

86th Legislature March 2019



Texas Pension Review Board



Josh B. McGee, Chair Term Expiration: January 31, 2021 Hometown: Houston

Keith Brainard, Vice Chair Term Expiration: January 31, 2019 Hometown: Georgetown

Andrew W. Cable Term Expiration: January 31, 2019 Hometown: Wimberley

Marcia Dush Term Expiration: January 31, 2019 Hometown: Austin **Rossy Fariña-Strauss** Term Expiration: January 31, 2023 Hometown: Austin

Stephanie Leibe Term Expiration: January 31, 2021 Hometown: Austin

Ernest Richards Term Expiration: January 31, 2021 Hometown: Irving

Anumeha (Anu) Kumar Executive Director March 1, 2019

Honorable Members of the 86th Texas Legislature

Ladies and Gentlemen:

The Texas Pension Review Board (PRB) is pleased to present its *Guide to Public Retirement Systems in Texas, March 2019 (Guide)*. The PRB publishes the *Guide* before each legislative session to give lawmakers, the public, retirement systems, and other stakeholders comparative information on the State's public retirement systems, including current actuarial, financial, benefits and governance data.

This Session's *Guide* includes several types of information designed to give readers a more complete picture of Texas public retirement systems. First, the 2019 *Guide* provides multi-year trends to allow for analysis over time of retirement systems' funding progress, actuarial value of assets compared to actuarial accrued liabilities, active to retiree members, and assumed rates of return. The 2019 *Guide* also features a summary of the Funding Soundness Restoration Plans (FSRP) submitted by retirement systems to the PRB; data on deferred retirement option plan (DROP) balances as a percentage of plan assets; and currently outstanding pension obligation bonds.

The *Guide* specifically focuses on the 99 actuarially-funded defined benefit systems and is divided into three major sections:

- The first section contains summaries of the current plan data, including boards of trustees for statewide and municipal retirement systems.
- The second section provides trends and key actuarial, membership, financial, investment performance, accounting disclosures, benefit, and governance data for retirement systems.
- The third section provides an appendix which includes a summary of significant pension-related legislation passed in recent legislative sessions, benefit information for pay-as-you-go volunteer firefighter and defined contribution retirement systems, and a directory of all 346 systems registered with the PRB.

The PRB would like to thank the retirement systems for their assistance in preparing this report. We look forward to working with interested parties during the 86th Legislative Session and hope that this report will serve as a reference point for any possible pension bills considered during this session.

Sincerely,

Anumeha Kumar Executive Director

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TEXAS PENSION REVIEW BOARD

ABOUT THE TEXAS PENSION REVIEW BOARD (PRB)

The Texas Pension Review Board (the "Board" or "PRB") was established in 1979 as an oversight agency for Texas public retirement systems. The PRB's service population consists of the members, trustees, and administrators of 346 public retirement plans; state and local government officials; and the general public.

The PRB monitors the financial and actuarial soundness of 99 actuarially funded defined benefit public retirement systems in Texas, as well as their compliance with state law. As of the most recent reports the PRB has on file, these retirement systems had approximately \$281 billion in total net assets and 2.7 million members. The agency also tracks 247 defined contribution and pay-as-you-go volunteer firefighter systems across the state. These retirement systems are only required to register with the PRB and submit plan description information.

Board Composition

The Board is composed of seven governor-appointed members, including: three persons who have experience in the fields of securities investment, pension administration, or pension law and are not members or retirees of a public retirement system; one active public retirement system member; one retired member of a public retirement system; one person who has experience in the field of governmental finance; and one member who is an actuary.

Primary Duties

The general duties of the PRB outlined in Chapter 801 of the Government Code are to (1) conduct a continuing review of public retirement systems, including compiling and comparing information about benefits, creditable service, financing, and the administration of systems; (2) conduct intensive studies of potential or existing problems that threaten the actuarial soundness of public retirement systems; (3) provide educational services to the trustees and system administrators of Texas public retirement systems; (4) provide information and technical assistance on pension planning to public retirement systems on request; (5) recommend policies, practices, and legislation to public retirement systems and appropriate governmental entities; and (6) prepare actuarial impact studies on proposed legislation. The Board can furnish other appropriate services such as actuarial studies or other requirements of systems and can establish appropriate fees for these activities and services.

Actuarial Impact Statements

During legislative sessions, the agency is required to prepare and provide an actuarial impact statement that analyzes the economic or financial impact of a proposed pension bill on the retirement system affected by the bill. Changes to pension systems often create financial commitments that extend far into the future. By addressing the actuarial impact of certain proposed changes, the PRB provides the Legislature with information that assists in managing pension costs.

When a bill with a potential cost effect on a retirement system is scheduled for committee hearing, the PRB obtains an actuarial analysis of the legislation from the actuary who represents the retirement system targeted by the bill. The analysis is reviewed by the PRB's staff actuary, providing a "second opinion" on any costs associated with the bill. These two documents—the system's actuarial analysis and the PRB's actuarial review—are summarized in an actuarial impact statement prepared by staff and submitted to the Legislative Budget Board (LBB). The LBB publishes the final actuarial impact statement, which is attached to the bill in committee and stays with the bill throughout the legislative process. If a bill is subsequently amended or substituted so that its actuarial effect is changed, another impact statement is usually prepared.

TEXAS PENSION REVIEW BOARD

PRB PENSION FUNDING GUIDELINES

Actuarial assumptions and methodologies are used to determine the proper funding policy for public pension plans. Actuaries include plan participant demographics, benefit obligations, and economic forecast assumptions to calculate the periodic contributions necessary to ensure the long-term financial viability of pension plans; and to estimate the impact that potential plan changes will have on their financial position.

To lend transparency to retirement systems' actuarial processes and to establish minimum funding standards necessary to meet long-term obligations, the PRB created the *Guidelines for Actuarial Soundness (Guidelines)* in 1984. Since the original adoption of the Guidelines, the PRB has reviewed and updated them as necessary, with the latest update adopted January 26, 2017, which went into effect on June 30, 2017. The new *Guidelines* include a preamble stating the purpose of the policy document and a change of the title to *PRB Pension Funding Guidelines*. The updated *Guidelines* are as follows:

The purpose of the Pension Review Board's Pension Funding Guidelines is to provide guidance to public retirement systems and their sponsoring governmental entities in meeting their long-term pension obligations. The Guidelines are intended to foster communication between plans and their sponsors as they determine a reasonable approach to responsible funding, whether the contribution rate is fixed or actuarially determined.

Public retirement systems should develop a funding policy, the primary objective of which is to fund the obligations over a time frame that ensures benefit security while balancing the additional, and sometimes competing, goals of intergenerational equity and a stable contribution rate.

- 1. The funding of a pension plan should reflect all plan obligations and assets.
- 2. The allocation of the normal cost portion of the contributions should be level or declining as a percentage of payroll over all generations of taxpayers, and should be calculated under applicable actuarial standards.
- 3. Funding of the unfunded actuarial accrued liability should be level or declining as a percentage of payroll over the amortization period.
- 4. Actual contributions made to the plan should be sufficient to cover the normal cost and to amortize the unfunded actuarial accrued liability over as brief a period as possible, but not to exceed 30 years, with 10 25 years being the preferable target range.* For plans that use multiple amortization layers, the weighted average of all amortization periods should not exceed 30 years.* Benefit increases should not be adopted if all plan changes being considered cause a material increase in the amortization period and if the resulting amortization period exceeds 25 years.
- 5. The choice of assumptions should be reasonable, and should comply with applicable actuarial standards.
- 6. Retirement systems should monitor, review, and report the impact of actual plan experience on actuarial assumptions at least once every five years.

*Plans with amortization periods that exceed 30 years as of 06/30/2017 should seek to reduce their amortization period to 30 years or less as soon as practicable, but not later than 06/30/2025.

TEXAS PENSION REVIEW BOARD

PRB PRINCIPLES OF RETIREMENT PLAN DESIGN

At its August 11, 2017 meeting, the PRB established the PRB Advisory Committee on Principles of Retirement Plan Design to develop a document to guide and inform public retirement systems and their associated governmental entities on how to structure retirement plans. The PRB received comments and feedback on the draft *Principles of Retirement Plan Design (Principles)* from plans, their actuaries, and the public. The Committee incorporated changes into the document, agreed on a draft for recommendation to the full Board, and the Board adopted the *Principles* on June 14, 2018. The *Principles* are presented below:

The Pension Review Board (PRB) recognizes that offering a sustainable, secure retirement benefit is vital to achieving the objectives of multiple public-sector stakeholders including employers, employees, retirees, beneficiaries, and taxpayers, and that benefits should be protected through sound plan design and adequate funding. Therefore, the PRB intends for these Principles to guide and inform public retirement systems and their associated governmental entities on how to structure retirement plans.

Because:

- state and local government is a major employer in Texas;
- the state and its many political subdivisions-counties, cities, school districts, special districts, and others-rely on employees to deliver essential public services, including teaching at public schools; protecting public health and safety; planning, building, and maintaining transportation, utility and other infrastructure, parks and recreational facilities; protecting vulnerable individuals, including children, the elderly, and those with developmental disabilities; and protecting the state's natural resources;
- employee compensation is a vital component in the ability of the state and its political subdivisions to attract qualified workers to perform public services and to keep those workers employed as long as they continue to add value to their employer and to the public;
- a retirement benefit is a critical element of employee compensation, serving as an important tool in the ability of employers to recruit and retain qualified and experienced employees; and
- the design and prudent financial management of the retirement benefit provided to public employees can significantly affect the ability of employers to attract and retain employees and maintain budgetary stability while providing essential public services;

The PRB supports the following Principles of Retirement Plan Design for public retirement systems in Texas:

- 1. Public employers should offer a retirement benefit, and participation in the employer-sponsored primary retirement plan should be mandatory.
- 2. Contributions to retirement plans should be consistent with the PRB Pension Funding Guidelines.
- 3. Employers and employees should share the cost of the benefit.
- 4. Retirement plan vesting should occur over a short period, preferably five years or less.

TEXAS PENSION REVIEW BOARD

PRB PRINCIPLES OF RETIREMENT PLAN DESIGN

- 5. Benefits should be designed to place employees on the path to financial security in retirement in consideration of participation or nonparticipation in Social Security.
- 6. A primary retirement plan should require annuitization of a substantial portion of retirement benefits.
- 7. In the absence of an immediate and heavy financial need, a retirement benefit should be used only for retirement.
- 8. Retirement benefits should be protected against the erosion of the benefit's value due to inflation; such benefits should not exceed actual inflation and should be funded in accordance with the Pension Review Board's *Pension Funding Guidelines*.
- 9. Employers should provide death and disability benefits.
- 10. Employers are encouraged to offer plans that are supplemental to the primary retirement plan.
- 11. Retirement plan governance should represent the interests of all stakeholders, respect fiduciary standards, and be transparent and publicly accountable.
- 12. Retirement plan assets should be pooled and professionally invested according to prudent investor standards, giving careful consideration to cost.

TEXAS PENSION REVIEW BOARD

SUMMARY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

TEXAS PENSION REVIEW BOARD

EMPLOYEES RETIREMENT SYSTEM OF TEXAS (ERS)

Summary of Current Plan Data										
Date of Valuation	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Period	Membership		Contribution ¹	
							Active	Annuitant	Employee	Employer
8/31/2018	\$38,989.26	\$27,359.94	\$11,629.32	70.17%	7.50%	Infinite	141,535	111,361	9.50%	10.00%

¹Employer contribution includes state contribution of 9.50% and state agency contribution of 0.50%.

In November 1946, voters approved an amendment to the Texas Constitution to create a retirement fund for state employees. ERS was officially established by the Legislature in 1947. ERS is responsible for overseeing retirement benefits for elected state officials and state employees. Other programs administered by ERS include the Texas Employees Group Benefits Program (GBP), TexFlex and Texa\$aver. In addition, ERS acts as the administrative and investment body for the Law Enforcement and Custodial Officers Supplemental Retirement Fund and the Judicial Retirement System, Plans I and II. All revisions in funding, benefits, membership eligibility, and creditable service under ERS require legislative action.

Governing Statute								
Texas Constitution								
Article XVI, Section 67								
Government Code								
Title 8, Subtitle B								
<u>Chapters 811-815</u>								

Executive Director
Porter Wilson
PO Box 13207
Austin, Texas 78711
(877) 275-4377

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www.ers.texas.gov

Employees Retirement System of Texas Board of Trustees

Name	Position	Term Expires
I. Craig Hester, Chair	Appointed by Chief Justice	8/31/2022
Ilesa Daniels, Vice Chair	Elected Member	8/31/2021
Doug Danzeiser	Appointed by ERS Board	8/31/2019
Cydney Donnell	Appointed by the Governor	8/31/2018
Catherine Melvin	Elected Member	8/31/2023
James Kee	Appointed by Speaker of the House	8/31/2020

TEXAS PENSION REVIEW BOARD

JUDICIAL RETIREMENT SYSTEM OF TEXAS PLAN TWO (JRS II)

	Summary of Current Plan Data									
Date of Valuation	Liability Assets		Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Period	Membership		Contribution ¹	
		(millions)					Active	Annuitant	Employee	Employer
8/31/2018	\$487.77	\$447.08	\$40.69	91.66%	7.50%	69	561	393	7.46%	15.66%

¹Member contributions may cease after 20 years or Rule of 70 with 12 years' service on Appellate Court. The current average member contribution rate is 7.46%.

JRS II is a retirement plan for state judges and justices who took office after August 31, 1985. This plan is administered by ERS. All revisions in funding, benefits, membership eligibility, and creditable service under JRS II require legislative action.

Governing Statute	Executive Director	Employees Retirement System of Texas Board of Trustees					
Texas Constitution	Porter Wilson	Name	Position	Term Expires			
Article XVI, Section 67 Government Code	PO Box 13207 Austin, Texas 78711	I. Craig Hester, Chair	Appointed by Chief Justice	8/31/2022			
Title 8, Subtitle E	(877) 275-4377	Ilesa Daniels, Vice Chair	Elected Member	8/31/2021			
<u>Chapters 836-840</u>	www.ers.texas.gov	Doug Danzeiser	Appointed by ERS Board	8/31/2019			
		Cydney Donnell	Appointed by the Governor	8/31/2018			
		Catherine Melvin	Elected Member	8/31/2023			
		James Kee	Appointed by Speaker of the House	8/31/2020			

TEXAS PENSION REVIEW BOARD

LAW ENFORCEMENT AND CUSTODIAL OFFICER SUPPLEMENTAL RETIREMENT FUND (LECOSRF)

Summary of Current Plan Data										
Date of Valuation	Liability Ass	Actuarial Value of Assets	of Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	t Amortization Period (years)	Membership		Contribution ¹	
		(millions)					Active	Annuitant	Employee	Employer
8/31/2018	\$1,452.66	\$953.05	\$499.60	65.61%	7.50%	Infinite	37,167	13,080	0.50%	1.57%

¹Employer contribution represents state contribution at 0.50% and court fee contributions equivalent to 1.07%. Rates are in addition to rates paid for ERS.

LECOSRF was created by the Texas Legislature in 1979. It is a supplemental plan of and administered by ERS. Membership is limited to law enforcement officers who have been commissioned by the Department of Public Safety, Texas Alcoholic Beverage Commission, Parks and Wildlife Department, and those members whose commissions are recognized by the Commission on Law Enforcement Officer Standards and Education. Membership is also provided to custodial officers employed by the Texas Department of Criminal Justice, and certified by the department as having direct contact with inmates. The supplemental benefits are available to any employee who completes 20 years of service in an eligible position. All revisions in funding, benefits, membership eligibility, and creditable service under LECOSRF require legislative action.

Governing Statute	Executive Director	Employees Retirement System of Texas Board of Trustees						
Texas Constitution	Porter Wilson	Name	Position	Term Expires				
Article XVI, Section 67 Government Code	PO Box 13207 Austin, Texas 78711	I. Craig Hester, Chair	Appointed by Chief Justice	8/31/2022				
Title 8, Subtitle B	(877) 275-4377	Ilesa Daniels, Vice Chair	Elected Member	8/31/2021				
<u>Chapters 811-815</u>	www.ers.texas.gov	Doug Danzeiser	Appointed by ERS Board	8/31/2019				
	<u> </u>	Cydney Donnell	Appointed by the Governor	8/31/2018				
		Catherine Melvin	Elected Member	8/31/2023				
		James Kee	Appointed by Speaker of the House	8/31/2020				

TEXAS PENSION REVIEW BOARD

TEACHER RETIREMENT SYSTEM OF TEXAS (TRS)

Summary of Current Plan Data										
Date of Valuation	Liability A	Actuarial Value of Assets		Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution ¹	
		(millions)					Active	Annuitant	Employee	Employer
8/31/2018	\$200,216.31	\$154,050.93	\$46,165.38	76.94%	7.25%	87	872,999	420,458	7.70%	7.76%

¹The State began contributing the current contribution rate of 6.80% in fiscal year 2014 and it is assumed the rate will remain at that level. In addition, covered employees whose employees are not participating in Social Security began contributing 1.50% of salary in fiscal year 2015. Combined, these contributions were approximately 7.76% of total payroll.

In November 1936, voters approved an amendment to the Texas Constitution to create a statewide teacher retirement system. TRS was officially established by the Legislature in 1937. TRS is the largest public retirement system in Texas, in both membership and assets. The system provides benefits to public school teachers, other public school employees, and higher education personnel who are not eligible for the Optional Retirement Program (ORP), or who choose not to belong to ORP. Revisions regarding benefits, contributions, and post-retirement adjustments require legislative action.

Governing Statutes	Executive Director	Teacher Retirement System of	Texas Board of Trustees	
Texas Constitution	Brian K. Guthrie	Name	Position	Term Expires
Article XVI, Section 67	1000 Red River Street	Jarvis V. Hollingsworth, Chair	Appointed by the Governor	8/31/2023
<u>Government Code</u> Title 8, Subtitle C	Austin, Texas 78701 (512) 542-6400	Dolores Ramirez, Vice Chair	Active Public Education Position	8/31/2019
Chapters 821-825	(312) 342-0400	Joe Colonnetta	Appointed by the Governor	8/31/2019
	www.trs.texas.gov	David Corpus	Nominated by State Board of Education	8/31/2019
		John Elliot	Appointed by the Governor	8/31/2021
		Dr. Greg Gibson	Active Public Education Position	8/31/2021
		Christopher Moss	Nominated by State Board of Education	8/31/2021
		James D. Nance	Retiree	8/31/2023
		Nanette Sissney	Active Public Education Position	8/31/2023

TEXAS PENSION REVIEW BOARD

OPTIONAL RETIREMENT PROGRAM (ORP)

In 1967, ORP was created as a 403(b) defined contribution plan to serve as an alternative to TRS for full-time faculty, librarians, and certain administrators and professionals employed by Texas public institutions of higher education. ORP is administered by the Texas Higher Education Coordinating Board (THECB). Because their careers normally involve interstate mobility, it was determined that a more portable retirement option would substantially improve higher education institutions' ability to compete for quality employees at the national level. Certain employees of the Texas Higher Education Coordinating Board and the Commissioner of Education are eligible to elect ORP in lieu of ERS. Eligible employees have up to 90 days to make a one-time irrevocable election of ORP. Each institution administers the plan for its employees, including authorization of companies to offer ORP accounts. Participants select a company and direct the allocation of their own investments. Benefits are a result of the amounts contributed and any net return on the investments selected by each participant. Contribution rates are set by the Legislature biennially. Institutions may supplement the state's base rate up to a total employer contribution rate of 8.5%.

Governing Statute	Statewide Coordinator	Texas Higher Education Coordinating Board	
Government Code	Toni Alexander	Name	Term Expires
<u>Title 8, Subtitle C</u> <u>Chapter 830</u>		Stuart W. Stedman, Chair	8/31/2021
-	PO Box 12788	Fred Farias III, O.D., Vice Chair	8/31/2019
	Austin, TX 78711 (512) 427-6101	John T. Steen, Jr., Secretary	8/31/2019
	(512) 427-0101	Arcilia C. Acosta	8/31/2019
	www.thecb.state.tx.us/orp	S. Javaid Anwar	8/31/2021
		Michael J. Plank	8/31/2023
		Ricky A. Raven	8/31/2021
		Michelle Q. Tran	8/31/2019
		Donna N. Williams	8/31/2023

Welcome W. Wilson, Jr.

8/31/2023

TEXAS PENSION REVIEW BOARD

TEXAS COUNTY & DISTRICT RETIREMENT SYSTEM (TCDRS)

	Summary of Current Plan Data									
Date of Actuarial Accrue			Unfunded Actuarial	Funded	Discount	Amortization Period ¹	Membership		Contribution ²	
Valuation	ion Liability (millions) Assets (millions) Accrued Liability (millions) Ratio	Ratio	atio Rate	(years)	Active	Annuitant	Employee	Employer		
12/31/2017	\$32,539.90	\$28,975.65	\$3,564.25	89.05%	8.00%	12.3	135,751	63,628	6.78%	11.57%

¹Amortization period is calculated using system wide aggregate UAAL and payroll amounts.

²*The members' contribution rate is set by plan sponsor with a weighted average calculated by the PRB. Employer contribution reflects weighted average.*

TCDRS was established in 1967 and is an agent multiple-employer retirement system which provides retirement, disability and survivor benefits to 760 Texas counties and districts, including water, hospital, appraisal and emergency service districts. Although created by the Texas Legislature, TCDRS does not receive funding from the State of Texas. Each employer plan is funded independently by the county or district, its employees and investment earnings. Member districts or counties may voluntarily join TCDRS. Participating counties and districts are required to pay 100% of their required contribution every year. Employers may elect to make additional contributions to help offset future adverse experience or pay liabilities faster. Employers have the ability to adjust their benefits annually to meet their local workforce needs and budgets. TCDRS is a savings-based plan where the benefit is based on how much a member has saved over the course of their career and employer matching at retirement.

Governing Statute	Executive Director	r Texas County & District Retirement System Board of Trustees					
Government Code	Amy Bishop	Name	County	Term Expires			
<u>Title 8, Subtitle F</u>	901 S. MoPac Expy	Robert A. Eckels, Chair	Harris	12/31/2019			
<u>Chapters 841-845</u>	Barton Oaks Plaza IV Suite 500	Robert Willis, Vice-Chair	Polk	12/31/2019			
	Austin, Texas 78746	H.C. "Chuck" Cazalas	Nueces	12/31/2017			
	(512) 328-8889	Chris Davis	Cherokee	12/31/2021			
	www.tcdrs.org	Mary Louise Nicholson	Tarrant	12/31/2017			
		Deborah Hunt	Williamson	12/31/2021			
		Bridget McDowell	Taylor	12/31/2019			
		Bill Metzger	Dallas	12/31/2021			
		Kristeen Roe	Brazos	12/31/2017			

TEXAS PENSION REVIEW BOARD

TEXAS EMERGENCY SERVICES RETIREMENT SYSTEM (TESRS)

	Summary of Current Plan Data									
Date of			Unfunded Actuarial Accrued Liability	Funded		Amortization Period	Membership		Contribution ¹	
Valuation	(millions)	v Patio	Ratio	(years)		Active	Annuitant	Employee	Employer	
8/31/2018	\$137.51	\$114.67	\$22.85	83.39%	7.75%	24	3,927	3,533	0.00%	Varies

¹TESRS contributions are comprised of two parts paid by local municipalities. Part one varies with a minimum contribution of \$36 per member, per month. Part two does not affect annuities and is adjusted by the state board based on the most recent actuarial valuation, effective for the following two state fiscal years. Members are volunteers and the covered group does not have a payroll.

TESRS was initially created in 1977 by the 65th Legislature as the Statewide Volunteer Fire Fighter's Retirement Act. In 2005, the System was renamed the Texas Emergency Services Retirement System. TESRS was previously administered by the Office of the Fire Fighters' Pension Commissioner and became a standalone state agency effective September 1, 2013, with the passing of Senate Bill 220. TESRS covers volunteer firefighters and emergency services personnel in 238 member departments. The System was created as a funded alternative to numerous local volunteer plans operated under the Texas Local Fire Fighters Retirement Act (TLFFRA). The State pays some of the costs of administering this fund and has a statutory obligation to contribute an amount not to exceed 1/3 of fire department contributions to the extent the system needs the funds in order to be actuarially sound.

Governing Statute	Executive Director	Texas Emergency Services Retirem	Texas Emergency Services Retirement System Board of Trustees						
Government Code	Kevin Deiters PO Box 12577	Name	City	Term Expires					
<u>Title 8, Subtitle H</u> Chapters 861-865	Austin, TX 78711	Frank Torres, Chair	Raymondville	9/1/2017					
<u>Chapters 801-805</u>	(512) 936-3372	Virginia "Jenny" Moore, Vice Chair	Lake Jackson	9/1/2021					
	www.tesrs.org	Ronald "Ron" Larson, Secretary	El Paso	9/1/2019					
		"Andrew" Taylor Allen	Dallas	9/1/2019					
		Courtney Gibson Bechtol	Rockport	9/1/2021					
		Dan Key	Friendswood	9/1/2019					
		Pilar Rodriguez	Edinburg	9/1/2021					
		Don R. Shipman	Fort Worth	9/1/2017					
		Stephen Williams	Carthage	9/1/2017					

TEXAS PENSION REVIEW BOARD

TEXAS MUNICIPAL RETIREMENT SYSTEM (TMRS)

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability	Actuarial Value of Assets		Funded	Discount	Amortization Period ¹	Membership		Contribution ²	
Valuation	(millions)	(millions)	Accrued Liability (millions) Ratio	Rate	(years)	Active	Annuitant	Employee	Employer	
12/31/2017	\$31,811.59	\$27,813.57	\$3,998.02	87.43%	6.75%	18.8	110,208	62,776	6.63%	13.09%

¹Amortization period is calculated using system wide aggregate UAAL and payroll amounts.

²The members' contribution rate is set by plan sponsor with a weighted average calculated by the PRB. Employer contribution reflects weighted average.

TMRS was established in 1947 and is an agent multiple-employer retirement system which provides retirement, disability and survivor benefits for employees of 883 municipalities in the state. Although created by the Texas Legislature, TMRS does not receive funding from the State of Texas. Member municipalities may voluntarily join the system, and municipalities that participate in TMRS have their own retirement plans within the general framework of the TMRS Act. Plan provisions may vary from city to city depending upon the options selected by each individual municipality. Participating municipalities are required to pay 100% of their required contribution every year and may elect to make additional contributions to help offset future adverse experience and/or pay liabilities faster. Municipalities may modify their benefits to meet their individual needs. Each plan in TMRS is funded independently by the municipalities, its employees and investment earnings.

Governing Statute	Executive Director	Texas Municipal Retirement System Board of Trustees					
<u>Government Code</u> Title 8, Subtitle G	David Gavia PO Box 149153	Name	City	Term Expires			
Chapters 851-855	Austin, Texas 78714	Bill Philibert, Chair	Deer Park	2/1/2019			
	(512) 476-7577	David Landis, Vice Chair	Perryton	2/1/2021			
	www.tmrs.org	Jesus A. Garza	Kingsville	2/1/2023			
		James "Jim" Jeffers	Nacogdoches	2/1/2021			
		Jim Parrish	Plano	2/1/2023			
		Julie Oakley	Lakeway	2/1/2019			

TEXAS PENSION REVIEW BOARD

CITY OF AUSTIN EMPLOYEES' RETIREMENT SYSTEM (COAERS)

	Summary of Current Plan Data									
Date of	of the second		Unfunded Actuarial Accrued Liability	Funded	Discount	Amortization Period	Membership		Contribution	
Valuation	(millions)	Assets (millions)	(millions)	Ratio	Rate	(years)	Active	Annuitant	Employee	Employer
12/31/2017	\$3,797.82	\$2,592.46	\$1,205.36	68.26%	7.50%	30	9,612	6,225	8.00%	18.00%

COAERS was initially established in 1941 by city ordinance. In 1991, the 72nd Legislature enacted Article 6243n, Vernon's Texas Civil Statutes, establishing the system in statute. COAERS is a single employer contributory defined benefit pension plan providing retirement, disability, and death benefit programs for regular full-time employees of the City of Austin working 30 or more hours per week and their beneficiaries. COAERS does not provide benefits for the mayor, members of the City Council, or commissioned civil service police officers and firefighters.

Governing Statute	Executive Director	City of Austin Employees' Retin	ement System Board of Trustees	
Vernon's Texas Civil Statutes Article 6243n	Christopher Hanson 6850 Austin Center Blvd	Name	Position	Term Expires
	Suite 320	Michael Benson, Chair	Active Elected Member	12/31/2019
	Austin, TX 78731 (512) 458-2551	Eyna Canales-Zarate, Vice Chair	Retired Elected Member	12/31/2020
		Stephanie Beach	Council Appointed Citizen	12/31/2020
	www.coaers.org	Chris Noak	Active Elected Member	12/31/2021
		Ed Van Eenoo	City Manager Designee	N/A
		Amy Hunter	Active Elected Member	12/31/2019
		Yuejiao Liu	Active Elected Member	12/31/2021
		Frank Merriman	Council Appointed Citizen	12/31/2021
		Leslie Pool	City Council Member	N/A
		Anthony B. Ross, Sr.	Retired Elected Member	12/31/2022
		Randy Spencer	Board Appointed Citizen	12/31/2021

TEXAS PENSION REVIEW BOARD

AUSTIN FIRE FIGHTERS RELIEF & RETIREMENT FUND

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability			Funded Discount		Contribution				
Valuation	(millions)	Assets (millions)Accrued Liability (millions)Functor Ratio	Rate	(years)	Active	Annuitant	Employee	Employer		
12/31/2017	\$1,038.12	\$916.93	\$121.19	88.33%	7.70%	17	1,061	789	18.70%	22.05%

The Austin Fire Fighters Relief and Retirement Fund was initially created in 1937 by an Act of the 45th Legislature under the Texas Local Fire Fighters Retirement Act (Article 6243e, Vernon's Texas Civil Statutes). In 1975, the 64th Legislature enacted Article 6243e-1, establishing the Fund independently in statute. The Fund is a single employer contributory defined benefit pension plan that provides retirement, disability, death and survivor benefits to firefighters employed by the City of Austin and their beneficiaries.

Governing Statute	Administrator	Austin Fire Fighters Relief & Retirement Fund Board of Trustees					
Vernon's Texas Civil Statutes Article 6243e.1	William E. Stefka 4101 Parkstone Heights Dr	Name	Position	Term Expires			
	Suite 270	Stephen Adler, Chair	Mayor	N/A			
	Austin, TX 78746 (512) 454-9567	Keith Johnson, Vice Chair	Fund Member	12/31/2020			
	www.afrs.org	Belinda Weaver, Treasurer	Secretary-Treasurer	N/A			
	<u>www.uns.org</u>	Jeremy Burke	Fund Member	12/31/2019			
		Brad Landi	Fund Member	12/31/2021			

TEXAS PENSION REVIEW BOARD

AUSTIN POLICE RETIREMENT SYSTEM

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded	Discount	Amortization Period	Membership		Contribution	
Valuation				Ratio	Rate	(years)	Active	Annuitant	Employee	Employer
12/31/2017	\$1,185.02	\$779.48	\$405.53	65.78%	7.70%	35	1,866	867	13.00%	21.31%

The Austin Police Retirement System was initially created in 1979 under City Ordinance. In 1991, the 72nd Legislature enacted Article 6243n-1, Vernon's Texas Civil Statutes, establishing the System in statute. The System is a single employer contributory defined benefit pension plan providing retirement, death, disability and withdrawal benefits to plan members and their beneficiaries. Members include all cadets upon enrollment in the Austin Police Academy, and commissioned law enforcement officers employed by the City of Austin Police Department, as well as full-time employees of the Austin Police Retirement System.

Governing Statute	Executive Director	Austin Police Retirement System Board of Trustees						
Vernon's Texas Civil Statutes 6243n-1	Pattie Featherston 2520 South IH 35, Suite 100	Name	Position	Term Expires				
	Austin, TX 78704	Jim Beck, Chair	Police Member	1/1/2020				
	(512) 416-7672	Andrew Romero, Vice Chair	Police Member	1/1/2020				
	www.ausprs.org	Keith Harrison	Retired Member	1/1/2022				
		Elaine Hart	City Member	N/A				

Thomas Hugonnett

Tyler Link

Todd Smith

Kathie Tovo

Belinda Weaver

Chesley Wood

Carl Zimmerman

Police Member

Police Member

Police Member

Secretary-Treasurer

Citizen Member

Retired Member

City Member

1/1/2022

1/1/2022

1/1/2020

N/A

N/A

1/1/2020

1/1/2020

TEXAS PENSION REVIEW BOARD

DALLAS EMPLOYEES' RETIREMENT FUND

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution	
Valuation							Active	Annuitant	Employee	Employer
12/31/2017	\$4,377.84	\$3,601.61	\$776.23	82.27%	7.75%	47	7,838	7,042	13.32%	14.39%

The Dallas Employees' Retirement Fund was established by ordinance in November 1943 and became effective in January 1944 after ratification by the voters of the City of Dallas. The Plan derives its authority from Chapter 40A of the Dallas City Code. The Plan is a single-employer defined benefit pension plan that provides retirement, disability, and death benefits to its members, and is sponsored by the City of Dallas. All permanent civilian employees of the City are members in the Plan, except police officers, firefighters, elected officers, non-salaried appointee members of administrative boards or commissions, temporary employees, individuals working under contract, and individuals whose salaries are paid in part by another government agency.

Governing Statute	Executive Director	Dallas Employees' Retirement Fu	nd Board of Trustees	
Chapter 40A, Dallas City Code	Cheryl Alston 1920 McKinney Avenue	Name	Position	Term Expires
	10th floor	John D. Jenkins, Chair	Active Member	12/31/2018 (Holdover)
	Dallas, TX 75201	Tina B. Richardson, Vice Chair	Active Member	12/31/2018 (Holdover)
	(214) 580-7700	Randy A. Bowman	Citizen Member	9/30/2019
	www.dallaserf.org	Carla D. Brewer	Active Member	12/31/2019
		Lee Kleinman	Citizen Member	9/30/2019
		John W. Peavy III	Citizen Member	N/A
		Carol A. Smith	Active Member	N/A

TEXAS PENSION REVIEW BOARD

DALLAS POLICE & FIRE PENSION SYSTEM (DPFPS)

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount	Amortization Period (years)	Membership		Contribution	
Valuation					Rate		Active	Annuitant	Employee	Employer
1/1/2018	\$4,505.44	\$2,151.04	\$2,354.40	47.74%	7.25%	45	4,952	4,748	13.50%	45.40%

DPFPS was initially created in 1916 under city ordinance. In 1933, the 43rd Legislature enacted 6243a, Vernon's Texas Civil Statutes, establishing the System in statute. The System was restated and continued in 1989 by an Act of the 71st Legislature under Article 6243a-1. The System is a single employer contributory defined benefit plan providing retirement, survivor, and disability benefits to the uniformed public safety employees of the City of Dallas and their beneficiaries.

Governing Statute	Executive Director	Dallas Police & Fire Pension Syste	m Board of Trustees	
Vernon's Texas Civil Statutes Article 6243a-1	Kelly Gottschalk 4100 Harry Hines Blvd	Name	Position	Term Expires
	Suite 100	William Quinn, Chair	Mayor Appointed	8/31/2020
	Dallas, TX 75219	Nicholas Merrick, Vice Chair	Mayor Appointed	8/31/2019
	(214) 638-3863 <u>www.dpfp.org</u>	Samuel Friar, Deputy Vice Chair	Fire-Elected	8/31/2020
		Blaine Dickens	Non-Member-Elected	8/31/2019
		Gilbert Garcia	Non-Member-Elected	8/31/2019
		Tina Hernandez-Patterson	Non-Member-Elected	8/31/2019
		Ray Nixon	Mayor Appointed	8/31/2019
		Frederick Rowe	Mayor Appointed	8/31/2020
		Joseph Schutz	Police-Elected	8/31/2020
		Robert Walters	Mayor Appointed	8/31/2020
		Kneeland Youngblood	Mayor Appointed	8/31/2019

TEXAS PENSION REVIEW BOARD

CITY OF EL PASO EMPLOYEES RETIREMENT TRUST (CERT)

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution	
Valuation	(millions)	(millions)					Active	Annuitant	Employee	Employer
9/1/2016	\$945.77	\$749.03	\$196.75	77.78%	7.50%	17	4,217	3,011	8.95%	14.05%

CERT is a single employer defined benefit plan and was established in accordance with authority granted by Chapter 2.64 of the El Paso City Code. The Plan is a component unit of the City of El Paso, Texas. The Plan provides retirement, death and disability benefits to participants and their beneficiaries. Substantially all full-time employees of the City are eligible to participate in the Plan, except for uniformed firefighters and police officers who are covered under separate plans. Non-employer contributions are limited to participating employees of the Plan.

Governing Statute Chapter 2.64, El Paso City Code Pension Administrator/ Legal Advisor Robert B. Ash 1039 Chelsea St. El Paso, TX 79903 (915) 212-1785 www.eppension.org

City of El Paso Employees Retirement Trust Board of Trustees

Position	Term Expires
Retiree Representative	4/30/2020
Elected City Employee	4/30/2021
City Council Representative	1/23/2020
Elected City Employee	4/30/2023
City Council Representative	1/23/2020
Elected City Employee	4/30/2023
Citizen Appointed by Mayor	4/30/2017
Citizen Appointed by Mayor	4/30/2019
Elected City Employee	4/30/2021
	Retiree Representative Elected City Employee City Council Representative Elected City Employee City Council Representative Elected City Employee Citizen Appointed by Mayor Citizen Appointed by Mayor

TEXAS PENSION REVIEW BOARD

EL PASO FIREMEN & POLICEMEN'S PENSION FUND

	Summary of Current Plan Data									
	Firemen									
Date of Actuarial Accrued LiabilityActuarial Value of AssetsUnfunded Actuarial Accrued LiabilityFunded Discount					Discount	Amortization Mer Period		ership	Contribution	
Valuation	(millions)	(millions)	(millions)	Ratio Rate	Rate (years)	Active	Annuitant	Employee	Employer	
1/1/2018	\$747.57	\$581.45	\$166.12	77.78%	7.75%	28	901	777	18.00%	18.50%
	Policemen									
1/1/2018	\$1,077.90	\$843.97	\$233.94	78.30%	7.75%	30.5	1,091	1,049	18.00%	18.25%

The El Paso Firemen & Policemen's Pension Fund was initially created in 1920. In 1933, the 43rd Legislature enacted Article 6243b, Vernon's Texas Civil Statutes, establishing the Fund in statute. The Fund is a single employer contributory defined benefit plan, providing retirement, disability and death benefits to uniformed public safety employees of the City of El Paso and their beneficiaries. The Fund is comprised of two divisions, a Policemen's Fund and a Firemen's Fund, both managed by a common Board of Trustees and administrative staff.

Governing Statute	Executive Director	El Paso Firemen & Policemen	's Pension Fund Board of Trust	ees
Vernon's Texas Civil Statutes	Tyler Grossman 909 E. San Antonio	Name	Position	Term Expires
Article 6243b	El Paso, TX 79901-2523	Jerry Villanueva, Chair	Active Fire	7/1/2021
	(915) 771-8111	Paul Thompson, Vice Chair	Active Fire	7/1/2021
	www.elpasofireandpolice.org	Jerry Armendariz	Active Police	7/1/2019
	www.erpasorreandponce.org	Gary Borsch	City Manager Appointee	9/1/2021
		Ricci J. Carson	Active Fire	7/1/2019
		Leila Melendez	Mayoral Appointee	7/1/2021
		Presi Ortega	Mayoral Appointee	9/1/2019
		John Schneider	Active Police	7/1/2022
		Sean Shelton	Active Police	2/1/2021
		Robert Tollen, Ph.D.	Mayoral Appointee	7/1/2019
		William Veliz	City Manager Appointee	9/1/2019

TEXAS PENSION REVIEW BOARD

FORT WORTH EMPLOYEES' RETIREMENT FUND

	Summary of Current Plan Data									
Date of	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution	
Valuation							Active	Annuitant	Employee	Employer
12/31/2017	\$3,956.72	\$2,288.27	\$1,668.46	57.83%	7.75%	Infinite	6,579	4,391	8.08%	19.99%

The Fort Worth Employees' Retirement Fund was initially created in 1945 by city ordinance. In 2007, the 80th Legislature enacted Article 6243i, Vernon's Civil Statues, establishing the Fund independently in statute. The Fort Worth Employees' Retirement Fund is ap'ci gnt multi-employer defined benefit pension plan covering all regular employees, police officers and firefighters employed full-time by the City of Fort Worth ("City Plan"), as well as all employees of the Fort Worth Employees' Retirement Plan ("Staff Plan"). The two plans are commingled for investment purposes and are both administered by the Retirement Fund's Board of Directors; each plan has its own separate actuarial valuation completed each year and its own funded status.

Governing Statute		Fort Worth Employees' Retirem	ent Fund Board of Trustees	
Vernon's Texas Civil Statutes	General Counsel	Name	Position	Term Expires
Article 6243i	Benita Falls Harper	Todd Cox, Chair	Active Fire	8/31/2020
	3801 Hulen St, Suite 101 Fort Worth, TX 76107	Richard Van Houten, Vice Chair	Active Police	8/31/2019
	(817) 632-8900	Marsha Anderson	Retired Municipal	8/31/2019
		Kevin B. Gunn	Chief Financial Officer	N/A
	www.fwretirement.org	Loraine Coleman	Active Municipal	8/31/2019
		Jarod Cox	Council Appointee	8/31/2019
		Kevin Foster	Retired Police	8/31/2020
		Thomas Lewis	Retired Fire	8/31/2019
		Steve Litke	Council Appointee	8/31/2020
		Jesús Payán	Council Appointee	8/31/2020
		Andrea Wright	Active Municipal	8/31/2020
		Bryan Barrett	Council Appointee	8/31/2019
		Jim Lacamp	Council Appointee	8/31/2020

TEXAS PENSION REVIEW BOARD

GALVESTON EMPLOYEES' RETIREMENT FUND

	Summary of Current Plan Data										
Date of	Date of Actuarial Accrued Actuarial Valu Liability Assets		Unfunded Actuarial	Funded	Discount	Amortization Period	Membership		Contribution		
Valuation	(millions)	Assets (millions)Accrued Liability (millions)Parademic Ratio	Rate	(years)	Active	Annuitant	Employee	Employer			
12/31/2017	\$64.06	\$50.98	\$13.08	79.58%	7.25%	11.6	531	335	6.00%	9.00%	

The Galveston Employees' Retirement Fund, a component unit of the City of Galveston, is a single employer defined benefit pension plan created by City ordinance under the authority of Chapter 810 of the Texas Government Code, to provide retirement and incidental benefits for employees of the City who are not participants of the retirement plans for the police department or firefighters.

Governing Statute	Administrator	Galveston Employees' Retirement Fund Board of Trustees					
Chapter 28, Galveston City	Jacque Vasquez	Name	Position	Term Expires			
Code	1011 Tremont Colvector TX 77550	Michel Boyer	Citizen	3/1/2022			
	Galveston, TX 77550 (409) 443-5006	Brandon Cook	Active	3/1/2019			
		Don Davison	Citizen	3/1/2019			
		Mike Loftin	Active	3/1/2019			
		Janice Norman	Active	3/1/2019			
		James Patterson	Citizen	3/1/2019			
		Robert Simmons	Active	3/1/2019			

TEXAS PENSION REVIEW BOARD

GALVESTON EMPLOYEES' RETIREMENT PLAN FOR POLICE

	Summary of Current Plan Data										
Date of	Date of Actuarial Accrued Actuarial		Unfunded Actuarial Accrued Liability	Funded	Discount	t Amortization Period (years)	Membership		Contribution		
Valuation	(millions)	Assets (millions)	(millions)	Ratio Rate	Active		Annuitant	Employee	Employer		
1/1/2018	\$52.85	\$20.79	\$32.06	39.31%	7.50%	35.5	157	144	12.00%	14.83%	

The Galveston Employees' Retirement Plan for Police was initially created in 1980 by city ordinance. In 1997, the 75th Legislature enacted Article 6243p, Vernon's Texas Civil Statutes, establishing the Plan independently in statute. City code provisions pertaining to the Plan were replaced with the language from Article 6243p in 1998. The Plan is a single employer contributory defined benefit pension plan covering police officers employed full-time by the City of Galveston that provides retirement, disability and death benefits to eligible members and their beneficiaries. Participation is mandatory for eligible employees hired on or after December 1, 1980; eligible employees hired prior to this date were given a onetime option of electing to participate as of December 1, 1980.

Governing Statute	Administrator	Galveston Employees' Retirement Plan for Police Board of Trustees						
Vernon's Texas Civil	Jacque Vasquez 1011 Tremont	Name	Position	Term Expires				
<u>Statutes</u> <u>Article 6243p</u>	Galveston, TX 77550	Geoffrey Gainer, Chair	Active	12/31/2019				
<u></u>	(409) 443-5006	Jeff Murdock	Active	N/A				
		Matthew Whiting	Active	12/31/2019				
		Mike Loftin	Council Appointment	N/A				
		Andre Mitchell	Active	12/31/2019				
		Thayer Evans	Citizen	12/31/2019				
		Richard Moore	Citizen	7/31/2020				

TEXAS PENSION REVIEW BOARD

HOUSTON FIREFIGHTERS' RELIEF & RETIREMENT FUND

	Summary of Current Plan Data										
Date of	Date of		Unfunded Actuarial Accrued Liability	Funded	Discount	Amortization Period (years)	Membership		Contribution		
Valuation	Liability (millions)	Assets (millions)	(millions)	Ratio Rate	Active		Annuitant	Employee	Employer		
7/1/2017	\$4,827.72	\$3,883.81	\$943.91	80.45%	7.00%	30	4,1041	3,307	10.50%	32.99%	

The Houston Firefighters' Relief and Retirement Fund was initially created in 1937 under the authority of the Texas Local Fire Fighters Retirement Act. In 1975, the 64th Legislature enacted Article 6243e.2, Vernon's Texas Civil Statutes, establishing the Fund independently in statute. The Fund was recodified by the 75th Legislature in 1997 under Article 6243e.2(1), Vernon's Texas Civil Statutes. The Fund is a single employer contributory defined benefit pension plan covering firefighters employed by the City of Houston that provides retirement, disability and death benefits to eligible members and their beneficiaries. Prior to 1988, the City of Houston provided the staff and financing for the daily administration of the Fund; effective July 1, 1988, the Board of Trustees assumed full responsibility for Fund administration.

Governing Statute	Executive Director	Houston Firefighters' Relief & Retir	ement Fund Board of Trustees	
Vernon's Texas Civil Statutes	Ralph Marsh	Name	Position	Term Expires
<u>Article 6243e.2(1)</u>	4225 Interwood N Pkwy Houston, TX 77032	Brett Robert Besselman, Chair	Active Firefighter	12/31/2021
	(281) 372-5100	Stephen Ray Whitehead, Vice Chair	Active Firefighter	12/31/2020
	www.hfrrf.org	Lisa R. Slagle, Secretary	Citizen Member	12/31/2019
		Garry W. Blackmon, Sr.	Active Firefighter	12/31/2020
		Gerard L. Daniels	Active Firefighter	12/31/2019
		Juliet N. Higgins	Active Firefighter	12/31/2019
		David O. Lantrip	Retired Firefighter	12/31/2021
		Albertino "Al" Mays	Citizen Member	12/31/2020
		Arif Rasheed	City Treasurer Designee	N/A
		Earnest W. Wotring	Mayor's Representative	N/A

TEXAS PENSION REVIEW BOARD

HOUSTON MUNICIPAL EMPLOYEES PENSION SYSTEM (HMEPS)

	Summary of Current Plan Data										
Date of			Unfunded Actuarial Accrued Liability	Funded	Discount	Discount Amortization Period –	Membership		Contribution ¹		
Valuation	(millions)	(millions)	(millions)	Ratio	Ratio Rate	Rate (years)	Active	Annuitant	Employee	Employer	
7/1/2018	\$4,982.01	\$2,874.59	\$2,107.42	57.70%	7.00%	29	11,880	10,834	3.00%	29.39%	

¹Group A contributes 8%, Group B contributes 4% and Group D contributes 3%. The member contribution rate reflects an average of all member contributions. City contribution rates are jointly determined by the pension board and the City under a statutorily determined "corridor." In FY 2018 the City contributed \$171.6 million, consisting of \$124.0 million in legacy liability payments and \$47.5 million based on the City contribution rate. In FY 2018, the City of Houston made a statutory one-time \$250 million payment of pension obligation bond proceeds as part of the SB 2190 reforms.

HMEPS was created in 1943 by an act of the 48th Legislature, and codified under Article 6243g, Vernon's Texas Civil Statutes. The System was recodified by the 77th Texas Legislature in 2001 under Article 6243h, Vernon's Texas Civil Statutes. The System is a multiple-employer defined benefit pension plan that provides service retirement, disability retirement and death benefits for all full-time municipal employees, except police officers and firefighters (other than certain police officers in the System as authorized by the Statute), elected city officials, full-time employees of the System, and eligible beneficiaries.

Governing Statute	Executive Director	Houston Municipal Employ	ees Pension System Board of T	rustees
Vernon's Texas Civil Statutes	David L. Long	Name	Position	Term Expires
Article 6243h	1201 Louisiana, Ste 900 Houston, TX 77002	Sherry Mose, Chair	Employee Trustee	8/1/2022
	(713) 595-0100	Roy W. Sanchez, Vice Chair	Employee Trustee	8/1/2022
	www.hmeps.org	Denise Castillo-Rhodes	City Council Appointee	7/1/2020
		Barbara Chelette	Board Appointed Trustee	7/1/2020
		David Donnelly	Mayoral Appointee	7/1/2020
		Edward J. Hamb II	Controller Appointee	7/1/2020
		Roderick J. Newman	Retiree Trustee	8/1/2022
		Asha Patnaik	Employee Trustee	8/1/2020
		Adrian Patterson	City Council Appointee	7/1/2020
		Lenard Polk	Employee Trustee	8/1/2020

TEXAS PENSION REVIEW BOARD

HOUSTON POLICE OFFICER'S PENSION SYSTEM (HPOPS)

	Summary of Current Plan Data										
Date of	Date of		Unfunded Actuarial Accrued Liability	Funded	Discount	nt Amortization Period	Membership		Contribution		
Valuation	(millions)	(millions)	(millions)	Ratio Rate	Rate	(years)	Active	Annuitant	Employee	Employer	
7/1/2018	\$6,463.87	\$5,128.84	\$1,335.04	79.35%	7.00%	29	5,247	4,275	10.50%	31.82%	

HPOPS was created in 1947 by an act of the 50th Legislature, and is governed by Article 6243g-4, Vernon's Texas Civil Statutes. The System is a single employer contributory defined benefit pension plan covering police officers employed full-time by the City of Houston that provides for service, disability and death benefits for eligible members and their beneficiaries.

Governing Statute	Executive Director	Houston Police Officer's Pension System Board of Trustees						
<u>Vernon's Texas</u>	John Lawson	Name	Position	Term Expires				
<u>Civil Statutes</u> Article 6243g-4	602 Sawyer St, Suite 300 Houston, TX 77007	Terry A. Bratton, Chair	Retired Police Member	12/31/2020				
	(713) 869-8734	Dwayne Ready, Vice Chair	Police Member	12/31/2020				
	www.hpops.org	David T. Coleman, Secretary	Retired Member	12/31/2021				
	<u>www.npops.org</u>	Melissa Dubowski	City Treasurer	N/A				
		Michael J. Newsome	Police Member	12/31/2019				
		Don Sanders	Mayor's Representative	N/A				
		Scott Siscoe	Police Member	12/31/2021				

TEXAS PENSION REVIEW BOARD

SAN ANTONIO FIRE & POLICE PENSION FUND

	Summary of Current Plan Data											
Date of	Actuarial Accrued Liability	Funded Discount		ership	Contri	ibution						
Valuation	(millions)	Assets (millions)	(millions)	Ratio Rate	Rate	Rate (years)	Active	Annuitant	Employee	Employer		
1/1/2018	\$3,538.23	\$3,196.53	\$341.70	90.34%	7.25%	9.9	3,906	2,719	12.32%	24.64%		

The San Antonio Fire & Police Pension Fund was created in 1941 by an act of the 47th Legislature, and is governed by Article 62430, Vernon's Texas Civil Statutes. The Fund is a single employer contributory defined benefit retirement plan that provides comprehensive retirement, death and disability benefits for the City of San Antonio's police officers, firefighters, retirees and their beneficiaries.

Governing Statute	Executive Director	San Antonio Fire & Police Pension Fund Board of Trustees						
Vernon's Texas Civil Statutes	Warren J. Schott 11603 W Coker Loop	Name	Position	Term Expires				
<u>Article 62430</u>	San Antonio, TX 78216	J.T. Trevino, Chair	Active Fire Trustee	5/31/2019				
	(210) 534-3262	Jim Smith, Vice Chair	Active Police Trustee	5/31/2019				
	www.safppf.org	W. Reed Williams, Secretary	Mayoral Designee	N/A				
		James Foster	Active Police Trustee	5/31/2021				
		Harry Griffin	Retired Police Trustee	5/31/2019				
		Dean R. Pearson	Active Fire Trustee	5/31/2021				
		Clayton Perry	Councilman	N/A				
		Larry A. Reed	Retired Fire Trustee	5/31/2021				

William "Cruz" Shaw

Councilman

N/A

TEXAS PENSION REVIEW BOARD

LOCAL FIREFIGHTER PLANS (TLFFRA)

Summary of Current Aggregate Plan Data										
Date of Valuation	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution	
							Active	Annuitant	Employee	Employer
N/A	\$3,023.54	\$2,006.82	\$1,016.72	66.37%	N/A	N/A	5,580	3,885	N/A	N/A

The Texas Local Fire Fighters Retirement Act (TLFFRA) was originally created in 1937 by the 45th Legislature and named the Firemen's Relief and Retirement Fund. In 1989, the Act was restated under <u>Article 6243e</u> and renamed as the Texas Local Fire Fighters Retirement Act. The Act allows for paid and part-paid fire departments and volunteer fire departments in participating cities to administer their own local retirement systems. The Act provides general guidelines for fund management, including some investment restrictions, but leaves administration, plan design, contributions, and specific investments to each system's local board. Systems operating under TLFFRA are entirely locally funded and each have their own local boards of trustees governed by state statute. The following list includes paid and part-paid TLFFRA retirement systems:

Abilene Firemen's Relief & Retirement Fund Amarillo Firemen's Relief & Retirement Fund Atlanta Firemen's Relief & Retirement Fund Beaumont Firemen's Relief & Retirement Fund Big Spring Firemen's Relief & Retirement Fund Cleburne Firemen's Relief & Retirement Fund Conroe Firemen's Relief & Retirement Fund Corpus Christi Fire Fighter's Retirement Fund Corsicana Firemen's Relief & Retirement Fund Denison Firemen's Relief & Retirement Fund Galveston Firefighter's Relief & Retirement Fund Galveston Firefighter's Relief & Retirement Fund Harlingen Firemen's Relief & Retirement Fund

Irving Firemen's Relief & Retirement Fund Killeen Firemen's Relief & Retirement Fund Laredo Firefighter's Retirement System Longview Firemen's Relief & Retirement Fund Lubbock Fire Pension Fund Lufkin Firemen's Relief & Retirement Fund Marshall Firemen's Relief & Retirement Fund McAllen Firemen's Relief & Retirement Fund Odessa Firemen's Relief & Retirement Fund Odessa Firemen's Relief & Retirement Fund Paris Firefighter's Relief & Retirement Fund Plainview Firemen's Relief & Retirement Fund Plainview Firemen's Relief & Retirement Fund Port Arthur Firemen's Relief & Retirement Fund San Angelo Firemen's Relief & Retirement Fund

San Benito Firemen's Pension Fund Sweetwater Firemen's Relief & Retirement Fund Temple Firemen's Relief & Retirement Fund Texarkana Firemen's Relief & Retirement Fund Texas City Firemen's Relief & Retirement Fund The Woodlands Firefighters' Retirement System Travis County ESD #6 Firefighter's Relief & Retirement Fund Tyler Firefighters' Relief & Retirement Fund University Park Firemen's Relief & Retirement Fund Waxahachie Firemen's Relief & Retirement Fund Weslaco Firemen's Relief & Retirement Fund Wichita Falls Firemen's Relief & Retirement Fund

TEXAS PENSION REVIEW BOARD

SPECIAL DISTRICT/SUPPLEMENTAL (CHAPTER 810)

Summary of Current Aggregate Plan Data										
Date of Valuation	Actuarial Accrued Liability (millions)	Actuarial Value of Assets (millions)	Unfunded Actuarial Accrued Liability (millions)	Funded Ratio	Discount Rate	Amortization Period (years)	Membership		Contribution	
							Active	Annuitant	Employee	Employer
N/A	\$8,287.86	\$6,380.42	\$1,907.43	76.99%	N/A	N/A	36,787	19,583	N/A	N/A

<u>Chapter 810</u> of the Government Code was enacted in 1991 by the 72nd Legislature in response to two Attorney General opinions (JM-1068 and JM-1142) determining that several local retirement systems were established lacking appropriate legislative authority and were thus invalid under the Texas Constitution. Chapter 810 authorizes all those systems that had been established prior to the Attorney General opinions, and provides authority for subsequent local retirement systems to be established by local jurisdictions. Retirement systems established under Chapter 810 of the Government Code have the authority to determine plan provisions locally. The following list includes actuarially funded retirement systems enabled by Chapter 810:

Arlington Employees Deferred Income Plan	Irving Supplemental Benefit Plan				
Brazos River Authority Retirement Plan	JPS Pension Plan - Tarrant County Hospital District				
Capital MTA Retirement Plan for Administrative Employees	Lower Colorado River Authority Retirement Plan				
Capital MTA Retirement Plan for Bargaining Unit Employees	Nacogdoches County Hospital District Retirement Plan				
Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust	Northeast Medical Center Hospital Retirement Plan				
Corpus Christi Regional Transportation Authority	Northwest Texas Healthcare System Retirement Plan				
CPS Energy Pension Plan	Plano Retirement Security Plan				
Dallas County Hospital District Retirement Income Plan	Port of Houston Authority Retirement Plan				
Dallas/Fort Worth Airport Board DPS Retirement Plan	Refugio County Memorial Hospital District Retirement Plan				
Dallas/Fort Worth Airport Board Retirement Plan	Retirement Plan for Anson General Hospital				
DART Employees' Defined Benefit Retirement Plan & Trust	Retirement Plan for Citizens Medical Center				
El Paso Firemen & Policemen's Pension Staff Plan and Trust	Retirement Plan for Employees of Brownsville Navigation District				
Galveston Wharves Pension Plan	Retirement Plan for Guadalupe Regional Medical Center				
Guadalupe-Blanco River Authority	Retirement Plan for Sweeny Community Hospital				
Harris County Hospital District Pension Plan	San Antonio Metropolitan Transit Retirement Plan				
Houston MTA Non-Union Pension Plan	University Health System Pension Plan				
Houston MTA Workers Union Pension Plan					

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INTRODUCTION

Designing the benefits, as well as determining the appropriate level of contributions, must take into account three common, but sometimes competing, policy goals of providing benefit security, intergenerational equity between generations of taxpayers and employees, and a stable contribution from year to year. In order to help retirement system trustees and plan sponsors make these decisions, actuaries estimate the future benefit payments expected to be paid from the plan by making assumptions about how long current employees will work, how much they will earn, and ultimately, the distributions they will receive. The benefits are valued in today's dollars using an interest rate, generally equal to the plan's assumed investment rate of return, and spread across a participant's period of service using an actuarial cost method.

In the following sections, we will discuss how each of these items fit together and summarize what Texas public retirement systems use.

PENSION FINANCING BASICS

To understand the basics of actuarial methods for valuing pension plan liabilities, consider the fundamental equation of pension plan financing:

Contributions (C) + Income (I) = Benefits (B) + Expenses (E)

- The *inputs* to the pension fund are contributions and investment income, while *outputs* from the fund are benefits and expenses. Therefore, over time, contributions and investment return must equal benefits and expenses.
- Generally, employers and employees **contribute** to a pension fund in regular intervals. The fund invests these contributions and earns a return on investment. Returns from investments (fixed income, equity, etc.) are considered **income**. Contributions and income combine to add to the fund over time.
- Retirement plans pay **benefits** to members who have met plan requirements. Retirement plans also pay **expenses** for maintaining the plan including administrative, investment fees, auditing costs, etc. Benefit payments and expenses combine to decrease the amount in the fund.

CALCULATING PENSION OBLIGATIONS

- Defined benefit plans require actuarial calculations to estimate the current value of future benefits based on many variables, such as future salary and life expectancy. The value of future benefits is reported in an actuarial valuation report, which systems use to assess the funded status of the plan and determine an appropriate contribution level sufficient to fully fund future benefit obligations.
- To calculate the present value (or value in today's dollars) of future benefits, the benefit payments expected to be made are **discounted** from the expected payment date to the valuation date. The higher the rate at which future payments are discounted, the lower the present value of those future obligations and vice versa.

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- Each expected future benefit payment is discounted to the valuation date using the discount rate and a portion of the benefits are spread over each participant's total expected service. Each year, there are values for benefits attributed to past years, benefits attributed to the current year, and benefits attributed to future years. These are referred to as follows:
 - * The current value of benefits attributed to past years is called the **actuarial accrued liability** or **AAL**.
 - * The current value of benefits attributed to the present year is called the **normal cost** or **NC**.
 - * The current value of benefits attributed to the present year and future years is called the **present value of future normal costs** or **PVFNC** (includes the normal cost as the first year).
 - * Since the AAL includes all past service and the PVFNC includes all future service, they sum to equal the PVFB (AAL + PVFNC = PVFB)

ACTUARIAL COST METHODS

The methods for attributing benefits to a participant's years of service are known as actuarial cost methods. Currently, Texas retirement system actuaries use one of the following cost methods.

Entry Age Normal (EAN) - This methodology projects the benefit costs of each individual from entry age into the plan to assumed exit age from the plan. This benefit liability is allocated on a level basis over the earnings or service of the individual. Relative to other actuarial cost methods, entry age normal tends to produce more stable, predictable contribution rates. EAN is the most common cost method used by Texas public plans.

Ultimate EAN – This methodology may be used by plans that have different tiers of benefits based on date of hire. Under Ultimate EAN, the future normal costs are calculated by assuming each plan participant is a member of the most recently added plan tier, while the PVFB is calculated using the member's actual benefit tier. The AAL is then calculated indirectly as PVFB - PVFNC. (Note: alternate variations of this cost method exist but are not currently used by the Texas public retirement systems.)

Projected Unit Credit (PUC) - Unlike EAN, PUC does not calculate benefits on a level basis over the earnings or service of the individual. Under the PUC methodology, annual benefit costs for each member increase as the member approaches retirement age.

Traditional Unit Credit (UC) - This methodology is appropriate for plans with benefits that are based on dollar amounts rather than percentages of pay, for frozen plans, or for plans with no active members. The UC methodology calculates the Actuarial Accrued Liability based on current pay and service, not future pay. Using this methodology, the annual cost attributable to benefit liabilities for each member (normal cost) increases significantly as the members approach retirement age.

Aggregate – Under this methodology, the actuarial accrued liability is set equal to the actuarial value of assets and the excess of the present value of projected benefits over the value of plan assets is allocated on a level basis over the future service lives of the plan participants. The portion of the allocation attributed to the current year is included as plan annual benefit cost (normal cost).

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The following table summarizes Texas public retirement system plan cost methodology use.

Cost Methodologies						
Cost Method	Percent of Plans					
Entry Age Normal	94%					
Ultimate EAN	3%					
Traditional Unit Credit	2%					
Aggregate	1%					
Total	100%					

ASSETS AND ASSET SMOOTHING

The **market value of assets (MVA)** is generally the value at which assets could be traded in the market. The **actuarial value of assets (AVA)** is the value of assets used for the actuarial valuation. **Asset smoothing** techniques are employed by actuaries to smooth the short-term effects of volatility in the MVA. Smoothing is a concept designed to recognize the long-term nature of pension obligations and attempt to reduce the volatility of assets, which can help keep contributions more stable and thus more predictable for the plan sponsor over time.

- Under smoothing, asset gains and losses are generally recognized over a period of years rather than immediately. The most frequent method of smoothing used by Texas public pension plans is a five-year phase-in of actuarial gains and losses, where 20% of any gain or loss is recognized in each subsequent year. To say it a different way, 80% of the most recent year's gain or loss will be deferred and 20% is recognized, 60% of the year immediately prior is deferred so 40% has been recognized, etc.
- To avoid significant deviation from the MVA, the smoothed value (AVA) may also be subject to a **corridor** around the market value, such as plus or minus 20% of the MVA. Such a corridor places an upper limit on the amount of deferred gains and losses included in the AVA.

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The following table summarizes Texas public retirement system plan cost methodology use.

Asset Smoothing Methodologies						
Smoothing Method	Percent of Plans					
5-Year Smoothing	80%					
Market Value (MVA)	17%					
10-Year Smoothing	1%					
4-Year Smoothing	1%					
3-Year Smoothing	1%					
Total	100%					

UNFUNDED LIABILITIES AND SURPLUS

The assets of the plan are ultimately the accumulation of all contributions and income and therefore must be sufficient to cover all distributions (i.e. benefits and expenses). However, at any point in time, the assets (AVA) and current liabilities (AAL) are rarely exactly equal to one another. When the difference between the AAL and AVA is positive (i.e. the AAL > assets), the plan has an **unfunded actuarial accrued liability (UAAL)**. Thus, the UAAL is the amount that is still "owed" to the fund for past obligations. If the difference is negative (i.e. AAL < assets), the plan has a **surplus**.

CONTRIBUTIONS

Contributions usually come from two sources: the **employer** and the **employee**. Plans vary widely in contribution level and how that responsibility is shared between employer and employee. Usually, the benefit provided by the plan is a function of the employee's compensation; therefore, both the employer and employee contributions are typically expressed as a percentage of payroll.

How the total contribution rate is calculated for a given year can be classified into two broad categories, fixed rate or actuarially determined contributions.

Fixed Rate Contribution

- The total contribution rate is the same from year to year and is known in advance.
- The total fixed contribution rate can be prescribed by state statute, city ordinance or simply as the funding policy agreed upon by the system and its sponsoring governmental entity.

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- A fixed rate contribution is the most common approach used by Texas public pension plans.
- In a fixed rate contribution plan, the total contribution rate is first applied to paying the normal cost (normal cost rate), and the remainder, if any, is used to amortize the UAAL (amortization rate).
- The actuary calculates the *normal cost rate* and determines the *amortization rate* by subtracting the year's normal cost from the total fixed contribution.

Actuarially Determined Contribution (ADC)

- The total contribution rate is **not** known in advance and is calculated by the plan's actuary.
- To determine the total contribution rate, the actuary calculates **both** the *normal cost rate* and the *amortization rate*.
- An ADC plan generally has a funding policy (in statute, ordinance or simply as an agreement between the system and its sponsoring entity) that outlines the parameters to determine the total contribution rate, including how to amortize the UAAL (amortization rate).
- The development of the amortization rate is based on the plan's **amortization policy**.

Some Texas public retirement systems do not use either a straight fixed rate or ADC approach for determining contributions. The following table summarizes Texas public retirement system contribution methodology.

Employer Contribution Method						
Contribution Method	Percent of Plans					
Actuarially Determined	32%					
Fixed	53%					
Other	15%					
Total	100%					

AMORTIZATION POLICY

- An amortization policy outlines the length of time and the structure of payments applied to the UAAL. An amortization policy is needed for a plan with an actuarially determined contribution (ADC).
- The specified length of time used when calculating the amortization payment portion of the ADC is known as the amortization period.
- One piece of how the payments are structured is known as the **amortization method**. The two most common amortization methods are the **level dollar** and **level percent of payroll** methods.

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- * Level dollar amortization is similar to a standard fixed-rate mortgage such that the annual payment towards the UAAL is assumed to be the same dollar amount every year.
- * Under the level percent of payroll calculation, the dollar amount of the annual payment towards the UAAL is assumed to increase at the rate of the expected payroll increase.
- The second piece of how the amortization payments are structured is how the amortization period changes from one year to the next. The approaches used in Texas are:
 - * Closed amortization period: Under a closed amortization period, the annual amortization payment towards the UAAL is calculated using a fixed schedule based on a specified starting and ending date. In other words, if the specified amortization period is set as 30, the ADC will be calculated using a 30 year period in the first year and decrease by one year at each subsequent year's valuation (29, 28, etc. down to 1, after which the plan would be fully funded). This is similar to a fixed period home mortgage with a known beginning and ending date (in this case, a 30-year mortgage). One variation of a closed amortization period amortizes the full UAAL over the stated period each year. Alternatively, different amortization bases can be established based on gain or loss type (i.e. actuarial gains or losses vs. plan amendments) or based on the year of the gain or loss (frequently referred to as layered amortization).
 - * **Open amortization period**: Under an open amortization period, the annual amortization payment towards the UAAL is calculated using the same period from one year to the next. In other words, if the specified amortization period is set as 30, the ADC will be calculated at each valuation using a 30 year period. This is similar to refinancing a home mortgage every single year. In theory, if an open amortization period is always used, the UAAL will never be fully funded.

Amortization period can be defined as an input to determine contributions for ADC plans (as discussed previously), or as the time it would theoretically take to fully fund the UAAL or fully recognize the surplus. The second definition applies to both ADC and fixed rate plans. To distinguish between the two the PRB uses the phrase effective amortization period for the second definition. The effective amortization period takes into account the plan's amortization policy and contribution history and can therefore differ from the value used to determine the ADC. Effective amortization period is the value reported by the PRB.

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A summary of the effective amortization periods for Texas public retirement systems is included in the following table.

Effective Amortization Periods							
Amortization Period	Percent of Plans						
Infinite	6%						
>= 40 years, but not infinite	16%						
> 30 years, < 40 years	13%						
> 25 years, <= 30 years	18%						
>= 10 years, <= 25 years	30%						
> 0 years, < 10 years	9%						
0 years	7%						
Total*	100%						

*Individual amounts may not sum to 100% due to rounding

ACTUARIAL ASSUMPTIONS

- Pension funding requires assumptions to be made about future events. These assumptions are called actuarial assumptions, which along with current plan participant data and the benefit formula, are used to project future benefit obligations.
- The plan's board adopts or approves the actuarial assumptions with guidance from the actuary. The actuary is required to follow the Actuarial Standards of Practice (ASOPs) when selecting assumptions, and has a professional responsibility to recommend and use reasonable assumptions.
- Actuarial assumptions can be split into two broad categories: *economic* and *demographic*.
 - * Economic assumptions include items such as discount rate, assumed investment return, salary increases and inflation.
 - * Demographic assumptions include rates of retirement, turnover, disability, mortality and other factors.

DISCOUNT RATE AND INVESTMENT RETURN ASSUMPTION

The discount rate is the assumption that typically has the largest single impact on the determination of the AAL and PVFB. Discounting a deferred payment with a higher (lower) discount rate will produce a lower (higher) present value, due to the higher (lower) expected interest to be added to a hypothetical fund for the payment. Currently, all Texas public retirement systems use the assumed long-term investment rate of return on their plan assets as the discount rate. If the actual returns do not meet or exceed the assumed returns, then the actuarially determined recommended contributions would not be adequate to ensure system sustainability in the long-term.

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A summary of the return assumptions for Texas public retirement systems is included in the following table.

Inv	estment Return Assumpti	ons
Return Assumption	Percent of Plans	Running Total
5.00%	1%	1%
6.17%	1%	2%
6.25%	1%	3%
6.50%	1%	4%
6.75%	8%	12%
7.00%	14%	26%
7.25%	18%	44%
7.40%	1%	45%
7.50%	20%	65%
7.70%	2%	67%
7.75%	22%	89%
7.90%	2%	91%
8.00%	9%	100%

INFLATION ASSUMPTION

Inflation is the rate at which price levels are rising, and purchasing power is falling. The assumed rate of inflation is included as a component of the assumed rate of return and the assumed plan participant salary increases. It is also used to value cost-of-living adjustment (COLA) benefit increases for pension systems that have COLAs tied to inflation. A summary of assumed rates of inflation for Texas public retirement systems is presented in the following table.

In	flation Rate Assumption	s		
Inflation Assumption	Percent of Plans	Running Total		
2.00%	2%	2%		
2.25%	2%	4%		
2.30%	3%	7%		
2.50%	29%	36%		
2.75%	15%	51%		
3.00%	29%	79%		
3.25%	4%	83%		
3.40%	1%	84%		
3.50%	4%	88%		
3.75%	1%	89%		
N/A	10%	100%		

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PAYROLL GROWTH ASSUMPTION

A payroll growth assumption is used for plans whose amortization method is a level percent. Because a level percentage of payroll amortization payment is expected to increase at the payroll growth assumption, a higher payroll growth assumption lowers the required contribution (and defers plan funding). The following table shows the percentage of Texas public retirement systems that use various payroll growth assumptions.

Current P	Current Payroll Growth Assumptions								
Payroll Growth Assumption	Percent of Systems	Running Total							
2.00%	1%	1%							
2.75%	9%	10%							
2.80%	1%	11%							
3.00%	29%	40%							
3.25%	11%	51%							
3.40%	1%	52%							
3.50%	21%	73%							
3.75%	3%	76%							
4.00%	20%	96%							
4.50%	3%	99%							
5.00%	1%	100%							

CONCLUSION

The most common actuarial methods and assumptions by Texas public retirement systems are: to utilize a fixed rate contribution, the individual entry age normal cost method, 5-year smoothing to determine the actuarial value of assets, a 7.75% investment return assumption, a 2.50% inflation assumption, and a 3.00% payroll growth assumption.

TEXAS PENSION REVIEW BOARD

FUNDING SOUNDNESS RESTORATION PLAN

The Funding Soundness Restoration Plan (FSRP) was introduced by the 84th Legislature via the enactment of House Bill 3310 (Paul/Taylor) and is contained in Chapters 802.2015 and 802.2016 of the Texas Government Code.

Funding Soundness Restoration Plan: Applicability

- A public retirement system is required to notify its associated governmental entity if it receives an actuarial valuation indicating the system's actual contributions are insufficient to achieve an amortization period of 40 years or less.
- If the system's amortization period exceeds 40 years over several valuations (three annual valuations or two valuations if prepared less frequently), the public retirement system and its associated governmental entity are required to formulate an FSRP in accordance with the system's governing statute.
- The FSRP requirement varies for certain systems, including exemption from the requirement.

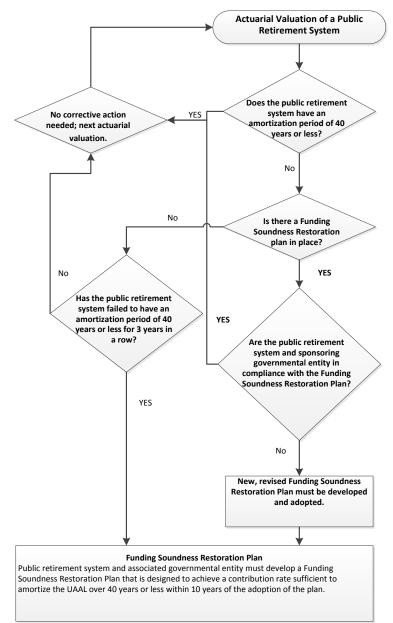
Funding Soundness Restoration Plan: Requirements

- The FSRP must be designed to achieve an amortization period of 40 years or less by the tenth anniversary of the date on which the final version of the plan is agreed.
- The public retirement system and its associated governmental entity must formulate and agree to the FSRP within six months following the adoption of the actuarial valuation triggering the requirement.
- Systems must submit a copy of the FSRP and any change to the PRB within 31 days after the FSRP or change is formulated. Additionally, the PRB must be notified every two years of any updates to the progress made towards improved actuarial soundness.

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FUNDING SOUNDNESS RESTORATION PLAN

The following diagram illustrates the process for determining the need for developing or revising an FSRP.



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FUNDING SOUNDNESS RESTORATION PLAN

Systems Immediately Subject to FSRP Formulation Requirement—as of 1/24/2019

The FSRP requirement is triggered for retirement systems that have had amortization periods over 40 years for three consecutive annual actuarial valuations, or two consecutive actuarial valuations if the systems conduct the valuations every two or three years.

The at-risk systems' most recent actuarial valuation shows an amortization period that exceeds 40 years but does not yet trigger the FSRP requirement.

Systems Immediately Subject to FSRP Formulation Requirement										
Plan Name	Am Period	Date of AV	Am Period	Date of AV	Am Period	Date of AV	FSRP Due Date			
Fort Worth Employees' Retirement Fund	72.5	12/31/2015	Infinite	12/31/2016	Infinite	12/31/2017	1/15/2017 ¹			
University Park Firemen's Relief & Retirement Fund – REVISED FSRP ²	81.3	12/31/2012	53.7	1/1/2015	Infinite	12/31/2016	10/22/2018			
Harlingen Firemen's Relief & Retirement Fund – REVISED FSRP ²	66.6	12/31/2013	Infinite	12/31/2015	59.1	9/30/2017	10/29/2018			
Wichita Falls Firemen's Relief & Retirement Fund – REVISED FSRP ²	43.7	1/1/2016	49.4	1/1/2017	Infinite	1/1/2018	2/10/2019			
Irving Firemen's Relief & Retirement Fund – REVISED FSRP ²	63.4 ³	1/1/2014	46.5	12/31/2015	Infinite	12/31/2017	4/17/2019			
Systems at	Risk of FSF	RP- <u>Not Yet s</u>	Subject to F	SRP Requir	<u>ement</u>					
Amarillo Firemen's Relief & Retirement Fund	28.8	1/1/2014	34.5	12/31/2015	43.5	12/31/2017	N/A			
Beaumont Firemen's Relief & Retirement Fund	49.6	12/31/2012	39.1	12/31/2014	104.0	12/31/2016	N/A			
Cleburne Firemen's Relief & Retirement Fund	34.1	12/31/2012	27.3	12/31/2014	49.6	12/31/2016	N/A			
Longview Firemen's Relief & Retirement Fund	37.9	12/31/2015	50.7	12/31/2016	40.2	12/31/2017	N/A			
McAllen Firemen's Relief & Retirement Fund	43.9	9/30/2012	29.0	10/1/2014	41.4	10/1/2016	N/A			
Paris Firefighters' Relief & Retirement Fund	29.2	1/1/2013	26.1	12/31/2014	41.9	12/31/2016	N/A			
Plainview Firemen's Relief & Retirement Fund	31.4	12/31/2013	31.6	12/31/2015	44.8	12/31/2017	N/A			

¹The City and the Fund are currently considering proposed changes to address the funding shortfall and achieve compliance with the FSRP requirement.

² Texas Government Code Section 802.2015(d) requires plans to formulate a revised FSRP if the system conducts an actuarial valuation showing that the system's amortization period exceeds 40 years, and the previously formulated FSRP has not been adhered to.

³ The amortization period was calculated by the PRB in consultation with the plan actuary.

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FUNDING SOUNDNESS RESTORATION PLAN

Progress Report on Previously Submitted FSRPs—as of 1/24/2019

Systems Still Working Towards Meeting the 40-Year Amortization Period Requirement								
	FSR	P Trigger	Frigger Curren					
Plan Name	Am Period	Date	Am Period	Date	Goal Year ²	Update Required ³		
Odessa Firemen's Relief & Retirement Fund	Infinite	1/1/2016	47.1	1/1/2018	2026	2/2019		
Midland Firemen's Relief & Retirement Fund	59.1	1/1/2014	44.7	12/31/2015	2026	5/2019		
Dallas Employees' Retirement Fund	Infinite	12/31/2015	47.0	12/31/2017	2026	7/2019		
Dallas Police & Fire Pension System - Combined Plan	44.0	1/1/2017	45.0	12/31/2018	2027	9/2019		
Greenville Firemen's Relief & Retirement Fund – REVISED FSRP	55.0	12/31/2016	38.0 ⁴	12/31/2016	2026	1/2020		
Orange Firemen's Relief & Retirement Fund – REVISED FSRP	69.3	1/1/2017	47.0	1/1/2017	2026	2/2020		
Marshall Firemen's Relief & Retirement Fund	56.4	12/31/2016	46.5 ⁵	12/31/2016	2026	3/2020		
	Systems No Longer Subject to FSRP Formulation Requirement (Systems that Have Submitted Post-FSRP Actuarial Valuations Showing Amortization Period Below 40 Years)							
Galveston Employees' Retirement Plan for Police	55.1	1/1/2014	35.3	1/1/2018	N/A	N/A		
Galveston Firefighter's Relief & Retirement Fund – REVISED FSRP	Infinite	12/31/2016	26.8	12/31/2017	N/A	N/A		
Lufkin Firemen's Relief and Retirement Fund	40.6	12/31/2014	33.1 ⁶	12/31/2016	N/A	N/A		
Sweetwater Firemen's Relief and Retirement Fund	58.8	12/31/2014	27.5	12/31/2016	N/A	N/A		

¹Based on the most recent valuation or FSRP.

² The year in which a plan must reach an amortization period of 40 years or less.

³ Reflects the statutory 2-year FSRP progress update requirement. The PRB considers a Fund's most recent actuarial valuation or revised FSRP as an update that fulfills the requirement.

⁴ The amortization period reflects estimates of actions that occurred after the valuation date. Plans will be removed from the list if a subsequent valuation reflects an amortization period of 40 years or less.

⁵ This calculation does not consider recent assumption changes that may increase the amortization period to be reported in the next actuarial valuation.

⁶ This valuation reflects a 10-year reduction in the amortization period associated with a change in actuarial consulting firms. The new actuary and the PRB were unable to determine the reason for the reduction without more detailed information and discussion with the prior actuarial firm.

TEXAS PENSION REVIEW BOARD

FUNDING SOUNDNESS RESTORATION PLAN

The following table summarizes the changes made by retirement systems as part of the Funding Soundness Restoration Plans (FSRP) submitted to the PRB. To satisfy the FSRP requirements, retirement systems must reasonably be expected to achieve an amortization period of 40 years or less by the tenth anniversary of the required submission date. In its review, the PRB only considered changes that had already been implemented, through board and/or sponsor action, as necessary, and did not consider proposed or future changes. The PRB did take into consideration any additional analysis or reports submitted prior to final FSRP review, such as subsequent actuarial valuations, additional staffing, or results of board action or member votes regarding plan changes.

	AV	Amortization		Plan Changes		
Retirement System	Effective Date ¹	Period ²	Employee Contributions	Employer Contributions	Other	Comments
Dallas Employees' Retirement Fund	12/31/2015	Infinite	N/A	N/A	For members hired after 12/31/2016: - Decreased normal retirement benefit multiplier, increased retirement age & increased final average salary period - Increased age/service needed early retirement eligibility (Rule of 80 with full actuarial reduction) - Removed unreduced pension benefit under a joint and one-half survivor option - Removed \$125 monthly health supplement - COLA is capped at a maximum of 3%	The system sent the PRB an AV with projections based on the changes made through city referendum.
Dallas Police & Fire Pension System - Combined Plan	1/1/2016	Infinite	Old: 8.50% New: 13.50%	Old: 27.50% New: 34.50% + \$13 million annually with a floor until 2024	 Ended DROP interest & COLA credit, instated maximum DROP period of 10 years, & annuitized DROP balances as of 9/1/2017 Decreased normal retirement benefit multiplier, increased retirement age & increased final average 	All changes listed are from H.B. 3158 signed by the Governor on May 31, 2017. The bill went into effect on September 1, 2017.

Summary of FSRP Submissions

¹Actuarial valuation that triggered the Funding Soundness Restoration Plan requirement.

²Amortization period prior to implementation of the Funding Soundness Restoration Plan requirement.

TEXAS PENSION REVIEW BOARD

FUNDING SOUNDNESS RESTORATION PLAN

Summary of FSRP Submissions, Continued

AV Effective Amortization						
Retirement System	Date ¹	Period ²	Employee Contributions	Employer Contributions	Other	Comments
Galveston Firefighter's Relief & Retirement Fund - REVISED FSRP ³	12/31/2016		Old: 16.00% New: 3/1/18: 17.00% 10/1/18: 18.00%		Discontinued automatic COLA for firefighters not yet retired; effective March 1, 2018.	
Greenville Firemen's Relief & Retirement Fund - REVISED FSRP ³	12/31/2016	55.0	N/A	Old: 17.30% New: 19.30%		The City provided a letter with analysis from its actuary to show the impact of the increase in city contributions.
Marshall Firemen's Relief & Retirement Fund ⁴	12/31/2016	56.4	N/A	Old: 19.05% New: 19.80%	- Increased vesting period from 10 to 20 years	The City's contribution rate increase is assumed to be effective 1/1/2019, but has not yet been approved. The FSRP also assumes city contributions will be made as of 12/31/2018 for unfilled vacancies that existed throughout the year.
Orange Firemen's Relief & Retirement Fund - REVISED FSRP ³	1/1/2017		Old: 12.00% New: 12.50%	Old: 14.00% New: 14.50%		In addition to the FSRP employee contribution increase, the FSRP's amortization period calculation recognized the 2017 actual return of 17.88%.

¹Actuarial valuation that triggered the Funding Soundness Restoration Plan requirement.

²Amortization period prior to implementation of the Funding Soundness Restoration Plan requirement.

³Texas Government Code Section 802.2015(d) requires plans to formulate a revised FSRP if the system conducts an actuarial valuation showing that the system's amortization period exceeds 40 years, and the previously formulated FSRP has not been adhered to.

⁴The FSRP does not consider already approved assumption changes that will likely result in the plan being out of compliance with the FSRP when the plan completes its December 31, 2018 actuarial valuation. The PRB has recommended that the system and sponsoring governmental entity consider taking potential corrective actions now, rather than waiting for the results of the upcoming valuation.

TEXAS PENSION REVIEW BOARD

PENSION OBLIGATION BONDS

Senate Bill 1696, enacted in 2003, added Chapter 107 to Subtitle A, Title 4 of the Local Government Code, allowing municipalities to issue bonds, certificates, notes and/or book-entry obligations to fund all or any part of a municipal pension plan's unfunded liability. The law requires that prior to issuance the municipality must enter into a written agreement with the governing body possessing fiduciary responsibility over pension fund assets.

Net proceeds of obligation issuance shall be credited to the public pension fund and become part of the fund's assets. Obligations may be made payable from the municipality's general fund, from the fund from which compensation for employees and officers is paid, or from taxes, revenues or any other money source that state law permits to be used to secure or pay any bond or obligation. Obligations may be sold at public or private sale, and must mature no later than 30 years from the issuance date.

The chart on the following page includes information on all outstanding pension obligation bonds held by Texas governmental entities, which include: Dallas, El Paso, Gainsville Hospital District, and Houston. The chart provides the par amount outstanding, the closing and maturity dates, principal outstanding, interest outstanding, and true interest cost.

Some key terms include:

Bond

Debt instrument through which an investor loans money to the issuer that specifies: when the loan is due ("term" or "maturity" such as 20 years), the interest rate the borrower will pay (such as 5%), when the payments will be made (such as monthly, semi-annually, annually) and the revenue source pledge to make the payments.

General Obligation Debt

Debt legally secured by a constitutional pledge of the first monies coming into the State Treasury not otherwise constitutionally dedicated for another purpose. General obligation debt must be approved by a 2/3 vote of both houses of the Texas Legislature and by a majority of the voters.

Maturity Date

The date principal is due and payable to the security holder.

Municipal Bond

A debt security issued to finance projects for a state, municipality, or county. Municipal securities are exempt from federal taxes and from most state and local taxes.

Par

The face value of a security that is due at maturity. A "par bond" is a bond selling at its face value.

Refunding Bond

Bonds issued to retire or defease all or a portion of outstanding bonds.

TEXAS PENSION REVIEW BOARD

PENSION OBLIGATION BONDS ISSUED AND OUTSTANDING AS OF 8/31/2018

Govt Name	Issue Name	Closing Date	Maturity Date	Par Amount Issued	Principal Outstanding as of 8/31/2018	Percent Outstanding	Scheduled Interest as of 8/31/2018	True Interest Cost
Dallas	Txbl GO Pension Bonds Ser 2005A	02/16/2005	02/15/2035	\$186,575,000	\$115,345,000	62%	\$54,849,150	4.98%
Dallas	Txbl GO Pension Bonds Ser 2005B	02/16/2005	02/15/2035	\$137,772,609	\$57,212,437	42%	\$500,092,563	5.32%
Dallas	Txbl GO Pension Bonds Ser 2005C	02/16/2005	02/15/2024	\$75,000,000	2010 Txbl GO Ref Bonds	0%	\$0	5.99%
Dallas	GO Refunding Bonds, Taxable Ser 2010	11/18/2010	08/15/2024	\$77,670,000	\$76,135,000	98%	\$17,343,478	4.58%
			-	\$477,017,609	\$248,692,437	52%	\$560,254,912	_
El Paso	Txbl GO Pension Bonds Ser 2007	07/19/2007	08/15/2035	\$101,240,000	\$81,425,000	80%	\$50,746,516	5.98%
El Paso	Txbl GO Pension Bonds Ser 2009	06/25/2009	08/15/2014	\$111,545,000	2014 Txbl GO Ref Bonds	0%	\$0	3.60%
El Paso	GO Ref Bonds Txbl Ser 2014	01/16/2014	08/15/2034	\$110,610,000	\$94,055,000	85%	\$44,685,558	2.64%
			-	\$323,395,000	\$175,480,000	54%	\$95,432,074	_
Gainesville Hos. Dist.	Ltd Tax Ref Bonds Txbl Ser 2017B (VR)	12/22/2017	8/15/2037	\$14,210,000	\$14,210,000	100%	\$29,124,561	N/A
			-	\$14,210,000	\$14,210,000	100%	\$29,124,561	_
Houston	Txbl Pension Oblig Notes Ser 2004	12/17/2004	02/15/2006	\$22,900,000	2005 Txbl GO Pension Bonds	0%	\$0	4.35%
Houston	Txbl GO Pension Bonds Ser 2005	03/30/2005	03/01/2035	\$57,165,000	\$57,165,000	100%	\$42,009,269	5.30%
Houston	Txbl Pension Oblig Bonds Ser 2006A	03/29/2006	03/01/2036	\$63,740,000	\$63,740,000	100%	\$54,557,842	5.51%
Houston	Txbl Pension Oblig Bonds Ser 2007A	03/01/2007	03/01/2037	\$63,800,000	\$63,800,000	100%	\$63,725,489	5.54%
Houston	Txbl Pension Oblig Notes Ser 2008	02/15/2008	02/18/2009	\$35,050,000	2008A Txbl GO Pension Ref Bonds	0%	\$0	3.32%
Houston	Txbl Pension Oblig Bonds Ser 2008B	01/08/2009	03/01/2032	\$20,190,000	\$18,355,000	91%	\$10,206,783	6.29%
Houston	Txbl Pension Oblig Ref Bonds Ser 2008A	01/08/2009	03/01/2032	\$382,630,000	\$347,980,000	91%	\$193,597,709	6.29%
Houston	Txbl Pension Oblig Notes Ser 2010 (VR)	05/21/2010	11/16/2011	\$20,100,000	2011B Txbl Pub Impr Ref Bonds	0%	\$0	N/A
Houston	Txbl Pension Obligation Bonds Ser 2017	12/15/2017	03/01/2047	\$1,005,145,000	\$1,005,145,000	100%	\$803,428,446	3.96%
Houston	Txbl Pub Impr Ref Bonds Ser 2011B	10/27/2011	03/01/2041	\$47,010,000	\$45,075,000	96%	\$25,411,053	4.04%
			-	\$1,717,730,000	\$1,601,260,000	93%	\$1,192,936,590	-
			-	\$2,532,352,609	\$2,039,642,437	81%	\$1,877,748,137	-

TEXAS PENSION REVIEW BOARD

DESCRIPTION OF ACTUARIAL TERMS

Actuarial Cost Methods

To determine the actuarial accrued liability (AAL) and the normal cost (NC), actuaries can use different cost methods. An actuarial cost method is a way to allocate pieces of a participant's total expected benefit to each year of their working career. In other words, it is a technique to determine how much of the present value of future benefits (PVFB) to assign to past service (AAL) vs. future service (present value of future normal costs, or PVFNC). Actuarial cost methods differ in the way the AAL and the NC are calculated and therefore how the total PVFB is allocated.

Actuarial Accrued Liability

The current value of benefits attributed to past years.

Actuarial Value of Assets (AVA)

The actuarial value of assets (AVA) is the value of assets used for the actuarial valuation. The AVA can be either the market value (MVA) or a smoothed value of assets. Asset smoothing techniques are employed by actuaries to smooth the short-term effects of volatility in the MVA. Smoothing is a concept designed to recognize the long-term nature of pension obligations and attempt to reduce the volatility of assets, which can help keep contributions more stable and thus more predictable for the plan sponsor over time. The AVA is used to calculate the unfunded actuarial accrued liability (UAAL).

Actuarially Determined Contribution (ADC)

GASB No. 67 defines ADC as the target or recommended contribution to a defined benefit plan for the reporting period, determined in conformity with Actuarial Standards of Practice (ASOPs). Section 802.101(a) of the Texas Government Code requires that a system's actuarial valuation include a recommended contribution rate for the system to achieve and maintain an amortization period that does not exceed 30 years.

Amortization Method

How the amortization payment is structured:

- Level Dollar similar to a standard fixed-rate mortgage such that the annual payment towards the UAAL is assumed to be the same dollar amount every year.
- Level Percentage the payments are a level percentage of payroll, and the dollar amount of the payment is assumed to increase at the rate of the expected payroll increase.
- **Open** the annual amortization payment towards the UAAL is calculated using the same period from one year to the next. In other words, if the specified amortization period is set as 30, the ADC will be calculated at each valuation using a 30 year period. This is similar to refinancing a home mortgage every single year.
- **Closed** the annual amortization payment towards the UAAL is calculated using a fixed schedule based on a specified starting and ending date. In other words, if the specified amortization period is set as 30, the ADC will be calculated using a 30 year period in the first year and decrease by one year at each subsequent year's valuation (29, 28, etc. down to 1, after which the plan would be fully funded). This is similar to a fixed period home mortgage with a known beginning and ending date (in this case, a 30-year mortgage).

TEXAS PENSION REVIEW BOARD

DESCRIPTION OF ACTUARIAL TERMS

Amortization Payment

The portion of the total contribution used to reduce the unfunded actuarial accrued liability.

Amortization Period

The specified length of time used when calculating the amortization payment portion of an actuarially determined contribution, or as the time it would theoretically take to fully fund the UAAL or fully recognize a surplus.

Asset Valuation Method

The method used to smooth the Actuarial Value of Assets.

Assumed Rate of Return

The assumed long-term rate of return on plan assets. The assumed rate of return is the most common interest rate used as the discount rate by Texas public retirement systems for funding calculations.

Benefit Security

The likelihood sufficient assets will be available to pay all benefits when they come due.

Covered Payroll

The amount of payroll of employees that are provided with pensions through the pension plan.

Deferred Retirement Option Plan (DROP)

An additional benefit that participants may receive from their retirement plan. Under a DROP arrangement, the participant is treated as retired on a date prior to the date they actually separate service. Under a Forward DROP, the participant may elect to "retire" but continue working for the sponsoring organization. His/ her monthly annuity is placed in a designated account until the member ceases to work or for a specified amount of time as allowed by the retirement system. When the member separates service, the account balance becomes available and is paid in accordance with plan terms. Under a Retro DROP, the participant is given the option to calculate their benefit as if they had retired on a date earlier than their actual separation of service. Benefit payments that would have been paid had they actually separated service on that date are accumulated and paid in accordance with the plan terms.

Discount Rate

The interest rate used to calculate the value of future payments as of the valuation date. This assumption typically has the largest single impact on the determination of the AAL and PVFB. Discounting a deferred payment with a higher (lower) discount rate will produce a lower (higher) present value, due to the higher (lower) expected interest to be added to a hypothetical fund for the payment. The assumed rate of return is the most common interest rate used as the discount rate by Texas public retirement systems for funding calculations.

TEXAS PENSION REVIEW BOARD

DESCRIPTION OF ACTUARIAL TERMS

Fiduciary Net Position (FNP)

The market value of assets as of the fiscal year end, as reported in the system's annual financial report.

Funded Ratio

The ratio of assets to accrued liability: Assets / AAL = Funded Ratio. Funded ratios are reported based on the actuarial value of assets (AVA or smoothed value) and market value of assets (MVA). Generally, the closer the funded ratio is to 100%, the more secure the current accrued benefits. However, if a plan is currently underfunded, the attempt to achieve a funded ratio of 100% will impact the other policy goals, intergenerational equity and the desire for a stable contribution from one year to another.

Inflation

The rate at which price levels are rising, and purchasing power is falling. Inflation is a component of both the assumed investment rate of return and the assumed rate of employee pay increases.

Intergenerational Equity

Seeks to have each generation of taxpayers incur the cost of benefits for the employees who provide services to those taxpayers, rather than deferring those costs to future taxpayers.

Negative Amortization

The increase in the unfunded actuarial accrued liability because the amortization payment is not sufficient or large enough to cover the interest that accrues on the unfunded liability.

Normal Cost (NC)

Computed differently under different funding methods, the normal cost generally represents the current value of benefits attributed to the present year. The employer normal cost equals the total normal cost of the plan reduced by employee contributions.

Present Value of Future Benefits

The current value of all benefits expected to be paid to current participants.

Present Value of Future Normal Costs

The current value of benefits attributed to the present year and all future years (includes the normal cost as the first year).

Unfunded Actuarial Accrued Liability (UAAL)

The difference between the actuarial accrued liability and the actuarial value of assets. Therefore the UAAL is the amount that is still owed to the fund for past obligations.

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—STATEWIDE PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
	-	(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Years)
		(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	(
Employees Retirement	8/31/2016	\$26,557.13	\$35,303.17	\$8,746.03	75.23%	\$6,806.46	128.50%	35.0
System of Texas	8/31/2017	\$26,371.83	\$37,629.79	\$11,257.96	70.08%	\$6,796.23	165.65%	Infinite
bystem of rexus	8/31/2018	\$27,359.94	\$38,989.26	\$11,629.32	70.17%	\$6,875.89	169.13%	Infinite
	8/31/2016	\$395.46	\$425.87	\$30.41	92.86%	\$78.24	38.87%	49.0
Judicial Retirement System of Texas Plan Two	8/31/2017	\$420.85	\$463.60	\$42.75	90.78%	\$79.33	53.89%	63.0
	8/31/2018	\$447.08	\$487.77	\$40.69	91.66%	\$80.07	50.82%	69.0
Law Enforcement &	8/31/2016	\$933.53	\$1,312.39	\$378.86	71.13%	\$1,743.68	21.73%	Infinite
Custodial Officer Supplemental Retirement	8/31/2017	\$923.99	\$1,399.88	\$475.89	66.01%	\$1,720.36	27.66%	Infinite
Fund	8/31/2018	\$953.05	\$1,452.66	\$499.60	65.61%	\$1,684.46	29.66%	Infinite
	8/31/2016	\$138,786.12	\$174,238.73	\$35,452.61	79.65%	\$42,375.84	83.66%	33.6
Teacher Retirement System of Texas	8/31/2017	\$146,282.04	\$181,752.80	\$35,470.75	80.48%	\$43,163.90	82.18%	32.2
System of Texas	8/31/2018	\$154,050.93	\$200,216.31	\$46,165.38	76.94%	\$44,955.80	102.69%	87.0
	12/31/2015	\$25,398.76	\$28,632.45	\$3,233.69	88.71%	\$6,122.30	52.82%	13.8
Texas County & District Retirement System ¹	12/31/2016	\$26,951.94	\$30,473.89	\$3,521.95	88.44%	\$6,378.40	55.22%	13.5
Retirement System	12/31/2017	\$28,975.65	\$32,539.90	\$3,564.25	89.05%	\$6,676.50	53.38%	12.3
	8/31/2014	\$83.76	\$109.85	\$26.09	76.25%	N/A	N/A	30.0
Texas Emergency Services Retirement System ²	8/31/2016	\$98.65	\$123.09	\$24.44	80.15%	N/A	N/A	30.0
Retirement System	8/31/2018	\$114.67	\$137.51	\$22.85	83.39%	N/A	N/A	24.0
Texas Municipal Retirement System ¹	12/31/2015	\$24,347.73	\$28,378.90	\$4,031.17	85.80%	\$5,851.00	68.90%	20.6
	12/31/2016	\$25,844.05	\$29,963.28	\$4,119.23	86.25%	\$6,122.00	67.29%	19.7
Nethenient System	12/31/2017	\$27,813.57	\$31,811.59	\$3,998.02	87.43%	\$6,396.00	62.51%	18.8

¹ Amortization period is calculated using system wide aggregate UAAL and payroll amounts.

² Members are volunteers and the covered group does not have a payroll.

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—MUNICIPAL PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions) (AVA)	Actuarial Accrued Liability (in millions) (AAL)	Unfunded Actuarial Accrued Liability (in millions) (UAAL)	Funded Ratio (% Funded)	Covered Payroll (in millions)	UAAL / Payroll Ratio (UAAL/Payroll)	Effective Amortization Period
	-	(a)	(AAL) (b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	- (Years)
	12/31/2015	\$2,308.09	\$3,391.80	\$1,083.71	68.05%	\$559.83	193.58%	33.0
Austin Employees' Retirement	12/31/2016	\$2,423.27	\$3,591.38	\$1,168.11	67.47%	\$599.57	194.82%	31.0
System	12/31/2017	\$2,592.46	\$3,797.82	\$1,205.36	68.26%	\$629.94	191.34%	30.0
	12/31/2015	\$828.92	\$921.88	\$92.96	89.92%	\$85.72	108.44%	12.3
Austin Fire Fighters Relief & Retirement Fund	12/31/2016	\$866.51	\$981.77	\$115.26	88.26%	\$84.50	136.40%	16.2
	12/31/2017	\$916.93	\$1,038.12	\$121.19	88.33%	\$88.21	137.39%	17.0
	12/31/2015	\$689.77	\$1,036.12	\$346.35	66.57%	\$151.57	228.51%	31.3
Austin Police Retirement System	12/31/2016	\$732.02	\$1,106.51	\$374.48	66.16%	\$158.54	236.21%	27.3
	12/31/2017	\$779.48	\$1,185.02	\$405.53	65.78%	\$171.50	236.47%	35.0
	12/31/2015	\$3,320.39	\$4,129.13	\$808.75	80.41%	\$393.19	205.69%	Infinite
Dallas Employees' Retirement Fund ¹	12/31/2016	\$3,451.46	\$4,291.80	\$840.34	80.42%	\$409.43	205.24%	47.0
Fullu	12/31/2017	\$3,601.61	\$4,377.84	\$776.23	82.27%	\$421.27	184.26%	47.0
	1/1/2016	\$2,680.12	\$5,947.17	\$3,267.05	45.07%	\$365.21	894.57%	Infinite
Dallas Police & Fire Pension System-Combined Plan	1/1/2017	\$2,157.80	\$4,367.18	\$2,209.38	49.41%	\$357.41	618.16%	44.0
System-combined Flam	1/1/2018	\$2,151.04	\$4,505.44	\$2,354.40	47.74%	\$346.04	680.39%	45.0
	1/1/2016	\$19.46	\$42.48	\$23.02	45.80%	\$0.72	3177.74%	10.0
Dallas Police & Fire Pension System-Supplemental ²	1/1/2017	\$17.66	\$33.38	\$15.72	52.91%	\$0.53	2994.07%	10.0
System-Supplemental	1/1/2018	\$17.81	\$34.55	\$16.74	51.53%	\$0.96	1742.77%	10.0
	9/1/2012	\$581.73	\$788.20	\$206.48	73.80%	\$147.74	139.76%	21.0
City of El Paso Employees Retirement Trust	9/1/2014	\$663.06	\$859.74	\$196.68	77.12%	\$153.61	128.04%	11.0
Nethenient must	9/1/2016	\$749.03	\$945.77	\$196.75	79.20%	\$156.34	125.85%	17.0
	1/1/2014	\$479.23	\$593.94	\$114.71	80.69%	\$53.87	212.93%	23.0
El Paso Firemen's Pension Fund	1/1/2016	\$528.80	\$667.79	\$138.99	79.19%	\$55.62	249.89%	26.0
	1/1/2018	\$581.45	\$747.57	\$166.12	77.78%	\$62.65	265.17%	28.0

¹Amortization period is calculated by the PRB.

²*Reported amortization period is based on an open amortization funding policy. The PRB is working with the plan to calculate an effective amortization period.*

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—MUNICIPAL PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions) (AVA)	Actuarial Accrued Liability (in millions) (AAL)	Unfunded Actuarial Accrued Liability (in millions) (UAAL)	Funded Ratio (% Funded)	Covered Payroll (in millions)	UAAL / Payroll Ratio (UAAL/Payroll)	Effective Amortization Period
	-	(AVA) (a)	(AAL) (b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	- (Years)
	1/1/2014	\$696.44	\$890.19	\$193.76	78.23%	\$70.82	273.60%	32.0
El Paso Police Pension Fund	1/1/2016	\$772.73	\$952.67	\$179.94	81.11%	\$69.81	257.75%	33.0
	1/1/2018	\$843.97	\$1,077.90	\$233.94	78.30%	\$82.23	284.50%	30.5
	12/31/2015	\$2,154.87	\$3 <i>,</i> 553.20	\$1,398.33	60.65%	\$404.30	345.86%	72.5
Fort Worth Employees'	12/31/2016	\$2,209.89	\$3,780.55	\$1,570.66	58.45%	\$433.96	361.94%	Infinite
Retirement Fund	12/31/2017	\$2,288.27	\$3,956.72	\$1,668.46	57.83%	\$460.56	362.26%	Infinite
	12/31/2015	\$3.36	\$4.56	\$1.20	73.71%	\$1.64	73.18%	10.3
Fort Worth Employees'	12/31/2016	\$3.88	\$5.07	\$1.19	76.46%	\$1.48	80.87%	27.0
Retirement Fund Staff Plan	12/31/2017	\$4.53	\$5.87	\$1.34	77.18%	\$1.58	84.74%	32.0
	12/31/2015	\$45.78	\$58.69	\$12.91	78.01%	\$21.51	60.01%	13.7
Galveston Employees' Retirement Fund	12/31/2016	\$47.93	\$61.09	\$13.16	78.46%	\$23.23	56.65%	13.4
Retirement Fund	12/31/2017	\$50.98	\$64.06	\$13.08	79.58%	\$25.63	51.03%	11.6
	1/1/2016	\$21.92	\$48.99	\$27.08	44.70%	\$10.14	267.08%	47.1
Galveston Employees' Retirement Plan for Police ¹	1/1/2017	\$21.21	\$50.35	\$29.15	42.10%	\$10.45	278.91%	48.7
Retirement Plan for Police	1/1/2018	\$20.79	\$52.85	\$32.06	39.31%	\$11.28	284.11%	35.5
	7/1/2015	\$3,929.99	\$4,397.01	\$467.02	89.38%	\$292.49	159.67%	30.0
Houston Firefighters' Relief & Retirement Fund	7/1/2016	\$3,729.67	\$4,629.89	\$900.22	80.56%	\$269.14	334.48%	31.0
Retrement Fund	7/1/2017	\$3,883.81	\$4,827.72	\$943.91	80.45%	\$269.74	349.94%	30.0
	7/1/2016	\$2,625.90	\$4,735.00	\$2,109.10	55.46%	\$613.77	343.63%	31.0
Houston Municipal Employees Pension System	7/1/2017	\$2,742.54	\$4,866.03	\$2,123.49	56.36%	\$621.53	341.66%	30.0
Fension System	7/1/2018	\$2,874.59	\$4,982.01	\$2,107.42	57.70%	\$628.31	335.41%	29.0
Haustan Dalias Officans' Dansian	7/1/2016	\$4,758.08	\$6,081.39	\$1,323.31	78.24%	\$424.30	311.88%	31.0
Iouston Police Officers' Pension System	7/1/2017	\$4,868.61	\$6,218.29	\$1,349.68	78.30%	\$440.61	306.32%	30.0
System	7/1/2018	\$5,128.84	\$6,463.87	\$1,335.04	79.35%	\$438.40	304.53%	29.0
San Antonio Fire & Police	10/1/2015	\$2,858.46	\$3,218.38	\$359.92	88.82%	\$310.81	115.80%	11.1
Pension Fund	1/1/2017	\$2,976.89	\$3,385.81	\$408.92	87.92%	\$314.84	129.88%	13.1
r ension i unu	1/1/2018	\$3,196.53	\$3,538.23	\$341.70	90.34%	\$318.75	107.20%	9.9

¹Current amortization period reflects an employer contribution increase to 14.83% of payroll as of February 17, 2018.

TEXAS PENSION REVIEW BOARD

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
	_	(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Veers)
		(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	- (Years)
	10/1/2013	\$52.92	\$92.05	\$39.13	57.49%	\$12.62	310.01%	33.5
Abilene Firemen's Relief & Retirement Fund	10/1/2015	\$56.62	\$100.04	\$43.41	56.60%	\$13.73	316.19%	31.5
Heti entener und	10/1/2017	\$59.43	\$106.71	\$47.29	55.69%	\$13.84	341.79%	31.9
	1/1/2014	\$132.54	\$159.73	\$27.19	82.98%	\$16.65	163.29%	28.8
Amarillo Firemen's Relief & Retirement Fund	12/31/2015	\$149.12	\$182.25	\$33.13	81.82%	\$19.21	172.47%	34.5
Kethement runu	12/31/2017	\$165.44	\$203.07	\$37.63	81.47%	\$20.26	185.69%	43.5
	12/31/2012	\$2.98	\$4.09	\$1.10	72.98%	\$0.57	193.90%	Infinite
Atlanta Firemen's Relief & Retirement Fund	12/31/2014	\$3.55	\$4.34	\$0.79	81.87%	\$0.60	130.44%	36.2
Kethement Fund	12/31/2016	\$3.95	\$4.81	\$0.86	82.13%	\$0.63	136.63%	28.4
	12/31/2012	\$92.03	\$134.84	\$42.80	68.25%	\$17.89	239.28%	49.6
Beaumont Firemen's Relief & Retirement Fund	12/31/2014	\$105.07	\$144.48	\$39.41	72.72%	\$18.41	214.07%	39.1
& Retirement Fund	12/31/2016	\$109.97	\$162.84	\$52.87	67.53%	\$19.25	274.69%	104.0
	1/1/2013	\$9.89	\$17.43	\$7.54	56.73%	\$3.17	237.80%	30.8
Big Spring Firemen's Relief & Retirement Fund	1/1/2015	\$10.96	\$20.00	\$9.03	54.82%	\$3.63	248.61%	28.7
	1/1/2017	\$11.03	\$20.11	\$9.08	54.86%	\$3.77	241.05%	36.2
	12/31/2013	\$3.29	\$7.52	\$4.23	43.76%	\$1.63	259.78%	37.0
Brownwood Firemen's Relief & Retirement Fund	12/31/2015	\$3.68	\$8.24	\$4.56	44.63%	\$1.77	257.78%	36.1
Keller & Kethement Fund	12/31/2017	\$4.17	\$9.25	\$5.09	45.03%	\$1.93	263.23%	38.6
	12/31/2012	\$16.29	\$28.40	\$12.11	57.36%	\$3.88	312.30%	34.1
Cleburne Firemen's Relief & Retirement Fund	12/31/2014	\$20.35	\$31.17	\$10.82	65.30%	\$4.02	269.25%	27.3
	12/31/2016	\$22.29	\$34.07	\$11.78	65.42%	\$4.24	277.79%	49.6
Conroe Fire Fighters'	12/31/2013	\$18.13	\$29.34	\$11.22	61.77%	\$5.66	198.18%	37.4
	12/31/2015	\$21.84	\$35.51	\$13.67	61.51%	\$8.15	167.60%	31.4
Retrement Fund	12/31/2017	\$25.87	\$41.71	\$15.84	62.03%	\$8.82	179.50%	39.0

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—TLFFRA PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Years)
		(a)	(b)	(b) - (a)	(a)/(b)	(c)	(b-a)/(c)	(Tears)
	12/31/2012	\$105.75	\$192.27	\$86.52	55.00%	\$29.46	293.68%	26.7
Corpus Christi Fire Fighters' Retirement System	12/31/2014	\$126.27	\$205.79	\$79.52	61.36%	\$29.48	269.69%	23.1
Retirement System	12/31/2016	\$141.14	\$227.14	\$86.00	62.14%	\$32.38	265.57%	23.1
	12/31/2012	\$6.96	\$14.52	\$7.57	47.90%	\$3.34	226.69%	28.6
Corsicana Firemen's Relief & Retirement Fund	12/31/2014	\$8.43	\$15.74	\$7.31	53.54%	\$3.76	194.46%	24.2
	12/31/2016	\$9.23	\$17.36	\$8.14	53.14%	\$3.85	211.44%	28.9
	1/1/2014	\$14.58	\$20.36	\$5.78	71.60%	\$3.09	186.86%	29.1
Denison Firemen's Relief & Retirement Fund	12/31/2015	\$16.38	\$22.02	\$5.64	74.37%	\$3.10	182.33%	27.1
Kethement Fund	12/31/2017	\$17.52	\$22.68	\$5.16	77.26%	\$3.32	155.45%	15.8
	12/31/2013	\$62.09	\$80.49	\$18.40	77.14%	\$13.79	133.43%	24.0
Denton Firemen's Relief & Retirement Fund	12/31/2015	\$72.69	\$89.94	\$17.25	80.82%	\$14.97	115.26%	31.6
Kethement Fund	12/31/2017	\$84.41	\$102.85	\$18.44	82.07%	\$17.62	104.60%	14.6
	12/31/2015	\$42.43	\$62.30	\$19.88	68.10%	\$7.23	275.05%	47.0
Galveston Firefighter's Relief & Retirement Fund ¹	12/31/2016	\$43.34	\$63.69	\$20.35	68.04%	\$7.92	257.06%	Infinite
	12/31/2017	\$44.33	\$64.10	\$19.77	69.16%	\$7.96	248.42%	26.8
	12/31/2012	\$12.20	\$25.72	\$13.52	47.40%	\$3.58	377.92%	Infinite
Greenville Firemen's Relief & Retirement Fund	12/31/2014	\$13.44	\$27.46	\$14.02	48.94%	\$3.81	368.49%	70.4
	12/31/2016	\$13.70	\$28.72	\$15.02	47.69%	\$3.88	387.00%	38.0
	12/31/2013	\$28.34	\$39.93	\$11.59	70.98%	\$5.91	195.98%	66.6
Harlingen Firemen's Relief	12/31/2015	\$27.70	\$43.89	\$16.19	63.12%	\$6.56	246.71%	Infinite
& Retirement Fund	9/30/2017	\$31.22	\$47.26	\$16.04	66.06%	\$6.44	248.99%	59.1
	1/1/2014	\$156.22	\$213.73	\$57.50	73.10%	\$25.48	225.65%	63.4
Irving Firemen's Relief & Retirement Fund ²	12/31/2015	\$184.78	\$246.66	\$61.87	74.92%	\$27.07	228.54%	46.5
	12/31/2017	\$207.49	\$289.75	\$82.26	71.61%	\$32.63	252.13%	Infinite

¹Latest amortization period reflects additional employees hired after the valuation date.

²Amortization period for the 1/1/2014 AV was calculated by the PRB in consultation with the plan actuary, reflecting a contribution rate increase of 0.65% effective January 1, 2015. Amortization period for the 12/31/2015 AV reflects an employer contribution increase of 1.10% effective January 1, 2017, additional employees hired after the valuation date, and member contribution increases of 0.50% effective February 1, 2017 and January 1, 2018.

TEXAS PENSION REVIEW BOARD

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Years)
		(a)	(b)	(b) - (a)	(a)/(b)	(c)	(b-a)/(c)	(Years)
	9/30/2012	\$27.53	\$41.14	\$13.61	66.90%	\$11.03	123.50%	36.1
Killeen Firemen's Relief & Retirement Fund	9/30/2014	\$32.60	\$49.06	\$16.45	66.46%	\$12.46	132.07%	29.5
Retirement Fund	9/30/2016	\$37.42	\$53.65	\$16.23	69.74%	\$14.18	114.49%	22.8
	9/30/2012	\$95.14	\$175.96	\$80.82	54.10%	\$30.99	260.80%	29.8
Laredo Firefighters Retirement System	9/30/2014	\$116.06	\$194.35	\$78.29	59.72%	\$31.19	251.04%	29.8
Kethement System	9/30/2016	\$134.25	\$221.98	\$87.73	59.28%	\$35.06	263.00%	28.0
	12/31/2015	\$41.66	\$88.00	\$46.34	47.34%	\$11.41	406.09%	37.9
Longview Firemen's Relief	12/31/2016	\$40.80	\$89.60	\$48.80	45.53%	\$12.73	383.31%	50.7
& Retirement Fund	12/31/2017	\$43.00	\$93.38	\$50.38	46.05%	\$12.93	389.47%	40.2
	1/1/2013	\$161.75	\$217.10	\$55.36	74.50%	\$24.74	223.76%	24.3
Lubbock Fire Pension Fund	1/1/2015	\$186.08	\$246.36	\$60.29	75.53%	\$28.34	212.72%	27.6
	12/31/2016	\$194.66	\$268.02	\$73.35	72.63%	\$30.50	240.47%	33.5
	12/31/2012	\$11.27	\$29.03	\$17.76	38.81%	\$4.32	411.00%	89.6
Lufkin Firemen's Relief & Retirement Fund	12/31/2014	\$14.20	\$32.64	\$18.44	43.51%	\$4.97	371.24%	40.6
Retirement Fund	12/31/2016	\$15.15	\$32.46	\$17.32	46.66%	\$5.00	346.11%	33.1
	12/31/2012	\$6.99	\$15.82	\$8.83	44.20%	\$2.40	368.20%	38.6
Marshall Firemen's Relief & Retirement Fund	12/31/2014	\$8.00	\$17.25	\$9.25	46.39%	\$2.47	375.08%	43.2
Retirement Fund	12/31/2016	\$7.71	\$18.35	\$10.64	42.02%	\$2.67	398.51%	56.4
	9/30/2012	\$37.84	\$57.22	\$19.36	66.15%	\$9.36	206.81%	43.9
McAllen Firemen's Relief &	10/1/2014	\$44.68	\$63.12	\$18.44	70.79%	\$11.16	165.11%	29.0
Retirement Fund	10/1/2016	\$48.26	\$69.83	\$21.57	69.11%	\$11.52	187.25%	41.4
Midland Firemen's Relief & Retirement Fund	1/1/2012	\$73.07	\$101.16	\$28.09	72.23%	\$12.72	220.84%	86.3
	1/1/2014	\$78.48	\$117.44	\$38.96	66.82%	\$14.60	266.92%	59.1
	12/31/2015	\$87.00	\$132.27	\$45.27	65.78%	\$17.10	264.77%	44.7

TEXAS PENSION REVIEW BOARD

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	- (Years)
		(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	(Tears)
	1/1/2016	\$48.03	\$111.38	\$63.35	43.12%	\$11.37	557.28%	Infinite
Odessa Firemen's Relief & Retirement Fund	1/1/2017	\$47.85	\$106.05	\$58.20	45.12%	\$11.38	511.52%	46.5
	1/1/2018	\$45.87	\$106.47	\$60.60	43.08%	\$11.87	510.60%	47.1
	12/31/2012	\$8.77	\$15.31	\$6.54	57.25%	\$2.00	327.90%	82.3
Orange Firemen's Relief &	1/1/2015	\$9.38	\$16.35	\$6.96	57.41%	\$2.29	303.74%	58.2
Retirement Fund	1/1/2017	\$8.15	\$16.35	\$8.20	49.86%	\$2.44	336.03%	69.3
	1/1/2013	\$6.11	\$13.60	\$7.49	44.94%	\$2.32	322.33%	29.2
Paris Firefighters' Relief &	12/31/2014	\$5.98	\$13.99	\$8.01	42.74%	\$2.58	311.01%	26.1
Retirement Fund	12/31/2016	\$5.33	\$14.96	\$9.63	35.64%	\$2.58	373.34%	41.9
	12/31/2013	\$5.26	\$13.49	\$8.23	39.00%	\$1.90	434.03%	31.4
Plainview Firemen's Relief	12/31/2015	\$5.83	\$15.61	\$9.78	37.33%	\$2.16	453.72%	31.6
& Retirement Fund	12/31/2017	\$6.22	\$16.51	\$10.29	37.67%	\$1.99	517.48%	44.8
	1/1/2012	\$36.12	\$49.64	\$13.52	72.80%	\$7.30	185.00%	22.5
Port Arthur Firemen's Relief & Retirement Fund	1/1/2014	\$40.75	\$52.66	\$11.90	77.40%	\$7.42	160.32%	17.0
Relief & Retifement Fund	12/31/2015	\$45.29	\$58.08	\$12.79	77.97%	\$7.96	160.73%	18.3
	12/31/2013	\$54.23	\$83.42	\$29.19	65.01%	\$10.41	280.32%	40.9
San Angelo Firemen's Relief & Retirement Fund	12/31/2015	\$61.47	\$93.63	\$32.16	65.65%	\$11.46	280.71%	38.5
Relief & Retirement Fund	12/31/2017	\$66.07	\$101.77	\$35.70	64.92%	\$12.26	291.10%	31.3
	12/31/2013	\$3.22	\$5.29	\$2.07	60.81%	\$1.22	169.88%	21.7
San Benito Firemen Relief	12/31/2015	\$3.30	\$5.46	\$2.15	60.52%	\$1.37	156.71%	21.7
& Retirement Fund	9/30/2017	\$3.50	\$5.77	\$2.27	60.68%	\$1.49	152.30%	21.8
Sweetwater Firemen's Relief & Retirement Fund	12/31/2012	\$7.22	\$10.38	\$3.16	69.52%	\$1.26	250.26%	Infinite
	12/31/2014	\$8.18	\$11.85	\$3.67	69.01%	\$1.49	246.28%	58.8
	12/31/2016	\$8.44	\$12.05	\$3.62	69.99%	\$1.58	229.12%	27.5

TEXAS PENSION REVIEW BOARD

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	
		(a)	(b)	(b) - (a)	(a)/(b)	(c)	(b-a)/(c)	- (Years)
	9/30/2012	\$34.40	\$45.15	\$10.75	76.20%	\$6.50	165.30%	30.8
Temple Firemen's Relief & Retirement Fund	9/30/2014	\$39.06	\$50.61	\$11.56	77.17%	\$7.45	155.21%	23.0
Retirement runu	9/30/2016	\$42.27	\$56.28	\$14.00	75.12%	\$8.49	164.97%	28.4
	12/31/2013	\$30.06	\$35.52	\$5.46	84.62%	\$4.02	135.85%	19.6
Texarkana Firemen's Relief	12/31/2015	\$33.10	\$37.89	\$4.79	87.37%	\$4.02	118.93%	16.3
& Retirement Fund	12/31/2017	\$35.25	\$40.84	\$5.58	86.32%	\$4.51	123.72%	15.0
	12/31/2012	\$14.86	\$28.06	\$13.20	53.00%	\$4.45	296.40%	33.6
Texas City Firemen's Relief	12/31/2014	\$16.27	\$29.92	\$13.65	54.39%	\$4.72	289.35%	31.6
& Retirement Fund	12/31/2016	\$15.85	\$31.47	\$15.62	50.37%	\$5.19	301.18%	28.0
The Woodlands	1/1/2016	\$22.18	\$22.08	(\$0.10)	100.46%	\$10.63	-0.96%	0.0
Firefighters' Retirement	1/1/2017	\$26.20	\$26.57	\$0.37	98.60%	\$11.38	3.26%	2.7
System	1/1/2018	\$32.22	\$30.40	(\$1.82)	105.98%	\$11.90	-15.28%	0.0
Travis County ESD #6	1/1/2014	\$7.55	\$12.00	\$4.44	62.98%	\$4.28	103.82%	7.3
Firefighter's Relief &	12/31/2015	\$12.61	\$17.60	\$5.00	71.61%	\$5.70	87.70%	5.8
Retirement Fund	12/31/2017	\$19.01	\$21.80	\$2.79	87.20%	\$5.78	48.27%	3.3
	12/31/2013	\$56.55	\$76.82	\$20.28	73.61%	\$10.94	185.37%	22.9
Tyler Firefighters' Relief &	12/31/2015	\$64.89	\$85.53	\$20.64	75.87%	\$11.58	178.30%	21.6
Retirement Fund	12/31/2017	\$69.57	\$91.33	\$21.76	76.18%	\$11.52	188.81%	25.5
	12/31/2012	\$8.56	\$19.33	\$10.78	44.30%	\$2.87	374.86%	81.3
University Park Firemen's Relief & Retirement Fund	1/1/2015	\$9.44	\$20.60	\$11.16	45.83%	\$3.11	358.48%	53.7
Relief & Retirement Fund	12/31/2016	\$10.15	\$23.08	\$12.94	43.96%	\$3.34	387.63%	Infinite
	10/1/2012	\$10.46	\$16.23	\$5.76	64.50%	\$3.19	180.80%	19.8
Waxahachie Firemen's Relief & Retirement Fund	10/1/2014	\$13.72	\$19.91	\$6.19	68.91%	\$3.69	167.80%	24.3
Relief & Retirement Fund	10/1/2016	\$14.20	\$21.24	\$7.04	66.86%	\$4.27	164.84%	25.4
	9/30/2012	\$6.99	\$11.03	\$4.05	63.33%	\$3.16	128.18%	26.8
Weslaco Firemen's Relief &	9/30/2014	\$8.36	\$12.07	\$3.71	69.23%	\$3.04	122.02%	15.9
Retirement Fund	9/30/2016	\$9.44	\$13.78	\$4.33	68.53%	\$3.90	111.07%	14.1
	1/1/2016	\$48.59	\$75.48	\$26.89	64.38%	\$10.66	252.24%	43.7
Wichita Falls Firemen's Relief & Retirement Fund	1/1/2017	\$49.80	\$79.71	\$29.91	62.48%	\$11.28	265.13%	49.4
	1/1/2018	\$51.32	\$88.95	\$37.63	57.70%	\$11.89	316.54%	Infinite

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—CH 810 PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Veers)
		(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	- (Years)
	7/1/2015	\$2.68	\$2.31	(\$0.37)	116.01%	\$2.59	-14.28%	0.0
Arlington Employees Deferred Income Plan	7/1/2016	\$2.73	\$2.53	(\$0.20)	107.94%	\$3.45	-5.81%	0.0
Deferred income Plan	7/1/2017	\$2.84	\$2.63	(\$0.21)	108.03%	\$3.48	-6.07%	0.0
	3/1/2016	\$21.20	\$30.38	\$9.18	69.78%	N/A	N/A	16.0
Brazos River Authority Retirement Plan ¹	3/1/2017	\$21.20	\$31.08	\$9.88	68.22%	N/A	N/A	15.0
Nethennent Flan	3/1/2018	\$20.87	\$31.45	\$10.58	66.36%	N/A	N/A	14.0
Capital MTA Retirement	1/1/2015	\$19.25	\$23.83	\$4.58	80.76%	\$16.96	27.03%	20.0
Plan for Administrative	1/1/2016	\$21.56	\$27.96	\$6.40	77.13%	\$17.85	35.84%	20.0
-	1/1/2017	\$24.25	\$33.40	\$9.15	72.62%	\$23.12	39.56%	20.0
Capital MTA Retirement	1/1/2016	\$29.28	\$59.20	\$29.92	49.46%	N/A	N/A	23.0
Plan for Bargaining Unit	1/1/2017	\$31.01	\$60.02	\$29.01	51.67%	N/A	N/A	22.0
Employees ¹	1/1/2018	\$32.31	\$62.24	\$29.94	51.90%	N/A	N/A	21.0
Colorado River	1/1/2016	\$9.17	\$9.81	\$0.64	93.52%	\$2.85	22.30%	9.4
Municipal Water District Defined Benefit	1/1/2017	\$9.66	\$10.75	\$1.09	89.87%	\$3.76	28.98%	9.1
Retirement Plan & Trust ³	1/1/2018	\$10.06	\$10.73	\$0.67	93.75%	\$3.79	17.70%	7.4
	1/1/2016	\$30.21	\$33.53	\$3.32	90.10%	\$9.18	36.18%	8.0
Corpus Christi Regional	1/1/2017	\$32.58	\$34.97	\$2.38	93.18%	\$9.77	24.38%	7.0
Transportation Authority-	1/1/2018	\$36.44	\$37.07	\$0.63	98.30%	\$10.68	5.89%	6.0
CPS Energy Pension Plan ²	1/1/2015	\$1,403.53	\$1,667.15	\$263.61	84.19%	\$235.36	112.00%	30.0
	1/1/2016	\$1,451.83	\$1,712.07	\$260.24	84.80%	\$242.48	107.33%	30.0
FIQII	1/1/2017	\$1,500.74	\$1,857.87	\$357.13	80.78%	\$254.24	140.47%	30.0

¹*Plan is frozen and does not report payroll data.*

²*Prior amortization period is based on an open amortization funding policy. The system has adopted a closed 30 year amortization funding policy effective January 1, 2017.*

³Amortization period is calculated by the PRB.

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—CH 810 PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Veees)
	_	(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	(Years)
Dallas County Hospital	1/1/2016	\$802.92	\$1,071.78	\$268.86	74.91%	\$574.21	46.82%	28.0
District Retirement	1/1/2017	\$871.13	\$1,180.99	\$309.86	73.76%	\$613.37	50.52%	27.0
Income Plan	1/1/2018	\$955.57	\$1,301.61	\$346.04	73.41%	\$632.67	54.70%	26.0
Dallas/Fort Worth	1/1/2016	\$152.27	\$203.48	\$51.21	74.83%	\$26.88	190.49%	19.0
Airport Board DPS	1/1/2017	\$164.36	\$217.41	\$53.05	75.60%	\$27.84	190.55%	18.0
Retirement Plan	1/1/2018	\$179.92	\$231.57	\$51.65	77.70%	\$30.01	172.12%	17.0
Dallas/Fort Worth	1/1/2016	\$422.74	\$540.17	\$117.43	78.26%	\$59.47	197.48%	19.0
Airport Board	1/1/2017	\$449.01	\$559.30	\$110.29	80.28%	\$55.85	197.48%	18.0
Retirement Plan	1/1/2018	\$481.74	\$584.40	\$102.66	82.43%	\$54.09	189.77%	17.0
DART Employees'	10/1/2014	\$151.00	\$203.31	\$52.32	74.27%	\$19.13	273.49%	30.0
Defined Benefit	10/1/2016	\$168.73	\$220.46	\$51.73	76.53%	\$18.54	279.10%	12.4
Retirement Plan & Trust ¹	10/1/2017	\$177.70	\$225.25	\$47.56	78.89%	\$16.06	296.09%	11.8
El Paso Firemen & Policemen's Pension	1/1/2016	\$0.16	\$0.06	(\$0.11)	282.88%	\$0.51	-20.83%	0.0
Staff Plan and Trust	1/1/2018	\$0.40	\$0.35	(\$0.05)	113.12%	\$0.73	-6.31%	0.0
	1/1/2015	\$12.02	\$14.50	\$2.48	82.91%	\$3.29	75.36%	30.0
Galveston Wharves Pension Plan ¹	1/1/2016	\$11.76	\$14.90	\$3.15	78.88%	\$3.17	99.15%	25.0
Felision Flan	1/1/2017	\$11.84	\$16.16	\$4.32	73.26%	\$2.66	162.45%	24.0
	1/1/2015	\$25.59	\$29.64	\$4.05	86.34%	\$7.57	53.53%	7.9
Guadalupe-Blanco River Authority ¹	1/1/2016	\$27.74	\$32.36	\$4.61	85.74%	\$7.39	62.42%	8.8
Authonity	1/1/2017	\$29.17	\$34.35	\$5.18	84.91%	\$6.62	78.26%	8.7
	1/1/2016	\$579.80	\$825.47	\$245.67	70.24%	\$194.92	126.04%	19.1
Harris County Hospital District Pension Plan ^{1,2}	1/1/2017	\$619.72	\$833.50	\$213.78	74.35%	\$174.96	122.19%	17.8
	1/1/2018	\$662.69	\$878.29	\$215.60	75.45%	\$169.89	126.91%	16.9
	1/1/2016	\$152.64	\$243.80	\$91.17	62.61%	\$47.10	193.56%	27.0
Houston MTA Non- Union Pension Plan ¹	1/1/2017	\$162.63	\$254.94	\$92.30	63.79%	\$43.48	212.28%	26.0
	1/1/2018	\$171.63	\$261.76	\$90.13	65.57%	\$41.77	215.78%	25.0

¹The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

²Amortization period is calculated by the PRB.

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—CH 810 PLANS

Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Veense)
		(a)	(b)	(b)-(a)	(a)/(b)	(c)	(b-a)/(c)	(Years)
	1/1/2016	\$238.72	\$382.16	\$143.44	62.47%	\$93.23	153.86%	27.0
Houston MTA Workers Union Pension Plan ¹	1/1/2017	\$252.59	\$387.34	\$134.75	65.21%	\$92.49	145.70%	26.0
	1/1/2018	\$267.44	\$403.72	\$136.27	66.25%	\$94.15	144.74%	25.0
	1/1/2016	\$53.67	\$74.10	\$20.43	72.43%	\$96.09	21.26%	22.9
Irving Supplemental Benefit Plan	1/1/2017	\$56.61	\$78.40	\$21.79	72.20%	\$99.52	21.90%	26.0
Benefit Pidn	1/1/2018	\$60.46	\$83.41	\$22.95	72.49%	\$100.27	22.88%	32.0
JPS Pension Plan	10/1/2016	\$216.60	\$231.36	\$14.76	93.62%	\$213.96	6.90%	4.8
Lower Colorado River	4/1/2016	\$421.15	\$551.24	\$130.10	76.40%	\$111.26	116.93%	21.0
Authority Retirement	1/1/2017	\$427.39	\$579.49	\$152.09	73.75%	\$117.45	129.50%	20.0
Plan ¹	1/1/2018	\$431.26	\$582.91	\$151.64	73.99%	\$110.52	137.21%	19.0
Nacogdoches County	7/1/2013	\$37.50	\$46.66	\$9.16	80.37%	\$30.78	29.75%	20.0
Hospital District	7/1/2014	\$42.31	\$51.14	\$8.82	82.74%	\$28.77	30.67%	20.0
Retirement Plan	7/1/2015	\$45.06	\$53.46	\$8.40	84.29%	\$30.06	27.94%	9.8
Northeast Medical	7/1/2015	\$9.85	\$11.71	\$1.86	84.15%	N/A	N/A	10.0
Center Hospital	7/1/2016	\$9.13	\$11.67	\$2.54	78.22%	N/A	N/A	10.0
Retirement Plan ^{2,3}	7/1/2017	\$9.58	\$11.45	\$1.88	83.62%	N/A	N/A	10.0
Northwest Texas	10/1/2013	\$17.74	\$28.89	\$11.15	61.40%	N/A	N/A	7.4
Healthcare System	10/1/2015	\$19.64	\$28.37	\$8.73	69.22%	N/A	N/A	6.0
Retirement Plan ²	10/1/2016	\$20.44	\$27.99	\$7.56	73.01%	N/A	N/A	5.0
	12/31/2013	\$100.88	\$100.60	(\$0.27)	100.27%	\$117.02	-0.23%	0.0
Plano Retirement	12/31/2015	\$120.04	\$122.99	\$0.95	99.23%	\$130.41	0.73%	19.0
Security Plan	12/31/2017	\$144.04	\$142.91	(\$1.13)	100.79%	\$147.45	-0.77%	0.0
Port of Houston	8/1/2016	\$163.31	\$176.67	\$13.36	92.44%	\$30.21	44.21%	30.0
Authority Retirement	8/1/2017	\$176.99	\$186.06	\$9.07	95.13%	\$29.96	30.27%	30.0
Plan ¹	8/1/2018	\$184.29	\$187.26	\$2.97	98.41%	\$30.33	9.81%	30.0

¹The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

²*Plan is frozen and does not report payroll data.*

³*Reported amortization period is based on an open amortization funding policy. The PRB is working with the plan to calculate an effective amortization period.*

TEXAS PENSION REVIEW BOARD

FUNDING PROGRESS—CH 810 PLANS

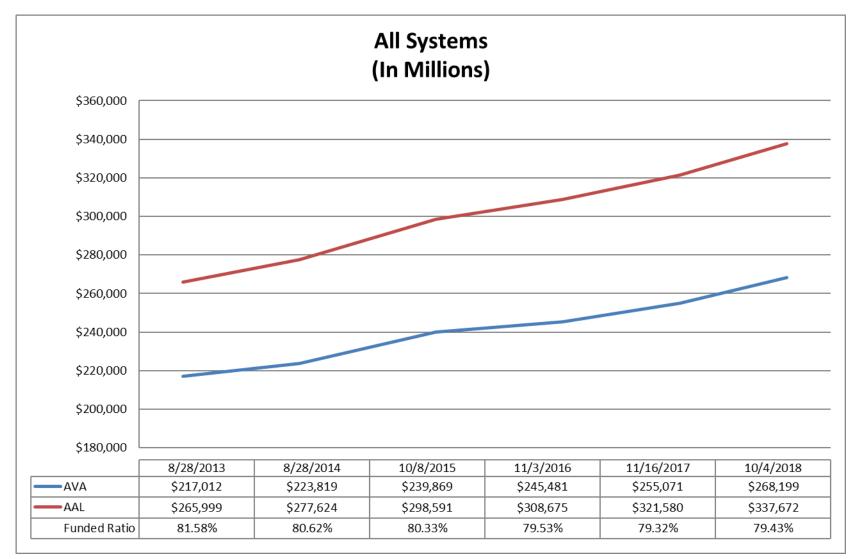
Plan (System)	Actuarial Valuation Date	Actuarial Value of Assets (in millions)	Actuarial Accrued Liability (in millions)	Unfunded Actuarial Accrued Liability (in millions)	Funded Ratio	Covered Payroll (in millions)	UAAL / Payroll Ratio	Effective Amortization Period
		(AVA)	(AAL)	(UAAL)	(% Funded)		(UAAL/Payroll)	(Years)
		(a)	(b)	(b) - (a)	(a)/(b)	(c)	(b-a)/(c)	(Tears)
Refugio County	11/1/2015	\$2.08	\$2.03	(\$0.04)	102.18%	\$3.32	-1.34%	0.0
Memorial Hospital	11/1/2016	\$2.05	\$2.00	(\$0.05)	102.30%	\$3.23	-1.43%	0.0
District Retirement Plan ¹	11/1/2017	\$2.23	\$2.01	(\$0.22)	111.07%	\$3.20	-6.93%	0.0
Retirement Plan for Anson General Hospital ¹	7/1/2016	\$1.90	\$1.59	(\$0.32)	119.87%	\$0.28	-111.63%	0.0
Retirement Plan for	3/1/2017	\$90.61	\$91.11	\$0.50	99.46%	\$58.27	0.85%	17.0
Citizens Medical Center	3/1/2018	\$101.52	\$94.77	(\$6.75)	107.13%	\$55.57	-12.15%	0.0
Retirement Plan for Employees of Brownsville Navigation District	1/1/2017	\$4.62	\$8.75	\$4.13	52.80%	\$4.02	102.83%	19.8
Retirement Plan for	1/1/2017	\$61.22	\$64.83	\$3.62	94.42%	\$25.49	14.20%	9.0
Guadalupe Regional Medical Center	1/1/2018	\$68.04	\$69.14	\$1.10	98.41%	\$25.36	4.33%	3.0
Retirement Plan for	1/1/2017	\$3.29	\$3.67	\$0.38	89.78%	\$1.24	30.14%	12.0
Sweeny Community Hospital ¹	1/1/2018	\$3.37	\$3.92	\$0.56	85.83%	\$0.99	56.39%	20.0
San Antonio	10/1/2014	\$210.45	\$355.39	\$144.94	59.22%	\$83.96	172.63%	27.0
Metropolitan Transit	10/1/2015	\$226.56	\$375.05	\$148.49	60.41%	\$92.53	213.71%	26.0
Retirement Plan	10/1/2016	\$245.94	\$390.21	\$144.27	63.03%	\$100.36	143.75%	25.0
	1/1/2014	\$231.79	\$306.41	\$74.63	75.65%	\$254.10	29.37%	20.6
University Health System Pension Plan	1/1/2015	\$258.32	\$375.18	\$116.86	68.85%	\$291.37	40.11%	29.0
System rension ridh	1/1/2016	\$284.43	\$428.66	\$144.22	66.35%	\$318.83	45.23%	28.0

¹The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

TEXAS PENSION REVIEW BOARD

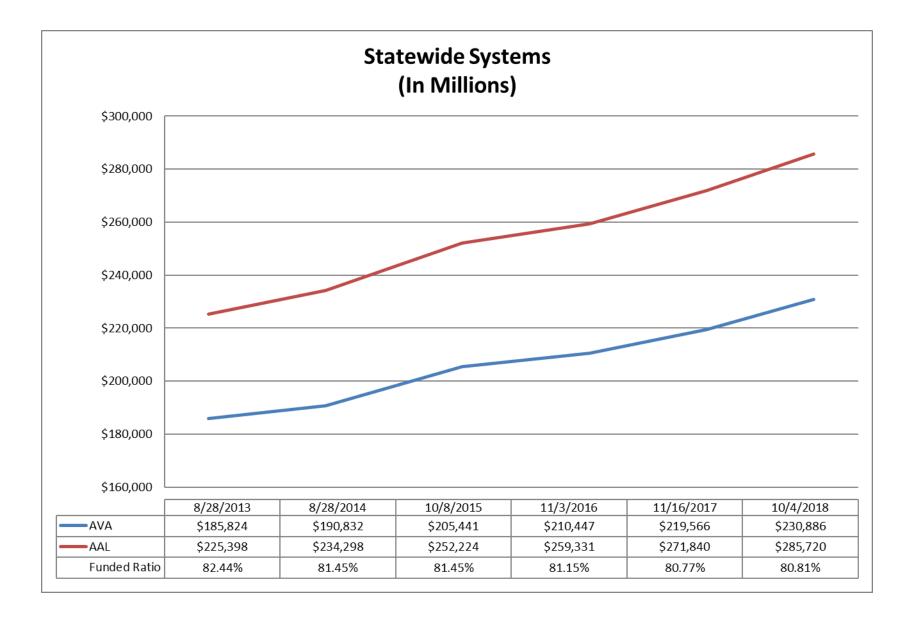
AVA to AAL COMPARISON — ALL SYSTEMS

The following charts show the changes in the aggregate actuarial value of assets (AVA) and actuarial accrued liability (AAL) for all systems and broken out by system type. The values in the chart are the values as reported in select PRB actuarial valuation reports from the last six years, and reflect the most recent actuarial valuation on file with the PRB as of that date. The actuarial funded ratio, which is the ratio of AVA to AAL, is also included in the tables below the charts.



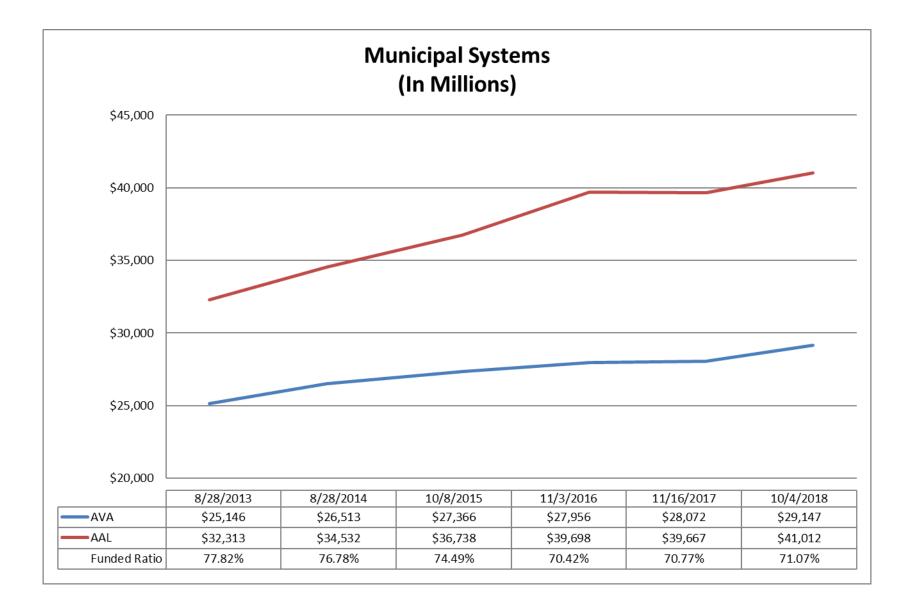
TEXAS PENSION REVIEW BOARD

AVA to AAL COMPARISON — STATEWIDE SYSTEMS



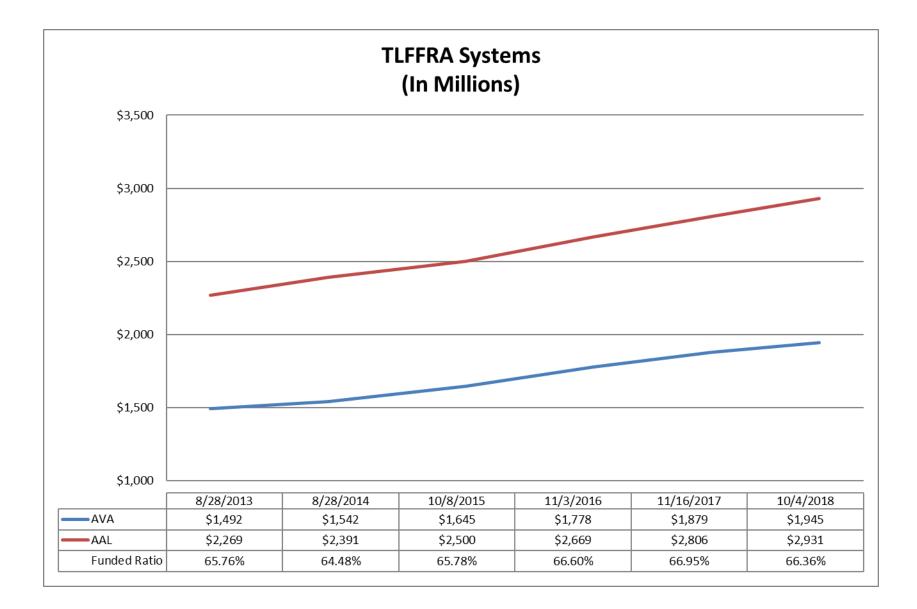
TEXAS PENSION REVIEW BOARD

AVA to AAL COMPARISON — MUNICIPAL SYSTEMS



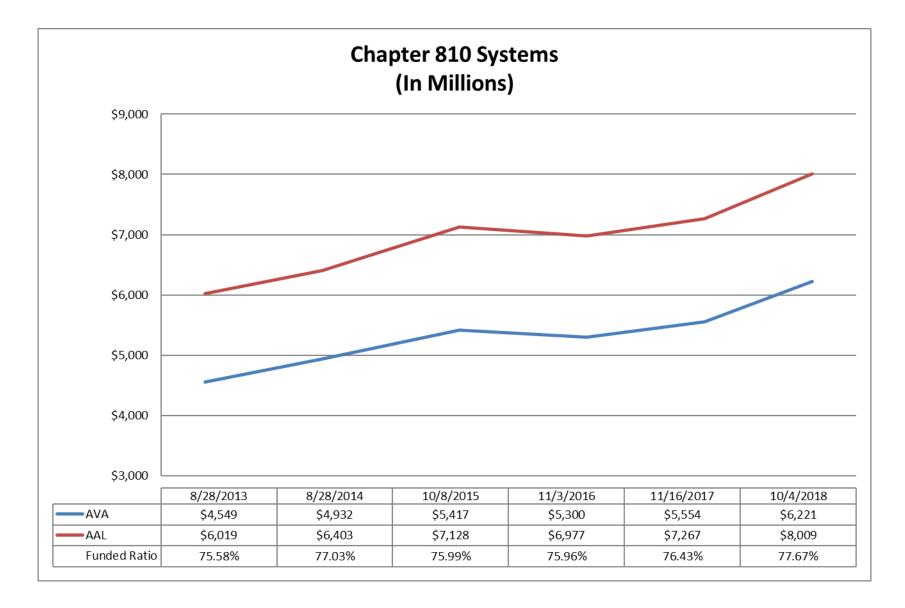
TEXAS PENSION REVIEW BOARD

AVA to AAL COMPARISON — TLFFRA SYSTEMS



TEXAS PENSION REVIEW BOARD

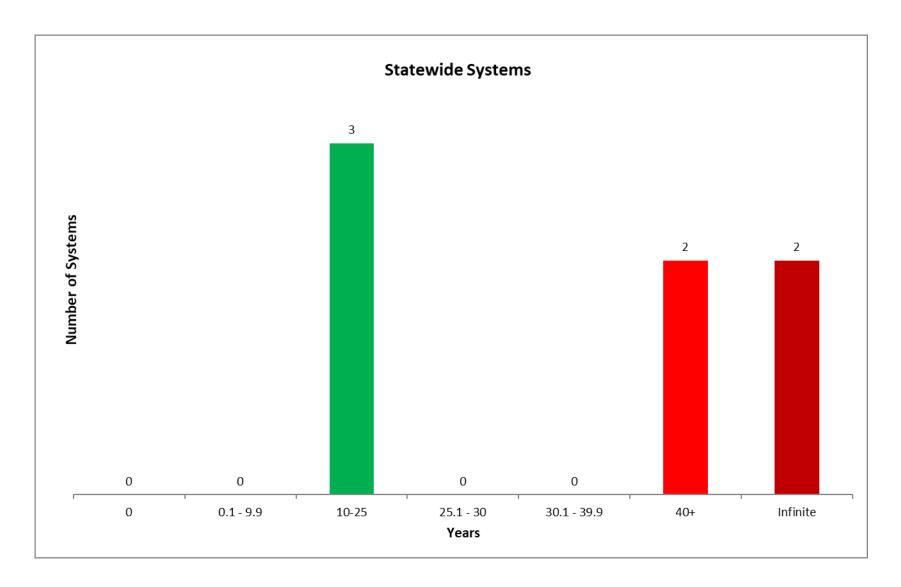
AVA to AAL COMPARISON—CHAPTER 810 SYSTEMS



TEXAS PENSION REVIEW BOARD

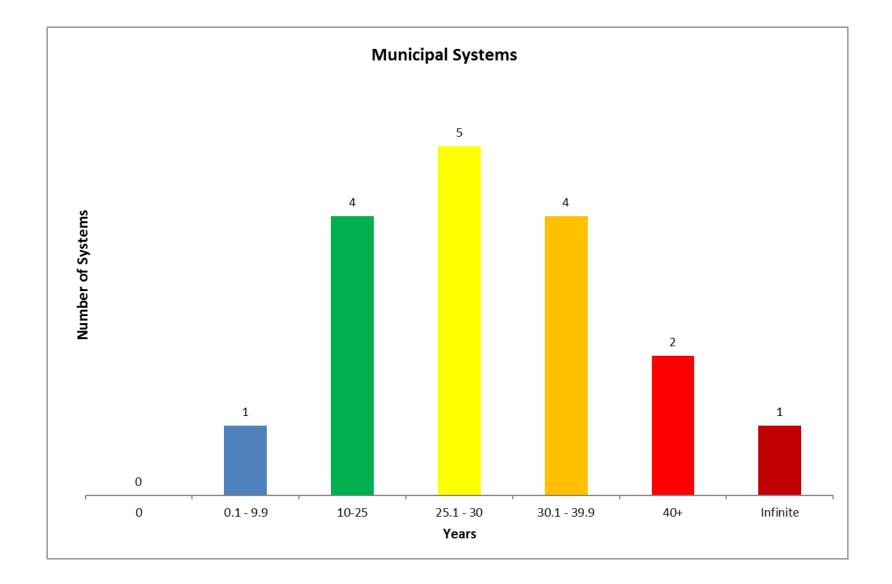
AMORTIZATION PERIOD GROUPINGS

The following charts show the number of systems in a specified amortization period grouping, as of the latest actuarial valuation on file with the PRB, organized by system type.



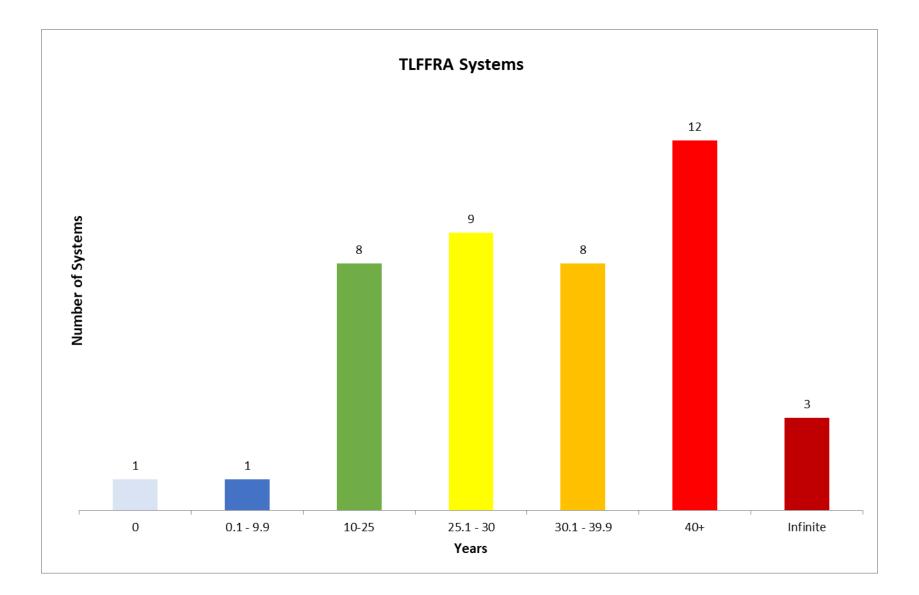
TEXAS PENSION REVIEW BOARD

AMORTIZATION PERIOD GROUPINGS



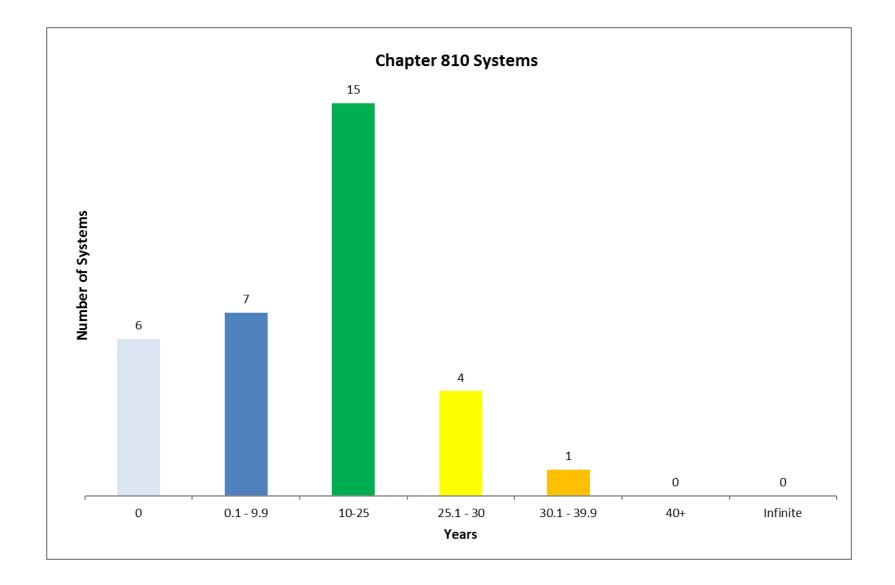
TEXAS PENSION REVIEW BOARD

AMORTIZATION PERIOD GROUPINGS



TEXAS PENSION REVIEW BOARD

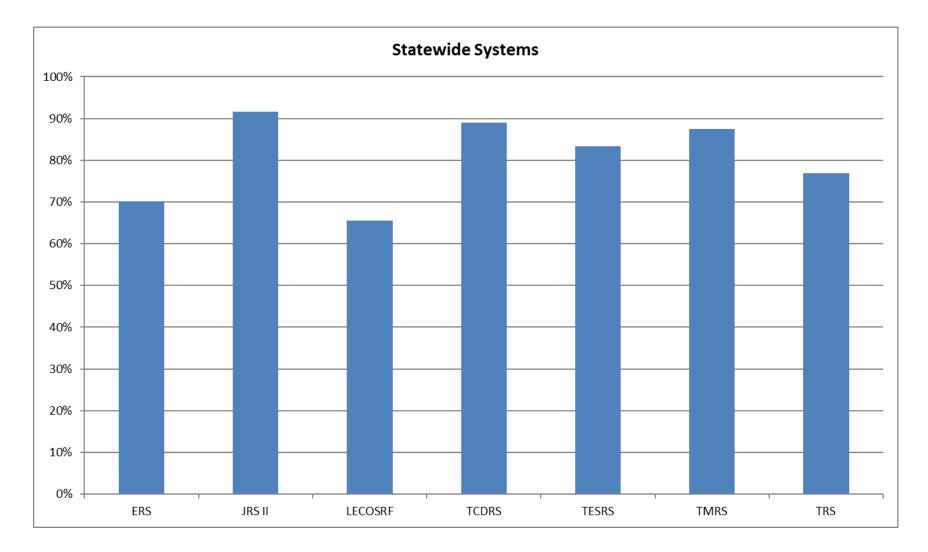
AMORTIZATION PERIOD GROUPINGS



TEXAS PENSION REVIEW BOARD

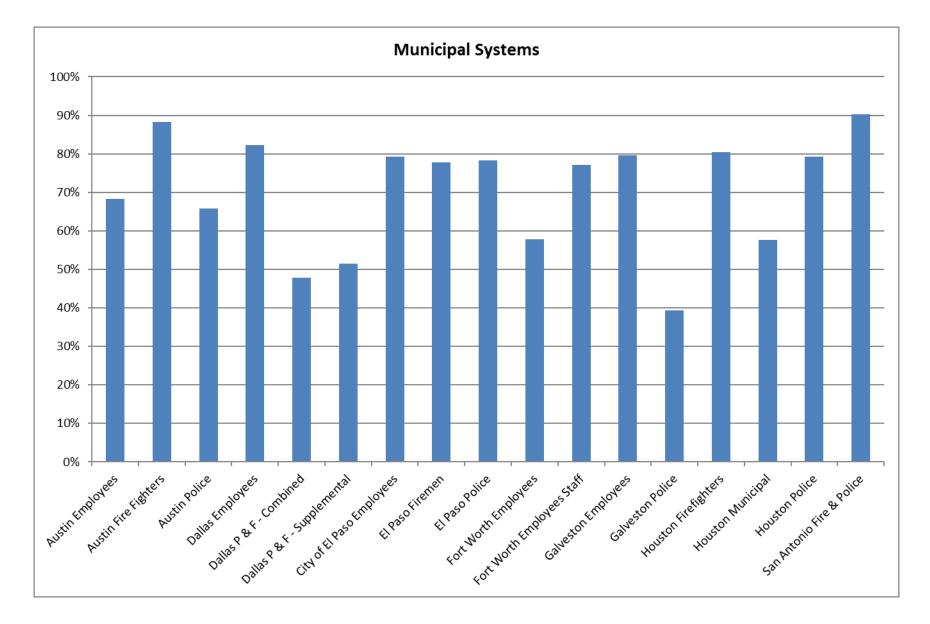
FUNDED RATIO — AVA/AAL

The following charts show the funded ratio as of the latest actuarial valuation on file with the PRB, organized by system type.



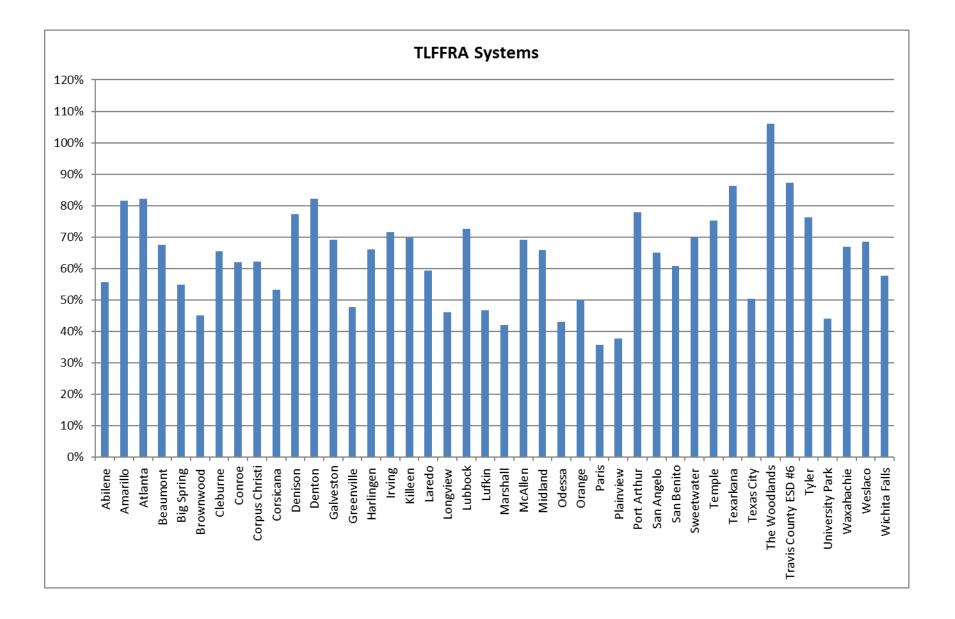
TEXAS PENSION REVIEW BOARD

FUNDED RATIO — AVA/AAL



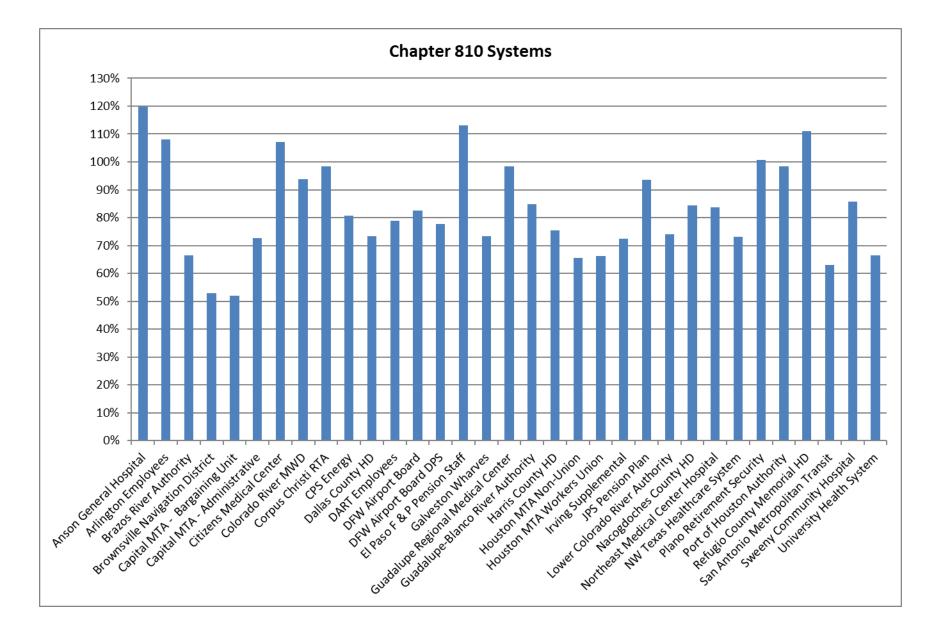
TEXAS PENSION REVIEW BOARD

FUNDED RATIO — AVA/AAL



TEXAS PENSION REVIEW BOARD

FUNDED RATIO — AVA/AAL



TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY — STATEWIDE PLANS

The following tables illustrate whether or not a retirement system is receiving the actuarially recommended contribution. The employer recommended contribution, ER Rec Cont, is the contribution rate needed for the system to achieve and maintain an amortization period that does not exceed 30 years, and is required to be disclosed under Section 802.101(a) of the Texas Government Code. In addition, the table outlines the portion of the recommended contribution attributable to employer normal cost and the amortization of the unfunded actuarial accrued liability, as well as showing the total normal cost and employee contributions. For systems that do not indicate the fiscal year associated with these values, the recommend contribution is based on the most recently reported valuation date on or before the beginning of the fiscal year. Values in this table may differ from those reported by the systems due to differences in timing, the use of actual vs expected payroll and/or rounding.

				(a)	(b)	(c) = (a) - (b)	(d)	(e) = (c) + (d)	(f)		(f) / (e)
Plan Name	Plan Status	Fiscal Year End	Covered Payroll	Total NC (% of Pay)	EE Cont (% of Pay)	ER Normal Cost (% of Pay)	Amort Pmt (% of Pay)		Actual ER Cont (% of Pay)		Percent of Rec Cont Paid
Employees Retirement System		0/24/2010	¢C 044 025 525	12.05%	0.50%	4.450/	0.000	42 740/			050/
of Texas ¹	Active	8/31/2018	\$6,811,925,525	13.95%	9.50%	4.45%	9.26%	13.71%	11.66%	Fixed	85%
Judicial Retirement System of Texas Plan Two	Active	8/31/2018	\$78,772,445	20.57%	7.43%	13.14%	3.28%	16.42%	15.94%	Fixed	97%
Law Enforcement & Custodial Officer Sup. Ret. Fund	Active	8/31/2018	\$1,689,590,272	2.11%	0.50%	1.61%	1.56%	3.17%	1.55%	Other	49%
Teacher Retirement System of Texas	Active	8/31/2018	\$43,646,405,156	10.06%	7.70%	2.36%	5.49%	7.85%	7.92%	Fixed	101%
Texas County & District Retirement System	Active	12/31/2017	\$6,676,520,194	13.54%	6.77%	6.77%	4.63%	11.40%	12.33%	Actuarial	108%
Texas Emergency Services Retirement System ²	Active	8/31/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Other	115%
Texas Municipal Retirement System	Active	12/31/2017	\$6,188,490,343	15.03%	6.62%	8.41%	4.83%	13.24%	13.55%	Actuarial	102%

¹Plan calculates a recommended contribution based on a 31-year amortization period.

²Covered payroll is not reported for this plan.

TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY — MUNICIPAL PLANS

				(a)	(b)	(c) = (a) - (b) ER Normal	(d)	(e) = (c) + (d) ER Rec	(f) Actual ER Cont	Actual ER	(f) / (e) Percent of Rec
Plan Name	Plan Status	Fiscal Year End	Covered Payroll	Total NC (% of Pay)	EE Cont (% of Pav)	Cost	Amort Pmt (% of Pav)	Cont (% of Pay)	(% of Pay)	Cont Type	Cont Paid
Austin Employees' Retirement System	Active	12/31/2017	\$615,814,344	18.01%	8.00%	10.01%	9.60%	19.61%	18.03%	Fixed	92%
Austin Fire Fighters Relief & Retirement			+								
Fund	Active	12/31/2017	\$87,266,236	28.20%	18.70%	9.50%	8.85%	18.35%	22.05%	Fixed	120%
Austin Police Retirement System	Active	12/31/2017	\$164,899,985	21.72%	13.00%	8.72%	11.85%	20.57%	21.31%	Fixed	104%
Dallas Employees' Retirement Fund	Active	12/31/2017	\$410,913,000	22.05%	13.32%	8.73%	13.13%	21.86%	14.35%	Other	66%
Dallas Police & Fire Pension System- Combined Plan	Active	12/31/2017	\$346,037,000	19.14%	9.37%	9.77%	37.48%	47.25%	36.50%	Fixed	77%
Dallas Police & Fire Pension System- Supplemental	Active	12/31/2017	\$916,000	31.87%	8.79%	23.08%	374.34%	397.42%	226.75%	Actuarial	57%
City of El Paso Employees Retirement Trust	Active	8/31/2017	\$161,026,109	12.19%	8.95%	3.24%	7.17%	10.41%	15.73%	Fixed	151%
El Paso Firemen's Pension Fund	Active	12/31/2017	\$62,828,632	21.29%	15.28%	6.01%	14.83%	20.84%	18.78%	Fixed	90%
El Paso Police Pension Fund	Active	12/31/2017	\$84,260,634	23.05%	13.89%	9.16%	14.46%	23.62%	18.11%	Fixed	77%
Fort Worth Employees' Retirement Fund	Active	9/30/2017	\$447,488,158	11.28%	8.00%	3.28%	21.79%	25.07%	19.98%	Fixed	80%
Fort Worth Employees' Retirement Fund Staff Plan	Active	9/30/2017	\$1,507,141	14.39%	8.25%	6.14%	5.08%	11.22%	15.74%	Fixed	140%
Galveston Employees' Retirement Fund	Active	12/31/2017	\$25,308,650	9.45%	6.00%	3.45%	5.55%	9.00%	8.99%	Fixed	100%
Galveston Employees' Retirement Plan for Police	Active	12/31/2017	\$11,432,183	10.97%	12.00%	-1.03%	18.48%	17.45%	12.58%	Fixed	72%
Houston Firefighters' Relief & Retirement Fund	Active	6/30/2018	\$260,345,000	27.60%	10.50%	17.10%	19.70%	36.80%	31.88%	Actuarial	87%
Houston Municipal Employees Pension System	Active	6/30/2018	\$611,493,104	11.17%	3.00%	8.17%	19.67%	27.84%	68.94%	Actuarial	248%
Houston Police Officers' Pension System	Active	6/30/2018	\$412,786,000	24.36%	10.50%	13.86%	17.91%	31.77%	214.92%	Actuarial	676%
San Antonio Fire & Police Pension Fund	Active	12/31/2017	\$308,101,000	24.31%	12.32%	11.99%	7.17%	19.16%	24.64%	Fixed	129%

TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY — TLFFRA PLANS

				(a)	(b)	(c) = (a) - (b)	(d)	(e) = (c) + (d)	(f)		(f) / (e)
Plan Name	Plan Status	Fiscal Year End	Covered Payroll	Total NC (% of Pay)	EE Cont (% of Pay)	ER Normal Cost (% of Pay)	Amort Pmt (% of Pay)	ER Rec Cont (% of Pay)	Actual ER Cont (% of Pay)	Actual ER Cont Type	Percent of Rec Cont Paid
Abilene Firemen's Relief & Retirement Fund	Active	9/30/2017	\$13,200,135	15.62%	13.20%	2.42%	17.27%	19.69%	19.25%	Fixed	98%
Amarillo Firemen's Relief & Retirement Fund	Active	12/31/2017	\$19,822,841	23.80%	13.00%	10.80%	9.42%	20.22%	19.58%	Fixed	97%
Atlanta Firemen's Relief & Retirement Fund	Active	12/31/2017	\$635,815	18.58%	13.00%	5.58%	7.42%	13.00%	14.64%	Fixed	113%
Beaumont Firemen's Relief & Retirement Fund	Active	12/31/2017	\$19,424,704	18.93%	15.13%	3.80%	16.37%	20.17%	15.11%	Fixed	75%
Big Spring Firemen's Relief & Retirement Fund	Active	12/31/2017	\$3,879,000	13.85%	13.00%	0.85%	11.69%	12.54%	12.59%	Fixed	100%
Brownwood Firemen's Relief & Retirement Fund	Active	12/31/2017	\$1,847,760	14.65%	8.00%	6.65%	14.65%	21.30%	20.00%	Fixed	94%
Cleburne Firemen's Relief & Retirement Fund	Active	12/31/2017	\$4,508,831	21.33%	13.00%	8.33%	17.51%	25.84%	22.42%	Other	87%
Conroe Fire Fighters' Retirement Fund	Active	12/31/2017	\$8,474,517	19.21%	13.24%	5.97%	10.31%	16.28%	15.00%	Fixed	92%
Corpus Christi Fire Fighters' Retirement System	Active	12/31/2017	\$31,581,550	15.91%	13.10%	2.81%	17.97%	20.78%	20.78%	Fixed	100%
Corsicana Firemen's Relief & Retirement Fund	Active	12/31/2017	\$3,916,319	15.73%	14.00%	1.73%	12.27%	14.00%	14.15%	Fixed	101%
Denison Firemen's Relief & Retirement Fund	Active	12/31/2017	\$3,344,313	15.92%	12.00%	3.92%	11.08%	15.00%	15.00%	Fixed	100%
Denton Firemen's Relief & Retirement Fund	Active	12/31/2017	\$17,007,857	21.91%	12.60%	9.31%	9.02%	18.33%	17.52%	Other	96%
Galveston Firefighter's Relief & Retirement Fund	Active	12/31/2017	\$7,799,971	19.87%	16.00%	3.87%	18.12%	21.99%	14.00%	Fixed	64%
Greenville Firemen's Relief & Retirement Fund	Active	12/31/2017	\$4,167,480	16.71%	16.30%	0.41%	21.14%	21.55%	16.93%	Fixed	79%
Harlingen Firemen's Relief & Retirement Fund	Active	9/30/2017	\$6,213,613	18.02%	13.00%	5.02%	15.97%	20.99%	14.83%	Fixed	71%
Irving Firemen's Relief & Retirement Fund	Active	12/31/2017	\$32,264,107	18.53%	12.00%	6.53%	12.48%	19.01%	16.75%	Fixed	88%
Killeen Firemen's Relief & Retirement Fund	Active	9/30/2017	\$14,410,555	16.00%	11.00%	5.00%	8.55%	13.55%	13.00%	Fixed	96%
Laredo Firefighters Retirement System	Active	9/30/2017	\$34,061,980	19.96%	15.00%	4.96%	17.46%	22.42%	20.10%	Fixed	90%
Longview Firemen's Relief & Retirement Fund	Active	12/31/2017	\$12,329,307	14.00%	16.92%	-2.92%	24.19%	21.27%	17.36%	Fixed	82%
Lubbock Fire Pension Fund	Active	12/31/2017	\$31,754,899	22.20%	12.43%	9.77%	12.78%	22.55%	21.72%	Other	96%
Lufkin Firemen's Relief & Retirement Fund	Active	12/31/2017	\$5,122,197	16.85%	14.20%	2.65%	21.26%	23.91%	23.02%	Fixed	96%
Marshall Firemen's Relief & Retirement Fund	Active	12/31/2017	\$2,738,929	16.39%	14.00%	2.39%	22.00%	24.39%	18.87%	Fixed	77%
McAllen Firemen's Relief & Retirement Fund	Active	9/30/2017	\$11,524,569	15.53%	11.00%	4.53%	9.95%	14.48%	13.00%	Fixed	90%
Midland Firemen's Relief & Retirement Fund	Active	12/31/2016	\$16,135,387	24.27%	13.20%	11.07%	13.66%	24.73%	22.20%	Fixed	90%
Odessa Firemen's Relief & Retirement Fund	Active	12/31/2017	\$12,504,900	15.06%	18.00%	-2.94%	27.94%	25.00%	20.33%	Fixed	81%

TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY — TLFFRA PLANS

Plan Name	Plan Status	Fiscal Year End	Covered Payroll	(a) Total NC (% of Pay)	(% of	(c) = (a) - (b) ER Normal Cost (% of Pay)	(d) Amort Pmt (% of Pay)	(e) = (c) + (d) ER Rec Cont (% of Pay)	(f) Actual ER Cont (% of Pay)	Actual ER Cont Type	(f) / (e) Percent of Rec Cont Paid
Orange Firemen's Relief & Retirement Fund	Active	12/31/2017	\$2,373,912	12.76%	12.00%	0.76%	18.49%	19.25%	14.04%	Fixed	73%
Paris Firefighters' Relief & Retirement Fund	Active	12/31/2017	\$2,719,967	9.54%	15.00%	-5.46%	20.43%	14.97%	12.00%	Fixed	80%
Plainview Firemen's Relief & Retirement Fund	Active	12/31/2017	\$2,028,514	12.84%	14.00%	-1.16%	26.50%	25.34%	25.04%	Fixed	99%
Port Arthur Firemen's Relief & Retirement Fund	Active	12/31/2017	\$9,410,130	14.92%	13.00%	1.92%	11.94%	13.86%	13.87%	Other	100%
San Angelo Firemen's Relief & Retirement Fund	Active	12/31/2016	\$11,068,691	19.48%	14.20%	5.28%	18.41%	23.69%	20.23%	Fixed	85%
San Benito Firemen Relief & Retirement Fund	Active	9/30/2016	\$1,040,275	13.61%	12.00%	1.61%	9.46%	11.07%	15.87%	Fixed	143%
Sweetwater Firemen's Relief & Retirement Fund	Active	12/31/2017	\$1,580,254	21.86%	17.00%	4.86%	13.14%	18.00%	18.00%	Fixed	100%
Temple Firemen's Relief & Retirement Fund	Active	9/30/2017	\$8,540,580	20.57%	15.00%	5.57%	10.40%	15.97%	15.21%	Fixed	95%
Texarkana Firemen's Relief & Retirement Fund	Active	12/31/2017	\$4,229,844	22.68%	13.50%	9.18%	10.32%	19.50%	19.87%	Fixed	102%
Texas City Firemen's Relief & Retirement Fund	Active	12/31/2017	\$5,107,869	12.77%	16.00%	-3.23%	18.59%	15.36%	16.00%	Fixed	104%
The Woodlands Firefighters' Retirement System	Active	12/31/2017	\$11,153,108	22.67%	12.00%	10.67%	0.26%	10.93%	12.03%	Fixed	110%
Travis County ESD #6 Firefighter's Relief & Retirement Fund	Active	12/31/2017	\$5,842,505	21.84%	20.00%	1.84%	17.36%	19.20%	19.20%	Fixed	100%
Tyler Firefighters' Relief & Retirement Fund	Active	12/31/2017	\$11,474,800	20.53%	13.50%	7.03%	12.47%	19.50%	20.96%	Fixed	107%
University Park Firemen's Relief & Retirement Fund	Closed	12/31/2017	\$3,159,841	18.13%	10.48%	7.65%	22.05%	29.70%	18.29%	Fixed	62%
Waxahachie Firemen's Relief & Retirement Fund	Active	9/30/2017	\$4,112,117	18.19%	12.00%	6.19%	8.36%	14.55%	15.41%	Other	106%
Weslaco Firemen's Relief & Retirement Fund	Active	9/30/2017	\$3,967,317	13.65%	12.00%	1.65%	6.31%	7.96%	12.30%	Fixed	155%
Wichita Falls Firemen's Relief & Retirement Fund	Active	12/31/2017	\$11,254,785	14.69%	13.00%	1.69%	18.20%	19.89%	12.54%	Fixed	63%

TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY — CHAPTER 810 PLANS

Plan Name	Plan Status	Fiscal Year End	Covered Payroll	(a) Total NC (% of Pay)	(b) EE Cont (% of Pay)	(c) = (a) - (b) ER Normal Cost (% of Pay)	(d) Amort Pmt (% of Pay)	(e) = (c) + (d) ER Rec Cont (% of Pay)	(f) Actual ER Cont (% of Pay)	Actual ER Cont Type	(f) / (e) Percent of Rec Cont Paid
Anson General Hospital	Closed	6/30/2017	\$282,481	20.66%	4.00%	16.66%	-16.89%	-0.23%	0.00%	Actuarial	N/A
Arlington Employees Deferred	0.0000	0,00,202	<i>\</i>			2010070	2010070	012070	0.0070		,
Income Plan	Active	6/30/2017	\$3,736,300	5.62%	3.00%	2.62%	-0.72%	1.90%	1.63%	Actuarial	86%
Brazos River Authority Retirement Plan ¹	Frozen	2/28/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Actuarial	100%
CPS Energy Pension Plan	Active	12/31/2017	\$240,763,422	14.59%	5.00%	9.59%	9.48%	19.07%	19.15%	Actuarial	100%
Capital MTA Retirement Plan for Administrative Employees	Active	12/31/2017	\$23,551,457	8.78%	0.00%	8.78%	1.80%	10.58%	13.19%	Actuarial	125%
Capital MTA Retirement Plan for Bargaining Unit Employees ¹	Frozen	12/31/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Actuarial	167%
Citizens Medical Center	Active	2/28/2018	\$58,274,773	8.67%	3.93%	4.74%	0.05%	4.79%	4.98%	Actuarial	104%
Colorado River Municipal Water Dist. Pension Trust	Active	12/31/2017	\$3,635,925	10.31%	0.00%	10.31%	4.92%	15.23%	13.61%	Actuarial	89%
Corpus Christi Regional Transportation Authority	Active	12/31/2017	\$9,773,977	10.03%	0.00%	10.03%	4.28%	14.32%	14.16%	Actuarial	99%
DART Employees' Defined Benefit Retirement Plan & Trust	Closed	9/30/2017	\$15,642,000	7.40%	0.02%	7.38%	34.40%	41.78%	63.93%	Actuarial	153%
Dallas Co. Hospital Dist. Retirement Income Plan	Active	12/31/2017	\$632,669,000	6.06%	4.50%	1.56%	2.99%	4.55%	4.41%	Actuarial	97%
Dallas/Fort Worth Airport Board DPS Retirement Plan	Active	12/31/2017	\$27,840,000	23.53%	7.00%	16.53%	14.83%	31.36%	31.36%	Actuarial	
Dallas/Fort Worth Airport Board Retirement Plan	Active	12/31/2017	\$55,850,000	17.89%	0.00%	17.89%	19.99%	37.88%	37.87%	Actuarial	
El Paso Firemen & Policemen's Pension Staff Plan	Active	12/31/2017	\$505,502	11.25%	10.00%	1.25%	10.00%	11.25%	10.42%	Actuarial	93%
Galveston Wharves Pension Plan	Closed	12/31/2017	\$2,659,786	5.79%	0.00%	5.79%	15.31%	21.10%	21.14%	Actuarial	100%

¹Covered payroll is not reported for this plan.

TEXAS PENSION REVIEW BOARD

CONTRIBUTION SUFFICIENCY— CHAPTER 810 PLANS

				(a) Total NC	(b)	(c) = (a) - (b) ER Normal	(d) Amort	(e) = (c) + (d) ER Rec	(f) Actual	Actual	(f) / (e) Percent of
Plan Name	Plan Status	Fiscal Year End	Covered Payroll	(% of Pay)	EE Cont (% of Pay)	Cost (% of Pay)	Pmt (% of Pay)	Cont (% of Pay)	ER Cont (% of Pay)	ER Cont Type	Rec Cont Paid
Guadalupe Regional Medical Center	Active	12/31/2017	\$25,486,937	8.85%	4.00%	4.85%	1.65%	6.50%	7.53%	Other	116%
Guadalupe-Blanco River Authority	Closed	12/31/2017	\$6,279,213	5.02%	0.00%	5.02%	11.10%	16.12%	17.00%	Other	105%
Harris County Hospital District Pension Plan	Closed	12/31/2017	\$173,272,000	3.89%	0.00%	3.89%	12.93%	16.82%	16.99%	Actuarial	101%
Houston MTA Non-Union Pension Plan	Closed	12/31/2017	\$43,479,995	7.93%	0.00%	7.93%	18.08%	26.01%	26.01%	Actuarial	100%
Houston MTA Workers Union Pension Plan	Closed	12/31/2017	\$103,245,714	4.34%	0.00%	4.34%	12.33%	16.67%	14.93%	Actuarial	90%
Irving Supplemental Benefit Plan	Active	12/31/2017	\$100,135,456	3.34%	2.50%	0.84%	1.27%	2.11%	2.08%	Other	99%
JPS Pension Plan - Tarrant County Hospital District	Active	9/30/2017	\$213,963,351	5.61%	1.00%	4.61%	2.14%	6.75%	6.75%	Actuarial	100%
Lower Colorado River Authority Retirement Plan	Closed	12/31/2017	\$112,700,000	5.84%	0.00%	5.84%	10.27%	16.11%	20.31%	Actuarial	126%
Nacogdoches County Hospital District Retirement Plan	Active	6/30/2016	\$30,057,297	4.56%	2.91%	1.65%	2.66%	4.31%	5.66%	Other	131%
Northeast Medical Center Hospital Retirement Plan ¹	Frozen	6/30/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Actuarial	100%
Northwest Texas Healthcare System Retirement Plan ¹	Frozen	9/30/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Other	100%
Plano Retirement Security Plan	Active	12/31/2017	\$142,526,560	3.56%	0.00%	3.56%	0.06%	3.62%	3.62%	Actuarial	100%
Port of Houston Authority Retirement Plan	Closed	7/31/2017	\$30,210,365	13.07%	0.00%	13.07%	3.99%	17.06%	31.78%	Actuarial	186%
Refugio County Memorial Hospital District Retirement Plan	Frozen	10/31/2017	\$3,234,547	0.00%	0.00%	0.00%	0.00%	0.00%	1.85%	Actuarial	N/A
San Antonio Metropolitan Transit Retirement Plan	Active	9/30/2017	\$67,512,908	8.54%	4.17%	4.37%	10.01%	14.38%	19.71%	Actuarial	137%
Sweeny Community Hospital	Closed	12/31/2017	\$1,244,699	5.39%	0.00%	5.39%	3.91%	9.30%	9.30%	Actuarial	100%
University Health System Pension Plan	Active	12/31/2017	\$331,014,376	4.09%	2.00%	2.09%	4.59%	6.68%	7.34%	Actuarial	110%

¹Covered payroll is not reported for this plan.

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

The average assumed rate of return for Texas retirement systems is currently 7.37%. The rate of return assumption is a key economic assumption that has an inverse correlation with the liability and short-term contribution requirements of a plan. A higher return assumption leads to a lower liability and contribution requirement and vice versa. Therefore, reducing the return assumption will lead to an increase in the unfunded liability of a plan. This will also result in higher recommended contributions in the short term. If a retirement system receives this higher contribution, the actuarial soundness of the plan should not be affected in the long term.

The following table includes the retirement system's investment return assumption, as reported in actuarial valuations since 2013. The table also displays member contributions, employer contributions, amortization periods and funded ratios over the same time period.

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			STATEWIDE				
	8/31/2013	8.00%	Infinite	77.36%	14.60%	6.60%	8.00%
	8/31/2014	8.00%	Infinite	77.24%	14.90%	6.90%	8.00%
Employees Retirement System of	8/31/2015	8.00%	33	76.33%	19.50%	9.50%	10.00%
Texas	8/31/2016	8.00%	35	75.23%	19.50%	9.50%	10.00%
	8/31/2017	7.50%	Infinite	70.08%	19.50%	9.50%	10.00%
	8/31/2018	7.50%	Infinite	70.17%	19.50%	9.50%	10.00%
	8/31/2013	8.00%	Infinite	88.57%	22.23%	6.57%	15.66%
	8/31/2014	8.00%	Infinite	90.20%	22.53%	6.87%	15.66%
Judicial Retirement System of Texas	8/31/2015	8.00%	Infinite	92.23%	22.82%	7.16%	15.66%
Plan Two	8/31/2016	8.00%	49	92.86%	23.10%	7.44%	15.66%
-	8/31/2017	7.50%	63	90.78%	23.09%	7.43%	15.66%
-	8/31/2018	7.50%	69	91.66%	23.12%	7.46%	15.66%
	8/31/2013	8.00%	Infinite	70.40%	2.20%	0.50%	1.70%
-	8/31/2014	8.00%	Infinite	73.22%	2.20%	0.50%	1.70%
Law Enforcement & Custodial Officer	8/31/2015	8.00%	Infinite	72.03%	2.20%	0.50%	1.70%
Supplemental Retirement Fund	8/31/2016	8.00%	Infinite	71.13%	2.10%	0.50%	1.60%
	8/31/2017	7.50%	Infinite	66.01%	2.09%	0.50%	1.59%
	8/31/2018	7.50%	Infinite	65.61%	2.07%	0.50%	1.57%

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			STATEWIDI				
	8/31/2013	8.00%	28	80.80%	13.20%	6.40%	6.80%
	8/31/2014	8.00%	29.8	80.23%	13.50%	6.70%	6.80%
Tarahan Dating a sat Gustana af Taura ¹	8/31/2015	8.00%	33.3	80.19%	14.90%	7.20%	7.70%
Teacher Retirement System of Texas ¹	8/31/2016	8.00%	33.6	79.65%	15.40%	7.70%	7.70%
	8/31/2017	8.00%	32.2	80.48%	15.40%	7.70%	7.70%
	8/31/2018	7.25%	87	76.94%	15.46%	7.70%	7.76%
	12/31/2013	8.00%	10.8	89.39%	19.15%	6.95%	12.20%
	12/31/2014	8.00%	9.2	90.47%	19.47%	6.99%	12.48%
Texas County & District Retirement System ²	12/31/2015	8.00%	13.8	88.71%	18.17%	6.77%	11.40%
System	12/31/2016	8.00%	13.5	88.44%	18.51%	6.77%	11.74%
	12/31/2017	8.00%	12.3	89.05%	18.35%	6.78%	11.57%
	8/31/2014	7.75%	30	76.25%	N/A	N/A	N/A
Texas Emergency Services Retirement	8/31/2016	7.75%	30	80.15%	N/A	N/A	N/A
System	8/31/2018	7.75%	24	83.39%	N/A	N/A	N/A
	12/31/2013	7.00%	18.6	84.10%	19.86%	6.61%	13.25%
	12/31/2014	7.00%	20.9	85.79%	20.00%	6.61%	13.39%
Texas Municipal Retirement System ²	12/31/2015	6.75%	20.6	85.80%	19.84%	6.62%	13.22%
	12/31/2016	6.75%	19.7	86.25%	19.68%	6.63%	13.05%
	12/31/2017	6.75%	18.8	87.43%	20.18%	6.63%	13.55%

¹The employer contribution since 2015 consists of a 6.80% of payroll contribution rate by the state and an additional 1.50% of payroll by districts whose employees are not participating in Social Security. Since 2018, the System also receives contributions on behalf of retired members who have returned to work which yields an approximate additional 0.05% of payroll.

²The members' contribution rate is set by the plan sponsor with a weighted average calculated by the PRB. Employer contribution also reflects a weighted average.

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			MUNICIPA	L			
	12/31/2013	7.75%	26	70.38%	26.00%	8.00%	18.00%
	12/31/2014	7.75%	24	70.91%	26.00%	8.00%	18.00%
Austin Employees' Retirement System	12/31/2015	7.50%	33	68.05%	26.00%	8.00%	18.00%
	12/31/2016	7.50%	31	67.47%	26.00%	8.00%	18.00%
	12/31/2017	7.50%	30	68.26%	26.00%	8.00%	18.00%
	12/31/2013	7.75%	10.51	91.75%	39.25%	17.20%	22.05%
Austin Fire Fighters Delief 9	12/31/2014	7.70%	10.57	90.93%	39.88%	17.83%	22.05%
Austin Fire Fighters Relief & Retirement Fund	12/31/2015	7.70%	12.29	89.92%	40.38%	18.33%	22.05%
Retrement i und	12/31/2016	7.70%	16.17	88.26%	40.75%	18.70%	22.05%
	12/31/2017	7.70%	16.95	88.33%	40.75%	18.70%	22.05%
	12/31/2013	8.00%	28.9	66.39%	34.63%	13.00%	21.63%
	12/31/2014	7.90%	28.6	67.45%	34.55%	13.00%	21.55%
Austin Police Retirement System	12/31/2015	7.80%	31.3	66.57%	34.31%	13.00%	21.31%
	12/31/2016	7.70%	27.3	66.16%	34.31%	13.00%	21.31%
	12/31/2017	7.70%	35	65.78%	34.31%	13.00%	21.31%
	12/31/2013	8.25%	51	85.14%	26.08%	13.06%	13.02%
	12/31/2014	8.00%	Infinite	80.94%	27.15%	13.32%	13.83%
Dallas Employees' Retirement Fund	12/31/2015	8.00%	Infinite	80.41%	27.65%	13.32%	14.33%
	12/31/2016	7.75%	47	80.42%	27.72%	13.32%	14.40%
	12/31/2017	7.75%	47	82.27%	27.71%	13.32%	14.39%
	1/1/2013	8.50%	23	78.10%	36.00%	8.50%	27.50%
	1/1/2014	8.50%	26	75.59%	36.00%	8.50%	27.50%
Dallas Police & Fire Pension System-	1/1/2015	7.25%	Infinite	63.80%	36.00%	8.50%	27.50%
Combined Plan	1/1/2016	7.25%	Infinite	45.07%	37.61%	7.08%	30.53%
	1/1/2017	7.25%	44	49.41%	42.43%	9.37%	33.06%
	1/1/2018	7.25%	45	47.74%	58.90%	13.50%	45.40%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			MUNICIPA	L			
	1/1/2013	8.50%	10	57.90%	438.89%	8.50%	430.39%
	1/1/2014	8.50%	10	61.99%	357.03%	8.50%	348.53%
Dallas Police & Fire Pension System-	1/1/2015	7.25%	10	51.15%	447.28%	8.50%	438.78%
Supplemental	1/1/2016	7.25%	10	45.80%	427.98%	5.13%	422.85%
	1/1/2017	7.25%	10	52.91%	406.21%	8.79%	397.42%
	1/1/2018	7.25%	10	51.53%	250.61%	13.98%	236.63%
City of El Paso Employees Retirement	9/1/2014	7.50%	11	77.12%	23.00%	8.95%	14.05%
Trust	9/1/2016	7.50%	17	79.20%	23.00%	8.95%	14.05%
	1/1/2014	7.75%	23	80.69%	33.78%	15.28%	18.50%
El Paso Firemen's Pension Fund	1/1/2016	7.75%	26	79.19%	33.78%	15.28%	18.50%
	1/1/2018	7.75%	28	77.78%	36.50%	18.00%	18.50%
	1/1/2014	7.75%	32	78.23%	32.39%	13.89%	18.50%
El Paso Police Pension Fund	1/1/2016	7.75%	33	81.11%	32.39%	13.89%	18.50%
	1/1/2018	7.75%	30.5	78.30%	36.25%	18.00%	18.25%
	1/1/2013	8.00%	36	63.26%	28.36%	8.40%	19.96%
	1/1/2014	8.00%	49.3	63.86%	28.39%	8.41%	19.98%
Fort Worth Employees' Retirement	12/31/2014	8.00%	55.7	62.23%	27.92%	7.94%	19.98%
Fund	12/31/2015	7.75%	72.5	60.65%	27.97%	8.00%	19.97%
	12/31/2016	7.75%	Infinite	58.45%	28.04%	8.06%	19.98%
	12/31/2017	7.75%	Infinite	57.83%	28.07%	8.08%	19.99%
Fort Worth Employees' Retirement	12/31/2015	7.75%	10.3	73.71%	23.99%	8.25%	15.74%
Fund	12/31/2016	7.75%	27	76.46%	23.99%	8.25%	15.74%
Staff Plan	12/31/2017	7.75%	32	77.18%	23.99%	8.25%	15.74%
	1/1/2013	8.00%	Infinite	77.50%	15.00%	6.00%	9.00%
	1/1/2014	8.00%	Infinite	81.40%	15.00%	6.00%	9.00%
Galveston Employees' Retirement	1/1/2015	8.00%	31.5	79.50%	15.00%	6.00%	9.00%
Fund	12/31/2015	7.50%	13.7	78.01%	15.00%	6.00%	9.00%
	12/31/2016	7.25%	13.4	78.46%	15.00%	6.00%	9.00%
	12/31/2017	7.25%	11.6	79.58%	15.00%	6.00%	9.00%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		Μι	JNICIPAL				
	1/1/2013	7.50%	65.8	43.00%	24.00%	12.00%	12.00%
	1/1/2014	7.50%	55.1	44.34%	24.00%	12.00%	12.00%
Galveston Employees' Retirement Plan for	1/1/2015	8.00%	54.9	47.00%	24.00%	12.00%	12.00%
Police	1/1/2016	8.00%	47.1	44.70%	24.00%	12.00%	12.00%
	1/1/2017	8.00%	48.7	42.10%	24.83%	12.00%	12.83%
	1/1/2018	7.50%	35.5	39.31%	26.83%	12.00%	14.83%
	7/1/2013	8.50%	30	86.56%	32.90%	9.00%	23.90%
Houston Firefighters' Relief & Retirement	7/1/2015	8.50%	30	89.38%	42.20%	9.00%	33.20%
Fund	7/1/2016	7.00%	31	80.56%	42.39%	10.50%	31.89%
	7/1/2017	7.00%	30	80.45%	43.49%	10.50%	32.99%
	7/1/2013	8.50%	35	57.70%	26.82%	3.12%	23.70%
	7/1/2014	8.50%	33	58.07%	28.10%	2.99%	25.11%
Usuatan Munisipal Employees Dension Custom	7/1/2015	8.00%	32	54.19%	30.12%	2.76%	27.36%
Houston Municipal Employees Pension System	7/1/2016	7.00%	31	55.46%	30.84%	3.00%	27.84%
	7/1/2017	7.00%	30	56.36%	32.00%	3.00%	29.00%
	7/1/2018	7.00%	29	57.70%	32.39%	3.00%	29.39%
	7/1/2013	8.50%	Infinite	81.26%	35.61%	9.33%	26.28%
	7/1/2014	8.00%	23	80.96%	37.66%	9.37%	28.29%
Houston Dollar Officeurs' Donation Sustan	7/1/2015	8.00%	23	79.75%	39.69%	9.41%	30.28%
Houston Police Officers' Pension System	7/1/2016	7.00%	31	78.24%	42.27%	10.50%	31.77%
	7/1/2017	7.00%	30	78.30%	42.35%	10.50%	31.85%
	7/1/2018	7.00%	29	79.35%	42.32%	10.50%	31.82%
	10/1/2013	7.50%	7.25	91.75%	36.96%	12.32%	24.64%
	10/1/2014	7.50%	6.15	92.91%	36.96%	12.32%	24.64%
San Antonio Fire & Police Pension Fund	10/1/2015	7.25%	11.14	88.82%	36.96%	12.32%	24.64%
	1/1/2017	7.25%	13.07	87.92%	36.96%	12.32%	24.64%
	1/1/2018	7.25%	9.88	90.34%	36.96%	12.32%	24.64%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			TLFFRA				
	10/1/2013	8.00%	33.5	57.49%	32.45%	13.20%	19.25%
Abilene Firemen's Relief & Retirement Fund	10/1/2015	8.00%	31.5	56.60%	32.45%	13.20%	19.25%
	10/1/2017	8.00%	31.9	55.69%	32.45%	13.20%	19.25%
	1/1/2014	8.25%	28.8	82.98%	31.83%	13.00%	18.83%
Amarillo Firemen's Relief & Retirement Fund	12/31/2015	8.00%	34.5	81.82%	32.57%	13.00%	19.57%
	12/31/2017	7.50%	43.5	81.47%	32.57%	13.00%	19.57%
Atlanta Finamaria Daliaf & Datinamant Fund	12/31/2014	7.50%	36.2	81.87%	26.00%	13.00%	13.00%
Atlanta Firemen's Relief & Retirement Fund	12/31/2016	7.40%	28.4	82.13%	26.00%	13.00%	13.00%
	12/31/2014	8.00%	39.1	72.72%	30.00%	15.00%	15.00%
Beaumont Firemen's Relief & Retirement Fund	12/31/2016	8.00%	104	67.53%	30.26%	15.13%	15.13%
	1/1/2013	8.00%	30.8	56.73%	25.00%	13.00%	12.00%
Big Spring Firemen's Relief & Retirement Fund	1/1/2015	8.00%	28.65	54.82%	26.00%	13.00%	13.00%
	1/1/2017	8.00%	36.19	54.86%	26.00%	13.00%	13.00%
	12/31/2013	7.50%	37	43.76%	28.00%	8.00%	20.00%
Brownwood Firemen's Relief & Retirement Fund	12/31/2015	7.40%	36.1	44.63%	28.00%	8.00%	20.00%
	12/31/2017	7.25%	38.6	45.03%	28.00%	8.00%	20.00%
Clabor Einen als Dalis C. P. Dalis C. P. Dalis	12/31/2014	7.50%	27.3	65.30%	36.50%	13.00%	23.50%
Cleburne Firemen's Relief & Retirement Fund	12/31/2016	7.25%	49.6	65.42%	34.00%	13.00%	21.00%
	12/31/2013	7.75%	37.4	61.77%	28.24%	13.24%	15.00%
Conroe Fire Fighters' Retirement Fund	12/31/2015	7.75%	31.4	61.51%	28.24%	13.24%	15.00%
	12/31/2017	7.75%	39	62.03%	28.24%	13.24%	15.00%
Corpus Christi Fire Fighters' Retirement System	12/31/2014	7.90%	23.1	61.36%	33.88%	13.10%	20.78%
Corpus Christi File Fighters Retirement System	12/31/2016	7.75%	23.1	62.14%	33.88%	13.10%	20.78%
Corsicana Firemen's Relief & Retirement Fund	12/31/2014	7.50%	24.2	53.54%	28.00%	14.00%	14.00%
Considenta rifements Kener & Kenement Fund	12/31/2016	7.00%	28.9	53.14%	28.00%	14.00%	14.00%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			TLFFRA				
	1/1/2014	7.75%	29.1	71.60%	27.00%	12.00%	15.00%
Denison Firemen's Relief & Retirement Fund	12/31/2015	7.75%	27.1	74.37%	27.00%	12.00%	15.00%
	12/31/2017	7.50%	15.8	77.26%	27.00%	12.00%	15.00%
	12/31/2013	7.00%	24	77.14%	29.60%	12.60%	17.00%
Denton Firemen's Relief & Retirement Fund	12/31/2015	6.75%	31.6	80.82%	28.10%	12.60%	15.50%
	12/31/2017	6.75%	14.6	82.07%	31.10%	12.60%	18.50%
	1/1/2014	8.00%	50.2	69.65%	30.00%	16.00%	14.00%
Galveston Firefighter's Relief & Retirement	12/31/2015	8.00%	47	68.10%	30.00%	16.00%	14.00%
Fund	12/31/2016	7.75%	Infinite	68.04%	30.00%	16.00%	14.00%
	12/31/2017	7.75%	26.8	69.16%	35.00%	18.00%	17.00%
Greenville Firemen's Relief & Retirement	12/31/2014	8.25%	70.4	48.94%	31.60%	15.30%	16.30%
Fund	12/31/2016	8.00%	38	47.69%	33.10%	16.30%	16.80%
	12/31/2013	8.00%	66.6	70.98%	26.00%	13.00%	13.00%
Harlingen Firemen's Relief & Retirement Fund	12/31/2015	8.00%	Infinite	63.12%	26.00%	13.00%	13.00%
Fullu	9/30/2017	7.75%	59.1	66.06%	30.00%	15.00%	15.00%
	1/1/2014	8.25%	63.4	73.10%	27.65%	12.00%	15.65%
Irving Firemen's Relief & Retirement Fund	12/31/2015	8.25%	46.5	74.92%	28.75%	12.00%	16.75%
	12/31/2017	7.50%	Infinite	71.61%	29.75%	13.00%	16.75%
Killoon Firemon's Delief & Detirement Fund	9/30/2014	7.75%	29.5	66.46%	24.00%	11.00%	13.00%
Killeen Firemen's Relief & Retirement Fund	9/30/2016	7.75%	22.8	69.74%	24.00%	11.00%	13.00%
Larada Firafizhtars Datiromant System	9/30/2014	8.00%	29.8	59.72%	35.10%	15.00%	20.10%
Laredo Firefighters Retirement System	9/30/2016	7.90%	28	59.28%	35.10%	15.00%	20.10%
	12/31/2013	8.00%	63.3	56.22%	31.00%	15.00%	16.00%
Long street Financials Dath (C.D. Street	12/31/2014	8.00%	41.4	53.73%	32.00%	15.00%	17.00%
Longview Firemen's Relief & Retirement Fund	12/31/2015	8.00%	37.9	47.34%	33.25%	16.25%	17.00%
, and	12/31/2016	8.00%	50.7	45.53%	33.92%	16.92%	17.00%
	12/31/2017	8.00%	40.2	46.05%	35.06%	16.81%	18.25%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			TLFFRA				
	1/1/2013	8.00%	24.3	74.50%	35.06%	12.43%	22.63%
Lubbock Fire Pension Fund	1/1/2015	7.75%	27.6	75.53%	34.16%	12.43%	21.73%
	12/31/2016	7.75%	33.5	72.63%	34.24%	12.43%	21.81%
Luflin Financala Daliaf & Datingment Fund	12/31/2014	7.50%	40.6	43.51%	36.20%	13.20%	23.00%
Lufkin Firemen's Relief & Retirement Fund	12/31/2016	7.50%	33.1	46.66%	36.20%	14.20%	22.00%
Marshall Firemen's Relief & Retirement	12/31/2014	7.75%	43.2	46.39%	33.05%	14.00%	19.05%
Fund	12/31/2016	7.75%	56.4	42.02%	33.05%	14.00%	19.05%
McAllen Firemen's Relief & Retirement	10/1/2014	7.75%	29	70.79%	24.00%	11.00%	13.00%
Fund	10/1/2016	7.75%	41.4	69.11%	24.00%	11.00%	13.00%
Midland Firemen's Relief & Retirement	1/1/2014	8.00%	59.1	66.82%	34.90%	13.20%	21.70%
Fund	12/31/2015	8.00%	44.7	65.78%	35.40%	13.20%	22.20%
	1/1/2013	8.25%	Infinite	48.82%	30.15%	15.00%	15.15%
	1/1/2015	8.25%	Infinite	49.75%	31.00%	15.00%	16.00%
Odessa Firemen's Relief & Retirement Fund	1/1/2016	7.75%	Infinite	43.12%	31.00%	15.00%	16.00%
	1/1/2017	7.75%	46.5	45.12%	38.00%	18.00%	20.00%
	1/1/2018	7.75%	47.1	43.08%	38.00%	18.00%	20.00%
Orange Firemen's Relief & Retirement Fund	1/1/2015	7.75%	58.2	57.41%	25.00%	11.00%	14.00%
Orange Firemen's Keller & Kethement Fund	1/1/2017	7.75%	69.3	49.86%	26.00%	12.00%	14.00%
	1/1/2013	8.00%	29.2	44.94%	27.00%	15.00%	12.00%
Paris Firefighters' Relief & Retirement Fund	12/31/2014	8.00%	26.1	42.74%	27.00%	15.00%	12.00%
	12/31/2016	7.50%	41.9	35.64%	27.00%	15.00%	12.00%
	12/31/2013	7.75%	31.4	39.00%	33.84%	14.00%	19.84%
Plainview Firemen's Relief & Retirement Fund	12/31/2015	7.75%	31.6	37.33%	38.68%	14.00%	24.68%
	12/31/2017	7.50%	44.8	37.67%	39.68%	15.00%	24.68%
Port Arthur Firemen's Relief & Retirement	1/1/2014	8.00%	17	77.40%	27.45%	13.00%	14.45%
Fund	12/31/2015	8.00%	18.3	77.97%	26.86%	13.00%	13.86%

TEXAS PENSION REVIEW BOARD

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			TLFFRA				
	12/31/2013	7.90%	40.9	65.01%	34.48%	14.20%	20.28%
San Angelo Firemen's Relief & Retirement Fund	12/31/2015	7.90%	38.5	65.65%	34.40%	14.20%	20.20%
i unu	12/31/2017	7.90%	31.3	64.92%	36.65%	16.45%	20.20%
	12/31/2013	7.00%	21.7	60.81%	24.00%	12.00%	12.00%
San Benito Firemen Relief & Retirement	12/31/2015	7.50%	21.7	60.52%	24.00%	12.00%	12.00%
Fund	9/30/2017	7.50%	21.8	60.68%	24.00%	12.00%	12.00%
Sweetwater Firemen's Relief & Retirement	12/31/2014	8.00%	58.8	69.01%	32.00%	16.00%	16.00%
Fund	12/31/2016	8.00%	27.5	69.99%	35.00%	17.00%	18.00%
	9/30/2014	8.00%	23	77.17%	30.24%	15.00%	15.24%
Temple Firemen's Relief & Retirement Fund	9/30/2016	7.75%	28.4	75.12%	30.24%	15.00%	15.24%
	12/31/2013	7.75%	19.6	84.62%	33.00%	13.50%	19.50%
Texarkana Firemen's Relief & Retirement Fund	12/31/2015	7.75%	16.3	87.37%	33.00%	13.50%	19.50%
Fund	12/31/2017	7.75%	15	86.32%	33.00%	13.50%	19.50%
Texas City Firemen's Relief & Retirement	12/31/2014	7.75%	31.6	54.39%	32.00%	16.00%	16.00%
Fund	12/31/2016	7.75%	28	50.37%	32.00%	16.00%	16.00%
	1/1/2016	7.00%	0	100.46%	24.00%	12.00%	12.00%
The Woodlands Firefighters' Retirement System	1/1/2017	7.00%	2.7	98.60%	24.00%	12.00%	12.00%
System	1/1/2018	7.00%	0	105.98%	24.00%	12.00%	12.00%
	1/1/2014	7.00%	7.3	62.98%	38.80%	19.60%	19.20%
Travis County ESD #6 Firefighter's Relief & Retirement Fund	12/31/2015	7.00%	5.8	71.61%	39.20%	20.00%	19.20%
Retrement i unu	12/31/2017	7.00%	3.3	87.20%	39.20%	20.00%	19.20%
	12/31/2013	7.75%	22.9	73.61%	33.00%	13.50%	19.50%
Tyler Firefighters' Relief & Retirement Fund	12/31/2015	7.65%	21.6	75.87%	33.00%	13.50%	19.50%
	12/31/2017	7.50%	25.5	76.18%	33.00%	13.50%	19.50%
University Park Firemen's Relief &	1/1/2015	8.00%	53.7	45.83%	30.54%	13.00%	17.54%
Retirement Fund	12/31/2016	7.50%	Infinite	43.96%	32.00%	10.48%	21.52%

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			TLFFRA				
Waxahachie Firemen's Relief &	10/1/2014	7.00%	24.3	68.91%	28.21%	12.00%	16.21%
Retirement Fund	10/1/2016	7.00%	25.4	66.86%	27.53%	12.00%	15.53%
Weslaco Firemen's Relief & Retirement	9/30/2014	7.25%	15.9	69.23%	24.00%	12.00%	12.00%
Fund	9/30/2016	7.25%	14.1	68.53%	24.00%	12.00%	12.00%
	1/1/2015	8.00%	105.9	65.24%	24.52%	12.00%	12.52%
Wichita Falls Firemen's Relief &	1/1/2016	8.00%	43.7	64.38%	25.00%	13.00%	12.00%
Retirement Fund	1/1/2017	8.00%	49.4	62.48%	25.00%	13.00%	12.00%
	1/1/2018	7.75%	Infinite	57.70%	25.00%	13.00%	12.00%
		СН	IAPTER 810				
	7/1/2013	5.50%	0	117.43%	3.80%	3.00%	0.80%
	7/1/2014	5.50%	0	119.45%	3.60%	3.00%	0.60%
Arlington Employees Deferred Income Plan	7/1/2015	5.50%	0	116.01%	4.90%	3.00%	1.90%
Plan	7/1/2016	5.00%	0	107.94%	6.00%	3.00%	3.00%
	7/1/2017	5.00%	0	108.03%	5.00%	3.00%	2.00%
	3/1/2013	6.50%	19	69.94%	7.55%	0.00%	7.55%
	3/1/2014	6.50%	18	73.75%	N/A	N/A	N/A
	3/1/2015	6.50%	17	71.25%	N/A	N/A	N/A
Brazos River Authority Retirement Plan ¹	3/1/2016	6.50%	16	69.78%	N/A	N/A	N/A
	3/1/2017	6.50%	15	68.22%	N/A	N/A	N/A
	3/1/2018	6.50%	14	66.36%	N/A	N/A	N/A
	1/1/2013	7.00%	20	74.75%	8.88%	0.00%	8.88%
	1/1/2014	7.00%	20	75.59%	8.91%	0.00%	8.91%
Capital MTA Retirement Plan for Administrative Employees	1/1/2015	7.00%	20	80.76%	10.40%	0.00%	10.40%
Administrative Employees	1/1/2016	7.00%	20	77.13%	10.55%	0.00%	10.55%
	1/1/2017	6.75%	20	72.62%	12.59%	0.00%	12.59%

¹ Plan is frozen and does not report payroll data.

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
			CHAPTER 810				
	1/1/2013	7.50%	26	46.62%	N/A	N/A	N/A
	1/1/2014	7.50%	25	44.08%	N/A	N/A	N/A
Capital MTA Retirement Plan for	1/1/2015	7.50%	24	46.62%	N/A	N/A	N/A
Bargaining Unit Employees ¹	1/1/2016	7.50%	23	49.46%	N/A	N/A	N/A
	1/1/2017	7.50%	22	51.67%	N/A	N/A	N/A
	1/1/2018	7.25%	21	51.90%	N/A	N/A	N/A
	1/1/2013	7.00%	30	94.11%	16.42%	0.00%	16.42%
	1/1/2014	7.00%	0	100.43%	15.29%	0.00%	15.29%
Colorado River Municipal Water District Defined Benefit Retirement Plan &	1/1/2015	6.75%	10	96.51%	11.49%	0.00%	11.49%
Trust ²	1/1/2016	6.75%	9.4	93.52%	13.34%	0.00%	13.34%
Tust	1/1/2017	6.25%	9.1	89.87%	15.23%	0.00%	15.23%
	1/1/2018	6.25%	7.4	93.75%	13.81%	0.00%	13.81%
	1/1/2013	7.50%	11	91.49%	13.23%	0.00%	13.23%
	1/1/2014	7.50%	0	102.07%	9.56%	0.00%	9.56%
Corpus Christi Regional Transportation	1/1/2015	7.50%	9	97.70%	11.16%	0.00%	11.16%
Authority	1/1/2016	7.50%	8	90.10%	16.00%	0.00%	16.00%
	1/1/2017	7.50%	7	93.18%	14.32%	0.00%	14.32%
	1/1/2018	7.50%	6	98.30%	11.16%	0.00%	11.16%
	1/1/2013	7.75%	30	82.19%	23.70%	5.00%	18.70%
	1/1/2014	7.50%	30	83.41%	23.00%	5.00%	18.00%
CPS Energy Pension Plan ³	1/1/2015	7.50%	30	84.19%	23.90%	5.00%	18.90%
	1/1/2016	7.50%	30	84.80%	24.07%	5.00%	19.07%
	1/1/2017	7.25%	30	80.78%	28.07%	5.00%	23.07%

¹*Plan is frozen and does not report payroll data.*

² Amortization period is calculated by the PRB.

³ Prior amortization periods are based on an open amortization funding policy. The system has adopted a closed 30 year amortization funding policy effective January 1, 2017.

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		СН	APTER 810				
	1/1/2013	8.00%	30	80.00%	8.90%	4.50%	4.40%
	1/1/2014	8.00%	30	82.53%	8.89%	4.50%	4.39%
Dallas County Hospital District Retirement	1/1/2015	8.00%	29	76.35%	8.93%	4.50%	4.43%
Income Plan	1/1/2016	7.75%	28	74.91%	9.39%	4.50%	4.89%
	1/1/2017	7.50%	27	73.76%	9.05%	4.50%	4.55%
	1/1/2018	7.25%	26	73.41%	10.76%	6.20%	4.56%
	1/1/2013	7.25%	22	67.17%	36.48%	7.00%	29.48%
	1/1/2014	7.25%	21	72.38%	34.98%	7.00%	27.98%
Dallas/Fort Worth Airport Board DPS	1/1/2015	7.25%	20	76.12%	33.93%	7.00%	26.93%
Retirement Plan	1/1/2016	7.25%	19	74.83%	37.71%	7.00%	30.71%
	1/1/2017	7.25%	18	75.60%	38.36%	7.00%	31.36%
	1/1/2018	7.25%	17	77.70%	37.60%	7.00%	30.60%
	1/1/2013	7.25%	22	71.81%	34.42%	0.00%	34.42%
	1/1/2014	7.25%	21	77.10%	32.38%	0.00%	32.38%
Dallas/Fort Worth Airport Board	1/1/2015	7.25%	20	81.27%	30.48%	0.00%	30.48%
Retirement Plan	1/1/2016	7.25%	19	78.26%	37.49%	0.00%	37.49%
	1/1/2017	7.25%	18	80.28%	37.88%	0.00%	37.88%
	1/1/2018	7.25%	17	82.43%	37.67%	0.00%	37.67%
	10/1/2013	7.00%	30	70.73%	46.94%	0.01%	46.93%
DART Employees' Defined Benefit	10/1/2014	7.00%	30	74.27%	45.52%	0.01%	45.51%
Retirement Plan & Trust ¹	10/1/2016	6.75%	12.4	76.53%	39.23%	0.02%	39.21%
	10/1/2017	6.75%	11.8	78.89%	42.24%	0.02%	42.22%
El Paso Firemen & Policemen's Pension	1/1/2016	7.75%	0	282.88%	10.87%	10.00%	0.87%
Staff Plan and Trust	1/1/2018	7.75%	0	113.12%	12.50%	5.00%	7.50%

¹*The plan is closed to new hires (but still accruing benefits).*

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		CH	APTER 810				
	1/1/2013	7.50%	30	71.35%	14.88%	0.00%	14.88%
	1/1/2014	7.50%	30	81.85%	11.43%	0.00%	11.43%
Galveston Wharves Pension Plan ¹	1/1/2015	7.50%	30	82.91%	11.48%	0.00%	11.48%
	1/1/2016	7.50%	25	78.88%	13.10%	0.00%	13.10%
	1/1/2017	7.25%	24	73.26%	21.10%	0.00% 0.00% 0.00% 0.00%	21.10%
	1/1/2013	7.75%	11.3	79.38%	20.80%	0.00%	20.80%
	1/1/2014	7.50%	9.6	83.41%	12.00%	0.00%	12.00%
Guadalupe-Blanco River Authority ¹	1/1/2015	7.25%	7.9	86.34%	12.00%	0.00%	12.00%
	1/1/2016	7.00%	8.8	85.74%	14.04%	0.00%	14.04%
	1/1/2017	7.00%	8.7	84.91%	16.12%	0.00%	16.12%
	1/1/2013	7.50%	20	71.50%	15.40%	0.00%	15.40%
	1/1/2014	7.50%	20	75.99%	14.85%	0.00%	14.85%
1/2 min Country $1/2$ min $1/2$	1/1/2015	7.50%	20	69.78%	16.03%	0.00%	16.03%
Harris County Hospital District Pension Plan ^{1,2}	1/1/2016	7.50%	19.1	70.24%	16.77%	0.00%	16.77%
	1/1/2017	7.50%	17.8	74.35%	16.82%	0.00%	16.82%
	1/1/2018	7.00%	16.9	75.45%	18.24%	0.00%	18.24%
	1/1/2013	8.00%	30	75.17%	19.93%	0.00%	19.93%
	1/1/2014	8.00%	29	80.17%	19.75%	0.00%	19.75%
Heusten MTA Nen Union Dension Divi ¹	1/1/2015	6.75%	28	66.88%	19.87%	0.00%	19.87%
Houston MTA Non-Union Pension Plan [⊥]	1/1/2016	6.75%	27	62.61%	23.74%	0.00%	23.74%
	1/1/2017	6.75%	26	63.79%	26.01%	0.00%	26.01%
	1/1/2018	6.75%	25	65.57%	26.48%	0.00%	26.48%

¹The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

² Amortization period is calculated by the PRB.

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		CH	APTER 810				
	1/1/2013 8.00%					0.00%	15.61%
	1/1/2014	8.00%	29	73.60%	12.68%	0.00%	12.68%
Houston MTA Workers Union Pension Plan ¹	1/1/2015	6.75%	28	63.70%	16.53%	0.00%	16.53%
	1/1/2016	6.75%	27	62.47%	17.77%	0.00%	17.77%
	1/1/2017	6.75%	26	65.21%	16.67%	0.00%	16.67%
	1/1/2018	6.75%	25	66.25%	16.60%	0.00%	16.60%
	1/1/2013	7.00%	29.1	76.33%	3.99%	2.50%	1.49%
	1/1/2014	7.00%	27.2	78.88%	3.99%	2.50%	1.49%
	1/1/2015	7.00%	25	80.94%	3.99%	2.50%	1.49%
Irving Supplemental Benefit Plan	1/1/2016	6.75%	22.9	72.43%	4.64%	2.50%	2.14%
	1/1/2017	6.75%	26	72.20%	4.64%	2.50%	2.14%
	1/1/2018	6.75%	32	72.49%	4.57%	2.50%	2.07%
JPS Pension Plan - Tarrant County Hospital District	10/1/2016	7.25%	4.8	93.62%	7.75%	1.00%	6.75%
	4/1/2013	7.50%	24	69.75%	16.27%	0.69%	15.58%
	4/1/2014	7.50%	23	74.69%	23.93%	0.00%	23.93%
Lower Colorado River Authority Retirement	4/1/2015	7.50%	22	79.49%	24.30%	0.33%	23.97%
Plan ¹	4/1/2016	7.25%	21	76.40%	16.11%	0.00%	16.11%
	1/1/2017	7.25%	20	73.75%	17.10%	0.00%	17.10%
	1/1/2018	7.25%	19	73.99%	18.49%	0.00%	18.49%
	7/1/2013	7.50%	20	80.37%	8.03%	3.32%	4.71%
Nacogdoches County Hospital District Retirement Plan	7/1/2014	7.50%	20	82.74%	8.77%	3.11%	5.66%
	7/1/2015	7.25%	9.77	84.29%	8.57%	2.91%	5.66%

¹The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		CH	APTER 810				
	7/1/2013	7.50%	10	79.08%	N/A	N/A	N/A
North cost Madical Conton Hospital	7/1/2014	7.50%	10	87.19%	N/A	N/A	N/A
Northeast Medical Center Hospital Retirement Plan ^{1,2}	7/1/2015	7.50%	10	84.15%	N/A	N/A	N/A
Nethernent Hun	7/1/2016	7.50%	10	78.22%	N/A	N/A	N/A
	7/1/2017	7.50%	10	83.62%	N/A	N/A	N/A
	10/1/2013	8.00%	7.4	61.40%	N/A	N/A	N/A
Northwest Texas Healthcare System Retirement Plan ¹	10/1/2015	7.50%	6	69.22%	N/A	N/A	N/A
Retirement Plan	10/1/2016	7.50%	5	73.01%	N/A	N/A	N/A
	12/31/2013	7.75%	0	100.27%	3.12%	0.00%	3.12%
Plano Retirement Security Plan	12/31/2015	7.50%	19	99.23%	3.62%	0.00%	3.62%
	12/31/2017	7.00%	0	100.79%	3.22%	0.00%	3.22%
	8/1/2013	7.00%	4	98.06%	29.30%	0.00%	29.30%
	8/1/2014	7.00%	0	104.44%	16.82%	0.00%	16.82%
	8/1/2015	7.00%	30	97.45%	14.73%	0.00%	14.73%
Port of Houston Authority Retirement Plan ³	8/1/2016	7.00%	30	92.44%	17.06%	0.00%	17.06%
	8/1/2017	6.75%	30	95.13%	16.71%	0.00%	16.71%
	8/1/2018	6.75%	30	98.41%	14.63%	0.00%	14.63%
	11/1/2014	7.00%	1	99.94%	N/A	N/A	N/A
Refugio County Memorial Hospital District	11/1/2015	7.00%	0	102.18%	N/A	N/A	N/A
Retirement Plan ³	11/1/2016	7.00%	0	102.30%	N/A	N/A	N/A
	11/1/2017	7.00%	0	111.07%	N/A	N/A	N/A
Retirement Plan for Anson General Hospital ³	7/1/2016	7.50%	0	119.87%	4.00%	4.00%	0.00%
Retirement Plan for Citizens Medical Center	3/1/2017	7.25%	17	99.46%	8.74%	3.93%	4.81%
	3/1/2018	7.25%	0	107.13%	8.46%	3.94%	4.52%

¹The plan is frozen and does not report payroll data.

²*Reported amortization period is based on an open amortization funding policy. The PRB is working with the plan to calculate an effective amortization period.*

³ The plan is closed to new hires (but still accruing benefits) or frozen (not accruing benefits).

TEXAS PENSION REVIEW BOARD

ASSUMED RATES OF RETURN TRENDS

Plan Name	Valuation Date	Assumed RoR	Amortization Period	Funded Ratio	Total Contribution	Member Contribution	Employer Contribution
		СН	APTER 810				
Retirement Plan for Employees of Brownsville Navigation District	1/1/2017	6.17%	19.8	52.80%	14.25%	4.00%	10.25%
Retirement Plan for Guadalupe Regional	1/1/2017	7.25%	9	94.42%	11.53%	4.00%	7.53%
Medical Center	1/1/2018	7.00%	3	98.41%	11.57%	4.00%	7.57%
Retirement Plan for Sweeny Community	1/1/2017	7.25%	12	89.78%	9.30%	0.00%	9.30%
Hospital ¹	1/1/2018	7.00%	20	85.83%	12.75%	0.00%	12.75%
	10/1/2013	7.50%	28	56.97%	20.27%	5.03%	15.24%
San Antonio Metropolitan Transit Retirement	10/1/2014	7.50%	27	59.22%	19.50%	4.60%	14.90%
Plan	10/1/2015	7.50%	26	60.41%	18.55%	4.17%	14.38%
	10/1/2016	7.50%	25	63.03%	16.67%	4.23%	12.44%
	1/1/2013	7.50%	30	73.16%	8.55%	2.00%	6.55%
2	1/1/2014	7.50%	20.61	75.65%	8.70%	2.00%	6.70%
University Health System Pension Plan ²	1/1/2015	7.50%	29	68.85%	8.14%	2.00%	6.14%
	1/1/2016	7.00%	28	66.35%	8.68%	2.00%	6.68%

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²Prior amortization periods are based on an open amortization funding policy. The system has adopted a closed 30 year amortization funding policy effective January 1, 2015.

TEXAS PENSION REVIEW BOARD

ACTUARIAL ASSUMPTIONS AND METHODS FOR STATE AND LOCAL RETIREMENT SYSTEMS

Statewide Plans AV Effective Actuarial Cost Amortization **Asset Valuation** Discount **Retirement System** Inflation Date Method Method Method Rate Employees Retirement System 8/31/2018 **Entry Age Normal** Level Percent 5-year Smoothing 7.50% 2.50% 8/31/2018 7.50% 2.50% Judicial Retirement System, Plan Two Entry Age Normal Level Percent 5-year Smoothing Law Enforcement & Custodial Officer Supplemental Retirement Fund 8/31/2018 Entry Age Normal Level Percent 5-year Smoothing 7.50% 2.50% 8/31/2018 7.25% 2.30% Teacher Retirement System **Entry Age Normal** Level Percent 5-year Smoothing Texas County & District Retirement System 12/31/2017 **Entry Age Normal** 2.75% Level Percent 5-year Smoothing 8.00% 8/31/2018 7.75% 3.00% Texas Emergency Services Retirement System Entry Age Normal Level Dollar 5-year Smoothing 2.50% Texas Municipal Retirement System 12/31/2017 **Entry Age Normal** Level Percent 10-year Smoothing 6.75%

Municipal Plans

Retirement System	AV Effective Date	Actuarial Cost Method	Amortization Method	Asset Valuation Method	Discount Rate	Inflation
Austin Employees' Retirement System	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.75%
Austin Fire Fighters Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.70%	3.50%
Austin Police Retirement System	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.70%	3.00%
Dallas Employees' Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	Market Value of Assets	7.75%	2.75%
Dallas Police & Fire Pension System-Combined Plan	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.75%
Dallas Police & Fire Pension System-Supplemental	1/1/2018	Entry Age Normal	Level Percent	Market Value of Assets	7.25%	2.75%
City of El Paso Employees Retirement Trust	9/1/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	3.00%
El Paso Firemen's Pension Fund	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
El Paso Police Pension Fund	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
Fort Worth Employees' Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	2.75%
Fort Worth Employees' Retirement Fund Staff Plan	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	2.75%
Galveston Employees' Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.75%
Galveston Employees' Retirement Plan for Police	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.50%
Houston Firefighters' Relief & Retirement Fund	7/1/2017	Ultimate Entry Age Normal	Level Percent	5-year Smoothing	7.00%	3.00%
Houston Municipal Employees Pension System	7/1/2018	Ultimate Entry Age Normal	Level Percent	5-year Smoothing	7.00%	2.25%
Houston Police Officers' Pension System	7/1/2018	Ultimate Entry Age Normal	Level Percent	5-year Smoothing	7.00%	2.75%
San Antonio Fire & Police Pension Fund	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	3.00%

TEXAS PENSION REVIEW BOARD

ACTUARIAL ASSUMPTIONS AND METHODS FOR STATE AND LOCAL RETIREMENT SYSTEMS

TLFFRA Plans

		I LFFINA FIA	115			
Retirement System	AV Effective Date	Actuarial Cost Method	Amortization Method	Asset Valuation Method	Discount Rate	Inflation
Abilene Firemen's Relief & Retirement Fund	10/1/2017	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%
Amarillo Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.50%
Atlanta Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.40%	3.00%
Beaumont Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	2.50%
Big Spring Firemen's Relief & Retirement Fund	1/1/2017	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%
Brownwood Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	3.25%
Cleburne Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	3.25%
Conroe Fire Fighters' Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	2.50%
Corpus Christi Fire Fighters' Retirement System	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.50%
Corsicana Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.00%	3.00%
Denison Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.50%
Denton Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	6.75%	2.50%
Galveston Firefighter's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
Greenville Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%
Harlingen Firemen's Relief & Retirement Fund	9/30/2017	Entry Age Normal	Level Percent	Market Value of Assets	7.75%	2.50%
Irving Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.75%
Killeen Firemen's Relief & Retirement Fund	9/30/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.25%
Laredo Firefighters Retirement System	9/30/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.90%	3.25%
Longview Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	Market Value of Assets	8.00%	3.00%
Lubbock Fire Pension Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
Lufkin Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	3.00%
Marshall Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	Market Value of Assets	7.75%	2.50%
McAllen Firemen's Relief & Retirement Fund	10/1/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
Midland Firemen's Relief & Retirement Fund	12/31/2015	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%
Odessa Firemen's Relief & Retirement Fund	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%
Orange Firemen's Relief & Retirement Fund	1/1/2017	Entry Age Normal	Level Percent	Market Value of Assets	7.75%	2.00%
Paris Firefighters' Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.75%

TEXAS PENSION REVIEW BOARD

ACTUARIAL ASSUMPTIONS AND METHODS FOR STATE AND LOCAL RETIREMENT SYSTEMS

TLFFRA Plans, Continued									
Retirement System	AV Effective Date	Actuarial Cost Method	Amortization Method	Asset Valuation Method	Discount Rate	Inflation			
Plainview Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.50%			
Port Arthur Firemen's Relief & Retirement Fund	12/31/2015	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%			
San Angelo Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.90%	N/A			
San Benito Firemen Relief & Retirement Fund	9/30/2017	Entry Age Normal	Level Percent	Market Value of Assets	7.50%	2.50%			
Sweetwater Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	8.00%	3.00%			
Temple Firemen's Relief & Retirement Fund	9/30/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.75%			
Texarkana Firemen's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	N/A			
Texas City Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	2.50%			
The Woodlands Firefighters' Retirement System	1/1/2018	Entry Age Normal	Level Dollar	Market Value of Assets	7.00%	2.50%			
Travis County ESD #6 Firefighter's Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.00%	2.50%			
Tyler Firefighters' Relief & Retirement Fund	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	3.40%			
University Park Firemen's Relief & Retirement Fund	12/31/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	2.50%			
Waxahachie Firemen's Relief & Retirement Fund	10/1/2016	Entry Age Normal	Level Percent	Market Value of Assets	7.00%	2.50%			
Weslaco Firemen's Relief & Retirement Fund	9/30/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.50%			
Wichita Falls Firemen's Relief & Retirement Fund	1/1/2018	Entry Age Normal	Level Percent	Market Value of Assets	7.75%	3.00%			

TEXAS PENSION REVIEW BOARD

ACTUARIAL ASSUMPTIONS AND METHODS FOR STATE AND LOCAL RETIREMENT SYSTEMS

Plans Governed by Chapter 810 of the Texas Government Code									
Retirement System	AV Effective Date	Actuarial Cost Method	Amortization Method	Asset Valuation Method	Discount Rate	Inflation			
Arlington Employees Deferred Income Plan	7/1/2017	Aggregate	Level Percent	Market Value of Assets	5.00%	2.50%			
Brazos River Authority Retirement Plan	3/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	6.50%	N/A			
Capital MTA Retirement Plan for Administrative Employees	1/1/2017	Entry Age Normal	Level Percent	5-year Smoothing	6.75%	N/A			
Capital MTA Retirement Plan for Bargaining Unit Employees	1/1/2018	Unit Credit	Level Percent	4-year Smoothing	7.25%	N/A			
Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust	1/1/2018	Entry Age Normal	Level Dollar	Market Value of Assets	6.25%	2.00%			
Corpus Christi Regional Transportation Authority	1/1/2018	Entry Age Normal	Level Dollar	Market Value of Assets	7.50%	N/A			
CPS Energy Pension Plan	1/1/2017	Entry Age Normal	Level Dollar	5-year Smoothing	7.25%	3.00%			
Dallas County Hospital District Retirement Income Plan	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	3.00%			
Dallas/Fort Worth Airport Board DPS Retirement Plan	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.75%			
Dallas/Fort Worth Airport Board Retirement Plan	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	7.25%	2.75%			
DART Employees' Defined Benefit Retirement Plan & Trust	10/1/2017	Entry Age Normal	Level Dollar	5-year Smoothing	6.75%	2.50%			
El Paso Firemen & Policemen's Pension Staff Plan and Trust	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.75%	3.00%			
Galveston Wharves Pension Plan	1/1/2017	Entry Age Normal	Level Dollar	Market Value of Assets	7.25%	2.75%			
Guadalupe-Blanco River Authority	1/1/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.00%	3.00%			
Harris County Hospital District Pension Plan	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	7.00%	3.00%			
Houston MTA Non-Union Pension Plan	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	6.75%	2.30%			
Houston MTA Workers Union Pension Plan	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	6.75%	2.30%			
Irving Supplemental Benefit Plan	1/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	6.75%	2.50%			
JPS Pension Plan - Tarrant County Hospital District	10/1/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.50%			
Lower Colorado River Authority Retirement Plan	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	7.25%	2.75%			
Nacogdoches County Hospital District Retirement Plan	7/1/2015	Entry Age Normal	Level Dollar	3-year Smoothing	7.25%	3.50%			
Northeast Medical Center Hospital Retirement Plan	7/1/2017	Entry Age Normal	Level Dollar	Market Value of Assets	7.50%	3.00%			
Northwest Texas Healthcare System Retirement Plan	10/1/2016	Entry Age Normal	Level Dollar	5-year Smoothing	7.50%	N/A			
Plano Retirement Security Plan	12/31/2017	Entry Age Normal	Level Percent	5-year Smoothing	7.00%	2.50%			
Port of Houston Authority Retirement Plan	8/1/2018	Entry Age Normal	Level Dollar	Market Value of Assets	6.75%	2.50%			
Refugio County Memorial Hospital District Retirement Plan	11/1/2017	Unit Credit	Level Dollar	Market Value of Assets	7.00%	N/A			
Retirement Plan for Anson General Hospital	7/1/2016	Entry Age Normal	Level Dollar	5-year Smoothing	7.50%	N/A			

TEXAS PENSION REVIEW BOARD

ACTUARIAL ASSUMPTIONS AND METHODS FOR STATE AND LOCAL RETIREMENT SYSTEMS

Plans Governed by Chapter 810 of the Texas Government Code, Continued

Retirement System	AV Effective Date	Actuarial Cost Method	Amortization Method	Asset Valuation Method	Discount Rate	Inflation
Retirement Plan for Citizens Medical Center	3/1/2018	Entry Age Normal	Level Percent	5-year Smoothing	7.25%	2.50%
Retirement Plan for Employees of Brownsville Navigation District	1/1/2017	Entry Age Normal	Level Percent	5-year Smoothing	6.17%	N/A
Retirement Plan for Guadalupe Regional Medical Center	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	7.00%	2.50%
Retirement Plan for Sweeny Community Hospital	1/1/2018	Entry Age Normal	Level Dollar	5-year Smoothing	7.00%	2.25%
San Antonio Metropolitan Transit Retirement Plan	10/1/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.50%	3.00%
University Health System Pension Plan	1/1/2016	Entry Age Normal	Level Percent	5-year Smoothing	7.00%	3.50%

TEXAS PENSION REVIEW BOARD

MEMBERSHIP

TEXAS PENSION REVIEW BOARD

MEMBERSHIP SUMMARY FOR ACTUARIALLY FUNDED RETIREMENT SYSTEMS

Active members include vested and non-vested members. Annuitants include retirees and beneficiaries. Total members includes active, annuitant, and inactive members, such as terminated members.

Statewide Plans									
Retirement System	Effective Date	Total Active	Total Annuitants	Total Members					
Employees Retirement System of Texas	8/31/2018	141,535	111,361	372,632					
Judicial Retirement System of Texas Plan Two	8/31/2018	561	393	1,107					
Law Enforcement & Custodial Officer Supplemental Retirement Fund	8/31/2018	37,167	13,080	70,089					
Teacher Retirement System of Texas	8/31/2018	872,999	420,458	1,591,955					
Texas County & District Retirement System	12/31/2017	135,751	63,628	294,243					
Texas Emergency Services Retirement System	8/31/2018	3,927	3,533	9,387					
Texas Municipal Retirement System	12/31/2017	110,208	62,776	230,353					

Municipal Plans									
Retirement System	Effective Date	Total Active	Total Annuitants	Total Members					
Austin Employees' Retirement System	12/31/2017	9,612	6,225	16,801					
Austin Fire Fighters Relief & Retirement Fund	12/31/2017	1,061	789	1,858					
Austin Police Retirement System	12/31/2017	1,866	867	2,831					
Dallas Employees' Retirement Fund	12/31/2017	7,838	7,042	16,128					
Dallas Police & Fire Pension System-Combined Plan	12/31/2017	4,952	4,748	10,325					
Dallas Police & Fire Pension System-Supplemental	12/31/2017	44	141	185					
City of El Paso Employees Retirement Trust	8/31/2017	4,217	3,011	7,311					
El Paso Firemen's Pension Fund	12/31/2017	901	777	1,682					
El Paso Police Pension Fund	12/31/2017	1,091	1,049	2,155					
Fort Worth Employees' Retirement Fund	12/31/2017	6,579	4,391	12,069					
Fort Worth Employees' Retirement Fund Staff Plan	12/31/2017	18	-	24					
Galveston Employees' Retirement Fund	12/31/2017	531	335	1,061					
Galveston Employees' Retirement Plan for Police	12/31/2017	157	144	320					
Houston Firefighters' Relief & Retirement Fund	6/30/2018	4,041	3,307	7,354					
Houston Municipal Employees Pension System	6/30/2018	11,880	10,834	26,171					
Houston Police Officers' Pension System	6/30/2018	5,247	4,275	9,548					
San Antonio Fire & Police Pension Fund	12/31/2017	3,906	2,719	6,628					

TEXAS PENSION REVIEW BOARD

MEMBERSHIP SUMMARY FOR ACTUARIALLY FUNDED RETIREMENT SYSTEMS

TLFFRA Plans										
Retirement System	Effective Date	Total Active	Total Annuitants	Total Members						
Abilene Firemen's Relief & Retirement Fund	9/30/2017	181	191	373						
Amarillo Firemen's Relief & Retirement Fund	12/31/2017	264	218	489						
Atlanta Firemen's Relief & Retirement Fund	12/31/2017	25	18	50						
Beaumont Firemen's Relief & Retirement Fund	12/31/2017	232	217	453						
Big Spring Firemen's Relief & Retirement Fund	12/31/2017	64	47	112						
Brownwood Firemen's Relief & Retirement Fund	12/31/2017	32	25	57						
Cleburne Firemen's Relief & Retirement Fund	12/31/2017	61	43	104						
Conroe Fire Fighters' Retirement Fund	12/31/2017	121	34	161						
Corpus Christi Fire Fighters' Retirement System	12/31/2017	408	333	741						
Corsicana Firemen's Relief & Retirement Fund	12/31/2017	59	37	97						
Denison Firemen's Relief & Retirement Fund	12/31/2017	56	56	115						
Denton Firemen's Relief & Retirement Fund	12/31/2017	175	84	261						
Galveston Firefighter's Relief & Retirement Fund	12/31/2017	115	85	201						
Greenville Firemen's Relief & Retirement Fund	12/31/2017	56	68	130						
Harlingen Firemen's Relief & Retirement Fund	9/30/2017	107	77	185						
Irving Firemen's Relief & Retirement Fund	12/31/2017	365	186	553						
Killeen Firemen's Relief & Retirement Fund	9/30/2017	222	72	305						
Laredo Firefighters Retirement System	9/30/2017	388	148	536						
Longview Firemen's Relief & Retirement Fund	12/31/2017	175	147	323						
Lubbock Fire Pension Fund	12/31/2017	407	307	715						
Lufkin Firemen's Relief & Retirement Fund	12/31/2017	78	62	142						
Marshall Firemen's Relief & Retirement Fund	12/31/2017	49	37	90						
McAllen Firemen's Relief & Retirement Fund	9/30/2017	170	103	273						
Midland Firemen's Relief & Retirement Fund	12/31/2016	207	162	378						
Odessa Firemen's Relief & Retirement Fund	12/31/2017	161	180	356						
Orange Firemen's Relief & Retirement Fund	12/31/2017	37	42	80						

TEXAS PENSION REVIEW BOARD

MEMBERSHIP SUMMARY FOR ACTUARIALLY FUNDED RETIREMENT SYSTEMS

	TEITRA Flans, continue	ŭ											
Retirement System	Effective Date	Total Active	Total Annuitants	Total Members									
Paris Firefighters' Relief & Retirement Fund	12/31/2017	49	42	96									
Plainview Firemen's Relief & Retirement Fund	12/31/2017	34	37	71									
Port Arthur Firemen's Relief & Retirement Fund	12/31/2017	106	79	188									
San Angelo Firemen's Relief & Retirement Fund	12/31/2016	176	147	323									
San Benito Firemen Relief & Retirement Fund	9/30/2017	26	10	37									
Sweetwater Firemen's Relief & Retirement Fund	12/31/2017	25	24	49									
Temple Firemen's Relief & Retirement Fund	9/30/2017	124	89	215									
Texarkana Firemen's Relief & Retirement Fund	12/31/2017	77	69	146									
Texas City Firemen's Relief & Retirement Fund	12/31/2017	70	55	131									
The Woodlands Firefighters' Retirement System	12/31/2017	140	-	141									
Travis County ESD #6 Firefighter's Relief & Retirement Fund	12/31/2017	79	-	81									
Tyler Firefighters' Relief & Retirement Fund	12/31/2017	157	110	267									
University Park Firemen's Relief & Retirement Fund	12/31/2017	30	47	77									
Waxahachie Firemen's Relief & Retirement Fund	9/30/2017	54	31	87									
Weslaco Firemen's Relief & Retirement Fund	9/30/2017	62	30	92									
Wichita Falls Firemen's Relief & Retirement Fund	12/31/2017	156	136	294									

TLFFRA Plans, Continued

TEXAS PENSION REVIEW BOARD

MEMBERSHIP SUMMARY FOR ACTUARIALLY FUNDED RETIREMENT SYSTEMS

Plans Governed by Chapter 810 of the Texas Government Code

Retirement System	Effective Date	Total Active	Total Annuitants	Total Members
Arlington Employees Deferred Income Plan	6/30/2017	779	15	4,298
Brazos River Authority Retirement Plan	2/28/2018	93	141	344
Capital MTA Retirement Plan for Administrative Employees	12/31/2017	296	99	633
Capital MTA Retirement Plan for Bargaining Unit Employees	12/31/2017	216	467	1,024
Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust	1/1/2018	70	35	128
Corpus Christi Regional Transportation Authority	12/31/2017	240	166	583
CPS Energy Pension Plan	12/31/2017	2,942	2,427	5,574
Dallas County Hospital District Retirement Income Plan	1/1/2018	10,974	2,634	18,771
Dallas/Fort Worth Airport Board DPS Retirement Plan	12/31/2017	367	181	582
Dallas/Fort Worth Airport Board Retirement Plan	12/31/2017	742	1,228	2,437
DART Employees' Defined Benefit Retirement Plan & Trust	9/30/2017	245	768	1,163
El Paso Firemen & Policemen's Pension Staff Plan and Trust	12/31/2017	9	-	9
Galveston Wharves Pension Plan	12/31/2017	53	70	197
Guadalupe-Blanco River Authority	12/31/2017	88	80	209
Harris County Hospital District Pension Plan	1/1/2018	2,469	3,047	6,860
Houston MTA Non-Union Pension Plan	1/1/2018	514	303	901
Houston MTA Workers Union Pension Plan	12/31/2017	1,754	1,725	3,993
Irving Supplemental Benefit Plan	12/31/2017	1,451	404	2,115
JPS Pension Plan - Tarrant County Hospital District	10/1/2016	3,108	304	4,562
Lower Colorado River Authority Retirement Plan	12/31/2017	1,134	888	2,114
Nacogdoches County Hospital District Retirement Plan	6/30/2016	585	194	1,092
Northeast Medical Center Hospital Retirement Plan	6/30/2017	-	301	510
Northwest Texas Healthcare System Retirement Plan	9/30/2017	117	375	703
Plano Retirement Security Plan	12/31/2017	2,208	812	3,089
Port of Houston Authority Retirement Plan	7/31/2017	370	530	1,103
Refugio County Memorial Hospital District Retirement Plan	10/31/2017	62	7	78
Retirement Plan for Anson General Hospital	7/1/2016	8	17	48

TEXAS PENSION REVIEW BOARD

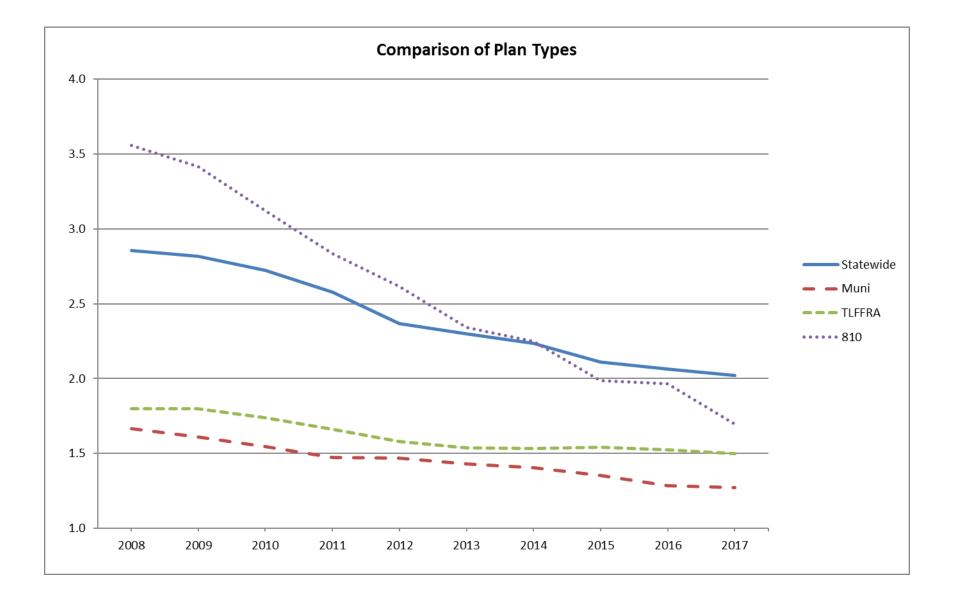
MEMBERSHIP SUMMARY FOR ACTUARIALLY FUNDED RETIREMENT SYSTEMS

Plans Governed by Chapter 810 of the Texas Government Code

Retirement System	Effective Date	Total Active	Total Annuitants	Total Members
Retirement Plan for Citizens Medical Center	3/1/2017	923	117	1,439
Retirement Plan for Employees of Brownsville Navigation District	12/31/2017	99	37	187
Retirement Plan for Guadalupe Regional Medical Center	1/1/2018	403	162	695
Retirement Plan for Sweeny Community Hospital	1/1/2018	13	16	53
San Antonio Metropolitan Transit Retirement Plan	9/30/2017	1,125	1,002	2,255
University Health System Pension Plan	12/31/2017	3,330	1,031	5,884

TEXAS PENSION REVIEW BOARD

RATIO OF TOTAL ACTIVES TO TOTAL ANNUITANTS



TEXAS PENSION REVIEW BOARD

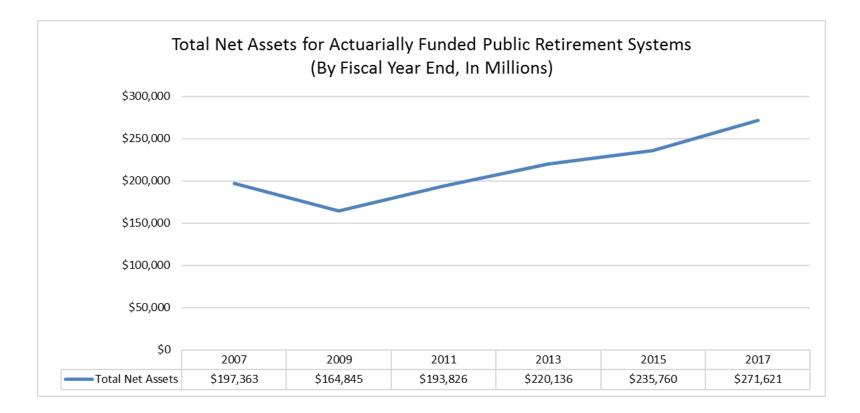
FINANCIAL

TEXAS PENSION REVIEW BOARD

FINANCIAL

Public retirement systems have three main sources of funding: earnings from investments, employer contributions, and member contributions. It is the ratio of these funding sources relative to the benefits paid to plan participants and plan expenses that determines the long-term financial viability of a retirement system. Policymakers and retirement system sponsors generally set system contributions and benefits, however, for certain systems, the governing body of the retirement system and/or the employees can set system contributions and benefits. For more information regarding policymaking decisions, please see the Governance section of this report. Earnings on investments are generated through management of assets held in trust by pension plans. This section will provide trends and plan-specific key financial data for retirement systems, including information relating to their asset allocation.

Annual contributions plus investment earnings minus benefit payments and expenses equals the yearly change in total net assets of a plan. The following chart shows a time series of total net assets for Texas public retirement systems from 2007 to 2017. As the chart shows, the net assets reported for 2017 are significantly greater than the 2007 highs.



TEXAS PENSION REVIEW BOARD

DESCRIPTION OF FINANCIAL TERMS

Employee Contributions

Contributions made to a pension plan from the participants (employees) in the plan.

Employer Contributions

Contributions made to a pension plan from the plan's primary sponsoring entity.

Fiduciary Net Position

The market value of assets as of the fiscal year end, as reported in the system's annual financial report.

Net Pension Liability

Measured as the Total Pension Liability less the amount of the system's Fiduciary Net Position.

Other Contributions

Contributions made to a pension plan from sources that are not the plan's sponsoring entity or participants in the plan, such as from a non-employer contributing entity and service transfer contributions from other retirement systems.

Rate of Return

Income and capital gains generated from the investment of pension plan assets.

Total Benefit Payments and Withdrawals

Includes all payments from the pension plan to plan participants for retirement or other benefits earned. Withdrawals include money withdrawn from the pension plan by a plan participant due to departure from the plan.

Total Expenses

Expenses, including administrative and investment related, incurred in the operation of a pension plan.

Total Income

Includes primarily income earned from investment of assets held by a pension plan. As well as minor income, classified as *other income*, received by a pension plan.

Total Net Assets

Total gross fair value of assets held in trust by a pension plan, net of plan financial liabilities, including accounts payable, but not net of the total present value of benefits due to plan participants.

Total Pension Liability

The actuarial accrued liability calculated in accordance with GASB 67, as reported in the system's annual financial report.

TEXAS PENSION REVIEW BOARD

FINANCIAL SUMMARY

This table highlights financial information for actuarially funded plans. It shows total net assets, calculated as gross plan assets net of plan financial liabilities. The table also includes sources and uses of plan funds, including current employer and employee contributions to the plan; total income, including income from investments and any other income earned by the plan; benefit payments and withdrawals; and total expenses, including administrative and investment expenses.

	Statewide Plans										
	Effective	Total		Contributions	_	Total	Benefit	Total			
Retirement System	Date	Net Assets	Employer	Employee	Other	Income	Payments & Withdrawals	Expenses			
Employees Retirement System of Texas	8/31/2018	\$27,753,334,784	\$697,225,914	\$683,932,829	\$97,061,015	\$2,467,126,659	\$2,503,092,717	\$60,746,214			
Judicial Retirement System of Texas Plan Two	8/31/2018	\$453,379,786	\$12,559,722	\$5,939,830	\$0	\$39,774,924	\$24,865,580	\$879,291			
Law Enforcement & Custodial Officer Supplemental Retirement Fund	8/31/2018	\$966,827,735	\$26,109,655	\$9,274,814	\$0	\$86,255,451	\$75,638,019	\$3,163,746			
Teacher Retirement System of Texas	8/31/2018	\$154,568,901,833	\$1,251,125,883	\$3,360,773,197	\$2,205,124,643	\$11,463,999,924	\$10,700,496,538	\$278,004,188			
Texas County & District Retirement System	12/31/2017	\$30,000,370,381	\$823,501,201	\$453,435,928	\$0	\$3,881,667,580	\$1,378,463,893	\$66,919,336			
Texas Emergency Services Retirement System	8/31/2018	\$115,863,894	\$4,098,835	\$0	\$1,329,224	\$11,855,548	\$5,839,620	\$699,881			
Texas Municipal Retirement System	12/31/2017	\$28,649,374,617	\$838,363,116	\$410,527,770	\$0	\$3,583,882,278	\$1,310,812,446	\$105,791,874			

Municipal Plans

Datiromant System	Effective	Total	Contri	butions	Total	Benefit	Total
Retirement System	Date	Net Assets	Employer	Employee	Income	Payments & Withdrawals	Expenses
Austin Employees' Retirement System	12/31/2017	\$2,650,458,116	\$111,057,665	\$56,193,592	\$382,719,865	\$190,543,262	\$8,678,130
Austin Fire Fighters Relief & Retirement Fund	12/31/2017	\$953,798,227	\$16,318,769	\$19,242,205	\$143,496,681	\$51,888,455	\$2,981,169
Austin Police Retirement System	12/31/2017	\$769,474,743	\$35,141,204	\$24,351,964	\$83,891,124	\$56,548,004	\$3,381,807
Dallas Employees' Retirement Fund	12/31/2017	\$3,612,260,000	\$58,966,000	\$55,175,000	\$430,603,000	\$261,690,000	\$22,837,000
Dallas Police & Fire Pension System-Combined Plan	12/31/2017	\$2,103,345,471	\$126,318,005	\$32,977,425	\$107,935,734	\$296,153,811	\$18,393,685
Dallas Police & Fire Pension System-Supplemental	12/31/2017	\$17,805,153	\$2,077,059	\$66,095	\$816,067	\$2,668,579	\$155,816
City of El Paso Employees Retirement Trust	8/31/2017	\$776,552,623	\$25,327,071	\$15,154,341	\$81,154,747	\$61,077,565	\$7,109,414
El Paso Firemen's Pension Fund	12/31/2017	\$601,790,721	\$11,796,406	\$9,600,215	\$94,643,900	\$37,453,448	\$3,140,976
El Paso Police Pension Fund	12/31/2017	\$870,658,507	\$15,261,366	\$11,703,802	\$133,034,978	\$54,415,579	\$4,023,624
Fort Worth Employees' Retirement Fund	9/30/2017	\$2,270,521,836	\$89,408,134	\$35,963,200	\$257,541,246	\$198,611,599	\$11,495,886
Fort Worth Employees' Retirement Fund Staff Plan	9/30/2017	\$4,526,754	\$237,224	\$124,339	\$513,462	\$35,933	\$28,204

TEXAS PENSION REVIEW BOARD

FINANCIAL SUMMARY

Municipal Plans

Retirement System	Effective	Total	Contril	butions	Total	Benefit	Total
Retirement System	Date	Net Assets	Employer	Employee	Income	Payments & Withdrawals	Expenses
Galveston Employees' Retirement Fund	12/31/2017	\$51,550,290	\$2,274,927	\$1,518,519	\$6,459,241	\$4,106,737	\$235,854
Galveston Employees' Retirement Plan for Police	12/31/2017	\$20,544,157	\$1,438,108	\$1,420,442	\$2,663,115	\$4,548,030	\$214,295
Houston Firefighters' Relief & Retirement Fund	6/30/2018	\$4,170,353,965	\$83,010,066	\$35,621,787	\$329,205,612	\$289,107,432	\$13,465,735
Houston Municipal Employees Pension System	6/30/2018	\$2,988,864,278	\$421,561,725	\$27,904,931	\$240,183,959	\$284,734,853	\$14,109,712
Houston Police Officer's Pension System	6/30/2018	\$5,486,614,000	\$887,143,000	\$45,254,000	\$477,513,000	\$362,362,000	\$18,112,000
San Antonio Fire & Police Pension Fund	12/31/2017	\$3,196,529,000	\$75,916,000	\$37,958,000	\$423,506,000	\$156,137,000	\$19,262,000

TLFFRA Plans

Contributions Benefit Effective Total Total Total **Retirement System** Payments & Net Assets Date Income Expenses Employer Employee Withdrawals Abilene Firemen's Relief & Retirement Fund 9/30/2017 \$57,456,309 \$2.541.026 \$1.742.417 \$5.178.496 \$6.799.344 \$224,315 Amarillo Firemen's Relief & Retirement Fund 12/31/2017 \$171.845.402 \$3,879,330 \$2,579,969 \$24,511,964 \$11.610.516 \$514,193 12/31/2017 \$4,146,145 \$93,096 \$82,656 \$513,881 \$229,716 Atlanta Firemen's Relief & Retirement Fund \$58,640 Beaumont Firemen's Relief & Retirement Fund 12/31/2017 \$115,620,710 \$2,935,156 \$2,935,156 \$17,351,481 \$9,306,499 \$722,865 Big Spring Firemen's Relief & Retirement Fund 12/31/2017 \$11,681,447 \$488,555 \$488,555 \$1,071,473 \$1,240,743 \$109,450 Brownwood Firemen's Relief & Retirement Fund 12/31/2017 \$4,158,090 \$369,559 \$147,813 \$602,509 \$517,907 \$61,460 12/31/2017 \$22,879,830 \$1,010,880 \$586,148 \$2,613,658 \$2,519,745 Cleburne Firemen's Relief & Retirement Fund \$134,260 Conroe Fire Fighters' Retirement Fund 12/31/2017 \$25,239,678 \$1.271.179 \$1.122.026 \$2.338.047 \$1,844,726 \$175,897 Corpus Christi Fire Fighters' Retirement System 12/31/2017 \$148,732,822 \$6,562,646 \$4,137,182 \$19,087,180 \$14,180,509 \$775,308 Corsicana Firemen's Relief & Retirement Fund 12/31/2017 \$8,969,762 \$554,105 \$554,030 \$1,352,650 \$1,698,239 \$137,101 12/31/2017 \$17,725,070 \$501,647 \$401,067 \$2,650,219 \$1,428,216 Denison Firemen's Relief & Retirement Fund \$121,015 Denton Firemen's Relief & Retirement Fund 12/31/2017 \$85,388,283 \$2.979.807 \$2,142,990 \$8,867,134 \$3,768,829 \$137,569 12/31/2017 \$44,651,640 \$1,091,996 \$1,247,995 \$6,618,457 \$4,143,975 Galveston Firefighter's Relief & Retirement Fund \$318,307 Greenville Firemen's Relief & Retirement Fund 12/31/2017 \$13,844,060 \$705,407 \$680,578 \$1,733,904 \$1,895,128 \$108,866 9/30/2017 \$921,686 \$31,224,379 \$921,686 \$3,061,457 \$2,197,233 Harlingen Firemen's Relief & Retirement Fund \$230,300 \$213,960,011 \$4,064,839 Irving Firemen's Relief & Retirement Fund 12/31/2017 \$5,404,238 \$33,290,077 \$14,034,393 \$1,327,433

\$1,873,368

\$1,585,161

\$4,658,009

\$3,383,661

\$191.144

\$39,884,563

9/30/2017

Killeen Firemen's Relief & Retirement Fund

TEXAS PENSION REVIEW BOARD

FINANCIAL SUMMARY

		TLFFRA Plans					
Detine we and Second and	Effective	Total	Contril	outions	Total	Benefit Payments &	Total
Retirement System	Date	Net Assets	Employer	Employee	Income	Withdrawals	Expenses
Laredo Firefighters Retirement System	9/30/2017	\$141,983,274	\$6,845,693	\$5,109,297	\$14,616,037	\$10,165,487	\$728,910
Longview Firemen's Relief & Retirement Fund	12/31/2017	\$44,353,523	\$2,139,846	\$2,090,185	\$5,763,774	\$6,422,915	\$273,905
Lubbock Fire Pension Fund	12/31/2017	\$194,854,312	\$6,897,164	\$3,947,134	\$24,499,153	\$15,841,569	\$664,391
Lufkin Firemen's Relief & Retirement Fund	12/31/2017	\$16,444,542	\$1,178,934	\$727,352	\$1,984,942	\$1,639,827	\$142,656
Marshall Firemen's Relief & Retirement Fund	12/31/2017	\$8,526,909	\$516,808	\$383,450	\$1,061,664	\$1,066,677	\$80,564
McAllen Firemen's Relief & Retirement Fund	9/30/2017	\$49,459,309	\$1,498,194	\$1,266,209	\$5,785,801	\$3,520,297	\$329,653
Midland Firemen's Relief & Retirement Fund	12/31/2016	\$82,664,948	\$3,582,056	\$2,129,871	\$3,737,259	\$6,843,836	\$882,787
Odessa Firemen's Relief & Retirement Fund	12/31/2017	\$45,717,250	\$2,541,894	\$2,250,882	\$6,564,055	\$9,473,944	\$422,674
Orange Firemen's Relief & Retirement Fund	12/31/2017	\$9,021,894	\$333,259	\$285,780	\$1,477,845	\$1,103,255	\$126,333
Paris Firefighters' Relief & Retirement Fund	12/31/2017	\$4,790,010	\$326,396	\$407,996	\$621,731	\$1,249,430	\$80,960
Plainview Firemen's Relief & Retirement Fund	12/31/2017	\$6,154,425	\$507 <i>,</i> 975	\$283,992	\$932,930	\$942,137	\$56,278
Port Arthur Firemen's Relief & Retirement Fund	12/31/2017	\$49,890,603	\$1,305,185	\$1,220,809	\$6,755,910	\$3,420,300	\$106,663
San Angelo Firemen's Relief & Retirement Fund	12/31/2016	\$60,206,802	\$2,239,456	\$1,590,202	\$4,458,455	\$6,039,371	\$314,872
San Benito Firemen Relief & Retirement Fund	12/31/2016	\$2,987,515	\$165,107	\$165,107	-\$211,511	\$302,345	\$54,092
Sweetwater Firemen's Relief & Retirement Fund	12/31/2017	\$8,547,174	\$284,446	\$268,643	\$1,067,739	\$799,457	\$101,077
Temple Firemen's Relief & Retirement Fund	9/30/2017	\$42,702,404	\$1,299,059	\$1,281,087	\$4,072,649	\$3,641,902	\$170,891
Texarkana Firemen's Relief & Retirement Fund	12/31/2017	\$34,819,005	\$840,328	\$581,355	\$4,299,816	\$2,386,385	\$293,289
Texas City Firemen's Relief & Retirement Fund	12/31/2017	\$16,117,766	\$817,259	\$817,259	\$2,251,282	\$1,990,964	\$189,654
The Woodlands Firefighters' Retirement System	12/31/2017	\$32,286,791	\$1,341,931	\$1,341,931	\$3,531,175	\$0	\$178,836
Travis County ESD #6 Firefighter's Relief & Retirement Fund	12/31/2017	\$15,043,500	\$1,077,176	\$1,122,061	\$720,565	\$38,945	\$97,508
Tyler Firefighters' Relief & Retirement Fund	12/31/2017	\$70,141,881	\$2,405,117	\$1,549,098	\$9,642,882	\$5,814,190	\$177,222
University Park Firemen's Relief & Retirement Fund	12/31/2017	\$9,686,944	\$577 <i>,</i> 935	\$383,092	\$1,258,359	\$1,881,221	\$99,595
Waxahachie Firemen's Relief & Retirement Fund	9/30/2017	\$15,817,088	\$633,627	\$493,454	\$1,710,267	\$1,040,144	\$181,275
Weslaco Firemen's Relief & Retirement Fund	9/30/2017	\$10,429,381	\$487,932	\$480,239	\$939,119	\$548,163	\$115,894
Wichita Falls Firemen's Relief & Retirement Fund	12/31/2017	\$51,447,622	\$1,411,351	\$1,463,122	\$7,231,627	\$5,252,272	\$356,248

TEXAS PENSION REVIEW BOARD

FINANCIAL SUMMARY

Chapter 810 Plans

		pter 810 Plans	Contrib	outions		Benefit	
Retirement System	Effective Date	Total Net Assets	Employer	Employee	Total Income	Payments & Withdrawals	Total Expenses
Arlington Employees Deferred Income Plan	6/30/2017	\$2,838,158	\$60,813	\$101,289	\$130,343	\$137,960	\$44,296
Brazos River Authority Retirement Plan	2/28/2018	\$20,434,799	\$1,018,208	\$0	\$1,255,630	\$2,392,970	\$84,045
Capital MTA Retirement Plan for Administrative Employees	12/31/2017	\$30,010,195	\$3,106,829	\$0	\$4,146,384	\$916,317	\$138,566
Capital MTA Retirement Plan for Bargaining Unit Employees	12/31/2017	\$33,199,579	\$4,004,599	\$4,578	\$4,513,293	\$4,540,291	\$317,796
Colorado River Muni. Water Dist. Defined Benefit Ret. Plan & Trust	12/31/2017	\$10,060,151	\$494,795	\$0	\$1,342,609	\$1,343,659	\$94,256
Corpus Christi Regional Transportation Authority	12/31/2017	\$36,440,324	\$1,383,969	\$0	\$4,409,016	\$1,833,510	\$102,228
CPS Energy Pension Plan	12/31/2017	\$1,627,840,308	\$46,096,970	\$12,922,573	\$230,679,766	\$93,230,296	\$18,779,439
Dallas County Hospital District Retirement Income Plan	12/31/2017	\$971,851,000	\$27,915,000	\$37,530,000	\$130,084,000	\$49,644,000	\$2,789,000
Dallas/Fort Worth Airport Board DPS Retirement Plan	12/31/2017	\$184,752,000	\$8,731,000	\$2,041,000	\$21,529,000	\$7,748,000	\$746,000
Dallas/Fort Worth Airport Board Retirement Plan	12/31/2017	\$494,836,000	\$21,153,000	\$0	\$58,317,000	\$22,353,000	\$2,019,000
DART Employees' Defined Benefit Retirement Plan & Trust	9/30/2017	\$180,355,000	\$10,000,000	\$2,000	\$16,275,000	\$13,471,000	\$785,000
El Paso Firemen & Policemen's Pension Staff Plan and Trust	12/31/2017	\$419,843	\$52 <i>,</i> 668	\$35,052	\$58,538	\$0	\$1,194
Galveston Wharves Pension Plan	12/31/2017	\$13,743,739	\$562,160	\$0	\$2,534,700	\$1,120,885	\$127,464
Guadalupe-Blanco River Authority	12/31/2017	\$30,638,650	\$1,067,716	\$0	\$4,559,281	\$1,553,198	\$67,524
Harris County Hospital District Pension Plan	12/31/2017	\$686,312,249	\$29,432,523	\$0	\$107,519,240	\$42,562,562	\$2,478,125
Houston MTA Non-Union Pension Plan	12/31/2017	\$176,017,259	\$11,307,275	\$0	\$25,342,695	\$13,179,671	\$556,451
Houston MTA Workers Union Pension Plan	12/31/2017	\$277,357,388	\$15,413,823	\$0	\$40,826,300	\$18,799,540	\$771,656
Irving Supplemental Benefit Plan	12/31/2017	\$59,743,544	\$2,083,347	\$2,585,695	\$6,900,769	\$3,639,007	\$445,382
JPS Pension Plan - Tarrant County Hospital District	9/30/2017	\$257,037,806	\$14,442,526	\$1,933,338	\$30,276,451	\$6,589,785	\$797,829
Lower Colorado River Authority Retirement Plan	12/31/2017	\$424,805,000	\$22,892,000	\$238,000	\$47,240,000	\$44,837,000	\$3,848,000
Nacogdoches County Hospital District Retirement Plan	6/30/2016	\$43,662,691	\$1,701,243	\$883,854	\$329,793	\$4,330,440	\$290,105
Northeast Medical Center Hospital Retirement Plan	6/30/2017	\$9,578,580	\$370,187	\$0	\$1,118,041	\$991,242	\$46,580
Northwest Texas Healthcare System Retirement Plan	9/30/2017	\$21,800,110	\$2,000,000	\$0	\$2,347,153	\$2,423,191	\$84,747
Plano Retirement Security Plan	12/31/2017	\$148,516,307	\$5,159,461	\$0	\$21,781,774	\$4,760,146	\$363,144
Port of Houston Authority Retirement Plan	7/31/2017	\$176,993,428	\$9,600,000	\$0	\$14,904,259	\$9,858,352	\$963,493
Refugio County Memorial Hospital District Retirement Plan	10/31/2017	\$2,227,940	\$60,000	\$0	\$269,369	\$141,541	\$11,012
Retirement Plan for Anson General Hospital	6/30/2017	\$1,931,984	\$0	\$9,133	\$251,006	\$151,386	\$30,566

TEXAS PENSION REVIEW BOARD

FINANCIAL SUMMARY

Chapter 810 Plans

	Effective	Total	Contributions		Total	Benefit	Total
Retirement System	Date	Net Assets	Employer	Employee	Income	Payments & Withdrawals	Expenses
Retirement Plan for Citizens Medical Center	2/28/2017	\$92,834,116	\$2,400,000	\$2,204,570	\$15,131,702	\$1,915,037	\$298,815
Retirement Plan for Employees of Brownsville Navigation $District^1$	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Retirement Plan for Guadalupe Regional Medical Center	12/31/2017	\$71,386,345	\$1,920,000	\$937,465	\$9,853,504	\$1,996,653	\$255,917
Retirement Plan for Sweeny Community Hospital	12/31/2017	\$3,579,168	\$115,735	\$0	\$505,828	\$237 <i>,</i> 839	\$63,433
San Antonio Metropolitan Transit Retirement Plan	9/30/2017	\$275,334,600	\$13,308,001	\$4,486,984	\$35,069,881	\$21,777,530	\$1,755,161
University Health System Pension Plan ²	12/31/2017	\$363,779,588	\$24,296,000	\$7,325,068	\$53,558,684	\$16,451,193	\$0

¹ The Retirement Plan for Employees of Brownsville Navigation District is registered with the PRB but has yet to submit an audited financial report.

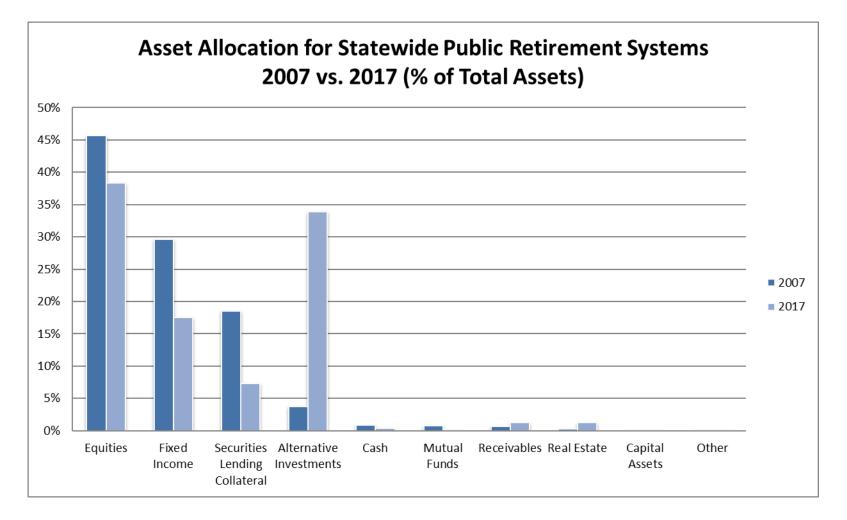
² University Health System does not report expenses for its pension plan separate from University Health System's 457 plan. The expenses for this plan are deducted from its investment earnings which is included in the Total Income column of this table.

TEXAS PENSION REVIEW BOARD

ASSET ALLOCATION

Actuarially funded plans hold money in trust to pay for participant benefits. These funds are invested in various financial assets, and the earnings on these investments and the contributions received by the plan are used to pay participant benefits and plan expenses. This section includes tables showing a comparison of Texas actuarially funded retirement system allocations and trends from 2007 to 2017. Summary asset allocation data is presented in the following chart.

From 2007 to 2017, asset allocations of traditional assets, including equities and fixed income, decreased for Texas public retirement systems in general, and allocations into alternative investments increased. This trend is reflected in the graph of statewide retirement system asset allocations, shown below.



TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR STATEWIDE PUBLIC RETIREMENT SYSTEMS

Employees Retirement System of Texas		
Assets	2007	2017
Alternative Investments	\$0	\$7,347,730,747
Capital Assets	\$5,772,348	\$6,403,587
Cash	\$731,987,147	\$47,863,461
Equities	\$14,921,204,958	\$12,678,706,164
Fixed Income	\$7,870,274,808	\$5,793,684,993
Mutual Funds	\$0	\$0
Other	\$21,860,759	\$10,356,434
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$212,574,423	\$605,991,488
Securities Lending Collateral	\$5,778,463,221	\$500,985,793
TOTAL	\$29,542,137,664	\$26,991,722,667
Liabilities	\$6,062,466,213	\$619,895,369
Total Net Assets	\$23,479,671,451	\$26,371,827,298

Law Enforcement & Custodial Officer Supplemental Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$257,959,813
Capital Assets	\$0	\$0
Cash	\$23,329,588	\$2,645,004
Equities	\$494,350,700	\$445,121,427
Fixed Income	\$245,290,849	\$203,373,276
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$9,096,474	\$18,931,597
Securities Lending Collateral	\$177,506,394	\$17,585,324
TOTAL	\$949,574,005	\$945,616,441
Liabilities	\$186,634,332	\$21,626,861
Total Net Assets	\$762,939,673	\$923,989,580

Judicial Retirement System of Texas Plan Two		
Assets	2007	2017
Alternative Investments	\$0	\$117,265,823
Capital Assets	\$0	\$0
Cash	\$9,057,510	\$1,206,933
Equities	\$124,492,883	\$202,340,459
Fixed Income	\$103,512,100	\$92,410,551
Mutual Funds	\$0	\$0
Other	\$115,786	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$2,588,225	\$9,447,110
Securities Lending Collateral	\$82,341,167	\$7,991,362
TOTAL	\$322,107,671	\$430,662,238
Liabilities	\$104,442,514	\$9,812,057
Total Net Assets	\$217,665,157	\$420,850,181

Teacher Retirement System of Texas		
Assets	2007	2017
Alternative Investments	\$7,824,404,404	\$58,980,377,270
Capital Assets	\$29,182,268	\$86,885,248
Cash	\$899,404,472	\$436,207,567
Equities	\$70,255,220,452	\$60,652,089,819
Fixed Income	\$33,041,197,262	\$25,774,169,353
Mutual Funds	\$0	\$509,765,475
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$649,201,413	\$1,285,776,590
Securities Lending Collateral	\$23,114,634,985	\$17,654,070,642
TOTAL	\$135,813,245,256	\$165,379,341,964
Liabilities	\$23,684,445,407	\$18,017,419,844
Total Net Assets	\$112,128,799,849	\$147,361,922,120

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR STATEWIDE PUBLIC RETIREMENT SYSTEMS

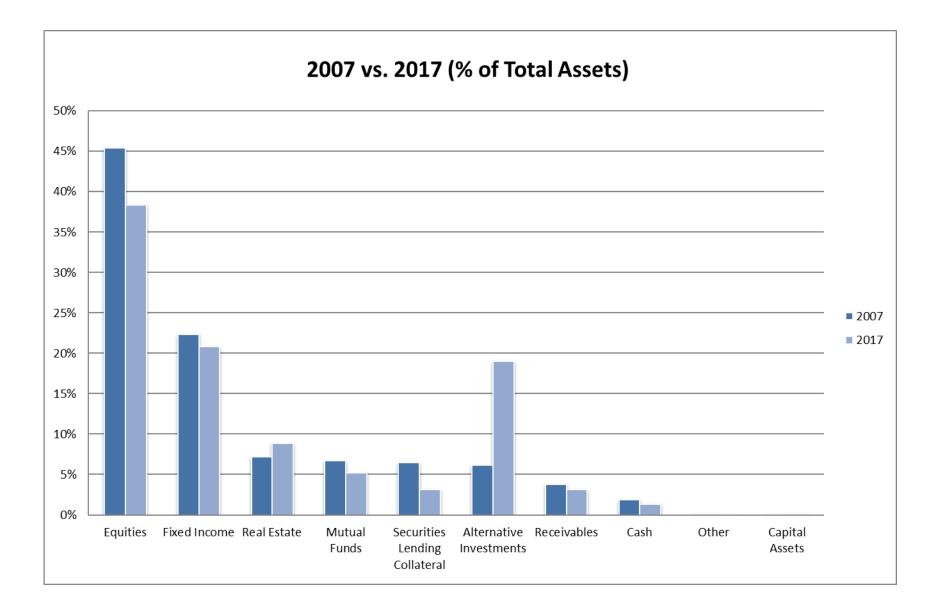
Texas County & District Retirement System		
Assets	2007	2017
Alternative Investments	\$1,937,997,523	\$15,330,173,832
Capital Assets	\$10,581,451	\$21,126,423
Cash	\$98,937,871	\$405,997,179
Equities	\$8,917,243,785	\$11,589,598,530
Fixed Income	\$5,385,292,381	\$1,901,618,731
Mutual Funds	\$0	\$0
Other	\$188,381	\$5,606,908
Participant Loans	\$0	\$0
Real Estate	\$461,995,925	\$679,400,147
Receivables	\$171,821,586	\$141,313,428
Securities Lending Collateral	\$1,491,970,381	\$336,045,357
TOTAL	\$18,476,029,284	\$30,410,880,535
Liabilities	\$1,565,865,774	\$410,510,154
Total Net Assets	\$16,910,163,510	\$30,000,370,381

Texas Emergency Services Retirement System		
Assets	2007	2017
Alternative Investments	\$0	\$4,074,348
Capital Assets	\$13,965	\$0
Cash	\$338,463	\$614,340
Equities	\$25,093,413	\$73,350,420
Fixed Income	\$976,102	\$25,533,787
Mutual Funds	\$0	\$0
Other	\$24,071,917	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$618,711	\$1,709,722
Securities Lending Collateral	\$0	\$0
TOTAL	\$51,112,571	\$105,282,617
Liabilities	\$148,695	\$162,829
Total Net Assets	\$50,963,876	\$105,119,788

Texas Municipal Retirement System		
Assets	2007	2017
Alternative Investments	\$0	\$4,143,176,812
Capital Assets	\$11,896,415	\$9,732,194
Cash	\$0	\$9,884,675
Equities	\$0	\$11,740,265,307
Fixed Income	\$14,509,377,454	\$10,654,093,204
Mutual Funds	\$0	\$0
Other	\$173,067	\$405,087
Participant Loans	\$0	\$0
Real Estate	\$0	\$2,383,493,263
Receivables	\$233,040,128	\$1,044,073,551
Securities Lending Collateral	\$7,860,799,979	\$0
TOTAL	\$22,615,287,043	\$29,985,124,093
Liabilities	\$7,899,425,662	\$1,335,749,476
Total Net Assets	\$14,715,861,381	\$28,649,374,617

TEXAS PENSION REVIEW BOARD

ASSET ALLOCATION FOR MUNICIPAL PUBLIC RETIREMENT SYSTEMS



TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR MUNICIPAL PENSION PLANS

Austin Employees' Retirement System		
Assets	2007	2017
Alternative Investments	\$0	\$209,876,562
Capital Assets	\$1,137,228	\$4,347,529
Cash	\$3,018,590	\$9,931,695
Equities	\$1,086,819,035	\$1,597,106,888
Fixed Income	\$512,941,164	\$598,322,215
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$91,622,081	\$224,622,762
Receivables	\$8,132,622	\$12,036,369
Securities Lending Collateral	\$194,210,934	\$148,922,849
TOTAL	\$1,897,881,654	\$2,805,166,869
Liabilities	\$199,684,762	\$154,708,753
Total Net Assets	\$1,698,196,892	\$2,650,458,116

Austin Police Retirement System		
Assets	2007	2017
Alternative Investments	\$10,170,242	\$53,793,840
Capital Assets	\$0	\$0
Cash	\$113,277	\$14,237,166
Equities	\$231,442,148	\$487,646,732
Fixed Income	\$136,709,152	\$146,256,860
Mutual Funds	\$0	\$0
Other	\$261,563	\$0
Participant Loans	\$0	\$0
Real Estate	\$135,297,987	\$69,572,389
Receivables	\$1,713,425	\$2,097,652
Securities Lending Collateral	\$0	\$0
TOTAL	\$515,707,794	\$773,604,639
Liabilities	\$696,121	\$4,129,896
Total Net Assets	\$515,011,673	\$769,474,743

Austin Fire Fighters Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$187,057,532
Capital Assets	\$316,740	\$235,821
Cash	\$12,065,072	\$8,756,546
Equities	\$328,722,001	\$387,573,357
Fixed Income	\$168,567,319	\$289,919,619
Mutual Funds	\$99,016,570	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$78,282,492
Receivables	\$651,368	\$2,503,042
Securities Lending Collateral	\$0	\$0
TOTAL	\$609,339,070	\$954,328,409
Liabilities	\$1,120,174	\$530,182
Total Net Assets	\$608,218,896	\$953,798,227

Dallas Employees' Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$210,182,000
Capital Assets	\$0	\$0
Cash	\$133,987,000	\$117,468,000
Equities	\$2,080,195,000	\$1,885,899,000
Fixed Income	\$1,348,655,000	\$930,414,000
Mutual Funds	\$132,433,000	\$163,761,000
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$302,767,000
Receivables	\$481,429,000	\$482,506,000
Securities Lending Collateral	\$0	\$288,565,000
TOTAL	\$4,176,699,000	\$4,381,562,000
Liabilities	\$991,289,000	\$769,302,000
Total Net Assets	\$3,185,410,000	\$3,612,260,000

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR MUNICIPAL PENSION PLANS

Dallas Police and Fire Pension System ¹		
Assets	2007	2017
Alternative Investments	\$0	\$367,168,472
Capital Assets	\$0	\$12,715,204
Cash	\$248,420,807	\$118,586,970
Equities	\$1,752,541,603	\$470,081,008
Fixed Income	\$466,278,469	\$352,146,322
Mutual Funds	\$73,954,679	\$0
Other	\$25,254,016	\$435,431
Participant Loans	\$0	\$0
Real Estate	\$811,647,760	\$801,206,306
Receivables	\$1,949,763	\$34,629,064
Securities Lending Collateral	\$0	\$12,152,708
TOTAL	\$3,380,047,098	\$2,169,121,485
Liabilities	\$1,453,313	\$47,970,861
Total Net Assets	\$3,378,593,785	\$2,121,150,624

¹Includes both the DPFP Combined and Supplemental plans

El Paso Firemen's Pension Fund		
Assets	2007	2017
Alternative Investments	\$0	\$41,464,752
Capital Assets	\$472,328	\$1,154,935
Cash	\$2,551,417	\$18,107,830
Equities	\$97,973,854	\$358,246,226
Fixed Income	\$118,338,671	\$135,120,187
Mutual Funds	\$118,150,644	\$0
Other	\$281,143	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$51,435,124
Receivables	\$606,783	\$496,082
Securities Lending Collateral	\$0	\$26,484,531
TOTAL	\$338,374,840	\$632,509,667
Liabilities	\$152,749	\$30,718,946
Total Net Assets	\$338,222,091	\$601,790,721

City of El Paso Employees Retirement Trust			
Assets	2007	2017	
Alternative Investments	\$0	\$203,708,137	
Capital Assets	\$0	\$891,306	
Cash	\$11,361,261	\$10,597,586	
Equities	\$329,207,638	\$349,495,399	
Fixed Income	\$30,779,152	\$144,030,706	
Mutual Funds	\$178,609,682	\$0	
Other	\$19,156	\$21,857	
Participant Loans	\$0	\$0	
Real Estate	\$0	\$67,975,022	
Receivables	\$3,384,863	\$3,259,849	
Securities Lending Collateral	\$0	\$0	
TOTAL	\$553,361,752	\$779,979,862	
Liabilities	\$3,026,994	\$3,427,239	
Total Net Assets	\$550,334,758	\$776,552,623	

Assets	2007	2017
Alternative Investments	\$0	\$60,386,006
Capital Assets	\$462,221	\$1,154,935
Cash	\$4,164,734	\$26,541,795
Equities	\$352,483,007	\$521,721,650
Fixed Income	\$193,031,155	\$196,778,422
Mutual Funds	\$0	\$0
Other	\$521,264	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$74,906,073
Receivables	\$851,782	\$613,634
Securities Lending Collateral	\$0	\$38,831,549
TOTAL	\$551,514,163	\$920,934,064
Liabilities	\$305,848	\$50,275,557
Total Net Assets	\$551,208,315	\$870,658,507

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR MUNICIPAL PENSION PLANS

Fort Worth Employees' Retirement Fund ¹		
Assets	2007	2017
Alternative Investments	\$202,142,512	\$626,693,500
Capital Assets	\$0	\$3,148,766
Cash	\$189,832	\$173,456
Equities	\$1,113,092,447	\$422,051,768
Fixed Income	\$296,140,279	\$423,774,203
Mutual Funds	\$334,596,597	\$797,262,898
Other	\$0	\$22,437
Participant Loans	\$0	\$0
Real Estate	\$0	\$65,629,897
Receivables	\$34,729,319	\$277,249,198
Securities Lending Collateral	\$0	\$132,585,433
TOTAL	\$1,980,890,986	\$2,748,591,556
Liabilities	\$37,287,561	\$473,542,966
Total Net Assets	\$1,943,603,425	\$2,275,048,590

¹Includes both the Fort Worth Employees' Retirement Fund and Staff Plan.

Galveston Employees' Retirement Plan for Police		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$1,126,109	\$741,018
Equities	\$13,081,625	\$8,613,020
Fixed Income	\$8,198,054	\$5,727,576
Mutual Funds	\$2,782,366	\$4,948,102
Other	\$203,279	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$278,349
Receivables	\$300,084	\$261,672
Securities Lending Collateral	\$0	\$0
TOTAL	\$25,691,517	\$20,569,737
Liabilities	\$0	\$25,580
Total Net Assets	\$25,691,517	\$20,544,157

Galveston Employees' Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$4,655,301	\$1,106,040
Equities	\$20,724,791	\$36,298,060
Fixed Income	\$11,780,425	\$14,146,089
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$931,305	\$25,934
Securities Lending Collateral	\$0	\$0
TOTAL	\$38,091,822	\$51,576,123
Liabilities	\$53,026	\$25,833
Total Net Assets	\$38,038,796	\$51,550,290

Houston Firefighter's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$396,492,511	\$629,037,826
Capital Assets	\$8,473,914	\$5,351,239
Cash	\$8,756,018	\$15,826,792
Equities	\$1,341,538,306	\$1,981,027,963
Fixed Income	\$1,082,714,812	\$1,156,344,515
Mutual Funds	\$0	\$0
Other	\$28,708	\$500,256
Participant Loans	\$0	\$0
Real Estate	\$122,626,092	\$194,666,779
Receivables	\$31,817,216	\$99,980,814
Securities Lending Collateral	\$662,886,229	\$197,985,113
TOTAL	\$3,655,333,806	\$4,280,721,297
Liabilities	\$689,252,078	\$255,631,630
Total Net Assets	\$2,966,081,728	\$4,025,089,667

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR MUNICIPAL PENSION PLANS

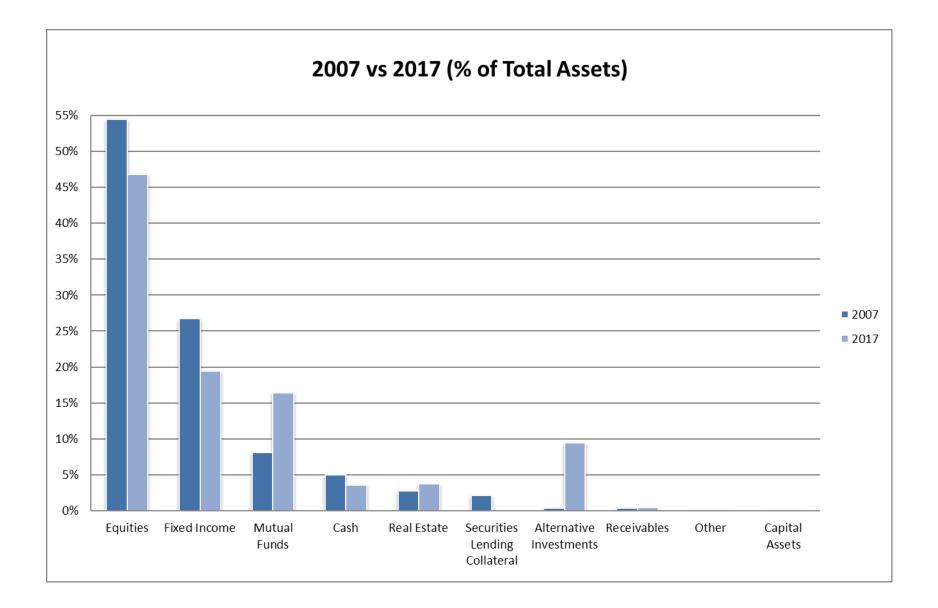
Houston Municipal Employees Pension System		
Assets	2007	2017
Alternative Investments	\$0	\$809,591,991
Capital Assets	\$418,576	\$177,788
Cash	\$3,148,398	\$7,916,715
Equities	\$652,858,988	\$540,683,622
Fixed Income	\$227,874,026	\$328,922,545
Mutual Funds	\$588,540,704	\$653,822,339
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$551,969,734	\$261,822,756
Receivables	\$373,921,132	\$15,775,350
Securities Lending Collateral	\$132,467,071	\$47,371,287
TOTAL	\$2,531,198,629	\$2,666,084,393
Liabilities	\$186,601,345	\$63,419,675
Total Net Assets	\$2,344,597,284	\$2,602,664,718

Houston Police Officers Pension System			
Assets	2007	2017	
Alternative Investments	\$877,750,000	\$1,644,059,000	
Capital Assets	\$0	\$0	
Cash	\$600,000	\$104,000	
Equities	\$1,474,702,000	\$1,435,775,000	
Fixed Income	\$967,622,000	\$1,079,861,000	
Mutual Funds	\$0	\$0	
Other	\$0	\$0	
Participant Loans	\$0	\$0	
Real Estate	\$0	\$294,990,000	
Receivables	\$52,992,000	\$5,997,000	
Securities Lending Collateral	\$517,637,000	\$25,778,000	
TOTAL	\$3,891,303,000	\$4,486,564,000	
Liabilities	\$531,637,000	\$29,386,000	
Total Net Assets	\$3,359,666,000	\$4,457,178,000	

San Antonio Fire & Police Pension Fund		
Assets	2007	2017
Alternative Investments	\$144,913,000	\$847,969,000
Capital Assets	\$538,000	\$535,000
Cash	\$68,799,000	\$56,287,000
Equities	\$1,133,376,000	\$1,402,871,000
Fixed Income	\$408,209,000	\$654,843,000
Mutual Funds	\$255,426,000	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$183,676,000	\$238,993,000
Receivables	\$12,534,000	\$21,260,000
Securities Lending Collateral	\$207,659,000	\$64,037,000
TOTAL	\$2,415,130,000	\$3,286,795,000
Liabilities	\$220,919,000	\$90,266,000
Total Net Assets	\$2,194,211,000	\$3,196,529,000

TEXAS PENSION REVIEW BOARD

ASSET ALLOCATION FOR TLFFRA PUBLIC RETIREMENT SYSTEMS



TEXAS PENSION REVIEW BOARD

Abilene Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$10,179,941
Capital Assets	\$0	\$0
Cash	\$1,112,638	\$1,541,296
Equities	\$25,447,897	\$35,077,054
Fixed Income	\$12,439,495	\$7,154,149
Mutual Funds	\$6,204,434	\$3,522,039
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$45,204,464	\$57,474,479
Liabilities	\$0	\$18,170
Total Net Assets	\$45,204,464	\$57,456,309

Atlanta Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$597,945
Capital Assets	\$0	\$0
Cash	\$52,138	\$152,235
Equities	\$1,592,900	\$2,279,589
Fixed Income	\$776,429	\$1,038,403
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$77,973
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$2,421,467	\$4,146,145
Liabilities	\$0	\$0
Total Net Assets	\$2,421,467	\$4,146,145

Amarillo Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$9,648,219	\$14,387,315
Equities	\$68,907,637	\$119,295,063
Fixed Income	\$30,904,265	\$37,898,972
Mutual Funds	\$5,890,133	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$692,457	\$327,039
Securities Lending Collateral	\$30,298,731	\$0
TOTAL	\$146,341,442	\$171,908,389
Liabilities	\$30,317,719	\$62,987
Total Net Assets	\$116,023,723	\$171,845,402

Beaumont Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$7,933,672
Capital Assets	\$364,670	\$1,048,946
Cash	\$4,103,095	\$1,900,210
Equities	\$44,396,604	\$75,925,678
Fixed Income	\$26,119,941	\$23,395,424
Mutual Funds	\$10,759,852	\$0
Other	\$0	\$0
Participant Loans	\$0	\$C
Real Estate	\$0	\$5,542,282
Receivables	\$423,194	\$125,974
Securities Lending Collateral	\$0	\$0
TOTAL	\$86,167,356	\$115,872,186
Liabilities	\$245,398	\$251,476
Total Net Assets	\$85,921,958	\$115,620,710

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR TLFFRA PLANS

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Big Spring Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$1,150,418
Capital Assets	\$0	\$0
Cash	\$3,506	\$391,596
Equities	\$6,860,196	\$7,204,370
Fixed Income	\$3,464,158	\$2,935,063
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$10,327,860	\$11,681,447
Liabilities	\$0	\$0
Total Net Assets	\$10,327,860	\$11,681,447

Cleburne Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$892,692	\$820,601
Equities	\$5,823,770	\$7,824,154
Fixed Income	\$5,522,469	\$8,267,265
Mutual Funds	\$0	\$5,906,750
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$37,344	\$61,060
Securities Lending Collateral	\$0	\$0
TOTAL	\$12,276,275	\$22,879,830
Liabilities	\$0	\$0
Total Net Assets	\$12,276,275	\$22,879,830

Brownwood Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$14,767	\$212,428
Equities	\$0	\$2,282,284
Fixed Income	\$0	\$696,835
Mutual Funds	\$0	\$966,543
Other	\$2,300,828	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$4,812	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$2,320,407	\$4,158,090
Liabilities	\$0	\$0
Total Net Assets	\$2,320,407	\$4,158,090

Conroe Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$634,702	\$854,743
Equities	\$9,843,436	\$14,885,604
Fixed Income	\$2,200,348	\$9,345,733
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$37,504	\$163,791
Securities Lending Collateral	\$0	\$0
TOTAL	\$12,715,990	\$25,249,871
Liabilities	\$1,565	\$10,193
Total Net Assets	\$12,714,425	\$25,239,678

TEXAS PENSION REVIEW BOARD

Corpus Christi Fire Fighter's Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$1,455
Cash	\$1,390,220	\$1,407,631
Equities	\$62,375,868	\$55,012,780
Fixed Income	\$37,304,859	\$48,003,912
Mutual Funds	\$0	\$26,426,253
Other	\$4,797	\$3,370
Participant Loans	\$0	\$0
Real Estate	\$0	\$17,529,349
Receivables	\$300,038	\$722,304
Securities Lending Collateral		\$0
TOTAL	\$101,375,782	\$149,107,054
Liabilities	\$111,597	\$374,232
Total Net Assets	\$101,264,185	\$148,732,822

Denison Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$1,575,391	\$0
Capital Assets	\$0	\$0
Cash	\$219,183	\$244,785
Equities	\$8,661,111	\$13,756,858
Fixed Income	\$1,693,112	\$8,378
Mutual Funds	\$1,784,240	\$2,754,834
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$1,129,169	\$975,305
Receivables	\$1,965	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$15,064,171	\$17,740,160
Liabilities	\$0	\$15,090
Total Net Assets	\$15,064,171	\$17,725,070

Corsicana Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$277,839	\$334,462
Equities	\$3,406,899	\$5,417,688
Fixed Income	\$1,623,095	\$590,273
Mutual Funds	\$0	\$1,536,900
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$1,074,978
Receivables	\$20,707	\$32,597
Securities Lending Collateral	\$0	\$0
TOTAL	\$5,328,540	\$8,986,898
Liabilities	\$0	\$17,136
Total Net Assets	\$5,328,540	\$8,969,762

Assets	2007	2017
Alternative Investments	\$0	\$4,650,760
Capital Assets	\$0	\$0
Cash	\$20,504	\$13,306,612
Equities	\$20,275,351	\$43,142,454
Fixed Income	\$19,444,786	\$9,062,813
Mutual Funds	\$2,205,682	\$3,211,300
Other	\$0	\$0
Participant Loans	\$0	\$C
Real Estate	\$0	\$11,972,403
Receivables	\$308,680	\$98,306
Securities Lending Collateral	\$0	\$0
TOTAL	\$42,255,003	\$85,444,648
Liabilities	\$203,078	\$56,365
Total Net Assets	\$42,051,925	\$85,388,283

TEXAS PENSION REVIEW BOARD

Galveston Firefighter's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$10,483,050
Capital Assets	\$0	\$0
Cash	\$2,864,567	\$544,593
Equities	\$18,175,392	\$32,449,139
Fixed Income	\$0	\$0
Mutual Funds	\$16,149,831	\$0
Other	\$0	\$10,550
Participant Loans	\$0	\$0
Real Estate	\$0	\$1,089,331
Receivables	\$0	\$75,337
Securities Lending Collateral	\$0	\$0
TOTAL	\$37,189,790	\$44,652,000
Liabilities	\$5,906	\$360
Total Net Assets	\$37,183,884	\$44,651,640

Harlingen Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$2,193,242
Capital Assets	\$0	\$0
Cash	\$20,728	\$510,167
Equities	\$14,257,337	\$19,613,335
Fixed Income	\$7,145,049	\$8,304,331
Mutual Funds	\$0	\$0
Other	\$0	\$2,167
Participant Loans	\$0	\$0
Real Estate	\$0	\$611,277
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$21,423,114	\$31,234,519
Liabilities	\$0	\$10,140
Total Net Assets	\$21,423,114	\$31,224,379

Greenville Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$2,036,501
Capital Assets	\$0	\$0
Cash	\$142,636	\$582,167
Equities	\$6,012,261	\$7,416,008
Fixed Income	\$5,792,349	\$3,569,158
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$332,801	\$264,181
Receivables	\$307	\$362
Securities Lending Collateral	\$0	\$0
TOTAL	\$12,280,354	\$13,868,377
Liabilities	\$0	\$24,317
Total Net Assets	\$12,280,354	\$13,844,060

Assets	2007	2017
Alternative Investments	\$0	\$46,643,594
Capital Assets	\$0	\$0
Cash	\$4,332,686	\$5,458,664
Equities	\$79,828,776	\$112,950,789
Fixed Income	\$14,403,384	\$35,273,517
Mutual Funds	\$0	\$6,357,564
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$21,138,707	\$6,872,413
Receivables	\$479 <i>,</i> 453	\$423,420
Securities Lending Collateral	\$0	\$0
TOTAL	\$120,183,006	\$213,979,961
Liabilities	\$6,986	\$19,950
Total Net Assets	\$120,176,020	\$213,960,011

TEXAS PENSION REVIEW BOARD

Killeen Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$4,326,919
Capital Assets	\$0	\$0
Cash	\$101,994	\$1,449,334
Equities	\$12,258,960	\$24,723,890
Fixed Income	\$7,004,558	\$9,211,955
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$73 <i>,</i> 698
Receivables	\$0	\$145,416
Securities Lending Collateral	\$0	\$0
TOTAL	\$19,365,512	\$39,931,212
Liabilities	\$0	\$46,649
Total Net Assets	\$19,365,512	\$39,884,563

Longview Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$16,912,077
Capital Assets	\$709	\$2,134
Cash	\$3,324,198	\$1,977,938
Equities	\$26,581,551	\$20,013,101
Fixed Income	\$11,539,455	\$5,333,426
Mutual Funds	\$3,191,946	\$0
Other	\$0	\$300
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$219,466	\$114,547
Securities Lending Collateral	\$0	\$0
TOTAL	\$44,857,325	\$44,353,523
Liabilities	\$921,553	\$0
Total Net Assets	\$43,935,772	\$44,353,523

aredo Firefighter's Retirement System		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$15,857,967	\$2,689,278
Equities	\$44,581,410	\$112,214,748
Fixed Income	\$10,618,123	\$27,180,982
Mutual Funds	\$0	\$0
Other	\$252,591	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$150,907	\$26,152
Securities Lending Collateral	\$0	\$0
TOTAL	\$71,460,998	\$142,111,160
Liabilities	\$81,331	\$127,886
Total Net Assets	\$71,379,667	\$141,983,274

Lubbock Fire Pension Fund		
Assets	2007	2017
Alternative Investments	\$0	\$40,925,262
Capital Assets	\$0	\$351,196
Cash	\$4,420,202	\$2,218,002
Equities	\$59,012,822	\$0
Fixed Income	\$60,903,107	\$35,187,411
Mutual Funds	\$18,393,190	\$111,404,468
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$10,950,653	\$3,650,947
Receivables	\$968,826	\$1,117,026
Securities Lending Collateral	\$0	\$0
TOTAL	\$154,648,800	\$194,854,312
Liabilities	\$0	\$0
Total Net Assets	\$154,648,800	\$194,854,312

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR TLFFRA PLANS

Lufkin Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$2,464,507
Capital Assets	\$794	\$0
Cash	\$590,094	\$394,049
Equities	\$6,485,913	\$8,858,001
Fixed Income	\$1,731,286	\$4,431,972
Mutual Funds	\$2,105,894	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$323,447
Receivables	\$8,876	\$365
Securities Lending Collateral	\$0	\$0
TOTAL	\$10,922,857	\$16,472,341
Liabilities	\$61,438	\$27,799
Total Net Assets	\$10,861,419	\$16,444,542

McAllen Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$3,365,200	\$8,272,990
Capital Assets	\$0	\$0
Cash	\$1,832,465	\$1,789,673
Equities	\$23,139,170	\$28,771,737
Fixed Income	\$6,119,599	\$8,314,170
Mutual Funds	\$0	\$2,298,348
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$0	\$15,469
Securities Lending Collateral	\$0	\$0
TOTAL	\$34,456,434	\$49,462,387
Liabilities	\$280	\$3,078
Total Net Assets	\$34,456,154	\$49,459,309

Marshall Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$1,275,680
Capital Assets	\$0	\$0
Cash	\$64,902	\$204,622
Equities	\$4,232,845	\$4,585,088
Fixed Income	\$2,080,782	\$2,294,141
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$167,378
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$6,378,529	\$8,526,909
Liabilities	\$0	\$0
Total Net Assets	\$6,378,529	\$8,526,909

Midland Firemen's Relief & Retirement Fund ¹		
Assets	2007	2016
Alternative Investments	\$0	\$7,484,110
Capital Assets	\$0	\$0
Cash	\$3,652,064	\$10,187,739
Equities	\$44,154,159	\$14,168,247
Fixed Income	\$19,992,276	\$22,948,753
Mutual Funds	\$0	\$4,628,855
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$1,638,919	\$19,462,620
Receivables	\$298,152	\$3,836,026
Securities Lending Collateral	\$0	\$0
TOTAL	\$69,735,569	\$82,716,350
Liabilities	\$30,011	\$51,402
Total Net Assets	\$69,705,559	\$82,664,948

¹The Fund's 2017 audited financial report was not received in time for publication.

TEXAS PENSION REVIEW BOARD

Odessa Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$1,982,562
Capital Assets	\$0	\$14,870
Cash	\$1,457,583	\$777,291
Equities	\$36,262,659	\$15,045,145
Fixed Income	\$5,716,368	\$7,777,868
Mutual Funds	\$6,133,501	\$16,538,087
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$3,238,822
Receivables	\$200,612	\$394,126
Securities Lending Collateral	\$0	\$0
TOTAL	\$49,770,723	\$45,768,771
Liabilities	\$0	\$51,521
Total Net Assets	\$49,770,723	\$45,717,250

Paris Firefighter's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$140,596
Capital Assets	\$0	\$0
Cash	\$246,179	\$239,735
Equities	\$3,779,269	\$2,508,579
Fixed Income	\$2,005,500	\$1,793,814
Mutual Funds	\$1,020,250	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$107,700	\$107,138
Receivables	\$0	\$148
Securities Lending Collateral	\$0	\$0
TOTAL	\$7,158,898	\$4,790,010
Liabilities	\$0	\$0
Total Net Assets	\$7,158,898	\$4,790,010

Orange Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$862,171	\$347,262
Equities	\$5,408,743	\$4,682,559
Fixed Income	\$3,138,773	\$3,992,448
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$18,385	\$3,811
Securities Lending Collateral	\$0	\$0
TOTAL	\$9,428,072	\$9,026,080
Liabilities	\$482,024	\$4,186
Total Net Assets	\$8,946,048	\$9,021,894

Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$360,653	\$218,625
Equities	\$2,606,240	\$4,103,073
Fixed Income	\$2,327,434	\$1,832,727
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$526,775	\$0
Receivables	\$6,974	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$5,828,076	\$6,154,425
Liabilities	\$0	\$0
Total Net Assets	\$5,828,076	\$6,154,425

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR TLFFRA PLANS

Port Arthur Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$433,997	\$140,590
Equities	\$18,288,537	\$33,902,427
Fixed Income	\$12,295,844	\$15,897,065
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$133,750	\$190,764
Securities Lending Collateral	\$0	\$0
TOTAL	\$31,152,128	\$50,130,846
Liabilities	\$117,599	\$240,243
Total Net Assets	\$31,034,529	\$49,890,603

San Benito Firemen's Relief & Retirement Fund ²		
Assets	2007	2016
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$150,238	\$189,830
Equities	\$1,295,261	\$2,530,572
Fixed Income	\$593,460	\$243,353
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$0	\$23,760
Securities Lending Collateral	\$0	\$0
TOTAL	\$2,038,959	\$2,987,515
Liabilities	\$4,670	\$0
Total Net Assets	\$2,034,289	\$2,987,515

²The Fund's 2017 audited financial report was not received in time for publication.

San Angelo Firemen's Relief & Retirement Fund ¹		
Assets	2007	2016
Alternative Investments	\$0	\$7,095,101
Capital Assets	\$0	\$0
Cash	\$1,386,470	\$1,938,497
Equities	\$30,486,256	\$33,747,193
Fixed Income	\$15,894,983	\$15,351,070
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$2,074,942
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$47,767,709	\$60,206,802
Liabilities	\$43,058	\$0
Total Net Assets	\$47,724,651	\$60,206,802

¹The Fund's 2017 audited financial report was not received in time for publication.

Sweetwater Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$601,709
Capital Assets	\$0	\$0
Cash	\$92,796	\$201,199
Equities	\$3,826,653	\$5,312,223
Fixed Income	\$2,560,372	\$2,314,837
Mutual Funds	\$989,322	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$175,172	\$168,873
Receivables	\$14,035	\$27,546
Securities Lending Collateral	\$0	\$0
TOTAL	\$7,658,350	\$8,626,387
Liabilities	\$23,354	\$79,213
Total Net Assets	\$7,634,996	\$8,547,174

TEXAS PENSION REVIEW BOARD

Temple Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$7,171,183
Capital Assets	\$0	\$0
Cash	\$588,941	\$521,875
Equities	\$17,613,279	\$17,054,411
Fixed Income	\$12,339,307	\$6,307,513
Mutual Funds	\$0	\$11,537,796
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$46,692
Receivables	\$49,491	\$62,934
Securities Lending Collateral	\$0	\$0
TOTAL	\$30,591,018	\$42,702,404
Liabilities	\$24,968	\$0
Total Net Assets	\$30,566,050	\$42,702,404

Texas City Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$2,493,060
Capital Assets	\$0	\$0
Cash	\$3,499,279	\$391,146
Equities	\$7,468,046	\$10,634,267
Fixed Income	\$2,983,928	\$940,209
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$1,726,605
Receivables	\$24,103	\$37,743
Securities Lending Collateral	\$0	\$0
TOTAL	\$13,975,356	\$16,223,030
Liabilities	\$0	\$105,264
Total Net Assets	\$13,975,356	\$16,117,766

Texarkana Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$350,899	\$1,360,215
Equities	\$16,156,111	\$1,636,071
Fixed Income	\$8,007,835	\$6,736,159
Mutual Funds	\$0	\$25,076,064
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$13,708	\$59,167
Securities Lending Collateral	\$0	\$0
TOTAL	\$24,528,553	\$34,867,676
Liabilities	\$16,122	\$48,671
Total Net Assets	\$24,512,431	\$34,819,005

The Woodlands Firefighter's Retirement System		
Assets	2007	2017
Alternative Investments	N/A	\$1,143,886
Captial Assets	N/A	\$0
Cash	N/A	\$803,809
Equities	N/A	\$22,760,911
Fixed Income	N/A	\$7,399,198
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$178,987
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$32,286,791
Liabilities	N/A	\$0
Total Net Assets	N/A	\$32,286,791

TEXAS PENSION REVIEW BOARD

Travis County ESD #6 Firefighter's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	N/A	\$0
Captial Assets	N/A	\$0
Cash	N/A	\$0
Equities	N/A	\$8,127,968
Fixed Income	N/A	\$4,225,738
Mutual Funds	N/A	\$7,194,769
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$139,589
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$19,688,064
Liabilities	N/A	\$0
Total Net Assets	N/A	\$19,688,064

University Park Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$780,861
Capital Assets	\$0	\$0
Cash	\$78,780	\$235,329
Equities	\$8,342,728	\$5,666,160
Fixed Income	\$492,846	\$2,799,156
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$1,301,814	\$224,039
Receivables	\$1,369	\$147
Securities Lending Collateral	\$0	\$0
TOTAL	\$10,217,537	\$9,705,692
Liabilities	\$75,216	\$18,748
Total Net Assets	\$10,142,321	\$9,686,944

Tyler Firefighters' Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$1,096,194
Capital Assets	\$0	\$0
Cash	\$1,852,036	\$1,231,289
Equities	\$13,835,594	\$5,019,674
Fixed Income	\$7,825,388	\$0
Mutual Funds	\$22,056,660	\$62,790,200
Other	\$124,383	\$4,524
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$198,333	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$45,892,394	\$70,141,881
Liabilities	\$191,127	\$0
Total Net Assets	\$45,701,267	\$70,141,881

Waxahachie Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$1,790,176
Capital Assets	\$0	\$0
Cash	\$2,367,640	\$356,012
Equities	\$4,666,902	\$9,695,232
Fixed Income	\$0	\$1,059,634
Mutual Funds	\$0	\$2,909,879
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$18,045	\$6,155
Securities Lending Collateral	\$0	\$0
TOTAL	\$7,052,587	\$15,817,088
Liabilities	\$0	\$0
Total Net Assets	\$7,052,587	\$15,817,088

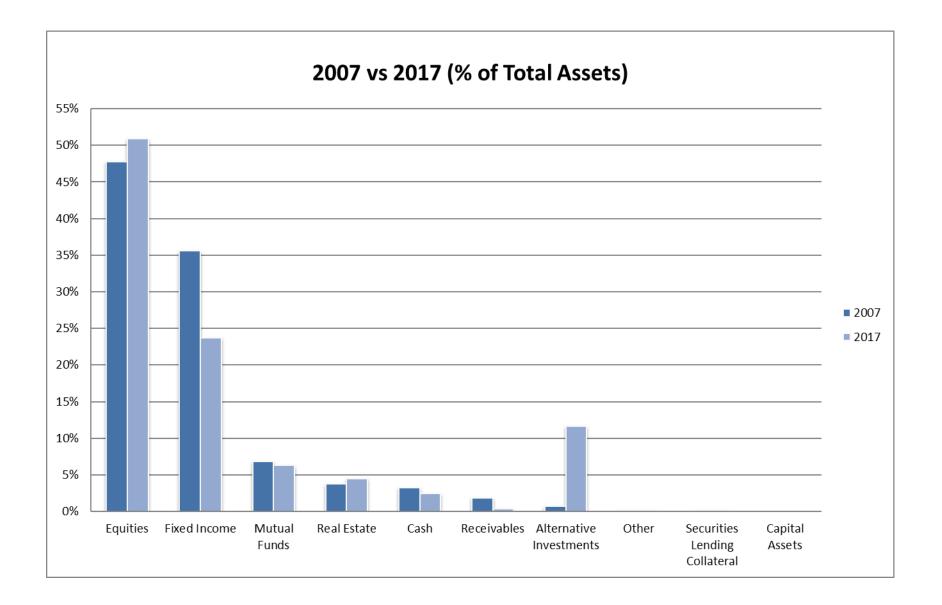
TEXAS PENSION REVIEW BOARD

Weslaco Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$373,727	\$466,009
Equities	\$2,520,321	\$7,584,949
Fixed Income	\$1,389,378	\$2,378,423
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$2,715	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$4,286,141	\$10,429,381
Liabilities	\$7,627	\$0
Total Net Assets	\$4,278,515	\$10,429,381

Wichita Falls Firemen's Relief & Retirement Fund		
Assets	2007	2017
Alternative Investments	\$0	\$2,126,077
Capital Assets	\$0	\$0
Cash	\$878,835	\$131,186
Equities	\$5,040,332	\$1,010,548
Fixed Income	\$12,953,434	\$5,897,371
Mutual Funds	\$18,364,425	\$41,250,050
Other	\$0	\$1,007,760
Participant Loans	\$0	\$0
Real Estate	\$1,351,510	\$0
Receivables	\$1,399	\$50,678
Securities Lending Collateral	\$0	\$0
TOTAL	\$38,589,935	\$51,473,670
Liabilities	\$923	\$26,048
Total Net Assets	\$38,589,012	\$51,447,622

TEXAS PENSION REVIEW BOARD

ASSET ALLOCATION FOR CH. 810 PUBLIC RETIREMENT SYSTEMS



TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR CHAPTER 810 PLANS

Arlington Employees Deferred Income Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$48,725	\$98,308
Equities	\$294,038	\$289,589
Fixed Income	\$1,137,119	\$2,144,706
Mutual Funds	\$0	\$268,607
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$26,479	\$40,659
Securities Lending Collateral	\$0	\$0
TOTAL	\$1,506,361	\$2,841,869
Liabilities	\$18,426	\$3,711
Total Net Assets	\$1,487,935	\$2,838,158

Capital MTA Retirement Plan for Administrative Employees		
Assets	2007	2017
Alternative Investments	\$0	\$810,461
Capital Assets	\$0	\$0
Cash	\$0	\$26,227
Equities	\$0	\$20,696,140
Fixed Income	\$0	\$7,649,417
Mutual Funds	\$4,966,693	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$835,864
Receivables	\$0	\$73,263
Securities Lending Collateral	\$0	\$0
TOTAL	\$4,966,693	\$30,091,372
Liabilities	\$0	\$81,177
Total Net Assets	\$4,966,693	\$30,010,195

Brazos River Authority Retirement Plan ¹		
Assets	2008	2018
Alternative Investments	\$0	\$3,645,393
Capital Assets	\$0	\$0
Cash	\$573,785	\$52,530
Equities	\$15,587,005	\$11,806,377
Fixed Income	\$4,973,337	\$3,258,897
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$4,830,090	\$1,935,287
Receivables	\$115,878	\$25
Securities Lending Collateral	\$0	\$0
TOTAL	\$26,080,095	\$20,698,509
Liabilities	\$13,454	\$263,710
Total Net Assets	\$26,066,641	\$20,434,799

¹The Plan's fiscal year end date for 2008 and 2018 is 2/28/2008 and 2/28/2018, respectively.

Capital MTA Retirement Plan for Bargaining Unit Employees		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$1,990,098	\$336,058
Equities	\$19,731,672	\$24,564,116
Fixed Income	\$6,574,146	\$8,322,572
Mutual Funds	\$605,311	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$243,684	\$24,801
Securities Lending Collateral	\$0	\$0
TOTAL	\$29,144,911	\$33,247,547
Liabilities	\$8,714	\$47,968
Total Net Assets	\$29,136,197	\$33,199,579

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR CHAPTER 810 PLANS

Colorado River Municipal Water District Defined Benefit Retirement Plan ¹		
Assets 2006 2		
Alternative Investments	\$0	\$207,322
Capital Assets	\$0	\$0
Cash	\$1,714,689	\$0
Equities	\$2,810,064	\$4,580,333
Fixed Income	\$1,874,762	\$4,507,306
Mutual Funds	\$0	\$0
Other	\$0	\$765,190
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$5,301	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$6,404,816	\$10,060,151
Liabilities	\$0	\$0
Total Net Assets	\$6,404,816	\$10,060,151

¹The Plan did not submit a financial report for 2007.

CPS Energy Pension Plan		
Assets	2007	2017
Alternative Investments	\$26,847,126	\$234,787,435
Capital Assets	\$0	\$0
Cash	\$44,151,763	\$63,370,096
Equities	\$644,021,893	\$901,045,546
Fixed Income	\$291,373,584	\$338,404,686
Mutual Funds	\$0	\$48,718,613
Other	\$226,915	\$0
Participant Loans	\$0	\$0
Real Estate	\$114,753,310	\$118,424,191
Receivables	\$19,478,402	\$6,517,852
Securities Lending Collateral	\$0	\$0
TOTAL	\$1,140,852,993	\$1,711,268,419
Liabilities	\$45,340,536	\$83,428,111
Total Net Assets	\$1,095,512,457	\$1,627,840,308

Corpus Christi Regional Transportation Authority		
Assets	2007	2017
Alternative Investments	\$0	\$936,131
Capital Assets	\$0	\$0
Cash	\$0	\$1,106,130
Equities	\$0	\$19,647,099
Fixed Income	\$0	\$13,478,768
Mutual Funds	\$18,514,359	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$1,271,005
Receivables	\$0	\$1,191
Securities Lending Collateral	\$0	\$0
TOTAL	\$18,514,359	\$36,440,324
Liabilities	\$0	\$0
Total Net Assets	\$18,514,359	\$36,440,324

Dallas County Hospital District Retirement Income Plan		
Assets	2007	2017
Alternative Investments	\$0	\$42,677,000
Capital Assets	\$0	\$0
Cash	\$2,216,665	\$22,818,000
Equities	\$113,142,549	\$555,211,000
Fixed Income	\$260,119,717	\$265,052,000
Mutual Funds	\$57,969,543	\$0
Other	\$0	\$6,062,000
Participant Loans	\$0	\$0
Real Estate	\$0	\$89,169,000
Receivables	\$2,590,170	\$6,447,000
Securities Lending Collateral	\$0	\$0
TOTAL	\$436,038,644	\$987,436,000
Liabilities	\$647,041	\$15,585,000
Total Net Assets	\$435,391,603	\$971,851,000

TEXAS PENSION REVIEW BOARD

Dallas/Fort Worth Airport Board DPS Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$78,335,000
Capital Assets	\$0	\$0
Cash	\$4,773,000	\$2,744,000
Equities	\$47,083,000	\$39,994,000
Fixed Income	\$24,026,000	\$22,279,000
Mutual Funds	\$0	\$41,254,000
Other	\$0	\$74,000
Participant Loans	\$0	\$0
Real Estate	\$139,000	\$0
Receivables	\$1,341,000	\$248,000
Securities Lending Collateral	\$0	\$0
TOTAL	\$77,362,000	\$184,928,000
Liabilities	\$470,000	\$176,000
Total Net Assets	\$76,892,000	\$184,752,000

DART Employees Defined Benefit Retirement Plan & Trust		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$1,172,000	\$4,994,000
Equities	\$80,575,000	\$91,937,000
Fixed Income	\$35,793,000	\$67,716,000
Mutual Funds	\$18,702,000	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$14,858,000	\$16,510,000
Receivables	\$241,000	\$76,000
Securities Lending Collateral	\$0	\$0
TOTAL	\$151,341,000	\$181,233,000
Liabilities	\$484,000	\$878,000
Total Net Assets	\$150,857,000	\$180,355,000

Dallas/Fort Worth Airport Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$209,813,000
Capital Assets	\$0	\$0
Cash	\$13,612,000	\$7,350,000
Equities	\$134,265,000	\$107,118,000
Fixed Income	\$68,513,000	\$59,671,000
Mutual Funds	\$0	\$110,493,000
Other	\$0	\$200,000
Participant Loans	\$0	\$0
Real Estate	\$398,000	\$0
Receivables	\$4,597,000	\$665,000
Securities Lending Collateral	\$0	\$0
TOTAL	\$221,385,000	\$495,310,000
Liabilities	\$1,340,000	\$474,000
Total Net Assets	\$220,045,000	\$494,836,000

El Paso Firemen & Policemen's Pension Staff Plan and Trust		
Assets	2007	2017
Alternative Investments	N/A	\$28,828
Capital Assets	N/A	\$0
Cash	N/A	\$12,532
Equities	N/A	\$249,072
Fixed Income	N/A	\$93,942
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$35,761
Receivables	N/A	\$0
Securities Lending Collateral	N/A	\$18,345
TOTAL	N/A	\$438,480
Liabilities	N/A	\$18,637
Total Net Assets	N/A	\$419,843

TEXAS PENSION REVIEW BOARD

Galveston Wharves Pension Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$84,393	\$374,055
Equities	\$9,279,755	\$11,051,434
Fixed Income	\$0	\$2,241,869
Mutual Funds	\$0	\$0
Other	\$0	\$76,381
Participant Loans	\$0	\$0
Real Estate	\$404,262	\$0
Receivables	\$274,395	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$10,042,805	\$13,743,739
Liabilities	\$0	\$0
Total Net Assets	\$10,042,805	\$13,743,739

Harris County Hospital District Pension Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$0	\$9,003,172
Equities	\$202,050,528	\$410,951,560
Fixed Income	\$183,713,728	\$217,526,279
Mutual Funds	\$57,322,312	\$30,484,352
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$29,300,639
Receivables	\$779,676	\$708,488
Securities Lending Collateral	\$0	\$0
TOTAL	\$443,866,244	\$697,974,490
Liabilities	\$1,048,138	\$11,662,241
Total Net Assets	\$442,818,106	\$686,312,249

Guadalupe-Blanco River Authority		
Assets	2007	2017
Alternative Investments	\$0	\$9,627,541
Capital Assets	\$0	\$0
Cash	\$304,620	\$1,200,386
Equities	\$7,263,826	\$15,497,061
Fixed Income	\$2,768,958	\$4,313,039
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$1,283	\$623
Securities Lending Collateral	\$0	\$0
TOTAL	\$10,338,687	\$30,638,650
Liabilities	\$0	\$0
Total Net Assets	\$10,338,687	\$30,638,650

Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$7,244,844	\$4,725,989
Equities	\$47,603,102	\$126,088,569
Fixed Income	\$51,878,113	\$45,365,046
Mutual Funds	\$29,134,748	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$238,094	\$83,497
Securities Lending Collateral	\$0	\$0
TOTAL	\$136,098,901	\$176,263,101
Liabilities	\$30,163,662	\$245,842
Total Net Assets	\$105,935,239	\$176,017,259

TEXAS PENSION REVIEW BOARD

Houston MTA Workers Union Pension Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$11,731,346	\$6,179,374
Equities	\$67,806,226	\$183,890,906
Fixed Income	\$53,378,634	\$87,508,022
Mutual Funds	\$44,563,834	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$35,641,558	\$143,270
Securities Lending Collateral	\$0	\$0
TOTAL	\$213,121,598	\$277,721,572
Liabilities	\$51,343,390	\$364,184
Total Net Assets	\$161,778,208	\$277,357,388

JPS Pension Plan - Tarrant County Hospital District		
Assets	2007	2017
Alternative Investments	N/A	\$0
Capital Assets	N/A	\$0
Cash	N/A	\$9,177,172
Equities	N/A	\$182,060,628
Fixed Income	N/A	\$63,426,258
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$2,373,747
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$257,037,806
Liabilities	N/A	\$0
Total Net Assets	N/A	\$257,037,806

Irving Supplemental Benefit Plan		
Assets	2007	2017
Alternative Investments	\$0	\$19,797,753
Capital Assets	\$0	\$0
Cash	\$2,640,840	\$1,681,836
Equities	\$23,583,870	\$26,042,231
Fixed Income	\$17,189,180	\$8,135,440
Mutual Funds	\$0	\$4,086,200
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$1,854,358	\$0
Receivables	\$68,591	\$84
Securities Lending Collateral	\$0	\$0
TOTAL	\$45,336,839	\$59,743,544
Liabilities	\$0	\$0
Total Net Assets	\$45,336,839	\$59,743,544

Lower Colorado River Authority Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$92,965,000
Capital Assets	\$0	\$0
Cash	\$9,270,202	\$15,432,000
Equities	\$163,424,457	\$73,256,000
Fixed Income	\$129,490,195	\$71,878,000
Mutual Funds	\$0	\$174,722,000
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$790,000
Receivables	\$1,196,396	\$920,000
Securities Lending Collateral	\$0	\$0
TOTAL	\$303,381,250	\$429,963,000
Liabilities	\$857,479	\$5,158,000
Total Net Assets	\$302,523,771	\$424,805,000

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR CHAPTER 810 PLANS

Nacogdoches County Hospital District Retirement Plan ¹		
Assets	2007	2016
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$0	\$0
Equities	\$16,655,363	\$43,205,230
Fixed Income	\$5,003,106	\$0
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$0	\$457,461
Securities Lending Collateral	\$0	\$0
TOTAL	\$21,658,469	\$43,662,691
Liabilities	\$0	\$0
Total Net Assets	\$21,658,469	\$43,662,691

¹The Fund's 2017 audited financial report was not received in time for publication.

Northwest Texas Healthcare System Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$2,245,244	\$1,061,005
Equities	\$10,558,948	\$13,702,481
Fixed Income	\$5,577,222	\$6,755,520
Mutual Funds	\$0	\$0
Other	\$127,720	\$212,525
Participant Loans	\$0	\$0
Real Estate	\$671,054	\$9
Receivables	\$100,817	\$68,570
Securities Lending Collateral	\$1,385,540	\$0
TOTAL	\$20,666,545	\$21,800,110
Liabilities	\$1,385,540	\$0
Total Net Assets	\$19,281,005	\$21,800,110

Northeast Medical Center Hospital Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$0	\$0
Equities	\$0	\$5,832,636
Fixed Income	\$0	\$3,278,903
Mutual Funds	\$11,629,811	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$467,041
Receivables	\$0	\$0
Securities Lending Collateral	\$0	\$0
TOTAL	\$11,629,811	\$9,578,580
Liabilities	\$0	\$0
Total Net Assets	\$11,629,811	\$9,578,580

Assets	2007	2017
Alternative Investments	\$0	\$1,448,255
Capital Assets	\$0	\$0
Cash	\$1,831,262	\$3,326,774
Equities	\$43,141,764	\$98,810,828
Fixed Income	\$18,743,556	\$40,838,772
Mutual Funds	\$5,483,465	\$3,842,903
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$461,908	\$314,028
Securities Lending Collateral	\$0	\$0
TOTAL	\$69,661,955	\$148,581,560
Liabilities	\$37,754	\$65,253
Total Net Assets	\$69,624,201	\$148,516,307

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR CHAPTER 810 PLANS

Port of Houston Authority Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$15,967,223
Capital Assets	\$0	\$0
Cash	\$3,913,066	\$3,700,267
Equities	\$50,667,759	\$82,483,219
Fixed Income	\$46,567,576	\$74,161,487
Mutual Funds	\$0	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$0
Receivables	\$449,741	\$734,430
Securities Lending Collateral	\$0	\$0
TOTAL	\$101,598,142	\$177,046,626
Liabilities	\$0	\$53,198
Total Net Assets	\$101,598,142	\$176,993,428

Retirement Plan for Anson General Hospital		
Assets	2007	2017
Alternative Investments	N/A	\$0
Capital Assets	N/A	\$0
Cash	N/A	\$25,383
Equities	N/A	\$1,410,037
Fixed Income	N/A	\$496,268
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$297
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$1,931,984
Liabilities	N/A	\$0
Total Net Assets	N/A	\$1,931,984

Refugio County Memorial Hospital District Retirement Plan		
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$0
Cash	\$0	\$59,038
Equities	\$0	\$1,164,981
Fixed Income	\$0	\$937,507
Mutual Funds	\$0	\$0
Other	\$1,853,316	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$66,133
Receivables	\$0	\$281
Securities Lending Collateral	\$0	\$0
TOTAL	\$1,853,316	\$2,227,940
Liabilities	\$0	\$0
Total Net Assets	\$1,853,316	\$2,227,940

Retirement Plan for Citizens Medical Center ¹		
Assets	2008	2018
Alternative Investments	N/A	\$0
Capital Assets	N/A	\$0
Cash	N/A	\$953,223
Equities	N/A	\$56,422,395
Fixed Income	N/A	\$172,329
Mutual Funds	N/A	\$47,838,944
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$166,812
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$105,553,704
Liabilities	N/A	\$12,375
Total Net Assets	N/A	\$105,541,329

¹The Plan's fiscal year end date for 2018 is 2/28/2018.

TEXAS PENSION REVIEW BOARD

ASSET SUMMARY FOR CHAPTER 810 PLANS

Retirement Plan for Employees of Bro	wnsville Navigation Distr	ict ¹
Assets	2007	2017
Alternative Investments	N/A	N/A
Capital Assets	N/A	N/A
Cash	N/A	N/A
Equities	N/A	N/A
Fixed Income	N/A	N/A
Mutual Funds	N/A	N/A
Other	N/A	N/A
Participant Loans	N/A	N/A
Real Estate	N/A	N/A
Receivables	N/A	N/A
Securities Lending Collateral	N/A	N/A
TOTAL	N/A	N/A
Liabilities	N/A	N/A
Total Net Assets	N/A	N/A

¹The Plan has not yet submitted an audited financial report to the PRB.

Retirement Plan for Sweeny Commun	ity Hospital	
Assets	2007	2017
Alternative Investments	N/A	\$0
Capital Assets	N/A	\$0
Cash	N/A	\$35,178
Equities	N/A	\$2,604,261
Fixed Income	N/A	\$939,011
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$718
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$3,579,168
Liabilities	N/A	\$0
Total Net Assets	N/A	\$3,579,168

Retirement Plan for Guadalup	e Regional Medical Cent	er
Assets	2007	2017
Alternative Investments	N/A	\$0
Capital Assets	N/A	\$0
Cash	N/A	\$701,403
Equities	N/A	\$51,924,938
Fixed Income	N/A	\$18,722,424
Mutual Funds	N/A	\$0
Other	N/A	\$0
Participant Loans	N/A	\$0
Real Estate	N/A	\$0
Receivables	N/A	\$37,580
Securities Lending Collateral	N/A	\$0
TOTAL	N/A	\$71,386,345
Liabilities	N/A	\$0
Total Net Assets	N/A	\$71,386,345

San Antonio Metropolitan Transit	Retirement Plan	
Assets	2007	2017
Alternative Investments	\$0	\$0
Capital Assets	\$0	\$(
Cash	\$2,820,605	\$5,434,751
Equities	\$100,607,904	\$179,829,018
Fixed Income	\$69,399,610	\$62,804,803
Mutual Funds	\$12,029,778	\$0
Other	\$0	\$0
Participant Loans	\$0	\$0
Real Estate	\$8,513,072	\$28,150,385
Receivables	\$2,014,874	\$3,478,223
Securities Lending Collateral	\$0	\$(
TOTAL	\$195,385,843	\$279,697,180
Liabilities	\$8,806,734	\$4,362,580
Total Net Assets	\$186,579,109	\$275,334,600

TEXAS PENSION REVIEW BOARD

University Health System Pensi	on Plan	
Assets	2007	2017
Alternative Investments	\$0	\$50,431,905
Capital Assets	\$0	\$0
Cash	\$9,412,311	\$2,252,781
Equities	\$32,019,697	\$209,298,000
Fixed Income	\$82,012,550	\$68,173,756
Mutual Funds	\$0	\$0
Other	\$12,610	\$0
Participant Loans	\$0	\$0
Real Estate	\$0	\$33,493,030
Receivables	\$492,971	\$366,149
Securities Lending Collateral	\$0	\$0
TOTAL	\$123,950,139	\$364,015,622
Liabilities	\$41,200	\$236,034
Total Net Assets	\$123,908,939	\$363,779,588

TEXAS PENSION REVIEW BOARD

INVESTMENT PERFORMANCE

TEXAS PENSION REVIEW BOARD

INVESTMENT PERFORMANCE

As previously mentioned, public retirement systems have three main sources of funding: earnings from investments, employer contributions, and member contributions. Investment returns are usually the most unpredictable of the three funding components, but are a key determinant of the long-term financial viability of a retirement system. Earnings from investments are generated through management of assets held in trust by pension plans. This section provides key investment data for retirement systems.

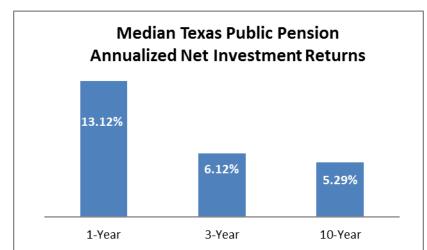
Texas Government Code Section 802.108 requires that each retirement system submit to the PRB the rolling gross and net investment returns for the most recent 1-year, 3-year, and 10-year period, as well as the most recent 30-year period or since the plan's inception, whichever is shorter. The chart below reflects the average return numbers provided to the PRB by the retirement systems for the 1-year, 3-year and 10-year periods and the average annual assumed rate of return on plan assets, by system type.

	Average Returns by Plan Type													
Plan Type	1-Year Gross	1-Year Net	3-Year Gross	3 Year Net	10-Year Gross	10-Year Net	Assumed Rate							
Statewide	11.70%	11.47%	8.43%	8.22%	6.92%	6.73%	7.46%							
Municipal	12.54%	12.32%	6.67%	6.17%	5.44%	5.08%	7.45%							
TLFFRA	13.81%	13.09%	5.93%	5.26%	5.43%	4.58%	7.61%							
Chapter 810	13.58%	13.11%	6.95%	6.42%	6.15%	5.57%	7.01%							
Total	13.48%	12.94%	6.49%	5.94%	5.80%	5.10%	7.37%							

Average actual and assumed rates of returns for all actuarially funded Statewide, Municipal, TLFFRA, and Chapter 810 plans are shown in the table above. The table shows both the gross and net unweighted average investment returns over the one, three, and ten year periods through 2017. Texas public retirement systems have generated positive returns in the past year with an average total net return of 12.94%. Returns have been overall positive over the past three to ten years. However, average returns for most Texas public retirement systems have been below their assumed rate of return for the 3-year and 10-year periods.

The chart on the following page shows the median net rate of return achieved by Texas public retirement systems over the past one, three, and ten years.

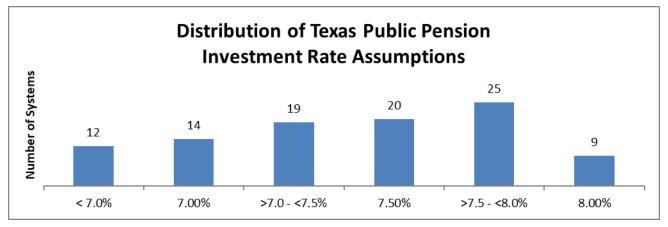
TEXAS PENSION REVIEW BOARD



INVESTMENT PERFORMANCE

Comparison of short-term investment return rates between plans may result in inaccurate conclusions due to the differences in plan fiscal year ending dates and methodologies used to calculate the annual returns. Additionally, any market volatility can result in plan investment returns that are greater or less than their long term averages. As seen above, investment return can look dramatically different from short time horizons compared to long term expectations. To ensure a more complete analysis, plan investment performance should be reviewed over longer time horizons. Long-term investment return analysis is consistent with pension funding policy, which is determined through forecasting of benefit liabilities over time periods incorporating the lives of plan participants. Pension systems will actuarially assume a rate of return that acts as a guideline for investment returns to meet over the long-term to ensure that a pension fund is financially sound.

The chart below shows the range of assumed rates of returns used by Texas public pension systems.



TEXAS PENSION REVIEW BOARD

INVESTMENT RETURNS

The following tables detail the return numbers provided to the PRB by the retirement systems for the 1-year, 3-year, 10-year and long term (defined as the most recent 30-year period or since the plan's inception, whichever is shorter) periods, as required by Texas Government Code Section 802.108, and the assumed rate of return on plan assets.

			Statewi	de Plans							
Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Employees Retirement System ¹	8/31/2018	9.58%	9.54%	8.98%	8.94%	7.14%	7.02%	8.26%	N/A	30 Years	7.50%
Teacher Retirement System	8/31/2018	8.32%	8.24%	9.49%	9.39%	7.22%	7.11%	8.93%	8.89%	30 Years	7.25%
Texas County & District Retirement System	12/31/2017	14.84%	14.72%	7.11%	7.00%	5.69%	5.55%	8.49%	8.42%	30 Years	8.00%
Texas Emergency Services Retirement System	8/31/2018	11.50%	11.08%	9.36%	8.93%	7.84%	7.42%	7.01%	6.67%	10/1/1999	7.75%
Texas Municipal Retirement System	12/31/2017	14.27%	13.78%	7.19%	6.83%	6.73%	6.56%	8.74%	8.68%	30 Years	6.75%

¹ERS, LECOSRF and JRS II all share an investment pool.

			Municip	oal Plans							
Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Austin Employees' Retirement System	12/31/2017	16.97%	16.59%	7.69%	7.29%	6.42%	6.03%	8.90%	8.74%	30 years	7.50%
Austin Fire Fighters Relief & Retirement Fund	12/31/2017	17.29%	17.00%	8.73%	8.71%	6.88%	6.54%	9.18%	N/A	3/1/1997	7.70%
Austin Police Retirement System	12/31/2017	12.17%	11.89%	6.27%	6.03%	3.30%	2.82%	8.61%	8.29%	9/1/1991	7.70%
Dallas Employees Retirement Fund	12/31/2017	N/A	13.29%	N/A	6.74%	N/A	6.22%	N/A	8.53%	30 years	7.75%
Dallas Police & Fire Pension System ²	12/31/2017	5.30%	5.10%	-1.50%	-1.80%	1.60%	0.90%	N/A	7.20%	30 years	7.25%
City of El Paso Employees Retirement Trust	8/31/2017	11.05%	10.63%	4.93%	4.52%	6.07%	N/A	8.75%	N/A	30 years	7.50%
El Paso Firemen & Policemen's Pension Fund ³	12/31/2017	17.53%	17.12%	8.21%	7.88%	6.14%	5.80%	N/A	N/A	7/1/1991	7.75%
Fort Worth Employees' Retirement Fund ⁴	9/30/2017	12.57%	12.20%	6.74%	6.37%	4.33%	3.91%	8.01%	7.79%	30 years	7.75%
Galveston Employees' Retirement Fund	12/31/2017	13.92%	13.68%	9.63%	6.10%	N/A	5.30%	N/A	3.73%	1/1/1999	7.25%
Galveston Employees' Retirement Fund for Police	12/31/2017	13.11%	12.93%	5.97%	5.59%	5.25%	4.58%	N/A	N/A	1/1/2004	7.50%

²Includes the Combined and Supplemental Plans.

³*The Fire and Police Plans share an investment pool.*

⁴Includes the Staff Plan.

TEXAS PENSION REVIEW BOARD

INVESTMENT RETURNS

Municipal Plans, Continued

Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Houston Firefighters' Relief & Retirement Fund	6/30/2018	8.27%	8.17%	6.28%	6.13%	6.35%	6.11%	9.19%	N/A	30 years	7.00%
Houston Municipal Employees Pension System	6/30/2018	9.33%	9.04%	7.80%	7.51%	7.01%	6.68%	9.06%	8.61%	30 years	7.00%
Houston Police Officers Pension System	6/30/2018	10.50%	10.20%	8.00%	7.60%	6.80%	6.30%	9.40%	9.00%	30 years	7.00%
San Antonio Fire & Police Pension Fund	12/31/2017	15.00%	14.70%	8.00%	7.70%	5.10%	4.80%	N/A	9.30%	30 years	7.25%

			TLFFI	RA Plans							
Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Abilene Firemen's Relief & Retirement Fund	9/30/2017	9.59%	9.22%	5.20%	4.79%	4.88%	4.40%	6.83%	6.40%	10/1/1994	8.00%
Amarillo Firemen's Relief & Retirement Fund	12/31/2017	16.27%	15.96%	8.49%	8.21%	7.59%	7.33%	9.07%	8.81%	1/1/1995	7.50%
Atlanta Firemen's Relief & Retirement Fund	12/31/2017	13.29%	12.24%	6.21%	5.38%	N/A	4.83%	N/A	6.18%	1/1/1995	7.40%
Beaumont Firemen's Relief & Retirement Fund	12/31/2017	17.33%	17.06%	7.70%	7.39%	N/A	4.85%	N/A	N/A	1/1/1995	8.00%
Big Spring Firemen's Relief & Retirement Fund	12/31/2017	15.93%	15.19%	6.87%	6.21%	N/A	5.01%	N/A	8.08%	1/1/1995	8.00%
Brownwood Firemen's Relief & Retirement Fund	12/31/2017	16.13%	14.79%	5.97%	4.76%	5.64%	4.34%	N/A	5.53%	1/1/1995	7.25%
Cleburne Firemen's Relief & Retirement Fund	12/31/2017	12.78%	12.16%	6.82%	6.28%	7.24%	6.81%	N/A	N/A	6/4/2008	7.25%
Conroe Fire Fighters' Retirement Fund	12/31/2017	9.88%	9.48%	4.38%	4.03%	N/A	2.22%	N/A	4.82%	1/1/1995	7.75%
Corpus Christi Fire Fighter's Retirement System	12/31/2017	14.27%	13.86%	6.74%	6.36%	N/A	6.05%	N/A	7.82%	1/1/1995	7.75%
Corsicana Firemen's Relief & Retirement Fund	12/31/2017	16.67%	15.34%	1.41%	0.26%	N/A	3.40%	N/A	4.08%	1/1/1995	7.00%
Denison Firemen's Relief & Retirement Fund	12/31/2017	16.94%	16.36%	5.86%	5.32%	4.84%	4.31%	7.31%	6.79%	1/1/1995	7.50%
Denton Firemen's Relief & Retirement Fund	12/31/2017	11.59%	11.49%	5.45%	5.34%	N/A	6.23%	N/A	7.64%	1/1/1995	6.75%
Galveston Firefighter's Relief & Retirement Fund	12/31/2017	16.53%	16.05%	6.56%	6.10%	4.84%	4.36%	7.44%	6.86%	1/1/1995	7.75%
Greenville Firemen's Relief & Retirement Fund	12/31/2017	13.85%	13.03%	6.41%	5.64%	6.00%	5.28%	7.37%	6.84%	1/1/1995	8.00%
Harlingen Firemen's Relief & Retirement Fund	9/30/2017	10.78%	10.10%	5.93%	5.34%	5.72%	5.06%	9.09%	8.64%	4/1/1995	7.75%
Irving Firemen's Relief & Retirement Fund	12/31/2017	18.08%	17.35%	8.00%	7.23%	6.64%	5.88%	7.18%	6.61%	1/1/1995	7.50%
Killeen Firemen's Relief & Retirement Fund	9/30/2017	12.79%	12.63%	4.63%	4.39%	N/A	4.30%	N/A	5.50%	10/1/1994	7.75%

TEXAS PENSION REVIEW BOARD

INVESTMENT RETURNS

TLFFRA Plans, Continued

		renna nans, continucu										
Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate	
Laredo Firefighters Retirement System	9/30/2017	11.27%	10.92%	4.85%	4.51%	4.57%	4.15%	5.51%	5.03%	9/30/1994	7.90%	
Logview Firemen's Relief & Retirement Fund	12/31/2017	14.21%	13.74%	4.16%	3.59%	N/A	3.17%	N/A	6.48%	1/1/1995	8.00%	
Lubbock Fire Pension Fund	12/31/2017	13.97%	13.74%	5.41%	5.07%	5.16%	4.77%	8.17%	7.81%	1/1/1995	7.75%	
Lufkin Firemen's Relief & Retirement Fund	12/31/2017	13.52%	12.73%	6.44%	5.71%	5.44%	4.68%	N/A	N/A	1/1/1995	7.50%	
Marshall Firemen's Relief & Retirement Fund	12/31/2017	14.02%	13.12%	6.67%	6.10%	6.08%	5.22%	6.66%	5.81%	9/30/2006	7.75%	
McAllen Firemen's Relief & Retirement Fund	9/30/2017	13.00%	12.29%	5.43%	4.75%	5.06%	4.17%	8.13%	7.13%	10/1/1994	7.75%	
Midland Firemen's Relief & Retirement Fund	12/31/2016	4.16%	3.55%	2.56%	1.84%	4.47%	3.88%	8.50%	7.84%	1/1/1995	8.00%	
Odessa Firemen's Relief & Retirement Fund	12/31/2017	15.21%	14.65%	6.70%	6.12%	N/A	3.76%	N/A	7.64%	1/1/1995	7.75%	
Orange Firemen's Relief & Retirement Fund	12/31/2017	18.43%	17.08%	7.36%	6.16%	5.73%	4.60%	7.65%	6.70%	1/1/1995	7.75%	
Paris Firefighters' Relief & Retirement Fund	12/31/2017	13.03%	12.00%	6.02%	5.22%	3.85%	2.85%	6.46%	5.64%	1/1/1995	7.50%	
Plainview Firemen's Relief & Retirement Fund	12/31/2017	17.08%	16.38%	5.70%	4.82%	N/A	2.88%	N/A	5.18%	1/1/1995	7.50%	
Port Arthur Firemen's Relief & Retirement Fund	12/31/2017	15.37%	15.22%	7.08%	6.94%	6.11%	5.98%	7.67%	7.43%	1/1/1995	8.00%	
San Angelo Firemen's Relief & Retirement Fund	12/31/2017	15.84%	12.78%	6.50%	6.10%	6.23%	5.61%	8.44%	7.37%	1/1/1988	7.90%	
San Benito Firemen's Relief & Retirement Fund	9/30/2017	8.34%	7.12%	3.43%	2.28%	3.03%	1.58%	1.88%	1.17%	10/1/2006	7.50%	
Sweetwater Firemen's Relief & Retirement Fund	12/31/2017	13.46%	12.55%	6.07%	5.21%	5.75%	4.91%	9.00%	8.09%	1/1/1995	8.00%	
Temple Firemen's Relief & Retirement Fund	9/30/2017	10.89%	10.56%	5.60%	3.76%	4.76%	4.17%	6.47%	6.09%	1/1/2001	7.75%	
Texarkana Firemen's Relief & Retirement Fund	12/31/2017	13.60%	12.80%	5.88%	5.13%	N/A	5.73%	N/A	7.97%	1/1/1995	7.75%	
Texas City Firemen's Relief & Retirement Fund	12/31/2017	16.12%	14.95%	5.97%	4.89%	5.38%	4.22%	6.62%	5.44%	2/1/2004	7.75%	
The Woodlands Firefighters' Retirement System	12/31/2017	12.55%	12.15%	N/A	N/A	N/A	N/A	9.54%	9.12%	1/1/2016	7.00%	
Travis County ESD # 6 Firefighter's Relief & Retirement Fund	12/31/2017	16.88%	16.28%	7.58%	7.01%	N/A	N/A	8.31%	7.55%	1/1/2009	7.00%	
Tyler Firefighters' Relief & Retirement Fund	12/31/2017	15.65%	15.36%	6.38%	6.12%	N/A	5.54%	N/A	7.48%	1/1/1995	7.50%	
University Park Firemen's Relief & Retirement Fund	12/31/2017	13.78%	12.89%	6.26%	5.42%	4.40%	3.62%	N/A	6.29%	1/1/1995	7.50%	
Waxahachie Firemen's Relief & Retirement Fund	9/30/2017	11.88%	10.73%	5.47%	4.38%	N/A	4.80%	N/A	5.68%	10/1/1994	7.00%	
Weslaco Firemen's Relief & Retirement Fund	9/30/2017	9.44%	8.76%	5.44%	4.78%	N/A	2.59%	N/A	5.08%	10/1/1994	7.25%	
Wichita Falls Firemen's Relief & Retirement Fund	12/31/2017	15.49%	15.02%	7.36%	6.89%	6.37%	5.81%	8.05%	7.56%	1/1/1995	7.75%	

TEXAS PENSION REVIEW BOARD

INVESTMENT RETURNS

Plans Governed By Chapter 810 of the Texas Government Code

Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Arlington Employees Deferred Income Plan	6/30/2017	4.80%	3.14%	3.63%	1.42%	5.28%	3.53%	N/A	N/A	7/1/1991	5.00%
Brazos River Authority Retirement Plan	2/28/2018	6.46%	6.37%	3.55%	3.45%	5.69%	5.62%	N/A	N/A	2/28/2009	6.50%
Capital MTA Retirement Plan for Administrative Employees	12/31/2017	17.63%	17.01%	8.97%	8.42%	7.43%	6.75%	7.59%	6.89%	1/1/2006	6.75%
Capital MTA Retirement Plan for Bargaining Unit Employees	12/31/2017	N/A	15.04%	N/A	7.02%	N/A	5.52%	N/A	5.51%	8/1/2000	7.25%
Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust	12/31/2017	N/A	13.76%	N/A	6.11%	N/A	5.90%	N/A	N/A	12/31/2008	6.25%
Corpus Christi Regional Transportation Authority	12/31/2017	13.43%	13.12%	6.90%	6.60%	7.33%	7.05%	7.28%	7.14%	30 years	7.50%
CPS Energy Pension Plan	12/31/2017	14.92%	14.59%	7.75%	7.62%	7.02%	6.98%	N/A	8.87%	12/31/1991	7.25%
Dallas County Hospital District Retirement income Plan	12/31/207	15.73%	15.37%	7.07%	6.75%	5.58%	5.29%	N/A	N/A	1/1/1982	7.25%
Dallas/Fort Worth Airport Board DPS Retirement Plan	12/31/2017	13.30%	13.00%	7.00%	6.60%	6.50%	6.00%	6.60%	6.10%	30 years	7.25%
Dallas/Fort Worth Airport Board Retirement Plan	12/31/2017	13.30%	13.00%	7.00%	6.60%	6.50%	6.00%	N/A	N/A	12/31/2001	7.25%
DART Employees' Defined Benefit Retirement Plan & Trust	9/30/2017	9.61%	9.20%	6.98%	6.55%	4.83%	4.53%	7.85%	7.57%	30 years	6.75%
El Paso Firemen & Policemen's Pension Staff Plan	12/31/2017	17.53%	17.12%	8.21%	7.88%	N/A	N/A	N/A	N/A	1/1/2015	7.75%
Galveston Wharves Pension Plan	12/31/2017	22.04%	21.46%	9.26%	8.72%	6.46%	5.89%	9.42%	8.71%	30 years	7.25%
Guadalupe-Blanco River Authority	12/31/2017	17.00%	16.72%	5.84%	5.56%	4.88%	4.55%	6.71%	6.15%	1/1/1989	7.00%
Harris County Hospital District Pension Plan	12/31/2017	18.30%	17.90%	8.20%	7.80%	7.00%	6.60%	9.70%	9.40%	30 years	7.00%
Houston MTA Non-Union Pension Plan	12/31/2017	16.60%	16.40%	6.50%	6.20%	5.70%	5.30%	N/A	N/A	12/31/2008	6.75%
Houston MTA Workers Union Pension Plan	12/31/2017	16.90%	16.70%	6.90%	6.70%	5.90%	5.50%	8.10%	7.90%	9/1/1989	6.75%
Irving Supplemental Benefit Plan	12/31/2017	14.04%	13.45%	5.28%	4.71%	4.15%	3.47%	5.03%	4.33%	12/1/2005	6.75%
JPS Pension Plan - Tarrant County Hospital District	9/30/2017	13.47%	13.24%	7.54%	7.25%	5.83%	5.50%	N/A	N/A	9/30/2007	7.25%

TEXAS PENSION REVIEW BOARD

INVESTMENT RETURNS

Plans Governed By Chapter 810 of the Texas Government Code, Continued

Retirement Systems	Effective Date	1-Year Gross	1-Year Net	3-Year Gross	3-Year Net	10-Year Gross	10-Year Net	Long Term Gross	Long Term Net	Long Term Return Period	Assumed Rate
Lower Colorado River Authority Retirement Plan	12/31/2017	11.06%	11.06%	5.58%	5.58%	5.70%	5.70%	8.21%	8.21%	1/1/1991	7.25%
Nacogdoches County Hospital District Retirement Plan	6/30/2016	0.74%	0.08%	8.01%	7.22%	6.23%	5.22%	5.09%	3.96%	7/1/2000	7.25%
Northeast Medical Center Hospital Retirement Plan	6/30/2017	N/A	12.76%	N/A	5.02%	N/A	4.42%	N/A	4.36%	6/1/2001	7.50%
Northwest Texas Healthcare System Retirement Plan	9/30/2017	2.35%	2.14%	3.87%	3.64%	N/A	4.21%	N/A	6.07%	10/1/1994	7.50%
Plano Retirement Security Plan	12/31/2017	17.28%	17.06%	7.88%	7.68%	7.10%	6.78%	N/A	N/A	12/31/2008	7.00%
Port of Houston Authority Retirement Plan	7/31/2017	9.31%	8.72%	5.36%	4.79%	6.82%	6.15%	7.01%	6.53%	30 years	6.75%
Refugio County Memorial Hospital District Retirement Plan	10/31/2017	13.34%	12.75%	5.61%	5.06%	4.64%	4.07%	6.81%	6.09%	4/1/1994	7.00%
Retirement Plan for Anson General Hospital	6/30/2017	13.96%	12.37%	6.18%	4.78%	5.75%	4.27%	N/A	N/A	6/30/2007	7.50%
Retirement Plan for Citizens Medical Center	2/28/2018	11.20%	10.86%	7.14%	6.84%	7.13%	6.81%	N/A	N/A	2/29/2008	7.25%
Retirement Plan for Employees of Brownsville Navigation District	12/31/2017	19.23%	18.00%	8.15%	7.10%	N/A	N/A	9.09%	8.07%	3/17/2010	6.17%
Retirement Plan for Guadalupe Regional Medical Center	12/31/2017	15.94%	15.65%	8.31%	8.13%	6.94%	6.68%	N/A	N/A	12/31/2007	7.00%
Retirement Plan for Sweeny Community Hospital	12/31/2017	15.92%	14.04%	8.30%	7.62%	6.93%	6.53%	N/A	N/A	12/31/2007	7.00%
San Antonio Metropolitan Transit Retirement Plan	9/30/2017	14.30%	13.72%	8.67%	8.11%	N/A	N/A	6.70%	N/A	10/31/1997	7.50%
University Health System Pension Plan	12/31/2017	17.63%	16.97%	8.95%	8.42%	6.57%	6.16%	7.51%	7.34%	7/1/1989	7.00%

TEXAS PENSION REVIEW BOARD

ACCOUNTING DISCLOSURES -GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENT NO. 67

TEXAS PENSION REVIEW BOARD

GASB DISCLOSURE INFORMATION

On June 25, 2012, the Governmental Accounting Standards Board (GASB) approved two new standards relating to financial reporting for state and local defined benefit and defined contribution plans — GASB Statement Nos. 67 and 68. According to GASB, the objective of the new Statements was to improve financial reporting by state and local governmental pension plans. GASB 67 applies to retirement systems, and 68 applies to their sponsoring entities.

The most significant change from the GASB Statements was the de-linking of pension accounting and funding. Previous standards used the annual required contribution (ARC) to set the measurement for funding. Statements 67 and 68 eliminated this reporting requirement. The Statements also provide that the unfunded portion of a pension liability meets the definition of a liability, and therefore should be reported on the financial statements of the sponsoring entity and the notes to the financial statements of the pension plan. The liability is reported as the net pension liability (NPL) and is measured as the total pension liability (TPL) net of the pension plan's assets.

The following tables highlight certain accounting disclosures for actuarially funded plans required to be reported by GASB 67. It shows total pension liability (TPL), fiduciary net position (FNP), and net pension liability (NPL), which is the difference between the TPL and FNP. The table also includes the FNP as a percentage of TPL; the preliminary and TPL discount rate; and the sensitivity of NPL to change in discount rate, if the discount rate were one percentage point higher or lower than the TPL discount rate.

Plan (System)	Fiscal Year End	Total Pension Liability (in millions)	Fiduciary Net Position (in millions)	Net Pension Liability (in millions)	FNP as a Percentage of TPL	•	TPL Discount Rate	NPL at Discount Rate -1%	NPL at Discount Rate + 1%
		(TPL)	(FNP)	(NPL)	(% Funded)	_			
		(a)	(b)	(a) - (b)	(b)/(a)				
ERS	8/31/2018	\$47,944.31	\$27,753.33	\$20,190.98	57.89%	7.50%	5.69%	\$26,609.73	\$14,878.32
JRS II	8/31/2018	\$487.77	\$453.38	\$34.39	92.95%	7.50%	7.50%	\$81.92	(\$6.54)
LECOSRF	8/31/2018	\$2,149.92	\$966.83	\$1,183.09	44.97%	7.50%	4.48%	\$1,534.18	\$902.39
TRS	8/31/2018	\$209,611.33	\$154,568.90	\$55,042.43	73.74%	7.25%	6.91%	\$83,072.22	\$32,350.65
TCDRS ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TESRS	8/31/2018	\$137.51	\$115.86	\$21.65	84.26%	7.75%	7.75%	\$43.03	\$7.23
TMRS ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

STATEWIDE PLANS

¹*Plan is an agent multiple-employer defined benefit plan and is not subject to the majority of GASB 67 reporting requirements.*

TEXAS PENSION REVIEW BOARD

GASB DISCLOSURE INFORMATION

MUNICIPAL PLANS

Plan (System)	Fiscal Year End	Total Pension Liability (in millions)	Fiduciary Net Position (in millions)	Net Pension Liability (in millions)	FNP as a Percentage of TPL		TPL Discount Rate	NPL at Discount Rate -1%	NPL at Discount Rate + 1%
		(TPL)	(FNP)	(NPL)	(% Funded)	_			
		(a)	(b)	(a) - (b)	(b)/(a)				
Austin Employees	12/31/2017	\$3,797.82	\$2,650.44	\$1,147.39	69.79%	7.50%	7.50%	\$1,608.63	\$762.47
Austin Fire Fighters	12/31/2017	\$1,038.80	\$953.80	\$85.00	91.81%	7.70%	7.70%	\$189.65	(\$3.09)
Austin Police	12/31/2017	\$1,189.59	\$769.47	\$420.12	64.68%	7.70%	7.70%	\$553.55	\$307.09
Dallas Employees	12/31/2017	\$4,377.84	\$3,612.26	\$765.58	82.51%	7.75%	7.75%	\$1,281.03	\$334.56
Dallas P & F - Combined	12/31/2017	\$4,497.35	\$2,103.35	\$2,394.00	46.76%	7.25%	7.25%	\$2,886.44	\$1,980.92
Dallas P & F - Supplemental	12/31/2017	\$33.67	\$17.81	\$15.87	52.88%	7.25%	7.25%	\$18.83	\$13.32
City of El Paso Employees	8/31/2017	\$976.00	\$776.55	\$199.44	79.56%	7.50%	7.50%	\$314.94	\$103.73
El Paso Firemen	12/31/2017	\$729.33	\$601.79	\$127.54	82.51%	7.75%	7.75%	\$230.82	\$43.89
El Paso Police	12/31/2017	\$1,041.43	\$870.66	\$170.77	83.60%	7.75%	7.75%	\$320.32	\$49.76
Fort Worth Employees	9/30/2017	\$5,354.70	\$2,270.52	\$3,084.18	42.40%	7.75%	5.13%	\$3,917.92	\$2,415.76
Fort Worth Staff Plan	9/30/2017	\$5.70	\$4.53	\$1.17	79.44%	7.75%	7.75%	\$2.13	\$0.39
Galveston Employees	12/31/2017	\$64.06	\$51.55	\$12.51	80.47%	7.25%	7.25%	\$19.62	\$6.46
Galveston Police	12/31/2017	\$52.85	\$20.54	\$32.31	38.87%	7.50%	7.50%	\$38.71	\$26.99
Houston Firefighters	6/30/2018	\$4,815.05	\$4,170.35	\$644.70	86.61%	7.25%	7.25%	\$1,145.88	\$234.69
Houston Municipal	6/30/2018	\$5,113.36	\$2,988.86	\$2,124.49	58.45%	7.00%	7.00%	\$2,686.43	\$1,655.39
Houston Police	6/30/2018	\$6,745.44	\$5,486.61	\$1,258.82	81.34%	7.00%	7.00%	\$2,006.43	\$648.43
San Antonio Fire & Police	12/31/2017	\$3,545.80	\$3,196.53	\$349.27	90.14%	7.25%	7.25%	\$852.39	(\$62.61)

TEXAS PENSION REVIEW BOARD

GASB DISCLOSURE INFORMATION

TLFFRA PLANS

Plan (System)	Fiscal Year End	Total Pension Liability (in millions)	Fiduciary Net Position (in millions)	Net Pension Liability (in millions)	FNP as a Percentage of TPL		TPL Discount Rate	NPL at Discount Rate -1%	NPL at Discount Rate + 1%
		(TPL)	(FNP)	(NPL)	(% Funded)	_			
		(a)	(b)	(a)-(b)	(b)/(a)				
Abilene	9/30/2017	\$107.97	\$57.46	\$50.51	53.21%	8.00%	8.00%	\$61.66	\$41.02
Amarillo	12/31/2017	\$198.51	\$171.85	\$26.67	86.56%	8.00%	8.00%	\$49.98	\$7.07
Atlanta	12/31/2017	\$5.04	\$4.15	\$0.90	82.23%	7.40%	7.40%	\$1.51	\$0.38
Beaumont	12/31/2017	\$194.56	\$115.62	\$78.94	59.42%	8.00%	6.37%	\$96.08	\$64.36
Big Spring	12/31/2017	\$21.38	\$11.68	\$9.70	54.63%	7.75%	7.75%	\$12.49	\$7.39
Brownwood	12/31/2017	\$9.03	\$4.16	\$4.88	46.02%	7.40%	7.40%	\$6.01	\$3.93
Cleburne	12/31/2017	\$34.85	\$22.88	\$11.97	65.65%	7.25%	7.25%	\$15.79	\$8.73
Conroe	12/31/2017	\$44.95	\$25.24	\$19.71	56.14%	7.75%	7.75%	\$25.87	\$14.64
Corpus Christi	12/31/2017	\$235.07	\$148.73	\$86.34	63.27%	7.75%	7.75%	\$111.21	\$65.12
Corsicana	12/31/2017	\$17.42	\$8.97	\$8.45	51.49%	7.00%	7.00%	\$10.77	\$6.25
Denison	12/31/2017	\$23.68	\$17.73	\$5.96	74.85%	7.75%	7.75%	\$8.51	\$3.61
Denton	12/31/2017	\$100.81	\$85.39	\$15.42	84.70%	6.75%	6.75%	\$28.09	\$4.73
Galveston	12/31/2017	\$64.40	\$44.65	\$19.74	69.33%	7.75%	7.75%	\$27.07	\$13.56
Greenville	12/31/2017	\$29.77	\$13.84	\$15.93	46.49%	8.00%	8.00%	\$19.07	\$13.26
Harlingen	9/30/2017	\$49.56	\$31.22	\$18.34	63.00%	7.75%	7.75%	\$24.46	\$13.27
Irving	12/31/2017	\$276.27	\$213.96	\$62.31	77.44%	8.25%	8.25%	\$80.78	\$46.53
Killeen	9/30/2017	\$56.50	\$39.88	\$16.62	70.58%	7.75%	7.75%	\$24.58	\$9.59
Laredo	9/30/2017	\$235.97	\$141.98	\$93.98	60.17%	7.90%	7.90%	\$124.04	\$68.79
Longview	12/31/2017	\$91.22	\$44.35	\$46.87	48.61%	8.00%	8.00%	\$57.34	\$38.04
Lubbock	12/31/2017	\$279.21	\$194.85	\$84.35	69.78%	7.75%	7.75%	\$117.12	\$58.10
Lufkin	12/31/2017	\$34.00	\$16.44	\$17.55	48.37%	7.50%	7.50%	\$21.31	\$14.37
Marshall	12/31/2017	\$19.48	\$8.53	\$10.96	43.76%	7.75%	7.75%	\$13.38	\$8.95
McAllen	9/30/2017	\$75.09	\$49.46	\$25.63	65.86%	7.50%	7.50%	\$39.34	\$21.67
Midland	12/31/2016	\$140.42	\$82.66	\$57.75	58.87%	8.00%	8.00%	\$73.09	\$44.90

TEXAS PENSION REVIEW BOARD

GASB DISCLOSURE INFORMATION

TLFFRA PLANS

Plan (System)	Fiscal Year End	Total Pension Liability (in millions)	Fiduciary Net Position (in millions)	Net Pension Liability (in millions)	FNP as a Percentage of TPL	Preliminary Discount Rate	TPL Discount Rate	NPL at Discount Rate -1%	NPL at Discount Rate + 1%
		(TPL)	(FNP)	(NPL)	(% Funded)	_			
		(a)	(b)	(a)-(b)	(b)/(a)				
Odessa	12/31/2017	\$138.60	\$45.72	\$92.88	32.98%	7.75%	5.32%	\$111.98	\$77.26
Orange	12/31/2017	\$16.63	\$9.02	\$7.60	54.26%	7.75%	7.75%	\$9.30	\$6.13
Paris	12/31/2017	\$15.06	\$4.79	\$10.27	31.81%	7.50%	7.50%	\$11.85	\$8.93
Plainview	12/31/2017	\$16.51	\$6.15	\$10.36	37.27%	7.50%	7.50%	\$12.25	\$8.79
Port Arthur	12/31/2017	\$62.11	\$49.89	\$12.21	80.33%	8.00%	8.00%	\$18.29	\$6.88
San Angelo	12/31/2016	\$101.45	\$60.21	\$41.24	59.34%	7.90%	7.90%	\$53.98	\$30.75
San Benito	9/30/2016	\$5.65	\$2.99	\$2.66	52.88%	7.50%	7.50%	\$3.44	\$2.01
Sweetwater	12/31/2017	\$12.59	\$8.55	\$4.04	67.89%	8.00%	8.00%	\$5.48	\$2.81
Temple	9/30/2017	\$58.70	\$42.70	\$16.00	72.74%	7.75%	7.75%	\$22.75	\$10.32
Texarkana	12/31/2017	\$40.84	\$34.82	\$6.02	85.26%	7.75%	7.75%	\$10.39	\$2.31
Texas City	12/31/2017	\$32.55	\$16.12	\$16.43	49.52%	7.75%	7.75%	\$20.15	\$13.34
The Woodlands	12/31/2017	\$30.26	\$32.29	(\$2.02)	106.68%	7.00%	7.00%	\$3.07	(\$6.13)
Travis County ESD #6	12/31/2017	\$22.33	\$19.69	\$2.64	88.16%	7.00%	7.00%	\$7.44	(\$0.47)
Tyler	12/31/2017	\$91.15	\$70.14	\$21.01	76.94%	7.65%	7.65%	\$30.72	\$12.58
University Park	12/31/2017	\$23.51	\$9.69	\$13.83	41.19%	7.50%	7.50%	\$16.54	\$11.57
Waxahachie	9/30/2017	\$22.42	\$15.82	\$6.60	70.55%	7.00%	7.00%	\$9.59	\$4.14
Weslaco	9/30/2017	\$15.13	\$10.43	\$4.70	68.92%	7.25%	7.25%	\$7.05	\$2.79
Wichita Falls	12/31/2017	\$121.93	\$51.45	\$70.49	42.19%	7.75%	4.83%	\$88.56	\$55.70

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Plan (System)	Fiscal Year End	Total Pension Liability (in millions)	Net Position (in millions)	Net Pension Liability (in millions)	FNP as a Percentage of TPL	Preliminary Discount Rate	TPL Discount Rate	NPL at Discount Rate -1%	NPL at Discount Rate + 1%
		(TPL) (a)	(FNP) (b)	(NPL) (a)-(b)	<u>(% Funded)</u> (b)/(a)				
Anson General Hospital	6/30/2017	\$1.58	\$1.93	(\$0.35)	122.02%	7.50%	7.50%	(\$0.20)	(\$0.48)
Arlington Employees	6/30/2017	\$2.63	\$2.84	(\$0.21)	108.03%	5.00%	5.00%	\$0.05	(\$0.43)
Brazos River Authority	2/28/2018	\$31.15	\$20.43	\$10.71	65.61%	6.50%	6.50%	\$13.85	\$8.03
Capital MTA - Administrative	12/31/2017	\$45.16	\$30.01	\$15.15	66.45%	6.75%	5.48%	\$22.38	\$9.23
Capital MTA - Bargaining Unit	12/31/2017	\$62.24	\$33.20	\$29.04	53.33%	7.25%	7.25%	\$34.83	\$24.10
Citizens Medical Center	2/28/2018	\$95.70	\$105.54	(\$9.85)	110.28%	7.25%	7.25%	\$3.52	(\$20.78)
Colorado River MWD	12/31/2017	\$10.41	\$10.06	\$0.35	96.64%	6.25%	6.25%	\$1.26	(\$0.44)
Corpus Christi RTA	12/31/2017	\$37.07	\$36.44	\$0.63	98.30%	7.50%	7.50%	\$4.92	(\$2.99)
CPS Energy	12/31/2017	\$1,933.84	\$1,627.84	\$306.00	84.17%	7.25%	7.25%	\$529.38	\$88.89
Dallas County HD	12/31/2017	\$1,340.18	\$971.85	\$368.33	72.51%	7.00%	7.00%	\$542.28	\$224.38
DFW Airport Board DPS	12/31/2017	\$231.57	\$184.75	\$46.81	79.78%	7.25%	7.25%	\$81.89	\$18.30
DFW Airport Board	12/31/2017	\$584.40	\$494.84	\$89.56	84.67%	7.25%	7.25%	\$171.07	\$22.25
DART Employees	9/30/2017	\$225.25	\$180.36	\$44.90	80.06%	6.75%	6.75%	\$67.61	\$25.29
El Paso F & P Staff	12/31/2017	\$0.17	\$0.42	(\$0.25)	251.59%	7.75%	7.75%	(\$0.24)	(\$0.26)
Employees of Brownsville Nav. Dist. ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galveston Wharves	12/31/2017	\$16.11	\$13.74	\$2.37	85.31%	7.25%	7.25%	\$3.95	\$0.93
Guadalupe-Blanco River Authority	12/31/2017	\$35.64	\$30.64	\$5.00	85.97%	7.00%	7.00%	\$8.87	\$1.68
Guadalupe Regional Medical Center	12/31/2017	\$69.71	\$71.39	(\$1.68)	102.41%	7.25%	7.25%	\$7.72	(\$9.40)
Harris County HD	12/31/2017	\$866.81	\$686.31	\$180.49	79.17%	7.00%	7.00%	\$282.22	\$93.98
Houston MTA Non-Union	12/31/2017	\$260.94	\$176.02	\$84.92	67.45%	6.75%	6.75%	\$108.87	\$64.52
Houston MTA Workers Union	12/31/2017	\$387.01	\$277.36	\$109.65	71.66%	6.75%	6.75%	\$152.05	\$73.70
Irving Supplemental	12/31/2017	\$83.41	\$59.74	\$23.67	71.62%	6.75%	6.75%	\$35.20	\$14.19
JPS - Tarrant County HD	9/30/2017	\$254.32	\$257.04	(\$2.72)	101.07%	7.25%	7.25%	\$27.72	(\$27.96)

¹*The Retirement Plan for Employees of Brownsville Navigation District is registered with the PRB but has yet to submit an audited financial report.*

TEXAS PENSION REVIEW BOARD

GASB DISCLOSURE INFORMATION

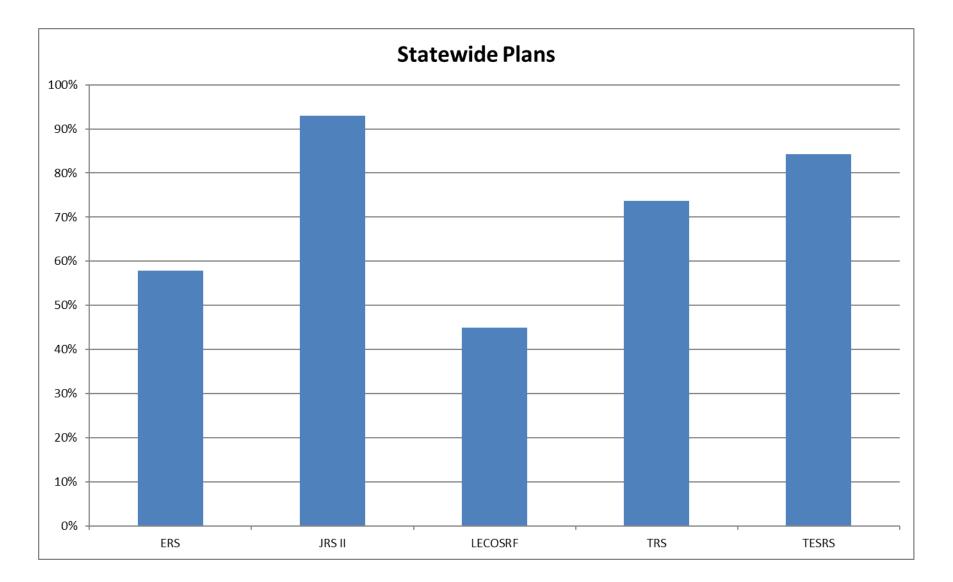
CHAPTER 810 PLANS

Dia	E'mal Vara	Total Pension	•	Net Pension	FNP as a	Preliminary	TPL Dimension	NDL + D'	NPL at
Plan (System)	Fiscal Year End	Liability (in millions)	Net Position (in millions)	Liability (in millions)	Percentage of TPL	Discount Rate	Discount Rate	Rate -1%	tDiscount Rate + 1%
		(TPL)	(FNP)	(NPL)	(% Funded)				
		(a)	(b)	(a)-(b)	(b)/(a)				
Lower Colorado River Authority	12/31/2017	\$582.91	\$424.81	\$158.10	72.87%	7.25%	7.25%	\$215.46	\$108.76
Nacogdoches County HD	6/30/2016	\$54.03	\$43.66	\$10.37	80.80%	7.25%	7.25%	\$17.08	\$4.78
Northeast Medical Center Hospital	6/30/2017	\$11.54	\$9.58	\$1.96	82.98%	7.50%	7.40%	\$2.91	\$1.14
Northwest Texas Healthcare System	9/30/2017	\$27.66	\$21.80	\$5.86	78.80%	7.50%	7.50%	\$8.24	\$3.82
Plano Retirement Security	12/31/2017	\$142.91	\$148.52	(\$5.61)	103.92%	7.00%	7.00%	\$15.73	(\$23.08)
Port of Houston Authority	7/31/2016	\$176.78	\$163.31	\$13.47	92.37%	7.00%	7.00%	\$34.45	(\$4.16)
Refugio County Memorial HD	10/31/2017	\$2.01	\$2.23	(\$0.22)	111.06%	7.00%	7.00%	\$0.04	(\$0.43)
San Antonio Metropolitan Transit	9/30/2017	\$404.78	\$275.33	\$129.45	68.02%	7.50%	7.50%	\$172.13	\$92.59
Sweeny Community Hospital	12/31/2017	\$3.70	\$3.58	\$0.12	96.68%	7.25%	7.25%	\$0.45	(\$0.17)
University Health System	12/31/2017	\$491.92	\$363.78	\$128.14	73.95%	7.00%	7.00%	\$186.40	\$73.11

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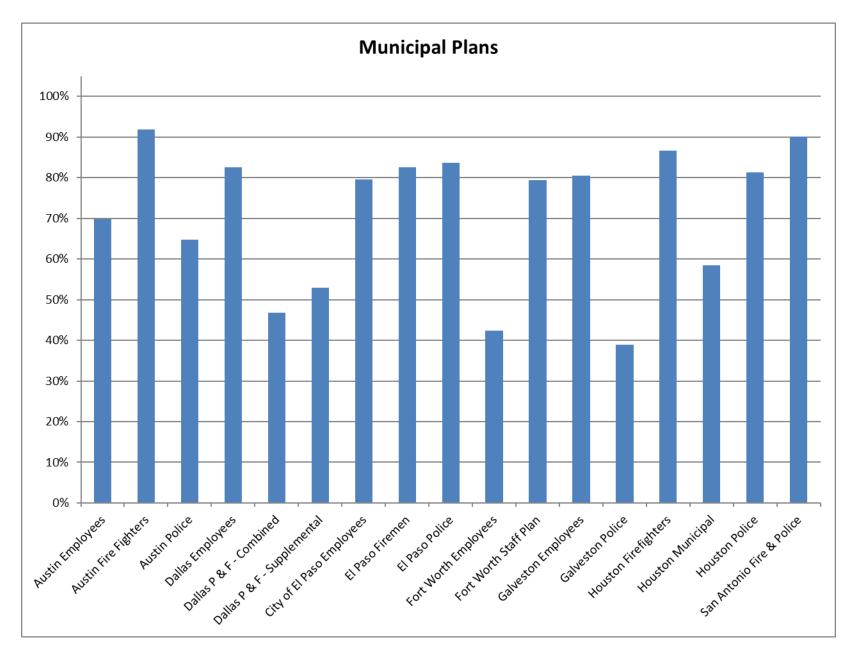
FIDUCIARY NET POSITION AS A PERCENT OF TOTAL PENSION LIABILITY

The following column charts provide the fiduciary net position as a percent of total pension liability, by system type.



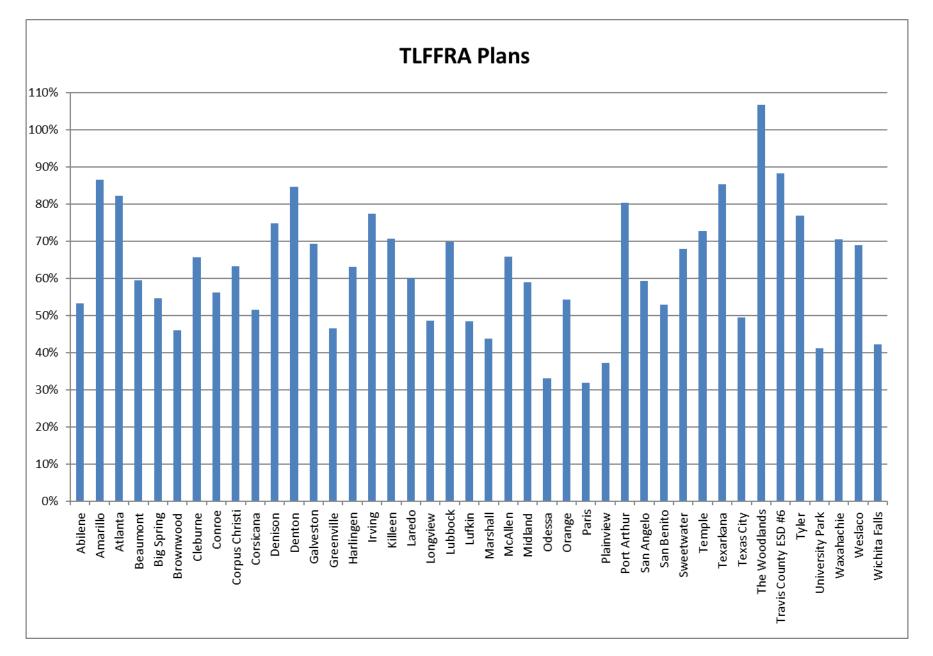
TEXAS PENSION REVIEW BOARD

FIDUCIARY NET POSITION AS A PERCENT OF TOTAL PENSION LIABILITY



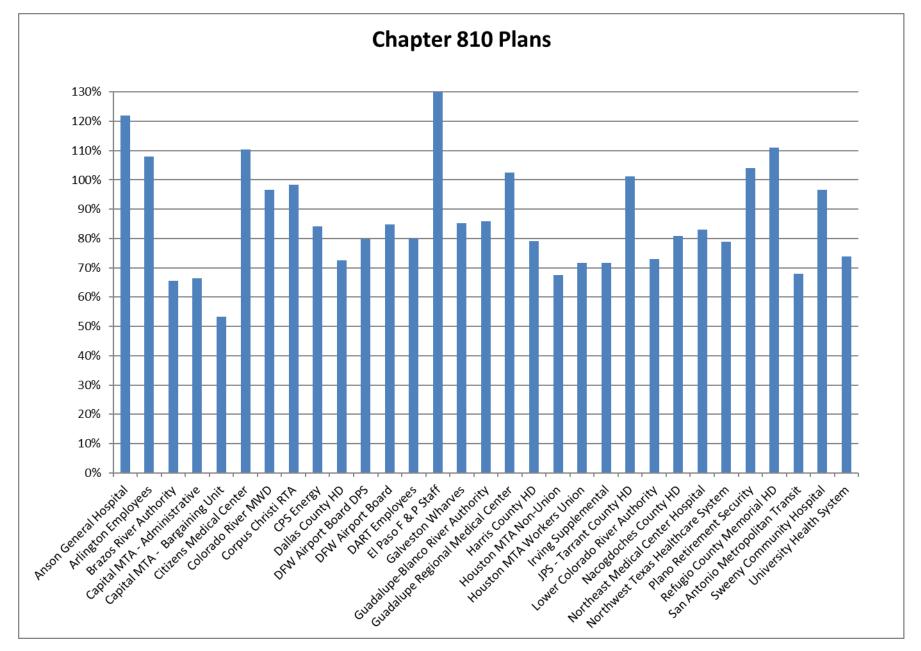
TEXAS PENSION REVIEW BOARD

FIDUCIARY NET POSITION AS A PERCENT OF TOTAL PENSION LIABILITY



TEXAS PENSION REVIEW BOARD

FIDUCIARY NET POSITION AS A PERCENT OF TOTAL PENSION LIABILITY



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DROP BALANCE AS A PERCENT OF ASSETS

This table shows the retirement systems that the PRB has identified as having a deferred retirement option plan (DROP), along with a corresponding DROP balance, as reported by systems in their GASB disclosures. This table also includes the plan's fiduciary net position (FNP), as reported by the plan, and the DROP balance as a percent of the FNP, which is calculated by the PRB.

Plan Name	Effective Date	DROP Balance (millions)	Fiduciary Net Position (FNP)	DROP Balance as a Percent of FNP
Abilene Firemen's Relief & Retirement Fund	9/30/2017	\$0.20	\$57.46	0.34%
Austin Fire Fighters Relief & Retirement Fund	12/31/2017	\$86.95	\$953.80	9.12%
Austin Police Retirement System	12/31/2017	\$40.84	\$769.47	5.31%
Beaumont Firemen's Relief & Retirement Fund	12/31/2017	\$33.92	\$115.62	29.34%
Big Spring Firemen's Relief & Retirement Fund	12/31/2017	\$0.00	\$11.68	0.00%
Cleburne Firemen's Relief & Retirement Fund	12/31/2017	\$0.74	\$22.88	3.22%
Conroe Fire Fighters' Retirement Fund	12/31/2017	\$1.07	\$25.24	4.25%
Dallas Police & Fire Pension System-Combined Plan	12/31/2017	\$243.12	\$2,103.35	11.56%
Dallas Police & Fire Pension System-Supplemental	12/31/2017	\$0.59	\$17.81	3.31%
El Paso Firemen's Pension Fund ¹	12/31/2017	\$3.75	\$601.79	0%
El Paso Police Pension Fund ¹	12/31/2017	\$10.76	\$870.66	0%
Fort Worth Employees' Retirement Fund	9/30/2017	\$115.10	\$2,270.52	5.07%
Harlingen Firemen's Relief & Retirement Fund	9/30/2017	\$0.54	\$31.22	1.74%
Houston Firefighters' Relief & Retirement Fund	6/30/2018	\$1,256.38	\$4,170.35	30.13%
Houston Municipal Employees Pension System	6/30/2018	\$570.90	\$2,988.86	19.10%
Houston Police Officers' Pension System	6/30/2018	\$1,837.79	\$5,486.61	33.50%
Irving Firemen's Relief & Retirement Fund	12/31/2017	\$55.45	\$213.96	25.92%
Longview Firemen's Relief & Retirement Fund	12/31/2017	\$0.00	\$44.35	0.00%
Lufkin Firemen's Relief & Retirement Fund	12/31/2017	\$0.12	\$16.44	0.72%
Marshall Firemen's Relief & Retirement Fund	12/31/2017	\$0.38	\$8.53	4.40%
Midland Firemen's Relief & Retirement Fund	12/31/2016	\$0.26	\$82.66	0.32%
Odessa Firemen's Relief & Retirement Fund	12/31/2017	\$2.08	\$45.72	4.54%
San Angelo Firemen's Relief & Retirement Fund	12/31/2016	\$0.00	\$60.21	0.00%
Teacher Retirement System of Texas	8/31/2018	\$10.00	\$154,568.90	0.01%

¹The Plan has a Forward DROP, but balances are excluded from reported FNP.

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BENEFITS

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BENEFITS

Actuarially funded defined benefit retirement systems offer participants a specified monthly benefit at retirement. The level of benefits an employee will receive at retirement is derived from a formula based on years of service, salary, and a multiplier factor. The costs of benefit changes, including multiplier increases and granting of COLAs, should be appropriately valued prior to adoption to ensure that additional costs will be funded adequately and consistently.

The benefit summary tables contained in this report compare current retirement benefit formulas and retirement eligibility criteria for actuarially funded retirement systems in Texas. Some systems have multiple tiers to cover different employee groups within these systems. Those groups are further broken down in the Eligible Members column which provides descriptions of members that fall within each tier.

This section also includes additional tables to further expand upon any retirement benefit options, such as a deferred retirement option plan (DROP) and a post retirement option plan (PROP). The additional DROP tables highlight the different features of a DROP program; such as whether or not interest, cost-of-living adjustments, or employee contributions are credited to the account.

RETIREMENT ELIGIBILITY

Employees must attain a certain age and/or years of credited service (YCS) in the retirement plan to become eligible for full retirement benefits. If a plan has no additional criteria listed under Age/YCS, employees are required to meet both the age and YCS minimums to receive full benefits. Alternatively, some plans use the "Rule of X" method, where an employee becomes eligible for retirement when their age plus their years of service equal "X." For Texas plans, the minimum age for retirement eligibility ranges from 45 to 65, and the YCS requirements range from 5 to 30. Plans using the "Rule of X" method have requirements for the value of X ranging from 70 to 85.

VESTING

Vesting is the conveyance of a legal, non-forfeitable right to a deferred pension. Pension plans grant vesting upon completion of a specified service requirement. Vesting may occur gradually according to a schedule, or it may occur all at once (i.e. "cliff vesting").

FINAL AVERAGE SALARY

Calculations for final average salary vary from plan to plan. In most cases, the final average salary is calculated based on a three, four, or five year average of an employee's salary. Some plans use the employee's highest earning years to calculate this average, and others use the employee's final years before retirement.

BENEFIT FORMULA

A majority of actuarially funded retirement plans use a formula to calculate retirement benefits. This formula typically takes into account an employee's years of credited service (YCS), final average salary, and a pre-established benefit multiplier:

YCS x Benefit Multiplier x Final Average Salary = Annual Retirement Annuity

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The benefit multiplier determines the percentage of final average salary an employee will earn as a retirement annuity for each year of service. For Texas actuarially funded plans using the above benefit formula, the benefit multiplier currently ranges from 0.7 percent to 3.95 percent.

Some plans use a variation of the above formula that incorporates an average YCS into the benefit multiplier, instead of calculating based on the employee's individual YCS. This formula variation is expressed as:

Benefit Multiplier x Final Average Salary = Annual Retirement Annuity

For Texas plans using this formula variation, the benefit multiplier currently ranges from 40 percent to 80 percent.

Other plans do not use a standard formula, and instead award benefits based on a cash balance approach or a set dollar amount.

COST OF LIVING ADJUSTMENTS

Cost-of-living adjustments (COLAs) can be automatic or ad hoc. Ad hoc COLAs require a governing body's approval before they are granted, whereas automatic COLAs do not need any action; they are given annually.

Plans offering an automatic COLA typically base their COLA on either a set percentage or on the change in the Consumer Price Index (CPI). A majority of Texas plans do not offer an automatic COLA, but reserve the right to grant an ad hoc COLA if certain conditions are met. Some plans provide a contingent COLA based on a target investment return or amortization period.

A COLA can be simple or compounded. Simple COLAs are calculated based on the original benefit; compounded COLAs are calculated based on the original benefit plus any prior benefit increases, including prior year COLAs.

In Texas, 13 actuarially funded systems currently offer an automatic COLA as part of the benefits package for current hires; 18 actuarially funded systems currently offer an automatic COLA for at least one of their benefit tiers.

DEFERRED RETIREMENT OPTION PLANS

Some plans offer members a Deferred Retirement Option Plan (DROP). DROPs are additional, optional benefits that members may elect to participate in upon reaching eligibility. The primary feature of a DROP is that participants are treated as retired from the plan on a date prior to the date they actually separate service.

Forward DROPs—known as Forward, Basic, or DROP—work as follows: a member, upon reaching retirement eligibility, chooses to continue working and enter the DROP. The member's monthly retirement benefit is placed in a designated account until the member ceases to work for the plan sponsor, at which time the account balance is paid in accordance with the terms of the plan.

In lieu of or in addition to a Forward DROP, several plans offer a variation called a Retro DROP-also known as Back or Reverse DROP. A Retro DROP allows

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an employee who has continued to work past their retirement eligibility date to retroactively retire and receive credit for the benefits they would have been paid had they retired earlier.

DROP provisions can vary significantly from plan to plan for both Forward and Retro variations. Some offer interest credits on the account balance which might be a guaranteed rate or could vary based on actual fund returns, while some do not offer any interest credit. Some Texas public retirement systems do not have a time limit on Forward DROP participation, while many limit participation in a Forward DROP anywhere from 3 to 13 years and a Retro DROP from 2 to 7 years. A few DROPs offer a COLA. Participant contributions paid during the DROP participation period may be credited to their DROP account balance or credited to the fund.

A few plans also offer a DROP program specifically for retirees. A Post Retirement Option Plan (PROP) may allow retirees the option to deposit all, or a portion of, their monthly annuity or other taxable benefits issued by the Fund, to their PROP account. If they were a member of the DROP program, this may include their existing DROP account balance.

A Partial Lump Sum Option Plan (PLOP) allows the retiree to opt to receive a portion of their retirement benefit as an immediate payout. 10 actuarially funded Texas public retirement plans offer a PLOP for at least one of their tiers.

SOCIAL SECURITY PARTICIPATION

Public retirement plans that meet certain minimum requirements may, but are not required to, participate in Social Security. In 2011, the PRB conducted a survey to ascertain what percentage of Texas public retirement systems participate in Social Security, and found that within the 77 percent response sample, almost 60 percent of civilian systems and 87 percent of public safety systems did not participate in Social Security.

TRENDS

In recent years, many actuarially funded plans in Texas have enacted modifications to their benefit structures. These changes have been made to strengthen plan funding, and to respond to the demands of a changing workforce. Any change made by a plan should be adequately valued prior to adoption. Some modifications made by Texas plans include:

- Creating new tiers for new hires with lower benefit multipliers;
- Increasing retirement eligibility ages;
- Increasing both employer and employee contributions;
- Eliminating or modifying COLAs;
- Eliminating or modifying DROPs;
- Including more years in the final average salary calculation, thereby reducing the possibility that benefits will be calculated only based on a few abnormally high-salary years preceding retirement.

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BENEFITS

THE 85TH LEGISLATURE REVIEW – BENEFIT CHANGES

Houston

In 2017, the 85th Texas Legislature enacted Senate Bill 2190, which altered the benefits and funding mechanisms for all three City of Houston pension plans – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Municipal Employees' Pension System (HMEPS), and Houston Police Officers Pension System (HPOPS). SB 2190 increased the employee contributions for all Houston System plans. All Houston systems will utilize a corridor mechanism to determine employer contributions. Changes were made to COLA and DROP for all Houston System plans, and no new funds may be added to the PROP accounts of HPOPS and HFRRF. Should the funded ratio for HFRRF and HPOPS plans fall under 65% any time after June 20, 2021, their boards will be required to close the existing plan to new members and establish a separate cash balance plan for new hires. If the funded ratio for HMEPS falls below 60% any time after June 30, 2027, their board will be required to close the existing plan to new members and establish a separate cash balance plan for new hires. If the funded ratio for new hires as well.

Dallas Police and Fire Pension System

Additionally, the 85th Texas Legislature enacted House Bill 3158 which altered the funding structure and benefits of the Dallas Police and Fire Pension System. The bill made several changes to member benefits, including changing the multiplier for all members to 2.5% for future service, increasing the normal retirement age to 58 years for all members, lowering the maximum retirement annuity from 96% to 90% of final average salary, and changing the calculation of final average salary prospectively from the highest 36-month period for Tiers 1 and 2 to highest 60-month period for service after September 1, 2017.

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BENEFIT SUMMARY FOR ACTUARIALLY FUNDED PUBLIC RETIREMENT SYSTEMS—STATEWIDE PLANS

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Employees Retirement System of	Hired before	60/5 or Rule of 80 with		Years of Credited Service x				
Texas Employee Class (Tier 1)	9/1/2009	5 YCS	5 YCS	2.3% x Final Average Salary	Highest 36 months	None	None	Yes
Employees Retirement System of	Hired btwn 9/1/2009 & 9/1/2013	65/10 or Rule of 80 with 5 YCS and with unreduced benefits at age 60	10 YCS	Years of Credited Service x 2.3% x Final Average Salary	Highest 48 months	None	None	Yes
	Hired on/after 9/1/2013	65/10 or Rule of 80 with 5 YCS and with unreduced benefits at age 62	10 YCS	Years of Credited Service x 2.3% x Final Average Salary	Highest 60 months	None	None	Yes
Employees Retirement System of				Years of Credited Service x	Current State salary	1		
Texas (Elected Class)	All	60/8 or 50/12	8 YCS	2.3% x Final Average Salary	of a district judge	None ¹	None	Yes
Judicial Retirement System of Texas Plan Two	Commenced service after 8/31/1985	65/10 currently presiding or 65/12 or 20 YCS or Rule of 70 including 12 YCS on appellate court	12 YCS	50% x Final Average Salary + 10% if retired within one year of leaving office and YCS x 2.3% X FAS for years after reaching Rule of 70	Final Salary for the last position from which the member was elected or appointed	None	None	Yes
Law Enforcement & Custodial Officer Supplemental Retirement Fund (Tier 1)	Hired before 9/1/2009	20 YCS with unreduced benefits at age 50 or Rule of 80	20 YCS	Years of Credited Service x 2.8% x Final Average Salary	Highest 36 months	None	None	Yes
Officer Supplemental Retirement	Hired btwn 9/1/2009 & 9/1/2013	20 YCS with unreduced benefits at age 55 or Rule of 80	20 YCS	Years of Credited Service x 2.8% x Final Average Salary	Highest 48 months	None	None	Yes
Law Enforcement & Custodial Officer Supplemental Retirement Fund (Tier 3)	Hired on/after 9/1/2013	20 YCS with unreduced benefits at age 57 or Rule of 80	20 YCS	Years of Credited Service x 2.8% x Final Average Salary	Highest 60 months	None	None	Yes
	Most recently hired before 9/1/20007 and met 2005 grandfathering			Years of Credited Service x			DROP closed	
Texas (Tier 1) ²	reqs	65/5 or Rule of 80	5 YCS	2.3% x Final Average Salary	Highest 3 years	None	12/31/2005	Varies

¹*Retirees of the Elected Class of ERS members receive an increase in their annuity payment when the current salary of a district judge is increased. Future benefit payments are recalculated based on the new salary.*

²To satisfy 2005 grandfathering requirements, one of the following must be met prior to 9/1/2005: at least 50 years old OR age and YCS total at least 70 years OR at least 25 YCS.

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BENEFIT SUMMARY FOR ACTUARIALLY FUNDED PUBLIC RETIREMENT SYSTEMS—STATEWIDE PLANS

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
	Most recently hired before 9/1/2007							
	.	65/5 or Rule of		Years of Credited Service x 2.3% x	Highest 5			
System of Texas (Tier 2)	reqs ¹	80	5 YCS	Final Average Salary	years	None	None	Varies
		65/5 or Rule of						
		80 with >= 60		Years of Credited Service x 2.3% x	Highest 5	N	News	\ /
	not meet 2005 grandfathering reqs ¹	/	5 YCS	Final Average Salary	years	None	None	Varies
		65/5 or Rule of						
		80 with >= 60		Years of Credited Service x 2.3% x	Highest 3			
-	met 2005 grandfathering reqs ¹	years	5 YCS	Final Average Salary	years	None	None	Varies
	Most recently hired after 8/31/2014;							
	or with < 5 YCS as of 8/31/2014; or							
		65/5 or Rule of						
		80 with >= 62		Years of Credited Service x 2.3% x	Highest 5			
System of Texas (Tier 5)	2005 grandfathering reqs ¹	years	5 YCS	Final Average Salary	years	None	None	Varies
	Most recently hired after 8/31/2014 or							
	with < 5 YCS as of 8/31/2014 or							
	withdrew contributions and rehired	65/5 or Rule of						
Teacher Retirement	after 8/31/2014 and met 2005	80 with >= 62		Years of Credited Service x 2.3% x	Highest 3			
System of Texas (Tier 6)	grandfathering reqs ¹	years	5 YCS	Final Average Salary	years	None	None	Varies
		Varies (60 with 5,		Lifetime Monthly Benefit based on				
		8 or 10 year		employee's account balance -				
		vesting, Rule of	Varies by	Employee contribution grown at 7%				
Texas County & District		75 or 80, or 20 or	plan: 5, 8	compounded annually, matched at a				
Retirement System	All	30 YCS)	or 10 YCS	specified percent by the employer	N/A	None	None	Varies
Texas Emergency			Graded	(6 x Avg. Monthly Contribution x				
Services Retirement			100% at	Vested %) x 1.062(t) where (t) =				
System	All	55/15	15 YCS	YCS>15	N/A	None	None	No
				Lifetime Monthly Benefit based on				
				employee's account balance -				
				Employee contributions with 5%				
		Choice of 60/5,	Varies by	annual interest plus city matching				
Texas Municipal				funds and other credits as may be				
Retirement System	АШ			granted by the employer.	N/A	Optional	None	Varies

¹To satisfy 2005 grandfathering requirements, one of the following must be met prior to 9/1/2005: at least 50 years old OR age and YCS total at least 70 years OR at least 25 YCS.

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BENEFIT SUMMARY FOR ACTUARIALLY FUNDED PUBLIC RETIREMENT SYSTEMS-MUNICIPAL PLANS

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Austin Employees' Retirement System (Group A)	Hired before 1/1/2012	55/20 or 62 with no YCS or 23 YCS		Years of Credited Service x 3.0% x Final Average Salary	Highest 36 months within final 10 years	Ad hoc when recommended and certified as financially sustainable by the actuary. Must be recommended by the City Manager, authorized by the Board, and approved by the City Council.	Retro DROP	Yes
Austin Employees' Retirement System (Group B)	Hired on/ after 1/1/2012	62/30 or 65/5		Years of Credited Service x 2.5% x Final Average Salary	Highest 36 months within final 10 years	Ad hoc when recommended and certified as financially sustainable by the actuary. Must be recommended by the City Manager, authorized by the Board, and approved by the City Council.	Retro DROP	Yes
Austin Fire Fighters Relief & Retirement Fund	All	50/10 or 25 YCS		Years of Credited Service x 3.3% x Final Average Salary	Highest 36 months	Determined by the actuary if providing a COLA will not impair financial stability of the Fund.	Retro DROP	No
Austin Police Retirement System	All	55/20 or 23 YCS or 62 years		Years of Credited Service x 3.2% x Final Average Salary	Highest 36 months within final 10 years	a COLA will not impair financial stability	Forward DROP, PROP and Retro DROP	Yes
Dallas Employees' Retirement Fund (Tier A)	Hired before 1/1/2017	50/30 or 60 years or Rule of 78		Years of Credited Service x 2.75% x Final Average Salary	Highest 3 years	Greater of: % change or annual avg change in CPI, max 5%	None	No
Dallas Employees' Retirement Fund (Tier B)	Hired on/ after 1/1/2017	40 YCS or 65/5 or Rule of 80		Years of Credited Service x 2.5% x Final Average Salary	Highest 5 years	Greater of: % change or annual avg change in CPI, max 3%	None	No
Dallas Police & Fire Pension System- Combined Plan (Group A Option 1)	Hired before 3/1/1973	50/20		50% Base Pay + 50% Longevity Pay + 50% Incentive Pay; min \$2,200	NA	4% simple	Forward and Retiree DROP	No
Dallas Police & Fire Pension System-	Hired before 3/1/1973			Years of Credited Service < 32 x 3.0% x Base Pay + 50% Longevity Pay + 50% Incentive Pay	NA	Board may grant an ad hoc COLA based on the actual market return over the prior 5 yrs - 5%; min 0%, max 4%; only if, after granting COLA, the market value funded ratio is > = 70%. Begins at age	Forward and Retiree DROP	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
,	3/1/1973 &	50/5 or 20 YCS	5 YCS	Final Average Salary; max	Before 9/1/2017: Highest consecutive 36 months. On/after 9/1/2017: Highest consecutive 60 months.		Forward and Retiree DROP	No
		58/5 or 20 YCS	5 YCS	Years of Credited Service x 2.5% x Final Average Salary; max 90%	Highest consecutive 60 months		Forward and Retiree DROP	No
Dallas Police & Fire Pension	Group B members who hold a permanent rank above the highest civil	50/5 (32 YCS	5 YCS	(Group B Benefit) - (Benefit that would be paid under combined plan if computation pay included supplemental			Forward and	No
	Participant before 9/1/2011	55/10 or 60/7 or 30 YCS	7 YCS	Years of Credited Service x 2.50% x Final Average Salary	months or final year or final month	None	None	Yes
	Participant on/ after 9/1/2011	60/7 or 35 YCS	7 YCS	Years of Credited Service x 2.25% x Final Average Salary Years of Credited Service x	Final 36 months	None 3% compound (begins at	None	Yes
	Hired before 6/30/2007	45/20	10 YCS		Highest consecutive 36 months	age 60, or 5 years post-	Retro DROP	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
					Highest			
El Paso Firemen's	Hired on/after			Years of Credited Service x	consecutive 36			
Pension Fund (Tier 2)	6/30/2007	45/20	10 YCS	2.5% x Final Average Salary	months	None	Retro DROP	No
					Highest			
	Hired before			Years of Credited Service x	consecutive 36	3% compound (begins at age 60,		
Fund (Base Plan)	6/30/2007	45/20	10 YCS	2.75% x Final Average Salary	months	or 2 years post-retirement)	Retro DROP	No
					Highest			
El Paso Police Pension	Hired on/after			Years of Credited Service x	consecutive 36			
Fund (Tier 2)	6/30/2007	45/20	10 YCS	2.5% x Final Average Salary	months	None	Retro DROP	No
				(Years of Credited Service	Before			
				before 10/1/2013 x 3.0% x	10/1/2013:	Guaranteed 2% for benefits		
Fort Worth Employees'				Final Average Salary) + (Years	highest 3 years;	accrued before 10/1/2013;		
Retirement Fund	Civilian - Hired			of Credited Service on/after	On/after	conditional ad hoc for benefits		
(Group I - General	before	65/5 or Rule		10/1/2013 x 2.5% x Final	10/1/2013:	after 10/1/2013, based on amort		
Employees (Tier I))	7/1/2011	of 80	5 YCS	Average Salary)	highest 5 years	period, min 0%; max 4%	Forward DROP	No
Fort Worth Employees'								
Retirement Fund	Civilian - Hired							
(Group II - General	on/after	65/5 or Rule		Years of Credited Service x				
Employees (Tier II))	7/1/2011	of 80 or 55/5	5 YCS	2.5% x Final Average Salary	Highest 5 years	None	Forward DROP	No
				(Years of Credited Service	Before			
				before 10/1/2013 x 3.0% x	10/1/2013:	Guaranteed 2% for benefits		
Fort Worth Employees'				Final Average Salary) + (Years	highest 3 years;	accrued before 10/1/2013;		
Retirement Fund	Police - Hired	65/5 or Rule		of Credited Service on/after	On/after	conditional ad hoc for benefits		
(Group III - Police	before	of 80 or 25		10/1/2013 x 2.5% x Final	10/1/2013:	after 10/1/2013, based on amort		
(Tier I))	1/1/2013	YCS		Average Salary)	highest 5 years	period, min 0%; max 4%	Forward DROP	No
Fort Worth Employees'			5 · •••					
Retirement Fund	Police - Hired	65/5 or Rule						
(Group IV - Police (Tier		of 80 YCS or		Years of Credited Service x				
II))	1/1/2013	25 YCS		2.5% x Final Average Salary	Highest 5 years	None	Forward DROP	No
11))	1/1/2015	23103	5105	(Years of Credited Service	Before	None		
				before 1/10/2015 x 3.0% x	1/10/2015:	Guaranteed 2% for benefits		
Fort Worth Employees'				Final Average Salary)+ (Years	highest 3 years;	accrued before 10/1/2015;		
Retirement Fund	Firefighter -			of Credited Service on after	on/after	conditional ad hoc for benefits		
	Hired before	65/5 or Rule		1/10/2015 x 2.5% x Final	1/10/2015:	after 10/1/2015, based on amort		
(Tier I))	1/10/2015	of 80		Average Salary)	highest 5 years	period, min 0%; max 4%	Forward DROP	No
	1/10/2013	00 00	5105	Average Jaiary)	ingliest 5 years	penou, mm 070, mdx 470		NU UNI

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Fort Worth Employees' Retirement Fund (Group VI - Firefighters (Tier II))		65/5 or Rule of 80		Years of Credited Service x 2.5% x Final Average Salary	Highest 5 years	None	Forward DROP	No
Fort Worth Employees' Retirement Fund Staff Plan	All	65/5 or Rule of 80	5 YCS	3.0% compensation base x YCS		Ad hoc for vested/terminated members before 2/24/2016. Amort period <= 18 yrs: 4%; 18.1-24 yrs: 3%; 24.1-28 yrs: 2%; 28+yrs: none.	Forward DROP	No
Galveston Employees' Retirement Fund	All	65/10		Years of Credited Service x 2.25%	Highest 60 months		None	Yes
Retirement Plan for	Members with >= 15 YCS as of 1/1/2006	45/20 or 65 years or 25 YCS		Years of Credited Service x 2.11% x Final Average Salary	Final 60 months	None	None	Yes
Retirement Plan for	Members with < 15 YCS as of 1/1/2006	years or 25	5 YCS	Years of Credited Service x 2.11% x Final Average Salary	Final 60 months	None	None	Yes
Houston Firefighter's Relief & Retirement Fund (Tier 1)	Hired before 7/1/17	20 YCS		(Member's accrued benefit as of 7/1/17) + (2.75% x Final Average Salary x Years of Credited Service on/after 7/1/17 < = 20) + (2% x Final Average Salary x Years of Credited Service on/after 7/1/17 > 20)	Highest 78 pay		and Retro DROP. PROP	No
Houston Firefighter's Relief & Retirement Fund				(2.25% x Final Average Salary x Years of Credited Service < = 20) + (2% x Final Average Salary x		100% of 5-yr smoothed return - 4.75%; min 0%, max 4%. Beginning at age 55 with a 3-yr freeze on COLAs for members under 70 yrs until 2021. COLA for FY 2018 and 2019 = 100% of 5-yr smoothed return - 5%.	None	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
	Hired before							
		62/5 or Rule		(Accrued benefit before				
	9/1/1999 &	of 75 with > =		1/1/2005) + Years of Credited				
	1/1/2008, or former			Service after 1/1/2005 x 2.50%		50% of rolling 5-year net return		
-	member of Group B			(First 20 YCS) then 3.25% (>20	Highest 78	minus 5%. Min 0%, Max 2%.		
	or C who elected to			YCS) x Final Average Salary; max	biweekly pay		Forward	
System (Group A)	join Group A		5 YCS	90% of FAS	periods	active employees under age 62.	DROP	Yes
		62/5 or Rule		(Accrued benefit before				
	Hired btwn	of 75 with > =		1/1/2005) + Years of Credited				
	9/1/1981 &	50 years or		Service after 1/1/2005 x 1.75%		50% of rolling 5-year net return		
	9/1/1999 and did	70 if met Rule		(First 10 YCS) then 2.0% (10 to 20	-	minus 5%. Min 0%, Max 2%.		
	not elect to become			YCS) then 2.5% (>20 YCS) x Final	biweekly pay		Forward	
System (Group B)	a Group A member	1/1/2005	5 YCS	Average Salary; max 90% of FAS	periods	active employees under age 62.	DROP	Yes
				Years of Credited Service x 1.80%				
Houston Municipal				(First 25 YCS) then 1.0% (>25 YCS)	Highest 78			
Employees Pension	Hired on/after			x Final Average Salary; max 90%	biweekly pay	50% of rolling 5-year net return		
System (Group D)	1/1/2008	62/5	5 YCS	of FAS	periods	minus 5%. Min 0%, Max 2%.	None	Yes
						100% of 5-yr smoothed return -		
Houston Police						5%; min 0%, max 4%. Beginning	Forward	
Officers Pension				Years of Credited Service x 2.75%			DROP and	
System (Prior to	Hired before	20 YCS or		(First 20 YCS) then 2% (> 20 YCS)	Final 78 biweekly	COLAs for members under 70	Retro DROP.	
10/9/2004)	10/9/2004	60/10	20 YCS	x Final Average Salary	pay periods	yrs until 2021.	PROP option.	No
						100% of 5-yr smoothed return -		
Houston Police						5%; min 0%, max 4%. Beginning		
Officers Pension				Years of Credited Service x 2.25%			Partial Lump	
System (After	Hired on/after			(First 20 YCS) then 2.0% (>20 YCS)	Final 78 biweekly	.	Sum Option	
	10/9/2004	Rule of 70	20 YCS	x Final Average Salary	pay periods	yrs until 2021.	offered	No
,					. , .	,		
				Years of Credited Service x 2.25%				
				(First 20 YCS) then 5.0% (21-27				
San Antonio Fire &				YCS) then 2.0% (28-30 YCS) then		100% of CPI if retired prior to		
Police Pension					Highest 36		Retro DROP,	
	All	20 YCS	20 YCS	Salary	months		max 60 mos.	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
				Years of Credited Service x 3% x Final				
Abilene Firemen's				Average Salary + YCS x 3% for YCS				
Relief & Retirement				btwn 20 and 21.5 + \$80 per month for				
Fund	All	50/20	20 YCS	YCS > 21.5	Highest 36 months	None	Retro DROP	No
					Highest 60 months,			
Amarillo Firemen's	Hired		Graded		but not less than			
Relief & Retirement	before			Years of Credited Service x 3.45% x	highest 36 months as			
Fund (Tier 1)	1/1/2018	50/20	20 YCS	Final Average Salary	of 12/31/2017	None	Retro DROP	No
Amarillo Firemen's	Hired on/		Graded	Years of Credited Service <= 20 x				
Relief & Retirement	after			3.25% x Final Average Salary + 2.5% x				
Fund (Tier 2)	1/1/2018	50/20	20 YCS	Final Average Salary x YCS > 20	Highest 60 months	None	Retro DROP	No
	Hired		Graded					
Relief & Retirement	before			61% x Final Average Salary, min				
Fund (Tier 1)	10/1/2014	50/20		\$1,000 + \$93/month x YCS > 20	Highest 60 months	None	Retro DROP	No
Atlanta Firemen's	Hired on/		Graded					
Relief & Retirement	after			61% x Final Average Salary, min				
Fund (Tier 2)	10/1/2014	55/20	20 YCS	\$1,000 + \$93/month x YCS > 20	Highest 60 months		Retro DROP	No
						Ad hoc, as		
						'	Retro DROP. Benefit	
Beaumont Firemen's						actuary based on	credits adjusted for	
Relief & Retirement				63.15% x Final Average Salary + \$123		financial condition of	payment form. PROP	
Fund	All	50/20	20 YCS	x YCS > 20	Highest 60 months	the fund.	option.	No
Big Spring Firemen's			Graded		Greater of: highest 60		Forward DROP or	
Relief & Retirement			100% at	Years of Credited Service x 2.55% x	months or 3-year avg		Partial Lump Sum	
Fund	All	50/20	20 YCS	Final Average Salary	as of 12/31/2006	None	Option.	No
Brownwood Firemen's Relief & Retirement				50% x Final Average Salary + \$54.50 x	Highest 60 consecutive		Forward or Retro DROP. Benefit credits adjusted for payment	
Fund	All	50/20	20 YCS	YCS > 20		None	form.	Yes
Cleburne Firemen's		50,20	20100			Tone		
Relief & Retirement	A 11	50/20		68% x Final Average Salary + \$97 x	Final 60 months	Nana	Dates DDOD	No
Fund	All	50/20	20 YCS	YCS >20	Final 60 months	None	Retro DROP	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
				67.5% x Final Average Salary + \$69 x YCS > 20 before		Future COLA's to be placed	Benefit credits	
Conroo Firo Fightors'				12/31/2010 and \$110 x YCS > 20		on ballot for firefighter election at discretion of	adjusted for	
Conroe Fire Fighters' Retirement Fund	All	50/20	20 YCS	earned after 12/31/2010	Highest 60 months	the Board		Yes
	АП	50/20	20 103		nighest ou months	Ad hoc based on financial	payment ionn.	res
Compus Christi Fina			Cupalad	The exector of 520/ v Final		condition of the retirement		
Corpus Christi Fire			Graded	The greater of: 52% x Final				
Fighters' Retirement	A 11	F 4 /20		Average Salary + \$150 x Years of	llish a st CO waa a tha	system shown in actuarial		Nia
System	All	54/20	20 YCS	Credited Service or \$137 x YCS	Highest 60 months	valuation	Retro DROP	No
			Graded					
Corsicana Firemen's Relief				53% x Final Average Salary +				
& Retirement Fund	All	50/20	20 YCS	\$90 x YCS > 20	Highest 60 months	None	Retro DROP	Yes
Denison Firemen's Relief		= 0 / 2 0		Years of Credited Service x	Highest consecutive 24			
& Retirement Fund	All	50/20	10 YCS	2.65% x Final Average Salary	months	None	None	No
						Ad hoc based on financial		
						condition of the fund as		
Denton Firemen's Relief &		_		Years of Credited Service x		determined by the fund		
Retirement Fund	All	50/20	20 YCS	2.59% x Final Average Salary	Highest 36 months	actuary.	Retro DROP	Yes
						0.6% compounded, not to		
						exceed CPI-U increase,		
						only applies to members		
Galveston Firefighter's				Years of Credited Service x 3% x		receiving benefits as of		
Relief & Retirement Fund	All	50/20	20 YCS	Final Average Salary	Highest 60 months	3/1/2018.	Retro DROP	No
				Years of Credited Service <= 20				
Greenville Firemen's				x 3.15% x Final Average Salary +				
Relief & Retirement Fund	All	50/20	20 YCS	\$63 x YCS > 20	Highest 36 months	None	Retro DROP	No
Harlingen Firemen's Relief				65.5% x Final Average Salary +			Forward or Retro	
& Retirement Fund	All	50/20	20 YCS	\$65 for YCS > 20	Highest 60 months	None	DROP	No
			Graded	Years of Credited Service x		Option for a Service		
Irving Firemen's Relief &			100% at	3.175% x Final Average Salary	Highest consecutive 78	Retirement Benefit with	Forward or Retro	
Retirement Fund	All	50/20	20 YCS	for YCS <=21 + \$60 x YCS > 21	biweekly pay periods	COLA.	DROP	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
			Graded	58.4% x Final Average Salary +				
Killeen Firemen's Relief		55/20 or	100% at	2.275% x Final Average Salary for				
& Retirement Fund	All	50/25	20 YCS	YCS >20	Highest 60 months	None	Retro DROP	Yes
						Ad hoc based on	Retro DROP. Benefit	
						financial	credits adjusted for	
					Highest 78 consecutive	condition of the	payment form. Plan	
					biweekly pay periods within	system as	offers an increasing	
Laredo Firefighters				Years of Credited Service x 3.03% x	· · · ·	determined by	payment form	
Retirement System	All	50/20	20 YCS	Final Average Salary	periods	the actuary	option.	No
					Members with >= 20 YCS as			
					of 1/22/2013: highest			
					consecutive 78 biweekly pay			
					periods; members with < 20			
Longview Firemen's					YCS as of 1/22/2013: highest			
Relief & Retirement	Hired before			80% x Final Average Salary + \$80 x	consecutive 130 biweekly		Forward and Retro	
Fund (Tier 1)	1/1/2016	50/20	20 YCS	YCS > 20	pay periods	None	DROP	No
Longview Firemen's				Years of Credited Service (max 25				
Relief & Retirement	Hired on/after			years) x 3.0% x Final Average Salary	-		Forward and Retro	
Fund (Tier 2)	1/1/2016	55/20	20 YCS	+ \$80 x YCS > 25	biweekly pay periods	None		No
							Retro DROP. Benefit	
							credits adjusted for	
							payment form.	
			Graded				Partial Lump Sum	
Lubbock Fire Pension	A 11			68.92% x Final Average Salary +	Final consecutive 104		Option of up to 36	N -
Fund	All	50/20		\$335.05 x YCS > 20	biweekly pay periods	None	months of benefit.	No
Lufkin Firemen's Relief				Years of Credited Service <= 20 x				
& Retirement Fund	Hired before			3.35% x Final Average Salary + \$66	Highest consecutive 60		Forward or Retro	
(Tier 1)		50/10	10 YCS	x YCS > 20	months	None	DROP	No
Lufkin Firemen's Relief				Years of Credited Service <= 20 x				
& Retirement Fund	9/1/2005 and			3.35% x Final Average Salary + \$66	Highest consecutive 60		Forward or Retro	
(Tier 2)		50/15	15 YCS	x YCS > 20	months	None	DROP	No
	Hired btwn			Years of Credited Service <= 20 x				
& Retirement Fund	6/25/2013 and			3.35% x Final Average Salary + \$66	Highest consecutive 60		Forward or Retro	
(Tier 3)	1/4/2016	52/20	20 YCS	x YCS > 20	months	None	DROP	No

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Lufkin Firemen's	Hired on/			Years of Credited Service <= 20 x	Highest			
Relief & Retirement	after			3.35% x Final Average Salary +	consecutive 60			
Fund (Tier 4)	1/5/2016	55/20	20 YCS	\$66 x YCS > 20	months	None	Forward or Retro DROP	No
Marshall Firemen's				Years of Credited Service <= 20				
Relief & Retirement				years x 3.125% x Final Average				
Fund	All	50/10		, Salary + \$65 x YCS > 20	Final 36 months	None	Forward DROP	No
				Years of Credited Service x 2.9%				
McAllen Firemen's				x Final Average Salary + (greater				
Relief & Retirement				of: 2.9% x FAS or \$58 x YCS 21 &	Highest 60			
Fund	All	50/20	20 YCS	22) + \$58 x YCS > 22	months	None	Retro DROP	Yes
						2% simple, after receiving benefits	4 DROP Options:	
				75% x Final Average Salary +\$80			Forward, Retro,	
Midland Firemen's			Graded	x YCS > 20 + \$500/month		investment performance does not	Reverse DROP or a	
Relief & Retirement		50/20 or 25		supplemental benefit after	Highest 60		Combined Forward and	
Fund	All	YCS		reaching 50/20	months	• • •	Retro DROP	No
				Frozen Benefit: Final Average	For benefits			
				Salary x 3.6% x YCS as of	accrued before			
				12/31/2016, <= 20 + \$107 x YCS	1/1/2017: Highest			
				> 20 as of 12/31/2016 +	5 years within			
				supplemental benefit (\$500	final 10 years as of			
				month for reaching 50/20 as of	12/31/2016 For	Automatic Fixed Dollar or Fixed	3 DROP Options: 1.	
				12/31/2016)	benefits accrued	Percentage. Ad hoc for members	Forward, Retro, or	
Odessa Firemen's	Hired			Service Retirement Benefit:	on/after	who do not meet requirements for	Immediate DROP - a	
Relief & Retirement	before			Final Average Salary x 2.88% x	1/1/2017:Final 5	automatic COLA 1% of monthly	partial lump sum	
Fund (Tier 1)	1/1/2017	50/20	20 YCS	YCS after 12/31/2016, <=25	years	frozen benefit.	option.	No
Odessa Firemen's	Hired on/							
Relief & Retirement	-			Final Average Salary x 2.88% x				
Fund (Tier 2)	1/1/2017	55/25		- .	Final 5 years	None	None	No
Orange Firemen's				Years of Credited Service <= 20 x				
Relief & Retirement				2.60% x Final Average Salary +	Highest 60			
Fund	All	50/20	20 YCS	\$91x YCS > 20	months	None	Retro DROP	Yes

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
		55/20 or						
Paris Firefighters' Relief &		Rule of 80		Years of Credited Service x \$94,	Highest 5			
Retirement Fund	All	with 20 YCS		min \$500/month	years	None	Retro DROP	No
Plainview Firemen's Relief & Retirement Fund (Tier 1)		50/20	Graded 100% at 20 YCS	63.75% x Final Average Salary + \$78 for YCS > 20 (max 15 years)	Highest 60 months	None	Retro DROP	No
	10/ 1/ 100 1	50,20	Graded					
Plainview Firemen's Relief & Retirement Fund (Tier 2)				63.75% x Final Average Salary + \$78 for YCS > 20 (max 15 years)	Highest 60 months	None	Retro DROP	No
Port Arthur Firemen's				Years of Credited Service <= 20 x 2.7% x Final Average Salary + \$125	Highest 60			
Relief & Retirement Fund	All	50/20	10 YCS	x YCS > 20	months	None	Retro DROP	No
San Angelo Firemen's Relief & Retirement Fund (Tier 1)	Hired before 5/1/1986		Graded 100% at 20 YCS	67.5% x Final Average Salary + \$230 x YCS > 20	Highest 48	For members with 20 YCS and termed btwn 1/1/97 and 3/1/13: 1.2% compounded after age 61. For members with 20 YCS and termed after 3/1/13: 1.2% compounded after age 65.	Forward or Retro DROP	No
San Angelo Firemen's Relief & Retirement Fund (Tier 2)	Hired on/after 5/1/1986		Graded 100% at 20 YCS	66.0% x Final Average Salary + \$230 x YCS > 20	Highest 48	For members with 20 YCS and termed btwn 1/1/97 and 3/1/13: 1.2% compounded after age 61. For members with 20 YCS and termed after 3/1/13: 1.2% compounded after age 65.	Forward or Retro DROP	No
San Benito Firemen's Pension Fund			Graded	45.0% x Final Average Salary + \$70 x YCS > 20		None	Partial Lump Sum Option of up to 24 months of benefit.	
Sweetwater Firemen's Relief & Retirement Fund	Hired before	50/20	10 YCS	Years of Credited Service <= 20 x 3.95% x Final Average Salary + \$50		Nono	Potro DPOD	No
Relief & Retirement Fund (Tier 1)		50/20	10 YCS	3.95% x Final Average Salary + \$50 x YCS > 20		None	Retro DROP	No

TEXAS PENSION REVIEW BOARD

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
					Highest			
Sweetwater Firemen's				Years of Credited Service <= 20	consecutive			
Relief & Retirement	Hired on/after			x 3.5% x Final Average Salary +	120 pay			
Fund (Tier 2)	8/1/2017	50/20	10 YCS	\$50 x YCS > 20	periods	None	Retro DROP	No
			Graded					
Temple Firemen's Relief			100% at 20	65.75% x Final Average Salary	Highest 60			
& Retirement Fund	All	50/20	YCS	+ \$98 x YCS > 20	months	None	Retro DROP	No
Texarkana Firemen's Relief & Retirement				Years of Credited Service x	Highest 36			
Fund	All	50/20	20 YCS	3.09% x Final Average Salary	months	None	Retro DROP	No
Texas City Firemen's Relief & Retirement	Hired before		Graded 100% at 20	(Years of Credited Service before 1/1/2006 x 3.5% x Final Average Salary) + (Years of Credited Service on/after 1/1/2006 x 3.0% x Final Average Salary) + \$116 x YCS >	Final 60	An ad hoc based on financial condition of the fund as determined by the		
Fund (Tier 1)	1/1/1996	50/20	YCS	20	months	actuary	Retro DROP	No
Texas City Firemen's Relief & Retirement Fund (Tier 2)	Hired btwn 1/1/1996 & 12/31/2005	53/20	Immediate	Years of Credited Service x 3.0% x Final Average Salary (for YCS < 20) + \$116 x YCS > 20	Final 60 months	An ad hoc based on financial condition of the fund as determined by the actuary	Retro DROP	No
Texas City Firemen's Relief & Retirement	Hired on/after			Years of Credited Service x 3.0% x Final Average Salary (for YCS < 20) + \$116 x YCS >	Final 60	An ad hoc based on financial condition of the fund as determined by the		
Fund (Tier 3)	1/1/2006	55/20	Immediate	20	months	actuary	Retro DROP	No
The Woodlands Firefighters' Retirement		52/20	20.405	Final Average Salary x 2.5% x 20 + Final Average Salary x	Highest 36 months within final 120	Nama	Nerra	
System Travis County ESD #6	All	52/20	20 YCS	3.0% x YCS > 20 Years of Credited Service <= 20 x 3.00% x Final Average Salary	months	None	None	Yes
Firefighter's Relief &				+ 2.15% x Final Average Salary	Highest 60			
Retirement Fund	All	55/20	10 YCS	x YCS > 20	months	None	None	No

TEXAS PENSION REVIEW BOARD

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Tyler Firefighters' Relief	Members with					Ad hoc based on financial condition of the fund as	Retro DROP. Or, Partial	
	>= 20 YCS on	55/20 or		71.50% x Final Average	Highest 60	determined by the fund	Lump Sum Option of up	
(Tier 1)	1/1/2005		20 YCS	Salary + \$113 x YCS > 20	months	actuary.	to 48 months of benefit.	No
, ,						Ad hoc based on financial		
Tyler Firefighters' Relief	Members with <					condition of the fund as	Retro DROP. Or, Partial	
& Retirement Fund	20 YCS on	55/20 or		71.50% x Final Average	Highest 60	determined by the fund	Lump Sum Option of up	
(Tier 2)	1/1/2005	50/25	20 YCS	Salary + \$113 x YCS > 20	months	actuary.	to 48 months of benefit.	No
University Park	ution of the offering			60% x Final Average Salary				
Firemen's Relief &	Hired before			for YCS<= 20 + \$80 x YCS >	Highest 60	Nora		Vaa
Retirement Fund	9/1/2017	50/20	20 YCS	20	months	None	Retro DROP	Yes
						Ad hoc based on financial		
Waxahachie Firemen's				Years of Credited Service x		condition of the fund as		
	Hired before			2.6% x Final Average Salary +	-	determined by the fund		
Fund (Tier 1)	7/1/2005	50/20	10 YCS	1.3% for YCS > 27	months	actuary.	Retro DROP	Yes
Maria ha shia Firana sala						Ad hoc based on financial		
Waxahachie Firemen's Relief & Retirement	lling of a m /officer			Years of Credited Service x		condition of the fund as		
	Hired on/after	FF (20	10.000	2.6% x Final Average Salary +	-	determined by the fund		Vaa
Fund (Tier 2)	7/1/2005	55/20	10 YCS	1.3% for YCS > 27	months	actuary.	Retro DROP	Yes
			Graded	50% x Final Average Salary			Partial Lump Sum	
Weslaco Firemen's Relief			100% at	(min \$1000) + \$132 month	Highest 60		Option of up to 24	
	All		20 YCS	for YCS > 20	months	None	months of benefit.	Yes
Wichita Falls Firemen's					Highest 78			
Relief & Retirement	Hired before			Years of Credited Service x	consecutive			
Fund (Tier 1)	4/20/2016	50/20	20 YCS	2.55% x Final Average Salary	pay periods	None	Retro DROP	Yes
						Mambar may alact to receive		
Wichita Falls Firemen's					Highest 130	Member may elect to receive actuarially equivalent benefit		
	Hired on/after			Years of Credited Service x	consecutive	that increases annually at		
	4/20/2016	55/20	20 YCS	2.50% x Final Average Salary		either 0.5% or 1% per year.	Retro DROP	Yes
	4/20/2010	55/20	20103	2.30 % X Filial Average Salary	pay perious		Retio DROP	162

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Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
					Highest consecutive 60 months within			
	Hired			(Years of Credited Service x 0.75% x Final Average	final 10 years,			
	before			Salary) + (0.65% x FAS >= \$400 x YCS <= 30), YCS	frozen as of			
Hospital	8/1/2015	65/5	7/31/2015	frozen as of 7/31/2015	7/1/2015	None	None	Yes
Arlington Employees Deferred Income Plan	All	65 years	Immediate	Lesser of: (A) Life annuity with an Actuarial Equivalent equal to a lump sum of 2.5x employee contribs with interest credited; or (B) a percentage (based on service) x Final Average Salary x YCS < = 30.	All years	None	None	No
	Hired before 9/1/1997		15 YCS	Greater of: Years of Credited Service x 1.75% x Final	Highest 5 consecutive years within final 10 years	None	None	Yes
Brazos River Authority Retirement Plan				Years of Credited Service x 1.0% x Final Average Salary	Highest 5 consecutive years within final 10 years	None	None	Yes
Capital MTA Retirement Plan for Administrative Employees	All	65/5 or Rule	Graded	Years of Credited Service x 1.5% x Final Average Salary + YCS x 0.5% x Excess of Covered Compensation	Highest 5 years	None	None	Yes
Capital MTA Retirement Plan for Bargaining Unit Employees	All	65 years	5 YCS	\$60 x Years of Credited Service	N/A	None	None	Yes
	Hired	65/5 or 3 YCS if >= 65 years upon hire (after		Final Average Salary x Replacement Rate (multiplier x YCS while serving that Employee Class); max Replacement Rate according to benefit class	•	For new retirees on/after 3/1/2017, automatic: based on CPI-U, max 2% of preceding year's		
Center (Tier 1)	3/1/2018	3/1/2015)	5 YCS	designation.	years	payment	None	Yes

TEXAS PENSION REVIEW BOARD

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
					Highest 5			
				3 , 1	complete			
Retirement Plan for	Hired on/			(multiplier x YCS while serving that	consecutive			
Citizens Medical Center	after				years within final			
· /	3/1/2018	65/5	5 YCS	according to benefit class designation.	10 years	None	None	Yes
Colorado River Municipal								
Water District Defined				Years of Credited Service x 1.50% (First 15				
Benefit Retirement Plan &			Graded 100% at	YCS) then 2.0% (>15 YCS) x Final Average				
Trust	All	65/5	15 YCS	Salary	Highest 5 years	None	None	Yes
Corpus Christi Regional				Years of Credited Service x 2.00% Final				
Transportation Authority	All	62 years	7 YCS		Final 3 years	None	None	No
					Highest 36			
				(Years of Credited Service x 2.25% x Final	consecutive			
			7 YCS; or 100%	6 // (months within	50% of the change		
CPS Energy Pension Plan	All	65/7	at age 40	Security Benefit x YCS <= 40 yrs)	final 10 years	in CPI, 5% max	None	Yes
				Years of Credited Service before 1/1/1982 x	Highest 5			
Dallas County Hospital				1.25% x Final Average Salary + Years of	consecutive			
District Retirement				Credited Service after 1/1/1982 x 2.50% x	years within final			
Income Plan	All	65/5	5 YCS	Final Average Salary	10 years	None	None	No
				Greater of: Years of Credited Service x				
Dallas/Fort Worth Airport				2.25% x Final Average Salary or Years of				
Board DPS Retirement	Hired before			Credited Service after age 45 x 3.33% x Final		% change in CPI,		
Plan (Tier 1)	12/31/2002	62/5	5 YCS	Average Salary	Final 36 months	max. 3%	None	Yes
Dallas/Fort Worth Airport								
Board DPS Retirement	Hired after			Years of Credited Service x 2.25% x Final		% change in CPI,		
Plan (Tier 2)	12/31/2002	62/5	5 YCS	Average Salary	Final 36 months	max. 3%	None	Yes
				Greater of: Years of Credited Service x				
Dallas/Fort Worth Airport				2.25% x Final Average Salary or Years of		Equal to Social		
Board Retirement Plan	Hired before			Credited Service after age 45 x 3.33% x Final		Security COLA,		
		62/5	5 YCS	•	Final 36 months	max 3%	None	Yes
Dallas/Fort Worth Airport						Equal to Social		
Board Retirement Plan	Hired after			Years of Credited Service x 2.25% x Final		Security COLA,		
		62/5	5 YCS		Final 36 months	max 3%	None	Yes

TEXAS PENSION REVIEW BOARD

BENEFIT SUMMARY FOR ACTUARIALLY FUNDED PUBLIC RETIREMENT SYSTEMS—CHAPTER 810 PLANS

	cipants evious				· ·		Benefit Options	Security
Benefit Retirement Plan & plans				Years of Credited Service before 10/01/1983 x				
				2.00% x Final Average Salary + Years of Credited		100% of CPI		
Trust 9/30/				Service after 10/01/1983 x 1.50% x Final Average		as of 9/30,		
	/1995	60 years	10 YCS	Salary	Highest 3 years	max 5%	PLOP ¹	Yes
El Paso Firemen & Hired	d full-				Highest			
Policemen's Pension Staff time a				Years of Credited Service x 1.75 x Final Average	consecutive 36			
		55/10		Salary	months	None	None	No
	1/2014	55/10	10 105	Lifetime monthly benefit based on employees'		None	None	
				account balance - beginning balance, employee				
Retirement Plan for				contribution, employer matching contribution				
	dhafara	65/5 or 70		(each with quarterly interest), and conversion				
		-			N/A	None	Nono	Voc
Navigation District (Tier 1) 1/1/2	2010	years	3 165	retirement supplement, if applicable.	IN/A	None	None	Yes
				Lifetime monthly benefit based on employees'				
	. ,			account balance - the greater of: employee and				
Retirement Plan for Hired				employer matching contributions with quarterly				
Employees of Brownsville after		65/5 or 70		interest based on actual return or employee and				
Navigation District (Tier 2) 1/1/2	2010	years	5 YCS	employer matching with 4% annual interest	N/A	None	None	Yes
				(Years of Credited Service <= 40 x 1.50% x Final				
				Average Salary) + (cash balance benefit =				
				contribution credits of 6%, ceasing 9/30/2005 +				
				interest credits applied annually based on the				
Galveston Wharves Pension Hired				lesser of 7% or annual interest rate on 5-yr				
Plan 1/1/2	2010	65/5	5 YCS	Treasury Securities)	Highest 5 years	None	None	No
		65/5 or Rule						
		of 85 with			Highest 3 years			
Guadalupe-Blanco River Hired	d before	age >= 60		Years of Credited Service x 1.30% x Final Average	within final 10			
Authority 12/31	1/2010	years	5 YCS	Salary	years	None	None	Yes
					Highest			
Retirement Plan for					consecutive 5 years			
Guadalupe Regional Medical				Final Average Salary x 1.80% x Years of Credited	within final 10	% change in		
Center All		65/5		Service	years	CPI, max. 3%	None	Yes
					, Highest 5 years			
Harris County Hospital				Years of Credited Service x 1.50% x Final Average	within final 10			
District Pension Plan All		65/5		Salary	years	None	None	No

¹Monthly benefit reduced 20% and a partial payment actuarially equivalent to 20% of monthly payment paid as lump sum.

TEXAS PENSION REVIEW BOARD

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
				\$60 x Years of Credited Service before				
				10/1/1978 + Years of Credited Service				
Houston MTA Non-	Hired before			after 10/1/1978 x 2.50% X Final Average				
Union Pension Plan	10/1/2007	65/5	5 YCS	Salary	Final 36 months	None	None	Yes
Houston MTA								
Workers Union	Hired before	60/5 or 28						
Pension Plan	10/1/2012	YCS	5 YCS	Years of Credited Service x \$60	N/A	None	None	Yes
Irving Supplemental				Years of Credited Service x 1/12 of 0.6% x				
Benefit Plan	All	65/5	5 YCS	Final Average Salary	Highest 3 years	None	None	No
	Hired prior to							
	10/1/2006, or if		3 YCS for					
	hired after		executives in					
	9/30/2006 upon		the	Years of Credited Service x 1.4% x Final				
JPS Pension Plan -	making voluntary		administrative	Average Salary + (YCS x 0.7% for FAS >	Highest consecutive			
Tarrant County	employee		staff, 5 YCS for	\$6,250); additional benefits provided to	5 years within final			
Hospital District	contributions	65/5	all others	certain named individuals and positions.	10 years	None	None	Yes
Lower Colorado River				(Years of Credited Service x 1.75% x Final				
Authority Retirement	Hired before	65/5 or Rule		Average Salary) + (0.40% x (FAS-				
Plan (Tier 1)	1/1/2002	of 80	3 YCS	Integration Level) x YCS)	Highest 60 months	None	None	Yes
Lower Colorado River	Hired btwn			Lifetime Monthly Benefit based on				
Authority Retirement	1/1/2002 &	65/5 or Rule		employee's account balance - Employee				
Plan (Tier 2)	5/1/2012	of 80	3 YCS	contribution grown at 7% annually.	N/A	None	None	Yes
				Years of Credited Service x 1.75% x Final				
Nacogdoches County				Average Salary minus 1.50% of expected				
Hospital District				Social Security benefit x Years of Credited	Highest 5 years			
Retirement Plan	All	65/5	5 YCS	Service (< 33.33 years)	within final 10 years	None	None	Yes
				(Years of Credited Service x 0.75% x				
				Average monthly covered compensation)				
				+ (Years of Credited Service <= 35 x 1.50%				
Northeast Medical				x Final Average Salary > Average monthly				
Center Hospital	Hired before				Final 5 years; frozen			
Retirement Plan	12/9/2001	65 years	at 11 YCS	12/8/2001	as of 12/8/2001	None	None	Yes

TEXAS PENSION REVIEW BOARD

Retirement System	Eligible Members	Retirement Eligibility	Vesting	Benefit Formula	Final Average Salary	COLA	Retirement Benefit Options	Social Security
Northwest Texas Healthcare System Retirement Plan	Hired before 5/9/1996	65 years	5 YCS	YCS > 20) + (0.65% x FAS > Monthly Covered Compensation <= 35 YCS); or C) accrued benefit as of 9/30/1989, YCS	Highest 60 consecutive months within final 120 months, frozen as of 5/8/1996	None	None	Yes
Plano Retirement Security Plan	All	65/5	5 YCS		Highest 3 years of final 10	% change in CPI, max. 4%	Lump Sum Option	No
Port of Houston Authority Retirement Plan	Hired before 8/1/2012	65/5	5 YCS		Highest 5 years within final 10 years	None	None	No
Refugio County Memorial Hospital District Retirement Plan	Hired before 1/1/2012	55/15 or Social Security Retirement Age	5 YCS	Years of Credited Service < 20 x 1% x Final	Highest 5 consecutive years, frozen as of 12/31/2011	None	None	Yes
San Antonio Metropolitan Transit Retirement Plan	Hired before 7/1/2013	65/10 or	5 YCS	Years of Credited Service x 2.00% x Final Average Salary for YCS > 25 or Years of Credited Service x 1.75% x Final Average Salary for YCS < 25	Highest 36 months	None	None	Yes
Retirement Plan for Sweeny Community Hospital	Hired before 12/31/2004		On/after 1/1/2003:		Highest consecutive	None	None	Yes
University Health System Pension Plan	All	65/5 or Rule	5 YCS	Years of Credited Service x 1.5% x Final	Highest 5 years within final 10 years	None	None	Yes

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
									One time lump sum at retirement actuarially
Austin Employees'									reduced to 90% of
Retirement System	Retro							One time lump	annuity payments for
(Group A & B)		None	5 years	No	Not Credited	No	None	sum	max 60 months.
	_		7 years. Must	-			DROP balance may	Lump sum	
			terminate				remain in fund and	distribution or	
		Annual 5%,	employment as fire	Yes, when			draw interest until a	in four	
	Forward	compounded	fighter on/before 7	deemed			distributions election is	payments by	
	DROP	monthly	years.	affordable	Yes	Yes	made.	age 70-1/2.	
			7 years. Must				DROP balance may	Lump sum	
			terminate				remain in fund and	distribution or	
Austin Fire Fighters		Annual 5%,	employment as fire	Yes, when			draw interest until a	in four	
Relief & Retirement			fighter on/before 7	deemed			distributions election is	payments by	
Fund (All)	DROP	monthly	years.	affordable	Yes	Yes	made.	age 70-1/2.	
Austin Police Retirement System (Members with 23 YCS on/before 2/17/2016)	Forward DROP	5% simple interest	60 months. (During participation, an increase in pension benefit multiplier affects the DROP calculation)	Yes	Yes	Yes	May transfer DROP balance to PROP account and/or deposit all or a portion of monthly annuity. Interest credit is tied to actual fund performance.	Lump sum or partial payments via transfer to PROP account.	Eligible active members not paritcipating in DROP as of 2/17/2016 may select either Forward DROP option.
Austin Police Retirement System (Members with 23 YCS after 2/17/2016)	Forward DROP	None	7 years.	No	Not Credited	N/A	May transfer DROP balance to PROP account and/or deposit all or a portion of monthly annuity. Interest credit is tied to actual fund performance.	partial payments via transfer to	A fee for DROP participation is applied on a graduated scale during the DROP period and ends after the DROP period.

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited?	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
Austin Police Retirement System (Members with 23 YCS on/before 2/17/2016)	Retro DROP	5% simple interest	Yes, max service of 36 months.	Yes	Yes	N/A	May transfer DROP balance to PROP account and/or deposit all or a portion of monthly annuity. Interest credit is tied to actual fund performance.	Lump sum or partial payments via transfer to PROP account.	
Dallas Employees' Retirement Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP offered.
	DROP	None for DROP elections after 7/1/17.	10 year max.	No	4% credited to the fund as member contributions.	Yes	or a Pensioner at any time before the required beginning date for required minimum distributions, may defer receipt of the pension benefit	Annuitized over the life expectancy of a member using mortality tables recommended by the pension system's qualified actuary. A Member who is in Active Service may not receive a distribution from the member's DROP account while the member is on active service.	
City of El Paso									
Employees Retirement Trust (Tier 1 & 2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP offered.

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
El Paso Firemen's Pension Fund (Base Plan)	Retro DROP	N/A	6 mos min, 36 mos max. After deducting the period of the Back DROP selected, the member must still have at least 20 YCS remaining in order to be eligible to participate in Back DROP.	N/A	N/A	Yes	N/A	One-time lump-sum payment plus a reduced pension amount.	As of 6/30/19, eligibility for Back DROP option is terminated.
	Retro DROP	N/A	6 mos min, 36 mos max. After deducting the period of the Back DROP selected, the member must still have at least 20 YCS remaining for purposes of eligibility for service retirement.	N/A	N/A	Yes	N/A	One-time lump-sum payment plus a reduced pension amount.	As of 6/30/19, eligibility for Back DROP option is terminated.
	Forward DROP	N/A	No max	Yes	N/A	N/A	N/A	Lump-sum payment with reduced monthly payment	
	Forward DROP	N/A	No max	No	N/A	N/A	N/A	Lump-sum payment with reduced monthly payment	
El Paso Police Pension Fund (Base Plan)	Retro DROP	N/A	6 mos min, 36 mos max. After deducting the period of the Back DROP selected, the member must still have at least 20 YCS remaining in order to be eligible to participate in Back DROP.	N/A	N/A	Yes	N/A	One-time lump-sum payment plus a reduced pension amount.	As of 6/30/19, eligibility for Back DROP option is terminated. As of
El Paso Police Pension Fund (Tier 2)	Retro DROP	N/A	6 mos min, 36 mos max. After deducting the period of the Back DROP selected, the member must still have at least 20 YCS remaining for purposes of eligibility for service retirement.	N/A	N/A	Yes	N/A	One-time lump-sum payment plus a reduced pension amount.	6/30/19, eligibility for Back DROP option is terminated.
El Paso Police Pension Fund (Base Plan)	Forward DROP	N/A	No max	Yes	N/A	N/A	N/A	Lump-sum payment with reduced monthly payment	
El Paso Police Pension Fund (Tier 2)	Forward DROP	N/A	No max	No	N/A	N/A	N/A	Lump-sum payment with reduced monthly payment	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
								Payment options: 1) Defer payment(s) until a later start date	
								with the latest possible benefit	
								commencement date as April 1st of the	
								calendar year following the year in which the	
								member attains 70 1/2 years of age;	
								2) Lump sum payment;	
								3) Periodic payments in which member	
				Tier I: Yes,				designates a specific amount;	
				after 2 YCS				4) Periodic payments in which member	
Fort Worth				after				designates a period of time;	
Employees'				· 0	Credited to			5) Life expectancy calculation;	
Retirement Fund -				-	the fund as member			6) Combination of a lump sum and periodic	
Civilian, Fire, and Police (Tiers I & II)	Forward DROP	None		election. Tier II: No.	contributions.	Voc	N/A	payments; 7) Defined benefit annuity.	
	DROP	None	5 years	THEF II. NO.		Tes	IN/A		
Galveston									
Employees'									
Retirement Fund									No DROP
(All)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	offered.
Galveston									
Employees'									
Retirement Plan for									No DROP
Police (Group A & B)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	offered.

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
							Yes, effective 10/1/2007,		
							retired members or	Available for	
							surviving spouses can	lump-sum distribution when	
							elect to have all or a	the firefighter leaves the Fire	
							portion of his or her	Department; or the firefighter	
								can elect to leave the DROP	The participant's
									monthly benefit at
							, , ,		actual retirement is
							the ineligible amount, credited to the PROP	-	increased by 2% for
Houston		GEQ(of E yr		No COLA			account. Interest credit	-	every full year of DROP participation
Firefighter's Relief &	Forward	65% of 5-yr		credited			same as DROP. No new	.	for the first 10 years,
Retirement Fund		avg return (min		after	None credited		funds or elections after	•	for a maximum of
(Tier 1)		2.5%)			after 7/1/17	Yes	7/1/17.		20%.
Houston	BROT	2.370	15 years	,, 1, 1,		105	// 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1		2070.
Firefighter's Relief &									
Retirement Fund									
(Tier 2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP offered.
				Retirees:				Options of a lump sum,	
				Yes;				periodic payments, or a	
				Active (in				combination of both. A	
		50% of the		DROP):				member may defer taking a	
		rolling 5-yr net		Yes, if				distribution until a future	
Houston Municipal		investment		age 62 or				date; however, distribution	
Employees Pension		return (min		older on				must commence no later than	
System (Group A &		2.5%, max		Jan 1 of		Yes, lump		age 70 1/2 or by termination	
В)	DROP	7.5%)	No max	the year	No	sum	N/A	of service.	
Houston Municipal									
Employees Pension									
System (Group D)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP offered.

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	PROP (offered to retirees)	Withdraw (how often, min/max)	Comments
Houston Police Officers Pension System (Hired before 10/9/04)	& Retro	65% of the 5-yr compounded avg return (min 2.5%)	20 year max.	No	No contributions after 7/1/17.		min. credited	Lump sum. Minimum required distributions must begin no later than April 1st of the year following the year in which a member attains 70 1/2.	"Back DROP" (look-back feature of DROP) effective 2001. Allows member to recalculate DROP notional account by selecting a different entrance date. Cannot be backdated prior to Sept. 1, 1995 or prior to 20 years of service.
Houston Police Officers Pension System (Hired on/ after 10/9/04)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP offered.
San Antonio Fire &	N/A					Yes. The surviving spouse of an active member may elect a Retro DROP, but if the member has over 27 years of service the spousal Retro DROP benefit is		One-time lump-sum payment plus a reduced pension amount. Payment of the lump sum may be deferred for up to twelve months following the date of actual retirement, and can usually be "rolled over" into a qualified retirement account	
Police Pension	Retro	NI (A	60 months	NI (A	N1 / A	based on 27 years		(such as an IRA) without	
Fund (All)	DROP	N/A	max.	N/A	N/A	of service.	N/A	creating a taxable event.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
Abilene	Retro	None	3 years	No	Yes	Yes	1-4 equal annual installments.	
			Later of: the date participant meets eligibility reqs. for DROP, or 2 years				Max 5 payments within 36 months of	
Amarillo	Retro	None	prior to retirement	No	Yes	Yes	date of termination of employment.	
Atlanta	Retro	None	2 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
	Retro	None	5 Year or 7 Year	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
		Yes; if hired on/before 12/31/16, based on annual rate = 2% less than investment return assumption. Hired on/after 1/1/17, based on actual return, max 6%, min	Until member					Member who elects a Retro DROP on/after 1/1/06 can elect to leave all/part of lump sum in fund. On/after 1/1/10, a retiring/retired member can elect to defer receipt of monthly benefit and have it accumulate in PROP. May
Beaumont	PROP	2%	reaches age 70.5 Option 1: 5 years Option 2: N/A (reduced benefit and	No	No	Yes	Annual payments over three years. Option 1: The sum of i) monthly benefit amount times the number of months of the DROP period, and ii) total of any member contributions made during the DROP period. Must be paid within 3 years in no more than 3 installments. Option 2: reduced annuity and a lump sum equal to 24 times the reduced	accumulate until age 70.
Big Spring		Option 1: 4% compounded annually	lump sum elected upon retirement)	No	Option 1: Yes	N/A	benefit. Must be paid over 3 years in no more than 3 installments.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
							Lump sum payment or payment in no more than 13 installments with the first installment not later than 13 months after leaving DROP and final installment not more than 121 months after	
	Forward	None	2 years	No	Yes	Yes	leaving DROP.	
Brownwood	Retro	None	2 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Cleburne	Retro	None	5 years	Yes	Yes	Yes	Lump sum payment or max 3 payments within 26 months of date of termination of employment.	
Conroe	Forward	None	7 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Corpus Christi	Retro	None	3 years with 54/20 or 4 years with 56/22	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Corsicana	Retro	None	3 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Denison	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP Offered.
Denton	Retro	None	4 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Galveston	Retro	None	3 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Greenville	Retro	None	2 years	No	Yes	Yes	Lump sum payment.	
	Forward	None credited after 8/1/2006	3 years		Yes, credited to firefighter's special DROP account	Yes	Lump sum payment or payment in no more than 3 installments with the first installment not more than 13 months after leaving DROP and final installment not more than 37 months after leaving DROP.	
Harlingen	Retro	None	N/A: reduced benefit and lump sum elected upon retirement	No	No	Yes	Monthly benefit equals 84 percent of the regular monthly amount payable for service retirement. In addition, member receives a lump sum payment upon retirement, equal to 24 times monthly reduced benefit.	Election of Retro DROP precludes election of DROP.

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	. Withdraw (how often, min/max)	Comments
	elected to participate in Forward DROP	2% less than the greater of: (a) or (b) (see note) compounded annually. Interest credited until DROP balance is					Lump sum or installments or any other form elected	(a) The rate used by the Fund's actuary in the last valuation report prepared before member's DROP date. (b) The rate used by the Fund's actuary in the last valuation report prepared before member's
	election.		108 months	No	Yes	Yes	approved by the board.	report prepared before member's retirement date.
Irving	Retro with PROP distribution feature	2% less than the valuation interest rate, credited on (a) and (b) (see note)	108 months	No	Yes	Yes		(a) The total of the monthly retirement benefits the member would have received between Retro DROP Eligibility Date and the time he retired under the plan. (b) The amount of member contributions based upon a contribution rate of 10% of pay that the member has made to the fund between Retro DROP Eligibility Date and the time he retired under the plan.
Killeen	Retro	None	2 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Laredo	Retro	None	2 years	No	Yes	Yes	Lump sum payment or max 5 payments within 36 months of date of termination of employment.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
	Forward	None	3 years	No	Yes	Yes	Lump sum payment.	
Longview	Retro	None	3 years	No	Yes	Yes	Lump sum payment.	
	Retro	None	2 years	No	Yes		Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
Lubbock	Early Retro	None	2 years	No	Yes		Lump sum payment or max 5 payments within 36 months of date of termination of employment.	
	Forward	None	6 years	No	Yes	Yes	Lump sum payment.	
Lufkin	Retro	None	3 years	No	Yes	Yes		Election of Retro DROP precludes election of DROP.
Marshall	Forward	None	3 years	No	Yes	Yes	Lump sum payment.	
McAllen	Retro	None	2 years	No	Yes	N/A	Lump sum payment.	
	Forward	4% compounded annually; no interest after conclusion of DROP period	3 years	No	Yes		No more than 3 installments within 3 years.	
	Reverse	None	N/A: reduced benefit and lump sum elected upon	No	No		No more than 3 installments within 3 years.	
	Retro	4% compounded annually; no interest after conclusion of DROP period	3 years	No	Yes		No more than 3 installments within 3 years.	
Midland	Combined Forward & Retro	4% compounded annually; no interest after conclusion of DROP period	Must retire within 3 years of Combined DROP	No	Yes		No more than 3 installments within 3 years.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
	Forward *closed to members who did not meet eligibility requirement on/	4% compounded annually for DROP elections made before 1/1/17; None for DROP elections made on/					1-5 payments over a 5 year period DROP shall be fully paid at earliest of 5th payment or end	
Odessa	before 12/31/16.	after 1/1/17	3 years	No	Yes	Yes	of 5-year period.	
Orange	Retro	None	3 years	No	Yes	Yes	Lump sum or max 5 payments within 36 months of date of termination of employment.	
Orange								
Paris	Retro	None	2 years	No	Yes	No	Lump sum payment.	
Plainview	Retro	None	2 years with 50/20 if hired prior to 10/1/94; 2 years with 53/20 if hired on or after 10/1/94	No	Yes	Yes	Lump sum or max 5 payments within 36 months of date of termination of employment.	
Port Arthur	Retro	None	3 years	No	Yes	Yes	Lump sum payment.	
	Retro	6% annual rate; no interest after date of employment termination	4 years		Yes	Yes	Lump sum payment or maximum of 3 payments within 25 months of date of termination of employment.	
San Angelo	Forward	6% annual rate; no interest after date of employment termination	4 years	No	Yes	Yes	Lump sum payment or maximum of 3 payments within 25 months of date of termination of employment.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
San Benito	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP Offered.
Sweetwater	Retro	None	2 years	No	No	Yes	Lump sum payment.	
Temple	Retro	None	2 years	No	Yes	Yes	Lump sum payment or maximum of 5 payments within 36 months of the firefighter's date of termination of employment.	
Texarkana	Retro	None	3 years	Yes (see note)	Yes	Yes	Lump sum payment or maximum of 5 payments within 36 months of the firefighter's date of termination of employment.	Ad hoc benefit increase for members electing a Retro DROP benefit calculation date prior to Oct. 1, 2014. Additional ad hoc benefit increase if Retro DROP benefit calculation date is prior to Nov. 1, 2012.
Texas City	Retro	None		Yes	Yes	Yes	Lump sum payment or maximum of 5 payments within 36 months of the firefighter's date of termination of employment.	
The Woodlands	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP Offered.
Travis Co. ESD #6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP Offered.
Tyler	Retro	None	3 years with 55/20 or 5 years with		Yes	Yes	Lump sum payment or maximum of 5 payments within 36 months of the firefighter's date of termination of employment.	
University Park	Retro	None	2 years	No	Yes	Yes	Lump sum payment or maximum of 5 payments within 36 months of the firefighter's date of termination of employment.	

TEXAS PENSION REVIEW BOARD

Retirement System	Type of DROP	Interest Credit	DROP Maximum Duration	COLA Credited	Employee Contribution Credited	Spouse continue after death	Withdraw (how often, min/max)	Comments
			1 year at 55/21 or 2 years					
			at 55/22 or 3 years at					
Waxahachie	Retro	None	55/23	No	Yes	Yes	Lump sum payment.	
Weslaco	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No DROP Offered.
							Receipt of lump sum must be	
							completed during the first four	
Wichita Falls	Retro	None	2 years	No	No		calendar years of retirement.	

TEXAS PENSION REVIEW BOARD

GOVERNANCE

TEXAS PENSION REVIEW BOARD

GOVERNANCE

TEXAS CONSTITUTION

Numerous statutes and laws govern state and local retirement systems in Texas, including the State Constitution. Article 16, Section 67(b) of the Texas Constitution, directs the Legislature to establish both the Teacher Retirement System of Texas (TRS) and the Employees Retirement System of Texas (ERS). It establishes the minimum and maximum state contribution rates to both TRS and ERS at six percent and ten percent. In an emergency, as determined by the Governor, the Legislature may appropriate additional sums as actuarially determined.

The Constitution also directs the Legislature to provide for two statewide retirement systems for officers and employees of cities and counties. Article 16, Section 67(c)(1)(B), establishes a statewide retirement system for officers and employees of counties and other political subdivisions that choose to voluntarily participate (Texas County and District Retirement System (TCDRS)). Article 16, Section 67(c)(1)(C), establishes a statewide retirement system for officers and employees of cities that choose to voluntarily participate (Texas Municipal Retirement System (TMRS)). Article 16, Section 67(c)(1)(C), establishes a statewide retirement system for officers and employees of cities that choose to voluntarily participate (Texas Municipal Retirement System (TMRS)). Article 16, Section 67(d), establishes a retirement system for justices, judges, and commissioners of the appellate courts as well as judges of the district and criminal district courts, which is administered by the Board of Trustees of ERS (Judicial Retirement System (JRS)).

The board of trustees of a public retirement system is the fiduciary of the system's trust fund. Fiduciary duty is defined in Article 16, Section 67(a)(3), as exercising the judgment and care under the circumstances then prevailing that persons of ordinary prudence, discretion, and intelligence exercise in management of their own affairs, not in regard to the permanent disposition of their funds, considering the probable income there from as well as the probable safety of their capital.

Article 16, Section 67(c) of the Constitution has two key subsections which provide for the creation of local retirement systems, as well as outline basic fiduciary and governance principles:

- Article 16, Section 67(c)(1)(A) states that the Legislature shall provide by law for the creation by any city or county of a system of benefits for its officers and employees.
- Article 16, Section 67(f) directs the boards of trustees of retirement systems not belonging to a statewide system to hold the assets in trust for the exclusive purpose of providing benefits to the members, defraying reasonable expenses of administering the system, and to adopt sound actuarial assumptions.

TEXAS GOVERNMENT CODE

Title 8 of the Texas Government Code applies to public retirement systems. Subtitle A of Title 8, Chapters 802 through 810, contain provisions generally applicable to public retirement systems. Statewide retirement systems' governing statutes are contained in Subtitle B through Subtitle H of Title 8. Those subtitles cover the general provisions, membership, creditable service, benefits and administration of the statewide retirement systems.

TEXAS PENSION REVIEW BOARD

GOVERNANCE

LOCAL RETIREMENT SYSTEMS

There are seventeen municipal retirement systems including fourteen retirement systems enabled by state statute and three other retirement systems created by city ordinances or city charters. The following are local retirement systems with their own provisions of Article 6243, Vernon's Civil Statutes (also known as Title 109):

- City of Austin Employees' Retirement System
- Austin Fire Fighters Relief & Retirement Fund
- Austin Police Retirement System
- Dallas Police & Fire Pension System—Combined
- Dallas Police & Fire Pension System—Supplemental
- El Paso Firemen's Pension Fund
- El Paso Policemen's Pension Fund

- Fort Worth Employees' Retirement Fund
- Fort Worth Employees' Retirement Fund Staff Plan
- Galveston Employees' Retirement Plan for Police
- Houston Firefighters' Relief & Retirement Fund
- Houston Municipal Employees Pension System
- Houston Police Officer's Pension System
- San Antonio Fire & Police Pension Fund

The three municipal retirement systems created by city ordinances or city charters are: Dallas Employees' Retirement Fund, City of El Paso Employees Retirement Trust, and Galveston Employees' Retirement Fund.

In addition to these systems, the Texas Local Fire Fighters Retirement Act (TLFFRA), Article 6243(e) of Vernon's Civil Statutes, is the governing statute of paid/part-paid and volunteer fire systems across the state.

Several local retirement systems were created without specific legislative authority required by the Constitution. Two Attorney General opinions (JM-1068 and JM-1142) determined these local retirement systems were invalid. To resolve this situation, the 72^{nd} Legislature adopted Chapter 810 of the Government Code to authorize all those systems that had been established prior to the Attorney General opinions as well as to provide for subsequent local retirement systems established by local jurisdictions.

Local retirement systems established in Title 109 have their contribution rates, benefit levels and the composition of their board of trustees set in statute. Certain systems may have authority to make changes locally, either through meet and confer provisions in their statute, or through other procedures outlined in their enabling statute. Local retirement systems established under TLFFRA have authority to determine member contribution rates, benefit levels, and other plan provisions locally through procedures outlined in TLFFRA, however, the composition of TLFFRA boards of trustees is set in statute. Sponsoring municipalities of TLFFRA systems must meet a statutory minimum contribution rate, but may adopt by ordinance a higher contribution rate than set in statute. Local retirement systems established under Chapter 810 of the Government Code have the authority to determine plan provisions locally.

TEXAS PENSION REVIEW BOARD

GOVERNANCE

Local retirement systems, except for certain deferred compensation plans, are also subject to Chapter 802 of the Government Code. Subchapter C of Chapter 802 covers the administration of the systems' assets and provides for the following key fiduciary guidelines:¹

- The assets held in trust are for the benefit of the members and retirees of the system and their beneficiaries.
- In making and supervising investments, an investment manager or the governing body of the system shall fulfill its duties solely in the interest of the participants and beneficiaries; and with the care, skill, prudence, and diligence under the prevailing circumstances that a prudent person acting in a like capacity would use.

TEXAS CONSTITUTION, ARTICLE XVI, SEC. 66

In 2003, the Texas Constitution was amended to include Section 66 of Article 16, "Protected Benefits under Certain Public Retirement Systems". This section applies only to certain local public retirement systems and does not cover health or life insurance benefits. The key provisions of this section of the Constitution are:

- Local retirement systems covered by this section may not reduce or otherwise impair benefits accrued by a person if the person could have terminated employment or had terminated employment and would have been eligible for those benefits without accumulating additional service under the retirement system.
- Benefits granted to a retiree or other annuitant may not be reduced or otherwise impaired.
- The political subdivision(s) and the retirement system that finance benefits under the retirement system are jointly responsible for ensuring that benefits under the section are not reduced or impaired and the section does not create a liability or an obligation to a retirement system for a member of the retirement system other than the payment by active members of a required contribution.
- Subsection (b) specifically exempts the San Antonio Fire and Police Pension Fund from the provisions of this section.

Additionally, the section allowed for a one-time opt-out election in May 2004 for any retirement system and the political subdivision that finances benefits under the retirement system. The following cities opted out of the section: Denison, Galveston, Houston, Marshall, McAllen, Paris, Port Arthur, and Sweetwater.

¹Local retirement systems created under TLFFRA are exempt from Subchapter C of Chapter 802 of the Government Code, except sections 802.205 and 802.207. Section 27(b) of TLFFRA provides for similar prudent care language for TLFFRA systems.

TEXAS PENSION REVIEW BOARD

VERNON'S TEXAS REVISED CIVIL STATUTES AND GOVERNMENT CODE

State Laws Governing Statew	vide Retirement Systems						
System or Issue Governed	Article/S	ection No.					
Employees Retirement System of Texas	Title 8, Gov. Code, Subtitle B: Ch. 811-815						
Teacher Retirement System of Texas	Title 8, Gov. Code, S	ubtitle C: Ch. 821-825					
Judicial Retirement System of Texas, Plan Two	Title 8, Gov. Code, S	ubtitle E: Ch. 836-840					
Texas County and District Retirement System	Title 8, Gov. Code, S	ubtitle F: Ch. 841-845					
Texas Municipal Retirement System	Title 8, Gov. Code, S	Title 8, Gov. Code, Subtitle G: Ch. 851-855					
Texas Emergency Services Retirement System	Title 8, Gov. Code, S	Title 8, Gov. Code, Subtitle H: Ch. 861-865					
State Laws Governing Municipal, Fire Fighte	r and Police Officer Retirement Syst	ems					
System or Issue Governed	Article/Section No.	Population Bracket					
Dallas Police & Fire Pension System	V.T.C.S. 6243a-1	1,180,000-1,900,000					
El Paso Firemen & Policemen's Pension Fund	6243b	500,000-600,000					
Texas Local Fire Fighters Retirement Act (TLFFRA)	6243e	Various					
Austin Fire Fighters Relief & Retirement Fund	6243e.1	450,000-500,000					
Houston Firefighters' Relief & Retirement Fund	6243e.2(1)	1,600,000					
Houston Police Officer's Pension System	6243g-4	>1,500,000					
Houston Municipal Employees' Pension System	6243h	>1,500,000					
Fort Worth Employees' Retirement Fund	6243i	>500,000					
Austin Employees' Retirement Fund	6243n	760,000-860,000					
Austin Police Retirement System	6243n-1	460,000-500,000					
San Antonio Fire & Police Pension Fund	62430	1,300,000-1,500,000					
Galveston Employees' Pension Plan for Police	6243p	50,000-400,000					
Political Entities, including Municipalities & Other Special Purpose Districts	Title 8, Gov	't Code §810					

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Decisions relating to contribution levels and benefit provisions are governed differently across Texas' diverse public retirement systems. The following chart shows how, and by whom, decisions related to contributions and benefits are made for statewide, municipal, Texas Local Fire Fighters Retirement Act (TLFFRA), and other governmental plans. For each type of plan, the chart also identifies statutory and constitutional parameters for making changes to contributions and benefits.

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
		Determined by Legislature, with a constitutional				
	-	minimum of six percent and a maximum of 10				
	Government	percent of the aggregate compensation paid to	Determined by Legislature,			
	Code Title 8,	members. In an emergency, as determined by the	but may not be less than six			
	Subtitle B	Governor, the Legislature may appropriate such	percent of current			
Employees Retirement		additional sums as are actuarially determined to be	1 /1	Determined by	Determined by	
System of Texas	815	required to fund benefits authorized by law.	Texas Constitution.	Legislature.	Legislature.	No
	Government					
	Code Title 8,					
Judicial Retirement	Subtitle B					
System of Texas Plan	Chapters 836-			Determined by	Determined by	
Two	840	Determined by Legislature.	Determined by Legislature.	Legislature.	Legislature.	No
	Government					
Law Enforcement &	Code Title 8,					
Custodial Officer	Subtitle B					
Supplemental	Chapters 811-			Determined by	Determined by	
Retirement Fund	815	Determined by Legislature.	Determined by Legislature.	Legislature.	Legislature.	No
		Determined by Legislature, with a constitutional				
		minimum of six percent and a maximum of 10				
	Government	percent of the aggregate compensation paid to	Determined by Legislature,			
	Code Title 8,	members. In an emergency, as determined by the	but may not be less than six			
	Subtitle C	Governor, the Legislature may appropriate such	percent of current			
Teacher Retirement	Chapters 821-	additional sums as are actuarially determined to be	compensation, per the	Determined by	Determined by	
System of Texas	825	required to fund benefits authorized by law.	Texas Constitution.	Legislature.	Legislature.	No

Statewide Plans

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
				Determined by	Determined by	
				employer	employer	
	Government		Determined by employer	(participating	(participating	
	Code Title 8,		(participating counties and	counties and	counties and	
	Subtitle F		districts), within statutory	districts), within	districts), within	
Texas County & District	Chapters 841-	Determined annually by the actuary and	guidelines based on plan	statutory	statutory	
Retirement System	845	approved by the TCDRS board of trustees.	options selected.	guidelines.	guidelines.	No
		TESRS board of trustees, by rule, determines minimum, and may determine maximum, contribution rate per member				
		to be contributed by local governments of			Determined by	
		participating departments (after			board of trustees;	
	Government	consultation with the actuary to make the			however, changes	
	Code Title 8,	system actuarially sound). State			to benefit formula	
	Subtitle H	contributes amount necessary for			not allowed for	
Texas Emergency Services	Chapters 861-	actuarial soundness, not to exceed		Determined by	pension system	
Retirement System	865	maximum set in governing statute.	No employee contribution.	board of trustees.	annuitants.	No
				Determined by	Determined by	
	Government			employer	employer	
	Code Title 8,		Determined by employer	(participating	(participating	
	Subtitle G		(participating cities), within	cities), within	cities), within	
Texas Municipal	Chapters 851-	Determined annually by the actuary and	statutory guidelines based	statutory	statutory	
Retirement System	855	approved by the TMRS board of trustees.	on plan options selected.	guidelines.	guidelines.	No

Statewide Plans, Continued

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
Austin Employees' Retirement System	V.T.C.S., Article 6243n	Determined by governing statute. City council may authorize additional contributions to the system.	members may increase their contributions by a	Determined by governing statute; any modifications require legislative action. COLAs must be recommended by actuary, city manager, authorized by retirement board, and approved by city council.	Retirement allowance and benefit payable are subject to adjustments to ensure actuarial soundness as approved by the actuary and adopted by board of trustees. Annuities already accrued may not be reduced.	Yes
Austin Fire Fighters Relief and Retirement Fund	V.T.C.S., Article 6243e.1	Determined by governing statute. City council may authorize additional contributions to the system.	members may increase their contributions by a	Determined by governing statute, but the board of trustees with approval of the board's actuary may change the service retirement benefit multiplier for certain member groups.	Determined by governing statute, but the board of trustees with approval of the board's actuary may change service retirement benefit multiplier for certain member groups. Board also allowed to make DROP- related changes and prorated reduction in benefit payments if funds become insufficient.	Yes. Also, system's governing statute does not allow for a change in service retirement benefit multiplier if it reduces a member's benefit accrued before the date of the change.
Austin Police Retirement System	1	Determined by governing statute. City council may authorize additional contributions to the system.	Determined by governing statute. Members by majority vote may increase or decrease contributions with a minimum set in statute.	Increase in retirement benefit multiplier allowed by the governing statute if approved by the board's actuary and adopted by the board of trustees as a board rule for all present, retired and new members.	Decrease in retirement benefit multiplier allowed by the governing statute if approved by the board's actuary, adopted by the board of trustees as a board rule, present members' vested interest before the effective date of the change is not reduced, and annuity payments are not reduced. The governing statute also allows the board of trustees to eliminate Retro DROP.	Yes
Dallas Employees' Retirement Fund	•	Determined by City Ordinance	Determined by City Ordinance	Determined by City Ordinance	Determined by City Ordinance	Yes

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
Keth ement System	Statute	Determined by the legislature,	Contributions	Denent mercases	Denent Reductions	(Article 00)
		or by a majority vote of city				
		voters, or by				
		written agreement between				
		the City and the Plan with at		Plan can be amended by the		
		least a 2/3 vote of all trustees,		legislature or by a 2/3 vote of	Plan can be amended by the	
			Determined by the	all trustees with certain	legislature or by 2/3 vote of all	
			legislature. Any increase	amortization period-related	trustees with certain amortization	
Dallas Police & Fire	V.T.C.S.,		requires approval of at	restrictions. Any change	period-related restrictions. Any	
Pension System-	Article		least 2/3 vote of all	requires a review by the	change requires a review by the	
Combined Plan	6243a-1		trustees.	Pension Review Board.	Pension Review Board.	Yes
			Determined by the		Members of the system may amend the plan including benefit provisions. Amendments should	
Dallas Police and	V.T.C.S.,		legislature or by a	Members of the system may	not deprive a member from	
Fire Pension System	Article		majority vote of city	amend the plan including	benefits that have become fully	
-Supplemental	6243a-1		voters.	benefit provisions.	vested or nonforfeitable.	Yes
	El Paso City					
City of El Paso	Code, Title					
Employees	II, Chapter		Determined by City			
Retirement Trust	2.64	Determined by City Ordinance	Ordinance	Determined by City Ordinance	Determined by City Ordinance	Yes
				Board of trustees may modify		
				benefits prospectively and		
				retroactively, if approved by an		
			Determined by the	actuary; by a majority of active		
		Determined by city voters;	board of trustees;	members; and either by the		
		however, governing statute	however, governing	city council or by city voters		
			statute allows employee	through charter referendum.		
		,	contribution rate to	Retroactive change can only		
	V.T.C.S.,	rate dependent on whether the		increase benefits. Certain	Board may modify benefits	
El Paso Firemen's	Article		contribution rate is	amortization period-related	prospectively. Retroactive change	
Pension Fund	6243b	determined by the actuary.	changed by city council.	restrictions apply.	can only increase benefits.	Yes

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

						Constitutional Benefit
	Governing					Protection
Retirement System	0	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	(Article 66)
iteen entene system	Statute			Denent mer cuses	Denent Reductions	
				Board of trustees may		
				modify benefits		
				prospectively and		
				retroactively, if approved		
				by an actuary; by a		
			Determined by the board	majority of active		
		Determined by city voters;	of trustees; however,	members; and either by		
		however, governing statute	governing statute allows	the city council or by city		
		allows city council to increase or	employee	voters through charter		
		decrease city contribution rate	contribution rate to	referendum. Retroactive	Board may modify	
		dependent on whether the	change if the city	change can only increase	benefits prospectively.	
El Paso Police	V.T.C.S.,	current rate is sufficient as	contribution rate is	benefits. Certain	Retroactive changes can	
Pension Fund	Article 6243b	determined by the actuary.	changed by city council.	amortization period	only increase benefits.	Yes
		Board of trustees or city council is				
		authorized to decrease municipal				
		contribution rate based on a	Determined by the board			
		special election and procedures	or city council based on a	Board of trustees may	City council is authorized	
Fort Worth		outlined in the governing statute;	special election and	propose benefit increases	to make benefit	
Employees'	V.T.C.S.,	however, only the city council	procedures outlined in the	that must be approved by	-	
Retirement Fund	Article 6243i	may increase the contributions.	governing statute.	city council.	notice to the board.	Yes
		Board of trustees or city council is				
		authorized to decrease municipal				
		contribution rate based on a	Determined by the board			
Fort Worth		special election and procedures	or city council based on a	Board of trustees may	City council is authorized	
Employees'		outlined in the governing statute;	special election and	propose benefit increases		
Retirement Fund	V.T.C.S.,	however, only the city council		that must be approved by	=	
Staff Plan	Article 6243i	may increase the contributions.	governing statute.	city council.	notice to the board.	Yes
				Board is authorized to		
		Determined by municipality		make benefit increases,		
Galveston		based on the advice of the fund's	Determined by board of	with approval of a	Board of trustees is	
	V.T.C.S.,	actuary in accordance with the	trustees in accordance	majority of the members	authorized to make	
Plan for Police	Article 6243p	governing statute.	with the governing statute.	of the fund.	benefit modifications.	No

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
Employees'	Galveston City Code, Part II, Chaptor 28	Determined by the city council			authorized to make	No
Retirement Fund	Chapter 28	Determined by the city council.	Determined by the city council.	plan.	amendments to the plan.	No
		Determined by the corridor mechanism outlined in the governing statute. Pension board and the city jointly determine the target contribution rate and the	whether the city's contribution rate is lower or greater than the target rate and funded ratio thresholds of less than, equal to or greater than 90% or 100%, the city and the pension	contribution rate is lower than the target rate and based on funded ratio targets of equal to or greater than 90% or 100%,	greater than the target rate,	governing statute states that neither the city nor
Houston Firefighter's		corridor around the target rate. The target rate must remain within the			the city and the pension board shall enter into a	the pension board can make any unilateral
-		corridor, but once the plan is 100%	-	-	written agreement to make	changes to the pension
		funded, the rate can be lowered.			benefit modifications.	plan.
		of payroll. The CCR is jointly determined by the Pension Board and the City. The CCR must remain within a predetermined corridor	statutorily determined actions must take place to bring the CCR back within the corridor should it rise above the maximum. This may include increases in employee contributions. While the plan is less than 100% funded, but greater than 90% funded, employee contributions can be decreased only to reverse a previous increase. If the plan is	The benefit restoration would be under a joint agreement between the City and the Pension Board. If the plan is over 100% funded, the Pension Board and City may jointly	Some combination of	
Houston Municipal		until the plan is 100% funded. The	as long as the funded ratio	funded ratio would remain	corridor should it rise above	make any unilateral
		corridor is built around target levels for CCR ("midpoints").		over 100% after the increase in benefits.	the maximum. This may include benefit reductions.	changes to the pension plan.
System	024311		the decrease in contributions.	penents.	include benefit reductions.	pian.

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Retirement System	Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)
Houston Police Officers Pension System	V.T.C.S., Article	Determined by the corridor mechanism outlined in the governing statute. Pension board and the city jointly determine the target contribution rate and the corridor around the target rate. The target rate must remain within the corridor, but once the plan is 100%	Determined by the corridor mechanism outlined in the governing statute. Based on whether the city's contribution rate is lower or greater than the target rate and funded ratio thresholds of less than, equal to or greater than 90% or 100%, the city and the pension board can/shall enter into a written agreement to increase/ decrease the member	than the target rate and	Determined by the corridor mechanism outlined in the governing statute. If the city's contribution rate is equal or greater than the target rate, the city and the pension board shall enter into a written agreement to make benefit modifications.	No. However, the governing statute states that neither the city nor the pension board can make any unilateral changes to the pension plan.
San Antonio Fire & Police Pension Fund	V.T.C.S., Article	Determined by governing statute.	statute. Modifications require	Determined by governing statute. Modifications require legislative action.	Determined by governing statute. Modifications require legislative action.	No. However, the governing statute states that municipal contribution and retirement annuities are a part of the compensation for services rendered to the municipality and makes the statute a contract of employment.

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

TLFFRA Plans

Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)	
V.T.C.S., Article 6243e	governing body of a municipality by ordinance can adopt a contribution rate	TLFFRA statute authorizes the members of each fund to determine their contribution rates by voting.	benefit modifications. The change must first be approved by 1) an eligible actuary selected by the board and 2) a majority of the participating members of the retirement system voting by secret ballot. For more	actuary and by a majority of the participating members of the system voting on the change. However, changes cannot deprive a member, retiree, or an	Yes, except for cities that have opted out. Also, under the TLFFRA statute, board of trustees is authorized to reduce benefit payments proportionately if money available to pay benefits is insufficient to pay the full amount. The board may only reduce benefit payments for the time necessary.	
LIST OF PAID AND PART-	PAID TLFFRA SYSTEMS					
Abilene Firemen's Relief 8	& Retirement Fund	Harlingen Firemen's Relief & Retirement Fund		Port Arthur Firemen's Relief and Retirement Fund		
Amarillo Firemen's Relief	& Retirement Fund	Irving Firemen's Relief & Retirement Fund		San Angelo Firemen's Relief and Retirement Fund		
Atlanta Firemen's Relief &	& Retirement Fund	Killeen Firemen's Relief & Retirement Fund		San Benito Firemen's Pension Fund		
Beaumont Firemen's Reli	ef & Retirement Fund	Laredo Firefighters Retirem	ent System	Sweetwater Firemen's Relief & Retirement Fund		
Big Spring Firemen's Relie	ef & Retirement Fund	Longview Firemen's Relief &	k Retirement Fund	Temple Firemen's Relief & Retirement Fund		
Brownwood Firemen's Re	elief and Retirement Fund	Lubbock Fire Pension Fund		Texarkana Firemen's Relief & Retirement Fund		
Cleburne Firemen's Relie	f & Retirement Fund	Lufkin Firemen's Relief & Re	etirement Fund	Texas City Firemen's Relief & Retirement Fund		
Conroe Fire Fighters' Reti	rement Fund	Marshall Firemen's Relief &	Retirement Fund	The Woodlands Firefighters' Retir	ement System	
Corpus Christi Fire Fighte	rs' Retirement System	McAllen Firemen's Relief &	Retirement Fund	Travis Cty ESD #6 Firemen's Relief	& Retirement Fund	
Corsicana Firemen's Relie	f & Retirement Fund	Midland Firemen's Relief ar	d Retirement Fund	Tyler Firefighters' Relief & Retiren	nent Fund	
Denison Firemen's Relief	& Retirement Fund	Odessa Firemen's Relief & F	Retirement Fund	University Park Firemen's Relief &	Retirement Fund	
Denton Firemen's Relief a	and Retirement Fund	Orange Firemen's Relief & F	Retirement Fund	Waxahachie Firemen's Relief & Re	etirement Fund	
Galveston Firefighter's Re	elief & Retirement Fund	Paris Firefighters' Relief & R	etirement Fund	Weslaco Firemen's Relief & Retirement Fund		
Greenville Firemen's Relie	ef and Retirement Fund	Plainview Firemen's Relief a	nd Retirement Fund	Wichita Falls Firemen's Relief & Re	etirement Fund	

TEXAS PENSION REVIEW BOARD

CONTRIBUTION AND BENEFIT DECISION-MAKING FOR TEXAS PUBLIC RETIREMENT SYSTEMS

Plans Governed by Chapter 810 of the Texas Government Code

Governing Statute	Employer Contributions	Employee Contributions	Benefit Increases	Benefit Reductions	Constitutional Benefit Protection (Article 66)	
Texas Government Code, Chapter 810	Determined by the political entity.	Determined by the political entity.	Determined by the political entity.	Determined by the political entity.	Yes, unless political entity has opted out.	
LIST OF RETIREMENT SYSTI	EMS ENABLED BY CHAPTER 810					
Arlington Employees Defer	red Income Plan	El Paso Firemen & Policemen's Per	sion Staff Plan and Trust	Northwest Texas Healthcare Sy	vstem Retirement Plan	
Brazos River Authority Reti	rement Plan	Galveston Wharves Pension Plan		Plano Retirement Security Plan		
Capital MTA Retirement Pla	an for Administrative Employees	Guadalupe-Blanco River Authority		Port of Houston Authority Retirement Plan		
Capital MTA Retirement Pla	an for Bargaining Unit Employees	Harris County Hospital District Pension Plan		Refugio Co. Memorial Hosp. Dist. Retirement Plan		
Colorado River Municipal W	Vater Dist. Pension Trust	Houston MTA Non-Union Pension Plan		Retirement Plan for Anson General Hospital		
Corpus Christi Regional Tra	nsportation Authority	Houston MTA Workers Union Pens	ion Plan	Retirement Plan for Citizens Medical Center		
CPS Energy Pension Plan		Irving Supplemental Benefit Plan		Retirement Plan for Employees of Brownsville Navigation District		
Dallas Co. Hospital Dist. Ret	tirement Income Plan	JPS Pension Plan - Tarrant County I	Hospital District	Retirement Plan for Guadalupe Regional Medical Center		
Dallas/Fort Worth Airport Board DPS Retirement Plan		Lower Colorado River Authority Re	tirement Plan	Retirement Plan for Sweeny Co	ommunity Hospital	
Dallas/Fort Worth Airport Board Retirement Plan		Nacogdoches County Hosp. District Retirement Plan		San Antonio Metropolitan Transit Retirement Plan		
DART Employees' Defined E	Benefit Retirement Plan & Trust	Northeast Medical Center Hospital Retirement Plan		University Health System Pension Plan		

TEXAS PENSION REVIEW BOARD

Retirement System	Active Employee	Retiree	Sponsor Government	Taxpayer, Not Affiliated with Fund/ Sponsor Govt.	Total	Governing Statute:
Employees Retirement System of Texas	3 - Trustees (active employees); elected by active and retired members. Six-year term (staggered).		3 - Trustees; one appointed by the governor, one by the Chief Justice of the Supreme Court of Texas, one by the Speaker of the House of Representatives. Six-year term (staggered).		6	Gov. Code, Title 8, Subtitle B: Ch. 811 -815
Judicial Retirement System of Texas, Plan One	Governed by ERS Board of Trustees.					Gov. Code, Title 8, Subtitle D: Ch. 831-835
Judicial Retirement System of Texas, Plan Two	Governed by ERS Board of Trustees.					Gov. Code, Title 8, Subtitle E: Ch. 836 -840
Teacher Retirement System of Texas	2 - Trustees, must be current public school employees; nominated by active public school employees, appointed by the Governor, and confirmed by two-thirds of the Senate.	appointed by the Governor, and	2 - Trustees, must have demonstrated financial expertise, have worked in private business/industry, and have broad investment - experience; nominated by the State Board of	3 - Trustees, must have pension fund investment experience, must not be fund members or annuitants; appointed by the Governor, and confirmed by two-thirds of the Senate. Six-year term (staggered).	9	Gov. Code, Title 8, Subtitle C: Ch. 821 -825
Texas County and District Retirement System	9 - Trustees, must be active or retired fund members; appointed by the Governor and confirmed by the Senate. Six-year term (staggered).	See Active Employee entry.			9	Gov. Code, Title 8, Subtitle F: Ch. 841 -845
Texas Emergency Services Retirement System	5 - Trustees, one must represent emergency medical services personnel; appointed by the Governor. Six-year term (staggered).	1 - Trustee, may be a retiree of the pension system. Six-year term (staggered).		3 - Trustees, must have experience in finance, securities investment or pension administration; appointed by the Governor. Six-year term (staggered).	9	Gov. Code, Title 8, Subtitle H: Ch. 861-865
Texas Municipal Retirement System	3 - Employee Trustees, must be employees of a participating municipality (two or more trustees serving concurrently may not be from the same municipality); appointed by the Governor with the advice and consent of the Senate.		3 - Executive Trustees, must be CEO, CFO or other officer, executive or department head of a participating municipality (two or more trustees serving concurrently may not be from the same municipality); appointed by the Governor with the advice and consent of the Senate.		6	Gov. Code, Title 8, Subtitle G: Ch. 851-855

TEXAS PENSION REVIEW BOARD

Retirement System	Active Employee	Retiree	Sponsor Government	Taxpayer, Not Affiliated with Fund/Sponsor Govt.	Total	Governing Statutes
Retirement Fund Austin Fire	4 - Active employees; elected by active membership body. Four-year term.3 - Fund members (may be active or	2 - Retired members; elected by retired membership body. Four- year term.	 Member of city governing body; appointed by and serving at the pleasure of the city governing body. No term specified. City manager or designee 	3 - City residents, must be qualified voters, not employees/ former employees; two appointed by city governing body and one appointed by the board. Four-year term.	11	Article 6243n, V.T.C.S. Article
Fighters' Relief and Retirement Fund	retired); elected by active and retired members. Three-year term.	See Active Employee entry.	1 - Mayor. 1 - City Treasurer. No terms specified.		5	6243e.1 <i>,</i> V.T.C.S.
Austin Police Retirement System		2 - Retired members; elected by the retired membership body. Four- year term.	1 - Member of City Council, designated by City Council.	1 - City resident, must be qualified voter and resident for preceding five years; appointed by police retirement board. Four-year term.	11	Article 6243n -1, V.T.C.S
Dallas Employees' Retirement Fund	3 - City employee fund members, from different city departments; elected by fund members. Three-year term.	,	3 - City Council members or appointees; appointed by City Council. Two-year term. 1 - City auditor.		7	Dallas City Code Chapter 40A
	2 - Current or former police officers or firefighters. Two- or three- year staggered terms, as determined by the Nominations Committee.		6 - Selected by Mayor in consultation with City Council. Two or three- year staggered terms, as determined by the Mayor.	3 - Selected by the Pension System through a nominations committee. Two- or three- year staggered terms, as determined by the Nominations Committee.	11	Article 6243a -1, V.T.C.S.
El Paso Firemen and Policemen's Pension Fund	 3 - Policemen; elected by members of the policemen's pension fund. Four-year terms. 3 - Firemen; elected by members of the firemen's pension fund. Four-year terms. 			3 - City residents; designated by the mayor. Four-year terms. 2 - City residents; designated by the city manager. Four-year term.	11	Article 6243b, V.T.C.S.
Fort Worth Employees' Retirement Fund	 1 - Vested police member; elected by police members. Two-year term. 1 - Vested firefighter member; elected by firefighter members. Two-year term. 2 - Vested general employee members, not police or firefighters; elected by 	year term. 1 - Retired general employee, not police or fire; elected by civilian	1 - City chief financial officer; designated by city governing body. Two-year term.	5 - City residents, may not be members of city governing body; nominated by mayor, confirmed by majority vote of city governing body. Two-year term.	13	Article 6243i, V.T.C.S

TEXAS PENSION REVIEW BOARD

Retirement System	Active Employee	Retiree	Sponsor Government	Taxpayer, Not Affiliated with Fund/ Sponsor Govt.	Total	Governing Statute
Galveston Employees' Pension Plan for Police	 President of municipal police association, or next-highest ranked member if President is not a fund member. Term equal to president's term of office. Members of the fund; elected by fund members. Three-year term. 		1 - Municipal finance staff employee; designated by and serving at the pleasure of the city manager. No term specified.	1 - Legally qualified voter; designated by the mayor. Two-year term. 1 - Legally qualified voter; designated by city council. Two-year term.	7	Article 6243p. V.T.C.S.
Galveston Employees' Retirement Plan	3 - City employees; elected by city employees who are current members in the plan. Terms of office determined by Board bylaws.		1 - City employee in the City's Finance Department; appointed by the City Manager. Terms of office determined by Board bylaws.	employees; appointed by the other five	7	Galveston City Code
Houston Firefighters' Relief and Retirement Fund	5 - Firefighters who are members of the fund; elected by	retired firefighter fund	representative of the mayor. No term specified.	2 - City residents, must be registered voters, not employees of the city, and city residents for at least one year preceding initial appointment; appointed by the elected members of the Board of Trustees. Two- year term.	10	Article 6243e.2(1). V.T.C.S.
Houston Municipal Employees' Pension System	4 - Municipal employees who are members of the pension system, with at least five years of credited service; elected by active members of the pension system.	2 - Retirees, must be receiving a retirement pension from the system, have at least five years of service in the pension system, and not currently a city officer or employee; elected by retirees of the pension system. No	 Person appointed by the city controller; must not be a participant or beneficiary in the pension system. Three-year term. Persons appointed by the governing body of the city; must not 	1 - Person appointed by elected Board of Trustee members, must have been a resident of the state for the three years preceding the date of initial appointment. Three-year term.	11	Article 6243h, V.T.C.S.

TEXAS PENSION REVIEW BOARD

Retirement System	Active Employee	Retiree	Sponsor Government	Taxpayer, Not Affiliated with Fund/Sponsor Govt	Total	Governing Statute
Houston Police Officer's Pension System	3 - Police employees who are members of the pension system; elected by active, inactive and retired members of the pension system. Three-year term.	2 - Retired members, must be receiving pensions from the system and not currently city employees or officers; elected by active, inactive and retired members of the system. Three- year term.	 Administrative head of the city, or authorized representative. No term specified. City treasurer, or person discharging treasurer duties. No term specified. 		7	Article 6243g- 4, V.T.C.S.
San Antonio Fire and Police Pension Fund	 2 - Active member firefighters, must be below the rank of fire chief; elected by fire department fund members. Four-year term. 2 - Active member police officers, must be below the rank of police chief; elected by police department fund members. Four-year term. 	 Fire department retiree; elected by fire department retiree fund members and surviving spouses currently receiving benefits. Four-year term. Police department retiree; elected by police department retiree fund members and surviving spouses currently receiving benefits. Four-year term. 	 Mayor, or qualified mayoral designee. Term corresponds to mayor's term of office. Members of the city governing body; appointed by the governing body. Term corresponds to city government term of office. 		9	Article 6243o, V.T.C.S.
TLFFRA Plans, Paid or Part- Paid	3 - Members of the retirement system; elected by fund members. Three-year term.		 Mayor or designated representative, or the political subdivision's Chief Operating Officer or designated representative. Chief Financial Officer of the political subdivision, or designated representative. Terms correspond to term of office. 	2 - Residents of the political subdivision, must not be officers/ employees of the political subdivision; elected by other Board of Trustee members. Two-year term.	7	Article 6243e, sec. 19. V.T.C.S.
TLFFRA Plans, Volunteer	3 - Members of the retirement system; elected by fund members. Three-year term.		 Mayor, or designated representative. Municipal treasurer, or person performing duties of municipal treasurer. Terms correspond to term of office. 		5	Article 6243e, sec. 20. V.T.C.S.

TEXAS PENSION REVIEW BOARD

APPENDICES

TEXAS PENSION REVIEW BOARD

APPENDIX A — LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

TEXAS PENSION REVIEW BOARD

APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Public Retirement Systems – General

85th Session:

HB 89 - King, Phil/Creighton

HB 89 added Chapter 808 to the Texas Government Code to prohibit certain state governmental entities from investing in companies engaged in a boycott of a person or entity doing business in Israel or in an Israeli-controlled territory. State public retirement systems that qualify under the bill include the Employees Retirement System, Teacher Retirement System of Texas, the Texas Municipal Retirement System, Texas County and District Retirement System, and the Texas Emergency Services Retirement System. The provisions of the bill could potentially impact the investment decisions made by these governmental entities, and could cause the entities to sell certain current investment holdings. The bill was signed by the Governor on May 2, 2017; and became effective September 1, 2017.

SB 253 – Taylor, Van/Davis, Sarah

The bill transferred and consolidated the investment prohibitions and divestment provisions of Government Code Chapters 806 and 807 into a new Chapter 2270 of the Government Code. The bill also added provisions to prohibit certain governmental entities defined as investing entities under the bill from investing in companies with business ties to designated foreign terrorist organizations. State public retirement systems that qualify under the bill include the Employees Retirement System of Texas and the Teacher Retirement System of Texas. The provisions of the bill could potentially impact the investment decisions made by these investing entities, and could cause the entities to sell certain current investment holdings.

Additionally, the bill transferred the duties of the PRB to prepare, maintain, and administer the Texas Prohibition on Investment in Iran Scrutinized <u>Companies List to the Office of the Comptroller</u>. The bill repealed Chapter 807, Government Code. The bill was signed by the Governor and became effective May 23, 2017.

SB 500 - Taylor, Van/Geren

The bill added Section 810.002 of the Texas Government Code, which makes certain elected officials who are convicted of a qualified felony related to the member's performance of public service, ineligible for retirement annuity. A qualifying felony is defined as any felony involving bribery; embezzlement, extortion, or other theft of public money; perjury; coercion of public servant or voter; tampering with governmental record; misuse of official information; conspiracy or the attempt to commit any of these crimes; or abuse of official capacity. The provisions of this bill apply to qualified offenses committed on or after the effective date of the bill. The bill was signed by the Governor and became effective immediately June 6, 2017.

TEXAS PENSION REVIEW BOARD

APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Public Retirement Systems – General

85th Session:

SB 1735 – Hughes/Springer

SB 1735 repealed several pension-related statutes that no longer apply to any existing persons, programs, or funds. The bill amended law relating to the repeal of certain obsolete laws governing state pensions and other similar benefits. The bill became effective June 12, 2017.

84th Session:

HB 3310 - Paul/Taylor

HB 3310 amended Chapter 802, Government Code, to make disclosure and reporting requirement changes for public retirement systems. The law requires a public retirement system to notify its sponsoring entity if the system receives an actuarial valuation indicating the system's contributions were insufficient to amortize the unfunded liability within 40 years. If a system receives several consecutive valuations showing that the system's amortization period exceeds 40 years, the system's governing body and sponsoring entity must formulate a funding soundness restoration plan and submit the plan to the Pension Review Board. The plan should be developed in accordance with the system's governing statute and be designed to achieve and maintain, by the tenth anniversary of the date on which the final version of the plan is agreed to, an amortization period of no more than 40 years. Any updates of progress made by the entities toward improved actuarial soundness shall be reported to the PRB every two years.

Under the provisions of this bill, the Employees Retirement System of Texas, the Teacher's Retirement System, the Texas County and District Retirement System, the Texas Municipal Retirement System, and the Judicial Retirement System of Texas, Plan Two would be exempt from the funding soundness restoration plan requirements.

The bill provides for the City of Fort Worth to independently formulate, adopt, and revise as necessary, the funding soundness restoration plan, if required to do so, for the Fort Worth Employees' Retirement Fund.

HB 3310 also requires an actuarial valuation of a public retirement system to include a recommended contribution rate to achieve and maintain an amortization period of that does not exceed 30 years. Public retirement systems that have assets of at least \$100 million are required to conduct an actuarial experience study once every five years and to submit that study to the PRB. The first such study would be conducted not later than September 1, 2016. The bill was signed by the Governor on June 18, 2015 and became effective immediately.

SB 940 - Taylor/Anchia

SB 940 made administrative changes to Sections 806.052 and 807.052, Government Code, by requiring the Employees Retirement System of Texas, the

TEXAS PENSION REVIEW BOARD

APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Public Retirement Systems – General

84th Session:

SB 940 – Taylor/Anchia, Continued

Teacher's Retirement System, the Texas County and District Retirement System, the Texas Municipal Retirement System, and the Texas Emergency Services Retirement System to notify the comptroller and the State Pension Review Board of the listed companies in which the these entities own direct or indirect holdings, not later than the 30th day after the date the state governmental entity receives the list provided under Sections 806.051 and 807.051. The previous deadline was not later than the 14th day after the list was received. The bill was signed by the Governor on June 16, 2015 and became effective September 1, 2015.

83rd Session:

HB 13 – Callegari

HB 13 amended various provisions of the Government Code, Chapters 801 and 802 by expanding reporting requirements for all public retirement systems and adding new duties for the State Pension Review Board (PRB). The law requires all public retirement systems to post their system administrator's contact information and most recent plan reports and information submitted to the PRB on the Internet. The bill also requires the retirement systems to file an investment return and assumptions report with the PRB, within 210 days of the end of the system's fiscal year. The report should include gross, net, and rolling gross and rolling net investment return; and assumed rate of return information for the periods specified in the bill. The bill further requires the PRB to post on its website or on another website to which the PRB website is linked the most recent data from the various reports submitted by the retirement systems. Under the new law, the PRB is also required to create and administer new education and training programs for the public retirement systems, including developing model ethical standards and conflict-of-interest policies and making them accessible online and developing and administering an educational training program with minimum training requirements for trustees and system administrators. Lastly, the bill mandates the PRB to study the financial health of public retirement systems, including each system's ability to meet its long-term obligations. The bill was signed by the Governor on May 24, 2013 and became effective immediately, except as otherwise provided in the bill.

SB 200 - Patrick

SB 200 continued the PRB for 12 years until September 1, 2025 and amended the Government Code, Chapters 801 (governing statute of the PRB) and 802 (administrative requirements for the public retirement systems). The bill amended the Government Code to provide flexibility to PRB's educational training efforts. The bill also amended the Government Code to include certain standard Sunset across-the-board recommendations relating to potential conflict of interest and alternative dispute resolution provisions. The bill reduced the members of the board from nine to seven by abolishing the two legislative member positions. Additionally, the bill amended Chapter 802 to update certain reporting requirements for retirement systems, including requiring certain systems that conduct an actuarial experience study to file a copy of the report with the PRB and exempts defined contribution and volunteer retirement systems organized under the Texas Local Fire Fighters Retirement Act from certain reporting requirements.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Public Retirement Systems – General

83rd Session:

SB 200 - Patrick

SB 200 also prohibited certain state governmental entities from investing in companies engaged in certain business operations with the government of Iran. State governmental entities that qualify under the bill include the Employees Retirement System of Texas (ERS) and other retirement systems administered by ERS, the Teacher Retirement System of Texas, the Texas Municipal Retirement System, the Texas County and District Retirement System, and the Texas Emergency Services Retirement System. This provision would take effect January 1, 2014. The bill was signed by the Governor on June 14, 2013 and became effective September 1, 2013, except as otherwise provided in the bill.

SB 366 - Taylor

SB 366 amended Chapter 609 of the Government Code to authorize a political subdivision to establish a qualified Roth contribution program in accordance with the federal Internal Revenue Code of 1986. Under the Roth contribution program an employee may designate all or a portion of the employee's contribution under a 401(k) or a 457 plan as a Roth contribution at the time the contribution is made or convert all or a portion of the employee's previous contribution under the plan to a Roth contribution. The bill also authorized the plan administrator of a 457 plan to develop and implement procedures to efficiently administer a program under the plan that allows a qualified vendor to lend money to a participating employee. The bill was signed by the Governor on May 18, 2013 and became effective immediately.

Employees Retirement System (ERS)

85th Session:

SB 301 - Watson/Flynn

SB 301 was the Sunset bill for the Employees Retirement System of Texas (ERS). The legislation focused primarily on strengthening board oversight of alternative investments, improving transparency of alternative investments, and ensuring the Group Benefit Program is managed effectively to meet the needs of members and the state. The bill requires the ERS board of trustees to approve any individual alternative investment over \$100 million and allows the board of trustees to discuss the investment in closed session or by teleconference. A vote on the alternative investment, however, must be taken in public.

The bill also directed the agency to develop a consistent method to collect or calculate profit-sharing data for alternative investments, which are defined in the bill as a private equity fund, private real estate fund, hedge fund, infrastructure fund, or another asset as defined by rule by the board of trustees. ERS will be required to conduct its experience study and adopt actuarial assumptions once every four years, instead of its previous

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Employees Retirement System (ERS)

85th Session:

SB 301 - Watson/Flynn, Continued

requirement of every five years.

The bill improved the insurance appeal process for state employees and other ERS members by allowing members to participate more directly in the appeal process and providing a precedent manual to help guide agency appeal decisions. In addition, the bill applies Sunset's standard across-the-board good government recommendations and sets the next Sunset review for ERS at 2029. The bill was signed by the Governor on June 9, 2017, and became effective September 1, 2017.

84th Session:

HB 9 – Flynn/Huffman

HB 9 amended Section 815.402(a), Government Code to increase the employee contribution rate for ERS members who are not legislators, from 7.2% to 9.5% of payroll, and for legislators from 8.0% to 9.5% for service after August 31, 2015. Additionally, for service rendered on or after September 1, 2017, the employee contribution rate for ERS members who are not legislators of 9.5% would be reduced by one-tenth of a percent for each corresponding one-tenth of a percent reduction in the State contribution.

HB 9 also amended Section 812.003, Government Code to eliminate the 90-day member participation waiting period, which would allow for retirement contributions by the State and members to the ERS to begin on the first day of employment. The bill was signed by the Governor on June 9, 2015 and became effective September 1, 2015.

HB 408 – Turner, Chris/Menendez

HB 408 amended several sections of the Government Code to prohibit a member of the elected class, excluding district attorneys and criminal district attorneys, from being able to retire and receive an annuity based on service credit transferred from the employee class to the elected class until the member no longer holds an elected-class position. The bill still allows a contributing elected-class member to receive an annuity based solely on service credit earned in the employee class. This bill was signed by the Governor on June 19, 2015 and became effective immediately.

83rd Session:

SB 1459 – Duncan

SB 1459 amended several sections of the Government Code relating to the ERS, Law Enforcement and Custodial Officer Supplemental Retirement Fund

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Employees Retirement System (ERS)

83rd Session:

SB 1459 – Duncan, Continued

(LECOSRF), and Judicial Retirement System of Texas Plan Two (JRS II). The bill increased the member contribution rates for ERS (employee class) and JRS II in steps over fiscal years 2014-2017 and beyond, with a rate of 6.6% in FY 2014, 6.9% in FY 2015, 7.2% in FY 2016, and 7.5% in FY 2017. Each employer participating in ERS is also required to contribute 0.5% of its total payroll. Additionally, the bill adds a new tier with a modified benefit structure to the ERS and LECOSRF for members hired on or after September 1, 2013. Under the new tier, the employee class members of ERS would have to achieve age 62 and the LECOSRF members would have to achieve age 57 in order to retire with unreduced benefits and their final average salary calculation would be changed to 60 months. The bill reduces the interest paid on retirement account balances from 5% to 2% and provides for a one-time cost-of-living-adjustment of 3% (with a maximum of \$100 per month) to all ERS annuitants who had been retired for 20 years or more if certain actuarial conditions are met. Lastly, the bill separates the accounting and actuarial functions of ERS and LECOSRF for the 2014-2015 biennium. The bill was signed by the Governor on June 14, 2013 and became effective September 1, 2013, except as otherwise provided in the bill.

Optional Retirement Program (ORP)

85th Session:

SB 1954 - Hughes/Lozano

SB 1954 amended the Government Code to allow a person more time to decide to participate in ORP if they are notified later than the day they become eligible.

The bill added a section to the Government Code to establish procedures for correcting reporting errors. The bill states that an employer submits a member contribution to TRS on behalf of a person in error if the person previously elected to participate in the optional TRS retirement program, participated in the program for at least one year, and is or was employed by a public institution of higher education in a position normally covered by TRS and is or was at the time of that employment not eligible for membership in TRS. The bill requires a person's participation in ORP to be immediately restored if an employer commits such an error and the person on whose behalf the member contribution is erroneously made is a participant in the optional retirement program and requires funds to be deposited in the person's participant account in the program or otherwise remitted to the person in accordance with the bill's provisions and as soon as practicable. The bill was signed by the Governor on May 26, 2017 and became effective September 1, 2017.

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Optional Retirement Program (ORP)

84th Session:

No major legislation passed.

83rd Session:

No major legislation passed.

Teacher Retirement System (TRS)

85th Session:

SB 1663 – Huffman/Flynn

The bill amended the Insurance Code and various sections of the Government Code to make clarifications and updates to the Teacher Retirement System of Texas (TRS) statute. The bill clarifies that certain student employment is not eligible for TRS service credit. The bill also makes administrative changes, which include the protection of key employees' personal information from public disclosure and prohibiting TRS employees from receiving "double" benefits while working outside the country.

The bill provides that a retiree working during the first 12 months following retirement as an independent contractor, volunteer, or who waives compensation is considered an employee of the public school or higher education employer. The bill also allows the TRS board to go into executive session to discuss particular investment strategies; allows TRS to charge late fees not to exceed \$1,000 for each business day and \$25,000 per reporting period if employer reports are filed after statutory deadlines; and allows TRS to send information to members electronically. The bill removes auxiliary personnel positions from the TRS Retiree Advisory Committee and removes the prohibition on members who do not complete a purchase of service credit using an installment payment method from using the method for the next three years. The bill was signed by the Governor June 15, 2017. Chapter 825.212, as amended by the bill, became effective immediately. The remainder of the bill became effective September 1, 2017.

SB 1664 – Huffman/Flynn

The bill amended the Education Code and Government Code to make clarifications, updates and corrections to the TRS statute. The bill clarifies sections in the Government Code to correctly cite the IRS Code, and updates TRS plan terms to allow rollover by TRS to a 401(a) plan. The bill makes statutory corrections to include the removal of a previous error that included a requirement for school districts to provide health care comparability reports to TRS. The bill also makes administrative changes, including granting additional time for TRS members to purchase service credit at retirement,

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Teacher Retirement System (TRS)

85th Session:

SB 1664 – Huffman/Flynn, Continued

as well as granting members additional time for purchasing sick or personal leave credit. The bill was signed by the Governor on June 15, 2017, and became effective September 1, 2017.

SB 1665 - Huffman/Flynn

SB 1665 amended the Government Code to include in the definition of "securities" any derivative instrument, and any other instrument commonly used by institutional investors to manage institutional investment portfolios.

The bill allows the board to delegate discretionary investment authority to external managers to invest and not manage more than 30 percent of the total assets held in trust by the system.

The bill repealed the temporary provision authorizing the board to buy and sell certain investment instruments for the purpose of efficiently managing and reducing the risk of the overall investment portfolio. The bill also extends the exemption of a contract under certain provisions relating to the investment of TRS assets from statutory provisions relating to the resolution of certain contract claims against the state to all contracts under provisions relating to the investment of TRS assets. The bill was signed by the Governor and became effective immediately on June 15, 2017.

84th Session:

HB 1937 – Darby/Fraser

HB 1937 amended Section 824.805, Government Code, providing certain members of TRS a one-time election to revoke their DROP participation. Those members revoking their election would have their annuities recalculated using all of their service as if those members never participated in the DROP. This bill was signed by the Governor on May 28, 2015 and became effective on September 1, 2015.

HB 2168 – Munoz/Lucio

HB 2168 made administrative changes to Section 824.003, Government Code, regarding the timing of monthly annuity payments from TRS. HB 2168 changed the day of payments from the first working day of the month, to the last working day of the month for which the payment accrues. The bill was signed by the Governor on June 17, 2015 and became effective September 1, 2015.

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Teacher Retirement System (TRS)

84th Session:

HB 2974 – Flynn/Huffman

HB 2974 created a joint interim committee to study and propose reforms to the two healthcare plans (TRS-Care and TRS-ActiveCare) administered by TRS. The bill amended the Government Code to make certain clarifying and technical changes to provisions applicable to TRS. It amended the definition of "annual compensation" and "employee" for purposes of TRS membership and service credit. Out-of-state service credit requirements and eligibility for membership and for contribution withdrawals is clarified to conform to IRS requirements.

The law also allows the TRS board of trustees to attend events without public notice if there is no deliberating, voting, or action taking on TRS business at the event. The law also made changes relating to the health benefit surcharge in return-to-work cases. This law became effective September 1, 2015.

83rd Session:

HB 3357 - Callegari/Murphy

HB 3357 amended several sections of the Government Code to make administrative changes to the governing statute of TRS. The bill amends provisions regarding benefits paid to retirees under the TRS to allow certain retirees to change their annuity selection post-retirement. The bill also amended the appointment process for the TRS board of trustees, requires the TRS board to adopt a code of ethics, repeals a requirement that TRS administrative expenses be funded by the state, and includes other amendments relating to the manner in which the TRS board conducts its meetings and the privacy provisions of TRS members. The bill was signed by the Governor on June 14, 2013 and became effective immediately, except as otherwise provided in the bill.

SB 1458 – Duncan

SB 1458 amended several sections of the Government Code relating to the TRS. The bill increased the TRS member contribution rates in steps over fiscal years 2014-2017 and beyond, with a rate of 6.7% in FY 2015, 7.2% in FY 2016, and 7.7% in FY 2017. For fiscal year 2015 and later, the bill requires school districts that do not contribute to Social Security (the OASDI program) for their employees to contribute 1.5% of each member's minimum salary into the TRS Trust Fund. Members who were not vested (have not earned five years of service) as of September 1, 2014 or were hired on or after September 1, 2014 are required to achieve age 65 with five years of service credit or age 62 with five years of service credit if the sum of the member's age and service is 80 to retire with unreduced benefits. The bill reduced the interest paid on retirement account balances from 5% to 2% and provides for a one-time cost-of-living-adjustment of 3% (with a maximum of \$100 per month) to all TRS annuitants who have been retired since August 31, 2004. The bill was signed by the Governor on June 14, 2013 and became effective September 1, 2013, except as otherwise provided in the bill.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Teacher Retirement System (TRS)

83rd Session:

SB 1812 – Duncan

SB 1812 amended Chapters 825 and 830 of the Government Code to provide for a method to estimate the state's contributions to the Teacher Retirement System of Texas (TRS) and the Optional Retirement System (ORP) for certain junior college employees. The bill requires the TRS board of trustees to include 50% of the costs associated with certain employees of public junior colleges when certifying to the comptroller of public accounts the amount necessary to pay the state's contributions to the TRS and the ORP. The bill also requires that, in determining the amount for certification for each public junior college, the number of eligible employees may not be adjusted in a proportion greater than the change in student enrollment at each college. The bill was signed by the Governor on June 14, 2013 and became effective immediately.

Texas Municipal Retirement System (TMRS)

85th Session:

See HB 3056 under TLFFRA

84th Session:

No major legislation passed.

83rd Session:

No major legislation passed.

Texas County and District Retirement System (TCDRS)

85th Session:

No major legislation passed.

84th Session:

SB 463 – Huffman/Kuempel

SB 463 restructured the three TCDRS internal fund accounts by eliminating the current service annuity reserve fund (CSARF), so that benefit payments to participants of active subdivisions would be made entirely from the subdivision accumulation fund (SAF). A one-time allocation and transfer of the

TEXAS PENSION REVIEW BOARD

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Texas County and District Retirement System (TCDRS)

84th Session:

SB 463 - Huffman/Kuempel, Continued

CSARF would be made, with active subdivision assets being transferred to the SAF, effective January 1, 2017. A new fund, the closed subdivision annuity reserve fund would be created, from which future benefit payments to participants of closed subdivisions would be made. The bill was signed by the Governor on June 1, 2015 and became effective immediately.

SB 463 restructures the current three TCDRS internal fund accounts by eliminating the current service annuity reserve fund (CSARF), so that benefit payments to participants of active subdivisions would be made entirely from the subdivision accumulation fund (SAF). A one-time allocation and transfer of the CSARF would be made, with active subdivision assets being transferred to the SAF, effective January 1, 2017. A new fund, the closed subdivision annuity reserve fund would be created, from which future benefit payments to participants of closed subdivisions would be made.

83rd Session:

No major legislation passed.

Texas Emergency Services Retirement System (TESRS)

85th Session:

No major legislation passed.

84th Session:

HB 1707 - Stephenson/Huffman

HB 1707 amended Section 865.014, Government Code, adding wire transfer and an automated clearinghouse withdrawal (ACH debit) to the methods a political subdivision may use to submit contributions to the Texas Emergency Services Retirement System. This bill was signed by the Governor on June 1, 2015 and became effective on September 1, 2015.

HB 1725 - Stephenson/Huffman

This bill amended Section 865.012, Government Code providing that if a participating department does not have enough active members to serve on a local board, the local board shall select a trustee or trustees to serve under that subdivision. A person selected to serve must be a retiree of the system or a beneficiary of the system who is a surviving spouse of a former member or retiree. This bill was signed by the Governor on June 1, 2015 and became effective immediately.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Texas Emergency Services Retirement System (TESRS)

83rd Session:

SB 220 – Birdwell/Nichols

SB 220 abolished the Office of Fire Fighters' Pension Commissioner; however, the Texas Emergency Services Retirement System (TESRS) continues to function as a state agency and will be subject to Sunset review every 12 years. The bill amended TESRS governing statute to require the TESRS board to hire an executive director to oversee benefit distributions and collect revenue from the governing bodies of participating departments. Appeals under TESRS would be submitted to the State Office of Administrative Hearings (SOAH), with the TESRS board making the final decision, and allowing for judicial review. The bill amended the composition of the TESRS board by requiring one trustee to be a retiree of the pension system. The bill requires the TESRS board to adopt a policy on contract management and oversight and applies standard, across-the-board Sunset recommendations regarding complaints, conflicts of interest, public participation, and board member training to TESRS. The bill also requires the TESRS board to notify the Legislature and PRB if there was a significant change to the actuarial valuation of the pension system's assets or liabilities or any change to members' contributions and benefits. The bill was signed by the Governor on June 14, 2013 and became effective immediately, except as otherwise provided in the bill.

Texas Local Fire Fighters Retirement Act (TLFFRA)

85th Session:

HB 3056 – Meyer/Huffines

The bill added Section 31A to the Texas Local Fire Fighters Relief and Retirement Act (TLFFRA) to allow the City of University Park to adopt ordinances that would concurrently:

- a. exclude fire fighters hired on or after the "closure effective date" under the bill from participation in the University Park Firemen's Relief and Retirement Fund, and
- b. allow those excluded employees to participate in TMRS.

Current employees of the City's fire department who are members of the Retirement Fund would continue to participate and would retire and receive benefits under the Fund.

The bill requires that within 60 days following the date the City adopts the ordinances, the ordinances must be approved, via election, by a majority of the participating members of the Retirement Fund. As soon as practicable following approval, the board of the Retirement Fund must amend the plan documents and the City must provide a notice of the election results and copies of the amended plan documents to TMRS. The "closure effective date"

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Texas Local Fire Fighters Retirement Act (TLFFRA)

85th Session:

HB 3056 - Meyer/Huffines, Continued

is the first day of the second month after the month TMRS receives the notice.

The bill also amended the definition of "Department" in the Texas Government Code Section 851.001(7) of the TMRS Act to include employees of the City excluded from the Retirement Fund and allowed in TMRS in accordance with the amended Section 31A of TLFFRA. The bill was signed by the Governor on June 15, 2107, and became effective September 1, 2017.

84th Session:

No major legislation passed.

83rd Session:

SB 220 - Birdwell/Nichols

SB 220 amended the Texas Local Fire Fighters Retirement Act (Article 6243e, Vernon's Texas Civil Statutes) by abolishing the Office of Fire Fighters' Pension Commissioner (FFPC). The bill transferred certain services currently provided by the FFPC to local pension systems organized under the Texas Local Fire Fighters Retirement Act (TLFFRA). SB 220 requires the State Pension Review Board (PRB) to provide technical assistance, information and training to local pension systems organized under the TLFFRA, refer appeals to State Office of Administrative Hearings; and based on the availability of resources, the PRB is required to designate one staff person to provide these services. The PRB is also required to customize the educational training to meet the specific needs of board members of these local pension systems. The bill was signed by the Governor on June 14, 2013 and became effective immediately, except as otherwise provided in the bill.

SB 1413 – Deuell

SB 1413 amended the Texas Local Fire Fighters Retirement Act (Article 6243e, Vernon's Texas Civil Statutes), to change the composition of the board of trustees of local firefighter retirement systems (that do not consist exclusively of volunteers) by including the president of the board of emergency services commissioners of an emergency services district as a member of the board of trustees. The bill also made changes to the nomination process for the board election and repeals the provision requiring the secretary of a board of trustees to forward accurate copies of the minutes of a board meeting to each fire station and to each division of the fire department. The bill made the caps on the annual amount of payments for expenses incurred by the retirement system calculable based on the market value, rather than book value, of the assets of the retirement system's fund.

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Texas Local Fire Fighters Retirement Act (TLFFRA)

83rd Session:

SB 1413 – Deuell, Continued

Additionally, the bill amended the statute to simplify the process of employer pick up of employee contributions to the system. The bill removed the requirement that each municipality or other political subdivision picking up employee contributions to the retirement system continue to compute federal income tax withholding on the contributions until the fire fighters' pension commissioner files with the secretary of state a notice relating to an IRS determination or federal court ruling that the contributions are not includable in the gross income of a member until they are distributed or made available. The bill also removed a condition relating to notice being filed with the secretary of state by the pension commissioner regarding an IRS determination that a local firefighter retirement system is a qualified retirement plan and that its related trust is tax exempt. The bill was signed by the Governor on June 14, 2013 and became effective immediately.

Austin Firefighters Relief and Retirement Fund

85th Session:

No major legislation passed.

84th Session:

HB 1756 - Rodriguez/Watson

HB 1756 makes administrative changes to Article 6243e.1, Vernon's Texas Civil Statutes by allowing the board of trustees to appoint a sole nominated candidate to the board without holding an election and to adopt procedures for such appointments, as well as allowing the board of trustees to adopt rules to establish procedures and requirements governing a member's designation of the beneficiary. The law also allows the board of trustees to adopt rules to modify the availability of certain distributions from a member's DROP account. HB 1756 clarifies provisions relating to payments from a DROP account at the member's death and relating to the determination period for the collective adjustment amount for an annual cost-of-living-adjustment.

83rd Session:

No major legislation passed.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

El Paso Firemen and Policemen's Pension Fund

85th Session:

No major legislation passed.

84th Session:

No major legislation passed.

83rd Session:

SB 1133 – Rodríguez

SB 1133 amended Article 6243b, Vernon's Civil Statutes relating to the El Paso Firemen and Policemen's Pension Fund. The bill authorized the city of El Paso to increase the city contributions to the El Paso Firemen and Policemen's Pension Fund without voter's consent if a qualified actuary selected by the pension fund's board determines that the total contribution rate to the fund, expressed as a percentage of wages, is insufficient to amortize the unfunded actuarial accrued liability, as defined under the Governmental Accounting Standards Board Statement No. 25, over a 40-year period. Any increase in contributions by the city would be accompanied by an increase in the member rate per the statute. The bill also allows for a decrease in the rate of the city contribution to the El Paso Firemen and Policemen's Pension Fund if a qualified actuary selected by the pension fund's board determines that the total contribution rate to the fund, expressed as a percentage of wages, is sufficient to amortize the unfunded actuarial accrued liability, as defined under the Governmental Accounting Standards Board Statement to amortize the unfunded actuarial accrued liability, as defined under the Governmental Accounting Standards Board Statement No. 25, over a 25-year period. The bill requires the member contribution rate to the fund, to the extent that the city's contribution rate decreases, to decrease in proportion to the decrease in the city's contribution rate and prohibits the sum of both rates after the decrease from falling below the total contribution rate determined by the qualified actuary to be necessary to amortize the unfunded actuarial accrued liability over a 25-year period. The bill was signed by the Governor on May 24, 2013 and became effective immediately.

Dallas Police and Fire Pension System

85th Session:

HB 3158 – Flynn/West

HB 3158 amended and added sections to Title 109, Revised Civil Statutes Article 6243a-1 to increase both employee and City contributions, modify future benefit accruals, provide a retroactive multiplier increase for certain members, modify Deferred Retirement Option Plan (DROP) participation and cost of living adjustment, make changes to the board's composition and governance structure, and require the creation of an investment advisory committee.

TEXAS PENSION REVIEW BOARD

APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Dallas Police and Fire Pension System

85th Session:

HB 3158 – Flynn/West, Continued

Board Composition

The bill changed the board composition by establishing new requirements for trustee positions. Six of the board trustees will be selected by the mayor in consultation with city council, three will be selected by the pension system through a nominations committee, and two will be current or former police officers or fire fighters nominated and elected by members of the pension system under rules adopted by the board. The board may not take any action until at least ten initial trustees have been appointed.

Board Governance

The bill clarified that the executive director is a fiduciary of the pension system if acting in their own discretion, whereas currently the statute states that the "administrator" of the plan is *not* a fiduciary. If the executive director is acting at the discretion of the board and not exercising their own discretion, the executive director does not owe a fiduciary duty.

• Two-thirds vote: The bill requires at least a two-thirds vote of the full board (8 out of 11 trustees) for creating an alternative benefit plan, reducing the city contribution rate, increasing the member contribution rate, lowering benefits or otherwise reducing amounts payable to, or accrued for, the benefit of any member, or any rules requiring the equitable return of funds paid to or credited to the benefit of a member or pensioner.

At least twice each year, the board shall have a meeting to receive public input regarding the pension system and to inform the public about the health and performance of the pension system. <u>The PRB is entitled to all documents and other information provided by DPFPS to the public, which would then</u> <u>be subject to an independent review by the PRB. Any employee or other agent acting on behalf of DPFPS or the city must certify to the PRB that any</u> <u>information provided is accurate and based on realistic assumptions.</u>

<u>The bill also requires the board to adopt a code of ethics, which must be filed with the PRB upon adoption or amendment.</u> The bill also requires the board members to take pension-related training from a manual created by the DPFPS executive director.

City and Member Contributions

• <u>City</u> - The bill increased City contributions from 27.5% to 34.5%. The contribution policy for the City is a fixed percentage of pay plus a flat dollar contribution per year through the end of 2024. However, the fixed percentage contribution will be subject to a minimum dollar floor in each year through 2024.

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Dallas Police and Fire Pension System

85th Session:

HB 3158 – Flynn/West, Continued

- Any change to the contributions required to be made to the pension system by the City may only be made by the legislature, by a majority vote of the voters of the City, or by written agreement with at least a 2/3 vote of all trustees on the board, and the City, provided that a change may not increase the period required to amortize the UAAL of the fund. Any reduction in City contributions requires the approval of at least a 2/3 vote of all trustees of the board.
- <u>Member</u> The bill increased employee contributions from 8.5% to 13.5%. Any increase in member contribution rate requires approval of at least 2/3 vote of all the trustees on the board.

Actuarial Analysis and Legislative Recommendations

Prior to July 1, 2024, the PRB will select an actuary without conflicts to be hired by the DPFPS board to perform an analysis based on the January 1, 2024 actuarial valuation prepared by the pension system. The analysis will include a conclusion by the actuary on whether the plan meets the current PRB pension funding guidelines, and the actuary will recommend changes to benefits, member or city contributions to be submitted to the board by October 1, 2024.

The DPFPS board will adopt a plan that complies with funding and amortization period requirements applicable to the pension system under Chapter 802 of the Texas Government Code and takes into consideration the independent actuary's recommendations.

The DPFPS board will provide a copy of the analysis and a summary of any rules adopted by the DPFPS board under this section to the PRB. Not later than December 1, 2024, the PRB will submit a report to the legislature regarding actions taken under this section. The report must include a copy of the analysis prepared by the independent actuary and a summary of rules adopted by the DPFPS board under this section. The legislature must approve the changes for them to become part of the statute.

Benefit Changes

The bill makes several changes to member benefits, including (for Normal Service Retirement):

- Changing the multiplier for all members to 2.5% for future service;
- Increasing the normal retirement age to 58 years for all members, and decreasing the vesting requirement to 5 years from 10 years for Tier 3

TEXAS PENSION REVIEW BOARD

APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Dallas Police and Fire Pension System

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members;

- Lowering the maximum retirement annuity from 96% to 90% of final average salary; and
- Changing the calculation of final average salary prospectively from the highest 36 month period for Tiers 1 and 2 to highest 60 month period for service after September 1, 2017.

Rulemaking to Change Benefits

The DPFPS board shall conduct an evaluation to study the impact on the pension system of establishing one or more alternative benefit plans, including a defined contribution plan or a hybrid plan for newly hired employees and for members who voluntarily elect to transfer to an alternative benefit plan. This evaluation must be completed by January 1, 2018.

Based on the evaluation, if the DPFPS board considers adopting a rule to establish any plan, it would be subject to the following:

- may not cause the amortization period of the system to exceed 35 years; and
- require the approval of 2/3 vote of all trustees on the board.

Additionally, any rule considered to increase benefits (obtained with 2/3 vote of all board members) can only be made if the increase will not cause the amortization period of the UAAL to exceed 25 years, after taking into account the impact of the increase. <u>Any rules under this section must be reviewed</u> by the PRB and the PRB must find that the implementation of the rule complies with the amortization periods prescribed by the specific subdivisions of the section.

Investment Advisory Committee

The bill requires the board to establish an investment advisory committee. The committee will be composed of a majority of outside investment professionals, as well as sitting board members. The committee will review investment-related matters and make recommendations to the board.

Board Approval of Certain Alternative Investments

Any person with delegated authority to invest or reinvest pension system assets under this article may not invest pension system assets in a single alternative investment unless the DPFPS board votes to approve the investment by at least a two-thirds vote. The bill defines "alternative investment"

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as an investment in an asset other than a traditional asset. The term includes an investment in private equity funds, private real estate transactions, hedge funds, and infrastructure.

Equitable Adjustments to Benefits

The bill allows the DPFPS board by at least a 2/3 vote of all trustees to consider and adopt rules requiring the equitable return of funds paid or credited to the benefit of a member or a pensioner before 9/1/17, including the return of excessive interest credited to a member's DROP account and excessive adjustments made as disability or COLA benefits. The bill also outlines the adjudication process for any judicial challenges to the equitable return of funds as required by the board.

DROP Payment Options

A member who terminated service on or before 9/1/2017, or who terminates from active service shall have their DROP account annuitized over their life expectancy as of the date of the annuitization using mortality tables recommended by the system's actuary. Upon election by the member, the account will be payable either monthly or annually.

The DPFPS board may adopt a shorter period for annuitizing DROP balances under this section if the system's actuary determines doing so will not cause the system's amortization period to exceed 25 years. The annuitization of an account under this section must reflect accrual of interest on the amount in the DROP account as of 9/1/17. The interest rate applied must be a rate as reasonably equivalent as practicable to the interest rate on a note issued by the U.S. Department of the Treasury or other federal treasury note with a duration that is reasonably comparable to the annuitization period applied to the account, as determined by the DPFPS board.

Prohibition on Certain Distributions

Distributions from DROP accounts are immediately prohibited, except in certain cases including hardships, those in compliance with court order, and minimum annual distributions under current DPFPS board policy are allowed to continue until August 31, 2017. If any lump sums are paid in violation of the bill prior to August 31, 2017, changes made under the legislation become null and void.

The board of trustees shall provide data or other information requested to the PRB in order for the PRB to determine whether DPFPS has violated the prohibition of certain distributions provision by August 31, 2017. If the PRB determines that the system is in violation of the statute, the PRB shall,

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before August 31, 2017, notify the board of trustees of the system and the mayor and city council of its determination under this section and publish notice of its determination on the PRB website and a notice of its determination under this section in the *Texas Register*.

Alternative Benefit Plan

The bill adds Section 810.002 to the Government Code to allow the City to establish an alternative benefit plan by ordinance and determine the benefits, funding source and amount, and administration of the alternative benefit plan. Also, the bill allows the municipality to require an employee first hired by the municipality on or after the date the alternative benefit plan is implemented to participate in the alternative benefit plan instead of participating in DPFPs. Employee and employer contributions shall be determined by the City.

An alternative benefit plan may only be established by the City if the pension system's actuary determines that its implementation would allow the pension system to continue to comply with funding and amortization period requirements of Chapter 802 and if the PRB conducts a review of and validates this determination.

The bill was signed by the Governor on May 31, 2017. Article 1 of the bill became effective September 1, 2017.

84th Session:

No major legislation passed.

83rd Session:

No major legislation passed.

Houston Systems – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Police Officers' Pension System (HPOPS), Houston Municipal Employees Pension System (HMEPS)

85th Session:

SB 2190 - Huffman/Flynn

SB 2190 amended and added sections to Title 109, Revised Civil Statutes Articles 6243e.2(1), 6243g-4, and 6243h to reduce benefits, increase employee contributions, outline funding policies, codify certain actuarial assumptions and methods for purposes of valuing benefits, and detail an approach to

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Houston Systems – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Police Officers' Pension System (HPOPS), Houston Municipal Employees Pension System (HMEPS)

85th Session:

SB 2190 - Huffman/Flynn, Continued

making modifications to the assumptions, methods and benefits under certain economic scenarios with the intent of minimizing the volatility of future contributions requirements for the affected retirement systems. The bill also requires the city to make contributions as outlined by the risk sharing sections.

Board Composition/Governance

- HPOPS The bill requires candidates for active or retired board member positions to receive the majority vote for that position, otherwise a runoff election shall be held.
- HMEPS trustees are required to complete minimum educational training requirements established by the PRB, and the bill allows the appointing entity to remove an appointed trustee who does not complete the required training. Also, a member may be removed if he or she attends less than 50% of board meetings.

Benefit Changes

The bill increased employee contributions and introduces a corridor mechanism to determine employer contributions for each fiscal year. The bill also made substantive changes to the three systems' benefit formulas, DROP programs, and death and disability benefits.

Corridor Midpoint

The bill established a unique funding policy that establishes a "target" contribution rate (or corridor midpoint) for the City, develops a minimum and maximum corridor around the City's target contribution rate (equal to +/- 5% of the projected midpoint), and defines steps that must be taken should the annual calculated contribution move outside this corridor. Generally, for all three retirement systems, the retirement system and the city must jointly determine the expected contribution requirements for the 31-year period beginning with the fiscal year starting July 1, 2017, consisting of the expected normal cost plus a closed 30-year amortization of the UAAL as it exists on June 30, 2016.

• For HFRRF and HPOPS, the sum of the expected normal cost, amortization payment and a provision for administrative expenses for each of the next 31 years becomes the "target" rate or corridor midpoint.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Houston Systems – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Police Officers' Pension System (HPOPS), Houston Municipal Employees Pension System (HMEPS)

85th Session:

SB 2190 - Huffman/Flynn, Continued

• For HMEPS, the corridor midpoint is the sum of the normal cost and a provision for administrative expenses. The 30-year amortization schedule of the unfunded liability as of June 30, 2016, known as the legacy liability, is established and treated separately from the corridor for HMEPS.

Additionally, in future years, a new base would be established to amortize gains and losses. The losses are amortized over a closed 30-year period, while the gains are amortized over the same period as the largest outstanding liability loss base, the gain and associated loss base are treated as a single base for any future actions.

Once the corridor is established in the initial valuation, it will not change.

Preparation of the Risk Sharing Valuation Study (RSVS)

The bill requires the systems' actuary and City actuary to separately prepare a draft of an RSVS, based on the systems' respective actuarial data. The initial RSVS must use the following assumptions set in statute to arrive at an estimated city contribution rate:

- Assumed rate of return (subject to adjustment) may not exceed 7% per year;
- Ultimate entry age normal actuarial cost method;
- Assets marked-to-market method applied as of June 30, 2016 (after initial RSVS, this changes to use 5-year smoothing method over a five-year period applied prospectively beginning on the year 2017 effective date);
- Closed 30-year amortization of legacy liability;
- For HMEPS, the City contribution rate is calculated without inclusion of the legacy liability
- Payroll growth rate assumption of 2.75%, not to exceed 3% in future RSVS

The RSVS must be included within an actuarial valuation. Once completed, each actuary shall exchange their draft RSVS. If the difference between the two estimated city contribution rates falls at or below 2%, the system's RSVS and estimated city contribution rate will be used to determine the contribution rate for the fiscal year. If the difference is greater than 2%, the actuaries must reconcile the rates until the difference falls below 2%. If it cannot be reconciled, the arithmetic average will be used.

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Houston Systems – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Police Officers' Pension System (HPOPS), Houston Municipal Employees Pension System (HMEPS)

85th Session:

SB 2190 – Huffman/Flynn, Continued

PRB Review of RSVS

The bill requires the systems and City to jointly submit a copy of the RSVS to the PRB for a determination that the pension systems and City are in compliance with the articles. <u>The PRB shall notify the governor, lieutenant governor, the speaker of the house of representatives, and the legislative committees having principal jurisdiction over legislation governing public retirement systems if the PRB determines the system or city is not in compliance with the applicable sections.</u>

City Approval of POBs

The bill amended Chapter 107, Local Government Code to require voter approval for POBs issued to fund the Houston pension systems.

Delivery of POBs

The bill allows HFRRF, HPOPS and HMEPS to rescind, prospectively, any or all benefit changes made effective under the bill, and allow HPOPS and HMEPS to reestablish the deadline of the delivery of the POB proceeds, if the city fails to deliver the proceeds of pension obligation bonds before March 31, 2018. If HPOPS and HMEPS do not receive the proceeds from the POBs by December 31, 2017, the initial RSVS shall be reprepared without assuming delivery of POB proceeds.

Additional Reporting Requirements

The bill added reporting requirements for the three systems, including the requirement to conduct actuarial experience studies at least once every four years with the first experience study for HFRRF no later than September 30, 2020, for HPOPS no later than September 30, 2022 and for HMEPS published no later than September 30, 2021.

The systems must also contract with an investment consultant to perform an audit on investments at least once every three years.

Alternative Retirement Plans

The bill allows the three retirement systems' boards and the City to enter into a written agreement to offer an alternative retirement plan or plans, including a cash balance retirement plan or plans, if both parties consider it appropriate.

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APPENDIX A—LEGISLATION RELATING TO PUBLIC RETIREMENT SYSTEMS ADOPTED BY THE 83RD, 84TH AND 85TH LEGISLATURE

Houston Systems – Houston Firefighters' Relief & Retirement Fund (HFRRF), Houston Police Officers' Pension System (HPOPS), Houston Municipal Employees Pension System (HMEPS)

85th Session:

SB 2190 - Huffman/Flynn, Continued

The bill also requires the respective boards to close the existing plan to new entrants and establish a separate cash balance plan for new hires under the following circumstances:

- For HFRRF and HPOPS, if the plan's ratio of assets to liabilities falls below 65% at any time after June 30, 2021, and
- For HMEPS, if the plan's ratio of assets to liabilities falls below 60% at any time after June 30, 2027.

The requirement to establish a separate cash balance plan for new hires will not take effect for HMEPS if they do not receive the required POB proceeds. The requirement to establish a separate cash balance plan for new hires will not take effect for HPOPS if they do not receive the required POB proceeds. The bill was signed by the Governor on May 31, 2017 and became effective July 1, 2017.

84th Session:

No major legislation passed.

83rd Session:

No major legislation passed.

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APPENDIX B—DEFINED CONTRIBUTION PLANS — BENEFIT SUMMARY

A Defined Contribution (DC) Plan is a retirement plan in which the employee and/or the employer contribute to the employee's individual account under the plan. The amount in the account at distribution includes the contributions and investment gains or losses, minus any investment and administrative fees. For participants in defined contribution plans, the amount of the contribution is defined, and the benefit at retirement is variable. The benefit amount at retirement is based on the ending account balance.

There are currently 166 DC Plans that are required to report to the Pension Review Board (PRB). However, legislation passed by the 83rd legislative session changed reporting requirements of DC Plans to the PRB. DC plans are now exempt from most of the state reporting requirements and are only required to register with the PRB and submit plan description information, which generally includes: employee contributions, employer contributions and vesting requirements, if any. This data is presented in the following tables.

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Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
32nd Judicial District Juvenile Board	All, except employees working				Graded; 100%
Pension Plan	less than 1,000 hours per year	N/A	None	7% of compensation	at 10 YCS
				6% of compensation, with 1-3%	
Abilene Regional MHMR Center				additional match for any voluntary	
Retirement Plan	All	401(a)	None	contributions made to 457 plan	5 YCS
ACCESS Employee Retirement Plan				Any employee contribution matched at	Graded; 100%
401	All full-time Employees	401(a)	Voluntary, up to IRS limits	up to 6.5% of compensation	at 4 YCS
Aldine ISD PARS 401(a) Matching			Voluntary up to 0.5% of	Any employee contribution matched, with double match for perfect	27/4
Plan for Retirement Savings	All	401(a)	compensation	attendance	N/A
A1 := ICD A01(-) C = a1 = a + (-1)D1 = a	All	401(-)		Graded; with perfect attendance is 100% match of employee contribution	Graded; 100% at 4 YCS
Alvin ISD 401(a) Supplemental Plan	All	401(a)	Up to 2% of compensation	100% match of employee contribution	
Andrews Center Retirement Plan	All with >1 YCS	401(a)	3% of compensation	7% of compensation	Graded; 100% at 5 YCS
Ark-Tex COG Money Purchase					Graded; 100%
Pension Plan	All	401(a)	None	7% of compensation	at 6 YCS
Arlington Money Purchase Plan	One member	401(a)	None	Closed	1 member, fully vested
			1% of compensation, up to	Up to 6% of employees' 50% base	Graded; 100%
Arlington Thrift Savings Plan	All	401(k)	IRS maximum	salary	at 6 YCS
Barton Springs/Edwards Aquifer Conservation District Retirement Plan & Trust	All except temp, part-time employees and interns must have completed 12 months of service and be at least 21 years of age	N/A	7.5% of compensation	7.5% of compensation	Graded; 100% at 2 YCS
Bastrop County Appraisal District					
Pension Plan & Trust	All	N/A	N/A	N/A	N/A
Bexar County Housing Authority Pension Plan	All	401(a)	5% of compensation	140% of employee contribution	Graded; 100% at 6 YCS
Bluebonnet Trails MHMR Center	All after 90 days of employment	401(a)	None	7% of compensation	Graded; 100% at 5 YCS
Border Region MHMR Community	All permanent employees with 1,000 hours of service in twelve				
Center	months and at least 18 years of age	401(a)	6% of compensation	5.25% of compensation	N/A
Briscoe County Appraisal District Pension Plan	All	401(a)	7% of compensation	7% of compensation	Graded; 100% at 5 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Burke Center MHMR Hourly					Graded; 100% at 5
Employee Retirement Plan	Hourly-paid Employees	401(a)	None	7.5% of compensation	YCS
Burke Center Salaried Staff Retirement Plan	All salaried employees	401(a)	None	8% of compensation	Graded; 100% at 5 YCS
Campbell Health System	Employees with 12 months of service and 1,000 hours during that period	N/A	None	5% of compensation	Graded; 100% at 5 YCS
Capital Area COG Retirement Plan	All	401(k)	6.3% of compensation	7.4% of compensation	Graded; 100% at 5 YCS
Capital MTA Retirement and Savings Plan	All	401(k)	Unlimited, but default rate is 6.9% of compensation	None	100%
Carroll ISD	All	N/A	*	Made at the Employer's Board's discretion	N/A
Carrollton Money Purchase Plan	City manager	401(a)	None	\$7500/yr.	Immediate
Carson County Appraisal District Pension Plan		401(a)		7.65% of compensation	Graded; 100% at 7 YCS
Castro County Appraisal District Pension Plan	All	401(a)	7% of compensation	8% of compensation	Graded; 100% at 10 YCS
Center for Health Care Services 401(a) Retirement Plan	All full-time employees of the Center who have 1 YCS and 1,000 hours worked	401(a)		Effective 1/1/10, the Center, at its own discretion, matches employee's contribution to the 457 plan and is limited to 3% of compensation	Graded; 100% at 5 YCS
Central Counties Center for MHMR Services Retirement Plan	All	401(k)		6% of compensation	Graded; 100% at 7 YCS
Central Plains Center for MHMR & Substance Abuse	Employees who have reached the age of 18 and have completed 6 months of service			For employees who contribute to the 457 plan the Center makes matching contributions at up to 5% of compensation	Graded; 100% at 6 YCS
Central Texas COG Pension Trust	All	N/A	N/A	N/A	N/A
Central Texas College Pension Plan & Trust	All	401(a)	6% of compensation	7% of compensation	Graded; 100% at 6 YCS
Central Texas College Supplemental Plan	All	401(a)	3.75% of compensation	3.75% of compensation	None

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Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Central Texas MHMR Retirement Plan	All	N/A	N/A	12% of compensation	6 YCS
Cherokee County Appraisal District					
Pension Plan	All	401(a)	7% of compensation	9% of compensation	5 YCS
City of Cedar Park	All	401(a)	N/A	N/A	N/A
City of Groves Employment Incentive Plan	All	401(a)	2%, 4%, 6%, or 8% of compensation	50% of employee contribution	3 YCS
City of Groves Money Purchase Plan	All	401(a)		50% of employee contribution	Based on years of service
			1-5 Years - 5% of compensation, 6-10 years - 6% of compensation, 11+ years -		
City of Harlingen Retirement Plan	All	401(a)	7% of compensation	Matches employee contributions	Immediate
Clear Lake City Water Authority Pension Plan	All	401(a)	None	October 2013 - September $2014 = 9\%$ of compensation ; October 2014 - September 2015 = 10% of compensation	7 YCS
				*	
Coastal Bend COG Coastal Plains Community MHMR	All	401(a)	5% of compensation	10% of compensation	N/A Graded; 100% at
Center Retirement Plan	All	401(a)	6% of compensation	9% of compensation	5 YCS
Coleman County Appraisal District Pension Plan	All	401(a)	5% of compensation	5% of compensation	Graded; 100% at 10 YCS
Colorado County Central Appraisal District Pension	All	401(k)	8% of compensation	14% of compensation	Graded; 100% at 5 YCS
Colorado River Municipal Water District 401(a) Defined Contribution Plan	All	401(a)	Voluntary	4% of compensation	6 YCS
Corpus Christi RTA Defined Contribution Plan & Trust	All	401(a)		N/A	N/A
Coryell County Appraisal District Pension Plan	All	401(a)	10% of compensation	Non-integrated 10% of compensation	Graded; 100% at 5 YCS
Culberson County Appraisal District Pension Plan	All	N/A	7% of compensation	9% of compensation	N/A
Dallam County Appraisal District Pension Plan	All	401(a)	7% of eligible compensation	7% of compensation	Graded; 100% at 10 YCS
Dallas County Hospital District Supplemental Retirement Plan	All	401(a)	Voluntary, up to IRS limits	Employee match up to 6% of compensation	Graded; 100% at 6 YCS

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Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
				Employees' 401(a) account will be	
				credited as follows: Teacher positions -	
	Teachers and staff who are			matches 50% of employee deferrals up to	
	active contributing members of			\$500 annually for 3-5 absences; matches	
	TRS and contributing to the			75% up to \$700 annually for 2 absences;	
	districts 457(b) or 403(b)			matches 100% up to \$1000 annually for 0	
	accounts; must be actively			-1 absences. All other employees -	
	employed with the district on 8/31 of each year to receive			matches 50% of employee deferrals up to \$200 annually for 3-5 absences; 75% up	
	that year's district contribution		Voluntary deferrals to 457(b) or	to \$300 annually for 2 absences; 10% up	Cradad: 1000/ at
Dallas ISD TERRP		401(a)	403(b) up to IRS limits	to \$400 annually for 0-1 absences	4 YCS
	unless fettied under TKS	401(a)		to \$400 annuary for 0-1 absences	4 105
Dallas Police & Fire 401(a)	Full-time employees	401(a)	Voluntary after tax	19.7861% of compensation	Immediate
			1% of compensation for less than		
Dallas/Fort Worth Airport				Employee match up to 7% of	Graded; 100% at
Board 401(a) Retirement Plan	All	401(a)	compensation	compensation	5 YCS
			Can choose to contribute from		
			2% to 50% of compensation. If		
			not already contributing after 180		
			days, employees are enrolled in		
			the plan at a rate of 4% of	After 180 days, DART matches 50% of	G 1 1 1000/ ·
DART Capital Accumulation	4.11	401()	compensation, which raises 1%	employee contributions up to 6% of	Graded; 100% at
Plan & Trust	All	401(a)	every year with a max of 6%	compensation	5 YCS
DART Employees Retirement	Full time employees only as of				Graded; 100% at
Plan & Trust	March 1, 2002	N/A	Not permitted	7.7% of compensation	5 YCS
	Contract teachers hired by the				
	employer for the first time or a				
	returning contract teacher with			One-time lump sum amount of \$1,000 to	
	over a year break in service on			the plan as a contract signing bonus for	G 1 1 1000/ ·
	or after the effective date of the	401()	2.7.4	each participant with contracts effective	Graded; 100% at
De Soto ISD TERRP	plan.	401(a)	N/A	on or after 7/1/02	5 YCS
					100% immediate
					unless hired after
					October 1, 2000;
					in which case they
Deep East Texas COG	6 months of service and 21				are fully vested
Retirement Plan	years of age	401(a)	Voluntary	7.5% of compensation	after 7 years

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Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Deep East Texas Self-Insurance Fund Profit Sharing Plan	A11	N/A	N/A	13% of compensation	N/A
Delta County Appraisal District Pension Plan	All	401(a) Money Purchase	7% of compensation	7.23% of annual covered payroll	Graded; 100% at 7 YCS
Denton County MHMR Center Retirement Plan	All	401(a)	None	3% of compensation	Graded; 100% at 5 YCS
Dimmit Central Appraisal District Pension Plan	All	N/A	7% of compensation	9% of compensation	100% immediate
East Texas COG Retirement Plan	A11	401(a)	8% of compensation	12% of compensation	5 YCS
Ector County ISD TERRP	All	401(a)	N/A	4% of compensation to a 403(b) or 457(b) plan with up to a maximum of \$200 per plan year	5 YCS
Ellis Central Appraisal District Pension Plan	All	401(a)	10% of compensation	13% of compensation	Graded; 100% at 5 YCS
Ennis ISD TERRP	All	401(a)	N/A	Half the employee contribution matched at up to 2% of compensation. Employer will match an additional 25 cents for every dollar for employees with 2 or fewer absences and an additional 50 cents for every dollar for employees with no absences during the year	Graded; 100% at 5 YCS
Erath County Appraisal District	A11	401(a)	8% of compensation	14% of compensation	Graded; 100% at 5 YCS
Fisher County Appraisal District Pension Plan	All	401(a)	None	12% of compensation	Immediate
Floyd County Central Appraisal District Pension Plan	After 3 months of service		7% of compensation	9% of compensation	2 YCS
Fort Bend ISD Employee Incentive Plan	All	401(a)	N/A	The employer may contribute to the plan a discretionary amount, as determined solely by the employer.	Graded; 100% at 6 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Franklin County Appraisal District				120/ 0	10 1/00
Pension Plan	All full time employees	N/A	Up to 7% of compensation	13% of compensation	10 YCS
				Employer will match any contribution made to a 403(b) or	
				457(b) on behalf of the	
				participant into the 401(a). Best	
	All, who contribute to 403			match is 25% of contribution up	
Frisco ISD TERRP	(b) or 457(b)	401(a)	Voluntary	to 1% of compensation	Graded; 100% at 5 YCS
Galveston Housing Authority Pension					
Plan	All	401(a)	None	13% of compensation	5 YCS
			Up to 7.65% (Up to the maximum amount taxable		
Galveston Wharves 2010 Plan	All	401(a)	for social security purposes)	None	3 YCS
Greater Texoma Utility Authority		101(u)	for social security purposes)		5105
Retirement Plan	All	N/A	6% of compensation	12% of annual compensation	Graded; 100% at 6 YCS
Gregg County Appraisal District	All	401(a)	7% of compensation	12% of compensation	Graded; 100% at 7 YCS
	All employees who work			Employee contributions	
	over 1,000 hours a year			matched at up to 6% of	
Gulf Bend Center Retirement Plan	and are over the age of 18	401(a)	Voluntary	compensation	Graded; 100% at 7 YCS
Gulf Coast Trades Center / The Ravens	1 VCC and 21 means ald	401(1-)	A man and and the IDC limits	Discusticular	Created, 1000/ et CVCC
School	1 YCS and 21 years old	401(k)	Any amount up to IRS limits	Discretionary	Graded; 100% at 6 YCS
Gulf Coast Waste Disposal Authority					
Pension Plan	All	401(a)	5% of compensation	10% of compensation	N/A
	All, but independent				
	contractors, employees				
	who normally work less	401()	00/ 0		G 1 1 1000/ (2 MOG
Pension Plan	than 1,000 hours per year	401(a)	2% of compensation	6% of compensation	Graded; 100% at 3 YCS
Hansford County Appraisal District					
Pension Plan	All	401(k)	None	14% of compensation	8 YCS
				500/year + up to 5% of	
Harris County Fresh Water District 61				compensation (elected into 457	
401(a)	All	401(a)	N/A	Deferred Compensation plan)	N/A

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Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Harris County MHMR Authority	A11	401(a)	None	5% of compensation, if enrolled in 403(b) plan	5 YCS
Harris-Galveston Coastal Subsidence District	All	401(a)	N/A	15% of compensation	5 YCS
Harrison Central Appraisal District Pension Plan	All but independent contractors, employees covered by Social Security	N/A	7% of compensation	Non-Integrated 10% of compensation	Graded; 100% at 5 YCS
Haskell County Appraisal District Money Purchase Pension Plan & Trust	All	401(a)	None	15% of compensation	Graded; 100% at 8 YCS
Heart of Texas Region MHMR Center Retirement Plan	All	401(a)	Minimum of 4% of compensation	12% of compensation	Graded; 100% at 5 YCS
Helen Farabee Regional MHMR Center	Full-time employees	401(a)	N/A	6% of compensation	Graded; 100% at 5 YCS
Hill Country Community MHMR Center	All	401(a)	None	Matches 6% of employees contributions to 457 plan	Graded; 100% at 6 YCS
Hill County Appraisal District Money Purchase Plan	All	401(a)	8% of compensation	14% of compensation	Graded; 100% at 7 YCS
Hill Junior College District (PARS)	All	401(a)	5.5% of compensation	2% of compensation	Immediate
Houston Firefighters Relief and Retirement Plan Profit Sharing Retirement Plan for Fund Staff Employees	All	401(a)	None	16% of compensation	Graded: 100% at 5 YCS
Houston-Galveston Area Council	All	401(a)	Required 3% of compensation, and voluntary contributions up to 93% of compensation	•	Graded; 100% at 6 YCS
Howard County Appraisal District Money Purchase Plan	All employees, except students	N/A	Mandatory 5% of compensation	12% of compensation	Graded; 100% at 5 YCS
Hunt Memorial Hospital District Retirement Plan	All	401(a)	1 to 50 % of compensation	Up to 6% of employees' 50% base salary	6 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Jefferson County Appraisal District 401(k) Retirement Plan	All	401(k)		Matches any employee contribution up to 5.5% of compensation	Graded; 100% at 6 YCS
Jefferson County Appraisal District Retirement Plan & Trust		401(a)		0.5% of compensation	Graded; 100% at 6 YCS
Johnson County SUD Profit Sharing Plan	All	401(a)	N/A	Discretionary	1 YCS and 1,000 hours worked with a minimum age of 21
Kaufman ISD TERRP	All	401(a)	6.4% of compensation	6% of compensation	N/A
Kerr Central Appraisal District Pension Plan	All	401(a)	.	8% of compensation	Graded; 100% at 5 YCS
Kingsland MUD Pension Plan	All	N/A	Voluntary, but minimum is 1.7% of compensation	*	Graded; 100% at 5 YCS
Klein ISD TERRP Retirement Plan	All	401(a)		Employer will make a contribution on behalf of the participant into a 401(a) for employees who put at least \$200 annually into 403(b) or 457(b)	Graded; 100% at 3 YCS
Lamar County Appraisal District Pension Plan	All	N/A	7% of compensation	10% of compensation	Graded; 100% at 10 YCS
Lee County Appraisal District Pension Plan	All	401(a)	6% of compensation	8% of compensation	Graded; 100% at 3 YCS
LifePath Systems Retirement Plan	Full-time employees			5% of compensation	Graded; 100% at 5 YCS
Limestone Medical Center Money Purchase Pension Plan	Full-time employees			Matches any employee contribution up to 5% of compensation	Graded; 100% at 5 YCS
Llano Central Appraisal District Pension Plan	All	401(a)	12.5% of gross salary	12.5% of compensation	Graded; 100% at 5 YCS
Los Fresnos Housing Authority Employee Retirement Plan	All All employees that have been employed	N/A	None	3.5% of compensation	N/A
Lost Creek MUD Pension Plan	by the district for 6 months	401(a)	4% of compensation	10% of gross salary	7 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
				7% of compensation minimum	
Lower Rio Grande Valley	A 11	401(-)	V 7 - 1	with additional funds added if	5 YOS
Development Council	All	401(a)	Voluntary	budget allows Up to 6% of compensation	5 YCS
				based on longevity and level of	
Lubbock Regional MHMR Center	All	401(a)	Voluntary	participation	5 YCS
Matagorda County Appraisal District	All who work 1,000 hours				
Pension Plan	per year	N/A	7.65% of compensation	7.65% of compensation	Graded; 100% at 10 YCS
				The employer will match any contribution made to a 403(b) or 457(b) into the 401(a). Match is 100% of contribution up to 0.5%	
McKinney ISD TERRP	All	401(a)	N/A	of compensation	Graded; 100% at 5 YCS
MHMR Services of Concho Valley Retirement Plan	All	401(a)	N/A	5% of compensation	6 YCS
Midland ISD	All	401(a)	Voluntary	Matching contribution up to 3% of employee's pay	Graded; 100% at 5 YCS
Morris County Appraisal District					
Pension Plan	All	401(a)	8% of compensation	12% of compensation	5 YCS
MTA of Harris County Defined Contribution Plan	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided
Nolan County Central Appraisal DistrictPension Plan	All	457	At least 70/ of colors	Matches up to 7% of an	10 VCS
	All	437	At least 7% of salary	employee's gross wages	10 YCS
North Central Texas COG	A11	401(a)	6% of compensation	12% of compensation	Graded; 100% at 7 YCS
North Central Texas COG (Plan 2)	Executive Director	401(a)	N/A	\$2000 Annually	100% vested
Panhandle Regional Planning Commission Pension Trust	All	401(a)	5% of compensation	14% of compensation	5 YCS
Panola County Appraisal District Pension Plan	All		7% of compensation	13% of compensation	2 YCS
Permian Basin Community Center for MHMR	All full-time employees	401(a)	None	10.2% of compensation	Graded; 100% at 5 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Part of Houston Authority Defined				At employers discretion with maximum rate of 7.5% of	
Port of Houston Authority Defined Contribution Plan	All full-time members	401(a)	None	compensation after 20 YCS	Graded; 100% at 5 YCS
Princeton ISD TERRP	All	401(a)	N/A	Lump some amount equal to \$10,000 for the 2002 Plan year and a lump sum amount equal to \$5,000 for each plan year after 2002. In order for the employer to make contributions the employee must be the Superintendent as of 8/1/2002.	Graded; 100% at 6 YCS,
		401(<i>a</i>)		*	
Prosper ISD TERRP	All	401(a)	N/A	100% match of employee contribution up to a maximum of \$1,200 per fiscal year	5 YCS
Rio Grande COG Pension Plan	All	401(a)	0.5% of compensation	5.68% of compensation	Graded; 100% at 5 YCS
Robertson County Appraisal District Pension Plan	A11	N/A	7% after tax	7% match of employee contributions	Graded; 100% at 10 YCS
Sabine River Authority Retirement Plan	Full-time employees after one year of service	401(a)	N/A	15% of compensation which is within the limitations as set out in Section 415(c) of the IRC.	N/A
Sabine Valley Center	All full-time employees	401(a)	None	3% of all eligible employees' gross earnings. Also, a matching contribution up to an additional 6% of each employee's gross earnings.	Graded; 100% at 6 YCS
San Antonio Housing Authority Employee's Pension Trust	All	N/A	5% to 25% of compensation	11% of compensation plus 5.7% of a participant's compensation for the plan year that exceeds the social security taxable wage base in effect at the beginning of the plan year.	5 YCS
San Antonio River Authority Pension Plan	All	401(a)	Voluntary after-tax contributions	Minimum of 8% of compensation	Graded; 100% at 7 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
San Saba County Central Appraisal District Pension Plan	All	N/A	3% of compensation	4% of compensation	Immediately 100% vested once contributions to the plan are remitted.
Schleicher County Appraisal District Pension Plan	All	401(a)	7% of compensation	7% of compensation	Graded; 100% at 7 YCS
Scurry County Appraisal District Pension Plan	All	N/A	7% of compensation	14% of compensation	3 YCS
South East Texas Regional Planning Commission	All	401(a)	8% of compensation	N/A	Graded; 100% at 5 YCS
South Plains College Pension Trust Plan	All full-time teaching personnel, officer, and/or administrators of the college who have attained at least one year of continuous employment	N/A		\$300/year for each eligible full- time employee who is a member of the plan	10 YCS
South Texas Water Authority Thrift Plan	Full-time employees	N/A	7.5% of compensation; and may elect to contribution up to 4.5% of post-tax earnings for a total of up to 12%	Dollar per dollar match of compensation	Graded; 100% at 6 YCS
Spindletop (Life Resource) Retirement Plan	Full-time employees	401(a)	order to receive employer	Contributes amounts to match employee's contributions to plan under IRS Code Sections 457 and 403(b); the Center will match employee elective deferrals up to 8% of compensation	Graded; 100% at 6 YCS
Starr County Memorial Hospital Money Purchase Pension Plan	All	401(a) Money Purchase Plan	Employees must contribute	Dollar per dollar match of compensation between 1% and	5 YCS
Stephens County Tax Appraisal District Pension Plan	All	401(a)	6% of compensation	10% of compensation	5 YCS
Sundown ISD Supplemental Retirement Plan	All	401(a)	6% of compensation	6% of compensation	2 YCS
Sutton County Appraisal District Pension Plan	A11	N/A	7% of compensation	7% of compensation	2 YCS
Tarrant County MHMR Service Pension Plan	Full-time employees who have completed one year of service	401(a) Money Purchase Plan	5% of compensation	8% of compensation	Graded; 100% at 5 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
	All full-time employees				
Tarrant County WCID #1	over the age of 18	401(a)	Voluntary	13% of compensation	5 YCS
Temple Housing Authority 401(a)	All	401(a)	5.6% of compensation	7% of compensation	7 YCS
Texana MHMR Center	All	401(a)	4% of compensation	6% of compensation	5 YCS
	Participants who miss 5 or fewer days each school year	401(a)	None	\$300/year	3 YCS
Texas Municipal Power Agency Employees Plan	A11	401(a)	Any amount up to 50% of compensation	10% of compensation	Graded; 100% at 5 YCS
Texas Panhandle MHMR Authority Retirement Plan	Full-time employees who have completed one year of service.	401(a)	N/A	Match any employee contributions up to a maximum of 6%	Graded; 100% at 6 YCS
Texoma COG Pension Trust	All	401(a)	3% of compensation	7% of compensation	Immediate
Texoma Community Center	All	401(a)	Voluntary, up to IRS limits	1	Graded; 100% at 7 YCS
THA Defined Contribution Pension Plan for Sweeny Community Hospital	Full-time employees who started after 12/31/2004	457	Voluntary	3% of compensation, and a matching contribution equal to 50% of the first 4% of employee contributions	Immediate
	All full-time employees, except for Nursing Home and Director of Nursing	457	Voluntary	4% of compensation	5 YCS
The Retirement Accumulation Plan for the Employees of the Galveston			Up to 7.65% (Up to the maximum amount taxable		
Wharves	All	401(a)	for social security purposes)	None	Immediate
Tom Green County Appraisal District Pension Plan	All	401(a)	5% of compensation	10% of compensation	3 YCS
Travis County Healthcare District	A11	401(a)	6% of compensation	6% of compensation	Graded; 100% at 5 YCS

TEXAS PENSION REVIEW BOARD

Defined Contribution Plan	Eligible Members	Internal Revenue Code	Employee Contribution	Employer Contribution	Vesting (If applicable)
Tri-County MHMR Services Retirement Plan	Full-time, regular employees	401(a)	N/A	7.5% plus match dollar for dollar up to 2.5%. An additional 0.5% for each 1 % of additional participant contribution over 2.5% up to a maximum of 4% of the compensation of each participant.	Graded; 100% at 5 YCS
Tropical TX Center for Services Retirement Plan & Trust	Full-time employees with 3 months of service	401(a)	Voluntary	100% match of employee's elective up to a max of 9%	Graded; 100% at 5 YCS
Tyler County Hospital District Thrift Plan	All	401(a) & 457 combo	1 to 10% of compensation	100% match not to exceed 3% of compensation	5 YCS
Upper Leon River Municipal Water District	All	N/A	N/A	8% of compensation	1 YCS
Upper Trinity Regional Water District Pension Plan	All	401(a)	6.2% of compensation	10% of compensation	5 YCS if hired before October 1, 2000, and 7 YCS if hired after September 30, 2000
Upshur County Appraisal District	All	N/A	10% of compensation	10% of compensation	5 YCS
Uvalde County Appraisal District Pension Plan	All	N/A	7% of compensation	9% of compensation	2 YCS
Victoria County Appraisal District Pension Plan	All	401(a)	7% of compensation	12% of compensation	Graded; 100% at 10 YCS
Walker County Appraisal District Pension Plan	All	401(a)	7% of compensation	1	Graded; 100% at 10 YCS
West Texas Center for MHMR Retirement Plan	Full-time eligible employees after 6 months of service	401(a)	At least 3% of compensation, up to max allowed by IRS	On/after 9/1/01 the Center will contribute a dollar-per-dollar match of both the 403(b) and 457(b) plan contributions of the employee ranging from a minimum of 3% to a maximum of 6%.	Graded; 100% at 5 YCS
Wharton County Central Appraisal District	All	401(a)	None	7% of compensation	Graded; 100% at 4 YCS

TEXAS PENSION REVIEW BOARD

APPENDIX C — VOLUNTEER TLFFRA PLANS

TEXAS PENSION REVIEW BOARD

APPENDIX C-VOLUNTEER TLFFRA PLANS

The Texas Local Firefighters Retirement Act (TLFFRA) is not a standalone pension system; it is a governing statute that allows the creation of pension systems for volunteer fire departments and outlines the various requirements relating to administration, membership, and benefits. Members are eligible for full retirement at the age of 55 with 20 years of service and receive a benefit of \$25 per month for the remainder of their life. Survivor, death, and disability benefits are also included under TLFFRA. The TLFFRA benefit is funded through both employer and employee contributions. The majority of volunteer TLFFRA pension systems do not have a trust fund balance; therefore, are considered pay-as-you-go systems. The employer contribution is the total amount of benefits paid to retirees and beneficiaries in a calendar year. The volunteer firefighters contribute a very small amount each year (some volunteer TLFFRA systems require their members to pay an annual contribution of five dollars). The employer may at any time make the member contributions. There are currently 81 volunteer TLFFRA plans registered with the PRB, as listed in the following table.

TEXAS PENSION REVIEW BOARD

APPENDIX C—VOLUNTEER TLFFRA PLANS

Arlington Firemen's Relief & Retirement Fund	Goldthwaite Firemen's Relief & Retirement Fund	Nocona Firemen's Relief & Retirement Fund
Bay City Firemen's Relief & Retirement Fund	Granger Firemen's Pension Fund	Olney Firemen's Relief & Retirement Fund
Beeville Firemen's Relief & Retirement Fund	Grapeland Firemen's Relief & Retirement Fund	Paducah Firemen's Relief & Retirement Fund
Belton Firemen's Relief & Retirement Fund	Hamlin Firemen's Pension	Pecos City Firemen's Relief & Retirement Fund
Benavides Firemen's Relief & Retirement Fund	Hemphill Firemen's Relief & Retirement Fund	Pittsburg Firemen's Relief & Retirement Fund
Bowie Volunteer Firemen's Relief & Retirement Fund	Henderson Firemen's Relief & Retirement Fund	Port Lavaca Firemen's Relief & Retirement Fund
Bronte Firemen's Relief & Retirement Fund	Henrietta Firemen's Relief & Retirement Fund	Ralls Firemen's Relief & Retirement Fund
Caddo Mills Volunteer Firemen's Relief & Retirement	Hico Firemen's Relief & Retirement Fund	Robert Lee Firemen's Relief & Retirement Fund
Canton Volunteer Firemen's Relief & Retirement Fund	Hughes Springs Firemen's Relief & Retirement Fund	Robstown Firemen's Relief & Retirement Fund
Chillicothe Firemen's Relief & Retirement Fund	Jacksboro Volunteer Fire Department	Rockdale Firemen's Relief & Retirement Fund
Cisco Firemen's Relief & Retirement Fund	Jacksonville Firemen's Relief & Retirement Fund	Round Rock Firemen's Relief & Retirement Fund
Clifton Firemen's Relief & Retirement Fund	Junction Firemen's Relief & Retirement Fund	Runge Firemen's Relief & Retirement Fund
Cockrell Hill Firemen's Relief & Retirement Fund	Karnes City Firemen's Relief & Retirement Fund	Rusk Firemen's Relief & Retirement Fund
College Station Firemen's Relief & Retirement Fund	Kaufman Fireman's Relief & Retirement Fund	Sealy Firemen's Relief & Retirement Fund
Colorado City Firemen's Relief & Retirement Fund	Kenedy Volunteer Firemen's Relief & Retirement Fund	Silsbee Firemen's Relief & Retirement Fund
Comanche Firemen's Relief & Retirement Fund	Lampasas Firemen's Relief & Retirement Fund	Silverton Firemen's Relief & Retirement Fund
Commerce Firemen's Relief & Retirement Fund	Leonard Volunteer Firemen's Relief & Retirement Fund	Smithville Firemen's Relief & Retirement Fund
Cooper Volunteer Firemen's Relief & Retirement Fund	Los Fresnos Firemen's Relief & Retirement Fund	Stephenville Firemen's Relief & Retirement Fund
De Kalb Firemen's Relief & Retirement Fund	Mason Firemen's Relief & Retirement Fund	Sulphur Springs Firemen's Relief & Retirement Fund
Decatur Firemen's Relief & Retirement Fund	McGregor Firemen's Relief & Retirement Fund	Taft Firemen's Relief & Retirement Fund
Donna Firemen's Relief & Retirement Fund	McKinney Volunteer Fire Pension Fund	Three Rivers Firemen's Relief & Retirement Fund
Eden Firemen's Relief & Retirement Fund	McLean Firemen's Relief & Retirement Fund	Throckmorton Firemen's Relief & Retirement Fund
Elsa Firemen's Relief & Retirement Fund	Memphis Firemen's Relief & Retirement Fund	Tulia Firemen's Relief & Retirement Fund
Ennis Firemen's Relief & Retirement Fund	Monahans Volunteer Firemen's Relief & Retirement Fund	Valley Mills Firemen's Relief & Retirement Fund
Floresville Firemen's Relief & Retirement Fund	Mount Pleasant Firemen's Relief & Retirement Fund	Weatherford Firemen's Relief & Retirement Fund
Franklin Firemen's Relief & Retirement Fund	Muenster Volunteer Firemen Relief & Retirement Fund	White Deer Volunteer Firemen's Relief & Retirement Fund
Gatesville Volunteer Firemen's Relief & Retirement Fund	Navasota Firemen's Relief & Retirement Fund	Winters Firemen's Relief & Retirement Fund

TEXAS PENSION REVIEW BOARD

APPENDIX D — DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Abilene Firemen's Relief & Retirement Fund

Rodney Goodman 102 Cedar St., Suite 100 Abilene TX 79601 (325) 665-8447

Amarillo Firemen's Relief & Retirement Fund

Laura Storrs PO Box 1971 Amarillo TX 79105 (806) 378-3040

Arlington Employees Deferred Income Plan

Heather Moorhead PO Box 90231 Arlington TX 76004 (817) 459-6869

Atlanta Firemen's Relief & Retirement Fund

Ricky Draper PO Box 1030 Atlanta TX 75551 (903) 796-2303

Austin Employees' Retirement System

Christopher Hanson 6850 Austin Center Blvd. Suite 320 Austin TX 78731 (512) 458-2551

Austin Fire Fighters Relief & Retirement Fund William Stefka 4101 Parkstone Heights Dr Ste 270 Austin TX 78746 (512) 454-9567

Austin Police Retirement System Pattie Featherson 2520 S IH 35 Ste 100

Austin TX 78704 (512) 416-7672

Beaumont Firemen's Relief & Retirement Fund Joni Hanley 1515 Cornerstone Ct Beaumont TX 77706 (409) 866-1526

Big Spring Firemen's Relief & Retirement Fund

Chanley Delk 310 Nolan St Big Spring TX 79720 (432) 263-4036

Brazos River Authority Retirement Plan

Matthew Wheelis PO Box 7555 Waco TX 76714 (254) 761-3100

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Brownwood Firemen's Relief & Retirement Fund

Walter Middleton PO Box 1389 Brownwood TX 76801 (325) 646-5775

Capital MTA Retirement Plan for Administrative Employees

Virginia Keeling 2910 E 5th St Austin TX 78702 (512) 389-7400

Capital MTA Retirement Plan for Bargaining Unit Employees

Virginia Keeling 2910 E 5th St Austin TX 78702 (512) 389-7400

Cleburne Firemen's Relief & Retirement Fund

John Harrell 114 W Wardville Cleburne TX 76033 (817) 645-0965

Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust

Mireya Castilaw PO Box 869 Big Spring TX 79721 (432) 267-6341 Conroe Fire Fighters' Retirement Fund Jordan Stepanski 402 Simonton Ste 175 Conroe TX 77301 (936) 756-5917

Corpus Christi Fire Fighters' Retirement System Gracie Flores 711 N Carancahua Ste 724 Corpus Christi TX 78401 (361) 882-1486

Corpus Christi Regional Transportation Authority

Dena Linnehan 602 N Staples St Corpus Christi TX 78401 (361) 289-2712

Corsicana Firemen's Relief & Retirement Fund

Melissa O'Sullivan 200 N 12th St Corsicana TX 75110 (903) 654-4815

CPS Energy Pension Plan

Lois Emerson PO Box 1771 San Antonio TX 78296 (210) 353-2948

TEXAS PENSION REVIEW BOARD

APPENDIX D-DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Dallas County Hospital District Retirement Income Plan	Dallas/Fort Worth Airport Board Retirement Plan
Joe Mayer	Michael Phemister
5200 Harry Hines Blvd - Accounting	PO Box 619428
Dallas TX 75235-7709	Dallas TX 75261
(214) 590-4123	(972) 973-5464
Dallas Employees' Retirement Fund	DART Employees' Defined Benefit Retirement Plan & Trust
Cheryl Alston	Blake Horton
1920 McKinney Avenue; 10th Floor	PO Box 660163
Dallas TX 75201	Dallas TX 75266
(214) 580-7700	(214) 749-3278
Dallas Police & Fire Pension System-Combined Plan	Denison Firemen's Relief & Retirement Fund
Kelly Gottschalk	Raj Allada
4100 Harry Hines Blvd Ste 100	PO Box 347
Dallas TX 75219	Denison TX 75021
(214) 638-3863	(903) 465-2720
Dallas Police & Fire Pension System-Supplemental	Denton Firemen's Relief & Retirement Fund
Kelly Gottschalk	Gary Calmes
4100 Harry Hines Blvd Ste 100	PO Box 2375
Dallas TX 75219	Denton TX 76202
(214) 638-3863	(940) 349-8200
Dallas/Fort Worth Airport Board DPS Retirement Plan	City of El Paso Employees Retirement Trust
Michael Phemister	Robert Ash
PO Box 619428	1039 Chelsea St.
Dallas TX 75261	El Paso TX 79903
(972) 973-5464	(915) 212-1785

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

El Paso Firemen & Policemen's Pension Fund Staff Plan and Trust

Tyler Grossman 909 East San Antonio Avenue El Paso TX 79901 (915) 771-8111

El Paso Firemen's & Policemen's Pension Fund

Tyler Grossman 909 East San Antonio Avenue El Paso TX 79901 (915) 771-8111

Employees Retirement System of Texas Porter Wilson

PO Box 13207 Austin TX 78711 (877) 275-4377

Fort Worth Employees' Retirement Fund

Benita Falls Harper 3801 Hulen St Ste 101 Fort Worth TX 76107 (817) 632-8900

Fort Worth Employees' Retirement Fund Staff Plan

Benita Falls Harper 3801 Hulen St Ste 101 Fort Worth TX 76107 (817) 632-8900 Galveston Employees' Retirement Fund Jacque Vasquez 1011 Tremont Galveston TX 77550 (409) 443-5006

Galveston Employees' Retirement Plan for Police Jacque Vasquez 1011 Tremont Galveston TX 77550 (409) 443-5006

Galveston Firefighter's Relief & Retirement Fund Rebecca Johnson 6511 Stewart Rd Unit 4 B Galveston TX 77551 (409) 740-0881

Galveston Wharves Pension Plan

Mark Murchison PO Box 328 Galveston TX 77553 (409) 766-6183

Greenville Firemen's Relief & Retirement Fund

Bryan Ausmus PO Box 1049 Greenville TX 75403 (903) 457-2940

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Guadalupe-Blanco River Authority

Susan Hubbert 933 E Court St Seguin TX 78155 (830) 379-5822

Harlingen Firemen's Relief & Retirement Fund

Nanette Fox PO Box 2207 Harlingen TX 78551 (956) 216-5704

Harris County Hospital District Pension Plan

Michael Norby 2525 Holly Hall St Ste 140 Houston TX 77054 (713) 566-6790

Houston Firefighters' Relief & Retirement Fund

Ralph Marsh 4225 Interwood N Pkwy Houston TX 77032 (281) 372-5100

Houston MTA Non-Union Pension Plan

Daniel Weber PO Box 61429 Houston TX 77208 (713) 739-4886 Houston MTA Workers Union Pension Plan Daniel Weber PO Box 61429 Houston TX 77208 (713) 739-4886

Houston Municipal Employees Pension System David Long 1201 Louisiana Houston TX 77002 (713) 595-0100

Houston Police Officer's Pension System John Lawson 602 Sawyer St Ste 300 Houston TX 77007 (713) 869-8734

Irving Firemen's Relief & Retirement Fund

Edith Auston 825 W Irving Blvd Irving TX 75060 (972) 721-4858

Irving Supplemental Benefit Plan

Robert Cascante-Diaz 825 W Irving Blvd Irving TX 75060 (972) 721-2696

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Judicial Retirement System of Texas Plan Two

Porter Wilson PO Box 13207 Austin TX 78711 (877) 275-4377

JPS Pension Plan - Tarrant County Hospital District

Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701-2180 (512) 465-1544

Killeen Firemen's Relief & Retirement Fund

Jennifer Hanna PO Box 10849 Killeen TX 76547 (254) 931-0338

Laredo Firefighters Retirement System

Jaime Jasso PO Box 3069 Laredo TX 78044 (956) 717-8018

Law Enforcement & Custodial Officer Supplemental Retirement

Fund Porter Wilson PO Box 13207 Austin TX 78711 (877) 275-4377 Longview Firemen's Relief & Retirement Fund Pam Randolph 411 N Fredonia St Ste 110 Longview TX 75601 (903) 212-4357

Lower Colorado River Authority Retirement Plan Laura Flores 3700 Lake Austin Blvd.

Austin TX 78703 (817) 569-4300

Lubbock Fire Pension Fund

Krista Bailey 4223 85th Street Lubbock TX 79423 (806) 762-1590

Lufkin Firemen's Relief & Retirement Fund

Cristi Elmore PO Box 190 Lufkin TX 75902 (936) 630-0555

Marshall Firemen's Relief & Retirement Fund

Joey Dunagan PO Box 698 Marshall TX 75671 (903) 935-4526

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

McAllen Firemen's Relief & Retirement Fund

Javier Gutierrez 1521 Galveston Ave McAllen TX 78501 (956) 681-2500

Midland Firemen's Relief & Retirement Fund

Shera Crow PO Box 4296 Midland TX 79704 (432) 685-7213

Nacogdoches County Hospital District Retirement Plan

Not Available¹ 1204 N Mound St Nacogdoches TX 75961 (936) 569-4611

Northeast Medical Center Hospital Retirement Plan

Joanne Pike PO Box 1508 Humble TX 77347 (281) 319-8415

Northwest Texas Healthcare System Retirement Plan

Michelle Bonner PO Box 1971 Amarillo TX 79105 (806) 378-3040 **Odessa Firemen's Relief & Retirement Fund** Jill Jones 1921 E 37th St Odessa TX 79762 (432) 614-2491

Orange Firemen's Relief & Retirement Fund Carol Wetherington PO Box 520 Orange TX 77631 (409) 883-1965

Paris Firefighters' Relief & Retirement Fund Bob Rast 1444 N Main Paris TX 75460 (903) 784-9225

Plainview Firemen's Relief & Retirement Fund

Rachael Foster 911 Quincy St Plainview TX 79072 (806) 291-1247

Plano Retirement Security Plan

Fannie Layer PO Box 860358 Plano TX 75086 (972) 941-7115

¹ Plan recently left their former administrator and the PRB has not been able to obtain a new contact party.

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

Port Arthur Firemen's Relief & Retirement Fund

Debra Jones PO Box 1089 Port Arthur TX 77641 (409) 983-8734

Port of Houston Authority Retirement Plan

Ramon Yi PO Box 2562 Houston TX 77252 (713) 670-2400

Refugio County Memorial Hospital District Retirement Plan

Lydia Schlabach 107 Swift St Refugio TX 78377 (361) 526-2321

Retirement Plan for Anson General Hospital

Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701-2180 (512) 346-1590

Retirement Plan for Citizens Medical Center

Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701-2180 (512) 346-1590 Retirement Plan for Employees of Brownsville Navigation District Donna Eymard 1000 Foust Road Brownsville TX 785211000 (956) 831-4592

Retirement Plan for Guadalupe Regional Medical Center

Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701-2180 (512) 346-1590

Retirement Plan for Sweeny Community Hospital Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701-2180 (512) 346-1590

San Angelo Firemen's Relief & Retirement Fund

Ronald Partusch PO Box 1751 San Angelo TX 76902 (325) 657-4355

San Antonio Fire & Police Pension Fund

Warren Schott 11603 W Coker Loop San Antonio TX 78216 (210) 534-3262

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

San Antonio Metropolitan Transit Retirement Plan

Cathy Schnitzer PO Box 12489 San Antonio TX 78212 (210) 362-2216

San Benito Firemen's Pension Fund

Ana Tinsley 485 N Sam Houston Blvd San Benito TX 78586 (956) 245-9633

Sweetwater Firemen's Relief & Retirement Fund

Debra Jones PO Box 6083 Longview TX 75608 (409) 828-0425

Teacher Retirement System of Texas

Brian Guthrie 1000 Red River St Austin TX 78701 (512) 542-6400

Temple Firemen's Relief & Retirement Fund

Jake Herndon PO Box 6101 Temple TX 76503 (254) 774-5834 **Texarkana Firemen's Relief & Retirement Fund** Debra Jones PO Box 6083 Longview TX 75608 (409) 828-0425

Texas City Firemen's Relief & Retirement Fund Mike Rusnak 1801 9th Ave N Texas City TX 77590 (409) 643-5714

Texas County & District Retirement System Amy Bishop 901 S. MoPac Expy; Barton Oaks Plaza IV, Suite 500 Austin TX 78746 (512) 328-8889

Texas Emergency Services Retirement System

Kevin Deiters PO Box 12577 Austin TX 78711 (512) 936-3372

Texas Municipal Retirement System

David Gavia PO Box 149153 Austin TX 78714 (512) 476-7577

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Actuarially Funded Plans

The Woodlands Firefighters' Retirement System	Waxahachie Firemen's Relief & Retirement Fund
Jennifer Hanna	Gary Myers
PO Box 497	407 Water St
Conroe TX 77305	Waxahachie TX 75168
(936) 537-4475	(972) 937-1200
Travis County ESD # 6 Firefighter's Relief & Retirement Fund	Weslaco Firemen's Relief & Retirement Fund

Travis County ESD # 6 Firefighter's Relief & Retirement Fund

Ana Tinsley 124 White Fox Cove Round Rock TX 78664 (512) 663-6804

Tyler Firefighters' Relief & Retirement Fund

Paula Henderson 1718 W Houston St Tyler TX 75702 (903) 535-0005

University Health System Pension Plan

George Hernandez 4502 Medical Dr San Antonio TX 78229 (210) 358-2218

University Park Firemen's Relief & Retirement Fund

Dustin Lewis 3800 University Blvd Dallas TX 75205 (214) 987-5380

Debra Jones PO Box 6083 Longview TX 75608 (409) 828-0425

Wichita Falls Firemen's Relief & Retirement Fund James (Chris) Duncan 624 Indiana Ave Ste 305 Wichita Falls TX 76301 (940) 761-7901

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Arlington	Firemen's	Relief &	Retirement	Fund
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April Nixon 101 W Abram St 3rd Floor Arlington TX 76010 (817) 459-6403

Bay City Firemen's Relief & Retirement Fund

Mark Bricker 1901 5th St Bay City TX 77415 (979) 245-2137

Beeville Firemen's Relief & Retirement Fund

Kristine Horton 400 N Washington Beeville TX 78102 (361) 358-4641

Belton Firemen's Relief & Retirement Fund

Susan Allamon PO Box 120 Belton TX 76513 (254) 933-5817

Benavides Firemen's Relief & Retirement Fund

Dalia Hernandez PO Drawer R Benavides TX 78341 (361) 256-3283 **Bowie Volunteer Firemen's Relief & Retirement Fund** Mitzi Wallace 203 Walnut St Bowie TX 76230 (940) 872-1114

Bronte Firemen's Relief & Retirement Fund Pat Martindale PO Box 370 Bronte TX 76933 (325) 473-3501

Caddo Mills Volunteer Firemen's Relief & Retirement Jeffery Holt PO Box 429 Caddo Mills TX 75135 (903) 527-3116

Canton Volunteer Firemen's Relief & Retirement Fund

Julie Seymore PO Box 245 Canton TX 75103 (903) 567-2826

Chillicothe Firemen's Relief & Retirement Fund

Marsha Stone PO Box 546 Chillicothe TX 79225 (940) 852-5211

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Cisco Firemen's Relief & Retirement Fund

Tammy Harris 109 W 6th St Cisco TX 76437 (254) 442-2111

Clifton Firemen's Relief & Retirement Fund

Pamela Harvey PO Box 231 Clifton TX 76634 (254) 675-8337

Cockrell Hill Firemen's Relief & Retirement Fund

Bret Haney 4125 W Clarendon Dr Cockrell Hill TX 75211 (214) 330-6333

College Station Firemen's Relief & Retirement Fund

Brandi Whittenton PO Box 9960 College Station TX 77842 (979) 764-3552

Colorado City Firemen's Relief & Retirement Fund

Connie Baker PO Box 912 Colorado City TX 79512 (325) 728-5331 Comanche Firemen's Relief & Retirement Fund William Flannery 114 W Central Comanche TX 76442 (325) 356-2616

Commerce Firemen's Relief & Retirement Fund Cleva Giddens 1119 Alamo St Commerce TX 75428 (903) 886-1100

Cooper Volunteer Firemen's Relief & Retirement Fund Margaret Eudy 91 North Side Sq Cooper TX 75432 (903) 395-2217

De Kalb Firemen's Relief & Retirement Fund

Abbi Baker 110 E Grizzly De Kalb TX 75559 (903) 667-2410

Decatur Firemen's Relief & Retirement Fund Brett Shannon

PO Box 1299 Decatur TX 76234 (940) 627-2741

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Donna Firemen's Relief & Retirement Fund

David Simmons 307 S 12th St Donna TX 78537 (956) 464-2121

Eden Firemen's Relief & Retirement Fund

Celina Hemmeter PO Box 915 Eden TX 76837 (325) 869-2211

Elsa Firemen's Relief & Retirement Fund

Melissa Mata PO Box 422 Elsa TX 78543 (956) 262-2127

Ennis Firemen's Relief & Retirement Fund

Christine Rogalski PO Box 220 Ennis TX 75120 (972) 875-3473

Floresville Firemen's Relief & Retirement Fund

Margaret de Hoyos 1120 D St Floresville TX 78114 (830) 393-3105 Franklin Firemen's Relief & Retirement Fund Frankie Wallace PO Box 421 Franklin TX 77856 (979) 828-5831

Gatesville Volunteer Firemen's Relief & Retirement Fund Luis Lobo 110 N 8th St Gatesville TX 76528 (254) 865-8951

Goldthwaite Firemen's Relief & Retirement Fund Paula Gore PO Box 450 Goldthwaite TX 76844 (325) 648-3186

Granger Firemen's Pension Fund

Rosie Ramirez PO Box 367 Granger TX 76530 (512) 859-2755

Grapeland Firemen's Relief & Retirement Fund

Dan Walling PO Box 567 Grapeland TX 75844 (936) 687-2115

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Hamlin Firemen's Pension

Maria Franco PO Box 157 Hamlin TX 79520 (325) 576-2711

Hemphill Firemen's Relief & Retirement Fund

Laure Morgan PO Box 788 Hemphill TX 75948 (409) 787-2251

Henderson Firemen's Relief & Retirement Fund

Stephanie Riddle 400 W Main St Henderson TX 75652 (903) 657-6551

Henrietta Firemen's Relief & Retirement Fund

Kelley Bloodworth PO Box 409 Henrietta TX 76365 (940) 538-4316

Hico Firemen's Relief & Retirement Fund

Kari Drueckhammer PO Box 533 Hico TX 76457 (254) 796-4620 Hughes Springs Firemen's Relief & Retirement Fund Jay Cates PO Box 805 Hughes Springs TX 75656 (903) 639-3716

Jacksboro Volunteer Fire Department

Thomas Cox 112 W Belknap St Jacksboro TX 76458 (940) 567-6321

Jacksonville Firemen's Relief & Retirement Fund Mo Raissi PO Box 1390 Jacksonville TX 75766 (903) 586-3510

Junction Firemen's Relief & Retirement Fund

K Saiz 730 Main St Junction TX 76849 (325) 446-2622

Karnes City Firemen's Relief & Retirement Fund Amelia Martinez 314 E Calvert Ave Karnes City TX 78118 (830) 780-3422

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Kaufman Fireman's Relief & Retirement Fund

JoAnn Talbot 209 S Washington St Kaufman TX 75142 (972) 932-2216

Kenedy Volunteer Firemen's Relief & Retirement Fund

Sandra Lundquist 303 W Main St Kenedy TX 78119 (830) 583-2230

Lampasas Firemen's Relief & Retirement Fund

Terry Lindsey 408 S Main Lampasas TX 76550 (512) 556-3446

Leonard Volunteer Firemen's Relief & Retirement Fund

George Henderson PO Box 1270 Leonard TX 75452 (903) 587-3334

Los Fresnos Firemen's Relief & Retirement Fund

Celina Gonzales 200 N Brazil Los Fresnos TX 78566 (956) 371-2870 Mason Firemen's Relief & Retirement Fund Pattie Grote PO Box 68 Mason TX 76856 (325) 347-6449

McGregor Firemen's Relief & Retirement Fund Angelia Sloan PO Box 192 McGregor TX 76657

(254) 840-2806

McKinney Volunteer Fire Pension Fund

Sandra Skinner 222 N Tennessee St McKinney TX 75069 (972) 547-7567

McLean Firemen's Relief & Retirement Fund

Toni Bohlar PO Box 212 McLean TX 79057 (806) 779-2481

Memphis Firemen's Relief & Retirement Fund

Nelwyn Ward 721 Robertson St Memphis TX 79245 (806) 259-3001

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Monahans Volunteer Firemen's Relief & Retirement Fund

Lorena Marquez 112 W 2nd St Monahans TX 79756 (432) 943-4343

Mount Pleasant Firemen's Relief & Retirement Fund

Lyndee Rodgers 728 E Ferguson Rd Mount Pleasant TX 75455 (903) 575-4144

Muenster Volunteer Firemen Relief & Retirement Fund

Stan Endres PO Box 208 Muenster TX 76252 (940) 759-2236

Navasota Firemen's Relief & Retirement Fund

Lance Hall PO Box 910 Navasota TX 77868 (936) 825-6490

Nocona Firemen's Relief & Retirement Fund

Revell Hardison 100 Cooke St Nocona TX 76255 (940) 825-4100 **Olney Firemen's Relief & Retirement Fund** Mathew Ickert PO Box 546 Olney TX 76374 (940) 564-5616

Paducah Firemen's Relief & Retirement Fund Janice Nash PO Box 759

Paducah TX 79248 (806) 492-3713

Pecos City Firemen's Relief & Retirement Fund

Carolina Gonzales PO Box 929 Pecos TX 79772 (432) 445-3519

Pittsburg Firemen's Relief & Retirement Fund

Tim Reynolds 200 Rusk St Pittsburg TX 75686 (903) 856-3621

Port Lavaca Firemen's Relief & Retirement Fund

Scotty Jones PO Box 105 Port Lavaca TX 77979 (361) 552-9793

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Ralls Firemen's Relief & Retirement Fund

Kimberly Perez 800 Avenue I Ralls TX 79357 (806) 253-2558

Robert Lee Firemen's Relief & Retirement Fund

Kay Torres PO Box 26 Robert Lee TX 76945 (325) 453-2831

Robstown Firemen's Relief & Retirement Fund

Sylvia Hernandez 516 E Avenue B Robstown TX 78380 (361) 387-4589

Rockdale Firemen's Relief & Retirement Fund

Sandra Ellis PO Box 586 Rockdale TX 76567 (512) 446-2511

Round Rock Firemen's Relief & Retirement Fund

Jerry Galloway 221 E Main Round Rock TX 78664 (512) 218-5432 Runge Firemen's Relief & Retirement Fund Esmeralda Castro PO Box 206 Runge TX 78151 (830) 239-4121

Rusk Firemen's Relief & Retirement Fund

Lindsey Lankford 408 N Main St Rusk TX 75785 (903) 683-5794

Sealy Firemen's Relief & Retirement Fund

Krisha Langton PO Box 517 Sealy TX 77474 (979) 885-3511

Silsbee Firemen's Relief & Retirement Fund

DeeAnn Zimmerman 105 S 3rd St Silsbee TX 77656 (409) 385-2863

Silverton Firemen's Relief & Retirement Fund

Jerry Patton PO Box 250 Silverton TX 79257 (806) 823-2125

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Smithville Firemen's Relief & Retirement Fund

Brenda Page PO Box 449 Smithville TX 78957 (512) 237-3282

Stephenville Firemen's Relief & Retirement Fund

Penny Hallmark 356 N Belknap St Stephenville TX 76401 (254) 918-1277

Sulphur Springs Firemen's Relief & Retirement Fund

Kirk Brown 125 Davis St S Sulphur Springs TX 75482 (903) 885-7541

Taft Firemen's Relief & Retirement Fund

Mary Alice Sandoval PO Box 416 Taft TX 78390 (361) 528-3512

Three Rivers Firemen's Relief & Retirement Fund

M. Forehand PO Box 398 Three Rivers TX 78071 (361) 786-2528 **Throckmorton Firemen's Relief & Retirement Fund** Jody Jackson PO Box 640 Throckmorton TX 76483 (940) 849-4411

Tulia Firemen's Relief & Retirement Fund James Davis PO Box 847 Tulia TX 79088

(806) 995-3547
Valley Mills Firemen's Relief & Retirement Fund Christi Turner
PO Box 239
Valley Mills TX 76689
(254) 932-5101

Weatherford Firemen's Relief & Retirement Fund

Brenda Hall PO Box 255 Weatherford TX 76086 (817) 598-4000

White Deer Volunteer Firemen's Relief & Retirement Fund Julie Bennett PO Box 98 White Deer TX 79097

(806) 883-4191

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Volunteer TLFFRA Plans

Winters Firemen's Relief & Retirement Fund

Shelly Antilley-Guevara 310 S Main St Winters TX 79567 (325) 754-4424

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

32nd Judicial District Juvenile Board Money Purchase Pension Plan Andrews Center Retirement Plan Gerald Jenschke Carol Fontenot 100 E 3rd Ste 301A PO Box 4730 Sweetwater TX 79556 Tyler TX 75712 (325) 236-6388 (903) 597-1351 **Ark-Tex COG Money Purchase Pension Plan** Abilene Regional MHMR Center Retirement Plan Sharon Pipes Jo Kincanon-Mitchell PO Box 5307 2616 S Clack Ste 160 Texarkana TX 75506 Abilene TX 79606 (903) 832-8636 (325) 690-5100 **Arlington Money Purchase Plan ACCESS Employee Retirement Plan 401** Anne Mott **Courtney Sammons** PO Box 90231 913 N Jackson Arlington TX 76004 Jacksonville TX 75766 (817) 459-6869 (903) 586-5507 **Arlington Thrift Savings Plan** Aldine ISD PARS 401(a) Matching Plan for Retirement Savings Breanna Standifer Archie Blanson PO Box 90231 14910 Aldine Westfield Rd Arlington TX 76004 Houston TX 77032 (817) 459-6869 (281) 985-6310 **Barton Springs/Edwards Aquifer Conservation District Retirement** Alvin ISD 401(a) Supplemental Plan **Plan & Trust** Susan Wilson Dana Wilson 301 E House St 1124 A Regal Row Alvin TX 77511 Austin TX 78748 (281) 388-1130 (512) 282-8441

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Bastrop County Appraisal District Pension Plan & Trust

Gayle Junker PO Drawer 578 Bastrop TX 78602 (512) 303-1930

Bexar County Housing Authority Pension Plan

Albert Aleman 1017 North Main Avenue Ste 201 San Antonio TX 78212 (210) 225-0071

Bluebonnet Trails MHMR Center

Amy Bodkins 1009 Georgetown St Round Rock TX 78664 (512) 244-8352

Border Region MHMR Community Center

Sergio Vigil PO Box 1835 Laredo TX 78044 (956) 794-3020

Briscoe County Appraisal District Pension Plan

Pat McWaters PO Box 728 Silverton TX 79257 (806) 823-2161 Burke Center MHMR Hourly Employee Retirement Plan Patricia Jelinek 4101 S Medford Dr Lufkin TX 75901 (936) 676-1248

Burke Center Salaried Staff Retirement Plan

Patricia Jelinek 4101 S Medford Dr Lufkin TX 75901 (936) 676-1248

Campbell Health System

Randall Young 713 E Anderson St Weatherford TX 76087 (817) 599-1225

Capital Area COG Retirement Plan

Sheila Jennings PO Box 17848 Austin TX 78760 (512) 916-6006

Capital MTA Retirement and Savings Plan

Virginia Keeling 2910 East 5th Street Austin TX 78702 (512) 369-6024

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Carroll ISD

Rob Welch 3051 Dove Rd Grapevine TX 76051 (817) 949-8222

Carrollton Money Purchase Plan

Jennifer Rogers PO Box 110535 Carrollton TX 75011 (972) 466-3000

Carson County Appraisal District Pension Plan

Donita Davis PO Box 970 Panhandle TX 79068 (806) 537-3569

Castro County Appraisal District Pension Plan

Jerry Heller 204 SE 3rd St Dimmitt TX 79027 (806) 647-5131

Center for Health Care Services 401(a) Retirement Plan

Robert Guevara 3031 IH 10 W San Antonio TX 78202 (210) 731-1300 Central Counties Center for MHMR Services Retirement Plan Jeanne Richard 304 S 22nd St Temple TX 76503 (254) 298-7000

Central Plains Center for MHMR & Substance Abuse

Carmen Laymon 2700 Yonkers St Plainview TX 79072 (806) 293-2636

Central Texas COG Pension Trust

Jim Reed PO Box 729 Belton TX 76513 (254) 770-2236

Central Texas College Pension Plan & Trust

Shaun Davis PO Box 1800 Killeen TX 76541 (254) 526-1807

Central Texas College Supplemental Plan Shaun Davis PO Box 1800 Killeen TX 76540 (254) 526-1807

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Central Texas MHMR Retirement Plan

James Barnes PO Box 250 Brownwood TX 76804 (325) 646-9574

Cherokee County Appraisal District Pension Plan

Lee Flowers PO Box 494 Rusk TX 75785 (903) 683-2296

City of Cedar Park

Joseph Gonzales 600 N Bell Blvd Cedar Park TX 78613 (512) 258-4121

City of Groves Employment Incentive Plan

Diane Thompson 3947 Lincoln Ave Groves TX 77619 (409) 960-5778

City of Groves Money Purchase Plan

Diane Thompson 3947 Lincoln Ave Groves TX 77619 (409) 960-5778 **City of Harlingen Retirement Plan** Gabriel Gonzalez 118 E Tyler Ave Harlingen TX 78550 (956) 216-5005

Clear Lake City Water Authority Pension Plan Jennifer Morrow 900 Bay Area Blvd

Houston TX 77058 (281) 488-1164

Coastal Bend COG

Veronica Toomey PO Box 9909 Corpus Christi TX 78470 (361) 883-5743

Coastal Plains Community MHMR Center Retirement Plan

Mark Durand 200 Marriott Dr Portland TX 78374 (361) 777-2083

Coleman County Appraisal District Pension Plan

Bill Jones PO Box 914 Coleman TX 76834 (325) 625-4155

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Colorado County Central Appraisal District Pension

Cindy Kubesch PO Box 10 Columbus TX 78934 (979) 732-8222

Colorado River Municipal Water District 401(a) Defined

Contribution Plan

Virginia Taylor PO Box 869 Big Spring TX 79721 (432) 267-6341

Corpus Christi RTA Defined Contribution Plan & Trust

Susan Vinson 5658 Bear Lane Corpus Christi TX 78405-4406 (361) 289-2712

Coryell County Appraisal District Pension Plan

Mitch Fast 705 E Main St Gatesville TX 76528 (254) 865-6593

Culberson County Appraisal District Pension Plan

Sally Carrasco PO Box 550 Van Horn TX 79855 (432) 283-2977 Dallam County Appraisal District Pension Plan Kim Pack PO Box 592 Dalhart TX 79022 (806) 249-6767

Dallas County Hospital District Supplemental Retirement Plan

Joe Mayer 5200 Harry Hines Blvd Dallas TX 75235 (214) 590-1276

Dallas ISD TERRP

Marita Hawkins 3700 Ross Ave Dallas TX 75204 (972) 925-3700

Dallas Police & Fire 401(a)

Kelly Gottschalk 4100 Harry Hines Blvd Ste 100 Dallas TX 75219 (214) 638-3863

Dallas/Fort Worth Airport Board 401(a) Retirement Plan

Cindy Farrow PO Box 619428 Dallas TX 75261 (972) 973-1133

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

DART Capital Accumulation Plan & Trust

Blake Horton PO Box 660163 Dallas TX 75266 (214) 749-3278

DART Employees Retirement Plan & Trust

Blake Horton PO Box 660163 Dallas TX 75266 (214) 749-3278

De Soto ISD TERRP

Bobby LaBorde 200 E Belt Line Rd De Soto TX 75115 (972) 223-6666

Deep East Texas COG Retirement Plan

CaTina Boykin 210 Premier Dr Jasper TX 75952 (409) 384-5704

Deep East Texas Self-Insurance Fund Profit Sharing Plan

Frank Strother PO Box 960 Jasper TX 75951 (409) 384-5444 Delta County Appraisal District Pension Plan Kim Gregory PO Box 47 Cooper TX 75432 (903) 395-4118

Denton County MHMR Center Retirement Plan Pam Gutierrez PO Box 2346

Denton TX 76202 (940) 565-5240

Dimmit Central Appraisal District Pension Plan

Norma Carrillo 404 W Pena Carrizo Springs TX 78834 (830) 876-3420

East Texas COG Retirement Plan

Sloane Bodle 3800 Stone Rd Kilgore TX 75663 (903) 984-8641

Ector County ISD TERRP

David Harwell PO Box 3912 Odessa TX 79760 (432) 332-9151

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Ellis Central Appraisal District Pension Plan

Kathy Rodrigue PO Box 878 Waxahachie TX 75168 (972) 937-3552

Ennis ISD TERRP

Lisa Fincher 303 W Knox Ennis TX 75119 (972) 872-7000

Erath County Appraisal District

Jerry Lee PO Box 94 Stephenville TX 76401 (254) 965-7301

Fisher County Appraisal District Pension Plan

Jackie Martin PO Box 516 Roby TX 79543 (325) 776-2733

Floyd County Central Appraisal District Pension Plan

Jim Finley PO Box 249 Floydada TX 79235 (806) 983-5256 Fort Bend ISD Employee Incentive Plan Ron Vlaskamp 16431 Lexington Blvd Sugar Land TX 77479 (281) 634-1000

Franklin County Appraisal District Pension Plan

Patty Young PO Box 720 Mt Vernon TX 75457 (903) 537-2286

Frisco ISD TERRP

James Bankston 6942 Maple St Frisco TX 75034 (469) 633-6000

Galveston Housing Authority Pension Plan

Bil Bruney 4700 Broadway Galveston TX 77551 (409) 765-1900

Galveston Wharves 2010 Plan

Mark Murchison PO Box 328 Galveston TX 77553 (409) 766-6113

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Greater Texoma Utility Authority Retirement Plan

Debi Atkins 5100 Airport Dr Denison TX 75020 (903) 786-4433

Gregg County Appraisal District

Thomas Hays 4367 W Loop 281 Longview TX 75605 (903) 238-8823

Gulf Bend Center Retirement Plan

Anna Arage 6502 Nursery Dr Ste 100 Victoria TX 77904 (361) 575-0611

Gulf Coast Trades Center / The Ravens School

Diane Wood PO Box 515 New Waverly TX 77358 (936) 344-6677

Gulf Coast Waste Disposal Authority Pension Plan

Bill Graves 910 Bay Area Blvd Houston TX 77058 (281) 488-4115 Hamilton County Appraisal District Pension Plan Doyle Roberts 119 E Henry St Hamilton TX 76531 (254) 386-8945

Hansford County Appraisal District Pension Plan

Sonya Shieldknight 709 W 7th St Spearman TX 79081 (806) 659-5575

Harris County Fresh Water District 61 401(a)

Jerry Homan PO Box 325 Cypress TX 77410 (281) 469-9405

Harris County MHMR Authority

Charlotte Simmons 7011 SW Freeway Houston TX 77074 (713) 970-3349

Harris-Galveston Coastal Subsidence District

Ronald Geesing 1660 W Bay Area Blvd Friendswood TX 77546 (281) 486-1105

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Harrison Central Appraisal District Pension Plan	Hill County Appraisal District Money Purchase Plan
Karen Jeans	Kerri Fort
PO Box 818	PO Box 416
Marshall TX 75670	Hillsboro TX 76645
(903) 935-1991	(254) 582-2508
Haskell County Appraisal District Money Purchase Pension	Hill Junior College District (PARS)
Plan & Trust	Billy Curbo
Leah Robertson	PO Box 619
PO Box 467	Hillsboro TX 76645
Haskell TX 79521	(254) 582-2555
 (940) 864-3805 Heart of Texas Region MHMR Center Retirement Plan Ryan Adams PO Box 890 Waco TX 76703 (254) 752-3451 	 Houston Firefighters' Relief and Retirement Plan Profit Sharing Retirement Plan for Fund Staff Employees Ralph Marsh 425 Interwood North Parkway Houston TX 77032 (281) 372-5100
Helen Farabee Regional MHMR Center's Money Purchase Plan	Houston-Galveston Area Council
Jana Simpson	Joyce Webb
PO Box 8266	PO Box 22777
Wichita Falls TX 76308	Houston TX 77227
(940) 397-3127	(713) 993-4590
Hill Country Community MHMR Center	Howard County Appraisal District Money Purchase Plan
Linda Werlein	Brett Mc Kibben
819 Water St Ste 300	PO Drawer 1151
Kerrville TX 78028	Big Spring TX 79721
(830) 792-3300	(432) 263-8301

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Hunt Memorial Hospital District Retirement Plan

Mitzi Parker PO Box 1059 Greenville TX 75403 (903) 408-1671

Jefferson County Appraisal District 401(k) Retirement Plan

Diana Miller PO Box 21337 Beaumont TX 77720 (409) 840-9944

Jefferson County Appraisal District Retirement Plan & Trust

Diana Miller PO Box 21337 Beaumont TX 77720 (409) 840-9944

Johnson County SUD Profit Sharing Plan

Shirley Bishop PO Box 509 Cleburne TX 76033 (817) 760-5200

Kaufman ISD TERRP

Brian Carter 1000 S Houston St Kaufman TX 75142 (972) 932-2622 Kerr Central Appraisal District Pension Plan Sharon Capeheart PO Box 294387 Kerrville TX 78029 (830) 895-5223

Kingsland MUD Pension Plan

Paul O Brian PO Box 748 Kingsland TX 78639 (325) 388-4559

Klein ISD TERRP Retirement Plan

Rick Stockton 7200 Spring Cypress Rd Klein TX 77379 (832) 249-4000

Lamar County Appraisal District Pension Plan

Phyllis Bryan PO Box 400 Paris TX 75461 (903) 785-7822

Lee County Appraisal District Pension Plan Patricia Davis 898 E Richmond St Ste 100 Giddings TX 78942 (979) 542-9618

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

LifePath Systems Retirement Plan

Robert Murphy PO Box 828 McKinney TX 75070 (972) 562-0190

Limestone Medical Center Money Purchase Pension Plan

Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701 (512) 465-1544

Llano Central Appraisal District Pension Plan

Wynona Low 103 E Sandstone Llano TX 78643 (325) 247-3065

Los Fresnos Housing Authority Employee Retirement Plan

Letty Puga 801 South Mesquite Los Fresnos TX 78566 (956) 233-5012

Lost Creek MUD Pension Plan

Tom Clark 1305 Quaker Ridge Rd Austin TX 78746 (512) 327-6243 Lower Colorado River Authority 401(k) Plan Laura Flores 3700 Lake Austin Blvd Austin TX 78703 (817) 569-4300

Lower Rio Grande Valley Development Council Kenneth Jones 311 N 15th St McAllen TX 78501 (956) 682-3481

Lubbock Regional MHMR Center

Becky Lusk PO Box 2828 Lubbock TX 79408 (806) 766-0310

Matagorda County Appraisal District Pension Plan

James Maloney 2225 Avenue G Bay City TX 77414 (979) 244-2031

McKinney ISD TERRP

Steve Fortenberry 1 Duvall St McKinney TX 75069 (469) 742-4000

TEXAS PENSION REVIEW BOARD

APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

MHMR Services of Concho Valley Retirement Plan

Annette Hernandez 1501 W Beauregard Ave San Angelo TX 76901 (325) 658-7750

Midland ISD

Adan Gonzales 615 W Missouri Ave Midland TX 79701 (432) 689-1000

Morris County Appraisal District Pension Plan

Rhonda Hall PO Box 563 Daingerfield TX 75638 (903) 645-5601

MTA of Harris County Defined Contribution Plan

Daniel Weber PO Box 61429 Houston TX 77208 (713) 739-4930

Nolan County Central Appraisal District Pension Plan

Brenda Klepper PO Box 1256 Sweetwater TX 79556 (325) 235-8421

North Central Texas COG

Shannan Ramirez PO Box 5888 Arlington TX 76005 (817) 695-9136

North Central Texas COG (Plan 2)

Karen Richard PO Box 5888 Arlington TX 76005 (817) 640-3300

Optional Retirement Program

Toni Alexander PO Box 12788 Austin TX 78711 (512) 427-6101

Panhandle Regional Planning Commission Pension Trust

Cindy Boone PO Box 9257 Amarillo TX 79105 (806) 372-3381

Panola County Appraisal District Pension Plan

Loyd Adams 1736 Ballpark Dr Carthage TX 75633 (903) 693-2891

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APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Permian Basin Community C	Center fo	or MHMR
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Chris Barnhill 401 E Illinois Ste 401 Midland TX 79701 (432) 570-3333

Port of Houston Authority Defined Contribution Plan

Ramon Yi PO Box 2562 Houston TX 77252 (713) 670-2400

Princeton ISD TERRP

Tina Pate 321 Panther Pkwy Princeton TX 75407 (469) 952-5400

Prosper ISD TERRP

Teri Meyers PO Box 100 Prosper TX 75078 (972) 346-3316

Rio Grande COG Pension Plan

Hector Diaz 1100 N Stanton St Ste 610 El Paso TX 79902 (915) 533-0998 **Robertson County Appraisal District Pension Plan** Dawn Spiller PO Box 998 Franklin TX 77856 (979) 828-5800

Sabine River Authority Retirement Plan

Jerry Clark PO Box 579 Orange TX 77631 (409) 746-2192

Sabine Valley Center

Sue Rathbun PO Box 6800 Longview TX 75608 (903) 237-2317

San Antonio Housing Authority Employee's Pension Trust

Muriel Rhoder 818 S Flores St San Antonio TX 78204 (210) 477-6262

San Antonio River Authority Pension Plan

Sharon McCoy-Huber PO Box 839980 San Antonio TX 78283 (210) 227-1373

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APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

San Saba County Central Appraisal District Pension Plan

Randy Henderson 423 E Wallace St San Saba TX 76877 (325) 372-5031

Schleicher County Appraisal District Pension Plan

Jani Mitchell PO Box 936 Eldorado TX 76936 (325) 853-2617

Scurry County Appraisal District Pension Plan

Lisa West 2612 College Ave Snyder TX 79549 (325) 573-8549

South East Texas Regional Planning Commission

William Borel 2210 Eastex Fwy Beaumont TX 77703 (409) 727-2384

South Plains College Pension Trust Plan

Anthony Riley 1401 S College Ave Levelland TX 79336 (806) 894-9611 South Texas Water Authority Thrift Plan Jo Wagner PO Box 1701 Kingsville TX 78364 (361) 592-9323

Spindletop (Life Resource) Retirement Plan

Carol Parker PO Box 3846 Beaumont TX 77704 (409) 784-5400

Starr County Memorial Hospital Money Purchase Pension Plan Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701

(512) 465-1544

Stephens County Tax Appraisal District Pension Plan

Bun Barry PO Box 351 Breckenridge TX 76424 (254) 559-8233

Sundown ISD Supplemental Retirement Plan

Scott Marshall PO Box 1110 Sundown TX 79372 (806) 229-3021

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Defined Contribution Plans

Sutton County Appraisal District Pension Plan

Mary Bustamante 300 E Oak St Ste 2 Sonora TX 76950 (325) 387-2809

Tarrant County MHMR Service Pension Plan

Espi West 3840 Hulen St Fort Worth TX 76107 (817) 569-4300

Tarrant County WCID #1

Nina Jalbert PO Box 4508 Fort Worth TX 76164 (817) 335-2491

Temple Housing Authority 401(a)

Stacie Kline 700 W Calhoun Ave Temple TX 76501 (254) 773-2009

Texana MHMR Center

Amanda Darr 4910 Airport Ave Ste D Rosenberg TX 77471 (281) 342-9887 **Texas City ISD TERRP Retirement Plan** Chad Marek 1401 9th Ave N Texas City TX 77590 (409) 916-0100

Texas Municipal Power Agency Employees Plan Connie Merhley PO Box 7000 Bryan TX 77805 (936) 873-1136

Texas Panhandle MHMR Authority Retirement Plan Joyce Lopez PO Box 3250 Amarillo TX 79116 (806) 358-1681

Texoma COG Pension Trust

Terrell Culbertson 1117 Gallagher Dr Ste 100 Sherman TX 75090 (903) 813-3516

Texoma Community Center

Tony Maddox 315 McLain St Sherman TX 75092 (903) 957-4700

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Defined Contribution Plans

THA Defined Contribution Pension Plan for Sweeny Community Hospital Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701 (512) 465-1544	Tri-County MHMR Services Retirement Plan Sandra Kelley PO Box 2067 Conroe TX 77305 (936) 521-6120
THA Retirement Plan for Jackson County Hospital District Money Purchase Pension Plan Lea Anne Porter 1108 Lavaca Street Ste 700 Austin TX 78701 (512) 465-1544	Tropical TX Center for Services Retirement Plan & Trust Beatriz Trejo PO Drawer 1108 Edinburg TX 78540 (956) 289-7015
The Retirement Accumulation Plan for the Employees of the Galveston Wharves Bill Benson PO Box 3307 San Angelo TX 76902 (325) 658-5575 Tom Green County Appraisal District Pension Plan Bill Benson PO Box 3307 San Angelo TX 76902 (325) 658-5575	Tyler County Hospital District Thrift PlanRichard Wallace1100 W BluffWoodville TX 75979(409) 283-6440Upper Leon River Municipal Water DistrictGary Lacy2250 Highway 2861Comanche TX 76442(254) 879-2258
Travis County Healthcare District Karen Osborn 1111 E Cesar Chavez St Austin TX 78702 (512) 978-8171	Upper Trinity Regional Water District Pension Plan John Adair PO Box 305 Lewisville TX 75067 (972) 219-1228

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APPENDIX D—DIRECTORY OF PUBLIC RETIREMENT SYSTEMS IN TEXAS

Defined Contribution Plans

Upshur County Appraisal District

Sarah Pruit 105 Diamond Loch Gilmer TX 75644 (903) 843-3041 Wharton County Central Appraisal District Tylene Gamble 2407 1/2 N Richmond Rd Wharton TX 77488 (979) 543-0019

Uvalde County Appraisal District Pension Plan

Alida Lopez 209 N High St Uvalde TX 78801 (830) 278-1106

Victoria County Appraisal District Pension Plan

Joan Mayfield 2805 N Navarro Ste 300 Victoria TX 77901 (361) 576-3621

Walker County Appraisal District Pension Plan

Carolyn Brown PO Box 1798 Huntsville TX 77342 (936) 295-0402

West Texas Center for MHMR Retirement Plan

Shelley Smith 319 Runnels St Big Spring TX 79720 (432) 263-0007

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