



2020 Comprehensive Annual Financial Report

Employees Retirement System of Texas | A Component Unit of the State of Texas

Fiscal Year Ended August 31, 2020



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

Published December 2020

2020 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, 2020

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Certificate of Achievement

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Organizational Chart and Data

Consultants and Advisors

Summary of Plan Provisions



Highlights of Retirement Programs

As of August 31, 2020

	ERS (Note A)	LECOS (Note A)	JRS II
Retirement Census Data			
Active Members	142,062	35,230	570
Terminated Employees Entitled to But Not Yet Receiving Benefits	134,909	25,511	187
Total Retirement Accounts	276,971	60,741	757
Retirees and Beneficiaries Currently Receiving Benefits	117,996	14,697	484
Total Retirements During the Fiscal Year	5,264	873	18
Funded Ratios (Note B)	66.0%	60.1%	82.3%
Plan Fiduciary Net Position as a Percentage of Total Pension Liability (Note C)	42.38%	33.09%	61.07%
Results of Investments - Pension Trust Funds			
Interest, Dividends & Securities Lending Income	\$ 620,298,444	\$ 21,329,272	\$ 10,547,295
Net Appreciation in Fair Value of Investments	1,207,108,820	41,046,801	20,674,031
Other Transactions Summary			
Member Contributions	\$ 713,985,036	\$ 8,949,911	\$ 8,634,071
State Retirement Contributions	735,903,212	22,293,664	14,186,283
Retirement Benefits	2,579,560,559	83,227,720	31,912,738
Member Contributions Withdrawn	121,569,462	3,487,259	128,056
Administrative Expenses	24,182,433	1,932,593	273,365
Investment Expenses	38,251,450	1,343,142	619,854
Money-Weighted Rates of Return	6.70%	6.64%	6.78%
Time Weighted Rates of Return	1-Year	3-Year	5-Year
Investment Pool Trust Fund	6.85%	6.46%	7.34%

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 78711-3207 | (877) 275-4377 TOLL-FREE | WWW.ERS.TEXAS.GOV

December 18, 2020

The Honorable Greg Abbott, Governor of Texas
The Honorable Glenn Hegar, Texas Comptroller
Jerry McGinty, Legislative Budget Board
Lisa Collier, First Assistant State Auditor
The Board of Trustees and Members of the Employee Retirement System of Texas

PORTER WILSON
EXECUTIVE DIRECTOR

I. CRAIG HESTER
CHAIR

CATHERINE MELVIN
VICE-CHAIR

BOARD OF TRUSTEES
BRIAN BARTH
ILESA DANIELS
JAMES KEE PH.D.

Ladies and Gentlemen:

I am honored to present the Employees Retirement System of Texas (ERS) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended August 31, 2020. The state's retirement benefits and health coverage administered by ERS are an investment in Texas, funded by both members and taxpayers. These benefits play an increasingly critical role in ensuring Texas has the workforce necessary to fulfill the mission of state government and provide crucial services Texans rely on daily. 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.

Fiscal Year 2020 was an unprecedented year. The state workforce provided critical frontline services and adapted to new work environments to support Texans, prevent the spread of COVID-19, and ensure Texas could respond to the pandemic.

During Fiscal Year 2020, ERS held its first remote board meeting in May. Thanks to the hard work of our staff, and members of the Board and ERS' Investment Advisory Committee, the board meetings have allowed ERS to continue its public meetings that ensure transparency to the public and our stakeholders. In its May 2020 meeting, the Board updated the assumed rate of return based upon the data from ERS' general investment consultant, NEPC, LLC. The data was included in the experience study prepared and presented by ERS' pension actuaries, Gabriel, Roeder, Smith & Company. This lowered the assumed rate of return from 7.5% to 7.0%.

The net position of the Fiduciary Funds administered by ERS totaled \$29.51 billion as of August 31, 2020, compared with \$28.83 billion as of August 31, 2019. During the COVID-19 global pandemic, ERS successfully sustained operations and investment management and closed the fiscal year with a net return of 6.82% while paying out more than \$2.7 billion in annuities to more than 118,000 retirees and beneficiaries. These regular monthly payments are important not only to the annuitants, but also to the local economies where they live.

However, the current member and state contribution rate level is not actuarially sound and the financial status of the prefunded pension plans for state employees, judicial, and law enforcement and custodial officers continues to decline. **All the plans are on a path to total fund depletion, with a funding gap that grows each year.** At this time, none of the three pre-funded pension plans has sufficient projected assets to meet the state's obligation to pay for benefits—benefits employees earn as they execute the mission of state government. ERS will work with leadership offices and the 87th Legislature to assist in development of a plan to address the unfunded liability.

The Honorable Greg Abbott, Governor of Texas
The Honorable Glenn Hegar, Texas Comptroller
Jerry McGinty, Legislative Budget Board
Lisa Collier, First Assistant State Auditor
The Board of Trustees and Members of the Employees Retirement System of Texas
December 18, 2020
Page 2

Thanks to aggressive cost management, ERS health plans remain on solid financial footing. As a result, we will not need to ask the Legislature for an increase in funding to offer the same high-quality benefits. This is remarkable in a time of rising health care cost and a global pandemic. There is some uncertainty ahead: Plan costs likely will increase as postponed medical procedures and doctor visits resume. To keep the health plan solid, we encourage our members to help improve health outcomes and control costs by adopting healthy behaviors, participating in wellness and disease management programs, and understanding how to make the best use of their benefits.

Thank you for your ongoing support. I'm proud that ERS was able to continue our operations, serve customers and keep in-office staff safe this past year. We know that similar efforts were underway by public servants throughout the state. We are honored to play a role in supporting this great state, its leadership, and its employees and retirees. We look forward to working with you to address the financial condition of the retirement programs, so they may continue to serve the State of Texas and the dedicated public servants who devote their careers to it.

Sincerely,



Porter Wilson
Executive Director

Letter of Transmittal



200 E. 18TH STREET, AUSTIN TEXAS 78701 | P.O. BOX 13207, AUSTIN, TEXAS 78711-3207 | (877) 275-4377 TOLL-FREE | WWW.ERS.TEXAS.GOV

December 18, 2020

The Board of Trustees and Members of the Employees Retirement System of Texas

Ladies and Gentlemen:

PORTER WILSON
EXECUTIVE DIRECTOR

I. CRAIG HESTER
CHAIR

CATHERINE MELVIN
VICE-CHAIR

BOARD OF TRUSTEES
BRIAN BARTH
ILESA DANIELS
JAMES KEE PH.D.

I am pleased to submit the Employees Retirement System of Texas (ERS) Comprehensive Annual Financial Report (CAFR) for the fiscal year ended August 31, 2020 in compliance with Texas Government Code ANN Sec 2101.011 and in accordance with the requirements established by the Texas Comptroller of Public Accounts.

The System's Financial Staff prepared this report in accordance with generally accepted accounting principles applied on a consistent basis as promulgated by the Government Accounting Standards Board (GASB). Its purpose is to provide information as a basis for making management decisions, to determine compliance with legal provisions, and to determine responsible stewardship over the assets contributed by the members and the state. The report has been audited by Clifton, Larson, Allen, LLP. 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 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, 2020.

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 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 and custodial officers specified in statute.

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 are governed by Title 8, Subtitle E of the Texas Government Code. Plan I was established in 1940 as a pay-as-you-go pension plan. The Judicial Retirement Plan II is governed by Section 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, and part of the System's goal of administering comprehensive and actuarially sound retirement 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 budget increase. Budgetary control is maintained in the financial system with automated edits, and through processes and procedures for approvals, encumbrances, and reporting. The Legislature determines the level of member and state contributions and benefit structures for the pension plans.

FINANCIAL CONDITION

Investment Performance

The investment portfolio closed the fiscal year with a fair value of \$29.1 billion and had a gross return of 6.85% for the year. The time weighted rate of return for three and five years were 6.46% and 7.34% respectively.

The System's investments are highly diversified and based on an asset allocation intended to withstand market fluctuations. The System successfully sustained operations and investment management during the COVID-19 pandemic. It maintains a professional and diversified investment program optimizing the mix of internal management and external advisors. During Fiscal Year 2020, the System completed the evaluation of appropriateness, adequacy and effectiveness of the system's investment practices and performance, as set out in SB 322 passed by the 86th Legislature. Please refer to the Investment Section for additional information in investment policies, strategies, safeguards and fees.

Funding Status

The Employees Retirement Plan actuarial value of assets to the actuarial accrued liability ratio was 66% for funding purposes as of August 31, 2020. The main goal of ERS' retirement programs is to fully fund the long-term cost of benefits provided by statute through disciplined and timely accumulation of contributions and prudent investment of assets. The ERS Pension Funding Priorities and Guidelines document lays out a multi-level funding goal to achieve actuarial soundness: (1) fund normal costs; (2) avoid trust fund depletion; (3) meet current statutory standard of a 31-year funding period for unfunded liabilities; and (4) match funding period to the average years of service at retirement once a 31-year funding period is achieved with a closed amortization period. Contributions to the Employees Retirement Plan exceed the normal cost, but are not at the actuarially determined sound level and are not projected to be sufficient to eliminate the unfunded liability over a finite period of time.

The LECOS Retirement Plan actuarial value of assets to the actuarial accrued liability ratio was 60.1% for funding purposes as of August 31, 2020. The JRS II Retirement Plan actuarial valuation of assets to the actuarial accrued liability ratio was 82.3% as of August 31, 2020. Contributions to JRS II are less than the normal cost and no payment is available to amortize the unfunded liability. The System is committed to working with the Legislature to return the retirement plans to an actuarially sound status. Additional information on funding status is presented in the Financial and Actuarial Sections.

New Accounting Standards

The System evaluated new reporting standards issued by the Governmental Accounting Standards board to assess applicability. The System adopted GASB Statement No. 84 Fiduciary Activities on September 1, 2019. This Statement establishes criteria for identifying fiduciary activities of all state and local governments.

Based on the reporting requirements from this pronouncement, the System has reclassified the following from Agency Funds to:

- General Funds - Judicial Retirement System Plan I and Unappropriated Receipts General Revenue Fund;
- Custodial Funds - USPS – Direct Deposit Return Money Fund, USPS – Overpayment to Employees Fund, Direct Deposit Correction Account Fund, and Child Support Employee Deduction –Offset Account; and
- Internal Service Fund – Health Savings Account.

Additional information on reporting changes is presented in the Financial Section

MAJOR INITIATIVES

The System has submitted a Legislative Appropriation Request (LAR) consistent with its funding policy to the Texas Legislature on the status of the state employee, judicial and supplemental law enforcement and custodial officer plans. The LAR seeks to increase state contributions to the three pre-funded pension plans to the actuarial sound contribution level as determined by statute.

The System continues to analyze and design innovative approaches to provide a quality health care plan and other benefits at a reasonable cost. During Fiscal Year 2020, the System developed and implemented the HealthSelectShoppERS member rewards program, which seeks to reduce group benefit costs by rewarding participants for choosing in-network lower cost providers for certain elective procedures under the HealthSelect of Texas® medical plan. During Fiscal Year 2021, the System is working to develop more robust reporting specific to mental health services and utilization.

The ERS Annex, which was the original ERS building, was demolished in early 2019 to make room for a new building which will maximize the location adjacent to University of Texas and Dell Medical School, and in close proximity to the Capital. Construction of the building has continued and prospective tenants have begun touring the facility. ERS will occupy a portion of one floor of the building in response to the agency’s space planning needs.

The System continues to enhance performance and accountability by expanding the use of technological solutions. During FY 20, the System expanded its use of video conferencing tools to continue operations while working remotely. To improve efficiency and member services using current technology, it engaged a consultant to help evaluate and identify solutions to replace aging pension and insurance benefit. It anticipates issuing a request for proposals in Fiscal Year 2021.

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, 2018. 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 31 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 Administration

The Public Pension Coordinating Council (PPCC) gave the 2020 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.

Sincerely,

Machelle Pharr

Machelle Pharr, CPA
Chief Financial Officer



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Employees Retirement System of Texas

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

August 31, 2019

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

***Recognition Award for Administration
2020***

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)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive, flowing style.

Alan H. Winkle
Program Administrator

Organizational Chart and Data

As of August 31, 2020



Consultants and Advisors

As of August 31, 2020

Consulting Actuaries

Mitchell L. Bilbe, FSA
Philip S. Dial, FSA
Christopher S. Johnson, FSA
Rudd and Wisdom, Inc.

Ryan Falls, FSA, FCA, EA, MAAA
Joseph Newton, FSA, FCA, EA, MAAA
Dana Woolfrey, FSA, FCA, EA, MAAA
Gabriel, Roeder, Smith & Company

Investment Advisory Committee

Robert G. Alley, CFA, Chair
Gene L. Needles, Jr., Vice-Chair
*Chairman and CEO,
Resolute Investment Managers*
Caroline Cooley
*Chief Investment Officer – Diversified Funds,
Crestline Investors, Inc.*
Laurie L. Dotter
James R. Hille, CFA, CAIA
*Chief Investment Officer,
Texas Christian University Endowment*
Ken D. Mindell
*Senior Vice-President and Treasurer,
Rosewood Management Corporation*
Milton Hixson, CPA, CFP
CEO, FMP Wealth Advisors

Investment Consultants

Aksia TorreyCove Partners, LLC
Albourne America, LLC
CBRE Caledon Capital Management Inc.
Meketa Investment Group
NEPC, LLC

External Investment Advisors

Domestic Equity

Barrow, Hanley, Mewhinney & Strauss, LLC
Brandywine Global Investment Management, LLC

International Equity

Acadian Asset Management
Axiom International Investors, LLC
BlackRock, Inc.
EAM Investors, LLC
Franklin Templeton Institutional, LLC
Global Alpha Capital Management Limited
Kayne Anderson Rudnick Investment Management, LLC
Lazard Asset Management
Quantitative Management Associates, LLC

Manager of Emerging Managers

Legato Capital Management, LLC

Global Custodian

BNY Mellon Asset Servicing

Group Benefits Advisory Committee

Large State Agency Representatives

Sandra White
Department of Criminal Justice
Matthew Miller
Department of Motor Vehicles

Mid-sized State Agency Representatives

Megan LaVoie
Office of Court Administration
Jane Thomas
Lottery Commission

Small State Agency Representative

Teresa Nelson
Department of Savings and Mortgage Lending

Four-year Institution of Higher Education Representative

Janet Bezner
Texas State University

Two-year Institution of Higher Education representative

Missy Kittner
McLennan Community College

Retiree Representatives

James Dobbins, Garland
Gary White, Austin

Health-Related Institution Representative

Cynthia Jumper
Texas Tech University Health Sciences Center

Insurance or Benefit Design Consultant Representative

Jennifer Cawley
Texas Association of Life and Health Insurers

Medical Board

Ace Alsup, M.D.
William Deaton, M.D.
William P. Taylor, M.D.
William M. Loving, M.D.

Please refer to pages 102 to 103 in the Investment Section for a schedule of fees and commission.



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. The Judicial Retirement System of Texas Plan One (JRS I) is a pay-as-you-go plan for justices assuming the bench prior to September 1, 1985.

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.

Membership:	
ERS	<p>Employee Class Only:</p> <ul style="list-style-type: none"> • 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, and JRS II <p>Elected Class Only:</p> <ul style="list-style-type: none"> • Persons who hold State offices that are normally filled by statewide election and that are not included under the plan provisions of JRS II. • Members of the Legislature. • District and criminal district attorneys.
LECOS	<ul style="list-style-type: none"> • Law enforcement officers recognized as commissioned law enforcement officers by the Texas Commission on Law Enforcement Officer Standards and Education and employed at an agency defined by statute. • 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.
JRS II	<ul style="list-style-type: none"> • 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.
Service Retirement Eligibility without Reduced Benefits:	
ERS	<p>Employee Class Only:</p> <p>Hire date prior to 9-1-2009:</p> <ul style="list-style-type: none"> • 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. <p>Hire date on or after 9-1-2009 and prior to 9-1-2013:</p> <ul style="list-style-type: none"> • Age 65 with 10 years of service credit, or • Rule-of-80, with at least 10 years of service credit at age 60, or • Age 60 with at least 10 years of service credit as a certified peace officer or custodial officer. <p>Hire date on or after 9-1-2013:</p> <ul style="list-style-type: none"> • Age 65 with 10 years of service credit, or • Rule-of-80, with at least 10 years of service credit at age 62, or • Age 62 with at least 10 years of service credit as a certified peace officer or custodial officer.

Summary of Plan Provisions (Continued)

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

Service Retirement Eligibility without Reduced Benefits (Continued):	
ERS (contd)	<p>Elected Class Only:</p> <ul style="list-style-type: none"> • Age 60 with eight years of service credit • Age 50 with 12 years of service credit.
LECOS	<p>Hire date prior to 9-1-2009:</p> <ul style="list-style-type: none"> • 20 years of service credit as a certified peace officer/custodial officer and the member's age is at or over the age of 50 or the age at which the sum of age and years of service credit equals or exceeds the number 80. <p>Hire date on or after 9-1-2009 and prior to 9-1-2013:</p> <ul style="list-style-type: none"> • 20 years of service credit as a certified peace officer/custodial officer at or over age 55. <p>Hire date on or after 9-1-2013:</p> <ul style="list-style-type: none"> • 20 years of service credit as a certified peace officer/custodial
JRS II	<ul style="list-style-type: none"> • 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 currently holding a judicial 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.
Early Service Retirement Eligibility with Reduced Benefits:	
ERS	<p>Hire date on or after 9-1-2009 and prior to 9-1-2013:</p> <ul style="list-style-type: none"> • Rule-of-80, with at least 10 years of service. (5% annuity reduction for each year retired under age 60, up to 25%), or • 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%) <p>Hire date on or after 9-1-2013:</p> <ul style="list-style-type: none"> • Rule-of-80, with at least 10 years of service credit. (5% annuity reduction for each year retired under age 62, no cap), or • 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)
LECOS	<p>Hire date prior to 09-01-2009:</p> <ul style="list-style-type: none"> • 20 years of service credit as a certified peace officer/custodial officer, under the age of 50 (Actuarial reduction is applied). <p>Hire date on or after 9-1-2009 and prior to 9-1-2013:</p> <ul style="list-style-type: none"> • 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%) <p>Hire date on or after 9-1-2013:</p> <ul style="list-style-type: none"> • 20 years of service credit as a certified peace officer/custodial officer (5% annuity reduction for each year retired under age 57, no cap and an additional actuarial reduction for those that retire prior to age 50).

Summary of Plan Provisions (Continued)

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

Early Service Retirement Eligibility with Reduced Benefits (Continued):	
JRS II	<ul style="list-style-type: none"> • Age 60 with 10 years of service credit and currently holding judicial office, or • Age 60 with 12 years of service credit, if not currently holding a judicial office. <p>Effective 09-01-2019:</p> <ul style="list-style-type: none"> • Reduction percentages for early retirement from 50%: Age 60: 40% Age 61: 41.7% Age 62: 43.6% Age 63: 45.6% Age 64: 47.7%
Standard Service Retirement without Reduced Benefits:	
ERS	<p>Employee Class Only:</p> <ul style="list-style-type: none"> • 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. <p>Elected Class Only:</p> <p>Prior to 9-1-2019</p> <ul style="list-style-type: none"> ◦ 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. <p>Effective 9-1-2019</p> <ul style="list-style-type: none"> ◦ Standard monthly annuity is 2.3% of the current State base 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 base salary being paid to a district judge. <p>District Attorneys Only:</p> <p>Effective 9-1-2019</p> <ul style="list-style-type: none"> • Standard monthly annuity is 2.3% of the salary being paid to a district judge based on the same number of years of contributing service. • Maximum standard annuity is 100% of the State base salary being paid to a district judge based on the same number of years of contributing service.

Summary of Plan Provisions (Continued)

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

Standard Service Retirement without Reduced Benefits (Continued):	
LECOS	<ul style="list-style-type: none"> • 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.
JRS II	<p>Prior to 9-1-2019</p> <ul style="list-style-type: none"> • 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%. <p>Effective 9-1-2019</p> <ul style="list-style-type: none"> • Standard monthly annuity is between 40%-47.7% (age 60-64) of the state salary paid to a judge to the last court they held judicial office based on Texas Gov't Code Section 839.102. • 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 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%.

Summary of Plan Provisions (Continued)

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

Optional Annuity Plans:	
ERS	<p>Employee Class and Elected Class: Members can choose one of the following beneficiary options at retirement and still receive a lifetime annuity that is actuarially reduced for life at time of retirement.</p> <ul style="list-style-type: none"> • Option 1: Lifetime with 100% to surviving beneficiary; • Option 2: Lifetime with 50% to surviving beneficiary; • Option 1: Lifetime with 100% to surviving beneficiary; • Option 2: Lifetime with 50% to surviving beneficiary; Option 3: Lifetime with five years certain (if retiree dies before receiving 60 payments, the surviving beneficiary gets the remaining 60 payments); • Option 4: Lifetime with 10 years certain (if retiree dies before receiving 120 payments, the surviving beneficiary gets the remaining 120 payments); • Option 5: Lifetime with 75% to surviving beneficiary; and • One-time partial lump sum of up to three years of standard annuity at retirement if the annuity is not age reduced (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.
LECOS	<ul style="list-style-type: none"> • Same as ERS.
JRS II	<ul style="list-style-type: none"> • Same as ERS except for the onetime partial lump sum.
Vesting Requirement:	
ERS	<p>Employee Class Only:</p> <p>Hire date prior to 09-01-2009:</p> <ul style="list-style-type: none"> • Five or more years of service credit. <p>Hire date on or after 09-01-2009 and prior to 9-1-2013:</p> <ul style="list-style-type: none"> • 10 or more years of service credit. <p>Hire date on or after 09-01-2013:</p> <ul style="list-style-type: none"> • 10 or more years of service credit. <p>Elected Class Only:</p> <ul style="list-style-type: none"> • Eight or more years of service credit.
LECOS	<ul style="list-style-type: none"> • 20 or more years of service credit as a certified peace officer/custodial officer.
JRS II	<ul style="list-style-type: none"> • 10 or more years of service credit if currently hold a judicial office • 12 or more years of service credit if not currently holding a judicial office.
Vested Benefits after Termination of Employment:	
ERS	<ul style="list-style-type: none"> • Member is entitled to a deferred retirement benefit based on service and compensation prior to termination. • Member must leave accumulated contributions in the System to which the member contributed. • 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.
LECOS	<ul style="list-style-type: none"> • Same as ERS.
JRS II	<ul style="list-style-type: none"> • Same as ERS.

Summary of Plan Provisions (Continued)

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

Disability Retirement Eligibility:	
ERS	<p>Employee Class Only:</p> <ul style="list-style-type: none"> For occupational disability, the member must have at least one month of service credit and they must make a retirement contribution in the month they become mentally or physically incapacitated to continue to perform his/her state job or any other job offering comparable pay. Other eligibility requirements also apply. 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 they become mentally or physically incapacitated to continue to perform his/her state job or any other job offering comparable pay. Other eligibility requirements also apply. <p>Elected Class Only:</p> <ul style="list-style-type: none"> 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 mentally or physically incapacitated to continue to perform his/her state job or any other job offering comparable pay. Other eligibility requirements also apply. For non-occupational disability, eight years of Elected Class service credit (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 they become mentally or physically incapacitated to continue to perform his/her state job or any other job offering comparable pay. Other eligibility requirements also apply.
LECOS	<ul style="list-style-type: none"> Same as ERS Employee Class only.
JRS II	<ul style="list-style-type: none"> At least seven years of service credit.
Disability Retirement Benefits:	
ERS	<p>Employee Class Only:</p> <ul style="list-style-type: none"> 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 highest average monthly compensation (calculated the same as a standard service retirement) 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 credit. The optional annuity plans available are the same as those under a service retirement except there is no partial lump-sum option. <p>Elected Class Only:</p> <ul style="list-style-type: none"> For non-occupational disability, the 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 base salary of a district judge or 2.3% of the State base 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.

Summary of Plan Provisions (Continued)

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

Disability Retirement Benefits (Continued):	
LECOS	<ul style="list-style-type: none"> For occupational disability, the standard annuity is a minimum of 50% of the highest average monthly compensation (calculated the same as a standard service retirement) regardless of the years of service credit or age. The standard annuity is increased to 100% of the average monthly compensation (calculated the same as a standard service retirement) 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.
JRS II	<ul style="list-style-type: none"> Same as standard JRS II service retirement benefits.
Death Benefits:	
ERS	<p>Non-Retiree Employee Class:</p> <ul style="list-style-type: none"> 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. <p>A contributing member with less than 10 years of service credit:</p> <ul style="list-style-type: none"> For a contributing member that had less than 10 years of service credit, the designated beneficiary(ies) or estate 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. <p>A contributing member with at least 10 years of service credit:</p> <ul style="list-style-type: none"> May select a death benefit plan: a lifetime monthly payment, a 10-year guaranteed monthly payment or a one-time refund of the retirement account balance at the time of the death. If the member was age 60 with five or more years of service credit and less than 10 years, and the beneficiary is either the spouse or a minor child, they may be eligible for a death benefit plan. If a one-time refund of the member's retirement account balance is selected, the beneficiary(ies) or estate 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 a lifetime monthly payment or a 10-year guaranteed monthly payment is selected, the beneficiary(ies) or estate are eligible for a one-time partial lump sum of up to three years of monthly payment. <p>Retiree Employee Class:</p> <ul style="list-style-type: none"> If a member selected an optional service retirement and dies, the beneficiary will receive a monthly payment based on the option chosen. If a retired member selected a standard annuity and dies after retiring from the state, the designated beneficiary(ies) or estate will receive a one-time refund of the member's retirement account balance if there is any money left in the account. If the member was retired, the designated beneficiary(ies) or estate is eligible for a one-time Retiree Lump Sum Death Benefit in the amount of \$5,000. If retired under the Proportionate Retirement Program with less than five years of service credit, this payment will be reduced proportionately.

Summary of Plan Provisions (Concluded)

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

Death Benefits (Continued):	
ERS (contd)	<p>Elected Class Only:</p> <ul style="list-style-type: none"> • For members with less than 8 years of service credit at the time of death, the designated beneficiary(ies) or estate will receive a one-time refund of the member's retirement account balance. If contributing, the beneficiary(ies) or estate 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) or estate 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 one-time 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 (ies) or estate 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 (ies) or estate would then be eligible for a refund of the member's retirement account balance plus the ADB if contributing. • If a member selected an optional service retirement and dies, the beneficiary (ies) or estate will receive a monthly payment based on the option chosen. • If a retired member selected a standard annuity and dies after retiring from the state, the designated beneficiary (ies) or estate 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 is retired, the designated beneficiary(ies) or estate is eligible for a one-time Retiree Lump Sum Death Benefit in the amount of \$5,000. If retired under the Proportionate Retirement Program with less than eight years of service credit, this payment will be reduced proportionately.
LECOS	<ul style="list-style-type: none"> • Same as ERS except beneficiary(ies) of deceased members with at least 20 years of certified peace officer/custodial officer service, under age of 50 at the time of death, are not eligible for a one-time partial lump sum of up to three years of the monthly payment.
JRS II	<ul style="list-style-type: none"> • Same as ERS except not eligible for a one-time partial lump sum of up to three years of the monthly payment and the Lump Sum Death Benefit in the amount of \$5,000 is reduced proportionately if retired under the Proportionate Retirement Program with less than 10 years of service credit.

FINANCIAL SECTION

Independent Auditor's Report

Management's Discussion and Analysis

Basic Financial Statements

Required Supplementary Information

Other Supplementary Information





CliftonLarsonAllen LLP
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INDEPENDENT AUDITORS' REPORT

Board of Trustees
Employees Retirement System of Texas
Austin, Texas

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the general fund and the aggregate remaining fund information of the Employees Retirements System of Texas (ERS), a component unit of the State of Texas, as of and for the year ended August 31, 2020, and the related notes to the financial statements, which collectively comprise the ERS' 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.

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

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



Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the general fund and the aggregate remaining fund information of the ERS, a component unit of the State of Texas, as of August 31, 2020, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

ERS' Financial Statements

As discussed in Note 1, Section 1.A, the financial statements of the ERS, 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 State of Texas that is attributable to ERS. They do not purport to, and do not, present fairly the financial position of the State of Texas as of August 31, 2020, 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.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management discussion & analysis, schedules of changes in net pension liability and related ratios – defined benefit plans, employer contributions – defined benefit plans, changes in net OPEB liability and related ratios, contributions from employers and non-employer contributing entities – other postemployment benefits plan and investment returns – annual money-weighted rate of return, net of investment expense and the related notes, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the ERS' basic financial statements. The schedules of revenues, expenses and changes in statutory account balances, other supplementary schedules and the introductory, investment, actuarial and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Board of Trustees
Employees Retirement System of Texas

The schedules of revenues, expenses and changes in statutory account balances and other supplementary schedules, as listed in the table of contents, are the responsibility of management and were 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, other supplementary schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections, as listed in the table of contents, 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 18, 2020, on our consideration of ERS' 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 ERS' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the ERS' internal control over financial reporting and compliance.



CliftonLarsonAllen LLP

Baltimore, Maryland
December 18, 2020

Management's Discussion and Analysis

Year Ended August 31, 2020

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, 2020. 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 seven programs:

- Social Security Administration,
- Death Benefits for Public Safety Officers,
- Compensation to Victims of Crime,
- Death Benefits for Retirees,
- Judicial Retirement System Plan One,
- Unappropriated Receipts General Revenue, 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:

	2020	2019	Changes
	\$	\$	%
Net Position	2,591.96	2,033.43	27.47
Current Liabilities	713.94	708.10	0.82
Member and Employer Contributions	2,765.37	3,092.00	(10.56)
Benefit Payments	2,298.10	2,212.81	3.85

The change in Net Position is primarily due to increase in interest revenues from the fixed income investments and savings generated from third party administrator and pharmacy benefit manager contracts.

Financial Highlights – Fiduciary Funds

- Net position of the Fiduciary Funds administered by the System totaled \$29.51 billion as of August 31, 2020, compared with \$28.83 billion as of August 31, 2019. The investment portfolio returned 6.85% 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 6.46% and 7.34%, respectively.
- The one year money-weighted rates of return for the Fiduciary Funds are summarized as follows:

Fund Name	Rate (%)
	%
Employees Retirement System	6.70
Law Enforcement and Custodial Officer Supplemental Retirement Fund	6.64
Judicial Retirement System of Texas Plan Two	6.78
Overall	6.70

- 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, 2020

Asset Allocation

Asset Class	%
Alternative Investments	30.08
Directional Growth	1.41
Global Credit Fixed Income Securities	12.26
Global Public Equity Special Situations	1.79
International Equity	16.53
Large Cap Domestic Equity	17.30
Small and Mid Cap Domestic Equity	2.95
Other Investments	2.16
Hedge Funds	4.47
Rates Fixed Income Securities	11.05

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:

	2020	2019	Changes
	\$	\$	%
Contributions:			
Retirement & Other	1,611.71	1,564.75	3.00
Insurance	897.20	510.86	75.63
Total (Exh. IX)	2,508.91	2,075.61	20.88
Benefit Payments:			
Retirement & Other	2,848.39	2,754.79	3.36
Insurance	846.74	828.75	2.17
Total (Exh. IX)	3,695.13	3,583.54	3.09

- The increase in insurance contributions is primarily due to the increase of funding from the Group Benefits Program. The most recent actuarial valuations of the funded defined benefit plans were completed as of August 31, 2020. The funded ratios are as follows:

Plans	2020	2019
	%	%
Employees Retirement System	66.0	70.5
Law Enforcement and Custodial Officer Supplemental Retirement Fund	60.1	65.3
Judicial Retirement System of Texas Plan Two	82.3	87.5

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:

	2020	2019	Changes
	\$	\$	%
Changes in Fiduciary Net Position (Exh. IX)	672.79	(741.46)	190.74
Total Net Position	29,506.89	28,834.11	2.33

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 6.85%, which was higher than the previous year return of 3.04%.

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:

	2020	2019	Changes
	\$	\$	
Member Contributions	801.21	782.95	2.33
Employer Contributions	1,520.75	1,152.90	31.91
Non-Employer Contributing Entity Contributions	37.74	20.18	87.02
Net Investment Income	1,884.31	801.77	135.02
Other Additions	226.07	195.76	15.48
Total Additions (Exh. IX)	4,470.08	2,953.56	51.35

The increase in the net investment income is due primarily to the improvement in the financial markets compared to the previous year. The increase in contribution from employer and non-employer contributing entities is primarily due to the increase of funding from the Group Benefits Program.

For the Employees Retirement Fund, member and State retirement contribution rates for fiscal year 2019 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,

Management's Discussion and Analysis (Continued)

Year Ended August 31, 2020

member and State retirement contribution rates were 9.5% 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 follows:

	2020	2019	Changes
	\$	\$	%
Retirement Benefits and Refunds	3,761.05	3,654.95	2.90
Administrative Expenses	35.03	38.76	(9.62)
Other Deductions	1.21	1.31	(7.63)
Total Deductions (Exh. IX)	3,797.29	3,695.02	2.77

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 millions as follows:

	2020	2019	Changes
	\$	\$	%
Cash and Cash Equivalents	128.79	110.53	16.52
Securities Lending Collateral	112.86	154.22	(26.82)
Legislative Appropriation	0.25	—	100.00
Investments	28,979.23	28,203.99	2.75
Receivables	615.44	1,450.79	(57.58)
Due From Other Funds/Agencies	22.58	44.16	(48.87)
Capital Assets	43.79	14.84	195.08
Total Assets (Exh. VIII)	29,902.94	29,978.53	(0.25)

Liabilities

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

	2020	2019	Changes
	\$	\$	%
Accounts Payable	273.04	991.4	(72.46)
Due To Other Funds/Agencies	5.37	7.08	(24.15)
Compensable Leave	4.36	3.45	26.38
Securities Lending Obligations	112.89	141.65	(20.30)
Other Liabilities	0.39	0.84	(53.57)
Total Liabilities (Exh. VIII)	396.05	1,144.42	(65.39)

Funding Status and Progress

Currently, pension benefit payments exceed pension contributions. During fiscal year 2020, the Board of Trustees decreased the assumed rate of return to 7%. ERS is working with State leadership on a path to reduce the unfunded accrued actuarial liability and achieve actuarial soundness.

For funding purposes, the latest annual actuarial valuation of the System, as of August 31, 2020, (compared to the August 31, 2019 actuarial valuation) is summarized in millions as follows:

Plans	Unfunded Actuarial Accrued Liability	
	2020	2019
	\$	\$
Employees Retirement System	(14,715.10)	(11,741.24)
Law Enforcement and Custodial Officer Supplemental Retirement Fund	(641.52)	(514.51)
Judicial Retirement System of Texas Plan Two	(104.43)	(66.78)

For the Employees Retirement System Fund, the August 31, 2020 actuarial valuation shows an unfunded accrued liability of \$14.72 billion. The funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability, is 66% as of August 31, 2020. The valuation shows that the total normal cost is 14.16% of payroll and total contributions are 19.5% of payroll. The total contribution rate exceeds the normal cost by 5.34% of payroll, but 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 unfunded

Management's Discussion and Analysis (Concluded)

Year Ended August 31, 2020

actuarial accrued liability balance over 31 years is 25.48% of payroll. The unfunded actuarial accrued liability will need to be met over the coming years through improved investment performance, increased contributions, or plan design changes.

The August 31, 2020 actuarial valuation for the Law Enforcement and Custodial Officer Supplemental Retirement Fund shows that the total normal cost rate for fiscal year 2020 is 1.96% of payroll. At August 31, 2020, the unfunded actuarial accrued liability is \$641.52 million, and the funded ratio is 60.1%. Total contributions are 1.0% of payroll. The total contribution rate and approximately \$17.1 million from court fees exceed the normal cost by 0.09%, but is not sufficient to amortize the unfunded actuarial accrued liability over a finite period of time. For fiscal year 2020, the total contribution rate to fund the normal cost plus amortize the unfunded actuarial accrued liability balance over 31 years as a level percentage of payroll is 3.43% of payroll.

For the Judicial Retirement System of Texas Plan II, the August 31, 2020 actuarial valuation shows that the total normal cost is 26.26% of payroll and unfunded actuarial accrued liability is \$104.43 million. The funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability is 82.3% as of August 31, 2020. Total contributions are 25.083% of payroll. The total contribution rate is below the normal cost by 1.177% of payroll for the current fiscal year, and it is not sufficient to amortize the unfunded actuarial accrued liability over a finite period of time. The rate needed to fund normal cost plus amortize the unfunded actuarial accrued liability over 31 years is 33.29%.

The State Retiree Health Plan is currently funded on a pay-as-you-go basis. For the State Retiree Health Plan, the August 31, 2020 actuarial valuation shows an unfunded accrued liability of \$33.04 billion. The funded ratio is 0.6%. The valuation shows that the total normal cost is 12.4% of payroll. The Actuarially Determined Contribution (ADC) as of August 31, 2020 is 20.5% of payroll. Total contributions are 30.42% of the Actuarially Determined Contribution.

Contributions include health care premiums, State and member contributions, and retiree drug subsidy payments. Contributions from employers and non-employer contributing entities were \$748.37 million and \$37.74 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 2020 totaling \$111.1 million. The above amounts, along with net investment income of \$1.35 million resulted in additions of \$898.56 million. These were offset by benefit payments of \$846.74 million, which is net of the \$230.15 million payment from members, and \$6.81 million in administrative expense. The net plan position is \$104.95 million.

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 Machel Pharr, Chief Financial Officer at Machel.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, 2020

Governmental Activities

Assets

Current Assets:	
Cash and Cash Equivalents:	
Cash in State Treasury	\$93,706,877
Total Cash and Cash Equivalents	93,706,877
Securities Lending Collateral	8,166,676
Short-Term Investments	1,056,508,516
Legislative Appropriations	192,037
Receivables	273,683,187
Due from Fiduciary Funds	917,867
Total Current Assets	1,433,175,160
Non-Current Assets:	
Public Equities	11,453,063
Fixed Income	1,759,062,058
Alternative Investments	102,410,698
Total Non-Current Assets	1,872,925,819
Total Assets	3,306,100,979

Liabilities

Current Liabilities:	
Payables	694,743,047
Due to Fiduciary Funds	11,270,875
Unearned Revenue	158
Obligations Under Securities Lending	8,130,431
Total Current Liabilities	714,144,511
Total Liabilities	714,144,511

Net Position

Restricted for:	
Employees Life, Accident and Health Insurance and Benefits	2,591,955,247
Unrestricted	1,221
Total Net Position (Exh. II & III)	\$2,591,956,468

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

Exhibit II
Statement of Activities
Year Ended August 31, 2020

	Program Revenues			Net (Expense)
	Expenses	Changes for Services	Operating Grants and Contributions	Revenue and Changes in Net Position
Functions/Programs	\$	\$	\$	\$
Governmental Activities				
Judicial Retirement System Plan One	19,941,228	19,941,228		
Social Security Administration	116,947	66,457		(50,490)
Death Benefits-Peace Officers, Firemen, etc.	7,839,475	7,839,475		
Compensation to Victims of Crime	3,500,000	3,500,000		
Death Benefits-Retiree \$5,000 Lump Sum	9,695,882	9,695,882		
Employees Life, Accident and Health Insurance and Benefits	2,315,144,687	2,765,508,158	108,162,637	558,526,108
Total Governmental Activities	2,356,238,219	2,806,551,200	108,162,637	558,475,618
			General Revenues:	
			Transfers	47,500
			Total General Revenues	47,500
			Change in Net Position (Exh. IV)	558,523,118
			Net Position - Beginning	2,033,433,350
			Net Position - Ending (Exh. I)	2,591,956,468

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

Exhibit III

Balance Sheet – Governmental Funds

August 31, 2020

	General Fund Totals (Note 1.E)	Non-major Special Revenue Funds Totals (Note 1.E)	Total Governmental Funds
Assets	\$	\$	\$
Current Assets:			
Cash and Cash Equivalents:			
Cash in State Treasury		10,724	10,724
Total Cash and Cash Equivalents	—	10,724	10,724
Legislative Appropriations	192,867	500	193,367
Accounts Receivable		547	547
Total Current Assets	192,867	11,771	204,638
Total Assets	192,867	11,771	204,638
Liabilities & Fund Balances			
Current Liabilities:			
Payables:			
Voucher/Accounts Payable	192,867	500	193,367
Due To Other Funds (Note 5.A)		9,892	9,892
Unearned Revenues		158	158
Total Current Liabilities	192,867	10,550	203,417
Total Liabilities	192,867	10,550	203,417
Fund Balances:			
Committed		1,221	1,221
Total Fund Balances (Exh. IV)	—	1,221	1,221
Total Liabilities & Fund Balances	192,867	11,771	204,638
Total Fund Balances - Governmental Funds (above):			1,221
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.			2,591,955,247
Net Position of Governmental Activities (Exh. I)			2,591,956,468

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

Exhibit IV

Statement of Revenues, Expenditures and Changes in Fund Balances – Governmental Funds

Year Ended August 31, 2020

	General Fund Totals (Note 1.E)	Non-major Special Revenue Funds Totals (Note 1.E)	Total Governmental Funds
Revenues	\$	\$	\$
Legislative Appropriations out of the State's General Revenue Fund:			
Appropriation Revenue:			
For Judicial Retirement System Plan One	19,941,228		19,941,228
For Death Benefits Peace Officers, etc.		7,839,475	7,839,475
For Victims of Crime		(554,118)	(554,118)
For Death Benefits-Retirees		13,750,000	13,750,000
Total Appropriation Revenue	19,941,228	21,035,357	40,976,585
Administration Fees for Social Security Administration	—	66,457	66,457
Total Revenues	19,941,228	21,101,814	41,043,042
Expenditures			
Current:			
Death Benefits		21,035,357	21,035,357
Retirement Benefits	19,941,228		19,941,228
Administrative Expenditures:			
Salaries & Wages		73,212	73,212
Payroll Related Costs		24,144	24,144
Professional Fees & Services		4,879	4,879
Travel		792	792
Materials & Supplies		4,493	4,493
Communications & Utilities		1,942	1,942
Repairs & Maintenance		5,439	5,439
Rentals & Leases		940	940
Printing & Reproduction		80	80
Other Expenditures		1,026	1,026
Total Administrative Expenditures	—	116,947	116,947
Total Expenditures	19,941,228	21,152,304	41,093,532
Deficiency of Revenues Under Expenditures	—	(50,490)	(50,490)
Other Financing Sources			
Transfers In-Retirement Membership Fees (Note 5.B)		47,500	47,500
Net Change in Fund Balance	—	(2,990)	(2,990)
Fund Balances - Beginning		4,211	4,211
Fund Balances - Ending (Exh. III)	—	1,221	1,221

Net Change in Fund Balances - Governmental Funds: (2,990)

Amounts reported for 'Governmental Activities' in the Statement of Activities (Exhibit II) are different because:

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.

558,526,108

Change in Net Position of Governmental Activities (Exh. II) 558,523,118

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

Exhibit V

Statement of Net Position – Proprietary Fund

August 31, 2020

	<u>Internal Service Fund</u>
	<u>Employees Life, Accident and Health Insurance and Benefits Fund (0973) (U/F 0973 and 4973)</u>
Assets	
Current Assets:	
Cash and Cash Equivalents:	
Cash in State Treasury	\$93,696,153
Total Cash and Cash Equivalents	93,696,153
Securities Lending Collateral	8,166,676
Short-Term Investments	1,056,508,516
Receivables:	
Interest Receivable	12,062,092
Accounts Receivable	259,925,209
Unsettled Sales-Investment Receivables	1,694,009
Total Receivables	273,681,310
Due From Other Funds (Note 5.A)	917,867
Total Current Assets	1,432,970,522
Non-Current Assets:	
Investments: (Note 2.A)	
Public Equities	11,453,063
Fixed Income	1,759,062,058
Alternative Investments	102,410,698
Total Non-Current Assets	1,872,925,819
Total Assets	3,305,896,341
Liabilities	
Current Liabilities:	
Payables:	
Claims Payable:	
Incurred, Self-Funded	56,302,938
Incurred But Not Reported, Self-Funded	618,851,172
Total Claims Payable	675,154,110
Premiums Payable	8,333,247
Administrative and Other Fees Payable	6,061,103
Accounts and Other Payable	149,036
Unsettled Purchases-Investment Payables	4,852,184
Total Payables	694,549,680
Due To Other Funds (Note 5.A) :	
Other Interfunds Payable	11,260,983
Total Due To Other Funds	11,260,983
Obligations Under Securities Lending	8,130,431
Total Current Liabilities	713,941,094
Total Liabilities	713,941,094
Net Position	
Restricted For:	
Employee Life, Accident and Health Insurance and Benefits	2,591,955,247
Total Net Position (Exh. VI)	\$2,591,955,247

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

Exhibit VI

Statement of Revenues, Expenses and Changes in Net Position – Proprietary Fund

Year Ended August 31, 2020

	Internal Service Fund
	Employees Life, Accident and Health Insurance and Benefits Fund (0973) (U/F 0973 and 4973)
Operating Revenues	
Contributions to Insurance Program:	
From Employers	\$2,219,781,558
From Members:	
For Employees	538,515,397
For COBRA	7,069,636
Total Contributions from Members	545,585,033
Total Contributions to Insurance Program	2,765,366,591
Other Operating Revenues:	
COBRA 2% Administration Fee	141,567
Penalty Assessed to Insurance Carrier	11,161,094
Miscellaneous Operating Revenue	763,208
Total Other Operating Revenues	12,065,869
Total Operating Revenues	2,777,432,460
Operating Expenses	
Employee Benefit Payments:	
For Employees ¹	2,269,292,767
For COBRA	27,664,272
For Health Savings Accounts	1,138,090
Total Employee Benefit Payments	2,298,095,129
Administrative Expenses:	
Salaries & Wages	8,539,911
Payroll Related Costs	2,900,337
Professional Fees & Services	1,486,765
Travel	36,064
Materials & Supplies	698,686
Communications & Utilities	475,884
Repairs & Maintenance	592,507
Rentals & Leases	206,021
Printing & Reproduction	46,721
Other Operating Expenses	2,165,509
Total Administrative Expenses	17,148,405
Total Operating Expenses	2,315,243,534
Operating Income	462,188,926
Non-Operating Revenues (Expenses)	
Net Increase in Fair Value of Investments	32,731,397
Interest Revenue	62,925,284
Securities Lending Activities:	
Loan Premium on Securities Lending	132,269
Broker Rebates	124,286
Agent Fees	(25,439)
Net Securities Lending Activity	231,116
Settlement Revenue	449,385
Total Non-Operating Revenues	96,337,182
Change in Net Position	558,526,108
Net Position - Beginning	2,033,429,139
Net Position - Ending (Exh. V)	\$2,591,955,247

¹ The benefit payments are reported net of \$185,647,509 pharmacy rebates.

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



Exhibit VII

Statement of Cash Flows – Proprietary Fund

Year Ended August 31, 2020

**Internal Service Fund
Employees Life, Accident and Health
Insurance and Benefits
Fund (0973)/(U/F 0973 and 4973)**

Cash Flows from Operating Activities:	
Cash Received from Members	\$507,704,954
Cash Received from Employers and Non-employer Contributing Entities	2,206,972,498
Cash Received from Pharmacy Rebates	139,041,953
Cash Payments to Insurance Carriers and Third Party Administrators	(2,386,818,951)
Cash Payments for Goods and Services	(7,034,463)
Other Cash Payments	(1,685,568)
Net Cash Provided by Operating Activities	458,180,423
Cash Flows from Investing Activities:	
Net Purchases of Short-Term Investment Fund	(506,191,344)
Interest on Deposit in State Treasury	2,955,089
Net Cash Used by Investing Activities	(503,236,255)
Net Decrease in Cash and Cash Equivalents	(45,055,832)
Cash and Cash Equivalents:	
Beginning of Year	138,751,985
End of Year	93,696,153
Reconciliation of Operating Income to Net Cash Provided by Operating Activities:	
Operating Income	462,188,926
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:	
Settlement Revenue	449,385
Change in Assets and Liabilities:	
Increase in Accounts Receivable	(22,921,373)
Decrease in Due From Other Agencies	2,174,276
Decrease in Due From Other Funds	565,277
Increase in Accounts Payable	36,528,127
Decrease in Due To Other Funds	(20,770,349)
Decrease in Unearned Revenue	(33,846)
Total Adjustments	(4,008,503)
Net Cash Provided by Operating Activities	\$458,180,423
Non-Cash Investing Activities:	
Net Appreciation in Fair Value of Non-Cash Equivalent Investments	32,731,397

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

Exhibit VIII

Statement of Fiduciary Net Position

August 31, 2020

	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	216,147	5,022		
Cash in Bank	500			
Cash in State Treasury	66,742,458	3,033,967	1,546,448	
Total Cash and Cash Equivalents	66,959,105	3,038,989	1,546,448	—
Securities Lending Collateral	107,364,040	3,657,466	1,836,817	
Short-Term Investments	489,398,935	16,669,497	8,373,325	
Total Cash, Cash Equivalent and Short-Term Investments	663,722,080	23,365,952	11,756,590	—
Legislative Appropriations				246,332
Investments: (Note 1.G)				
Public Equities	11,042,335,060	376,076,268	188,959,718	
Fixed Income	5,707,483,667	194,383,629	97,668,156	
Alternative Investments	9,924,225,848	337,996,066	169,826,201	
Other Investments	346,421,358	11,798,306	5,928,065	
Total Investments	27,020,465,933	920,254,269	462,382,140	—
Receivables:				
Federal Receivable				
Interest and Dividends Receivable	95,602,711	3,257,066	1,636,052	
Contributions/Accounts Receivable	118,986,963	1,405,139	1,875,340	
Unsettled Sales-Investment Receivables	194,652,000	6,629,395	3,330,943	
Total Receivables	409,241,674	11,291,600	6,842,335	—
Due From Other Funds (Note 5.A)	13,374,437	145	66	
Due From Other Agencies (Note 1.G)	9,194,156			
Capital Assets:				
Non-Depreciable:				
Land and Land Improvements	874,889			
Construction in Progress	39,162,239			
Depreciable, Net of Accumulated Depreciation/Amortization of \$21,219,444				
Building	3,407,927			
Furniture and Equipment	325,618			
Vehicles	17,746			
Total Capital Assets	43,788,419	—	—	—
Total Assets	28,159,786,699	954,911,966	480,981,131	246,332
Liabilities				
Payables:				
Voucher/Accounts Payable	30,014,826	598,452	359,367	
Unsettled Purchases-Investment Payables	69,277,221	2,359,421	1,185,493	
Total Payables	99,292,047	2,957,873	1,544,860	—
Due To Other Funds (Note 5.A)	293	859,687	216,219	
Due To Other Agencies (Note 1.G)	2,339,914			
Unearned Revenue	194,802	112,656	51,074	
Employees Compensable Leave	4,360,093			
Obligations Under Securities Lending	107,393,010	3,657,556	1,837,741	
Total Liabilities	213,580,159	7,587,772	3,649,894	—
Net Position Restricted for				
Net Position Restricted for Pension and Other Employee Benefits	27,946,206,540	947,324,194	477,331,237	246,332

USAS Funds (U/F) are:

Fund 0955: 0955, 0980, 8070, 8955, 9014, 9015; 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;

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

State Retiree Health Plan (3973)	Total Defined Benefit Plans	TexaSaver 401(k) Trust Fund (0946)	TexaSaver 457 Trust Fund (0945)	Commuter Spending Account Fund (3944)	State Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds
\$	\$	\$	\$	\$	\$	\$
21,145	242,314					242,314
	500	401,208	129,119			530,827
46,925,167	118,248,040	2,785,836	3,681,772	482,324	2,822,583	128,020,555
46,946,312	118,490,854	3,187,044	3,810,891	482,324	2,822,583	128,793,696
	112,858,323					112,858,323
38,026,345	552,468,102			68,312	23,594,214	576,130,628
84,972,657	783,817,279	3,187,044	3,810,891	550,636	26,416,797	817,782,647
	246,332					246,332
	11,607,371,046					11,607,371,046
	5,999,535,452					5,999,535,452
	10,432,048,115					10,432,048,115
	364,147,729					364,147,729
—	28,403,102,342	—	—	—	—	28,403,102,342
166,127,306	166,127,306					166,127,306
27,844	100,523,673	1,600	2,139	288	2,676	100,530,376
15,805,328	138,072,770	137,638	84,707	3,739	5,870,223	144,169,077
	204,612,338					204,612,338
181,960,478	609,336,087	139,238	86,846	4,027	5,872,899	615,439,097
10,895	13,385,543					13,385,543
	9,194,156					9,194,156
	874,889					874,889
	39,162,239					39,162,239
	3,407,927					3,407,927
	325,618					325,618
	17,746					17,746
—	43,788,419	—	—	—	—	43,788,419
266,944,030	29,862,870,158	3,326,282	3,897,737	554,663	32,289,696	29,902,938,536
160,266,446	191,239,091	401,208	129,119	290	8,447,664	200,217,372
	72,822,135					72,822,135
160,266,446	264,061,226	401,208	129,119	290	8,447,664	273,039,507
1,708,987	2,785,186	95,979	58,981	6,100	86,289	3,032,535
	2,339,914					2,339,914
21,145	379,677		5,770			385,447
	4,360,093					4,360,093
	112,888,307					112,888,307
161,996,578	386,814,403	497,187	193,870	6,390	8,533,953	396,045,803
104,947,452	29,476,055,755	2,829,095	3,703,867	548,273	23,755,743	29,506,892,733

Exhibit IX

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

Year Ended August 31, 2020

	Employees Retirement Fund (0955)	Law Enforcement and Custodial Officer Supplemental Fund (0977)	Judicial Retirement System Plan II (0993)	Excess Benefit Arrangement (5039)
Additions	\$	\$	\$	\$
Contributions:				
Members	713,985,036	8,949,911	8,634,071	
Employers	735,903,212	22,293,664	14,186,283	
Non-Employer Contributing Entity Contributions				
Service Contributions Transferred from Teacher Retirement System (Note 1.G)	107,757,217			
Federal Revenues				
Others - Forfeitures				
Total Contributions	1,557,645,465	31,243,575	22,820,354	—
Investment Income:				
From Investing Activities:				
Net Appreciation in Fair Value of Investments	1,207,108,820	41,046,801	20,674,031	
Interest and Dividends	617,986,820	21,249,850	10,508,246	
Class Action Settlements	1,861,296	64,018	31,321	
Total Investing Activity Income	1,826,956,936	62,360,669	31,213,598	—
Less: Investment Expense	(38,251,450)	(1,343,142)	(619,854)	
Net Income, Investing Activities	1,788,705,486	61,017,527	30,593,744	—
From Securities Lending Activities:				
Loan Premium on Securities Lending	1,621,041	55,816	27,257	
Broker Rebates	966,851	33,098	16,458	
Agent Fees	(276,268)	(9,492)	(4,666)	
Net Income, Securities Lending Activities	2,311,624	79,422	39,049	—
Net Investment Income	1,791,017,110	61,096,949	30,632,793	—
Other Additions:				
Other Revenue:				
Warrants Voided by Statute of Limitations	230,961	8,597		
Reimbursements - Third Party				
Rental Income	41,418			
Miscellaneous Revenue	2,950			
Administration Fees				
Total Other Revenue	275,329	8,597	—	—
Transfer In:				
Interfund Transfers In (Note 1.G):				1,077,860
Interagency Transfers In (Note 5.C):				246,332
Total Transfers In	—	—	—	1,324,192
Total Other Additions	275,329	8,597	—	1,324,192
Total Additions	3,348,937,904	92,349,121	53,453,147	1,324,192

USAS Funds (U/F) are:

Fund 0955: 0955, 0980, 8070, 8955, 9014, 9015; 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;

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

State Retiree Health Plan (3973)	Total Defined Benefit Plans	TexaSaver 401(k) Trust Fund (0946)	TexaSaver 457 Trust Fund (0945)	Commuter Spending Account Fund (3944)	State Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds
\$	\$	\$	\$	\$	\$	\$
	731,569,018			127,118	69,511,612	801,207,748
748,369,212	1,520,752,371					1,520,752,371
37,736,903	37,736,903					37,736,903
	107,757,217					107,757,217
111,098,506	111,098,506					111,098,506
					3,778,830	3,778,830
897,204,621	2,508,914,015	—	—	127,118	73,290,442	2,582,331,575
	1,268,829,652					1,268,829,652
1,343,988	651,088,904	37,216	53,566	8,068	185,454	651,373,208
	1,956,635					1,956,635
1,343,988	1,921,875,191	37,216	53,566	8,068	185,454	1,922,159,495
(7,717)	(40,222,163)	(26,194)	(30,508)		(1,802)	(40,280,667)
1,336,271	1,881,653,028	11,022	23,058	8,068	183,652	1,881,878,828
	1,704,114					1,704,114
	1,016,407					1,016,407
	(290,426)					(290,426)
—	2,430,095	—	—	—	—	2,430,095
1,336,271	1,884,083,123	11,022	23,058	8,068	183,652	1,884,308,923
23,686	263,244					263,244
19	19	(21,935)	(10,524)		28,800	(3,640)
	41,418					41,418
	2,950					2,950
		1,232,060	580,645			1,812,705
23,705	307,631	1,210,125	570,121	—	28,800	2,116,677
	1,077,860					1,077,860
	246,332					246,332
—	1,324,192	—	—	—	—	1,324,192
23,705	1,631,823	1,210,125	570,121	—	28,800	3,440,869
898,564,597	4,394,628,961	1,221,147	593,179	135,186	73,502,894	4,470,081,367

- to next page

Exhibit IX (Concluded)

Statement of Changes in Fiduciary Net Position – Pension and Other Employee Benefit Trust Funds Year Ended August 31, 2020

	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	2,579,560,559	83,227,720	31,912,738	987,743
Health Care Claims ¹				
Less: Payments from Members				
Refunds of Contributions	121,569,462	3,487,259	128,056	
Service Contributions Transferred to Teacher Retirement System (Note 1.G)	27,517,707			
Total Benefits	2,728,647,728	86,714,979	32,040,794	987,743
Administrative Expenses:				
Salaries & Wages	10,775,722	1,038,111	120,290	
Payroll Related Costs	3,338,318	363,014	39,580	
Professional Fees & Services	5,879,837	259,826	78,498	
Travel	45,591	4,048	475	
Materials & Supplies	855,837	73,311	10,745	
Communications & Utilities	390,385	43,545	4,680	
Repairs & Maintenance	837,553	84,251	11,171	
Rentals & Leases	238,684	21,763	3,134	
Printing & Reproduction	56,841	5,122	498	
Depreciation	688,131			
Other Operating Expenses	1,075,534	39,602	4,294	
Total Administrative Expenses	24,182,433	1,932,593	273,365	—
Other Deductions:				
Loss on Sale of Capital Assets				
Interfund Transfers Out (Note 1.G):	47,500			
Other Transfers	1,077,860			
Interagency Transfers Out (Note 5.C):				90,117
Total Transfers Out	1,125,360	—	—	90,117
Total Other Deductions	1,125,360	—	—	90,117
Total Deductions	2,753,955,521	88,647,572	32,314,159	1,077,860
Net Increase	594,982,383	3,701,549	21,138,988	246,332
Net Position Restricted for Pension and Other Employee Benefits:				
Beginning of Year	27,351,224,157	943,622,645	456,192,249	
End of Year (Exh. VIII)	27,946,206,540	947,324,194	477,331,237	246,332

¹ The benefit payments in the State Retiree Health Plan are reported net of \$163,453,243 pharmacy rebates.

State Retiree Health Plan (3973)	Total Defined Benefit Plans	TexaSaver 401(k) Trust Fund (0946)	TexaSaver 457 Trust Fund (0945)	Commuter Spending Account Fund (3944)	State Employees Cafeteria Plan Trust Fund (0943)	Total Pension and Other Employee Benefit Trust Funds
\$	\$	\$	\$	\$	\$	\$
	2,695,688,760			79,366	65,837,157	2,761,605,283
1,076,889,832	1,076,889,832					1,076,889,832
(230,151,101)	(230,151,101)					(230,151,101)
	125,184,777					125,184,777
	27,517,707					27,517,707
846,738,731	3,695,129,975	—	—	79,366	65,837,157	3,761,046,498
3,217,766	15,151,889	162,523	110,547	8,101	141,778	15,574,838
1,081,432	4,822,344	53,007	35,640	2,675	48,100	4,961,766
701,235	6,919,396	7,024	3,192	370	16,794	6,946,776
16,122	66,236	1,171	1,010	13	606	69,036
225,163	1,165,056	6,563	4,119	294	10,646	1,186,678
174,196	612,806	3,423	2,257	140	6,999	625,625
253,674	1,186,649	8,299	4,929	396	12,704	1,212,977
72,106	335,687	2,250	1,118	86	3,208	342,349
12,758	75,219	185	162	8	220	75,794
	688,131					688,131
1,060,426	2,179,856	15,585	2,066	118	1,150,276	3,347,901
6,814,878	33,203,269	260,030	165,040	12,201	1,391,331	35,031,871
	47,500					47,500
	1,077,860					1,077,860
	90,117					90,117
—	1,215,477	—	—	—	—	1,215,477
—	1,215,477	—	—	—	—	1,215,477
853,553,609	3,729,548,721	260,030	165,040	91,567	67,228,488	3,797,293,846
45,010,988	665,080,240	961,117	428,139	43,619	6,274,406	672,787,521
59,936,464	28,810,975,515	1,867,978	3,275,728	504,654	17,481,337	28,834,105,212
104,947,452	29,476,055,755	2,829,095	3,703,867	548,273	23,755,743	29,506,892,733



Notes to the Basic Financial Statements

August 31, 2020

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Notes to the Basic Financial Statements

August 31, 2020

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 approximately 400 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, 2019, the System adopted GASB Statement No. 84 *Fiduciary Activities*. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less. Based on the reporting

requirements from this pronouncement, the System has reclassified the Judicial Retirement System Plan One Fund and Unappropriated Receipts General Revenue Fund to General Funds, USPS – Direct Deposit Return Money Fund, USPS – Overpayment to Employees Fund, Direct Deposit Correction Account Fund, and Child Support Employee Deduction – Offset Account Fund to Custodial Funds, and Health Saving Account Fund to Internal Service Fund. These funds were reported as Agency Funds in previous fiscal years.

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

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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 Judicial Retirement System Plan One, 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 are considered 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.

Proprietary fund distinguishes operating activities from nonoperating ones. Operating activities generally include providing services and producing or delivering goods. The majority of the operating revenues in the System's proprietary fund are insurance premiums. Operating expenses include the costs of claims and related administrative expenses. Non-operating revenues and expenses are those items that do not meet any of the above definitions.

The System does not have a policy for eliminating internal activities in the Government-wide Statement of Activities because the funds reported in the Government-wide Statement of Activities are distinct programs and do not have activities among each other.

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.

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.

General Fund

The General Fund is the principal operating fund used to account for most of the state's general activities. It accounts for all financial resources except

Notes to the Basic Financial Statements (Continued)

August 31, 2020

those accounted for in other funds. The system reports the following funds as General Fund:

- 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.

For fiscal year 2020, the System continues to report the Special Revenue Funds as nonmajor funds. The reporting is based on a statement on page 58 of 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 2020.

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.

- 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.
- 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.

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.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

- 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, Texas Insurance Code. The State Retiree Health Plan (SHRP) is a cost-sharing multiple-employer postemployment health care plan that covers retired employees of the State, and other entities as specified by the state legislature.
- TexaSaver 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.
- TexaSaver 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.

Custodial Funds

Custodial Funds are used to report fiduciary activities that are not required to be reported in pension (and other employee benefit) trust funds, investment trust funds, or private-purpose trust funds. The system reports the following funds as Custodial Funds:

- USPS - Direct Deposit Return Money – This fund accounts for direct deposits that are processed through the Uniform Statewide Accounting Payroll System and returned by financial institutions because of death, termination, retirement, incorrect account number, or incorrect routing numbers. The System transfers the funds back to the original issuing funds.
- USPS - Overpayment to Employees – This fund is used to provide a temporary depository for money held in suspense pending final disposition. Items held in the fund are cleared to the various Special Funds or the General Revenue Fund, or refunded to the payer.
- 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.
- 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.

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

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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. A separate budget report which demonstrates compliance at the legal level of budgetary control is available in the Reports and Studies section of the System's website.

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 non-appropriated budget for administrative expenses, including capital outlay, is prepared annually and approved by the System's Board of Trustees at the line-item 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 the 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 account, 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 amortized cost.

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. 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.

Other Investments

Other investments are 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. In addition, other investments include one commingled equity limited partnership priced at the net asset value per share by the general partner.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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 flow 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. Closed-ended 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 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 commingled 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 commingled or separate. These funds are classified as predominately "credit" instruments that may be liquid or illiquid. The System utilizes 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

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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 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

Notes to the Basic Financial Statements (Continued)

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consolidated fund are allocated to each of the participating funds on a daily basis using the pro rata fair value share.

Unsettled Sales - Investment Receivables and Unsettled Purchases - Investment Payables

The System reports Unsettled Sales - Investment Receivables to account for sales of investments that traded before fiscal year and settled after fiscal year end. Likewise, the System reports Unsettled Purchases - Investment Payables to account for purchases of investments that are traded before fiscal year end and settled after fiscal year end.

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. Donated capital assets or donated works of art or similar items are reported at fair value on the acquisition date. If donated capital assets are received in a service concession arrangement, they are reported at acquisition value. 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 Improvements	100,000	10 - 20
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. 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

Notes to the Basic Financial Statements (Continued)

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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 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.

2. Detail Disclosures on Funds (In accordance with GASB Statements 3, 28, 40, 67, and 72)

2.A Deposits, Investments, and Repurchase Agreements

Deposits

The total carrying amounts of Deposit as of August 31, 2020 are presented in Figure 2. The deposits with the custodian bank are temporary deposits related to unsettled trade or income transactions.

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Figure 2
Deposits of Cash in Bank

Deposits	Carrying Value	Bank Balance
	\$	\$
Fiduciary Funds:		
Cash on Hand (Exh. VIII)	242,314	242,314
Cash in Bank (Exh. VIII)	530,827	530,827
Deposits with Custodian Bank	5,161,866	5,161,866
Totals	5,935,007	5,935,007
Proprietary Funds:		
Deposits with Custodian Bank	(9,303)	(9,303)
Totals	(9,303)	(9,303)

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 balance of deposits with custodian bank as of August 31, 2020 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

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 hedge funds, domestic and international equities to provide liquidity, diversification and high returns to the component. Alternative Investments include private equity, private real estate, private infrastructure, private fixed income and hedge funds. The private equity investments are in private equity limited partnerships. The private real estate investments are in limited partnerships that specialize in real estate. Private Infrastructure investments are limited partnerships based on event-driven strategies (e.g., tender offers, mergers, and acquisitions etc.). Hedge fund investments are in hedge fund limited partnership. Private fixed income funds are limited partnerships that invest in foreign and domestic fixed income securities.

Fair Value Measurement

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.

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

- Market Approach: Prices and other relevant information generated by market

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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.

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 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.

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, 2020 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. 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, 2020 is summarized in Figure 5 on page 61. The securities were rated according to categories from Standard & Poor's, Moody's, or Fitch ratings, whichever is lower. A withdrawn rating signifies the removal of a rating on either an obligation or an issuer due to inadequate information, bankruptcy, reorganization, liquidation, or maturity of obligation.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Figure 3
Fair Value of Investments

	Level 1	Level 2	Level 3	NAV	Total
Fiduciary Funds:					
Investments:					
Public Equities:					
Domestic Equities	5,910,549,403	14,025,468	306,120		5,924,880,991
International Equities	4,485,431,034		553,803		4,485,984,837
Exchange Traded Funds (ETFs)	114,227,019				114,227,019
Real Estate Investment Trust (REITs)	1,075,653,673	4,424,513	2,200,013		1,082,278,199
Total Public Equities	11,585,861,129	18,449,981	3,059,936	—	11,607,371,046
Fixed Income:					
U.S. Treasury Securities	2,603,675,808				2,603,675,808
U.S. Government Agency Obligations		485,508,899			485,508,899
Corporate Obligations		1,895,038,922			1,895,038,922
Corporate Asset and Mortgage Backed Securities		48,690,036			48,690,036
International Obligations		503,947,559			503,947,559
Exchange Traded Funds (ETFs)	400,170,487				400,170,487
Real Estate Investment Trust (REITs)		62,503,741			62,503,741
Total Fixed Income	3,003,846,295	2,995,689,157	—	—	5,999,535,452
Other Investments:					
Derivatives	(107,425)				(107,425)
Commingled Funds				364,255,154	364,255,154
Total Other Investments	(107,425)	—	—	364,255,154	364,147,729
Investments Measured at the Net Asset Value (NAV):					
Equity Long/Short				600,084,716	600,084,716
Event Driven				228,114,804	228,114,804
Macro				160,485,151	160,485,151
Multi-Strategies				416,050,112	416,050,112
Opportunistic				244,829,398	244,829,398
Private Equity				4,495,728,326	4,495,728,326
Private Real Estate				2,357,722,279	2,357,722,279
Private Infrastructure				1,077,998,325	1,077,998,325
Private Fixed Income				482,699,181	482,699,181
Relative Value				368,335,823	368,335,823
Total Investments Measured at the NAV:	—	—	—	10,432,048,115	10,432,048,115
Total Investments	14,589,599,999	3,014,139,138	3,059,936	10,796,303,269	28,403,102,342
					(Exh. VIII)
Securities Lending Collateral (Note A):					
Government Repurchase Agreements	112,858,323				112,858,323
Total Securities Lending Collateral	112,858,323	—	—	—	112,858,323
					(Exh. VIII)
Short-Term Investments (Note A):					
Money Market and Bond Funds				566,951,218	566,951,218
Investment in Pool Cash	4,017,544				4,017,544
Deposits	5,161,866				5,161,866
Total Short-Term Investments	9,179,410	—	—	566,951,218	576,130,628
					(Exh. VIII)
Proprietary Fund:					
Investments:					
Public Equities:					
Domestic Equities	9,189,047	2,263,032	126		11,452,205
International Equities			858		858
Total Public Equities	9,189,047	2,263,032	984	—	11,453,063
Fixed Income:					
U.S. Treasury Securities	1,066,823,847				1,066,823,847
U.S. Government Agency Obligations		198,931,245			198,931,245
Corporate Obligations		305,767,636			305,767,636
Corporate Asset and Mortgage Backed Securities		18,262,783			18,262,783
International Obligations		81,312,765			81,312,765
Exchange Traded Funds (ETFs)	77,878,701				77,878,701
Real Estate Investment Trust (REITs)		10,085,081			10,085,081
Total Fixed Income	1,144,702,548	614,359,510	—	—	1,759,062,058
Investments Measured at the Net Asset Value (NAV):					
Opportunistic				24,526,394	24,526,394
Private Fixed Income				77,884,304	77,884,304
Total Investments Measured at the NAV	—	—	—	102,410,698	102,410,698
Total Investments	1,153,891,595	616,622,542	984	102,410,698	1,872,925,819
					(Exh. V)

Notes to the Basic Financial Statements (Continued)

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Figure 3
Fair Value of Investment (Concluded)

	Level 1	Level 2	Level 3	NAV	Total
Securities Lending Collateral (Note A):					
Government Repurchase Agreements	8,166,676				8,166,676
Total Securities Lending Collateral	8,166,676	—	—	—	8,166,676
(Exh. V)					
Short-Term Investments (Note A):					
Money Market and Bond Funds				1,056,517,819	1,056,517,819
Deposits	(9,303)				(9,303)
Total Short-Term Investments	(9,303)	—	—	1,056,517,819	1,056,508,516
(Exh. V)					

Note A: Investments are reported at amortized cost.

The System earns interest on monies held at the custodial agent bank overnight when a domestic 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 does not earn any interest on any failed foreign security purchase transactions.

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 fair value of the total fund. As of August 31, 2020, the System was not exposed to any concentration risk.

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, 2020, the System invested \$66,952,819 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. U.S. Government Agency Obligations are implicitly guaranteed by the US government. 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, 2020, the System's exposure to interest rate risk is summarized in Figure 6.

Figure 4
Foreign Currency Risk

Currency	Investments		Investments Total (USD)	Short-term Investments Deposits (USD)
	Public Equities (USD)	Alternative Investments (USD)		
Fiduciary Funds:	\$	\$	\$	\$
Australian Dollar	136,586,878	75,107,797	211,694,675	407,517
Brazilian Real	56,353,174		56,353,174	39,917
Canadian Dollar	289,829,742		289,829,742	
Chilean Peso	1,391,252		1,391,252	(1)
Chinese Yuan Renminbi	58,394,204		58,394,204	4,635
Czech Koruna	2,730,277		2,730,277	5,432
Danish Krone	52,315,908		52,315,908	165,260
Egyptian Pound	3,341,383		3,341,383	559
Euro	1,060,918,476	441,107,676	1,502,026,152	102,176
Hong Kong Dollar	403,652,926		403,652,926	12,754
Hungarian Forint	4,853,132		4,853,132	1,459
Indian Rupee	97,069,751		97,069,751	14,473
Indonesian Rupiah	20,256,529		20,256,529	4,066
Israeli Shekel	11,119,074		11,119,074	4,365
Japanese Yen	825,811,472		825,811,472	9,884
Malaysian Ringgit	15,598,580		15,598,580	4,455
Mexican Peso	31,726,383		31,726,383	(164,326)
New Taiwan Dollar	165,186,245		165,186,245	103,093
New Zealand Dollar	5,325,443		5,325,443	3,380
Norwegian Krone	27,021,612		27,021,612	467,686
Pakistan Rupee	988,380		988,380	
Philippine Peso	5,764,446		5,764,446	
Polish Zloty	10,578,359		10,578,359	
Pound Sterling	405,865,982	131,265,526	537,131,508	1,216,386
Qatari Riyal	3,680,510		3,680,510	
Russian Ruble	4,435,217		4,435,217	
Saudi Arabia Riyal	4,830,524		4,830,524	11,046
Singapore Dollar	52,979,966		52,979,966	183,148
South African Rand	31,371,373		31,371,373	39,406
South Korean Won	144,916,053	32,796	144,948,849	44,895
Swedish Krona	156,834,954		156,834,954	519,587
Swiss Franc	234,501,031		234,501,031	235,778
Thai Baht	27,063,756		27,063,756	42,907
Turkish Lira	14,717,862		14,717,862	
UAE Dirham	1,366,995		1,366,995	47,927
Total for Investments	4,369,377,849	647,513,795	5,016,891,644	3,527,864

Notes to the Basic Financial Statements (Continued)

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Figure 5
Fixed Income Investment Credit Risk

Standard & Poors/ Moody's/ Fitch Ratings	U. S Treasury Securities	U.S. Government Agency Obligations	Corporate Obligations	Corporate Asset and Mortgage Backed Securities	International Obligations	Real Estate Investment Trust(REITs)	Exchange Traded Funds (ETFs)	Total
Fiduciary Funds	\$	\$	\$	\$	\$	\$	\$	\$
Investments:								
A+/A1/A+							131,789,541	131,789,541
AA/Aa2/AA				3,638,686				3,638,686
AA-/Aa3/AA-		442,584					268,380,946	268,823,530
AA+/Aa1/AA+	40,788,287	485,066,315						525,854,602
AAA/Aaa/AAA	2,562,887,521			38,258,080				2,601,145,601
B/B2/B			234,817,711		91,233,600	6,958,007		333,009,318
B-/B3/B-			135,689,274		42,929,965			178,619,239
B+/B1/B+			187,518,759	5,505,293	51,601,552	19,279,876		263,905,480
BB/Ba2/BB			397,728,428		25,283,042	16,121,297		439,132,767
BB-/Ba3/BB-			299,389,419		61,429,111	951,947		361,770,477
BB+/Ba1/BB+			272,445,760	1,287,977	73,365,846			347,099,583
BBB/Baa2/BBB			13,645,660		2,802,820			16,448,480
BBB-/Baa3/BBB-			105,967,965		8,472,928	7,269,808		121,710,701
CCC-/Caa3/C			15,462,483		4,096,542	9,475,573		29,034,598
CCC/Caa2/CC			40,966,620		21,633,029			62,599,649
CCC+/Caa1/CCC			133,339,344		105,543,973			238,883,317
D-/DD			180,928		5,267,869			5,448,797
Not Rated			57,886,571		10,287,282	2,447,233		70,621,086
Investments Totals	2,603,675,808	485,508,899	1,895,038,922	48,690,036	503,947,559	62,503,741	400,170,487	5,999,535,452
Proprietary Funds	\$	\$	\$	\$	\$	\$	\$	\$
Investments:								
A+/A1/A+							21,264,459	21,264,459
AA/Aa2/AA				1,490,906				1,490,906
AA-/Aa3/AA-		181,343					56,614,242	56,795,585
AA+/Aa1/AA+	16,712,494	198,749,902						215,462,396
AAA/Aaa/AAA	1,050,111,353			15,675,773				1,065,787,126
B/B2/B			37,888,222		14,720,691	1,122,686		53,731,599
B-/B3/B-			21,893,687		6,926,820			28,820,507
B+/B1/B+			30,256,459	888,288	8,325,995	3,110,840		42,581,582
BB/Ba2/BB			64,174,134		4,079,460	2,601,198		70,854,792
BB-/Ba3/BB-			48,306,973		9,911,688	153,598		58,372,259
BB+/Ba1/BB+			43,959,570	207,816	11,837,699			56,005,085
BBB/Baa2/BBB			2,201,750		452,240			2,653,990
BBB-/Baa3/BBB-			17,098,105		1,367,121	1,172,995		19,638,221
CCC-/Caa3/C			2,494,897		660,984	1,528,899		4,684,780
CCC/Caa2/CC			6,610,031		3,490,525			10,100,556
CCC+/Caa1/CCC			21,514,522		17,029,693			38,544,215
D-/DD			29,193		849,979			879,172
NR			9,340,093		1,659,870	394,865		11,394,828
Investments Totals	1,066,823,847	198,931,245	305,767,636	18,262,783	81,312,765	10,085,081	77,878,701	1,759,062,058

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Figure 6 – Investment Interest Rate Risk

Investment Type	Fiduciary Funds		Proprietary Fund	
	Fair Value	Modified Duration	Fair Value	Modified Duration
	\$		\$	
U.S. Treasury Securities	2,603,675,808	4.11	1,066,823,847	4.11
U.S. Government Agency Obligations	485,508,899	3.44	198,931,245	3.44
Corporate Obligations	1,895,038,922	4.64	305,767,636	4.64
Corporate Asset and Mortgage Backed Securities	48,690,036	1.83	18,262,783	1.88
International Obligations	503,947,559	4.00	81,312,765	4.00
Real Estate Investment Trusts (REITs)	62,503,741	3.90	10,085,081	3.90
Totals	5,599,364,965	4.20	1,681,183,357	4.09

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 fully if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the System for income distributions by the securities' issuers while the securities are on loan. 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 2020. The System received net securities lending income totaling \$2,661,211 for the fiscal year ended August 31, 2020. The collateral information as of August 31, 2020 is summarized in Figure 7.

**Figure 7
Securities Lending Collateral Summary**

Investment Type	Underlying Securities Fair Value	Cash Collateral Fair Value
	\$	\$
Fiduciary Funds:		
Domestic Equities	3,347,396	3,433,520
International Equities	16,516,480	17,442,081
Corporate Obligations	42,869,110	43,866,925
Exchange Traded Funds - Equities (ETFs)	36,109,836	36,882,901
Exchange Traded Funds - Fixed Income (ETFs)	281,419	287,307
International Obligations	6,052,040	6,179,294
Real Estate Investment Trust (REITs) - Equity	4,536,451	4,766,295
Totals	109,712,732	112,858,323
		Exh. VIII
Proprietary Fund:		
Domestic Equities	6,317	6,907
International Obligations	976,507	1,001,750
Corporate Obligations	6,917,001	7,111,442
Exchange Traded Funds - Fixed Income (ETFs)	45,408	46,577
Totals	7,945,233	8,166,676
		Exh. V

Repurchase Agreements

During the fiscal year 2020, the System invested the cash collaterals from the securities lending program in repurchase agreements. As of August 31, 2020, the System had \$121,024,999 of repurchase agreements.

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 categories of these investments as of August 31, 2020 are summarized in Figure 8.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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

Currency	No. of Funds	Commitment	Remaining Commitment	Adjusted Funded Amount	Fair Value	Redemption Frequency	Redemption Notice	Redemption Restrictions
		\$	\$	\$	\$			
Private Equity:								
US Dollar	132	7,639,171,756	2,725,674,761	4,913,496,995	4,108,381,836	N/A	N/A	N/A
Euro Dollar	19	824,685,949	402,805,360	421,880,589	293,277,607	N/A	N/A	N/A
British Pound	3	104,438,100	32,957,027	71,481,073	94,036,086	N/A	N/A	N/A
Korean Won	1	23,991,017	0	23,991,017	32,796	N/A	N/A	N/A
Sub-total	155	8,592,286,822	3,161,437,148	5,430,849,674	4,495,728,326			
Private Real Estate:								
US Dollar	72	4,544,514,532	1,693,670,058	2,850,844,474	2,205,668,833	N/A, Monthly/ Quarterly	N/A, 45-90 Days	N/A
Euro Dollar	3	228,426,450	47,517,613	180,908,837	134,674,003	N/A, Monthly/ Quarterly	N/A, 45-90 Days	N/A
British Pound	1	56,667,737	11,957,481	44,710,256	17,379,442	N/A	N/A	N/A
Sub-total	76	4,829,608,719	1,753,145,152	3,076,463,567	2,357,722,279			
Private Infrastructure:								
US Dollar	31	1,868,600,000	778,307,209	1,090,292,791	970,144,776	N/A	N/A	N/A
Australian Dollar	2	75,225,443	297,145	72,253,992	74,847,485	N/A	N/A	N/A
British Pound	1	9,372,650	—	9,372,650	19,849,998	N/A	N/A	N/A
Euro Dollar	2	149,493,750	134,185,590	15,308,160	13,156,066	N/A	N/A	N/A
Sub-total	36	2,102,691,843	915,464,250	1,187,227,593	1,077,998,325			
Private Fixed Income:								
US Dollar	8	850,000,000	306,318,940	543,681,060	560,583,485	N/A	N/A, 90 Days	N/A
Hedge Funds:								
Equity Long/Short								
US Dollar	2	310,000,000	—	310,000,000	522,496,595	Monthly	30 Days	N/A
US Dollar	1	75,000,000	—	75,000,000	77,588,121	Annually	45 Days	12 Month Lockup
Event Driven								
US Dollar	1	109,554,176	—	109,554,176	88,494,796	Monthly	30 Days	N/A
US Dollar	1	80,000,000	—	80,000,000	30,277,023	Quarterly	60 Days	12 Month Lockup
US Dollar	1	100,000,000	—	100,000,000	109,342,985	Quarterly	65 Days	N/A
Macro								
US Dollar	1	100,000,000	—	100,000,000	75,046,140	Quarterly	30 Days	N/A
US Dollar	1	105,000,000	—	105,000,000	85,439,011	Quarterly	60 Days	25% Fund Gate, 24 Month Lockup
Multi-Strategies								
US Dollar	1	120,000,000	—	120,000,000	130,886,279	Quarterly	180 Days	12.5% Fund Gate, 12 Month Lockup
US Dollar	1	16,345,085	—	16,345,085	16,082,463	N/A	N/A	N/A
US Dollar	1	150,000,000	23,948,109	126,051,891	129,924,026	Varies	Varies	Varies
US Dollar	1	125,000,000	—	125,000,000	139,157,344	Rolling 9 Month	60 Days	25% Investor Gate, 9 Month Lockup
Opportunistic								
US Dollar	1	100,000,000	—	100,000,000	92,823,543	Annually	N/A	36 Month Lockup
US Dollar	1	150,000,000	—	150,000,000	170,156,271	Quarterly	60 Days	33% Investor Gate
US Dollar	1	5,000,000	—	5,000,000	6,375,978	Quarterly	60 Days	33% Investor Gate
Relative Value								
US Dollar	1	100,000,000	—	100,000,000	82,964,734	Quarterly	45 Days	N/A
US Dollar	1	100,000,000	—	100,000,000	46,953,323	Semiannually	90 Days	12.5% Investor Gate
US Dollar	1	100,000,000	—	100,000,000	121,627,536	Quarterly	60 Days	50% Investor Gate
US Dollar	1	100,000,000	—	100,000,000	116,790,231	Quarterly	45 Days	25% Investor Gate
Sub-total	19	1,945,899,261	23,948,109	1,921,951,152	2,042,426,398			
Total	294	18,320,486,645	6,160,313,599	12,160,173,046	10,534,458,813			

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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, 2020 is presented in Figure 9.

Figure 9
Net Position - Fiduciary Fund

Fund Type	Amount
	\$
Defined Benefit Plans (Note A)	29,476,055,755
Deferred Compensation Plans and Cafeteria Plan:	
Administration - Deferred Compensation Plans	6,532,962
Administration - State Employees Cafeteria Plan	23,755,743
Total Deferred Compensation Plans and Cafeteria Plan	30,288,705
Commuter Spending Account Fund	548,273
Net Position Restricted for Pension and Other Benefits	29,506,892,733
	Exh. VIII

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

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, 2020.

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. The System has option contracts as of August 31, 2020 is summarized in Figure 10.

Forward Contracts

The System enters into forward contracts to minimize the short-term impact of foreign exchange rate fluctuation on the asset and liability positions of international equities. The System had no outstanding forward contracts on August 31, 2020.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

**Figure 10
Summary of Outstanding Derivative Investments**

Options	Expiration Date	No. of Options		Change in Fair Value		Fair Value		
				Put/Call	Classification	Amount	Classification	Amount
Equity	9/18/2020	300	Put	Investment Revenue	(29,833)	Investments	(107,425)	(77,592)
Total Options		300			(29,833)		(107,425)	(77,592)

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 as operating leases. Current year expenses for these leased assets totaled \$549,309. 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, 2020 is presented in Figure 11.

**Figure 11
Non-Cancelable Operating Leases**

Fiscal Year	Future Minimum Lease Rental Payments	Future Minimum Lease Rental Revenues
2021	522,438	41,418
2022	451,009	45,980
2023	388,056	45,980
2024	347,734	45,980
2025	232,655	45,980
	1,941,892	225,338

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 for employee class was 9.5% for fiscal year 2020. Legislators and other elected class

Notes to the Basic Financial Statements (Continued)

August 31, 2020

members are required to contribute 9.5% of their compensation to the System.

For fiscal year 2020, 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 as commissioned law enforcement officers by the Texas Commission of Law Enforcement.

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 2020, both employee members and the State contributed 0.5% of the covered payroll for LECOS members. An additional \$13,592,954 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 became 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 9.5% of their compensation to the System during fiscal year 2020. Members who accrue 20 years of service credit in the retirement system may cease making contributions, but are considered contributing members for all other purposes; however, the State contribution continues. For the fiscal year ended August 31, 2020 the State contributed 15.663% of the payroll of members. See Note 3.B Funded Status and Funding Progress.

3.B Net Pension Liability

(In accordance with GASB Statement 67)

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.

Figure 12
Actuarial Assumptions - Defined Benefit Plans

	Employees Retirement Fund	Law Enforcement and Custodial Officer Supplemental Fund	Judicial Retirement System Plan II
	(In accordance with GASB Statement No. 67)		
Valuation Date		August 31, 2020	
Actuarial Cost Method		Entry Age Normal	
Investment Rate of Return		7.0%	
Projected Salary Increases	0.0% – 8.8%	3.75% – 8.75%	2.3% plus follows State judicial tiered salary schedule as prescribed in Section 659.012
Inflation Rate		2.3%	
Last Experience Study	5-year period from September 1, 2014 to August 31, 2019		
Mortality Rate	2020 State Retirees of Texas (SRT) mortality table. Generational mortality improvements in accordance with ultimate rates from the scale most recently published by Retirement Plans Experience Committee of the Society of Actuaries ("Scale U-MP") and projected from the year 2020. Rates for male LECO members are set forward one year.		

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Based on the actuarial assumptions listed in Figure 11, the components of the net pension liability as of August 31, 2020 are determined and summarized in Figure 13. The projected cash flow 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 State contributions and maintain 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 indicates that the legislature is committed to funding the state pension obligations. Projected employer contributions are based on fiscal year 2020 funding levels. See Note 3.A for descriptions of member and State contributions.

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 the target asset allocation percentage and 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, 2020 are summarized in Figure 14.

**Figure 14
Target Allocations**

Asset Class	Target Allocation	Real Return	Long-term Expected Portfolio Real Rate of Return
	%	%	%
Global Equity	37.00	8.10	2.15
Private Equity	13.00	11.20	1.16
Global Credit	11.00	5.80	0.39
Opportunistic Credit	3.00	7.80	0.17
Real Estate Investment Trust	3.00	7.60	0.16
Infrastructure/Land	7.00	7.20	0.34
Private Real Estate	9.00	5.70	0.31
Fixed Income - Rates	11.00	1.90	(0.04)
Absolute Returns	5.00	5.80	0.18
Cash	1.00	1.80	(0.01)
Totals	100.00		4.79
Inflation			2.30
Expected Nominal Rate of Return			7.09

In May 2020, the System Board of Trustees adopted a long-term rate of return assumption of 7.0% after considering 1) the long-term expected return from the building block method; 2) an analysis of long-term expected return performed by the System investment consultant; and 3) analyses and recommendations of the System pension actuary. A formal review of the assumption will occur as part of the next asset allocation and experience study.

A single discount rate was used to measure the total pension liability as of August 31, 2020. 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 flow 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.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Figure 13
Net Pension Liability
(In accordance with GASB Statement No. 67)

	ERS		LECOS	JRS II
	\$	\$	\$	
Total Pension Liability	65,936,876,828		2,862,456,243	781,670,394
Plan Fiduciary Net Position	27,946,206,540		947,324,194	477,331,237
Net Pension Liability	<u>37,990,670,288</u>		<u>1,915,132,049</u>	<u>304,339,157</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	42.38%		33.09%	61.07%

The single discount rate, the municipal bond rates, and the year when the fiduciary net position is projected to be depleted are summarized in Figure 15.

Figure 15
Assumptions for Single Discount Rate

	ERS	LECOS	JRS II
Expected investment rate of return	7.00 %	7.00 %	7.00 %
Municipal bond rate (Note A)	2.33 %	2.33 %	2.33 %
Year fiduciary net position depleted	2044	2036	2041
Single Discount Rate	3.62 %	2.87 %	4.19 %

Note A: The source of the municipal bond rate is the rate for Fixed Income Market Data/Yield Curve/Data Municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index."

The sensitivity of the net pension liability to one percentage point increase or decrease to the single discount rate is summarized in Figure 16.

Figure 16
Sensitivity of Net Pension Liability

Net Pension Liability	1% Decrease	Single Discount Rate	1% Increase
ERS:	2.62%	3.62%	4.62%
	\$48,372,383,169	\$37,990,670,288	\$29,625,291,116
LECOS:	1.87%	2.87%	3.87%
	\$2,448,883,618	\$1,915,132,049	\$1,498,098,752
JRS II:	3.19%	4.19%	5.19%
	\$396,587,380	\$304,339,157	\$226,534,890

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, 2020, the annual money-weighted rate of return on the defined benefit plans was 6.7%. 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, 2020 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, 2020 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.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Figure 17
Retirement Systems Membership

	ERS			
	Employee Class	Elected Class	LECOS	JRS II
Retirees and Beneficiaries Currently Receiving Benefits	117,265	731	14,697	484
Terminated Employees Entitled to By Not Yet Receiving Benefits	134,780	129	25,511	187
Active Employees	141,733	329	35,230	570
Totals	393,778	1,189	75,438	1,241

Note: Estimated based on actuarial valuation as of August 31, 2020.

Figure 18
Reserves

	ERS	LECOS	JRS II	Totals
Net Plan Assets Reserved For:	\$	\$	\$	\$
Employee Savings	6,278,991,035	58,423,646	79,308,832	6,416,723,513
State Accumulation	(3,937,564,674)	(31,453,288)	73,317,679	(3,895,700,283)
Annuity Reserves	25,604,780,179	920,353,836	324,704,726	26,849,838,741
Total Net Plan Assets Reserved	27,946,206,540	947,324,194	477,331,237	29,370,861,971
	(Exh. VIII)	(Exh. VIII)	(Exh. VIII)	

4. Other Postemployment Benefits 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.

Figure 19
Participating Reporting Entities for the State Retiree Health Plan

	August 31, 2020
State Agencies	115
Universities	27
Junior and Community Colleges	50
Other Entities	8
Total Participating Entities	200

The principal participating employer is the state of Texas. State agencies and universities employ 187,142 which is 80.5% of the employees covered by the State Retiree Health Plan.

Contributions

Figure 20 summarizes the maximum monthly employer contribution toward eligible retirees' health and basic life premium, which is based on a blended rate. 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.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

Figure 20
Employer Contribution Rates - Retiree Health and Basic Life Premium - Fiscal Year 2020

	September 1, 2020
	\$
Retiree Only	624.82
Retiree & Spouse	1,340.82
Retiree & Children	1,104.22
Retiree & Family	1,820.22

Figure 21 summarizes premium contributions by source and claims expenses on a pay-as-you-go basis for the current fiscal year. 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

	Amount
	\$
Contributions:	
Employers	748,369,212
Non-Employer Contributing Entities	37,736,903
Federal Revenues:	
Medicare Part D	1,768,189
Direct Subsidy	12,121,300
Low Income Premium Subsidy	577,613
Low Income Cost Sharing	4,620,970
Catastrophe Reinsurance	92,010,434
Total Federal Revenues	111,098,506
Total Contributions	897,204,621
Claims Expenses	1,076,889,832
Less: Payments from Inactive Members	(230,151,101)
Benefit Payments	846,738,731

4.B Net OPEB Liability

(In accordance with GASB Statement 74)

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.

Figure 23 shows the System's net OPEB liability for the State Retiree Health Plan as of August 31, 2020. 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

	Amount
	\$
Total OPEB Liability	33,149,579,149
Less: Plan Fiduciary Net Position	104,947,452
Net OPEB Liability	33,044,631,697
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.32 %

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 2020. Multiyear trend information is presented.

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 funds 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.

Notes to the Basic Financial Statements (Continued)

August 31, 2020

**Figure 22
Actuarial Assumptions - State Retiree Health Plan**

Valuation Date	August 31, 2020
Actuarial Cost Method	Entry Age
Last Experience Study	State Agency Members: 5-year period from September 1, 2014 to August 31, 2019 Higher Education Members: 7-year period from September 1, 2010 to August 31, 2017
Actuarial Assumptions:	
Discount Rate	2.20%
Projected Annual Salary Increase	2.30% to 9.05%, including inflation
Annual Healthcare Trend Rate	<u>HealthSelect</u> 8.80% for FY2022, 5.25% for FY2023, 5.00% for FY2024, 4.75% for FY2025, 4.60% for FY2026, decreasing 10 basis points per year to an ultimate rate of 4.30% for FY2029 and later years <u>HealthSelect Medicare Advantage</u> -53.30% for FY2022, 0.00% for FY2023, 66.67% for FY2024, 24.00% for FY2025, 4.60% for FY2026, decreasing 10 basis points per year to an ultimate rate of 4.30% for FY2029 and later years <u>Pharmacy</u> 10.00% for FY2022 and FY2023, decreasing 100 basis points per year to 5.00% for FY2028 and 4.30% for FY2029 and later years
Inflation Assumption Rate	2.30%
Ad hoc Postemployment Benefit Changes	None
Mortality Rate	<u>State Agency Members</u> a. Service Retirees, Survivors and other Inactive Members (Regular, Elected, CPO/CO and JRS I and II Employee Classes): 2020 State Retirees of Texas Mortality table with a 1 year set forward for male CPO/CO members and Ultimate MP Projection Scale projected from the year 2020. b. Disability Retirees (Regular, Elected, CPO/CO and JRS I and II Employee Classes): 2020 State Retirees of Texas Mortality table with a 3 year set forward for males and females with minimum rates at all ages of 3.0% for males and 2.5% for females, respectively, and Ultimate MP Projection Scale projected from the year 2020. c. Active Members: Pub-2010 General Employees Active Member Mortality table for non-CPO/CO members and Pub-2010 Public Safety Active Member Mortality table for CPO/CO members with Ultimate MP Projection Scale from the year 2010. <u>Higher Education Members</u> a. Service Retirees, Survivors and other Inactive Members: Tables based on TRS experience with Ultimate MP Projection Scale from the year 2018. b. Disability Retirees: Tables based on TRS experience with Ultimate MP Projection Scale from the year 2018 using a 3-year set forward and minimum mortality rates of four per 100 male members and two per 100 female members. c. Active Members: Sex Distinct RP-2014 Employee Mortality multiplied by 90% with Ultimate MP Projection Scale from the year 2014

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

Expected investment rate of return	Not applicable because the plan operates on a pay-as-you-go basis
Municipal bond rate (Note A)	2.20%
Year fiduciary net position depleted	2021
Single Discount Rate	2.20%
<i>Note A: The source of the municipal bond 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.</i>	

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 Thousands) -
State Retiree Health Plan**

	1% Decrease	Single Discount Rate	1% Increase
Rate	1.20%	2.20%	3.20%
Net OPEB Liability	\$39,275,875	\$33,044,632	\$28,163,011

Notes to the Basic Financial Statements (Continued)

August 31, 2020

The initial healthcare trend rate is 8.8% for HealthSelect and (53.3)% for HealthSelect Medicare Advantage and the ultimate rate is 4.3% for both. The sensitivity of the net OPEB liability to the changes in the discount rate and healthcare trend rate is summarized in Figure 26.

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, 2020, the annual money-weighted rate of return on the State Retiree Health Plan was 1.59%.

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, 2020 is summarized in Figure 27.

Figure 27
State Retiree Health Plan Membership

Active Members	232,367
Inactive Members Currently Receiving Benefit Payments	130,910
Inactive Members Entitled to But Not Yet Receiving Benefit Payments	12,317
Total	<u>375,594</u>

Note: Estimated based on actuarial valuation as of August 31, 2020

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.

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

	1% Decrease (HealthSelect: 7.80% decreasing to 3.30%; HealthSelect Medicare Advantage: -54.30% to 3.30%; Pharmacy: 9.00% decreasing to 3.30%)	Current Healthcare Cost Trend Rates (HealthSelect: 8.80% decreasing to 4.30%; HealthSelect Medicare Advantage: -53.30% to 4.30%; Pharmacy: 10.00% decreasing to 4.30%)	1% Increase (HealthSelect: 9.80% decreasing to 5.30%; HealthSelect Medicare Advantage: -52.30% to 5.30%; Pharmacy: 11.00% decreasing to 5.30%)
Net OPEB Liability	\$27,656,183	\$33,044,632	\$40,108,325

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).

The majority of the due to other funds balance in the Employees Life, Accident and Health Insurance and Benefits fund are payments from retirees, which are due to the State Retiree Health Plan. Figure 28 presents individual interfund receivable and interfund payable balances at August 31, 2020.

Figure 28
Interfund Receivables and Payables

	Due From Other Funds	Due to Other Funds
Governmental Activities:	\$	\$
Governmental Funds		9,892
Employees Life, Accident & Health Insurance and Benefits Fund	917,867	11,260,983
Total Governmental Activities	917,867	11,270,875
Fiduciary Funds:		
Pension & Other Employee Benefit Trust Funds	13,385,543	3,032,535
Total - Interfund Receivables & Payables	14,303,410	14,303,410

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 presents interfund transfers for the year ended August 31, 2020.

Figure 29
Interfund Transfers

	Transfers In	Transfers Out
	\$	\$
Governmental Activities:		
Non-Major Governmental Fund:		
Social Security Administration	47,500	
Total Governmental Activities	47,500	—
Fiduciary Funds:		
Pension and Other Employee Benefit Trust Funds	1,077,860	1,125,360
Total - Interfund Transfers	1,125,360	1,125,360

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

Notes to the Basic Financial Statements (Continued)

August 31, 2020

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.

6.C Incentive Compensation Plan

An Incentive Compensation Plan was adopted in December 2006 and amended subsequently to enable the System to remain competitive in its efforts to attract, retain, and motivate talented employees who are specialized in investments and other functions that support investment decisions. The purpose of the Plan is to provide the opportunity for Plan participants to earn performance incentive pay based on the System's investment performance and the participant's job performance.

Payments can only be earned following years in which the System earns a positive return, and plan participants must be employed by the System on the designated dates in the Plan in order to earn and receive payment. The Board of Trustees may cancel or modify the Plan at any time. The performance incentive pay is paid over the subsequent 2 years. The remaining liability for the incentive pay plan as of August 31, 2020 will not exceed \$6.2 million.

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, dental health maintenance organization (DHMO) 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.

Notes to the Basic Financial Statements (Concluded)

August 31, 2020

**Figure 30
Summary of Risk Financing**

Type of Coverage	Plan Name	Self-Funded	Risk Retained with
Health	• HealthSelect	Yes	System
	• Consumer Directed HealthSelect	Yes	System
	• HMOs	No	Insurance Carrier
	• Prescription Drug	Yes	System
	• Vision	Yes	System
Life	N/A	No	Insurance Carrier
Accidental Death and Dismemberment	N/A	No	Insurance Carrier
Disability	N/A	Yes	System
Dental	• DHMOs	No	Insurance Carrier
	• Dental Indemnity Plan	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

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. 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 fiscal year are presented in Figure 31.

**Figure 31
Changes in Self-Funded Claims Liabilities**

	Amount
	\$
Beginning Balance	635,161,172
Current-Year Claims and Changes in Estimates	2,160,806,204
Claim Payments	(2,120,813,266)
Ending Balance	<u>675,154,110</u>

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, 2020 is \$618,851,172. Claim settlements did not exceed coverage in the last three fiscal years.

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 1,199 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.

Required Supplementary Information

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

	2014	2015	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$	\$	\$
Employees Retirement Fund (Note A)							
Total Pension Liability							
Service Cost	1,139,451	1,231,203	1,146,791	1,457,263	1,445,557	1,346,986	1,827,864
Interest	2,324,180	2,373,849	2,522,626	2,510,128	2,559,723	2,694,083	2,516,723
Changes of Benefit Terms	—	(87,835)	—	—	—	—	—
Difference between Expected and Actual Experience	(252,967)	(284,751)	133,557	115,632	91,881	(578,195)	510,657
Changes of Assumptions	1,199,067	(3,429,167)	5,301,965	2,219,672	(1,982,914)	8,469,458	6,366,987
Benefit Payments and Refunds	(1,963,481)	(2,049,291)	(2,147,307)	(2,288,825)	(2,406,361)	(2,540,262)	(2,621,737)
Net Change in Total Pension Liability	2,446,250	(2,245,992)	6,957,632	4,013,870	(292,114)	9,392,070	8,600,494
Total Pension Liability - Beginning	37,064,667	39,510,917	37,264,925	44,222,557	48,236,427	47,944,313	57,336,383
Total Pension Liability - Ending	39,510,917	37,264,925	44,222,557	48,236,427	47,944,313	57,336,383	65,936,877
Plan Fiduciary Net Position							
Contributions - Employer	482,239	500,395	686,763	700,078	697,189	712,648	735,856
Contributions - Member	430,595	462,159	674,678	685,461	683,933	694,788	713,985
Pension Plan Net Investment Income	3,252,417	56,941	1,273,414	2,832,628	2,430,297	758,467	1,791,061
Benefit Payments and Refunds	(1,963,481)	(2,049,291)	(2,147,307)	(2,288,825)	(2,406,361)	(2,540,262)	(2,621,737)
Pension Plan Administrative Expense	(20,195)	(21,840)	(20,449)	(23,095)	(23,550)	(27,752)	(24,182)
Net Change in Plan Fiduciary Net Position	2,181,575	(1,051,636)	467,099	1,906,247	1,381,508	(402,111)	594,983
Plan Fiduciary Net Position - Beginning	22,868,542	25,050,117	23,998,481	24,465,580	26,371,827	27,753,335	27,351,224
Plan Fiduciary Net Position - Ending	25,050,117	23,998,481	24,465,580	26,371,827	27,753,335	27,351,224	27,946,207
Net Pension Liability - Ending	14,460,800	13,266,444	19,756,977	21,864,600	20,190,978	29,985,159	37,990,670
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	63.4%	64.4%	55.32%	54.67%	57.89%	47.7%	42.38%
Covered Payroll (Note B)	5,955,461	6,150,195	6,742,143	6,859,707	6,811,926	6,947,625	7,158,435
Net Pension Liability as a Percentage of Covered Payroll	242.82%	215.71%	293.04%	318.74%	296.41%	431.59%	530.71%

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Required Supplementary Information (Continued)

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

	2014	2015	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$	\$	\$
Law Enforcement and Custodial Officer Supplemental Fund (Note A)							
Total Pension Liability							
Service Cost	54,528	57,459	71,429	99,390	79,309	71,926	96,690
Interest	88,025	87,224	88,410	82,236	91,171	96,085	86,012
Difference between Expected and Actual Experience	(76,585)	(9,640)	(21,657)	(17,532)	(21,651)	(54,147)	(1,841)
Changes of Assumptions	68,228	148,114	375,371	(144,398)	(87,015)	427,818	158,946
Benefit Payments and Refunds	(57,147)	(61,344)	(64,542)	(69,756)	(75,633)	(82,250)	(86,706)
Net Change in Total Pension Liability	77,049	221,813	449,011	(50,060)	(13,819)	459,432	253,101
Total Pension Liability - Beginning	1,465,929	1,542,978	1,764,791	2,213,802	2,163,742	2,149,923	2,609,355
Total Pension Liability - Ending	1,542,978	1,764,791	2,213,802	2,163,742	2,149,923	2,609,355	2,862,456
Plan Fiduciary Net Position							
Contributions - Employer	27,758	26,728	27,497	26,583	26,110	25,864	22,293
Contributions - Member	8,180	8,376	9,539	9,583	9,275	9,098	8,950
Pension Plan Net Investment Income	111,741	1,918	44,831	99,341	84,938	26,250	61,097
Benefit Payments and Refunds	(57,147)	(61,344)	(64,542)	(69,756)	(75,633)	(82,250)	(86,706)
Pension Plan Administrative Expense	(1,324)	(1,411)	(1,421)	(1,811)	(1,851)	(2,167)	(1,933)
Net Change in Plan Fiduciary Net Position	89,208	(25,733)	15,904	63,940	42,839	(23,205)	3,701
Plan Fiduciary Net Position - Beginning	780,670	869,878	844,145	860,049	923,989	966,828	943,623
Plan Fiduciary Net Position - Ending	869,878	844,145	860,049	923,989	966,828	943,623	947,324
Net Pension Liability - Ending	673,100	920,646	1,353,753	1,239,753	1,183,095	1,665,732	1,915,132
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	56.38%	47.83%	38.85%	42.70%	44.97%	36.16%	33.09%
Covered Payroll (Note B)	1,496,013	1,506,028	1,725,880	1,746,349	1,689,590	1,682,633	1,662,147
Net Pension Liability as a Percentage of Covered Payroll	44.99%	61.13%	78.44%	70.99%	70.02%	99.00%	115.22%

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Required Supplementary Information (Continued)

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

	2014	2015	2016	2017	2018	2019	2020
Judicial Retirement System Plan II (Note A)							
Total Pension Liability							
Service Cost	17,805	16,244	19,429	20,420	16,056	16,415	28,965
Interest	28,004	30,785	30,980	31,671	34,440	36,103	35,248
Changes of Benefit Terms	—	—	—	—	—	(1,019)	—
Difference between Expected and Actual Experience	(640)	(10,066)	(5,833)	5,091	(1,463)	26,592	(12,695)
Changes of Assumptions	(25,924)	35,653	23,397	(56,699)	—	111,655	113,895
Benefit Payments and Refunds	(16,420)	(19,238)	(21,155)	(23,361)	(24,865)	(29,220)	(32,041)
Net Change in Total Pension Liability	2,825	53,378	46,818	(22,878)	24,168	160,526	133,372
Total Pension Liability - Beginning	383,461	386,286	439,664	486,482	463,604	487,772	648,298
Total Pension Liability - Ending	386,286	439,664	486,482	463,604	487,772	648,298	781,670
Plan Fiduciary Net Position							
Contributions - Employer	12,211	12,457	12,374	12,495	12,560	13,100	14,186
Contributions - Member	5,195	5,465	5,754	6,017	5,940	6,463	8,634
Pension Plan Net Investment Income	46,186	820	19,862	44,875	39,192	12,832	30,633
Benefit Payments and Refunds	(16,420)	(19,238)	(21,155)	(23,361)	(24,866)	(29,220)	(32,041)
Pension Plan Administrative Expense	(267)	(284)	(226)	(295)	(296)	(363)	(273)
Net Change in Plan Fiduciary Net Position	46,905	(780)	16,609	39,731	32,530	2,812	21,139
Plan Fiduciary Net Position - Beginning	318,385	365,290	364,510	381,119	420,850	453,380	456,192
Plan Fiduciary Net Position - Ending	365,290	364,510	381,119	420,850	453,380	456,192	477,331
Net Pension Liability - Ending	20,996	75,154	105,363	42,754	34,392	192,106	304,339
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	94.56%	82.91%	78.34%	90.78%	92.95%	70.37%	61.07%
Covered Payroll (Note B)	77,441	77,501	78,261	78,190	78,772	79,711	88,579
Net Pension Liability as a Percentage of Covered Payroll	27.11%	96.97%	134.63%	54.68%	43.66%	241.00%	343.58%

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 (Continued)

Schedule of Employer Contributions – Defined Benefit Plans

Fiscal Year (Note A)	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency/(Excess)	Covered 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
2018	933,914,990	697,189,414	236,725,576	6,811,925,525	10.23
2019	946,266,489	712,647,639	233,618,850	6,947,624,737	10.26
2020	985,000,670	735,855,712	249,144,958	7,158,435,103	10.28
Law Enforcement and Custodial Officer Supplemental 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
2018	53,560,012	26,109,655	27,450,357	1,689,590,272	1.55
2019	54,853,838	25,864,146	28,989,692	1,682,633,066	1.54
2020	56,679,229	22,293,664	34,385,565	1,662,147,480	1.34
Judicial Retirement System Plan 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
2018	12,934,435	12,559,722	374,713	78,772,445	15.94
2019	13,056,631	13,100,263	(43,632)	79,710,813	16.43
2020	16,342,752	14,186,283	2,156,469	88,578,603	16.02

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

Required Supplementary Information (Continued)

Schedule of Changes in Net OPEB Liability and Related Ratios

(in 000's)

	2017 (Note A)	2018	2019	2020
State Retiree Health Plan (Note B)				
Total OPEB Liability				
Service Cost	2,303,979	1,495,979	1,206,106	1,539,978
Interest	1,225,588	1,261,856	1,221,955	1,063,159
Difference between Expected and Actual Experience	(501,666)	(935,689)	(89,009)	(818,424)
Changes of Assumptions	(8,728,822)	(5,924,045)	3,006,228	(2,520,337)
Benefit Payments and Refunds	(728,548)	(662,723)	(740,841)	(737,408)
Net Change in Total OPEB Liability	(6,429,469)	(4,764,622)	4,604,439	(1,473,032)
Total OPEB Liability - Beginning	41,212,263	34,782,794	30,018,172	34,622,611
Total OPEB Liability - Ending	34,782,794	30,018,172	34,622,611	33,149,579
Plan Fiduciary Net Position				
Contributions - Employer	892,205	307,029	401,285	748,369
Contributions - Non-employer Contributing Entity	45,035	16,585	20,183	37,737
Contributions - Member (Note C)	195,806			
Contributions - Federal Revenues for Medicare Part D Subsidies	1,659	1,418	1,480	1,768
Contributions - Adjustments	(2,071)			
Net Investment Income	4,517	10,907	3,323	1,336
Health Care Claims	(995,816)	(938,921)	(1,038,588)	(1,076,890)
Payment from Members (Note C)		203,123	209,837	230,151
Total Benefit Payments	(995,816)	(735,798)	(828,751)	(846,739)
Administrative Expense	(5,629)	(5,818)	(6,008)	(6,815)
Other - Federal Revenues	71,462	73,075	87,909	109,331
Other Additions	356	3,249	85	24
Net Change in Plan Fiduciary Net Position	207,524	(329,353)	(320,494)	45,011
Plan Fiduciary Net Position - Beginning	502,259	709,783	380,430	59,936
Plan Fiduciary Net Position - Ending	709,783	380,430	59,936	104,947
Net OPEB Liability - Ending	34,073,011	29,637,742	34,562,675	33,044,632
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	2.04%	1.27%	0.17%	0.32%
Covered Employee Payroll	11,745,310	12,047,167	12,320,028	12,655,247

Note A: The beginning balance and components of the total OPEB liability for fiscal year 2017 are recalculated based on the correct discount rate defined under GASB Statement No. 74.

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

Note C: In fiscal year 2017, payments from members were reported as contributions from members. Beginning from fiscal year 2018, payments from members are reported as deductions from benefit payments.

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

Fiscal Year (Note A)	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency/(Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
	\$	\$	\$	\$	%
State Retiree Health Plan					
2017	2,714,958,093	936,827,489	1,778,130,604	11,745,310,057	7.98
2018	2,332,643,695	325,031,537	2,007,612,158	12,047,166,658	2.70
2019	2,687,207,910	422,947,418	2,264,260,492	12,320,028,164	3.43
2020	2,590,236,378	787,874,304	1,802,362,074	12,655,246,687	6.23

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

Required Supplementary Information (Continued)

Schedule of Investment Returns

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

	2014	2015	2016	2017	2018	2019	2020
							%
Defined Benefit Plans:							
Employees Retirement Fund	14.58	0.23	5.40	11.84	9.42	2.80	6.70
Law Enforcement and Custodial Officer Supplemental Fund	14.55	0.22	5.39	11.80	9.40	2.79	6.64
Judicial Retirement System Plan II	14.55	0.23	5.47	11.88	9.40	2.86	6.78
Overall	14.58	0.23	5.40	11.84	9.42	2.80	6.70
Other Post-Employment Benefit Plan:							
State Retiree Health Plan	N/A	N/A	N/A	1.03	1.84	2.32	1.59

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. 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, 2019, based on the actuarial assumptions described in Figure 1. These contributions are reported in the Schedule of Employer's Contribution – Defined Benefit Plans.

Other Postemployment Benefit Plan

The assumptions and methods used for this actuarial valuation are the same as those used for defined benefit plans where appropriate. Additional information on the actuarial assumptions as of

Figure 1
Summary of Actuarial Assumptions - Defined Benefit Plans

	Employees Retirement Fund	Law Enforcement and Custodial Officer Supplemental Fund	Judicial Retirement System Plan II
	(In accordance with GASB Statement No. 67)		
Valuation Date	August 31, 2019	August 31, 2019	August 31, 2019
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Open	Level Percentage of Payroll, Open	Level Percentage of Payroll, Open
Remaining Amortization Period	31 years	31 years	31 years
Asset Valuation Method	Marked to Market. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.	Marked to Market. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.	Marked to Market. Future gains and losses each recognized over closed five-year period, with allowance of direct offsetting of deferrals by subsequent gains or losses.
Actuarial Assumptions:			
Investment Rate of Return	7.50%	7.50%	7.50%
Projected Salary Increases	0.0% – 9.5%	4.5% – 9.5%	3.00%
Inflation Rate	2.50%	2.50%	2.50%
Cost-of-living Adjustments	None – Employee 3.5% – Elected	None	None

Required Supplementary Information (Concluded)

Notes to The Required Supplementary Information (Concluded)

the latest actuarial valuation is summarized in Figure 2. The following assumptions have been changed since the previous Other Postemployment Benefits (OPEB) valuation:

- Demographic assumptions (including rates of preretirement and post-disability mortality for all State Agency members; assumed rates of termination and retirement for certain members who are Certified Peace Officers/Custodial Officers (CPO/CO); and assumed salary, aggregate payroll increases and the assumed rate of general inflation) have been updated to reflect assumptions recently adopted by the System's Board of Trustees.
- Assumed Per Capita Health Benefit Costs and assumed Health Benefit Cost and Retiree Contribution trends have been updated to reflect recent experience and its effects on our short term expectations.
- 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 percentage of future female retirees assumed to be married and electing coverage for their spouse.
- The proportion of future retirees assumed to cover dependent children have been updated to reflect recent plan experience and expected trends. Moreover, the PCORI fees payable under the ACA have been updated to reflect IRS Notice 2020-44.
- The discount rate was changed from 2.97% as of August 31, 2019 to 2.20% as of August 31, 2020 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 in effect on the measurement date.

The valuation reflects the minor benefit changes that will become effective January 1, 2021, since these changes were communicated to plan members in advance of the preparation of this report. These changes, which are not expected to have a significant impact on plan costs for fiscal year 2021, are provided for in the fiscal year 2021 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, 2020
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	2.20%
Projected Salary Increases	2.30% to 9.05%, including inflation
Inflation Rate	2.30%
Healthcare Cost and Trend Rate	<p style="text-align: center;"><u>HealthSelect</u></p> 8.80% for FY2022, 5.25% for FY2023, 5.00% for FY2024, 4.75% for FY2025, 4.60% for FY2026, decreasing 10 basis points per year to an ultimate rate of 4.30% for FY2029 and later years
	<p style="text-align: center;"><u>HealthSelect Medicare Advantage</u></p> -53.30% for FY2022, 0.00% for FY2023, 66.67% for FY2024, 24.00% for FY2025, 4.60% for FY2026, decreasing 10 basis points per year to an ultimate rate of 4.30% for FY2029 and later years
	<p style="text-align: center;"><u>Pharmacy</u></p> 10.00% for FY2022 and FY2023, decreasing 100 basis points per year to 5.00% for FY2028 and 4.30% for FY2029 and later years



Other Supplementary Information – Schedule 1

Revenues, Expenses and Changes in Statutory Account Balances

(Non-GAAP Presentation) - Employees Retirement Fund
Year Ended August 31, 2020

	Employee Savings Account	State Accumulation Account	Retirement Annuity Reserve Account	Interest Account	Expense Account	Totals
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	706,040,644					706,040,644
Employer Contributions		735,403,354				735,403,354
Service Contributions from Teacher Retirement System			107,757,217			107,757,217
Membership Fees					499,858	499,858
Penalty Interest		7,944,392				7,944,392
Investment Income:						
Net Appreciation in Fair Value of Investments				1,207,108,820		1,207,108,820
Interest and Dividends				620,298,444		620,298,444
Class Action Settlements				1,861,296		1,861,296
Rental Income					41,418	41,418
Warrants Voided By Statute of Limitations		230,961				230,961
Recycling Revenue					589	589
Miscellaneous					2,361	2,361
Total Operating Revenues	706,040,644	743,578,707	107,757,217	1,829,268,560	544,226	3,387,189,354
Operating Expenses						
Retirement System Benefits Paid:						
Retirement Benefits			2,574,767,697			2,574,767,697
Death Benefits:						
Active Members		2,915,749				2,915,749
Retirees			1,877,113			1,877,113
Member Contributions Withdrawn	121,569,462					121,569,462
Service Contributions to Teacher Retirement System			27,517,707			27,517,707
Administrative Expenses					61,745,752	61,745,752
Depreciation Expense					688,131	688,131
Total Operating Expenses	121,569,462	2,915,749	2,604,162,517	—	62,433,883	2,791,081,611
Income (Loss) Before Operating Transfers	584,471,182	740,662,958	(2,496,405,300)	1,829,268,560	(61,889,657)	596,107,743
Operating Transfers In (Out)						
Distribution of Interest	117,282,921	(55,024,087)	1,703,994,709	(1,766,253,543)		
Establishment of Benefit Reserves	(463,956,777)	(2,247,226,439)	2,711,183,216			
Distribution of Interest for Administrative Expenses				(63,015,017)	63,015,017	
Member Accounts-Escheated	(3,228,787)	3,228,787				
Membership Fees Transferred Out					(47,500)	(47,500)
Excess Benefit Arrangement Transfers					(1,077,860)	(1,077,860)
Net Operating Transfers	(349,902,643)	(2,299,021,739)	4,415,177,925	(1,829,268,560)	61,889,657	(1,125,360)
Net Income (Loss)	234,568,539	(1,558,358,781)	1,918,772,625	—	—	594,982,383
Account Balances - Beginning	6,044,422,496	(2,379,205,893)	23,686,007,554	—	—	27,351,224,157
Account Balances - Ending	6,278,991,035	(3,937,564,674)	25,604,780,179	—	—	27,946,206,540

Note: As required by Texas Government Code Chapter 815.322, the System moved funds from the State Accumulation 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, 2020

	Employee Savings Account	State Accumulation Account	Retirement Annuity Reserve Account	Interest Account	Expense Account	Totals
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	8,964,422					8,964,422
State Retirement Contributions		22,293,664				22,293,664
Penalty Interest		(14,511)				(14,511)
Investment Income:						
Net Appreciation in Fair Value of Investments				41,046,801		41,046,801
Interest and Dividends				21,329,272		21,329,272
Class Action Settlements				64,018		64,018
Warrants Voided By Statute of Limitations		8,597				8,597
Total Operating Revenues	8,964,422	22,287,750	—	62,440,091	—	93,692,263
Operating Expenses						
Retirement System Benefits Paid:						
Retirement Benefits			83,198,742			83,198,742
Refunds of Retirement Contributions	3,487,259					3,487,259
Death Benefits:						
Active Members		28,434				28,434
Retirees			544			544
Administrative Expenses					3,275,735	3,275,735
Total Operating Expenses	3,487,259	28,434	83,199,286	—	3,275,735	89,990,714
Income (Loss) Before Operating Transfers	5,477,163	22,259,316	(83,199,286)	62,440,091	(3,275,735)	3,701,549
Operating Transfers In (Out)						
Distribution of Interest	1,148,229	(3,020,924)	61,037,051	(59,164,356)		
Establishment of Benefit Reserves	(2,939,058)	(110,461,179)	113,400,237			
Distribution of Interest for Administrative Expenses				(3,275,735)	3,275,735	
Net Operating Transfers	(1,790,829)	(113,482,103)	174,437,288	(62,440,091)	3,275,735	—
Net Income (Loss)	3,686,334	(91,222,787)	91,238,002	—	—	3,701,549
Account Balances - Beginning	54,737,312	59,769,499	829,115,834	—	—	943,622,645
Account Balances - Ending	58,423,646	(31,453,288)	920,353,836	—	—	947,324,194

Note: As required by Texas Government Code Chapter 815.322, the System moved funds from the State Accumulation 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 3

Revenues, Expenses and Changes in Statutory Account Balances

(Non-GAAP Presentation) - Judicial Retirement System Plan Two Fund

Year Ended August 31, 2020

	Employee Savings Account	State Accumulation Account	Retirement Annuity Reserve Account	Interest Account	Expense Account	Totals
Operating Revenues	\$	\$	\$	\$	\$	\$
Contributions to Retirement System:						
Member Contributions	8,575,003					8,575,003
Employer Contributions		14,186,283				14,186,283
Penalty Interest		59,068				59,068
Investment Income:						
Net Appreciation in Fair Value of Investments				20,674,031		20,674,031
Interest and Dividends				10,547,295		10,547,295
Class Action Settlements				31,321		31,321
Total Operating Revenues	8,575,003	14,245,351	—	31,252,647	—	54,073,001
Operating Expenses						
Retirement System Benefits Paid:						
Retirement Benefits			31,902,116			31,902,116
Death Benefits:						
Active Members		10,622				10,622
Member Contributions Withdrawn	128,056					128,056
Administrative Expenses					893,219	893,219
Total Operating Expenses	128,056	10,622	31,902,116	—	893,219	32,934,013
Income (Loss) Before Operating Transfers	8,446,947	14,234,729	(31,902,116)	31,252,647	(893,219)	21,138,988
Operating Transfers In (Out)						
Distribution of Interest	1,278,390	8,191,201	20,889,837	(30,359,428)		
Establishment of Benefit Reserves	(659,035)	(26,989,422)	27,648,457			
Distribution of Interest for Administrative Expenses				(893,219)	893,219	
Net Operating Transfers	619,355	(18,798,221)	48,538,294	(31,252,647)	893,219	—
Net Income (Loss)	9,066,302	(4,563,492)	16,636,178	—	—	21,138,988
Account Balances - Beginning	70,242,530	77,881,171	308,068,548	—	—	456,192,249
Account Balances - Ending	79,308,832	73,317,679	324,704,726	—	—	477,331,237

Other Supplementary Information – Schedule 4

Administrative and Investment Expenses/Expenditures

Statutory Administrative Funds and Accounts

Year Ended August 31, 2020

	Administrative Expenses (Note A)	
	Non-Investment	Investment
Personnel Services	\$	\$
Salaries and Wages	23,868,920	15,192,716
Payroll Related Costs:		
Retirement Contributions	2,176,166	1,093,746
Retirement Membership Fees	19,383	262
Employees Insurance Contributions	2,600,628	741,627
Retirees Insurance Contributions	1,304,029	307,013
Social Security Contributions	1,691,708	825,185
Unemployment Compensation	26,150	6,158
Total Payroll Related Costs	7,818,064	2,973,991
Total Personnel Services	31,686,984	18,166,707
Professional Fees and Services		
Actuarial Services	1,060,218	
Audit Services	651,872	
Investment Consulting Fees	7	2,948,521
Investment Advisors		10,073,706
Group Benefits Advisors	997	
Medical Board Member Fees	51,100	
Architectural Services	6,000	
Legal Services	178,762	921,812
Computer Programming Services	4,775,936	560,785
Other Professional Services	1,641,441	101,917
Total Professional Fees and Services	8,366,333	14,606,741
Other Services and Charges		
Travel	100,525	317,581
Materials and Supplies:		
Postage	666,293	
General Office and Other Supplies	142,008	298
Subscriptions	52,979	33,839
Furniture and Equipment	213,950	5,039
Computer Software	813,785	
Total Materials and Supplies	1,889,015	39,176
Communications and Utilities:		
Electricity, Gas and Water	194,363	
Telephone and Telegraph	575,747	19
Electronic Communication Services	224,759	6,181,810
Total Communications and Utilities	994,869	6,181,829
Repairs and Maintenance:		
Land and Building	308,266	
Furniture and Equipment	13,893	
Computer Software and Equipment	1,488,764	
Total Repairs and Maintenance	1,810,923	—
Rentals and Leases:		
Computer Software and Equipment	188,873	
Office Equipment	233,335	
Space	127,102	
Total Rentals and Leases	549,310	—
Printing and Reproduction Services	122,595	
Depreciation	688,131	

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Other Supplementary Information – Schedule 4

Administrative and Investment Expenses/Expenditures

Statutory Administrative Funds and Accounts (Concluded)

Year Ended August 31, 2020

	Administrative Expenses (Note A)	
	Non-Investment	Investment
Other Services and Charges (continued)	\$	\$
Other Operating Expenses/Expenditures:		
Membership Fees	34,096	47,761
Employee Training	94,763	25,825
Insurance - Building and Vehicle	36,149	
Fees and Other Charges	2,471,394	60,278
Investment Banking		1,385,640
Tenure Awards	3,159	12
Temporary Employment Agencies	333,095	23,296
Cleaning Services	111,807	
Advertising Services	1,249	2,753
Freight/Delivery Services	4,390	
Purchased Contracted Services	1,273,333	
Prompt Payment Interest	2,488	
SORM Assessment	2,843	667
Third Party Administrator Fee - Cafeteria Plan	1,142,173	
Total Other Operating Expenses/Expenditures	5,510,939	1,546,232
Total Other Services and Charges	11,666,307	8,084,818
Total Expenses/Expenditures	51,719,624	40,858,266
Method of Finance:		
State Employees Retirement System (S.E.R.S.) Trust Account (0955)	24,182,433	38,251,450
Law Enforcement and Custodial Officer Supplement Retirement Trust Fund (0977)	1,932,593	1,343,142
Judicial Retirement System Plan Two Trust Fund (0993)	273,365	619,854
TexaSaver 401(k) Trust Fund (0946)	260,030	26,194
TexaSaver 457 Trust Fund (0945)	165,040	30,508
Commuter Spending Account Fund (3944)	12,201	
State Employees Cafeteria Plan Trust Fund (0943)	1,391,331	1,802
State Retiree Health Plan (3973)	6,814,878	7,717
Total Fiduciary Funds	35,031,871	40,280,667
Employees Life, Accident, Health Insurance and Benefits Trust Account (0973)	16,570,806	577,599
Total Proprietary Fund	16,570,806	577,599
Social Security Administration Trust Account (0929)	116,947	
Total Governmental Funds	116,947	—
Total Method of Finance	51,719,624	40,858,266

Note A: \$93,190,143 management fees were deducted and paid from the net asset value of Alternative Investments during fiscal year 2020. The accrued management fees were reported as deductions from the fair value of Alternative 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, 2020

Nature of Service	Totals
	\$
Actuarial Services - Retirement	347,942
Actuarial Services - Insurance	712,276
Audit Fees - Financial	282,999
Audit Fees - Insurance Carrier	227,721
Audit Fees - Other	141,152
Investment Consulting Fees	2,948,528
Investment Advisors	10,073,706
Group Benefits Advisors	997
Medical Board	51,100
Architectural Services	6,000
Legal Services	1,100,574
Computer Programming Services	5,336,721
Educational Services	95,497
Other Professional Services	1,534,923
Other Consulting Services	112,938
Total Professional and Consulting Fees	22,973,074
Method of Finance:	
State Employees Retirement System (S.E.R.S.) Trust Account (0955)	19,703,874
Law Enforcement and Custodial Officer Supplement Retirement Trust Fund (0977)	734,080
Judicial Retirement System Plan Two Trust Fund (0993)	306,995
Texasaver 401(k) Trust Fund (0946)	7,079
Texasaver 457 Trust Fund (0945)	3,245
Commuter Spending Account Fund (3944)	370
State Employees Cafeteria Plan Trust Fund (0943)	16,835
State Retiree Health Plan (3973)	708,952
Total Fiduciary Funds	21,481,430
Employees Life, Accident, Health Insurance and Benefits Trust Account (0973)	1,486,765
Total Proprietary Fund	1,486,765
Social Security Administration Fund (0929)	4,879
Total Governmental Funds	4,879
Total Method of Finance	22,973,074

INVESTMENT SECTION

Report on Investment Activity

Outline of Investment Policies

Time-weighted Rates of Return and Asset Allocations

Broker Commissions

Fees for Alternative Investments

Investment Advisory and Service Fees

List of Largest Assets Held

Investment Summary at Fair Value



Report on Investment Activity

Fiscal Year 2020

Overview

The System's investment portfolio closed the fiscal year with a fair value of \$29.1 billion and received a net return of 6.82% for the year, compared to the global policy benchmark return of 8.17%. The fiscal year was extremely volatile with a 35% decline in the popular Standard & Poor's 500 Index and other investments assets, due to the economic fallout from the COVID-19 pandemic. Over the longer term, the fund returned 7.30% for the 5 years ended August 31, 2020, compared to the policy benchmark of 7.47%. For the 10 years ended August 31, 2020, the fund returned 8.12%, outperforming the policy benchmark of 8.03%. The fiscal year-end asset allocation stood at 23.31% fixed-income, 39.98% global public equity, 10.96% global real estate, 15.42% in private equity, infrastructure of 3.70%, 4.46% in absolute return funds, 0.45% other investments, and 1.72% in cash.

During Fiscal Year 2020, 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 and its beneficiaries. The Division successfully sustained operations and investment management during the COVID-19 global pandemic, transitioned to a new consultant for the private equity asset class, and completed significant deals associated with the ERS Hedge Fund Emerging Manager Program.

The Division co-hosted the 5th Biennial Real Estate Emerging Manager Program with over 200 investment professionals in attendance. In efforts to equip stakeholders for informed decision making, the staff also broadened in-house educational conferences and promoted strategic outreach, including investment primers to Board and Investment Advisory Committee (IAC), and external stakeholders.

The Division remains committed to enhancing the agency's performance and accountability. The Division's leaders completed the evaluation of the appropriateness, adequacy and effectiveness of the system's practices and performance, as set out in SB 322 passed by the 86th Legislature. The Division also held over 28 asset class investment committee meetings.

As of June 30, 2020 the following had occurred:

- Held 3,481 meetings with external companies, brokers, managers and advisors to provide due

- diligence of investable ideas for the trust.
- HYL B, a high yield bond ETF created by the Agency, grew to a market capitalization of \$4.6 billion.
- Committed \$175 million to two Fixed Income funds.
- Committed \$480 million to hedge fund investments associated with Absolute Return Portfolio and closed on 4 new funds and 1 existing fund.
- Committed \$650 million to Real Estate and closed 12 funds.
- Committed \$534.7 million to Private Equity and closed on 9 funds and 1 co-investment.
- Committed \$339 million to Private Infrastructure and closed on 3 funds and 3 co-investments.

In Fiscal Year 2021, the Division will continue its goal to expand existing core competencies for innovative investment management by exploring new investment alternatives, enhance the investment manager monitoring process through implementing a manager scorecard, continue enhancing the System's Emerging Manager Program, and co-host the 6th Biennial Real Estate Emerging Manager Conference.

In addition the Division will strive to continue to have educational in-house conferences and promote strategic outreach to the Board, Investment Advisory Committee (IAC), and external stakeholders.

The Division will continue to review and refine the asset class procedures, guidelines, and tactical plans in efforts to continue to enhance the performance and accountability in Fiscal Year 2021.

Domestic Equity

The fiscal year ending August 31, 2020 was a remarkable year for domestic public equities. In general, returns were strong. Positive returns, however, came with volatility and divergence on historical levels. Volatility picked up in February as the market quickly shifted its focus from a trade deal with China to the emerging COVID-19 pandemic. The pandemic then accelerated some fundamental trends and drove a sharp divergence between growth and technology and everything else.

The fiscal year started off strong, as optimism around a China-U.S. trade pact sent the S&P 500 up about 25% from early September to late February. The S&P 500 then tumbled by about 30% through late March. At that point, COVID-19 daily infections began to decline in early-hit areas and governments began to

Report on Investment Activity (Continued)

Fiscal Year 2020

inject tremendous amounts of money into economies. The result was a run-up of about 60% from the low through August 31.

The technology-heavy NASDAQ Index was up 47.9% in Fiscal Year 2020, leading the major U.S. benchmarks. The S&P 500 Growth was up 35.7% with the full S&P 500 up 19.6%. The less tech-weighted Dow Jones Industrial Average was up just 7.7%, S&P 500 Value up just 0.6% and the S&P Small Cap 600 index down 2.2%.

In terms of the S&P 500 sector performance, Information Technology led the way at 55.9%, with Apple Inc. and Microsoft Corp. driving the sector. Consumer Discretionary followed at 33.3%, but it is important to note that Amazon.com Inc. accounts for 41% of that sector by market weight. Communication Services was up 25.5%, with half of that sector weighted in Google parent Alphabet Inc. and Facebook Inc. In general, markets gravitated to sectors and firms where business was helped, or at least not disrupted, by COVID-19.

The worst-performing sector was Energy, down 36.9%. The oil & gas industry faced a perfect storm of COVID-19-related demand weakness, and posturing between OPEC and Russia sent West Texas Intermediate Crude as low as negative \$37 in April. Real Estate was down 7.4% due to exposure to pandemic-affected areas like hospitality and restaurants.

In terms of the S&P 500 stocks, semiconductor company NVIDIA Corp. was the best performer, up 219%. In terms of market impact, Apple and Amazon Inc. were up 147% and 94%, respectively and are the highest- and third-highest-weighted names. The worst-returning stocks included a variety of oil & gas companies and cruise lines.

International Equity

International stock markets, as measured by the Morgan Stanley Capital International All Country World Index (MSCI ACWI) ex U.S. Index, rose 8.9% in Fiscal Year 2020 as investors grappled with the sizable shock of the COVID-19 virus and subsequent rebound. Returns were positive across all but two sectors, with Information Technology (38.7%) and Health Care (24.6%) leading the index while Financials (-6.4%) and Energy (-20.6%) were the largest detractors of performance. Morgan Stanley Capital International Europe, Australasia and Far East Index (MSCI EAFE) lagged

the broader international index in Fiscal Year 2020 (6.7%). Europe and Developed Asia endured a fiscal year comprising waves of volatility related not just to COVID-19, but also to trade wars, Brexit and the Hong Kong protests. Pre-COVID-19, the index enjoyed strong gains as a cyclical upswing unfolded in Asia. However, impacts from COVID-19 led to a dramatic drop from January to March, followed by an equally dramatic recovery supported by various fiscal and monetary recovery packages from governments around the globe.

Both European and Japanese markets finished the fiscal year ahead of the MSCI EAFE index while the U.K. suffered a loss that weighed on the index. Information Technology and Health Care were the top-performing sectors, and Materials benefited from demand for gold and the supply chain recovery. Energy declined on plummeting demand from COVID-19 lockdowns and European environmental, social, governance (ESG) mandates while Real Estate suffered from concerns around delayed rent payments, challenging contract rates and an escalation of China-Hong Kong tensions.

Morgan Stanley Capital International Emerging Markets (MSCI EM) had a strong Fiscal Year 2020, rising more than the broader international index (14.9%). The fiscal year went through several distinct stages as the region absorbed the many tumultuous events, while each country and sector followed a similar pattern to global equities. MSCI EM equities endured a dramatic drop in February and March, followed by an equally dramatic recovery the remainder of the fiscal year. Health Care, Discretionary and Information Technology were the big winners among the sectors. Laggards were focused either on sectors exposed to the drop in oil prices, such as Utilities and Energy, or those subject to default and credit risk concerns, such as Financials and Real Estate. Country performance followed a similar pattern, as tech heavy China, Taiwan and South Korea ended the fiscal year in positive territory, while countries that lagged tended to have exposure to tourism (Greece, Mexico), commodities (Columbia, Chile, Indonesia) or both (Brazil, Egypt, Turkey).

Real Estate

Following four years of consecutive positive returns, the global real estate equity markets as measured by the Financial Times Stock Exchange European Public Real Estate Association Nareit (FTSE EPRA/NAREIT) Developed Index was down -12.8% for the fiscal year ending August 31, 2020, underperforming

Report on Investment Activity (Continued)

Fiscal Year 2020

the broader equities market MSCI World Index return of +17.4% for the same period.

The real estate equity market performance was relatively stable for the first half of the fiscal year until mid-February when COVID-19 became a global pandemic. Global countries adopted social distance rules and the real estate sector was significantly impacted as investors were concerned about rent collections. The sector declined over 40% within one month from February to March. By the end of the fiscal year, the Real Estate sector was up 40% from the trough in March, but still down 20% from the peak in February. Hotel and Retail sectors were hit the most. The Office sector was also negatively impacted as investors questioned the future demand of office space, especially for urban areas.

The Industrial sector was the best-performing sector, up over 20% during the same period. During the fiscal year, the political tension between the U.S. and China continued to escalate and the upcoming U.S. presidential election continued to dominate the headlines.

Global government bond yields in general dropped over the period. The U.S. 10-year government bond yield dropped 70 basis points to 0.7% over the period. While the market was concerned about recession risk, global governments and central banks proactively provided liquidity support and fiscal stimulus, which supported the equity markets.

In Asia, all markets posted negative returns, with Singapore being the relative better performer, down 1.2% (local -5.4%), supported by the relatively larger exposure of the Industrial sector which was up 30% for the period. Australia was down 23.5% (local -30.3%). Not surprising, Retail was the worst performing subsector, down 30.2%, and Self Storage was the best performer. The Australian Central Bank cut interest rates twice during the period from 1.00% to 0.25%. Hong Kong was down 12.7%. Office was the worst performer, down 21.2%, as investors were concerned about the economic cycle and China's continuing intrusion into Hong Kong politics and governing impacting multinationals' presence there. Performance among the retail names was mixed. Mainland China-focused retail names outperformed the Hong Kong-focused retail names. China imposed a National Security Law in Hong Kong effective July 1, 2020, which has had a chilling effect on its future. The U.S. announced sanction measures against some of China's government officials. Japan was down 14.2% (local -14.3%).

Similar to other markets, Industrial was the best-performing subsector, while Retail and Hotels lagged. The Olympic Games, previously scheduled for July 2020 in Tokyo, were postponed until 2021. In the European market, the U.K. was up 3.1%, mainly helped by stronger local currency against the USD. While Brexit continued to be an overhang, the escalation of friction between the U.S. and China overshadowed it, as well as the political tension in the Middle East and COVID-19. Logistics and Residential subsectors were up 34.7% and 44.2%, respectively, while Retail was down 58.9%. Finland was the best performer, up 32.5%, driven by one name in the index, which was up 64.0% as investors favored the residential rental business. France was the worst performer, down 39.5%, mainly affected by the concentration of retail exposure names.

Following a strong 2019 fiscal year (+11.7%), the U.S. as measured by the FTSE EPRA / NAREIT United States Index posted underwhelming returns (-16.0%) for the fiscal year ending August 31, 2020. Notably, U.S. REITs significantly underperformed the broader equities market (MSCI World Index), which finished +17.4% in Fiscal Year 2020, after materially outperforming the broader equities market in the prior fiscal year. Fiscal Year 2020 was quite the reversal from the prior fiscal year when the anniversary of tax cuts allowed REITs to look relatively attractive versus general equities from an earnings perspective, which positively benefited fund flows in the REIT space. Furthermore, an extended lower-rate environment, as well as volatility associated with the China-U.S. trade war, increased the attractiveness of REITs in the first half of the fiscal year given the sector's interest rate sensitivity and domestic-oriented businesses.

Unfortunately, the emergence of the COVID-19 pandemic, which essentially shut down the economy, forced retail business closures and prevented person-to-person interaction. Along these lines, the more defensive subsectors such as Industrial (+20.6%), Diversified (-5.2%, led by data centers) and Self-Storage (-12.1%) that benefit either directly or indirectly from work-from-home business models and migration trends outperformed. Given the fallout from the pandemic, which led to out-migration from more dense coastal cities, it was no surprise that the Residential (-16.5%) subsector underperformed the index, but certain names did benefit from strong demand and in-migration to suburban and Sunbelt locations.

Alternatively, those subsectors that had dense coastal footprints were most negatively impacted by stay-at-

Report on Investment Activity (Continued)

Fiscal Year 2020

home orders, such as Office (-17.1%), Health Care (-24.4%), Lodging/Resorts (-33.6%) and Retail (-36.1%), and underperformed.

Although unprecedented fiscal and monetary stimulus helped the REIT index rally from the March lows, the negative investor perception, associated with an impairment of long-term earnings growth in REIT subsectors and concerns about rent collections in the short hit Office, Lodging, Retail and Health Care disproportionately. Specifically, the uncertainty associated with changes in long-term consumer preferences could depress the stock prices of REITs in the aforementioned subsectors and M&A (mergers and acquisitions) consolidation could be the only catalyst to unlock value in the near- to medium-term.

During the 2020 fiscal year, the System committed \$699.5 million across 13 equity commitments. This comprised six “re-up” commitments to managers to which the System already had committed, six commitments to new managers and one sidecar co-investment commitment. These fund commitments comprised six diversified, two property tech (main fund and sidecar), two multifamily, one retail/mixed use and one data center. Eleven of these new commitments were for non-core equity investment strategies and one was to an equity open-end core-plus fund. These commitments exceeded the commitment target of \$650 million, but were below the upper range of \$975 million set forth in the Fiscal Year 2020 Tactical Plan. Eleven of these commitments were to domestic-focused funds and one was to an Asian-focused fund.

Co-investments typically have focused investments, lower management fees and stronger governance structures. From inception through the end of Fiscal year 2020, the System’s Private Real Estate Portfolio had total co-investment commitments of approximately \$261 million in seven co-investments. The System’s staff expects to make additional co-investments in Fiscal Year 2021 as opportunities become available that meet risk and return parameters, and have strong “hands-on” property management that can drive performance and create value for the System and complement its existing portfolio of investments.

As of August 31, Private Real Estate commitments totaled approximately \$5.2 billion to 74 funds and seven co-investments. The System continues to play an active role in monitoring each investment and is on the Advisory Board on all but seven fund investments.

Since inception, approximately \$3.9 billion in capital has been called and the net asset value of the System’s Private Real Estate Portfolio is approximately \$2.4 billion. The System has also received approximately \$3 billion as income, realized gains or a return of principal. In Fiscal Year 2020, approximately \$500 million in equity capital was called for the System’s portfolio and \$312 million was returned as income, realized gains or a return of principal, resulting in a net contribution of \$188 million. The System is carefully monitoring the pace of capital calls and distributions from all of the investments to ensure the Private Real Estate portfolio is within an acceptable range of the target allocation.

Beginning in Fiscal Year 2018, The System’s target allocation to real estate increased to 12% of the Trust’s total assets, up from 10%. The increase will be phased in to the Private Real Estate portfolio through Fiscal Year 2021. At the end of Fiscal Year 2020, the Private Real Estate portfolio represented 8.1% of the overall Trust’s assets, which is slightly above the Fiscal Year 2020 interim target weight of 8%. The System will continue to prudently add to the portfolio to work toward achieving the 9% Fiscal Year 2021 target allocation and maintain an appropriate vintage year exposure.

Private Equity

For Fiscal Year 2020, Private Equity closed on 13 deals, including three co-investments, with commitments totaling \$638 million, versus a goal of \$800 million and a range of \$600 million to \$1.0 billion.

As of August 31, the Private Equity portfolio net asset value was \$4.49 billion, compared to \$4.08 billion for the fiscal year ending August 31, 2019. Since inception, the Private Equity team has closed 114 funds and 57 co-investments with commitments totaling \$10.2 billion (adjusted for currency exchange rates). In addition, the System has obtained LP Advisory Committee seats on 69 active funds and six fund LP Advisory Observer seats

Fixed Income

Economy

Fiscal Year 2020 was completely defined by the introduction of COVID-19. Prior to COVID-19, the U.S. economic growth was relatively steady and the unemployment rate was historically low. That all changed in March as cases of COVID-19 accelerated

Report on Investment Activity (Continued)

Fiscal Year 2020

in New York and began spreading throughout the country. Local, state and federal governments took unprecedented actions to shut down large parts of the economy to control the spread of the virus. Record numbers of Americans began filing for unemployment benefits as businesses shuttered, sending the unemployment rate to 14.7% by the end of April.

The Federal Reserve and Congress took swift monetary and fiscal policy actions to support the economy. The Fed essentially lowered the Fed Funds rate to zero and announced other actions such as small business loans, a bond purchase program and state and local government loans. Congress passed a record fiscal stimulus to support households and enable businesses to retain employees.

Some states began reopening their economies in May, but many had to backtrack on some of their reopening as they began to see their initial surge of the virus. Governments have begun to have the virus under control and at more manageable levels. The virus remains with us, which will continue to weigh on a full reopening of the economy. At the end of August, as states had taken measures to reopen, the unemployment rate declined to 8.4%. Economic measures of industrial production have sharply rebounded and the housing market is particularly strong, supported by record-low mortgage rates and movement among the population from cities to suburbs as many employees work from home. Going forward, we expect the Federal Reserve to remain very accommodative for an extended period of time and for Congress to pass additional fiscal measures to support the economy.

- **Labor:** The unemployment rate surged to 14.7% in April as governments shut down large portions of the economy. The unemployment rate subsequently declined to 8.4% as states partially reopened.
- **Inflation:** The Federal Reserve's preferred measure of inflation, Core PCE, was at 1.3% year-over-year for August, well below the Fed's 2% target. The Fed has signaled that it is willing to let inflation run above 2% in the future to target a longer run 2% average.
- **Housing:** The housing market has remained relatively robust amid record low interest rates and migration from cities amidst work from home. In August, existing home sales increased 24.7% month-over-month and new home sales increased 13.9% month-over-month.
- **Durable Goods:** Durable goods orders have rebounded sharply from the depths of the crisis.

In August, orders increased 11.4% month-over-month.

Note: Due to the lagged nature of economic data we have not yet seen the data fully reflect the current economic environment.

The Bond Markets

Treasury yields declined significantly as the Federal Reserve lowered rates to spur the economy. The decline in yields drove very robust returns for Treasuries and rates-sensitive Investment Grade Corporate Bonds for the fiscal year; the Treasury index returned 6.98% and Investment Grade Corporates returned 7.5% for the fiscal year. This type of performance for these two asset classes is unlikely to be replicated for the coming fiscal year given the absolute levels of yields and very tight spreads. High-yield bonds returned 4.65% for the fiscal year; the asset class continues to recover from the significant sell-off that occurred in March.

Private Infrastructure

For Fiscal Year 2020, the Private Infrastructure team closed on seven deals (three fund investments and four co-investments), with commitments totaling \$414 million. The total commitment target for Fiscal Year 2020 was \$450 million with a commitment range of +/- 30% (\$315-\$585 million).

Since inception, the Private Infrastructure team has closed on 20 co-investments and 18 funds with commitments totaling \$2.1 billion (adjusted for currency exchange rates). The System holds an LP Advisory Committee seat on 17 funds and an observer seat on one fund. As of August 31, 2020, the Infrastructure portfolio net asset value was \$1.08 billion, or 3.7% of System assets, compared to \$827.0 million, or 2.9% of System assets, for the fiscal year ending August 31, 2019.

Hedge Funds

The Absolute Return Portfolio generated an estimated return of +7.32% for Fiscal Year 2020. Please note that this return is preliminary, as the August returns are not final and several of the managers have less liquid holdings. Over the same time period, the 90-day T-bills plus 350 basis points has returned an estimated +5.02%. The portfolio's secondary benchmark, the HFRI Fund of Funds Diversified, returned +7.34% for the fiscal year.

Report on Investment Activity (Concluded)

Fiscal Year 2020

The start of the 2020 fiscal year was led by risk-on market environments. During September and into 4Q 2019, ongoing U.S.-China tensions and Brexit dominated the news headlines. Positive developments helped support the equity markets, in particular, the announcement and agreement to the “phase-one” trade deal between the U.S. and China. Additionally, the risks of a hard Brexit began to subside. The U.S. Fed cut rates in both September and October, which also was a tailwind for equity markets.

Calendar Year 2019 closed strong for the Absolute Return program, whereby all managers were positive for December. The new year began with risk assets moving higher as a continuation of 2019. By the end of January, the market headlines were led by the discovery of a mystery virus that had originated in China. Investors began taking a risk-off stance in response as uncertainty around the spread and magnitude of the virus lingered. Due to the effects of COVID-19 spreading outside of China, the markets began exhibiting heightened volatility. Moreover, investors began de-risking their portfolios. This led to a massive de-grossing, most notably in March, which resulted in sharp equity market drawdowns.

In response to COVID-19 and the falling markets, several central banks began to look at measures to stimulate their respective economies. During this time, the U.S. Fed reduced benchmark interest rates to 0%. Toward the end of the fiscal year, the equity markets began to rebound, although COVID-19 and its effects remained the dominant theme within the news. The markets remained in risk-on mode for most of the summer. Within the credit markets, the Fed announced a corporate bond buying program that helped lift credit markets. The fiscal year ended with overall strong equity markets.

In the U.S., investor sentiment remained positive on encouraging COVID-19 vaccine development as well as an overall dovish Fed outlook leading to the view of a prolonged interest rate environment. Europe markets remained mostly positive toward the end of the fiscal year. Finally, Asia ended the fiscal year in mostly positive territory as COVID-19 impacts have lessened and with favorable industrial data coming out of China. In Japan, Prime Minister Shinzo Abe announced his resignation due to health issues. The Japanese markets digested the news without too much concern as his proposed replacement will continue with “Abenomics” as planned.

The System's Absolute Return Portfolio ended the fiscal year quite strong on both an absolute and relative basis. All but three managers ended the fiscal year in positive territory. The System's Hedge fund team is focused on increasing its exposure to event-driven and equity long/short strategies.

Key Portfolio Statistics

Statistics	2020	2019
Contributions to Pool	1,308,700,000	1,246,000,000
Withdrawals from Pool	(2,615,200,000)	(2,558,000,000)
Interest & Dividends	649,744,916	709,416,286
Securities Lending Net Income	2,430,095	3,190,953
Net Appreciation in Fair Value	1,268,829,652	124,061,087

Basic of Presentation:

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

Outline of Investment Policies

Fiscal Year 2020

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 Beneficiaries;
- Adopt a long-term asset allocation
- 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 the Trust; and
- Exercise reasonable care consistent with ERS' fiduciary duty, and maintain the integrity of the investment program.

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.

Roles and Responsibilities

The Board of Trustees is responsible for formulating, adopting, and overseeing the investment policies of the Trust. The Board shall (i) invest the funds as a single Trust without distinction as to their source (ii) hold securities purchased with such funds collectively for the proportionate benefit of the pension plans. Separate investment objective, investment guidelines, investment strategy and accounting will be used for Texas Employees Group Benefits Program assets.

The Board of Trustees will approve alternative investments over 0.6% of the total market value of the System's assets as reported in the most recent

Comprehensive Annual Financial Report pursuant to Texas Government Code Section 815.3016.

In accordance with Texas Government Code 815.301 (b), the Executive Director is delegated full authority and responsibility by the Board of Trustees to perform the responsibilities of the Board of Trustees and in the implementation of the Trust subject to the Board of Trustees' policies, rules, regulation and directives consistent with constitutional and statutory limitations. The Executive Director will establish procedures and controls for efficient implementation of the Trust by the System's staff. The Executive Director may delegate to another employees of the System any right, power of duty assigned to the Executive Director pursuant to Texas Government Code § 815.202 (f).

Asset Allocation

The Board of Trustees has adopted the assets allocation to improve the long-term expected return and the return relative to the risk taken of the trust. This framework for the asset allocation between return seeking and risk reduction/liquidity assets provides broader diversification and improved returns in disparate economic regimes. This framework is segregated into asset classes that are geared to seek returns and those that provide both risk reduction and liquidity as needed. In addition, the Board of Trustees has established specific sub-targets with minimums and maximums around target allocations.

Risk Management

The following statements represent the core values and beliefs that form the basis of the risk philosophy for the Trust in a long-term perspective.

- The System's investment program is structured to address systematic risk (or market risk) and non-systematic risk (risks associated with an asset class or portfolio).
- Risk management recognizes that some risks are quantitative or statistically measurable while others are not.
- Risk reporting should be timely, relevant, and understandable.

Risk management is a primary responsibility for the System's staff and investment results will be reviewed in the context of risk-adjusted returns. The Risk Management framework is established through (1) the adoption of the investment policies and the

Outline of Investment Policies (Concluded)

Fiscal Year 2020

strategic asset allocation, (2) adoption of individual asset class benchmarks, and (3) reasonable risk limits within the investment policies for the implementation of the investment program. The goal is not to eliminate risk but to strive to achieve a balance between risk and return. The System's Chief Investment Officer is responsible for reporting and effectively communicating risk management results to the Board of Trustees on a regular basis.

Permissible Investments

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

- Compliance with the definition of "securities" set forth in Texas Government Code § 815.301(f);
- Their consistency with Policy and portfolio objectives;
- Their application to the portfolio's diversification;
- The System's staff and /or advisor competency in evaluating, managing and trading the securities;
- Consideration of their liquidity within the portfolio; and
- The costs.

Proxy Voting

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 cast in accordance with the System's best interest and investment objectives for the funds.

Basis of Presentation: Texas Statute and the System's Investment Policy

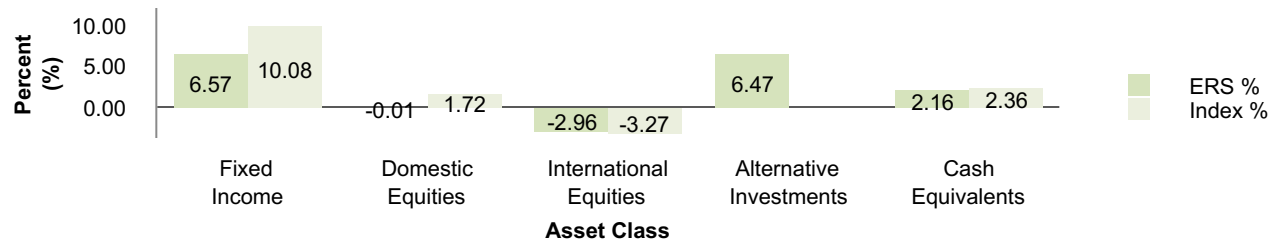
Time-Weighted Rates of Return and Asset Allocations

Investment Pool

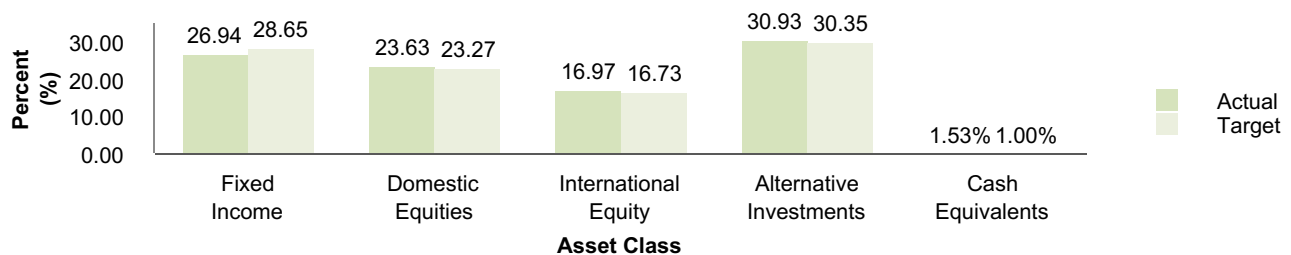
August 31, 2020

	Time-Weighted Rates of Return (Note A)								
						3 Year	5 Year	10 Year	
	2016	2017	2018	2019	2020	(2018-2020)	(2016-2020)	(2011-2020)	
	%	%	%	%	%	%	%	%	
Fixed Income									
ERS	5.14	3.49	1.19	6.57	4.16	3.95	4.1	3.47	
Index	6.5	1.34	-0.93	10.08	6.41	5.09	4.61	3.97	
Domestic Equities									
ERS	8.48	15.81	20.89	-0.01	17.67	12.46	12.31	14.24	
Index	12.54	15.87	20.06	1.72	21.64	14.1	14.14	15.04	
International Equities									
ERS	1.44	19.38	3.72	-2.96	10.04	3.46	6.05	6.03	
Index	2.92	18.88	3.18	-3.27	8.31	2.63	5.75	5.26	
Alternative Investments									
ERS	6.76	11.26	12.5	6.47	0.98	6.53	7.51	10.19	
Index	NA	NA	NA	NA	NA	NA	NA	NA	
Cash Equivalents									
ERS	0.76	1.91	2.72	2.16	1.01	1.96	1.71	0.86	
Index	0.23	0.62	1.52	2.36	1.26	1.72	1.2	0.64	
ERS Overall									
ERS	5.32	12.15	9.58	3.04	6.85	6.46	7.34	8.22	
Index	7.23	11.08	7.94	3.06	8.17	6.36	7.47	8.03	
Change in CPI	0.87	1.74	3.01	1.81	1.03	1.93	1.68	1.74	

Overall One Year Time-Weighted Return



Overall One Year Average Asset Allocation



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:

$$\text{Ending Market Value} / (\text{Beginning Market Value} + \text{Net Cash Flows})$$

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

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.

Broker Commissions

Year Ended August 31, 2020

Domestic Equity

Brokerage Firm	No. of Shares Traded	Commissions	Commission Per Share
	\$	\$	
Baird, Robert W & Co., Inc.	5,346,038	106,921	0.020
Barclays Capital	8,791,988	170,681	0.019
BMO Capital Markets Corp.	4,280,754	85,615	0.020
BNY Mellon Clearing	8,402,359	168,047	0.020
Cantor Fitzgerald	549,540	10,991	0.020
Capital Institutional Services, Inc.	1,234,072	37,022	0.030
Citigroup Global Markets, Inc.	6,964,029	111,659	0.016
Cowen & Co., LLC	2,534,959	50,699	0.020
Credit Suisse	10,981,744	213,030	0.019
Euroclear Bank SA	118,584	1,767	0.015
Goldman Sachs	5,470,853	99,159	0.018
ICBC Financial Services LLC	12,704	635	0.050
Instinet LLC	190,143	1,901	0.010
Investment Technology Group, Inc.	595,203	5,952	0.010
Jefferies & Co, Inc.	11,228,393	224,568	0.020
JP Morgan Securities, LLC	18,827,193	199,722	0.011
Macquarie Securities (USA), Inc.	896,853	17,937	0.020
Merrill Lynch & Co., Inc.	15,781,544	315,631	0.020
Morgan Stanley & Co., Inc.	5,101,486	102,030	0.020
National Financial Services, LLC	9,394,752	179,888	0.019
Raymond James & Associates, Inc.	5,622,848	145,285	0.026
RBC Capital Markets	3,791,388	75,828	0.020
Sanford C Bernstein & Co., Inc.	2,444,005	48,845	0.020
Stifel, Nicolaus & Co., Inc.	5,401,634	108,033	0.020
UBS	3,934,095	78,682	0.020
Wells Fargo Securities, LLC	2,525,792	50,516	0.020
	140,422,953	2,611,044	0.019

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Broker Commissions (Concluded)

Year Ended August 31, 2020

International Equity

Brokerage Firm	No. of Shares Traded	Commissions	Commission Per Share
		\$	\$
Bank of America	4,673,014	14,570	0.003
Barclays Capital	2,685,976	41,605	0.015
BMO Nesbitt Burns	2,521,482	37,225	0.015
BNP Paribas	1,943,443	56,505	0.029
BNY Mellon Clearing	2,861,260	39,176	0.014
Bradesco SA	97,000	1,105	0.011
Caceis Bank	589,600	18,496	0.031
Calyon Securities	6,143,654	52,752	0.009
Cenkos	187,972	3,672	0.020
Citigroup Global Markets, Inc.	17,614,116	137,789	0.008
CLSA	8,519,183	76,387	0.009
Credit Agricole Cheuvreux N.A., Inc.	225,000	4,420	0.020
Credit Lyonnais Securities	33,446,177	158,675	0.005
Credit Suisse	9,101,316	126,764	0.014
Daiwa Securities	142,151,266	335,652	0.002
Euroclear Bank SA	626,879	8,881	0.014
Exane	4,532,595	82,888	0.018
Fidelity Clearing Canada	211,700	3,219	0.015
Goldman Sachs	580,154	4,040	0.007
HSBC	52,875,613	154,526	0.003
Instinet LLC	4,411,600	8,291	0.002
Investec Securities Limited	14,512	95	0.007
Investment Technology Group, Inc.	232,672	8,192	0.035
ITG, Inc.	22,100	330	0.015
Jefferies & Co, Inc.	21,041,663	171,143	0.008
JP Morgan Securities, LLC	37,897,744	233,187	0.006
KEB Salomon Smith Barney Securities	2,242	2,541	1.134
Kepler Cheuvreux	1,773,828	39,406	0.022
Liquidnet, Inc.	87,719	1,331	0.015
Macquarie Securities (USA), Inc.	49,902,911	201,207	0.004
Merrill Lynch & Co., Inc.	12,592,699	195,529	0.016
Mitsubishi Securities	954,000	32,838	0.034
Mizuho Securities USA, Inc.	2,267,661	102,607	0.045
Morgan Stanley & Co., Inc.	36,990,677	230,186	0.006
Nomura Securities Co. Ltd.	157,000	1,815	0.012
Parel	682,649	30,921	0.045
Redburn Partners, LLP	5,750,684	127,292	0.022
S. G. Warburg & Co., Ltd.	20,100	59	0.003
Sanford C Bernstein & Co., Inc.	2,334,164	25,588	0.011
SG SEC (London) LTD, London	379,679	701	0.002
Societe Generale	1,354,109	20,196	0.015
The Depository Trust Company	33,000	503	0.015
UBS	17,341,986	220,749	0.013
	487,832,799	3,013,054	0.006

Basis of Presentation: Master custodian records.

Fees for Alternative Investments

Year Ended August 31, 2020

Investment Type	Management Fees		Profit Share	Other Fees
	Asset Value	(Note A)	(Note B)	
	\$	\$	\$	\$
Private Equity	4,495,728,326	41,512,564	12,419,174	20,053,598
Private Real Estate	2,357,722,279	23,474,865	21,835,698	6,596,298
Private Infrastructure	1,077,998,325	9,437,567	1,016,632	4,235,756
Private Fixed Income	560,583,485	154,646	162,625	
Hedge Funds (Note C)	2,042,426,398	18,610,501	14,794,237	
Public Equity	202,085,539	504,173	755,382	
Grand Total	10,736,544,352	93,694,316	50,983,748	30,885,652

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, 2020 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.

Note C: The amounts reported are for the period from July 1, 2019 to June 30, 2020.

Investment Advisory and Service Fees

Year Ended August 31, 2020

Advisory Service	Asset Value		Basis Points	Other Investment Services	Fees
	\$	\$			\$
Domestic Equity Advisors	777,386,690	1,532,086	20	Custodian Fees	1,335,112
International Equity Advisors	1,556,892,635	8,007,629	51	Security Lending Agent Fees	315,865
Total	2,334,279,325	9,539,715	41	Investment Consultant Fees	2,948,528
				Investment Banking Fees:	50,528
				Total	4,650,033

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 \$565,582 during fiscal year 2020.

Basis of Presentation: Master custodian records.

List of Largest Assets Held (Note A)

Year Ended August 31, 2020

Ten Largest Stock Holdings

No. of Shares	Description	Fair Value
2,803,600	Apple, Inc	361,776,544
1,154,300	Microsoft Corporation	260,329,279
73,400	Amazon, Inc	253,300,464
508,190	Facebook, Inc	149,001,308
79,800	Alphabet, Inc	130,407,564
304,791	Alibaba Group Holding Limited	87,484,161
762,495	JP Morgan Chase & Company	76,394,374
488,000	Johnson & Johnson	74,864,080
344,542	Paypal Holdings, Inc	70,334,804
689,839	Prologis, Inc	70,267,001

Ten Largest Fixed Income Security Holdings

Par Value	Description	Fair Value
4,650,000	Xtrackers USD High Yield Corporate Bond ETF	226,734,000
1,800,000	iShares iBoxx High Yield Corporate Bond ETF	153,054,000
682,555	iShares MBS ETF	75,545,187
50,000,000	U.S. Treasury Note 2.875% 08/15/2028 Dd 08/15/18, Rating AA+	59,031,250
50,000,000	U.S. Treasury Note 2.375% 05/15/2029 Dd 05/15/19, Rating AA+	57,492,188
50,000,000	U.S. Treasury Note 2.500% 05/15/2024 Dd 05/15/14, Rating AA+	54,265,625
45,000,000	U.S. Treasury Note 2.625% 02/15/2029 Dd 02/15/19, Rating AA+	52,537,500
45,000,000	U.S. Treasury Note 2.750% 02/15/2028 Dd 02/15/18, Rating AA+	52,354,688
45,000,000	U.S. Treasury Note 2.000% 08/15/2025 Dd 08/15/15, Rating AA+	48,814,453
45,000,000	U.S. Treasury Note 2.000% 02/15/2025 Dd 02/15/15, Rating AA+	48,512,110

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, 2020

Type of Investment	Pooled Pension Trust Funds (Note A)				Investment Pool	
	Fund 0955	Fund 0977	Fund 0993	Fund 0973	Fair Value	% Total
	\$	\$	\$	\$		
Public Equities:						
Domestic Equities	5,636,463,316	191,964,840	96,452,835	11,452,205	5,936,333,196	18.64 %
Foreign Equities	4,267,611,283	145,344,922	73,028,632	858	4,485,985,695	14.09 %
Exchange Traded Funds	108,666,555	3,700,930	1,859,534		114,227,019	0.36 %
Real Estate Investment Trust	1,029,593,906	35,065,576	17,618,717		1,082,278,199	3.40 %
Total Public Equities	11,042,335,060	376,076,268	188,959,718	11,453,063	11,618,824,109	36.49 %
Fixed Income:						
U.S. Treasury Securities	2,476,931,301	84,358,523	42,385,984	1,066,823,847	3,670,499,655	11.53 %
U.S. Government Agency Obligations	439,560,540	14,970,410	7,521,891	198,931,245	660,984,086	2.08 %
Corporate Obligations	1,825,104,433	62,158,815	31,231,729	305,767,636	2,224,262,613	6.98 %
Corporate Asset and Mortgage Backed Securities	46,319,851	1,577,547	792,639	18,262,783	66,952,820	0.21 %
Exchange Traded Funds	380,690,561	12,965,436	6,514,490	77,878,701	478,049,188	1.50 %
Real Estate Investment Trust	59,461,118	2,025,108	1,017,516	10,085,081	72,588,823	0.23 %
Foreign Obligations	479,415,863	16,327,790	8,203,907	81,312,765	585,260,325	1.84 %
Total Fixed Income	5,707,483,667	194,383,629	97,668,156	1,759,062,058	7,758,597,510	24.37 %
Alternative Investments	9,924,225,848	337,996,066	169,826,201	102,410,698	10,534,458,813	33.08 %
Other Investments	346,421,358	11,798,306	5,928,065		364,147,729	1.14 %
Short-term Investments:						
Investment in Pool Cash	3,821,696	131,865	63,983		4,017,544	0.01 %
Other Short-term Investment	485,577,239	16,537,632	8,309,342	1,056,508,516	1,566,932,729	4.91 %
Total Short-term Investments	489,398,935	16,669,497	8,373,325	1,056,508,516	1,570,950,273	4.92 %
Total Before Securities Lending Collateral (Notes B & C)	27,509,864,868	936,923,766	470,755,465	2,929,434,335	31,846,978,434	100.00 %
Securities Lending Collateral	107,364,040	3,657,466	1,836,817	8,166,676	121,024,999	
Total Pension Investment Pool Trust Fund (0888)	27,617,228,908	940,581,232	472,592,282	2,937,601,011	31,968,003,433	
Cash Equivalents:						
Cash in State Treasury-Pension Funds	66,742,458	3,033,967	1,546,448	93,696,153		
Total Investments	27,683,971,366	943,615,199	474,138,730	3,031,297,164		

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), the Judicial Retirement System Plan Two Fund (Fund 0993), and the long-term investments from the Employees Life, Accident and Health Insurance and Benefits Fund (Fund 0973).

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

	Fair Value				
	Fund 0955	Fund 0977	Fund 0993	Fund 0973	Total
	\$	\$	\$	\$	\$
Total Fair Value of Investments Before Securities Lending Collateral, as above	27,509,864,868	936,923,766	470,755,465	2,929,434,335	31,846,978,434
Unsettled Sales-Investment Receivables	194,652,000	6,629,395	3,330,943	1,694,009	206,306,347
Unsettled Purchases-Investment Payables	(69,277,221)	(2,359,421)	(1,185,493)	(4,852,184)	(77,674,319)
Accrued Interest and Dividends/Tax Reclaims Receivable/Prepaid Fees	95,534,956	3,253,833	1,634,899	11,958,025	112,381,713
Securities Lending Fees Payables/Miscellaneous Payables	(1,324,353)	(45,104)	(22,663)	12,458	(1,379,662)
Total Fair Value of Investments, Adjusted to Comply with the CFA Institute Standards	27,729,450,250	944,402,469	474,513,151	2,938,246,643	32,086,612,513

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:

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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

Effect of Changes in Actuarial Assumptions

State Retirees Health Plan:

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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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December 4, 2020

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, 2020

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, 2020, 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, 2020 for ERF, LECOSRF and JRS-2. GRS prepared the *Actuarial Balance Sheets* and the supporting schedules in the Actuarial Section for the Defined Benefit Plans. GRS prepared the *Schedule of Changes in Net Pension Liability and Related Ratios – Defined Benefit Plans* and the *Schedule of Employer Contributions – Defined Benefit Plans* of the Required Supplementary Information and the *Notes to the Required Supplementary Information* for the Defined Benefit Plans presented in the Financial Section of this report. GRS also prepared the *Retired Members by Type of Benefit* schedule in the Statistical Section. Full actuarial valuation reports have also been provided to ERS.

Data

The valuation was based upon information as of August 31, 2020, 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 May 20, 2020 based on the experience investigation that covered the five-year period from September 1, 2014 through August 31, 2019. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERF, LECOSRF and JRS-2, and meet the parameters set by Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuarial assumptions and

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Actuary's Certification Letter – Pension Plans (Continued)

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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.

The actuarial valuation as of August 31, 2020 incorporates the notable 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 increases on September 1, 2020.

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, LECOSRF, and JRS-2, 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 is outside the scope of this actuarial valuation.

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

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."

Board Funding Policy

The Board of Trustees of ERS approved the Pension Funding Priorities and Guidelines on May 23, 2018 and most recently incorporated updates in August, 2020. For the Board, adoption of this policy is intended to:

- enhance communications and provide transparency to the Legislature and plan members and retirees regarding Board of Trustees' positions on plan funding strategy;
- provide policy guidance to current and future Boards;
- ensure that legislators, elected officials and other stakeholders have clear and accurate information about the Trust's funding goals and the needs of the Board in supporting sound fiduciary investment decisions in accordance with Texas Government Code Section 815.106; and
- identify a recommended plan for the state of Texas, as the plan sponsor, to achieve a 100% funded ratio while following funding best practices and sound actuarial principles, in accordance with Texas Government Code Section 802.2011.



Actuary's Certification Letter – Pension Plans (Continued)

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This policy also stated that the main objective of ERS' retirement programs is to fully fund the long-term cost of benefits provided by statute, through disciplined and timely accumulation of contributions and prudent investment of assets to deliver earned benefits on a continuing basis. In support of this objective, the policy laid out a multi-level funding period goal to gradually achieve funding on sound actuarial principles:

1. Fund normal costs,
2. Avoid trust fund depletion of the pre-funded plans,
3. Meet current statutory standard of a 31-year funding period for unfunded liabilities, per Texas Government Code Sections 811.006 and 840.106, and
4. Match funding period to the average years of service at retirement once a 31-year funding period is achieved, and closed.

Funding Policy and Objectives – Employees Retirement Fund

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, the State is scheduled to contribute 9.50% of payroll through direct appropriations, and state agencies contribute an additional 0.50% of payroll, resulting in total contributions of 19.50% of payroll for the current biennium. The long-term State contribution rates are subject to future legislative appropriations.

The unfunded actuarial accrued liability (UAAL) of ERF increased from \$11.7 billion as of August 31, 2019 to \$14.7 billion as of August 31, 2020. Additionally, the funded ratio of ERF—actuarial value of assets divided by the actuarial accrued liability—decreased from 70.5% to 66.0% as of August 31, 2020. This decrease in the funded ratio was primarily due to the changes in actuarial assumptions and methods adopted by the Board in May 2020. 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 14.16% 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 5.34% of payroll which will be available to amortize the unfunded liability. The first level of the Board's funding period goal is currently being met but the following discussion will demonstrate that the current contribution rate is insufficient to meet any of the remaining vital funding period goals.

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. Assuming the market value of assets earns 7.00% per year, ERF is projected to remain solvent until the year 2061, after which the funding would revert to a pay-as-you-go status. **As a result, the second level of the Board's funding period goal is not currently being realized.**



Actuary's Certification Letter – Pension Plans (Continued)

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The third level of the Board's funding period goal 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. Further, 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 expected to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. In this context, the Actuarially Sound Contribution (ASC) rate is the contribution rate that meets this standard. Based on the actuarial valuation as of August 31, 2020, the ASC rate for ERF is 25.48% of payroll. **Based on the total contribution rate of 19.50% of payroll, the third level of the Board's funding period goal is also not currently being realized.**

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. We recommend that the Board seek a plan funding strategy that meets the fourth level of the Board's funding period goal or meets an ultimate goal of eliminating the UAAL by a certain date.

Funding Policy and Objectives – Law Enforcement and Custodial Officer Supplemental Retirement Fund

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, 2020, 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 \$17.1 million for fiscal year 2021 and all subsequent years. 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 2021, the contribution from court fees is expected to be approximately 1.05% of payroll.

The unfunded actuarial accrued liability (UAAL) of LECOSRF increased from \$515 million as of August 31, 2019 to \$642 million as of August 31, 2020. Additionally, the funded ratio of LECOSRF—actuarial value of assets divided by the actuarial accrued liability—decreased from 65.3% to 60.1% as of August 31, 2020. This decrease was primarily due to the changes in actuarial assumptions and methods adopted by the Board in May 2020. 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.



Actuary's Certification Letter – Pension Plans (Continued)

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The valuation shows that the total normal cost for funding purposes is 1.96% of payroll. The approximate total contribution rate is currently 2.05% of payroll. Thus, the total contribution rate for the current fiscal year exceeds the normal cost by 0.09% 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. However, the projected contributions are not expected to exceed the normal cost in future years and will not be sufficient to eliminate the unfunded liability over a finite period of time. Assuming the market value of assets earns 7.00% per year, LECOSRF is projected to remain solvent until the year 2041, after which the funding would revert to a pay-as-you-go status. **As a result, the first and second levels of the Board's funding period goal are not currently being realized.**

The third level of the Board's funding period goal 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. Further, 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 expected to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. In this context, the Actuarially Sound Contribution (ASC) rate is the contribution rate that meets this standard. Based on the actuarial valuation as of August 31, 2019, the ASC rate for LECOSRF is 3.43% of payroll in addition to the expected annual contributions from court fees of \$17.1 million. **Based on the current approximate total contribution rate of 1.00% of payroll, in addition to court fees, the third level of the Board's funding period goal is also not currently being realized.**

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. We recommend that the Board seek a plan funding strategy that meets the fourth level of the Board's funding period goal or meets an ultimate goal of eliminating the UAAL by a certain date.

Funding Policy and Objectives – Judicial Retirement System Plan Two

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, 2020, members accruing benefits contribute 9.50% 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, 2020 is 9.42% of payroll. This State contribution rate is subject to future legislative appropriations.



Actuary's Certification Letter – Pension Plans (Continued)

Board of Trustees
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The unfunded actuarial accrued liability (UAAL) of JRS-2 increased from \$66.8 million as of August 31, 2019 to \$104.4 million as of August 31, 2020. Additionally, the funded ratio of JRS-2—actuarial value of assets divided by the actuarial accrued liability—decreased from 87.5% to 82.3% as of August 31, 2020. This deterioration in plan funding levels was primarily due to the changes in actuarial assumptions and methods adopted by the Board in May 2020. 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 26.26% of payroll. The total contribution rate is 25.083% of payroll for the current fiscal year. The total contribution rate for the current fiscal year is less than the normal cost by 1.177% of payroll and no payment will be available to amortize the unfunded liability. As a result, 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. Assuming the market value of assets earns 7.00% per year, JRS-2 is projected to remain solvent until the year 2059, after which the funding would revert to a pay-as-you-go status. **As a result, the first and second levels of the Board's funding period goal are not currently being realized.**

The third level of the Board's funding period goal 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. Further, Section 840.106 of the Texas Government Code also 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 expected to amortize any unfunded actuarial accrued liability over a period that does not exceed 30 years by one or more years. In this context, the Actuarially Sound Contribution (ASC) rate is the contribution rate that meets this standard. Based on the actuarial valuation as of August 31, 2020, the ASC rate for JRS-2 is 33.29% of payroll. **Based on the total contribution rate of 25.083% of payroll, the third level of the Board's funding period goal is not currently being realized.**

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. We recommend that the Board seek a plan funding strategy that meets the fourth level of the Board's funding period goal or meets an ultimate goal of eliminating the UAAL by a certain date.

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. Actuarial valuations are performed on an annual basis. In our opinion, our calculations also comply with the requirements of, where applicable, the Governmental Accounting Standards Board, the Internal Revenue Code and ERISA.



Actuary's Certification Letter – Pension Plans (Concluded)

Board of Trustees
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The signing actuaries are independent of the plan sponsor. Mr. Falls, Mr. Newton and Ms. Woolfrey are Enrolled Actuaries and Fellows of the Society of Actuaries, and all of the undersigned are 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



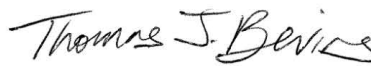
R. Ryan Falls, FSA, EA, MAAA
Senior Consultant & Actuary



Dana Woolfrey, FSA, EA, MAAA
Senior Consultant & Actuary



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



Thomas J. Bevins, ASA, MAAA
Consultant & Actuary



Actuarial Balance Sheet –

Employees Retirement Fund

August 31, 2020 (With Comparative Totals at August 31, 2019)

ACTUARIAL BALANCE SHEET

Assets:

	<u>August 31, 2020</u>	<u>August 31, 2019</u>
Actuarial Value Assets	\$ 28,543,207,745	\$ 28,060,120,223
Present Value of Future Normal Cost		
Member	4,967,126,377	4,718,694,315
Employer	2,056,813,451	1,768,371,175
Total	<u>7,023,939,828</u>	<u>6,487,065,490</u>
Total	\$ 35,567,147,573	\$ 34,547,185,713

Liabilities:

Present Value of Benefits

Active Members

– service retirement	\$ 20,518,535,700	\$ 18,826,885,220
– disability	173,006,886	164,793,909
– death before retirement	176,360,290	241,503,386
– termination	1,864,913,185	1,645,020,068

Total	<u>22,732,816,061</u>	<u>20,878,202,583</u>
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Inactive Members

Annuitants	25,604,780,179	23,686,007,554
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Total	\$ 50,282,251,901	\$ 46,288,424,168
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Unfunded Accrued Liability (UAL)

	<u>\$ 14,715,104,328</u>	<u>\$ 11,741,238,455</u>
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SUMMARY OF ACTUARIAL VALUATION RESULTS

Total Contribution Rate	19.5 %	19.5 %
Normal Cost		
– dollars	\$ 1,022,572,697	\$ 961,077,754
– percent of payroll	14.16 %	13.76 %
Contribution Available to Amortize UAL	5.34 %	5.74 %
Accrued Liability	\$ 43,258,312,073	\$ 39,801,358,678
Amortization Period in Years	Never	Never
Funded Ratio	66.0 %	70.5 %
Valuation Payroll	\$ 7,221,558,595	\$ 6,984,576,697
Active Members	142,062	141,865

Actuarial Balance Sheet –

Law Enforcement and Custodial Officers Supplemental Retirement Fund

August 31, 2020 (With Comparative Totals at August 31, 2019)

ACTUARIAL BALANCE SHEET

Assets:

	August 31, 2020	August 31, 2019
Actuarial Value Assets	\$ 968,062,761	\$ 968,129,751
Present Value of Future Normal Cost		
Member	55,185,707	58,033,991
Employer	158,372,607	180,310,577
Total	<u>213,558,314</u>	<u>238,344,568</u>
Total	\$ 1,181,621,075	\$ 1,206,474,319

Liabilities:

Present Value of Benefits

Active Members		
– service retirement	\$ 860,946,338	\$ 850,915,208
– disability	4,629,103	4,852,577
– death before retirement	4,163,566	6,227,199
– termination	14,910,772	13,583,538
Total	<u>884,649,779</u>	<u>875,578,522</u>
Inactive Members	18,141,759	16,285,415
Annuitants	920,353,836	829,115,833
Total	\$ 1,823,145,374	\$ 1,720,979,770

Unfunded Accrued Liability (UAL)

\$ 641,524,299	\$ 514,505,451
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SUMMARY OF ACTUARIAL VALUATION RESULTS

Total Contribution Rate	1.00 %	1.00 %
Estimated Contribution from Court Fees	\$ 17,100,000	\$ 17,100,000
Normal Cost		
– dollars	\$ 31,935,981	\$ 34,203,347
– percent of payroll	1.96 %	2.08 %
Contribution Available to Amortize UAL	0.09 %	(0.04)%
Accrued Liability	\$ 1,609,587,060	\$ 1,482,635,202
Amortization Period in Years	Never	Never
Funded Ratio	60.1 %	65.3 %
Valuation Payroll	\$ 1,629,386,809	\$ 1,644,391,700
Active Members	35,230	36,296

Actuarial Balance Sheet –

Judicial Retirement System of Texas Plan Two Fund

August 31, 2020 (With Comparative Totals at August 31, 2019)

ACTUARIAL BALANCE SHEET

Assets:

	<u>August 31, 2020</u>	<u>August 31, 2019</u>
Actuarial Value Assets	\$ 486,802,031	\$ 467,787,034
Present Value of Future Normal Cost		
Member	52,898,234	52,490,999
Employer	87,176,795	70,807,534
Total	<u>140,075,029</u>	<u>123,298,533</u>
Total	\$ 626,877,060	\$ 591,085,567

Liabilities:

Present Value of Benefits

Active Members		
– service retirement	\$ 344,914,059	\$ 306,898,474
– disability	3,787,651	3,693,678
– death before retirement	5,504,170	8,636,983
– termination	28,323,291	16,287,061
Total	<u>382,529,171</u>	<u>335,516,196</u>
Inactive Members	24,071,258	14,277,536
Annuitants	324,704,726	308,068,547
Total	\$ 731,305,155	\$ 657,862,279

Unfunded Accrued Liability (UAL)

\$ 104,428,095	\$ 66,776,712
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SUMMARY OF ACTUARIAL VALUATION RESULTS

Total Contribution Rate	25.083 %	25.053 %
Normal Cost		
– dollars	\$ 23,584,280	\$ 21,063,555
– percent of payroll	26.26 %	23.14 %
Contribution Available to Amortize UAL	(1.177)%	1.913 %
Accrued Liability	\$ 591,230,126	\$ 534,563,746
Amortization Period in Years	Never	Never
Funded Ratio	82.3 %	87.5 %
Valuation Payroll	\$ 89,810,664	\$ 91,026,600
Active Members	570	573

Summary of Actuarial Methods and Assumptions – Pension Plans

In May 2020, 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 2015 to 2019. No plan provision change took place in fiscal year 2020. 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.

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.

Summary of Actuarial Methods and Assumptions – Pension Plans (Continued)

**Figure 1
Economic Assumptions for Employee Classes**

	Employee Class & Supplemental Benefits for CPO/CO's	Elected Class	Judicial Class
Investment Rate of Return	7.0% 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%
Inflation	2.30%	Legislators: 0.00% Others: 2.30%	2.30%
Salary Increase:	<ul style="list-style-type: none"> Includes 2.3% annual increase for inflation plus increases for merit, promotion and longevity. See Table 1 for rates of salary increase for sample ages. 	<ul style="list-style-type: none"> No real wage growth. No increase in merit, promotion, and longevity except for District Attorneys. See Table 2 below for the salary structure for District Attorneys. 	<ul style="list-style-type: none"> No real wage growth See Table 2 on next page for the salary structure for judges.
Payroll Growth per Year, Compounded Annually	2.70% per year, compounded annually		2.30% per year, compounded annually
Post-retirement Increase	N/A	2.30% per year, compounded annually	N/A

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

Age	Years of Service – Non-CPO/CO							Years of Service – CPO/CO					
	0	1	2-4	5-9	10-14	15-19	20+	0	1	2-4	5-8	9-17	18+
20	6.50%	4.95%	4.45%	4.00%				6.45%	4.45%	2.95%	1.95%	1.70%	1.45%
30	5.60	4.95	4.45	2.70	2.20%	1.70%		6.45	4.45	2.95	1.95	1.70	1.45
40	4.60	4.45	3.70	2.70	2.20	1.60	1.50%	6.45	4.45	2.95	1.95	1.70	1.45
50	3.60	3.40	2.90	2.40	1.90	1.40	1.30	6.45	4.45	2.95	1.95	1.70	1.45
60+	2.60	2.40	2.00	1.70	1.30	1.10	1.00	6.45	4.45	2.95	1.95	1.70	1.45

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

**Table 2
Economic Assumption –
Rates of Merit, Promotion and Longevity Salary Increases
For District Attorneys in the Elected Class and Judges, Male and Female**

Age	Years of Eligibility Service		
	Less than 4	4 or more, but less than 8	8 or more
All	State base salary	110% of State base salary	120% of State base salary

Summary of Actuarial Methods and Assumptions – Pension Plans (Continued)

The demographic assumptions are summarized in Tables 3 to 9.

Table 3
Demographic Assumption –
Annual Rates of Termination from Active Employment before Retirement (Note B)

Eligibility Service	Male and Female Regular State Employees		Eligibility Service	Male and Female LECO Members
	Entry age 35 or younger	Entry age over 35		All entry ages
0	25.25%	19.63%	0	26.45%
5	10.86	8.16	5	10.13
10	5.67	5.11	10	5.70
15	3.64	3.29	15	3.34
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 4
Demographic Assumption –
Mortality Rates for Active Members (Notes C & D)

Age	Regular State Employees		LECO Members	
	Females	Males	Females	Males
20	0.0130%	0.0370%	0.0160%	0.0410%
30	0.0150	0.0360	0.0270	0.0410
40	0.0360	0.0660	0.0490	0.0590
50	0.0830	0.1490	0.0910	0.1200
60	0.1860	0.3190	0.1680	0.2640
65	0.2960	0.4680	0.2280	0.4100

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 Pub-2010 Active Member Mortality Tables, General for Non-LECO and Public Safety for LECO. Additionally, generational mortality improvements are projected from the year 2010 based on the Ultimate MP scale..

Table 5
Demographic Assumption –
Mortality Rates for Service Retirees and Beneficiaries (Note E)

Age	Females (All)	Males (Non-LECO)	Males (LECO)
50	0.1179%	0.1771%	0.1975%
55	0.2086	0.3052	0.3403
60	0.3691	0.5260	0.5865
65	0.6530	0.9066	1.0109
70	1.1554	1.5627	1.7424
75	2.0443	2.6933	3.0031
80	3.6170	4.6421	5.1761

Table 6
Demographic Assumption –
Mortality Rates for Disability Retirees (Note F)

Age	Females	Males
50	2.5000%	3.0000%
55	2.5000	3.0000
60	2.5000	3.0000
65	2.5000	3.0000
70	2.5000	3.0000
75	2.8789	3.7337
80	5.0937	6.4353

Note E: The base rates indicated above are based on the 2020 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 2020 based on the Ultimate MP scale.

Note F: The base rates indicated above are based on the 2020 State Retirees of Texas Mortality Tables, with ages set forward three years, subject to minimum rates of 3.0% and 2.5% for males and females, respectively. Additionally, generational mortality improvements are projected from the year 2020 based on the Ultimate MP scale.

Summary of Actuarial Methods and Assumptions – Pension Plans (Continued)

**Table 7
Demographic Assumption –
Disability Retirement Rates (Note G)**

Age	Regular State Employees, Elected		LECO Members
	Class and Judicial Class		
	Females	Males	Females & Males
30	0.0135%	0.0275%	0.0092%
40	0.0896	0.0749	0.0586
50	0.2072	0.1484	0.1774
60	0.5583	0.3740	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.

**Table 8
Demographic Assumption –
Percentage of Members Electing Various Benefit Options (Notes H & I)**

	Option Selection Percentage		
	Standard	Option 1	Option 4
Male Member			
Disability	50 %	50 %	50 %
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 %

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

Summary of Actuarial Methods and Assumptions – Pension Plans (Concluded)

**Table 9
Demographic Assumption –
Service Retirement Rate (Note J and K)**

Regular State Employees – Males & Females

Age	Eligibility A Rule of 80	Eligibility B Other Age/ Service
<50	50%	
50	40	
51	35	
52	30	
53	28	
54	27	
55	26	
56	25	
57	24	
58	23	
59	22	
60	21	18%
61	20	12
62	33	20
63-64	27	18
65-74	27	27
75	100	100

**LECO Members
Males & Females (Note L)**

Age	Eligibility C 20 yrs CPO/CO	Age	Eligibility D Age 55 & 10 yrs CPO/CO
<48	3%		
48	4	55	20%
49	5	56	18
50	60	57	16
51-61	33	58-61	14
62-74	50	62-74	27
75	100	75	100

Elected Class

Age	Male & Female
50-61	10%
62-74	20
75	100

Judicial Class (Note M)

Age	Male & Female	
	Unreduced	Reduced
50-64	20%	10%
65-69	20	N/A
70-74	25	N/A
75	100	N/A

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

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.

Active Member Valuation Data

Valuation Year August 31	Number (Note A)	Actual Annual Payroll	Average Pay (Note B)	Change in Average Pay
		\$	\$	%
Employees Retirement Fund:				
2011	137,293	5,926,331,865	41,620	1.50
2012	132,669	5,720,722,855	42,188	1.40
2013	133,669	5,713,759,137	42,564	0.90
2014	134,162	5,955,460,705	44,374	4.30
2015	142,409	6,150,194,660	44,990	1.40
2016	146,390	6,742,143,036	46,495	3.30
2017	141,629	6,859,706,582	47,986	3.20
2018	141,535	6,811,925,525	48,581	1.20
2019	141,865	6,947,624,737	49,220	1.30
2020	142,062	7,158,435,103	50,834	3.30
Law Enforcement and Custodial Officer Supplemental Retirement Fund:				
2011	36,806	1,520,864,574	39,454	3.90
2012	37,404	1,457,492,314	39,444	0.00
2013	37,415	1,429,059,562	39,469	0.10
2014	37,084	1,496,012,750	41,584	5.40
2015	38,526	1,506,027,764	41,957	0.90
2016	39,066	1,725,879,688	44,634	6.40
2017	38,206	1,746,349,412	45,029	0.90
2018	37,167	1,689,590,272	45,321	0.60
2019	36,296	1,682,633,066	45,305	0.00
2020	35,230	1,662,147,480	46,250	2.10
Judicial Retirement Plan Two Fund:				
2011	546	67,927,624	127,573	0.00
2012	541	68,373,289	127,130	(0.30)
2013	545	68,781,009	127,550	0.30
2014	554	77,441,466	142,820	12.00
2015	563	77,500,736	142,721	(0.10)
2016	548	78,260,550	142,770	0.00
2017	557	78,189,668	142,424	(0.20)
2018	561	78,772,445	142,731	0.20
2019	573	79,710,813	142,600	(0.10)
2020	570	88,578,603	157,563	10.50

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

Valuation Year August, 31	Added to Rolls		Removed from Rolls		Other Beneficiaries		Rolls end of Year		Increase Average	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	Annual Benefits	Annual Benefit
	\$	\$	\$	\$	\$	\$	%	\$		
Employees Retirement Fund:										
2011	5,808	123,585,132	2,237	35,797,140	548	8,145,660	83,430	1,552,999,200	6.6	18,614
2012	5,928	124,604,412	2,128	35,049,012	569	7,965,072	87,799	1,650,519,672	6.3	18,799
2013	5,287	108,395,484	2,418	36,921,000	699	8,999,592	91,367	1,730,993,748	4.9	18,946
2014	6,231	132,027,948	2,331	38,751,696	573	11,250,312	95,840	1,835,520,312	6.0	19,152
2015	6,042	134,725,212	2,506	40,066,764	627	10,129,440	100,003	1,940,308,200	5.7	19,402
2016	5,668	132,332,424	2,555	42,411,504	642	10,458,660	103,758	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
2018	6,029	151,352,376	2,912	49,203,420	714	11,816,892	111,361	2,258,946,384	5.3	20,285
2019	6,034	155,789,472	2,910	49,004,268	670	11,670,672	115,155	2,377,402,260	5.2	20,645
2020	5,264	136,837,956	3,104	53,016,372	681	11,670,036	117,996	2,472,893,880	4.0	20,957
Law Enforcement and Custodial Officer Supplemental Retirement Fund:										
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
2013	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
2018	966	6,151,404	205	1,094,460	71	287,868	13,080	70,762,560	8.2	5,410
2019	1,020	6,720,840	179	981,720	60	284,784	13,981	76,786,464	8.5	5,492
2020	873	5,648,916	230	1,150,728	73	346,260	14,697	81,630,912	6.3	5,554
Judicial Retirement Plan Two Fund:										
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
2018	16	1,032,864	6	481,368	5	309,336	393	24,976,140	3.6	63,553
2019	83	6,458,064	6	424,044	2	122,124	472	31,132,284	24.6	65,958
2020	18	1,399,572	7	527,352	1	29,868	484	32,034,372	2.9	66,187

Schedule of Funding Progress – Defined Benefit Plans

Actuarial Valuation Date August 31	(a) Actuarial Value of Assets (000's)	[Note A] (b) Actuarial Accrued Liability (AAL) (000's)	(c) (Overfunded) Unfunded AAL (UAAL) (b) - (a) (000's)	(b) Funded Ratio (a)/(b) %	[Note B] (e) Covered Payroll (000's)	(f) UAAL As A Percentage Of Covered Payroll (c)/(e) %
Employees Retirement Fund:						
2011	23,997,445	28,398,213	4,400,768	84.50	5,795,185	75.90
2012	24,272,514	29,377,069	5,104,555	82.60	5,676,509	89.90
2013	24,667,639	31,886,026	7,218,387	77.40	5,959,473	121.10
2014	25,431,922	32,924,737	7,492,815	77.20	6,171,443	121.40
2015	25,850,542	33,868,360	8,017,818	76.30	6,659,647	120.40
2016	26,557,130	35,303,165	8,746,035	75.20	6,806,457	128.50
2017	26,371,827	37,629,785	11,257,958	70.10	6,796,226	165.70
2018	27,359,943	38,989,263	11,629,320	70.20	6,875,887	169.10
2019	28,060,120	39,801,359	11,741,239	70.50	6,984,577	168.10
2020	28,543,208	43,258,312	14,715,104	66.00	7,221,559	203.80
Law Enforcement and Custodial Officer Supplemental Retirement Fund:						
2011	830,522	960,953	130,431	86.40	1,475,432	8.80
2012	832,451	1,015,668	183,217	82.00	1,498,979	12.20
2013	843,017	1,197,164	354,147	70.40	1,627,699	21.80
2014	883,595	1,206,770	323,175	73.20	1,609,491	20.10
2015	909,249	1,262,311	353,062	72.00	1,750,709	20.20
2016	933,534	1,312,392	378,858	71.10	1,743,679	21.70
2017	923,990	1,399,877	475,887	66.00	1,720,362	27.70
2018	953,054	1,452,658	499,604	65.60	1,684,458	29.70
2019	968,130	1,482,635	514,505	65.30	1,644,392	31.30
2020	968,063	1,609,587	641,524	60.10	1,629,387	39.40
Judicial Retirement System Plan Two Fund:						
2011	283,936	300,163	16,227	94.60	69,655	23.30
2012	300,433	315,199	14,766	95.30	68,778	21.50
2013	318,026	359,059	41,033	88.60	77,854	52.70
2014	348,431	386,286	37,855	90.20	79,123	47.80
2015	372,615	404,011	31,396	92.20	80,352	39.10
2016	395,457	425,865	30,408	92.90	78,238	38.90
2017	420,850	463,604	42,754	90.80	79,330	53.90
2018	447,078	487,772	40,694	91.70	80,072	50.80
2019	467,787	534,564	66,777	87.50	91,027	73.40
2020	486,802	591,230	104,428	82.30	89,811	116.30

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.

Solvency Test

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:

Valuation Year August 31,	Aggregate Accrued Liabilities For				Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	(1)	(2)	(3)	(1)		(2)	(3)	
	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)					%
	\$	\$	\$	\$		%	%	%
Employees Retirement Fund (Note A):								
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	
2018	5,897,455,633	22,527,977,524	10,563,830,405	27,359,943,116	100	95.3	0.0	
2019	6,044,422,496	23,686,007,554	10,070,928,628	28,060,120,223	100	92.9	0.0	
2020	6,278,991,035	25,604,780,179	11,374,540,859	28,543,207,745	100	87.0	0.0	
Law Enforcement and Custodial Officer Supplemental Retirement Fund (Note A):								
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	
2018	51,536,313	762,668,410	638,453,074	953,054,283	100	100	21.7	
2019	54,737,312	829,115,833	598,782,057	968,129,751	100	100	14.1	
2020	58,423,646	920,353,836	630,809,578	968,062,761	100	98.8	0.0	
Judicial Retirement Plan Two Fund (Note A):								
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	
2018	78,282,916	246,496,810	162,991,820	447,077,710	100	100	75.0	
2019	70,242,531	308,068,547	156,252,668	467,787,034	100	100	57.3	
2020	79,308,832	324,704,726	187,216,568	486,802,031	100	100	44.2	

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.

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:

Type of Activity	Increase/(Decrease) in Unfunded Accrued Liability for Year (in Millions)					
	ERS		LECOS		JRS II	
	2020	2019	2020	2019	2020	2019
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.	520.6	448.0	43.4	39.4	8.5	0.7
Components of (Gain)/Loss						
<u>Investment Income</u> If there is greater investment income than assumed on the actuarial value of assets, there is a gain. If less income, a loss.	243.2	147.7	8.4	5.1	3.9	2.4
<u>Active Member Demographics</u> Combined (gain)/loss from age and service retirements, disability retirements, death-in-service benefits, and withdrawal from employment.	16.7	9.5	(6.0)	(8.3)	(5.4)	2.3
<u>Pay Increases</u> If there are smaller pay increases than assumed, there is a gain. If greater increases occur, a loss.	284.7	100.8	7.2	(3.6)	(1.5)	0.6
<u>Death After Retirement</u> If retirees live longer than assumed, there is a loss. If not as long, a gain.	(45.5)	(18.3)	(1.5)	0.1	(0.8)	(0.1)
<u>Other</u> Miscellaneous (gains)/losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	46.3	(0.7)	6.4	6.7	(2.2)	(1.0)
Increase/(Decrease) in Unfunded Accrued Liability During Year from Financial Experience	1,066.0	687.0	57.9	39.4	2.5	4.9
Non-Recurring Items						
Adjustments for plan amendments, changes in actuarial assumptions, increase in Service Retirement Formula, legislative action, etc.	1,907.9	(575.1)	69.1	(24.5)	35.1	21.2
Composite Increase/(Decrease) During Year	2,973.9	111.9	127	14.9	37.6	26.1

Effects of Changes in Actuarial Assumptions

Following is a summary of key results of the August 31, 2020 actuarial valuation under both the old and new actuarial assumptions.

Key Result	ERS		LECOS		JRS II	
	After Changes	Before Changes	After Changes	Before Changes	After Changes	Before Changes
Normal Cost						
Dollars	\$ 1,022,572,697	\$ 987,187,060	\$ 31,935,981	\$ 33,565,368	\$ 23,584,280	\$ 20,746,263
Percent of Payroll	14.16%	13.67%	1.96%	2.06%	26.26%	23.10%
Actuarial Accrued Liability	\$43,258,312,073	\$41,302,465,260	\$1,609,587,060	\$1,538,763,325	\$591,230,126	\$556,188,709
Unfunded Actuarial Accrued Liability	\$14,715,104,328	\$12,759,257,515	\$ 641,524,299	\$ 570,700,564	\$104,428,095	\$ 69,386,678
Actuarial Value of Assets	\$28,543,207,745	\$28,543,207,745	\$ 968,062,761	\$ 968,062,761	\$486,802,031	\$486,802,031
Funded Ratio	66.0%	69.1%	60.1%	62.9%	82.3%	87.5%
Amortization Period in Years	Infinite	Infinite	Infinite	Infinite	Infinite	Infinite

Effects of Changes in Actuarial Assumptions



EMPLOYEES RETIREMENT SYSTEM OF TEXAS
GROUP BENEFITS PROGRAM
FY20 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, 2020 (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, 2020 provided by ERS, former employee data as of August 31, 2020 provided by 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 the following schedules in the Actuarial Section of the ERS CAFR for the State Retiree Health Plan: (a) Active Member Valuation Data, (b) Retirees and Nominees Added and Removed and (c) Schedule of Funding Progress.

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 L. Bilbe, F.S.A.
Member of American Academy of Actuaries

Philip S. Dial, F.S.A.
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Actuarial Valuation Results – State Retiree Health Plan



EMPLOYEES RETIREMENT SYSTEM OF TEXAS
GROUP BENEFITS PROGRAM
FY19 GASB No. 74 ACTUARIAL VALUATION

Summary of Results for FY2020

Actuarial Valuation Results as of August 31, 2020		
	(\$ thousands)	As a % of Payroll
1. Number of Members (actual count, not in thousands)		
a. Actives	232,367	
b. Deferred Vested	12,317	
c. Retirees and Nominees	130,910	
d. Total Number of Members	375,594	
2. Payroll of Active Members for FY2020	\$12,655,247	
3. Actuarial Present Value of Projected Benefit Payments		
a. Actives	\$38,171,488	
b. Deferred Vested	2,081,191	
c. Retirees and Nominees	13,124,846	
d. Total	\$53,377,525	421.4 %
4. Total OPEB Liability		
a. Actives	\$17,943,542	
b. Deferred Vested	2,081,191	
c. Retirees and Nominees	13,124,846	
d. Total	\$33,149,579	261.7 %
5. Fiduciary Net Position	\$104,947	0.8 %
6. Net OPEB Liability [4.d - 5]	\$33,044,632	260.9 %
7. Actuarially Determined Contribution for FYE August 31, 2020		
a. Normal Cost	\$1,564,918	12.4 %
b. Amortization of Net OPEB Liability	1,025,319	8.1 %
c. Total ADC for FYE August 31, 2020	\$2,590,236 ¹	20.5 %

¹ Adjusted due to rounding error caused by rounding individual components.

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.

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. Unfunded net OPEB liability is amortized over 30 years as a level percentage of projected payroll.

Changes in Actuarial Assumptions

Since the last valuation was prepared for this plan, demographic assumptions (including rates of preretirement and post-disability mortality for all State Agency members; assumed rates of termination and retirement for certain members who are Certified Peace Officers/Custodial Officers (CPO/CO); and assumed salary, aggregate payroll increases and the assumed rate of general inflation) have been updated to reflect assumptions recently adopted by the ERS Trustees. These new assumptions were adopted to reflect an experience study on the ERS retirement plan performed by the ERS retirement plan actuary.

Assumed Per Capita Health Benefit Costs and assumed Health Benefit Cost and Retiree Contribution trends have been updated to reflect recent experience and its effects on our short-term expectations. Furthermore, (a) 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, (b) the percentage of future female retirees assumed to be married and electing coverage for their spouse and (c) the proportion of future retirees assumed to cover dependent children have been updated to reflect recent plan experience and expected trends.

Moreover, the PCORI fees payable under the ACA have been updated to reflect IRS Notice 2020-44.

The discount rate was changed from 2.97% as of August 31, 2019 to 2.20% as of August 31, 2020 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 in effect on the measurement date.

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

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

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, 2020, such funds provide less than a full year's benefit payments and are expected to be depleted shortly.) Since no plan 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, 2020 is 2.20% 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 will become effective January 1, 2021, since these

changes were communicated to plan members in advance of the preparation of this report. These changes, which are not expected to have a significant impact on plan costs for Fiscal Year 2021, are provided for in the Fiscal Year 2021 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 and Health Insurance Providers Fee

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 the Net OPEB Liability as of the August 31, 2019 measurement date presented in this report. The Net OPEB Liability as of August 31, 2019 is increased by the \$251 million present value of the estimated Excise Taxes in future years. The Cadillac Tax provisions of the ACA were repealed by the Further Consolidated Appropriations Act, 2020 which was signed into law on December 20, 2019. Due to the repeal of these provisions, the Net OPEB Liability as of August 31, 2020 presented in this report is not adjusted for the Cadillac Tax provisions of the ACA.

Consistent with the prior valuation, the effects of the Health Insurance Providers Fee imposed by Section 9010 of the ACA (sometimes referred to as the "HIP Fee") on fully insured health plans have been included in the Net OPEB Liability as of the August 31, 2019 measurement date presented in this report. The HIP Fee provisions of the ACA were also repealed by the Further Consolidated Appropriations Act, 2020. Due to the repeal of these provisions, the Net OPEB Liability as of August 31, 2020 presented in this report does not include provision for the HIP Fee.

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, the Retiree Drug Subsidy (RDS), 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.

For purposes of GASB No. 74, the valuation of future OPEB may not reflect the anticipated receipt of future RDS payments as required under GASB Technical Bulletin No. 2006-1. The Bulletin requires that the RDS payments to an employer be reported by the employer as revenue, rather than being netted

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

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. ERS is no longer eligible for the RDS for retirees enrolled in the EGWP plus Wrap. As a result, the RDS has been significantly reduced.

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 directly related to the payment of BP health benefits are \$180.24 for medical for HealthSelect plus \$9.00 for prescription drugs for HealthSelect and HealthSelect Medicare Advantage per year per covered member for fiscal year 2021. The 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 2.20%.

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	
	HealthSelect	HealthSelect Medicare
	%	%
2022	8.80	(53.30)
2023	5.25	0.00
2024	5.00	66.67
2025	4.75	24.00
2026	4.60	4.60
2027	4.50	4.50
2028	4.40	4.40
2029 and beyond	4.30	4.30

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 fiscal year 2021 at the rates shown below.

Fiscal Year	Annual Rate of Increase	
	HealthSelect	HealthSelect Medicare
	%	%
2022	0.00	0.00
2023	0.00	0.00
2024	6.30	27.45
2025	5.80	13.10
2026	5.40	6.25
2027	5.00	5.50
2028	4.60	4.80
2029 and beyond	4.30	4.30

Expense Trend Rate

The expenses directly related to the payment of GBP Health benefits are contractually guaranteed at the current rate through fiscal year 2023. They are assumed to increase 2.30% per annum thereafter.

Trend Rate for the Opt-Out Credit

The monthly benefit of \$60 in fiscal year 2021 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 – State Retiree Health Plan

Valuation Year August 31,	Number of Members (Note A)			Actual Annual Payroll Not			Average Pay			% Change in Average Pay		
	Not Medicare Eligible	Medicare Eligible	Total	Not Medicare Eligible	Medicare Eligible	Total	Not Medicare Eligible	Medicare Eligible	Overall	Not Medicare Eligible	Medicare Eligible	Overall
			\$	\$	\$	\$	\$	\$	\$	%	%	%
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	218,237	11,962	230,199	10,940,126,454	805,183,603	11,745,310,057	50,130	67,312	51,022			1.8
2018	219,333	12,578	231,911	11,201,279,203	845,887,455	12,047,166,658	51,070	67,251	51,947	1.9	(0.1)	1.8
2019	220,937	12,950	233,887	11,440,052,736	879,975,428	12,320,028,164	51,780	67,952	52,675	1.4	1.0	1.4
2020	219,474	12,893	232,367	11,752,663,149	902,583,538	12,655,246,687	53,549	70,006	54,462	3.4	3.0	3.4

Note A: Includes return-to-work retirees and employees who have not yet satisfied the 90-day waiting period. Active members are reported by the eligibility of Medicare since the implementation of GASB Statement 74 in Fiscal year 2017.

Retirees and Nominees Added and Removed– State Retiree Health Plan

Valuation Year August 31,	Added to Rolls		Removed from Rolls		Rolls End of Year		Increase/ (Decrease) Annual Benefits	Average Annual Benefit
	No.	Annual Benefits	No.	Annual Benefits	No. (Note A)	Annual Benefits		
		\$	\$	\$		%	\$	
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
2018	8,228	(104,727,144)	3,758	(47,832,354)	122,350	938,921,013	(5.7)	7,674
2019	8,435	179,098,524	3,741	79,431,841	127,044	1,038,587,696	10.6	8,175
2020	7,806	77,337,422	3,940	39,035,286	130,910	1,076,889,832	3.7	8,226

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 (000's)	(b) Actuarial Liability (AAL) (000's)	(c) (Overfunded) UAAL (b) - (a) (000's)	(b) Funded Ratio (a)/(b) %	(e) Covered Payroll (000's)	(f)
						UAAL As A
						Percentage Of Covered Payroll (c)/(e) %
2011	0	21,502,434	21,502,434	0.0	10,376,487	207.2
2012	0	20,823,410	20,823,410	0.0	10,268,696	202.8
2013	0	23,030,469	23,030,469	0.0	10,478,117	219.8
2014	0	24,701,904	24,701,904	0.0	10,963,773	225.3
2015	0	25,740,698	25,740,698	0.0	11,176,584	230.3
2016	0	27,091,372	27,091,372	0.0	11,786,869	229.8
2017	709,783	34,782,794	34,073,011	2.0	11,745,310	290.1
2018	380,430	30,018,172	29,637,742	1.27	12,047,167	246.0
2019	59,936	34,622,611	34,562,675	0.17	12,320,028	280.5
2020	104,947	33,149,579	33,044,632	0.32	12,655,247	261.1



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



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									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Governmental Activities:	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Restricted	227,985	284,814	325,412	379,311	440,466	498,874	87,945	1,060,687	2,033,429	2,591,955
Unrestricted	8	18	—	5000	17	22	4	25	4	1
Total Governmental Activities	227,993	284,832	325,412	379,316	440,483	498,896	87,949	1,060,712	2,033,433	2,591,956

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 (Note A)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenses	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Governmental Activities:										
Social Security Administration		102	105	92	156	178	139	152	85	94
Judicial Retirement System Plan I										19,941
Death Benefits:										
Peace Officers, Firemen, etc.	2,784	2,141	5,444	5,738	2,162	7,281	8,826	9,432	7,831	7,839
Compensation to Victims of Crime	1,750	1,000	2,000	1,625	1,000	2,000	3,500	4,905	2,000	3,500
Retiree \$5,000 Lump Sum	7,885	8,628	9,108	8,846	9,286	10,080	10,893	10,167	9,811	9,696
Employees Life, Accident and Health Insurance and Benefits:										
Claims Expenses	1,776,296	1,826,996	1,934,325	2,047,749	2,242,195	2,455,030	2,434,697	2,163,858	2,212,805	2,298,095
Administration	9,437	9,401	9,356	24,535	36,692	19,390	14,977	13,911	13,158	17,050
Total Expenses	1,798,254	1,848,271	1,960,325	2,088,649	2,291,513	2,493,920	2,473,045	2,202,358	2,245,699	2,356,238
Program Revenues										
Governmental Activities:										
Charges for Services:										
Administration Fees		66	74	75	70	71	71	70	70	73
Appropriations:										
Judicial Retirement System Plan I										19,941
Death Benefits:										
Peace Officers, Firemen, etc.	2,784	2,141	5,444	5,738	2,162	7,281	8,826	9,432	7,831	7,839
Compensation to Victims of Crime	1,750	1,000	2,000	1,625	1,000	2,000	3,500	4,905	2,000	3,500
Retiree \$5,000 Lump Sum	7,885	8,628	9,108	8,846	9,289	10,075	10,893	10,167	9,811	9,696
Insurance Contributions:										
Employer	1,414,732	1,434,186	1,527,002	1,631,916	1,834,956	1,992,220	1,963,388	2,582,653	2,529,624	2,219,782
Member	444,731	444,786	460,944	482,566	495,723	521,361	562,140	559,111	562,373	545,585
Other	209	192	179	141	121	120	125	135	141	142
Operating Grants and Contributions:										
Investment Income	12,758	13,188	(5,885)	10,913	6,298	19,492	13,569	5,631	91,752	95,789
Other	4,688	875	2,039	647	2,945	1,386	1,782	2,981	14,815	12,374
Total Program Revenues	1,889,603	1,905,070	2,000,906	2,142,462	2,352,565	2,554,006	2,564,293	3,175,085	3,218,420	2,914,714
General Revenues										
Transfers				90	115	(1,673)	64	37	—	48
Total General Revenues		40	—	90	115	(1,673)	64	37	—	48
Net Revenue Governmental Activities	91,349	56,839	40,581	53,903	61,167	58,413	91,312	972,764	972,721	558,523

Note A: Because of the implementation of GASB Statement 84 Fiduciary Activities, Judicial Retirement System Plan I is reclassified from an Agency Fund to a General Fund beginning in fiscal year 2020.

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 Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Governmental Funds:	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Committed:										
Social Security Administration Fund	8	18	—	5	17	22	4	25	4	1
Total Governmental Funds	8	18	—	5	17	22	4	25	4	1

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.

	Fiscal Year									
	2011	2012	2013	2014	2,015	2,016	2017	2018	2019	2020
Revenues	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Appropriations for (Note A):										
Judicial Retirement System Plan I (Note B)										19,941
Death Benefits:										
Public Employee Survivors	2,784	2,141	5,444	5,738	2,162	7,281	8,826	9,432	7,831	7,840
Victims of Crime	1,750	1,000	2,000	1,625	1,000	2,000	3,500	4,904	2,000	(554)
Retiree \$5,000 Lump Sum	7,885	8,628	9,108	8,847	9,289	10,075	10,893	10,167	9,810	13,750
Administration Fees	66	74	75	70	71	71	70	70	74	66
Total Revenues	12,485	11,843	16,627	16,280	12,522	19,427	23,289	24,573	19,715	41,043
Expenditures										
Judicial Retirement System Plan I (Note B)										19,941
Death Benefits:										
Public Employee Survivors	2,784	2,141	5,444	5,738	2,162	7,281	8,826	9,432	7,831	7,840
Victims of Crime	1,750	1,000	2,000	1,625	1,000	2,000	3,500	4,904	2,000	3,500
Retiree \$5,000 Lump Sum	7,885	8,628	9,108	8,846	9,286	10,080	10,893	10,167	9,810	9,696
Administrative Expenditures	102	105	92	156	178	139	152	86	95	117
Total Expenditures	12,521	11,874	16,644	16,365	12,626	19,500	23,371	24,589	19,736	41,094
Excess of Revenues Over (Under) Expenditures	(36)	(31)	(17)	(85)	(104)	(73)	(82)	(16)	(21)	(51)
Other Financing Sources (Uses)										
Transfers In - Retirement Membership Fees					115	77	64	36		48
Net Change in Fund Balances	(36)	9	(17)	5	11	4	(18)	20	(21)	(3)

Note A: Include lapsed appropriations

Note A: Because of the implementation of GASB Statement 84 Fiduciary Activities, Judicial Retirement System Plan I is reclassified from an Agency Fund to a General Fund beginning in fiscal year 2020. Note A: Because of the implementation of GASB Statement 84 Fiduciary Activities, Judicial Retirement System Plan I is reclassified from an Agency Fund to General Fund beginning in fiscal year 2020..

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.

	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Operating Revenues	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Insurance Contributions:										
Employer	1,414,731	1,434,186	1,527,002	1,631,916	1,834,956	1,992,220	1,963,388	2,582,653	2,529,624	2,219,782
Member	444,731	444,786	460,944	482,566	495,723	521,360	562,140	559,111	562,373	545,585
Federal Revenues-COBRA Stimulus	1,312	27								
Other	3,089	835	2,199	604	1,856	1,480	1,905	3,116	14,956	12,066
Total Operating Revenues	1,863,863	1,879,834	1,990,145	2,115,086	2,332,535	2,515,060	2,527,433	3,144,880	3,106,953	2,777,432
Operating Expenses										
Benefit Payments:										
Employee	1,743,897	1,792,645	1,900,026	2,017,586	2,213,193	2,428,066	2,408,452	2,141,516	2,186,649	2,269,293
COBRA	32,398	34,351	34,299	30,163	29,003	26,963	25,972	21,817	25,282	27,664
Health Savings Account								525	874	1,138
Administrative and Other Expenses	9,437	9,401	9,356	24,535	36,692	19,390	15,060	13,880	13,066	17,148
Total Operating Expenses	1,785,732	1,836,397	1,943,681	2,072,284	2,278,888	2,474,419	2,449,757	2,177,738	2,225,871	2,315,244
Operating Income (Loss)	78,131	43,437	46,464	42,802	53,647	40,641	77,676	967,142	881,082	462,189
Non-Operating Revenues (Expenses)										
Net Appreciation (Depreciation) in Fair Value of Investments	4,273	5,395	(17,215)	1,284	(3,195)	7,771	(830)	(15,417)	33,360	32,731
Investment Income	8,485	7,794	11,331	9,629	9,493	11,721	14,482	21,017	58,300	63,156
Other	496	204	18	184	1,210	25	1			
Total Non-Operating Revenues (Expenses)	13,254	13,393	(5,866)	11,097	7,508	19,517	13,653	5,600	91,660	96,337
Transfer Out						(1,750)				
Change in Net Position	91,385	56,830	40,598	53,899	61,155	58,408	91,329	972,742	972,742	558,526

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.

	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Employees Retirement Fund (ERS)										
Additions										
Member Contributions	425,811	411,066	422,588	430,595	462,160	674,678	685,462	683,933	694,788	713,985
Employer Contributions	414,084	347,121	375,737	482,329	500,510	686,841	700,142	697,226	712,648	735,903
Investment Income (Net of Expenses)	2,414,830	1,614,670	2,097,577	3,252,362	56,905	1,273,373	2,832,594	2,430,255	758,868	1,791,017
Other Additions	64,970	71,255	75,637	80,324	84,203	89,035	93,506	97,318	103,006	108,033
Total Additions	3,319,695	2,444,112	2,971,539	4,245,610	1,103,778	2,723,927	4,311,704	3,908,732	2,269,310	3,348,938
Deductions										
Retirement Benefits	1,593,537	1,712,821	1,819,779	1,933,694	2,041,389	2,146,522	2,257,219	2,374,013	2,496,771	2,602,286
Death Benefits	4,142	3,654	3,283	3,053	4,730	5,082	3,664	5,132	3,444	4,793
Refunds	79,535	88,060	86,668	106,809	87,167	84,445	120,944	123,948	142,303	121,569
Administrative and Other Expenses	19,000	18,024	18,911	20,480	22,127	20,779	23,630	24,132	28,903	25,308
Total Deductions	1,696,214	1,822,559	1,928,641	2,064,036	2,155,413	2,256,828	2,405,457	2,527,225	2,671,421	2,753,956
Change in Net Position	1,623,481	621,553	1,042,898	2,181,574	(1,051,635)	467,099	1,906,247	1,381,507	(402,111)	594,982
Law Enforcement and Custodial Officer Supplemental Retirement Fund (LECOS)										
Additions										
Member Contributions	7,604	7,287	7,185	8,180	8,377	9,539	9,583	9,275	9,098	8,950
Employer Contributions	24,228	(3)	7,117	27,758	26,728	27,497	26,583	26,110	25,864	22,293
Investment Income (Net of Expenses)	81,881	51,909	71,885	111,741	1,919	44,831	99,341	84,937	26,250	61,097
Other Additions	2	1				4	1	5	3	9
Total Additions	113,715	59,194	86,187	147,679	37,028	81,871	135,508	120,327	61,215	92,349
Deductions										
Retirement Benefits	42,914	46,868	50,848	55,222	59,211	62,698	66,800	72,228	78,470	83,198
Death Benefits		6	6	6	9	22	18	18	15	29
Refunds	694	1,220	1,531	1,919	2,128	1,826	2,938	3,392	3,768	3,487
Administrative and Other Expenses	937	844	805	1,324	1,412	1,421	1,811	1,851	2,167	1,933
Total Deductions	44,651	48,938	53,190	58,471	62,760	65,967	71,567	77,489	84,420	88,647
Change in Net Position	69,064	10,256	32,997	89,208	(25,732)	15,904	63,941	42,838	(23,205)	3,702
Judicial Retirement System of Texas Plan Two (JRS II)										
Additions										
Member Contributions	4,291	4,170	4,268	5,195	5,465	5,754	6,017	5,940	6,463	8,634
Employer Contributions	11,933	4,150	4,549	12,211	12,457	12,374	12,495	12,560	13,100	14,186
Investment Income (Net of Expenses)	30,189	41,181	28,753	46,186	820	19,862	44,875	39,191	12,832	30,633
Other Additions										
Total Additions	46,415	49,501	37,571	63,592	18,744	37,990	63,387	57,691	32,396	53,453
Deductions										
Retirement Benefits	11,722	12,782	14,586	16,166	19,158	20,825	22,988	24,706	28,980	31,902
Death Benefits						31				11
Refunds	48	179	285	254	56	299	374	159	213	128
Administrative and Other Expenses	286	230	228	267	284	226	294	296	363	273
Total Deductions	12,056	13,212	15,099	16,687	19,524	21,381	23,656	25,161	29,583	32,314
Change in Net Position	34,359	36,289	22,472	46,905	(780)	16,609	39,731	32,530	2,813	21,139

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Changes in Net Position – Defined Benefit Plans (Concluded)

Last Ten Fiscal Years (in 000's)

	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Excess Benefit Arrangement	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Additions										
Other Additions	342	506	569	493	457	540	746	817	953	1,324
Total Additions	342	506	569	493	457	540	746	817	953	1,324
Deductions										
Retirement Benefits	297	436	488	422	392	448	668	753	797	988
Administrative and Other Expenses	45	70	81	71	65	92	78	64	156	90
Total Deductions	342	506	569	493	457	540	746	817	953	1,078
Change in Net Position	—	—	—	—	—	—	—	—	—	246
State Retiree Health Plan										
Additions										
Member Contributions	135,133	134,993	141,008	155,276	169,075	183,284	195,806			
Employer Contributions	444,895	483,636	535,905	605,512	612,769	663,986	890,735	307,028	401,285	748,369
Non-Employer Contributing Entity Contributions (Note A)	N/A	N/A	N/A	N/A	N/A	N/A	44,433	16,585	20,183	37,737
Federal Revenues	38,207	39,612	50,874	63,362	86,054	69,186	73,120	74,493	89,389	111,099
Early Retirees Reinsurance Program		40,724								
Investment Income (Net of Expenses)	436	329	236	255	324	1,137	4,517	10,907	3,324	1,336
Other Additions						5,961	357	3,249	85	24
Total Additions	648,847	699,294	728,023	824,405	872,191	923,554	1,208,968	412,262	514,266	898,565
Deductions										
Healthcare Benefits	646,197	696,085	724,381	813,823	863,926	912,886	995,815	938,921	1,038,588	1,076,890
Less: Payments from Members (Note B)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(203,123)	(209,837)	(230,151)
Administrative and Other Expenses	2,650	3,209	3,642	10,582	8,265	10,668	5,629	5,817	6,008	6,815
Total Deductions	648,847	699,294	728,023	824,405	872,191	923,554	1,001,444	741,615	834,759	853,554
Change in Net Position	—	—	—	—	—	—	207,524	(329,353)	(320,493)	45,011

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.

Note B: Beginning from fiscal year 2018, contributions from members are reported as payments from members to be in compliance with the reporting requirements under GASB Statement 74.

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									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Texa\$aver 401(k) Plan										
Additions										
Investment Income (Net of Expenses)	43	26	27	(7)	7	18	(7)	59	71	11
Other Additions	830	607	550	398	188	50	565	390	486	1,210
Total Additions	873	633	577	391	195	68	558	449	557	1,221
Deductions										
Administrative and Other Expenses	615	596	759	590	529	433	479	482	490	260
Total Deductions	615	596	759	590	529	433	479	482	490	260
Change in Net Position	258	37	(182)	(199)	(334)	(365)	79	(33)	67	961
Texa\$aver 457 Plan										
Additions										
Investment Income (Net of Expenses)	13	12	11	(2)	6	17	18	52	75	23
Other Additions	513	486	520	507	581	587	719	763	896	570
Total Additions	526	498	531	505	587	604	737	815	971	593
Deductions										
Administrative and Other Expenses	510	452	330	334	265	233	269	512	523	165
Total Deductions	510	452	330	334	265	233	269	512	523	165
Change in Net Position	16	46	201	171	322	371	468	303	448	428
Commuter Spending Account Fund (CSA)										
Additions										
Contributions						73	129	141	140	127
Investment Income (Net of Expenses)					1	4	7	12	8	
Other Additions							6			
Transfers In						1,750				
Total Additions	0	0	0	0	0	1,824	133	154	152	135
Deductions										
Reimbursement Account Claims						43	114	116	115	79
Administrative and Other Expenses						1,276	72	19	4	12
Total Deductions	0	0	0	0	0	1,319	186	135	119	92
Change in Net Position	0	0	0	0	0	505	(53)	19	33	44
State Employees Cafeteria Plan (TexFlex)										
Additions										
Contributions	96,033	95,986	95,578	83,214	83,092	80,953	79,559	76,656	73,406	73,290
Investment Income (Net of Expenses)	20	19	20	9	20	34	72	193	336	184
Other Additions	104	76	92	113	398	194	92	101		
Total Additions	96,157	96,081	95,690	83,336	83,510	81,181	79,723	76,950	73,742	73,503
Deductions										
Reimbursement Account Claims	93,737	92,093	92,799	78,720	77,744	81,179	69,697	73,729	71,301	65,837
Administrative and Other Expenses	2,725	2,485	2,365	2,460	3,662	1,815	1,619	1,526	1,452	1,391
Total Deductions	96,462	94,578	95,164	81,180	81,406	82,994	71,316	75,255	72,753	67,228
Change in Net Position	(305)	1,503	526	2,156	2,104	(1,813)	8,407	1,695	989	6,274

Note A: The System implemented the Commuter Spending Accounts on January 1, 2016.

Benefit and Refund Payments - Defined Benefit Plans

Last Ten 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 Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Employees Retirement Fund:										
Type of Benefit										
Retirement Benefits:										
Service:										
Retirees	1,476,597	1,585,066	1,649,308	1,799,608	1,906,043	2,013,347	2,120,153	2,232,174	2,351,834	2,461,583
Survivors	21,188	21,410	59,425	21,370	21,835	21,396	21,493	21,686	21,232	21,075
Disability	28,854	28,376	27,980	27,386	26,797	26,148	25,640	25,166	24,654	24,078
Partial Lump Sum Option	51,885	60,687	63,641	63,359	62,438	58,351	59,262	61,250	62,846	56,401
Proportional	15,013	17,282	19,425	21,971	24,276	27,280	30,671	33,737	36,205	39,149
Total Retirement Benefits	1,593,537	1,712,821	1,819,779	1,933,694	2,041,389	2,146,522	2,257,219	2,374,013	2,496,771	2,602,286
Death Benefits										
Active Members:										
Occupational	189	117	86	32	116	132	43	209	51	129
Non-Occupational	2,308	1,920	1,999	1,453	2,909	3,317	2,053	3,401	1,858	2,786
Retiree	1,645	1,617	1,198	1,568	1,705	1,633	1,568	1,522	1,535	1,877
Total Death Benefits	4,142	3,654	3,283	3,053	4,730	5,082	3,664	5,132	3,444	4,792
Refunds:										
Resignation	61,235	74,640	84,004	82,026	102,175	80,876	78,206	115,416	117,908	115,652
Death	4,099	4,895	4,056	4,642	4,634	6,291	6,239	5,528	6,040	5,917
Total Refunds	65,334	79,535	88,060	86,668	106,809	87,167	84,445	120,944	123,948	121,569
Law Enforcement and Custodial Officer Supplemental Retirement Fund:										
Type of Benefit										
Retirement Benefits:										
Service	39,509	42,670	46,561	50,261	54,747	58,444	62,571	67,822	73,632	78,830
Disability	1,128	1,093	1,088	1,053	1,022	1,008	990	922	883	858
Partial Lump Sum Option	2,277	3,105	3,199	3,907	3,442	3,247	3,239	3,484	3,955	3,511
Total Retirement Benefits	42,914	46,868	50,848	55,221	59,211	62,699	66,800	72,228	78,470	83,199
Death Benefits:										
Active Members:										
Non-Occupational	106	6	6	6	9	21	18	18	15	28
Annuity Death Refund										1
Total Death Benefits	106	6	6	6	9	21	18	18	15	29
Refunds:										
Resignation	686	1,205	1,513	1,895	2,097	1,772	2,892	3,355	3,732	3,433
Death	9	15	18	24	31	54	46	37	36	54
Total Refunds	695	1,220	1,531	1,919	2,128	1,826	2,938	3,392	3,768	3,487
Judicial Retirement System of Texas Plan Two:										
Type of Benefit										
Retirement Benefits:										
Service	8,923	9,942	11,346	12,670	15,389	16,841	18,550	19,947	23,753	26,172
Disability	570	358	358	358	358	395	442	422	358	512
Proportional	2,229	2,482	2,882	3,138	3,411	3,589	3,996	4,337	4,869	5,218
Total Retirement Benefits	11,722	12,782	14,586	16,166	19,158	20,825	22,988	24,706	28,980	31,902
Death Benefits:										
Active Members:										
Non-Occupational		21				5			27	11
Annuity Death Refund					27	26				
Total Death Benefits	—	21	—	—	27	31	—	—	27	11
Refunds:										
Resignation	47	117	210	228	56	224	215	159	138	75
Death		62	75	26		75	159		76	53
Total Refunds	47	179	285	254	56	299	374	159	214	128

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Benefit and Refund Payments - Defined Benefit Plans (Concluded)

Last Ten Years (in 000's)

	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Excess Benefit Arrangement:										
Type of Benefit										
Retirement Benefits:										
Service	297	436	488	422	392	448	668	753	797	988
Total Retirement Benefits	297	436	488	422	392	448	668	753	797	988
State Retiree Health Plan:										
Type of Benefit										
Insurance Benefits:										
Accrued Claims	53,835	50,148	36,356	22,706	9,848	(5,601)	20,769	(27,916)	4,781	6,762
Life Claims	24,663	29,722	37,349	41,763	45,740	46,994	55,347	54,426	58,278	60,363
Prescriptions Drugs	171,191	201,279	217,332	241,583	253,591	279,144	255,976	289,856	308,940	355,589
Administrative Fees	18,872	15,061	15,775	19,077	18,721	19,338	20,744	19,802	19,776	20,405
HMO Payments	32,349	73,491	98,107	110,232	139,696	156,418	188,633	179,537	201,752	195,654
Health	330,801	310,261	301,785	358,696	373,469	391,327	426,911	393,907	411,988	409,119
Dental	14,486	16,123	17,677	19,766	22,861	25,266	27,436	29,309	33,073	28,998
Total Insurance Benefits	646,197	696,085	724,381	813,823	863,926	912,886	995,816	938,921	1,038,588	1,076,890

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 Credited Service						
	September 30, 2010 to August 31, 2020	5-10	10-15	15-20	20-25	25-30	30+
- Period 9/30/10 to 8/31/11:							
Average Monthly Benefit	\$ 541.71	863.85	1,437.10	2,048.33	2,814.49	3,727.77	
Average Final Average Salary	\$ 3,585.54	3,308.86	3,770.38	4,254.06	4,662.99	5,128.08	
Number of Retired Members	226	558	558	770	745	614	
- Period 9/30/11 to 8/31/12:							
Average Monthly Benefit	\$ 509.22	871.22	1,425.95	2,071.83	2,858.45	3,712.65	
Average Final Average Salary	\$ 3,323.09	3,340.22	3,689.58	4,247.05	4,732.90	5,076.86	
Number of Retired Members	223	525	658	796	735	551	
- Period 9/30/12 to 8/31/13:							
Average Monthly Benefit	\$ 548.59	953.18	1,511.04	2,087.00	2,926.64	3,765.11	
Average Final Average Salary	\$ 3,522.61	3,574.99	3,899.28	4,253.98	4,845.43	5,153.36	
Number of Retired Members	278	583	696	847	797	547	
- Period 9/30/13 to 8/31/14:							
Average Monthly Benefit	\$ 512.26	920.39	1,480.19	2,006.38	2,903.39	3,875.10	
Average Final Average Salary	\$ 3,390.86	3,519.12	3,840.45	4,148.11	4,845.08	5,374.15	
Number of Retired Members	326	598	691	875	720	532	
- Period 9/30/14 to 8/31/15:							
Average Monthly Benefit	\$ 579.74	949.71	1,449.46	1,985.29	2,944.35	4,049.72	
Average Final Average Salary	\$ 3,736.26	3,669.72	3,803.01	4,195.95	4,901.39	5,617.38	
Number of Retired Members	264	636	717	1,013	888	628	
- Period 9/30/15 to 8/31/16:							
Average Monthly Benefit	\$ 563.58	929.75	1,468.28	2,046.85	3,095.95	4,317.90	
Average Final Average Salary	\$ 3,494.31	3,671.12	3,851.78	4,284.99	5,147.43	5,898.58	
Number of Retired Members	219	628	665	928	896	613	
- Period 9/30/16 to 8/31/17:							
Average Monthly Benefit	\$ 588.47	956.75	1,515.58	2,099.24	3,118.94	4,364.50	
Average Final Average Salary	\$ 3,615.38	3,761.76	3,986.35	4,320.64	5,134.90	6,048.32	
Number of Retired Members	264	734	705	912	858	628	
- Period 9/30/17 to 8/31/18:							
Average Monthly Benefit	\$ 610.95	985.97	1,628.58	2,255.54	3,227.34	4,575.79	
Average Final Average Salary	\$ 3,618.41	3,823.68	4,216.69	4,653.16	5,333.30	6,235.86	
Number of Retired Members	147	681	621	813	804	636	
- Period 9/30/18 to 8/31/19:							
Average Monthly Benefit	\$ 578.52	1,030.91	1,681.05	2,383.37	3,244.38	4,647.97	
Average Final Average Salary	\$ 3,687.87	3,968.15	4,387.83	4,853.83	5,316.72	6,295.96	
Number of Retired Members	133	748	602	825	827	605	
- Period 9/30/19 to 8/31/20:							
Average Monthly Benefit	\$ 653.68	1,027.41	1,685.92	2,282.41	3,378.41	4,677.15	
Average Final Average Salary	\$ 4,036.79	3,903.44	4,358.01	4,665.01	5,571.28	6,359.58	
Number of Retired Members	100	651	513	729	746	520	
Five Year Average -							
Period 9/30/15 to 8/31/20:							
Average Monthly Benefit	\$ 542.40	780.72	1,294.36	1,771.39	2,603.85	3,665.67	
Average Final Average Salary	\$ 3,645.18	3,829.12	4,142.79	4,541.27	5,291.43	6,161.30	
Average Number of Retired Members	173	688	621	841	826	600	
Ten Year Average -							
Period 9/30/10 to 8/31/20:							
Average Monthly Benefit	\$ 559.38	953.50	1,523.04	2,120.20	3,054.33	4,177.89	
Average Final Average Salary	\$ 3,741.18	3,547.51	3,968.60	4,344.15	4,979.11	5,734.77	
Average Number of Retired Members	218	634	643	851	802	587	

Note A: This schedule includes service retirements of the employee class as of November 2, 2020. 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, 2020

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 Benefit	Number of Retirees	Type of Retirement				Option Selected (Note B)				
		Service	Disability	Life	Option 1	Option 2	Option 3	Option 4	Option 5	
Employees Retirement Fund (Note A)										
\$										
\$ 0-300	7,242	7,000	242	4,757	1,442	441	136	245	221	
301-600	12,721	12,106	615	8,901	2,220	629	215	335	421	
601-900	14,299	13,639	660	10,002	2,407	825	266	286	513	
901-1,200	13,396	13,053	343	9,142	2,283	981	236	279	475	
1,201-1,500	13,264	13,105	159	8,734	2,361	1,103	228	215	623	
1,501-2,000	18,150	18,042	108	11,676	3,032	1,854	294	338	956	
2,001-2,500	13,247	13,219	28	8,010	2,286	1,649	207	297	798	
2,501-3,000	8,926	8,916	10	5,099	1,603	1,207	157	223	637	
3,001-4,000	9,601	9,597	4	5,381	1,877	1,193	128	233	789	
4,001-10,999	7,150	7,149	1	3,482	1,849	889	78	146	706	
Total	117,996	115,826	2,170	75,184	21,360	10,771	1,945	2,597	6,139	
Law Enforcement And Custodial Officer Supplemental Retirement Fund (Not e A)										
\$										
\$ 0-200	429	429	0	285	100	23	4	5	12	
201-400	7,020	6,976	44	3,933	1,733	749	78	93	434	
401-600	4,635	4,618	17	2,492	967	648	44	85	399	
601-800	1,290	1,287	3	561	335	189	16	24	165	
801-1,000	732	732	0	279	241	108	9	8	87	
1,001-1,200	354	353	1	118	137	44	0	4	51	
1,201-1,400	137	131	6	43	53	15	1	2	23	
1,401-1,600	49	40	9	19	18	4	0	1	7	
1,601-1,800	22	17	5	11	6	2	0	1	2	
1,801-9,999	29	24	5	10	13	0	0	1	5	
Total	14,697	14,607	90	7,751	3,603	1,782	152	224	1,185	
Judicial Retirement Plan Two Fund (Note A)										
\$										
\$ 0-2,000	33	33	0	14	15	2	1	0	1	
2,001-2,500	10	10	0	5	5	0	0	0	0	
2,501-3,000	8	8	0	1	3	1	1	0	2	
3,001-3,500	7	7	0	2	2	2	0	0	1	
3,501-4,000	20	20	0	9	8	2	0	1	0	
4,001-4,500	41	41	0	15	19	5	0	1	1	
4,501-5,000	49	49	0	25	18	3	0	3	0	
5,001-5,500	63	63	0	20	26	5	1	0	11	
5,501-6,000	58	58	0	24	25	5	0	1	3	
6,001-6,500	58	57	1	32	17	6	1	0	2	
6,501-7,000	39	39	0	12	15	7	0	2	3	
7,001-9,999	98	97	1	55	21	14	0	4	4	
Total	484	482	2	214	174	52	4	12	28	

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									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Defined Benefit Plans	%	%	%	%	%	%	%	%	%	%
Employees Retirement Fund										
Employee Class:										
Employee	6.50	6.50	6.50	6.60	6.90	9.50	9.50	9.50	9.50	9.50
Employer	6.95	6.50	6.50	8.00	8.00	10.00	10.00	10.00	10.00	10.00
Elected Class:										
Legislators	8.00	8.00	8.00	8.00	8.00	9.50	9.50	9.50	9.50	9.50
Employer	6.45	6.00	6.50	8.00	8.00	10.00	10.00	10.00	10.00	10.00
Other Elected Class	6.50	6.50	6.50	6.60	6.90	9.50	9.50	9.50	9.50	9.50
Employer	6.95	6.00	6.50	8.00	8.00	10.00	10.00	10.00	10.00	10.00
Law Enforcement and Custodial Officer Supplemental Retirement Fund (Note A)										
Employee	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Employer	1.59	0.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Judicial Retirement System Plan Two Fund										
Employee	6.00	6.00	6.00	6.00	6.90	7.20	7.50	7.50	7.50	9.50
Employer	16.83	6.00	6.50	15.663	15.663	15.663	15.663	15.663	15.663	15.663
<hr/>										
State Retire Health Plan (Note B)										
Group Benefits Program										
Employee Only:	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
State Contribution Monthly Rate	411.04	438.30	470.38	503.14	537.66	576.54	617.30	621.90	624.82	624.82
HealthSelect Monthly Premium	411.04	438.30	470.38	503.14	537.66	576.54	617.30	621.90	624.82	624.82
Employee & Children:										
State Contribution Monthly Rate	569.30	606.20	470.38	503.15	537.66	797.66	854.10	860.48	864.52	864.52
HealthSelect Monthly Premium	727.56	774.10	830.86	888.86	949.94	1,018.78	1,090.90	1,099.06	1,104.22	1,104.22
Employee & Spouse:										
State Contribution Monthly Rate	647.38	689.04	739.58	791.16	845.54	906.78	970.98	978.22	982.82	982.82
HealthSelect Monthly Premium	883.72	939.78	1,008.78	1,079.18	1,153.42	1,237.02	1,237.02	1,334.54	1,340.82	1,340.82
Employee & Family:										
State Contribution Monthly Rate	805.64	856.94	919.82	984.02	1,051.68	1,127.90	1,207.78	1,216.80	1,222.52	1,222.52
HealthSelect Monthly Premium	1,200.24	1,275.58	1,369.26	1,464.90	1,565.70	1,679.26	1,798.26	1,811.70	1,820.22	1,820.22

Note A: Beginning in Fiscal Year 2018, an additional amount equivalent to 1.07% of payroll is contributed by employer from dedicated court fees.

Note B: 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 Year (Note A)									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Employees Retirement Fund										
Active Contributing Members	137,293	132,669	133,669	134,162	142,409	146,390	141,629	141,535	141,865	142,062
Non-Contributing Members	84,900	90,190	96,015	96,507	101,122	108,873	112,192	119,736	125,935	134,909
Retirees and Beneficiaries	83,430	87,799	91,367	95,840	100,003	103,758	107,530	111,361	115,155	117,996
Service and Disability Retirements	5,808	5,928	5,287	6,231	6,042	5,668	5,966	6,029	6,034	5,264
Law Enforcement and Custodial Officer Supplemental Retirement Fund (Note B)										
Active Contributing Members	36,806	37,404	37,415	37,084	38,526	39,066	38,206	37,167	36,296	35,230
Non-Contributing Members	5,785	7,129	10,187	11,311	12,962	15,203	17,100	19,842	22,207	25,511
Retirees and Beneficiaries	7,728	8,477	9,089	10,024	10,845	11,515	12,248	13,080	13,981	14,697
Service and Disability Retirements	695	895	744	1,071	959	803	876	966	1,020	873
State Retiree Health Plan										
Active Contributing Members	546	541	545	554	563	548	557	561	573	570
Non-Contributing Members	134	143	152	139	148	166	158	153	187	187
Retirees and Beneficiaries	208	215	254	267	322	331	378	393	472	17
Service and Disability Retirements	43	8	43	14	57	10	48	16	83	1
State Retiree Health Plan										
Retirees	90,213	95,375	100,054	104,770	109,311	113,430	117,880	122,350	127,044	130,910
Dependents	32,412	35,549	35,830	36,933	38,130	38,910	39,880	41,061	42,024	42,855

Note A: The source of the retirement systems and State Retiree Health Plan membership is the System's actuaries. The System's actuaries include 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.

Statistical Information – Other Programs

(All items expressed as numbers unless otherwise indicated)

This schedule provides ten year historical trend information for members of the TexaSaver 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									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
457 Deferred Compensation Plan (Note A)										
TexaSaver 457 Plan (Note A):										
Total Participants	21,153	23,219	24,689	26,902	29,129	31,515	33,131	34,023	34,102	33,456
Participants Currently Deferring	13,293	14,189	14,385	20,030	16,685	17,052	19,803	18,591	18,281	17,886
Current Fair Value of Plan Assets (in millions)	\$ 380.6	442.6	494.7	591.1	603.7	669.7	759	869.0	896.2	1,053
Original 457 Plan (Notes A & B):										
Total Participants	734	657	598	580	513	468	440	424	401	388
Participants Currently Deferring	57	53	38	32	22	17	15	14	12	10
TexaSaver 401(k) Deferred Compensation Plan										
Total Participants	109,613	121,516	135,237	151,034	165,513	181,249	195,737	206,617	220,430	213,974
Participants Currently Deferring	64,704	66,910	69,692	89,774	82,851	92,527	95,813	95,392	99,909	103,190
Current Fair Value of Plan Assets (in millions)	\$ 1,315.5	1,527.2	1,593.8	1,853.9	1,836.2	1,984.7	2,193.6	2,449	2,478.1	2,876
Deferrals (in millions)	\$ 107.3	105.5	145.7	152.2	160.3	182.3	159.3	135.1	141.9	148.2
Commuter Spending Account (CSA)										
Reimbursement Accounts:										
Parking						14	26	26	29	32
Transit						127	120	134	129	72
Participant Contributions (Note C)										
Cafeteria Plan										
Reimbursement Accounts:										
Health Care	48,807	47,591	46,942	46,173	46,609	48,010	47,799	46,337	44,584	43,134
Dependent Care	3,686	3,747	3,747	3,785	3,880	3,825	3,713	3,636	3,574	3,117
Total Redirected (in millions)	\$ 93.7	92.8	91.9	78.9	78.5	80.3	78.7	75.8	73	69.9
Premium Conversion:										
Participants	222,295	218,587	219,357	221,876	222,789	226,864	223,026	223,233	224,699	224,626
Premiums Redirected (in millions)	\$ 482.4	487.5	500.9	509.2	522.1	548.3	504.5	505.8	509.7	506.4
Tax Savings (in millions):										
Employees	\$ 109.2	110.4	113.5	115.3	118.3	124.2	132.1	131.7	132.0	130.5
State of Texas	\$ 36.9	37.3	38.3	39	39.9	41.9	44.6	44.5	44.6	44.1
Group Benefits Program (Note D)										
Membership:										
Active	239,138	237,041	226,181	228,805	230,023	235,108	230,199	231,911	233,887	232,367
Dependents	183,626	172,695	171,023	169,282	166,772	168,161	166,266	164,685	163,172	162,180
COBRA (Note E)	2,213	2,460	1,674	1,144	1,167	984	723	1,104	1,137	1,199
Total Membership	424,977	412,196	398,878	399,231	397,962	404,253	397,188	397,700	398,196	395,746
Death Benefit Programs										
Lump Sum Payments	14	9	23	29	8	14	21	17	13	14
Monthly Payments to Guardians	107	99	111	112	114	114	111	122	116	139
Victims of Violent Crime	13	5	11	8	4	4	7	10	4	7

Note A: In fiscal year 2001, a new TexaSaver 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, 2018.

Note C: The System implemented the Commuter Spending Accounts on January 1, 2016. During fiscal year 2018, 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. The source of the membership is the System's actuary.

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 Law Examiners Bond Review Board
Cancer Prevention and Research Institute of Texas
Commission on Jail Standards
Commission on State Emergency Communications
Comptroller – Judiciary Section
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 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 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
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
Texas School for the Blind and Visually Impaired
Texas School for the Deaf
Texas State Board of Examiners of Psychologists
Texas State Board of Pharmacy

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Listing of Participating Reporting Entities for State Retiree Health Plan (Concluded)

exas State Board of Plumbing Examiners
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 and Southwest Collegiate Institute for the
Deaf are a part of the Howard County Junior College
District
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
Wharton County Junior College

Other Entities

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 187,142 which is 80.5% of the employees covered by the State Retiree Health Plan.

ERS SUPPORTS THE STATE WORKFORCE BY OFFERING
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