



Texas Pension Review Board

Pension Basics Legislative Seminar

January 25, 2023

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Agenda

- PRB Overview
- Landscape of Texas Plans
- Current Financial and Actuarial Condition of Texas Public Retirement Systems
- Reporting Requirements for Texas Plans and Recent Agency Activities
- Actuarial Impact Statement Process
- Questions



PRB Overview

Primary Duties

- Conduct a **continuing review** of all Texas public retirement systems
- Conduct **intensive studies** of potential or existing problems that threaten the actuarial soundness of public retirement systems
- Prepare **actuarial impact statements** for pending legislation
- Provide **information** and **technical assistance**
- Recommend **policies, practices, and legislation** to public retirement systems and governmental entities
- Develop and administer an **educational training program** for trustees and administrators of retirement systems



PRB Overview

Board Composition

Composed of **seven** governor-appointed members, including:

- three members with a background in securities investment, pension administration, or pension law
- one member who is an actuary
- one member who is an expert in governmental finance
- one active member of a public retirement system
- one retired member of a public retirement system

Staff

- **13 FTEs**, including technical experts





Landscape of Texas Plans



Basic Pension Terminology

- **Pension Financing Equation: $C + I = B + E$** Contributions (C) + Income (I) = Benefits (B) + Expenses (E).
- In a **defined benefit (DB) plan**, actuarial methods are used to calculate and predict the benefits, expenses and income in the equation; actuaries then determine the recommended contributions for sound funding of the plan.
- In a **defined contribution (DC) plan**, the contributions and income determine the amount of benefit available, net of expenses.
- **Hybrid plans** utilize components of DB and DC. Benefits look like DC plan but are valued and funded like DB plan. The largest cash balance plans in Texas are TCDRS and TMRS. The 87th Legislature added a cash balance tier to ERS for new hires beginning state employment on/after September 1, 2022.

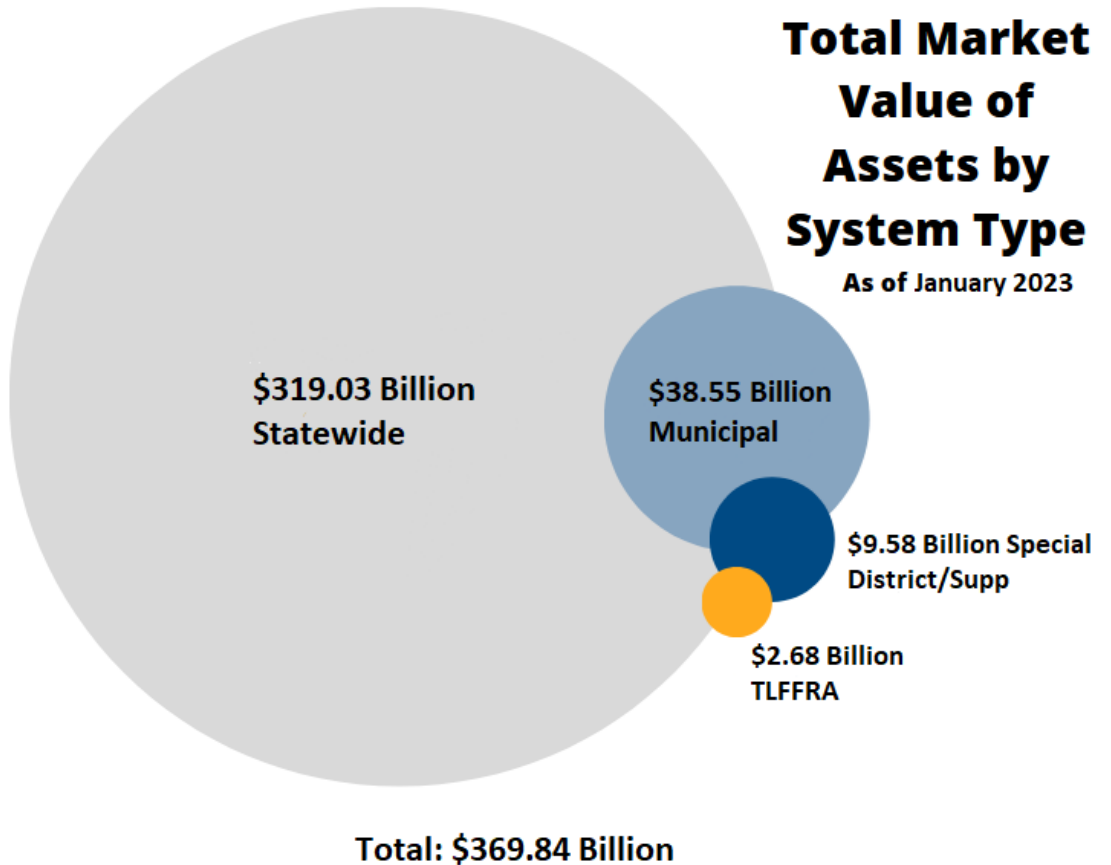
*More terms can be found on the PRB Actuarial Best Practices and Resources [webpage](#).



Landscape of Texas Plans

347 Public Retirement Systems in Texas:

- **100** actuarially funded defined benefit (DB) plans (including two hybrid plans)
- **166** defined contribution (DC)
- **81** pay-as-you-go volunteer firefighter plans



Landscape of Texas Plans

- **The two hybrid/cash-balance plans are Texas Municipal Retirement System (TMRS) and Texas County and District Retirement System (TCDRS).**
 - **901** municipalities are participating in **TMRS**
 - **831** counties and districts are participating in **TCDRS**
- As of September 1, 2022, the Employees Retirement System of Texas (ERS) also has a cash-balance tier (Tier 4).
- **DC plans** are primarily offered as supplemental plans by school districts, housing authorities, municipal districts, COGs, and health facilities. Plan types include 401(a), 401(k), 403(b), and 457(b) plans.



Landscape of Texas Plans

Of the **100** actuarially funded defined benefit plans in Texas:

- **7** are **statewide** retirement systems, governed by the Texas Government Code.
- **17** are **major municipal** retirement systems including 14 systems enabled by state statute (Article 6243, Vernon's Civil Statutes) and three retirement systems created by city ordinance or charter (Dallas Employees, Galveston Employees, El Paso City Employees).
- **42** are **paid/part-paid firefighter** systems across the state, created under the Texas Local Firefighters Retirement Act (TLFFRA), Article 6243(e) of Vernon's Civil Statutes.
- **34** are local retirement systems offered by **other political entities** such as water districts, appraisal districts, or other special purpose districts, authorized by Chapter 810 of the Texas Government Code.



Texas Constitution

Constitutional Authority to Create Pensions

- State and local retirement systems are enabled by **Article 16, Section 67 of the Texas Constitution** which grants authority to the Legislature to enact general laws establishing retirement systems for public employees and officers.
- The Constitution also provides that the financing of benefits must be based on sound actuarial principles and that the assets of a system are held in trust for the benefit of the members and may not be diverted.
- The **Teacher Retirement System (TRS)** and **Employees Retirement System (ERS)** are established in the Constitution with a floor and ceiling for state contributions to both funds at 6% and 10%, respectively.

Constitutional Benefit Protection

- **Article 16, Section 66 of the Texas Constitution** provides benefit protection to certain local retirement systems by prohibiting the reduction or impairment of accrued benefit. (8 cities opted out of this provision: Denison, Galveston, Houston, Marshall, McAllen, Paris, Port Arthur, and Sweetwater)
- The benefit protection was tested in the courts in lawsuits related to Ft. Worth Employees' Retirement System and Dallas Police and Fire Pension System lawsuits. The courts determined that prospective benefit reductions do not violate this provision.



Defined Benefit Plan Governance

- **Decision-making authority** relating to **contribution levels** and **benefit provisions** varies considerably across Texas' diverse public retirement systems.
- **TRS** and **ERS** boards do not set the contribution or benefit policy; this is set in statute and can only be changed by the Legislature.
- Some **municipal retirement systems** must come before the Legislature to make contribution and/or benefit changes (San Antonio Fire and Police).
- Other **municipal and firefighter systems** are allowed to make certain contribution and/or benefit changes without legislative approval (Houston Municipal, Ft. Worth Employees', Dallas Police and Fire and local firefighters/TLFFRA plans).
- Retirement systems established under **Chapter 810** of the Government Code have complete authority to determine plan provisions locally.



Governing Statutes

State Laws Governing Statewide Retirement Systems		
System or Issue Governed	Article/Section No.	
Employees Retirement System of Texas	Title 8, Gov. Code, Subtitle B: Ch. 811-815	
Teacher Retirement System of Texas	Title 8, Gov. Code, Subtitle C: Ch. 821-825	
Judicial Retirement System of Texas, Plan Two	Title 8, Gov. Code, Subtitle E: Ch. 836-840	
Texas County and District Retirement System	Title 8, Gov. Code, Subtitle F: Ch. 841-845	
Texas Municipal Retirement System	Title 8, Gov. Code, Subtitle G: Ch. 851-855	
Texas Emergency Services Retirement System	Title 8, Gov. Code, Subtitle H: Ch. 861-865	
State Laws Governing Municipal, Fire Fighter and Police Officer Retirement Systems		
System or Issue Governed	Article/Section No.	Population Bracket
Dallas Police & Fire Pension System	V.T.C.S. 6243a-1	>1,180,000
El Paso Firemen & Policemen's Pension Fund	6243b	600,000-700,000
Texas Local Fire Fighters Retirement Act (TLFFRA)	6243e	Various
Austin Fire Fighters' Relief & Retirement Fund	6243e.1	750,000-850,000
Houston Firefighters' Relief & Retirement Fund	6243e.2(1)	1,600,000
Houston Police Officers' Pension System	6243g-4	>2,000,000
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	750,00-850,000
San Antonio Fire & Police Pension Fund	6243o	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. Code §810	





Current Financial and Actuarial Condition of Texas Public Retirement Systems

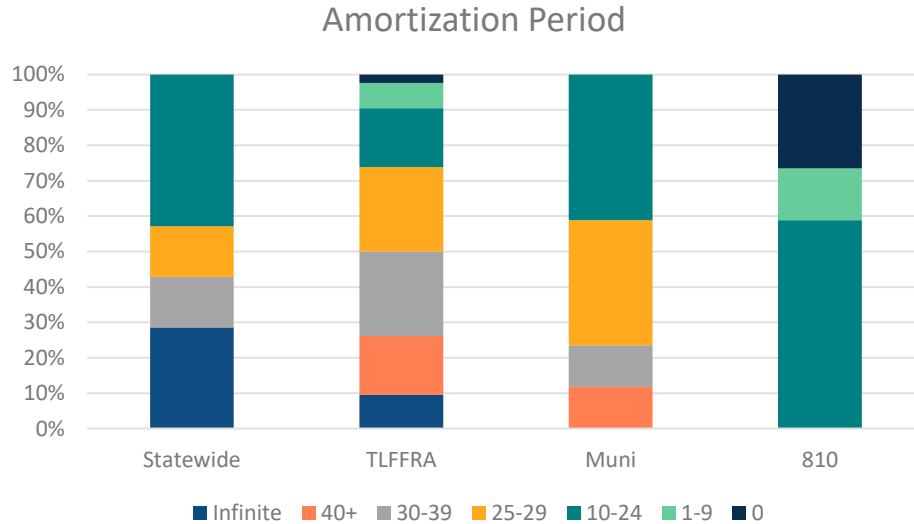


Key Actuarial Measures

- **Two measures** frequently used to assess a system's **financial health**: funded ratio and amortization/funding period.
 - **Funded ratio**: It is the proportion of a system's accrued liabilities that are covered by the assets. It is the ratio of the assets to the liabilities.
 - **Amortization/funding period**: The amortization period or funding period is the expected amount of time for a system to pay off its unfunded liability based on current contribution levels.



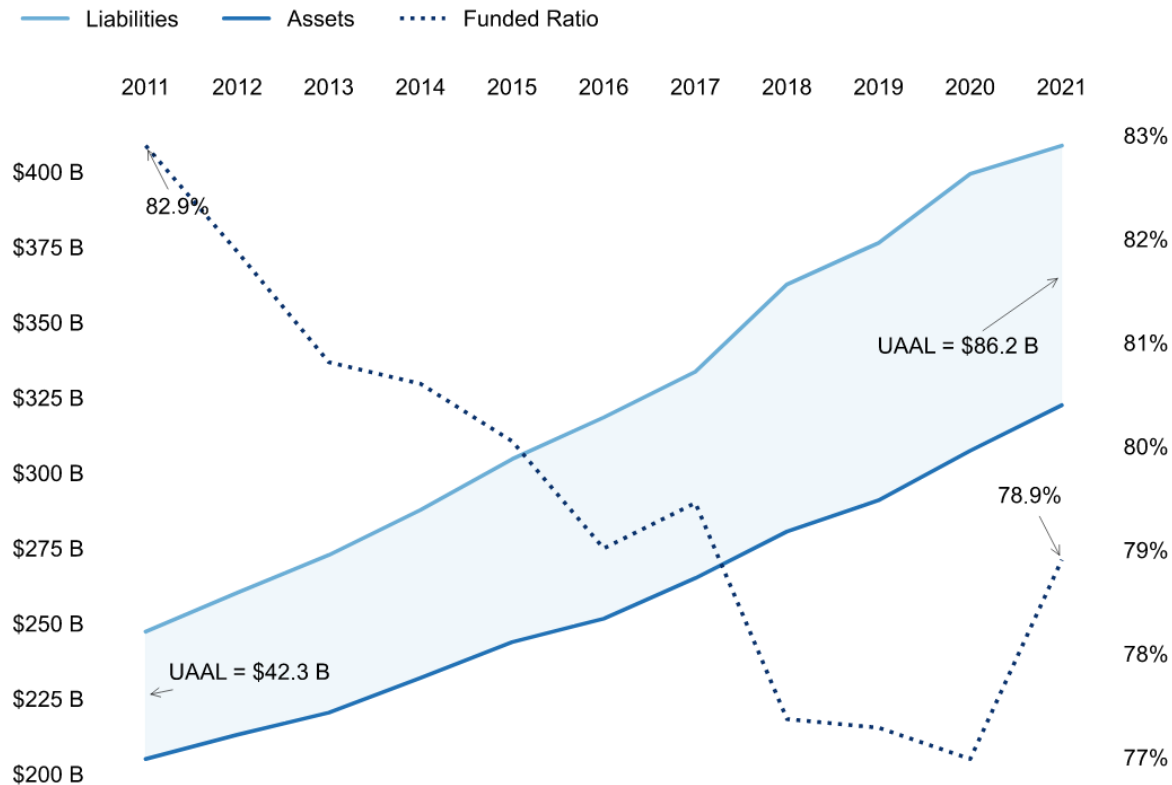
Current Amortization Periods



Current AV				
Assumption	Statewide	TLFFRA	Muni	810
Infinite	29%	10%	0%	0%
40+	0%	17%	12%	0%
30-39	14%	24%	12%	0%
25-29	14%	24%	35%	0%
10-24	43%	17%	41%	59%
1-9	0%	7%	0%	15%
0	0%	0%	12%	47%

Assets - Liabilities Trends

Since 2011, the overall unfunded actuarial accrued liability (UAAL), which is the difference between the actuarial value of assets (AVA) and accrued actuarial liability (AAL), has steadily increased from \$42.3 billion in 2011 to \$86.2 billion in 2021. The aggregate funded ratio, in turn, has decreased over time from 82.9% to 78.9%.



Assumed Rates of Return

- The average assumed rate of return for Texas retirement systems is currently **7.02%**. The national average is **6.99%** (NASRA, March 2022).
- In response to projected market conditions and actual plan experience, retirement systems across the country, including Texas, have **reduced their return assumptions** in recent years and we expect this trend to continue.
- 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.
- In 2018, **ERS** lowered its return assumption from **8%** to **7.5%** and to **7%** in 2020.
- **TRS** lowered its return assumption from **8%** to **7.25%** in 2018 and to **7%** in 2022.



Investment Return Assumption Trends

FYE 2021

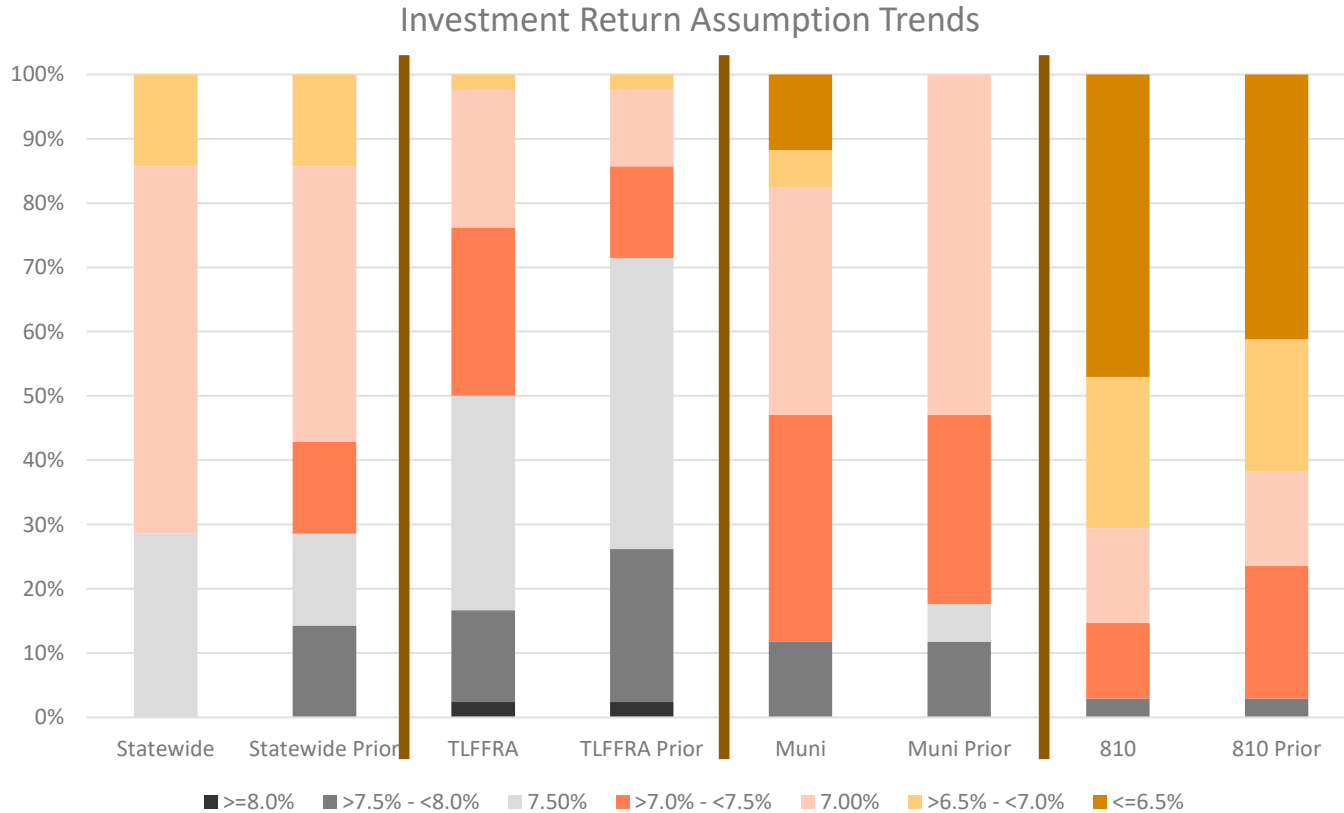
Current AV				
Assumption	Statewide	TLFFRA	Muni	810
>=8.0%	0%	2%	0%	0%
>7.5% - <8.0%	0%	14%	12%	3%
7.5%	29%	33%	0%	0%
>7.0% - <7.5%	0%	26%	35%	12%
7.0%	57%	21%	35%	15%
>6.5% - <7.0%	14%	2%	6%	24%
<=6.5%	0%	0%	12%	47%

Prior AV				
Assumption	Statewide	TLFFRA	Muni	810
>=8.0%	0%	2%	0%	0%
>7.5% - <8.0%	14%	24%	12%	3%
7.5%	14%	45%	6%	0%
>7.0% - <7.5%	14%	14%	29%	21%
7.0%	43%	12%	53%	15%
>6.5% - <7.0%	14%	2%	0%	21%
<=6.5%	0%	0%	0%	41%



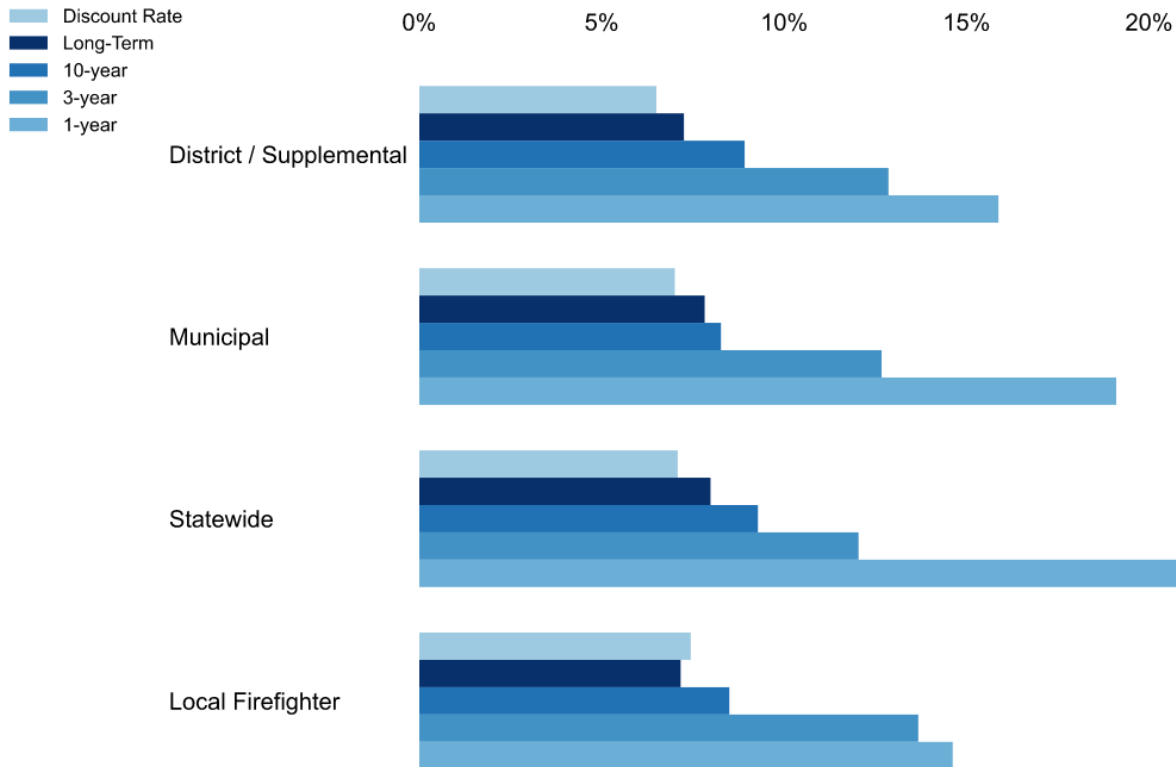
Investment Return Assumption Trends

FYE 2021



Average Actual Investment Return Trends

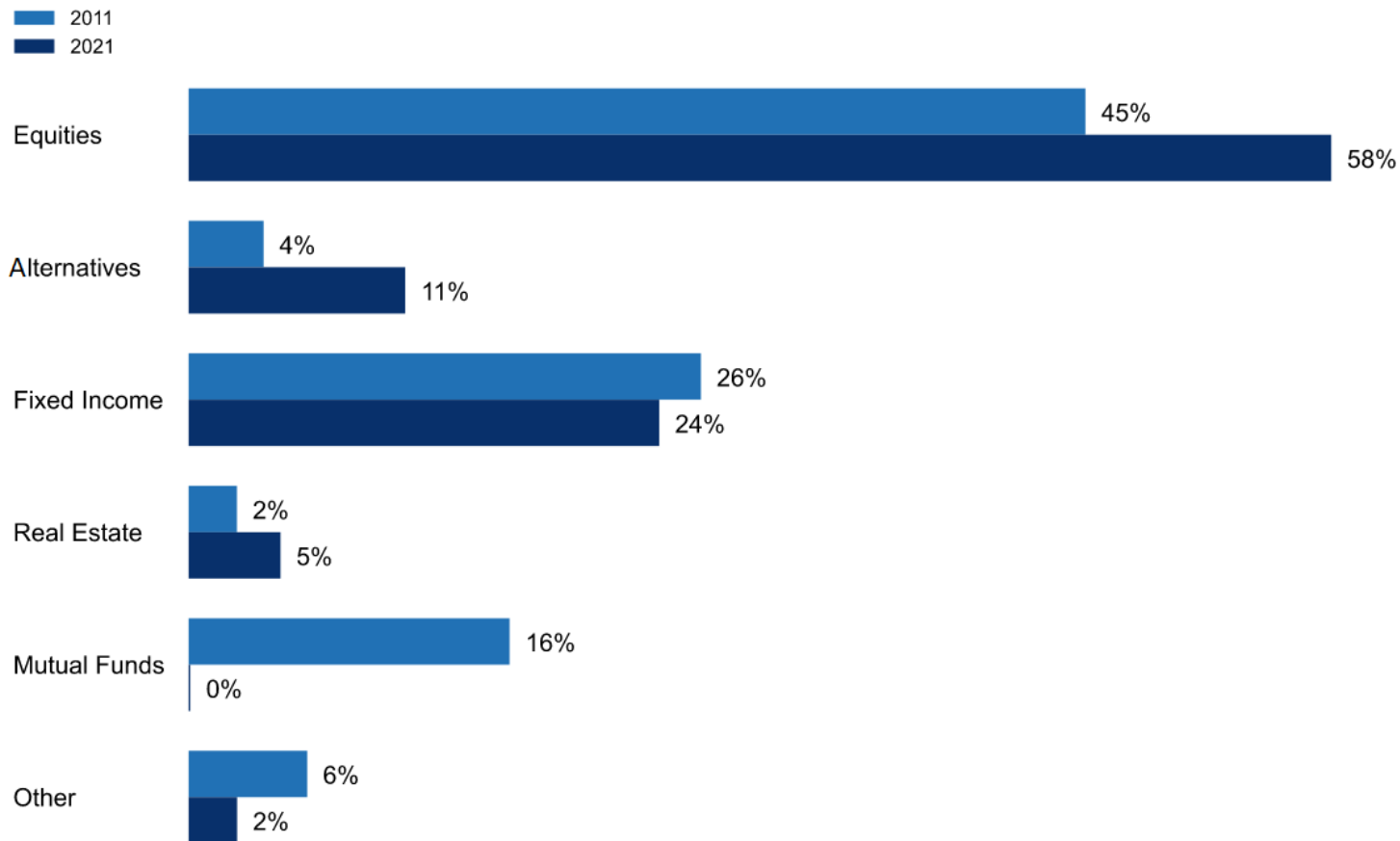
FYE 2021



Long-term return is 30 years or longest term available. All figures are net of fees. Assumed returns obtained from most recent actuarial valuation reports.



Average Asset Allocation FYE 2011 v 2021



Other includes: capital assets, receivables, securities lending collateral, liabilities and cash. The allocations provided are an unweighted average of all Texas defined benefit plans. Figures are obtained from the annual financial reports and may differ from allocation targets in investment policy statements.



Reporting Requirements for Texas Plans & Recent Agency Activities



System Reporting Requirements

Systems Required	Report	How often
All	<ul style="list-style-type: none"> Annual Financial Report (audited) Investment Returns and Assumptions Report (PRB-1000) Membership report MET form to report training (PRB-2000) 	Annually
All	<ul style="list-style-type: none"> Actuarial Valuation 	Every three years
Systems with assets over \$100 million	<ul style="list-style-type: none"> Investment Practices and Performance Evaluation 	Every three years
Systems with assets over \$100 million	<ul style="list-style-type: none"> Actuarial Experience Study Actuarial Audit 	Every five years
Systems with assets over \$30 million	<ul style="list-style-type: none"> Investment Practices and Performance Evaluation 	Every six years
All	<ul style="list-style-type: none"> Funding Policy Investment Policy Summary Plan Description Registration/board information (Form PRB-150) 	Upon change
All non-statewide systems	<ul style="list-style-type: none"> Funding soundness restoration plan 	If necessary



PRB Pension Funding Guidelines

(effective 6/30/17)

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 6/30/2017 should seek to reduce their amortization period to 30 years or less as soon as practicable, but not later than 6/30/2025.



Funding Soundness Restoration Plans (FSRPs)

- Created by HB 3310 (84R) in 2015 to help ensure systems can meet their long-term obligations
 - Systems would create a plan to improve their funding status if funding period higher than maximum over time
- Requirements updated by 87th Legislature (HB 3898)
 - Maximum funding period reduced; additional triggers created
 - More direct sponsor involvement and tied to funding policy requirement
 - Revised FSRP requirement strengthened to prevent repeated, ineffective revisions
 - More time to create FSRP, shorter time to reach target
 - Additional changes to process and material requirements



FSRP Rule Summary

Rulemaking January – October 2022

40 TAC Chapter 610

- **General:** Applicability, definitions, etc.
- **Member Communication:** Valuation that puts a system at risk of an FSRP would prompt the requirement to notify members in the annual report.
- **Legacy FSRPs:** Helping ensure a smooth transition for systems with FSRPs prepared under the old law.
- **New FSRPs:** Clarifying the necessary documentation for submission and progress updates, timelines, voluntary FSRPs, and qualification for revised FSRP exemption.



Investment Practices and Performance Evaluations (IPPEs)

- Created by SB 322 (86R) to improve investment practices
- Systems of at least \$30 million in assets must have an independent firm:
 - Evaluate the investment practices and performance
 - Recommend ways to improve the investment policies, procedures, and practices
- Requirements updated by 87th Legislature (HB 3898)
 - Added additional disclosure requirements about experience of evaluators, conflicts of interest, and reasons for not including recommendations
 - Added formal review-and-comment process
 - Sponsor may help pay the cost, and current investment consultants can be hired to prepare a system's IPPE



IPPE & Funding Policy Guidance Updates

- In October 2022, the PRB adopted the updated *Informal Guidance for Investment Policy and Performance Evaluations* to reflect the statutory changes in HB 3898.
- Planning to update the *Informal Guidance for Systems Developing a Funding Policy* next.



Intensive Reviews to Date

January 2018	April 2018	October 2018	October 2019	November 2021	October 2022
Galveston Police Greenville Fire	Beaumont Fire Marshall Fire	Longview Fire Orange Fire Irving Fire	Odessa Fire Paris Fire	Midland Fire	Wichita Falls Fire

Recommendations:

- Adopt a funding policy that requires payment of an actuarially determined contribution, or at minimum, that fully funds the plan over a finite period of 30 years or less
- Adopt a formal risk/cost-sharing framework with “guardrails” or triggers that reduce uncertainty and guide stakeholders in how benefit and contribution levels will be modified under different economic conditions
- Closely monitor investment performance including asset allocation and expenses
- Conduct an in-depth asset-liability study of potential risks associated with existing asset mix and liabilities they support. Perform scenario testing of large PROP withdrawals coupled with potential adverse investment experience
- Regularly review actuarial assumptions against experience, making necessary changes
- Complete required training so that the board can make informed decisions



Intensive Reviews to Date, cont.

November 2021 Midland Fire

- Contract with an independent third party to perform a forensic and governance audit.
- Use investment professionals to guide the investment program.
- Develop a robust Funding Soundness Restoration Plan (FSRP) and funding policy that is sustainable and achievable.
- Commit to inform plan members of issues facing the fund.
- Keep the PRB and the Legislature informed of the progress.

October 2022 Wichita Falls Fire

- Consider options to increase contributions to offset previous underfunding.
- Adjust or remove the benefit cap as part of determining the long-term contribution level.
- Use an experience study and asset-liability study to adjust assumptions, estimate future changes, and determine long-term contribution level.
- Submit a new FSRP prior to September 1, 2025, to avoid the stricter revised FSRP requirements.
- Consider using a smoothed actuarial value of assets.





Actuarial Impact Statement Process



Actuarial Impact Statements

- During legislative sessions, the agency provides an actuarial impact statement analyzing the **economic or financial impact** of a proposed pension bill on a public retirement system.
- Changes to pension systems often create **financial commitments** that extend far into the future.
- By addressing the actuarial impact of proposed changes, the PRB provides the Legislature with information that assists in **managing pension costs**.

87th Legislature Pension Bill Tracking

- 92 pension bills were filed during the 87th Legislative Session.
- The PRB provided 53 actuarial impact statements on bills affecting public retirement systems.



Triggers for Actuarial Impact Statement

A bill that may affect any element of the basic funding equation: $C + I = B + E$

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

- **C** = Increase or decrease in employer, employee or non-employer contributions
- **I & E** = Permissible investments or financing
- **B** = Plan participation, eligibility for benefits, or amount of benefits.
 - Benefit change examples:
 - **New tiers** for new or existing employees.
 - **Benefit formula** for existing members (e.g., multiplier, final average salary, service credit)
 - **Retirement eligibility** requirements
 - Cost of living adjustment (**COLA**) or **supplemental payments**.
 - Adding or removing a **class of employees**.



Actuarial Impact Statement Process

- 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 system's actuary.
- The actuarial analysis is reviewed by the PRB's staff actuary, providing a "**second opinion**" or actuarial review of any costs associated with the bill.
- These two documents 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.
- The PRB also estimates the **cumulative effect** of all pension bills affecting TRS and ERS **70** days and again at **30** days before the end of session.



Resources

- **PRB Public Pension Data Center:** <https://data.prb.texas.gov/>
- **PRB Legislative page:** <https://www.prb.texas.gov/legislative/>
- **PRB Online Courses:** Actuarial Matters, Benefits Administration, Investments, Governance, Fiduciary Matters, Ethics, Risk Management:
<https://education.prb.texas.gov>
- **FSRP and rulemaking resources:** <https://www.prb.texas.gov/actuarial/funding-soundness-restoration-plan-fsrp/>
- **Funding policy information:** <https://www.prb.texas.gov/actuarial/funding-policy/>
- **Investment Practices and Performance Evaluations:**
<https://www.prb.texas.gov/investments/ippe/>

www.prb.texas.gov

512-463-1736





Appendix



PRB Online Data Center



Texas Public Pension Data Center

This data center is meant to provide lawmakers, taxpayers, pension systems, and other stakeholders with current, historical and comparative public pension information. As part of its mission, the Pension Review Board compiles and reviews data from state and local public retirement systems in Texas. This website contains information reported by retirement systems to the PRB.

This section contains three interactive cards on a blue background. Each card has a circular icon at the top, a title, a brief description, and a "VIEW DATA" button.

- View Plans:** Icon shows a hand pointing at a document with a magnifying glass. Description: "Select a pension plan to view current and historical data." Button: "VIEW DATA".
- Compare Plans:** Icon shows hands typing on a laptop. Description: "Select a peer group by plan type or asset size to view comparative data." Button: "VIEW DATA".
- All Texas Plans:** Icon shows a white outline of Texas with a star. Description: "View key indicators of financial health for all Texas plans in the aggregate." Button: "VIEW DATA".

This data center contains information reported by retirement systems to the PRB in annual financial reports, actuarial valuations and other studies, and investment and membership reports. The information may not reflect a system's current status, only its most recently reported information. Deadlines for reporting information vary and may be viewed here. Historical data and trends presented are not intended to predict future events or continuing trends.

The information in this data center is intended to meet the Texas Government Code Section 801.209(a) requirement to post each public retirement system's most recent data from reports required under Chapter 802, as well as to meet the Section 2054.1265 requirement for state agencies to post high-value data sets created or maintained by the agency on a generally accessible internet website maintained by or for the agency.

PRB Online Data Center – Plan Data

Texas Public Pension Plans

This data center is meant to provide lawmakers, taxpayers, pension systems, and other stakeholders with current, historical and comparative public pension information. As part of its mission, the Pension Review Board compiles and reviews data from state and local public retirement systems in Texas. This website contains information reported by retirement systems to the PRB.

Locate a Pension Plan

Select a plan and view key indicators of financial health over time.

Select a plan

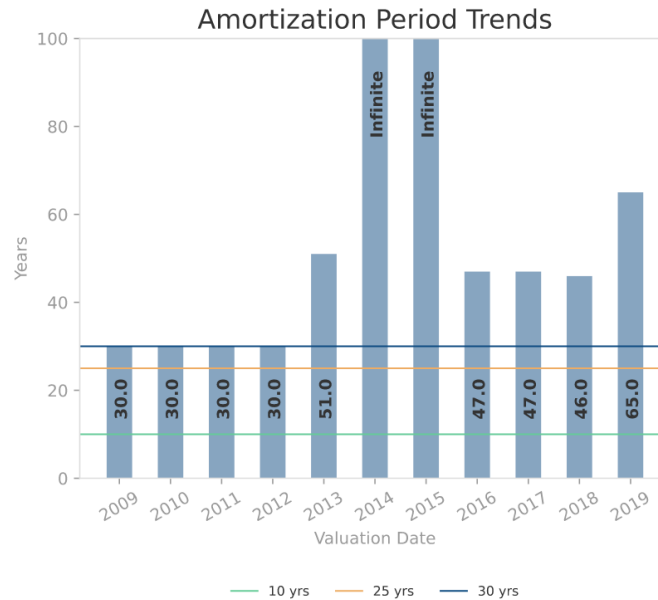


Dallas Employees' Retirement Fund

Membership	Total Net Assets	Social Security	Contributions	Contribution Type	Fiscal Year End
Active: 7,427 Annuitant: 7,405	\$3,658,088,000	No	Employee: 13.32 % Employer: 14.14 %	Other	December

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 employees of the City are members in the Plan, except police officers, firefighters, elected officers, non-salaried appointee members of administrative boards or commissions, part-time employees working less than one-half time, temporary employees, individuals working under contract, and individuals whose salaries are paid in part by another government agency.

Actuarial Financial Investments





A retirement system's effective amortization period is defined by the PRB as the time it would theoretically take to fully fund the system's unfunded actuarial accrued liability (UAAL), if any exists. The effective amortization period assumes no future gains or losses and factors in both the plan's stated and historical contribution policy. The calculation is done at each actuarial valuation which is conducted every year or every two years. If no bar appears for a particular fiscal year, the amortization period is zero.

Download Data

PRB Online Data Center – Comparative Data

Compare by Type

 Local Firefighter Local plans organized under the Texas Local Fire Fighters Retirement Act. View Data	 District / Supplemental Local plans administered by special purpose districts or as supplemental plans. View Data	 Municipal Major municipal plans either in state law or local ordinance. View Data	 Statewide Statewide plans including two cash balance plans that municipalities, counties and districts may join. View Data
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Compare by Total Assets

Less than \$10M Plans with less than \$10 million in total assets View Data	\$10M to \$50M Plans with at least \$10 million and less than \$50 million in total assets View Data	\$50M to \$100M Plans with at least \$50 million and less than \$100 million in total assets View Data	\$100M or Greater Plans with at least \$100 million in total assets View Data
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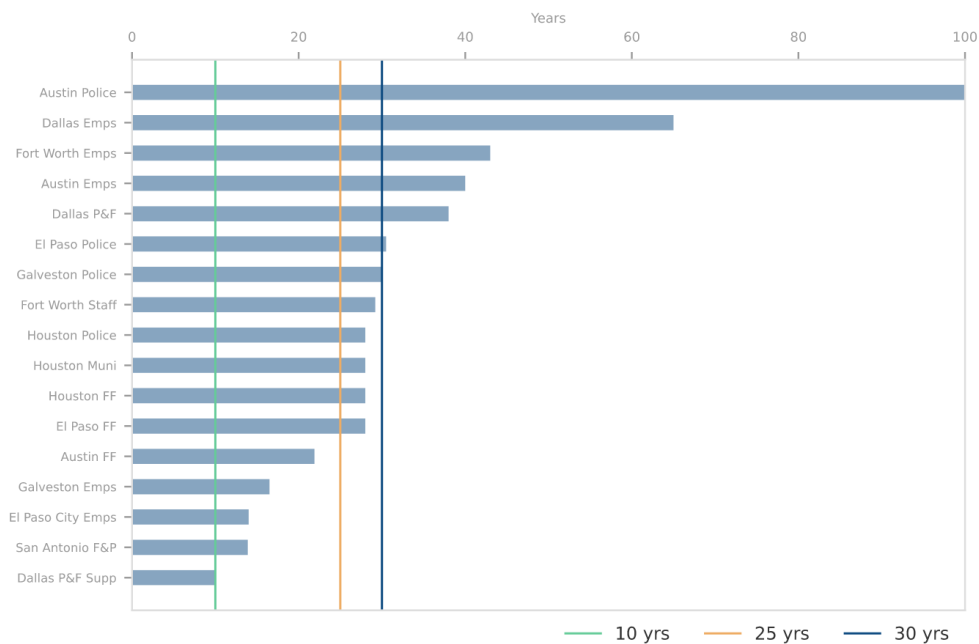


Municipal FY 2019

There are 17 municipal retirement systems including 14 systems enabled by Article 6243, Vernon's Civil Statutes and three created by city ordinances or charters, which are the Dallas Employees' Retirement Fund, City of El Paso Employees Retirement Trust, and Galveston Employees' Retirement Fund.

Actuarial Financial Investments

Amortization Period FY 2019



A retirement system's effective amortization period is defined by the PRB as the time it would theoretically take to fully fund the system's unfunded actuarial accrued liability (UAAL). The reported amortization period takes into account the plan's amortization policy and contribution history. The chart displays Municipal retirement systems' effective amortization periods for the selected fiscal year. If an actuarial valuation was not completed for the selected fiscal year, the immediately preceding fiscal year is shown.

Download Data