	4,170	4,268	5,195	5,465	5,754	6,017
Employer Contributions	11,138	11,356	11,511	11,933	4,150	4,549	12,211	12,457	12,374	12,495
Investment Income (Net of Expenses)	(10,765)	(16,421)	13,586	30,189	41,181	28,753	46,186	820	19,862	44,875
Other Additions				2		1		2	-	-
Total Additions	4,337	(842)	29,218	46,415	49,501	37,571	63,592	18,744	37,990	63,387
Deductions										
Retirement Benefits	6,645	8,023	9,289	11,722	12,782	14,586	16,166	19,158	20,825	22,988
Death Benefits					21			26	31	-
Refunds	73	206	118	48	179	285	254	56	299	374
Administrative and Other Expenses	244	239	277	286	230	228	267	284	226	294
Total Deductions	6,962	8,468	9,684	12,056	13,212	15,099	16,687	19,524	21,381	23,656
Change in Net Position	(2,625)	(9,310)	19,534	34,359	36,289	22,472	46,905	(780)	16,609	39,731

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# Changes in Net Position – Defined Benefit Plans (Concluded) Last Ten Fiscal Years (in 000's)

					Fiscal	Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Excess Benefit Arrangement										
Additions										
Other Additions	350	328	294	342	506	569	493	457	540	746
Total Additions	350	328	294	342	506	569	493	457	540	746
Deductions										
Retirement Benefits	298	279	251	297	436	488	422	392	448	668
Administrative and Other Expenses	52	49	43	45	70	81	71	65	92	78
Total Deductions	350	328	294	342	506	569	493	457	540	746
Change in Net Position	-	-	-	-	-	-	-	-	-	-
State Retiree Health Plan										
Additions										
Member Contributions	109,447	114,360	126,073	135,133	134,993	141,008	155,276	169,075	183,284	195,806
Employer Contributions	417,106	447,765	478,348	444,895	483,636	535,905	605,512	612,769	663,986	890,735
Non-Employer Contributing Entity Contributions (Note A)	N/A	44,433								
Federal Revenues	32,964	35,784	40,988	38,207	39,612	50,874	63,362	86,054	69,186	73,120
Early Retirees Reinsurance Program	02,001	00,101	10,000	30,176	40.724	00,011	00,002	00,001	00,100	. 0, . 20
Investment Income (Net of Expenses)	1.362	1.056	609	436	329	236	255	324	1.137	4,517
Other Additions	.,	775	1					3,969	5.961	357
Total Additions	560,879	599,740	646,019	648,847	699,294	728,023	824,405	872,191	923,554	1,208,968
	,		,	,	,	,	,			
Deductions										
Healthcare Benefits	558,228	596,858	643,389	646,197	696,085	724,381	813,823	863,926	912,886	995,815
Administrative and Other Expenses	2,651	2,882	2,630	2,650	3,209	3,642	10,582	8,265	10,668	5,629
Total Deductions	560,879	599,740	646,019	648,847	699,294	728,023	824,405	872,191	923,554	1,001,444
Change in Net Position	-	-	-	-	-	-	-	-	-	207,524

Note A: To comply with the reporting requirements under GASB Statement 74, the System begins report the contributions from non-employer contributing entity in Fiscal Year 2017. These contributions are the portion of the insurance premiums that the State of Texas pays for the retirees from the junior and community colleges and were reported as part of the employer contributions before Fiscal Year 2017.

## Changes in Net Position – Deferred Compensation Plans and Cafeteria Plan

Last Ten Fiscal Years (in 000's)

This schedule provides summarized trend information on additions and deductions for the Tex\$aver 401(k) and 457 plans, the Commuter Spending Account, and the state employees' cafeteria plan (TexFlex). The information source of this schedule is Exhibit IX.

					Fiscal	Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Texa\$aver 401(k) Plan	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Additions										
Investment Income (Net of Expenses)	116	476	42	43	26	27	(7)	7	18	(7)
Other Additions Total Additions	464 580	215 691	1,439 <b>1,481</b>	830 873	607 633	550 577	398 <b>391</b>	188 <b>195</b>	50 68	565 <b>558</b>
	500	001	1,401	0/5	000	5//		155		
Deductions										
Administrative and Other Expenses	581	457	513	615	596	759	590	529	433	479
Total Deductions	581	457	513	615	596	759	590	529	433	479
Change in Net Position		234	968	258	37	(182)	(199)	(334)	(365)	79
Texa\$aver 457 Plan										
Additions										
Contributions		7								
Investment Income (Net of Expenses)	50	122	13	13 512	12	520	(2)	6 591	17 597	18
Other Additions Total Additions	592 642	405 534	589 602	513 <b>526</b>	486 <b>498</b>	520 531	507 505	581 587	587 604	719 737
	042	554	002	520	430	551	505	507	004	151
Deductions										
		0.50	660	510	452	330	334	265	233	269
Administrative and Other Expenses	547	656	669							
Total Deductions Change in Net Position	547 95	656 656 (122)	669 (67)	510 16	452 46	330 201	334 171	265 322	233 371	269 468
Total Deductions	547 95	656	669	510	452					
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)	547 95	656	669	510	452				<b>371</b> 73 1	468
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In	547 95 ote A)	656 (122)	669 (67)	510 16	452 46	201	171	322	<b>371</b> 73 1 1,750	<b>468</b> 129 4
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)	547 95	656	669	510	452				<b>371</b> 73 1	<b>468</b> 129
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In	547 95 ote A)	656 (122)	669 (67)	510 16	452 46	201	171	322	<b>371</b> 73 1 1,750	<b>468</b> 129 4
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses	547 95 ote A)	656 (122) -	669 (67) -	510 16 -	452 46 -	- 201	- 171	-	<b>371</b> 73 1 1,750 <b>1,824</b> 43 1,276	468 129 4 133 114 72
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions	547 95 ote A)	656 (122)	669 (67)	510 16 -	452 46	201	-	-	371 73 1 1,750 1,824 43 1,276 1,319	468 129 4 133 114 72 186
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Cotal Deductions         Change in Net Position	547 95 ote A) - -	656 (122) -	669 (67) -	510 16 -	452 46 -	- 201	- 171	-	<b>371</b> 73 1 1,750 <b>1,824</b> 43 1,276	468 129 4 133 114 72
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFlag)	547 95 ote A) - -	656 (122) -	669 (67) -	510 16 -	452 46 -	- 201	-	-	371 73 1 1,750 1,824 43 1,276 1,319	468 129 4 133 114 72 186
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFle         Additions	547 95 ote A) - - ex)	656 (122) - - -		510 16 - -	452 46 -		<u> </u>	<u>322</u>	371 73 1 1,750 1,824 43 1,276 1,319 505	468 129 4 133 114 72 186 (53)
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFle         Additions         Contributions	547 95 ote A) - - ex) 76,780	656 (122) - - - - - -	669 (67) - - - 90,290	510 16 - - - 96,033	452 46 - - - 95,986		<u>    171                               </u>	<u>322</u> - - 83,092	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953	468 129 4 133 114 72 186 (53) 79,559
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFle         Additions         Contributions         Investment Income (Net of Expenses)	547 95 ote A) - - ex) 76,780 72	656 (122) - - - - - - - - - - - - - - - - - -	669 (67) - - - - - - - - - - - - - - - - - - -	510 16 - - - - - - - - - - - - - - - - - -	452 46 - - - 95,986 19	201 - - 95,578 20	<u>171</u> - - 83,214 9	322 - - - - - - - - - - - - - - - - - -	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953 34	468 129 4 133 114 72 186 (53) 79,559 72
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFle         Additions         Contributions	547 95 ote A) - - ex) 76,780	656 (122) - - - - - -	669 (67) - - - 90,290	510 16 - - - 96,033	452 46 - - - 95,986		<u>    171                               </u>	<u>322</u> - - 83,092	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953	468 129 4 133 114 72 186 (53) 79,559
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFleteria)         Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions	547 95 ote A) - - ex) 76,780 72 95	656 (122) - - - - - - - - - - - - - - - - - -	669 (67) - - - 90,290 25 105	510 16 - - - - - - - - - - - - - - - - - -	452 46 - - - - - - - - - - - - - - - - - -	201 - - 95,578 20 92	171 - - - - - - - - - - - - - - - - - -	322 - - - - - - - - - - - - - - - - - -	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953 34 194	468 129 4 133 114 72 186 (53) 79,559 72 92
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFleteria)         Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions         Deductions	547 95 ote A) - - - ex) 76,780 72 95 76,947	656 (122) - - - - - - - - - - - - - - - - - -	669 (67) - - - - - - - - - - - - - - - - - - -	510 16 - - - - - - - - - - - - - - - - - -	452 46 - - - - - - - - - - - - - - - - - -	201 - - 95,578 20 92 95,690	171 - - - - - - - - - - - - - - - - - -	322 - - - - - - - - - - - - - - - - - -	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953 34 194 81,181	468 129 4 133 114 72 186 (53) 79,559 72 92 79,723
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFl)         Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions         Reimbursement Account Claims	547 95 ote A) - - - ex) 76,780 72 95 76,947 75,043	656 (122) - - - - - - - - - - - - - - - - - -	669 (67) - - - - - - - - - - - - - - - - - - -	510 16 - - - - - - - - - - - - - - - - - -	452 46 - - - - - - - - - - - - - - - - - -	201 - - 95,578 20 92 95,690 92,799	171 - - - - - - - - - - - - - - - - - -	322 - - - - - - - - - - - - - - - - - -	<b>371</b> 73 1 1,750 <b>1,824</b> 43 1,276 <b>1,319</b> <b>505</b> 80,953 34 194 <b>81,181</b> 81,179	468 129 4 133 114 72 186 (53) 79,559 72 92 79,723 69,697
Total Deductions         Change in Net Position         Commuter Spending Account Fund (N         Additions         Contributions         Investment Income (Net of Expenses)         Transfers In         Total Additions         Deductions         Reimbursement Account Claims         Administrative and Other Expenses         Total Deductions         Change in Net Position         State Employees Cafeteria Plan (TexFleteria)         Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions         Contributions         Investment Income (Net of Expenses)         Other Additions         Total Additions         Deductions	547 95 ote A) - - - ex) 76,780 72 95 76,947	656 (122) - - - - - - - - - - - - - - - - - -	669 (67) - - - - - - - - - - - - - - - - - - -	510 16 - - - - - - - - - - - - - - - - - -	452 46 - - - - - - - - - - - - - - - - - -	201 - - 95,578 20 92 95,690	171 - - - - - - - - - - - - - - - - - -	322 - - - - - - - - - - - - - - - - - -	371 73 1 1,750 1,824 43 1,276 1,319 505 80,953 34 194 81,181	468 129 4 133 114 72 186 (53) 79,559 72 92 79,723

Note A: The System implemented the Commuter Spending Accounts on January 1, 2016.

# Benefit and Refund Payments – Defined Benefit Plans Last Ten Fiscal Years (in 000's)

This schedule provides trend information on benefit and refund payments by types from the defined benefit plans. This information is obtained from the System's detailed records for refunds and benefit payments

					Fiscal Y	/ear				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
\$	; \$	\$	\$	\$	\$	\$	\$	\$	\$	
Employees Retirement Fur	nd:									
Type of Benefit										
Retirement Benefits:										
Service:										
Retirees	1,254,754	1,324,897	1,394,889	1,476,597	1,585,066	1,649,308	1,799,608	1,906,043	2,013,347	2,120,153
Survivors	20,461	20,651	20,765	21,188	21,410	59,425	21,370	21,835	21,396	21,493
Disability	30,626	30,402	30,301	28,854	28,376	27,980	27,386	26,797	26,148	25,640
Partial Lump Sum Option	44,207	45,301	46,362	51,885	60,687	63,641	63,359	62,438	58,351	59,262
Proportional	10,332	11,760	13,270	15,013	17,282	19,425	21,971	24,276	27,280	30,671
Total Retirement Benefits	1,360,380	1,433,011	1,505,587	1,593,537	1,712,821	1,819,779	1,933,694	2,041,389	2,146,522	2,257,219
Death Benefits:										
Active Members:										
Occupational	35	100	76	189	117	86	32	116	132	43
Non-Occupational	1,266	1,275	1,526	2,308	1,920	1,999	1,453	2,909	3,317	2,053
Retiree	501	850	1,484	1,645	1,617	1,198	1,568	1,705	1,633	1,568
Total Death Benefits	1,802	2,225	3,086	4,142	3,654	3,283	3,053	4,730	5,082	3,664
Refunds:										
Resignation	71,717	67,405	61,235	74,640	84,004	82,026	102,175	80,876	78,206	115,416
Death	2,787	3,553	4,099	4,895	4,056	4,642	4,634	6,291	6,239	5,528
Total Refunds	74,504	70,958	65,334	79,535	88,060	86,668	106,809	87,167	84,445	120,944
Law Enforcement and Cus Type of Benefit	todial Officer S	Supplementa	I Retirement	Fund:						
Retirement Benefits:										
Service	31,675	35,174	37,580	39,509	42,670	46,561	50,261	54,747	58,444	62,571
Disability	1,180	1,168	1,161	1,128	1,093	1,088	1,053	1,022	1,008	990
Partial Lump Sum Option	2,053	2,300	2,260	2,277	3,105	3,199	3,907	3,442	3,247	3,239
Total Retirement Benefits	34,908	38,642	41,001	42,914	46,868	50,848	55,221	59,211	62,699	66,800
Death Benefits:										
Active Members:										
Non-Occupational				106	6	6	6	9	21	18
Total Death Benefits	-	-	-	106	6	6	6	9	21	18
Refunds:										
Resignation			162	686	1,205	1,513	1,895	2,097	1,772	2,892
Death				9	15	18	24	31	54	46
Total Refunds		-	162	695	1,220	1,531	1,919	2,128	1,826	2,938
Judicial Retirement System	n of Texas Pla	n Two:								
Type of Benefit										
Retirement Benefits:										
Service	4,958	6,134	7,149	8,923	9,942	11,346	12,670	15,389	16,841	18,550
Disability	470	493	358	570	358	358	358	358	395	442
Proportional	1,216	1,396	1,782	2,229	2,482	2,882	3,138	3,411	3,589	3,996
Total Retirement Benefits	6,644	8,023	9,289	11,722	12,782	14,586	16,166	19,158	20,825	22,988
Death Benefits:										
Active Members:										
Non-Occupational					21				5	-
Annuity Death Refund	-	-	-	-	-	-	-	27	26	-
Total Death Benefits	-	-	-	-	21	-	-	27	31	-
Refunds:										
Resignation	73	206	118	47	117	210	228	56	224	215
Death					62	75	26		75	159
Total Refunds	73	206	118	47	179	285	254	56	299	374

- to next page

# Benefit and Refund Payments – Defined Benefit Plans (Concluded) Last Ten Fiscal Years (in 000's)

					Fiscal Y	'ear				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	\$\$	\$	\$	\$	\$	\$	\$	\$		\$
Excess Benefit Arrangement:										
Type of Benefit										
Retirement Benefits:										
Service	298	279	251	297	436	488	422	392	448	668
Total Retirement Benefits	298	279	251	297	436	488	422	392	448	668
State Retiree Health Plan: Type of Benefit										
Insurance Benefits: Accrued Claims	50.050	50.000		50.005	50 4 40	20.250	00 700	0.040	(5 004)	00 700
Life Claims	50,858 18.514	50,800 20.839	55,675 24,430	53,835 24.663	50,148 29.722	36,356 37,349	22,706 41,763	9,848 45,740	(5,601) 46,994	20,769 55,347
Prescriptions Drugs	172,701	175,831	182,620	171,191	201,279	217,332	241,583	253,591	279.144	255,976
Administrative Fees	14,373	16,794	17,391	18,872	15,061	15,775	19,077	18,721	19,338	20,744
HMO Payments	30,985	35,036	31,606	32,349	73,491	98,107	110,232	139,696	156,418	188,633
Health	259,845	285,591	318,593	330,801	310,261	301,785	358,696	373,469	391,327	426,911
Dental	10,952	11,967	13,074	14,486	16,123	17,677	19,766	22,861	25,266	27,436
Total Insurance Benefits	558,228	596,858	643,389	646,197	696,085	724,381	813,823	863,926	912,886	995,816

## Average Benefit Payments - Employee Class

Last Ten Fiscal Years

This schedule provides ten years of information for service retirements. It shows the average monthly benefit, the average final salary and the number of retired members. The information source of this schedule is the System's member records.

Retirement Effective Dates (Note A)						Years of Cre	dited Service
September 30, 2007 to August 31, 201	17	5-10	10-15	15-20	20-25	25-30	30+
- Period 9/30/07 to 8/31/08:							
Average Monthly Benefit	\$	451.58	804.91	1,334.30	1,867.70	2,634.00	3,500.32
Average Final Average Salary	\$	2,952.81	3,136.95	3,457.71	3,896.62	4,323.26	4,778.15
Number of Retired Members		184	445	414	628	610	428
- Period 9/30/08 to 8/31/09:	•	(00.00		1 000 05	4 074 50	0 500 0 4	0 550 50
Average Monthly Benefit	\$	469.20	840.46	1,323.95	1,871.59	2,598.84	3,552.50
Average Final Average Salary	\$	3,088.05	3,229.90	3,500.18	3,886.84	4,285.19	4,906.40
Number of Retired Members		181	433	489	639	546	404
- Period 9/30/09 to 8/31/10:	¢	402.00	005 40	4 000 04	4 000 05	0.057.40	0 700 45
Average Monthly Benefit	\$ \$	463.98	895.19	1,360.91	1,920.25	2,657.43 4.428.84	3,739.45
Average Final Average Salary	Φ	3,109.12	3,442.66	3,606.63	3,950.19	,	5,118.58
Number of Retired Members		195	474	537	686	642	532
- Period 9/30/10 to 8/31/11:	¢	E24 74	062.00	1 400 50	0.044.74	0 000 04	2 702 20
Average Monthly Benefit	\$	534.71 3,518.40	863.80	1,428.58	2,044.74	2,828.34 4,679.75	3,703.30 5,091.54
Average Final Average Salary Number of Retired Members	\$	243	3,316.70 598	3,744.09 599	4,241.38 796	4,679.75	5,091.54
- Period 9/30/11 to 8/31/12:		243	590	099	790	110	030
Average Monthly Benefit	\$	515.50	870.29	1,423.09	2,061.75	2,855.79	3,672.15
Average Final Average Salary	э \$	3,406.53	3,312.96	3,682.34	4,228.19	4,720.76	5,072.15
Number of Retired Members	φ	232	559	678	4,220.19	749	566
- Period 9/30/12 to 8/31/13:		232	555	070	025	745	500
Average Monthly Benefit	\$	541.06	949.22	1.498.84	2,082.32	2,914.50	3,750.63
Average Final Average Salary	э \$	3,484.04	3,574.13	3,878.29	4,248.14	4,813.99	5,136.38
Number of Retired Members	φ	293	616	732	4,240.14	4,013.99	567
- Period 9/30/13 to 8/31/14:		235	010	102	0/1	015	507
Average Monthly Benefit	\$	506.92	920.05	1,474.19	2,011.88	2,906.05	3,850.92
Average Final Average Salary	\$	3,346.52	3,510.94	3,822.85	4.150.04	4,844.81	5,335.76
Number of Retired Members	Ψ	342	634	721	890	738	554
- Period 9/30/14 to 8/31/15:		012	001	121	000	100	001
Average Monthly Benefit	\$	585.57	978.09	1,477.06	2,070.25	2,991.33	4,087.05
Average Final Average Salary	\$	3,731.07	3,719.25	3,840.43	4,292.92	4,960.61	5,630.13
Number of Retired Members	Ψ	265	604	677	890	846	610
- Period 9/30/15 to 8/31/16:		200	001	011	000	010	010
Average Monthly Benefit	\$	574.11	954.56	1,503.54	2,103.93	3,144.73	4,344.00
Average Final Average Salary	\$	3,479.51	3,715.82	3,891.70	4,333.45	5,202.81	5,931.41
Number of Retired Members	Ŷ	212	596	612	823	835	610
- Period 9/30/16 to 8/31/17:							
Average Monthly Benefit	\$	589.69	966.63	1,534.64	2,160.43	3,166.94	4,422.25
Average Final Average Salary	\$	3,609.46	3,748.50	4,000.76	4,383.91	5,180.01	6,066.73
Number of Retired Members	Ť	256	709	667	827	811	624
Five Year Average -							
Period 9/30/12 to 8/31/17:							
Average Monthly Benefit	\$	541.95	935.26	1,475.16	2,065.43	2,966.48	3,949.57
Average Final Average Salary	\$	3,483.66	3,569.49	3,822.66	4,249.60	4,914.82	5,424.58
Average Number of Retired Members		269	602	684	860	797	581
Ten Year Average -							
Period 9/30/07 to 8/31/17:							
Average Monthly Benefit	\$	527.58	910.82	1445.47	2029.17	2892.30	3890.53
Average Final Average Salary	\$	3,399.74	3494.70	3765.03	4179.21	4781.28	5341.33
Average Number of Retired Members		240	567	613	788	737	553

Note A: This schedule includes service retirements of the employee class as of October 25, 2017. It does not include disability retirements or the elected state official class. This schedule does not include Partial Lump Sum (PLSO) payments.

### Retired Members by Type of Benefit

August 31, 2016

This schedule provides the average amount of monthly benefit, the number of retirees and the type of retirement for ERS, LECOS, and JRS2. The information source of this schedule is the System's pension actuary.

Average									
Amount of									
Monthly	Number of	Type of Re				Option Select	<u> </u>		
Benefit	Retirees	Service	Disability	Life	Option 1	Option 2	Option 3	Option 4	Option 5
Employees Retireme	ont Fund (Note A)								
\$									
<b>0</b> -300	6,993	6,762	231	4,602	1,381	411	141	258	200
301-600	12,664	11,987	677	8,874	2,118	617	274	366	415
601-900	13,541	12,819	722	9,441	2,171	786	331	333	479
901-1,200	12,594	12,216	378	8,587	2,049	952	264	291	451
1,201-1,500	12,322	12,141	181	7,984	2,115	1,112	275	231	605
1,501-2,000	16,096	15,983	113	10,213	2,558	1,735	324	355	911
2,001-2,500	11,694	11,665	29	6,979	1,886	1,546	223	314	746
2,501-3,000	8,017	8,007	10	4,457	1,366	1,186	155	232	621
3,001-4,000	8,292	8,287	5	4,548	1,500	1,135	128	240	741
4,001-10,999	5,317	5,316	1	2,617	1,244	703	72	128	553
Total	107,530	105,183	2,347	68,302	18,388	10,183	2,187	2,748	5,722
Law Enforcement An	nd Custodial Officer Si	upplemental Re	tirement Fund	(Note A)					
				(					
\$	140	110	0	000	400	07	F	-	4.4
0-200	416	416	0	262	103	27	5	5	14
201-400	6,254	6,211	43	3,468	1,547	685	80	88	386
401-600	3,514	3,491	23	1,813	698	546	46	74	337
601-800 801-1,000	1,123 589	1,121 588	2 1	473 231	283 186	173 92	15 10	20 6	159 64
1,001-1,200	222	221	1	231	72	92 32	0	0	64 37
1,201-1,400	67	61	6	25	15	32 11	1	1	14
1,401-1,600	33	23	10	17	9	2	1	1	3
1,601-1,800	16	9	7	11	3	0	0	1	1
1,801-9,999	14	3 7	7	10	2	0	0	0	2
Total	12,248	12,148	100	6,390	2,918	1,568	158	197	1,017
				0,000	2,010	1,000	100		1,017
Judicial Retirement	Plan Two Fund (Note A	A)							
\$									
0-2,000	20	20	0	9	9	1	1	0	0
2,001-2,500	7	7	0	5	2	0	0	0	0
2,501-3,000	7	7	0	0	2	2	1	0	2
3,001-3,500	5	5	0	1	1	2	0	0	1
3,501-4,000	17	17	0	9	5	2	0	1	0
4,001-4,500	39	39	0	15	17	5	0	1	1
4,501-5,000	46	46	0	22	17	4	0	3	0
5,001-5,500	63	63	0	20	25	6	1	0	11
5,501-6,000	49	49	0	21	19	5	0	1	3
6,001-6,500	49	48	1	30	14	3	1	0	1
6,501-7,000	28	28	0	9	10	5	0	1	3
7,001-9,999	48	47	1	29	10	7	0	0	2
Total	378	376	2	170	131	42	4	7	24

Note A: These calculations are based on actuarial estimates.

Note B: Life - standard annuity.

Option 1 - a reduced annuity for the lifetime of the member, then pays the same amount throughout the life of the nominee.

Option 2 - a reduced annuity for the lifetime of the member, then pays one-half of that amount throughout the life of the nominee.

Option 3 - a reduced annuity to the member or the nominee for a guaranteed period of 5 years, and for the lifetime of the member.

Option 4 - a reduced annuity to the member or the nominee for a guaranteed period of 10 years, and for the lifetime of the member.

Option 5 - a reduced annuity for the lifetime of the member, then pays three-fourths of that amount throughout the life of the nominee.

### **Contribution Rates**

Last Ten Fiscal Years

This schedule provides the amounts contributed by the employer for the defined benefit plans including ERS, LECOS, JRS2 and the State Retiree Health Plan. The rates are determined by the General Appropriations Act. Employer contribution rates are also listed for the Group Benefits Program. Those rates are set by the System's Board of Trustees and incorporated into the system's records

					Fiscal	Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Defined Benefit Plans	%	%	%	%	%	%	%	%	%	%
Employees Retirement Fund	70	70	70	70	/0	70	70	/0	70	70
Employee Class:			Blended (Note A)							
Employee (Note A)	6.00	6.00	6.48	6.50	6.50	6.50	6.60	6.90	9.50	9.50
Employer (Note B)	6.45	6.45	6.78	6.95	6.00	6.50	8.00	8.00	10.00	10.00
Elected Class:										
Legislators	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	9.50	9.50
Employer	6.45	6.45	6.45	6.45	6.00	6.50	8.00	8.00	10.00	10.00
Other Elected Class (Note A)	6.00	6.00	6.48	6.50	6.50	6.50	6.60	6.90	9.50	9.50
Employer (Note B)	6.45	6.45	6.78	6.95	6.00	6.50	8.00	8.00	10.00	10.00
Law Enforcement and Custodial Office	r Supplementa	I Retireme	•							
Employee			0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Employer	1.59	1.59	1.59	1.59	0.00	0.50	0.50	0.50	0.50	0.50
Judicial Retirement System Plan Two Fu										
Employee	6.00	6.00	6.00	6.00	6.00	6.00	6.60	6.90	7.20	7.50
Employer	16.83	16.83	16.83	16.83	6.00	6.50	15.66	15.66	15.66	15.66
State Retiree Health Plan (Note D)										
Group Benefits Program	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Employee Only:										
State Contribution Monthly Rate	360.54	360.54	385.38	411.04	438.30	470.38	503.14	537.66	576.54	617.30
HealthSelect Monthly Premium	360.54	360.54	385.38	411.04	438.30	470.38	503.14	537.66	576.54	617.30
Employee & Children:	100.10	100.10	500.00	500.00		050.00		740.00		054.40
State Contribution Monthly Rate	498.49	498.49	532.90	569.30	606.20	650.62	696.00	743.80	797.66	854.10
HealthSelect Monthly Premium	636.44	636.44	680.42	727.56	774.10	830.86	888.86	949.94	1,018.78	1,090.90
Employee & Spouse:	500 57	500 57				700 50				
State Contribution Monthly Rate	566.57	566.57	605.70	647.38	689.04	739.58	791.16	845.54	906.78	970.98
HealthSelect Monthly Premium	772.60	772.60	826.02	883.72	939.78	1,008.78	1,079.18	1,153.42	1,237.02	1,324.66
Employee & Family: State Contribution Monthly Rate	704.52	704.52	753.22	805.64	856.94	919.82	984.02	1,051.68	1,127.90	1,207.78
HealthSelect Monthly Premium	1,048.50	1,048.50	1,121.06	1,200.24	1,275.58	1,369.26	1,464.90	1,565.70	1,679.26	1,798.26
	1,040.00	1,040.00	1,121.00	1,200.24	1,210.00	1,000.20	1,-0-1.30	1,000.70	1,070.20	1,100.20

Note A: For Fiscal Year 2010, members contributed 6.45% from September, 2009 through December, 2009. Members contributed 6.5% from Jan. to August, 2010.

Note B: For Fiscal Year 2010, employer contributed 6.45% from September, 2009 through December, 2009. Employer contributed 6.95% from Jan. to August, 2010.

Note C: Fiscal Year 2010 is the first year that members contributed 0.5% to the Law Enforcement and Custodial Officer Supplemental Retirement Fund. Beginning in Fiscal Year 2017, an additional amount equivalent to 1.1% of payroll is contributed by employer from dedicated court fees.

Note D: The State Retiree Health Plan is a pay-as-you-go plan. The monthly rates as shown above are the same for active and retired members of the Group Benefits Program.

### Statistical Information – Defined Benefit Plans

(All items expressed as numbers unless otherwise indicated)

This schedule provides member census information for active, non-contributing, and various retirement for ERS, LECOS, and JRS2 and the State Retiree Health Plan. The member records for retiree and actives are from the System's actuarial records and the refunds are obtained from the System's records.

					Fiscal Yea	r (Note A)				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Employees Retirement Fund										
Active Contributing Members	134,626	141,223	142,490	137,293	132,669	133,669	134,162	142,409	146,390	141,629
Non-Contributing Members	74,094	72,585	78,737	84,900	90,190	96,015	96,507	101,122	108,873	112,192
Retirees and Beneficiaries	72,678	75,722	79,311	83,430	87,799	91,367	95,840	100,003	103,758	107,530
Service Retirements	4,445	4,338	4,803	5,734	5,860	5,174	6,180	5,982	5,605	5,908
Disability Retirements	115	95	67	74	68	113	51	60	63	58
Law Enforcement and Custodial Officer S	upplemental	Retirement	t Fund (No	otes B)						
Active Contributing Members	33,642	37,819	39,052	36,806	37,404	37,415	37,084	38,526	39,066	38,206
Non-Contributing Members	35	39	2,978	5,785	7,129	10,187	11,311	12,962	15,203	17,100
Retirees and Beneficiaries	6,204	6,647	7,175	7,728	8,477	9,089	10,024	10,845	11,515	12,248
Service Retirements	637	559	635	695	895	741	1,071	959	803	876
Disability Retirements		2				3				
Judicial Retirement System of Texas Plan	Two									
Active Contributing Members	518	533	539	546	541	545	554	563	548	557
Non-Contributing Members	120	134	130	134	143	152	139	148	166	158
Retirees and Beneficiaries	117	152	164	208	215	254	267	322	331	378
Service Retirements	6	36	12	43	8	43	14	57	9	48
Disability Retirements									1	
State Retiree Health Plan (Note C)										
Retirees	80,543	83,494	86,111	90,213	95,375	100,054	104,770	109,311	113,430	117,880
Dependents	31,293	32,067	32,408	32,412	35,549	35,830	36,933	38,130	38,910	39,880

Note A: The source of the retirement systems membership is the System's actuary. The System's actuary includes members who retired on August 31 and received their first annuity in September as retirees in the actuarial valuation.

Note B: The members of the LECOS are also members of the ERS.

Note C: Due to GASB 43, retiree and active member data under the Group Benefit Program is shown separately beginning with Fiscal Year 2007 data. The data in the table is for retired members and their dependents.

### Statistical Information – Other Programs

(All items expressed as numbers unless otherwise indicated)

This schedule provides ten year historical trend information for members of the Texa\$aver 457 and 401(k) deferred compensation plans, the Commuter Spending Accounts, the cafeteria plan, and the Group Benefits Program. It also provides death benefit program information. Participant counts, current market values, and death benefit payments are from the System's records. Group Benefit Program member counts are from the System's insurance actuary.

	Fiscal Year									
	200	3 2009	2010	2011	2012	2013	2014	2015	2016	2017
457 Deferred Componention Plan (Note A)										
457 Deferred Compensation Plan (Note A)										
Texa\$aver 457 Plan (Note A):										
Total Participants	15,98	16,727	18,479	21,153	23,219	24,689	26,902	29,129	31,515	33,131
Participants Currently Deferring	10,28	2 10,295	11,649	13,293	14,189	14,385	20,030	16,685	17,052	19,803
Current Market Value of Plan Assets (in millions)	\$ 26	7 274	335	381	443	495	591	604	670	759
Original 457 Plan (Notes A & B):										
Total Participants	2,52	, -	1,293	734	657	598	580	513	468	440
Participants Currently Deferring	8	2 74	63	57	53	38	32	22	17	15
Texa\$aver 401(k) Deferred Compensation Plan										
Total Participants	61,69	2 80,735	96,250	109,613	121,516	135,237	151,034	165,513	181,249	195,737
Participants Currently Deferring	37,39	,	69,311	64,704	66,910	69,692	89,774	82,851	92,527	95,813
	\$ 1,14	,	1,250	1,316	1,527	1,594	1,854	1,836	1,985	2,194
	\$	,	108	107	106	146	152	160	182	159
Commuter Spending Account (CSA)										
Reimbursement Accounts: Parking									14	26
Transit									14	20 120
Participant Contributions (Note C)									127	120
Cafeteria Plan										
Reimbursement Accounts:										
Health Care	40,68	5 43,001	46,556	48,807	47,591	46,942	46,173	46,609	48,010	47,799
Dependent Care	3,01	,	3,549	3,686	3,747	3,747	3,785	3,880	3,825	3,713
· · · · · · · · · · · · · · · · · · ·	\$7	5 80	88	94	93	92	79	79	80	79
Premium Conversion:					040 505	040.057	004 070			
Participants	215,61 \$39	,	228,121	222,295	218,587	219,357	221,876	222,789	226,864	223,026
Premiums Redirected (in millions) Tax Savings (in millions):	\$ 39	0 410	457	482	488	501	509	522	548	505
<b>o</b> ( )	\$8	3 93	104	109	110	114	115	118	124	132
	\$3		35	37	37	38	39	40	42	45
Group Benefits Program (Note D)										
Membership:									005 400	
Active	222,66	,	234,057	239,138	237,041	226,181	228,805	230,023	235,108	230,199
Dependents COBRA (Note E)	190,57 2,13		197,979 2,544	183,626 2,213	172,695 2,460	171,023 1,674	169,282 1,144	166,772 1,167	168,161 984	166,266 723
Total Membership	415,37		434,580	424,977	412,196	398,878	399,231	397,962	404,253	397,188
Death Benefit Programs				,0.1						
-										
Lump Sum Payments	1		18	14	9	23	29	8	14	21
Monthly Payments to Guardians	11		103	107	99	111	112	114	114	111
Victims of Violent Crime		3 8	5	13	5	11	8	4	4	7

Note A: In fiscal year 2001, a new Texa\$aver 457 Plan was established with different investment options. The original 457 Plan only offers life insurance products.

Note B: Data for the original 457 Plan is as of June 30, 2017.

Note C: The System implemented the Commuter Spending Accounts on January 1, 2016. During fiscal year 2017, the participant contributions to the reimbursement accounts were immaterial for reporting in this schedule.

Note D: In fiscal year 2007, the Group Benefits Program was separated into two funds (Active and Retiree) due to the implementation of GASB 43. Retired members and their dependents were moved to a fiduciary fund named the State Retiree Health Plan.

Note E: Starting in fiscal year 2006, the COBRA membership includes the beneficiaries of the COBRA group plan.

### Listing of Participating Reporting Entities for State Retiree Health Plan

This schedule provides a list of state agencies, universities, junior and community colleges, and other entities participating in the plan. The source of the data is from the System's records.

#### State Agencies

Attorney General Board of Examiners of Psychologists Board of Law Examiners Board of Plumbing Examiners Bond Review Board Cancer Prevention and Research Institute of Texas Commission on Jail Standards Commission on State Emergency Communications Comptroller - State Energy Conservation Office Comptroller of Public Accounts Court of Appeals - First Court of Appeals District Court of Appeals - Second Court of Appeals District Court of Appeals - Third Court of Appeals District Court of Appeals - Fourth Court of Appeals District Court of Appeals - Fifth Court of Appeals District Court of Appeals - Sixth Court of Appeals District Court of Appeals - Seventh Court of Appeals District Court of Appeals - Eighth Court of Appeals District Court of Appeals - Ninth Court of Appeals District Court of Appeals - Tenth Court of Appeals District Court of Appeals - Eleventh Court of Appeals District Court of Appeals - Twelfth Court of Appeals District Court of Appeals - Thirteenth Court of Appeals District Court of Appeals - Fourteenth Court of Appeals District Court of Criminal Appeals Credit Union Department Department of Aging and Disability Services Department of Agriculture Department of Family and Protective Services Department of Information Resources Department of Public Safety Department of Savings and Mortgage Lending Department of State Health Services District Courts - Comptroller's Judiciary Section Employees Retirement System of Texas Executive Council of Physical and Occupational Therapy Examiners General Land Office Governor - Executive Governor - Fiscal Health and Human Services Commission Health Professions Council House of Representatives Legislative Budget Board Legislative Reference Library Office of Capital and Forensic Writs Office of Consumer Credit Commissioner Office of Court Administration Office of Injured Employee Counsel Office of Public Insurance Counsel Office of Public Utility Counsel Parks and Wildlife Department Public Utility Commission of Texas

Railroad Commission of Texas Secretary of State Senate Soil and Water Conservation Board State Auditor State Bar of Texas State Board of Dental Examiners State Board of Podiatric Medical Examiners State Board of Veterinary Medical Examiners State Commission on Judicial Conduct State Law Library State Office of Administrative Hearings State Office of Risk Management State Pension Review Board State Preservation Board State Prosecuting Attorney, Office of State Securities Board Sunset Advisory Commission Supreme Court Teacher Retirement System of Texas Texas Alcoholic Beverage Commission Texas Animal Health Commission Texas Board of Architectural Examiners Texas Board of Chiropractic Examiners Texas Board of Nursing Texas Board of Professional Engineers Texas Board of Professional Geoscientists Texas Board of Professional Land Surveying Texas Commission on Environmental Quality Texas Commission on Fire Protection Texas Commission on Law Enforcement Texas Commission on the Arts Texas Department of Banking Texas Department of Criminal Justice Texas Department of Housing and Community Affairs Texas Department of Insurance Texas Department of Licensing and Regulation Texas Department of Motor Vehicles Texas Department of Transportation Texas Education Agency Texas Emergency Services Retirement System Texas Ethics Commission Texas Facilities Commission Texas Funeral Service Commission Texas Higher Education Coordinating Board Texas Historical Commission Texas Juvenile Justice Department Texas Legislative Council **Texas Lottery Commission** Texas Medical Board Texas Military Department Texas Optometry Board Texas Public Finance Authority **Texas Racing Commission** Texas Real Estate Commission

# Listing of Participating Reporting Entities for State Retiree Health Plan (Concluded)

Texas School for the Blind and Visually Impaired Texas School for the Deaf Texas State Board of Pharmacy Texas State Board of Public Accountancy Texas State Library and Archives Commission Texas Treasury Safekeeping Trust Company Texas Veterans Commission Texas Water Development Board Texas Workforce Commission

#### Universities

Angelo State University Lamar Institute of Technology Lamar State College - Orange Lamar State College - Port Arthur Lamar University Midwestern State University Sam Houston State University Stephen F. Austin State University Sul Ross State University **Texas Southern University** Texas State Technical College System Texas State University Texas State University System Texas Tech University Texas Tech University Health Sciences Center Texas Tech University Health Sciences Center - El Paso Texas Tech University System Texas Woman's University University of Houston University of Houston - Clear Lake University of Houston - Downtown University of Houston - Victoria University of Houston System University of North Texas University of North Texas at Dallas University of North Texas Health Science Center at Fort Worth University of North Texas System

#### Junior and Community Colleges

Alamo Community College Alvin Community College Amarillo College Angelina College Austin Community College Blinn College Brazosport College Central Texas College Cisco Junior College Clarendon College Coastal Bend College College of the Mainland Collin County Community College District Dallas County Community College Del Mar College El Paso Community College Frank Phillips College Galveston College Grayson County College Hill College Houston Community College Howard College including Southwest Collegiate Institute for the Deaf **Kilgore College** Laredo Junior College Lee College Lone Star College System McLennan Community College Midland College Navarro College North Central Texas College Northeast Texas Community College Odessa College Panola College Paris Junior College Ranger Junior College San Jacinto College South Plains College South Texas Community College Southwest Texas Counties Junior College Tarrant County College District Temple College Texarkana College Texas Southmost College Trinity Valley Community College Tyler Junior College Vernon Regional Junior College Victoria College Weatherford College Western Texas College

#### **Other Entities**

Wharton County Junior College

Community Supervision & Corrections Departments Texas Cooperative Inspection Program Texas County and District Retirement System Texas Municipal Retirement System Texas Turnpike Authority University of Texas Medical Branch at Galveston University of Texas Mental Sciences Institute Windham School District

The principal participating employer is the state of Texas. State agencies and universities employ 185,760 which is 80.7% of the employees covered by the State Retiree Health Plan.

#### ERS SUPPORTS THE STATE WORKFORCE BY OFFERING Competitive benefits at a reasonable cost.



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