Texas Pension Review Board

Biennial Report

2023-2024

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TEXAS PENSION REVIEW BOARD

November 26, 2024

The Texas Pension Review Board (PRB) is pleased to present this Biennial Report on its activities and findings for 2023 through 2024. During this biennium, the PRB has worked diligently to fulfill its mission to provide information and recommendations to help ensure that Texas public retirement systems are properly managed and actuarially sound. The PRB has accomplished a great deal in the last two years. The agency provided a high level of education, assistance, and guidance to the members, administrators, and trustees of 100 Texas public retirement systems; state and local government officials; and the public. The total membership of actuarially funded Texas public retirement systems includes over 3.4 million members with total net assets of approximately $357 billion.

The agency continued to work through the biennium toward implementing legislation from previous sessions by updating guidance and guidelines, providing additional educational resources to systems, and developing new IT infrastructure. The agency also completed a quadrennial rule review for most chapters of its rules, making updates to clarify and improve several agency processes. Throughout this process, the PRB relied significantly on stakeholder involvement to ensure rules, policies, and guidelines were as helpful, effective, and clear as possible.

Additionally, the PRB conducted an intensive review on one system, an intensive study on systems that have completed Funding Soundness Restoration Plans, and a study on Texas Local Fire Fighter Retirement Act system governance structures. Some previously reviewed systems made major reforms and progress in working with their sponsors to remedy their long-term funding situations, such as by increasing contributions, paying off unfunded liabilities with pension obligation bonds, and establishing guardrails to mitigate future funding issues.

The PRB also focused on major IT projects during the biennium. The agency completed a new internal database in 2023, which serves to streamline agency workflow, modernize reports, and improve the agency's public-facing data center. In August 2024, the agency launched a new reporting portal for systems to submit reports and view agency correspondence, which enhances the efficiency and security of data sharing.

The PRB is the sole ongoing oversight mechanism for Texas public retirement systems. Fulfilling its mission requires the combined effort of the systems, their sponsoring governmental entities, and other members of the Texas public pension plan community. The PRB remains focused on helping ensure that retirement benefits are securely provided at the lowest cost to the taxpayers.

Sincerely,

Stephanie Leibe

Stephanie Leibe
Chair

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EXECUTIVE SUMMARY

During the last biennium, the Pension Review Board (PRB) has focused on increasing resource and education options to help promote actuarial soundness and the proper management of Texas public retirement systems. The agency currently oversees and manages several programs and reporting requirements, including Funding Soundness Restoration Plans (FSRPs) and other actuarial reports, investment expense reporting, Investment Practices and Performance Evaluations (IPPEs), and the Minimum Educational Training (MET) program. The agency has worked closely with stakeholders to develop guidelines, guidance, studies, rules, and other tools to help clarify how systems and their sponsors can create and maintain successful plans for the operation and management of their funds.

To enhance efficiency and increase security, the agency successfully completed its two major IT projects over the biennium using one-time funds appropriated by the legislature. The agency upgraded its database in 2023 to ensure staff would be able to more efficiently process and store reports submitted to the agency. The numerous reports and the data obtained from them are the foundation of all analytical functions of the PRB. The data helps staff evaluate public retirement system health and create resources for further assisting systems. In 2024, the agency launched the Pension Online Reporting Tool (PORT) which is a secure portal for systems to submit required reports. The portal provides enhanced technical assistance by allowing administrators to see what reports they have submitted to the agency and streamlines PRB internal processes to allow agency resources to be more effectively utilized.

The agency conducted two intensive studies this biennium. In 2023, the agency conducted an intensive review of the Abilene Firemen's Relief and Retirement Fund, providing the system and its sponsoring governmental entity, the city of Abilene, a starting point to address funding issues. The PRB typically conducts intensive reviews on individual systems; however, in 2021, the 87th legislature made significant updates to the FSRP statute and set a deadline of September 1, 2025, for systems to reach a 30-year funding period target, and so the agency focused its 2024 review on studying 14 systems that have implemented an FSRP or have successfully avoided triggering the requirement by making proactive changes. One of the primary goals of this macro-level intensive study is to provide a useful resource for systems and sponsors as they develop funding solutions.

The changes to the FSRP statute also necessitated an update to the Pension Funding Guidelines and funding policy guidance. Several years had passed since the PRB had updated either document, so both underwent a review and several public comment periods to update the guidelines and guidance to reflect current statutory requirements and best practices. In addition to the funding policy guidance, the PRB also provided systems with an updated sample funding policy to use as a tool for creating or updating their existing policies. After nearly a year of work, the agency's board approved these updated documents in July 2025.

After submission of the PRB's first Investment Performance Report in 2020, the agency identified areas where it could provide greater education and support regarding public retirement systems' investment practices and performance. Systems are statutorily required to maintain investment policy statements (IPS) and during the recent biennium, the agency created guidelines, guidance, and tools to assist systems in developing and maintaining a complete, well-developed IPS consistent with various industry best practices.

Further investment reporting comes to the PRB through IPPEs and investment expenses that systems submit to the PRB. After the second round of IPPEs were submitted in 2024, the PRB identified opportunities where modifications to the statute may prove beneficial. The PRB has proposed two legislative recommendations which focus on clarifying and simplifying the statutory requirements related to retirement system applicability and the timeline of IPPE reporting.

The other set of PRB legislative recommendations stems from a study on Texas Local Fire Fighters Retirement Act (TLFFRA) governance. In the fall of 2023, the PRB worked with TLFFRA stakeholders to form a work group comprised of stakeholders from multiple TLFFRA systems and sponsoring entities representing small, medium, and large systems. After three meetings with this work group and other research, PRB staff developed draft recommendations based on identified issues as a starting point for consideration by the board and TLFFRA stakeholders. From January through September 2024, the agency engaged in a total of three rounds of stakeholder feedback, provided a presentation and obtained useful stakeholder feedback at a TLFFRA conference about the draft recommendations, and worked with the board to further refine them. The board-adopted recommendations include proposals for statutory change as well as the development of PRB guidance or other education and technical assistance.

The agency's education program, MET, requires trustees and administrators to obtain pension education in several topic areas. The PRB launched a new education website in 2023 to house the PRB's free online courses and shifted to a new learning management system to address user feedback. The agency also created several new continuing education courses during the recent biennium in response to stakeholder requests. The MET program has grown substantially since its establishment a decade ago and in 2024, the agency reviewed and made major changes to the rules governing the program to increase efficiency and improve compliance.

Throughout the 2023-2024 biennium, the PRB remained dedicated to providing exemplary customer service and assistance to stakeholders. The agency worked extensively with systems and stakeholders during the development of resource materials, recommendations, and rule development and provided stakeholders, including trustees, administrators, and contractors, with multiple avenues to provide feedback. The PRB focused on systems' funding practices and ways the agency could further assist systems in achieving and maintaining actuarial soundness. The PRB looks forward to continuing working closely with systems and other stakeholders in the future.

TRANSPARENCY INITIATIVES AND LEGISLATIVE PRIORITIES

Pension Funding Guidelines and Funding Policy Guidance

The *Pension Funding Guidelines* provide guidance to public retirement systems and their sponsoring governmental entities for meeting their long-term pension obligations. The guidelines foster communication between systems and their sponsors as they determine a reasonable approach to responsible funding. The PRB last revised the guidelines in 2017, and systems with funding periods between 30 and 40 years were given until June 2025 to reach a 30-year funding period. During the 87th legislative session, the legislature formalized and extended the deadline to achieve a 30-year funding period in statute to September 1, 2025.

Under Section 802.2011, Texas Government Code, Texas public retirement systems and their sponsors are required to jointly develop and adopt a funding policy. After the legislature passed this requirement

in 2019, the PRB developed guidance and an example policy to assist systems with the formation of their own funding policies. Since then, 97 out of 100 systems have adopted a funding policy.

The agency reviewed and updated the *Funding Policy Guidance* and *Pension Funding Guidelines* to reflect recent statutory changes and ensure these documents evolve with best practices, with final approval by the board in July 2024 after nearly a year of work.

Pension Funding Guidelines

The PRB made several changes addressing the technical language and scope of the guidelines.

Guideline 3

Though much of Guideline 3 remains the same, the PRB adjusted it to reflect that starting September 1, 2025, according to statute the funded ratio will be a factor in triggering an FSRP requirement.

Guideline 4

The PRB made a change to Guideline 4 regarding overfunded plans. Previously, the guidelines did not address systems that were overfunded. The PRB has now specified that once a system reaches 100 percent funded, at minimum, contributions should continue to cover normal costs until the funded ratio exceeds at least 120 percent. Continuing contributions after reaching full funding are essential to maintain the fully funded status, as the liability will continue to grow with normal costs and interest each year.

New Guidelines 5 and 6

For the target funding period range, Guideline 4 previously defined 10 to 25 years as the preferable target range. New Guideline 5 sets a 15-year funding period goal to be reached by September 1, 2040. A 15-year target funding period aims to prevent systems from remaining in negative amortization (where the unfunded liability is expected to increase based on the funding policy). A system with a 15-year funding period would be expected to reduce its unfunded liability, which would not be the case for a system with a 25-year funding period. The 15-year funding period would be reached by all Texas public retirement systems by September 1, 2040, if they stay on track with a 30-year funding period beginning on September 1, 2025.

Guideline 4 also previously stated that benefit enhancements should not be adopted if the resulting amortization period exceeded 25 years. The new Guideline 6 reflects the change in Guideline 5 and now specifies that after September 1, 2040, benefit increases and contribution decreases should not be adopted if the proposed changes cause a material increase in the funding period and if the resulting funding period exceeds the greater of 15 years and the average future working lifetime of the current active members. The estimate of how long current members are expected to continue working was added as a parameter to allow benefit enhancements for current members only when they are expected to be fully paid before current members retire, leaving no liability left to be paid by future members.

New Guideline 7

The last change the PRB made was to Guideline 7, stating that benefit decreases and contribution increases should not be adopted without studying how the resulting normal costs compare to the contribution rates for each tier, and board discussion of whether members in each tier will receive a benefit that is worth more than their contributions. The new guideline is meant to ensure that boards are

fully informed regarding how a benefit reduction or contribution increase will impact each member before enacting the change.

The PRB will assess the impact of new changes on the systems to determine any improvements that may be necessary.

The PRB solicited stakeholder feedback multiple times throughout the process, which helped staff identify which sections needed clarification or further consideration. For example, staff used feedback from stakeholders to clarify Guideline 4 and improve Guidelines 5 and 6 to ensure systems could more easily remain in compliance from year to year.

Guidance for Developing a Funding Policy

Section 802.2011, Texas Government Code requires the governing body of a public retirement system and, if the system is not a statewide retirement system, its associated governmental entity to jointly develop and adopt a written funding policy that details a plan for achieving a funded ratio equal to or greater than 100 percent.

The policy shall be timely revised to reflect any significant changes, including those made when formulating and implementing a Funding Soundness Restoration Plan (FSRP), including a revised FSRP.

The written funding policy must outline any automatic contribution or benefit changes designed to prevent the need for a revised FSRP, including any implemented automatic risk-sharing mechanisms, the adoption of an actuarially determined contribution structure, and other adjustable benefit or contribution mechanisms.

After the legislature first passed the funding policy statute during the 86th Legislative Session, the agency developed guidance and an example policy to assist systems with the formation their own funding policies. The statute was later updated during the recent 87th Legislative Session to specify that FSRP changes should be included in an updated funding policy. Staff updated the *Guidance for Developing a Funding Policy* and *Sample Funding Policy* the reflect changes to statute and best practices.

Staff solicited stakeholder feedback multiple times during the drafting process. The feedback helped staff identify which areas needed further guidance and clarification. The major updates to the guidance include altering language to reflect current statutory requirements, encouraging system boards to collaborate with their actuary and work with the sponsoring entity when creating a funding policy, and adding more information on risk management. The agency also updated the guidance to remove examples from specific systems and instead organize examples by system type. Staff updated the sample funding policy to include updated technical language reflecting statutory changes, as well as adding a two-year periodic review of the policy, a surplus management policy, and a signature line for both the system official and the city official to sign.

The guidance and sample policy serves as a starting point for systems and sponsors as they create their own funding policies.

TLFFRA Governance Project

Background

In 2020, the Pension Review Board (PRB) directed staff to study Texas public retirement system governance structures and practices. Staff began the process of studying system governance of all 100 systems by completing reports on board structure, outlining each system's decision-making processes, and providing data on board qualifications for some systems. While the initial directive of the PRB board was for staff to study pension system governance generally, the board later directed staff to narrow the scope specifically to the 42 Texas Local Fire Fighters Retirement Act (TLFFRA) systems, which all operate under the same statute. The PRB prioritized studying TLFFRA governance because these systems have struggled more with poor funding than other types of systems, indicating improvements in governance are necessary.

To complete preliminary research on TLFFRA governance, in the fall of 2022, PRB staff engaged a team of graduate students at the University of Texas at Austin's LBJ School of Public Affairs to research TLFFRA governance, develop research findings, and identify potential recommendations. The team completed their policy research project and provided a report to the PRB in the spring of 2023. The report findings provided a basis for further PRB staff research.

In the fall of 2023, the PRB formed a work group comprised of stakeholders from multiple TLFFRA systems and sponsoring entities representing small, medium, and large systems.[1] The PRB's goal in forming the TLFFRA Governance Work Group (Work Group) was to build on previous research and identify areas for improvement in TLFFRA governance by working directly with stakeholders. This process helped staff develop recommendations aimed at improving system governance and success. The PRB held three meetings at the end of 2023 with the Work Group to discuss topic areas where TLFFRA systems may face challenges. The first meeting was held in October 2023 and focused on internal system issues such as member votes and board structure. The second meeting held in November 2023 focused on sponsor and system relations, including how information is shared and what tools can assist with communication. The final Work Group meeting was held in December 2023 which focused on the role of the PRB and the agency's relationship with systems.

Staff presented the first draft of the recommendations to the PRB's Actuarial Committee in January of 2024. From that point forward, the agency engaged in three rounds of stakeholder feedback and publicly presented the feedback and updated recommendations to the Actuarial Committee and the full board, provided a presentation at a TLFFRA educational event about the recommendations, and worked with the board to further refine the recommendations, incorporating stakeholder and board feedback at every step in the process. A summary of the feedback received may be found in Appendix A. The final recommendations were approved by the board on September 25, 2024.

Recommendations adopted by the board include recommended statutory changes, as well as future projects where the PRB could develop guidance or other provide further education or technical assistance.

[1] As of December 31, 2023, the asset values of the Work Group systems ranged from $23 million to $263 million.

Issue Areas

Staff published a study on TLFFRA governance titled *TLFFRA Governance Issues and Options* with four identified issue areas:

1. System funding and decision-making practices
2. Board structure and membership
3. Transparency and communication
4. Additional areas for research and consideration

The study includes a detailed breakdown of each issue area, as well as specific issues that the recommendations aim to address.

Recommendations

PRB staff ultimately proposed 20 recommendations to the board to conclude the study, and 18 were adopted on September 25, 2024. Eleven of the 18 are legislative recommendations that would require statutory changes for implementation. The recommendations are located under *Recommendations to the Legislature* section of this report.

Lump Sum Guidance

In July 2024, the PRB approved the Guidance for Calculating and Administering Lump Sums, which provides systems with a list of best practices to ensure the relevant administrative practices and plan provisions remain up to date and that members and their spouses can make a fully informed decision.

Upon retirement, some pension members may have a choice between various optional forms of payment, including the option of taking a full or partial lump sum. This choice of payment form is a critical decision but may be very complicated for a member and their spouse to understand. It is very difficult for a layperson to compare, for example, a $300,000 one-time lump sum to a $3,000 ongoing monthly annuity. It is also difficult for plan sponsors to understand that they may be paying lump sums that are worth far less than the monthly annuity due to outdated mortality and interest assumptions used in the calculation.

Mortality Table

In Texas, several public retirement systems are still using mortality assumptions from 1984, while one system still uses a mortality table from 1971. Outdated mortality tables will generally underestimate the number of monthly pension payments expected to be paid to a member under the normal form annuity due to increases in expected lifetimes, causing lump sums to be smaller than they would if calculated with updated expected retiree lifetimes. When systems use outdated mortality tables, on average, the system pays out less in benefits when the member chooses a lump sum option.

New mortality tables typically come out approximately every 10 years. The PRB's guidance suggests pension systems review and consider updating this plan provision at least once per decade to align with typical time frames for mortality table updates.

Interest Rate

In Texas, most systems offering lump sums use a higher expected return to calculate the lump sums than they use as their best estimate in their actuarial valuation reports. The PRB's guidance suggests a

reasonable interest rate will be no higher than the system's best estimate of future investment returns used in the actuarial valuation.

When a public retirement system uses an interest rate higher than their best estimate of the system's future investment returns, on average, the plan sponsor would also pay less in benefits when the member chooses a lump sum option.

Relative Values

When presenting a prospective retiree with optional forms of payments, the PRB's guidance suggests that systems consider various disclosures in the benefit election paperwork, including the interest rate and mortality assumptions used to calculate the options, a statement that various options may not all be of equal value, and the relative value of each option. The PRB's guidance includes examples of such language and suggests potential assumptions to use in the calculations of the relative values.

Spousal Approval

For annuity and lump sum options that do not include continuing payments to the spouse after the death of the member, the PRB's guidance is to require the spouse's signature for acknowledgement and approval of the member's choice. When the spouse's signature is not required for approval, the spouse may not ever be informed that they are not covered after the member's death. Most, but not all, Texas public retirement systems already require spousal approval.

Investment Policy Statement Guidelines, Guidance, and Tool

Section 802.202, Texas Government Code requires Texas public retirement system governing bodies to develop and adopt a written investment policy for management of their investments. Systems must maintain the policies for public review and file them with the PRB. The PRB developed guidelines, guidance, a template, and a tool during the recent biennium to assist systems in developing and maintaining a complete, well-developed investment policy statement (IPS) consistent with statute and industry best practices.

The 2020 PRB Investment Performance Report showed that systems would benefit from additional guidance on pension investment practices. In July 2022, the board tasked staff with developing guidelines on investment matters as laid out under Section 802.109, Texas Government Code. To create the guidelines, staff reviewed various industry best practice resources, 56 Investment Practices and Performance Evaluations (IPPE) submitted in 2020, and all 100 current investment policies submitted by Texas retirement systems. The PRB found only 55 out of 100 systems had an IPS updated and submitted to the PRB within the last four years, with several systems' IPSs being 10 to 18 years old. Instead of creating only one guidelines document, in late 2023, the PRB created multiple draft documents with varying levels of detail, from high level guidelines to more detailed guidance and an example template to assist systems at any level of expertise as a resource. Throughout 2024, PRB staff further collaborated with systems on refining the various draft guidelines and guidance to create a consolidated resource for systems. Even while in draft form, the guidance and guidelines were used by systems, with one system even considering acknowledging the policies in their IPS while conducting their 2024 IPPE.

The guidelines offer a high-level overview and minimum framework, allowing for systems and their investment consultants, advisors, and staff to flexibly construct an IPS that fits their needs. The guidance and template further expand upon the guidelines in more detail to highlight important practices and

examples of well documented policies, often directly from a Texas retirement system's IPS. The tool created by the PRB serves as an easy checklist for systems' boards to reference when reviewing their IPS, preferably annually.

Investment Data Report

Introduced in November 2023, the PRB's investment data report provides legislators, taxpayers, pension systems, and other stakeholders with investment related data. The report includes new investment expense data reported pursuant to recent amendments to Section 802.103, Texas Government Code, which requires public retirement systems to report details on direct and indirect investment expenses incurred. In 2024, the agency continued to improve the report to better identify systems with investments underperforming relative to their assumptions and potentially negatively impacting actuarial soundness.

The investment data report also offers comparisons of investment returns, assumptions, and fees incurred by asset class. Staff plans to increase the accessibility of the report and add further analysis. The new data will be phased in to the PRB Data Center starting late 2024 through 2025.

Dallas Police and Fire Pension System Independent Actuarial Review and Funding Plan

Background

In 2017, the legislature passed House Bill 3158 (85R), which made significant changes to the statute for the Dallas Police and Fire Pension (DPFP) system. At the time, the system was facing a severe funding crisis, due largely to substantial losses from risky investments and a run on the bank when retired members pulled significant amounts of funds from their deferred retirement option plan (DROP) accounts. HB 3158 modified contributions, benefits, and plan governance, but did not fully address the system's funding situation. As a result, through the bill the legislature also created a process for an independent actuarial analysis and funding plan to be completed before the 89th Legislative Session, and required the PRB to report to the legislature on the actions taken under the statute. Statute also expressly authorizes the legislature to preempt the funding plan adopted pursuant to the statutory requirement.

Statutory requirements

The requirement in Section 2.025, Article 6243a-1, Vernon's Texas Civil Statutes reads as follows:

> Sec. 2.025. INDEPENDENT ACTUARIAL ANALYSIS AND LEGISLATIVE RECOMMENDATIONS.
>
> (a) Before July 1, 2024, the State Pension Review Board shall select an independent actuary who the board shall hire to perform an actuarial analysis of the most recently completed actuarial valuation of the pension system. The independent actuary shall submit the analysis to the State Pension Review Board and the board not later than October 1, 2024. The analysis must include the independent actuary's:
>
> (1) conclusion regarding whether the pension system meets State Pension Review Board pension funding guidelines; and (2) recommendations regarding changes to benefits or to member or city contribution rates.
>
> (b) Subject to Subsection (d) of this section, not later than November 1, 2024, the board shall by rule adopt a plan that:

(1) complies with funding and amortization period requirements applicable to the pension system under Subchapter C, Chapter 802, Government Code; and

(2) takes into consideration the independent actuary's recommendations under Subsection (a)(2) of this section.

(b-1) The board shall provide a copy of the analysis prepared under Subsection (a) of this section and a summary of any rules adopted by the board under Subsection (b) of this section to the State Pension Review Board.

(c) Not later than December 1, 2024, the State Pension Review Board shall submit a report to the legislature regarding actions taken under this section. The report required under this section must include a copy of the analysis prepared under Subsection (a) of this section and a summary of rules adopted by the board under Subsection (b) of this section.

(d) Notwithstanding any other provision of this article, a rule adopted by the board under Subsection (b) of this section that conflicts with a provision of this article remains in effect until:

(1) a law that is enacted by the legislature and becomes law preempts the rule; or

(2) the board amends the rule and the amendment takes effect, provided the board may only amend the rule if the pension system complies with the funding and amortization period requirements applicable to the pension system under Subchapter C, Chapter 802, Government Code.

(e) This section expires September 1, 2025.

In addition to this provision in DPFP's statute, in 2022, the system triggered the Funding Soundness Restoration Plan (FSRP) requirement in Section 802.2015, Texas Government Code. This statutory provision requires financially distressed public retirement systems and their sponsoring governmental entities to formulate a plan to improve their funding status, bringing the funding period to within 30 years – ultimately the same goal as the statutory requirement discussed above. FSRPs must be adopted by both the system and the sponsoring governmental entity at an open meeting. The DPFP FSRP is due September 1, 2025.

Procurement and independent actuary review

To fulfill this requirement, the PRB conducted a competitive procurement in the summer of 2023, publishing a request for proposals (RFP) jointly with DPFP, and independently evaluating proposals. The PRB selected Cheiron, Inc. (Cheiron) as the independent actuary in July of 2023, and DPFP and Cheiron entered into a contract to perform the independent analysis in August of 2023. The RFP sought to have work performed in two phases, with a preliminary replication of and recommendations based on the 2022 actuarial valuation (AV), and the final recommendations based on the 2023 AV.

Cheiron presented its preliminary review and recommendations to both the DPFP board and, in a separate meeting, the city of Dallas' Ad Hoc Committee on Pensions in November of 2023. Cheiron's key recommendations were:

1. The city should adopt an actuarially determined contribution (ADC), rather than a fixed rate.
2. Reduce the employee contribution rate as funding improves.
3. Provide some cost-of-living adjustment (COLAs) earlier than current statutory provisions permit.

DPFP's 2023 AV showed the system's funded ratio was 39 percent, with an 82-year funding period. Cheiron presented its revised recommendations based on this AV in February of 2024, once again presenting to both the DPFP board and, separately, the Ad Hoc Committee on Pensions. The recommendations did not change, but Cheiron presented more alternatives for consideration for each recommendation.

1. Adopt an ADC. Cheiron posed several alternatives, including an immediate ADC, three- or five-year step-up and step-down, or three- or five-year step-up.
2. Reduce the employee contribution rate as funding improves.
3. Provide some cost-of-living adjustment (COLAs) earlier than current statutory provisions permit. Cheiron presented numerous possible designs for a COLA, such as inflation vs. investment return basis, simple vs. compound, and partial COLAs based on funded status.

Cheiron's independent actuarial analysis can be found in Appendix B.

Plan development and negotiations

Both the DPFP board and the Ad Hoc Committee on Pensions held regular meetings – each meeting generally monthly – throughout late 2023 and most of 2024 to discuss the recommendations and develop a plan to improve DPFP's funding. The PRB Actuarial Committee heard presentations from DPFP, the Ad Hoc Committee on Pensions, and Cheiron at its January 25, 2024, meeting. The Actuarial Committee members encouraged DPFP and the city to work collaboratively to develop a plan together.

Following Cheiron's February 2024 recommendations, DPFP staff made recommendations to their board based on the Cheiron recommendations, while city staff developed recommendations for consideration by the Ad Hoc Committee on Pensions and ultimately the full city council. Both parties recommended the city adopt an ADC, though they disagreed on the phase-in period. DPFP staff sought to implement a COLA before the current statutory COLA, which can only be paid when the system is 70 percent funded. City staff developed recommendations for additional provisions that would give the city additional oversight for plan governance, such as approving certain assumptions or reconciling discrepancies between system and city ADC calculations. DPFP and city staff met regularly to negotiate a mutually agreeable solution, including discussing various COLA options, but ultimately could not come to an agreement and adopted separate plans, discussed below.

DPFP plan and lawsuit

On August 8, 2024, the DPFP board adopted a funding plan that includes the following provisions:

- City contribution of a layered ADC with some immediate implementation and some contributions stepped up over three years.

- A COLA before the system is 70 percent funded, based on the market value funded percentage multiplied by the increase in consumer price index, with a maximum COLA of 1.5 percent.[2]

The DPFP board also voted to authorize the filing of a suit in Travis County seeking to clarify the approval roles of the system board and the city of Dallas under the requirements of Section 2.025 of the system's statute and Section 802 of the Texas Government Code. As part of the litigation, the parties have agreed that the system will not pay the COLA the DPFP board adopted until after August 31, 2025. On November 19, 2024, a district court judge issued a summary judgment order holding that the DPFP plan prevails.[3]

The DPFP plan is included as Appendix C to this report.

City of Dallas plan

On September 11, 2024, Dallas City Council adopted a plan that includes the following provisions.

- City contribution of an ADC with a five-year step up built into the 30-year schedule, a corridor for employer normal cost, and new amortization layers as necessary.[4]
- Any changes to actuarial assumptions (including the current discount rate) that increase the system's liabilities must be approved by both the system and city council.
- Settlement of any lawsuit by DPFP that increases the system's liabilities must be approved by both the system and city council.
- Any increase in benefits proposed by DPFP, including COLAs, that would increase the system's liabilities must be approved by both the system and city council.
- Creates a process for annual ADC calculation and reconciliation by both DPFP and the city. If the difference is greater than 3 percent, both entities will engage in a 30-day reconciliation period. If no resolution is reached during that time, the two rates will be averaged to determine the contribution for the upcoming fiscal year.
- Authorizes city council to waive the normal cost corridor provision if the fund is not projected to be fully funded within 30 years.

The city describes this plan as an FSRP, but it has not been jointly adopted by the system, as statute requires for an FSRP. The city plan is included as Appendix D to this report.

Rule Review: Chapter 601-605

During the 2023-2024 biennium, the PRB conducted its quadrennial rule review, as required by the Administrative Procedure Act, for most chapters of its rules, excluding Chapter 610, rules pertaining to Funding Soundness Restoration Plans that were adopted in 2022, and therefore not yet subject to the review requirement. The agency began the rule review process in September 2023, with notice of intent to review the rules published in October. In addition to publishing the notice, the agency also sent out the current rules to stakeholders for informal comment. The PRB did not receive any public comments on the

[2] Once the system is 70 percent funded, the COLA is unchanged from current statute, which provides an ad hoc COLA based on the annual investment return minus 5 percent, with the COLA not to exceed 4 percent.
[3] Devyani Chhetri, "Dallas Police and Fire Pension System wins case against city in fight over funding plan," *Dallas Morning News*, November 21, 2024, https://www.dallasnews.com/news/politics/2024/11/21/dallas-police-and-fire-pension-system-wins-case-against-city-in-fight-over-funding-plan/.
[4] The city's fiscal year 2025 budget includes funding for the ADC adopted in the city plan.

notice of intent to review rules. As required by the Administrative Procedure Act, the agency considered whether the reasons for initially adopting each rule continue to exist.

Chapters 601-605 generally pertain to the agency's organization and administration. The PRB readopted each of these chapters in March 2024 following the rule review, with additional rulemaking identified as part of the rule review process and discussed below.

First, the PRB adopted new rules in Chapter 601 pertaining to state employee leave pools with rules proposed in March 2024 and adopted in July 2024. Next, the board adopted amendments to Chapter 605, which pertain to standardized forms adopted by the PRB, with rules proposed in March 2024 and adopted in July 2024. Statute requires the PRB to adopt forms in rule that public retirement systems must complete to allow the agency to determine the actuarial soundness and financial condition of each system. The amendments added a reference to the statutory requirement, split one existing form into two separate forms to reflect actual practice, and made a few additional minor, non-substantive changes. The PRB did not receive any public comments on these proposed rules.

Chapter	Notice of Intent to Review Published	Final Action
601 – General Provisions	October 6, 2023	Readopted March 6, 2024; New section 601.70 adopted July 25, 2024, pertaining to state employee sick and family leave pools.
603 – Officers and Meetings	October 6, 2023	Readopted March 6, 2024
604 – Historically Underutilized Business Program	October 6, 2023	Readopted March 6, 2024
605 – Standardized Form	October 6, 2023	Readopted March 6, 2024; Sections 605.1 amended to split existing Benefits and Membership Report into two separate reports and make other minor, non-substantive changes; Section 605.3 amended to reflect modified reporting requirement.

Rule Review: Chapter 607

In 2014, the PRB first adopted the Minimum Educational Training (MET) program rules in Chapter 607. The most recent revisions were in 2019, and the PRB anticipated a need for extensive updates during the rule review. To help with the review, the PRB requested and received informal comments from stakeholders on the current rules. Staff identified potential rule changes and held a stakeholder meeting in December of 2023 to discuss the ideas and solicit additional feedback from stakeholders. PRB staff also held follow-up meetings with some stakeholders regarding specific suggestions they had.

PRB staff drafted proposed rule changes and presented to the PRB Education Committee in May of 2024, then distributed the draft proposed changes to stakeholders for informal comment. Three stakeholders

provided comments on the draft proposed rules. PRB staff presented to the full board on the proposed rules in July of 2024. Staff did not recommend any changes to the full board based on stakeholder feedback, but did make some revisions to the proposed draft rules.

Since the rule changes were extensive, the PRB voted to propose the repeal of the full chapter and new rules to replace them in July of 2024. The board materials can be found in the meeting packet, beginning on page 22 of the PDF. The PRB did not receive any formal comments on the proposed rules, and in September 2024, the board voted to adopt the rules.

The PRB intended to clarify and improve the MET program through the proposed rule changes, which are detailed below:

- Some term definitions were modified to increase clarity. Among the changes, the PRB created a new definition for "first year of service" to transition trustees and administrators to a calendar year training cycle beginning in 2025, intended to increase clarity and efficiency and improve compliance by streamlining training timelines for all trustees and administrators.
- The rules modify the existing MET requirements. The changes:
    - Incorporate the revised first year of service definition discussed above and create a process to apply for a limited extension if additional time is needed to complete the first year of service training.
    - Modify the continuing education (CE) cycle to require two hours each calendar year, rather than four hours in each two-year cycle. The rules specify that trustees or administrators may not carry over CE hours completed that exceed the annual requirement. Like the change to the first year of service training cycle, this change will increase clarity and efficiency and improve compliance.
    - Remove an exemption from the CE requirements for a trustee whose term is expiring during their current training cycle.
- The rules require that systems report concurrent service or employment with another system to the PRB because training can be used to satisfy multiple concurrent roles, so long as the PRB is informed of concurrent service or employment.
- The rules authorize trustees and administrators to gain credit for teaching an accredited MET activity, to align with best practices for continuing education programs.
- The rules replace the current exemption from repeating core training for reappointed and re-elected trustees and rehired system administrators from two to five years since the last date of service, to provide additional flexibility while ensuring trustees and administrators have the training needed to successfully fulfill their responsibilities.
- The rules modify the training provider requirements to ensure training providers offer high-quality training while minimizing administrative burden. These changes include:
    - Authorizing additional methods to verify participation in online training and recordkeeping and reporting requirements; and
    - Exempting systems providing in-house training from certain requirements for training providers.
- The rules modify the current reporting timelines and require systems to annually report trustee and administrator registration information to the PRB, rather than on an "ongoing basis" or only

when changes occur, to ensure the agency has all needed information to administer the MET program.

- The rules also make various minor technical changes, adjust terminology to increase clarity, and provide for the transition to the new calendar year training cycle.

The table below also provides a high-level summary of the key changes to each subchapter of the MET rules.

Chapter/Section	Notice of Intent to Review Published	Final Action and Key Changes
Chapter 607 – Public Retirement System Minimum Educational Training Program	October 6, 2023	Readopted March 6, 2024, with repeal and new rules detailed below.
Chapter 607, Subchapter A – General Provisions	October 6, 2023	Repeal and new rule proposed July 25, 2024, and adopted September 25, 2024. • Alter terminology to "PRS board" and "training provider." • Modify "first year of service" to reflect calendar year training cycles and a transition period for new rules.
Chapter 607, Subchapter B – Training Requirements for Trustees and System Administrators	October 6, 2023	Repeal and new rule proposed July 25, 2024, and adopted September 25, 2024. • Create limited extension process for core requirement. • Change CE cycle to a one-year cycle requiring two credit hours. • Grant ability to earn credit for teaching an MET activity. • Clarify excess credit hours cannot be carried over to subsequent cycles. • Add language regarding transition to new rules. • Extend time a trustee or system administrator can be off the board before repeating core training.
Chapter 607, Subchapter C – Minimum Educational Training Program Training Providers	October 6, 2023	Repeal and new rule proposed July 25, 2024, and adopted September 25, 2024. • Add methods for verifying attendee participation. • Computation of course credit for certain digital media and for attendees who are late or leave early. • Removal of a sponsor number.

		• Recordkeeping requirement for course evaluations. • Require sponsors to provide core training participation info directly to the PRB. • Match individual course approval applications to current practice. • Exemption from certain requirements for systems providing in-house training.
Subchapter 607, Subchapter D – Compliance with the Minimum Training Requirements	October 6, 2023	Repeal and new rule proposed July 25, 2024, and adopted September 25, 2024. • Move PRB-2000 due date to April 1. • Add annual April 1 due date to PRB-150. • Add section to PRB-150 notifying the PRB of a trustee or system administrator serving multiple retirement systems. • Removal of sponsor number.

Following adoption of the new rules, the PRB updated the MET website, created new and updated forms, and provided guidance and training for public retirement systems and training providers to ensure they are aware of the rule changes and the impact for trustees, administrators, systems, and training providers. The PRB provided regular communication on the changes through weekly news clips and social media posts and made extensive updates to its website, including the new forms and detailed frequently asked questions. The PRB also held a live virtual training on the rule changes in November of 2024, which allowed for questions from participants. This training was also made available on the PRB website for individuals unable to attend the live training.

Rule Review: Chapter 609

Like Chapter 607, the PRB anticipated a potential need for more significant updates to the rules in Chapter 609, which pertain to investment expense reporting. The PRB received informal comments from stakeholders on the current rules, some of which were incorporated into the draft proposed changes. PRB staff presented the draft proposed rule changes to the Investment Committee in May 2024, and distributed the draft proposed changes to stakeholders for informal comment. The PRB received two comments from stakeholders on the draft proposed rules, arranged follow-up meetings with some stakeholders, and made changes to reflect some of this feedback.

At the July 2024 board meeting, the PRB voted to propose amendments to two sections in Chapter 609 and the repeal of one section in the chapter. The proposed amendments clarified the definitions of "direct and indirect fees and commissions" and "investment service" and clarified that systems must report investment expenses by type of fees and commissions. The proposed amendments also specified that the supplemental schedule containing the investment expense report may be unaudited, addressing a frequent question from systems and reflecting current practice. Overall, the proposed amendments sought to increase the clarity, consistency, and accuracy of investment expense reports while reflecting current practice. The proposed repeal would repeal an obsolete section of the rules that pertained to the

first reporting period and expressly expired April 1, 2022. The PRB did not receive any formal comments on the proposed rules, and in September 2024, the board voted to adopt the rules as published.

Chapter/Section	Notice of Intent to Review Published	Final Action
Chapter 609 – Public Retirement System Investment Expense Reporting	October 6, 2023	Readopted March 6, 2024, with amendments and repeals as detailed below.
Section 609.105 – Definitions	October 6, 2023	Amendments proposed July 25, 2024, and adopted September 25, 2024, to clarify "direct and indirect fees and commissions" includes fees netted from returns; and clarify "investment service" includes in-house investment staff.
Section 609.109 – Investment Expense Reporting (for first reporting period)	October 6, 2023	Repeal proposed July 25, 2024, and adopted September 25, 2024, to strike entire obsolete section.
Section 609.111 – Investment Expense Reporting Structure	October 6, 2023	Amendments proposed July 25, 2024, and adopted September 25, 2024, to clarify that investment expenses must be reported by type of fees and commissions; and specify the information may be provided in an unaudited supplemental schedule.

MAJOR IT PROJECTS

In 2021, the 87th Legislature appropriated $600,000 to the PRB through the supplemental appropriations bill (HB 2) for two major IT projects:

1. Database rewrite – to migrate data from multiple servers to the cloud and create a new web-based interface to replace the agency's outdated databases
2. Reporting portal – to create a website for all Texas public retirement systems to access a self-service portal to upload their reports and to complete and submit required forms online

In 2023, the 88th Legislature extended the agency's timeframe to use the funds from 2023 to 2025 through SB 30 (88R), to allow the agency sufficient time to complete the two projects.

Internal Database rewrite

The PRB prioritized the database rewrite project, since its internal databases hold the information central to the agency performing its major functions. The project entailed combining existing data from failing Access databases and creating a single cloud-based database.

Staff regularly enters information from the hundreds of reports submitted by public retirement systems each year into this database. It is linked to the agency's online data center, which provides up-to-date comparative and system information for the public. The agency continues its ongoing effort to develop skills for certain staff and provide opportunities to learn programming languages such as structured query language (SQL) and Python. Learning these programming languages helps both staff members and the agency, so that future reports and graphics can be developed in-house for agency websites, publications, and other reports.

Staff was able to begin the project in the summer of 2022 after contracting a programmer, and the project took approximately 1.5 years to complete, concluding by early 2024. Beyond successfully combining and transferring data from prior databases, the new database has improved features, including streamlined staff processing and workflow, and the ability for staff to collect new data from new reports added to statute in the last decade.

Pension Online Reporting Tool

Central to its ability to monitor systems' financial and actuarial health and trustee education, one of the agency's main functions is to collect information from systems through statutorily required reports. These reports include financial, actuarial, investment, membership, benefits, and training information.

In the past, systems submitted their required reports to the PRB via email, fax, or mail. The agency found that there was a cybersecurity risk when electronically collecting reports, since the agency collects over 600 reports a year, mostly through email, increasing the risk of a possible phishing attack. In the spring of 2023, PRB staff began working with its IT consultant to outline an external-facing portal for systems to submit all required reports to the PRB.

The goals of the reporting portal, the Pension Online Reporting Tool (PORT), were as follows:

- Improve overall customer service
- Streamline report submission
- Provide efficient information sharing

PRB staff began working with its contracted programmer after the conclusion of the database rewrite project and completed the portal in the summer of 2024. Staff then asked a select number of systems to test the portal and provide feedback on the ease of use or any problems they encountered. The PRB launched PORT on August 6, 2024.

Thus far, systems have provided helpful feedback and have generally reported that the portal is easy to use and understand. Features include linking the portal to the agency's internal database to authenticate users and allow them to login without a password, significantly reducing the amount of user support the agency must provide. The portal provides instant submission confirmation, as any reports shown in the portal are confirmed received by the agency. It also streamlines PRB workflow by

instantly logging the information into the agency's database and automatically saving to the agency's internal folders, allowing for quicker, more efficient processing.

Planned Enhancements

The PRB has requested funds through its 2026-2027 Legislative Appropriations Request to make enhancements to these and other PRB systems. For example, retirement systems have requested to be able to see compliance information, including reporting and trustees' education compliance status in the portal dashboard. This information being automatically populated for users would decrease the number of requests the agency fulfills just on compliance status alone. It could also help increase compliance with requirements since administrators would be able to login and immediately see whether they are missing information.

Another potential enhancement to the agency's internal database and to PORT is a secure message center. This would decrease the number of emails the agency sends and receives, but also allows systems to have peace of mind to be able to reference agency correspondence in an organized way. Much like the portal is a secure way for systems to submit reports, it could also be used as a secure way to receive and send correspondence, limiting cybersecurity risks that stem from email phishing attempts and other threats.

REPORTING REQUIREMENTS

FSRP Reporting and Compliance

At each PRB meeting, the PRB senior actuary presents the FSRP report. The FSRP report lists the systems with FSRP status changes since the previous board meeting and presents separate lists of FSRP statuses by system. The systems on the FSRP status lists mainly include those already subject to FSRPs, at risk of triggering an FSRP with their next actuarial valuation (AV) report, and those who remain operating under legacy FSRPs put in place prior to the 2021 statutory FSRP changes.

Communication is a priority for systems that have triggered FSRPs or are at risk of triggering an FSRP, including:

- PRB notification that a system is at risk of triggering an FSRP
- PRB notification that a system has triggered an FSRP
- Scheduled and ad hoc progress updates, discussed more below.

The submission deadline for most systems already subject to FSRPs is September 1, 2025, except for one system whose deadline is January 1, 2026, after triggering the FSRP with the January 1, 2024, AV report. Once subject to an FSRP, these systems must provide progress updates every six months. Many systems satisfy this requirement through regular discussions with the PRB. The regular discussions may include:

- Public system and sponsor updates at PRB board meetings
- Requests for PRB feedback on proposals from the system and sponsor
- PRB suggestions for ways to compromise between the system and sponsor
- Requests for PRB feedback on preliminary FSRP submissions prior to scheduling a citizen vote
- PRB guidance for potential ways to improve the preliminary FSRP submissions.

For those systems that do not interact regularly with the PRB regarding their FSRP progress, the PRB sends reminders around a month ahead of the deadline. Systems have generally complied with the progress update requirement, though the PRB received some after the deadline.

All systems must complete regular AV reports, including systems at risk of FSRPs. Since a potential FSRP would be due two years after the date of the AV report that triggers the FSRP, the PRB reminds at risk systems to complete valuations in a timely manner to ensure they maximize the time the system has to study and enact any necessary changes. The PRB generally reminds at risk systems of the need for timely AV reports a month or two before the next valuation date.

Systems operating under legacy FSRPs must continue to produce AV reports demonstrating that their funding periods or funded ratios remain within the allowable compliance corridors, which were established under FSRP rules to determine when a system is within a reasonable range of its established FSRP target funding date. Two systems currently subject to FSRPs, Marshall Fire and Wichita Falls Fire, were previously operating under legacy FSRPs but failed to stay within the compliance corridors.

Six systems have already submitted their FSRP to the PRB, successfully fulfilling the requirement prior to the September 1, 2025 deadline. Eight systems remain subject to the September 1, 2025 deadline, including three that triggered FSRPs prior to the 2021 statutory FSRP changes. The PRB has provided assistance to systems that wanted guidance on FSRP submissions and to help systems remain compliant following FSRP submissions. Following a suggestion from the PRB, for example, Longview Fire was able to secure enough additional funding from the city of Longview to avoid becoming at risk of another FSRP.

FSRP: Overview, Implementation, and Case Studies

Section 801.202, Texas Government Code requires the PRB to conduct intensive studies of potential or existing problems that threaten public retirement system actuarial soundness. In past years, the PRB has satisfied this mandate by performing intensive reviews of individual retirement systems, which generally includes a deep dive into a system's unique funding situation and recommendations to address those challenges. With the new provisions for the Funding Soundness Restoration Plan (FSRP) requirement going into effect on September 1, 2025, the PRB determined it beneficial to conduct a macro-level intensive study to determine the impact the FSRP requirement has had on Texas systems so far, including a review of the specific strategies and changes implemented by several individual systems to meet the requirement. The FSRP requirement establishes the state's minimum pension funding standard and encourages Texas public retirement systems and their sponsors to work together to develop effective plans to improve system funding status.

This study, *FSRP: Overview, Implementation, and Case Studies*, reviews the steps the PRB has taken to implement the requirement, including rulemaking and providing technical assistance and resources, analyzes the impact the requirement has had on Texas public retirement systems, and provides helpful information to systems who may become subject to it in the future. It also contains case studies on 14 retirement systems that took action to improve their funding—either in response to triggering the FSRP requirement or being at risk of doing so. The case studies section of the report categorizes the systems based on the types of changes made and explores how they chose to address their funding issues and move toward full funding by September 1, 2055. This full funding date is in line with the FSRP deadline for systems to reach a 30-year funding period by September 1, 2025.

The PRB began research in preparation of the study in February 2024 and presented on the background, purpose, and timeline of the study to the public at the March 6, 2024, PRB meeting. Staff sent a survey in late March to retirement systems that triggered the FSRP requirement to help the PRB incorporate their experiences with creating their FSRP into the study. PRB staff presented the final study at the PRB's September 25th board meeting and subsequently published the report on the FSRP section of the PRB website.

Investment Expense Reporting

In 2019, the Texas Legislature enacted SB 322 (86R), which focused on public retirement system investment transparency. The bill included a section expanding the reporting requirements in Section 802.103, Texas Government Code, which requires systems to publish annual financial reports. The reports must now include the following new pieces of information:

1. A listing, by asset class, of all direct and indirect commissions and fees paid by the retirement system during the system's previous fiscal year for the sale, purchase, or management of system assets, and
2. The names of investment managers engaged by the retirement system.

Staff thoroughly reviews the reported information and contacts systems with expenses that are different than expected to verify the accuracy of the information. During review of the annual audit, if staff identifies any issues with the report - such as misreporting fees by asset class – staff requests corrections or additional supporting details. Staff also provides guidance upon request to ensure the data collected follows a consistent methodology, and that the data follows the template established by the PRB. In the previous biennium, over 50 percent of Texas public retirement systems either requested technical assistance from staff or had reporting accuracy issues identified by staff. By contrast, in the most recent fiscal year reporting period, only 10 percent of Texas public retirement systems had reporting inaccuracies or issues.

After the bill was enacted, Texas public retirement systems had a learning curve on gathering the new information to report in their annual audits. In February 2020, the PRB adopted rules in Chapter 609 requiring plans to specify amounts paid towards investment services provided to the system.[5] The PRB also provided a template to help with reporting. In September 2024, the PRB adopted updated rules, which became effective in October 2024, to remove initial implementation information and clarify definitions and requirements based on stakeholder feedback.

Staff began publishing the investment expense information in the new investment data report which is available on the PRB's website, with plans to make it available on the Texas Public Pension Data Center in the future. The new investment data report which was first introduced to the PRB's Investment Committee in November 2023, provides key investment performance metrics in one report on the investment health of pensions. Similar to the AV report, PRB staff will provide this investment data report to the board regularly. More information can be found in the investment data report section.

In the next biennium, staff plans to add more of the investment expense data to the PRB data center and improve accessibility by adding easy downloadable options. The PRB aims to provide additional data

[5] 40 T.A.C. Chapter 609

analysis that will offer useful insight into Texas public retirement systems' fees, giving systems with less assets and smaller budgets another resource to help them evaluate their own investment programs.

Annual Reporting and Compliance

While public retirement systems are subject to various statutory reporting requirements, the most frequently reported information comes from annually required reports. Chapter 802, Texas Government Code, requires systems to submit an annual financial report, membership report, and an investment Returns and Assumptions Report (form PRB-1000) within 210 days after the end of the previous fiscal year. Systems are also required to report training taken by system administrators and trustees, as well as provide a PRB-150 registration form each year, beginning April 1, 2025.

The PRB also monitors reports that are not due annually and sends reminders to systems when a deadline is upcoming or has passed. This includes reminders for actuarial valuations, experience studies, actuarial audits, Investment Practices and Performance Evaluations and Funding Soundness Restoration Plans.

The PRB provides multiple resources to assist systems with meeting annual reporting requirements, including a section of the website that focuses exclusively on reporting and compliance, and a reference document titled *Summary of Reporting Requirements for Texas Public Retirement Systems* which lists all of the required reports that must be sent to the PRB. This document contains summaries of the reporting statute, a calendar with reporting deadlines, as well as additional links to resources to help systems complete their requirements for the reports shown below. The PRB also presented on reporting requirements at the 2024 Annual TLFFRA Conference, including details on what information the PRB is looking for in the reports and how that information is used and shared with the public.

Systems Required	Report	How often
All	• Annual Financial Report (audited)[6] • Investment Returns and Assumptions Report (PRB-1000) • Membership Report • MET Training Form (PRB-2000) • Registration/Board Information Form (PRB-150)	Annually
All	• Actuarial Valuation	Every three years
Systems with assets over $100 million	• Investment Practices and Performance Evaluation	Every three years
Systems with assets over $100 million	• Actuarial Experience Study • Actuarial Audit	Every five years
Systems with assets over $30 million	• Investment Practices and Performance Evaluation	Every six years
All	• Funding Policy • Investment Policy • Summary Plan Description • Registration/Board Information Form (PRB-150)	Upon change
All non-statewide systems	• Funding Soundness Restoration Plan	If necessary

Per Section 801.209, Texas Government Code and the agency's *Policy for Regulation of Non-Compliant Retirement Systems*, systems and their associated governmental entities are subject to a noncompliance notice after 60 days from the reporting deadline for one or more of the required reports. Most recently, 10 systems were over 60 days noncompliant for their 2023 fiscal year reporting, which is in line with the average annual noncompliant number. A list of systems that have been noncompliant for 60 or more days are placed on the agency's website under the 60-day noncompliant list. PRB staff also provides this list to the board during its meetings. Additionally, the board may invite noncompliant systems to provide testimony during a board meeting and to discuss the issues they face with meeting reporting deadlines.

[6] The annual financial report includes a requirement for retirement systems to report the direct and indirect investment commissions and fees paid by the retirement system. This information does not need to be audited and may be included as a note to the financial statements.

Some examples of the issues retirement systems have stated to the PRB include investment asset reporting not aligning with the audit deadline and causing delays, errors within drafted audits that must be corrected before the final report could be adopted, inaccurate or unavailable historical records due to a change in contractor, and a change in third party administrators causing delays in providing information to auditors.

Investment Practices and Performance Evaluation and Investment Performance Report

The 86th Legislature enacted Senate Bill (SB) 322, which added Section 802.109, Texas Government Code, concerning investment practices and performance evaluations (IPPE). The statute requires public retirement systems with assets of at least $30 million to select an independent firm with substantial experience to evaluate the appropriateness, adequacy, and effectiveness of the system's investment practices and performance and to make recommendations for improving its investment policies, procedures, and practices.

Public retirement systems are required to submit an evaluation to the PRB every three or six years depending upon their preceding fiscal year's assets. The evaluations are due at the latest to the PRB on June 1 in the year following the completion of an evaluation. In 2024, systems with at least $100 million in assets submitted their second evaluations. The PRB monitors the evaluations for compliance with statute and notifies systems of any issues with missing sections, disclosures, or missed deadlines.

The PRB aids systems and their independent evaluators in producing an evaluation in compliance with governing statute by providing resources including guidance, making past evaluations accessible via the PRB website, and staff answering questions for technical assistance.

Section 802.109(i), Texas Government Code requires the PRB to submit an Investment Performance Report (IPR) that both compiles and summarizes the information from the evaluations and include the report in the agency's Biennial Report to the Legislature. This report contains aggregate analysis of the evaluations, summaries of each individual evaluation and resources including a compilation of references from the evaluations to help systems access best practices and relevant benchmarking resources.

The PRB may include legislative recommendations for improving the governing statute based on observations from the received evaluations in the biennial IPR. The previous IPR included several recommendations some of which were ultimately passed by the 87th Legislature in 2021. The 2024 IPR contains two legislative recommendations for improving the clarity of the reporting requirement from a schedule and applicability standpoint, which should improve the efficiency of government resources in monitoring the IPPE requirement and provide clearer requirements for systems and the PRB. The IPR can be found in Appendix E.

PUBLIC RETIREMENT SYSTEM INTENSIVE REVIEWS

Abilene Intensive Review

The PRB is mandated by Section 801.202, Texas Government Code to conduct intensive studies of potential or existing problems that threaten the actuarial soundness of public retirement systems. In 2023, the PRB conducted an intensive review of the Abilene Firemen's Relief & Retirement Fund. The PRB chose the system for an intensive review due to a concern regarding the system's funding metrics and at the request of Texas State Representative Stan Lambert. Representative Lambert's request was the first of its kind – no legislative office has requested the PRB to review a system before. The review provided a

starting point for the system and its sponsoring governmental entity, the city of Abilene, to begin addressing the difficult situations their fund faces. The PRB also intended this review to serve as a valuable educational resource and case study for other systems who may be facing similar challenges, suggesting it in particular to a couple of systems that considered implementing similar benefit caps so they could fully understand the potential downside to that approach.

Key recommendations from the intensive review include:

- Adjusting benefits and contributions to sustainable levels based on reasonable plan assumptions.
- Adjusting or removing the $90,000 benefit cap as part of determining the necessary long-term contribution level.
- Conduct a voluntary Funding Soundness Restoration Plan and update current funding policy.
- Become compliant with minimum educational training requirements as soon as possible.

The review process provided multiple opportunities for input from both the system and city of Abilene. Both parties were invited to provide input on the initial review and written responses for inclusion in the final report. The agency invited both parties to attend the PRB's board meetings to discuss the review findings and answer questions. The full report may be found on the PRB's website.

Updates on Past Reviews

The PRB has performed 12 intensive reviews since 2018. Appendix F provides a summary of those systems' progress after the review publication. The following updates highlight significant changes to reviewed systems since the PRB's 2021-2022 Biennial Report.

Midland Firemen's Relief and Retirement Fund: In November 2021, the PRB published its *Intensive Review of Midland Firemen's Relief and Retirement Fund* which, for the first time in the PRB's history of conducting intensive reviews, included a more detailed review of a system's investment program. The review noted that between 2000 and 2019, the system went from a stable funded ratio of 93.7 percent to 51.1 percent. The review found that investment underperformance was the primary contributor to an increase in unfunded actuarially accrued liability (UAAL) with the fund only achieving a 10-year compounded return of 5.1 percent over the last decade, despite a strong bull market during that same period. Additionally, the review noted the system's board does not monitor the composite portfolio or have a formal policy to evaluate the program's performance and expenses, raising transparency and accountability concerns. The PRB adopted the review and recommendations, including that the system engage a third party to conduct a forensic and governance audit based on issues identified in the review.

The system has since completed the audits and hired new investment consultants. Now that the 2023 Actuarial Valuation Report has been completed, the system and sponsor have been using the report to study potential changes to contributions and benefits. As of November 2024, the Midland City Council and system have agreed to a preliminary FSRP solution, subject to a vote by the members.

Odessa Firemen's Relief and Retirement Fund: In October 2019, the PRB published its *Intensive Review of Odessa Firemen's Relief and Retirement Fund* and provided a summary of the review in its 2019-2020 biennial report. At the time, the system was 43 percent funded with a funding period of over 47 years.

Since the review, the city contributions have increased from 20 percent to 28 percent. The funded ratio has decreased to 36 percent due to the system adopting more realistic assumptions, including a decrease

in the expected investment return from 7.75 percent to 7 percent. The funding period, however, has decreased to below 23 years. In October 2024, the city of Odessa agreed to begin paying an actuarially determined contribution. With reasonable assumptions and actuarially determined contributions, the system is on a good path forward to improve the funded percentage in the coming years.

Longview Firemen's Relief and Retirement Fund (Longview Fire): In October of 2018, the PRB published its *Intensive Actuarial Review of Longview Firemen's Relief and Retirement Fund* . The PRB identified issues with a mismatch in the assets and liabilities coming from lower investment returns and insufficient contributions.

Following the review, Longview Fire made changes to lower its return assumptions and increase contributions. The city of Longview also issued $45.6 million in pension obligation bonds (POBs) in July 2022 to pay down most of the system's UAAL. Additionally, the system issued a memorandum of understanding (MOU) between the system and the city agreeing that there would be no plan changes to increase benefits until the funding period is less than five years, and no plan changes can result in an increase in the funding period of over 10 years.

The system used the POB and MOU to meet the FSRP requirement of expected full funding by September 2055. When the preliminary 2023 actuarial valuation report showed the system's expected full funding date would be later than September 2055, the PRB discussed potential solutions with the system. Based on those discussions, the city provided a one-time contribution to keep the expected full funding date before September 2055.

Beaumont Firemen's Relief and Retirement Fund: In April 2018, the PRB published its *Intensive Review of Beaumont Firemen's Relief and Retirement Fund.* At the time, the system was 68 percent funded with a funding period of 104 years.

Since the review, the city and members increased their contributions, and the system reduced benefits for new hires. The funded ratio has decreased to 56 percent due to the system adopting more realistic assumptions, including decreasing the expected investment return from 8 percent to 7.5 percent. The funding period has decreased to 33 years. The system has made substantial progress toward meeting FSRP requirements.

Greenville Firemen's Relief and Retirement Fund: In January 2018, the PRB published its *Intensive Review of Greenville Firemen's Relief and Retirement Fund.* At the time, the system was 49 percent funded with a funding period of 70 years.

Since the review, the city and member contributions have increased, and the expected return assumption has decreased from 8.25 percent to 7.25 percent. The funded ratio has decreased to 41 percent due to the system adopting more realistic assumptions, while the funding period has decreased to 35 years. The system will trigger an FSRP if the next actuarial valuation report shows a funding period longer than 30 years. Nevertheless, the system has made substantial progress toward a 30-year funding goal since the intensive review.

DATA COLLECTION

PRB Websites

The PRB maintains several websites that serve as resources for stakeholders and the public. Staff maintains the websites in-house, allowing for quick and efficient updates to information. The main PRB

website plays an important part in the agency's transparency efforts. On the website, users can access information about upcoming and previous board and committee meetings, and view board documents and policies. Guidance, tools, and additional resources are also available on the PRB website. Important announcements are also featured on the homepage to draw attention to agency updates.

During the previous biennium, the PRB completed an overhaul of the primary website. However, staff must actively maintain and update the websites so they do not become outdated. During fall and winter 2023, the agency reviewed all the webpages on the primary website to ensure that the information was as accurate and accessible as possible.

In addition to the primary PRB website, in January 2023, the agency launched a new website for the Minimum Educational Training (MET) program. The new website hosts the agency's courses and allows for system trustees and administrators to obtain free training to help them comply with statutory requirements.

The PRB also maintains the Texas Public Pension Data Center website, as well as an online portal for report submissions. More information about the portal is located under the Major IT Projects section.

Public Pension Data Center

Launched in January of 2019, the PRB's *Texas Public Pension Data Center* provides lawmakers, taxpayers, public retirement systems, and other stakeholders with a searchable, user-friendly database of Texas public retirement system information. Over the 2023-2024 biennium, the agency has continued to improve the data center, which includes key actuarial and financial indicators of retirement system health over time, as well as demographic, benefit, and governance information.

Staff made improvements to the data center over the biennium, which included updating various graphs, improving data accessibility, and other database improvements preparing for future updates. While the internal database upgrade is now complete, the PRB's goal for future improvements is to redesign the data center graphs to include interactivity and add information from newer reports received from systems, such as investment expenses, which are currently only accessible in board reports. These updates are expected to be completed in phases starting late 2024 and completed in 2025.

AV Report

Report of Key Pension Findings

At each Pension Review Board meeting, the PRB senior actuary provides four reports and an accompanying presentation to the board. The four reports include a summary of key findings and statistics and three detailed reports. The three detailed reports, broken down by system, include the Actuarial Valuation Report showing key funding statistics, the Supplemental Report showing financial statistics, and the Contribution Report showing actual contributions versus necessary contributions.

Over the recent biennium, the accompanying presentation evolved at each meeting. Notable new slides during the 2023-2024 period include:

- The addition of a Funding Progress slide to show how key summary statistics changed over the last two years. The slide shows general progress and allows the PRB to track how many systems are reaching or approaching the targets set in the funding guidelines.

- A slide that lists the necessary funding period for each system to avoid negative amortization and begin paying down the unfunded liability. It illustrates the necessity of reaching funding periods even shorter than the statutory minimum requirement.
- Slides that list the systems with the lowest employer normal costs for all members and for new members to highlight systems whose members are paying most or all of their benefit cost. At least one highlighted system has used the slides to begin negotiating a more appropriate benefit for its members.
- Slides that detail the systems with the highest unfunded liability as a percentage of payroll to highlight systems that may have more difficulty finding funding solutions than others.

To view an example of the AV report presentation, the full presentation from September 25, 2024, may be found in Appendix G.

Guide to Public Retirement Systems in Texas (Primer)

Every odd-numbered year, the PRB publishes the *Guide to Public Retirement Systems in Texas*. Publication coincides with the beginning of each legislative session to provide lawmakers with the most relevant and current information on the state's public retirement systems. The March 2023 *Guide to Public Retirement Systems in Texas* may be found on the agency's website. The PRB is currently drafting its 2025 Guide for the 89th Legislature. The PRB's online data center has allowed much of the information previously published only biennially in the guide to be available to the legislature and the public as soon as the PRB receives and reviews it. This allows the guide to primarily focus on providing analysis and key insights from the data already available through the agency's data portal.

Public Pension Search Tool

The PRB continues its online data partnership with the office of the Texas Comptroller of Public Accounts to maintain the Public Pension Search Tool, promoting transparency and open government. The PRB provides the Comptroller's Office with the most recent data received, including contact information, financial, actuarial, membership, benefit, targeted asset allocations, and investment returns from all public defined benefit retirement plans in the state. The PRB sent the latest update to the Comptroller's Office in October 2024 and generally sends updates in February, June, and October. The search tool is located on the Comptroller's website.

PRB MINIMUM EDUCATIONAL TRAINING (MET) PROGRAM

Core Compliance Project

In November 2023, the board requested that PRB staff study system administrator and trustee compliance with the Minimum Educational Training (MET) program's core requirements. Trustees and administrators must complete their core education requirement during their first year of service and no continuing education (CE) courses may be accepted until they finish their core training. PRB board members were concerned with the number of participants noncompliant with the core requirement, because the core courses educate administrators and trustees on key public pension components essential for discharging their duties. Staff presented the final results of the project at the March 2024 board meeting.

The project started with a total of 96 administrators and trustees noncompliant with the core requirements in December 2023, spanning 41 retirement systems. Of the 96 administrators and

trustees, 51 had been noncompliant with the core requirements for an "extended period," which was defined as at least two years. Staff sent two emails to systems highlighting the MET program's requirements, which courses should be completed, options for fulfilling the core requirement, and a list of administrators and trustees noncompliant with the requirements.

During the project, 19 additional administrators and trustees became noncompliant and were added to the list of those noncompliant with the core requirement.

At the end of the project in February 2024, the total number of administrators and trustees noncompliant the core requirement reduced by 34 percent. Of those trustees and administrators who had been noncompliant for an extended period, nine became compliant during the project.

The following table displays improved core compliance amongst administrators and trustees, accounting for the increase in January.

Core Compliance Project Noncompliant Administrators/Trustees			
	Noncompliant Systems	Total Admin./Trustees Noncompliant	Total Admin./Trustees Noncompliant for an extended period
Total as of Dec. 8, 2023	41	96	51
Total as of Dec. 31, 2023	37	81	41
Total as of Jan. 1, 2024	49	100	49
Total as of Feb. 27, 2024	**29**	**74**	**42**

Through the project, PRB staff discovered that many systems were unaware that they had noncompliant administrators or trustees and that some training was completed but never reported to the PRB. Many systems were behind on reporting changes to their board composition, which led to inactive trustees being erroneously included in the core compliance project. Staff also found that trustees and administrators who had not completed the core requirement for an extended period were less likely to complete the necessary courses than those who had just recently become noncompliant.

While the core compliance project is complete, the agency has continued to use the project results to enhance the MET program and improve compliance. Staff used the results to further develop and update the MET program administrative rules and began more closely monitoring core compliance to limit the occurrence of extended noncompliance. Staff have continued communication with systems with administrators and trustees noncompliant with core, which most commonly occurs when training reported to the PRB is not accepted for the core requirement. Systems have also requested MET Compliance Reports detailing what training is needed by each trustee to reach compliance. The agency has continued to receive training reports for noncompliant trustees that have completed their core training. Some of these trustees were also able to complete and report continuing education courses that were previously unable to be accepted due to their core noncompliance.

New Continuing Education Courses

In response to stakeholder feedback consistently asking for more continuing education options, the agency has continued to create new courses. The PRB's goal was to provide more continuing education courses in 2023 and 2024, and staff produced two continuing education courses within this timeframe, with a third course set to be completed by the end of calendar year 2024.

The PRB has also presented at events held by accredited training providers that provided participants continuing education credit. More information about these presentations can be found later in this section.

Continuing Education Provided by PRB Investment Committee Chair Christopher Zook

On December 12, 2023, board member and Investment Committee Chair Christopher Zook hosted a virtual webinar titled, *Path to Pension Success,* which discussed ways public retirement system boards can be more successful in how they govern and make financial decisions. The training focused on strategies for system administrators and trustees to effectively manage their pension systems and contribute to long-term success.

This occasion was the first time the PRB provided a course for MET credit through a virtual webinar, and 15 system administrators and trustees participated during the live event. Participants received one hour of continuing education credit from the PRB for attending the webinar. In January 2024 the PRB made the webinar recording available on the PRB education website, allowing the opportunity for those who did not attend the webinar to earn MET credit for the course.

Changes to Funding Guidelines for Texas Public Pensions

On August 19, 2024, Senior Actuary David Fee presented at the Texas Association of Public Employee Retirement Systems (TEXPERS) Summer Educational Forum in San Antonio on the recent updates to the PRB's Pension Funding Guidelines, adopted by the board at their July 2024 meeting. The course focused on the purpose of the guidelines and what changes were adopted by the PRB. Following the conference, staff added the course to the PRB's education website. Now, trustees and administrators may watch the recording to receive .25 hours of continuing education credit.

Future Courses

PRB staff is in the process of creating a new continuing education course which will focus on providing information about the agency. The course will cover the PRB's primary duties, types of retirement systems the PRB oversees, various reporting requirements for systems, and an overview of the MET program's requirements and resources. This course is near completion and will be available on the PRB's education website before the end of calendar year 2024.

The PRB also adopted governance recommendations for the 42 systems organized under the Texas Local Firefighters Retirement Act (TLFFRA) at the September 2024 board meeting that included feedback and suggestions from the systems. One common suggestion and adopted recommendation included the PRB providing more continuing education courses on various topics tailored to the needs of TLFFRA systems. The TLFFRA governance recommendations can be found on page 37 for more information.

Presentations given by PRB staff at Conferences

Throughout the 2023 and 2024 biennium, PRB staff have participated in various conferences provided by accredited training providers, including the Texas Association of Public Employees Retirement Systems (TEXPERS) and the Texas Local Fire Fighters Retirement Act (TLFFRA) Education Foundation. TEXPERS offers both core and continuing education courses, and those attending TLFFRA can receive continuing education credit. These two training providers hold well attended conferences among MET participants and frequently invite the PRB to present. Staff presentations covered various topics with some available for continuing education credit for MET participants.

June 2023

The PRB executive director and policy analyst presented an overview of the PRB at the TLFFRA Peer Review in Austin. The presentation covered the agency's primary duties, resources available to TLFFRA systems, and a landscape of Texas public retirement systems. The presentation also provided more in-depth information on the Funding Soundness Restoration Plan requirement, since several TLFFRA system are subject to this requirement. The presentation was worth 0.75 hours of continuing education in compliance.

October 2023 and 2024

The PRB staff actuary moderated an actuarial panel at two consecutive TLFFRA annual conferences consisting of actuaries representing multiple TLFFRA systems. The panels discussed relevant and timely actuarial topics, including how actuarial assumptions may respond to short term events and strategies used by TLFFRA systems and their sponsors to improve funding. The panels were each worth 1.25 hours of continuing education in actuarial matters.

April 2024

The PRB executive director and deputy director presented on updates to various PRB initiatives impacting systems and stakeholders at the TEXPERS conference in Dallas. The updates included more information on the TLFFRA governance project, changes to the Pension Funding Guidelines, and investment policy statement guidelines. The presentation also provided participants with reminders of how they can provide feedback on PRB projects, remaining PRB meetings, and the upcoming Funding Soundness Restoration Plan due date of September 1, 2025.

May 2024

The PRB executive director and policy and communications manager presented on the TLFFRA governance project at the TLFFRA Alva Littlejohn Peer Review in Tyler. PRB staff discussed the project with multiple TLFFRA systems, gained feedback, and answered questions about the project and draft recommendations. The presentation was worth one hour of continuing education in governance.

August 2024

The PRB staff actuary presented the PRB's 2024 updates to the Pension Funding Guidelines at the TEXPERS Summer Educational Forum in San Antonio. This presentation was later uploaded to the PRB education website for MET continuing education credit, with the permission of TEXPERS. The PRB also had a booth at this conference where staff were available to answer questions and provide resources for

stakeholders. This was the first time the PRB has had a booth at a conference held by an accredited training provider.

October 2024

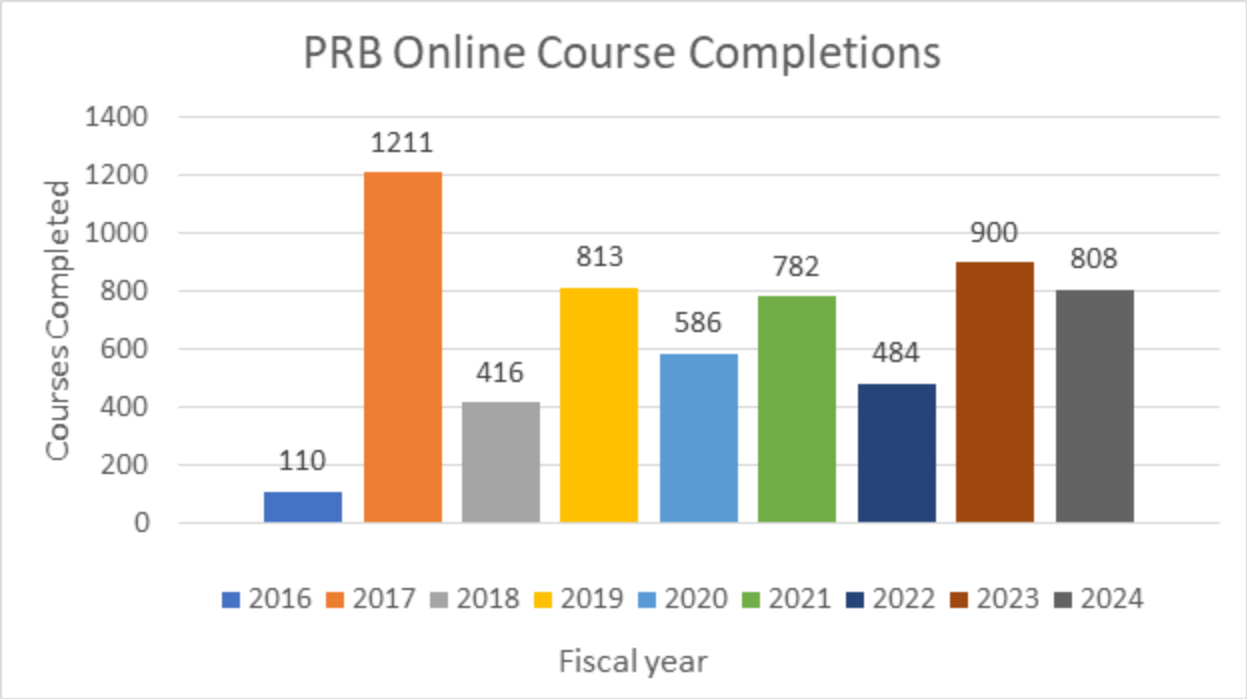
The PRB deputy director, Analytical Services Manager and TLFFRA Specialist, and Corpus Christi Firefighters' Retirement Fund Plan Administrator presented on the PRB's new Pension Online Reporting Tool at the TLFFRA Annual Conference in Irving. The presentation included a live demonstration on how to navigate the website and upload reports. The presentation was worth one hour of continuing education in compliance.

New LMS Software, Course Utilization Update

The PRB created online courses when first launching the Minimum Education Training (MET) Program in 2015. Over time, the trustees and administrators taking the online courses began reporting issues with the previous platform the agency used to host the courses. Staff received consistent feedback from users about specific problems with the platform, such as being unable to print off certificates or pause and resume a course.

In 2022, staff built a new website with the assistance of a consultant and changed to a new learning management system (LMS), which the agency launched in early 2023. The new LMS has features that address many of the past complaints. It also allows individual users to create their own logins and have their own unique user dashboard where they can view the courses in which they are currently enrolled. The dashboard also shows users their previous course certificates for any course completed on the platform. Another feature of the new LMS is it allows the PRB the ability to utilize videos as a different type of training method.

A new feature on the education website is the addition of continuing education (CE) courses. Previously only core courses were available, which trustees and administrators could complete again for CE credit. The PRB has sought to expand the program and offer CE courses, which the new LMS has enabled.



Overall, the response to the new education website and LMS has been positive. The above graph shows the total number of course completions for both core and CE courses for each fiscal year. Odd years tended to have higher completion rates because many trustees were on their two-year CE cycle and tend to complete all four hours of training in one year. Excluding the 2017 fiscal year, which was the first year the education requirement was in place and all trustees and administrators were required to complete seven hours of training, the 2023 launch of the new education website saw the largest number of course completions.

Sponsor Accreditation

As of August 31, 2024, the PRB has 18 accredited MET training providers, previously referred to as "sponsors." Accredited training providers consist of nine retirement systems offering in-house training and nine third-party training providers. Of the 18 approved, five renewed their accreditation and all training providers up for renewal renewed their accreditation.

Frequent education providers, including public retirement systems conducting in-house training, may apply to become accredited training providers with the PRB and give MET credit for their courses.

In 2024, PRB staff made updates to the training provider accreditation application process while reviewing MET program rules. One update to the application requires training providers seeking core accreditation to obtain approval for all core courses to be offered.

The PRB also updated the MET program rules that aim to increase transparency amongst training providers, address any concerns or changes training providers would like to see, and adjust requirements for retirement systems offering in-house training to streamline their accreditation. These updates included the creation of a recordkeeping requirement for course evaluations completed by participants so feedback can easily be referenced and provided to the PRB if the agency asks for it. Additional updates introduced more options for training providers to verify participant attendance,

addressing questions staff had received about this requirement. Another major update addressed concerns received from retirement systems providing in-house training regarding certain obligations they had to meet that seemed redundant as the information could easily be found in board meeting minutes and other materials.

Other changes to Chapter 607 MET rules, including those concerning recordkeeping and reporting requirements for training providers are discussed further on page 12.

When the PRB accepts an application to become an accredited training provider, the retirement system or training organization is accredited for two years. At the end of those two years, the training provider must apply for renewal of their accreditation, and if granted, is then a training provider for four years before they must renew again.

Retirement systems or training organizations that do not wish to become an accredited training provider but would like to offer MET credit for a course may apply for approval of individual courses. The PRB currently has accredited nine individual courses provided by non-accredited training providers.

A list of current accredited training providers can be found online on the PRB's accredited training providers and courses page.

MET Reporting and Compliance

The PRB requires systems to annually report training completed by their trustees and administrators during the previous period. The PRB uses the information received from systems to update each trustee and administrator's MET compliance status and compile the *Public Retirement System Compliance with Minimum Educational Training Requirements* report (Appendix H). This report shows the current compliance status of each trustee and administrator's most recent training cycle.

Currently, trustee and administrator MET cycles depend on individual term start dates, so many trustees and administrators are in the middle of their training cycle and may be reported as "in progress." Individuals with this designation have not yet completed their required training but have time remaining in their current cycle to meet the requirements. Trustees and administrators with at least one previous MET cycle where they did not meet the training requirements are labeled as "not compliant."

The PRB recently updated the Chapter 607 MET rules, which included changes to trustee and administrator cycle start dates, requirements, and more. Trustees and administrators will be moving to calendar year cycles instead of cycles dependent on their individual term start dates, and continuing education cycles will move from two years to one year. Visit 'Rule Review: Chapter 607' for more information on MET rule changes.

The following table provides aggregate MET compliance information for all trustees and administrators, by retirement system type, as of January 9, 2025 and according to previous MET rules.

The following systems have provided reports to update their system administrators and trustees' compliance since initial publication: Corsicana Firemen's Relief & Retirement Fund, Dallas Police & Fire Pension System, Dallas/Fort Worth Airport Board DPS Retirement Plan, Denton Firemen's Relief & Retirement Fund, El Paso Firemen & Policemen's Pension Fund, Guadalipe-Blanco River Authority, Houston Firefighter's Relief & Retirement Fund, Laredo Firefighters Retirement System, Lower Colorado River Authority Retirement Plan, McAllen Firemen's Relief & Retirement Fund, Odessa Firemen's Relief & Retirement Fund, Retirement Plan for Employees of Brownsville Navigation District, San Antonio Fire & Police Pension Fund, and Waxahachie Firemen's Relief & Retirement Fund.

MET Compliance

As of November 15, 2024

System Type	Percent of Trustees/Administrators Compliant
Statewide	**93.18%**
Municipal	**82.24%**
Local Fire Fighter	**60.49%**
Special District and Supplemental	**59.90%**

TECHNICAL ASSISTANCE

System Technical Assistance

An important service the PRB provides is technical assistance for the legislature, public retirement systems, state agencies, and members of the public. This technical assistance includes providing information about legislation or answering questions about reporting requirements and compliance.

Staff responds to all technical assistance requests in a timely and thorough manner. The agency achieved 118 percent of its general technical assistance goals in fiscal year 2023 and 52 percent for fiscal year 2024. Fiscal year 2024's percentage reflects the PRB's optimization of the exceptional item allocations provided by the 88th Legislature to improve the agency's online accessibility, allowing stakeholders to search for and retrieve for themselves from the PRB website much of the information they previously requested from the agency. Administrators are now able to submit and review reports via the new Pension Online Reporting Tool. Additionally, the new education website has allowed users to view completed MET courses, generate their own certificates of completion, and access the PRB's growing continuing education the PRB offers. The Public Pension Data Center underwent practical, targeted updates that made system information more readily accessible.

News Clips

The PRB staff produce weekly News Clips, sent via email and posted on the agency website, that contain an overview of local and national news related to public retirement systems and the economy. The clips include news covering PRB updates and initiatives, Texas pensions and economy, national pensions and investments, studies and reports, and editorials and perspectives. Subscriptions to the PRB News Clips increased by 24 percent in the 2023 and 2024 biennium, with just four people unsubscribed or otherwise removed from the News Clips email list.

Customer Service Survey

The agency performs a Customer Service Survey during even-numbered years as part of the agency's strategic planning process. The survey covers the PRB's educational materials, mission, transparency, communications, TLFFRA relations, facilities, staff, complaints, timeliness, and overall satisfaction.

Staff conducted the most recent survey from March through April of 2024 with a response rate of 10.22 percent. The participants' average overall satisfaction with the agency was 84.09 percent. While responses were generally positive overall, some respondents indicated a desire for more proactive trainings, guidance, and reminders. The PRB works diligently toward continuous customer service improvement and communication with stakeholders. Staff has reviewed all of the feedback received from the survey and has used the results to help drive new projects such as expanded educational offerings and new guidance materials.

Education Services Survey

The PRB conducts an Educational Services Survey during odd-numbered years, focusing on the Minimum Educational Training (MET) program and other resources such as the Texas Public Pension Data Center, Texas Local Fire Fighters Retirement Act (TLFFRA) resources, legislative session material, and weekly News Clips. This biennium, the survey was conducted during April and May of 2023. The results showed an average overall satisfaction with PRB educational services rating of 97.7 percent, with the questions related to the data center, MET program, and News Clips receiving satisfaction ratings over 96 percent.

In January 2023, the PRB launched a new Learning Management System (LMS) to improve functionality and modernize the MET course website. Stakeholders were satisfied with the new website's usability and with the courses provided by the PRB. Stakeholders were also able to provide suggestions for new continuing education courses the PRB could provide, with common suggestions for courses covering investment fees, communications between systems and members, and practical applications of PRB requirements for administrators. Stakeholders also suggested that new continuing education courses come in additional formats or partnerships.

PRB staff has since released two new courses and is set to release another by the end of calendar year 2024, all in new formats. Staff will continue to develop and publish new continuing education courses throughout the upcoming biennium.

The PRB provides various training, assistance, and resources during the legislative session to systems, legislators, and other stakeholders. Stakeholders were satisfied with the materials the PRB provided during the 88th Legislative Session, with the satisfaction rating increasing from 83.9 percent in 2021 to 97.4 percent in 2023. The cause of the increase is unclear.

The Educational Services Survey Results may be found here.

Other Data Requests

The PRB also assists the public with obtaining technical assistance and information via the complaint process and open records requests.

The agency updated its *Complaint Policy and Procedures* during the biennium. The purpose of the complaints process is to provide conclusions and recommendations on whether a system's policies and procedures were sufficient and followed correctly. The PRB reviewed and handled one complaint pursuant to the agency's policies and procedures.

During the 2023-2024 biennium, the agency implemented a policy of requiring all requests for data be submitted as Public Information Act (PIA) requests, to ensure that all information is reviewed and provided appropriately, and to ensure that all requestors are treated fairly and consistently. The PRB

fulfilled 13 PIA requests in fiscal year 2023 and 25 requests in fiscal year 2024. The PRB reports information to the Office of the Attorney General on PIA requests that the agency receives, as required by the PIA.

SPECIAL ASSISTANCE FOR TLFFRA SYSTEMS

Role of the TLFFRA Specialist

The PRB oversees 42 defined benefit retirement systems organized under the Texas Local Fire Fighters Retirement Act (TLFFRA), Article 6243e, Vernon's Texas Civil Statutes. These systems are typically small in terms of both assets and staff compared to most other Texas systems, and range between less than $5 million for the smallest system to more than $250 million for the largest. Part of the PRB's mandate is to offer specific services and resources tailored to the needs of these systems. For example, PRB staff often makes educational presentations at TLFFRA events, such as the annual conference. The PRB also publishes a TLFFRA-specific report on a biennial basis, providing comparative actuarial and financial information on TLFFRA systems. More specific information on these presentations and the TLFFRA report can be found elsewhere in this report. the PRB's TLFFRA specialist works closely with TLFFRA systems to provide technical assistance and information on various issues, including answering questions relating to the TLFFRA statute, and assisting the systems with reporting requirements.

Conference Presentations

PRB staff play a role in providing training to TLFFRA systems and worked with the TLFFRA Education Foundation to present on key educational topics at both the 2023 and 2024 TLFFRA annual conferences and TLFFRA peer review trainings. The TLFFRA Education Foundation is a nonprofit organization formed for the purpose of educating firefighter pension board members by providing educational opportunities that may include annual statewide conferences, regional workshops, lectures, and other events.[7]

At the 2023 TLFFRA annual peer review training, an event usually held in the spring, the PRB's executive director, deputy director, and policy analyst provided attendees with an overview of the PRB; including primary duties of the agency, resources available to TLFFRA systems, a landscape of Texas public retirement systems, as well as information about Funding Soundness Restoration Plans (FSRPs) and the new rules that the PRB adopted in the fall of 2022.

The PRB senior actuary has hosted an actuarial panel at the past two TLFFRA annual conferences consisting of actuaries representing multiple TLFFRA systems. The panels discussed timely and relevant topics such as how long-term actuarial assumptions may respond to short term events such as inflation in 2023 or large pay increases in 2024, and strategies used by TLFFRA systems and their sponsors to improve funding.

At the 2024 TLFFRA peer review, PRB's executive director and policy and communications manager presented on the PRB's draft TLFFRA governance recommendations. At the time of the presentation, staff had been working for several months on reviewing TLFFRA governance and identifying areas of concern that could become potential recommendations for the board to ultimately recommend to the 89th Texas Legislature. PRB staff provided an overview of the issues identified and proposed recommendations and received valuable feedback and perspectives from peer review participants. Staff used, in part, meetings with stakeholders and a working group that consisted of TLFFRA board trustees, system administrators,

[7] "Who We Are," TLFFRA Education Foundation, accessed November 4, 2024, https://www.tlffra.org.

and various city staff to identify issues and inform the recommendations. Key governance topic areas included benefit decision making and TLFFRA board structure.

At the 2024 annual conference, the PRB's deputy director and TLFFRA specialist presented on retirement system reporting requirements and provided a live demonstration of the agency's new report submission portal, the Pension Online Reporting Tool, in collaboration with a TLFFRA system administrator. This presentation included an overview of all the reports TLFFRA systems must submit to the PRB, examples of what PRB staff is looking for when reviewing these reports, as well as how the PRB uses the data collected to assist TLFFRA systems.

2024 TLFFRA Report

Every two years, the PRB releases its TLFFRA Pension Report which contains financial, actuarial, investment, and other key information for all 42 paid/part-paid TLFFRA retirement systems. The goal of the report is to help TLFFRA systems by allowing them to compare their data easily with peer systems, including providing a list of contractors each system hires, such as actuaries and investment managers.

A new addition to the 2024 report was the investment expenses as a percentage of assets by system. As investment expense information is one of the newest reporting requirements for systems, the PRB is now able to provide new data to the systems and the public. The report also breaks down total expenses to show direct and indirect manager fees and investment service fees, such as custodial and consulting fees. The expense data, in combination with the list of contractors and investment return data, allow TLFFRA systems to better assess the fees they are paying toward the management of their investments. Systems can use this information to determine if the fees they are currently paying are reasonable compared to the other options available to them. The PRB completed the most recent report in March of 2024.

88TH LEGISLATURE

Public Pension Legislation & Impact Statements

During legislative sessions, the PRB tracks bills related to Texas public retirement systems. In 2023, tracking reports for bills during the 88th Regular Session were posted regularly on the PRB website as a quick reference for stakeholders. In total, the PRB tracked 136 bills related to pensions during the most recent regular Legislative Session.

PRB staff also prepare actuarial impact statements during sessions, as required by Section 802.301, Texas Government Code. Impact statements contain an analysis of the actuarial effects a specific bill would have on state and local retirement systems and provides vital technical information for the legislature to use when considering these bills. The PRB issued 66 actuarial impact statements to the Legislative Budget Board during the most recent Regular Session and two during the four special sessions.

Presentations to the Legislature

As part of the agency's role providing pensions information and analysis to the legislature, the PRB offers informational presentations and expert testimony throughout legislative sessions and the interim periods. On January 25, 2023, staff provided a seminar to legislative staff and other government relations stakeholders. The presentation, titled "Pension Basics Legislative Seminar," offered an overview of both the agency and Texas public retirement systems. This is a recurring training organized at the beginning of each legislative session to provide legislative staff, especially those working on pension legislation, with the background information they need to make informed decisions.

During the interim, the executive director and senior actuary presented to the House Pensions, Investments, and Financial Services committee on September 19, 2024, to provide requested updates on the status of the Dallas Police and Fire Pension Fund, as well as systems with high funding periods. The presentations are included in Appendix I.

RECOMMENDATIONS TO THE LEGISLATURE

TLFFRA Governance

During the 2023-2024 biennium, the PRB studied TLFFRA governance structures and identified several issues that could be addressed through legislative changes or additional resources produced by the agency. The full report on *TLFFRA Governance Issues and Options* is available on the agency website.

Staff proposed 20 recommendations, some of which were alternative versions of each other, and the board adopted 18 recommendations. The only recommendations not adopted were those staff presented as alternatives to other similar recommendations. The following recommendations include only the legislative recommendations, which would require statutory changes. A full list of all proposed staff recommendations may be found in Appendix J.

TOPIC AREA 1: SYSTEM FUNDING AND DECISION-MAKING PRACTICES

Identified Issue: TLFFRA statutory decision-making processes may hinder progress toward resolving funding issues faced by many TLFFRA systems and their sponsors.

Topic Area 1 Legislative Recommendations
1.1 Require the governing body of the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote. This recommendation would ensure sponsors and systems work collaboratively on potential changes before going to a member vote and could change the incentive structure to make it more likely sponsors would be less hesitant to provide necessary employer contributions.
1.2 Authorize the system and the governing body of the sponsoring entity to enter into a separate agreement defining parameters for member contribution and benefit decisions. These agreements may be reflected in a jointly developed and adopted funding policy as required by Section 802.2011, Texas Government Code. This recommendation would allow for both parties to proactively define conditions in which contribution and benefit changes could be made, ensuring mutual agreement especially for those systems for which the sponsoring entity pays an ADC.
1.3 Proposed benefit changes must be approved by a majority of the board plus one member.

TOPIC AREA 2. BOARD STRUCTURE AND MEMBERSHIP

Identified Issue: TLFFRA board structure may need updating to address identified concerns and ensure balanced representation.

Identified Issue: TLFFRA boards occasionally struggle with disengaged and/or noncompliant trustees, but systems lack tools and policies to address these issues.

Topic Area 2 Legislative Recommendations
2.1a Provide statutory authorization for TLFFRA boards to adopt a policy that would allow for the conversion of one citizen seat to a city appointee position if both citizen seats are unable to be filled within 120 days. Authorize TLFFRA boards to adopt a policy that adjusts the number of days after which a position is deemed unfilled so long as the number is fewer than 120 days. The policy must include the length of time the agreement is effective and specify the term length for the converted city appointee seat. Additionally, remove the exclusion from the TLFFRA statute that prevents a city employee from participating as a citizen trustee.
2.2 Allow for one active member seat to be filled by either an active or retired system member.
2.3 Require citizen members be elected by a minimum of four members of the system board. Four members constitute a supermajority of the five board members that vote to select citizen members.
2.4 Update the citizen seat provision to specify that a retired member of the plan may not serve in a citizen position. This recommendation would not prohibit retired members of other systems from serving on a particular TLFFRA board.
2.5 Formalize in statute that it is a ground for removal from the board when a member attends less than 75 percent of the regularly scheduled board meetings that the member is eligible to attend during a calendar year without an excuse approved by a majority vote of the board. If the member is an ex-officio member, then they may be requested by the board to select a designee to serve in their position.
2.6 Provide statutory authorization for boards to adopt a policy for removing a board member noncompliant with Minimum Educational Training (MET) requirements.
2.7 Include statutory language specifying the mayor may appoint a designee from city council or city staff. Also specify that the CFO of the sponsoring entity, or the individual acting in that capacity, may appoint a designee from city council or city staff who has a financial background.

TOPIC AREA 3. TRANSPARENCY AND COMMUNICATION

Identified Issue: Information may not be easily accessible by all parties, including sponsoring entity and membership.

Topic Area 3 Legislative Recommendations
3.1 Require the sponsoring entity of a TLFFRA system to make publicly available on their website reports submitted to the PRB by the system. The sponsoring entity may link to the report on the system's website if the report is already posted by the system. This change would facilitate access to information about TLFFRA systems even in situations where the system is unable to maintain an independent website.

TOPIC AREA 4. ADDITIONAL AREAS FOR RESEARCH AND CONSIDERATION

Identified Issue: Additional information-sharing mechanisms and resources may be helpful for TLFFRA systems.

Topic Area 4 Legislative Recommendation
4.1 Propose language authorizing boards to adopt an education policy.

Investment Practices and Performance Evaluations

The 86th Legislature enacted Senate Bill (SB) 322, which added Section 802.109, Texas Government Code, concerning Investment Practices and Performance Evaluations (IPPE). The statute requires public retirement systems with assets of at least $30 million to select an independent firm with substantial experience to evaluate the appropriateness, adequacy, and effectiveness of the system's investment practices and performance and to make recommendations for improving its investment policies, procedures, and practices.

After the second round of evaluations submitted by retirement systems in 2024, the PRB identified opportunities where modifications to the statute may prove beneficial both in terms of the reporting schedule as well as applicability of the requirement based on asset levels. The PRB identified two areas for improvement which are intended to provide clarity to systems on applicability of the IPPE requirement and to the PRB for administering and overseeing compliance with the requirement. The two recommendations would primarily impact systems that become subject to the six-year reporting requirement when their assets reach $30 million or more, and systems moving from a six-year reporting cycle to a three-year cycle when they reach $100 million or more in assets. For example, currently two systems reported in calendar year 2023 that their 2022 fiscal year end net total assets were below the $100 million threshold. In calendar year 2024, they both reported 2023 assets above the $100 million threshold now requiring them to complete an IPPE every three years. If these two systems were to start the IPPE process immediately or in calendar year 2025, their reporting period will be slightly out of sync with the other $100 million systems. This could result in the PRB needing to track these systems' unique reporting due dates that will not match with the other $100 million systems. Also, those two systems will be conducting the evaluations at a time when no other system will be reporting and as such would be the only evaluations to analyze in an investment performance report on some years. This would largely prevent the PRB from analyzing these IPPEs in the context of those submitted by other peer systems, hindering the ability to do quality comparisons and identify overall trends.

At the July 25, 2024, board meeting, PRB staff presented initial drafts of the recommendations and then requested feedback from systems. At the following September 25, 2024, meeting, staff presented a final version of the recommendations for approval. The board adopted the following recommendations for consideration by the legislature that will help enhance clarity and efficiency for the investment practices, benefitting plan members, taxpayers, and local governments:

1. **Modify the reporting timeline requirement to simplify the reporting due date to be the same for all systems based on a respective six- or three-year reporting cycle.**

Goal. Clarify how often IPPE reports should be completed by retirement systems, the expected due dates of the reports, and change to reporting cycles for simplification. Current statute specifies that systems trigger the requirement or move from a six-year to a three-year reporting frequency based on the preceding year's assets. However, statute is less clear on when that report will be due—three or six years from hitting the asset threshold, or on the same timelines as other systems already subject to the requirement based on the effective date of SB 322.

Issue. A system that become applicable to the IPPE statute or assets increase to above $100 million in assets can potentially because of timing become required to submit a report in a year when no other system would report. For example, as the 24 systems with assets between $30 million and $100 million already reporting continue to grow in size, inevitably many of them will cross the $100 million threshold and will potentially be out of sync with reporting compared to the 42 systems with at least $100 million in assets already.

Recommendation. Adjust language for reporting timeline to a cycle-based approach that has a three-year and six-year reporting cycle based on applicability. Additionally, clarify Section 802.109, Texas Government Code as follows, "If a retirement system's asset size increases in a fiscal year to above one of the specified thresholds, the system will complete the evaluation by the next cycle's due date."

1) For systems already reporting, this change would not impact current expectations.
2) The update would provide additional clarification on how the PRB should handle reporting expectations as retirement system assets grow over time and their requirements change. It would prevent systems from triggering unique reporting cycles out of sync from all other systems, making evaluation and analysis by the PRB less efficient and less effective. Based on the timeline set up in SB 322 (86R), systems have been grouped together in a three- or six-year cycle based on applicability at the time the bill passed. While no systems have newly triggered the six-year requirement since then or moved above $100 million to trigger the three-year requirement, several are close and may hit those targets soon.

Benefits:

- Simplify schedule by defining two clear reporting cycles for this requirement with known due dates.
- No single system would have a unique reporting deadline caused by timing of when they became subject to the six-year requirement by crossing the $30 million threshold or by crossing the $100 million asset size threshold for three-year reporting. The PRB receiving only one or two IPPEs in a given year prevents meaningful comparisons and analysis with other systems' evaluations.
- This change would not impact most systems. The 42 systems with assets over $100 million already reporting would not be impacted and only the systems with less than $100 million in assets would potentially be affected.

2. Modify the reporting applicability criteria to include total pension liabilities only when lowering the reporting requirement.

Goal. Clarify the criteria for applicability of the IPPE requirement by adjusting the language that references the total assets of the preceding fiscal year. Assets would continue to determine applicability initially, but only total pension liabilities (TPL) would be used to determine whether a system continues to be subject to a more frequent IPPE requirement.

Issue. Currently a system that is required to complete a subsequent evaluation is required to complete an IPPE every three or six years depending on asset size but does not have to provide the report to the PRB until the following year. Systems with assets that fluctuate around the $30 or $100 million threshold have an unclear requirement if assets rise above a threshold and back below before a report is due. This lack of clarity is due to the fact that systems report on their assets annually, while the IPPE requirement operates on a three and six-year timeline.

Recommendation. Adjust applicability language to include additional criteria that prevents normal asset fluctuations between years from obscuring reporting expectations. For example, if a system's assets reach or exceed $100 million in one year, but dip below that threshold the following year, current statute does not provide clarity on whether the system would still be required to complete an IPPE.

Statute	Assets 2024	TPL 2024	Assets 2025	TPL 2025	Requirement
					3 years
Current	$105 mil	$190 mil	$98 mil	$185 mil	6 years
Recommended	$105 mil	$190 mil	$98 mil	$185mil	3 years

Statute could be modified such that the applicability for a three- or six-year reporting requirement will still use the preceding fiscal year's assets to determine the reporting requirement initially; however, once the assets rise above the specified asset threshold, only when both the assets and the total pension liability (TPL) decrease below the asset threshold will the reporting requirement be lowered or no longer applicable. The board chose to use TPL because pension liabilities are the main concern systems and systems that are underfunded would be kept in the more frequent reporting cycle once assets cross the statutory thresholds. In practice this change would keep systems near the asset thresholds in a more frequent reporting schedule unless they are at or above fully funded status.

Benefits:

- Triggering the requirement would still work the same way as current statute because asset thresholds in current law would not change. This recommendation would only potentially impact the reporting frequency of systems that already triggered the requirement and their assets are close to the $30 million and $100 million thresholds.
- This change would clarify how to handle systems' assets fluctuations year over year by adding additional criteria. Statutory clarification would provide more certainty for both the PRB and the systems subject to the IPPE requirement.

APPENDICES

Appendix A – TLFFRA Governance Project Stakeholder Feedback Summaries

Potential TLFFRA Governance Issues and Recommendations
Summary of Feedback Received and Possible Alternatives – May 9, 2024

Staff presented a report on potential Texas Local Fire Fighters Retirement Act (TLFFRA) governance issues and related recommendations to the Actuarial Committee on January 25, 2024. The document was divided into four topic areas covering different aspects of TLFFRA system governance. On February 12, 2024, staff requested feedback from stakeholders on the proposed recommendations.

The PRB received seven responses on the issues and recommendations document. The comments predominantly came from systems, but staff also received comments from a city, a law firm, and other stakeholders. Most of the recommendations received feedback that was generally positive. However, stakeholders expressed concern regarding some of the proposed recommendations, particularly regarding statutory decision-making processes and TLFFRA board structure. To address those concerns, several stakeholders provided alternative options that staff would like to present to the committee. The following are highlights from the feedback, along with a brief discussion from staff and updated recommendations for the committee's consideration.

TOPIC AREA 1: SYSTEM FUNDING AND DECISION-MAKING PRACTICES

Identified Issue:
• TLFFRA statutory decision-making processes may hinder progress toward resolving funding issues faced by many TLFFRA systems and their sponsors.

Staff Recommendations - Statutory/Legislative

1.1 Require the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote. This recommendation would ensure sponsors and systems work collaboratively on potential changes before going to a member vote and could change the incentive structure to make it more likely sponsors would be less hesitant to provide necessary employer contributions.

OR

[New] 1.1a Require the system to provide notice to the sponsor of key plan changes during a comment period preceding a member vote. Any comments would be made publicly available to members before a vote.

1.1 Feedback	
Odessa Firemen's Relief and Retirement Fund	“The board does not support the sponsoring entity voting on fund changes or ballot options prior to a member vote. All board members are fiduciaries of the plan regardless of their individual role. The goal is not to stifle cooperation between board and the sponsoring entity but ensure all parties are represented fairly.”
Texarkana Firemen's Relief and Retirement Fund	"We are already required to have actuary approval for any retirement benefits. This requirement is adequate to ensure that no unaffordable benefit increases are issued."
Jackson Walker LLP	“The suggestion to disrupt the existing balance by requiring the plan sponsor to approve any plan changes, or have a formal agreement with the plan, is potentially problematic. Giving municipalities this authority would potentially politicize important plan decisions by making city councils a key decision-maker and shift certain administrative decisions away from the board who serves in a fiduciary capacity. To better address these issues, we might suggest a framework where the plan sponsors are given notice of key plan changes and have the ability to comment on them, as opposed to having actual decision-making authority.”
City of Galveston	“Governing boards and plan sponsors should share ownership of needed contribution adjustments and benefit changes in addition to jointly developing written funding policies and amendments to achieve full funding goals. Require a joint "develop, review and concur" partnership role between the plan sponsor and governing board. Such a "checks and balances" decision-making approach over critical plan policies, benefits and contributions prevents deviating from progress towards funding goals. Future significant plan changes should require a super majority vote of the trustees. Also, when the plan underperforms.”
Galveston Firefighters Pension Fund	“The fear that plans will increase benefits due to the fact that the changes must be first approved by the system’s actuary, as well as by a majority vote of participating members of the system, I can understand. I would truly like to see a study of the 42 TLFFRA funds on when the last time a fund has had a benefit enhancement. I would believe that most funds have been cutting benefits and increasing contributions, as the case with Galveston. Many TLFFRA fund sponsors have not increased their contribution rate in recent years, and I believe the PRB has knowledge of this.”

Staff Discussion:

The goal behind the original staff recommendation was to improve collaboration between the two parties by ensuring the sponsor has a formal role in signing off before members vote on ballot options. Given stakeholder concerns, new option 1.1a would ensure the sponsor receives the potential ballot options and has an opportunity to provide feedback prior to a vote, in addition to existing statutory requirements that the system board and actuary approve of those options before members may vote on them. Systems would then be required to publish any received comments when an option goes on the ballot. Sponsors would not be required to approve a ballot option, but there would be a mechanism to

ensure sponsors are informed and their publicly available feedback would allow members to see why the sponsor does or does not support a potential ballot option.

Sponsors have expressed concerns about benefit enhancements which has led to some wariness about increasing contributions. Staff may consider researching previous benefit enhancements among TLFFRA systems, including if and how the sponsor was involved and the overall context, including impact on system funded status, of those enhancements. Through discussions with TLFFRA systems regarding their Funding Soundness Restoration Plans and through the TLFFRA governance workgroup meetings, staff have found systems use several approaches to working with their sponsor on plan changes, and further researching these approaches can be part of the guidance recommended under Staff Recommendation 1.2.

Staff Recommendations - PRB guidance/technical assistance

1.2 The PRB may publish guidance based on experiences of multiple TLFFRA systems for improving overall plan governance. This may take the form of best practices for creating a joint working agreement (and ultimately jointly adopted funding policies) between the system and sponsor, encouraging the use of guardrails to limit the system's ability to enact benefit increases or contribution decreases without consideration of factors which may include sponsor agreement and the plan's actuarial health. Such guidance could also highlight methods for effectively educating members in preparation for a vote on plan changes. Included in this effort could be compiling actual agreements and funding policies as examples and making them publicly available.

1.3 The PRB may create a continuing education (CE) course on successful system reforms, potentially featuring a panel of TLFFRA stakeholders.

1.2 Feedback	
Texarkana Firemen's Relief and Retirement Fund	"… I don't see a problem with issuing guidance which may benefit systems who may not have a good relationship between members and the sponsor. Nor do I see a problem with using "guardrails" to help guide benefits. I strongly caution against any mandatory "guardrails" which would require city or sponsor approval of retirement benefit improvements as referenced in Number 1 above."
Jackson Walker LLP	"We would also suggest that plans adopt benefit improvement policies or implement other 'guardrails' for making contribution and benefit decisions." "That said, requiring a separate benefit improvement policy is unnecessary; as the PRB Report notes, many of these guardrails would be appropriate to be addressed through a jointly developed funding policy, which is already a statutory requirement."
City of Galveston	"The Legislature should require sponsors and governing boards to work jointly not only when developing funding policies, but also when acting on benefit and/or contribution changes that could affect plan unfunded liabilities."

	"If contributions are fixed, then other components such as benefits must be flexible to bring the financing equation back into balance in order to avoid additional unfunded liabilities. Governing board actions to increase benefits or reduce contributions should be controlled through the use of an actuarially determined contribution rate (ADCR) along with a closed funding period not to exceed thirty (30) years."
1.3 Feedback	
Texarkana Firemen's Relief and Retirement Fund	"I believe [a continuing education (CE) course on successful system reforms] could be very beneficial for retirement plans who are not performing well. I think it should require attendance by both the membership side and the city or sponsor side of the TLFFRA boards. It would also be beneficial for city or sponsor administrators who are not members of the TLFFRA board."

Staff Discussion:

The proposed guidance would be intended to serve as a resource document for systems to reference when they develop their own policies. The goal would be to showcase successful reforms and agreements from similar systems that a TLFFRA system could use as a starting point. Staff concurs with the suggestion for plans to adopt policies regarding benefit and contribution changes, and further discusses such policies in the *Guidance for Developing a Funding Policy*. The guidance and *Pension Funding Guidelines* address using closed funding periods not exceeding 30 years and also suggest the use of an ADC rate as a best practice.

Staff agrees that the material covered in Minimum Educational Training (MET) program courses would be helpful for sponsors to review if they are interested. The PRB's courses are online and free for anyone to take, and the PRB encourages all interested parties to utilize those resources. At this time, staff is not proposing any changes to recommendations 1.2 or 1.3.

TOPIC AREA 2: BOARD STRUCTURE AND MEMBERSHIP

Identified Issues
• TLFFRA board structure may need updating to address identified concerns and ensure balanced representation. • TLFFRA boards occasionally struggle with disengaged and/or noncompliant trustees, but systems lack tools and policies to address these issues.

Staff Recommendations - Statutory/Legislative

2.1 Consider changes to statutory TLFFRA board structure. A potential option could be to eliminate one citizen seat and make it an additional city appointee and retain one citizen seat. Such a change would provide even representation between city and plan members but still retain one citizen member meant to represent taxpayers.

OR

[New] 2.1a Provide statutory authorization for TLFFRA boards to adopt a policy that would allow for the conversion of one citizen seat to a city appointee position if both citizen seats are unable to be filled.

[New] 2.1b Propose raising the total number of TLFFRA board positions to nine with the following composition:

- Three active members
- Three sponsoring entity designees
- Three Texas citizens

[New] 2.1c Propose statutory language prohibiting retired system members from filling a citizen seat on their system's board.

2.1 Feedback	
Texarkana Firemen's Relief and Retirement Fund	"In Texarkana, both of our citizen board members are financial professionals. The argument for giving the city or sponsor another board member is that both sides are represented equally. On the boards where the two sides don't work well together the city is not going to appoint a financial professional. They will appoint someone who they can make vote for their side. This move will reduce the amount of financial expertise on the TLFFRA board. Particularly, in Texarkana, it will reduce the amount of financial expertise on the board."
Galveston Firefighters Pension Fund	"With this I am against losing a citizen board position since this would impact our current board, but I can see that other TLFFRA funds might struggle to fill these positions. Galveston has never had this issue and most of the Board members are able to search out in the community to find a citizen willing to serve when there is a vacancy."
Port Arthur Firemen's Relief and Retirement Fund	"Each fund, based on their particular needs, should have the option to keep two citizen board members or convert one position to a "city member". This would solve the issue of removing a very productive member(s) and wasting the time, money, and education invested in that person because of a perceived governance issue that not all funds have. If a fund can't fill but one citizen position this option keeps local control, not PRB or state mandate. Changing the statute to a reasonable option lets the boards that are not having issues continue and not suffer the fate of those that are."

Odessa Firemen's Relief and Retirement Fund	"The board does not believe changing the board structure is necessary as each stakeholder is represented fairly. There is no one party that has the majority for any vote without support from the others. If altering the structure is found to be necessary, we would support increasing the total board number to 9 with there being 3 fire representatives, 3 city representatives, and 3 citizen representatives as opposed to removing a citizen (taxpayer) representative. We believe the important part here is that each trustee is obligated by fiduciary duty to act in the interest of the fund over the interest of the parties they represent." "We do believe that added direction could be given in the statute as to the prohibition of a member of the fund (retiree) acting in the role of a citizen trustee member to help eliminate any perceived conflicts of interest or undue majorities."

Staff Discussion:

The feedback indicates that not all TLFFRA systems are having difficulty filling citizen seat positions, so eliminating the seat could be potentially detrimental to some boards. Some systems may still benefit from having only one citizen seat and increased sponsor representation on the board, so staff provide option 2.1a, recommending a statutory change to authorize boards to adopt a policy allowing for the conversion of one citizen seat to a city appointee position if both citizen seats are unable to be filled. This would allow for boards to retain some local control over their board structure and select the option that works best for them.

Option 2.1b would propose recommending increasing the overall number of board seats, as suggested by Odessa Fire. One of the goals of the original recommendation was to help provide equal representation on the board. Increasing the total number of seats would allow for each seat type to have an equal distribution of members.

Texan residency is one of the few qualifications required for a citizen trustee. New option 2.1c would propose specifying in statute that the citizen trustee may not also be a retired member of the system whose board they would be serving. This potential option, as proposed by Odessa Fire, would also help maintain equitable distribution of perspectives on the boards.

Staff Recommendations - Statutory/Legislative

2.2 Provide statutory authorization for TLFFRA boards to remove disengaged/noncompliant board members. Some options may include:

- Authorize each board to adopt a policy for removing inactive or noncompliant board members. The specific criteria would be left up to each system's board.

- Include language allowing for appointed trustees to be removed by the mayor or elected trustees removed by members in accordance with procedures adopted by the board.
- Formalize in statute that absences beyond a certain percent of meetings or number of meetings is cause for removal, or a certain number of consecutive meetings.

OR

[New] additional 2.2 option:

- Formalize in statute that absences beyond a 50 percent of meetings in a fiscal year is cause for removal unless the board formally excuses the absence.

[New] 2.2a Include statutory language allowing the mayor to appoint a designee from city council if the mayor determines they are unable to actively participate on the board.

2.2 Feedback	
Jackson Walker LLP	"We believe that placing requirements on who may serve in that designated role may help in ensuring the plan sponsor is engaged (for example, if the mayor cannot serve as a trustee, the Act could require that a city council member be appointed)." "While this lack of attendance and engagement is problematic, we do not believe that the suggestion to authorize the board to remove trustees, the mayor to remove his designated appointee on the board, or permitting members to hold a "recall" election at any time is the proper solution." "Instead, the PRB Report's recommendation to impose a statutory attendance requirement, with an automatic removal provision if a trustee misses a certain number of consecutive meetings, would help TLFFRA funds address the lack of engagement by applying a clear, objective and consistent standard to all trustees."
Texarkana Firemen's Relief and Retirement Fund	"I believe it would be beneficial to TLFFRA boards to be able to remove absent or disengaged board members. I like the idea of leaving the decision on how to accomplish this to the local board. The board can craft criteria which fits their individual situation. I would caution against setting any minimum attendance requirements in statute. This could result in the loss of a really good board member who has encountered some sort of personal situation that required them to miss a few or a certain number of consecutive members. This criteria should also be left to each individual board which would be able to use some discretion in certain situations."

Staff Discussion:

Current recommendation 2.2 requests that authorizing language be added to statute allowing boards to adopt individualized policies. The individual policies themselves would be up to the systems to create. The agency may offer resources as a starting point.

Per recommendation 2.2a, the committee could also consider including a minimum statutory attendance rate, such as attending at least 50 percent of meetings during a fiscal year. Individual boards could further adopt policies themselves to increase the threshold or apply a limit on the number of consecutive meetings missed. Note that stakeholder feedback regarding specific attendance thresholds is mixed, with some stakeholders preferring an approach in which the specific criteria are left up to each board.

Staff has added new recommendation 2.2a that would allow for the mayor to designate an alternate appointee if they are unable to participate on the board. The appointment of a city council member, an elected official like the mayor, could help maintain communication between the two parties and ensure sponsor input and representation if the mayor is unable to serve on the board.

Staff Recommendations - PRB guidance/technical assistance

2.3 The PRB may compile information and guidance on processes used by TLFFRA systems for identifying citizen members with qualifications and example policies used by systems to set standards for engagement of their board members, including attendance policies and education policies. This recommendation would provide information and assistance to TLFFRA systems while not mandating specific qualifications for citizen members, which may be difficult for some systems to comply with.

2.3 Feedback	
Odessa Firemen's Relief and Retirement Fund	"…giving directions as to the experience or vocation of these trustee position holders could unnecessarily burden TLFFRA boards in filling an already potentially difficult spot. We believe boards do and should consider those kinds of qualifications when seeking volunteers to fill these roles; but we should not be statutorily obligated to do so. We do not mandate that kind of knowledge from the firefighters that fill the trustee roles, nor the mayoral role- we should do nothing other than represent the taxpayers by statute."
City of Galveston	"Education and training requirements will ensure board members have the background to make informed decisions to preserve a healthy and sustainable pension plan.

Staff Discussion:

At this time, staff is not proposing to require any specific education or experience qualifications in statute for citizen seat positions. During discussions with stakeholders, some stakeholders indicated they needed assistance with identifying potential candidates for those positions and what types of experience would be helpful to have on the board. With the current recommendation as is, individual boards would still be able to adopt and customize different qualifications based on the needs of their boards, with the potential for the PRB to facilitate information sharing among systems regarding board member qualifications.

TOPIC AREA 3: TRANSPARENCY AND COMMUNICATION

Identified Issues
• Information may not be easily accessible by all parties, including sponsoring entity and membership. • Some TLFFRA systems have difficulty contacting their sponsoring entity to discuss plan issues. • Minutes and board meeting materials are sometimes incomplete or not comprehensive.

Staff Recommendations - Statutory/legislative

3.1 Require the sponsoring entity of a TLFFRA system to make publicly available on their website reports submitted to the PRB by the system. This change would facilitate access to information about TLFFRA systems even in situations where the system is unable to maintain an independent website.

PRB guidance/technical assistance

3.2 The PRB may issue guidance or conduct continuing education on transparency and communication topics.

3.2 Feedback	
Jackson Walker LLP	"The PRB Report suggests that various additional administrative measures be put in place to enhance communication and transparency. While we agree with some of these suggestions, we believe that the administrative costs and burdens of any additional requirements must be seriously considered."

Staff Discussion:

Staff concurs that administrative costs should be considered and acknowledges that the creation of policies may carry a cost for the system. However, having policies in place that help systems establish and maintain sound governance practices could improve funding overall down the line. Additionally, some of the proposals could reduce administrative costs for the systems, such as having sponsors post reports on their websites rather than requiring systems to allocate resources for this out of small administrative budgets. Finally, the only requirement staff propose would be for cities to post TLFFRA system materials on their own websites, whereas guidance on transparency and communication would be for the purpose of assisting systems to improve in these areas, not imposing new requirements.

TOPIC AREA 4: ADDITIONAL AREAS FOR RESEARCH AND CONSIDERATION

Identified Issues
• Statutory language is potentially outdated in some areas and may not reflect current practices. • Additional information-sharing mechanisms and resources may be helpful for TLFFRA systems.

Staff Recommendations - Statutory/legislative

4.1 Propose statutory updates based on any specific feedback or suggestions received from TLFFRA stakeholders through this process. Proposing any such updates would depend on the PRB receiving specific suggestions from TLFFRA stakeholders.

OR

[New] 4.1a Propose language authorizing boards to adopt an education policy.

4.1 Feedback	
Justin Graham and Eric Stewart[1],	"Standardized Administrative Processes in "Red Flag" Situations: Cities should be compelled to implement processes stipulated by the Legislature or the Pension Review Board for managing their local firefighter pension funds once specific warnings are issued. " "For instance, pension funds would be obligated to alert their respective city sponsors about potential red flag issues, such as subpar investment returns; higher-than-normal employee departures; increased numbers of refunds of contributions; payroll processing problems; reporting issues; or any funding issues raised by actuaries in an AVR. Certain actions could be required once a red flag issue is declared."
Odessa Firemen's Relief and Retirement Fund	"The board supports requiring newly appointed members to complete core training before they may participate in their first board meeting."

[1] Justin Graham and Eric Stewart are trustees of the Midland Firemen's Relief and Retirement Fund. They submitted comments on their own behalf, rather than as representatives of the system.

Staff Discussion:

Staff currently contacts and reports on funding issues according to the *Policy for Promoting Compliance with FSRP Requirements*, and as part of the regular Actuarial Valuation and FSRP reports presented by staff at PRB board meetings. Also, many systems' funding policies already include criteria that would require their pension board to notify their sponsors. The funding policy is a good avenue for systems to customize the exact triggers for a notification system to best suit their needs and is already a statutory requirement to be developed and adopted jointly with the sponsor.

Option 4.1a proposes statutory authorization for boards to adopt an education policy expanding on the existing training requirements for trustees. This could include requiring additional training hours or an advanced training requirement, allowing each system to decide if having new trustees complete training ahead of their first meeting would be feasible. At least one system, Odessa Fire, has adopted an education policy that adds requirements above and beyond MET requirements that apply statewide. This recommendation would provide statutory authorization for boards to adopt stricter education standards but not require these across the board. Staff recommends changes to MET requirements be considered as part of overall MET rulemaking discussion or future changes to statute.

PRB guidance/technical assistance

4.2 The PRB could create a new core or CE course on reporting requirements and the role of the PRB for new administrators and trustees. The PRB may also consider other topics based on TLFFRA stakeholder requests. Such a course could help trustees and administrators more easily learn statutory reporting and education requirements and make compliance easier.

4.3 The PRB could implement a process to collect, share and regularly update example polices, requests for proposal and other relevant resources. This process would ultimately make it easier for systems to access useful examples since they would just have to go to one place.

4.2 Feedback	
Justin Graham and Eric Stewart	"Mandatory Training for Elected Officials: The Legislature should mandate training and certification for all elected officials (not just those on Pension Fund Boards) and relevant City Staff, on City financial responsibilities for pension fund health. "

Staff Discussion:

Requiring training for elected officials and certain city staff members would fall outside of the scope of the PRB's mandate. However, the PRB's pension training is free and available to anyone who wishes to take it through the agency MET website.

TLFFRA Governance Issues and Options
Summary of Feedback Received and Possible Alternatives – September 25, 2024

In 2020, the Pension Review Board (PRB) directed staff to study Texas public retirement system governance structures and practices. Staff began the process of studying system governance of all 100 systems by completing reports on board structure, outlining each system's decision-making process, and providing data on board qualifications for some systems. Since that time, the PRB's focus on studying governance has shifted more specifically to the 42 systems that operate under the Texas Local Fire Fighters Retirement Act (TLFFRA).

Staff presented the first iteration the *TLFFRA Governance Issues and Options* to the Actuarial Committee on January 25, 2024. The document subsequently went through two rounds of comment periods and was present to the Actuarial Committee and the full Pension Review Board for discussion several times throughout the year, with the most recent meeting occurring on July 25, 2024.

A third and final comment period was opened from August 7 through September 6, 2024. This document contains a summary of the seven comments received during the third comment period. Staff will present final options and staff recommendations during the September 25, 2024, board meeting for consideration and possible approval by the board.

TOPIC AREA 1: SYSTEM FUNDING AND DECISION-MAKING PRACTICES

Identified Issue:
• TLFFRA statutory decision-making processes may hinder progress toward resolving funding issues faced by many TLFFRA systems and their sponsors.

Proposed Options - Statutory/Legislative

1.1 Require the governing body of the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote. This recommendation would ensure sponsors and systems work collaboratively on potential changes before going to a member vote and could change the incentive structure to make it more likely sponsors would be less hesitant to provide necessary employer contributions.

OR

Staff Recommendation - 1.1a Require the governing body of the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote if the system and sponsor solely utilizes a closed actuarially determined contribution (ADC) rate. This recommendation would allow for sponsors paying an ADC, who experience higher levels of risk associated with changes to plan provisions, to have direct input on benefit and member contribution changes.

1.1 and 1.1a Feedback	
Longview Firefighters Relief and Retirement Fund (Longview Fire)	"Option 1.1- I feel this option would give unfair access to the sponsoring entity. By design the TLFFRA board is designed with all parties represented (employees, sponsoring entity and tax payers). No one group holds a majority of the vote. No one group makes a quorum." "Option 1.1a- I feel this option would better explain why the sponsoring entity would be entitled to more control over benefit changes. Agreeing to pay the ADC would be a fair trigger for allowing the sponsoring entity the right to approve benefit changes. I would state that the PRB would have to consider changing the maximum allowed smoothing period to better help sponsoring entities budget for funding the ADC by reducing the volatility of the markets over time. TMRS I believe is set at a 10 year smoothing."
City of Galveston	Notes that 1.1a aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Justin Graham[1]	"First, option 1.1, the idea of requiring the sponsoring entity to vote on any changes prior to a member vote will not create healthier plans. The reason being is the fact that not only does this potentially politicize the operation of the plan, it also would put elected officials with no fiduciary responsibility to the plan in a position that directly affects operations. It has become clear in my time on this board that not all members of the plan sponsor understand the intricacies and details that are involved in operating a successful plan. Option 1.1a seems as though it may be a more reasonable option because the plan sponsor would be holding all the liability for any plan change. "
Tyler Firefighter's Relief and Retirement Fund (Tyler Fire)	"I do not agree with [Option 1.1 or 1.1a] because it gives too much control to the City. The current board makeup has the potential already to slant towards the City. There are 3 Firefighter positions and if both citizens (Taxpayers) side with the 2 City positions on the board, the Firefighters will not be able to approve ballot options for benefit or contribution changes."
Weslaco Firemen's Relief & Retirement Fund (Weslaco Fire)	"I would also state we currently don't have a funding issue as you claim. There are many funds at risk." "I believe identifying the number of funds would help the board have a better understating of your recommendations and if it's needed." "My other concern I feel they will bring **Union Politics** into the pension decision making. Not all fire personnel are union members. Hence if a council member has an issue with the union this would give the city an advantage over our union and pension. In conclusion to the first topic I feel the funds that are having funding issues need to stay at a local level or handled with those particular Funds. There is no need at this time to involve all 42 funds for the few funds that have the issues."

[1] Justin Graham is the Chairman of Midland Firemen's Relief and Retirement Fund but provided comments as an individual and not as a representative of his board.

Staff Discussion:

Overall, stakeholders expressed more agreement towards Option 1.1a than Option 1.1. There were general concerns that allowing sponsors to potentially block a change to benefit or contribution increases could tip the balance of power too far in the sponsor's favor. The current board structure could potentially allow for votes to pass even if the sponsor representatives voted against changes because they hold two seats on a seven-member board. This is a concern that was raised by sponsors as a reason they are unwilling to increase contributions.

To address concerns on smoothing periods, staff suggests systems and their sponsors create a policy outlining how to calculate the ADC. This policy could then be incorporated into the joint system and sponsor funding policy. The PRB does not prescribe a maximum smoothing period. While most systems use a three to five year smoothing period, systems and their sponsors should select what time period works best for them, in consultation with their actuary.

Proposed Options - Statutory/Legislative

Staff Recommendation - 1.2 Authorize the system and the governing body of the sponsoring entity to enter into a separate agreement defining parameters for member contribution and benefit decisions. These agreements may be reflected in a jointly developed and adopted funding policy as required by Section 802.2011, Texas Government Code. This recommendation would allow for both parties to proactively define conditions in which contribution and benefit changes could be made, ensuring mutual agreement especially for those systems for which the sponsoring entity pays an ADC.

Staff Recommendation - 1.3 Proposed benefit changes must be approved by a minimum of five members of the board.

1.2 Feedback	
Longview Fire & Weslaco Fire	"I would agree this option keeps the local issues at the local level."
Odessa Firefighters Relief and Retirement Fund (Odessa Fire)	"We are in support of options 1.2 and 1.3 if changes must be made, however, we believe that nothing needs to change."
Tyler Fire	"I do not agree with [Option 1.2] because it gives too much control to the City."
1.3 Feedback	
Longview Fire	" I would have the concern that a 5 member vote would allow groups to stall progression by being absent. The quorum for a TLFFRA board is 4 members."
City of Galveston	Notes that 1.3 aligns with the best practices identified by the City in earlier comments submitted to the PRB.

Odessa Fire	"We are in support of options 1.2 and 1.3 if changes must be made, however, we believe that nothing needs to change."
Justin Graham	"Option 1.3 is yet again an even better option as it doesn't allow any side of representation to completely control or pursue changes. However, it does ensure that everyone voting is a fiduciary for the plan. This potentially eliminates politicizing the benefits and operation of the plan."
Tyler Fire	"I do not agree with [Option 1.3] because it gives too much control to the City." "For instance, on our board, we only consider changes to benefits or contributions based on our actuarial studies and we have always been conservative in our approach to changes. When we have looked at changes in the past, most of the time it has been a 7-0 vote for or against changes."
Weslaco Fire	"We currently have no issues having a quorum. It's rare that we don't have all 7 members present. On the other hand, I would see an issue for other funds that this could cause a problem for. They could stall the meeting by not showing up. The quorum is 4 to have a meeting. By going to 5 for this kind of vote, it would only delay the progress of the fund."

Staff Discussion:

Staff noticed that board member attendance has been a concern raised by various stakeholders throughout this project. Option 2.5 addresses the lack of attendance by certain members. Five members being present for a vote would help ensure that a greater than two-thirds supermajority of the board is in favor of the change that could carry significant impacts for both the members and the sponsor down the line. The vote is not required to be unanimous, so some parties may still dissent or be absent and a proposal could still pass.

Proposed Options - PRB guidance/technical assistance

Staff Recommendation - 1.4 The PRB may publish guidance based on experiences of multiple TLFFRA systems for improving overall plan governance. This may take the form of best practices for creating a joint working agreement (and ultimately jointly adopted funding policies) between the system and sponsor, encouraging the use of guardrails to limit the system's ability to enact benefit increases or contribution decreases without consideration of factors which may include sponsor agreement and the plan's actuarial health. Such guidance could also highlight methods for effectively educating members in preparation for a vote on plan changes. Included in this effort could be compiling actual agreements and funding policies as examples and making them publicly available.

Staff Recommendation - 1.5 The PRB may create a continuing education (CE) course on successful system reforms, potentially featuring a panel of TLFFRA stakeholders.

1.4 and 1.5 Feedback	
Tyler Fire	"I would like to hear more information on these 2 options. I feel that if the PRB provided the board's guidance based on other TLFFRA funds' experience, it would help the board make better informed decisions. Also, the idea of the PRB creating a continuing education course on these topics would really help boards make better informed decisions as well."

Staff Discussion:

Any guidance created by PRB staff would be further discussed as it is developed, using stakeholder feedback similar to how past guidance documents have been created. If there are specific requests for the material within a guidance document or CE course, stakeholders should contact PRB staff so these requests can be considered as materials are developed.

TOPIC AREA 2: BOARD STRUCTURE AND MEMBERSHIP

Identified Issues
• TLFFRA board structure may need updating to address identified concerns and ensure balanced representation. • TLFFRA boards occasionally struggle with disengaged and/or noncompliant trustees, but systems lack tools and policies to address these issues.

Proposed Options - Statutory/Legislative

2.1 Consider changes to statutory TLFFRA board structure. A potential option could be to eliminate one citizen seat and make it a mayoral appointee and retain one citizen seat. Such a change would provide even representation between city and plan members but still retain one citizen member meant to represent taxpayers.

Staff Recommendation - 2.1a Provide statutory authorization for TLFFRA boards to adopt a policy that would allow for the conversion of one citizen seat to a city appointee position if both citizen seats are unable to be filled. The policy must include the length of time the agreement is effective and specify the term length for the converted city appointee seat. Additionally, remove the exclusion from the TLFFRA statute that prevents a city employee from participating as a citizen trustee.

2.1 and 2.1a Feedback	
Longview Fire	"Option 2.1- I would not be in favor of reducing representation of any group. TLFFRA boards are designed with all parties represented (Employees, Sponsoring entities and Taxpayers). No one group holds a majority of the vote." "I would like to see a more detailed breakdown of training attendance by each group represented on the Board."

	"Option 2.1a- I would refer to my comments in Option 2.1 for this also. I would think just enacting the last line of this option 'Removing the exclusion from the TLFFRA statute that prevents a city employee from participating as a citizen trustee' would be fair, as long as the current rule of sponsoring entities and employee representatives are who vote for the citizen trustee position."
City of Galveston	"…the City of Galveston remains concerned the recommended options fail to solidly correct the unfair advantages with the current seven-member board structure. The TLFFRA statute impedes efforts for the equal board representation critically needed for implementing best practices that assure benefits are funded in a sustainable manner." "To ensure a suitable role for plan sponsors when making these critical decisions, the City recommends TLFFRA amendments to increase the board from seven to eight total members that include equal representation of fire fighter members (4 members elected by participating members) and City-appointed members (2 appointed by City Manager; 2 seats appointed by the City Council). A similar board structure has improved governance on the City's police pension plan board. On the TLFFRA board, plan members and plan sponsors could each designate one of their four respective allotted seats for an independent citizen. Board members must meet qualifications and training requirements for board trustees defined in statute."
Odessa Fire	"We are vehemently against changing the composition of the board (option 2.1) and believe the current structure represents each stakeholder fairly. If changes were made, we would support options 2.1a and 2.3-2.8."
Justin Graham	"To address the issue of balanced board structure representation, there are a few factors that I have identified as a board member. The issue does not generally lie with the representation on the board as it would seem." "The way to increase participation would be to address mandatory ADC just like the other state plans that they participate in. These plans already must use professional actuaries to approve any plan changes. Changing the board structure is not going to change the number of plans that recognize and seek to resolve issues."
Tyler Fire	"I do not like either one of these options. I feel that the 2 citizen board members are very important because they represent the taxpayers directly. In my experience on Tyler's board, we have never had issues with filling those positions. Our 2 citizen member positions have always been the most faithful to attend meetings and are always willing to give their opinion on investments, governance issues, legal etc. I feel that giving the City another position on the board gives them too much control of the board."
Weslaco Fire	"Option 2.1- As staff stated in the TLFFRA Peer Review back in May there are city that have issues getting their city members to attend regular monthly meetings. How is removing a citizen going to help with the attendee of those funds having issues already with city members not going. TLFFRA boards are designed with all parties represented. No one group holds a majority of the vote. No one group makes a quorum."

	"Option 2.1a- I would refer to my comments in Option 2.1 for this also. I would think just enacting the last line of this option 'Removing the exclusion from the TLFFRA statute that prevents a city employee from participating as a citizen trustee' would be fair, as long as the current rule of sponsoring entities and employee representatives are who vote for the citizen trustee position."
Midland Professional Association of Firefighters	"Additionally, we oppose adding a city council member to TLFFRA fund boards. The current board structure already has adequate 'taxpayer' representation as firefighters are taxpayers too. In other states, city council control of pension benefits has sometimes led to untenable levels as council members seek job security at election time. In Texas, city representation on TLFFRA boards is limited to the Mayor and the Chief Financial Officer, or their delegates. This has been appropriate."

Staff Discussion:

Throughout the review of TLFFRA governance structure, the statutory trustee designations topic frequently came up. Staff found that some systems have no trouble filling their citizen seats whereas others are unable to find suitable candidates. The TLFFRA statute applies across the board for 42 systems which poses a challenge when trying to develop recommendations for statutory updates. Many of the proposed recommendations from staff, including option 2.1a, uses authorizing language, which would not require systems to make changes if they are currently not facing any problems. It would, however, allow for those who are needing adjustments to create unique policies to improve their situations.

Staff did not receive much feedback on the second round of proposals. An earlier proposed option suggested an increase of total board members, but both stakeholders and board members raised concerns that having to fill more trustee seats may create more problems for systems that already struggle to find trustees for a full board under current statute.

In general, the concept of having a closed ADC rate for the system and sponsor has come up a number of times throughout this project. While there is not a recommendation at this time to require an ADC, several of the proposed options would encourage the adoption of an ADC. Regardless, any systems and their sponsors subject to a revised FSRP in the future would be required to adopt an ADC as part of that revised FSRP requirement. The stricter funding requirements of the revised FSRP are meant to help incentivize systems and their sponsors to adopt effective FSRPs the first time.

Proposed Options - Statutory/Legislative

2.2 Allow for one active member seat to be filled by either an active or retired system member.

Staff Recommendation - 2.3 Require citizen members be elected by a minimum of four members of the system board. Four members constitute a supermajority of the five board members that vote to select citizen members.[2]

Staff Recommendation - 2.4 Update the citizen seat provision to specify that a retired member of the plan may not serve in a citizen position. This recommendation would not prohibit retired members of other systems from serving on a particular TLFFRA board.

2.2 Feedback	
Longview Fire	"If this was an option, would that retiree be nominated by the actives and just the actives would have to vote them on the board? Trying to get the retirees all to vote would make the annual process very difficult. If this is an option to be considered, I would limit it to a maximum of one retiree on the Board."
Odessa Fire	"We would support a language change indicating that a seat could be filled by a retiree IF an active member could not hold that seat."
Tyler Fire	"I am opposed to this option. I am a retiree myself and feel like I should not be on the board because I do not pay into the fund with contributions coming from my salary like the active Firefighters. Potentially, as a retiree, that board member could approve a retiree benefit increase and the current Firefighters would have to contribute more from their salary into the fund. I feel like you have the opportunity to be on the board while you are actively contributing to the fund. Once you retire, you are a beneficiary at that point and not part of the fund because you are not contributing any more at that time. I do not have a problem with a retired Firefighter being on another TLFFRA funds board as a citizen, but not the fund he retired from."
Weslaco Fire	"How would that retiree be nominated? Would it be the actives and just the actives members or would the current retirees have a vote. If the retirees had a vote it would almost be impossible to get them together as they don't all live in the area. Trying to get the retirees all to vote would make the annual process very difficult."
2.3 Feedback	
Longview Fire	"What happens when 4 of the 5 people who elect the citizen board member cannot agree?"
Tyler Fire	"I feel like this is already being done on most boards. In my experience, the Firefighters present a potential candidate for the Citizen position and after vetting that person, the board votes to approve them in a meeting."

[2] Stakeholders provided comment on the previous version of this recommendation, which read: "Require citizen seats be elected by a minimum of four members of the system board."

Weslaco Fire	"I feel this should stay at a local policy level not a state level. Why put a number quorum is 4. what happens when you have 2 for 2 against. just leave at a majority vote. Again I feel its making things more complicated than it needs to be."
2.4 Feedback	
Longview Fire	"I see both sides of this argument. I think this should be a local decision."
Tyler Fire	"I agree that retired Firefighters should not be on the same TLFFRA fund board that they have retired from. I feel like if they serve on a different TLFFRA fund board, that should be allowed."
Weslaco Fire	"What would be the state's or city's advantage to this option. I can see how it may look but on the flip side to this in some cases the retiree has a vested interest to make sure the fund is in good health. you may see it one way I see it the other. I still feel he is a taxpayer representing the citizens and has a fiduciary responsibility to the fund. Our fund does not have a retiree serving on the board but I feel this should be a local decision."

Staff Discussion:

Staff intended that if Option 2.2 was adopted, the retiree member election would not differ from the current process of electing active members, only the potential candidate pool would be expanded.

In a situation where four trustees are unable to come to a consensus on electing a citizen board member, the board of trustees would have a failed vote and would need to find a new candidate. While this may make it more difficult in some situations to fill a citizen seat, it would ensure that at least one representative from either the sponsor or the system agreed with the elected citizen trustee member. This could help prevent the balance of power tipping in favor of either side.

Proposed Options – Statutory/Legislative

Staff Recommendation - 2.5 Formalize in statute that it is a ground for removal from the board when a member attends less than 75 percent of the regularly scheduled board meetings that the member is eligible to attend during a calendar year without an excuse approved by a majority vote of the board. If the member is an ex-officio member, then they may be requested by the board to select a designee to serve in their position.

Staff Recommendation - 2.6 Provide statutory authorization for boards to adopt a policy for removing a board member noncompliant with Minimum Educational Training (MET) requirements.

Staff Recommendation - 2.7 Include statutory language specifying the mayor may appoint a designee from city council or city staff if the mayor determines they are unable to actively participate on the board. Also specify that the CFO of the sponsoring entity, or the individual acting in that

capacity, may appoint a designee from city council or city staff who has a financial background if the CFO is unable to actively participate on the board.

2.5 Feedback	
Longview Fire & Weslaco Fire	"I feel Option 2.6 is a better fit for addressing both options."
City of Galveston	Notes that 2.5 aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Justin Graham	"Options 2.5 and 2.6 are proposals that do need to be addressed. While it is important to be able to remove a board member who is elected if there is a lack of participation, there is an equal need to be able to address ex-officio members if there is a lack of participation on their part as well."
Tyler Fire	"I agree with this option. A standard attendance policy would be great to have in place."
2.6 Feedback	
Longview Fire	"I agree and would also include the right for Board's to adopt removal of a member if they do not meet a locally established minimum attendance."
City of Galveston	Notes that 2.6 aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Tyler Fire	"I agree with this option as well. Board members should always seek to educate themselves and should be willing to complete MET requirements."
Weslaco Fire	"I agree and include all positions of the board to include the 2 city's positions. Also include the right for Board's to adopt removal of a member if they do not meet a locally established minimum attendance standard."
2.7 Feedback	
Longview Fire	"This language already exists for those positions to have a designee."
Tyler Fire	"I feel like this is already covered in the current TLFFRA statute, that the mayor and/or CFO could appoint a designee in their place. In our fund, the mayor's designee has always been someone from the City's legal department. Our CFO has always participated on the board, but usually will send a Finance personnel person in his place if he is unable to attend."
Weslaco Fire	"This language is redundant I don't see the need for change."

Staff Discussion:

Boards can currently adopt an attendance policy, and Option 2.5, which can be adopted concurrently with other options, would potentially establish a standard across all TLFFRA boards. Boards can also specify what they would like to include in a policy, which may include next steps if trustees do not complete their minimum required education. Some systems have already developed education policies with this information.

It is important for all members to be active and engaged on a board and the implementation of an attendance policy could help improve engagement. Staff recognizes that sometimes an ex-officio member is unable to attend meetings. While those positions could not be removed because they are statutorily designated, Option 2.5 includes language that would allow the board to request that trustee to select a designee to serve in their place.

Option 2.7 restricts the potential pool for the ex-officio designee positions. Statute already allows for those positions to select designees, but there is no requirement on who may be selected. Restricting the potential designees to individuals that hold similar positions or have similar qualifications as the ex-officio members helps ensure that perspective remains present on the board. This may already be the case for several boards who have ex-officio designee trustees, but this would formalize it so that representation is clear in the future.

Proposed Options – PRB Guidance/Technical Assistance

Staff Recommendation - 2.8 The PRB may compile information and guidance on processes used by TLFFRA systems for identifying citizen members with qualifications and example policies used by systems to set standards for engagement of their board members, including attendance policies and education policies. This recommendation would provide information and assistance to TLFFRA systems while not mandating specific qualifications for citizen members, which may be difficult for some systems to comply with.

2.8 Feedback	
Tyler Fire	"I think it would be great to provide TLFFRA funds with information and guidance on processes used by other TLFFRA funds as long as these are to be used to inform the funds and not forced on all funds. Some funds may have no problems with certain things and if they are forced to change, it could actually create a new problem for them."

Staff Discussion:

Guidance issued by the PRB does not constitute a statutory or rule requirement and is instead intended to be a resource for systems to use if they find it helpful and beneficial. They are not required to adhere to guidance; however, it may be in the best interest of the systems and sponsors to use guidance as reference as the PRB often incorporates best practices and updates guidance as best practices evolve over time.

TOPIC AREA 3: TRANSPARENCY AND COMMUNICATION

Identified Issues
• Information may not be easily accessible by all parties, including sponsoring entity and membership. • Some TLFFRA systems have difficulty contacting their sponsoring entity to discuss plan issues. • Minutes and board meeting materials are sometimes incomplete or not comprehensive.

Proposed Options - Statutory/legislative

Staff Recommendation - 3.1 Require the sponsoring entity of a TLFFRA system to make publicly available on their website reports submitted to the PRB by the system. The sponsoring entity may link to the report on the system's website if the report is already posted by the system. This change would facilitate access to information about TLFFRA systems even in situations where the system is unable to maintain an independent website. [3]

Proposed Options - PRB guidance/technical assistance

Staff Recommendation - 3.2 The PRB may issue guidance or conduct continuing education on transparency and communication topics. Such guidance or education may include recommending system boards provide regular updates to the governing body of the sponsoring entity, such as presentations regarding the system's funding condition with each actuarial valuation report.

3.1 Feedback	
Longview Fire	"The local pension plan should be doing this already, thus adding it to the sponsoring entities website seems redundant, but I have no major issue with the idea. I would allow the sponsoring entity to place a link to the pension's website where the information is posted, as an acceptable compliance measure. Would minimize the redundancy of work."
Odessa Fire	"The board supports submitting anything on the sponsoring entities' website that we already report to the PRB."
Tyler Fire	"I would have no problem with this option."
Weslaco Fire	"We do this already on our webpage. Adding it to the sponsoring entities website seems redundant, but I'm ok with it might be more work for them. I would allow the sponsoring entity to place a link to the pensions' website where the information is posted, as an acceptable compliance measure. Would minimize the redundancy of work."
3.2 Feedback	

[3] Stakeholders provided comment on the previous version of this recommendation, which read: "Require the sponsoring entity of a TLFFRA system to make publicly available on their website reports submitted to the PRB by the system."

Tyler Fire	"I would have no problem with this option." "I think CE on this topic would be welcomed."
Weslaco Fire	"I feel if the board has the 2 representing the city the mayor and CFO already what's the purpose of another report. The city already does an audit and the pension fund is included in that report."

Staff Discussion:

Statute currently requires certain reports submitted to the PRB to be posted on a public website; however, many systems do not maintain websites. Some sponsors already post reports on behalf of the systems and from discussion, it likely would not be difficult for sponsors to post the reports if they do not do so already. Staff has updated the language on Option 3.1 to clarify that posting a link to the report housed on the system's website would meet the requirement. Option 3.2 suggests potential guidance and CE and would not require a new or additional report to be prepared or submitted.

TOPIC AREA 4: ADDITIONAL AREAS FOR RESEARCH AND CONSIDERATION

Identified Issues
• Statutory language is potentially outdated in some areas and may not reflect current practices. • Additional information-sharing mechanisms and resources may be helpful for TLFFRA systems.

Proposed Options - Statutory/legislative

Staff Recommendation - 4.1 Propose language authorizing boards to adopt an education policy.

4.1 Feedback	
City of Galveston	Notes that 4.1 aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Longview Fire	"Option 4.1 - I would rather see a blanket rule that allows local Boards to adopt policies that are needed to best administer their duties to their fund."
Odessa Fire	"We are in support of all options listed under topic area four."
Tyler Fire	"I think that any proposed language should be discussed with the TLFFRA funds before authorizing boards to adopt an education policy. I would have no problem with it after discussions and agreement upon the language."

Staff Discussion:

The recommendation stems from wanting to provide boards with support, as well as helping to increase awareness that boards can adopt such policies if they are interested. Currently, boards and trustees may adopt policies as needed to administer their fund. This recommendation would not dictate specific language to be included in an education policy, and each individual board would be able to customize and adopt a policy.

Proposed Options - PRB guidance/technical assistance

Staff Recommendation - 4.2 The PRB could create a new core or CE course on reporting requirements and the role of the PRB for new administrators and trustees. The PRB may also consider other topics based on TLFFRA stakeholder requests, including additional education on actuarial matters. Such a course could help trustees and administrators more easily learn statutory reporting and education requirements and make compliance easier.

Staff Recommendation - 4.3 The PRB could implement a process to collect, share and regularly update example polices, requests for proposal, and other relevant resources. This process would ultimately make it easier for systems to access useful examples since they would just have to go to one place. Making such materials available could be incorporated into other efforts outlined in this document to develop best practices and guidance.

4.2 Feedback	
City of Galveston	Notes that 4.2 aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Tyler Fire	"I agree with this option. I feel all board members and Plan Administrators should be well educated in all aspects of pension funds, investments, legal, governance, plan administration, actuarial studies etc."
4.3 Feedback	
City of Galveston	Notes that 4.3 aligns with the best practices identified by the City in earlier comments submitted to the PRB.
Tyler Fire	"I agree with this option. I think information sharing is a great way for funds to learn from each other and make our funds better overall."

Additional Items for Consideration

General Feedback	
Longview Fire	"All currently listed TLFFRA funds must meet the standards set to remain under the umbrella of TLFFRA. Any exclusive Volunteer only or any other type fund that is not actively meeting the rules should be removed from TLFFRA and

	moved to an appropriate statute. No active TLFFRA fund to my knowledge is exclusively Volunteer only. Much of the language in the TLFFRA statute applies to these funds. This language could be removed from the TLFFRA statute and greatly improve the simplification of interpretation of said statute." "I also ask the PRB Board to consider when an issue is a local issue vs a statute issue. All TLFFRA Funds have improved due to hard work from both members and Sponsoring entities. Undermining that hard work because of any one Fund or City's inability to work together should not be placed on all the Fund's through statute changes. It would be more prudent to make those entities work towards a resolution at the local level."

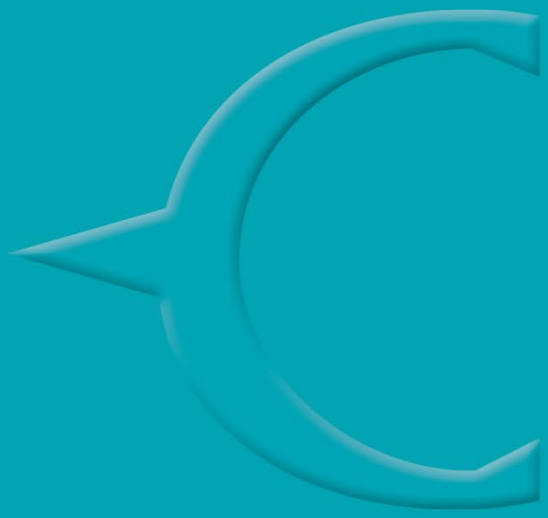
Staff Discussion:

In earlier versions of the staff recommendations document, there was an option requesting feedback from stakeholders for other items the PRB should consider. An example given was specific areas of statute that could be considered redundant or obsolete; however no specific requests were received.

Many of the options proposed by PRB staff would allow for systems to develop policies that best suit their plans. In those cases, the agency may provide resources, but would not require plans to adopt specific policies or implement any changes. The goal of the recommendations is to provide options for boards that may benefit from having additional tools to facilitate better governance practices and helping sponsors feel more confident raising contribution rates as needed.

Appendix B – Cheiron Independent Actuarial Analysis

CHEIRON Classic Values, Innovative Advice



Dallas Police and Fire Pension System

Independent Actuarial Analysis

Produced by Cheiron

August 2024

www.cheiron.us 1.877.CHEIRON (243.4766)

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SECTION I – EXECUTIVE SUMMARY

Background

The Texas Pension Review Board selected Cheiron in accordance with Section 2.025 of the Dallas Police and Fire Pension System (the System or DPFP) to provide an independent actuarial analysis. The analysis is required to include:

- The independent actuary's conclusion regarding whether the System meets the Pension Review Board's pension funding guidelines (primarily a funding period no longer than 30 years) and
- The independent actuary's recommendations regarding changes to benefits or member or city contribution rates.

No later than November 1, 2024, the System Board is required to adopt a plan that:

1. Complies with the funding and amortization period requirements of Subchapter C, Chapter 802 of the Texas Government Code; and
2. Takes into consideration the independent actuary's recommendations in this report.

Cheiron's Process

Our process started by replicating the January 1, 2022, actuarial valuation performed by the System's actuary. This replication ensured we correctly programmed the current plan provisions and applied the correct assumptions based on accurate census data. As a result, we would expect any cost estimates we develop to be consistent with calculations performed by the System's actuary. While the final analysis is based on the 2023 actuarial valuation, starting with the 2022 actuarial valuation gave us more time to develop options and receive feedback before issuing a final report.

While replicating the valuation and building our projection models, we also performed a high-level comparison of the benefits provided by other public safety pension systems for large cities in Texas and the Dallas Employees' Retirement Fund. Any benefit changes we recommend would need to allow Dallas to remain competitive in attracting and retaining police officers and firefighters.

Key Steps in Independent Actuarial Analysis

- ✓ Replicate January 1, 2022 actuarial valuation performed by the System's actuary.
- ✓ Build projection models and perform high level comparisons to other Texas pension systems.
- ✓ Develop alternative benefit/contribution scenarios.
- ✓ Draft recommendations based on 2022 actuarial valuation presented to System Board, City Council Ad Hoc Pension Committee, and Texas Pension Review Board (PRB).
- ✓ Replicate January 1, 2023 actuarial valuation performed by the System's actuary.
- ✓ Preliminary recommendations based on 2023 actuarial valuation presented to System Board and City Council Ad Hoc Pension Committee.
- ✓ Final report with recommendations to be delivered to:
  - Dallas Police & Fire Pension System,
  - City of Dallas, and
  - Texas PRB.

SECTION I – EXECUTIVE SUMMARY

With this baseline of information, we developed our draft recommendations and presented our analysis to the System Board and the City Council's Ad Hoc Pension Committee on November 9, 2023. We also presented this information to the Texas Pension Review Board on January 25, 2024.

We updated our analysis by replicating the January 1, 2023, actuarial valuation performed by the System's actuary and updating our projection models to reflect the latest information. We refined and updated our recommendations, reflecting feedback from the initial presentations. The same principal recommendations remained, and we presented our preliminary analysis and recommendations based on the 2023 valuation to the System's Board and the City Council's Ad Hoc Pension Committee on February 8, 2024.

Following our last presentation, we received questions and feedback that caused us to refine our proposed methodology further. As a result, the projections shown in this final report differ in some details from those in our February presentation.

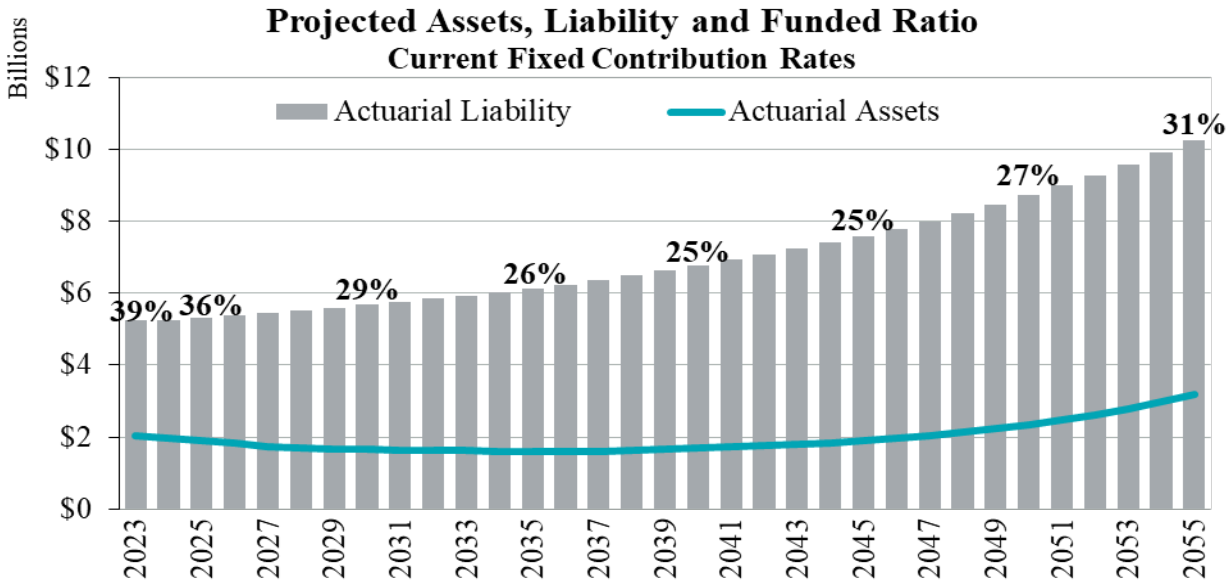
System Status Based on January 1, 2023 Actuarial Valuation

The System's 2023 actuarial valuation reports a funded ratio based on the smoothed actuarial value of assets of 39%. However, based on the market value of assets, the System is only 34% funded and carries an unfunded actuarial liability of more than $3.4 billion. Based on the current fixed contribution rates (including the floor on City contributions through 2024) and the City's Hiring Plan payroll projection, the System actuary estimates an effective funding period of 82 years. This period is not consistent with the Texas Pension Review Board's funding guidelines, which require a funding period no longer than 30 years.

Chart I-1 on the next page shows our projection of smoothed actuarial assets (teal line), liabilities (gray bars), and funded ratio through 2055 based on the January 1, 2023, actuarial valuation. Note that the funded ratio is projected to continue declining for decades even if investment returns and all other assumptions are met. Eventually, the funded ratio begins to improve, but it is only projected to be 31% in 2055.

SECTION I – EXECUTIVE SUMMARY

Chart I-1



Aggravating the effort to improve the funded status is the fact that current benefit payments being paid out of the System are significantly larger than the contributions coming into the System. Net cash flow (contributions minus benefit payments and expenses) is approximately -7.1% of assets. At a time when the System would like to invest in growing its assets, it also must plan redemptions greater than its expected investment returns just to pay benefits. These liquidity requirements can create a significant headwind to investment performance.

Finally, the System offers its retirees a potential Cost-of-Living Adjustment (COLA) once it is 70% funded. In the System's 2023 actuarial valuation, it is assumed, based on the current fixed rate of contributions, that no COLA will be payable until 2073. This assumption produces a lower Actuarial Liability and lower normal cost than if COLAs were payable earlier. Consequently, increasing contributions so that the System is expected to reach 70% funding earlier also increases the normal cost, Actuarial Liability, and Unfunded Actuarial Liability due to COLAs being paid earlier. For example, if the System were 70% funded in 2023, the actuarial liability would be about $5.8 billion (instead of $5.2 billion), and the normal cost rate would be approximately 21.4% of payroll (instead of 18.7%).

Key Considerations

In developing our recommendations, we recognize that there is a balance between competing objectives:

- **Benefit Security and Adequacy** – The benefits promised by the System must be secured with the assets in the trust, future investment earnings on those assets, and future contributions from members and the City of Dallas. Investment earnings are uncertain, so there must be some mechanism to adjust either benefits or contributions for unexpected changes in investment earnings. At the same time, benefits must be adequate to get the necessary support from members to make the System sustainable.

- **Contribution Stability, Predictability, and Sustainability** – The contributions required of both employees and the city must be at a level that each can sustain over a long period. Ideally, those contributions would be stable so that employees and the city could plan their budgets around the known contribution amounts. To the extent contributions need to change, the changes should be relatively predictable, and move in steps that allow for adjustments to the related budgets.
- **Generational Equity** – Ideally, each generation of taxpayers pays for the benefits of the employees who provided services for that generation. Given the current funding situation, prior generations have not paid the full cost related to the services that they received. The challenge for the System is to create a plan to restore funding without overly burdening the current generation and without simply shifting the burden to future generations. The Pension Review Board's funding guidelines put a limit of 30 years on paying for the unfunded liability left by prior generations.

Principal Recommendations

Ultimately, in a pension plan, the contributions and investment earnings must add up to the benefits and expenses paid by the System. Expenses are relatively small, so to restore the System, some combination of higher contributions, better investment returns, and benefit reductions may be necessary. Investment returns are outside the scope of our analysis, so our focus is strictly on benefits and contributions.

Benefits under the System have already been reduced as a part of efforts to shore up the System, particularly in 2011 and 2017. Based on comparisons to other large public safety systems in Texas, we do not believe that further reductions in the final average pay multiplier or increases in the retirement age could be sustained without eroding the ability of the city to recruit and retain police officers and firefighters. In fact, our analysis indicates that it may be necessary to improve the COLA provisions soon, and if so, we believe those improvements should be incorporated into budget plans now to avoid further underfunding the System.

With little funding improvement to gain from benefit changes, most of the improvement will need to be from higher contributions. Since the employee contribution rate is already high as a proportion of the total normal cost compared to similar peers, our recommendation is thus primarily higher contributions from the City of Dallas.

SECTION I – EXECUTIVE SUMMARY

While there are alternative scenarios within our recommendations, the three principal recommendations are:

Adopt an Actuarially Determined Contribution	Reduce Employee Contribution Rate as Funding Improves	Provide Some COLA Earlier Than Current Provisions Permit
• Contribution amounts adjust to circumstances • System will always comply with the PRB funding guidelines	• Current rate is high as a proportion of the normal cost rate compared to peers • As funding improves, grade employee rate down to 50% of normal cost rate	• Members are not covered by Social Security, so they have no inflation protection in retirement • Lack of COLA is likely to create a recruitment and retention issue

SECTION I – EXECUTIVE SUMMARY

Actuarially Determined Contributions

The Dallas Police and Fire Pension System's current fixed contribution rate is inadequate and unsustainable. Contributions must be increased substantially to meet the Texas Pension Review Board's funding guidelines. Simply increasing the fixed rate risks the possibility of violating the funding guidelines again in the future if the System's experience does not meet expectations. Each time a fixed rate must be changed, it can lead to sudden, large changes in contributions that can be disruptive and difficult for the City's budget to absorb, creating a financial risk for the City and potentially putting member benefits at risk.

Consequently, we recommend switching to an Actuarially Determined Contribution (ADC). This means the City's contribution to the pension plan is calculated each year based on the plan's actual financial situation. The ADC automatically adjusts to reflect:

- Changes in the plan's investments,
- Changes in retirement or termination patterns, and
- Other financial factors.

Key Benefits of an ADC

- **Predictability**: An ADC makes relatively small changes each year, avoiding sudden cost increases or decreases and making budgeting more predictable over the long term.
- **Sustainability**: Ensures the pension plan is always on track to meet its obligations and always complies with the Texas Pension Review Board's funding guidelines.
- **Fairness**: Costs are spread more evenly across generations of taxpayers. The current fixed rate has resulted in a prior generation of taxpayers paying less than what was needed and transferring those costs to a future generation. While an ADC does not eliminate generational transfers, it limits them by making continuous annual cost adjustments.

How an ADC Works

The ADC has three parts:

1. **Normal cost**: The cost of benefits attributed to the current year of service for employees. This cost is designed to be a level percentage of payroll over each employee's career.
2. **Administrative expenses**: The annual cost of running the pension plan.
3. **Amortization payment**: The annual cost of paying down the System's Unfunded Actuarial Liability (the difference between the System's assets and what it should have based on the valuation model). Think of this like paying down a mortgage over time.

While the normal cost is a percentage of each individual's pay, the administrative expenses and amortization payments are dollar amounts that are independent of payroll.

SECTION I – EXECUTIVE SUMMARY

Recommendation

Since an ADC changes with each valuation, there needs to be time between when the ADC is calculated and when it is reflected in the City's contribution so the City can adjust its budget. We recommend that the January 1 valuation, which is typically completed near the end of the calendar year, be used to set the ADC for either the fiscal year beginning 21 months after the valuation date or the calendar year beginning 24 months after the valuation date.

We recommend a 'layered' amortization approach to gradually pay down the unfunded liability over the next 30 years. This approach combines a responsible schedule of payments to pay off the entire current unfunded liability within 30 years with additional schedules of payments or credits transitioning to 20-year layers to pay off any future gains, losses, or assumption changes. This amortization period balances the stability and predictability of contributions with generational equity while ensuring continuous compliance with the Texas Pension Review Board's funding guidelines. To ease the transition, the ADC can include a step-up period where the City's contribution increases gradually over a few years, and similarly, it can include a step-down period at the end of the 30 years.

We developed five alternative amortization policies outlined on the following page. Each alternative is reasonable. Given the current funding situation, we prefer the policies that require a higher level of contributions more quickly. We ordered the policies from most preferred on the left to least preferred on the right.

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Traditional	3 Year Step Up / Down	5 Year Step Up / Down	3 Year Step Up	5 Year Step Up
• Single initial 30-year amortization layer for entire UAL • 2.5% annual increase in payments • No step up or down in payments	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over three years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over three years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over five years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over five years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over three years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over five years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization

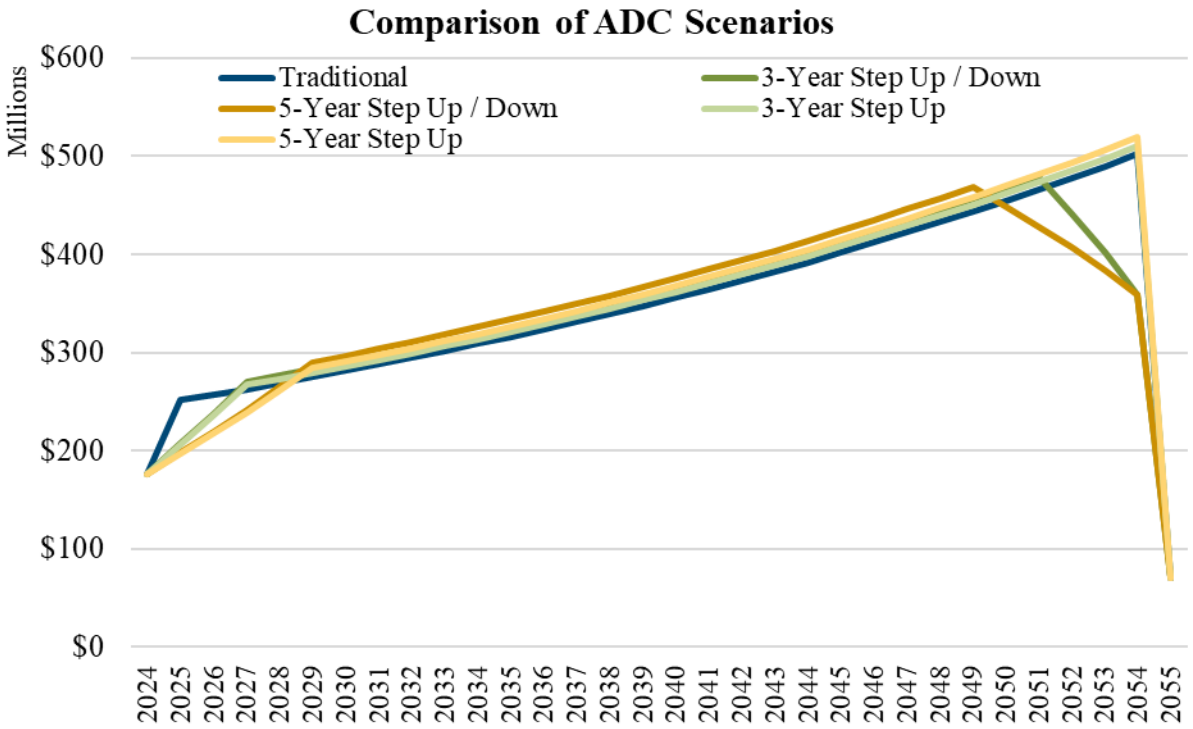
Comparison of Options

All five scenarios require a significant increase in City contributions and are expected to achieve 100% funding in 2055 if all assumptions are met. To smooth the projected pattern of contributions, we recommend re-setting the Actuarial Value of Assets to equal the Market Value of Assets as of January 1, 2023. The five-year asset smoothing would resume with investment returns following the reset. In addition, the valuation should take into account projected contributions and projected changes in normal cost during the period from the valuation date to when the contributions change to reflect the ADC.

All five scenarios are expected first to reach the 70% threshold to pay a COLA in 2046 or 2047, and all five scenarios are expected to experience minimum funded ratios of 32% to 34%. The System's current negative net cash flow of -7.1% is expected to improve to better than -2.0% by 2029 and to become positive net cash flow by 2036 under all five scenarios. The differences between the ADC options are less important than adopting an ADC compared to the current or even an increased fixed contribution rate. Nevertheless, there are differences in the level and pattern of payments, which are shown in Chart I-2.

SECTION I – EXECUTIVE SUMMARY

Chart I-2

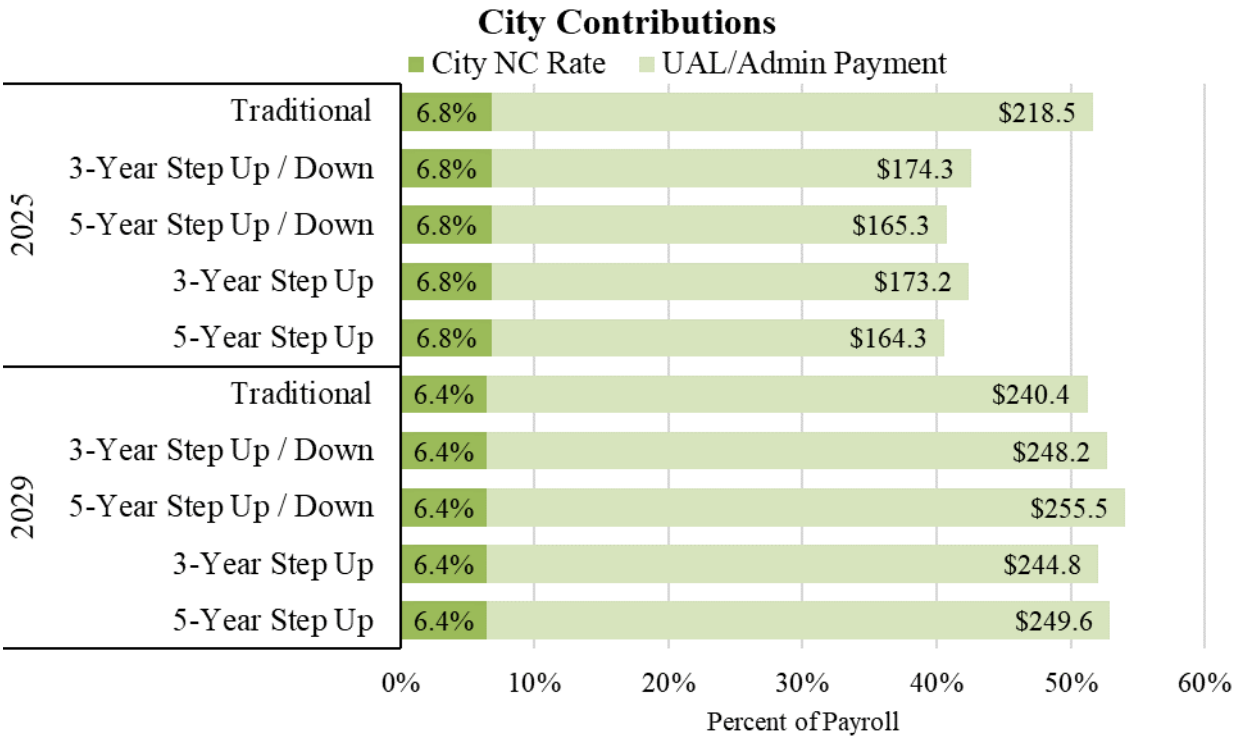


In general, any step up or step down employed by the method necessitates a higher contribution in the middle years. So, the Traditional option has the highest initial cost but the lowest cost in the middle years. The five-year step-up and down option has the second lowest initial cost but the highest cost in the middle years.

Chart I-3 compares the contributions required under each of these scenarios in 2025 (the first year) and 2029 (after all step-ups have been completed).

SECTION I – EXECUTIVE SUMMARY

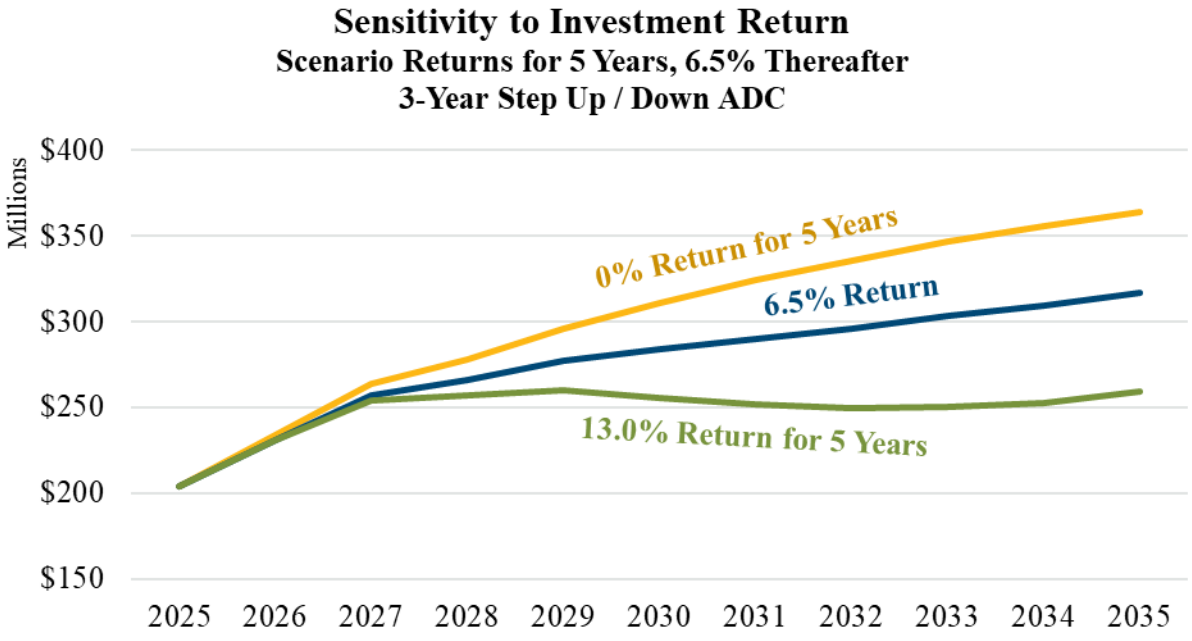
Chart I-3



Sensitivity to Investment Returns

One of the benefits of an Actuarially Determined Contribution is that it automatically adjusts to the System's experience each year. The size of these adjustments is controlled by the five-year asset smoothing method and the amortization method. As a result, only 20% of any investment gain or loss is recognized in a given year, and when recognized, the payment for a loss or credit for a gain is amortized over at least 20 years (29 years initially). To provide a sense of the potential change in ADC from one year to the next, Chart I-4 shows the ADC under the 3-Year Step Up / Down scenario assuming either 0% investment returns, 6.5% investment returns, and 13.0% investment returns for the first five years of experience.

Chart I-4



The asset smoothing and amortization cause the differences in the ADC to emerge slowly, even in these extreme scenarios. Ultimately, the differences for these scenarios are significant, but the ADC transitions the contributions to the new required level in steps to make the adjustments more budget-friendly. These are unrealistic extreme scenarios designed to illustrate how the ADC manages such a situation. In more likely and realistic scenarios with a mix of offsetting gains and losses, the asset smoothing and amortization methods serve to keep contributions stable by not overreacting to changes in any individual year.

ADC Conclusions

The most important recommendation in our report is to adopt an Actuarially Determined Contribution (ADC). An ADC will ensure the System improves its funded position in an orderly and affordable manner, automatically adjusting contributions annually to always satisfy the Texas Pension Review Board's funding guidelines. There are a range of reasonable alternatives to structure the transition to an ADC. All the alternatives outlined in this report are expected to achieve 70% funding by 2046 or 2047 and 100% by 2055.

Given the currently low funded status of the System, we prefer the ADC alternatives that transition to the needed higher level of contributions as quickly as possible while recognizing the realities of the City's budgeting process.

We also understand that there has been some discussion of potential lump sum contributions from the City. While not directly built in, all the ADC alternatives would automatically reduce contributions after a lump sum contribution was made to reflect the improved funded status due to the lump sum contribution.

Employee Contribution Rate

Our second recommendation is to reduce the employee contribution rate as funding improves. The employee contribution rate of 13.5% of pay currently covers almost 74% of the normal cost rate. The normal cost rate represents the expected cost of the benefits attributable to the current year of service, and this proportion of that cost being allocated to employees is high compared to peer systems. However, given the System's current funded status, it would be difficult to reduce employee contributions.

Under the current provisions, once the System is 100% funded, employees would only pay 50% of the normal cost rate. Our recommendation is simply to establish a schedule so that as the funded ratio improves, the employee contribution rate gradually declines to equal 50% of the normal cost rate. This recommendation is intended to be combined with the prior recommendation of adopting an Actuarially Determined Contribution. Furthermore, if any additional COLA is adopted as in our final recommendation, the schedule and ultimate employee contribution rate would need to be adjusted to reflect that COLA.

Table I-1 shows an example of a schedule that could be adopted to accomplish this recommendation. To develop the schedule, the base employee rate is first set equal to 50% of the normal cost rate applicable for members hired on or after March 1, 2011, rounded to the nearest 0.5%. By the time the System is well funded, virtually all active members will have been hired after this date. For this scenario, we calculate this base employee contribution rate to be 9.5% of pay. Then, a schedule to increase this employee contribution rate for various funding levels is established. In the schedule in Table I-1, there is no adjustment once the System is 90% funded, and the full increase of 4.0% is applied whenever the System is less than 50% funded.

Table I-1

Sample Employee Contribution Rate Adjustment Schedule

Funded Ratio	Base Employee Contribution Rate	Rate Adjustment	Total Employee Contribution Rate
90% or Greater	9.5%	0.0%	9.5%
85% – 89%	9.5%	0.5%	10.0%
80% – 84%	9.5%	1.0%	10.5%
75% – 79%	9.5%	1.5%	11.0%
70% – 74%	9.5%	2.0%	11.5%
65% – 69%	9.5%	2.5%	12.0%
60% – 64%	9.5%	3.0%	12.5%
50% – 59%	9.5%	3.5%	13.0%
Under 50%	9.5%	4.0%	13.5%

SECTION I – EXECUTIVE SUMMARY

When the employee contribution rate is adjusted, there is an exactly equal offsetting adjustment to the employer's normal cost rate. The employer's normal cost rate equals the total normal cost rate minus the employee contribution rate. Consequently, these adjustments do not affect the contribution amount received by the System but simply shift contributions between employees and the city.

Other adjustment schedules would also be appropriate. The schedule on the previous page is simply an example. The recommendation is to create a schedule that gradually reduces the employee contribution rate to 50% of the normal cost rate as the System's funded status improves rather than make a significant adjustment all at once when the System becomes 100% funded.

Cost-of-Living Adjustments

Our final recommendation is that the System be amended to provide some Cost-of-Living Adjustments (COLAs) earlier than the current plan provisions permit. While recognizing the large increases in contributions required to fully fund the System within 30 years, we believe the current COLA provisions will need to be improved to provide some level of COLA prior to the System reaching 70% funded, which will require even higher contributions. Under the current provisions, no COLA is expected to be paid until 2046. Even in relatively low inflation environments, this period without a COLA will result in a significant loss in purchasing power for retirees that will likely result in significant pressure to provide some level of COLA, at least for the retirees who have experienced the largest decline in purchasing power. Consequently, the costs of an increased COLA should be included in the contribution budget now. Ignoring or deferring these costs may lead to inadequate funding and further generational transfers. The COLA to be provided is a policy decision that will need to balance the benefits of providing a COLA and protecting purchasing power for retirees against the additional costs. This report provides a range of options to illustrate the tradeoff between additional benefits and additional costs of providing COLAs to members earlier than currently anticipated.

Key Findings of COLA Analysis

- **COLA Absence:** The System has not provided a COLA since 2016. Current provisions prevent a COLA from being paid until the fund achieves a 70% funded status – an unlikely scenario for at least 20 years, even with increased contributions.
- **Inflation's Impact:** The lack of COLA protection significantly erodes the purchasing power of retirement benefits over time. This is a critical issue, given members' lack of Social Security coverage.
- **Competitive Landscape:** The City's Employees' Retirement Fund and many other public safety pension systems offer inflation protection, creating a competitive disadvantage in recruitment and retention.

Purchasing Power Erosion

In retirement, inflation erodes purchasing power to the extent that retirees' benefits are not increased by COLAs. Since the last COLA was provided in 2016, inflation has reduced retirees' purchasing power to about 76% of what it was then. The total reduction in purchasing power for individual retirees varies by the inflation experienced since their retirement compared to the COLAs granted over that same period. Table I-2 shows the remaining purchasing power in 2024 for retirees by year of retirement and projects future purchasing power under the current COLA provisions, assuming 2.5% inflation each year.

Table I-2

Retirement Year	Purchasing Power						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	61%	56%	53%
2022	96%	85%	75%	66%	58%	54%	51%
2021	88%	77%	68%	60%	53%	49%	47%
2020	83%	73%	65%	57%	50%	47%	44%
2019	82%	73%	64%	57%	50%	46%	44%
2018	81%	71%	63%	56%	49%	45%	43%
2017	79%	70%	61%	54%	48%	44%	42%
2016	76%	67%	60%	53%	47%	43%	41%
2015	78%	69%	61%	54%	47%	44%	41%
2010	86%	76%	67%	59%	52%	48%	45%
2005	93%	83%	73%	65%	57%	52%	48%
2000	94%	83%	73%	65%	57%	52%	
1995	92%	82%	72%	64%	56%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

For members who retired in 2023, purchasing power is expected to decline to nearly 60% of their current purchasing power before the System is expected to reach the 70% funded ratio at which a COLA could potentially be paid under the current provisions.

COLA Options for Consideration

The report presents a range of potential COLA options with varying levels of benefits and associated costs. These options aim to assist the City of Dallas and the Retirement Board in finding a solution that balances the additional benefits with the additional cost.

The range of options presented extends from the current System COLA to the current COLA provided by the Dallas Employees' Retirement Fund (DERF) for non-safety employees of the City of Dallas and includes the following seven options:

- **Current System COLA** – Ad hoc simple COLA equal to 5-year average investment return minus 5.0% with a maximum COLA of 4.0%. COLA can only be provided if the System is at least 70% funded after providing the COLA.
- **Current DERF COLA** – Automatic simple COLA equal to inflation up to a maximum of 5.0% for members hired prior to January 1, 2017 and 3.0% for members hired thereafter.
- **Immediate Partial COLA** – Ad hoc simple COLA equal to 5-year average investment return minus 5.0%, all multiplied by the current funded percentage with a maximum COLA of 4.0%.

- **Current System COLA with 70% Purchasing Power Protection** – Same as current System COLA except that COLAs are also provided to individual retirees as needed to ensure their purchasing power is not less than 70% of what it was in 2024.
- **Current System COLA with 80% Purchasing Power Protection** – Same as current System COLA except that COLAs are also provided to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.
- **Immediate Current COLA with 80% Purchasing Power Protection** – Same as current System COLA except without the 70% funded status restriction and providing COLAs to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.
- **Compound Immediate Current COLA with 80% Purchasing Power Protection** – Compound (instead of simple) version of current System COLA without the 70% funded status restriction and providing COLAs to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.

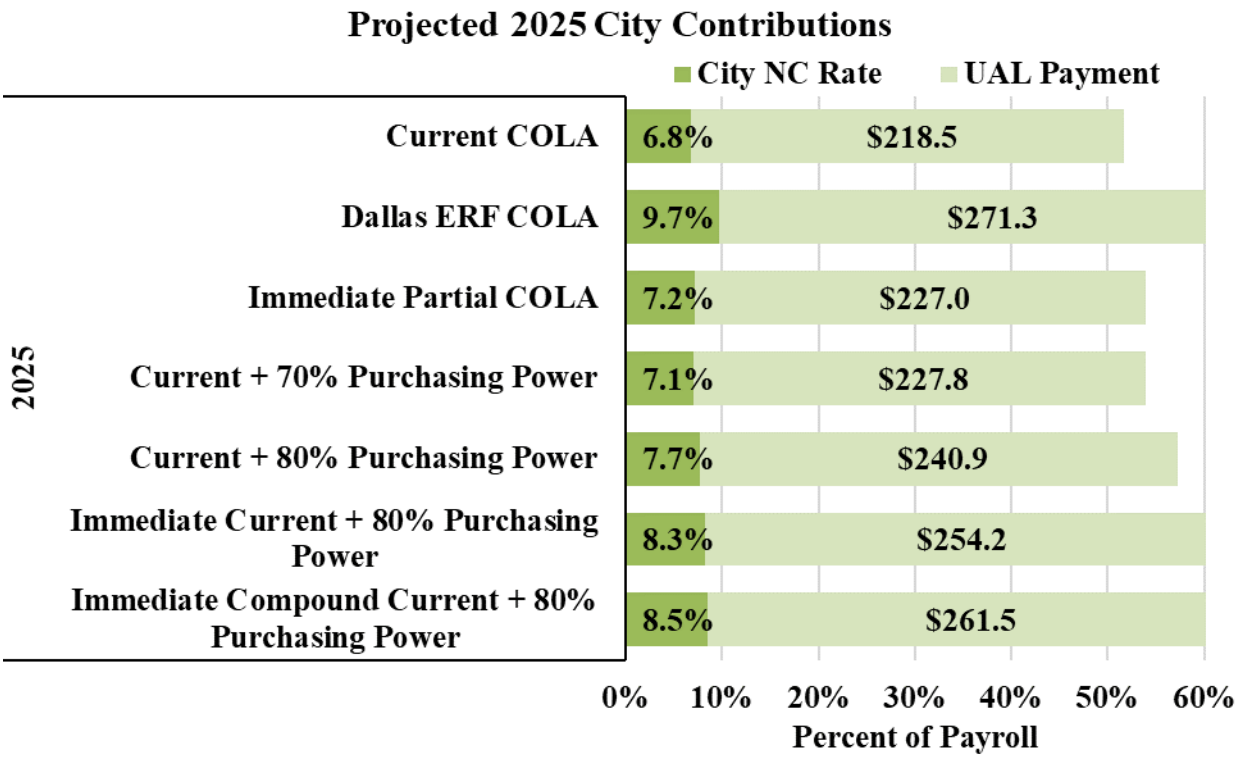
Table I-3 shows the expected purchasing power under each of these options, assuming future inflation is 2.50% each year.

Table I-3

COLA Scenario	Purchasing Power 2024	2029	2034	2039	2044	2049	2054
Current	100%	**88%**	*78%*	*69%*	*61%*	*56%*	*53%*
Dallas ERF COLA	100%	99%	98%	95%	92%	**88%**	**83%**
Immediate Partial COLA	100%	**89%**	**81%**	*74%*	*68%*	*63%*	*59%*
Current + 70% Purchasing Power Protection	100%	**88%**	*78%*	*70%*	*70%*	*70%*	*70%*
Current + 80% Purchasing Power Protection	100%	**88%**	*80%*	*80%*	*80%*	*80%*	*80%*
Current Immediate + 80% Purchasing Power Protection	100%	95%	**90%**	**85%**	*80%*	*80%*	*80%*
Compound Current Immediate + 80% Purchasing Power Protection	100%	95%	91%	**86%**	**82%**	*80%*	*80%*

Any additional COLAs would also increase the normal cost, unfunded actuarial liability (UAL), and the City's Actuarial Determined Contributions. Chart I-5 summarizes the estimated cost impact by comparing the projected City contributions in 2025 using the Traditional ADC. Note that while we have shown these with the Traditional ADC option for illustrative purposes, these COLA scenarios could be combined with any of the ADC options in our recommendations.

Chart I-5



COLA Conclusions

We recommend amending the System to implement earlier COLA provisions for the following reasons:

- **Preserving Purchasing Power:** COLAs are crucial to offset inflation and ensure retired members' financial well-being.
- **Competitive Necessity:** Aligning with market practices and considering parity with other City of Dallas employees is essential to attract and retain qualified Police and Fire personnel.
- **Fiscal Responsibility:** We believe the System will have to provide some level of COLA before the current provisions anticipate one being paid. Proactively incorporating the cost of these future COLAs into the budget plan ensures sustainable, long-term funding of the System.

Addressing the COLA issue is paramount to ensuring a financially secure retirement for valued Police and Fire personnel while maintaining the City of Dallas' competitiveness as an employer. The COLA options presented offer a starting point for policy decisions to achieve these dual objectives while maintaining an affordable contribution level.

Conclusion

A sustainable pension system requires contributions and investment earnings to accumulate over time to equal the benefits and expenses paid from the system. The current level of contributions to the Dallas Police and Fire Pension System is inadequate to support the benefits promised. Benefit reductions in 2011 and 2017 have already significantly reduced the liability, and further reductions would put the City of Dallas at a competitive disadvantage. Furthermore, employee contributions already pay for a larger portion of the expected cost of benefits than peer systems in Texas. Consequently, our primary recommendation is to increase city contributions.

City contributions have historically been a fixed percentage of pay. This approach provides budget stability for the city, but the contributions do not automatically adjust to the needs of the System. We strongly recommend the adoption of an Actuarially Determined Contribution that adjusts annually as the experience of the System changes. We have outlined some alternatives that balance the city's need for budget stability with the System's need for contributions that change as experience emerges. These alternatives will ensure that the Dallas Police and Fire Pension System remains in compliance with the Texas Pension Review Board's funding guidelines.

Employees currently pay for over 70% of the expected cost of their benefits, which is well above the average for peer systems. Under current provisions, this percentage will drop to 50% once the System is 100% funded. Rather than maintaining these high employee contribution rates all the way until the System is 100% funded and then dropping the rate in one year, we recommend establishing a schedule of employee contribution rate adjustments based on the funded status of the System that will gradually reduce employee contribution rates as the System is better funded.

Finally, the System currently cannot pay a COLA until it is 70% funded, which is not expected for over 20 years. Given the loss of purchasing power retirees face the fact that employees are not covered by Social Security, we believe the System will need to pay a COLA before it is 70% funded. Consequently, we recommend that the System determine what COLA it will need to pay and build the additional costs of that COLA into the budget plan today. Failure to do so means that when the System needs to pay the COLA, none of it will have been funded in advance, and the entire cost will fall to future generations.

While we do not recommend a specific COLA, we have outlined a range of options for the System to consider. These options are not all-encompassing but are intended to provide a starting point for analysis of the balance between the purchasing power protection the COLAs can provide and the additional cost of providing that protection.

SECTION II – CERTIFICATION

The purpose of this report is to present the results of our independent actuarial analysis of the Dallas Police and Fire Pension System, including providing alternative benefit and contribution scenarios that comply with the requirements of Texas Government Code Section 802. This analysis is based on our replication of the 2023 actuarial valuation performed by Segal.

In preparing our report, we relied on information, some oral and some written, supplied by the System and its ongoing actuary, Segal. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

The economic and demographic assumptions used in our analysis are the same as those used by Segal for the 2023 actuarial valuation. We believe these assumptions are reasonable for the purpose of this analysis. A summary of the data, assumptions, methods, and plan provisions used to prepare our analysis can be found in Segal's 2023 actuarial valuation report, supplemented by additional information in the appendix of this report.

The funding ratios in this report are for the purpose of establishing contribution rates. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities, normal costs, and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have used it in accordance with its original intended purpose. We have not identified any material inconsistencies in the assumptions or output of ProVal that would affect this analysis.

Deterministic projections in this valuation report were developed using *P-Scan*, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System. *P-Scan* uses standard roll-forward techniques that implicitly assume a stable active population. Because *P-Scan* does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

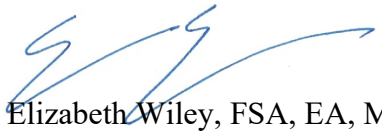
This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

SECTION II – CERTIFICATION

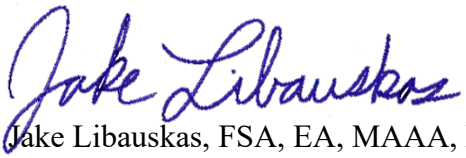
This report was prepared for the Dallas Police and Fire Pension System, the City of Dallas, and the Texas Pension Review Board for the purposes described herein. This report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.



William R. Hallmark, ASA, EA, MAAA, FCA
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SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Overview

Part of the independent actuarial analysis requirements is to recommend benefit changes. Recognizing the importance of competitive benefits to a sustainable retirement system, we assessed the System´s benefits, both in absolute terms and in comparison to the City of Dallas Employees' Retirement Fund (ERF) and other Texas municipal public safety plans.

Public pension plans typically have a primary benefit formula that multiplies service by a final average compensation and a benefit multiplier. Adjusting the definition of final average compensation and the level of the benefit multiplier are powerful ways to increase or decrease the benefits provided by the System. In the 2011 and 2017 reforms of the System, the final average compensation had already been extended to a 60-consecutive month period, which is not uncommon but is longer than most public plans. Consequently, we did not explore additional adjustments to the averaging period. The retirement benefit is also sensitive to the types of pay included in the calculation, but our analysis did not examine whether any pay elements currently included in pensionable compensation should be excluded. We suspect any adjustments would have at most, a modest impact. Instead, our analysis focused primarily on benefit multipliers at various retirement ages to compare the initial benefit amount at retirement and on post-retirement cost-of-living adjustments to assess the preservation of purchasing power.

Comparison of Benefit Multipliers

The System reforms in 2011 and 2017 reduced the maximum benefit multiplier to 2.50% for future service. Although the System could reduce the multiplier for future service further, for example to 2.25%, we do not recommend such a reduction for competitive reasons. The System's current multiplier of 2.5% matches that of the newest tiers of Austin Police, both El Paso Fire and Police, and both Ft. Worth Police and Fire. The Houston and San Antonio plans feature multipliers that vary with service and are lower than the current 2.5% for DPFP for some or all service bands. Austin Fire currently provides a significantly higher benefit multiplier at 3.3%. The System's 2.5% benefit multiplier thus lies in the middle of the peer group and is also the multiplier of the majority of this group.

The newest tier of Dallas' ERF also has a 2.50% multiplier. Reducing the System's 2.5% benefit multiplier would result in lower retirement benefits for Dallas's public safety employees than for its nonpublic safety employees with the same service and salary levels.

Comparison of Retirement Ages

The full 2.5% benefit multiplier is currently available at age 58 with five years of service. This benefit multiplier is reduced at earlier retirement ages, with smaller reductions for members who have completed at least 20 years of service. Although it would be possible to change these requirements for future service, we advise against doing so due to the impact on the competitiveness of the System's benefits.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Generally, other Texas municipal public safety plans also establish normal retirement eligibility based on some combination of age and service. They also often adjust the benefit multiplier for earlier retirements based on different age and service criteria.

The retirement eligibility conditions for Tier B of ERF include three pathways to eligibility:

- Age 65 with five years of service,
- 40 years of service at any age, or
- Rule of 80 (age plus service greater than or equal to 80) with reduction if the member is under age 65.

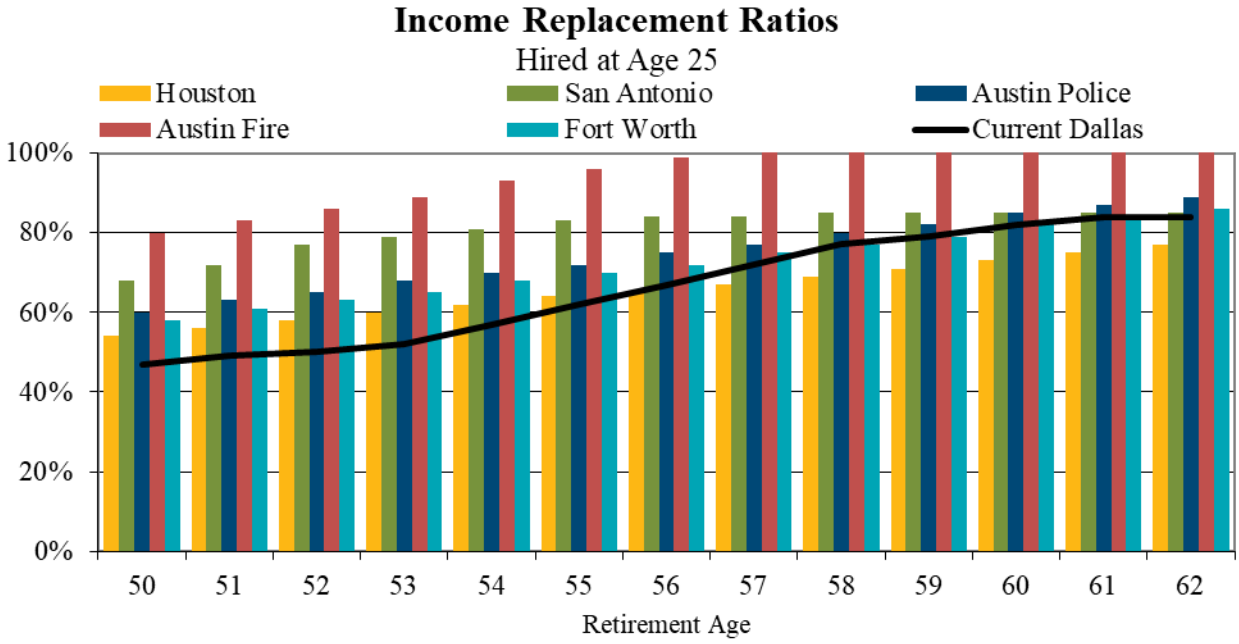
While these conditions are greater than those for DPFP, it is typical to have earlier eligibility for public safety members relative to nonpublic safety members.

Comparison of Replacement Income at Retirement

We combined the age and service requirements with the multiplier to calculate income replacement ratios to evaluate the competitiveness of the System's benefits compared to other Texas municipal public safety systems. These ratios represent the percentage of pre-retirement salary provided by the benefits paid at the time of retirement.

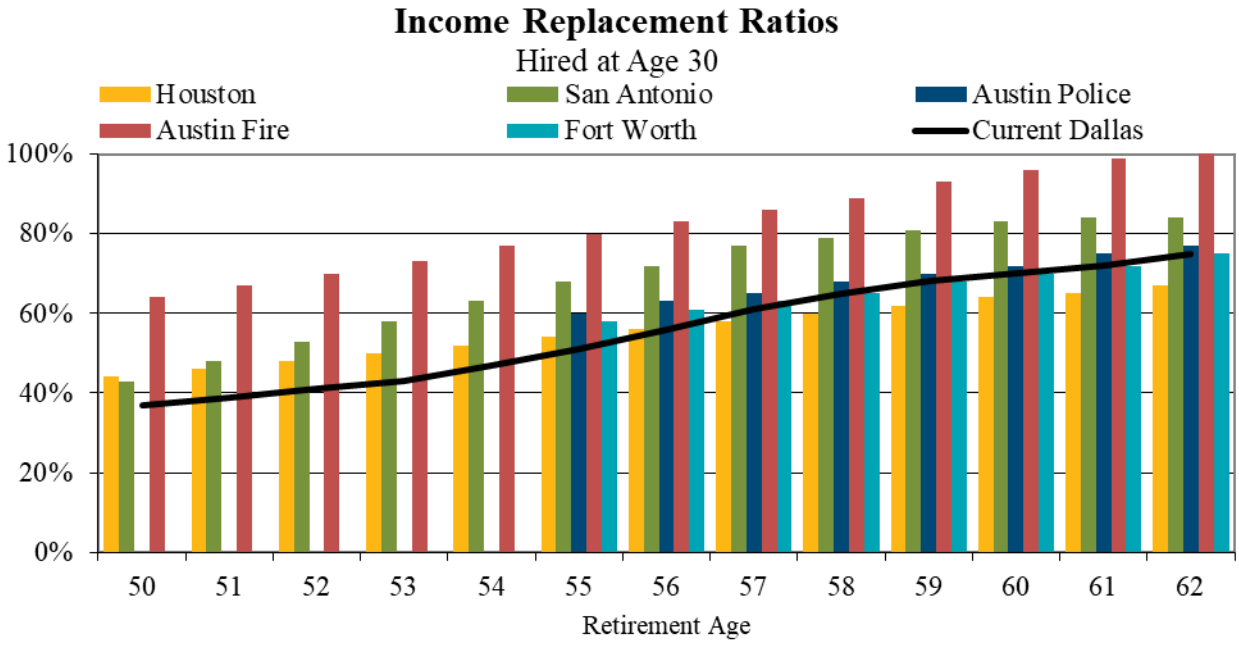
Chart III-1 below compares the income replacement ratios for the various plans for a member hired at age 25 and retiring at the age shown on the X-axis. Chart III-2 on the following page shows the same information for a member hired at age 30.

Chart III-1



SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Chart III-2



Note: Fort Worth Police are eligible for retirement after 25 years of service, but Fire personnel must satisfy the Rule of 80.

For both of these representative hire ages, the DPFP benefits offer lower income replacement ratios generally compared to similar systems, especially at earlier retirement ages. These benefits become more competitive with similar plans at, or beyond, the current DPFP normal retirement age of 58.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Comparison of Employee Contribution Rates

In our evaluation of the employee contribution rates, we compared both the absolute level of the employee contribution and the proportion of the total normal cost paid by the employee contribution for the System, the Dallas ERF, and other Texas municipal public safety systems.

Table III-1 summarizes these comparisons based on the most recent valuation reports available.

Table III-1

System	Total Normal Cost Rate	Employee Contribution Rate	Proportion of Normal Cost Paid by Employee
Dallas P&F	18.65%	13.50%	72.39%
Dallas ERF	19.17%	13.32%	69.48%
Austin Fire	30.73%	18.70%	60.85%
Austin Police	24.85%	15.00%	60.37%
Fort Worth Fire	15.86%	13.65%	86.07%
Fort Worth Police	15.86%	14.73%	92.88%
Houston Fire	25.25%	10.50%	41.58%
Houston Police	24.90%	10.50%	42.17%
San Antonio	36.03%	12.32%	34.19%
Average	23.44%	13.58%	62.36%

Fort Worth valuation does not report the total normal cost for Police and Fire separate from general employees, but they have similar benefits.

The System's current 13.5% employee contribution rate constitutes over 70% of the total normal cost. This proportion is even higher for newer employees, who have reduced benefits and thus a lower normal cost than those hired under the earlier tier. This proportion of the normal cost provided by the employee contributions is among the highest in our comparison group, with only the Fort Worth plans being higher. Across the group, the average portion of the normal cost covered by the employee contribution rate is about 62%, including current temporary increases related to funded status. These rates are expected to decrease as the funded status of the systems improves. Similarly, the employee contribution rate for DPFP is set to decrease to 50% of the total normal cost rate once the System achieves 100% funding.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Comparison of COLA Provisions

Inflation erodes the purchasing power of retirement benefits unless sufficient Cost-of-Living Adjustments (COLAs) are also provided. The comparisons above focused on the benefits payable at retirement, while this section focuses on how well those benefits are protected from erosion due to inflation. Protection from inflation is particularly important for systems like DPFP, as their members do not receive the full inflation-indexed benefits provided by Social Security due to their municipal employment not being covered by Social Security.

Like DPFP, all the other Texas large municipal public safety plans do not have Social Security coverage except for Austin Police. However, despite this commonality, these plans have a wide range of COLA provisions. At the low end, Austin Police and the Ft. Worth systems cannot pay any COLA without legislative action to amend their statutes. Progressing up the range, Austin Fire offers ad hoc COLAs intended to provide complete purchasing power protection but are limited as necessary based on financial sustainability. Moving from ad hoc to automatic, the Houston Police and Fire plans pay COLAs based on their actual five-year average return, reduced by either 4.75% for Fire or 5% for Police with a minimum of 0% and a maximum of 4%. The most generous system in providing COLAs among this group is San Antonio Police and Fire, offering a COLA equal to 100% of actual inflation for their older tier, 70% of inflation for their newer tier, and potentially additional 13th and 14th checks for all their members based on investment performance.

The nonpublic safety employees of the City of Dallas, who are covered by ERF, receive an automatic simple COLA based on actual inflation with a minimum value of 0% and a maximum value of 3% for the new Tier B and 5% for the old Tier A. This is a simple COLA, meaning it applies to the base benefit determined at retirement and does not compound over time.

Currently, the System's COLA provisions stipulate that no COLA can be paid until funding, reflecting the granting of such COLA, reaches at least 70%, a milestone currently projected not to be met until 2073 based on the January 1, 2023, valuation. Furthermore, no COLA has been granted since 2016.

Conclusions

After considering the System's current benefits, which reflect past benefit reductions, and comparing these current benefits to a peer group of other Texas municipal public safety plans, we recommend no further changes to the multipliers or retirement eligibility requirements.

Our recommendations on employee contribution rates and COLAs are discussed in Sections V and VI of this report.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

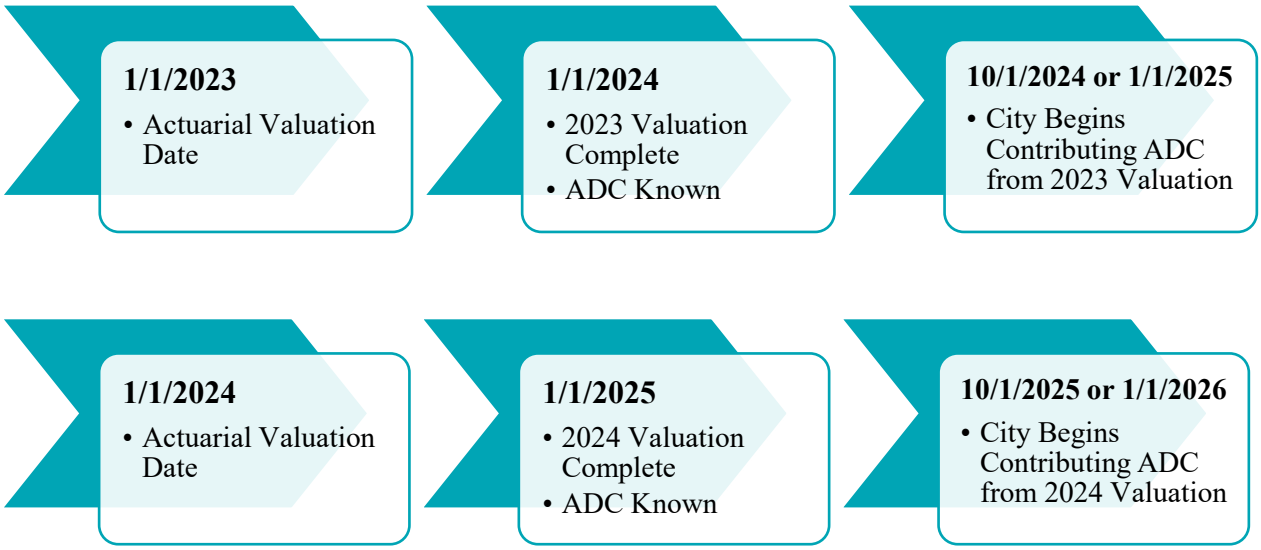
Overview

Our principal recommendation is that the Dallas Police and Fire Pension System change its employer contribution from a fixed rate to an Actuarially Determined Contribution (ADC). Fixed-rate contributions are difficult to change, and as a result, experience that differs from the assumptions when the fixed rate was established can cause a significant decline in the plan's funded status. When the fixed rate is finally changed, often a significant change is required, disrupting sponsor budgets and shifting costs to a subsequent generation of employees and taxpayers.

The Texas Pension Review Board's funding guidelines require that contributions be sufficient to amortize the Unfunded Actuarial Liability over a period of 30 years or less. The System currently does not satisfy these guidelines, so contributions and/or benefits must be changed to bring the System into compliance. If the System were to fail to meet these guidelines in the future, a Funding Soundness Restoration Plan would be required.

The System could simply increase the fixed contribution rate to satisfy the PRB's funding guidelines, but doing so would risk a failure if the experience of the System did not meet the assumptions. In contrast to a fixed rate, an ADC adjusts the contribution for the System's experience each year so that the PRB's funding guidelines are always satisfied. By making measured adjustments each year, the ADC also avoids large disruptive changes in contributions.

Because the ADC changes each year, a process needs to be established so that the ADC can be calculated in advance and inserted into the sponsor's budget process. The System currently performs actuarial valuations as of January 1 each year, and the valuations are normally completed within 12 months of the valuation date. Consequently, we recommend that the ADC become effective either 21 months (Beginning of the City's fiscal year) or 24 months (Beginning of the System's fiscal year) after each valuation date. This timing allows the ADC to be calculated and known when the City is preparing its budget for the fiscal year when the contribution will change.



SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Recommended ADC Components

An Actuarially Determined Contribution typically consists of three components:

- Normal cost,
- Administrative expenses, and
- Payment on any Unfunded Actuarial Liability.

Normal Cost

The normal cost represents the expected cost of benefits attributed to the current year of service for each active member of the System under the actuarial cost method. The System, like most public pension plans, currently uses the Entry Age Actuarial Cost Method, which spreads the costs of each member's benefits as a level percentage of pay over their career. Given this actuarial cost method, it is appropriate to collect the normal cost portion of the ADC as a percentage of payroll. Then, any variations in actual payroll from the payroll used in the valuation automatically adjust the amount collected to reflect the expected cost of benefits attributable to the current year of service.

There is one technical change from the methodology used in the current valuation that we believe is important to adopt when the System switches to an ADC. The current normal cost rate is calculated by dividing the dollar amount of the normal cost as of the valuation date by the total expected payroll for the year following the valuation date, assuming no active members retire, terminate employment, become disabled, or die during the year. The dollar amount of the normal cost is calculated using these assumptions, but the payroll is not. For an ADC, it is better practice to determine the normal cost rate by dividing the dollar amount of the normal cost by the expected payroll for the same members, reflecting these assumptions. This approach will prevent liability losses for new entrants to the System each year.

Administrative Expenses

The System currently assumes administrative expenses equal to the greater of $7 million or one percent of payroll each year. This amount is independent of payroll. Consequently, we believe it is more accurate to collect the payment for administrative expenses as a dollar amount rather than a percentage of payroll.

Payment on Unfunded Actuarial Liability

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. The current methodology for developing the Actuarial Value of Assets recognizes deviations from expected investment returns over a five-year period, effectively smoothing the value of assets. Under the current fixed contribution rate, this smoothing had minimal impact, as it only affected the reported funded percentage and the reported funding period. However, in developing an Actuarially Determined Contribution, asset smoothing helps control how much the City's contribution changes from year to year, which is important for managing the budget process. The current five-year smoothing methodology is appropriate for the development of an ADC, and we recommend that it be retained.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

The Actuarial Liability represents the target amount of assets the System should have as of the valuation date to pay for benefits attributable to past service. While the Unfunded Actuarial Liability changes each year based on the System's experience, any assumption or plan changes, and the level of contributions, it is largely independent of future payroll. Hiring additional employees or choosing not to replace existing employees when they retire or otherwise terminate employment has no impact on the UAL. Consequently, we recommend that the UAL payment be set as a fixed dollar amount as opposed to a percentage of payroll. In addition to ensuring the System collects the payment it needs on the UAL, this approach provides the city an amount for the budget that is certain and does not have to be adjusted depending on the positions they fill or don't fill.

We recommend a closed, layered amortization methodology. Under this methodology, a payment schedule is established for the existing UAL. Then, each subsequent year, a new layer is established for any difference between the actual and expected UAL with its own payment or credit schedule while the payments on the original UAL continue as originally scheduled. This approach helps to stabilize contributions while ensuring that there is a timely schedule to pay off the entire UAL.

Amortization payments should be scheduled as a level or declining percentage of expected payroll. Systems that backload their amortization payments such that the payments grow faster than payroll or the sponsor's revenue can run into difficulty making those payments when they are eventually due. Systems that frontload amortization payments too much may experience volatility in contribution levels that disrupt budgeting. Balancing these factors, we recommend that amortization payments be scheduled to increase at the assumed rate of inflation, currently 2.5%. This rate of increase produces a schedule of payments that is expected to be level in terms of real dollars.

One of the most consequential decisions on amortization is the length of the amortization period. Short amortization periods are likely to be too expensive and result in volatile levels of contributions that disrupt budgeting. Long amortization periods stabilize contributions but may shift costs associated with benefits earned by the current generation to future generations. Balancing these perspectives, an amortization period of 15 to 20 years is generally accepted as a model practice for public pension plans.[1]

Given the current level of the UAL, immediately imposing a 20-year amortization period would be very costly, and it is generally recognized that longer amortization periods may be needed to transition to an Actuarially Determined Contribution if prior funding has been inadequate. The Texas Pension Review Board guidelines permit up to a 30-year funding period. Consequently, we recommend that the initial funding period be set at 30 years but that it declines each year until it reaches 20 years. Once the remaining period reaches 20 years, any new layers will be amortized over 20 years, while the prior layers will continue to be paid according to their original schedules.

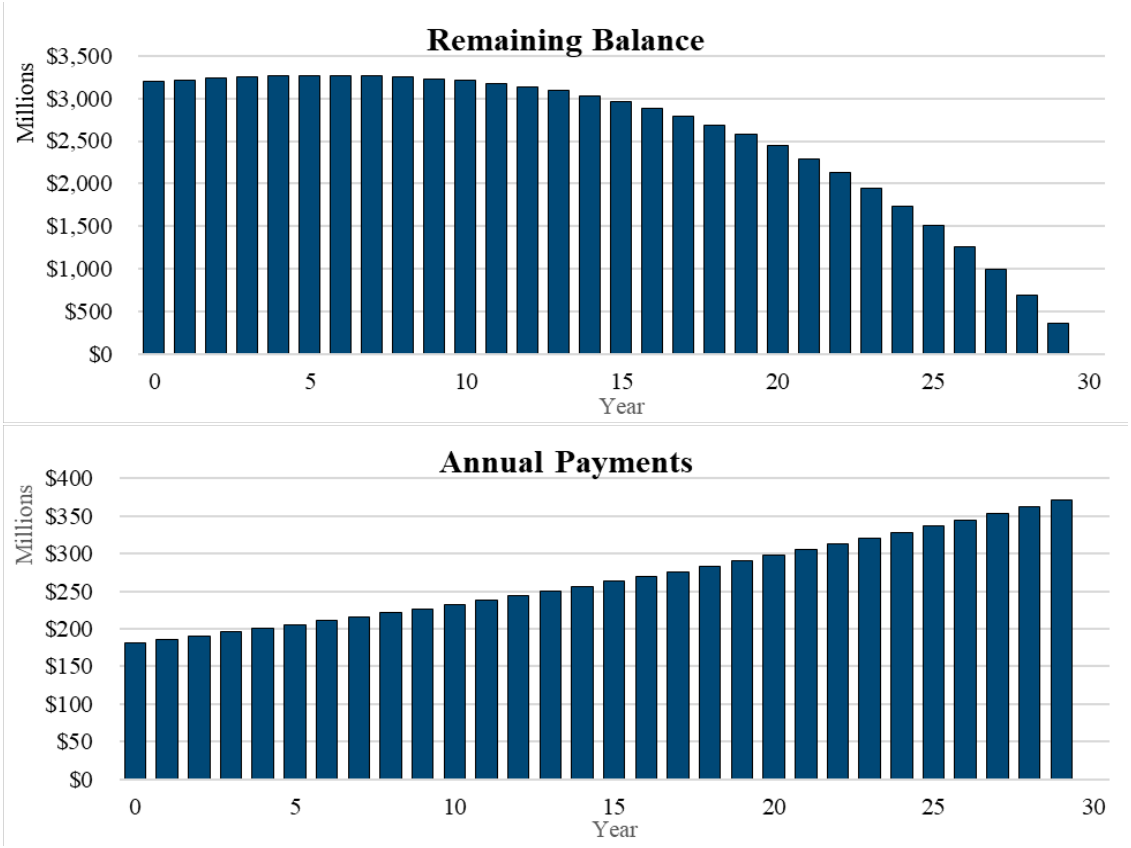
1 See "Actuarial Funding Policies and Practices for Public Pension Plans" published by the Conference of Consulting Actuaries, October 2014.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Illustrations

The Unfunded Actuarial Liability as of January 1, 2023, is approximately $3.2 billion. Chart IV-1 shows the scheduled amortization of this initial UAL over 30 years with the remaining balance each year shown on the top and the annual payment shown on the bottom.

Chart IV-1

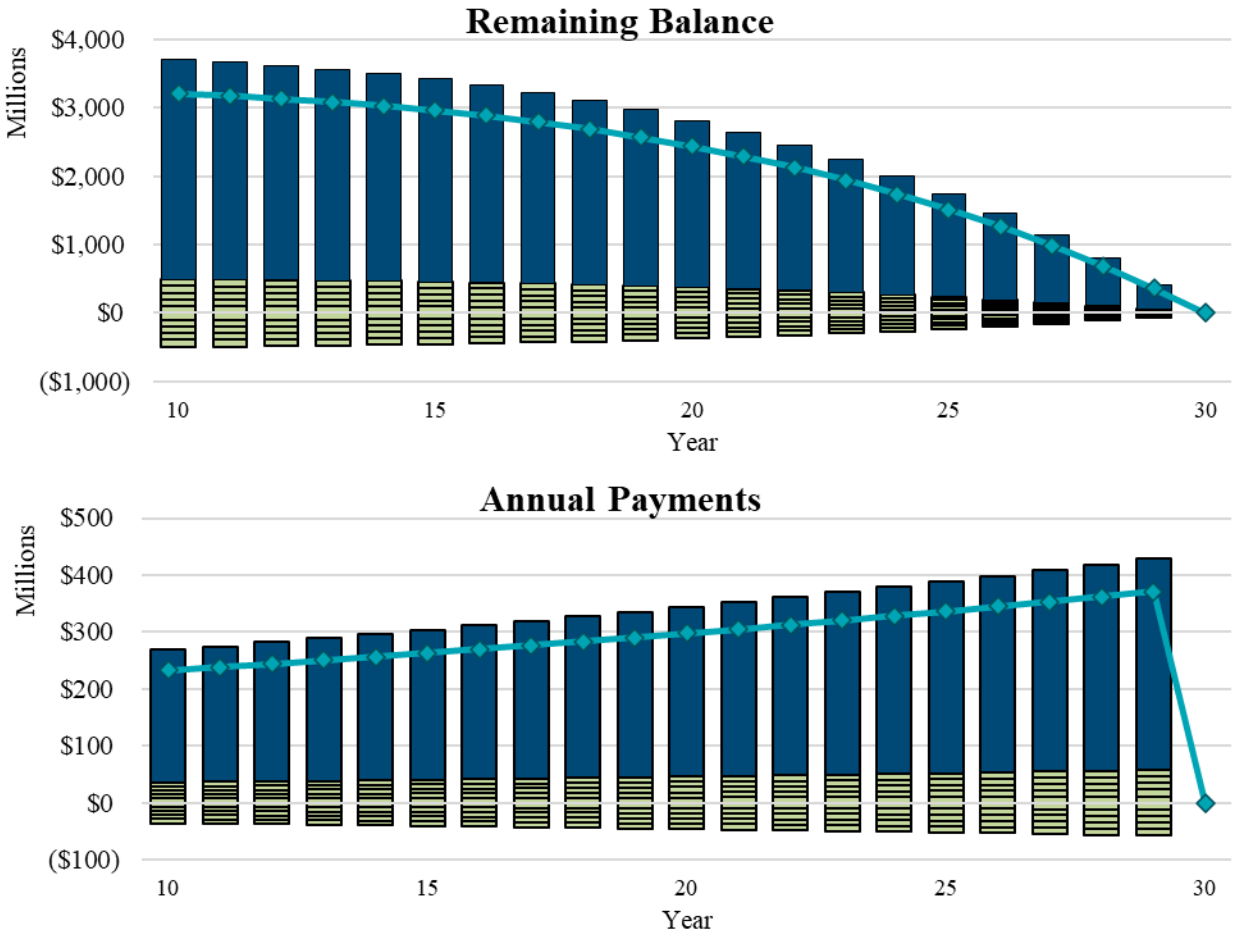


The payments increase by 2.5% each year, which allows for a lower starting payment than if all payments were the same dollar amount. However, as shown on the top, the lower initial payments cause the remaining balance to increase for a few years before it starts to be paid down and gets back to the initial amount after about ten years. This pattern is one reason we recommend transitioning from a 30-year period to a 20-year period. With a 20-year period, the balance of the amortization base will be paid down from the beginning of the amortization period.

To transition to the 20-year layered amortization method that we recommend, each year, the actuarial gain or loss for the year would be amortized over a period that is one year shorter than the prior year until all the layers have 20 years remaining. To illustrate this process, Chart IV-2 shows the amortization schedule ten years from now with the addition of alternating layers of $100 million actuarial gains with $100 million actuarial losses in light green during the intervening period. The blue bars are the final 20 years of the initial UAL layer and the teal line represents the net remaining balance in the chart on the top and the net amortization payment in the chart on the bottom.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Chart IV-2

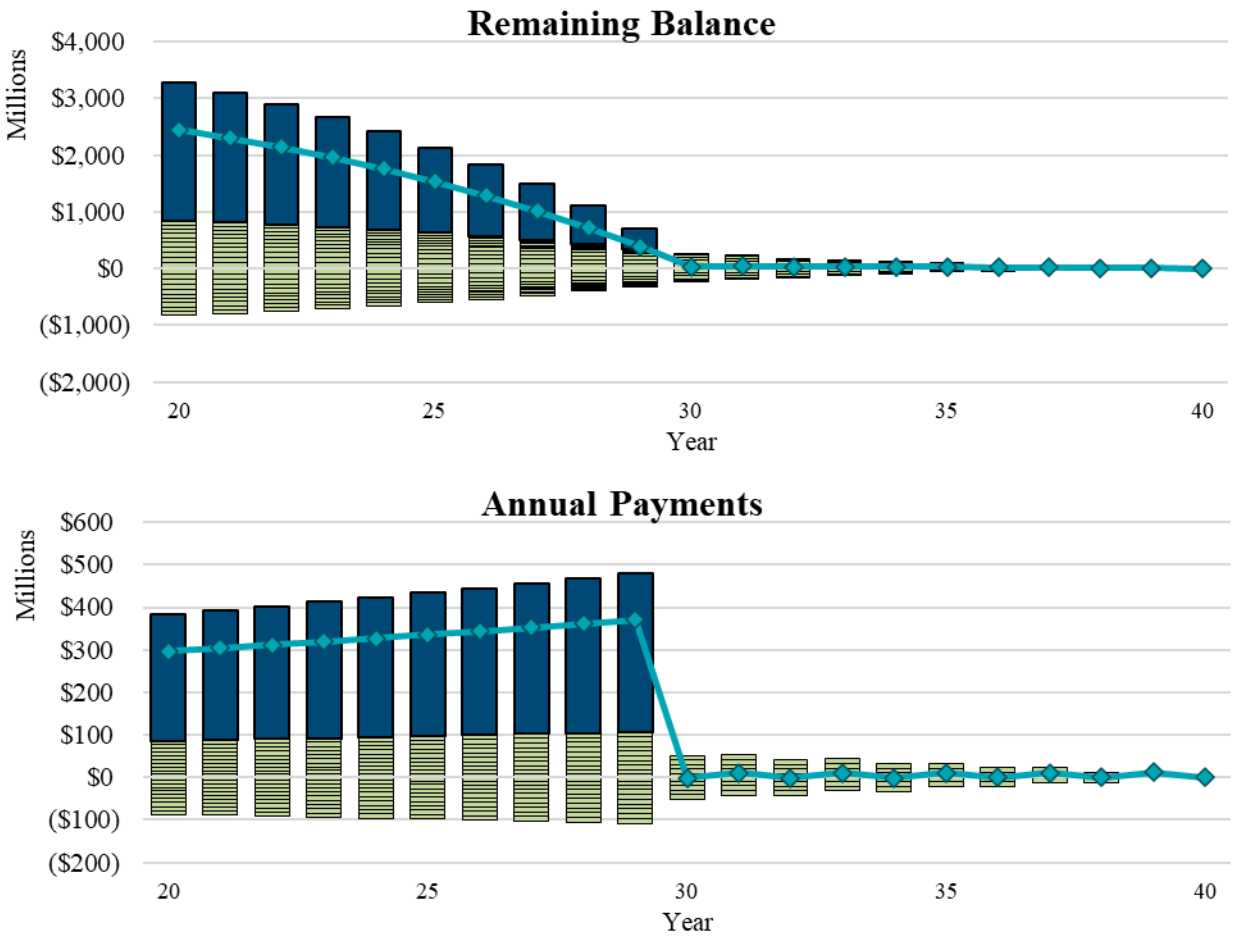


A layer has been added each year, but each layer is fully amortized at the same time. These layers could be combined into a single layer, but keeping the layers distinct shows the history of gains and losses.

After these first ten years, each new layer is amortized over its own 20-year period, resulting in different payoff dates and an extended amortization schedule. However, at any point in time, the remaining funding period is always 20 years or less. Chart IV-3 continues the illustration ten years further in the future to show the staggered payoff periods of the different amortization layers.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Chart IV-3



After ten more years, the initial UAL layer and the first ten annual gain/loss layers are paid off. In this illustration, the net remaining balance and the net annual payments are near zero. Whether they are near zero depends on what gains and losses the System experiences after the first ten years, but in any case, the net amortization payment will drop by the net payment amount on the initial UAL and the first ten annual gain/loss layers.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Five amortization options

We developed five amortization options for consideration. We believe all of the options are reasonable, although given the System's current funded status, we generally prefer the options that require higher contributions as soon as possible. The other variations provide different levels of accommodation for the city to adjust its budget to the higher contributions needed in the near term and transition back to lower contributions at the end of the amortization period. The various accommodations generally result in larger expected total contributions over the 30-year period.

Traditional ADC

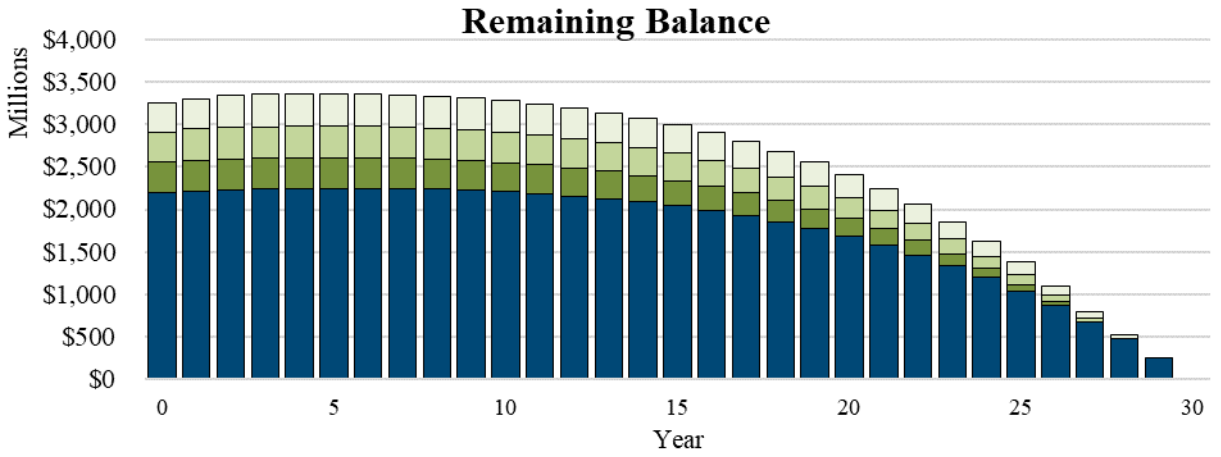
The illustrations shown on page 29 represent a traditional ADC amortization method. This method results in an immediate significant increase in the City's contribution compared to the current fixed rate contribution. The UAL payment increases 2.5% each year, remaining a constant percentage of expected payroll, for the full 30-year period. At the end of the 30-year period, the payment ceases, resulting in a significant drop in the City's contribution.

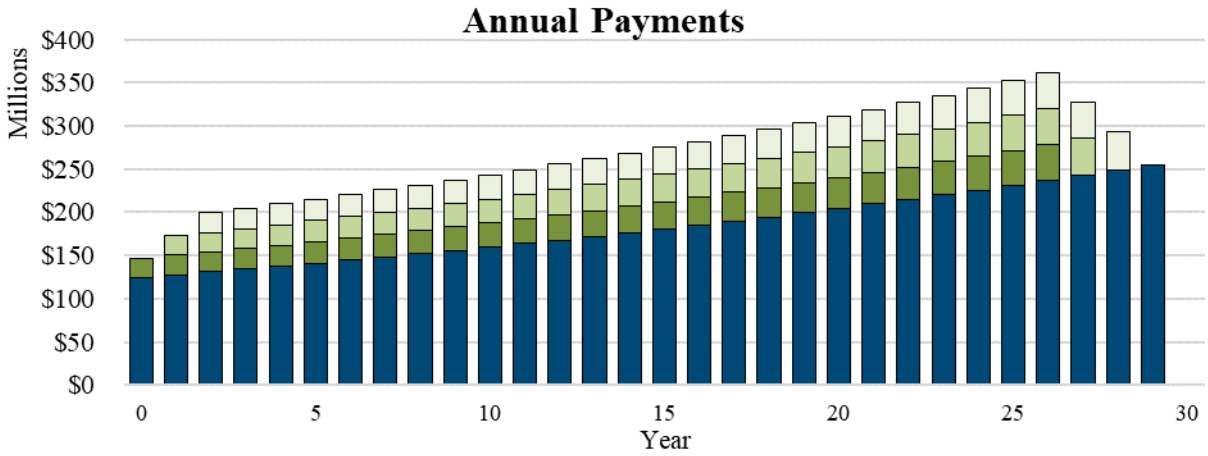
3-Year Step Up and Step Down ADC

The 3-Year Step Up and Step Down option includes a 3-year ramp up to the full ADC at the beginning of the 30-year amortization period and a 3-year ramp down at the end of the 30-year amortization period. For this and the other amortization options with step up and step down features, the initial UAL is split into two layers. The first layer ("base layer") has a $2.2 billion initial balance as of January 1, 2023, and uses the traditional 30-year amortization methodology. The UAL payment is similar to the current fixed rate payment on the UAL.

The second layer ("graded layer") has an initial balance equal to the portion of the UAL not covered by the base layer with payments that step up at the beginning of the period and step down at the end of the period. To construct this ramp up and down, the graded amortization layer described above is effectively divided into three 27-year amortization layers with the payment on the first layer starting immediately, the payment on the second starting in year two, and the payment on the third starting in year three. The illustrations on the next page show the remaining balance and annual payments for the 3-Year Step Up and Step Down option. The blue bars represent the base layer, and the three shades of green bars represent the graded layer's three 27-year amortizations commencing in subsequent years.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

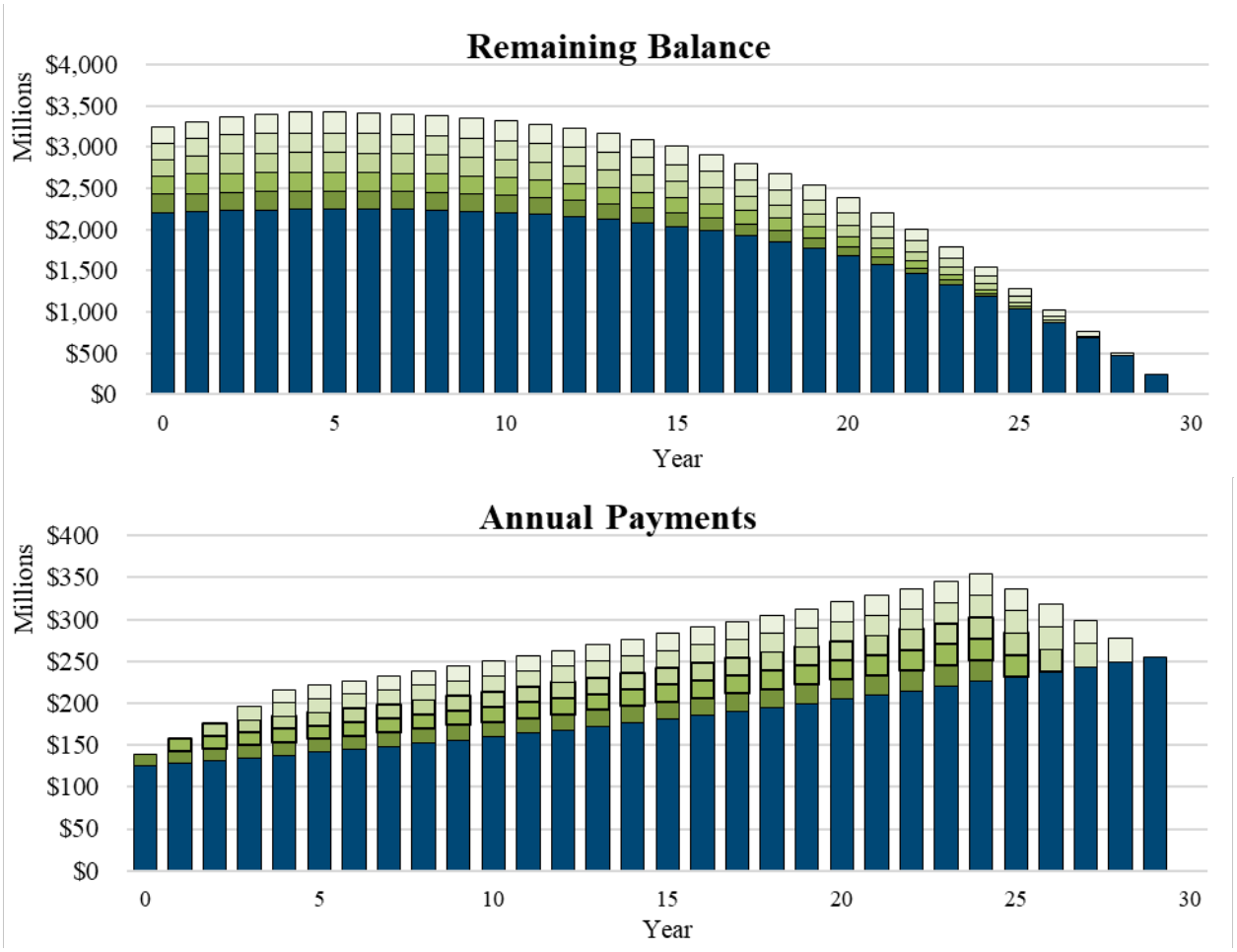




SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

5-Year Step Up and Step Down ADC

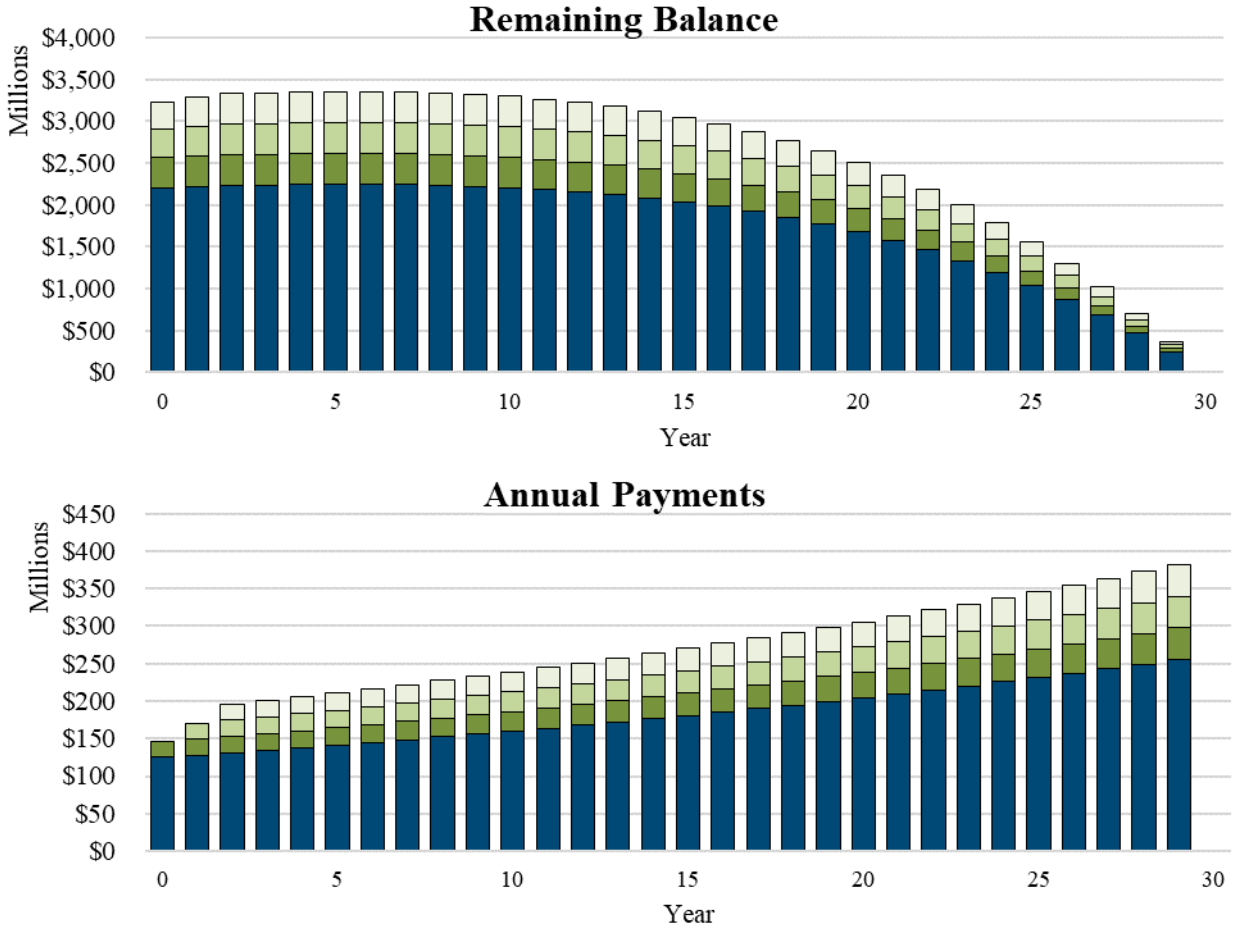
The 5-Year Step Up and Step Down option includes a 5-year ramp up to the full ADC at the beginning of the 30-year amortization period and a 5-year ramp down at the end of the 30-year amortization period. To construct this ramp up and down, the graded amortization layer described previously is effectively divided into five 25-year amortization layers, with payments for each layer starting in successive years. The illustrations below show the remaining balance and annual payments for the 5-Year Step Up and Step Down option. The blue bars represent the base layer, and the five shades of green bars represent the graded layer's five 25-year amortizations commencing in subsequent years.



SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

3-Year Step Up ADC

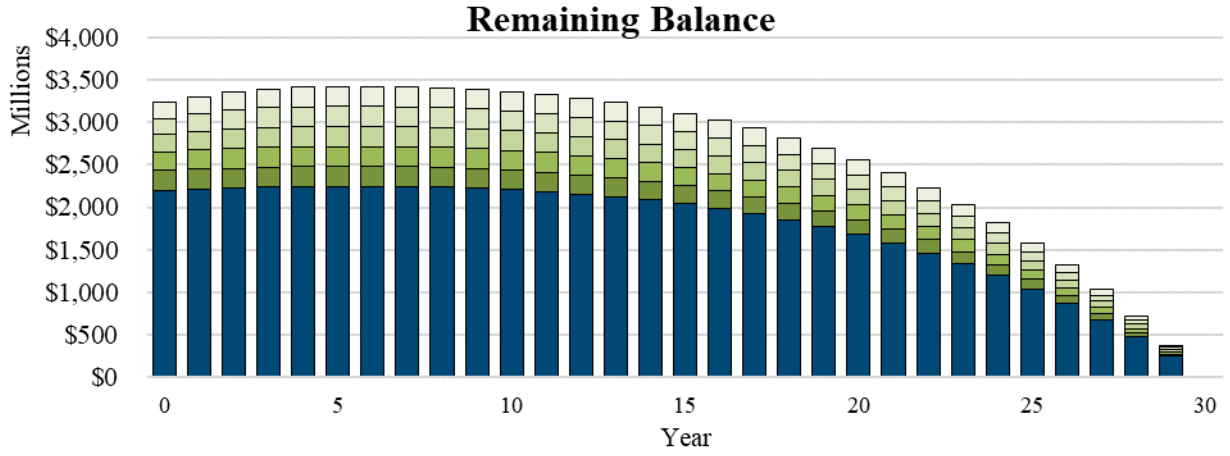
The 3-Year Step Up option includes a 3-year ramp up to the full ADC at the beginning of the 30-year amortization period but does not ramp down at the end of the amortization period. To construct this ramp-up, the graded amortization layer described previously is effectively divided into one 30-year amortization layer, one 29-year amortization layer, and one 28-year amortization layer with the 30-year amortization payment starting immediately, the 29-year amortization payment starting in year two, and the 28-year amortization payment starting in year three. The illustrations below show the remaining balance and annual payments for the 3-Year Step Up option. The blue bars represent the base layer, and the three shades of green bars represent the graded layer's 30-year amortization, 29-year amortization, and 28-year amortization commencing in subsequent years.

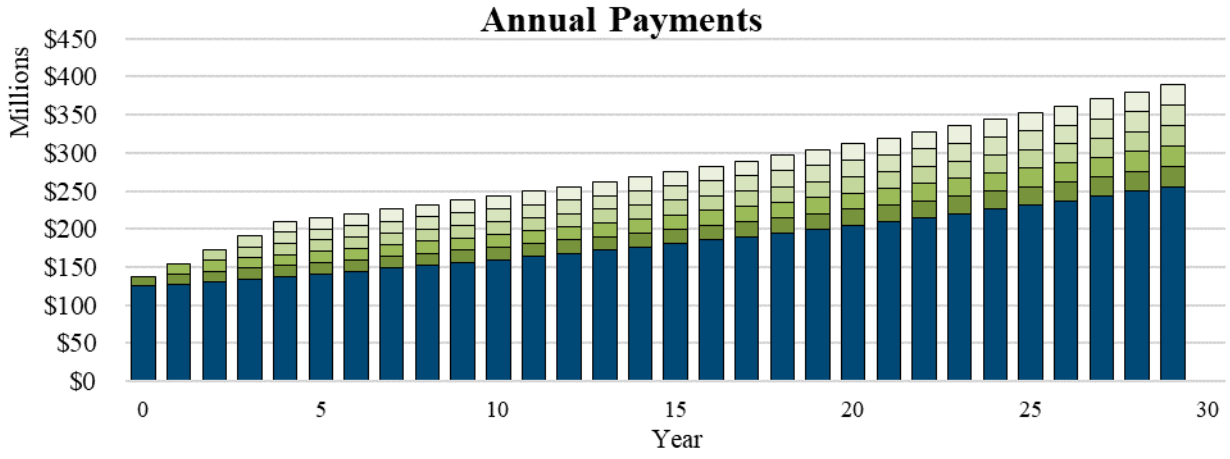


SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

5-Year Step Up ADC

The 5-Year Step Up option includes a 5-year ramp up to the full ADC at the beginning of the 30-year amortization period but does not ramp down at the end of the amortization period. To construct this ramp-up, the graded amortization layer described previously is effectively divided into one 30-year amortization layer, one 29-year amortization layer, one 28-year amortization layer, one 27-year amortization layer, and one 26-year amortization layer with payments for each layer starting in successive years such that they all are fully amortized in the 30th year. The illustrations below show the remaining balance and annual payments for the 5-Year Step Up option. The blue bars represent the base layer, and the five shades of green bars represent the graded layer's 30-year amortization, 29-year amortization, 28-year amortization, 27-year amortization, and 26-year amortization commencing in subsequent years.





SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Comparison of Options

Detailed Calculation of 2025 ADC

As discussed previously, the city's ADC consists of the employer's normal cost, administrative expenses, and a payment on the Unfunded Actuarial Liability (UAL). The total normal cost rate is expected to decline as members hired before March 1, 2011, retire and are replaced with new members who have lower benefits. To calculate the ADC for 2025 based on the 2023 valuation, separate normal cost rates are calculated for members hired before and after March 1, 2023, and a weighted average normal cost rate is calculated for the System based on the expected 2025 payroll for each of the tiers. Table IV-1 shows the weighted average calculation for the 2025 ADC.

Table IV-1

Details of 2025 Actuarially Determined Contribution Calculation
Calculation of Employer Normal Cost Rate

		Member Participation Date vs. 3/1/2011		
		Before	After	Total
1.	2025 Expected Computation Pay	$ 224,481,823	$ 261,749,222	$ 486,231,045
2.	2025 Total Normal Cost Rate	21.60%	19.14%	20.28%
3.	2025 Employee Contribution Rate			13.50%
4.	2025 Employer Normal Cost Rate: (2) - (3)			6.78%

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

All of the different amortization options are based on the same measure of Unfunded Actuarial Liability as of January 1, 2023, adjusted for expected payments on the UAL before the ADC is paid in 2025. The expected UAL payments for 2023 and 2024 equal the total expected payments under the fixed rate (with the $13 million supplement) less the normal cost and assumed administrative expenses for 2023 and 2024. These expected UAL payments are discounted to January 1, 2023, and subtracted from the 2023 UAL to get the total outstanding balance of the amortization layers on January 1, 2023. Table IV-2 shows this calculation.

Table IV-2

Details of 2025 Actuarially Determined Contribution Calculation
Calculation of Total Outstanding Balance of Amortization Layers

1.	2023 Actuarial Liability	$ 5,343,156,004
2.	2023 Actuarial Value of Assets	1,806,567,341
3.	2023 Unfunded Actuarial Liability: (1) - (2)	$ 3,536,588,663
4.	2023 Expected UAL Payment	131,674,929
5.	2024 Expected UAL Payment	136,599,244
6.	PV UAL Payments 1/1/2023 - 12/31/2024	$ 251,879,902
7.	Total Outstanding Balance of Amortization Layers: (3) - (6)	$ 3,284,708,761

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Table IV-3 shows the development of each of the amortization options and summarizes the city's 2025 ADC for each of these options.

Table IV-3

Details of 2025 Actuarially Determined Contribution Calculation
Calculation of Amortization Options and Summary of ADC

	UAL Amortization Options				
	Traditional	3 Yr Step Up & Down	5 Yr Step Up & Down	3 Yr Step Up	5 Yr Step Up
Amortization Layers					
1. 2023 Base Layer	3,284,709	2,200,000	2,200,000	2,200,000	2,200,000
2. 2023 Graded Layer	0	1,084,709	1,084,709	1,084,709	1,084,709
3. Total Layers: (1) + (2)	$3,284,709	$3,284,709	$3,284,709	$3,284,709	$3,284,709
Amortization Payments in 2025					
4. 2023 Base Layer	$ 211,465	$ 141,633	$ 141,633	$ 141,633	$ 141,633
5. 2023 Graded Layer	0	25,622	16,691	24,614	15,621
6. Total Payments: (4) + (5)	$ 211,465	$ 167,255	$ 158,324	$ 166,247	$ 157,255
7. Administrative Expenses	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
Actuarially Determined Contribution Summary					
8. Dollar Portion of ADC: (6) + (7)	$ 218,465	$ 174,255	$ 165,324	$ 173,247	$ 164,255
9. Percent of Pay Portion of ADC[1]	6.78%	6.78%	6.78%	6.78%	6.78%
10. Estimated Total ADC[2]	$ 251,411	$ 207,201	$ 198,270	$ 206,193	$ 197,200
11. Estimated Total ADC Rate[2]	51.71%	42.61%	40.78%	42.41%	40.56%

[1] Employer Normal Cost Rate from Table IV-1.

[2] Provided for comparison purposes only.

Dollar Amounts in Thousands

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Expected 2029 ADC

Since the UAL amortization payment under the various ADC options step up to the full amount over, at most, a five-year period, the 2029 ADC is the first year that all ADC options are expected to reach their peak as a percentage of payroll. The ADC options that step up to the full amount more gradually will have a lower ADC in 2025 and will have a higher ADC in 2029 to adjust for the lower contributions during the step-up period. Table IV-4 shows the expected 2029 ADC under the five ADC options, assuming 6.50% annual investment returns for 2023 and thereafter, and all other experience emerging as assumed. The actual 2029 ADC will be calculated in the January 1, 2027, actuarial valuation report and will reflect System experience through 2026.

Table IV-4

Details of 2029 Actuarially Determined Contribution Calculation
Calculation of Amortization Options and Summary of ADC

	UAL Amortization Options				
	Traditional	3 Yr Step Up & Down	5 Yr Step Up & Down	3 Yr Step Up	5 Yr Step Up
Amortization Payments in 2029					
1. 2023 Base Layer	$ 233,418	$ 156,336	$ 156,336	$ 156,336	$ 156,336
2. 2023 Graded Layer	0	84,846	92,118	81,508	86,216
3. Total Payments: (1) + (2)	$ 233,418	$ 241,182	$ 248,454	$ 237,845	$ 242,552
4. Administrative Expenses	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
Actuarially Determined Contribution Summary					
5. Dollar Portion of ADC: (3) + (4)	$ 240,418	$ 248,182	$ 255,454	$ 244,845	$ 249,552
6. Percent of Pay Portion of ADC[1]	6.45%	6.45%	6.45%	6.45%	6.45%
7. Estimated Total ADC[2]	$ 275,029	$ 282,794	$ 290,065	$ 279,456	$ 284,164
8. Estimated Total ADC Rate[2]	51.24%	52.69%	54.05%	52.07%	52.95%

[1] Employer Normal Cost Rate for 2029.

[2] Provided for comparison purposes only.

Dollar Amounts in Thousands

Rationale for Preferences

All five of the ADC options presented in this report are reasonable and will put the System on the path to becoming fully funded in compliance with the funding requirements of Chapter 802. However, Tables IV-3 and IV-4 list the ADC options in order from left to right as most preferred to least preferred based on our professional judgment. Given the current funded status, we prefer

higher contributions as soon as possible to prevent future declines in the funded status and to reduce the negative net cash flow. Reducing the negative net cash flow reduces the System's risk of having to sell investments to pay benefits during market downturns, which could have a significant short-term impact on System asset levels.

Therefore, the most preferred option is the traditional ADC because it immediately increases the City's contributions to the ADC. However, we understand that the City's budget may not be able to accommodate such a large increase in one year, which is why we have included alternative ADC options to facilitate more gradual increases in the City's budget. The ADC should step into the full contribution over as short a period as financially possible, which is why the 3-year step-up options are preferred over the 5-year step-up options.

The Step Up & Down options are preferred over the Step Up only options because the step-down provides a mechanism to allow time for the City's budget to adjust to lower contribution levels at the end of the 30-year amortization period. The Step Up & Down options also result in the System's funded status being slightly greater throughout the initial 30-year amortization period. The improved funded status is the result of slightly higher contributions for most of the amortization period, which is necessary to allow the contributions to gradually step down at the end of the 30-year period.

It is important to build any contribution step-up into the ADC methodology rather than having fixed dollar contribution increases because the ADC will adjust the contributions as experience emerges during the step-up period. The annual recognition of experience gains and losses ensures a more level annual contribution increase during the step-up period. For example, if the City were to implement a 5-year step up using four years of fixed dollar contribution increases with the 5th year being the full ADC where all five step ups were originally designed to be the same dollar amount, then experience losses during the step up period may result in the 5th step up to the full ADC being significantly larger than the City had budgeted. In this scenario, steps 1-4 would not increase as losses emerged, so the entire impact of those experience losses is first recognized in the 5th year step up to the full ADC.

SECTION V– EMPLOYEE CONTRIBUTION RATE

Overview

Our second recommendation is to reduce the employee contribution rate as the System's funding improves. The current employee contribution rate of 13.5% of pay covers 72.4% of the expected cost of the benefits, which is high compared to peer systems. However, given the system's current funded status, it would be difficult to reduce employee contributions immediately.

Under the current plan provisions, once the System is 100% funded, employees would only pay 50% of the normal cost rate. Assuming an Actuarially Determined Contribution is adopted, we would expect the System to become fully funded in 30 years. In the interim, employees would continue to pay 13.5% – a substantial portion of the expected cost of their benefits.

In Section III, we showed that the average peer system only required employee contribution rates to cover 62.4% of normal cost compared to the System's 72.4% of normal cost. Furthermore, several systems have temporary increases in the employee rate due to their low funded ratios. As their funding improves, the employee rates will become lower.

Our recommendation is simply to establish a schedule so that as the funded ratio improves, the employee contribution rate gradually declines to equal 50% of the normal cost rate.

Development of Proposed Adjustment Schedule

To accomplish this objective, we suggest that first a base employee contribution rate be established equal to 50% of the normal cost rate for employees hired after March 1, 2011. These employees have lower benefits and a lower normal cost rate than employees hired prior to March 1, 2011, but by the time the System nears 100% funding, virtually all active members will have been hired after that date.

Setting the base employee contribution rate equal to 50% of this normal cost rate also automatically adjusts the employee contribution rate when the expectations of the System change due to plan amendments, assumption changes, or demographic changes. To avoid having to make minor changes each year, we suggest rounding this rate to the nearest 0.5% of payroll. In our baseline scenario, this produces a base employee contribution rate of 9.5%. If an additional COLA is added or assumptions are changed, the base employee contribution rate may also change.

Once the base employee contribution rate is set, a schedule of adjustments to that contribution rate should be developed ranging from 0% to an amount that, when added to the base employee contribution rate, produces a total contribution rate of 13.5%. In our baseline scenario, the top adjustment is 4.0%, which, when combined with the base rate of 9.5%, produces a total employee contribution rate of 13.5%.

There are many different options for the schedule. The objective is simply to gradually adjust the employee contribution rate as funding improves from its current level to 50% of normal cost rather than have a significant adjustment all in the year the System becomes 100% funded.

SECTION V– EMPLOYEE CONTRIBUTION RATE

When the employee contribution rate is adjusted, there is an exactly equal offsetting adjustment to the employer's normal cost rate. The employer's normal cost rate equals the total normal cost rate minus the employee contribution rate. Consequently, these adjustments do not affect the contribution amount received by the System, but simply shift contributions between employees and the city.

Table V-1 shows three possible adjustment schedules that could be adopted in conjunction with the base employee rate to accomplish this recommendation. To develop the schedule, the base employee rate is first set equal to 50% of the normal cost rate applicable for members hired on or after March 1, 2011, rounded to the nearest 0.5%. By the time the System is well funded, virtually all active members will have been hired after this date. For this scenario, we calculate this base employee contribution rate to be 9.5% of pay. Then, a schedule to increase this employee contribution rate for various funding levels is established. In the schedule in Table I-1, there is no adjustment once the System is 90% funded and the full increase of 4.0% is applied whenever the System is less than 50% funded. Table V-1 below shows three alternative adjustment schedules. These schedules are examples of possibilities and are not an exhaustive list of the possible options.

Table V-1

Sample Employee Contribution Rate Adjustment Schedules

Funded Ratio	Possible Adjustment Schedules Assuming 9.5% Base Rate Schedule 1	Schedule 2	Schedule 3
100% or Greater	0.00%	0.00%	0.00%
95% – 99%	0.00%	0.50%	0.00%
90% – 94%	0.00%	0.50%	0.50%
85% – 89%	0.50%	1.00%	1.00%
80% – 84%	1.00%	1.00%	1.50%
75% – 79%	1.50%	1.50%	2.00%
70% – 74%	2.00%	1.50%	2.25%
65% - 69%	2.50%	2.00%	2.50%
60% – 64%	3.00%	2.00%	2.75%
55% – 59%	3.50%	2.50%	3.00%
50% - 54%	3.50%	2.50%	3.25%
45% – 49%	4.00%	3.00%	3.50%
40% – 44%	4.00%	3.50%	3.75%
Under 40%	4.00%	4.00%	4.00%

This recommendation is intended to be combined with the prior recommendation of adopting an Actuarially Determined Contribution. Furthermore, if any changes are adopted that affect the base normal cost rate, the schedule of adjustments to employee contribution rates would need to be changed.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Overview

Our final recommendation is that the System be amended to provide some Cost-of-Living Adjustments (COLAs) earlier than the current plan provisions permit. No COLA has been provided since 2016 and under the current plan provisions, no COLA can be provided until the System is at least 70% funded following the granting of such COLA. Given the current funding level, even with the dramatically increased contributions recommended above, the System is not expected to be 70% funded for more than 20 years.

Historically the System provided a four percent annual simple COLA automatically. For members hired after December 31, 2006, the COLA was changed from automatic to ad hoc. HB 3158 changed the COLA provisions to only allow a COLA to be granted if the System is at least 70% funded after providing the COLA. If the funded status requirement is met, an ad hoc simple COLA can be provided equal to the average investment return over the previous five years less five percent. The COLA can't be less than zero, and it can't exceed four percent. With an assumed return of 6.50%, this formula is expected to produce a COLA of 1.50%.

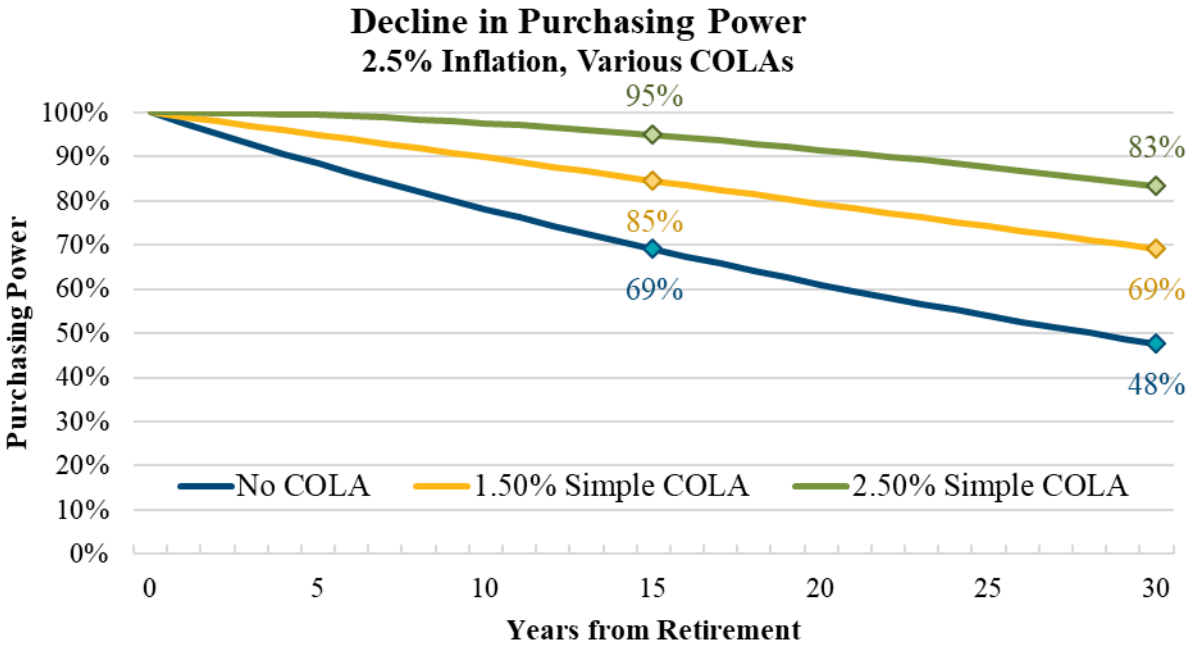
As noted in our analysis of benefits above, some other Police and Fire pension systems in Texas also do not currently provide a COLA, while others provide a significant COLA. Also, the Dallas Employees' Retirement Fund provides an automatic simple COLA each year equal to inflation up to a maximum of 3.0% for members hired after December 31, 2016, and up to 5.0% for members hired before January 1, 2017. Consequently, we believe there will be significant competitive pressure to provide a COLA. While new hires who are just starting their careers typically don't consider pension benefits, mid-career employees and mid-career transfers from other locations often do, making the lack of a COLA a potential issue in attracting and retaining mid-career employees.

Finally, Dallas Police and Fire members are not covered by Social Security and may not have any protection in retirement for inflation other than what is provided by the System.

In retirement, inflation erodes purchasing power to the extent it is not offset by COLAs. For example, if a member retires with a benefit of $1,000 and inflation for the year after retirement is 2.5%, the member will need a COLA increasing the benefit to $1,025 to preserve the member's purchasing power. The member's purchasing power erodes if the benefit is not increased to this level. Chart VI-1 shows how purchasing power would erode if inflation were 2.5% each year under various COLAs.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Chart VI-1



With no COLA, after 15 years in retirement, the purchasing power of the pension benefit is expected to erode to 69% of the original benefit and to 48% after 30 years. If instead, a 1.5% simple COLA (the expected COLA once the System is 70% funded) is provided, the purchasing power would be expected to erode to 85% after 15 years and 69% after 30 years. And if a 2.5% simple COLA (the COLA under the Dallas ERF for this scenario) is provided, the purchasing power would be expected to only erode to 95% after 15 years and 83% after 30 years.

Why Consider Improving the COLA now?

Given the System's poor funded status, it is tempting to delay any decision on improving the COLA until the funded status improves. Any increase to COLAs will require additional contributions to fully fund the System, and the increases required to fund the System without improving the COLA are already substantial.

However, even with the increased contributions discussed above, no COLA is expected to be paid for an additional 20 years or longer. With no Social Security coverage to provide inflation protection and with the remainder of the Dallas workforce receiving annual COLAs in retirement, can Dallas maintain its Police and Fire workforce without offering at least some COLA in the next 20 years?

We believe Dallas will likely need to provide a COLA earlier than would be provided under the current plan provisions. If so, these costs should be included in the budget plan now rather than waiting until later. Ignoring or deferring these costs may lead to inadequate funding and a failure to meet the objective of fully funding the System.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The COLA that will need to be provided is not an actuarial decision but is rather a policy decision that balances the benefits against the costs of providing the COLA. The options outlined in this report are intended to illustrate the tradeoff between additional benefits and additional costs for a spectrum of COLAs ranging from the current System COLA to the COLA provided by the Dallas Employees' Retirement Fund. The options are not exhaustive, and the City and System may find other options to better fit their needs.

COLA Design Considerations

Several aspects must be considered in developing the System's COLA. This section provides a high-level overview of these considerations as background to the options modeled in this report and for reference in the event there is a desire to develop an alternative design.

Inflation Versus Investment Return

Living expenses for retirees increase with inflation, so it is common for COLA provisions to be based on a measure of inflation such as CPI-U. The Dallas Employees Retirement Fund, for example, bases its COLA on the CPI change for the year. However, the System's resources to pay for a COLA depend significantly on the investment return on the System's assets. When the System's investment returns are below expectations, it can be doubly difficult to pay for a COLA. Consequently, some Systems base all or a portion of the COLA on investment returns. The System's current COLA, for example, is based on average investment returns over the prior five years in excess of 5.0%. This approach better aligns the provision of a COLA with the resources needed to pay for the COLA. It also reduces the range of projected outcomes because investment losses are offset by the gain of a reduced COLA and investment gains are offset by the loss of higher COLAs. However, this approach does not align as well with the needs of retirees because it is not directly connected to the actual inflation they experience.

Simple Versus Compound COLAs

Inflation compounds. When prices rise by 3.00% two years in a row, prices are 6.09% higher than at the beginning of the two years. A compound 3.0% COLA would match this increase, while a simple 3.0% COLA would only increase by 6.00%, eroding some of the original purchasing power. This difference between a simple COLA and a compound COLA is small at first but grows over time. As a result, simple COLAs are less expensive to fund, but also don't protect retirees from inflation as well.

Funded Status Requirement

Funded status requirements are a way to ensure sufficient resources are available before a COLA is paid. The requirement automatically reduces or eliminates the COLA when the System is not funded well enough as defined by the threshold. The idea is to reduce costs when the System needs it most. Reducing COLAs is often an easy and powerful reduction when the System needs to improve its funded status, but they can force retirees to go many years without a COLA.

From an actuarial perspective, funded status requirements can also add some complications to be aware of. Projections are more uncertain, particularly when the funded status is near the threshold, because slight changes that put the System slightly above or below the threshold can have a material impact. In addition, Board decisions about assumptions and other changes may be influenced by whether the decision may cause the System to rise above or fall below the threshold.

Purchasing Power Protection

In the previous section, the potential decline in purchasing power assuming 2.5% inflation was illustrated for a few different COLA provisions. A purchasing power protection provision simply adds a purchasing power floor to the System's COLA provisions. For example, a 70% purchasing power protection provision would allow the regular COLA provision to operate until a retiree's purchasing power had declined to 70% of the retiree's purchasing power at retirement, after which the retiree would receive COLAs equal to inflation unless the regular COLA was greater.

Purchasing power protection provisions are not normally the only COLA provision but are more common when the regular COLA provisions may not always be viewed as adequate usually due to a cap on the regular COLA that may be lower than actual inflation. Purchasing power protection provisions are generally less expensive than simply raising the COLA because only some retirees will qualify for the purchasing power protection in any given year.

Expected, Minimum, and Maximum Amounts

The COLA provisions combined with relevant assumptions (e.g., inflation, investment return, etc.) produce an expected amount of COLA provided each year. In addition, Systems often include minimums and maximums to the COLA to manage costs and the volatility of benefits. For example, the System's current COLA has a minimum of 0% and a maximum of 4%.

In addition, some Systems with maximums allow retirees to "bank" any excess of actual inflation over the maximum amount to be applied in a future year when the COLA would otherwise be less than the maximum. For example, if inflation were 6% one year and 2% the following year, a System with a 4% maximum that did not allow "banking" would pay COLAs of 4% and 2% while a System that did allow "banking" would pay COLAs of 4% and 4%, respectively.

COLA Options Modeled

This section of the report describes a range of alternative COLA options for consideration, showing the purchasing power and projected city contributions under each COLA option using the Traditional ADC option. The options are designed to span the range of costs from the current COLA to an alternative that provides the same COLA as the Dallas Employees' Retirement Fund.

The purchasing power percentage shown in each table represents the portion of purchasing power remaining compared to the purchasing power in the first year of retirement assuming 2.5% inflation for 2024 and all future years. The actual CPI for the Dallas area and the actual COLA awarded under DPFP were used for 2023 and all prior years.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The projected contribution graphs show the City's normal cost rate (dark green bars), and City UAL and administrative expense payment (light green bars). The y-axis is a percentage of payroll but the labels for the City UAL and administrative expense payment show the dollar amounts in millions. Employee contributions are 13.5% of pay for all years in all the projections, so they are not shown on the charts.

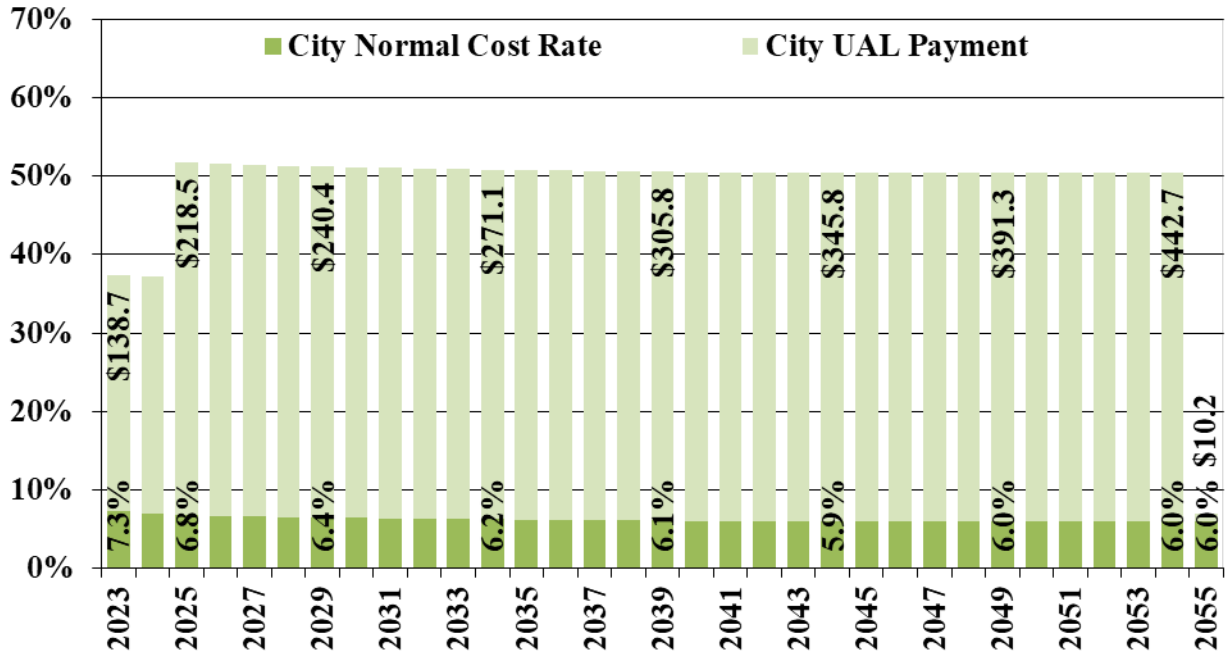
Current DPFP COLA provisions

Based on the System's current COLA provisions, a 1.5% simple COLA is assumed to be payable annually starting October 1, 2046, when the System is expected to reach the 70% funded ratio.

Retirement Year	Purchasing Power – Current DPFP COLA						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	61%	56%	53%
2022	96%	85%	75%	66%	58%	54%	51%
2021	88%	77%	68%	60%	53%	49%	47%
2020	83%	73%	65%	57%	50%	47%	44%
2019	82%	73%	64%	57%	50%	46%	44%
2018	81%	71%	63%	56%	49%	45%	43%
2017	79%	70%	61%	54%	48%	44%	42%
2016	76%	67%	60%	53%	47%	43%	41%
2015	78%	69%	61%	54%	47%	44%	41%
2010	86%	76%	67%	59%	52%	48%	45%
2005	93%	83%	73%	65%	57%	52%	48%
2000	94%	83%	73%	65%	57%	52%	
1995	92%	82%	72%	64%	56%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the current COLA using the traditional ADC are shown in the chart below. This is the least expensive option.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DERF COLA provisions

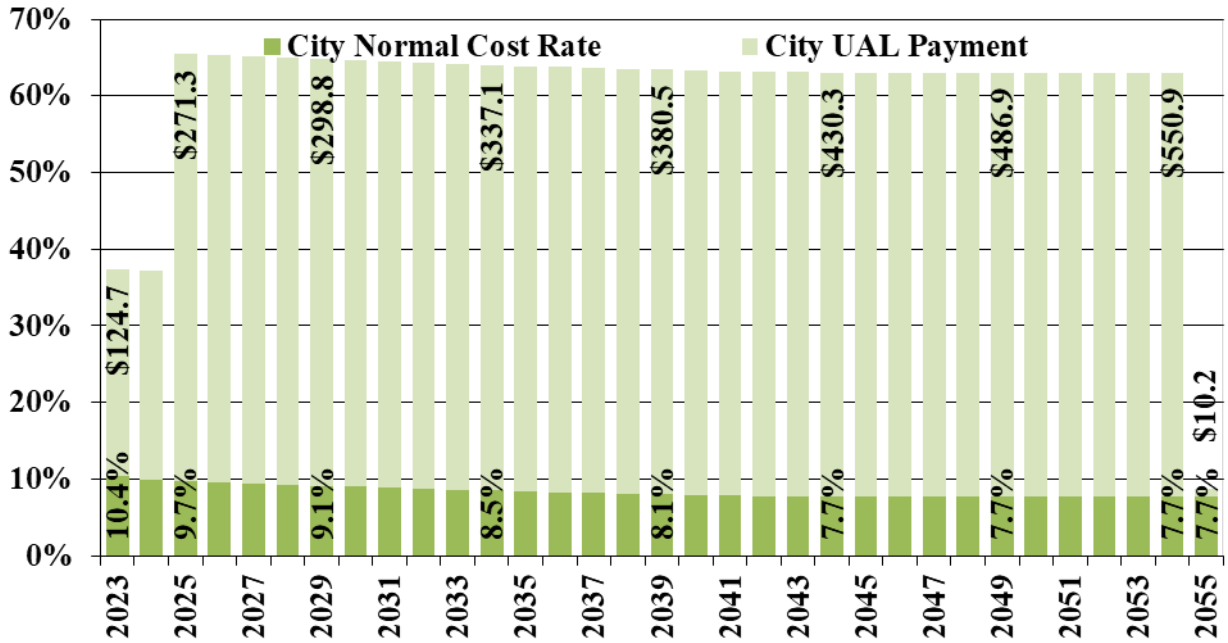
The current Dallas Employees' Retirement Fund COLA provisions provide an automatic simple COLA equal to inflation up to 3% for members hired after December 31, 2016, and up to 5% for members hired before January 1, 2017. If DPFP adopts this COLA design, a 2.5% simple COLA is assumed to be paid immediately since the current inflation assumption is 2.5%.

As shown in the table below, the DERF COLA is expected to better maintain retirees purchasing power. Purchasing power only declines gradually due to the difference between the simple COLA and compound inflation.

Retirement Year	Purchasing Power – Current DERF COLA						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	99%	98%	95%	92%	88%	83%
2022	96%	95%	93%	91%	88%	84%	80%
2021	88%	87%	86%	83%	80%	77%	73%
2020	83%	82%	81%	79%	76%	72%	69%
2019	82%	82%	80%	78%	75%	72%	69%
2018	81%	80%	79%	77%	74%	71%	67%
2017	79%	78%	77%	75%	72%	69%	66%
2016	76%	76%	74%	72%	70%	67%	64%
2015	78%	77%	75%	73%	70%	67%	64%
2010	86%	84%	81%	77%	74%	70%	66%
2005	93%	90%	86%	81%	77%	72%	68%
2000	94%	89%	85%	80%	75%	70%	
1995	92%	87%	82%	77%	72%		
1990	90%	84%	79%	73%			
1985	84%	79%	73%				
1980	70%	65%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the DERF COLA using the traditional ADC are shown in the chart below. Implementing the DERF COLA for DPFP would increase costs significantly, while all the other alternatives have lower costs.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Immediate partial COLA

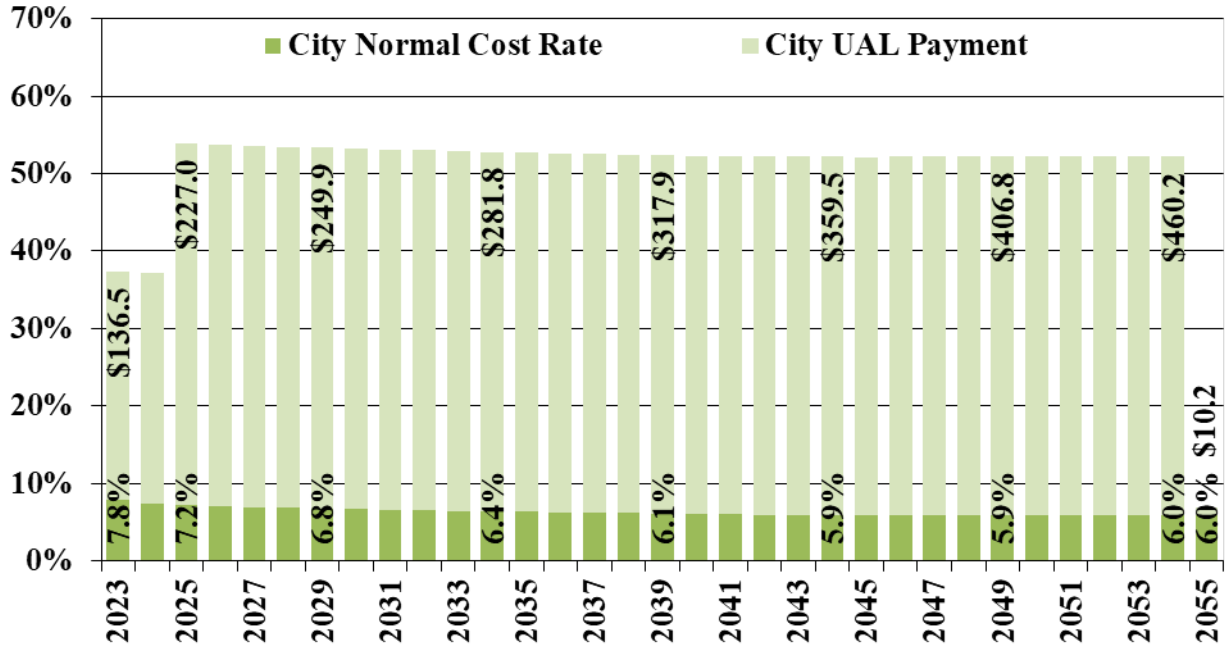
The immediate partial COLA option maintains the current DPFP COLA design but eliminates the 70% funded ratio threshold and instead multiplies the COLA by the funded ratio before applying the 4% maximum COLA. For example, if the System's five-year average return is 6.5% and the funded ratio is 40%, the COLA payable that year would be 0.6% = [(6.5% – 5.0%) x 40%]. This COLA option provides a partial COLA immediately when the five-year average return exceeds 5%. However, it also provides a lower COLA than under the current COLA provisions when the System's funded ratio is between 70% and 100%. For example, if the System's five-year average return is 6.5% and the funded ratio is 80%, the COLA payable that year would be 1.2% = [(6.5% – 5.0%) x 80%] which is less than the 1.5% COLA that would be payable under the current COLA provisions.

As shown in the table below, the immediate partial COLA provides some minor improvement in purchasing power over the next 20 years compared to the current COLA, but the expected COLAs are still substantially lower than assumed inflation.

Retirement Year	Purchasing Power – Immediate Partial COLA						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	89%	81%	74%	68%	63%	59%
2022	96%	85%	77%	71%	65%	60%	56%
2021	88%	78%	71%	65%	60%	55%	52%
2020	83%	73%	67%	61%	56%	52%	49%
2019	82%	73%	67%	61%	56%	52%	49%
2018	81%	72%	65%	60%	55%	51%	47%
2017	79%	70%	64%	58%	54%	50%	46%
2016	76%	68%	62%	56%	52%	48%	45%
2015	78%	69%	63%	57%	53%	49%	45%
2010	86%	76%	69%	63%	57%	53%	49%
2005	93%	83%	75%	68%	62%	56%	52%
2000	94%	83%	75%	68%	61%	56%	
1995	92%	82%	73%	66%	60%		
1990	90%	79%	71%	64%			
1985	84%	75%	67%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the immediate partial COLA using the traditional ADC are shown in the chart below. The immediate partial COLA option would increase costs moderately compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with 70% of 2024 Purchasing Power Protection

The current DPFP COLA provision could be modified to add a purchasing power floor that would prevent a retiree's purchasing power from declining too far. For this option, we have used a purchasing power floor equal to 70% of the 2024 purchasing power for current retirees and 70% of the purchasing power at retirement for future retirees. The purchasing power is expected to erode with inflation until it reaches the floor. Once the purchasing power reaches the floor, inflationary COLAs are provided to maintain the floor purchasing power level. Current retirees are expected to reach the floor in about 15 years, assuming 2.5% annual inflation at which point they are assumed to receive 2.5% compound COLAs to maintain the floor purchasing power level.

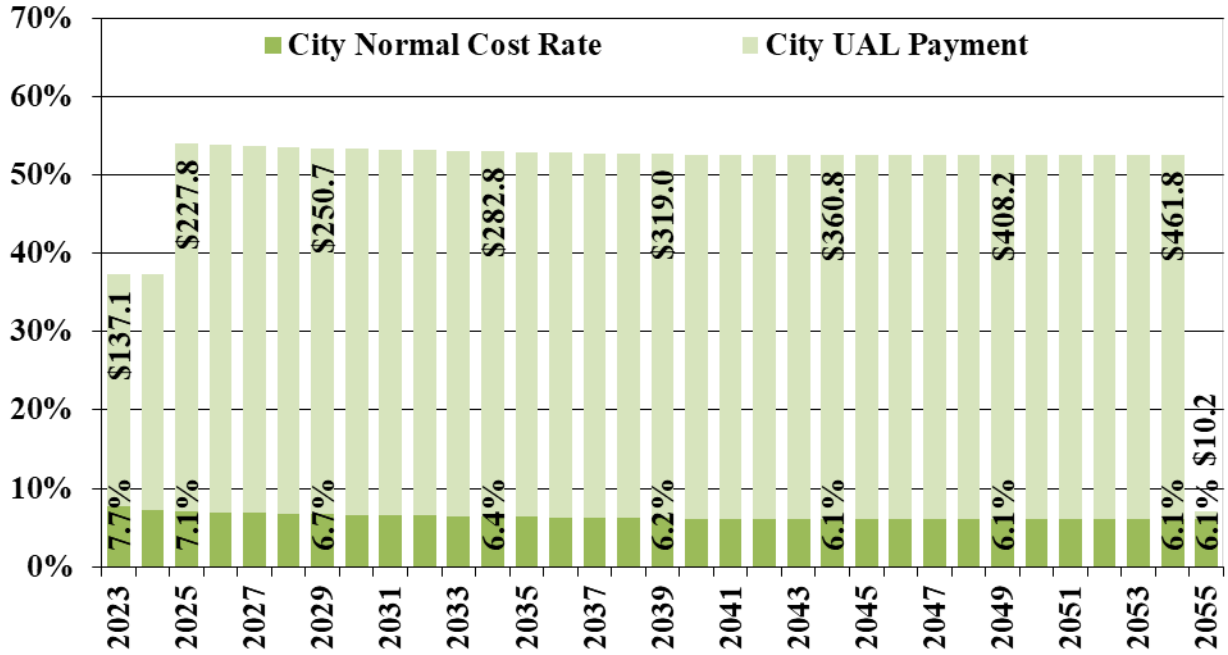
To balance financial stability and benefit security, this COLA option combines two design features: the investment return requirements of the Current COLA and the inflationary protection of the purchasing power floor. The Current COLA is only payable when investment returns support the cost of the COLA, and the purchasing power floor protects retirees from "too much" inflationary erosion if the Current COLA is not payable due to either poor investment returns or due to the 70% funded ratio requirement.

Using the 2024 purchasing power as the benchmark for current retirees limits the cost increase but does not protect all retiree cohorts at the same level as shown in the table below.

Retirement Year	Purchasing Power – Current COLA & 70% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	70%	70%	70%	70%
2022	96%	85%	75%	67%	67%	67%	67%
2021	88%	77%	68%	61%	61%	61%	61%
2020	83%	73%	65%	58%	58%	58%	58%
2019	82%	73%	64%	58%	58%	58%	58%
2018	81%	71%	63%	56%	56%	56%	56%
2017	79%	70%	61%	55%	55%	55%	55%
2016	76%	67%	60%	53%	53%	53%	53%
2015	78%	69%	61%	54%	54%	54%	54%
2010	86%	76%	67%	60%	60%	60%	60%
2005	93%	83%	73%	65%	65%	65%	65%
2000	94%	83%	73%	66%	66%	66%	
1995	92%	82%	72%	65%	65%		
1990	90%	79%	70%	63%			
1985	84%	75%	66%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the current COLA with a 70% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs moderately compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with 80% of 2024 Purchasing Power Protection

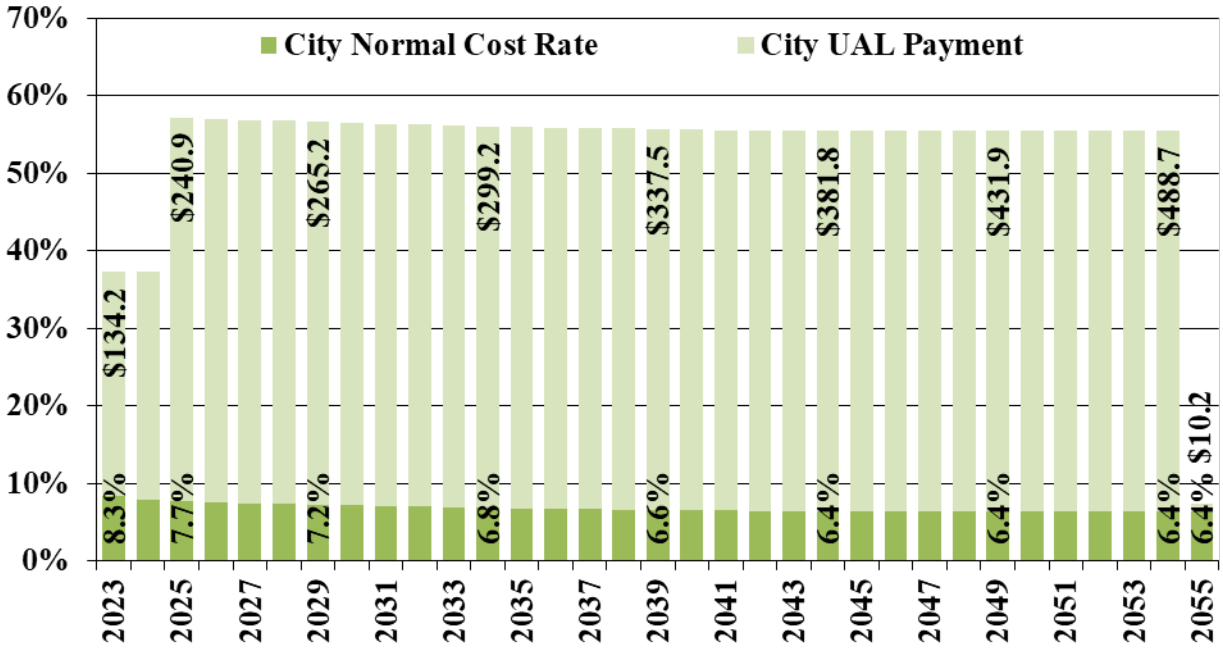
Like the prior COLA option, this option keeps the current COLA provision and adds a purchasing power floor equal to 80% of the 2024 purchasing power for current retirees and 80% of the purchasing power at retirement for future retirees. Current retirees are expected to reach the floor in about ten years, assuming 2.5% annual inflation.

As shown in the table below, this option provides a higher purchasing power guarantee than the 70% purchasing power option.

Retirement Year	Purchasing Power – Current COLA & 80% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	80%	80%	80%	80%	80%
2022	96%	85%	77%	77%	77%	77%	77%
2021	88%	77%	70%	70%	70%	70%	70%
2020	83%	73%	66%	66%	66%	66%	66%
2019	82%	73%	66%	66%	66%	66%	66%
2018	81%	71%	64%	64%	64%	64%	64%
2017	79%	70%	63%	63%	63%	63%	63%
2016	76%	67%	61%	61%	61%	61%	61%
2015	78%	69%	62%	62%	62%	62%	62%
2010	86%	76%	69%	69%	69%	69%	69%
2005	93%	83%	75%	75%	75%	75%	75%
2000	94%	83%	75%	75%	75%	75%	
1995	92%	82%	74%	74%	74%		
1990	90%	79%	72%	72%			
1985	84%	75%	67%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Current COLA with an 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would substantially increase costs compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with no funded status requirement and with 80% of 2024 Purchasing Power Protection

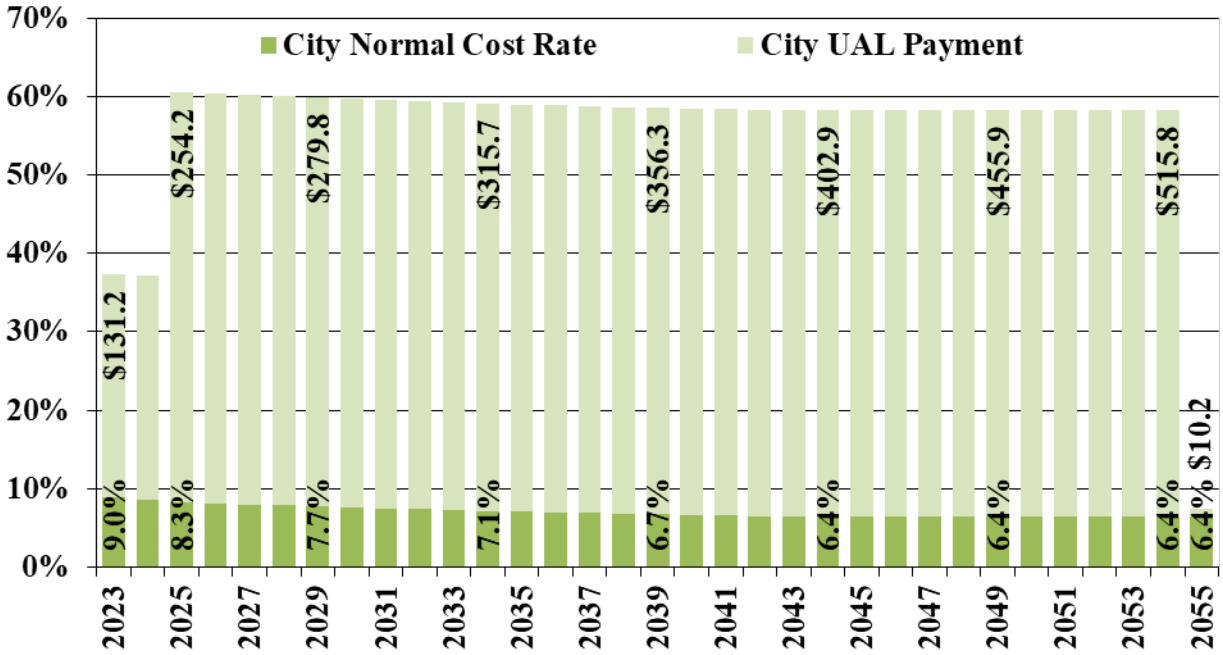
This option builds off the prior option and removes the 70% funded ratio requirement from the Current COLA provision. This option is assumed to provide 1.5% simple COLAs immediately until the purchasing power floor is reached when 2.5% compound COLAs are assumed to be paid. Under this option, current retirees are expected to reach the purchasing power floor in about 20 years, assuming 2.5% annual inflation.

As shown in the table below, this option provides higher purchasing power before reaching the floor further in the future.

Retirement Year	Purchasing Power – Current COLA with No Funded Status Requirement & 80% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	95%	90%	85%	80%	80%	80%
2022	96%	91%	86%	81%	77%	77%	77%
2021	88%	83%	79%	74%	70%	70%	70%
2020	83%	79%	74%	70%	66%	66%	66%
2019	82%	78%	74%	70%	66%	66%	66%
2018	81%	77%	72%	68%	64%	64%	64%
2017	79%	75%	71%	67%	63%	63%	63%
2016	76%	72%	69%	65%	61%	61%	61%
2015	78%	74%	69%	65%	62%	62%	62%
2010	86%	81%	75%	70%	69%	69%	69%
2005	93%	87%	81%	75%	75%	75%	75%
2000	94%	87%	80%	75%	75%	75%	
1995	92%	85%	78%	74%	74%		
1990	90%	82%	75%	72%			
1985	84%	77%	70%				
1980	70%	64%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Current COLA with No Funded Status Requirement and 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs substantially compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Compound Current DPFP COLA with no funded status requirement and with 80% of 2024 Purchasing Power Protection

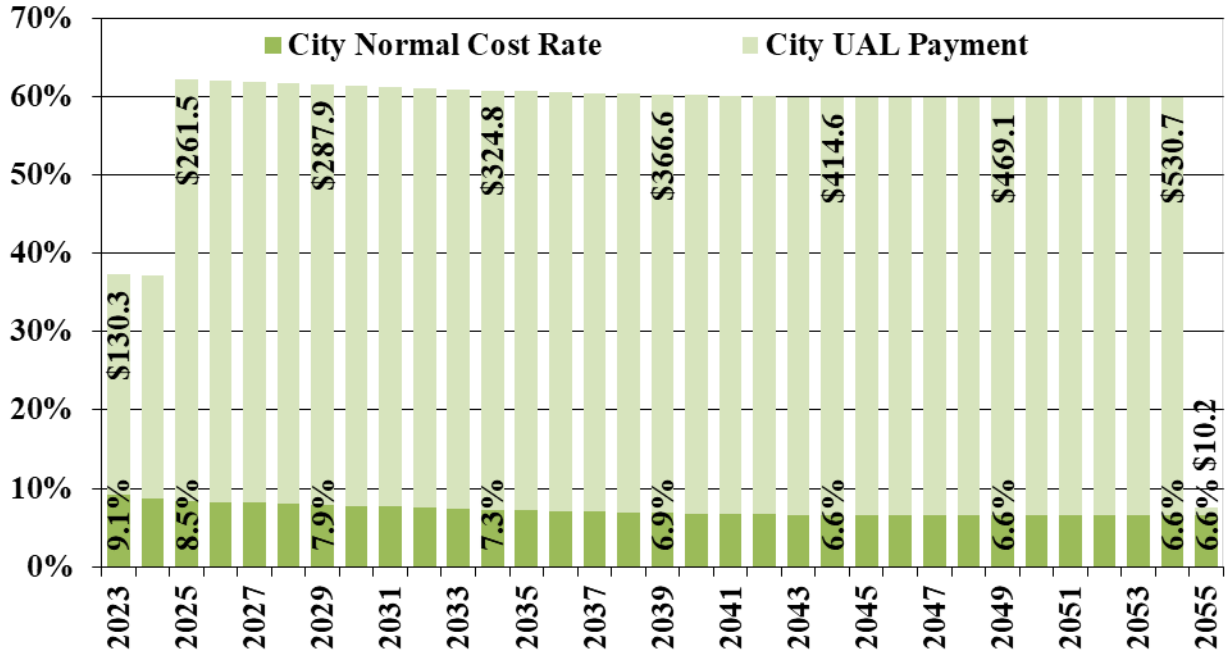
This option builds on the prior option and changes the Current COLA from simple to compound. This option is assumed to provide 1.5% compound COLAs immediately until the purchasing power floor is reached when 2.5% compound COLAs are assumed to be paid. Under this option, current retirees are expected to reach the purchasing power floor in about 25 years, assuming 2.5% annual inflation.

As shown in the table below, this option provides higher purchasing power before reaching the floor even further in the future.

Retirement Year	Purchasing Power – Compound Current COLA with No Funded Status Requirement & 80% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	95%	91%	86%	82%	80%	80%
2022	96%	91%	87%	83%	79%	77%	77%
2021	88%	83%	79%	76%	72%	70%	70%
2020	83%	79%	75%	71%	68%	66%	66%
2019	82%	78%	75%	71%	68%	66%	66%
2018	81%	77%	73%	70%	66%	64%	64%
2017	79%	75%	71%	68%	65%	63%	63%
2016	76%	73%	69%	66%	63%	61%	61%
2015	78%	74%	70%	67%	64%	62%	62%
2010	86%	82%	78%	74%	71%	69%	69%
2005	93%	89%	85%	81%	77%	75%	75%
2000	94%	90%	85%	81%	77%	75%	
1995	92%	88%	84%	80%	76%		
1990	90%	85%	81%	77%			
1985	84%	80%	76%				
1980	70%	67%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Compound Current COLA with No Funded Status Requirement and 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs significantly compared to the current COLA.



Comparison of Options

The chart below compares the expected purchasing power for new retirees under each of the COLA options outlined above.

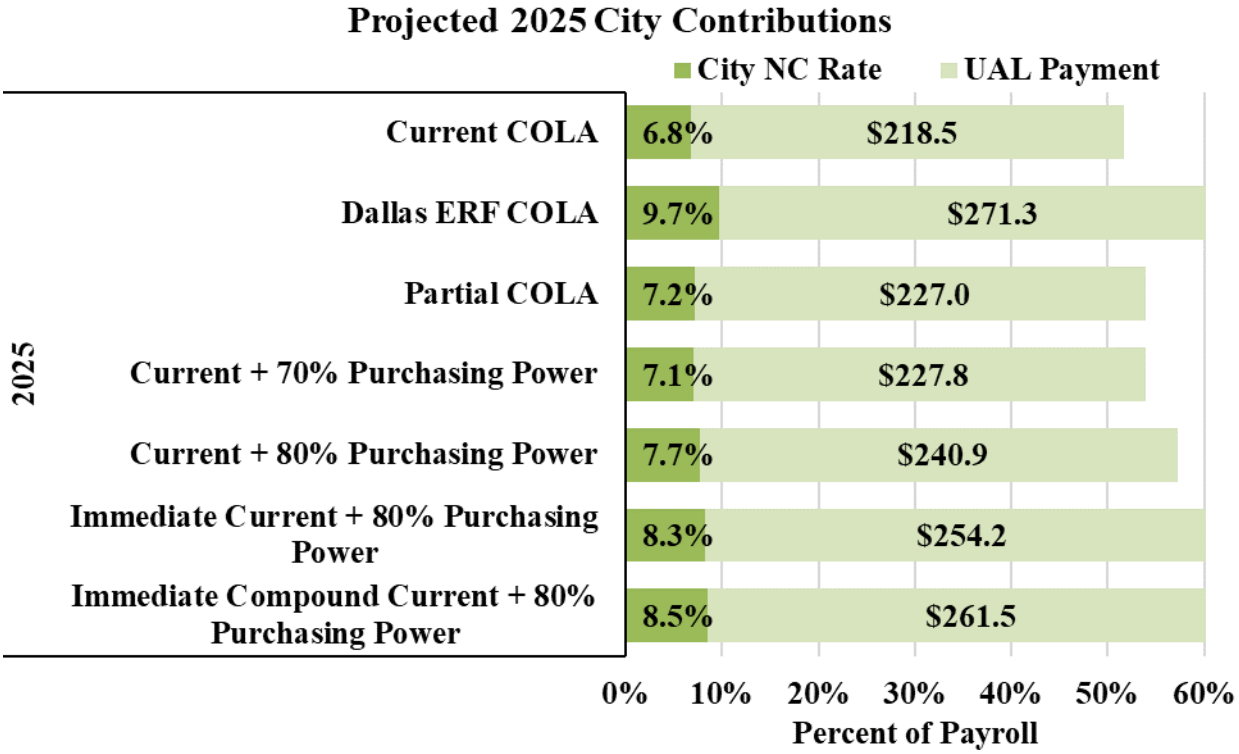
COLA Scenario	Purchasing Power 2024	2029	2034	2039	2044	2049	2054
Current	100%	**88%**	*78%*	*69%*	*61%*	*56%*	*53%*
Dallas ERF COLA	100%	99%	98%	95%	92%	**88%**	**83%**
Immediate Partial COLA	100%	**89%**	**81%**	*74%*	*68%*	*63%*	*59%*
Current + 70% Purchasing Power Protection	100%	**88%**	*78%*	*70%*	*70%*	*70%*	*70%*
Current + 80% Purchasing Power Protection	100%	**88%**	*80%*	*80%*	*80%*	*80%*	*80%*
Current Immediate + 80% Purchasing Power Protection	100%	95%	**90%**	**85%**	*80%*	*80%*	*80%*
Compound Current Immediate + 80% Purchasing Power Protection	100%	95%	91%	**86%**	**82%**	*80%*	*80%*

The table below compares the recalculated 2023 UAL and funded ratio using each of the COLA options outlined above.

COLA Scenario	2023 UAL ($ in Millions)	2023 Funded Ratio
Current	$ 3,537	33.8%
Dallas ERF COLA	$ 4,331	29.4%
Immediate Partial COLA	$ 3,666	33.0%
Current + 70% Purchasing Power Protection	$ 3,679	32.9%
Current + 80% Purchasing Power Protection	$ 3,877	31.8%
Current Immediate + 80% Purchasing Power Protection	$ 4,077	30.7%
Compound Current Immediate + 80% Purchasing Power Protection	$ 4,189	30.1%

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The chart below compares the 2025 city contribution using the Traditional ADC option under each of the COLA options outlined above.



Observations and Rationale for Recommendation

We do not have a recommendation for a specific COLA option because the COLA that will need to be provided is a policy decision and not an actuarial decision. However, we believe it is likely that Dallas will need to provide some COLAs earlier than would be provided under the current plan provisions. Furthermore, it is important to include any anticipated COLAs in the current projections so the costs can be anticipated and pre-funded. Consequently, we recommend that a decision be made on a COLA option now so it can be incorporated into the projected contributions.

Each COLA option has benefits and weaknesses as described on the previous page. However, it is worth highlighting that the combination of the Current COLA and a purchasing power floor provides a balance between financial stability and benefit security. The current COLA only provides COLAs when investment returns support the cost of the COLA, and the purchasing power floor protects retirees from "too much" inflationary erosion of their purchasing power.

APPENDIX A – REPLICATION OF 2023 ACTUARIAL VALUATION

Via Electronic Mail

December 22, 2023

Ms. Kelly Gottschalk, Executive Director
Dallas Police & Fire Pension System
4100 Harry Hines Blvd., Suite 100
Dallas, TX 75219

Re: Replication of the January 1, 2023 Actuarial Valuation Results
Dallas Police & Fire Pension System

Dear Ms. Gottschalk:

As requested, we have completed our replication of the January 1, 2023 actuarial valuation results for the Dallas Police & Fire Pension System (DPFPS). The following tables compare our replication results to Segal's valuation results.

Present Value of Benefits ($ in Millions)	Segal	Cheiron	% Diff
Actives Hired Before 3/1/2011	$ 1,847	$ 1,854	0.4%
Actives Hired On/After 3/1/2011	643	656	2.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 6,088	$ 6,105	0.3%

Actuarial Liability ($ in Millions)	Segal	Cheiron	% Diff
Actives Hired Before 3/1/2011	$ 1,454	$ 1,453	-0.1%
Actives Hired On/After 3/1/2011	198	196	-1.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 5,249	$ 5,244	-0.1%

APPENDIX A – REPLICATION OF 2023 ACTUARIAL VALUATION

Normal Cost ($ in Millions)	Segal	Cheiron	% Diff
Members Hired Before 3/1/2011	$ 49.7	$ 50.9	2.3%
Members Hired On/After 3/1/2011	33.9	33.2	-2.0%
Total Normal Cost (NC)	$ 83.7	$ 84.1	0.6%
Normal Cost with Interest[1]	$ 86.3	$ 86.8	0.6%
Payroll	$ 462.8	$ 462.8	0.0%
NC Rate for Members Hired Before 3/1/2011	19.7%	20.2%	0.5%
NC Rate for Members Hired On/After 3/1/2011	17.3%	16.9%	-0.4%
Total NC Rate	18.7%	18.8%	0.1%

[1] Half year of interest to reflect mid-year contribution timing

Our replication results are based on the January 1, 2023 census data provided by Segal and the assumptions, methods, and plan provisions used in the January 1, 2023 actuarial valuation report. All the differences are within normal tolerances for replicating a valuation. We don't view these differences as material.

We appreciate Segal's assistance in this matter. If you have any questions or need additional information on the replication, please let us know.

Sincerely,
Cheiron

William R. Hallmark, ASA, EA, MAAA, FCA
Consulting Actuary

Jake Libauskas, FSA, EA, MAAA, FCA
Consulting Actuary

APPENDIX B – DATA, ACTUARIAL ASSUMPTIONS AND METHODS

Member Data

This report is based on the January 1, 2023, census data provided by Segal. See Segal's January 1, 2023, actuarial valuation report for a summary of the census data.

Actuarial Assumptions

This report is based on the actuarial assumptions used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the actuarial assumptions.

These assumptions were adopted by the Board based on recommendations from an experience study covering the five-year period ended December 31, 2019. We performed a high-level review of these assumptions for reasonability and a more thorough review of the assumptions was outside our scope of services.

In addition, the following assumptions were used:

- Annual investment return for 2023 and thereafter: 6.5%
- Payroll growth: 2.5% per year
- Stable active population
- 1.5% Simple COLA is assumed to be payable annually effective October 1, 2046, unless noted otherwise.
- The COLA is assumed to be based on the regular pension benefit. Any supplemental or DROP benefits are not subject to the COLA.

This analysis would be materially changed if the System receives an adverse result in pending litigation on annual benefit adjustments.

Actuarial Methods

This report is based on the actuarial methods used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the actuarial methods.

The Actuarially Determined Contribution was calculated assuming that the Actuarial Value of Assets is reset to equal the Market Value of Assets as of January 1, 2023, and that the annual payments begin two years after the corresponding valuation date. The components of the Actuarially Determined Contribution are detailed below.

1. The UAL payment was calculated as of the valuation date and two and a half years of interest were added to approximate payments that begin two years after the valuation date and are made throughout the year. The present value of expected UAL payments during the two-year delay were subtracted from the UAL.

APPENDIX B – DATA, ACTUARIAL ASSUMPTIONS AND METHODS

2. The administrative expense payment was calculated based on the expected administrative expense for the payment year.

3. The normal cost rate is based on the expected normal cost rate for the payment year, which reflects the expectation that a larger percentage of the active population will be members hired on or after March 1, 2011, and that the COLA is closer to being payable when it is assumed to start being payable in 2046. The normal cost rate is based on the mid-year normal cost dollar amount divided by the expected payroll during the year, which reflects the same expected decrements during the year as used in the calculation of the normal cost. This methodology produces a normal cost rate that can be applied to all payroll for the year and appropriately fund benefit accruals of current members and those hired throughout the year.

Future normal costs for members hired before March 1, 2011, are based on a closed group projection that calculates the normal cost at each future valuation date. Future normal costs for members hired on or after March 1, 2011, are based on a linear interpolation between 2023 and 2046 starting with the normal cost rate reflecting the COLA payable starting in 2046 and gradually increasing to the normal cost rate reflecting the COLA payable starting immediately.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

This report is based on the plan provisions used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the plan provisions.

APPENDIX D – GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of future benefits and the present value of total future normal costs. This is also referred to by some actuaries as the "accrued liability" or "actuarial accrued liability." The Actuarial Liability represents the amount of assets a plan should have as of a valuation date according to the actuarial cost method.

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income, and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (price inflation, wage inflation, and investment income) are generally based on expectations for the future that may differ from a plan's past experience.

3. Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the present value of future benefits between future normal cost and Actuarial Liability.

4. Actuarial Gain or Loss

The difference between actual experience and the anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

5. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at the discount rate and by probabilities of payment.

6. Actuarially Determined Contribution

The payment to a plan as determined by the actuary using a contribution allocation procedure. It may or may not be the actual amount contributed to a plan.

7. Amortization Method

A method for determining the amount, timing, and pattern of payment of the Unfunded Actuarial Liability.

APPENDIX D – GLOSSARY OF TERMS

8. Asset Valuation Method

The method used to develop the Actuarial Value of Assets from the Market Value of Assets typically by smoothing investment returns above or below the assumed rate of return over a period of time.

9. Contribution Allocation Procedure

A procedure typically using an actuarial cost method, an asset valuation method, and an amortization method to develop the Actuarially Determined Contribution.

10. Cost-of-Living Adjustment (COLA)

An increase to retirement benefit payments intended to help those benefits keep up with the rate of inflation.

11. Discount Rate

The rate of interest used to discount future benefit payments to determine the actuarial present value. For purposes of determining an Actuarially Determined Contribution, the discount rate is typically based on the long-term expected return on assets.

12. Funded Status or Funding Ratio

Either the Market or Actuarial Value of Assets divided by the Actuarial Liability. For purposes of this report, the funded status represents the proportion of the actual assets as of the valuation date compared to the assets expected by the actuarial cost method. These measures are for contribution budgeting purposes and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

13. Net Cash Flow

Total contributions (employee and employer) minus benefit payments and administrative expenses.

14. Normal Cost

The portion of the present value of future benefits allocated to the current year by the actuarial cost method.

15. Present Value of Future Benefits

The actuarial present value of all benefits both earned as of the valuation date and expected to be earned in the future by current plan members based on current plan provisions and actuarial assumptions.

APPENDIX D – GLOSSARY OF TERMS

16. Purchasing Power

The amount of goods or services that a certain amount of money can buy. As inflation increases the cost of goods and services, the purchasing power of a fixed amount of money decreases. In this report, Purchasing power is calculated as the percentage of the purchasing power a retirement benefit retains compared to the initial purchasing power it had at retirement. It is calculated as the product of the ratios for each year since retirement of (1+COLA)/(1+Inflation), where COLA is the percentage increase in the retirement benefit from the prior year.

17. Unfunded Actuarial Liability (UAL)

The Unfunded Actuarial Liability is the difference between Actuarial Liability and either the Market or the Actuarial Value of Assets. This value is sometimes referred to as "unfunded actuarial accrued liability." It represents the difference between the actual assets and the amount of assets expected by the actuarial cost method as of the valuation date.



Classic Values, Innovative Advice

Appendix C – Dallas Police and Fire Pension System Funding Plan

D A L L A S
POLICE & FIRE
PENSION SYSTEM

September 17, 2024

Amy Cardona
State Pension Review Board
P.O. Box 13498
Austin, TX 78711-3498

RE: PRB notification of the Art. 6243a-1. Pension System For Police Officers And Firefighters In Certain Cities

In accordance with Article 6243a-1, Section 3.01 (j-10), this letter certifies that the information provided to the Pension Review Board is accurate and based on realistic assumptions.

Sincerely,

Kelly Gottschalk
Executive Director

Plan Document Section 2.025

4100 Harry Hines Blvd, • Suite 100 • Dallas, Texas 75219
Phone: 214.638.3863 • Fax: 214.638.6403

DALLAS POLICE & FIRE PENSION SYSTEM

September 17, 2024

Amy Cardona
State Pension Review Board
P.O. Box 13498
Austin, TX 78711-3498

Ms. Cardona,

According to the Board's responsibility under Article 6243a-1, Section 2.025, the Dallas Police and Fire Pension Board adopted by rule a plan that complies with the funding and amortization period requirements under Subchapter C, Chapter 802 of the Texas Government Code. The Board considered the independent actuary's recommendations in adopting the plan. Although not required, the Board also considered information provided by the City when adopting the plan.

The plan adopted by the Board is enclosed along with the minutes of the August 8th Board meeting reflecting the Board's action to adopt the plan. The Board authorized transmitting the plan to the Texas Pension Review Board on September 14, 2025. The Board may amend the adopted plan pursuant to section 2.025 until the section expires on September 1, 2025 so long as the amended plan continues to comply with the funding and amortization requirements, unless the legislature enacts a law that preempts the rule.

Sincerely,

Kelly Gottschalk
Executive Director

Pursuant to the requirements of Section 2.025 of Article 6243a-1 of Vernon's Revised Civil Statutes, the Board of Trustees of the Dallas Police and Fire Pension System has considered information provided to the Board from numerous sources including the report of the independent actuary selected by the Texas Pension Review Board. After such consideration, as required by Section 2.025, the Board of Trustees adopts a rule which effectuates the following changes to the foregoing sections of Article 6243a-1, subject to any subsequent change by legislative action.

1. Subsection (d) of Section 4.02 is amended and restated to read as follows:

(d) Subject to Section 4.025 of this article, the city shall make contributions to the pension system as follows:

(1) For each biweekly pay period beginning with the first biweekly pay period that begins after October 1, 2024, and ending on the last day of the first biweekly pay period that ends after September 30, 2025, the city shall make contributions of $8,273,000.

(2) Effective for the city's fiscal year beginning with the first biweekly pay period that begins after October 1, 2025, and each fiscal year after that, for each biweekly pay period the City shall contribute an Actuarially Determined Contribution based on the actuarial valuation performed as of the measurement date 21 months before the beginning of the city's fiscal year. The Actuarially Determined Contribution shall be the sum of the Employer Normal Cost Contribution, the Administrative Expense Contribution and the Unfunded Actuarial Liability Contribution.

(A) Employer Normal Cost Contribution: The Employer Normal Cost contribution shall be equal to the Employer's Normal Cost Rate computed by the pension system's Qualified Actuary multiplied by the actual biweekly payroll of active members of the pension system during the fiscal year.

(B) Administrative Expense Contribution: The administrative expense contribution, as required by Section 4.02(c) of this Article, shall equal the dollar amount of administrative expenses expected to be incurred by the pension system during the applicable fiscal year. The city shall make a fixed-dollar administrative expense contribution for each biweekly pay period during the applicable fiscal year equal to the annual administrative expense contribution divided by the number of biweekly pay periods during the applicable fiscal year.

(C) Unfunded Actuarial Liability (UAL) Contribution: The unfunded actuarial liability as of a valuation date is the Entry Age actuarial liability less the Actuarial Value of Assets. As of January 1, 2023, the Actuarial Value of Assets shall equal the Market Value of Assets. The unfunded actuarial liability shall be divided into layers with fixed contribution schedules for each layer such that the present value of all future UAL contributions equals the unfunded actuarial liability as of the valuation date. The city shall make a fixed-dollar UAL contribution for each biweekly pay period during the applicable fiscal year equal to the sum of the annual UAL contributions for each layer divided by the number of biweekly pay periods during the applicable fiscal year. The layers and UAL contribution schedules shall be developed as follows:

(i) The present value of UAL contributions expected to be received between the valuation date and the effective date of the new Actuarially Determined Contribution shall be deducted from the unfunded actuarial liability as of the valuation date.

(ii) Effective January 1, 2023, the base layer has a starting balance of $2,250,000,000 and shall be amortized over the 30-year period from October 1, 2024 through September 30, 2054. The payment for the City's fiscal year beginning October 1, 2024, based on a 6.5% discount rate and a 2.5% amortization payment growth rate, is $142,589,330.

(iii) Effective January 1, 2023, the graded layer has a starting balance of $1,330,588,874 and shall be amortized over the 30-year period from October 1, 2024 through September 30, 2054 with payments stepping up over three years in equal increments as a percentage of expected payroll before reaching the ultimate payment rate as a percentage of expected payroll for the fiscal year beginning October 1, 2026. The payment for the City's fiscal year beginning October 1, 2024, based on a 6.5% discount rate and a 2.5% amortization payment growth rate, is $29,722,087.

(iv) For valuation dates from January 1, 2024, through January 1, 2033, the annual change in the unfunded actuarial liability due to System experience, assumption changes, method changes, or benefit changes shall be amortized from the City's fiscal year that begins 21 months after the valuation date through the City's fiscal year ending September 30, 2054. The

amount of the scheduled amortization payments shall increase annually by no more than the assumed inflation.

(v) For valuation dates after January 1, 2033, the annual change in the unfunded actuarial liability due to System experience, assumption changes, method changes, or benefit changes shall be amortized over a 20-year period starting at the beginning of the City's fiscal year that begins 21 months after the valuation date. The amount of the scheduled amortization payments shall increase annually by no more than the assumed inflation.

2. Subsection (d-1) is added to Section 6.12 to read as follows:

(d-1) If a benefit adjustment for any year is not available to be made as a result of the ratio in Subsection (d) of this section being less than .70, then the adjustment in Subsection (b) of this section shall be equal to the ratio calculated in Subsection (d) of this section multiplied by the percentage of increase for the calendar year prior to the year of adjustment of the Consumer Price Index-U All Items in Dallas-Fort Worth-Arlington, Texas, provided that the adjustment may not exceed 1.5% for any year.

ADOPTED BY THE BOARD OF TRUSTEES ON August 8, 2024

Nicholas Merrick
Chairman

Kelly Gottschalk
Secretary

Dallas Police and Fire Pension System
Thursday, August 8, 2024
8:30 a.m.
4100 Harry Hines Blvd., Suite 100
Second Floor Board Room
Dallas, TX

Regular meeting, Nicholas A. Merrick, Chairman, presiding:

ROLL CALL

Board Members

Present at 8:30 a.m.	Nicholas Merrick, Tina Hernandez Patterson, Michael Taglienti, Tom Tull, Matthew Shomer, Marcus Smith
By telephone at 8:30 a.m.	Michael Brown, Anthony Scavuzzo, Steve Idoux
By telephone at 10:41 a.m.	Nancy Rocha
Absent	Mark Malveaux
Staff	Kelly Gottschalk, Josh Mond, Brenda Barnes, Ryan Wagner, Christina Wu, Akshay Patel, Kyle Schmit, John Holt, Nien Nguyen, Milissa Romero, Bill Scoggins (by phone), Chelsea Abbott, Aubrey Rosalez
Others	David Harper, Ben Mesches, Gay Donnell Willis, Chad Anderson, Farrah Ali, Aaron Bruce, Charles W. Hyles, Brian Elliot, John Hankins
By telephone	Eric Solis, Buddy Jones, Jeff Williams, Caitlin Grice, Ken Haben

* * * * * * * *

The meeting was called to order at 8:30 a.m.

* * * * * * * *

A. MOMENT OF SILENCE

The Board observed a moment of silence in memory of retired police officers Clyde Dickerson, William L. Johnson, Craig A. Reynerson, Albert L. Hay, David L. Goelden, and retired firefighters Thomas S. Swing, Richard E. Beebe, Eugene M. Walther, Jimmy A. Bollman, Robert W. Foster.

No motion was made.

* * * * * * * *

B. APPROVAL OF MINUTES

Regular meeting of July 11, 2024

After discussion, Mr. Tull made a motion to approve the minutes of the Regular meeting of July 11, 2024. Mr. Shomer seconded the motion, which was unanimously approved by the Board.

* * * * * * * *

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Independent Actuarial Analysis and Recommendations and Section 2.025 Update

The Board went into closed executive session – Legal at 8:32 a.m.

The meeting reopened at 10:10 a.m.

The Board went into closed executive session – Legal at 11:26 a.m.

The meeting reopened at 11:51 a.m.

a. After discussion, Mr. Taglienti made a motion to approve, in the form presented by staff, the rule effecting changes to the DPFP plan, pursuant to the requirements of Section 2.025. Mr. Tull seconded the motion, which was unanimously approved by the Board.

b. After discussion, Mr. Shomer made a motion to accept the final report of Cheiron and direct staff to transmit the report to the Pension Review Board. Mr. Taglienti seconded the motion, which was unanimously approved by the Board.

c. After discussion, Mr. Shomer made a motion to authorize the filing of a declaratory judgment action in Travis County to clarify the requirements of Section 2.025 and Section 802 of the Texas Government Code. Mr. Tull seconded the motion, which was by the following vote:

For:	Mr. Merrick, Mr. Taglienti, Mr. Scavuzzo, Mr. Tull, Mr. Shomer, Mr. Smith, Ms. Rocha, Mr. Idoux
Opposed:	None
Abstained:	Ms. Hernandez Patterson, Mr. Brown

* * * * * * * *

2. Quarterly Financial Reports

The Chief Financial Officer presented the second quarter 2024 financial statements.

No motion was made.

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3. 2024 Mid-Year Budget Review

The Chief Financial Officer presented a review of the 2024 Operating Expense Budget detailing expenses for the first six months of the calendar year.

No motion was made.

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4. Financial Audit Status

The Chief Financial Officer provided a status update on the annual financial audit.

No motion was made.

* * * * * * * * *

5. Executive Director Approved Pension Ministerial Actions

The Executive Director reported on the July pension ministerial actions.

No motion was made.

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6. Monthly Contribution Report

The Executive Director reviewed the Monthly Contribution Report.

No motion was made.

* * * * * * * * *

7. Board approval of Trustee education and travel

a. Future Education and Business-related Travel
b. Future Investment-related Travel

The Board and staff discussed future Trustee education. There was no future Trustee business-related travel or investment-related travel scheduled.

No motion was made.

* * * * * * * *

8. Actuarial Review Required by Texas Government Code 802.1012

The Executive Director provided an overview of the process and timeline for the actuarial review required by Section 802.1012 of the Texas Government Code that requires the City of Dallas hire an independent actuary to audit the most recently prepared actuarial valuation every five years.

No motion was made.

* * * * * * * *

9. Portfolio Update

Investment staff briefed the Board on recent events and current developments with respect to the investment portfolio.

No motion was made.

* * * * * * * *

10. Lone Star Investment Advisors

The Board went into closed executive session – Legal at 11:26 a.m.

The meeting reopened at 11:51 a.m.

Investment staff updated the Board on investments managed by Lone Star Investment Advisors.

No motion was made.

* * * * * * * *

11. Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.

The Board went into closed executive session – Legal at 11:26 a.m.

The meeting reopened at 11:51 a.m.

The Board and staff discussed legal issues.

No motion was made.

* * * * * * * * *

12. Closed Session - Board serving as Medical Committee

a. Application for death benefits for disabled child 2024-1c
b. Disability application 2024-2d

The Board went into closed executive session – Medical at 11:26 a.m.

The meeting reopened at 11:51 a.m.

a. After discussion, Mr. Taglienti made a motion to grant survivor benefits to applicant 2024-1c under the provisions of Article 6243a-1, Section 6.06(o-2). Mr. Smith seconded the motion, which was unanimously approved by the Board.

b. No discussion was held, and no motion was made regarding the disability application.

D. BRIEFING ITEMS

1. Public Comments

Prior to commencing items for Board discussion and deliberation, the Chairman extended an opportunity for public comment. No one requested to speak to the Board.

* * * * * * * * *

2. Executive Director's Report

a. Associations' newsletters
- NCPERS Monitor (August 2024)
- NCPERS PERSist (Summer 2024)

b. Open Records

* * * * * * * * *

Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Taglienti and a second by Mr. Tull, the meeting was adjourned at 11:55 a.m.

Nicholas A. Merrick,
Chairman

ATTEST:

Kelly Gottschalk,
Secretary

Appendix D – City of Dallas Funding Soundness Restoration Plan

City of Dallas

September 30, 2024

David Fee
Senior Actuary
Texas Pension Review Board
300 W 15th Street, Suite 406
Austin, Texas 78701

Dear Mr. Fee,

Enclosed is the Funding Soundness Restoration Plan (FSRP) submission form and required documents for the Dallas Police and Fire Pension System (DPFPS) submitted on behalf of the City Council of the City of Dallas (City) as approved on September 11, 2024, by Council Resolution #24-1318.

While the City tried to work together with DPFPS over the past year to develop a joint funding plan and while the City believed this work was being done in good faith, on August 8, 2024, we learned that the DPFPS Board unilaterally adopted a plan that purports to obligate the City to higher contribution amounts without agreement from the City and without regard for the City's financial constraints. As the sponsoring municipality for DPFPS, the City rejects any plan submitted to the Pension Review Board by DPFPS that has not been approved by the City. The City does not and has not agreed to the plan adopted by the DPFPS Board on August 8, 2024.

Despite the actions of DPFPS, and the unwillingness of DPFPS to jointly formulate a plan, the City wishes to comply with its obligation under Texas Vernon Civil Statute, Article 6243a-1 and Texas Government Code Chapter 802 Subchapter C and has worked to develop a plan that satisfies both statutory provisions and fully funds the unfunded actuarial accrued liability of DPFPS within 30 years.

On September 11, 2024, the Dallas City Council approved Resolution #24-1318 that adopts the Article 6243a-1 Plan/Subchapter C Funding Soundness Restoration Plan, which is attached. Among other things, this plan provides that beginning in October 2024, City contributions will be based on an Actuarially Determined Contribution Rate that includes:

1. An established 30-year closed amortization amount with a five-year step-up for the unfunded actuarial accrued liability and administrative expenses, developed by Cheiron, Inc. based on the DPFPS January 1, 2023 Actuarial Valuation;
2. Normal cost; and
3. New amortization layers as necessary to amortize the difference between the expected remaining balance of all previous year's layers and the actual unfunded actuarial accrued liability for the given valuation.

Subject to limited budgetary guardrails that protect the City of Dallas from extraordinary increases in the Actuarially Determined Contribution Rate (excluding item 1 above) that exceed five percent (5%), City contributions will be sufficient to fund DPFPS' normal cost, administrative expense, and fully satisfy DPFPS' January 1, 2023, unfunded liability over a 30-year period according to the attached schedule.

Please confirm receipt of this submission by e-mail to me at jack.ireland@dallas.gov and do not hesitate to contact me should you have any questions or comments. If through your review, you identify any issue, please allow us the opportunity to work with you to ensure that we satisfy all Pension Review Board requirements.

If you have any questions, I may also be reached at 214-384-0692. Thank you for your continued assistance.

Jack Ireland
Chief Financial Officer

Attachments

C: Mayor Pro Tem Tennell Atkins, Chair of Ad Hoc Committee on Pensions
Kimberly Bizor Tolbert, Interim City Manager
Tammy L. Palomino, City Attorney
Nick Merrick, DPFPS Board Chair
Kelly Gottschalk, DPFPS Executive Director
Jeannie Chen, Deloitte Consulting

February 2023

TEXAS PENSION REVIEW BOARD

P.O. Box 13498, Austin, TX 78711 | Phone: (800) 213-9425 or (512) 463-1736 | Fax: (512) 463-1882 | Email: prb@prb.texas.gov

Funding Soundness Restoration Plan Coversheet

Retirement System Profile

Dallas Police and Fire Pension System	214-670-9070
System Name	Phone Number
Jack Ireland	jack.ireland@dallas.gov
Report Contact Name (Please Print)	Email Address

FSRP Documentation

This form is a required component of Funding Soundness Restoration Plans (FSRPs), Revised Funding Soundness Restoration Plans (R-FSRPs), and Voluntary Funding Soundness Restoration Plans (V-FSRPs). For full details on FSRP requirements, please review Section 802.2015/802.2016 of the Texas Government Code, Chapter 610 of the Texas Administrative Code, and the materials at prb.texas.gov/actuarial/funding-soundness-restoration-plan-fsrp/.

Final Adoption:

FSRPs are required to be adopted at open meetings of the respective governing bodies of the system and entity not later than the second anniversary of the triggering actuarial valuation.[1] Please provide documentation of the open meeting dates with associated minutes and/or recordings below.

Adoption of FSRP/R-FSRP by governing body of retirement system

Meeting Date _____ ☐ Minutes (attached)

☐ Recording (location: _____)

Adoption of FSRP/R-FSRP by governing body of associated governmental entity

Meeting Date 9/11/24 ☑ Minutes (attached) See attached Council Meeting Agenda and Resolution 24-2877

☑ Recording (location: https://dallastx.new.swagit.com/videos/314)

[1] §§802.2015(e)(4) and (e-1)(4) and 802.2016(e)(4) and (e-1)(4), Texas Government Code.

Analysis:

FSRPs must include an actuarial projection of expected future assets and liabilities[2] within an actuarial valuation report **or** separate analysis. The projection must begin with the triggering valuation date and demonstrate the year in which the system is expected to reach full funding, accompanied by a description of all assumptions and methods used to perform the analysis, which must comply with Actuarial Standards of Practice.

To show the combined impact of all changes to an FSRP or R-FSRP in accordance with §802.2015(e-2) or §802.2016(e-2), Texas Government Code, we will submit a/an:

□ Actuarial valuation required by §802.101(a) or other law.

■ Separate analysis.

Please indicate if the AV or separate analysis:

■ Is attached with this coversheet.

□ Will be submitted separately within 90 days

Components: Please indicate all categories that apply to your system's FSRP, R-FSRP, or V-FSRP. Risk-sharing mechanisms are optional for first-time FSRPs with a maximum allowable funding period of 30 years. **Revised FSRPs MUST include automatic risk sharing mechanisms, an ADC structure, and other adjustable benefit or contribution mechanisms.** A description of what is considered a "automatic risk sharing-mechanism" can be found in §610.30(c) of the Texas Administrative Code.

Benefit Changes:	Contribution Changes:	Risk-sharing Mechanisms:
☐ New benefits tier ☐ COLA eliminated ☐ COLA changed ☐ DROP eliminated ☐ DROP changed ☐ Other (describe below or on a separate page.)	■ Actuarially determined contribution structure ■ Sponsor contribution increase ☐ Member contribution increase ☐ Other (describe below or on a separate page.)	☐ Corridor ☐ Other (describe below or on a separate page.)

Please Briefly Describe Changes:

On September 11, 2024, the City Council approved Resolution 24-1318 that adopts the Article 6243a-1 Plan/Subchapter C Funding Soundness Restoration Plan, Exhibit A, attached. Among other things, this provide that beginning on October 2024, City contributions will be based on an Actuarially Determined Contribution rate that includes an established 30-year closed amortization amount with five-year step-up for the unfunded actuarial accrued liability and administrative expenses, developed by by Cheiron, Inc. based on the DPFP January 1, 2023 Actuarial Valuation.

[2] Example projection available at https://www.prb.texas.gov/wp-content/uploads/2023/02/FSRP-Sample-Additional-Analysis.pdf

Attached Documents: Please list or describe any supplemental documents your system is submitting with this form to constitute your FSRP.

1. Dallas City Council September 11, 2024 Agenda (Item 57)
2. City Resolution 24-1318: DPFPS Funding Soundness Restoration Plan
3. 30-Year amortization schedule of unfunded actuarial accrued liability as of January 1, 2023 with 5-year step up ADC and current COLA, and accompanying report/presentations developed by Cheiron Inc.
4. FSRP 30-Year Projection Illustration

Certification

I hereby certify that the information provided above is correct and accurate and that I am duly authorized by the retirement system to complete this form.

Authorizing Signature

Sept 30, 2024

Date

Jack Ireland, Chief Financial Officer

Printed Name

PRB Review

Having reviewed this form and attached documents, I certify that the FSRP/R-FSRP/L-FSRP status is:

☐ Submitted, needs AV/analysis

☐ Additional materials needed (see description)

☐ Compliant

☐ Noncompliant

Staff Signature

Date

Printed Name

RECEIVED

2024 SEP -6 PM 8:27

CITY SECRETARY
DALLAS, TEXAS

City of Dallas

1500 Marilla Street
Council Chambers, 6th Floor
Dallas, Texas 75201

Public Notice

240843

POSTED CITY SECRETARY
DALLAS, TX

COUNCIL AGENDA

September 11, 2024
9:00 AM

(For General Information and Rules of Courtesy, Please See Opposite Side.)
(La Información General Y Reglas De Cortesía Que Deben Observarse
Durante Las Asambleas Del Consejo Municipal Aparecen En El Lado Opuesto, Favor De Leerlas.)

General Information

The Dallas City Council regularly meets on Wednesdays beginning at 9:00 a.m. in the Council Chambers, 6th floor, City Hall, 1500 Marilla. Council agenda meetings are broadcast live on bit.ly/cityofdallastv and on Time Warner City Cable Channel 16. Briefing meetings are held the first and third Wednesdays of each month. Council agenda (voting) meetings are held on the second and fourth Wednesdays. Anyone wishing to speak at a meeting should sign up with the City Secretary's Office by calling (214) 670-3738 by 5:00 p.m. of the last regular business day preceding the meeting. Citizens can find out the name of their representative and their voting district by calling the City Secretary's Office.

Sign interpreters are available upon request with a 48-hour advance notice by calling (214) 670-5208 V/TDD. The City of Dallas is committed to compliance with the Americans with Disabilities Act. ***The Council agenda is available in alternative formats upon request***.

If you have any questions about this agenda or comments or complaints about city services, call 311.

Rules of Courtesy

City Council meetings bring together citizens of many varied interests and ideas. To insure fairness and orderly meetings, the Council has adopted rules of courtesy which apply to all members of the Council, administrative staff, news media, citizens and visitors. These procedures provide:

- That no one shall delay or interrupt the proceedings, or refuse to obey the orders of the presiding officer.
- All persons should refrain from private conversation, eating, drinking and smoking while in the Council Chamber.
- Posters or placards must remain outside the Council Chamber.
- No cellular phones or audible beepers allowed in Council Chamber while City Council is in session.

"Citizens and other visitors attending City Council meetings shall observe the same rules of propriety, decorum and good conduct applicable to members of the City Council. Any person making personal, impertinent, profane or slanderous remarks or who becomes boisterous while addressing the City Council or while attending the City Council meeting shall be removed from the room if the sergeant-at-arms is so directed by the presiding officer, and the person shall be barred from further audience before the City Council during that session of the City Council. If the presiding officer fails to

Información General

El Ayuntamiento de la Ciudad de Dallas se reúne regularmente los miércoles en la Cámara del Ayuntamiento en el sexto piso de la Alcaldía, 1500 Marilla, a las 9 de la mañana. Las reuniones informativas se llevan a cabo el primer y tercer miércoles del mes. Estas audiencias se transmiten en vivo por la bit.ly/cityofdallastv y por cablevisión en la estación *Time Warner City Cable* Canal 16. El Ayuntamiento Municipal se reúne en el segundo y cuarto miércoles del mes para tratar asuntos presentados de manera oficial en la agenda para su aprobación. Toda persona que desee hablar durante la asamblea del Ayuntamiento, debe inscribirse llamando a la Secretaría Municipal al teléfono (214) 670-3738, antes de las 5:00 pm del último día hábil anterior a la reunión. Para enterarse del nombre de su representante en el Ayuntamiento Municipal y el distrito donde usted puede votar, favor de llamar a la Secretaría Municipal.

Intérpretes para personas con impedimentos auditivos están disponibles si lo solicita con 48 horas de anticipación llamando al (214) 670-5208 (aparato auditivo V/TDD). La Ciudad de Dallas se esfuerza por cumplir con el decreto que protege a las personas con impedimentos, *Americans with Disabilities Act.* ***La agenda del Ayuntamiento está disponible en formatos alternos si lo solicita.***

Si tiene preguntas sobre esta agenda, o si desea hacer comentarios o presentar quejas con respecto a servicios de la Ciudad, llame al 311.

Reglas de Cortesía

Las asambleas del Ayuntamiento Municipal reúnen a ciudadanos de diversos intereses e ideologías. Para asegurar la imparcialidad y el orden durante las asambleas, el Ayuntamiento ha adoptado ciertas reglas de cortesía que aplican a todos los miembros del Ayuntamiento, al personal administrativo, personal de los medios de comunicación, a los ciudadanos, y a visitantes. Estos reglamentos establecen lo siguiente:

- Ninguna persona retrasara o interrumpirá los procedimientos, o se negara a obedecer las órdenes del oficial que preside la asamblea.
- Todas las personas deben abstenerse de entablar conversaciones, comer, beber y fumar dentro de la cámara del Ayuntamiento.
- Anuncios y pancartas deben permanecer fuera de la cámara del Ayuntamiento.
- No se permite usar teléfonos celulares o enlaces electrónicos *(pagers)* audibles en la cámara del Ayuntamiento durante audiencias del Ayuntamiento Municipal

"Los ciudadanos y visitantes presentes durante las asambleas del Ayuntamiento Municipal deben de obedecer las mismas reglas de comportamiento, decoro y buena conducta que se aplican a los miembros del Ayuntamiento Municipal. Cualquier persona que haga comentarios impertinentes, utilice vocabulario obsceno o difamatorio, o que al dirigirse al Ayuntamiento lo haga en forma escandalosa, o si causa disturbio durante la asamblea del

act, any member of the City Council may move to require enforcement of the rules, and the affirmative vote of a majority of the City Council shall require the presiding officer to act." Section 3.3(c) of the City Council Rules of Procedure.

Ayuntamiento Municipal, será expulsada de la cámara si el oficial que este presidiendo la asamblea así lo ordena. Además, se le prohibirá continuar participando en la audiencia ante el Ayuntamiento Municipal. Si el oficial que preside la asamblea no toma acción, cualquier otro miembro del Ayuntamiento Municipal puede tomar medidas para hacer cumplir las reglas establecidas, y el voto afirmativo de la mayoría del Ayuntamiento Municipal precisara al oficial que este presidiendo la sesión a tomar acción." Según la sección 3.3 (c) de las reglas de procedimientos del Ayuntamiento.

Handgun Prohibition Notice for Meetings of Governmental Entities

"Pursuant to Section 30.06, Penal Code (trespass by license holder with a concealed handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a concealed handgun."

"De acuerdo con la sección 30.06 del código penal (ingreso sin autorización de un titular de una licencia con una pistol oculta), una persona con licencia según el subcapítulo h, capítulo 411, código del gobierno (ley sobre licencias para portar pistolas), no puede ingresar a esta propiedad con una pistola oculta."

"Pursuant to Section 30.07, Penal Code (trespass by license holder with an openly carried handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a handgun that is carried openly."

"De acuerdo con la sección 30.07 del código penal (ingreso sin autorización de un titular de una licencia con una pistola a la vista), una persona con licencia según el subcapítulo h, capítulo 411, código del gobierno (ley sobre licencias para portar pistolas), no puede ingresar a esta propiedad con una pistola a la vista."

"Pursuant to Section 46.03, Penal Code (places weapons prohibited), a person may not carry a firearm or other weapon into any open meeting on this property."

"De conformidad con la Sección 46.03, Código Penal (coloca armas prohibidas), una persona no puede llevar un arma de fuego u otra arma a ninguna reunión abierta en esta propriedad."

AGENDA
CITY COUNCIL MEETING
WEDNESDAY, SEPTEMBER 11, 2024
ORDER OF BUSINESS

The City Council meeting will be held by videoconference and in the Council Chambers, 6th Floor at City Hall. Individuals who wish to speak in accordance with the City Council Rules of Procedure must sign up with the City Secretary's Office.

The public may attend the meeting virtually; however, City Hall is available for those wishing to attend the meeting in person.

The following videoconference link is available to the public to listen to the meeting and Communications, Outreach, and Marketing (COM) will also stream the City Council meeting on Spectrum Cable Channel 16 and bit.ly/cityofdallastv:
https://dallascityhall.webex.com/dallascityhall/j.php?MTID=mdea6925f9d9fb37ec2669321d1a9a17c

Public hearings will not be heard before 1:00 p.m.

INVOCATION AND PLEDGE OF ALLEGIANCE

OPEN MICROPHONE

MINUTES	Item 1
CONSENT AGENDA	Items 2-44
DELETION	Item 29
ITEMS FOR INDIVIDUAL CONSIDERATION	Items 45-48
ADDITIONS	Items 49-61
ZONING	Items Z1-Z10
PUBLIC HEARINGS AND RELATED ACTIONS	Item PH1

NOTE: A revised order of business may be posted prior to the date of the council meeting if necessary.

Invocation and Pledge of Allegiance

Agenda Item/Open Microphone Speakers

VOTING AGENDA

1. 24-2653 Approval of Minutes of the August 28, 2024 City Council Meeting

CONSENT AGENDA

Department of Aviation

2. 24-1656 Authorize **(1)** a construction service contract for construction services to the Dallas Airport System Signage Project at Dallas Executive Airport - Holt Construction Corp., lowest responsible bidder of four; and **(2)** an increase in appropriation in an amount not to exceed $1,218,633.00 in the AVI Commercial Paper - Not to exceed $1,218,633.00 - Financing: AVI Commercial Paper

Attachments: Map
Resolution

3. 24-2241 Authorize Supplemental Agreement No. 1 to the engineering services contract with O'Brien Engineering, Inc. to provide construction administration services to Garages A and B pedestrian concourse heating, ventilation, and air conditioning (HVAC) and roof assessment for mechanical, electrical, plumbing, and structural infrastructure systems that support the demolition, removal, and installation of ten new rooftop HVAC units, two new and updated boilers, and five new air handling units, along with roof layered replacement at Dallas Love Field - Not to exceed $55,300.00, from $249,600.00 to $304,900.00 - Financing: Aviation Fund

Attachments: Map
Resolution

Department of Convention and Event Services

4. 24-2595 Authorize an Advance Funding Agreement with the Texas Department of Transportation in an estimated amount of $22,412,995.32 for the City of Dallas' portion of the construction of a deck cap over Interstate Highway 30 on Lamar Street in the City of Dallas - Total amount of $22,412,995.32 - Financing: Convention Center Construction Fund

Attachments: Resolution

Department of Dallas Animal Services

5. 24-2529 An ordinance amending sections of the Dallas City Code, Chapter 7, "Animals", of the Dallas City Code by amending Sections 7-5.5, 7-5.6, 7-5.12, 7-5.13, 7-5.15, 7-5.16, and 7-8.1 **(1)** amending the ownership requirements for a dangerous or aggressive dog; **(2)** increasing the time to comply with the requirements for ownership of a dangerous dog or aggressive dog; **(3)** providing a noncompliance hearing for failing to comply with requirements for ownership of an aggressive dog; **(4)** providing a penalty not to exceed $500.00; **(5)** providing a saving clause; **(6)** providing a severality clause; and **(7)** providing an effective date - Financing: No cost consideration to the City

Attachments: Ordinance

Department of Facilities and Real Estate Management

6. 24-2650 An ordinance abandoning a portion of a utility easement to CP Hollow, LP, the abutting owner, containing approximately 10,982 square feet of land, located near the intersection of Tulane Boulevard and Northwest Highway - Revenue: General Fund $7,800.00, plus the $20.00 ordinance publication fee

Attachments: Map
Ordinance
Exhibit A

7. 24-2651 An ordinance abandoning all of two water easements and a portion of a drainage easement to Victory Block M LP, the abutting owner, containing a total of approximately 4,242 square feet of land, located near the intersection of Museum Way and Victory Avenue; and providing for the dedication of approximately 4,288 square feet of land needed for a drainage easement - Revenue: General Fund $7,800.00, plus the $20.00 ordinance publication fee

Attachments: Map
Ordinance
Exhibit A

8. 24-2652 An ordinance abandoning a water easement to St. Mark's School of Texas, the abutting owner, containing approximately 4,744 square feet of land, located near the intersection of Preston Road and Orchid Lane - Revenue: General Fund $7,800.00, plus the $20.00 ordinance publication fee

Attachments: Map
Ordinance
Exhibit A

9. 24-2537 Authorize an amendment to an existing lease agreement with Central Congressional Church to extend the lease agreement for an additional 25 years for approximately 20,000 square feet of land located at 5600 Royal Lane, to be used as a parking lot for the period September 25, 2024 through September 24, 2049 - Not to exceed $91,576.50 - Financing: General Fund (subject to annual appropriations)

Attachments: Map
Resolution

Department of Housing & Neighborhood Revitalization

10. 24-2572 ~~Authorize a~~A resolution to authorize **(1)** the Dallas Housing Finance Corporation ~~(~~DFHC or Corporation)~~—~~to delegate to the Texas Department of Housing & Community Affairs (TDHCA) its authority to issue Qualified Mortgage Revenue Bonds (Bonds) to be administered by the TDHCA through the Texas Homebuyer Program in an amount not to exceed $64,819,515.00 ~~for the purpose of obtaining funds to finance home mortgage loans for persons of low and moderate income~~; and **(2)** ~~the~~ an ~~a~~Assignment Agreement between the DHFC and the TDHCA for the assignment of the Bonds ~~to be administered by the Texas Department of Housing & Community Affairs (TDHCA) through the Texas Homebuyer Program in an amount not to exceed $64,819,515.00~~ - Financing: No cost consideration to the City

Attachments: Resolution
Exhibit A
Exhibit B

Department of Information and Technology Services

11. 24-2618 Authorize a one-year cooperative purchasing agreement for ServiceNow, the cloud-based workflow automation platform which functions as the Department of Information and Technology Services' Service Desk, with Carahsoft Technology Corp. through Texas Department of Information Resources cooperative purchasing agreement - Not to exceed $1,974,299.84 - Financing: Data Services Fund

Attachments: Resolution

Department of Public Works

12. 24-2175 Authorize a construction services contract for the construction of Target Neighborhood Group 17-7007 (list attached to the Agenda Information Sheet) - Estrada Concrete Company, LLC, lowest responsible bidder of three - Not to exceed $7,353,742.50 - Financing: 2024B Certificates of Obligation Fund ($5,245,047.00), Wastewater Capital Improvement F Fund ($1,083,843.50), Wastewater Construction Fund ($17,250.00), Water Capital Improvement G Fund ($409,046.07), and Water Construction Fund ($598,555.93)

Attachments: List
Maps
Resolution

13. 24-2527 Authorize Supplemental Agreement No. 8 to the engineering contract with Wiss, Janney, Elstner Associates, Inc. **(1)** to continue with the development of a Bridge Management Program in support of the Infrastructure Management Plan, provide engineering and construction inspection services on minor bridge repair projects; **(2)** provide inspection and monitoring on multiple bridges; and **(3)** extend the existing contract for an additional year from November 5, 2024 to October 12, 2025 - Not to exceed $650,000.00, from $1,292,921.00 to $1,942,921.00 - Financing: General Fund

Attachments: Map
Resolution

Department of Sanitation Services

14. 24-2500 Authorize **(1)** ratification of the City Manager's purchase and payment of $515,650.00 incurred for emergency post-collections transfer station hauling support related to the severe weather event occurring on May 28, 2024; and **(2)** a six month emergency service price agreement with UMGA Logistics, Inc. for emergency post-collections transfer hauling support in the estimated amount of $234,350.00, for a total estimated contract amount of $750,000.00 - Total estimated amount of $750,000.00 - Financing: Sanitation Operation Fund (subject to appropriations)

Attachments: Resolution

15. 24-2499 Authorize **(1)** ratification of the City Manager's purchase and payment in the amount of $225,000.00 incurred for emergency debris monitoring services related to the severe weather event occurring on May 28, 2024; and **(2)** a one-year emergency service price agreement with Tetra Tech, Inc. for emergency debris monitoring services in the estimated amount of $525,000.00, for a total estimated contract amount of $750,000.00 - Tetra Tech, Inc., lowest responsible bidder of seven - Total estimated amount of $750,000.00 - Financing: Sanitation Operation Fund

Attachments: Resolution

Department of Transportation

16. 24-2569 An ordinance amending Chapter 28, "Expressways and Freeways," of the Dallas City Code by amending Section 28-45; **(1)** designating speed regulations on freeways or expressways; **(2)** providing a penalty not to exceed $200.00; **(3)** providing a saving clause; **(4)** providing a severability clause; and **(5)** providing an effective date - Financing: No cost consideration to the City (see Fiscal Information)

Attachments: Map
Ordinance

17. 24-2590 Authorize **(1)** an agreement with the Texas Department of Transportation (TxDOT) through a grant from the U.S. Department of Transportation Federal Highway Administration (CSJ 0009-11-254, Assistance Listing No. 20.205) for the 2021 Highway Safety Improvement Program in the amount of $2,073,073.15 to provide cost reimbursement for material and labor incurred by the City related to the construction of traffic signals at the following intersections: Cadiz Street at Interstate Highway (IH) 35, Lamar/Botham Jean Boulevard at Canton Street, Botham Jean Boulevard at Cadiz Street, Griffin Street at IH 30, Griffin Street at Cadiz Street, Griffin Street at Canton Street, Akard Street at Parkway Street, Akard Street at Cadiz Street, Akard Street at Canton Street, Browder Street at Parkway Street, Ervay Street at Griffin Street West, Ervay Street at Griffin Street East, Ervay Street at Parkway Street, St. Paul Street at Griffin Street East/West, Harwood Street at Parkway Street, Harwood Street at R.L. Thornton Freeway Eastbound, Cesar Chavez Boulevard at IH 30, and Good Latimer Expressway at IH 30, and retiming of directly impacted signals in the area related to the construction; **(2)** the establishment of appropriations in the amount of $2,073,073.15 in the Canyon Traffic Signals Reimbursement Grant Fund; **(3)** the receipt and deposit of funds in the amount of $2,073,073.15 in the Canyon Traffic Signals Reimbursement Grant Fund; and **(4)** execution of the agreement and all terms, conditions, and documents required by the agreement - Total amount of $2,073,073.15 - Financing: Canyon Traffic Signals Reimbursement Grant Fund

Attachments: Map
Resolution

18. 24-2534 Authorize **(1)** an Agreement with ATC Investments, LLC, for contribution of funds towards the warranted traffic signal installation at the intersection of Bonnie View Road and Langdon Road in the City of Dallas; **(2)** the establishment of appropriations in an amount not to exceed $75,000.00 in the Transportation Special Projects Fund; **(3)** the receipt and deposit of funds in an amount not to exceed $75,000.00 in the Transportation Special Projects Fund; and **(4)** the disbursement of funds in the amount of $75,000.00 from the Transportation Special Projects Fund - Not to exceed $75,000.00 - Financing: Transportation Special Projects Fund (see Fiscal Information)

Attachments: Map
Resolution

19. 24-2579 Authorize a professional engineering services contract with BGE, Inc., the most highly qualified proposer specifically for traffic signal design services for the six intersections in Group 11 as follows: Lancaster Road at Ledbetter Drive, Al Lipscomb Way at Robert B Cullum Boulevard, Metropolitan Avenue at Robert B Cullum Boulevard, Ledbetter Drive at Pastor Pryor Drive, Ledbetter Drive at Cockrell Hill Road, Martin Luther King Jr. Boulevard at Robert B Cullum Boulevard; and other related tasks - Not to exceed $343,370.00 - Financing: Coronavirus State and Local Fiscal Recovery Fund ($279,270.00) and Street and Transportation (A) Fund (2017 General Obligation Bond Fund) ($64,100.00)

Attachments: Map
Resolution

20. 24-2581 Authorize a professional engineering services contract with Kimley-Horn and Associates, Inc., the most highly qualified proposer specifically for traffic signal design services for the five intersections in Group 5 as follows: Royal Lane and Gemini Lane; Royal Lane and Brockbank Drive/Dennis Road; Royal Lane and Welch Road; Marsh Lane and Merrell Road; and Marsh Lane and Clover Lane; and other related tasks - Not to exceed $454,250.00 - Financing: Coronavirus State and Local Fiscal Recovery Fund ($417,250.00) and Street and Transportation (A) Fund (2017 General Obligation Bond Fund) ($37,000.00)

Attachments: Map
Resolution

21. 24-2580 Authorize a professional engineering services contract with Urban Engineers Group, the most highly qualified proposer specifically for traffic signal design services for the four intersections in Group 6 as follows: Marsh Lane at Northaven Road, Midway Road at Northaven Road, Inwood Road at Willow Lane, Inwood Road and Northaven Lane; and other related tasks - Not to exceed $357,930.00 - Financing: Coronavirus State and Local Fiscal Recovery Fund ($319,730.00) and Street and Transportation (A) Fund (2017 General Obligation Bond Fund) ($38,200.00)

Attachments: Map
Resolution

22. 24-2577 Authorize a professional engineering services contract with WSB LLC, the most highly qualified proposer specifically for traffic signal design services for the four intersections in Group 12 as follows: Northwest Highway and Shady Brook Lane, Bruton Road at Hillburn Drive, Lake June Road at St. Augustine Road, Oates Drive and Shiloh Road; and other related tasks - Not to exceed $403,465.00 - Financing: Coronavirus State and Local Fiscal Recovery Fund ($303,465.00) and Street and Transportation (A) Fund (2017 General Obligation Bond Fund) ($100,000.00)

Attachments: Map
Resolution

23. 24-2589 Authorize an Advance Funding Agreement with the Texas Department of Transportation for a United States Department of Transportation - Federal Highway Administration Surface Transportation Block Grant and Category 10 (CSJ 0918-47-502, Assistance Listing No. 20.205) in the estimated amount of $50,624,942.89 with $31,000,000.00 as Federal participation for construction, $19,624,942.89 for direct and indirect state costs, and the City of Dallas' portion, for construction of the bridge abutment foundations for a deck cap over Interstate Highway 30 near Old City Park from East Ervay Street to Harwood Street in the city of Dallas - Total amount of $19,624,942.89 - Financing: Convention Center Construction Fund

Attachments: Map
Resolution

Office of Procurement Services

24. 24-2413 Authorize a five-year cooperative purchasing agreement for printing, insertion, mailing, and document composition services of invoices for the Water Utilities Department and Court and Detention Services with Formmaker Software, Inc. dba Kubra Data Transfer Ltd. through an interlocal agreement with the City of Arlington - Not to exceed $15,616,510.64 - Financing: General Fund ($925,918.74) and Dallas Water Utilities Fund ($14,690,591.90) (subject to annual appropriations)

Attachments: Resolution

25. 24-2607 Authorize a three-year master agreement for the purchase of steel and aluminum for citywide use - Garland Steel, Inc., only bidder - Estimated amount of $1,476,324.73 - Financing: General Fund ($564,224.73), Equipment and Fleet Management Fund ($87,100.00), Sanitation Operation ($355,300.00), Dallas Water Utilities Fund ($308,550.00), Stormwater Drainage Management Fund ($150,000.00), and Aviation Fund ($11,150.00)

Attachments: Resolution

26. 24-2608 Authorize a three-year master agreement for the purchase of various types and sizes of fasteners and bolts for citywide use - Fastenal Company in the estimated amount of $423,641.70 and DF Sales TX LLC in the estimated amount of $289,138.58, lowest responsible bidders of three - Total estimated amount of $712,780.28 - Financing: General Fund ($254,025.84), Dallas Water Utilities Fund ($381,310.78), Equipment and Fleet Management Fund ($68,943.66), and Stormwater Drainage Management Operation Fund ($8,500.00)

Attachments: Resolution

27. 24-2602 Authorize a three-year master agreement for the purchase of asphalt emulsion for the Department of Public Works - P Squared Emulsion Plants, LLC., only bidder - Estimated amount of $486,600.00 - Financing: General Fund

Attachments: Resolution

28. 24-2609 Authorize a three-year master agreement for the purchase of saw blades for citywide use - Texas Bearings of Dallas, Inc., only bidder - Estimated amount of $187,500.00 - Financing: General Fund ($112,500.00), Dallas Water Utilities Fund ($50,000.00), and Stormwater Drainage Management Fund ($25,000.00)

Attachments: Resolution

~~29. 24-2611 Authorize a one-year service contract to complete a senior services strategic plan for the Office of Community Care for the term of one year from September 11, 2024 to September 10, 2025 with Guidehouse, Inc., most advantageous proposer of six - Not to exceed $250,000.00 - Financing: General Fund~~

~~***Attachments:*** Resolution~~

30. 24-2603 Authorize a one-year service contract, with two one-year renewal options, for emergency shelter services for individuals experiencing homelessness for the Office of Homeless Solutions - The Salvation Army North Texas Area Command in the amount of $265,394.00, Bridge Steps dba The Bridge in the amount of $225,600.00, and Austin Street Center in the amount of $153,376.00, most advantageous proposers of seven - Total not to exceed $644,370.00 - Financing: FY 2024-25 Emergency Solutions Grant Fund ($563,318.00) and FY 2023-24 Emergency Solutions Grant Fund ($81,052.00)

Attachments: Resolution

31. 24-2601 Authorize a one-year service contract from October 1, 2024 through September 30, 2025, with two one-year renewal options, for homeless diversion services for persons experiencing homelessness for the Office of Homeless Solutions - Harmony Community Development Corporation in an amount not to exceed $130,000.00, Catholic Charities of Dallas, Inc. in an amount not to exceed $120,000.00, and First Presbyterian Church of Dallas, Texas dba The Stewpot in an amount not to exceed $70,000.00, most advantageous proposers of nine - Total amount not to exceed $320,000.00 - Financing: General Fund (subject to annual appropriations)

Attachments: Resolution

32. 24-2604 Authorize a four-year service contract for aquatic herbicide treatment for the Water Utilities Department - V.L.& I., Inc. dba Urban Landscaping & Irrigation, lowest responsible bidders of three - Not to exceed $240,800.00 - Financing: Stormwater Drainage Management Fund (subject to annual appropriation)

Attachments: Resolution

33. 24-2213 Authorize a five-year service contract for a comprehensive citywide public tree inventory - Davey Resource Group, Inc., most advantageous proposer of two - Not to exceed $6,295,802.00 - Financing: General Fund ($3,771,744.00) and Stormwater Drainage Management Fund ($2,524,058.00) (subject to annual appropriations)

Attachments: Resolution

34. 24-2304 Authorize a five-year service contract, with two one-year renewal options, for banking depository services for the City Controller's Office and Water Utilities Department - JPMorgan Chase Bank, N.A., most advantageous proposer of seven - Not to exceed $1,596,992.11 - Financing: General Fund ($1,277,593.69) and Dallas Water Utilities Fund ($319,398.42) (subject to annual appropriations)

Attachments: Resolution

35. 24-2422 Authorize a five-year service contract, with two one-year renewal options, for a property room evidence management system for the Police Department - Omnigo Software LLC, most advantageous proposer of seven - Not to exceed $772,481.21 - Financing: General Fund ($472,481.21) and Coronavirus State and Local Fiscal Recovery Fund ($300,000.00) (subject to annual appropriations)

Attachments: Resolution

36. 24-2416 Authorize a three-year service price agreement for heating, ventilation, and air conditioning water treatment chemicals for citywide use - ChemAqua, Inc., lowest responsible bidder of ten - Estimated amount of $287,000.00 - Financing: General Fund ($207,116.42), Capital Construction Fund ($47,251.68), Dallas Water Utilities Fund ($22,357.30), and Aviation Fund ($10,274.60) (subject to annual appropriations)

Attachments: Resolution

37. 24-2606 Authorize a three-year service price agreement for the restoration, maintenance, repair, lining, striping, and surface coating of multi-sport court surfaces for the Park & Recreation Department - Hellas Construction, Inc., in the estimated amount of $710,168.00, and GG Contractors, LLC. in the estimated amount of $382,500.00, lowest responsible bidders of three - Total estimated amount of $1,092,668.00 - Financing: General Fund (subject to annual appropriations)

Attachments: Resolution

38. 24-2605 Authorize a five-year service price agreement for vehicle and heavy equipment rental for citywide use - H&E Equipment Services, Inc. in the estimated amount of $218,300.00, EAN Holdings, LLC dba Enterprise Rent-A-Car in the estimated amount of $128,508.00.00, and United Rentals, Inc. in the estimated amount of $107,131.00, lowest responsible bidders of four - Total estimated amount of $453,939.00 - Financing: General Fund ($243,561.00) and Dallas Water Utilities Fund ($210,378.00) (subject to annual appropriations)

Attachments: Resolution

39. 24-2731 Authorize Supplemental Agreement No. 1 to increase the cooperative purchasing agreement for continued purchase of software upgrade and infrastructure migration to the City's existing financial software for the Department of Information and Technology Services with Carahsoft Technology Corp. through the Omnia Partners cooperative agreement - Not to exceed $1,708,376.16, $22,095,744.84 to $23,804,121.00 - Financing: Data Services Fund ($1,050,000.00) and Information Technology Equipment Fund ($658,376.16) (subject to annual appropriations)

Attachments: Resolution

Park & Recreation Department

40. 24-2704 Authorize **(1)** Supplemental Agreement No. 2 to the construction manager at risk agreement with JE Dunn-Russell, a joint venture, to provide additional construction services for Part Two of the Cotton Bowl Renovation, Rehabilitation and Addition Project (Project), located at 3750 The Midway, in an amount not to exceed $65,015,823.00, which includes a Guaranteed Maximum Price for Construction of $63,122,159.00 and an owner's contingency of $1,893,664.00, thereby increasing the agreement amount from $53,071,620.00 to $118,087,443.00. - JE Dunn-Russell, a joint venture; and **(2)** increase appropriations in an amount not to exceed $2,856,430.01 in the Fair Park Revenue Bond, Series 2023 Fund - Not to exceed $65,015,823.00 - Financing: Fair Park Revenue Bonds, Series 2023 Fund ($9,490,491.80) and 2024 Certificate of Obligation Fund ($55,525,331.20)

Attachments: Map
Resolution

Police Department

41. 24-2614 Authorize a three-year service contract for the purchase of gunshot detection equipment and services for the Police Department - Crime Gun Intelligence Technologies, LLC, sole source - Not to exceed $336,362.00 - Financing: Communications Services Fund (subject to annual appropriations)

Attachments: Resolution

Water Utilities Department

42. 24-2114 Authorize a construction services contract for the renovation of the East Side Water Treatment Plant Laboratory - Gadberry Construction Company, Inc., lowest responsible bidder of two - Not to exceed $10,265,928.00 - Financing: Water Construction Fund ($456,116.00), Water Capital Improvement F Fund ($2,088,812), and Water Capital Improvement G Fund ($7,721,000.00)

Attachments: Map
Resolution

43. 24-2165 Authorize a construction services contract for the installation of water and wastewater mains at twenty-one locations (list attached to the Agenda Information Sheet) - Camino Construction, LP, lowest responsible bidder of five - Not to exceed $11,631,673.00 - Financing: 2022C Water Revenue Bonds (TWDB LM221535) ($7,033,091.09), Water (Drinking Water) - TWDB 2022 Fund ($182,170.47) and Wastewater Capital Improvement F Fund ($4,416,411.44)

Attachments: List
Maps
Resolution

44. 24-2281 Authorize an increase in the construction services contract with Archer Western Construction, LLC, for additional work associated with improvements to the ozone generation facilities at the Bachman, East Side, and Elm Fork Water Treatment Plants - Not to exceed $1,073,195.26, from $36,420,755.00 to $37,493,950.26 - Financing: Water Construction Fund

Attachments: List
Maps
Resolution

ITEMS FOR INDIVIDUAL CONSIDERATION

City Secretary's Office

45. 24-2654 Consideration of appointments to boards and commissions and the evaluation and duties of board and commission members (List of nominees is available in the City Secretary's Office)

Mayor and City Council Office

46. 24-2646 Authorize the endorsement of Councilmember Adam Bazaldua as the City's candidate for the 2025 National League of Cities Board of Directors - Financing: No cost consideration to the City

Attachments: Resolution

ITEMS FOR FURTHER CONSIDERATION

Department of Transportation

47. 24-2808 An ordinance amending Chapter 28, "Motor Vehicles and Traffic," of the Dallas City Code by amending Sections 28-44; **(1)** designating speed regulations on streets other than expressways; **(2)** providing a penalty not to exceed $200.00; **(3)** providing a saving clause; **(4)** providing a severability clause; and **(5)** providing an effective date - Financing: This action has no cost consideration to the City (see Fiscal Information) (This item was deferred on August 28, 2024)

Attachments: Maps
Ordinance

Office of Homeless Solutions

48. 24-2809 Authorize an Interlocal Agreement with Dallas County to accept funds in the amount of $1,000,000.00, to be granted to Bridge Steps for homeless assistance services to be provided at The Bridge for the period October 1, 2024 through September 30, 2025 - Estimated Revenue: General Fund $1,000,000.00 (This item was deferred on August 28, 2024)

Attachments: Resolution

ADDITIONS:

CLOSED SESSION

49. 24-2829 Real Estate (Sec. 551.072 T.O.M.A.)

- Deliberate the purchase, exchange, lease, or value of real property located at 7800 Stemmons because deliberation in an open meeting would have a detrimental effect on the position of the governmental body in negotiations with a third

50. 24-2853 Attorney Briefings (Sec. 551.071 T.O.M.A.)

Seeking the advice of the City Attorney regarding:

- *Dallas Police and Fire Pension System v. City of Dallas*
- *In re Dallas HERO and Cathy Cortina*

OTHER ITEMS FOR INDIVIDUAL CONSIDERATION

City Secretary's Office

51. 24-2810 A resolution authorizing **(1)** a joint elections agreement and election services contract between the City of Dallas, Dallas County, and various other jurisdictions within Dallas County, for the conduct of a special election to be held Tuesday, November 5, 2024, in an amount not to exceed $2,714,577.64; and **(2)** advertising in connection with the Tuesday, November 5, 2024 Special Election, in an amount not to exceed $150,000.00 - Total not to exceed $2,864,577.64 - Financing: General Fund

Attachments: Resolution
Dallas Contract

52. 24-2811 A resolution authorizing a joint elections agreement and election services contract between the City of Dallas, Collin County, and various other jurisdictions within Collin County, for the conduct of a special election to be held Tuesday, November 5, 2024 - Not to exceed $62,039.64 - Financing: General Fund

Attachments: Resolution
Collin Contract

53. 24-2812 A resolution authorizing a joint elections agreement and election services contract between the City of Dallas, Denton County, and various other jurisdictions within Denton County, for the conduct of a special election to be held Tuesday, November 5, 2024 - Not to exceed $40,000.00 - Financing: General Fund

Attachments: Resolution
Denton Contract

54. 24-2813 A resolution authorizing the Mayor to appoint an Ad Hoc City Council Canvassing Committee to meet and review the returns of the November 5, 2024 special election, and submit a canvass report to the full City Council at its Wednesday, November 13, 2024 City Council meeting or at a special called city council meeting - Financing: No cost consideration to the City

Attachments: Resolution

55. 24-2888 An ordinance amending Ordinance No. 32798 ordering a special election to be held in the City of Dallas on Tuesday, November 5, 2024, for the purpose of submitting to the qualified voters of the City, proposed amendments to the Dallas City Charter in anticipation of a potential court ruling - Financing: No cost consideration to the City

56. 24-2890 An ordinance amending Ordinance No. 32800 ordering a special election to be held in the City of Dallas on Tuesday, November 5, 2024, for the purpose of submitting to the qualified voters of the City three proposed amendments to the Dallas City Charter, submitted by Dallas HERO Initiative in accordance with Section 9.004(a) of the Texas Local Government Code, in anticipation of a potential court ruling - Financing: No cost consideration to the City

Budget and Management Services

57. 24-2877 A resolution **(1)** adopting a funding soundness restoration plan for the Dallas Police and Fire Pension System; and **(2)** directing the city manager to submit the funding soundness restoration plan and all other required documents to the State Pension Review Board not later than November 1, 2024 - Financing: No cost consideration to the City (see Fiscal Information)

Attachments: Resolution
Exhibit A

Department of Aviation

58. 24-2869 Authorize the **(1)** acceptance of a grant upon receipt from the U.S. Department of Transportation, Federal Aviation Administration (FAA) for the federal share of the eligible capital improvement project for the Airport Improvement Program (AIP) at Dallas Love Field (Grant No. TBD, Assistance Listing No. 20.106) in a total amount not to exceed $12,000,000.00 for the Runway 13L-31R Runway Safety Area Improvements and Rehabilitate Taxiway A project; **(2)** establishment of appropriations in an amount not to exceed $12,000,000.00 in the FAA AIP FY24 Grant Fund; **(3)** receipt and deposit of grant funds in an amount not to exceed $12,000,000.00 in the FAA AIP FY24 Grant Fund; **(4)** increase appropriations in an amount not to exceed $12,000,000.00 in the Aviation Passenger Facility Charge Near Term Fund; **(5)** reimbursement of funds in an amount not to exceed $12,000,000.00 from the Aviation Passenger Facility Charge Near Projects Term Fund to the FAA AIP FY24 Grant Fund; and **(6)** execution of the grant agreement and all terms, conditions, and documents required by the grant agreement - Not to exceed $12,000,000.00 - Financing: FAA AIP FY24 Grant Fund

Attachments: Map
Resolution

Department of Convention and Event Services

59. 24-2587 Authorize **(1)** a contract with Perkins+Will, Inc. to provide architectural and engineering design services for the Kay Bailey Hutchison Convention Center Dallas Master Plan Component 1 Convention Center Expansion West of Lamar Only; and **(2)** the establishment of appropriations in an amount not to exceed $141,502,525.00 in the Convention Center Revenue Bonds, Series 2023 Fund - Not to exceed $141,502,525.00 - Financing: Convention Center Revenue Bonds, Series 2023 Fund

Attachments: Resolution

Office of Government Affairs

60. 24-2873 A resolution to approve the Dallas Fort Worth International Airport Board's FY 2025 budget - Financing: No cost consideration to the City

Attachments: Resolution
Exhibit A
Exhibit B

Office of Procurement Services

61. 24-2874 Authorize **(1)** the rejection of proposals received for components two, six, and seven for the project management services and owner's representation for the implementation of the Kay Bailey Hutchison Convention Center Dallas master plan; **(2)** the re-advertisement of the solicitation for components two, six, and seven; and **(3)** a three-year professional services contract in the amount of $3,266,575.00 with a $500,000.00 contingency for a one-year renewal option as detailed in the Fiscal Information section, for project management services and owner's representation for the implementation of component five of the Kay Bailey Hutchison Convention Center Dallas master plan, which includes project management of the process for the renovation and reconstruction of Pioneer Plaza and Cemetery - Metropolitan Infrastructure, PLLC, most highly qualified proposer of seven - Total not to exceed $3,766,575.00 - Financing: Convention Center Construction Fund (subject to annual appropriations)

Attachments: Resolution

PUBLIC HEARINGS AND RELATED ACTIONS

Department of Planning and Department

ZONING CASES - CONSENT

Z1. 24-2622 A public hearing to receive comments regarding an application for and an ordinance granting a new subdistrict for retail and personal service uses on property zoned Subarea 2 and Subarea 3 within Planned Development District No. 363, the Jeffries/Meyers Planned Development District, on the north and west corners of Merlin Street and Al Lipscomb Way
Recommendation of Staff: Approval, subject to conditions
Recommendation of CPC: Approval, subject to conditions
Z223-307(MP)

Attachments: Case Report

Z2. 24-2623 A public hearing to receive comments regarding an application for and an ordinance granting a new subdistrict for SC Shopping Center District uses and residential uses within Planned Development District No. 101, on the northwest line of West Camp Wisdom Road, between Belt Line Road and Mountain Creek Parkway
Recommendation of Staff: Approval, subject to a conceptual plan and staff's recommended conditions
Recommendation of CPC: Approval, subject to a conceptual plan and conditions
Z223-331(MP)

Attachments: Case Report

Z3. 24-2624 A public hearing to receive comments regarding an application for and an ordinance granting an amendment to Planned Development District No. 1017 on property bounded by Bickers Street, North Westmoreland Road, Gallagher Street, and Furey Street
Recommendation of Staff: Approval, subject to an amended development plan, an amended landscape plan, an amended traffic management plan, and amended conditions
Recommendation of CPC: Approval, subject to an amended development plan, an amended landscape plan, an amended traffic management plan, and amended conditions
Z234-122(JA)

Attachments: Case Report

Z4. 24-2625 A public hearing to receive comments regarding an application for and an ordinance granting a Specific Use Permit for a child-care facility on property zoned Subdistrict 10 within Planned Development District No. 298, the Bryan Area Special Purpose District, on the southeast line of Live Oak Street, between Liberty Street and Oak Street

Recommendation of Staff: Approval for a ten-year period, subject to a site plan and conditions

Recommendation of CPC: Approval for a ten-year period, subject to a site plan and conditions

Z234-128(WK)

Attachments: Case Report

Z5. 24-2627 A public hearing to receive comments regarding an application for and **(1)** an ordinance granting an amendment to Subdistrict 1D within Planned Development District No. 714, the West Commerce Street/Fort Worth Avenue Special Purpose District; and **(2)** an ordinance granting an amendment to Specific Use Permit No. 2437 for alcoholic beverage manufacturing, on the south side of Powell Street, between Haslet Street and Sulphur Street, north of Yorktown Street

Recommendation of Staff: **(1)** Approval of an amendment to Subdistrict 1D within Planned Development District No. 714, subject to amended conditions; and **(2)** approval of an amendment to Specific Use Permit No. 2437 for a five-year period, subject to an amended site plan and amended conditions

Recommendation of CPC: **pending September 5, 2024 meeting.**

Z234-205(MB)

Attachments: Case Report

Z6. 24-2628 A public hearing to receive comments regarding an application for and an ordinance granting an amendment to Planned Development District No. 411, on the southeast corner of Harvest Hill Road and Noel Road

Recommendation of Staff: Approval, subject to an amended development plan and amended conditions

Recommendation of CPC: Approval, subject to an amended development plan and amended conditions

Z234-206(WK)

Attachments: Case Report

ZONING CASES - INDIVIDUAL

Z7. 24-2626

A public hearing to receive comments regarding an application for and an ordinance granting a Specific Use Permit for an electrical substation on property zoned an R-16(A) Single Family District, on the west side of Edgemere Road, between Lawnhaven Road and Royalton Drive

Recommendation of Staff: Approval for a five-year period, subject to a revised site plan and staff's recommended conditions

Recommendation of CPC: Approval for a five-year period, subject to a site plan and the applicant's requested conditions with changes

Z234-142(LC)

Attachments: Case Report

Z8. 24-2629

A public hearing to receive comments regarding an application for and **(1)** an ordinance granting a new subdistrict for WMU-12 Walkable Urban Mixed-Use District uses; **(2)** an ordinance granting a Specific Use Permit for a restaurant with drive-in or drive-through service; and **(3)** a resolution terminating deed restrictions [Z890-182] on property zoned Subdistrict F within Planned Development District No. 468, the Oak Cliff Gateway Special Purpose District, with deed restrictions [Z890-182] on a portion, on the west line of South I-35 Freeway, between East Eighth Street and Dale Street

Recommendation of Staff: **(1)** Denial of a new subdistrict for WMU-12 Walkable Urban Mixed Use District uses; **(2)** denial of a Specific Use Permit for a restaurant with drive-in or drive-through service; and **(3)** approval of the termination of deed restrictions [Z890-182] as volunteered by the applicant

Recommendation of CPC: **(1)** Approval of a new subdistrict for WMU-12 Walkable Urban Mixed Use District uses, subject to conditions; **(2)** approval of a Specific Use Permit for a restaurant with drive-in or drive-through service for a ten-year period, subject to a site plan, landscape plan, and conditions; and **(3)** approval of the termination of deed restrictions [Z890-182] as volunteered by the applicant

Z223-238(MP)

Attachments: Case Report

ZONING CASES - UNDER ADVISEMENT - INDIVIDUAL

Z9. 24-2778 A public hearing to receive comments regarding an application for and an ordinance granting an amendment to and an expansion of Planned Development District No. 1049, on property zoned Planned Development No. 1049, an IR Industrial Research District, and an IM Industrial Manufacturing District, on the south line of Singleton Boulevard at the terminus of Navaro Street, and on the east line of Vilbig Road; south of Duluth Street

Recommendation of Staff: Approval, subject to an amended conceptual plan and amended conditions

Recommendation of CPC: Approval, subject to an amended conceptual plan and amended conditions

Z223-257(MB)

Note: This item was deferred by the City Council at the public hearing on August 28, 2024 and is scheduled for consideration on September 11, 2024.

Attachments: Case Report

Z10. 24-2779 A public hearing to receive comments regarding an application for and an ordinance granting a Planned Development District for CS Commercial Service District uses on property zoned a CS Commercial Service District with consideration for a Specific Use Permit for a truck stop on the north corner of South Lancaster Road and Cherry Valley Boulevard

Recommendation of Staff: Denial

Recommendation of CPC: Approval, subject to a development plan and conditions

Z234-115(MB)

Note: This item was deferred by the City Council at the public hearing on August 28, 2024 and is scheduled for consideration on September 11, 2024.

Attachments: Case Report

MISCELLANEOUS HEARINGS

Park & Recreation Department

PH1. 24-2585 A public hearing on September 11, 2024, to receive public comments on readopting and continuing in Chapter 12, "City Youth Program Standards of Care," of the Dallas City Code, to seek Council Approval **(1)** extending the expiration date of the City Youth Program Standards of Care to September 13, 2025: and **(2)** at the close of the public hearing, approving an ordinance re-establishing and continuing in effect the City Youth Program Standards - Financing: No cost consideration to the City

Attachments: Ordinance

EXECUTIVE SESSION NOTICE

A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

1. seeking the advice of its attorney about pending or contemplated litigation, settlement offers, or any matter in which the duty of the attorney to the City Council under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act. [Tex. Govt. Code §551.071]

2. deliberating the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.072]

3. deliberating a negotiated contract for a prospective gift or donation to the city if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.073]

4. deliberating the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee unless the officer or employee who is the subject of the deliberation or hearing requests a public hearing. [Tex. Govt. Code §551.074]

5. deliberating the deployment, or specific occasions for implementation, of security personnel or devices. [Tex. Govt. Code §551.076]

6. discussing or deliberating commercial or financial information that the city has received from a business prospect that the city seeks to have locate, stay or expand in or near the city and with which the city is conducting economic development negotiations; or deliberating the offer of a financial or other incentive to a business prospect. [Tex Govt. Code §551.087]

7. deliberating security assessments or deployments relating to information resources technology, network security information, or the deployment or specific occasions for implementations of security personnel, critical infrastructure, or security devices. [Tex Govt. Code §551.089]

September 11, 2024

RESOLUTION NO. 241318

WHEREAS, in accordance with Vernon's Texas Revised Civil Statute Annotated, Article 6243a-1 (Article 6243a-1), Section 2.025(a), an independent actuary, Cheiron, Inc., was hired by the Dallas Police and Fire Pension System (DPFPS) to perform an actuarial analysis of the most recently completed actuarial valuation of the pension system; and

WHEREAS, per Article 6243a-1, Section 2.025(b), the DPFPS Board, not later than November 1, 2024, shall by rule adopt a plan that complies with the funding and amortization period requirements applicable to DPFPS under the Texas Government Code Chapter 802 Subchapter C (Subchapter C) that takes into consideration the independent actuary's recommendations; and

WHEREAS, per Article 6243a-1, Section 2.025(b-1), the DPFPS Board shall provide to the State Pension Review Board a copy of the independent actuary's analysis prepared under Article 6243a-1, Section 2.025(a), and a summary of any rules adopted by the DPFPS Board; and

WHEREAS, in 2023, DPFPS, in accordance with Subchapter C, was added by the State Pension Review Board to the list of pension systems that must comply with the funding soundness restoration plan provisions of Subchapter C, "Administration of Assets," as actuarial valuations showed that DPFPS's expected period to amortize the unfunded actuarial accrued liability had exceeded 30 years for three consecutive annual actuarial valuations; and

WHEREAS, the requirements of a jointly agreed to plan by the DPFPS and the City has been triggered by both the Article 6243a-1, Section 2.025 requirement that the adopted plan must comply with the **funding and amortization period requirements** applicable to DPFPS under Subchapter C and the requirement that the DPFPS must comply with the funding soundness restoration provisions of Subchapter C, "Administration of Assets," as actuarial valuations showed that DPFPS's expected funding period had exceeded 30 years for three consecutive annual actuarial valuations; and

WHEREAS, a funding plan adopted to comply with Subchapter C must be based on actions agreed to be taken by the DPFPS Board and the City each at an open meeting; and

WHEREAS, in accordance with Article 6243a-1, Section 4.02(b), any change to the required contributions of the City may only be made by: (1) the legislature; (2) a majority vote of the voters of the City; or (3) in accordance with a written agreement entered into between the City and the DPFPS Board, by at least a two-thirds vote of all trustees of the DPFPS Board; and

WHEREAS, on August 8, 2024, while the City believed its good faith discussions with DPFPS were ongoing, the DPFPS Board unilaterally adopted a plan that purports to obligate the City to increase its contributions to DPFPS without agreement from the City and without regard to the City's budgeting process and constraints; and

WHEREAS, the City does not and has not agreed to the plan adopted by the DPFPS Board on August 8, 2024; and

WHEREAS, despite the actions of DPFPS, and the unwillingness of DPFPS to jointly formulate a plan to comply with Subchapter C, the City wishes to comply with its obligation under Article 6243a-1and Subchapter C and has worked to develop a plan that satisfies both statutory provisions and fully funds the unfunded actuarial accrued liability of DPFPS within 30 years.

Now, Therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That the City Council, in accordance with and giving effect to both Article 6243a-1 and Subchapter C, hereby adopts the Article 6243a-1 Plan/Subchapter C Funding Soundness Restoration Plan, Exhibit A, attached hereto.

SECTION 2. That the City Manager is authorized and directed to coordinate the submission of the following documents to the State Pension Review Board as soon as practical, but not later than November 1, 2024: (1) the coversheet for the funding soundness restoration plan; (2) the Article 6243a-1 Plan/Subchapter C Funding Soundness Restoration Plan; and (3) all other required documents.

SECTION 3. That this resolution shall take effect immediately from and after its passage in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so resolved.

APPROVED BY
CITY COUNCIL

SEP 11 2024

CITY SECRETARY

EXHIBIT A

CITY OF DALLAS VERNON'S TEXAS REVISED CIVIL STATUTES ANNOTATED ARTICLE 6243A-1, SECTION 2.025 PLAN / TEXAS GOVERNMENT CODE SUBCHAPTER 802 C FUNDING SOUNDNESS RESTORATION PLAN

The City of Dallas (City), in compliance with Vernon's Texas Revised Civil Statutes Annotated Article 6243a-1 (Article 6243a-1) and Texas Government Code Subchapter 802 C (Subchapter C) (City Plan), has formulated this City Plan to achieve a contribution rate that will be sufficient to amortize the unfunded actuarial accrued liability of the Dallas Police and Fire Pension System (DPFPS) within 30 years.

1. City Contributions.

(a) Under Article 6243a-1, Section 4.02(b), any change to the contributions **required to be made** to the pension system by the City may only be made: (1) by the legislature; (2) a majority vote of the voters of the City; or (3) in accordance with a written agreement entered into between DPFPS, by at least a two-thirds vote of all trustees of the DPFPS Board, and the City. While Article 6243a-1 sets out the mandatory process to change the City's required contributions, nothing in Article 6243a-1 prevents the City from voluntarily, and through its own state law required appropriations process, increasing its contribution rate. This City Plan reflects a voluntary increase in the City's contributions above the requirements in Article 6243a-1, Section 4.02, and is subject to annual appropriations.

(b) Under Article 6243a-1, Section 4.02(d), "Use of Public Funds," the City will voluntarily make contributions to DPFPS biweekly using an Actuarially Determined Contribution Rate beginning October 2024, subject to the governance provisions set forth in Section 2, and the contribution maximums set forth in (d).

(c) ACTUARIALLY DETERMINED CONTRIBUTION (ADC) RATE is, for any fiscal year, a rate of contribution expressed as a percentage of members' projected wages for such fiscal year, that is the sum of the following as determined in the actuarial valuation for the plan year preceding such fiscal year:

(1) an established 30-year closed amortization amount with five-year step-up and no step-down for the unfunded actuarial accrued liability and administrative expenses, determined based on the January 1, 2023 Actuarial Valuation Report, as shown in the fixed dollar schedule as follows, divided by the members' projected wages for each fiscal year;

Fiscal Year ending 9/30	Amortization of January 1, 2023 Unfunded Actuarial Accrued Liability	Administrative Expenses	Total
2025	$ 161,656,000	$ 7,000,000	$ 168,656,000
2026	$ 179,482,000	$ 7,000,000	$ 186,482,000
2027	$ 197,889,000	$ 7,000,000	$ 204,889,000
2028	$ 217,163,000	$ 7,000,000	$ 224,163,000
2029	$ 237,336,000	$ 7,000,000	$ 244,336,000
2030	$ 242,341,000	$ 7,000,000	$ 249,341,000
2031	$ 248,399,000	$ 7,000,000	$ 255,399,000
2032	$ 254,609,000	$ 7,000,000	$ 261,609,000
2033	$ 260,975,000	$ 7,000,000	$ 267,975,000
2034	$ 267,499,000	$ 7,000,000	$ 274,499,000
2035	$ 274,186,000	$ 7,000,000	$ 281,186,000
2036	$ 281,041,000	$ 7,000,000	$ 288,041,000
2037	$ 288,067,000	$ 7,000,000	$ 295,067,000
2038	$ 295,269,000	$ 7,000,000	$ 302,269,000
2039	$ 302,650,000	$ 7,000,000	$ 309,650,000
2040	$ 310,217,000	$ 7,042,000	$ 317,259,000
2041	$ 317,972,000	$ 7,218,000	$ 325,190,000
2042	$ 325,921,000	$ 7,399,000	$ 333,320,000
2043	$ 334,069,000	$ 7,584,000	$ 341,653,000
2044	$ 342,421,000	$ 7,773,000	$ 350,194,000
2045	$ 350,982,000	$ 7,967,000	$ 358,949,000
2046	$ 359,756,000	$ 8,167,000	$ 367,923,000
2047	$ 368,750,000	$ 8,371,000	$ 377,121,000
2048	$ 377,969,000	$ 8,580,000	$ 386,549,000
2049	$ 387,418,000	$ 8,795,000	$ 396,213,000
2050	$ 397,104,000	$ 9,014,000	$ 406,118,000
2051	$ 407,031,000	$ 9,240,000	$ 416,271,000
2052	$ 417,207,000	$ 9,471,000	$ 426,678,000
2053	$ 427,637,000	$ 9,708,000	$ 437,345,000
2054	$ 438,328,000	$ 9,950,000	$ 448,278,000

(2) normal cost; and

(3) new amortization layers as necessary to amortize the difference between the expected remaining balance of all previous year's layers and the actual unfunded actuarial accrued liability for the given valuation. New amortization layers will be amortized over a closed amortization period of 20 years or until January 1, 2053, whichever is later. If the actuarial assets of the fund exceed the actuarial liabilities for a given valuation, the outstanding layers may be collapsed into a single layer with a closed amortization period of 20 years or until January 1, 2053, whichever is later.

(d) For fiscal years ending September 30, 2025, through September 30, 2029, in no event shall the City contributions exceed:

(1) the dollar amounts set forth in (c)(1), plus

(2) the maximum percentage set forth in Section 2(e) multiplied by the members' wages for each fiscal year.

2. **Governance.** The City Plan to comply with the funding and amortization period requirements applicable to DPFPS by adopting an ADC with a five-year step-up is a significant financial commitment to DPFPS. For some predictability in its funding commitment, the City intends to implement the following governance provisions:

(a) Any changes to the actuarial assumptions, including, but not limited to, the current discount rate, that increases the DPFPS' liability must be approved prospectively by the DPFPS and City Council.

(b) Settlement of any lawsuit by DPFPS that increases DPFPS' liability must be approved prospectively by the DPFPS and City Council.

(c) Any proposed increase by DPFPS in benefits, including, but not limited to, cost of living adjustments, that would increase the DPFPS' liability must be approved prospectively by the DPFPS and the City Council.

(d) Annually, the DPFPS and the City will each calculate an ADC rate for the following fiscal year. The City will accept the rate that is determined by DPFPS' actuary and presented to the DPFPS Board, except, if the difference between the rates that are calculated by the actuaries of the City and DPFPS is greater than three percent, DPFPS and the City will engage in a 30-day reconciliation period. If, within such period, the actuaries of the City and DPFPS reconcile the results of their respective calculations of the ADC rate for the applicable fiscal year, the rate that was calculated by DPFPS' actuary will be accepted by the City and DPFPS. If no such resolution is reached within the 30-day reconciliation period, an average of the rates, determined by the actuaries of the City and DPFPS, will be used to determine the city's voluntary contribution for the upcoming fiscal year.

(e) If in any plan year the ADC rate (excluding the amounts set forth in Section 1(c)(1) is outside of the minimum or maximum shown in the schedule as follows, the difference between ADC rate and the minimum or maximum will be amortized over a closed period of 20 years or until January 1, 2053, whichever is later. If the City Council determines that the fund is projected to be fully funded in over 30 years, the City Council may, in its sole discretion, waive this paragraph. The DPPFS Board may make a recommendation to City Council requesting that City Council waive this paragraph.

		Normal Cost (% of Pay)					Normal Cost (% of Pay)		
Plan Year	Fiscal Year ending 9/30	Minimum	30-year projection of Normal Cost*	Maximum	Plan Year	Fiscal Year ending 9/30	Minimum	30-year projection of Normal Cost*	Maximum
2023	2025	6.78%	6.78%	6.78%	2038	2040	1.03%	6.03%	11.03%
2024	2026	6.66%	6.66%	6.66%	2039	2041	0.99%	5.99%	10.99%
2025	2027	6.57%	6.57%	6.57%	2040	2042	0.97%	5.97%	10.97%
2026	2028	6.51%	6.51%	6.51%	2041	2043	0.95%	5.95%	10.95%
2027	2029	6.45%	6.45%	6.45%	2042	2044	0.94%	5.94%	10.94%
2028	2030	1.39%	6.39%	11.39%	2043	2045	0.95%	5.95%	10.95%
2029	2031	1.34%	6.34%	11.34%	2044	2046	0.96%	5.96%	10.96%
2030	2032	1.29%	6.29%	11.29%	2045	2047	0.96%	5.96%	10.96%
2031	2033	1.25%	6.25%	11.25%	2046	2048	0.96%	5.96%	10.96%
2032	2034	1.21%	6.21%	11.21%	2047	2049	0.96%	5.96%	10.96%
2033	2035	1.17%	6.17%	11.17%	2048	2050	0.96%	5.96%	10.96%
2034	2036	1.14%	6.14%	11.14%	2049	2051	0.96%	5.96%	10.96%
2035	2037	1.12%	6.12%	11.12%	2050	2052	0.96%	5.96%	10.96%
2036	2038	1.09%	6.09%	11.09%	2051	2053	0.96%	5.96%	10.96%
2037	2039	1.06%	6.06%	11.06%	2052	2054	0.96%	5.96%	10.96%

* 30-year Normal Cost projection based on the January 1, 2023 actuarial valuation report

City of Dallas

1500 Marilla Street
Council Chambers, 6th Floor
Dallas, Texas 75201

Agenda Information Sheet

File #: 24-2877 **Item #:** 57.

STRATEGIC PRIORITY:	Government Performance & Financial Management
AGENDA DATE:	September 11, 2024
COUNCIL DISTRICT(S):	All
DEPARTMENT:	Budget and Management Services
EXECUTIVE:	Jack Ireland

SUBJECT

A resolution **(1)** adopting a funding soundness restoration plan for the Dallas Police and Fire Pension System; and **(2)** directing the city manager to submit the funding soundness restoration plan and all other required documents to the State Pension Review Board not later than November 1, 2024 - Financing: No cost consideration to the City (see Fiscal Information)

BACKGROUND

The Dallas Police and Fire Pension System (DPFPS) provides retirement, death, and disability benefits for permanent police and fire uniform employees of the City of Dallas. Currently there are approximately 5,300 retirees and beneficiaries, and approximately 5,100 active police and fire uniform employees that are members of DPFPS. The fund was established in 1916 and is governed by Vernon's Texas Revised Civil Statute Annotated, Article 6243a-1 (Article 6243a-1). The Texas Pension Review Board (PRB) is mandated to oversee all Texas public retirement systems based on Chapter 802 of the Texas Government Code. The PRB's funding guidelines require that actual contributions 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.

As of January 1, 2023, DPFPS has a funding percentage of 39.1 percent and is projected to achieve full funding in 82 years. To comply with the Chapter 802 funding and amortization period requirements, a jointly agreed to plan by DPFPS and the City, a Funding Soundness Restoration Plan (FSRP), must be submitted to the Pension Review Board by September 1, 2025. The FSRP is required in accordance with Chapter 802 of the Texas Government Code.

Further, the Texas Legislature passed HB3158 in 2017 to address the solvency of DPFPS and outlined additional requirements. As required by Article 6243a-1, Section 2.025(b), the DPFPS Board, not later than November 1, 2024, shall by rule adopt a plan that complies with the funding and amortization period requirements applicable to DPFPS under the Texas Government Code Chapter 802 Subchapter C (Subchapter C) that takes into consideration the independent actuary's recommendations. Thus, the requirements of a jointly agreed to plan by the DPFPS and the city has

been triggered by both the Article 6243a-1, Section 2.025 requirement that the adopted plan must comply with the funding and amortization period requirements applicable to DPFPS under Subchapter C and the requirement that the DPFPS must comply with the funding soundness restoration provisions of Subchapter C, "Administration of Assets," as actuarial valuations showed that DPFPS's expected funding period had exceeded 30 years for three consecutive annual actuarial valuations.

The recommendations made by the independent actuary, Cheiron, include: (1) implement an Actuarial Determined Contribution (ADC) methodology, (2) reduce employee contributions as funded status improves, and (3) provide some cost-of-living adjustment earlier than required by HB3158.

1. Cheiron provided multiple scenarios for the ADC including a traditional model, 3-year step-up and step-down model, 5-year step-up and step-down model, 3-year step-up model, and 5-year step-up model. Cheiron indicated that all five models are reasonable and would comply with the Pension Review Board's requirement for DPFPS to be fully funded in 30 years. Through months of work with the Mayor appointed Ad Hoc Committee on Pensions, representatives of the Mayor appointed task force including financial and industry experts, and DPFPS staff, city staff made final recommendations to the City Council. City staff has recommended implementation of an ADC methodology with a 5-year step-up approach that will better align with budgetary constraints of the City.
2. While city staff agrees that a reduction to employee contributions is an appropriate consideration once DPFPS funding status has improved, the current funding status does not make this possible at this time.
3. HB3158 suspended cost of living adjustments until DPFPS achieves 70 percent funding. City staff recommends maintaining the cost-of-living adjustment methodology and requirements included in HB3158 which becomes available after DPFPS is 70 percent funded. Providing supplemental pay before DPFPS is 70 percent funded has been supported by city staff and members of the City Council but is not included in the proposed FSRP at this time. Contribution of any funding from the City to DPFPS associated with supplemental pay prior to achieving 70 percent funding is paused but may be disbursed at a future date upon approval of the City Council.

Enhanced oversight of DPFPS is recommended to include City Council approval for expenses that will increase the unfunded liability and cost to the city, establishment of guardrails to mitigate year-over-year cost increases to the city, and establishment of a process for managing ADC calculation discrepancies.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Presentations to the Ad Hoc Committee on Pensions occurred between September 2023 and June 2024. Presentations to the Dallas City Council occurred or were provided on January 19, 2024, June 18, 2024, August 7, 2024, and September 4, 2024.

FISCAL INFORMATION

The Funding Soundness Restoration Plan recommended by city staff will have a total cost to the city of approximately $11.1 billion over 30-years as a result of implementing an Actuarial Determined Contribution methodology. The city's current contribution to DPFPS is based on a fixed rate of 34.5 percent of salary and would have a total cost to the city of approximately $7.9 billion over 30-years, however, this contribution fails to meet the PRB's funding requirements and timelines. Implementation of the Actuarial Determined Contribution methodology and the increased cost to the City is necessary to meet the PRB's funding guidelines which require that actual contributions 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. The city's contributions will be subject to annual budget appropriations. This cost is reflective of the period to achieve full-funding in 30-years in compliance with State guidelines. City contributions to DPFPS will continue beyond 2055 but are not included in the above cited amount.

EXHIBIT A

CITY OF DALLAS VERNON'S TEXAS REVISED CIVIL STATUTES ANNOTATED ARTICLE 6243A-1, SECTION 2.025 PLAN / TEXAS GOVERNMENT CODE SUBCHAPTER 802 C FUNDING SOUNDNESS RESTORATION PLAN

The City of Dallas (City), in compliance with Vernon's Texas Revised Civil Statutes Annotated Article 6243a-1 (Article 6243a-1) and Texas Government Code Subchapter 802 C (Subchapter C) (City Plan), has formulated this City Plan to achieve a contribution rate that will be sufficient to amortize the unfunded actuarial accrued liability of the Dallas Police and Fire Pension System (DPFPS) within 30 years.

1. City Contributions.

(a) Under Article 6243a-1, Section 4.02(b), any change to the contributions **required to be made** to the pension system by the City may only be made: (1) by the legislature; (2) a majority vote of the voters of the City; or (3) in accordance with a written agreement entered into between DPFPS, by at least a two-thirds vote of all trustees of the DPFPS Board, and the City. While Article 6243a-1 sets out the mandatory process to change the City's required contributions, nothing in Article 6243a-1 prevents the City from voluntarily, and through its own state law required appropriations process, increasing its contribution rate. This City Plan reflects a voluntary increase in the City's contributions above the requirements in Article 6243a-1, Section 4.02, and is subject to annual appropriations.

(b) Under Article 6243a-1, Section 4.02(d), "Use of Public Funds," the City will voluntarily make contributions to DPFPS biweekly using an Actuarially Determined Contribution Rate beginning October 2024, subject to the governance provisions set forth in Section 2, and the contribution maximums set forth in (d).

(c) ACTUARIALLY DETERMINED CONTRIBUTION (ADC) RATE is, for any fiscal year, a rate of contribution expressed as a percentage of members' projected wages for such fiscal year, that is the sum of the following as determined in the actuarial valuation for the plan year preceding such fiscal year:

(1) an established 30-year closed amortization amount with five-year step-up and no step-down for the unfunded actuarial accrued liability and administrative expenses, determined based on the January 1, 2023 Actuarial Valuation Report, as shown in the fixed dollar schedule as follows, divided by the members' projected wages for each fiscal year;

Fiscal Year ending 9/30	Amortization of January 1, 2023 Unfunded Actuarial Accrued Liability	Administrative Expenses	Total	Fiscal Year ending 9/30	Amortization of January 1, 2023 Unfunded Actuarial Accrued Liability	Administrative Expenses	Total
2025	$ 161,656,000	$ 7,000,000	$ 168,656,000	2040	$ 310,217,000	$ 7,042,000	$ 317,259,000
2026	$ 179,482,000	$ 7,000,000	$ 186,482,000	2041	$ 317,972,000	$ 7,218,000	$ 325,190,000
2027	$ 197,889,000	$ 7,000,000	$ 204,889,000	2042	$ 325,921,000	$ 7,399,000	$ 333,320,000
2028	$ 217,163,000	$ 7,000,000	$ 224,163,000	2043	$ 334,069,000	$ 7,584,000	$ 341,653,000
2029	$ 237,336,000	$ 7,000,000	$ 244,336,000	2044	$ 342,421,000	$ 7,773,000	$ 350,194,000
2030	$ 242,341,000	$ 7,000,000	$ 249,341,000	2045	$ 350,982,000	$ 7,967,000	$ 358,949,000
2031	$ 248,399,000	$ 7,000,000	$ 255,399,000	2046	$ 359,756,000	$ 8,167,000	$ 367,923,000
2032	$ 254,609,000	$ 7,000,000	$ 261,609,000	2047	$ 368,750,000	$ 8,371,000	$ 377,121,000
2033	$ 260,975,000	$ 7,000,000	$ 267,975,000	2048	$ 377,969,000	$ 8,580,000	$ 386,549,000
2034	$ 267,499,000	$ 7,000,000	$ 274,499,000	2049	$ 387,418,000	$ 8,795,000	$ 396,213,000
2035	$ 274,186,000	$ 7,000,000	$ 281,186,000	2050	$ 397,104,000	$ 9,014,000	$ 406,118,000
2036	$ 281,041,000	$ 7,000,000	$ 288,041,000	2051	$ 407,031,000	$ 9,240,000	$ 416,271,000
2037	$ 288,067,000	$ 7,000,000	$ 295,067,000	2052	$ 417,207,000	$ 9,471,000	$ 426,678,000
2038	$ 295,269,000	$ 7,000,000	$ 302,269,000	2053	$ 427,637,000	$ 9,708,000	$ 437,345,000
2039	$ 302,650,000	$ 7,000,000	$ 309,650,000	2054	$ 438,328,000	$ 9,950,000	$ 448,278,000

(2) normal cost; and

(3) new amortization layers as necessary to amortize the difference between the expected remaining balance of all previous year's layers and the actual unfunded actuarial accrued liability for the given valuation. New amortization layers will be amortized over a closed amortization period of 20 years or until January 1, 2053, whichever is later. If the actuarial assets of the fund exceed the actuarial liabilities for a given valuation, the outstanding layers may be collapsed into a single layer with a closed amortization period of 20 years or until January 1, 2053, whichever is later.

(d) For fiscal years ending September 30, 2025, through September 30, 2029, in no event shall the City contributions exceed:

(1) the dollar amounts set forth in (c)(1), plus

(2) the maximum percentage set forth in Section 2(e) multiplied by the members' wages for each fiscal year.

2. **Governance.** The City Plan to comply with the funding and amortization period requirements applicable to DPFPS by adopting an ADC with a five-year step-up is a significant financial commitment to DPFPS. For some predictability in its funding commitment, the City intends to implement the following governance provisions:

(a) Any changes to the actuarial assumptions, including, but not limited to, the current discount rate, that increases the DPFPS' liability must be approved prospectively by the DPFPS and City Council.

(b) Settlement of any lawsuit by DPFPS that increases DPFPS' liability must be approved prospectively by the DPFPS and City Council.

(c) Any proposed increase by DPFPS in benefits, including, but not limited to, cost of living adjustments, that would increase the DPFPS' liability must be approved prospectively by the DPFPS and the City Council.

(d) Annually, the DPFPS and the City will each calculate an ADC rate for the following fiscal year. The City will accept the rate that is determined by DPFPS' actuary and presented to the DPFPS Board, except, if the difference between the rates that are calculated by the actuaries of the City and DPFPS is greater than three percent, DPFPS and the City will engage in a 30-day reconciliation period. If, within such period, the actuaries of the City and DPFPS reconcile the results of their respective calculations of the ADC rate for the applicable fiscal year, the rate that was calculated by DPFPS' actuary will be accepted by the City and DPFPS. If no such resolution is reached within the 30-day reconciliation period, an average of the rates, determined by the actuaries of the City and DPFPS, will be used to determine the city's voluntary contribution for the upcoming fiscal year.

(e) If in any plan year the ADC rate (excluding the amounts set forth in Section 1(c)(1) is outside of the minimum or maximum shown in the schedule as follows, the difference between ADC rate and the minimum or maximum will be amortized over a closed period of 20 years or until January 1, 2053, whichever is later. If the City Council determines that the fund is projected to be fully funded in over 30 years, the City Council may, in its sole discretion, waive this paragraph. The DPPFS Board may make a recommendation to City Council requesting that City Council waive this paragraph.

		Normal Cost (% of Pay)					Normal Cost (% of Pay)		
Plan Year	Fiscal Year ending 9/30	Minimum	30-year projection of Normal Cost*	Maximum	Plan Year	Fiscal Year ending 9/30	Minimum	30-year projection of Normal Cost*	Maximum
2023	2025	6.78%	6.78%	6.78%	2038	2040	1.03%	6.03%	11.03%
2024	2026	6.66%	6.66%	6.66%	2039	2041	0.99%	5.99%	10.99%
2025	2027	6.57%	6.57%	6.57%	2040	2042	0.97%	5.97%	10.97%
2026	2028	6.51%	6.51%	6.51%	2041	2043	0.95%	5.95%	10.95%
2027	2029	6.45%	6.45%	6.45%	2042	2044	0.94%	5.94%	10.94%
2028	2030	1.39%	6.39%	11.39%	2043	2045	0.95%	5.95%	10.95%
2029	2031	1.34%	6.34%	11.34%	2044	2046	0.96%	5.96%	10.96%
2030	2032	1.29%	6.29%	11.29%	2045	2047	0.96%	5.96%	10.96%
2031	2033	1.25%	6.25%	11.25%	2046	2048	0.96%	5.96%	10.96%
2032	2034	1.21%	6.21%	11.21%	2047	2049	0.96%	5.96%	10.96%
2033	2035	1.17%	6.17%	11.17%	2048	2050	0.96%	5.96%	10.96%
2034	2036	1.14%	6.14%	11.14%	2049	2051	0.96%	5.96%	10.96%
2035	2037	1.12%	6.12%	11.12%	2050	2052	0.96%	5.96%	10.96%
2036	2038	1.09%	6.09%	11.09%	2051	2053	0.96%	5.96%	10.96%
2037	2039	1.06%	6.06%	11.06%	2052	2054	0.96%	5.96%	10.96%
* 30-year Normal Cost projection based on the January 1, 2023 actuarial valuation report									

Dallas Police & Fire
Pension System

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Additional COLA and Lump Sum Scenario

July 10, 2024

Bill Hallmark, ASA, EA, MAAA, FCA
Jake Libauskas, FSA, EA, MAAA, FCA

Additional COLA Scenario

- A Scenario in Six Steps – See Appendix for Details
  1. Current investment return based COLA
  2. CPI COLA not to exceed 1.75%, payable when 70% funded
  3. Add 13th check equal to 1% of the annual original regular pension amount payable each year that the System's investment return is positive (i.e., exceeds 0%) starting in 2025 until CPI COLA is payable
  4. Additional 13th check equal to 1% of the annual original regular pension amount payable each year that the System's 5-year average investment return exceeds 7.5% starting in 2025 until CPI COLA is payable
  5. Additional $500 million lump sum City contribution in 2029
  6. Change CPI COLA to not exceed 3%, instead of 1.75%.
- ADC based on 5-Year Step Up scenario

Summary Results
Six Scenarios

Detailed Projection Results Are Provided
in an Excel Spreadsheet

Provide Different Advantages

- CPI-Based COLA
  - Benefit increases are tied to retirees' need for increases due to changes in cost-of-living
  - Increased COLA costs are no longer correlated with investment returns
  - Caps limit the effectiveness in protecting purchasing power
  - Cap of 3.0% matches ERF, but is lower than cap on current COLA
- 13th Check
  - Provides a small additional benefit until the COLA can be paid
- Cost impacts reflect the different levels of benefit provided

Expected Purchasing Power Comparison 2023 Retirees

	Purchasing Power						
COLA Change	**2024**	**2029**	**2034**	**2039**	**2044**	**2049**	**2054**
Current - No Change	100%	**88%**	***78%***	***69%***	***61%***	***56%***	***53%***
Change to CPI COLA with 1.75% Cap When 70% Funded	100%	**88%**	***78%***	***69%***	***61%***	***56%***	***53%***
Add 13th Checks Equal to 1% Simple COLA When Annual Return is Positive Until 70% Funded	100%	**89%**	***79%***	***70%***	***61%***	***57%***	***54%***
Add additional 13th Check When 5-Year Average Returns Exceed 7.5% Until 70% Funded	100%	**89%**	***79%***	***70%***	***62%***	***57%***	***54%***
In 2030 Change CPI COLA to 3.0% Cap When 70% Funded	100%	**89%**	***79%***	***70%***	***62%***	***58%***	***57%***

2.5% Assumed Inflation for All Years

13th Checks Tied to Investment Returns

- Providing 13th Checks that require certain investment returns will reduce the volatility of future City contributions
  - When System returns are negative, the System will experience a small liability gain from not paying the 13th check which will partially offset the investment loss of a negative return
  - When 5-year average returns exceed 7.5%, the System will experience a small liability loss from paying a larger 13th check than assumed, which will partially offset the investment gains
- This analysis assumes the total 13th Check will be 1.15% of the annual original regular pension each year
  - 70% chance annual return will exceed 0%
  - 45% chance 5-year average returns will exceed 7.5%[1]

[1] Based on an expected return of 6.5% and a standard deviation of 13.8%. The standard deviation was calculated using the System's target asset allocation and Meketa's capital market assumptions.

Impact of Immediate COLA Changes on Liabilities

Immediate COLA Changes	2023 Actuarial Liability ($ in Millions)	2025 Normal Cost Rate
Current COLA	$ 5,343	20.3%
Add 13th check equal to 1% Simple COLA when System returns are positive	$ 5,359	20.3%
Add additional 13th check equal to 1% Simple COLA when System's 5-year average returns exceed 7.5%	$ 5,369	20.3%

- 13th Check when returns are positive
  - Probability of positive returns for any year is estimated to be 70%[1]
    - 13th Check assumed to be 0.70% of the annual original regular pension
  - 2023 Actuarial Liability increased by $16M
  - 2025 Normal Cost rate increases very slightly
- Additional 13th Check when 5-year average returns exceed 7.5%
  - Probability of five-year average returns exceeding 7.5% is estimated to be 45%[1]
    - Total 13th Check assumed to be 1.15% of the annual original regular pension, which includes 0.70% when returns are positive plus 0.45% when 5-year average returns exceed 7.5%
  - 2023 Actuarial Liability increased an additional $10M
  - 2025 Normal Cost rate increases very slightly

[1] Based on an expected return of 6.5% and a standard deviation of 13.8%. The standard deviation was calculated using the System's target asset allocation and Meketa's capital market assumptions.

2023 Market & Actuarial Value of Assets is $1,807 million

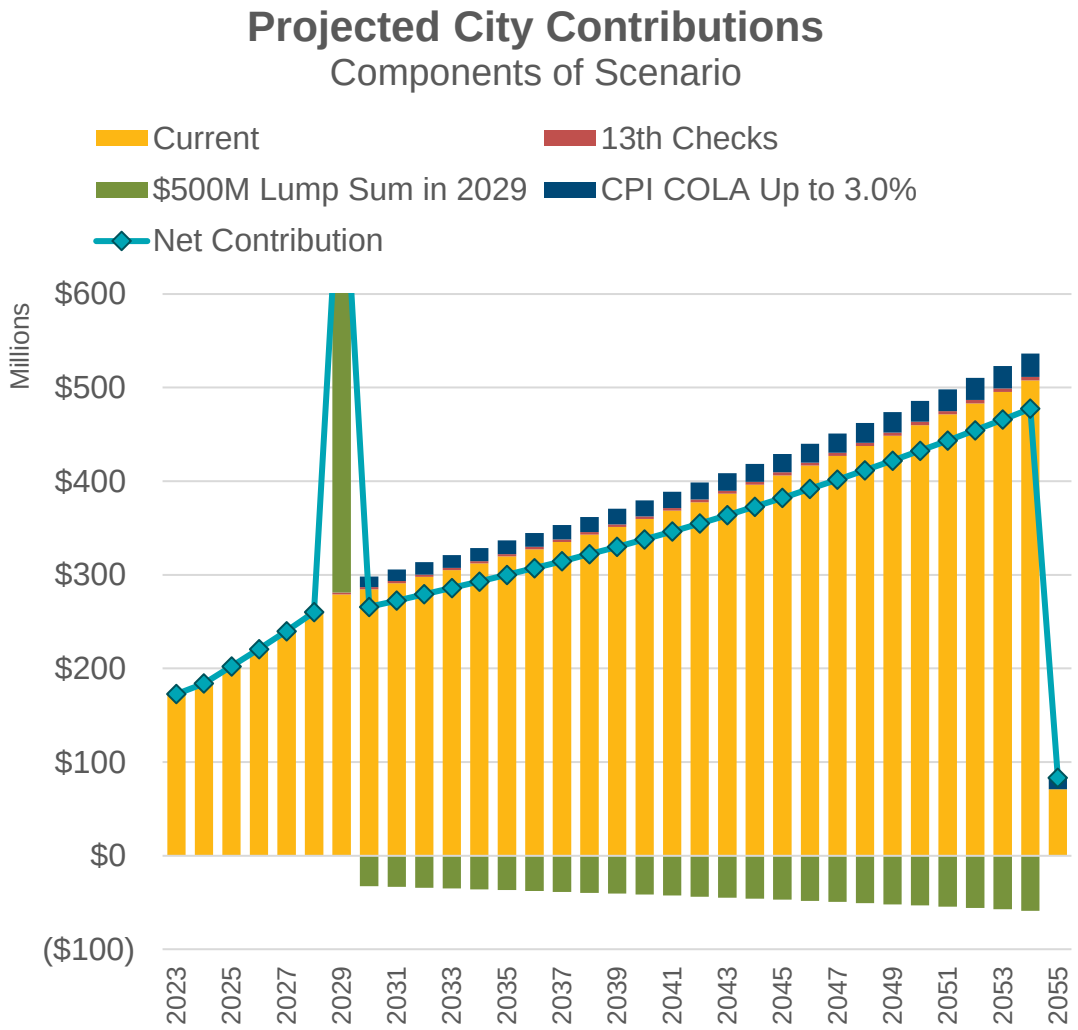
Impact of Changes in 2030 on Liabilities

Scenario	2030 Actuarial Liability ($ in Millions)	2030 Normal Cost Rate
Current COLA	$ 5,972	19.9%
Add 13th check equal to 1% Simple COLA when System returns are positive	$ 5,991	19.9%
Add additional 13th check equal to 1% Simple COLA when System's 5-year average returns exceed 7.5%	$ 6,003	19.9%
In 2030, Change CPI COLA cap to 3.0% (2.2% simple COLA assumed starting in 2046)	$ 6,113	20.9%

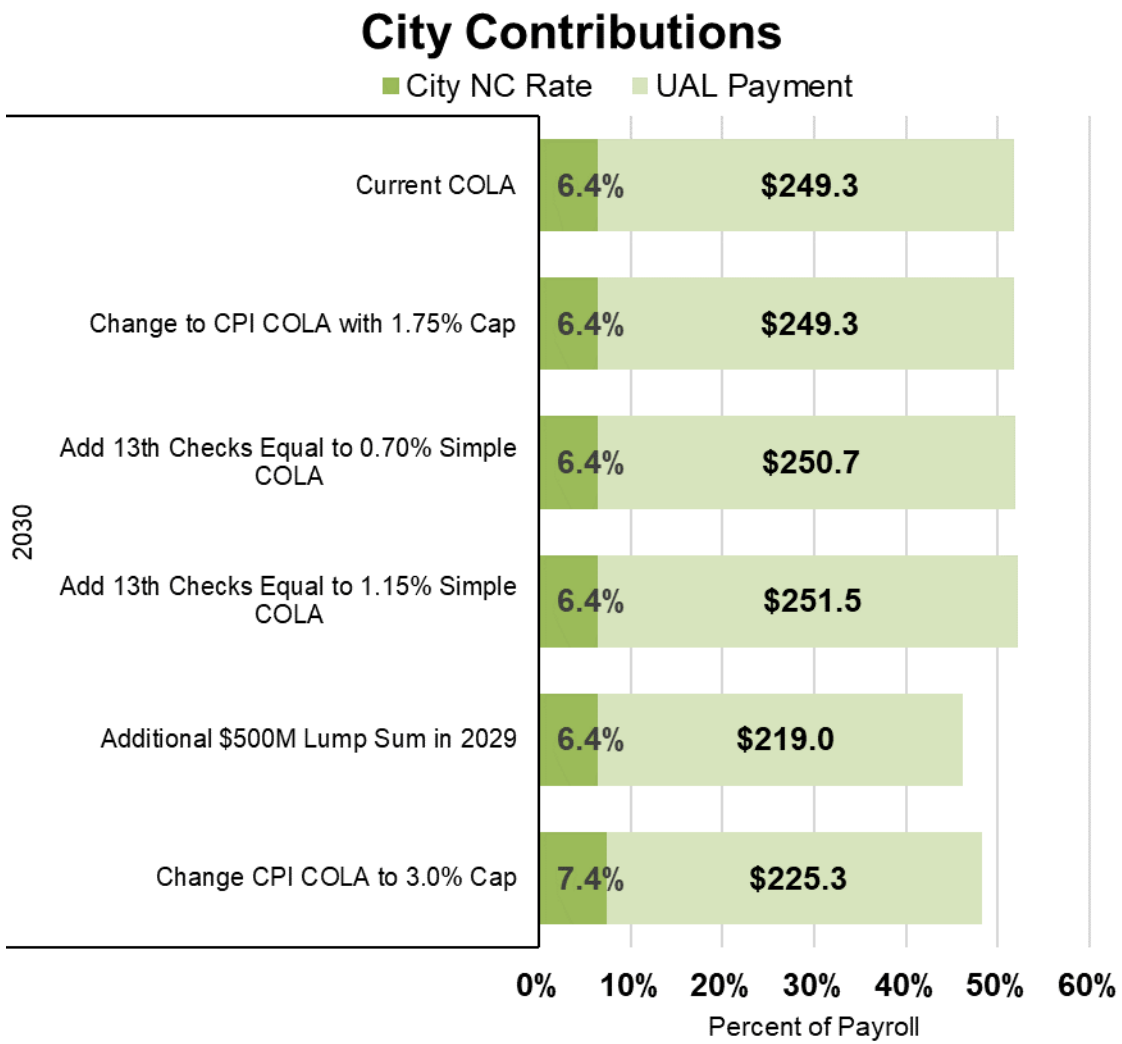
- Lump sum contribution of $500 M itself in 2029 does not impact the Actuarial Liability or Normal Cost Rate
- Raising the COLA cap to 3.0% increases the Actuarial Liability and Normal Cost Rate
  - 2030 Actuarial Liability increases by $110 million
  - 2030 Normal Cost rate increases by 1.0% of payroll
- Our analysis assumes that the 2030 and 2031 City Contributions are recalculated to reflect the CPI COLA cap change and lump sum contribution
  - Will require updating prior valuation results

Overview of Impact on City Contributions

- Immediate changes (CPI Cola and 13th Checks) have very little impact on contributions
- $500 million additional contribution in 2029 reduces contributions beginning in 2030
- Raising the COLA cap to 3.0% offsets this reduction
- Net impact is a noticeable reduction in contributions



Summary of City Contributions for 2030



- 2030 is first year all changes have been implemented
- Change to CPI COLA with 1.75% cap and additional 13th checks still have a minor impact in 2030
  - Increases UAL payment by $2.2 million
- Additional $500 million lump sum reduces 2030 contribution by $32.5 million
- Raising the COLA cap to 3.0% increases the normal cost rate by about 1.0% and the UAL payment by $6.3 million
  - Total increase for raising the COLA cap is expected to be $11.5 million

Certification

The purpose of this presentation is provide the estimated impact of the requested benefit and contribution scenarios. Please refer to our February 8, 2024 and March 22, 2024 presentations for additional details.

In preparing our presentation, we relied on information, some oral and some written, supplied by the Dallas Police and Fire Pension System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. A summary of the data, assumptions, methods, and plan provisions used to prepare our analysis can be found in Segal's 2023 actuarial valuation report supplemented by additional information in the appendix of this presentation.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Dallas Police and Fire Pension System Board for the purpose described herein. This presentation is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

William R. Hallmark, ASA, EA, MAAAA, FCA
Consulting Actuary

Jake Libauskas, FSA, EA, MAAA, FCA
Consulting Actuary

Appendix: Assumption & Method Changes

- Projections reflect method changes described in our 3/29 email
  - Reset actuarial value of assets to equal the market value of assets as of January 1, 2023
  - Recognize UAL contributions expected to be made between the valuation date and when the ADC becomes effective two years later
  - The Normal Cost rate is based on projected normal cost for the year the ADC is paid and includes expected new hires during the year
  - Administrative expenses are included in the UAL contribution
- Projections also reflect some new information
  - The 2023 investment return is assumed to be 10%, unless otherwise noted
  - The 2024 City contribution is assumed to be $184 million, unless otherwise noted

Appendix: Description of Scenario Steps

- Current COLA
  - Payable once the System is 70% funded
  - Simple COLA equal to 5-year average investment return less 5%, not less than 0% or greater than 4%
  - Current COLA is assumed to be 1.5% simple COLA payable starting October 1, 2046, when System is projected to be 70% funded
    - 1.5% = 6.5% assumed return minus 5%

Appendix: Description of Scenario Steps

- CPI COLA Not to Exceed 1.75%, Payable when 70% Funded
  - Payable once the System is 70% funded
  - Simple COLA equal to annual change in Consumer Price Index (CPI), but not to exceed 1.75%
  - This CPI COLA is assumed to be 1.5% simple COLA payable starting October 1, 2046, when System is projected to be 70% funded
    - 1.5% reflects probability that CPI will be less than 1.75% in some years

Appendix: Description of Scenario Steps

- 13th Check Every Year System Returns are Positive Until 70% Funded
  - 13th Check = 1% of Annual Original Regular Pension Amount
  - 13th Check payable each year that System returns are positive starting in 2025 until System is 70% funded and CPI COLA can be paid
  - Probability of positive returns for any year is estimated to be 70%[1]
    - For this scenario, 13th check is assumed to be 0.70% of the annual original regular pension

[1] Based on an expected return of 6.5% and a standard deviation of 13.8%. The standard deviation was calculated using the System's target asset allocation and Meketa's capital market assumptions.

Appendix: Description of Scenario Steps

- Additional 13th Check When System's 5-Year Average Returns Exceed 7.5% Until 70% Funded
  - 13th Check = 1% of Annual Original Regular Pension Amount
  - 13th Check payable each year that System's 5-year average returns exceed 7.5% starting in 2025 until System is 70% funded and CPI COLA can be paid
  - Probability of 5-year average returns exceeding 7.5% is estimated to be 45%[1]
    - For this scenario, total 13th check is assumed to be 1.15% of the annual original regular pension, which includes 0.70% when returns are positive plus 0.45% when 5-year average returns exceed 7.5%

[1] Based on an expected return of 6.5% and a standard deviation of 13.8%. The standard deviation was calculated using the System's target asset allocation and Meketa's capital market assumptions.

Appendix: Description of Scenario Steps

- For Step 5, the $500 million lump sum contribution is assumed to be made on July 1, 2029
  - Assumed to affect future contributions beginning in 2030
- Raise CPI COLA Cap to 3.0% in 2030
  - After the lump sum contribution, the CPI COLA is assumed to be a 2.2% simple COLA starting October 1, 2046
  - Assumed to affect future contributions beginning in 2030. This would require a revision of prior valuation results

Dallas Police & Fire Pension System (DPFP)

Projected City Contributions

Details from July 10, 2024 Cheiron presentation

Scenario: 5-Year Step Up ADC & Current COLA

Year	UAL/Admin	Normal Cost	Total	DPFP Projected Payroll
2024	$ 150,941,000	$ 33,059,000	$ 184,000,000	$ 474,372,000
2025	$ 168,656,000	$ 32,964,000	$ 201,620,000	$ 486,231,000
2026	$ 186,482,000	$ 33,196,000	$ 219,678,000	$ 498,387,000
2027	$ 204,889,000	$ 33,578,000	$ 238,467,000	$ 510,846,000
2028	$ 224,163,000	$ 34,079,000	$ 258,242,000	$ 523,618,000
2029	$ 244,336,000	$ 34,611,000	$ 278,947,000	$ 536,708,000
2030	$ 249,341,000	$ 35,180,000	$ 284,521,000	$ 550,126,000
2031	$ 255,399,000	$ 35,765,000	$ 291,164,000	$ 563,879,000
2032	$ 261,609,000	$ 36,356,000	$ 297,965,000	$ 577,976,000
2033	$ 267,975,000	$ 37,017,000	$ 304,992,000	$ 592,425,000
2034	$ 274,499,000	$ 37,705,000	$ 312,204,000	$ 607,236,000
2035	$ 281,186,000	$ 38,420,000	$ 319,606,000	$ 622,417,000
2036	$ 288,041,000	$ 39,186,000	$ 327,227,000	$ 637,977,000
2037	$ 295,067,000	$ 39,991,000	$ 335,058,000	$ 653,927,000
2038	$ 302,269,000	$ 40,788,000	$ 343,057,000	$ 670,275,000
2039	$ 309,650,000	$ 41,630,000	$ 351,280,000	$ 687,032,000
2040	$ 317,259,000	$ 42,454,000	$ 359,713,000	$ 704,208,000
2041	$ 325,190,000	$ 43,266,000	$ 368,456,000	$ 721,813,000
2042	$ 333,320,000	$ 44,198,000	$ 377,518,000	$ 739,858,000
2043	$ 341,653,000	$ 45,115,000	$ 386,768,000	$ 758,354,000
2044	$ 350,194,000	$ 46,189,000	$ 396,383,000	$ 777,313,000
2045	$ 358,949,000	$ 47,384,000	$ 406,333,000	$ 796,746,000
2046	$ 367,923,000	$ 48,691,000	$ 416,614,000	$ 816,665,000
2047	$ 377,121,000	$ 49,908,000	$ 427,029,000	$ 837,081,000
2048	$ 386,549,000	$ 51,155,000	$ 437,704,000	$ 858,008,000
2049	$ 396,213,000	$ 52,435,000	$ 448,648,000	$ 879,459,000
2050	$ 406,118,000	$ 53,746,000	$ 459,864,000	$ 901,445,000
2051	$ 416,271,000	$ 55,089,000	$ 471,360,000	$ 923,981,000
2052	$ 426,678,000	$ 56,466,000	$ 483,144,000	$ 947,081,000
2053	$ 437,345,000	$ 57,878,000	$ 495,223,000	$ 970,758,000
2054	$ 448,278,000	$ 59,325,000	$ 507,603,000	$ 995,027,000
2055	$ 10,199,000	$ 60,808,000	$ 71,007,000	$ 1,019,902,000

Dallas Police & Fire Pension System

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Independent Actuarial Analysis Recommendations

Preliminary Recommendations Based on 2023 Actuarial Valuation

February 8, 2024

Bill Hallmark, ASA, EA, MAAA, FCA
Elizabeth Wiley, FSA, EA, MAAA, FCA
Jake Libauskas, FSA, EA, MAAA, FCA

Agenda

Background

Primary Recommendations

- Adopt an Actuarially Determined Contribution
- Reduce Employee Contributions as Funded Status Improves
- Provide Some COLA Earlier

Questions

Appendix

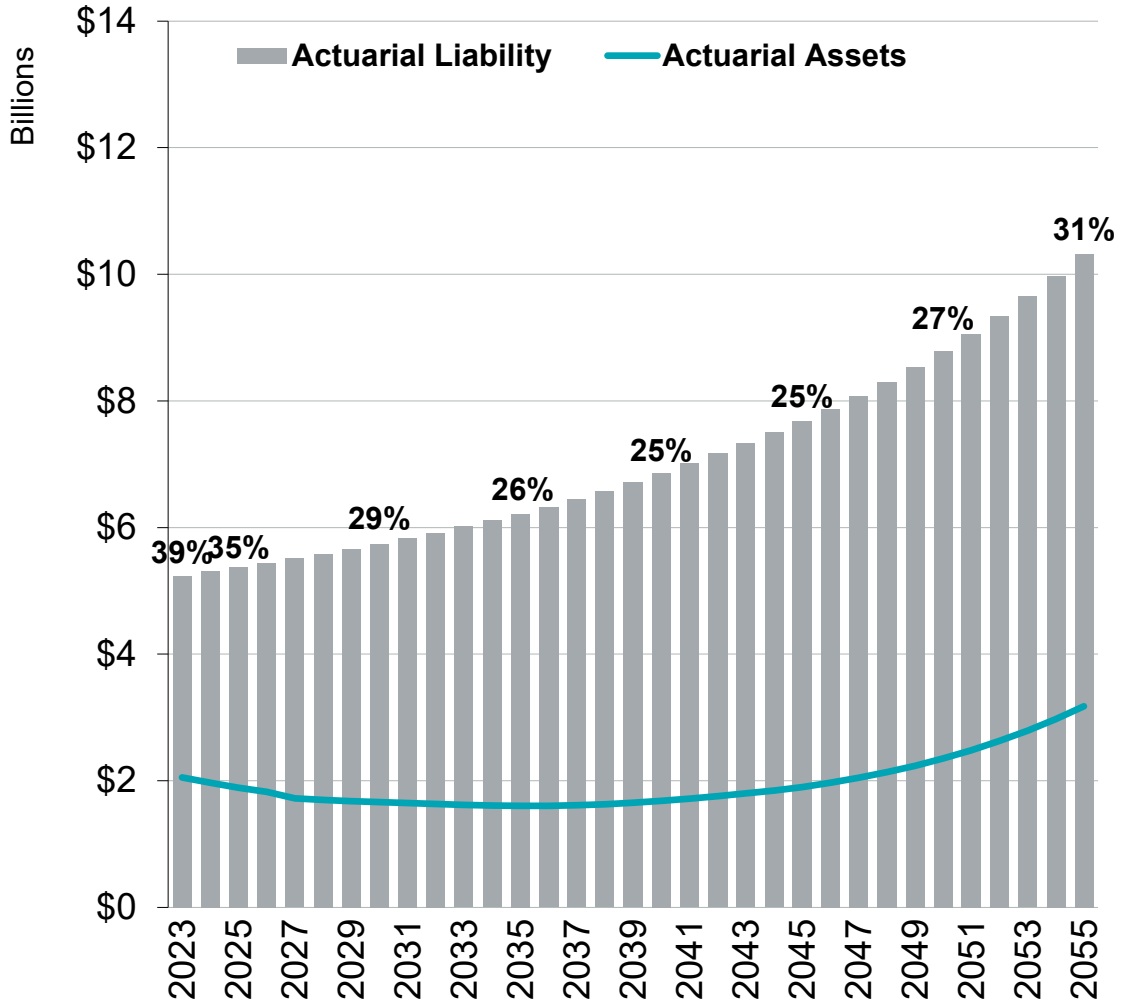
Independent Actuarial Analysis

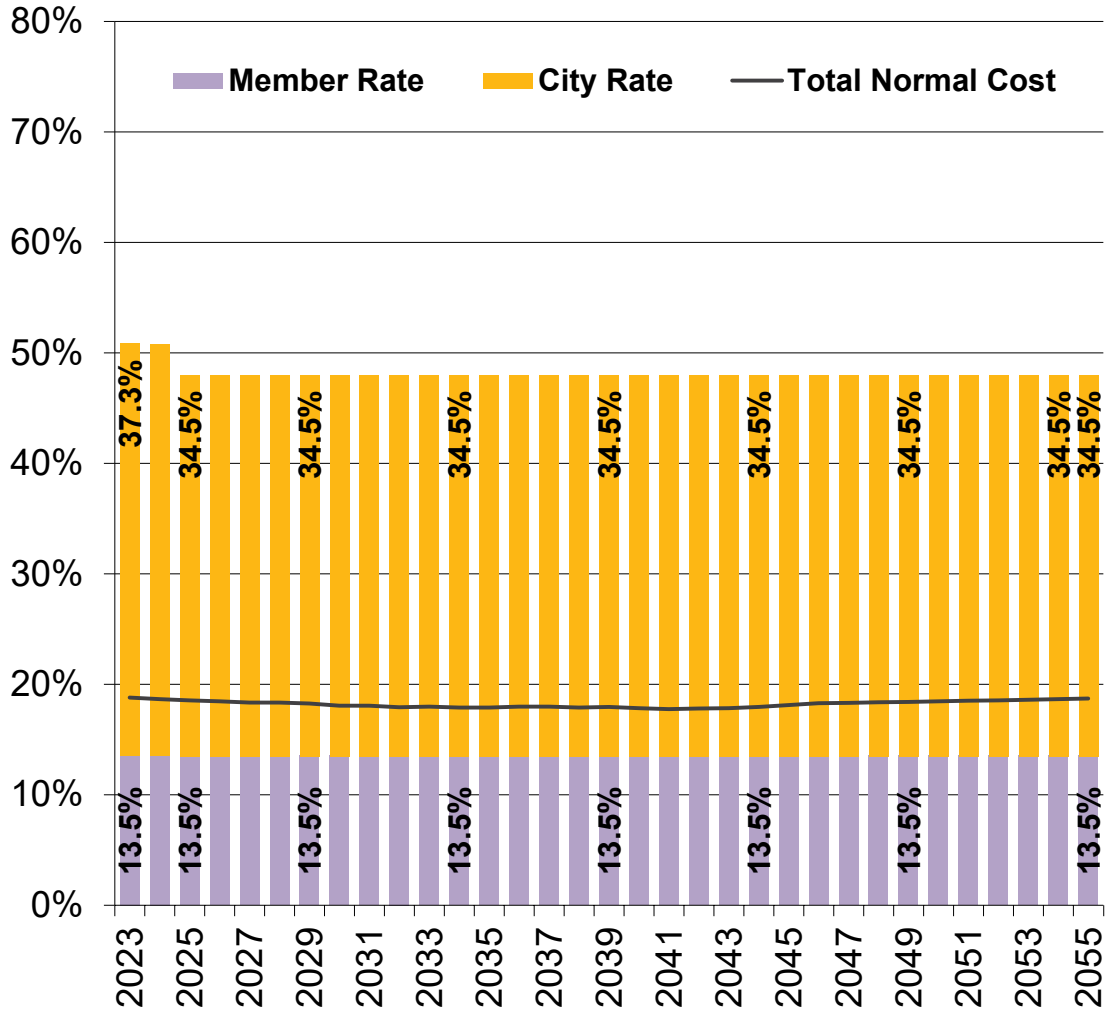
- Pension Review Board selected Cheiron as the Independent Actuary
- Analysis required
  - Does system meet funding guidelines of Chapter 802 of Texas Government Code?
    - Funding period achieved and maintained <= 30 years
  - Make recommendations regarding:
    - Changes to benefits
    - Changes to member contributions
    - Changes to City contributions
- Board action by 11/1/2024
  - Complying with funding requirements of Chapter 802
  - Taking into consideration recommendations of Independent Actuary

Process

- ✓ Replicate 2022 Valuation Performed by Segal
- ✓ Build Interactive Models
- ✓ Develop Alternative Contribution/Benefit Scenarios (At least 3)
- ✓ Draft Report and Presentation Based on 2022 Actuarial Valuation
  - Presented to Board, City, and Pension Review Board
  - Refinement of Options
- ✓ Replicate 2023 Valuation Performed by Segal
- Preliminary Report and Presentation Based on 2023 Actuarial Valuation
  - Feedback from Board
  - Final refinements
- Final Report
  - Texas Pension Review Board
  - Dallas Police & Fire Pension System Board
  - City of Dallas

Baseline Projections – 2023 Valuation





Primary Recommendations

Adopt an Actuarially Determined Contribution

- Contribution amounts adjust to circumstances
- Always comply with funding guidelines
- Start contributions effective either 10/1/2024 or 1/1/2025 based on 1/1/2023 valuation

Reduce Employee Contribution Rate as Funding Improves

- Current rate is high compared to competitors and as proportion of benefit cost
- As funding improves, grade employee rate down to 50% of normal cost rate

Provide Some COLA Earlier Than Current Provisions Permit

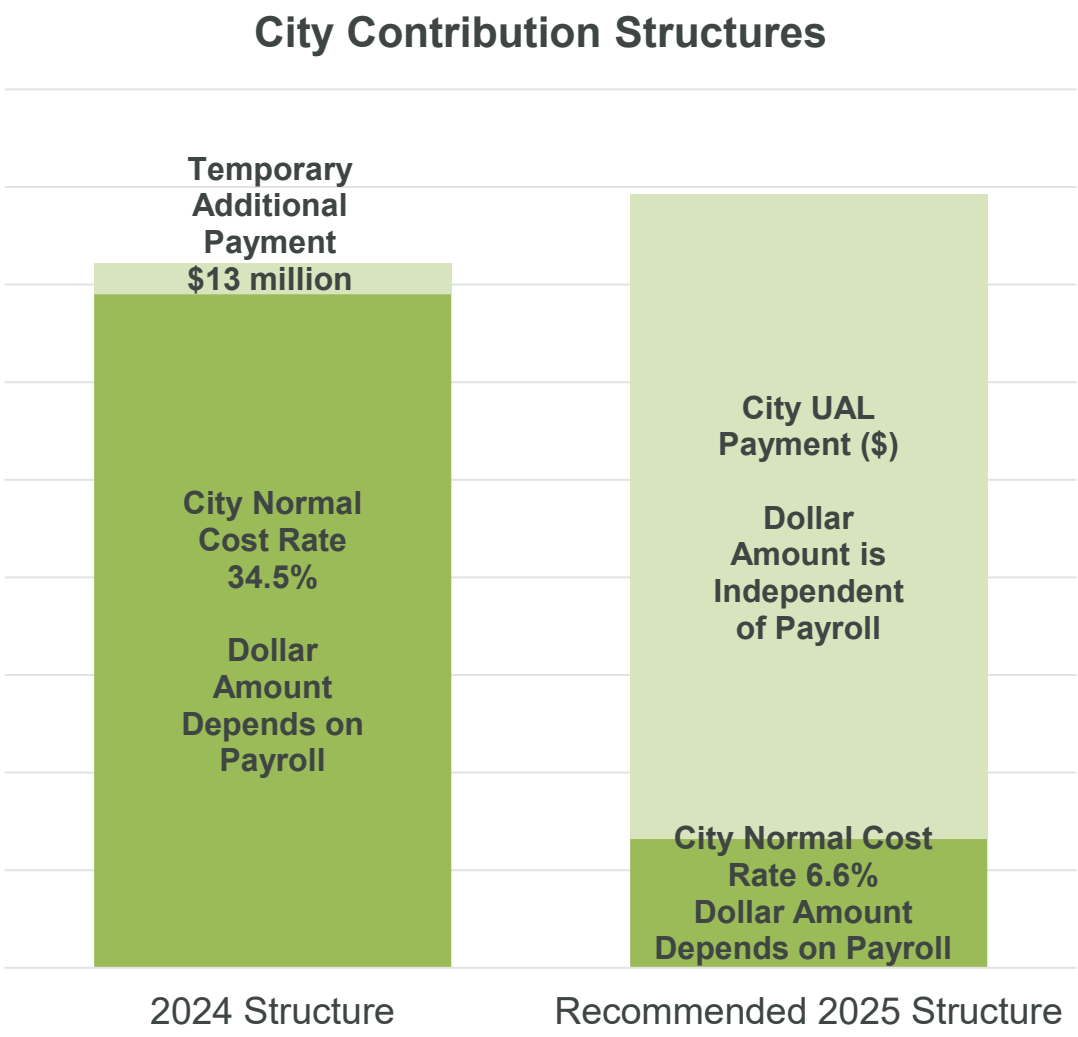
- Members are not covered by Social Security, so they have no inflation protection in retirement
- Lack of COLA is likely to create a recruitment and retention issue

Adopt an Actuarially Determined Contribution



Actuarially Determined Contribution (ADC)

- Current fixed rate implicitly pays:
  - City's normal cost
    - City's expected cost of benefits attributable to the current year of service
  - Administrative expenses
  - An amount towards the Unfunded Actuarial Liability (UAL)
    - UAL payment is thus the excess of fixed rate over the City's normal cost rate and administrative expenses
    - UAL payment is independent of actual UAL
- Proposed ADC consists of:
  - City's normal cost rate
    - Designed to be a percentage of pay
  - Administrative expenses - a dollar amount
  - UAL payment - a dollar amount based on an amortization schedule
    - Designed to pay off UAL over a specified period
    - Independent of actual payroll



Timeline of Actuarially Determined Contribution

1/1/2023
Valuation Date

1/1/2024
2023 Valuation Complete
& ADC Known

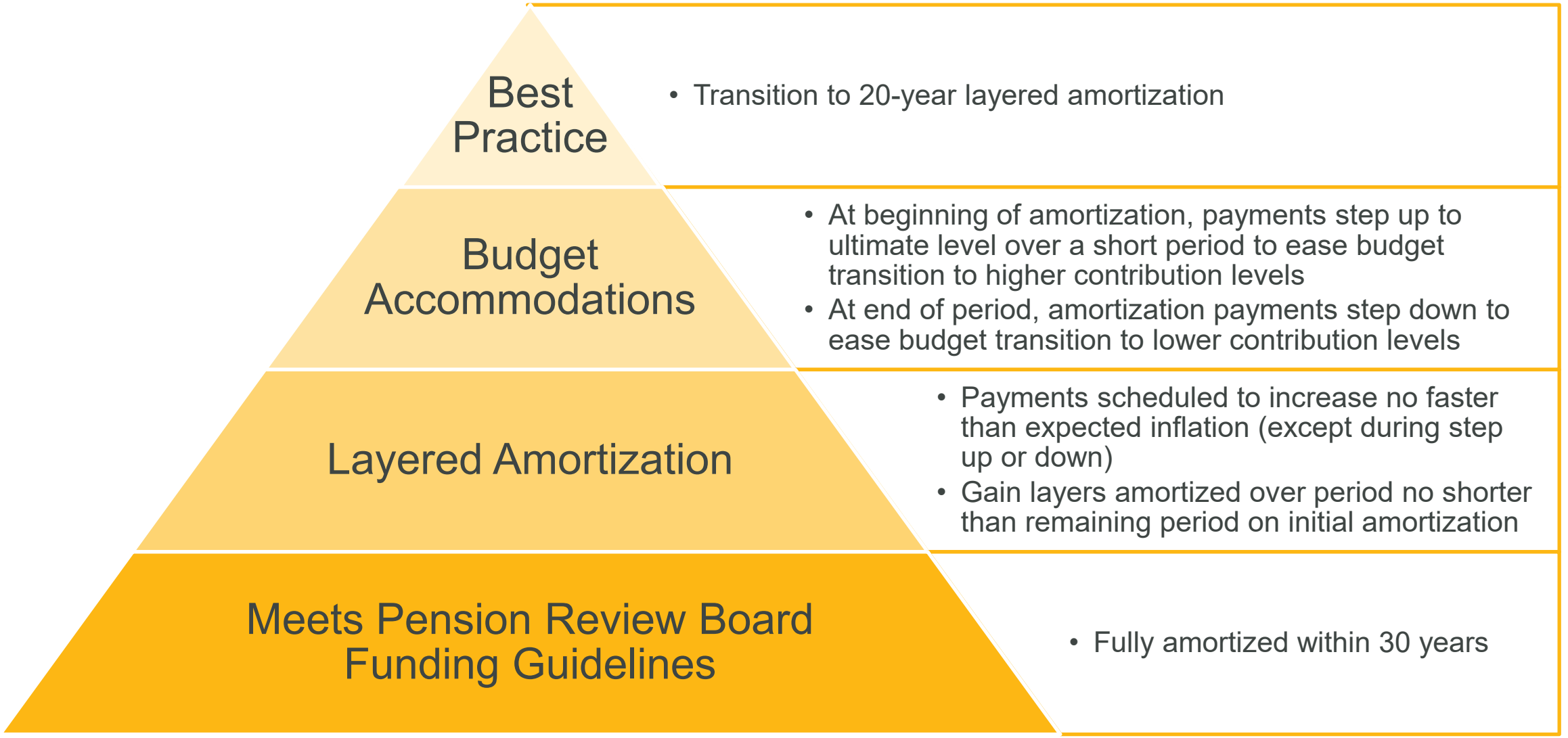
10/1/2024 or 1/1/2025
City Begins Contributing ADC From
2023 Valuation

1/1/2024
Valuation Date

1/1/2025
2024 Valuation Complete
& ADC Known

10/1/2025 or 1/1/2026
City Begins Contributing ADC From
2024 Valuation

Key Amortization Principles Applied

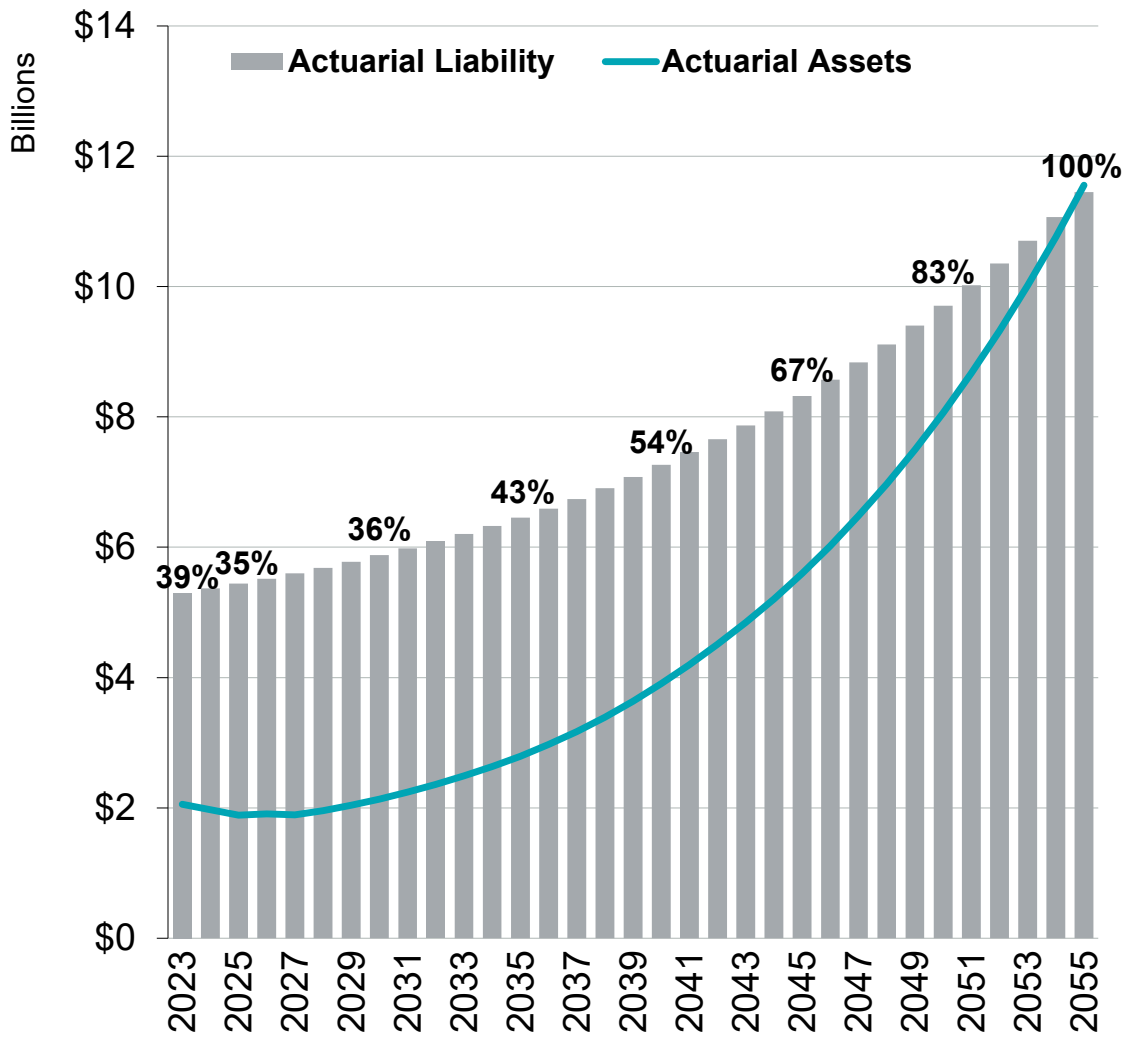


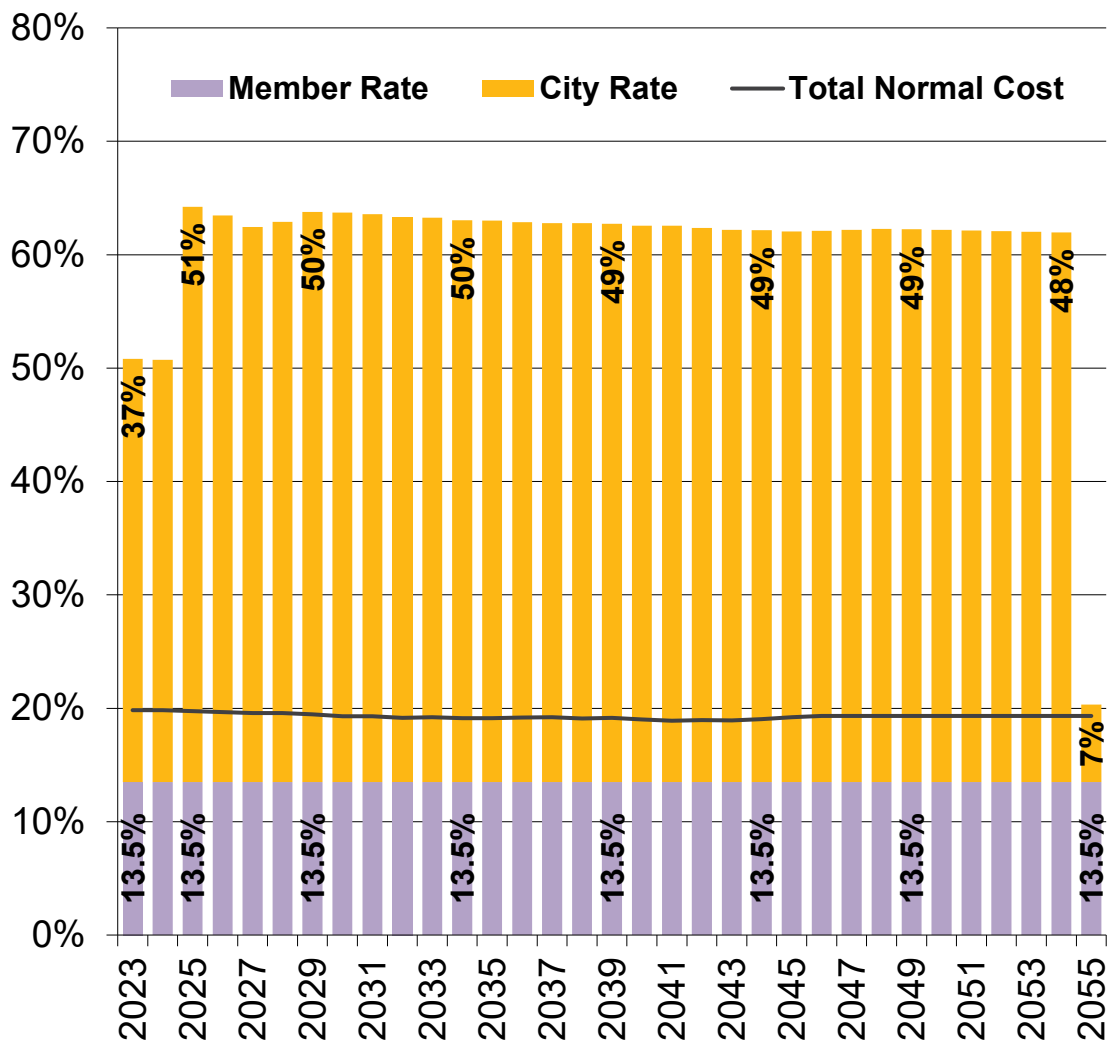
Modeled Amortization Options

Most Preferred ← All Are Reasonable → Least Preferred

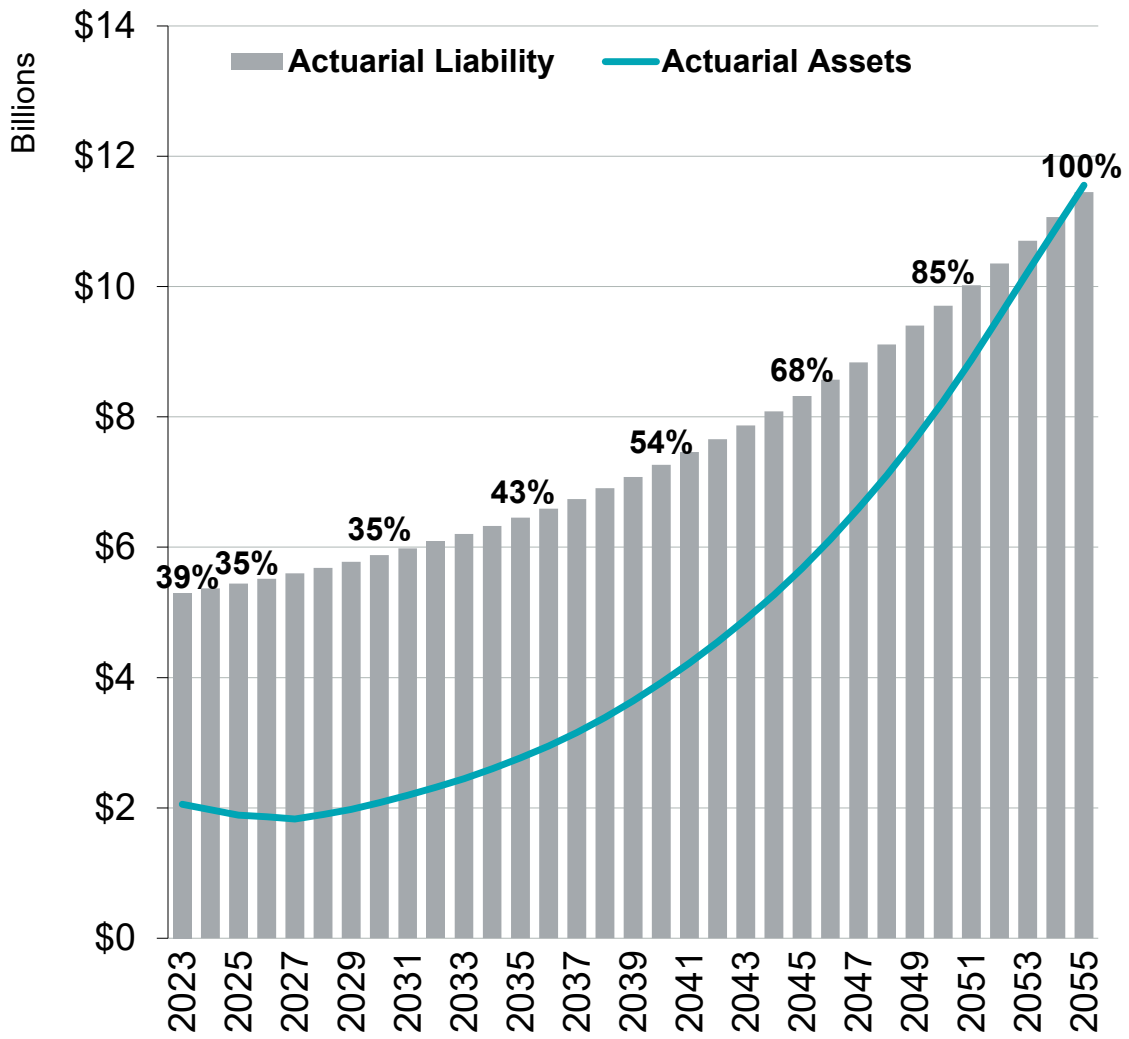
Traditional	3-Year Step Up/Down	5-Year Step Up/Down	3-Year Step Up	5-Year Step Up
• Single initial 30-year amortization layer for entire UAL • 2.5% annual increase in payments • No step up or down in payments	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over 3 years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over 3 years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over 5 years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over 5 years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over 3 years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over 5 years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization

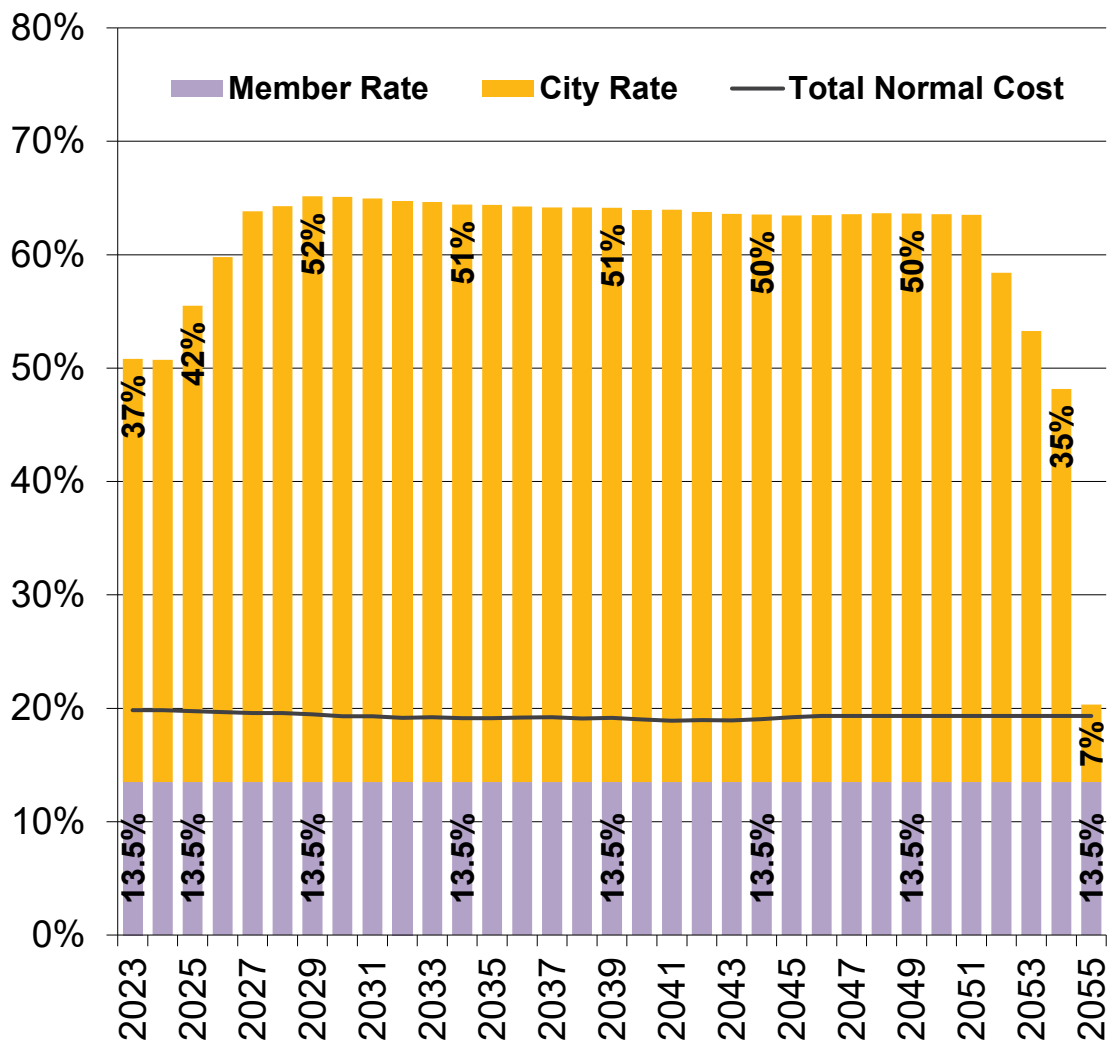
Option 1A – Traditional ADC



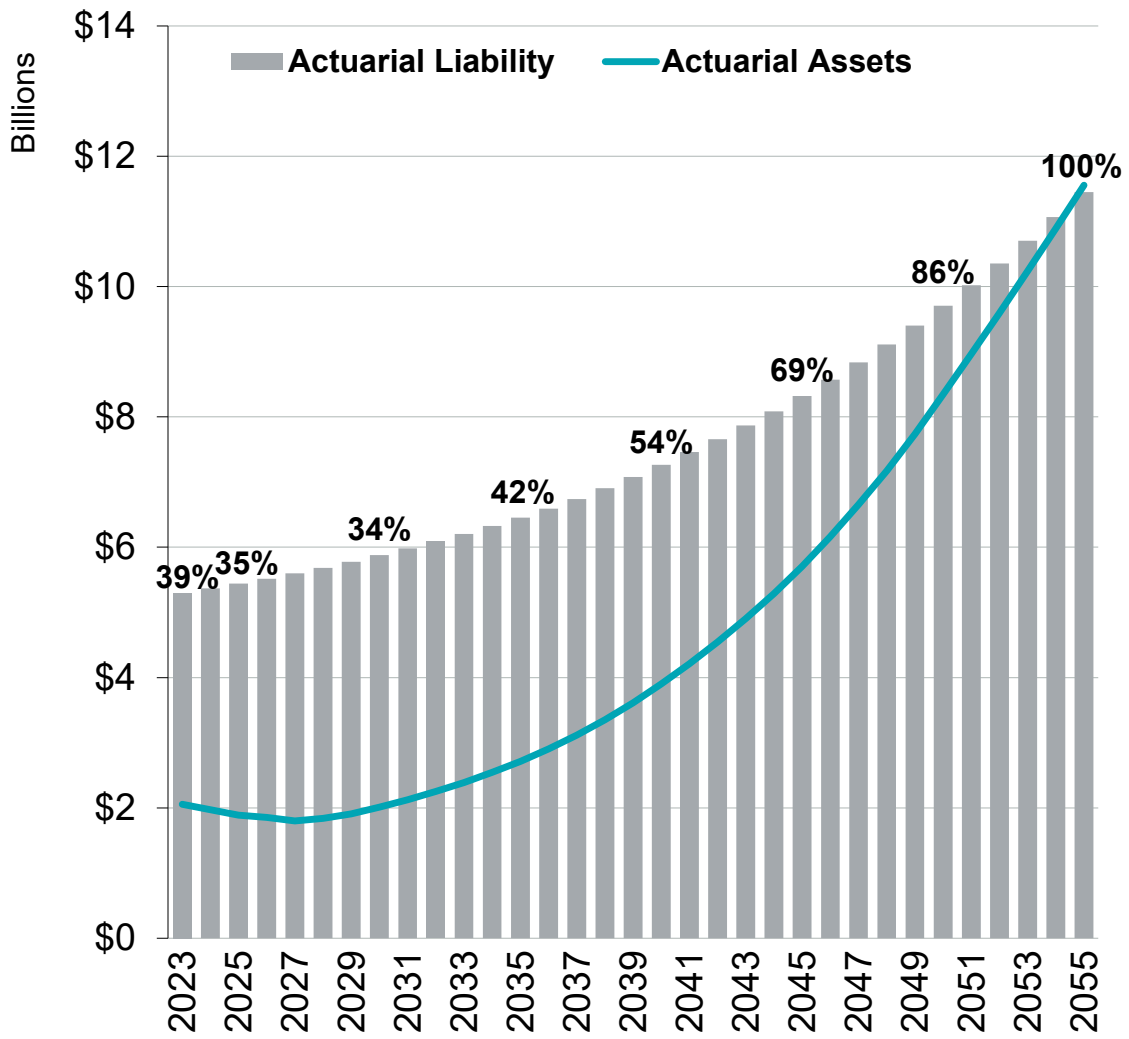


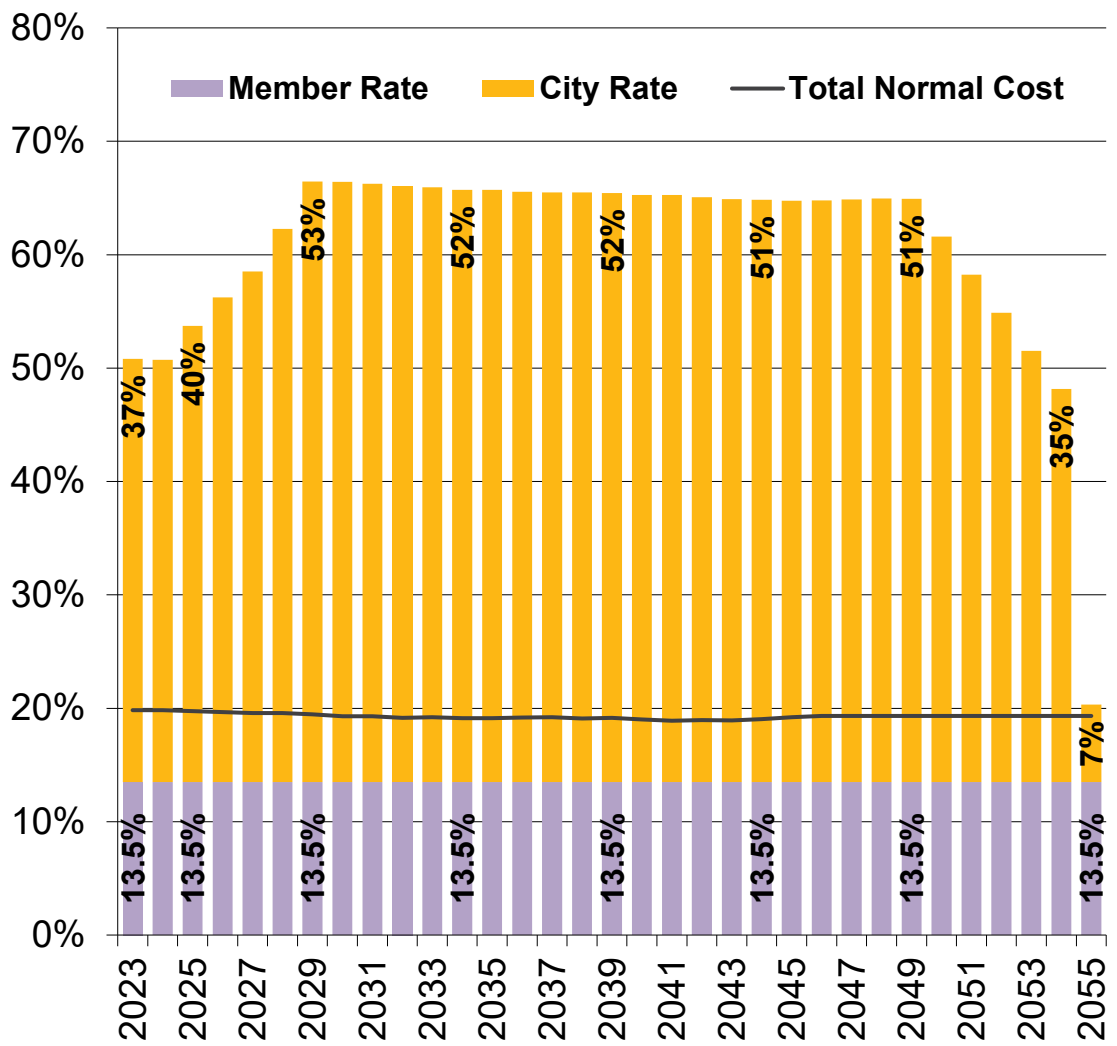
Option 1B – 3-Year Step Up/Step Down ADC



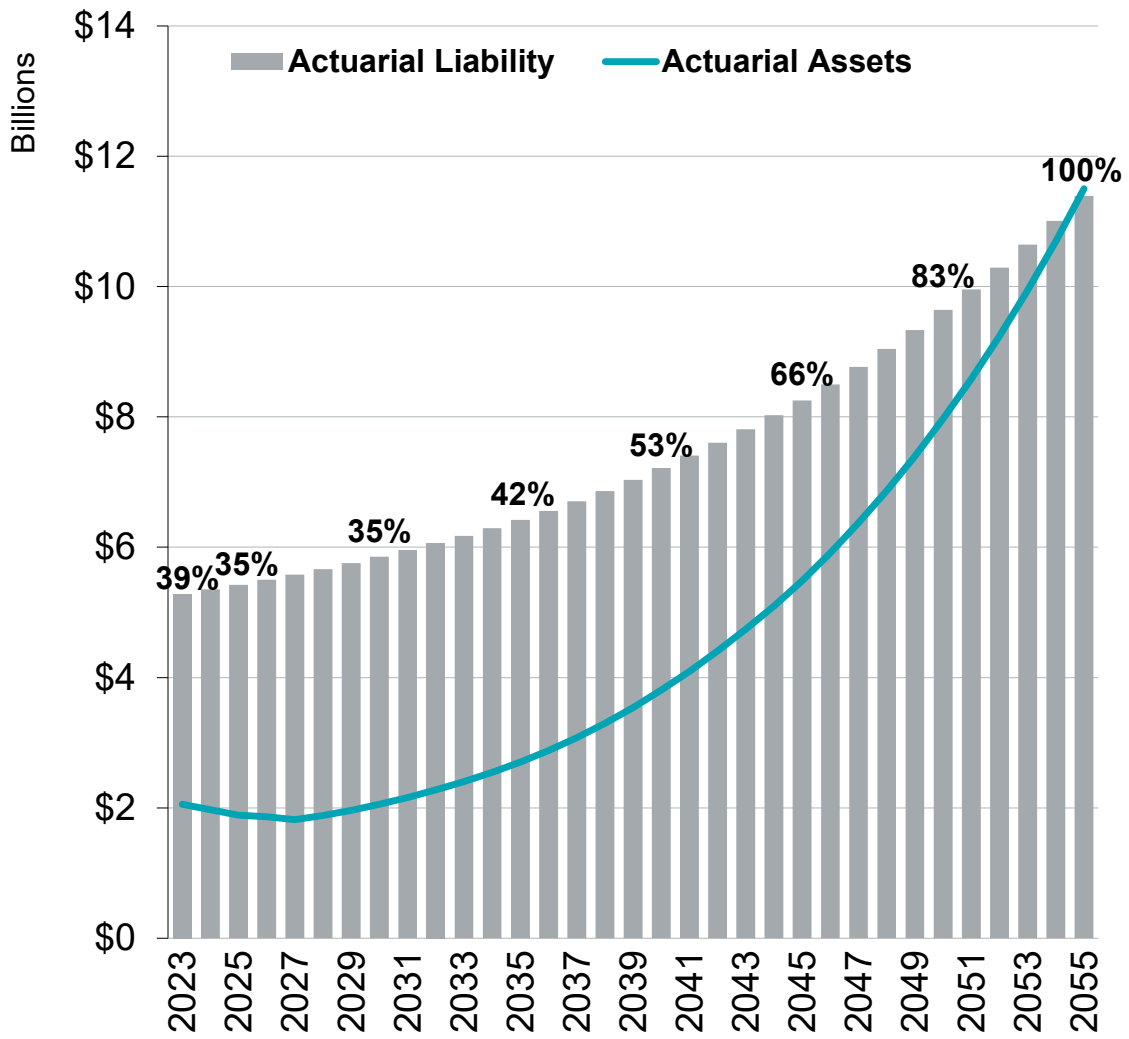


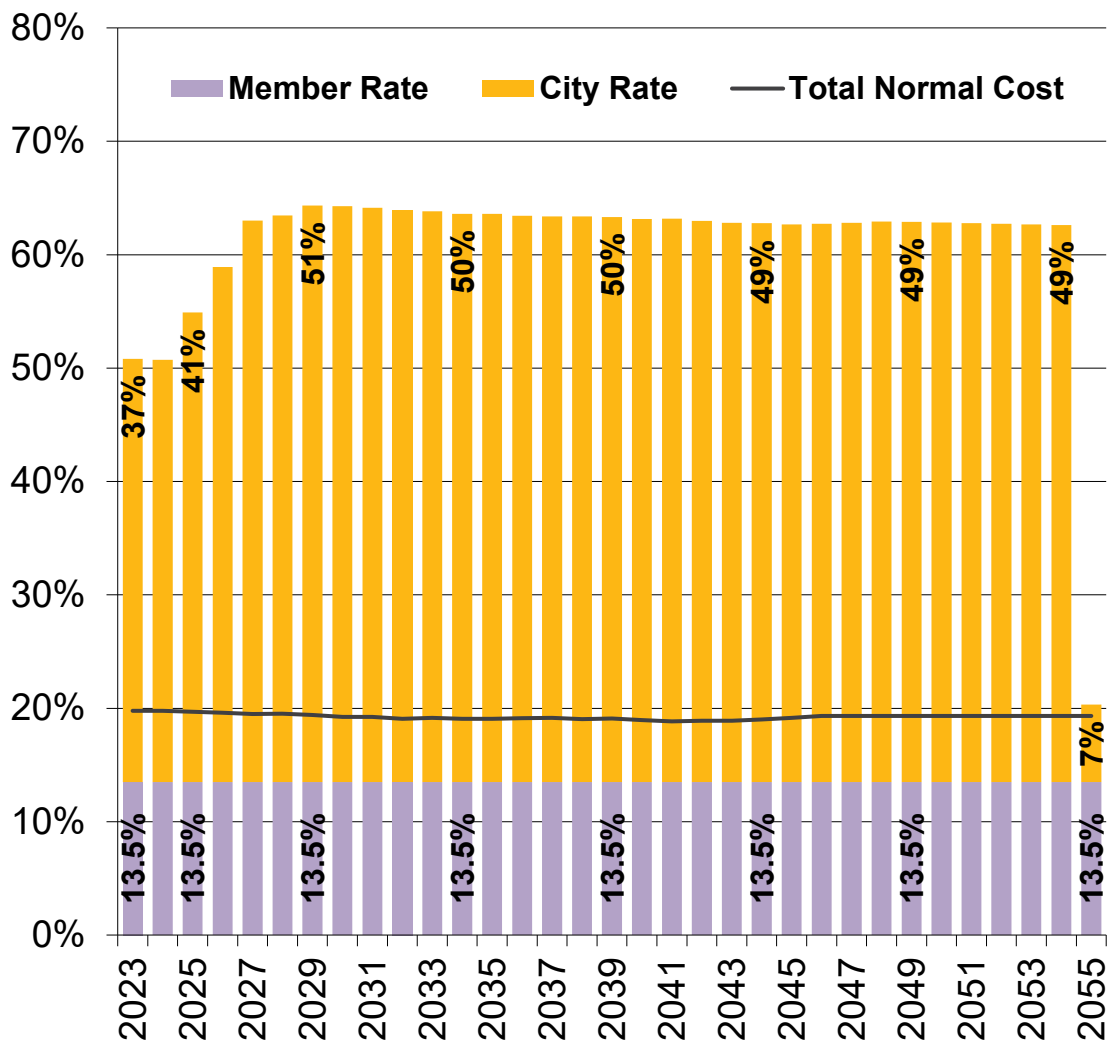
Option 1C – 5-Year Step Up / Step Down ADC



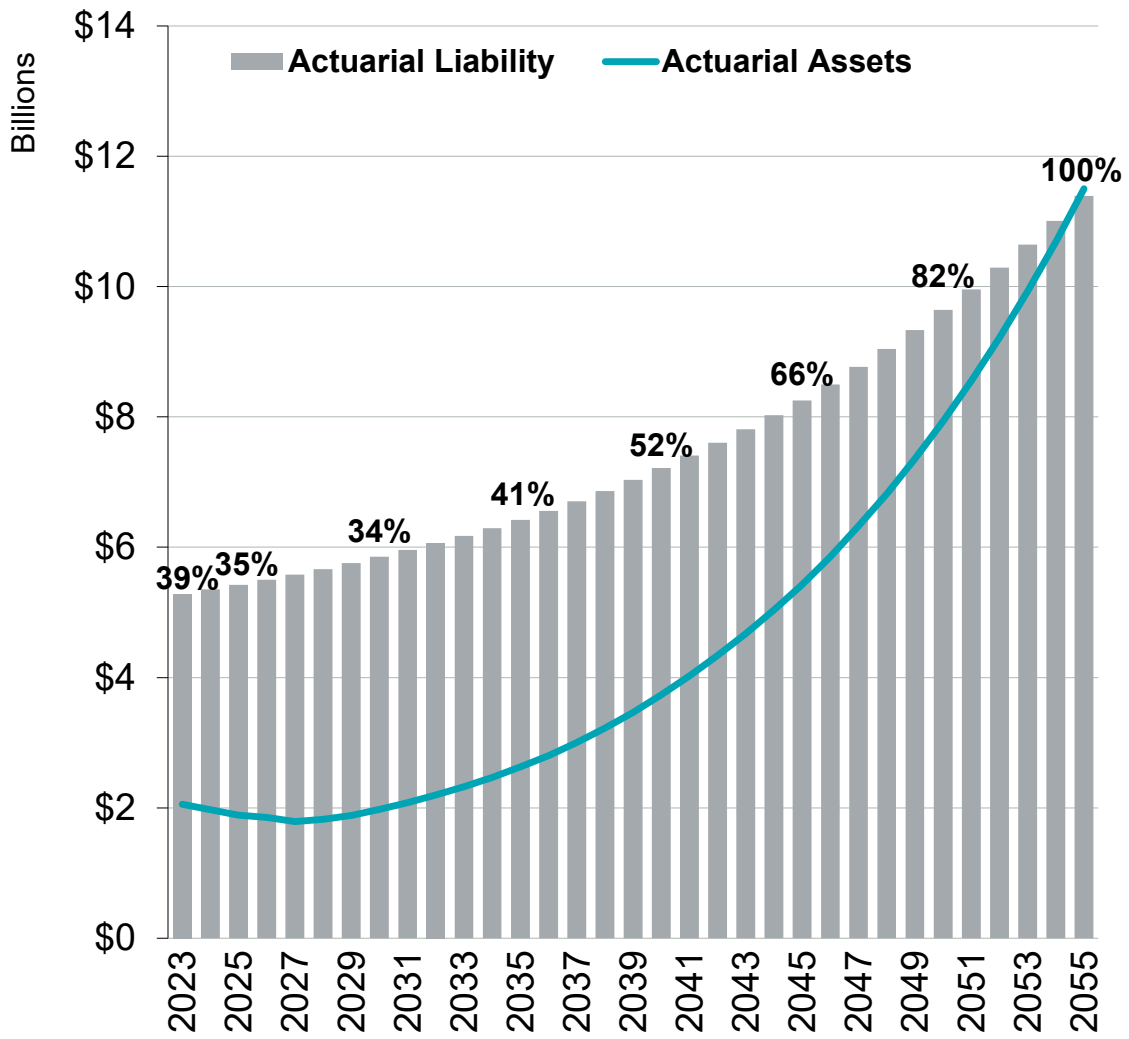


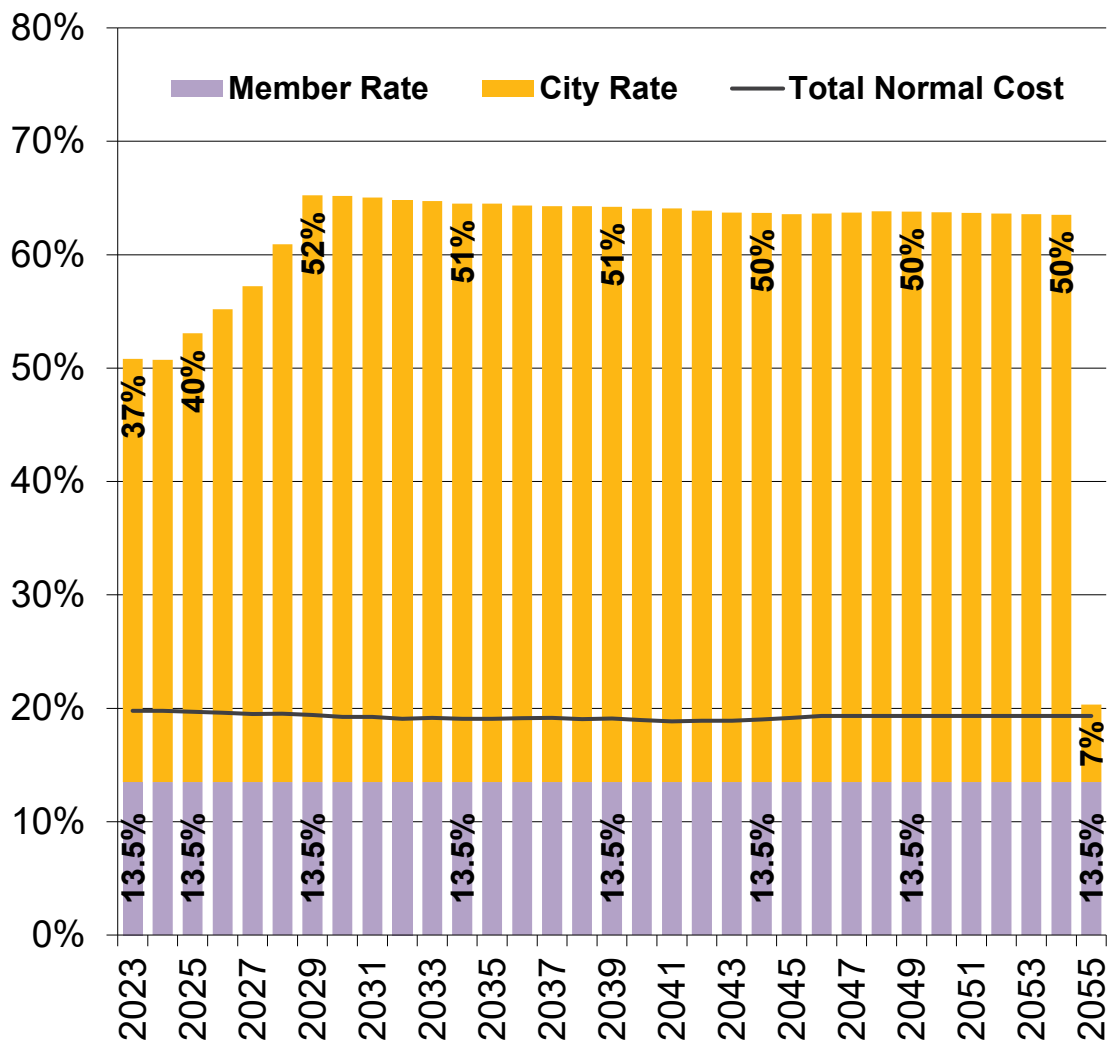
Option 1D – 3-Year Step Up ADC





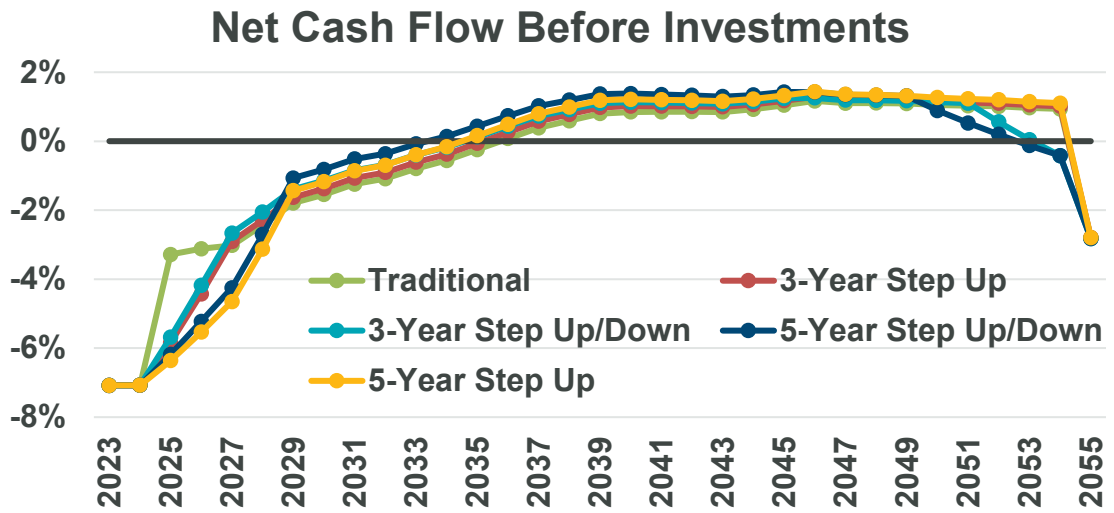
Option 1E – 5-Year Step Up ADC

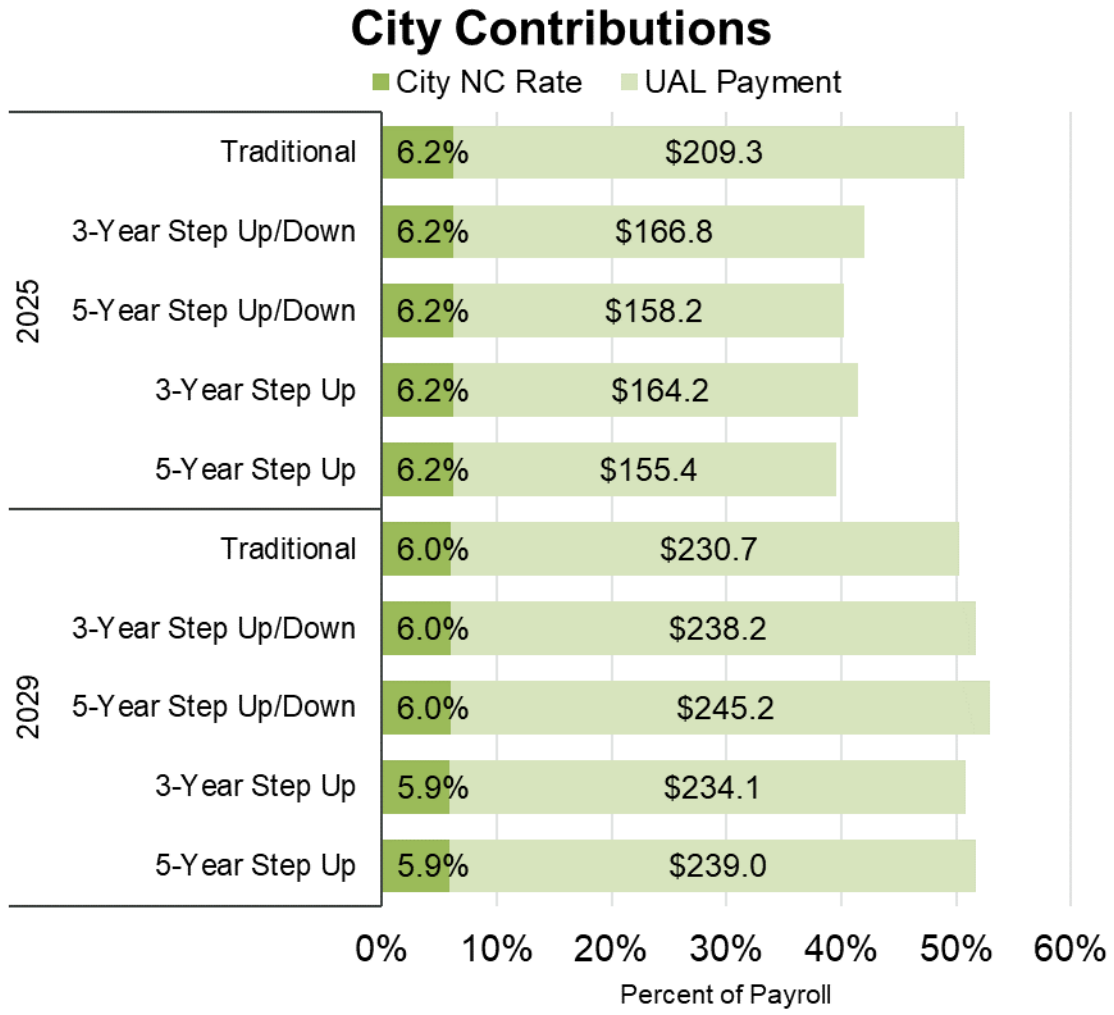




Comparison of ADC Options

ADC	Minimum Expected Funded Percentage	Year Reach 70% Funded
Traditional	34%	2047
3-Year Step Up/Down	32%	2046
5-Year Step Up/Down	32%	2046
3-Year Step Up	32%	2047
5-Year Step Up	32%	2047





Observations/Rationale for Recommendations

- All ADC options are reasonable:
  - Meet the PRB's funding guidelines
  - Adjust contributions as circumstances change so funding guidelines are always satisfied
  - Improve cash flow
  - Expect to achieve 70% funding in 2046 or 2047
  - Expect to achieve 100% funding by 1/1/2055
- Given the current funded status, we prefer higher contributions as soon as possible
  - Lump sum contributions would reduce future actuarially determined contributions
- To manage the change to a higher level of contributions, we prefer the step up / step down options
  - Step up provides time for the City's budget to adjust to higher contribution levels while automatically adjusting for experience during the step-up period
  - Step down provides some time to adjust City's budget to lower contribution levels
    - Most entities facing a significant drop in contribution levels have elected to step them down instead, often extending the amortization period to do so
    - Better to plan for the step down in advance

Reduce Employee Contribution Rate as Funding Improves

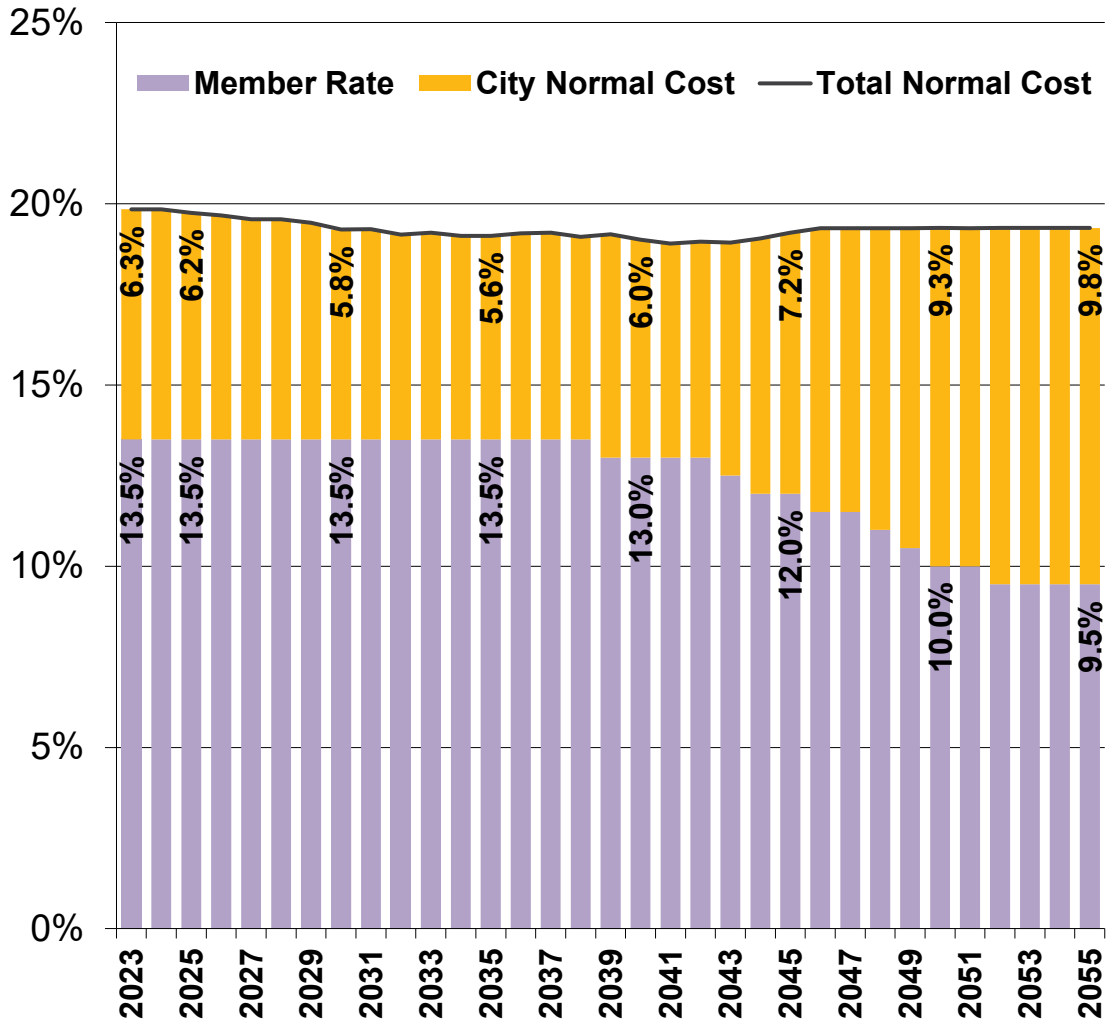


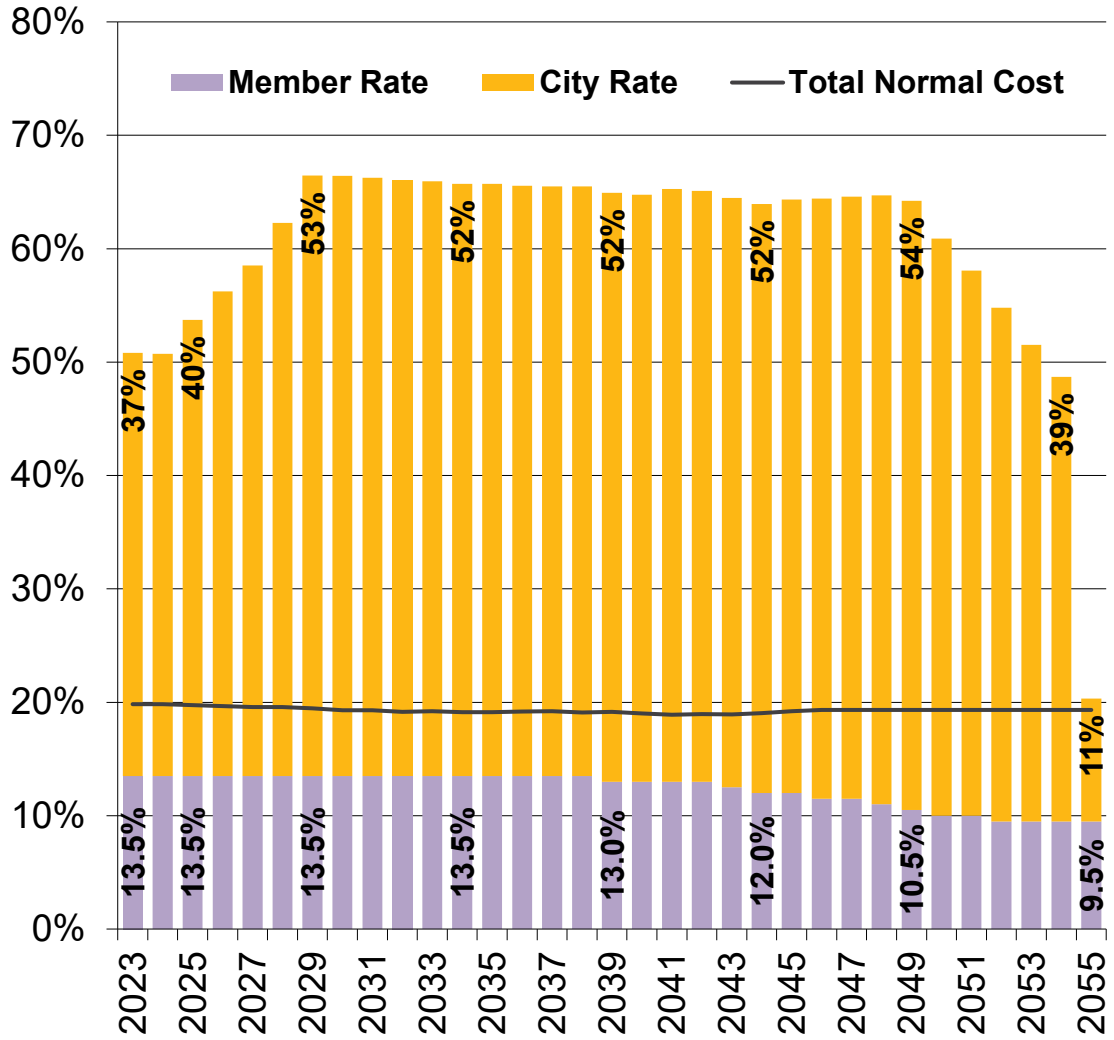
Scenario 2 – Adjustable Employee Contribution Rate

- Set base employee contribution rate to 50% of the normal cost rate applicable for members hired on/after March 1, 2011
  - Similar to current law once System is fully funded
  - Round to nearest 0.5%
  - 9.5% for this scenario
- Add adjustment designed to maintain current 13.5% contribution rate initially, with rate decreases as the System becomes better funded
- Adjustments proposed for this scenario shown in the table below:

Funded Ratio	<50%	50-59%	60-64%	65-69%	70-74%	75-79%	80-84%	85-89%	90%+
EE Rate Adjustment	4.0%	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0%

Scenario 2 – Adjustable EE Rate with 5-Yr Step Up/Dn ADC





Provide Some COLA Earlier

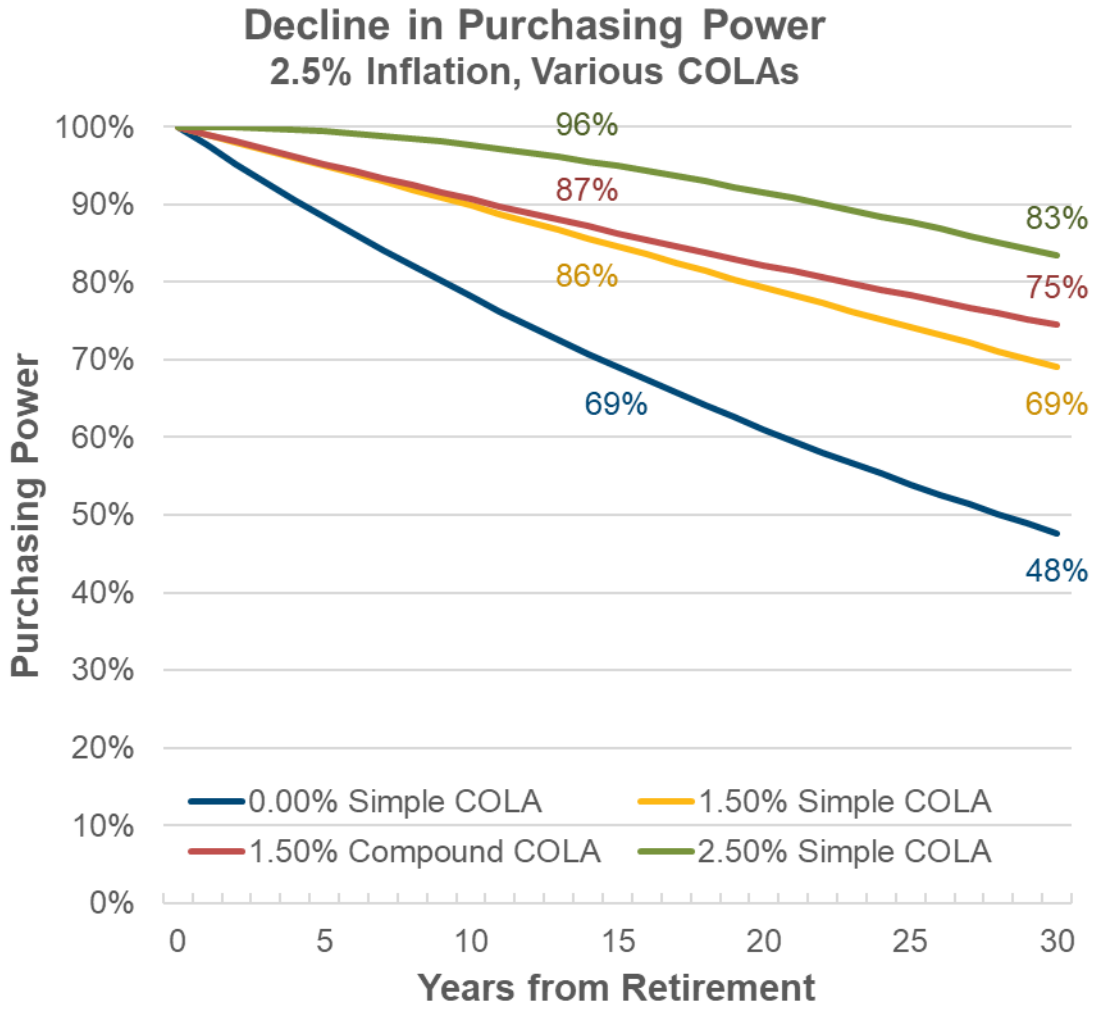


COLA Background

- Prior to HB 3158
  - Automatic 4% Simple COLA if hired prior to 1/1/2007
  - Ad Hoc Simple COLA up to 4% if hired after 12/31/2006
- After HB 3158
  - Ad Hoc Simple COLA that depends on investment returns (not inflation)
    - 5-year average return minus 5%
    - Maximum of 4%
  - COLA can only be granted if funded percentage > 70%
    - 2023 valuation projects first COLA in 2073
    - With revised funding plan, first COLA expected to be paid about 2046

COLA Provides Purchasing Power Protection

- DPFP members are not covered by Social Security
  - Social Security benefits are fully indexed to inflation
- Over time, COLAs that don't keep up with inflation erode the retiree's purchasing power
- COLAs are expensive



Why Consider Improving the COLA Now?

- Arguments against improving COLAs
  - System is already poorly funded without improved COLAs
  - COLAs will require additional contributions to fully fund the System
  - Natural response is to exclude consideration of any COLA improvements until funding improves
- However, can Dallas maintain its Police and Fire workforce while offering no COLA for the next 20+ years?
  - No Social Security coverage to provide inflation protection in retirement
  - Remainder of Dallas' workforce receives annual COLAs up to 3.0% (5.0% if hired prior to 2017)
- If COLAs will be needed within the next 20 years
  - Costs should be included in the budget plan now
  - Ignoring or deferring these costs may lead to inadequate funding
  - Options outlined in the presentation provide a spectrum to illustrate the cost/benefit trade-offs, but are not exhaustive of all options available

COLA Design Choices

CPI vs. Investment Return Basis

- Retirees living expenses vary with CPI
- Resources to pay for COLA depend on investment returns

Simple vs. Compound

- Inflation compounds
- Compound COLAs are more expensive than simple COLAs
- Difference is minimal in years shortly after retirement but grows as retirees age
- Savings from simple COLAs come at the expense of the oldest retirees

Funded Status Requirement

- Automatically reduces or eliminates COLA when plan is not well funded
- Reduces plan costs when the plan most needs it
- May force retirees to go without any COLA for many years, resulting in a significant decline in purchasing power

Purchasing Power Protection

- Sets a floor (e.g., 70%) for each retiree's decline in purchasing power, providing compound COLAs equal to inflation once a retiree's benefit reaches the floor
- Purchasing power protection limits risk to retirees when COLA is:
  - Simple,
  - Based on investment return, or
  - Subject to funded status requirements

Expected and Maximum Amounts

- COLAs are usually designed to provide an expected amount with some level of variability
- To control costs, there is often a cap on the amount of any single COLA
- Some plans allow retirees to "bank" any excess amount to use in a future year if the CPI increase exceeds the maximum COLA

COLA Background

Dallas Police & Fire Pension System

- After HB 3158 (Effective 9/1/2017)
  - Ad Hoc
  - Simple COLA that depends on investment returns (not inflation)
    - 5-year average return minus 5%
    - Expected 1.5% COLA
      - 6.5% expected return – 5.0% = 1.5%
    - Maximum of 4%
  - Can only be granted if funded percentage > 70%
    - 2023 valuation projects first COLA in 2073
    - With revised funding plan, first COLA expected to be paid about 2046

Dallas Employees Retirement Fund

- Hired prior to January 1, 2017
  - Automatic
  - Simple COLA equal to CPI
  - Maximum = 5.0%
- Hired after December 31, 2016
  - Automatic
  - Simple COLA equal to CPI
  - Maximum = 3.0%

Modeled COLA Options

	Current	Dallas Employees Retirement Fund COLA	Immediate Partial COLA	Current + 70% PP	Current + 80% PP	Current Immediate + 80% PP	Compound Current Immediate + 80% PP
CPI vs. Investment	Investment	**CPI**	Investment	Investment / **CPI**	Investment / **CPI**	Investment / **CPI**	Investment / **CPI**
Simple vs. Compound	Simple	Simple	Simple	Simple / **Compound**	Simple / **Compound**	Simple / **Compound**	**Compound**
Funded Status	70%	**0%**	**0%**	70%	70%	**0%**	**0%**
Purchasing Power (PP) Protection	None	None	None	**70% of 2024 PP**	**80% of 2024 PP**	**80% of 2024 PP**	**80% of 2024 PP**
Expected Amount / Maximum	1.5% / 4.0%	**2.5% / 3.0%**	**1.5% times Funded %** / 4.0%	1.5% / 4.0%	1.5% / 4.0%	1.5% / 4.0%	1.5% / 4.0%

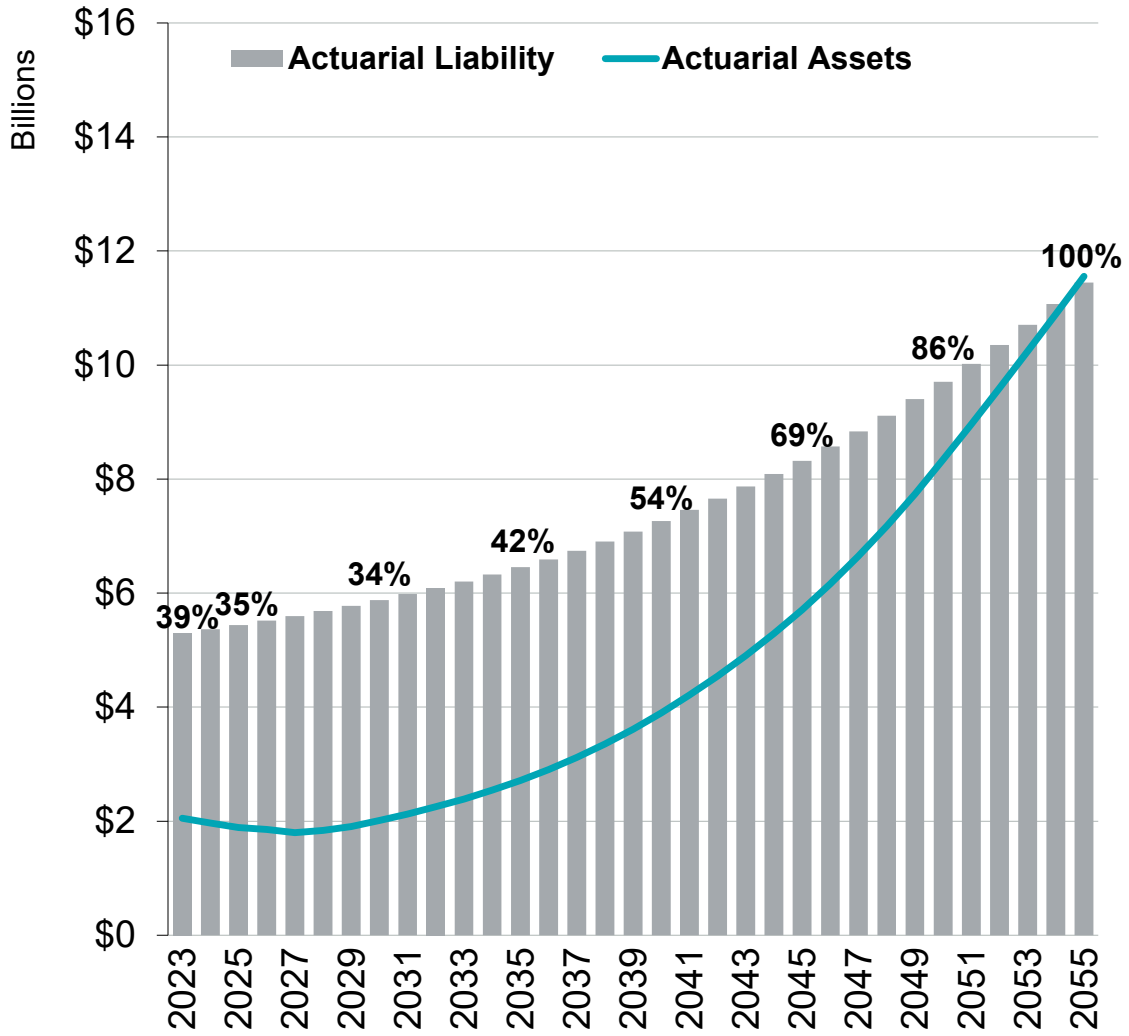
Option 3A - Current COLA – Purchasing Power Impact

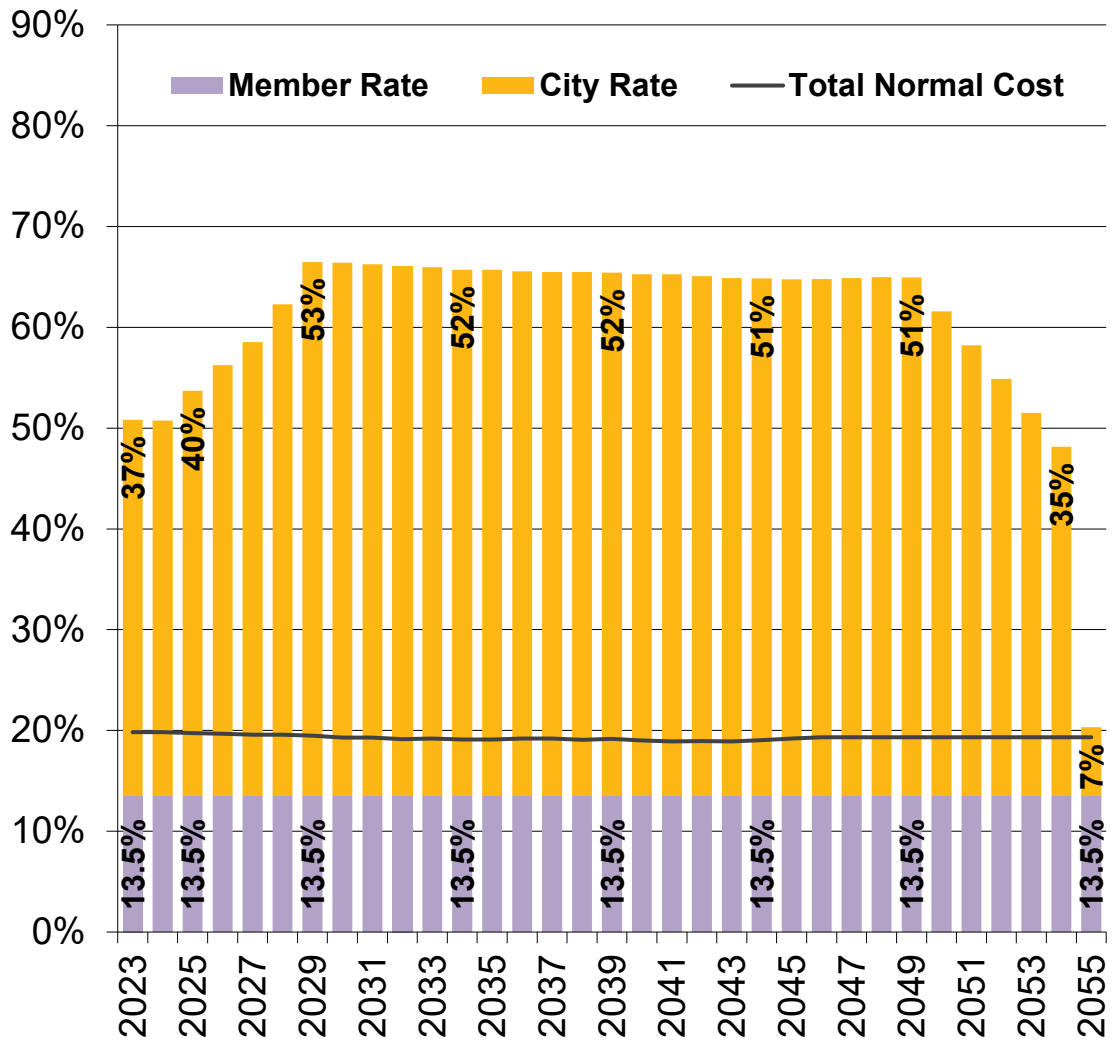
Purchasing Power

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	63%	60%	56%
2022	96%	85%	75%	66%	60%	57%	54%
2021	88%	77%	68%	60%	55%	52%	49%
2020	83%	73%	65%	57%	52%	49%	47%
2019	82%	73%	64%	57%	52%	49%	46%
2018	81%	71%	63%	56%	51%	48%	45%
2017	79%	70%	61%	54%	49%	47%	44%
2016	76%	67%	60%	53%	48%	45%	43%
2015	78%	69%	61%	54%	49%	46%	43%
2010	86%	76%	67%	59%	54%	50%	47%
2005	93%	83%	73%	65%	58%	54%	50%
2000	94%	83%	73%	65%	58%	54%	
1995	92%	82%	72%	64%	57%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

- Chart shows purchasing power in each year compared to purchasing power at time of retirement
- Future inflation = 2.5%
- Past COLAs
  - 4% simple through 2016
  - 0% 2017 - 2023
- Future COLAs
  - COLAs re-start once plan achieves 70% funding (~2046)
  - Expected COLA = 1.5% Simple

Option 3A – Current COLA
With 5-Year Step Up / Step Down ADC





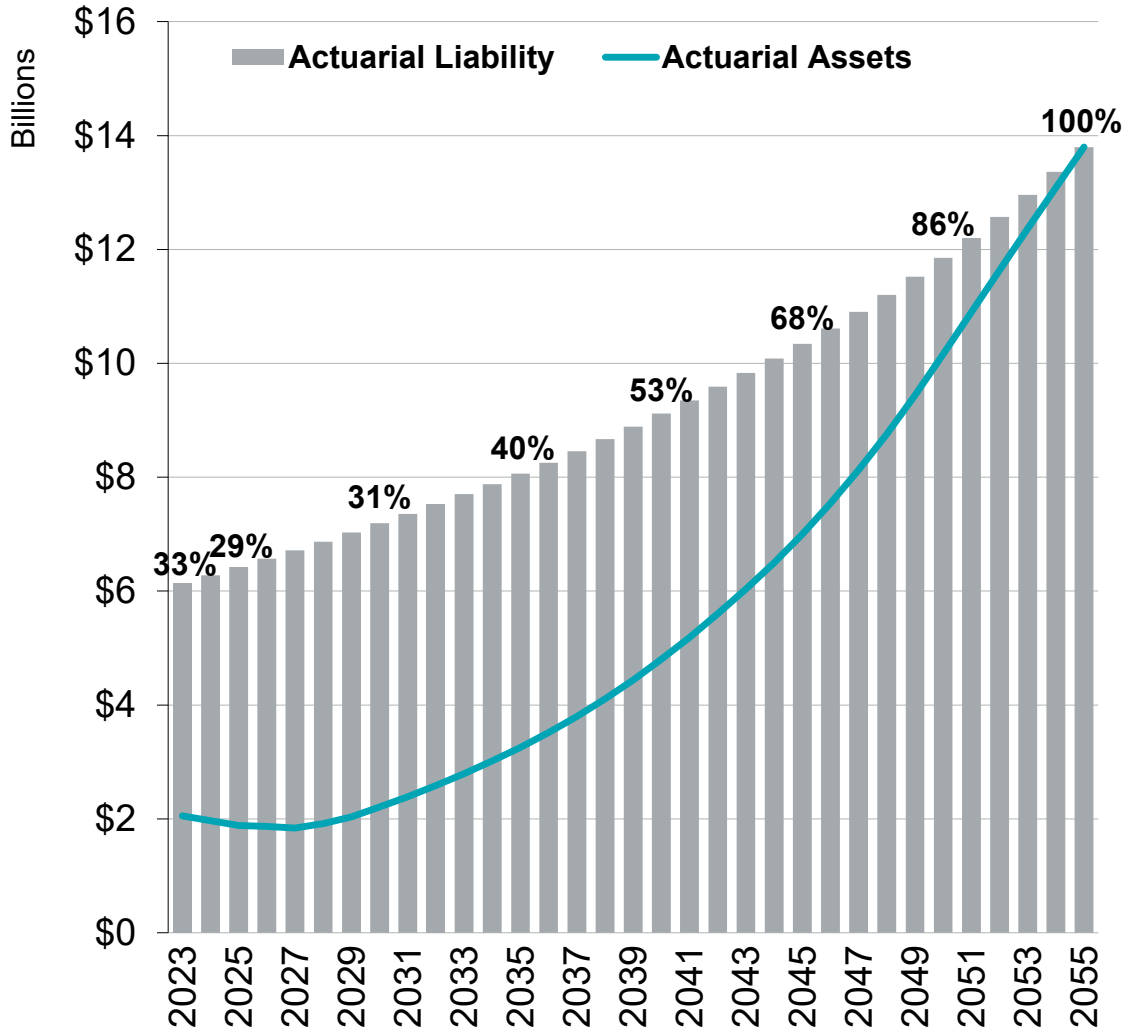
Option 3B – Current Employees Retirement Fund COLA
Purchasing Power Impact

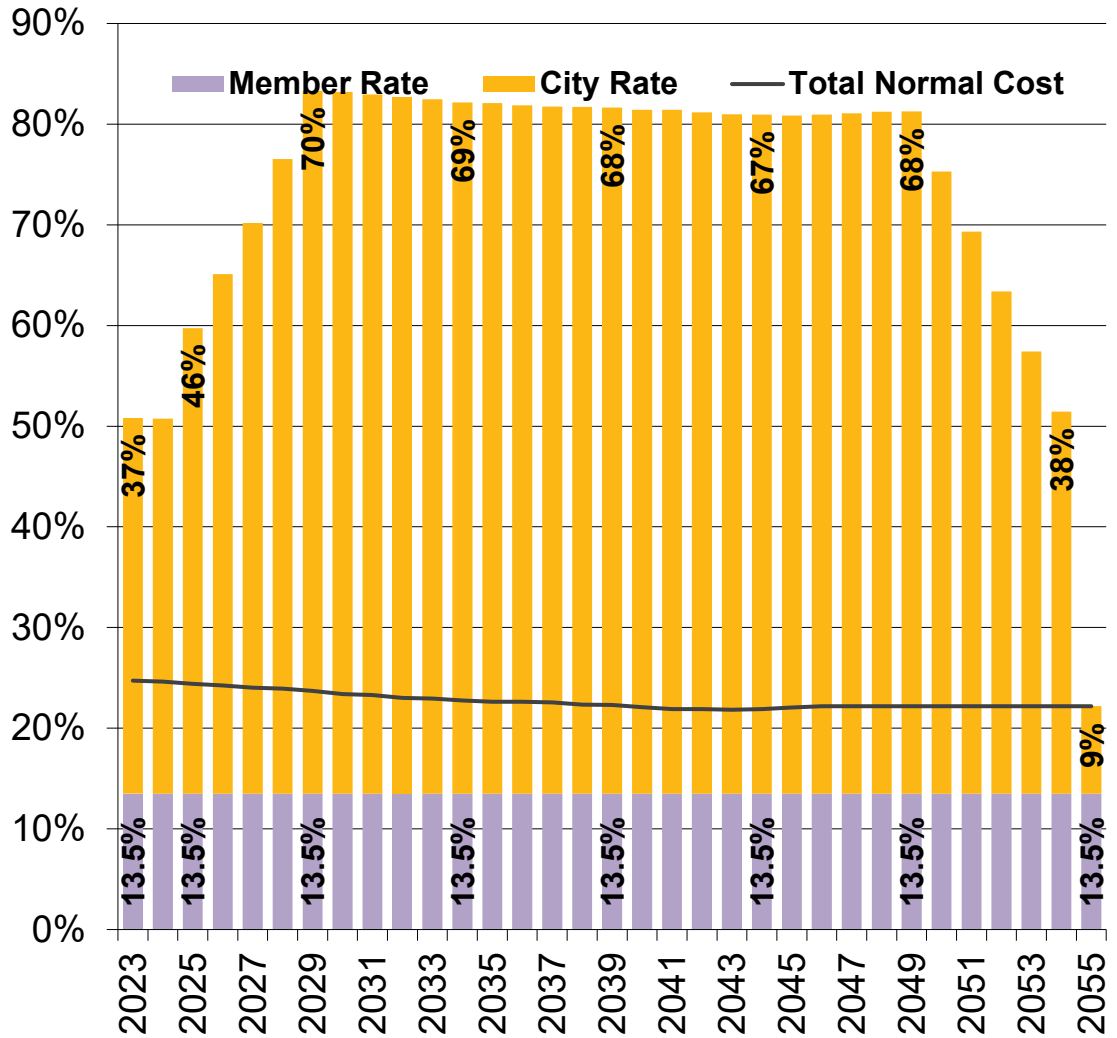
Purchasing Power

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	99%	98%	95%	92%	88%	83%
2022	96%	95%	93%	91%	88%	84%	80%
2021	88%	87%	86%	83%	80%	77%	73%
2020	83%	82%	81%	79%	76%	72%	69%
2019	82%	82%	80%	78%	75%	72%	69%
2018	81%	80%	79%	77%	74%	71%	67%
2017	79%	78%	77%	75%	72%	69%	66%
2016	76%	76%	74%	72%	70%	67%	64%
2015	78%	77%	75%	73%	70%	67%	64%
2010	86%	84%	81%	77%	74%	70%	66%
2005	93%	90%	86%	81%	77%	72%	68%
2000	94%	89%	85%	80%	75%	70%	
1995	92%	87%	82%	77%	72%		
1990	90%	84%	79%	73%			
1985	84%	79%	73%				
1980	70%	65%					

- ERF COLA is expected to better maintain retirees purchasing power
  - 2.5% assumed inflation
  - COLA equals CPI up to a maximum of 3.0% (Tier B)
- Retirees' purchasing power declines gradually due to simple COLA vs. compound inflation
- Implementing the ERF COLA for DPFP would increase costs significantly

Option 3B – Current Employees Retirement Fund COLA
With 5-Year Step Up / Step Down ADC





Option 3D – Current COLA with 70% 2024 PP Protection
Purchasing Power Impact

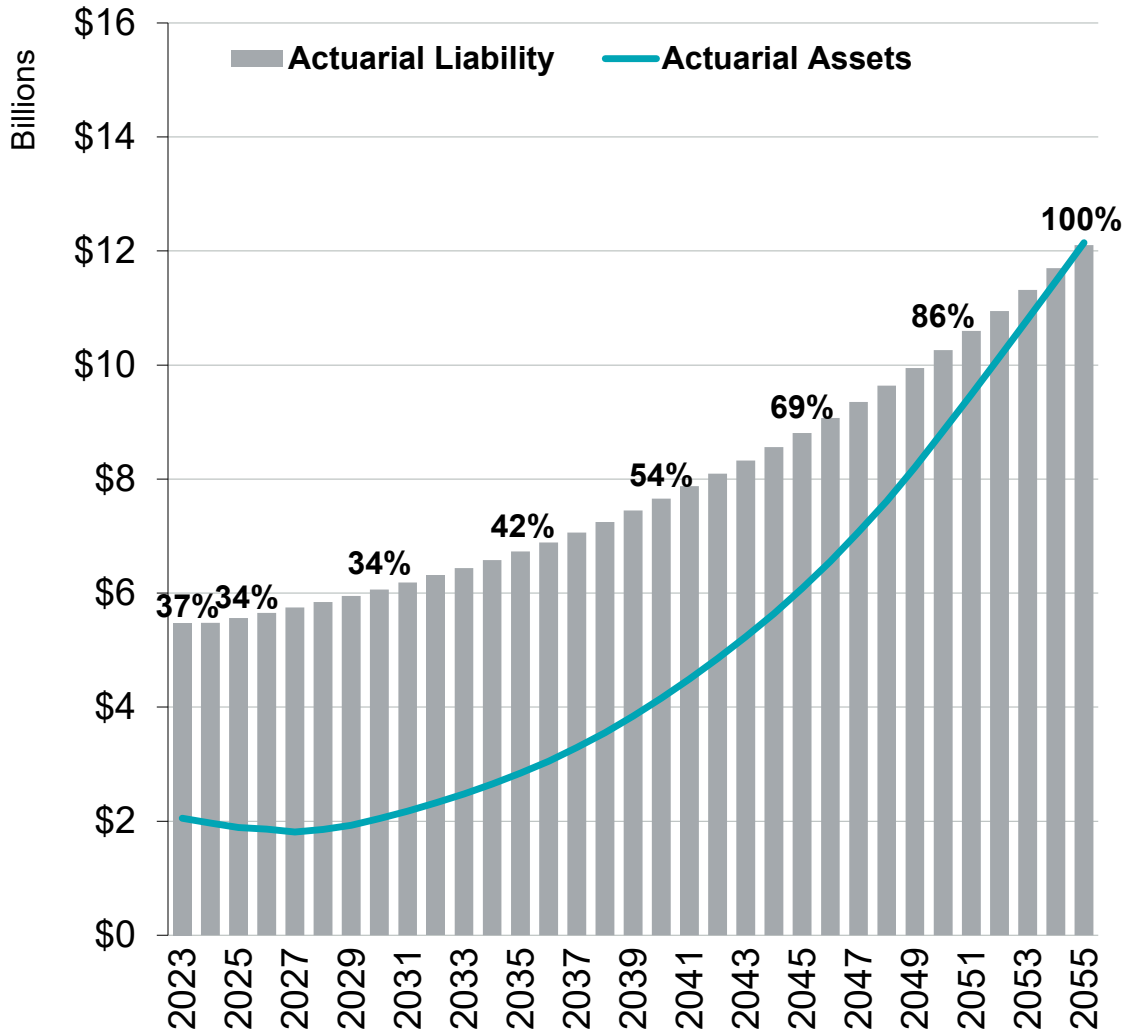
Purchasing Power

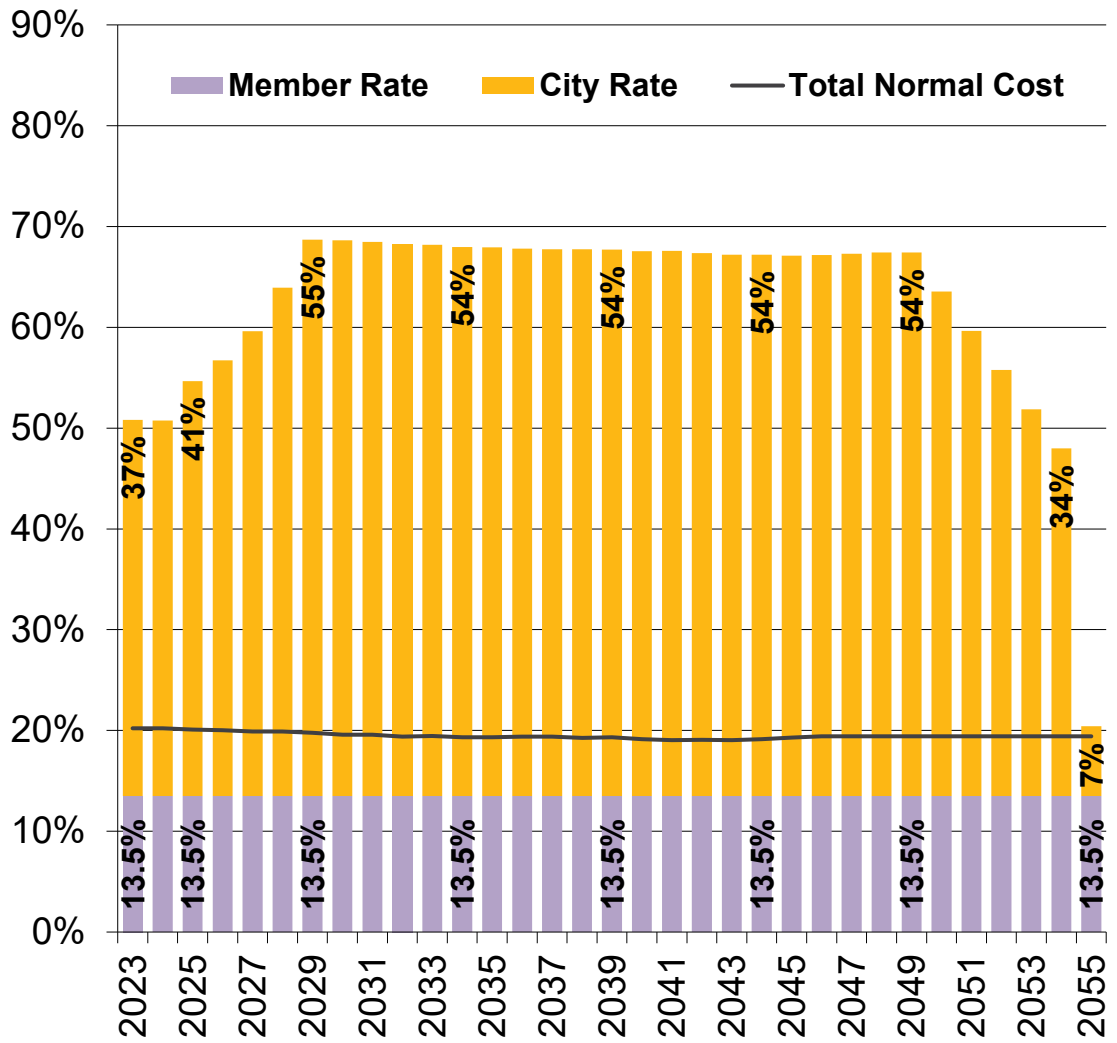
Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	70%	70%	70%	70%
2022	96%	85%	75%	67%	67%	67%	67%
2021	88%	77%	68%	61%	61%	61%	61%
2020	83%	73%	65%	58%	58%	58%	58%
2019	82%	73%	64%	58%	58%	58%	58%
2018	81%	71%	63%	56%	56%	56%	56%
2017	79%	70%	61%	55%	55%	55%	55%
2016	76%	67%	60%	53%	53%	53%	53%
2015	78%	69%	61%	54%	54%	54%	54%
2010	86%	76%	67%	60%	60%	60%	60%
2005	93%	83%	73%	65%	65%	65%	65%
2000	94%	83%	73%	66%	66%	66%	
1995	92%	82%	72%	65%	65%		
1990	90%	79%	70%	63%			
1985	84%	75%	66%				
1980	70%	62%					

- Provides floor to protect retirees' purchasing power from declining too far
  - Floor = 70% of the 2024 purchasing power
  - Purchasing power gradually erodes with inflation until it reaches the floor (~15 years)
  - Thereafter, inflationary COLAs are provided to maintain the floor purchasing power level
- Using 2024 purchasing power as the benchmark
  - Limits costs
  - Does not protect all retiree cohorts at the same level

Option 3D – Current COLA with 70% 2024 PP Protection

With 5-Year Step Up / Step Down ADC





Option 3E – Current COLA with 80% 2024 PP Protection
Purchasing Power Impact

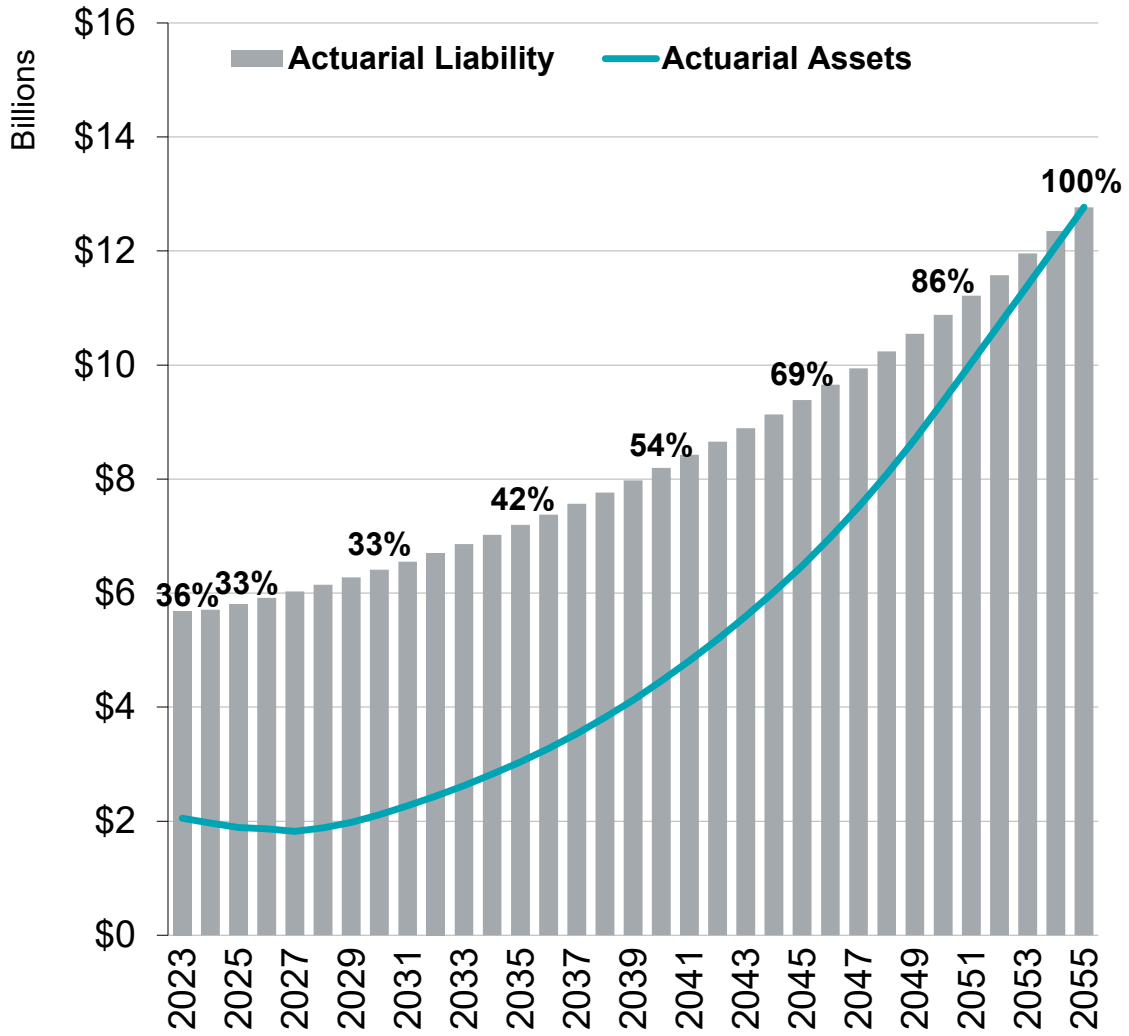
Purchasing Power

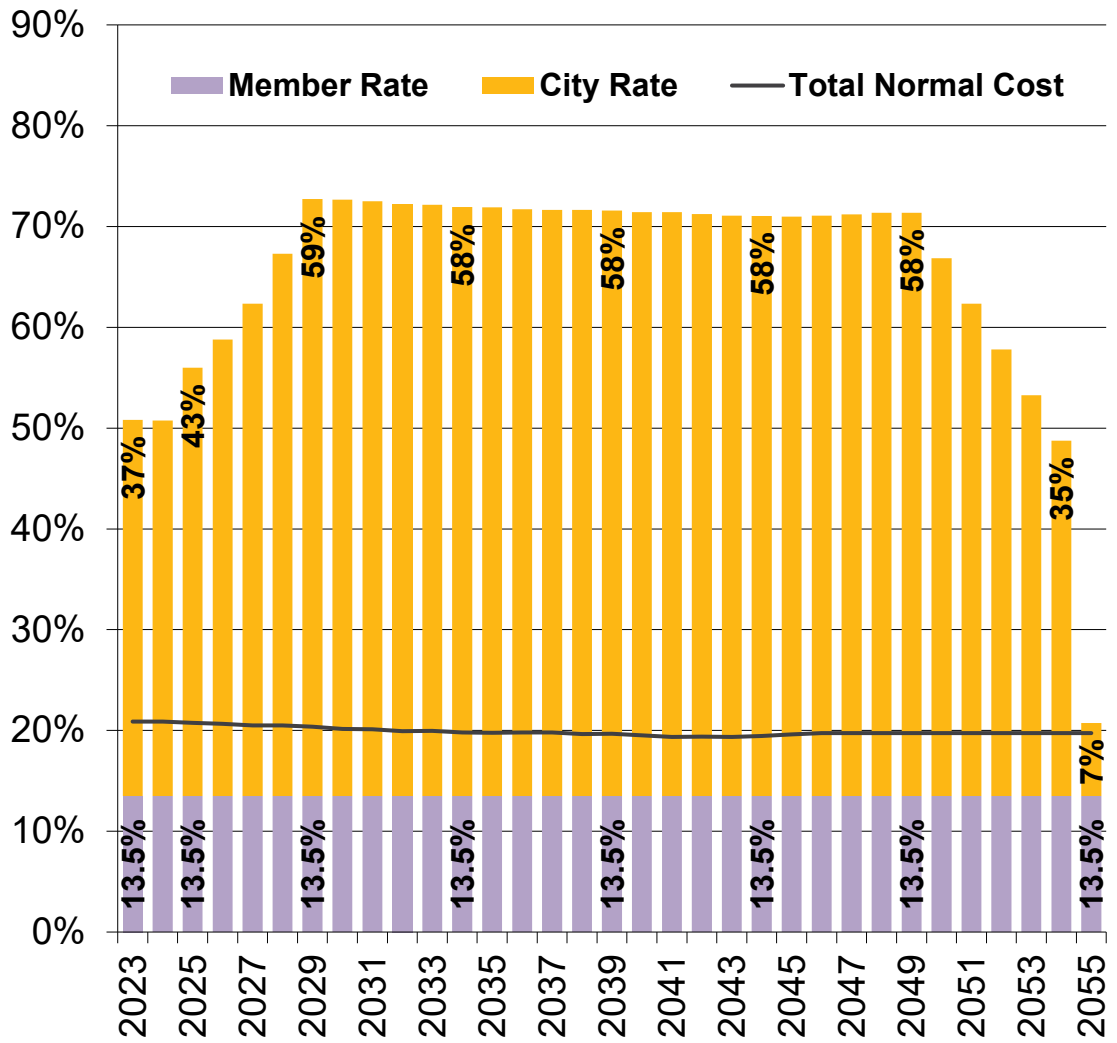
Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	80%	80%	80%	80%	80%
2022	96%	85%	77%	77%	77%	77%	77%
2021	88%	77%	70%	70%	70%	70%	70%
2020	83%	73%	66%	66%	66%	66%	66%
2019	82%	73%	66%	66%	66%	66%	66%
2018	81%	71%	64%	64%	64%	64%	64%
2017	79%	70%	63%	63%	63%	63%	63%
2016	76%	67%	61%	61%	61%	61%	61%
2015	78%	69%	62%	62%	62%	62%	62%
2010	86%	76%	69%	69%	69%	69%	69%
2005	93%	83%	75%	75%	75%	75%	75%
2000	94%	83%	75%	75%	75%	75%	
1995	92%	82%	74%	74%	74%		
1990	90%	79%	72%	72%			
1985	84%	75%	67%				
1980	70%	62%					

- Provides floor to protect retirees' purchasing power from declining too far
  - Floor = 80% of the 2024 purchasing power
  - Purchasing power gradually erodes with inflation until it reaches the floor (~10 years)
  - Thereafter, inflationary COLAs are provided to maintain the floor purchasing power level
- Using 2024 purchasing power as the benchmark
  - Limits costs
  - Does not protect all retiree cohorts at the same level

Option 3E – Current COLA with 80% 2024 PP Protection

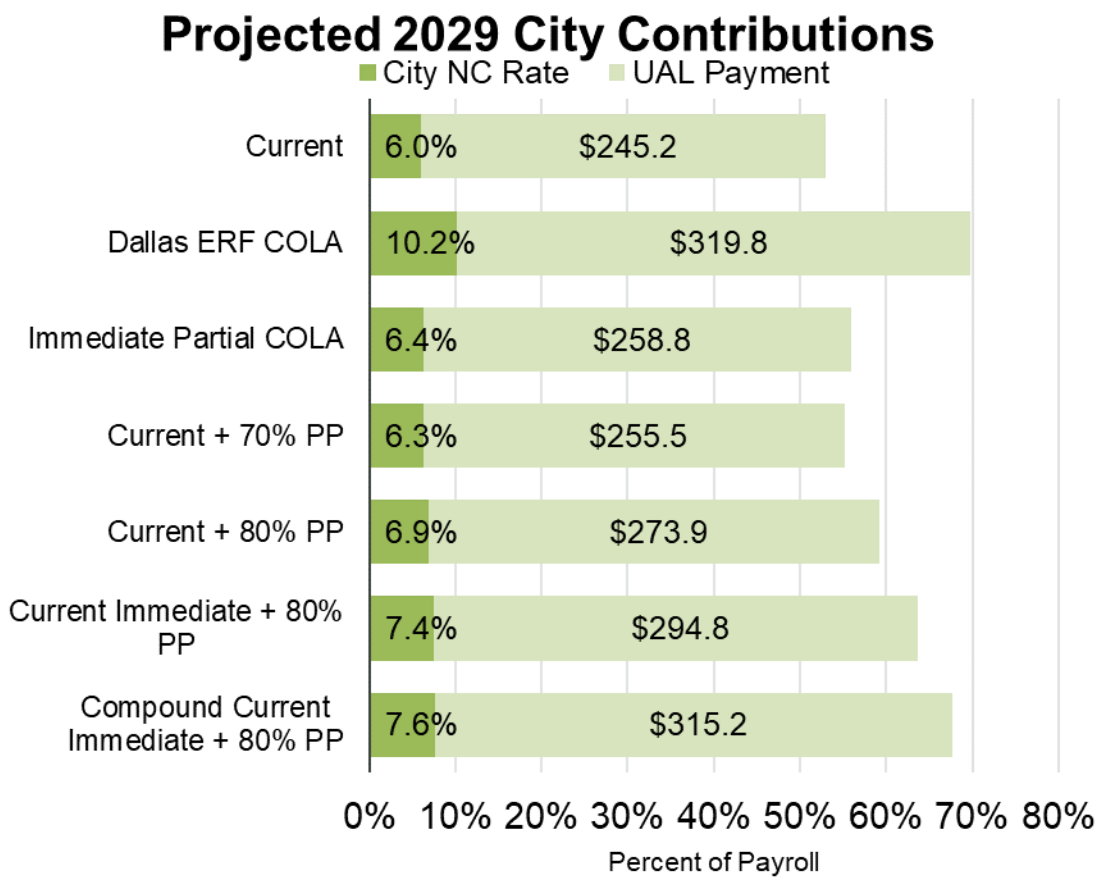
With 5-Year Step Up / Step Down ADC





Summary of COLA Options

Estimated Cost Impact



Expected Purchasing Power Comparison 2023 Retirees

	Purchasing Power						
COLA Scenario	**2024**	**2029**	**2034**	**2039**	**2044**	**2049**	**2054**
Current	100%	88%	78%	69%	63%	60%	56%
Dallas ERF COLA	100%	99%	98%	95%	92%	88%	83%
Immediate Partial COLA	100%	89%	81%	74%	69%	64%	60%
Current + 70% PP	100%	88%	78%	70%	70%	70%	70%
Current + 80% PP	100%	88%	80%	80%	80%	80%	80%
Current Immediate + 80% PP	100%	95%	90%	85%	80%	80%	80%
Compound Current Immediate + 80% PP	100%	95%	91%	86%	82%	80%	80%

COLA Scenario	2023 UAL	2023 Funded %
Current	$ 3,244	38.8%
Dallas ERF COLA	$ 4,084	33.5%
Immediate Partial COLA	$ 3,403	37.6%
Current + 70% PP	$ 3,424	37.5%
Current + 80% PP	$ 3,632	36.1%
Current Immediate + 80% PP	$ 3,803	35.1%
Compound Current Immediate + 80% PP	$ 4,020	33.8%

Observations/Rationale for Recommendations

- COLAs are expensive
  - Often first item cut to save costs
- Can Dallas continue to maintain its Police and Fire workforce while offering no COLA for the next 20+ years?
  - Expect significant reduction in purchasing power for retirees
  - No Social Security coverage to provide inflation protection in retirement
  - Remainder of Dallas' workforce receives annual COLAs up to 3.0% (5.0% if hired prior to 2017)
- Rather than waiting and having new COLAs add to plan costs later, we recommend building the costs into the budget plan now
  - Determine COLA provisions needed for the Police and Fire workforce
  - Balance with additional contributions required to pay for COLA
  - Options outlined in presentation provide a spectrum to illustrate the cost/benefit trade-offs, but are not exhaustive of all options available

Primary Recommendations

Adopt an Actuarially Determined Contribution

- Contribution amounts adjust to circumstances
- Always comply with funding guidelines
- Start contributions effective either 10/1/2024 or 1/1/2025 based on 1/1/2023 valuation

Reduce Employee Contribution Rate as Funding Improves

- Current rate is high compared to competitors and as proportion of benefit cost
- As funding improves, grade employee rate down to 50% of normal cost rate

Provide Some COLA Earlier Than Current Provisions Permit

- Members are not covered by Social Security, so they have no inflation protection in retirement
- Lack of COLA is likely to create a recruitment and retention issue

Questions



Certification

The purpose of this presentation is to show the initial independent actuarial analysis providing alternative benefit and contribution scenarios that comply with the requirements of Texas Government Code Section 802 to the Dallas Police and Fire Pension System Board. The initial analysis is based on our replication of the 2023 actuarial valuation performed by Segal.

In preparing our presentation, we relied on information, some oral and some written, supplied by the Dallas Police and Fire Pension System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23. A summary of the data, assumptions, methods, and plan provisions used to prepare our analysis can be found in Segal's 2023 actuarial valuation report supplemented by additional information in the appendix of this presentation.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in this presentation. This presentation does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Dallas Police and Fire Pension System Board for the purpose described herein. This presentation is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

William R. Hallmark, ASA, EA, MAAAA, FCA
Consulting Actuary

Elizabeth Wiley, FSA, EA, MAAA, FCA
Consulting Actuary

Jake Libauskas, FSA, EA, MAAA, FCA
Consulting Actuary

Appendix – Basis for Analysis

- The preliminary analysis shown in this presentation is based on the data, assumptions, methods, and plan provisions as summarized in Segal's January 1, 2023 actuarial valuation
- In addition, the following assumptions were used, unless otherwise noted:
  - Investment return for 2023 and thereafter: 6.5%
  - Payroll growth of 2.5% per year
- This analysis would be materially changed if the System receives an adverse result in pending litigation on annual benefit adjustments

Appendix – Models

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have a basic understanding of ProVal and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this valuation.

Deterministic projections in this report were developed using *P-Scan*, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System.

P-Scan uses standard roll-forward techniques that implicitly assume a stable active population. Because *P-Scan* does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

Appendix – 2023 Valuation Replication

Present Value of Benefits

	Segal	Cheiron	Percent Difference
Actives			
Hired Before 3/1/2011	$ 1,847	$ 1,854	0.4%
Hired On/After 3/1/2011	643	656	2.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 6,088	$ 6,105	0.3%

Actuarial Liability

	Segal	Cheiron	Percent Difference
Actives			
Hired Before 3/1/2011	$ 1,454	$ 1,453	-0.1%
Hired On/After 3/1/2011	198	196	-1.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 5,249	$ 5,244	-0.1%

Amounts in Millions

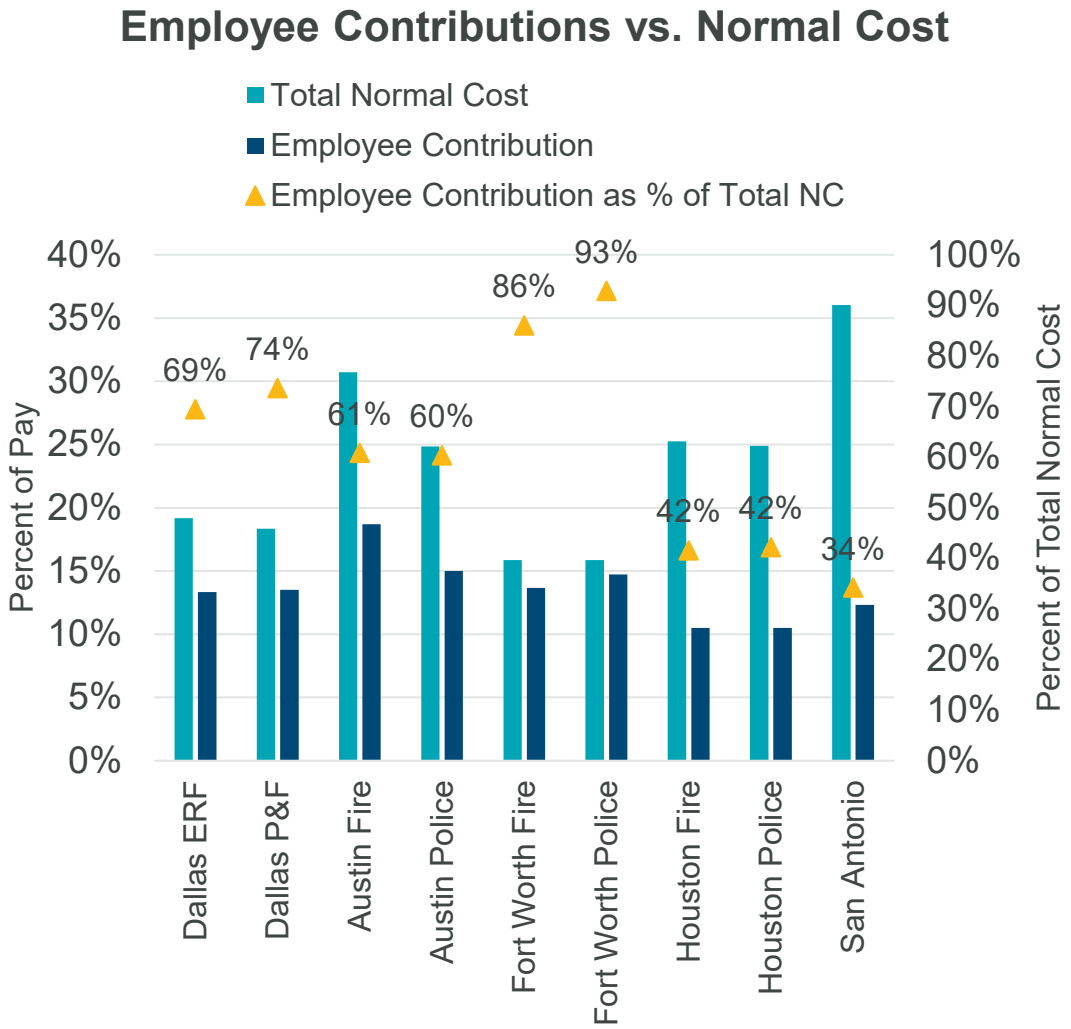
Normal Cost

	Segal	Cheiron	Percent Difference
Hired Before 3/1/2011	$ 49.7	$ 50.9	2.3%
Hired On/After 3/1/2011	33.9	33.2	-2.0%
Total Normal Cost	$ 83.7	$ 84.1	0.6%
Total Normal Cost with interest to reflect mid-year contribution timing	$ 86.3	$ 86.8	0.6%
Payroll	$ 462.8	$ 462.8	0.0%
Normal Cost Rate			
Hired Before 3/1/2011	19.7%	20.2%	0.5%
Hired On/After 3/1/2011	17.3%	16.9%	-0.4%
Total Normal Cost Rate	18.7%	18.8%	0.1%

Amounts in Millions

Appendix - Employee Contribution Rates (Most Recent Tiers)

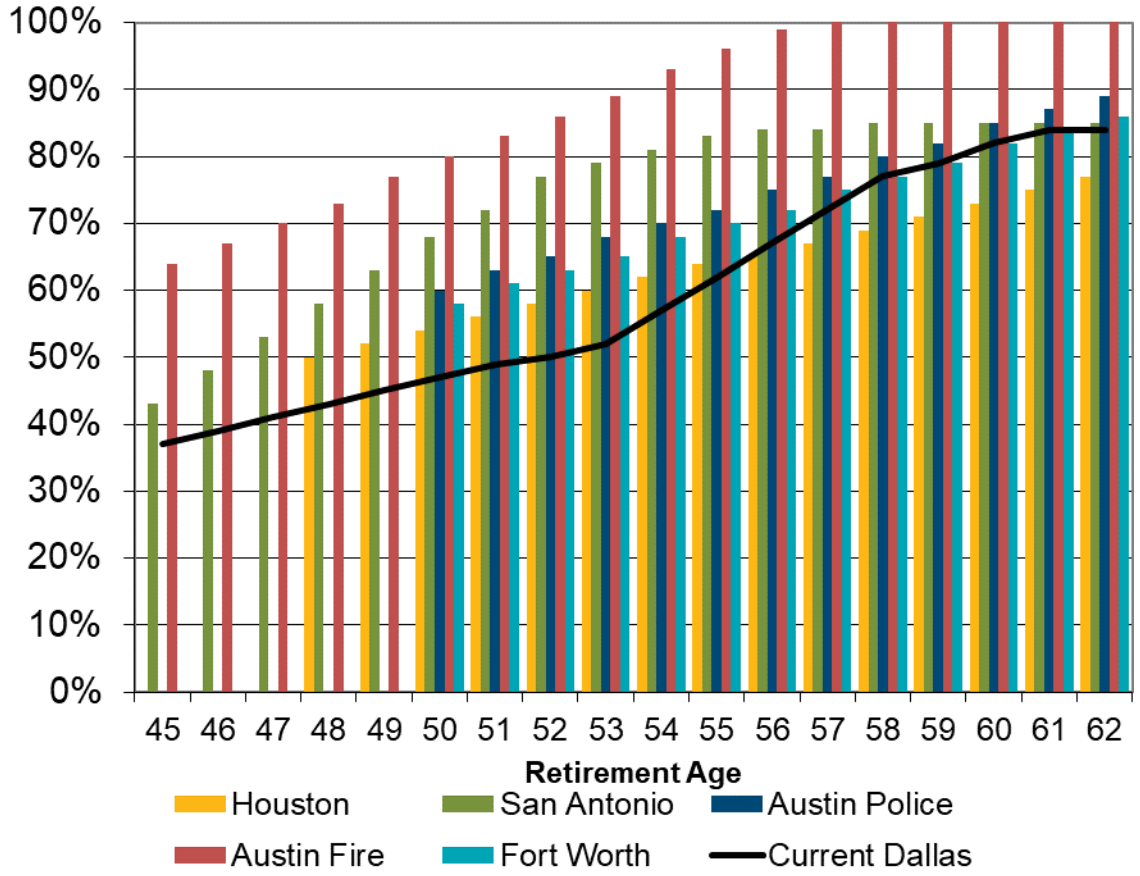
- Current DPFP employee contribution rate is over 70% of the total normal cost
  - Even higher percentage for new employees
  - Highest portion of normal cost in comparison group except for Fort Worth
  - Average of group is about 60%
    - Reflecting current temporary increases due to funded status for some Systems
- Hard to reduce employee contributions until better funded
  - DPFP employee rate reduces to 50% of total normal cost once 100%+ funded
- Consider setting the employee contribution rate equal to 50% of total normal cost plus an additional amount based on funded ratio
  - Current rate remains the same
  - As funding improves, employee contribution rate would gradually decline



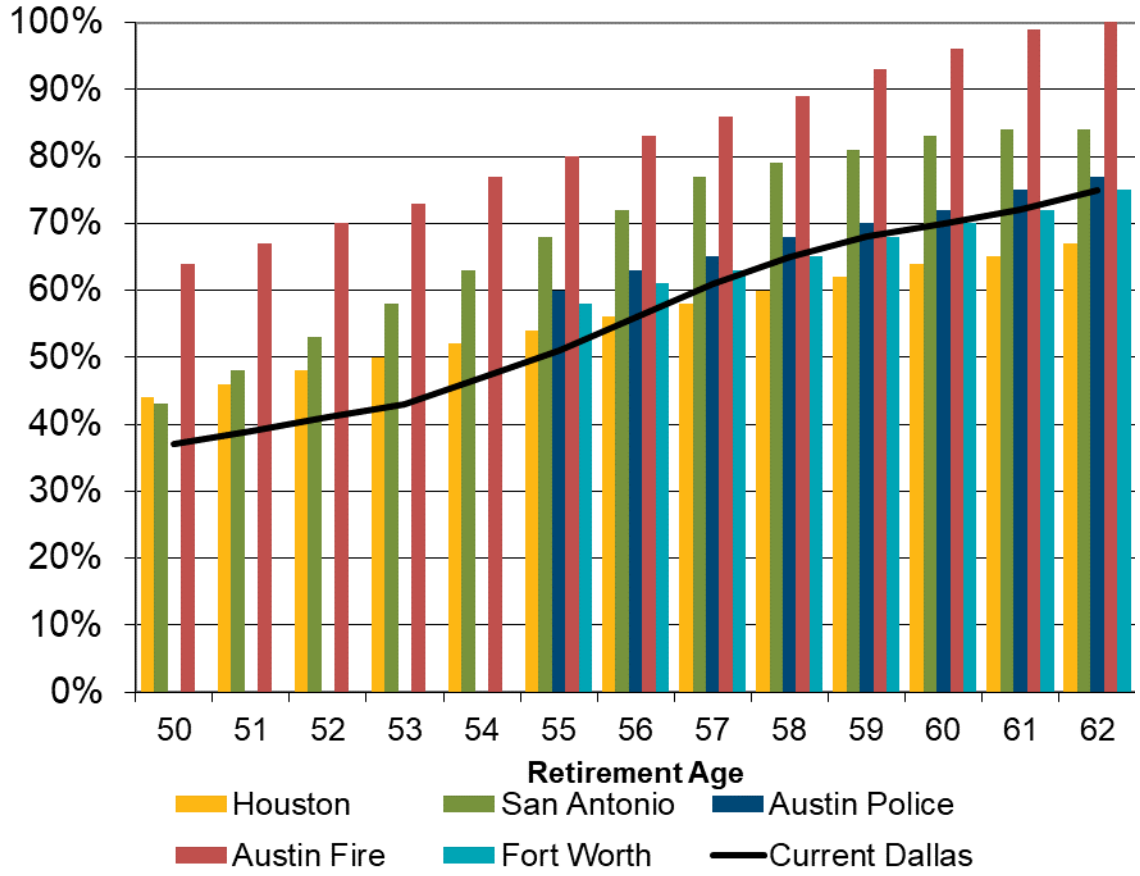
Fort Worth valuation doesn't report total normal cost for Police and Fire separate from general employees, but benefits are similar.

Appendix - Income Replacement Ratios* – Most Recent Safety Tiers

Hired at Age 25



Hired at Age 30

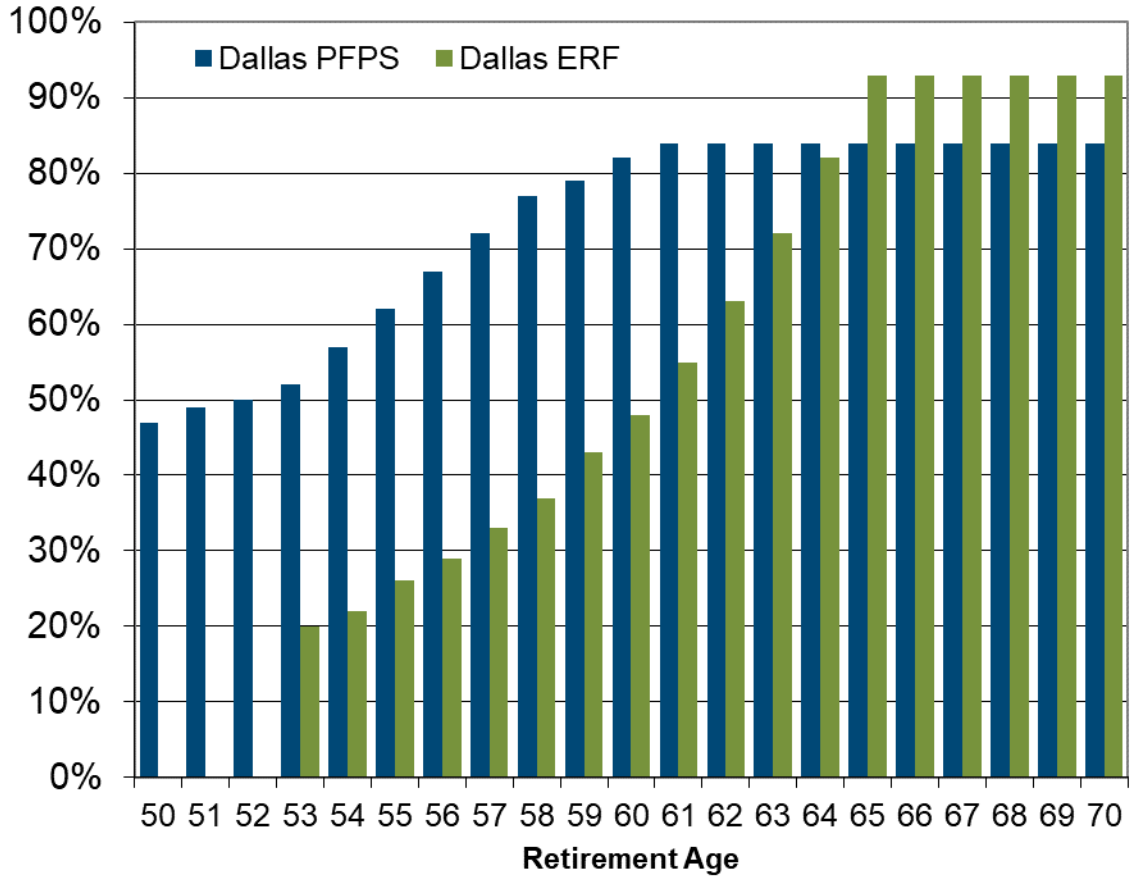


Fort Worth Police can retire after 25 years of service, but Fire must satisfy the Rule of 80

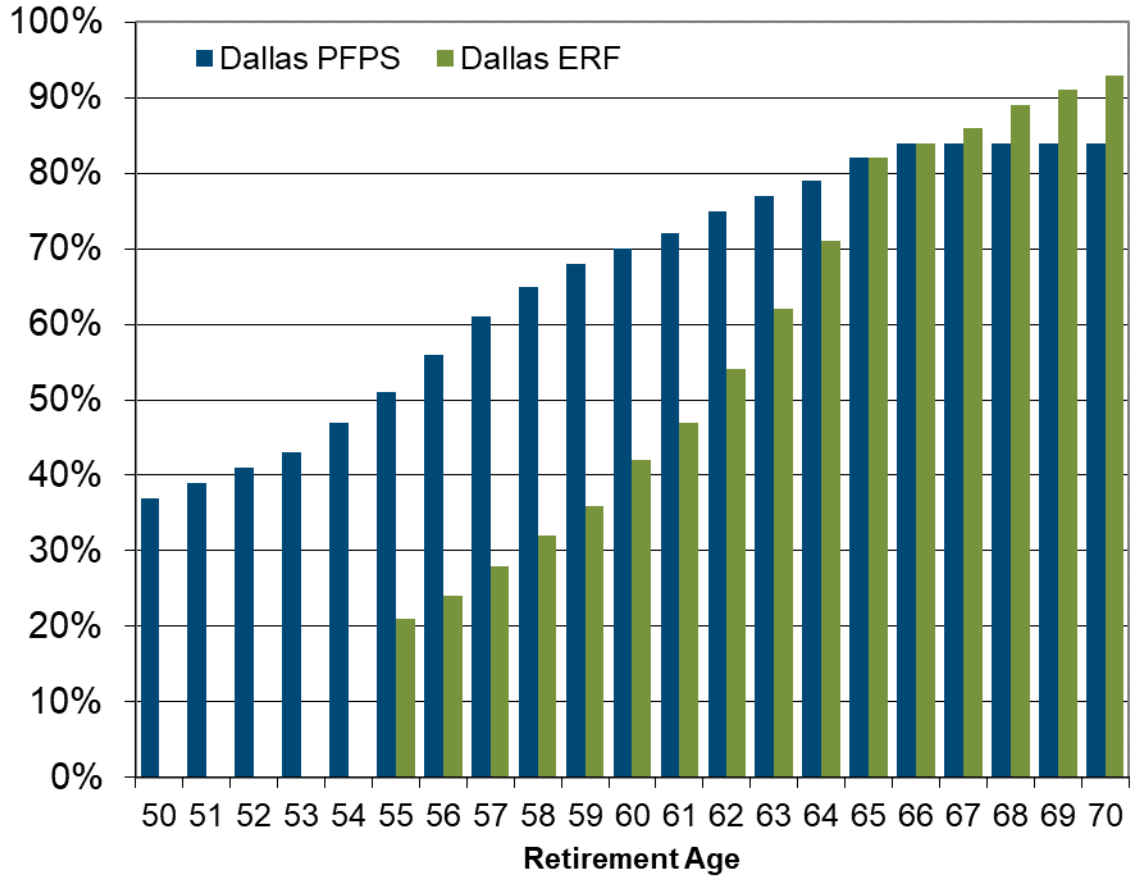
**Income replacement ratios are at retirement and do not reflect COLAs after retirement*

Appendix - Income Replacement Ratios* – Dallas Newest Tiers

Hired at Age 25



Hired at Age 30



**Income replacement ratios are at retirement and do not reflect COLAs after retirement*

Appendix - Other System COLAs – Most Recent Tier

- Dallas Employees' Retirement Fund
  - Simple CPI up to 3.0%
- Austin
  - Police – no COLAs permissible unless statutes amended by Legislature
  - Fire – ad hoc COLAs based on affordability under Board's COLA policy
- Ft. Worth – no COLA permissible without Legislative action
- Houston
  - Five-year average return minus 4.75%/5.00% (Fire/Police)
    - Minimum = 0.0%
    - Maximum = 4.0%
  - No funded ratio requirement
- San Antonio Fire & Police
  - 75% of CPI
  - Possible additional payments
    - 13th check if five-year average return exceeds assumption by at least 100 basis points
    - 14th check if five-year average return exceeds assumption by at least 300 basis points

Appendix – Recommended UAL Payment Structure

Structure and Initial Layers

- Layered amortizations with 2.5% rate of annual payment increases
  - Separate amortization layer for each year of experience, assumption changes, and plan changes
- Start with two initial layers that add up to the full UAL
  - 30-year base layer approximating the current UAL payment
  - Layer that steps into the full contribution over as short of a period as financially possible and steps back down at the end of 30 years

Future Amortization Layers

- Experience and assumption changes = Maximum of 20 years or remaining period on base layer
  - Prevents any gains from being amortized faster than the base layer
  - Transitions to 20-year layered amortization
- Plan changes
  - Active employees = Average future service of those affected by change or 15 years
  - Retirees = Average remaining lifetime of those affected by change or 10 years
- Lump sum contributions
  - In first four years, first reduce or eliminate any remaining graded increases
  - After four years or after future graded increases have been eliminated, reduce the base layer

Additional COLA Options

Option 3C – Immediate Partial COLA
Purchasing Power Impact

Purchasing Power

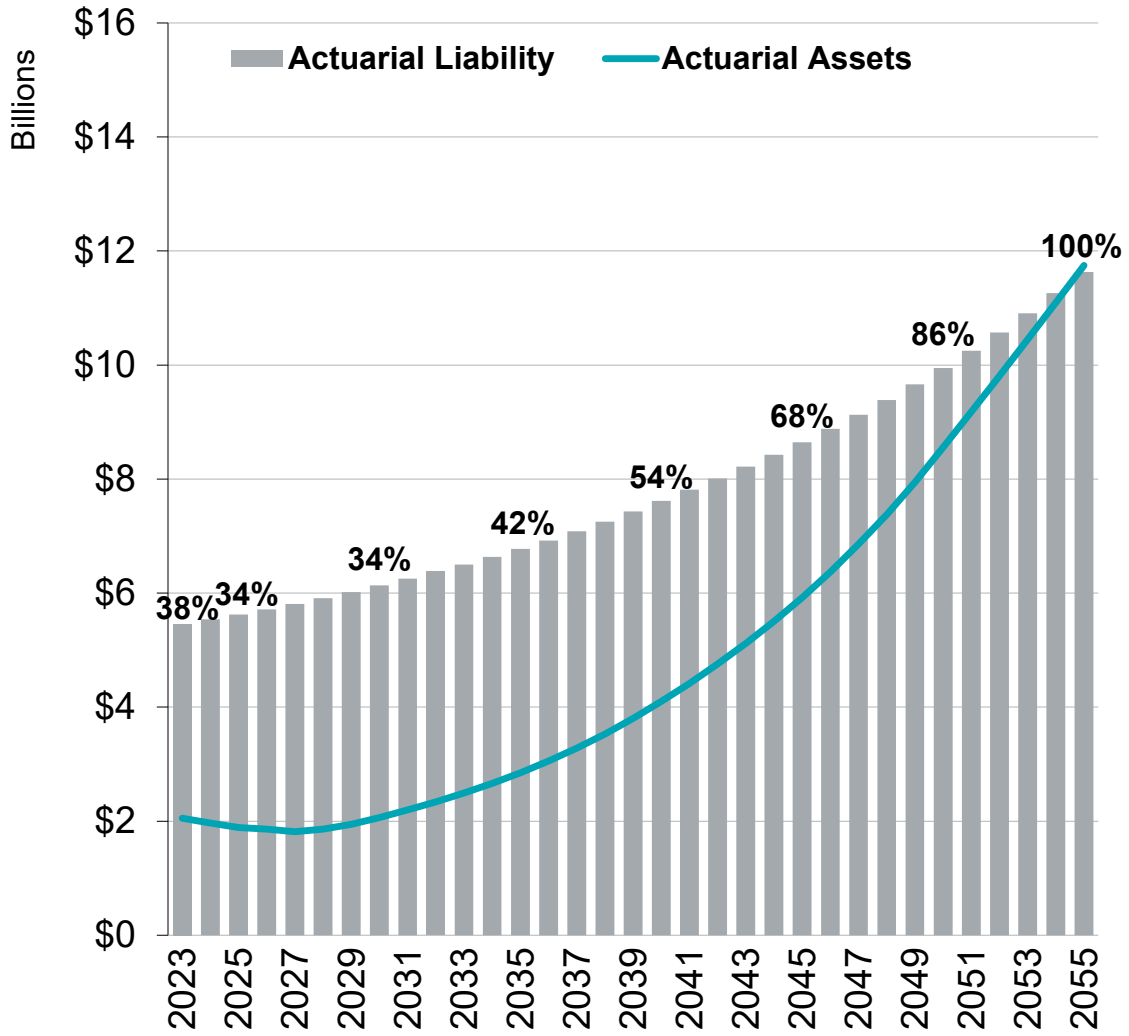
Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	89%	81%	74%	69%	64%	60%
2022	96%	85%	77%	71%	66%	61%	58%
2021	88%	78%	71%	65%	60%	56%	53%
2020	83%	73%	67%	61%	57%	53%	50%
2019	82%	73%	67%	61%	56%	53%	50%
2018	81%	72%	65%	60%	55%	52%	48%
2017	79%	70%	64%	58%	54%	50%	47%
2016	76%	68%	62%	57%	52%	49%	46%
2015	78%	69%	63%	57%	53%	49%	46%
2010	86%	76%	69%	63%	58%	53%	50%
2005	93%	83%	75%	68%	62%	57%	53%
2000	94%	83%	75%	68%	62%	57%	
1995	92%	82%	73%	66%	60%		
1990	90%	79%	71%	64%			
1985	84%	75%	67%				
1980	70%	62%					

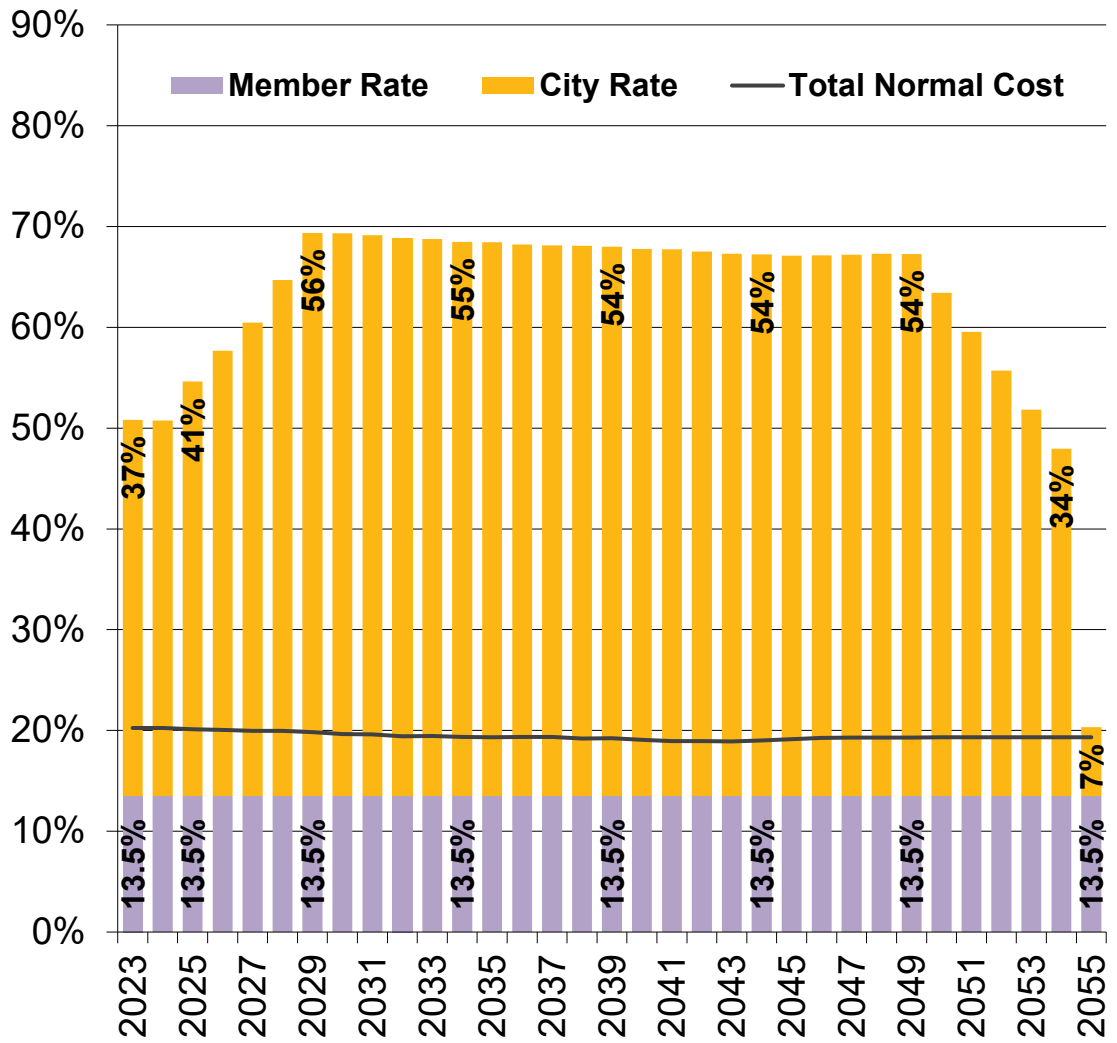
- Partial COLA provides some minor improvement in purchasing power over the next 20 years
- Partial COLA Formula =

  (5-Year Ave Return – 5.0%) x Funded Percentage

  Maximum = 4.0%
- Expected COLA is still substantially lower than assumed inflation

Option 3C – Immediate Partial COLA
With 5-Year Step Up / Step Down ADC





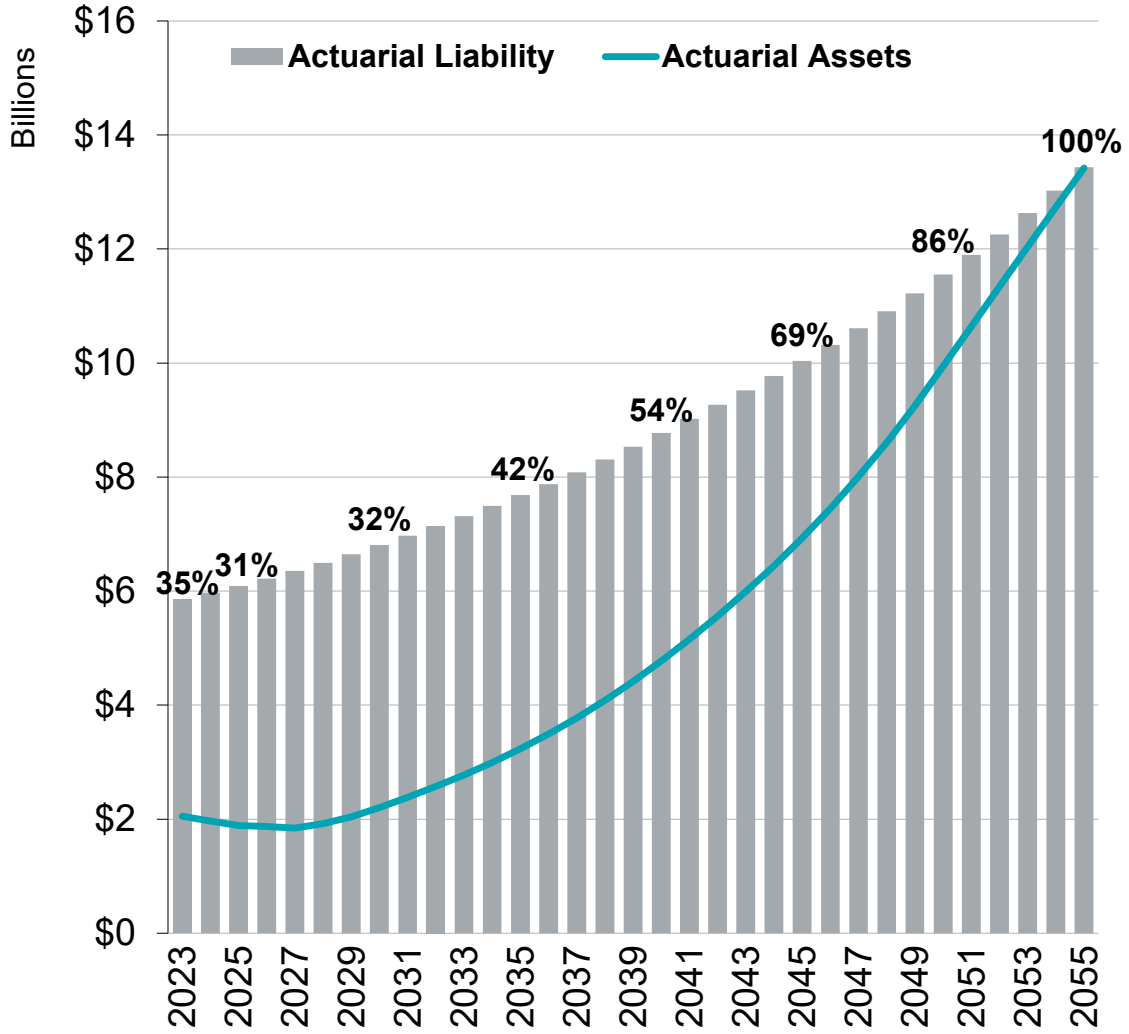
Option 3F – Current COLA, No Funded Status Restriction, and 80% 2024 PP Protection – Purchasing Power Impact

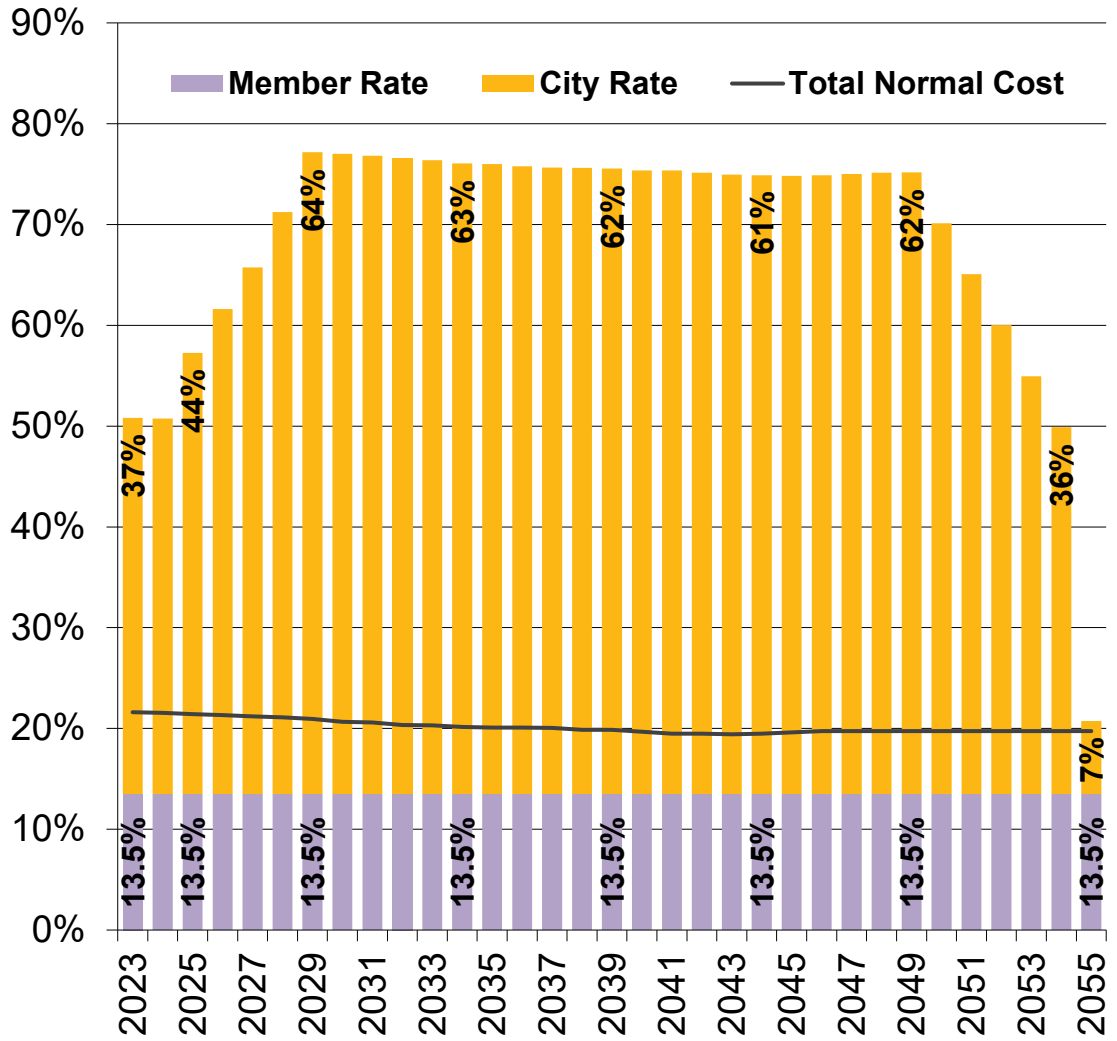
Purchasing Power

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	95%	90%	85%	80%	80%	80%
2022	96%	91%	86%	81%	77%	77%	77%
2021	88%	83%	79%	74%	70%	70%	70%
2020	83%	79%	74%	70%	66%	66%	66%
2019	82%	78%	74%	70%	66%	66%	66%
2018	81%	77%	72%	68%	64%	64%	64%
2017	79%	75%	71%	67%	63%	63%	63%
2016	76%	72%	69%	65%	61%	61%	61%
2015	78%	74%	69%	65%	62%	62%	62%
2010	86%	81%	75%	70%	69%	69%	69%
2005	93%	87%	81%	75%	75%	75%	75%
2000	94%	87%	80%	75%	75%	75%	
1995	92%	85%	78%	74%	74%		
1990	90%	82%	75%	72%			
1985	84%	77%	70%				
1980	70%	64%					

- Removing funded status restriction provides an expected 1.5% simple COLA immediately
- Investment return based COLA is combined with purchasing power floor to protect retirees from losing too much purchasing power
- Years until purchasing power floor
  - No immediate COLA = ~10 years
  - Immediate 1.5% simple COLA = ~20 years

Option 3F – Current COLA, No Funded Status Restriction, and 80% Purchasing Power Protection With 5-Year Step Up / Step Down ADC





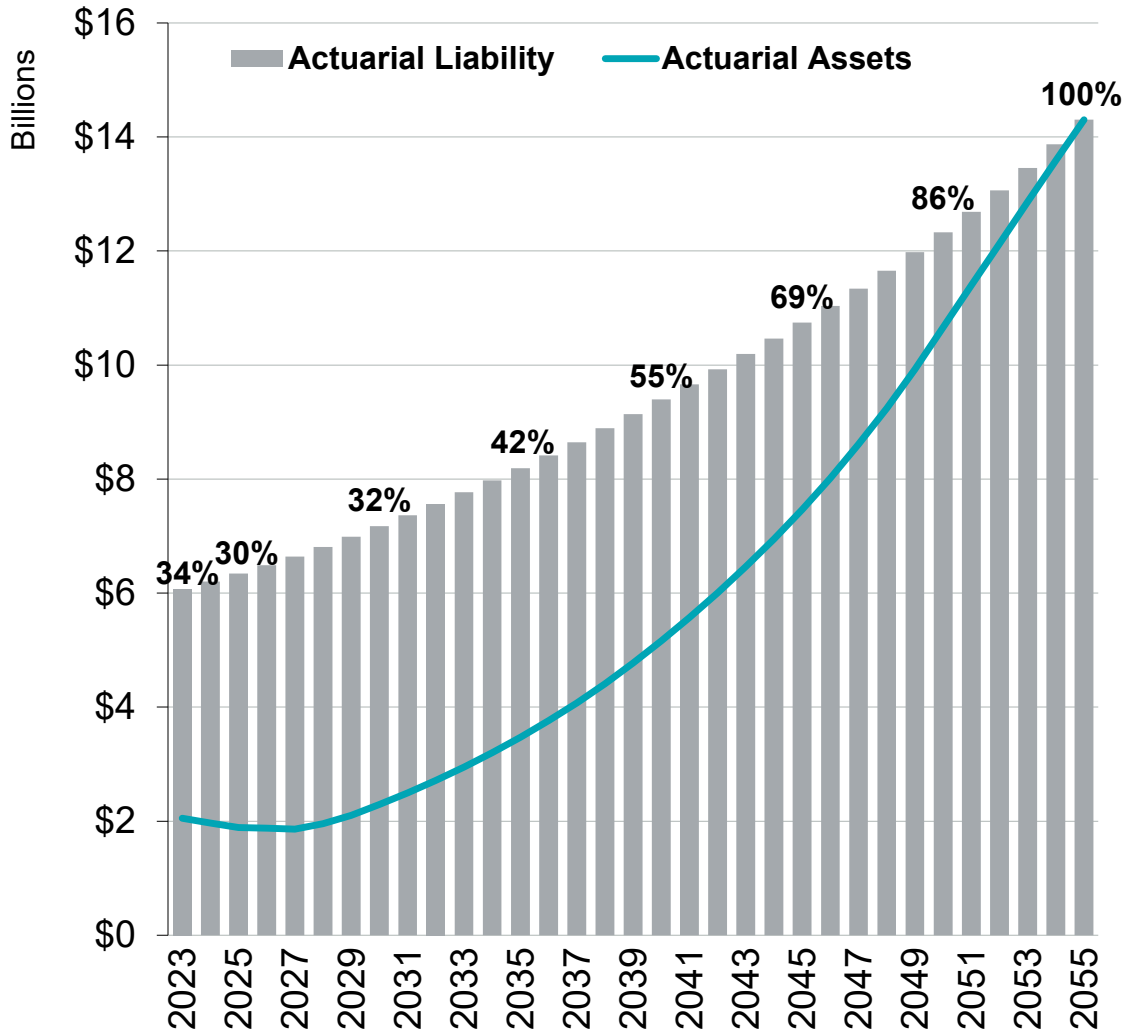
Option 3G – Compound Current COLA, No Funded Status Restriction, and 80% 2024 PP Protection – Purchasing Power Impact

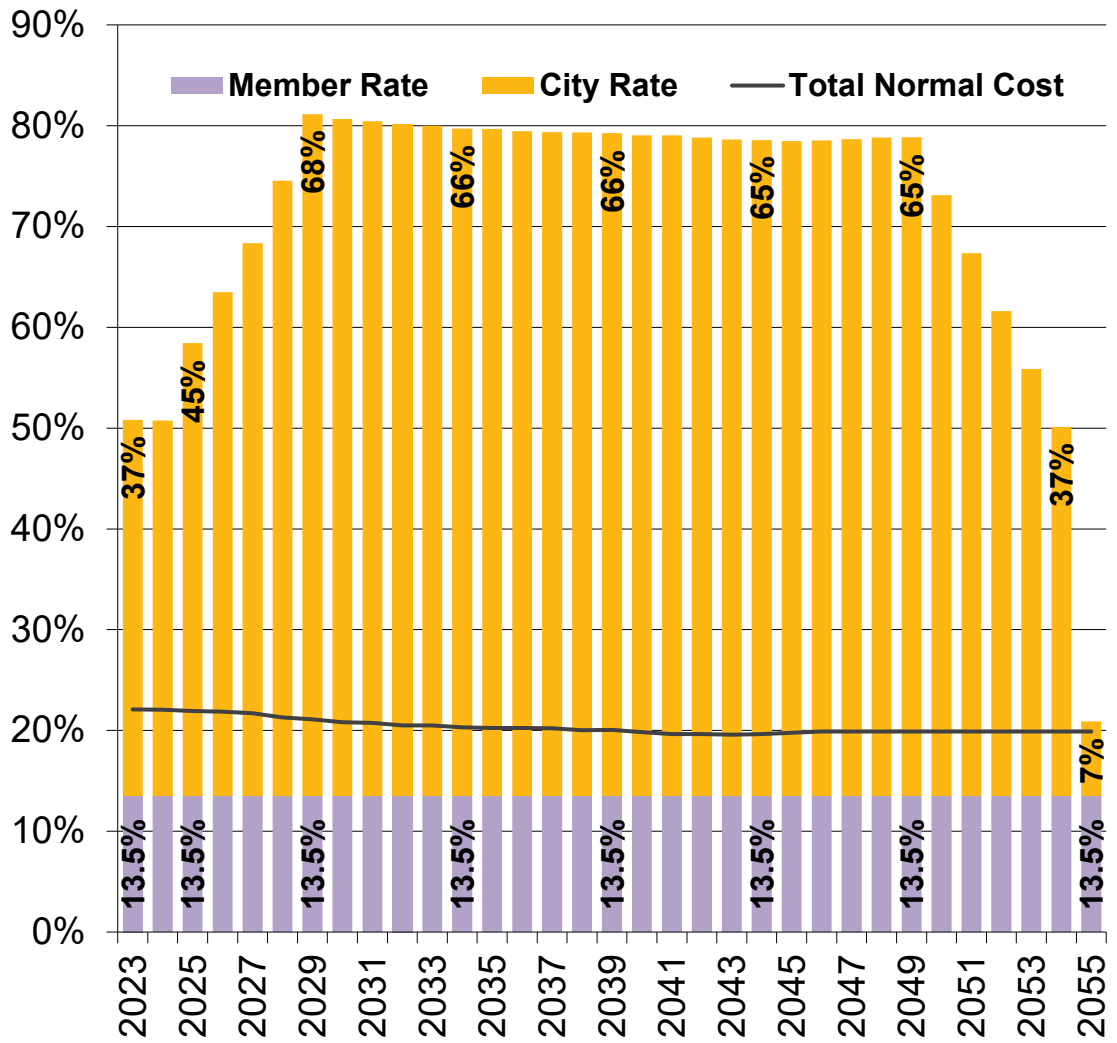
Purchasing Power

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	95%	91%	86%	82%	80%	80%
2022	96%	91%	87%	83%	79%	77%	77%
2021	88%	83%	79%	76%	72%	70%	70%
2020	83%	79%	75%	71%	68%	66%	66%
2019	82%	78%	75%	71%	68%	66%	66%
2018	81%	77%	73%	70%	66%	64%	64%
2017	79%	75%	71%	68%	65%	63%	63%
2016	76%	73%	69%	66%	63%	61%	61%
2015	78%	74%	70%	67%	64%	62%	62%
2010	86%	82%	78%	74%	71%	69%	69%
2005	93%	89%	85%	81%	77%	75%	75%
2000	94%	90%	85%	81%	77%	75%	
1995	92%	88%	84%	80%	76%		
1990	90%	85%	81%	77%			
1985	84%	80%	76%				
1980	70%	67%					

- Changes Option 3F COLA from simple to compound
- Years until purchasing power floor
  - No immediate COLA = ~10 years
  - Immediate 1.5% simple COLA = ~20 years
  - Immediate 1.5% compound COLA = ~25 years

Option 3G – Compound Current COLA, No Funded Status Restriction and 80% 2024 PP Protection With 5-Year Step Up / Step Down ADC





Dallas Police & Fire Pension System (DPFPS)

FSRP Projection demonstrating full funding in 30th year

			Midpoint 1	Midpoint 2
$	27,961,953	Employer Normal Cost for 2023 plan year per Segal's January 1, 2023 valuation report	5/17/2023	11/15/2023
$	171,576,199	City Contribution for Fiscal Year Ended 9/30/2023	0.625	0.125

Source

Prepared by Cheiron Inc.
Details from Cheiron's July 10, 2024 presentation

5-Year Step Up ADC & Current COLA

Cheiron's presentations and report show that the schedule on the left meets full funding in 30 years. This illustration is prepared by Deloitte Consulting LLP using Actuarial Liability and Market Value of Assets* disclosed in Segal's January 1, 2023 and 30-year schedule prepared by Cheiron, Inc.

Fiscal Year Ending 9/30	UAL	Admin	Employer Normal Cost	Total	DPFP Projected Payroll
2024	$ 143,941,000	$ 7,000,000	$ 33,059,000	$ 184,000,000	$ 474,372,000
2025	$ 161,656,000	$ 7,000,000	$ 32,964,000	$ 201,620,000	$ 486,231,000
2026	$ 179,482,000	$ 7,000,000	$ 33,196,000	$ 219,678,000	$ 498,387,000
2027	$ 197,889,000	$ 7,000,000	$ 33,578,000	$ 238,467,000	$ 510,846,000
2028	$ 217,163,000	$ 7,000,000	$ 34,079,000	$ 258,242,000	$ 523,618,000
2029	$ 237,336,000	$ 7,000,000	$ 34,611,000	$ 278,947,000	$ 536,708,000
2030	$ 242,341,000	$ 7,000,000	$ 35,180,000	$ 284,521,000	$ 550,126,000
2031	$ 248,399,000	$ 7,000,000	$ 35,765,000	$ 291,164,000	$ 563,879,000
2032	$ 254,609,000	$ 7,000,000	$ 36,356,000	$ 297,965,000	$ 577,976,000
2033	$ 260,975,000	$ 7,000,000	$ 37,017,000	$ 304,992,000	$ 592,425,000
2034	$ 267,499,000	$ 7,000,000	$ 37,705,000	$ 312,204,000	$ 607,236,000
2035	$ 274,186,000	$ 7,000,000	$ 38,420,000	$ 319,606,000	$ 622,417,000
2036	$ 281,041,000	$ 7,000,000	$ 39,186,000	$ 327,227,000	$ 637,977,000
2037	$ 288,067,000	$ 7,000,000	$ 39,991,000	$ 335,058,000	$ 653,927,000
2038	$ 295,269,000	$ 7,000,000	$ 40,788,000	$ 343,057,000	$ 670,275,000
2039	$ 302,650,000	$ 7,000,000	$ 41,630,000	$ 351,280,000	$ 687,032,000
2040	$ 310,217,000	$ 7,042,000	$ 42,454,000	$ 359,713,000	$ 704,208,000
2041	$ 317,972,000	$ 7,218,000	$ 43,266,000	$ 368,456,000	$ 721,813,000
2042	$ 325,921,000	$ 7,399,000	$ 44,198,000	$ 377,518,000	$ 739,858,000
2043	$ 334,069,000	$ 7,584,000	$ 45,115,000	$ 386,768,000	$ 758,354,000
2044	$ 342,421,000	$ 7,773,000	$ 46,189,000	$ 396,383,000	$ 777,313,000
2045	$ 350,982,000	$ 7,967,000	$ 47,384,000	$ 406,333,000	$ 796,746,000
2046	$ 359,756,000	$ 8,167,000	$ 48,691,000	$ 416,614,000	$ 816,665,000
2047	$ 368,750,000	$ 8,371,000	$ 49,908,000	$ 427,029,000	$ 837,081,000
2048	$ 377,969,000	$ 8,580,000	$ 51,155,000	$ 437,704,000	$ 858,008,000
2049	$ 387,418,000	$ 8,795,000	$ 52,435,000	$ 448,648,000	$ 879,459,000
2050	$ 397,104,000	$ 9,014,000	$ 53,746,000	$ 459,864,000	$ 901,445,000
2051	$ 407,031,000	$ 9,240,000	$ 55,089,000	$ 471,360,000	$ 923,981,000
2052	$ 417,207,000	$ 9,471,000	$ 56,466,000	$ 483,144,000	$ 947,081,000
2053	$ 427,637,000	$ 9,708,000	$ 57,878,000	$ 495,223,000	$ 970,758,000
2054	$ 438,328,000	$ 9,950,000	$ 59,325,000	$ 507,603,000	$ 995,027,000
2055	$ -	$ 10,199,000	$ 60,808,000	$ 71,007,000	$ 1,019,902,000

Plan Year beginning 1/1	Unfunded Liability	Actuarial Liability	Market Value of Assets*
2023	$ 3,442,447,472	$ 5,249,014,813	$ 1,806,567,341
2024	$ 3,515,774,527		
2025	$ 3,592,389,062		
2026	$ 3,655,586,685		
2027	$ 3,704,317,671		
2028	$ 3,736,982,730		
2029	$ 3,751,660,788		
2030	$ 3,750,302,850		
2031	$ 3,743,440,434		
2032	$ 3,729,859,040		
2033	$ 3,708,948,123		
2034	$ 3,680,082,893		
2035	$ 3,642,582,880		
2036	$ 3,595,712,173		
2037	$ 3,538,692,235		
2038	$ 3,470,698,746		
2039	$ 3,390,822,405		
2040	$ 3,298,121,674		
2041	$ 3,191,568,393		
2042	$ 3,070,032,946		
2043	$ 2,932,377,976		
2044	$ 2,777,305,235		
2045	$ 2,603,485,001		
2046	$ 2,409,488,226		
2047	$ 2,193,836,422		
2048	$ 1,954,860,495		
2049	$ 1,690,811,128		
2050	$ 1,399,820,996		
2051	$ 1,079,894,106		
2052	$ 728,899,369		
2053	$ 344,559,994		
2054	$ (75,554,181)		
2055	$ (420,829,337)		

* Due to long-term nature of projections, projecting with MVA as AVA will equal MVA after five years with no additional gains/losses

Appendix E – Investment Performance Report

Investment Performance Report

NOVEMBER 2024

TEXAS PENSION REVIEW BOARD

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Appendix B – Individual Plan Summaries of the Investment Practices and Performance Evaluations II

OVERVIEW

The 86th Legislature enacted Senate Bill (SB) 322, which added Section 802.109, Texas Government Code, concerning Investment Practices and Performance Evaluations (IPPE). The statute requires public retirement systems with assets of at least $30 million to select an independent firm with substantial experience to evaluate the appropriateness, adequacy, and effectiveness of a system's investment practices and performance and to make recommendations for improving its investment policies, procedures, and practices. Systems with assets of at least $100 million are required to conduct a subsequent evaluation every three years and those with at least $30 million, but less than $100 million must conduct a subsequent evaluation every six years. The law also requires the PRB to compile and summarize the evaluations and submit an *Investment Performance Report* to the legislature and governor in its biennial report.[1] This Investment Performance Report contains aggregate analysis of the evaluations, summaries of each evaluation, compiled recommendations made by evaluators, and recommendations to the legislature from the Pension Review Board (PRB) to improve IPPE statute.

Per Section 802.109(a), Texas Government Code states that each evaluation must include:

1) an analysis of any **investment policy** or strategic investment plan adopted by the retirement system and the retirement system's compliance with that policy or plan;
2) a detailed review of the retirement system's investment **asset allocation**;
3) a review of the appropriateness of **investment fees and commissions** paid by the retirement system;
4) a review of the retirement system's **governance processes** related to investment activities; and
5) a review of the retirement system's **investment manager selection and monitoring** process.

The first evaluation must be a comprehensive analysis of the retirement system's investment program that covers all asset classes, while subsequent evaluations may focus on particular asset classes.

Implementation

Upon enactment of SB 322 in 2019, the PRB sent notification to Texas public retirement systems to inform them of the new requirement. The PRB also worked with stakeholders and held several Actuarial Committee and board meetings to provide informal guidance.

The PRB reviewed the statute after the first round of IPPEs were received in 2020 and ultimately made recommendations to the legislature for improvement. The legislature enacted HB 3898 (87R) in 2021 to clarify the requirement, and staff updated the guidance in 2022 to mirror updated statutes effective September 1, 2021. The guidance featured questions that could be used by systems and their evaluators to ensure a thorough review of the five components detailed in statute, expected subsequent evaluation deadlines, and updates made to statute. The PRB distributed the guidance to public retirement systems and made it available on the PRB website.[2] The example questions provided in the PRB guidance to demonstrate a thorough evaluation were used by several evaluators to complete their reports.

[1] Section 802.109, Texas Government Code
[2] Pension Review Board, *Investment Practices and Performance Evaluations*, https://www.prb.texas.gov/investments/ippe/

Compliance

Subsequent evaluations for systems with at least $100 million in assets must be completed every three years and are due to the PRB by June 1st of the year following the evaluation. Of the 100 public retirement systems in Texas, the PRB expected 37 evaluations covering 42 plans that met the $100 million threshold.[3] To date, the PRB has received all 37 evaluations, which are summarized in this report. While most systems submitted evaluations on time, several had questions regarding the due date set by the statute. The PRB guidance does include details regarding the due dates; however, because of how infrequent these evaluations are conducted and with it still being a relatively new requirement, a small number of systems missed the deadline.

IPPE 2020-2024 Results

Approximately 75 percent of evaluations completed in 2020 were conducted by systems' investment consultants rather than an independent third party. While some evaluations conducted by investment consultants were thorough and contained recommendations, almost all evaluations that did not contain any recommendations for improvement were completed by an existing investment consultant. This was a key factor in some of the PRB's 2022 legislative recommendations and changes made during the 87th Legislative Session.

The systems in the 2024 cycle of subsequent IPPEs – those with at least $100 million in assets – increased the number of third-party evaluations from 10 to 14. The evaluations this cycle provided 170 recommendations of which the largest focus was on reviewing benchmark and performance metrics for appropriateness given market changes. Based on several popular recommendations identified by evaluators in 2020, the PRB found that additional guidance on investment policy statements (IPS) and best practices could further assist systems. Using the findings from the evaluations summarized in the 2020 IPR and other industry resources, PRB staff created guidelines for IPS best practices, adopted by the board in 2024.[4,5] During the development of these guidelines, the PRB provided multiple opportunities for stakeholders to give feedback and made changes responsive to this feedback, and two evaluators referenced the guidelines as a useful resource. The evaluations continue to provide the PRB with a better understanding of relevant concerns that evaluators are identifying and their recommended solutions. This process allows the PRB to create useful guidance and provide specific resources for systems which can be used to reinforce improvement of systems' investment practices.

Key Recommendations From the Evaluations

Statute requires evaluations to include five specific components of review. The importance of updating policy and performance benchmarks as needed to better align with capital markets was an overarching theme across the evaluations. Some of the most common recommendations in evaluations centered on adjusting benchmarks and policies for performance or asset allocation purposes. Such changes are

[3] Several trusts serve multiple plans, in which case only one evaluation of the trust's investment practices is necessary.
[4] Pension Review Board, *Investment Performance Report*, accessed November 22, 2024, https://www.prb.texas.gov/wp-content/uploads/2020/11/Investment-Practices-Report.pdf
[5] Investment Policies, Pension Review Board, last modified July 27, 2024. https://www.prb.texas.gov/investments/investment-policies/

expected, because as capital markets adjust so should policies and strategies. The top seven recommendations from the 2024 IPPEs are as follows:[6]

1. Include the selection criteria for investment managers in the IPS as well as document rationale for all hiring and firing decisions.
2. Consider a new benchmark for performance reports or IPS.
3. Add specific measurable criteria for monitoring performance to the IPS.
4. Document existing practice or recommend potential changes for determining and evaluating the asset allocation.
5. Provides specific language changes to be more specific regarding rebalancing ranges and guidelines.
6. Include a discussion of risk in the IPS.
7. Add language to document various processes regarding the reconciliation and payment of fees or the level of detail recorded for direct and indirect compensation.

PRB ANALYSIS OF EVALUATIONS

The legislature enacted SB 322 to "increase transparency, strengthen oversight, and protect retirement systems from self-inflicted investment catastrophes that jeopardize their members' benefits."[7] The IPPE provides an invaluable opportunity for a strategic level review of the practices and policies of Texas public retirement systems, which are managing net assets of approximately $357 billion and serving over 3.4 million members. After completion of the first evaluation cycle in 2020, each subsequent evaluation should offer an additional checkpoint for stakeholders to ensure assets continue to be well managed.

The comprehensive evaluation required in the initial IPPE, when done well, improves transparency by offering a complete picture of a retirement system's investment operations in a digestible format accessible to stakeholders that are interested in learning more. The evaluations provide a window into a system's investment program that can be very difficult to obtain without wading through numerous documents and following a board's ongoing discussions. The subsequent evaluations can offer another perspective from an outside party or may provide updates to recommendations made during the prior evaluation.

Additionally, the PRB can identify and compile best practices, industry standards, and benchmarks from the evaluations to provide more resources to systems, giving smaller systems an opportunity to access resources they might not have known about.

Both the breadth and depth of information resulting from the evaluations provide all stakeholders an opportunity to learn from the practices of others. Ultimately, having the information raises the bar of existing practice in Texas. The initial comprehensive evaluations and the more focused future

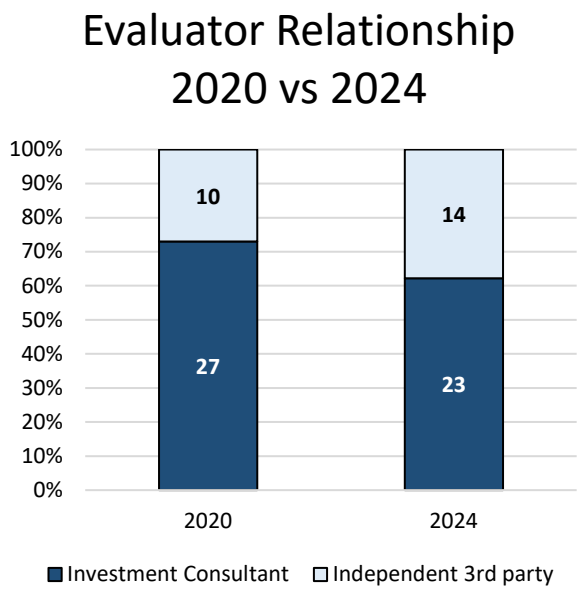
[6] Staff determined the top recommendations were those made at least five times.
[7] Bill Analysis, SB 322, 86th Texas Legislature, Regular Session, 2019.
https://capitol.texas.gov/tlodocs/86R/analysis/pdf/SB00322F.pdf

evaluations will help systems continue to refine their practices and provide a new tool for communicating those improvements and educating stakeholders. This can best be accomplished when systems embrace the process and treat it as an important educational resource for the benefit of all stakeholders rather than another box to be checked.

Overview of Evaluations

The PRB examined each of the 37 evaluations received from Texas public retirement systems. While the evaluations varied in the amount of new detail, analysis, and recommendations for improvement, overall, most were informative and provided insight into the practices currently used by Texas systems. The evaluations indicated that these systems follow industry best practices, and no evaluation identified any critical concern for a system's practices that would inhibit their ability to continue operating – even those systems that were identified as facing funding challenges or other ongoing issues that take time for improvements to be seen.

With this being the next round of evaluations after the initial in 2020, many evaluators provided additional analysis on how any previous recommendations were implemented and, in some cases, the observed positive impact. This new analysis of the implementation of past recommendations improved the transparency in the management of pension assets. Further, some systems used the new review-and-comment period provided for in statute with their final report to the PRB. This comment period allowed systems to demonstrate an enhanced understanding of planned actions for recommendations that stakeholders can monitor.



This 2024 cycle showed a 10 percent increase in the use of a third-party evaluator since the initial 2020 evaluation. Independent third-party evaluators previously tended to make recommendations more often than an existing investment consultant reviewing a system's program. While this could be because the investment consultant constantly works with the system to improve practices, a completely independent third-party evaluation offers a new perspective and often analyzes other investment strategies for the board's consideration. The new perspective, analysis, and recommendations found in many IPPEs are significant to the usefulness of these reports. Additionally, some 2024 evaluations provided highly similar and, in some instances, duplicative findings to the 2020 evaluations.

Evaluators' Recommendations

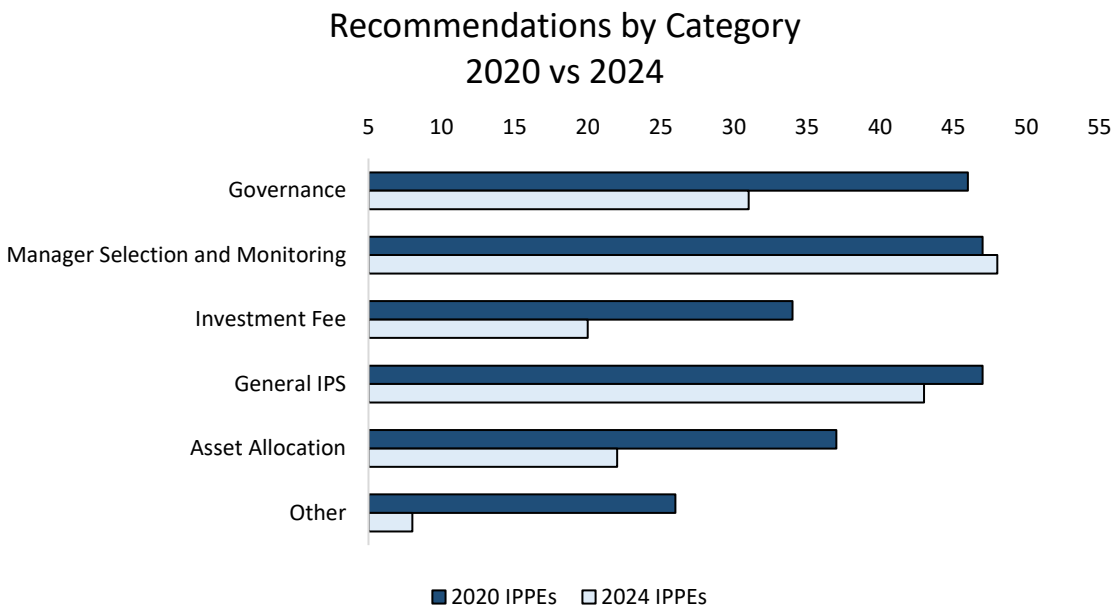
The PRB identified over 172 recommendations in 29 of the 37 evaluations.[8] The recommendations covered a variety of practices across all sections of the statute. To summarize the information, the PRB examined the recommendations and grouped them into broad categories. While there is no clear

[8] A summary of the recommendations can be found in Appendix A.

delineation of categories, most evaluations were organized according to the five subsections of Section 802.109(a), Texas Government Code, and therefore the recommendations could generally be grouped on that basis. A small subset of recommendations covered areas that did not fit as well within these five categories and are identified as "other" in the graph *Recommendations by Category*.

Key Practices Identified by Evaluators

The PRB identified several common policy recommendations that were present in the 2020 and 2024 evaluations. The graph *Recommendations by Category* shows how many recommendations were made in each of the five categories.[9]



In each category, the number of summarized recommendation types, which are the unique recommendations made by evaluators turned into a generalized version that summarizes the recommendation for analysis, covering a wide range of improvements decreased in 2024 compared to the 2020 evaluations as many past recommendations were noted as implemented and new recommendations were more targeted on specific areas. Most categories also experienced significant decreases in the number of recommendations except in two categories: Investment Manager Selection and Monitoring and General IPS. Most recommendations in these two categories were from evaluators focused on either updating or adjusting policies and benchmarks to align closer with current capital markets.

Most common recommendations

Of all the recommendations made by evaluators this reporting period, seven of the summarized recommendation types were made at least five times. All these summarized recommendation types were previously issued in 2020. A summarized recommendation table can be found in the appendix with further details about how the 2024 recommendations have changed since 2020.

[9] Many recommendations were broad or could easily categorized in multiple ways. For example, recommendations regarding the IPS were included in General IPS unless they were specific to a practice in another category.

Investment Manager Selection and Monitoring

In 2020, recommendations related to investment manager selection and monitoring focused on two main topics: improving performance benchmarking policies and strengthening the manager hiring and firing process. This continued in 2024 but with three summarized recommendation types emphasized, which together accounted for 15 percent of all recommendations in 2024. Evaluators identified the changing capital markets and challenging investment environment as core reasons for updating benchmarks and performance criteria.

There were some new recommendations to this category section; however, these were more specific recommendations based on system needs and not of a larger concern across multiple systems.

Investment Manager Hiring and Firing Policies

The most common recommendation to improve the investment manager hiring and firing process was to update the selection criteria or process in the IPS. The recommendations ranged from specific examples of improvement to general suggestions for the system to consider.

Both the CFA Institute and GFOA provide guidelines, promote industry best practices, and recommend careful consideration of the procedures related to investment managers.[10]

"We recommend the System formally documents the rationale for all hiring and firing decisions."
- Irving Firemen's Relief & Retirement Fund IPPE

"Simplify the process description, providing high-level guidelines for flexibility with specificity on required rigor only where necessary. For example, it may not be necessary to have candidate managers complete an RFP for every search, but it may be necessary to obtain Investment Committee and Board approval every time."
-Houston Police Officers' Pension System IPPE

Benchmark of Performance Measures

The second and third most common recommendations to improve the investment manager hiring and firing process was to consider new benchmarks for performance reports in the IPS, and to consider the specifics of how performance is measured.

Some of the recommendations stated that benchmarks for investment managers should be reviewed at least once every three years. A generally accepted best practice is to review asset allocations every three years, and every five years conduct an asset-liability study.

Asset Allocation

A system's asset allocation has a significant impact on the system's future return outcomes. The number of recommendations made in this section was significantly less than those made in 2020 and the recommendations were focused on adjustments to policy language or small changes to the investment

"The asset allocation analysis could be expanded to include a forward-looking Monte Carlo simulation and additional risk measurements such as maximum loss and value-at-risk."
-Lubbock Fire Pension IPPE

[10] Pension Review Board, *Guidance for Developing Investment Policy Statements,* accessed November 22, 2024, https://www.prb.texas.gov/wp-content/uploads/2024/07/IPS-Guidance.pdf

strategy.

Update IPS Allocation

Adjustments to the asset allocation or the practices and policies governing the asset allocation were the most common recommendations for 2024. These recommendations and suggestions made by the evaluators covered aspects ranging from asset/liability studies, which influence asset allocation itself when performed, to the policies currently in practice. These fall under the following summarized recommendation types:

1. Document existing practice or recommend potential changes for determining and evaluating the asset allocation.
2. Provides specific language changes to be more specific regarding rebalancing ranges and guidelines.

Investment Policy Statement (IPS)

The second most frequent subcategory recommendation in the evaluations was to adjust policies in the IPS. This included a popular summarized recommendation type to discuss risk but also 11 other summarized recommendation types. The IPS could be considered the most important guiding document of an investment program, and as such, must be kept up to date with current practice. The recommendations made in the 2024 evaluations had some of the largest variance in type of recommendation and changes from the previous evaluation cycle in 2020. The recommendations in this section contained fewer previously seen recommendations and mostly new recommendations to adjust policy language or to add policy to the IPS after comparing against industry best practices. This is expected as the IPS is a living document that should change with the needs of the retirement system and constantly be improved upon.

GFOA Guidelines

> "GFOA recommends that defined benefit plans establish and adhere to a formal investment policy to regulate and monitor the system's investment program. Such a policy should be viewed as a long-term governing document. The formal investment policy should be adopted by the governing board(s) and should be reviewed at least annually and updated as deemed appropriate."[11]

General IPS

The most common recommendation for policies in the IPS was to include more details or discussion on risk. As a plan matures or investing markets change so do the risks associated with the pension assets. A good takeaway from the CFA Institute's *Primer for Investment Trustees* is that "risk management is like any other management process: It involves thinking about what might happen and what to do if bad things happen."[12]

[11] GFOA, *Investment Policies for Defined Benefit Plans*, last modified September 30, 2017, https://www.gfoa.org/materials/investment-policies-for-defined-benefit-plans

[12] Jeffery V. Bailey, CFA, and Thomas M. Richards, CFA, *Primer for Investment Trustees* (CFA Institute, 2017).

"Consider adding a risk objective to consider how the volatility of assets may impact the Fund's liability amortization period. This may provide additional guardrails to better enable the Fund to stay under the 30-year time frame to amortize the unfunded actuarial liability set by the Pension Review Board."

-Austin Firefighters Retirement Fund IPPE

Investment Fees

Recommendations concerning the investment fees significantly decreased in both the number and variance in type of recommendations. Aside from a fairly consistent recommendation to consider more passive investments, which is usually a consideration for any system that does not strictly use passive investments, evaluators made recommendations to add or adjust investment fee policies.

In addition to creating the evaluation requirement, SB 322 also significantly enhanced fee transparency reporting in Texas. Over the past decade, public retirement systems have increased their allocation to alternative investments while at the same time raising concerns that expenses for alternative investments are opaque and greater fee transparency in this asset class is desired. The fee reporting law requires Texas public retirement systems to list, by asset class, all direct and indirect commissions and fees paid by the retirement system during the system's previous fiscal year for the sale, purchase or management of system assets.[13]

"Consider adding language to the IPS outlining the frequency and requirements of fee benchmarking. Texas law only requires the reporting of absolute investment management fees, which may not provide stakeholders the appropriate context. An annual fee analysis may be beneficial for monitoring manager fees and assessing reasonableness compared to peers."

- Austin Firefighters Retirement Fund IPPE

The PRB has fully implemented this requirement through rulemaking and by providing a template for reporting fees. Systems must now report investment fees that previously would typically not be reported. This has led to some adjustments to investment policies and will likely continue to as systems further adapt to the requirement. Additionally, the PRB uses this information for analysis and identifying systems with returns or expenses outside of peer or industry expected ranges that could suggest issues with their investment approach.[14]

IPPE endorsement of improvements

Several subsequent IPPEs included reviews of the effectiveness of the previous evaluations' recommendations, or the progress made to improve a system's investment program based on previous recommendations. These evaluations confirm that an independent third party evaluating a system's investment practices can provide an objective outside view and suggest changes that might not otherwise have been made.

[13] Section 802.103(a), Texas Government Code

[14] Pension Review Board, *Investment Reports,* accessed November 20, 2024, https://www.prb.texas.gov/wp-content/uploads/2024/11/July-Investment-Data-Report-Combined.pdf

The following provides an example of a significant improvement made by a system from a previous recommendation and confirmation of this improvement in the system's response.

Summary of 2020 governance recommendations by evaluator:

"Since our last evaluation completed in June of 2020, the Retirement Board changed the governance structure of the LCRA Retirement Plan and Trust. The Retirement Board effectuated this change as a result of concerns over the responsiveness of the Board to emergent investment issues, particularly those related to the performance of investment managers, and the ability of the Board and Staff to provide a sufficient level of focused and expert attention to the Plan's investments."

System's noted improvement:

"Following a competitive review process, the Board engaged with a provider of outsourced CIO ("OCIO") services and granted them discretionary decision-making authority over many of the Plan's investment processes. This change has had the intended effect of streamlining the investment decision-making process, placing the authority to make certain decisions in the hands of experienced investment professionals, increasing responsiveness to emergent investment issues, and allowing the Retirement Board to focus on investment policy development and oversight. Throughout our interview process, each of the interviewees described the new governance structure as highly effective and a meaningful improvement over the previous structure, where all decision-making authority resided with the Retirement Board. Our review of the current governance structure supports the legitimacy of this description."

- Lower Colorado River Authority Retirement Plan IPPE

Other evaluators included status updates on the previous recommendations made in 2020 either by themselves or by another evaluator. This served as a useful practice in evaluating the system's governance while increasing transparency.

Subsequent IPPE Review and Comment

The 87th Texas Legislature amended the IPPE statute in several ways including adding a way for systems to review and comment on evaluations. This allows for increased transparency of a system's actions to address any concerns or recommendations. A quarter of the systems required to complete an IPPE in 2024 chose to provide comments on their evaluation. These ranged from commentary on the report finding to tables detailing recommendations and concerns raised by the evaluator and the planned response by the system.

The review-and-comment section also lends to the effectiveness of the IPPE and supports the fiduciary duty of every trustee member. Trustees have a fiduciary duty to the beneficiaries of the fund, which includes a duty of loyalty, prudence, reasonableness, transparency, and accountability.[15]

Subsequent IPPE concerns

The PRB identified several 2024 IPPEs that were nearly identical to the system's 2020 submission. While various aspects of the evaluations were updated, a near identical report or identical statements of

[15] Jeffery V. Bailey, CFA, and Thomas M. Richards, CFA, *Primer for Investment Trustees* (CFA Institute, 2017).

practices made by systems makes it difficult to determine what new analysis the evaluator made in the subsequent report. This approach also decreases the value of subsequent reports.

Twenty-five percent of system evaluations for 2024 were nearly identical to their previous evaluation. All of these evaluations were produced by the investment consultant for the system. The PRB will provide further guidance as needed to reduce the number of duplicated reports by working with systems during the next evaluation period, and depending on those results, may provide additional recommendations to the legislature if this practice remains and ongoing concern.

LEGISLATIVE RECOMMENDATIONS

After the second round of evaluations submitted by retirement systems in 2024, the PRB identified opportunities where modifications to the statute may prove beneficial both in terms of the reporting schedule as well as applicability of the requirement based on asset levels. The PRB identified two areas for improvement which are intended to provide clarity to systems on applicability of the IPPE requirement and to the PRB for administering and overseeing compliance with the requirement. The two recommendations would primarily impact systems that become subject to the six-year reporting requirement when their assets reach $30 million or more, and systems moving from a six-year reporting cycle to a three-year cycle when they reach $100 million or more in assets. For example, currently two systems reported in calendar year 2023 that their 2022 fiscal year end net total assets were below the $100 million threshold. In calendar year 2024, they both reported 2023 assets above the $100 million threshold now requiring them to complete an IPPE every three years. If these two systems were to start the IPPE process immediately or in calendar year 2025, their reporting period will be slightly out of sync with the other $100 million systems. This could result in the PRB needing to track these systems' unique reporting due dates that will not match with the other $100 million systems. Also, those two systems will be conducting the evaluations at a time when no other system will be reporting and as such would be the only evaluations to analyze in an investment performance report on some years. This would largely prevent the PRB from analyzing these IPPEs in the context of those submitted by other peer systems, hindering the ability to do quality comparisons and identify overall trends.

At the July 25, 2024, board meeting, PRB staff presented initial drafts of the recommendations and then requested feedback from systems. At the following September 25, 2024, meeting, staff presented a final version of the recommendations for approval. The board adopted the following recommendations for consideration by the legislature that will help enhance clarity and efficiency for the investment practices, benefitting plan members, taxpayers, and local governments:

1. Modify the reporting timeline requirement to simplify the reporting due date to be the same for all systems based on a respective six- or three-year reporting cycle.

Goal. Clarify how often IPPE reports should be completed by retirement systems, the expected due dates of the reports, and change to reporting cycles for simplification. Current statute specifies that systems trigger the requirement or move from a six-year to a three-year reporting frequency based on the preceding year's assets. However, statute is less clear on when that report will be due—three or six years from hitting the asset threshold, or on the same timelines as other systems already subject to the requirement based on the effective date of SB 322.

Issue. A system that become applicable to the IPPE statute or assets increase to above $100 million in assets can potentially because of timing become required to submit a report in a year when no other system would report. For example, as the 24 systems with assets between $30 million and $100 million already reporting continue to grow in size, inevitably many of them will cross the $100 million threshold

and will potentially be out of sync with reporting compared to the 42 systems with at least $100 million in assets already.

Recommendation. Adjust language for reporting timeline to a cycle-based approach that has a three-year and six-year reporting cycle based on applicability. Additionally, clarify Section 802.109, Texas Government Code as follows, "If a retirement system's asset size increases in a fiscal year to above one of the specified thresholds, the system will complete the evaluation by the next cycle's due date."

1) For systems already reporting, this change would not impact current expectations.
2) The update would provide additional clarification on how the PRB should handle reporting expectations as retirement system assets grow over time and their requirements change. It would prevent systems from triggering unique reporting cycles out of sync from all other systems, making evaluation and analysis by the PRB less efficient and less effective. Based on the timeline set up in SB 322 (86R), systems have been grouped together in a three- or six-year cycle based on applicability at the time the bill passed. While no systems have newly triggered the six-year requirement since then or moved above $100 million to trigger the three-year requirement, several are close and may hit those targets soon.

Benefits:

- Simplify schedule by defining two clear reporting cycles for this requirement with known due dates.
- No single system would have a unique reporting deadline caused by timing of when they became subject to the six-year requirement by crossing the $30 million threshold or by crossing the $100 million asset size threshold for three-year reporting. The PRB receiving only one or two IPPEs in a given year prevents meaningful comparisons and analysis with other systems' evaluations.
- This change would not impact most systems. The 42 systems with assets over $100 million already reporting would not be impacted and only the systems with less than $100 million in assets would potentially be affected.

2. Modify the reporting applicability criteria to include total pension liabilities only when lowering the reporting requirement.

Goal. Clarify the criteria for applicability of the IPPE requirement by adjusting the language that references the total assets of the preceding fiscal year. Assets would continue to determine applicability initially, but only total pension liabilities (TPL) would be used to determine whether a system continues to be subject to a more frequent IPPE requirement.

Issue. Currently a system that is required to complete a subsequent evaluation is required to complete an IPPE every three or six years depending on asset size but does not have to provide the report to the PRB until the following year. Systems with assets that fluctuate around the $30 or $100 million threshold have an unclear requirement if assets rise above a threshold and back below before a report is due. This lack of clarity is due to the fact that systems report on their assets annually, while the IPPE requirement operates on a three and six-year timeline.

Recommendation. Adjust applicability language to include additional criteria that prevents normal asset fluctuations between years from obscuring reporting expectations. For example, if a system's assets reach or exceed $100 million in one year, but dip below that threshold the following year, current statute does not provide clarity on whether the system would still be required to complete an IPPE.

Statute	Assets 2024	TPL 2024	Assets 2025	TPL 2025	Requirement
Current	$105 mil	$190 mil	$120 mil	$185 mil	3 years
Current	$105 mil	$190 mil	$98 mil	$185 mil	6 years
Recommended	$105 mil	$190 mil	$98 mil	$185mil	3 years

Statute could be modified such that the applicability for a three- or six-year reporting requirement will still use the preceding fiscal year's assets to determine the reporting requirement initially; however, once the assets rise above the specified asset threshold, only when both the assets and the total pension liability (TPL) decrease below the asset threshold will the reporting requirement be lowered or no longer applicable. The board chose to use TPL because pension liabilities are the main concern systems and systems that are underfunded would be kept in the more frequent reporting cycle once assets cross the statutory thresholds. In practice this change would keep systems near the asset thresholds in a more frequent reporting schedule unless they are at or above fully funded status.

Benefits:

- Triggering the requirement would still work the same way as current statute because asset thresholds in current law would not change. This recommendation would only potentially impact the reporting frequency of systems that already triggered the requirement and their assets are close to the $30 million and $100 million thresholds.
- This change would clarify how to handle systems' assets fluctuations year over year by adding additional criteria. Statutory clarification would provide more certainty for both the PRB and the systems subject to the IPPE requirement.

APPENDICES

Appendix A – Summary of Investment Practices and Performance Evaluation Recommendations

Similar to 2020 New Addition Not Recommended

Appendix A
Summary of Investment Practices and Performance Evaluation Recommendations

Number of Recommendations	Governance Recommendations	2020 Total	2024 Total
OPERATIONAL PRACTICE			
4	Annual IPS and/or system review		
1	Review RFP process and its potential impact on delays/missing investment opportunities		
1	Fund counsel reviews all legal contracts		
1	Review compliance requirements		
1	Build staff expertise		
1	Create a key person risk policy		
1	Create an implementation policy from executive director to the Board		
1	Establish formal procedure to review the CIO and Executive Director		
1	Improve in-house investment staff recruiting, compensation, and career development		
1	Improve operational efficiency with industry best practices	**21**	**16**
1	Perform periodic or ad hoc vendor reviews		
1	Increase board continuity		
1	Review service providers		
0	Quarterly board meetings should formally review underperforming investment managers		
0	Conduct more frequent AVs		
0	Limit and stagger committee member terms		
0	Review investing core beliefs anytime significant investment changes occur		
0	Create an implementation policy to assist in documentation of policies/procedures		
0	IPS should always be under review		
DOCUMENTATION			
2	Document existing governance practice		
1	Develop and document standard operating procedures		
1	Improve descriptions of existing policies and responsibilities		
1	Document investment consultant recommendations to the investment committee		
0	Develop an ethics policy specifically dedicated to the Plan and those charged with overseeing it.	**9**	**5**
0	Include ESG-related and internal management considerations in the IPS		
TRAINING			
4	Ensure training stays up to date	**7**	**4**

0	Develop materials specifically for new board members		
0	Document training requirements or practice in IPS		
TRANSPARENCY			
2	Make additional information available online	**7**	**3**
1	Post additional documents to the website		
0	Maintain a focus on transparency		
0	Modernize website		
OTHER			
1	Maintain current reviews of performance, providers and consultants	**2**	**3**
1	Review compliance staffing levels		
1	Review personal trading policy		
0	Improve plan adherence by adjusting policies exceeding best practice to align more with best practices		
0	State in IPS the frequency of investment consultant RFP process		
Total Governance Recommendations		**46**	**31**

Number of Recommendations	Manager Selection and Monitoring Recommendations	2020 Total	2024 Total
INVESTMENT MANAGER HIRING AND FIRING PROCESS			
10	Include the selection criteria in the IPS as well as document rationale for all hiring and firing decisions	**16**	**15**
1	Simplify the process description, providing high-level guidelines for flexibility with specificity where necessary		
1	Add language that the manager must affirm that they act in a fiduciary capacity		
1	Add a conflict-of-interest policy when selecting investment managers		
1	Discuss investment manager selection criteria		
1	Update selection and monitoring process language to match current practice		
0	Refine the manager selection criteria so that it places less emphasis on past performance		
0	Discuss investment manager selection criteria		
BENCHMARKING OR PERFORMANCE MEASURES			
10	Consider new benchmark for performance reports or IPS		
6	Add specific measurable criteria for monitoring performance to the IPS		

2	Include net- and gross-of-fee returns relative to benchmark and peers in each quarterly report	11	22
1	Add section in IPS that covers Asset/Liability studies		
1	Perform a benchmarking study to review fees, admin costs and staff levels		
1	Perform formal benchmark reviews of each public investment manager one every three years		
1	Periodically review the asset class benchmarks		
0	Create a performance metric and reporting requirement for non-public securities		
0	Additional qualitative information should be included in the manager performance review summary		
0	Add a process for comparing total portfolio and investment managers' risk adjusted returns to peers and benchmark		
ADD POLICIES OR PROCEDURE			
3	Document existing policy on how performance is measured	8	3
0	Add formal investment manager review process, criteria, and procedures		
0	Prepare adequate documentation to ensure/demonstrate process has been followed		
0	Add a watch list policy		
0	Add a policy documenting proxy voting rationale		
OTHER			
2	Update policy language regarding reporting/reviewing for investment managers	12	8
2	Improve documentation of processes being followed		
1	Clarify due diligence required by investment type		
1	Improve watch list policy		
1	Maintain annual report addressing qualitative factors for each investment manager		
1	Review performance objectives for consistency with IPS		
0	IPS should specify that performance reporting include net of investment management fee		
0	Investment performance reports should be quarterly with monthly flash reports		
0	Separate reporting requirement by asset class instead of consultant or investment manager		
0	Add policy language defining a reporting or valuation process for less liquid or illiquid securities		
0	Revisit the watch list for alternative		
0	Review Private Equity performance benchmarking to IPS policy		
0	Standardize investment monitoring processes across all asset classes		
0	Generalize watch list language to avoid being overly prescriptive		
Total Manager Selection and Monitoring Recommendations		**47**	**48**

Number of Recommendations	Investment Fee Recommendations	2020 Total	2024 Total
	IPS GUIDELINES		
7	Add language to document various processes regarding the reconciliation and payment of fees or the level of detail recorded for direct and indirect compensation	**12**	**8**
1	Add language to review expenses annually		
0	Adhere to existing policies		
0	Expand investment fee study policy to provide more specifics on who is responsible, the frequency and metrics		
	REPORTING		
1	Disaggregating research and securities brokerage costs	**7**	**1**
0	Trade cost analysis summarizing explicit and implicit trading expenses		
0	Management fees netted from returns		
0	Profit share/carried interest from alternative investments		
0	Expenses related to cash (if any)		
0	Expenses related to real estate		
0	Reconciling actual payments with negotiated rates		
0	Document the results of its provider service and fee review at least annually		
0	Tracking the difference between negotiated rates and “headline rates” charged to smaller investors as fee savings		
	FEE REDUCTIONS		
4	Include (more) passive investment, where appropriate	**6**	**8**
2	Utilize a benchmarking firm to compare investment fees and other expenses to peers		
1	Maintain passive investment allocation, where appropriate		
1	Evaluate ways to reduce fees in private markets		
0	Seek no fee or discounted fee arrangements		
	OTHER		
1	Benchmark fees against peer group or industry averages	**9**	**3**

1	Re-evaluate fee benchmarks		
1	Conduct annual review of available fund vehicles		
0	"Remaining diligent" comments		
0	Understand that overall portfolio fees are influenced by size and asset allocation		
0	Consider an evaluation metric for securities brokerage vendors based on execution skill		
0	Review vendor contracts regularly for cost saving improvements		
Total Investment Fee Recommendations		**34**	**20**

Number of Recommendations	General IPS Recommendations	2020 Total	2024 Total
	ROLES AND RESPONSIBILITIES		
4	Define Investment Committee		
1	Define who conducts fee review and reporting		
1	Define CIO/Executive Director role		
1	Define custodian responsibilities		
1	Define Legal's responsibilities		
1	Define Staffs role		
1	Define Actuary responsibilities		
1	Define Investment Consultant responsibilities		
1	Statement that the Board is ultimately responsible, and the board hires other roles		
0	Define Fiduciary Duty	**24**	**12**
0	Define Broker/Dealer		
0	All parties involved in oversight of Plan investments, investment fee monitoring process, along with fund selection and monitoring criteria		
0	Define Specialty Consultants role		
0	Define Fund Administrator responsibilities		
0	Define reporting requirements for Investment Managers		
0	Define who selects Investment Managers		
0	Define who sets benchmarks		
0	Update Investment Committees responsibilities to include assigned tasks		

0	Define who is responsible for notifying managers of "unusually large liquidity needs" by the system and explain responsibility		
IPS LANGUAGE			
5	Include a discussion of risk in the IPS	**15**	**20**
3	Language discussing funding and liquidity needs in reference to systems liabilities		
2	Add policy similar to GFOA for determining and evaluating asset allocations		
2	Improve proxy voting language or process		
1	Language on IPS and governance review frequency		
1	Language to meet or exceed the Fund's actuarial assumed rate of return over the long term		
1	Language explaining investment beliefs		
1	Fiduciary language to certain roles to make decisions in the best economic interest of the fund's participants and their beneficiaries		
1	Define total fund benchmark aligned with asset allocation targets in IPS or reference in appendix		
1	Include a discussion of leverage in the IPS		
1	Language specifying if an external service provider is used and have authority to create compliance reporting		
1	Language that general objective is to provide promised benefits to members		
0	Language explaining Emerging Manager program definition and scope		
0	Language discussing funded status		
0	Update IPS target allocation to match current allocation in practice		
0	Define mandatory reporting expectations to the board		
0	Language around plan expenses		
0	Add language to better reflect alternative investments and their unique aspects		
0	Language should also be added to address that investments into mutual funds, exchange-traded funds or comingled investment trusts that may not follow the investment stipulations of the Statement of Investment Policy		
OTHER			
4	Cleanup or remove IPS language	**8**	**11**
4	Review IPS to PRB and industry best practices		
1	Continue simplifying the IPS		
1	List IPS revision dates in IPS appendix with past IPS documents retained		

1	Consider combining the IPS and operating procedures		
0	Finalize the update to Investment Beliefs and Fee Policy		
0	Improve the IPS with more explicit and measurable details		
0	Generalize policy language to avoid being overly prescriptive		
Total General IPS Recommendations		**47**	**43**

Number of Recommendations	Asset Allocation Recommendations	2020 Total	2024 Total
UPDATE IPS ALLOCATION SECTION			
6	Document existing practice or recommend potential changes for determining and evaluating the asset allocation	**24**	**13**
5	Provides specific language changes to be more specific regarding rebalancing ranges and guidelines		
1	Add language to review of the expected return assumptions, expected risk assumptions, portfolio standard deviation and peer group rankings at least annually or more frequently if needed		
1	Add section in IPS that covers Asset/Liability studies		
0	Include general language regarding diversification		
0	Add language for informal annual reviews of capital markets to improve flexibility of investments		
0	Add language defining maximum allocation to illiquid investments		
0	Define a more precise definition but more flexible with the timing of asset allocation studies		
0	Add language in IPS to define annual review as an asset allocation (or asset-only) study		
0	Including language specific to commingled funds stating the guidelines in the prospectus or similar governing document will prevail		
0	Clarify policy language regarding “readily marketable securities”		
OTHER TOPICS			
4	Recommending specific changes or to consider investments	**13**	**9**
2	Update the asset allocation study		
2	Review specific risk or asset class for current market expectations		
1	Avoid large changes in the strategic asset allocation too frequently		
0	Continue deep dive reviews of all asset classes annually		
0	Review the strategic asset allocation annually		

0	Incorporating the target allocation weights and ranges, along with preferred benchmark, into an appendix.		
0	Review the strategic asset allocation biennially or more frequently if needed based on market assumptions		
Total Asset Allocation Recommendations		**37**	**22**

Number of Recommendations	Other Topics	2020 Total	2024 Total
LIQUIDITY OR CASHFLOW CONCERNS			
2	Contribution levels and/or negative non-investment cash flow concerns	**10**	**2**
0	Make enhancements to liquidity reporting or management		
0	Add language discussing plan liquidity risk and every three years provide a comprehensive report		
OTHER TOPICS			
4	Complete an asset/liability study or study considerations	**16**	**6**
1	Add schedule for completing asset/liability studies to the IPS		
1	Improve in-house staff analytical expertise in scenario analysis and third-party reviews		
0	Consider potential plan design changes		
0	Develop/foster capital market assumptions with the investment consultant and actuary working closely		
0	Perform an experience study and make changes to assumptions as needed		
0	Different investment managers should attend board meetings semi-annually to provide updates		
0	Complete an asset allocation study every 3-5 years		
0	Utilize the expertise of investment consultants to ensure alternative assets are properly valued and managed		
0	Allow managers to select most efficient way to obtain their foreign currency hedge		
Total Other Topics		**26**	**8**

Appendix B – Individual Plan Summaries of the Investment Practices and Performance Evaluations

The following pages contain summaries of evaluations received by the Pension Review Board (PRB). Links to the individual plan evaluations can be found at the end of each summary or on the PRB website here.

Under Section 802.109(i) of the Texas Government Code, the PRB's report must "compile and summarize" the information received. There is no mandate for the PRB to perform independent analyses of any data presented or to assess whether plan practices align with industry standards. The PRB has therefore focused on identifying and reproducing key excerpts from each report, along with significant recommendations, to provide a quick reference for policymakers. All material included in the excerpt tables is provided verbatim. The PRB Analysis section calls attention to certain highlights of an evaluation, noting unique aspects that may distinguish it from other evaluations received.

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Investment Practices and Performance Evaluations performed by Independent Third Party

Austin Firefighters Retirement Fund

PRB Analysis of Evaluation

The evaluation provides helpful explanations and includes useful comparisons to industry practices to confirm that the system's policies are consistent with best practices. The evaluation uses color coding that helps identify areas of concern for the reader throughout the evaluation sections. The evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the investment practices.

The evaluator provides detailed peer comparison data including detailed analysis of potentially concerning sections such as the net cash flow and DROP program impacts on the system. The evaluator notes that, "like most mature pensions, cash flow is negative and has increased from 1.5% of assets in 2015 to 3.5% in 2022. [Deferred retirement option plan (DROP)] assets and payments have steadily increased as a percentage of the total fund assets and total distributions, respectively. DROP payments account for approximately 25% of distributions. These pressures may impact the Fund's tolerance for illiquids if they continue to increase at this pace."

Plan Assets:[1] $1,162,694,392

Evaluator: Callan

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 14

House District: 48

The evaluation also includes additional cost analysis based on information available to the evaluator from their expertise which provides an additional point of comparison than the generally used National Conference on Public Employee Retirement Systems (NCPERS) survey. This allows the analysis to offer a more unique datapoint and helping confirm the evaluator's statement that "the investment manager fees for the Fund appear higher than the industry average when compared to both the Callan and NCPERS surveys. However, investment manager fees for the Fund appear lower than industry median on a weighted-average basis, which considers the asset allocation impact of AFRF on total fees."

AFRF also included detailed comments in response to the recommendations of the evaluator. This increases the transparency for stakeholders and supports good governing practices by openly identifying areas for improvement and any potential actions that the system will take.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
One of the most important actions a Board can take is to develop, follow, and periodically review an investment policy statement (IPS), which should be an active document and provide a "road map" for the ongoing prudent management of the Fund. AFRF has a clearly articulated IPS that outlines the primary goals and objectives of the Fund, investment guidelines and limitations, fiduciary responsibilities, and a rebalancing policy. The policy also clearly delineates the roles and responsibilities of the Board of Trustees, staff, the investment consultant, investment managers, and the custodian. AFRF's IPS is regularly reviewed and includes a record of all revision dates back to adoption in 2002. The Austin Firefighters Retirement Fund maintains a thoroughly written Investment Policy Statement that includes investment goals and objectives, roles and responsibilities, asset allocation ranges, a rebalancing policy, investment guidelines and restrictions, and statements describing the risk tolerance, time horizon, and liquidity requirements of the Fund. It also maintains Operating Procedures that include asset class assumptions, broad

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

and sub-asset class allocation targets, manager selection and termination procedures, fee reconciliation and payment, performance objectives, asset class guidelines and a class action policy.

Strengths:

- The IPS is clear and serves as an effective guide that offers an objective course of action.
- Between the IPS and the Operating Procedures, AFRF's policies incorporate the primary components outlined by the CFA Institute.

Recommendations:

- Consider combining the IPS and Operating Procedures into a single document.
- Consider documenting all fund-level benchmarks used in performance reporting in the policy documents. This will allow stakeholders to understand the rationale of including each benchmark and the construction methodology. Currently, two of the total fund benchmarks used in performance reports are not outlined in the policies.
- Consider adding an investment management fee philosophy that outlines how the Board considers fees when seeking to achieve the most attractive risk-adjusted net return for the Fund.
- Consider including an acknowledgement that AFRF will look to meet the policies as defined by the PRB.
- Consider adding a risk objective to consider how the volatility of assets may impact the Fund's liability amortization period. This may provide additional guardrails to better enable the Fund to stay under the 30-year time frame to amortize the unfunded actuarial liability set by the PRB.
- Consider modelling plan liabilities and conducting integrated asset-liability studies on a periodic basis, typically every 3-5 years, to ensure that the Fund's asset allocation is designed to meet its liabilities and liquidity needs. Asset-liability studies illustrate the potential implications that asset allocation decisions have on future contribution policies. Most of Callan's public defined benefit plan clients, especially those of AFRF's size, conduct regular asset-liability studies.
- Consider adding an appendix or table that defines the benchmarks used for individual managers.
- Consider defining shorter term periods and specifying how relative performance against peers will be evaluated.
- Consider outlining the process for new manager selection and criteria for manager termination.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Asset allocation is reviewed annually by the Board and Meketa with the last review in May 2023. Meketa uses 20-year capital market projections and mean variance optimization to model the asset allocation and evaluate the most efficient mix of assets at a given level of return. Assets are allocated in accordance with the Fund's risk and return objectives as outlined in the Investment Policy Statement and the asset allocation documented in the Operating Procedures. The assets are appropriately diversified and maintain sufficient liquidity to meet obligations. A Fund's strategic asset allocation policy serves as the foundation of the investment program and is often the primary determinant of long-term returns and risks. A well-designed asset allocation policy balances the need for asset growth, income, liquidity, and risk mitigation specific to the asset pool's objectives. The primary return objective of the Fund is to achieve a high likelihood of attaining a 7.3% nominal return (the actuarial assumed rate of return) over the long term. The main risk objectives are to take the least amount of risk possible to achieve the return objective, minimize the risk of loss over a full market cycle, and to diversify industry and company specific risks. AFRF has established a strategic asset allocation process designed to meet these objectives. The investment consultant's capital market assumption development is reasonable and consistent with industry standards. Callan also reviewed the assumptions against the Horizon Actuarial Services survey (Meketa does this as well) and the assumptions appear reasonable. **Strengths:** - AFRF's asset allocation policy is aligned with the GFOA's asset allocation best practices for defined benefit plans. **Weaknesses:** - While the Board has requested the investment consultant review the impact of different scenarios on funded ratio and liquidity, it has not conducted a full asset-liability study in the last five years. **Recommendations:** - The Board should consider a full asset-liability study, which integrates different asset allocation mixes and market scenarios with their potential impact on all aspects of the Fund's liabilities (i.e. funded ratio, contribution expectations, amortization period, etc.).

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
AFRF's Board annually reports on direct and indirect management fees, brokerage fees, and profit share, in compliance with PRB requirements. A formalized procedure to document performance-based fees may be useful to guarantee their tracking. Custodial fees, investment consulting fees, and brokerage fees/commissions seem competitive when compared to industry averages. AFRF's investment management fees appear above industry averages when compared to funds of similar sizes. However, when considering the asset allocation of the Fund, fees align closely with peers. An annual fee analysis that includes fee benchmarking may be beneficial in assessing the reasonableness of current fees. The Fund Staff efficiently manages the fee payment process. However, there are recommendations to amend the Operating Procedures for more practical fee reconciliation and reporting. AFRF has successfully reduced investment management costs through strategic allocations to passive management and direct investments, demonstrating a proactive approach to fee optimization. **Strengths:** - AFRF's investment consulting fee is lower than the survey's total for Other External Advisors, which includes other service providers in addition to the investment consultant. **Recommendations:** - Consider a formalized procedure to document performance-based fees may be useful to guarantee their tracking. - Consider adding language to the IPS outlining the frequency and requirements of fee benchmarking. Texas law only requires the reporting of absolute investment management fees, which may not provide stakeholders the appropriate context. An annual fee analysis may be beneficial for monitoring manager fees and assessing reasonableness compared to peers. - Consider amending the fee reconciliation and payment section of the Operating Procedures. Only six of the 49 strategies invoice for fees, which makes the current language of reconciliation and then payment impractical. Consider amending to a review and possible reconciliation of fees. Additionally, consider removing the Trustee oversight requirement in the Operating Procedures. Requiring a pre-identified trustee to verify manager's fee payments may cause governance issues. This could be perceived as a conflict as one of the Trustees responsible for broad oversight would be directly involved in the day-to-day mechanics they are responsible for overseeing. - Consider naming the party responsible for reporting investment management fees to the Board in the IPS.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
Callan conducted a comprehensive review of the Austin Firefighters Retirement Fund governance processes and documentation. The Board of Trustees of the Austin Firefighters Retirement Fund is responsible for administering the Fund pursuant to the terms of Section 2.01 of Article 6243e.1 of Vernon's Texas Civil Statutes. The Fund is governed by Texas Government Code, the Pension Statute, Fund Rules, Governance Policy, Investment Policy Statement, and Operating Procedures. All Trustees are required to act as a fiduciary and to comply with the Board of Trustees' Code of Ethics, which includes guidance on Trustee responsibility, professional requirements, conflicts of interest, gifts and benefits, vendor contact during RFP processes, and travel policies. The Code details enforcement policies as well. The Fund appears to have adequate polices in place to address ethics, governance, and investment education. The documents and rules clearly describe responsibilities and expectations. The Fund has a standard process for confirming adherence with the requirements. The Board has ultimate responsibility for investment manager selection and asset allocation as delineated in the IPS. The Board utilizes an investment consultant to assist with asset allocation, investment manager selection and ongoing monitoring of the investment program. **Strengths:** - AFRF has established a robust governance framework that is outlined in various policies and statutory regulations, ensuring that all operations are carried out with high standards of accountability and transparency. - The governance process is consistent with industry best practices and many other public funds. - According to the November 2023 Board meeting minutes, Elizabeth Wiley, a representative from the Fund's Actuary, stated that the "Fund's benefit policy is much better developed than most public pensions and that the tests are strong without being overly rigorous."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The Board utilizes a multi-step approach, consistent with principles of procedural due diligence for manager selection. As part of this process, the Board has outsourced key pieces to Meketa. As noted, once the Board determines, with assistance from Meketa, a new manager is needed, Meketa typically leads the search process. Meketa has an investment manager research team that regularly monitors and reviews investment managers across public and private asset classes. This multi-phase process includes, among other criteria, analysis of a manager's organization, strategy investment team, investment philosophy and process, performance, and fees. The process includes quantitative and qualitative assessment as well as virtual and in-person meetings. Through this research process, the team develops a high conviction list of strategies in each asset class. The Board reviews and evaluates reports on the investment performance of the Fund quarterly. The reports provide an economic and market update followed by an executive summary that reviews high level relative performance. This is followed by a top-down performance attribution analysis, which analyzes the Fund's performance relative to the performance of its policy targets. The report shows the actual versus target asset allocation and compliance with the IPS. Historical, net-of-fee performance for the total fund and each individual manager is examined in detail against appropriate benchmarks and peer groups. Relative returns are looked at for quarter-to-date, year-to-date, 1, 3, 5, 10-year and since inception as well as 10 calendar years. Private equity, private real estate, and natural resources investments are reviewed using more appropriate metrics such as IRR and TVPI. **Strengths:** - AFRF has a robust process for manager search and selection where the Board is ultimately responsible for selection but generally relies on Meketa, to lead the search process and identify appropriate candidates. - AFRF's investment manager search process is consistent with best practices and follows a similar process to many comparable public pension plans. - The performance platform is used by several large consulting firms, and the calculation methodology for both public and private markets is industry standard and consistent with the CFA Institute's Global Investment Performance Standards (GIPS).

Full Investment Practices and Performance Evaluation

City of El Paso Employees Retirement Trust

PRB Analysis of Evaluation

Plan Assets:[1] $914,311,891
Evaluator: Asset Consulting Group (ACG)
Evaluator Disclosures:[2]
Relationship: Independent 3rd Party
Investment Discretion: None
Conflicts of Interest: None
Senate District: 29
House District: 76

The evaluation provides a summary report, with detailed information and simplified "report cards" in several sections, which makes it easy to view the evaluator's assessments and areas for potential improvement. The evaluation uses infographics to present data in a digestible format, and in many cases, presents the system's data in comparison to peers or benchmarks. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices, including the investment consultant's role.

Particularly noteworthy is the evaluator's analysis of the system's strategic asset allocation, which provides a comparison of the current asset mix to one alternative that could potentially improve risk adjusted returns, reduce risk, or both. This should provide value to the trustees as they review a soon-to-be-completed asset liability study mentioned in the evaluation.

The analysis of investment fees is also particularly useful. It compares the fees associated with the existing portfolio's funds to a universe of peer funds. This provides transparency to stakeholders regarding the system's total fees and the selected individual investments managers which most are identified as having fees in line with or less expensive than the median manager peer.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The IPS was reviewed for completeness and to ensure all the key elements were included. The IPS is written thoroughly, and all nine major key elements are included. The portfolio has a 1% strategic allocation to cash and an estimated 71% of the portfolio has daily liquidity based on the actual asset allocation as of December 2022. Annual cash flow needs are estimated to be approximately 4% of the value of the portfolio based on actuarial projections of annual benefit payments (8%) net of contributions (4%). The portfolio appears to be in a reasonable position to provide for future cash flow needs. **Strengths:** - The purpose of the investment program is clearly stated. - The rebalancing process and considerations are thoroughly outlined. - Acceptable volatility ranges are set for each asset class.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- Consider documenting a process within the IPS for the comparison of the total portfolio and the investment managers' risk adjusted returns to both peers and the benchmark index.
- Consider adding a total portfolio performance objective to earn a rate of return after all expenses that equals or exceeds the actuarial rate of return assumption, which is currently 7.25%, net of expenses.
- Consider increasing the min/max asset class ranges. This allows for more flexibility when making rebalancing decisions.
- Review performance objectives for consistency within the IPS so the appropriate evaluation can occur for the Trust.
- List all IPS' revision dates in the Appendix of the IPS. Records of past IPS' should be retained.

Investment Asset Allocation
Using ACG's capital market assumptions, the strategic asset allocation target has an estimated median expected return of 8.1% per year over the next ten years. This compares to Callan's projections for the strategic target asset allocation, a median expected return of 7.3% per year. The portfolio is diversified across equity, fixed income and real assets. The FY22 funded status of 81% on an actuarial value of assets basis compares to a national average of 75%. The median return expectation of the portfolio is expected to meet the actuarial rate of return assumption of 7.25%, net of expenses.
Strengths:
- The current portfolio is well-diversified with allocations to all major asset classes. - All managers adhere to the guidelines of the fund strategy.
Recommendations:
- Consider expanding the fixed income allocation to provide access to the full fixed income universe (i.e. non US fixed income and/or high yield).

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The estimated total weighted average investment management fee using ending Dec 2022 market values for the City of El Paso portfolio is 0.50% (50 basis points). This includes all traditional and non-traditional strategies, but does not include performance-based fee structures or underlying Fund of Funds manager fees. The estimated weighted average investment management fee of 50 basis points is in-line with the least expensive quartile when compared to a similarly structured hypothetical portfolio. Most of the underlying investment managers' fees are in-line or less expensive than the median manager in their respective eVestment universe. **Strengths:** - Fees appear reasonable for investment management, custody and consulting services.

Governance
The Board of Trustees delegates to an Investment Committee that considers issues related to the investment of Fund assets, and which makes recommendations to the Board. The Investment Committee is charged with investigating investment related issues, and reports its findings and recommendations to the Board of Trustees. The investment decision making process and delegation of investment authority are appropriately documented within the IPS. The Board meets monthly, while the Investment Committee meets the day before the regular Board meeting in odd numbered months. The Board voted to adopt the State Pension Review Board's minimum educational training requirements for both Trustees and System Administrators. New Trustees are required to complete seven credit hours of education in core content within the first year of service. Continuing Trustees and Administrators are required to complete at least four hours of continuing education in either core or non-core content areas within each two-year period after the first year of service. **Strengths:** - Governance structure, procedures, and documentation is thorough and in line with industry standards.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The Board, through its Investment Committee hires investment managers from time-to-time in order to carry out its duties to diversify the Trust's investment portfolio. The Board has granted authority to the Investment Committee to review possible manager candidates and make recommendations to the Board. Managers are meeting their expectations and investing within the constraints outlined in the IPS. Managers with performance concerns are undergoing periodic reviews and the watch list is actively monitored. We reviewed trailing net performance for the total fund per the most recent quarterly investment report, and compared the performance to peers within the Investment Metrics Public DB Funds universe with assets between $100 million and $1 billion. We also compared to a broader universe of peers with a similar equity allocation (55%-70%). Over the trailing 1-year, 3-year, 5-year, 7-year and 10-year time periods, the plan ranks in the 28th, 7th, 17th, 26th and 41st percentiles in the universe of DB peers, respectively. Net of fees, the total fund performance is ahead of the policy index and the peer group (Investment Metrics Public Funds with asset between $100 million and $1 billion) over the 1-year, 3-year, 5-year, 7-year and 10-year time periods. **Strengths:** - The investment manager search process conducted by Callan is thorough and meets IPS guidelines and industry standards. - Performance goals and benchmarks for the Total Fund and investment managers are documented and adequate. **Weaknesses:** - Manager performance is not compared against the most appropriate peer group and benchmark stated in the IPS. **Recommendations:** - Consider using the Russell 3000 + 3% in the performance reports for Private Equity investments as outlined in the IPS for consistency. - Consider adding universes for the passive Mellon strategies in the Performance Measurement Standards section of the IPS.

Full Investment Practices and Performance Evaluation

CPS Energy Pension Plan

PRB Analysis of Evaluation

Plan Assets:[1] $2,136,985,511
Evaluator: Champion Capital Research, Inc. (CCR)
Evaluator Disclosures:[2]
Relationship: Independent 3rd Party
Investment Discretion: None
Conflicts of Interest: None
Senate District: 26
House District: 123

The evaluation provides helpful explanations and includes useful comparisons to industry practices to confirm that the system's policies are consistent with best practices. The evaluation clearly identifies and discusses past recommendations, and the resulting changes made by the system. The evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation conducted portfolio analysis on the asset allocation and the level of risk in the portfolio. It noted that the portfolio's standard deviation of 12.46 was among the highest in its peer group. However, further analysis also noted that, "Despite the larger standard deviation found by CCR, and the resulting nearly 3% point increase in the large loss estimate, this relatively small difference between these two measurements is a positive result that reflects prudent risk management."

The evaluator concluded their analysis by stating that "the Plan has demonstrated adherence to policies and procedures that are aligned with prudence, care, loyalty, and fiduciary best practices. The commitment of the Plan's fiduciaries to compliance training and fiduciary education is commendable. Prudent asset allocation, fee and expense monitoring, enhanced selection and monitoring procedures for investment managers showcase the Plan's dedication to fiduciary excellence." The board trustees also took additional steps as fiduciaries by providing a review-and-comment of the evaluation which supports their transparency and accountability.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
CCR is pleased that the Plan has an Investment Policy Statement (IPS) that is consistent with fiduciary best practices. The IPS documents clearly roles, responsibilities, fiduciary status, and specific monitoring criteria. The IPS aligns with industry best practices by focusing on achieving measurable outcomes. The Plan consistently demonstrates a strong commitment to adhering to its governance and investment policies and procedures. Furthermore, the Plan's fiduciaries actively engage in compliance and fiduciary training as required by the Pension Review Board (PRB).

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Upon review of the Plan's asset allocation methodology, CCR found that the Plan engages in a prudent process for developing asset class weights, sub-asset class target allocations and rebalancing bands. The Plan's process includes the Investment Consultant ("IC") and Actuary having dialogue regarding capital market assumptions, liquidity needs, future funded ratios, and other analyses conducted on behalf of the Plan. The Plan's asset allocation and re-balancing policies are derived using a sound and prudent process consistently applied. The Plan portfolio's overall risk tolerance is represented by the strategic asset allocation and risk monitored in the IC's quarterly monitoring report.8 The Plan's portfolio is reported to have a standard deviation of 12.46 (92%), which is among the highest in its peer group. Risk, relative to return, as measured by the Sharpe Ratio is used to express the added value of the excess risk. In the same report, this kind of risk is also high relative to the Plan's peers. With respect to the risk inherent in strategic asset allocation, or policy risk, our findings are similar. **Strengths:** - CPS Energy's staff not only tracks investment-related and administrative fees but annually completes a detailed fee and expense spreadsheet. This type of monitoring is an improvement in monitoring policies since the 2020 CCR Report and is consistent with fiduciary best practices. - CPS Energy has a prudent process for determining target allocations using the capital market statistics approved by the Plan.

Investment Fees
In terms of expenses and fees, the Plan has a robust monitoring process for assessing and monitoring fees and expenses. The Plan's staff tracks both investment and administrative fees and annually prepares a comprehensive accounting of all expenses. The Plan's total fees for 2022 were $12.7 million.10 Based on assets of approximately $1.9 billion, this is an expense ratio of roughly 65 bps. According to the current publicly available data of public pension plans the Plan's investment expense is below the median of 81 bps based on similarly sized plans (19 of 111 plans). 11 Fees in the previous year totaled $15.8M. Therefore in 2022, the plan saw a year over year reduction in fees of approx. $3.1M. **Strengths:** - CPS Energy has implemented robust monitoring processes for reviewing fees and expenses.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
CCR completed an analysis of the investment and governance policies that have been adopted by the Plan and assessed the Plan's compliance with these policies. The Plan's Statement of Governance ("SoG") continues to be comprehensive as it relates to the duties and responsibilities of the CPS Energy Board of Trustees ("Board"), the Employee Benefits Oversight Committee ("EBOC"), the President & CEO, and the Plan's Administrative Committee ("AC"). The Investment Policy Statement ("IPS") further defines the roles and responsibilities of the custodial Trustee, the AC, the Investment Managers ("IM's"), and the Investment Consultant ("IC"). **Strengths:** - The Plan added "soft dollar" monitoring policies in its most recent IPS. The Plan is vigilant in its compliance with both its governance and investment policies and procedures, thus, CCR believes the Plan will continue implementing "best practice" processes as best practices evolve. - The Plan's decision-making processes and delegation of authority among the Board, EBOC, and Administrative Committee are prudent processes and consistently applied.

Investment Manager Selection and Monitoring
The Plan has investment manager selection and monitoring processes that are consistent with best practices. This includes quarterly monitoring of both gross and net performance, enabling a comprehensive evaluation of managers against benchmarks. This has improved the fiduciaries' ability to assess the net value add for each manager, including privately assets. The best thinking among fiduciary experts is that the monitoring criteria for investment manager performance is best done using the same objective, specific measurable criteria which were used for selecting investment managers. For IMs operating in liquid markets, selection, and monitoring criteria could be more specific with respect to time-period evaluation. Importantly, each quarter can be viewed as a new "stress test" for every IM. Each quarter, IMs "run the race" against their peers, and against the appropriate benchmark, and against the return expectations for the asset class associated with that particular IM. **Strengths:** - The Plan has significantly improved its monitoring processes since the 2020 CCR Report. Specifically, the Plan has implemented a level of that ensures both gross and net of fee performance are compared relative to benchmark, peer groups, and objectives. CCR commends the Plan for monitoring "soft dollar" arrangements, as these arrangements conflict with a fiduciary's duty of loyalty.

Full Investment Practices and Performance Evaluation

Dallas County Hospital District Retirement Income Plan

PRB Analysis of Evaluation

The evaluation provides a thorough review of the governing policies, procedures, and practices of the system, while offering easy-to-understand explanations of its findings and recommendations. The evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation includes an explanation of its methodology, tying sections of the report back to the applicable section of the Texas Government Code; and a summary of recommendations that discusses the recommendation, rationale, and any supporting industry standard in support of the recommendation.

The evaluation also confirmed that "the cumulative investment management related fees and expenses for the Plan were 0.38% of the plan value. This 0.38% is below the peer median of 0.45% for plans of similar size."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $1,665,132,000

Evaluator: Anodos

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 23

House District: 100

Investment Policy Statement
The IPS is organized consistent with the "best practices" identified by the CFA Institute, GFOA, and TPRB, including sections regarding (1) investment principles, (2) objectives (3) approved allocation, (4) manager selection process, and (5) monitoring functions and key performance indicators. The investment policy clearly defines three performance objectives for the Plan. These objectives are, over a 5-year period to (1) meet or exceed the actuarial assumed return, (2) meet or exceed the return of the Policy Index, and (3) experience comparable volatility of returns – as measured by standard deviation – of the Policy Index. Since the initial IPPE was completed in q1 2020, the Plan has experienced an unusually high level of volatility from both the equity markets and the fixed income markets (Covid Crash q2 2020 and Fed Tightening 2022). This "real world" stress test has demonstrated that the governance instructions within the IPS are clear as evidenced by the B&FC's faithful adherence to the instructions within the IPS. Also, the Treasury Director has exercised a disciplined application of the rebalance instructions within the IPS. Finally, the B&FC has reaffirmed the long-term risk expectations and return objectives for the Plan in total and for each of the asset classes and managers that make up the total. For these reasons we conclude that the instructions within the IPS are clear and consistently applied. **Recommendations:** - When comparing the plan's return to the actuarial assumed return, the plan's return should be reported net-of-fee

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The methodology used to develop the approved allocation is based on long established and prudent process which includes (1) defining the performance objective (return target and risk expectations), (2) establishing capital market expectations of the various recognized asset classes, (3) modeling combinations of these assets classes to develop a series of allocation that are reasonably expected to accomplish the return objectives within acceptable risk expectations, (4) considering the prevailing economic environment, and (5) selecting that allocation of asset classes that is reasonably expected to accomplish the Plan's goals. The System's risk expectation is expressed as the standard deviation of quarterly returns of the Plan over the preceding five years and is compared against the risk of the Policy Index (a blended benchmark index consistent with the approved allocation). As noted above, the Plan's 5-year standard deviation is not noted in the Callan report, but the 10-year standard deviation of 10.26% is reported which is reasonably close to the 10-year standard deviation of the Policy Index of 9.81%20. In February of 2022, the Investment Consultant projected that the Strategic Allocation would have a 10-year standard deviation of 11.8% and a Sharpe Ratio of 0.37. **Strengths:** - An asset liability study was performed in August of 2022 which found 2022 contributions far exceeded benefit payments. **Recommendations:** - The performance standards for active managers should be expected to be achieved over a five-year measuring period rather than both three- and five-year periods.

Investment Fees
The Investment Policy Statement directs that Investment Consultant will conduct an "Annual review of investment management fees and comparisons with fees of other managers with similar strategies." The Callan fee study dated August 2021 found that the cumulative investment management related fees and expenses for the Plan were 0.38% of the plan value. This 0.38% is below the peer median of 0.45% for plans of similar size. Total direct fees paid by the plan were $3,676,017 or 0.2298% of the year-end plan value of $1,599,131,000. Total indirect fees represent 0.1496% of the 2021 year-end plan value.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The Board has adopted a series of investment policies and procedures which are memorialized in the IPS. This document is the sole repository of governance policies unique to the System. Separate and apart from the System's governance policies the TPRB has adopted several reporting responsibilities for the System which could also be considered "governance policies" but are appropriately not included in the IPS because they are universally applicable to all public funds in Texas. The IPS is clear that B&FC retains all authority for investment decisions related to the Plan other than (1) the day-to-day investment duties which have been delegated to the various investment managers and (2) the authority to rebalance the portfolio which has been delegated to Staff within clear written guidelines in the IPS. Other than these two exceptions, all investment authority is vested exclusively with the B&FC and has not been delegated. **Recommendations:** - This long-standing practice of annually reviewing and reaffirming the IPS is a sufficiently important governance discipline that is should be added as an affirmative policy in the IPS.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The qualifying criteria for investment manager candidates are, among other factors, (1) a clearly defined investment philosophy, (2) a stable investment team, (3) sufficient assets under management, (4) experience and tenure in managing the strategy, and (4) reasonable fees. Once engaged, the actual performance of each investment manager (risk and return outcomes) is compared to (1) a benchmark index that is consistent with the asset class or strategy the investment manager employees and (2) peer group managers within the same asset class or investment strategy. The Investment Consultant is responsible for calculating and presenting the performance of the overall Fund, the individual investment managers and the key performance indicators used to measure against. If concerns develop regarding some aspect of an investment manager's performance or activities, that manager will be put on the "Watch List." That factors that would trigger a manager being included on the Watch List are (1) failure of the manager to meet their performance standards for a sustained period, (2) change in key members of the investment team, (3) change of ownership of the investment management firm, (4) change in focus of the investment manager, (5) judicial or administrative proceedings brought against the manager, (6) violation of an SEC rule has been committed or (7) other factors determined by the Investment Committee. Because these concerns may or may not be of sufficient importance to justify terminating an investment manager, the Watch List is intended to serve as a management tool for the Investment Consultant and the Investment Committee to evaluate the investment managers. **Recommendations:** - We recommend the Plan adopt a policy that requires the Investment Consultant to disclose any relationship or revenue between themselves and any candidate investment manager that they introduce to the Plan. - We recommend the Plan adopt a policy that at the time of engagement with an investment manager, the manager shall affirm that they act in a fiduciary capacity toward the Plan and its participants

Full Investment Practices and Performance Evaluation

Dallas Employees' Retirement Fund

PRB Analysis of Evaluation

The evaluation offers a brief summary of the Fund's practices and performance, with some details in specific areas. It should be noted that the evaluation was completed by a 3rd-party firm, which allowed for an enhanced independent review of the investment practices, including the investment consultant's role.

The evaluation touches on the System's annual asset liability study that is identified as a best practice. The evaluator also states that "In our review of the ERF's processes, procedures and documentation, we found no clear deviances from industry standards or prescribed norms for similar funds."

The evaluation includes recommendations for the System to continue existing practice and in general identifies the each various practice that ERF follows is consistent with best practices.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $3,649,102,000

Evaluator: Cook Street Consulting

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 23

House District: 108

Investment Policy Statement
An Investment Policy Statement is a manifestation of a disciplined process for selecting and monitoring the components in an investment program. It forms a foundation for a fund's investment strategy, formally establishes the governance structure and asset class representation, and defines the processes for investment manager selection and monitoring. The ERF has a written IPS for the overall plan as well as sub-asset classes, clearly customized for the ERF. The IPS is written clearly so existing as well as newly appointed or elected Trustees will find it helpful as an ongoing tool for evaluating the Fund's investment program, consistent with best practices. The Investment Manager Guidelines contain specific, measurable objectives for the managers, net of fees, over "a full market cycle", which is expected to be 3-5 years. **Strengths:** - ERF's IPS is consistent with best practices.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The ERF has a formal asset allocation policy defined within the IPS. It is specific in terms of asset classes used, ranges around target allocations, and evaluation criteria. The Staff, working with the Investment Consultant, makes recommendations to the Board for approval. They examine the asset allocation monthly and will rebalance to targets based on defined ranges. The ERF's Investment Consultant and Actuary communicate regularly on the expected returns for the ERF. The Actuary examines the Investment Consultant's expectations and compares them to a survey of other capital market expectations from other sources. The ERF does not implement any tactical asset allocation component but does recognize and attribute its managers' returns by their invested sectors and geographical positioning. The Investment Consultant develops return expectations using an Income Growth Valuation Model, Dividend Discount Model, and Cyclically Adjusted P/E Model. The IPS outlines the specific types of alternative assets allowed including ranges and maximum allocations. The ERF's long-term time horizon provides the context for properly setting and measuring performance of these assets as well as defining their target allocations. The IPS, along with Staff procedures and manager selection, help mitigate the implied risk of these asset classes. For example, Private Equity investments are managed in a fund-of-fund structure with multiple managers utilizing two layers of audit and valuation (pricing). An Asset Liability Study is conducted annually, reflecting the current population and expected cash flow needs. **Strengths:** - An asset allocation study is conducted annually, incorporating current capital market assumptions and the Investment Consultant's current views on the market. We found these assumptions to be in-line with peers. - The ERF's asset allocation is appropriate for a plan of its size and is consistent with best practices. - The inputs for the asset allocation modeling are reasonable, and the approach used by the system to develop the expected returns and asset mix is disciplined and reviewed regularly. It is consistent with best practices, and results in a well-diversified portfolio that is appropriate for the plan's size. - The ERF's frequent evaluation of expected returns is an example of a Fund procedure that is consistent with best practices. - The ERF's annual Asset Liability Study is an example of a Fund procedure that is consistent with best practices.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The ERF has a disciplined and detailed evaluation procedure to measure, reconcile, and benchmark fees. Applicable investment fees and commissions have been assessed against appropriate benchmarks. Such fees and commissions within the Plan have been deemed reasonable. The ERF's custodian provides reporting on securities trading, brokerage fees, and other risk measures, such as sector weights, country weights, cash levels, etc. All fees are transparent and reconciled with service agreements. The ERF does not use commission recapture or directed trades. **Strengths:** - The ERF's discipline around fees is very thorough, and we consider these Fund procedures to be consistent with best practices.

Governance
The ERF and the Board are organized under Chapter 40A. The ERF has Investment Policies related to all asset classes (e.g. International Equity, REITs, Private Equity, Real Assets, etc.) as well as a Manager Selection and Monitoring Policy. The ERF's Code of Ethics (this "Code") covers the Board and Staff and addresses topics such as travel, gifts, prohibited transactions, and conflicts of interests. This Code also covers the ERF's consultants, advisors, vendors, employees, and other fiduciaries of the ERF. This Code is read and enforced together with the code of ethics found in Chapter 12A of the Dallas City Code and the travel policy adopted by the Board for itself and its Staff. The Board members are required to complete the PRB Trustee education with the ERF filing annual disclosure statements. Many members come to the Board with prior professional investment experience. The ERF issues RFPs for their Investment Consultant typically every 5 years. **Strengths:** - The ERF's governance policy and transparency of practices is adequate for a plan of its size and is consistent with best practices.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
Managers are selected by issuing an RFP for each asset class. Working with the Investment Consultant, Staff will recommend candidates for due diligence visits for Board approval. After conducting due diligence, Staff then recommends finalist candidates to present to the Board. Once hired, managers are required to meet with the Board as needed, typically once every two years. The ERF reviews performance monthly, examining both gross-of-fee and net-of-fee returns compared to index benchmarks. Quarterly, the ERF examines managers compared to peer groups, net of fees, attributing returns to sector, timing, and manager skill. Managers can be placed on "watch" for different periods of time depending on the market environment for that manager's asset class. The Board is provided special information related to watch manager evaluation criteria and the expectations on timing and conditions for improvement. **Strengths:** - The manager selection and monitoring process is consistent with best practices.

Full Investment Practices and Performance Evaluation

Houston Firefighters' Relief & Retirement Fund

PRB Analysis of Evaluation

The evaluation was prepared in accordance with the Houston Firefighters' Relief & Retirement Fund's governing statute.

The evaluation provides a general overview of each of the eight subject areas identified for review in the pertinent statute. It should be noted that the evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation identifies various best practices the system uses and studies that the system conducts such as asset liability and asset allocation studies that improve their ability to manage assets. The evaluator further states, "Even with the most prudent and effective management, portfolio volatility has increased in recent years due to external economic conditions…We believe the strong team in place at [Houston Firefighters' Relief and Retirement Fund] has managed the last three years with consummate skill and expect their legacy to continue."

Plan Assets:[1] $5,109,178,130

Evaluator: Global Sovereign Advisors (GSA)

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 6

House District: 141

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The Fund's Investment Policy Statement (IPS) went through an extensive review and revision by the staff and Investment Committee (IC) in 2021, which was approved by the Board. It incorporated revisions to align with the 2021 Asset Liability Management (ALM) Study and Strategic Asset Allocation (SAA). This IPS embodies current best practices covering governance (including the definition of duties and investment philosophy), objectives and constraints of the Fund (such as time horizon, return objectives, and liquidity requirements), portfolio parameters (such as asset allocation, benchmarks, types of securities), risk management (including performance objectives and control procedures) and reporting (monthly, quarterly, annually and ad hoc when needed). Board oversight responsibilities remain the same, with the exception that prior signoff by the Board Chair is no longer needed to rebalance the public markets asset allocation when it shifts outside of TAA ranges or when an expected cash outflow requires the replenishment of cash through sale of public markets assets. All other safeguards remain. Such changes provide for more timely portfolio management. Following this change, rebalancing activities will be reported to the IC in the monthly investment actions summary. **Strengths:** - The breadth, frequency and detail of the reports [investment compliance] is deemed to be in keeping with industry best practices.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
It is best practice to conduct scenario analysis regularly to test how the portfolio is expected to perform under stressed economic conditions. Diversification is important to manage risk, but it is not always effective, especially when a market crisis arises and the correlation across asset classes increases. The CIO and Senior Investment Officer, no less than annually request scenario analyses and stress tests from third party consultants unless market conditions warrant an ad hoc analysis. It is inherent in the private equity asset class for performance and reporting to lag the more actively traded public markets. For this reason, stress tests, pacing and scenario analyses for private assets conducted on an annual basis is often adequate. Higher fee arrangements are limited to classes of investments where more active management approaches can enhance returns. HFRRF practices diligent compliance functions, employs external professionals to conduct regular external audits and engages actuaries to perform periodic ALM studies consistent with industry best practices. Overall, the closely monitored portfolio, with allocations to a prudent blend of active and passive funds, provides adequate diversification for the long term. **Recommendations:** - Building analytical expertise in-house is suggested as a way to provide more timely scenario analyses as well as added insights to reviewing third party analyses when considering purchases and sales of assets.

Investment Fees
The portion of the portfolio invested with publicly-traded stocks is primarily held in low-cost index funds or in commingled funds with respected fund managers. Research regarding public equity markets indicates a lack of persistent excess returns (i.e., above benchmark, net of fees) with active management in the large, developed markets that are considered more efficient due to information flows, favorable regulatory environments, and sound trading infrastructure. **Strengths:** - Management has been successful in negotiating significant cost reductions which benefits the Fund regardless of market conditions and will strengthen HFRRF's negotiating position as a fair, yet cost-Management has been successful in negotiating significant cost reductions which benefits the Fund regardless of market conditions and will strengthen HFRRF's negotiating position as a fair, yet cost-conscious investor. **Recommendations:** - It would be beneficial for the Fund to utilize a benchmarking firm to compare investment fees, administrative costs, and staff size, to funds of a similar size and asset allocation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
Section Not Required Per Governing Statute Given the increased frequency of unexpected events, there is risk that senior management, such as the CIO, or Executive Director becomes unavailable. A clear emergency backup plan should be in place and documented. A back-up plan for key service providers (such as Custodians) should also be considered. Current service providers should also share information regarding disaster recovery strategies relevant to their work with HFRRF. Potential key participants in a back-up plan should be kept up-to-date on mission critical matters and procedures. **Recommendations:** - While there are external advisors hired to perform various analyses, the Fund should build bench depth and strength. Looking ahead, it would be valuable to have additional staff with the potential to develop cross-functional skills such as risk management, or to become future leaders of the Fund.

Investment Manager Selection and Monitoring
The Fund does not use any fund-level leverage. Individual managers and hedge funds may use options or futures for risk management, which can be viewed as leverage. The Fund does not borrow money to make investments. The reporting frequency of investment managers vary from monthly to quarterly. A review of private market investments usually requires more in-depth analysis and contact with the General Partner (i.e., investment management team) and the other limited partners. Managing these relationships for opportunities for further investment is important. Given the large number of meetings, there are increased travel requirements as well as numerous meetings to be monitored virtually by the CIO and Senior Investment Officer. Given the number of private investments for a growing portfolio, staffing considerations are important and require monitoring. **Strengths:** - For 39 years, HFRRF has received a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association. **Recommendations:** - We recommend undertaking an independent benchmarking study that not only reviews fees and administrative costs, but also includes an assessment of staffing levels given the Fund's complex structure.

Full Investment Practices and Performance Evaluation

Houston Police Officers' Pension System

PRB Analysis of Evaluation

The evaluation was prepared in accordance with the Houston Police Officers' Pension System's governing statute.[1]

The evaluation provides useful explanations and comparison to leading practices for important topics that ultimately improve the understanding of the system. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The evaluator also states that, "Through our evaluation process, we found HPOPS to be a well-managed plan with a well-defined and disciplined governance structure, a strong and ethical culture, clear decision-making processes, and an institutional quality investment strategy. We found no critical-path practices which we believe would imperil the health and solvency of the Plan."

The evaluator identified several recommendations regarding the Investment Manager Selection and Monitoring section, which were recommended during the evaluator's previous evaluation period in 2020.

Plan Assets:[2] $7,208,455,000

Evaluator: Verus

Evaluator Disclosures:[3]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 6

House District: 147

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
Through our review, we found HPOPS takes compliance very seriously, and we found that HPOPS closely follows both the letter and spirit of its policies in most cases. However, we identified certain areas where Policy has not been updated to match current practice, and our recommendations in these areas are detailed below. **Strengths:** - Upon review, we found HPOPS' Ethics Policy to be thorough and well-structured with sufficient requirements to effectively monitor compliance. **Recommendations:** - Add a section on program-level leverage that includes a description of objective(s), implementation, and performance attribution. - Add detail on tactical asset allocation by including governance parameters in roles and responsibilities (Section 428), defining allowable ranges, and performance attribution. - Define specific Total Fund benchmark aligned with Strategic Asset Allocation targets, possibly in a separate referenceable Appendix on Benchmarks.

[1] Section 802.109(k)(1), Texas Government Code, authorizes HPOPS to use the report required by Section 10A, Article 6243g-4, Texas Revised Statutes, to satisfy the evaluation requirement.

[2] As of 12/31/2023

[3] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- Include allowable ranges in Strategic Allocation table contained in Executive Summary section of IPS and move to separate referenceable Appendix.
- Adjust manager selection and manager monitoring process language to match current practice as identified in the Implementation section below (pp.14-16).
- Identify specific risk parameters established by the Board as described in sub-section 404.02, possibly in section 432, Risk Control Policy.

Investment Asset Allocation
HPOPS' risk and return objectives are to achieve its actuarial investment rate, currently set at 7.0% net of fees and expenses, within the risk parameters established by the Board. HPOPS' current allocation is tilted toward heavier equity exposure and lower fixed income exposure than its peers, which has served it well as higher risk exposures have been accretive to performance since the Global Financial Crisis, notwithstanding the meaningful drawdown that occurred in 2022. Based on these performance metrics [Historical fund performance compared to policy index and peers], HPOPS' actual allocation as implemented has been highly effective in meeting its return objectives over most historical periods and showing strong performance relative to peers. **Recommendations:** - Conduct a Strategic Asset Allocation review in light of generally higher capital market assumptions to determine if a lower risk portfolio is a viable option. - Assess ongoing ability to derive value from portfolio leverage in higher rate environment. - Consider utilizing peer universe comparisons for public markets investment strategies, including passive mandates in a more formalized/structured manner. - Reassess liquid alternatives portfolio to align benchmarks with strategic purpose.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
HPOPS' commitment to passive investing is high relative to that of most other public pension plans. That said, we find the rationale behind their decision sound and their position reasonable. Investment management fees illustrated in HPOPS' 2021 ACFR were lower than those included in the schedule referenced above, at approximately $6.9 million or less than 10 basis points of total assets. However, the ACFR figures did not include investment management fees for private market investments. After removing private markets investments from the table referenced above, the two data sets are comparable. In 2022, HPOPS commissioned a study by CEM Benchmarking to conduct a review of the Plan's fees paid to both public and private markets investment managers. For private markets, the study included private equity, private credit, and private real estate investments. The study concluded HPOPS pays modestly higher fees on average than other institutional investors in private markets. While we find HPOPS' fee structure to be reasonable in aggregate, given its investment strategy implementation, we believe there may be opportunities to reduce the Plan's fee load further, as a result of the general downward trend in investment management fees over the past several years. **Strengths:** - Because of HPOPS' heavy usage of passively managed investment strategies, overall fees are low relative to public market peers. **Recommendations:** - Undertake a comparative fee review of investment managers across the public markets portfolio, including passive mandates. - Evaluate ways to reduce the fee structure of future private markets commitments

Governance
Section Not Required Per Governing Statute We found no critical-path practices which we believe would imperil the health and solvency of the Plan. We found HPOPS to be somewhat unique relative to many of its peers in that they do not utilize a general consultant to assist with program implementation. However, this has not hindered their long-term performance, which places them in the top percentile among their public fund peers over the long-term.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
HPOPS has developed robust processes for assessing manager suitability for hire and for conducting periodic on-site due diligence after a manager has been hired, which are described in detail in the Investment Policy Statement. In addition, HPOPS' Investment Staff monitors each manager on an ongoing basis, utilizing a monthly performance report that is published and reviewed in summary with the Investment Committee. Once a manager is hired, the focus shifts to ensuring they are meeting established performance expectations and can be expected to continue to do so. Typically, this is accomplished by tracking investment performance through time and periodically reviewing qualitative factors such as style drift and organizational stability. HPOPS has established procedures for both. **Weaknesses:** - In our view actively managed traditional investments and alternative investments require different approaches to due diligence, including varying degrees of rigor. HPOPS' established search process does not explicitly address these differences. **Recommendations:** - Specify separate requirements for active and passive traditional investments, as well as for alternative investments. - Simplify the process description, providing high-level guidelines for flexibility with specificity on required rigor only where necessary. For example, it may not be necessary to have candidate managers complete an RFP for every search, but it may be necessary to obtain Investment Committee and Board approval every time. - Prepare and maintain adequate documentation to ensure/demonstrate process has been followed. - Include peer rankings in periodic performance reports, as appropriate. - Clarify the level of due diligence required by type of investment. - Reduce the specificity of the coverage topics in Section 443 to provide Staff with flexibility. - Standardize documentation to ensure/demonstrate process has been followed.

Full Investment Practices and Performance Evaluation

Lower Colorado River Authority Retirement Plan

PRB Analysis of Evaluation

Plan Assets:[1] $456,574,000
Evaluator: Verus
Evaluator Disclosures:[2]
Relationship: Independent 3rd Party
Investment Discretion: None
Conflicts of Interest: None
Senate District: 14
House District: 48

The evaluation provides useful explanation and comparison to leading practices for topics that ultimately improve the understanding of the system. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation provides detailed analysis of both the asset allocation and liquidity of the system using multiple tables, graphs, and references to best practices to explain their conclusions. Additionally, the evaluator provides a summary statement of their evaluation, "Through our evaluation process, we found the Lower Colorado River Authority Retirement Plan and Trust ("the Plan") to have a reasonable and well-implemented investment strategy."

The evaluation also confirmed that based on recommendations made from the 2020 evaluation that, "throughout our interview process, each of the interviewees described the new governance structure as highly effective and a meaningful improvement over the previous structure, where all decision-making authority resided with the Retirement Board."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
As a result of the governance structure transition, the Plan's IPS has been simplified to reflect a shift in decision-making authority. With this in mind, we reviewed the IPS to assess sufficiency and effectiveness and also to ensure compliance with key provisions. Upon review, we found the updated policy to provide a sufficient level of guidance for the effective management of the Plan. **Recommendations:** - A language adjustment: The third sentence in Paragraph 1 under Duties and Responsibilities on p. 4 currently reads, "The OCIO's role is set forth in the IMA and may provide guidance to the Board on matters pertaining to the investment of Plan assets including the creation of the Investment Policy, investment selection, monitoring the Plan's performance, and compliance with the Investment Policy." Since it is presumed that it is the OCIO, rather than the OCIO's role, that is to provide guidance, et cetera, this passage may be more clearly written as, "The OCIO's role is set forth in the IMA. The OCIO may provide guidance to the Board on matters pertaining to the investment of Plan assets including the creation of the Investment Policy, investment selection, monitoring the Plan's performance, and compliance with the Investment Policy." - Documentation concerns: We were unable to find clear evidence that the Board of Trustees reviewed governing documents controlling the investment products used in the investment program. In the future, such evidence could include emails to the Trustees containing the governing documents and meeting minutes indicating that discussions of the governing documents has taken place.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Asset allocation is broadly recognized as the primary tool institutional investors have at their disposal to meet return objective within a pre-determined risk tolerance. The Plan's risk and return objectives are to achieve its actuarial investment rate, currently set at 7.0% net of fees and expenses within the risk parameters established by the Board. While the Board has delegated decision-making authority in certain areas such as manager selection and portfolio rebalancing, it has retained authority for strategic asset allocation with input from the OCIO Provider. We reviewed the process by which the Provider evaluates and recommends asset allocation adjustments and found it too be adequate and in line with industry best practices. **Recommendations:** - The Plan's current active/passive structure is reasonable, but we nevertheless continue to encourage consideration of an increased share of passive investments in the portfolio.

Investment Fees
To assess the Plans' management fee structure, we compared the Plan's actual fee to the median fee in the eVestment manager database for each representative asset class, using the Plan's assets under management. The Plan compares favorably to the universe median in all categories evaluated. Benchmarking data for the Plan's Real Estate and Other Alternatives managers was not available in the eVestment database. However, based on our experience with these asset classes, we believe the fees the Plan is paying is within a reasonable range.

Governance
Since our last evaluation completed in June of 2020, the Retirement Board changed the governance structure of the LCRA Retirement Plan and Trust. The Retirement Board effectuated this change as a result of concerns over the responsiveness of the Board to emergent investment issues, particularly those related to the performance of investment managers, and the ability of the Board and Staff to provide a sufficient level of focused and expert attention to the Plan's investments. Following a competitive review process, the Board engaged with a provider of outsourced CIO ("OCIO") services and granted them discretionary decision-making authority over many of the Plan's investment processes. This change has had the intended effect of streamlining the investment decision-making process, placing the authority to make certain decisions in the hands of experienced investment professionals, increasing responsiveness to emergent investment issues, and allowing the Retirement Board to focus on investment policy development and oversight.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Throughout our interview process, each of the interviewees described the new governance structure as highly effective and a meaningful improvement over the previous structure, where all decision-making authority resided with the Retirement Board. Our review of the current governance structure supports the legitimacy of this description.

Investment Manager Selection and Monitoring
Effective benchmarks are ones that assist an investor in determining whether or not an investment strategy is meeting performance expectations over time. Characteristics of an ideal benchmark can be easily recalled by using the SAMURAI mnemonic. Most traditional public markets investment strategies can typically find benchmarks that meet the SAMURAI criteria, but it becomes more difficult with alternative investment strategies. We found that in most cases the Plan utilizes a set of benchmarks that reflects the investment strategies deployed across the portfolio and follows the SAMURAI criteria as closely as possible. We find the benchmarks used to be reasonable and appropriate for measuring performance. **Recommendations:** - It was not clear whether performance is measured on a gross-of-fee or net-of-fee basis. We recommend including net-of-fee performance to ensure managers are evaluated on their excess returns over and above the fees paid to achieve them. - Compare manager returns to a universe of similar managers to ensure the managers selected are not only adding value relative to a passive benchmark, but they are also outperforming other managers who also may be considered for their respective mandates. - There are no asset class composite benchmarks included in performance reports. We recommend composite benchmarks made up of the underlying benchmark returns weighted by policy target allocations for each asset class.

Full Investment Practices and Performance Evaluation

Lubbock Fire Pension Fund

PRB Analysis of Evaluation

The evaluation provides helpful explanations and includes useful references to industry practices and peer groups to confirm that the System's policies are consistent with best practices. The evaluation clearly identifies peer groups and public pension data studies for comparisons made in the evaluation. It should be noted that the evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the system's investment practices.

The evaluation found that the investment consultant's performance monitoring of various assets including alternatives and the fees associated with the investments are being conducted appropriately. Along with confirming proper monitoring the evaluator reviewed noted "Based on the 2022 actuarial study, the Plan cash flows are not expected to change materially. The Fund has exhibited only modest cash outflows of 2 % per year for the long term. Based on the actuarial valuation, this relationship appears stable."

Plan Assets:[1] $258,961,847

Evaluator: Southeastern Advisory Services, Inc.

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 28

House District: 83

The evaluator in general found that the system's "policies, procedures, and practices appropriate and consistent with prevailing industry comparisons." Additionally, the evaluator did make several recommendations for improvement and provided additional details justifying the recommendations where needed.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The plan takes a total return approach to achieving its objectives, including a clearly defined liquidity policy (IPS: Asset Allocation Strategy, page 6). The cash reserves required to meet liabilities are specifically quantified with dollar ranges. Although funding and benefit policies are not specifically articulated, this document section is evidence that liabilities and cash needs are considered and regularly measured. Asset manager responsibilities are clearly defined. Specific asset manager benchmarks and comparative universes are correctly identified. Measurement periods for performance are identified as a three-to-five-year period. There is a clear process for reviewing and replacing managers based on performance. The investment policy statement (IPS) document is clearly written and consistent with industry practice. The board has regularly reviewed and updated the document. The consultant uses "Appendix A" to express the Fund objectives, benchmarks, and manager assignments. This format streamlines the document and makes it easily understandable. The document has been updated annually, also consistent with accepted industry practices. We found the concise approach of the policy to be effective. **Recommendations:** - We recommend that a process for vendor review be identified and included to ensure quality services and competitive costs. This could be developed as periodic or on an ad hoc basis.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- We recommend a discussion on risk to identify the types of risk to be mitigated, to define a time horizon, and to explain a quantitative framework for measuring risk at the total fund level.
- We recommend a discussion on how performance is to be measured. This should specify metrics (time-weighted/internal rate of return), cost management, and gross and net fee return calculations. Also included should be the discussion for expense reporting consistent with the Texas statutory requirements (direct and indirect fee evaluation).
- For the benefit of future trustees and overall continuity, Lubbock Fire Pension Fund (LFPF) should memorialize its current practice of reviewing the IPS and asset allocation each year in the IPS document.
- The document should acknowledge the unique funding constraints and benefit payment requirements in the IPS and how this may inform the asset allocation strategy.

Investment Asset Allocation
The Board of Trustees has conducted an asset allocation study each year for the past three years. These studies include stress testing and are consistent with industry standards. The board's practice of annual review is consistent with industry standards. The asset allocation studies determine if the current assumed rate of return is achievable and reasonable given risk parameters. The consultant weighs the assumed return against the trustees' risk tolerances to determine the most appropriate recommended assumed rate for the plan's valuation. The asset allocation studies evaluate three different absolute return targets (assumed rates of return) and produce optimized portfolio scenarios based on simulated historical performance. Stress testing shows total drawdowns of hypothetical portfolios during historic market dislocations. Based on the March 2024 asset allocation study, the plan's 7.5 percent absolute return target is not achievable based on the existing asset classes and constraints. The consultant asked the board to consider reducing the goal return and moving to a more conservative allocation: 40 percent public equity (down from 50 percent), 10 percent private equity, 25 percent fixed rate debt (up from 15 percent), 5 percent floating rate debt, 5 percent private credit, 10 percent core real estate, and 5 percent value add real estate. **Recommendations:** - The asset allocation analysis could be expanded to include a forward-looking Monte Carlo simulation and additional risk measurements such as maximum loss and value-at-risk. - These studies could be expanded to include additional risk measures such as value-at-risk and maximum loss.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The plan's most recent IPS, dated 11/15/23, indicates a detailed fee summary across asset managers. The investment consultant also reflects management fees, which are provided to the board quarterly for review. The current disclosures do not distinguish between direct and indirect fees, investment commissions are not shown, and other fees and expenses for custody and investment consulting are not measured or reported. We observe that there do not appear to be any commissions based on the use of mutual funds. Total fees of 67 basis points are consistent with plans of similar size with alternative investment allocations. Based on the plan size and its asset allocation, including alternative strategies, the total plan expenses are deemed to be consistent with peers. All asset performance is shown net-of-fees. Fees are now evaluated each time a vendor is hired. Asset manager fees are expressed both in the IPS and quarterly performance reports. The asset manager fees are also being disclosed and quantified consistent with industry practice. **Recommendations:** - The reporting of investment advisory fees is now consistent with industry practice. The consultant's fee reporting could be expanded to better match the plan's annual financial report requirement to identify direct versus indirect fees, brokerage fees or commissions, and other investment-related expenses such as investment consulting and custody.

Governance
The plan also demonstrates governance through its policies for funding, travel, ethics, and gifts and gratuities. Monthly board meetings are held. Meeting lengths vary based on the agenda but typically last 1- 3 hours. The discussion topics are typically: Call to order, public comment(s), consent agenda (varies), benefit applications, changes and qualified domestic relations orders, consultant report, discussion and action on consultant presentation, miscellaneous, administrator's report, committee reports, and adjournment. The board has shown a willingness to schedule special meetings for miscellaneous items that arise, such as vendor interviews. Based on the evaluation of historical meeting minutes, there appears to be ample detailed time and discussion devoted to each issue. **Strengths:** - We find the governance processes and practices to be effective and robust. **Recommendations:** - The IPS could be updated to identify the use of an Investment Committee in its decision making.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The consultant, working with the board, will establish certain consistently applied minimum criteria for a money manager to be considered to participate in the search. Analysis of qualified candidates is based on quantitative characteristics, qualitative characteristics, and organizational factors. The board will strive to hire investment managers who offer the greatest incremental benefit to the fund, net of fees and expenses. The board will focus on firms with products with Global Investment Performance Standards (GIPS) compliant track records of at least five years. Individual managers are monitored and evaluated by the investment consultant. This function involves assigning a benchmark and comparisons to peer groups. The investment consultant is tasked with evaluating qualitative and quantitative factors in determining opinions on the asset managers. It is within the consultant's responsibility to then make recommendations to the board to put a manager on probation or terminate them. A manager may be removed from probation if they demonstrate satisfactorily to the board that significant improvement or rectification of the problem has been accomplished. Active managers are expected to outperform their designated benchmarks over rolling three-to-five-year periods. The overall fund performance is to exceed the benchmarks specified in Appendix A of the Investment Policy. The investment consultant provides a quarterly report and regularly measures the board's progress towards meeting these requirements. The plan and consultant have a clearly defined process for evaluating and reviewing asset managers. Once the decision is made to replace a manager, the consultant is tasked with sourcing appropriate candidates based on industry-accepted criteria.

Full Investment Practices and Performance Evaluation

Plano Retirement Security Plan

PRB Analysis of Evaluation

The evaluation offers a brief summary of the system's practices and performance, with some details in specific areas. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation provides comparisons of system practices to peers in a few sections, best practices in all sections, but does not reference or clearly identify what constitutes best practice. The evaluation concludes that the system's "governance structure strikes a good balance between risk and efficiency and is consistent with best practices is adequate for a plan its size," and generally asserts policies as following best practices with "no clear deviances from industry standards or prescribed norms for similar plans."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $211,401,023

Evaluator: Milliman

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 8

House District: 70

Investment Policy Statement
Plano RSP has a written investment policy statement for the overall plan as well as sub-asset classes. It is clearly customized for Plano RSP. The IPS is reviewed periodically and updated as needed to reflect changes in investment objective, policies and managers. The Plan has engaged an independent Investment Consultant to review asset allocations, investment policies and make recommendations to the Board. The files reviewed demonstrate the evolution of targets and expectations in the IPS based on the consultant's and Board's review. The investment consultant for the Plano RSP, who is also a fiduciary, is independent of the managers and trading platforms utilized by the Plan. The IPS is written clearly allowing existing and newly appointed or elected trustees to quickly understand its value as an ongoing tool for evaluating the RSP's investment program using consistent methods and best practices. The Plano RSP Investment Policy Statement is consistent with other plans and best practices. **Strengths:** - The IPS is written clearly allowing existing and newly appointed or elected trustees to quickly understand its value as an ongoing tool for evaluating the RSP's investment program using consistent methods and best practices. - Maintain a focus on transparency.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Plano RSP is well funded and has a formal asset allocation policy defined within the IPS. It is specific in terms of asset class, ranges around targets and evaluation criteria. An asset allocation study is conducted periodically (every 3-5 years), incorporating current capital market assumptions and the consultant's current views on the market. As reported in the most recent asset allocation, the expectations used by the RSP are in line with peers. Plano RSP is implementing its strategy using both active and passive management. Plano RSP's return and risk expectations used in the asset allocation process are stress tested under different scenarios as well as 5th and 95th percentile measurements. The inputs for the asset allocation modeling are reasonable, and the approach used by the system to develop the expected returns and asset mix is disciplined and reviewed regularly. **Strengths:** - The asset allocation is appropriate for a plan its size and is consistent with best practices. - Plano RSP's policy for future cash flow and liquidity needs is adequate for their plan's size and consistent with best practices.

Investment Fees
Plano RSP has a disciplined quarterly process to measure and benchmark fees. Most of the managers are mutual funds, and the expense ratios are examined each quarter. Plano RSP does not use commission recapture or directed trades. Four of the managers are pooled collective trusts with consistent expense ratios similar to mutual funds. The current expense ratios are in-line with their peer universes. **Strengths:** - Fees are appropriate for their plan's size and consistent with best practices.

Governance
Board members are required to complete the PRB trustee education and Plano RSP must file annual disclosure statements. Some of the board members have professional investment experience. Board members as well as staff attend conferences and other educational opportunities and will frequently report back on what they learn. Plano RSP issues RFPs for their investment consultant periodically. **Strengths:** - Adequate for a plan its size and is consistent with best practices.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- Adjust training and education requirements as needed to stay abreast of evolving investment strategies in a very dynamic global environment.

Investment Manager Selection and Monitoring
Investment manager guidelines are defined in the IPS. The guidelines outline investment objectives, benchmarks, and allowable asset types. Investment managers are selected for investment by the RSP by reviewing search material developed and presented by the Investment Consultant. Typically, at least three prospective managers are reviewed and discussed for each manager search. Plano RSP reviews performance quarterly, examining both gross returns when the portfolio is managed gross (investment vehicles other than mutual funds) and net returns compared to net universes for mutual funds. They also use index benchmarks which have no fees. **Strengths:** - Maintain current reviews of the RSP's performance, providers and consultants. - We found no clear deviances from industry standards or prescribed norms for similar plans.

Full Investment Practices and Performance Evaluation

Port of Houston Authority Retirement Plan

PRB Analysis of Evaluation

The evaluation offers a review of the system's practices and performance, with some details and analysis in various areas. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The evaluation provides confirmation of policies that are consistent with fiduciary and industry best practices. The evaluator states that, "In conclusion, the Plan has demonstrated a commitment to adhere to policies and procedures that are aligned with prudence, care, loyalty, and fiduciary best practices. The commitment of the Plan's fiduciaries to compliance training and fiduciary education is commendable. Prudent asset allocation, fee and expense monitoring, enhanced selection and monitoring procedures for investment managers showcase the Plan's dedication to fiduciary excellence."

The investment fees analysis confirmed the system's investment expenses are in-line with peers of roughly 65 basis points (bps) compared to the median of 66 bps.

Plan Assets:[1] $201,357,241

Evaluator: Champion Capital Research, Inc (CCR)

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 6

House District: 143

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The Plan has a robust Statement of Investment Objectives and Policy ("SIOP"). In many areas such as governance structure it is consistent with best practices. The roles and responsibilities of those involved in governance, investing, consulting, monitoring, and custody are defined in the SIOP. The SIOP is written clearly and while sufficiently explicit, modified language regarding governance and monitoring processes will improve adherence to policies. The Plan periodically reviews its investment policies, with the most recent SIOP dated September 27, 2022. PHA Staff review the SIOP annually and track changes. The SIOP clearly describes the appropriate allocation and styles to be determined by the PC. The August 1, 2022, actuarial valuation specifies a 6.00% long term rate of return. The same long-term expected rate of return is specified in the Independent Auditor's Report and Financial Statements, July 31, 2022, and 2021. **Strengths:** - The document is well-written. It is explicit, clear enough for a competent third party to follow, and allows for effective portfolio management. - The stated goal of the Plan is to deliver performance that exceeds the Pension Actuarial Assumption rate of return. Relative to this goal, during the last seven years the fund's composite net of fees has outperformed. - The actuarial rates of return are identified as reasonable in the study based on demographics and Capital Asset Models used by the AC.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- With respect to monitoring the portfolio, evaluation would be more objective by specifying a horizon over which to assess performance. The use of a "full market cycle" as a time horizon over which to assess performance would be improved by using a measurable and specific time horizon to provide a clearer benchmark for success.

Investment Asset Allocation
The system has a formal/written policy for determining and evaluating its strategic asset allocation. Those responsible for making the decisions regarding strategic asset allocation include the Commission with assistance from the PC. Actuarial analyses are based on 10-year capital market expectations provided by various investment firms. The actuarial return on assets is an expected return of 6.00% over the next 10 years and is stated as an annual return. Because the asset allocation is reviewed quarterly, there is frequent opportunity for a review of the portfolio relative to strategic asset allocation and the bands assigned for re-balancing. Except for the PHAs process for immunizing short-term liabilities, the system makes no use of tactical asset allocation. The Plan's funding policy approved by the PC allows staff to fund up to 105% of the actuarially determined contributions. The SIOP includes statements on the benefits of active management and has equity return goals established to outperform indices. The SIOP includes an allocation to the passive S&P 500 Index. The reliance on both active and passive investment management is prudent. **Recommendations:** - Including the capital market inputs (expected risk and return by asset class) as an appendix or attachment to the SIOP would ensure that the expected volatility and risk of the Plan's asset allocation is easily monitored.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
CCR found investment manager fees clearly reported quarterly in the performance reports delivered by the PC. In the appendix of the annual audit of the fee and expense worksheet, the aggregate fees charged, whether paid directly by the Plan or deducted from returns, are stated. Investment service fees are measured including custodial, actuarial, audit, and advisory fees providing a comprehensive annual fee analysis. Information for management fees paid by the trust is provided using data from the Plan's custodian, PNC. IM fees netted from returns are provided by the PC using an average of each manager's month-end market value and the manager's respective net expense ratio. Our analysis verified contractual fee arrangements are being met. When fees are decomposed, we find that 48 basis points allocated to investments, and 17 basis points to administrative expenses. According to the current publicly available data of public pension plans, the median administrative expense for similar sized plans was also 17 basis points, and the median investment expense was 49 basis points. **Strengths:** - Based on assets of $194M (July 31, 2022), this represents an expense ratio of roughly 65 basis points. According to the current publicly available data of public pension plans the Plan's investment expense lies right under the median of 66 bps. - The PHA [Fund] continues to evaluate the potential savings and performance enhancements that may result by implementing the strategic asset allocation with additional passive investment strategies.

Governance
The Amended and Restated Bylaws ("Bylaws") of the Port of Houston Authority, Amended October 27, 2022, prescribe and describe the Port Commission Committees and Task Forces, including Pension and Benefits. The Port of Houston Authority Restated Retirement Plan Statement of Investment Objectives and Policy was adopted September 27, 2022. It is a standalone policy statement. The investment management model is internal. The SIOP delegates day-to-day management and administration of the Plan Sponsor Staff; such activity to be "under the supervision and direction of the Commission, and in accordance with applicable state and federal laws, including supervising the PC, Investment Managers, the Trustee, and any other parties engaged by the Commission." The SIOP provides detailed responsibilities for the PC, and the Investment Manager(s), and declares that "[e]ach Investment Manager will have full discretion to make all investment decisions for the Plan assets placed under its investment discretion and control." The SIOP states that "[t]he Commission will review the total Asset Allocation between Investment Managers and the overall Asset Allocation on a quarterly basis to keep the Asset Allocation of the various managers in line with the target Asset Allocation…" "Plan Sponsor staff is authorized to rebalance the portfolio…and may also maintain portfolio assets in money market accounts or other cash equivalents as deemed appropriate or necessary to cover Plan expenses and monthly benefit payment requirements."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Strengths:

- Importantly, the PHA's website is well constructed and contains up-to-date information.

Investment Manager Selection and Monitoring
The Commission is responsible for selecting investment managers. At each quarterly meeting, the PC provides the Commission with performance updates on the total fund, and for each investment manager. The performance is broken down by manager for the quarter, one-year, three-year, five-year, seven-year and since inception. At each period, benchmark performance is also displayed alongside manager performance, making it clear which IMs were outperforming and which were underperforming. Manager returns are reported net of fees, and total fund composite is broken down by gross and net of fees at each period. **Strengths:** - Continued procedural prudence of monitoring IMs relative to mandates, both quantitative and qualitative mandates. **Recommendations:** - While each asset class has IM constraints listed in the SIOP, the selection criteria for including potential candidates will be measurable and quantifiable. The PHA will implement enhanced processes to include quantifiable criteria in the IM selection process. - The SIOP should state quantifiable monitoring criteria for the PC to avoid ambiguity. - An annual report addressing qualitative factors, including staff turnover, changes in management team, and the quality of reporting, for each IM should be maintained in the PHA's fiduciary files.

Full Investment Practices and Performance Evaluation

Texas Emergency Services Retirement System

PRB Analysis of Evaluation

Plan Assets:[1] $127,384,132
Evaluator: RVK
Evaluator Disclosures:[2]
Relationship: Independent 3rd Party
Investment Discretion: None
Conflicts of Interest: None

The evaluation provides a summary of observations and detailed explanations along with analysis where appropriate for all recommendations. The evaluators used useful infographics, graphs, and tables to present complex data and analysis in a digestible format, and in the case of investment fees comparisons to peers. The evaluation was completed by a third-party firm, which allowed for an enhanced independent review of the investment practices, including the investment consultant's role.

Particularly noteworthy is the evaluator's analysis of the system's investment expenses, which provides supporting evidence of fees being in line or lower than peers with data tables comparing the fund to peers. However, the evaluator did state that "for a portfolio with an 85% target allocation to public market mandates, the overall fees are comparatively high due to the use of actively managed funds across all the asset classes."

The analysis also included a review of past asset liability studies regularly conducted by the system which allowed for a more detailed review of the practices that guide the decisions made by the board.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
TESRS' investment program is governed by the Investment Policy Statement (IPS), which details the objectives and guidelines used for the management of the System's assets. It is important to note that the IPS has been updated recently and is also reviewed on a consistent basis and, in fact, is included in Board materials as part of each quarterly Investment Consultant Report on Investment Performance. Section XVI of the IPS includes a history of IPS changes, which is impressive and provides great transparency for the Board, staff, and System members and their beneficiaries. While not mandatory, many pension plan investment policy statements will also make a general objective statement similar to the following: the overall objective of the system is to provide promised benefits to its members and their beneficiaries in a timely, effective, and efficient manner. The Board's investment strategy mandates formal asset allocation studies at least every 5 years. We note that a similar schedule for Asset/Liability studies is often included in investment policies of other pension plans. RVK believes the TESRS IPS is consistent with industry best practices, representing clearly defined language aimed at providing the Board governance standards when instituting their investment program. **Recommendations:** - Section III, consider adding a statement to remind the reader that the overall general objective is to provide promised benefits to its members and their beneficiaries in a timely, effective, and efficient manner. - Section IV, consider adding a schedule for completing asset/liability studies, at least every 7 years or as needed would be appropriate.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- Section V, consider adding an introductory statement reminding the reader that the Board is ultimately responsible for the administration of the System and its investment program. Also consider clarifying that the Board hires the Executive Director, investment consultants, and custodian.
- Section VI, add the responsibility of the Investment Committee to provide regular reports to the Board documenting their meetings and the process taken for the recommendations made to the Board.
- Section VII, consider adding that a responsibility of the Executive Director is to provide concise documentation of the actions taken during the quarter to implement the Board's investment decisions that add clarity and provide confirmation of the action taken. In Section XI, add a formalized rebalancing process to the IPS.
- Section X indicates that managers are required to submit proxy voting guidelines. Review Is this creating a compliance issue for TESRS?
- Section XI, add a formalized rebalancing process to the IPS.
- Section XII, consider a Board discussion and IPS clarification regarding measurement period for performance monitoring. Is 3 years long-term? Also consider clarifying whether the performance being monitored is net or gross of fees?
- Section XII.B.1., a minor cleanup is warranted as there are no addenda to the IPS. If appropriate, an edit could be made to reference the benchmarks listed in Section XI.C. for the individual target allocations.
- Add a section to the IPS stating the Evaluation and Due Diligence Process for Traditional, Publicly Traded Mandates.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
TESRS' target allocation is ultimately driven by the liabilities of the System including expected cash flow and liquidity needs. The primary method for analyzing the projected liabilities in the context of asset allocation is through an Asset/Liability (A/L) Study. The System performs A/L studies periodically, with the most recent study performed in December 2019 based on the August 31, 2018, actuarial valuation. These studies are the primary basis for informing appropriate risk levels and any large shifts in target allocation, though smaller changes can occur in between A/L studies based on changes to market environment, capital markets assumptions, and the needs of the System. Specific cash flow and liquidity information from the most recent A/L Study can be found in Section D. As shown in Figure 2.7 above, the System is expected to have net cash outflow through 2023 with its fixed nature of contributions and its projected benefit stream across various portfolio mixes. This is likely to be the case with unchanged contribution policy going forward. It is important to note that sustained outflows can potentially impose liquidity constraints on the management of the portfolio, therefore further limiting the opportunity to invest in alternative strategies regardless of the return or risk reducing diversification benefits they may offer. **Weaknesses:** - We observe that AndCo primarily relies on J.P. Morgan's capital market assumptions for the annual asset allocation review. We believe that reliance on third-party capital market assumptions can generally run the risk of the asset allocation modelling being constrained to asset classes covered by the data provider. There is also the possibility of discontinuation of asset class coverage. **Recommendations:** - Consider extending the projection period for contribution, benefit payments, and funded ratio in asset/liability studies - Consider including projected annual rate of return to reach full funding in asset/liability studies.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
As shown above in Figure 3.1 above, two-thirds of the Fund's managers have effective annual fees that fall below or are equal to the industry median for the respective mandates. Even though all of System's investments are in actively managed funds, which have higher expense ratios than their passive counterparts, TESRS manager fees fare well against their peer universes consisting of both active and passive managers. In terms of the usage of public market fund vehicles, TESRS invests in a mix of mutual funds and separately managed accounts (SMAs). The choice of vehicle is mainly driven by mandate size, fees, ease of execution, and lower administrative burden. While most of the mutual fund investments are in the lowest fee share classes, fees of the majority of the SMAs are below the peer median for their respective strategies. TESRS' allocation to private market alternatives is relatively low, primarily due to the size of the overall System assets and its liquidity constraints. The size of the mandate determines the fee arrangements for alternatives managers. The fees of both private mandates fall in the middle of the peer universe fee range. TESRS' overall investment manager fees are lower than many of its public peers primarily due to its relatively low allocation to alternatives, which is attributable to the size of the System and its liquidity needs. However, it is worth noting that for a portfolio with an 85% target allocation to public market mandates, the overall fees are comparatively high due to the use of actively managed funds across all the asset classes. **Recommendations:** - Consider conducting an annual review of availability of fund vehicles. - Consider conducting asset class structure studies.

Governance
The TESRS Investment Policy itself, while appropriately not specifying required processes in detail, nonetheless provides an indispensable sound foundation for investment decision-making. At the policy level, it clearly calls out adherence to key principles that are the touchstones of best institutional investment management, including but not limited to: a. The absolute primacy of the interests of the System's member and their beneficiaries b. Asset allocation is the most important determinant of investment return c. The investment strategy is long-term d. The critical role of diversification in minimizing investment risk

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

e. The importance of portfolio rebalancing to maintain the Board-approved asset allocation

f. Investment managers monitoring will emphasize performance over a market cycle

g. Cost control is valued

h. Maintaining reasonable liquidity to meet benefit payments is an investment consideration

i. Delegation of implementation of Board policies regarding investments to the Investment Committee and Executive Director

Finally, we would note that education opportunities for the Board are not limited to formal educational sessions. As in our broad experience with institutional investors of all types, including public funds, the presentations and discussion of key analyses required by the TESRS IPS offer critically important educational opportunities and can be pre-approved by the PRB by application for an individual course or as a sponsor-accreditation.

Strengths:

- The TESRS investment decision-making process indicates it broadly reflects implementation of best practices.

Weaknesses:

- Not all Board members are in compliance with the MET requirements as reported to the Pension Review Board (PRB).

Recommendations:

- Document investment consultant recommendations to the Investment Committee in the form of a simple memo.
- Consider other avenues to encourage all Board members to become compliant with mandated educational requirements.
- Add responsibility that an investment Implementation Report from Executive Director to Board should occur quarterly.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
TESRS follows what could be considered a "short list" process when evaluating new investment managers or comparing current mandates to potential replacements. This is particularly true in public markets, whereas private markets are more depending on the asset class itself. The IPS also notes that the Investment Consultant has the responsibility to "perform manager search and evaluation and perform ongoing manager due diligence," and to "recommend replacement managers and perform fund evaluations as necessary…." The IPS is clear about the due diligence expectations for private markets strategies but has indirectly delegated public markets due diligence to the Investment Consultant. While the Board still retains the ultimate authority to hire or fire investment managers, it is an important distinction found in the policy. In our review of the work performed by AndCo, we would note that in recent years it would appear the Board typically only sees two candidates for potential investment, either with a new mandate or to replace an existing manager. This is somewhat common in the industry, particularly when an Investment Committee provides additional vetting of potential managers on a short list. However, what is lacking in the current process is documentation from the Investment Committee on what was reviewed with the Investment Consultant, and what is being recommended to the Board. While the Investment Committee does not have authority to hire or fire managers, it does have the responsibility to "…advise the Board and make recommendations with respect to the following service providers: 1. investment managers; 2. transition managers; 3. investment consultants; and 4. custodian banks."

Full Investment Practices and Performance Evaluation

Houston MTA Non-Union Pension Plan

PRB Analysis of Evaluation

The evaluator thoroughly details the evaluation requirements and provides supporting materials for their conclusions of best practices. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The report references outside sources for best practices, and the evaluator's explanations outline those best practices and how they compare to the system's current practices. In particular, the evaluator noted that the IPS' inclusion of a funding policy meets the pertinent GFOA best practice.

The evaluation also indicates both the system's board and the committee responsible for managing the union plan meets to share expertise between members of both groups.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $192,913,885

Evaluator: Smart Management Services Inc.

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 13

House District: 147

Investment Policy Statement
The Metropolitan Transit Authority Non-Union Pension Plan IPS has most of the elements contained in the GFOA Investment Policies for Defined Benefit (DB) Plans including the elements of a Statement of Purpose; Asset Allocation Strategy; Guidelines for other investment-related service providers; Investment Management Guidelines; Cost Management; and Performance Measurement (benchmarking) and Reporting. The IPS does not discuss Liquidity of Investments. It does discuss risk throughout; but does not have a Statement on Managing Risks of Investments. The roles and responsibilities are clearly outlined and discussed more in Section 4 Governance. They are designed to meet the needs and objectives of the Plan consider the current funded status of the plan, the specific liquidity needs associated with the difference between expected short-term inflows and outflows, the underlying nature of the liabilities being supported [e.g., pay-based vs. flat $ benefit, automatic COLAs, DROP, etc.]. **Strengths:** - There is evidence that the System is in compliance with following its IPS because Marquette advises the Board/Committee by reporting on compliance with the IPS. - The Funding Policy meets the GFOA Best Practice for Core Elements of a Funding Policy.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Currently, the Investment Consultant takes risk into consideration. As mentioned on page 8 of this report the IPS does discuss risk throughout; but does not have a Statement on Managing Risks of Investments. On a quarterly basis, Marquette analyzes and reports on risk as measured by standard deviation for the total fund portfolio relative to its peers. The fund's absolute risk and relative risk ranks can be monitored over time for as long as the fund has historical data. They can also compare the total fund to all total fund portfolios in the universe to see where the fund plots in the following categories: excess return over investment policy, tracking error, and information ratio. Marquette stress tests portfolios based on various market conditions. This is a way to quantify several types of risk (interest rate risk, etc.) and identify portfolio sensitivities that may not show up in an asset allocation study. **Weaknesses:** - The lack of a discussion [in the IPS] on how the System's overall risk tolerance is expressed and measured. The expected risk is not categorized per asset class. **Recommendations:** - Include in its IPS a written policy for determining and evaluating the asset allocation similar to the GFOA recommendation. - Add a discussion of risk to the IPS.

Investment Fees
The Investment Consultant is an active participant in the process of negotiating fees, as well as seeking the lowest-cost account structure. Marquette actively monitors investment manager trading costs, soft dollar trading practices, portfolio rebalancing, and larger multi-asset class transition events to minimize trading costs and control risk. In some cases, a commission recapture is also explored. Marquette reports investment fees in their reports in both expense ratios and hard dollars. They compare actuals versus industry averages to ensure they are continually at the appropriate level. In their performance reports, they include a comparison, by asset class, between the Plan's asset management fees and the industry average. The July 2023 MTA Non-Union Flash includes a Fee Schedule which shows the expense ratios are .28% compared to the 2019 Marquette Associates Investment Management Fee Study-Industry Median of .40%. Fees include investment management fees, participant reporting and portfolio administration. The Plan does invest in core open-end real estate; however, the funds do not invest in alternative investments such as private equity and private credit. As a result, the sometimes-substantial performance-based fees, known as carried interest, to manage those investments have not been experienced by the System.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The IPS clearly delineates roles and responsibilities of those involved in governance, investing, consulting, monitoring, and custody. The responsibility for decisions rests with the Board/Committee. The procedures and requirements for Investment Consultants and Investment Managers are included. The System does not have a written governance policy statement outlining the governance structure; however, the IPS outlines some of the governance structure by including the roles and responsibilities of the Board/Committee, staff, and external participants in oversight and control of the System. The members have strong educational backgrounds. Four (4) of the members are employed by METRO, the remaining three (3) work in the private sector. All of the METRO representatives maintain high-level positions. Many of the Board/Committee members have strong financial backgrounds (including portfolio management); some of which hold positions in the financial and/or investment area. The Non-Union Committee's and the Union Board's usual practice is to meet together, so expertise of Non-Union members is available to Union members and vice versa. **Strengths:** - The System has an Ethics and Conflicts of Interest Policy. The Policy includes all of the recommended areas to be covered under Ethical and Fiduciary Conduct in the American Federation of State, County and Municipal Employees, AFL-CIO (AFSCME) Best Practices Policies for Trustees and Pension Systems except for Prohibitions of Campaign Contributions. - The Non-Union Committee's and the Union Board's usual practice is to meet together, so expertise of Non-Union members is available to Union members and vice versa. **Recommendations:** - Make additional information available to the public. At a minimum this information should include the Investment Policy Statement, meeting minutes, and the Non-Union one-page Flash Report from Marquette

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The System does not have a formal investment professional selection policy; however, the selection would occur under the procurement guidelines of METRO with the use of an RFP. The Investment Consultant has the responsibility for searching for and screening potential Investment Managers. In conjunction with the Plan, Marquette develops the criteria for the selection process based on the circumstances and allocation preferences. Marquette's research analysts will then identify candidates who best meet these criteria. The Investment Consultant is responsible for monitoring individual and overall fund performance. Besides performance, they monitor changes in an investment manager's portfolio characteristics, deviation from investment style, change in philosophy, change in ownership, and departure of key investment professionals. Each Investment Manager and asset class composite has an appropriate benchmark that it is measured against. The Board/Committee is provided with monthly performance reports by the Investment Consultant. The monthly performance reports provide net-of-fee and gross fee performance.

Full Investment Practices and Performance Evaluation

Houston MTA Workers Union Pension Plan

PRB Analysis of Evaluation

The evaluator thoroughly details the evaluation requirements and provides supporting materials for their conclusions of best practices. The evaluation was completed by a third party firm, which allowed for an enhanced independent review of the investment practices.

The report references outside sources for best practices, and the explanations provided outline those best practices and how they compare to the system's current practices. In particular, the evaluator noted that the IPS' inclusion of a funding policy meets the pertinent GFOA best practice.

The evaluation also indicates both the system's board and the committee responsible for managing the non-union plan meets to share expertise between members of both groups.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $299,834,850

Evaluator: Smart Management Services Inc.

Evaluator Disclosures:[2]

Relationship: Independent 3rd Party

Investment Discretion: None

Conflicts of Interest: None

Senate District: 13

House District: 147

Investment Policy Statement
The Metropolitan Transit Authority Workers Union Pension Plan IPS has most of the elements contained in the GFOA Investment Policies for Defined Benefit (DB) Plans including the elements of a Statement of Purpose; Asset Allocation Strategy; Guidelines for other investment-related service providers; Investment Management Guidelines; Cost Management; and Performance Measurement (benchmarking) and Reporting. The IPS does not discuss Liquidity of Investments. It does discuss risk throughout; but does not have a Statement on Managing Risks of Investments. The roles and responsibilities are clearly outlined and discussed more in Section 4 Governance. They are designed to meet the needs and objectives of the Plan consider the current funded status of the plan, the specific liquidity needs associated with the difference between expected short-term inflows and outflows, the underlying nature of the liabilities being supported [e.g., pay-based vs. flat $ benefit, automatic COLAs, DROP, etc.]. **Strengths:** - There is evidence that the System is in compliance with following its IPS because Marquette advises the Board/Committee by reporting on compliance with the IPS. - The Funding Policy meets the GFOA Best Practice for Core Elements of a Funding Policy.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Currently, the Investment Consultant takes risk into consideration. As mentioned on page 8 of this report the IPS does discuss risk throughout; but does not have a Statement on Managing Risks of Investments. On a quarterly basis, Marquette analyzes and reports on risk as measured by standard deviation for the total fund portfolio relative to its peers. The fund's absolute risk and relative risk ranks can be monitored over time for as long as the fund has historical data. They can also compare the total fund to all total fund portfolios in the universe to see where the fund plots in the following categories: excess return over investment policy, tracking error, and information ratio. Marquette stress tests portfolios based on various market conditions. This is a way to quantify several types of risk (interest rate risk, etc.) and identify portfolio sensitivities that may not show up in an asset allocation study. **Weaknesses:** - The lack of a discussion [in the IPS] on how the System's overall risk tolerance is expressed and measured. The expected risk is not categorized per asset class. **Recommendations:** - Include in its IPS a written policy for determining and evaluating the asset allocation similar to the GFOA recommendation. - The Board/Committee add a discussion of risk to the IPS.

Investment Fees
The Investment Consultant is an active participant in the process of negotiating fees, as well as seeking the lowest-cost account structure. Marquette actively monitors investment manager trading costs, soft dollar trading practices, portfolio rebalancing, and larger multi-asset class transition events to minimize trading costs and control risk. In some cases, a commission recapture is also explored. Marquette reports investment fees in their reports in both expense ratios and hard dollars. They compare actuals versus industry averages to ensure they are continually at the appropriate level. In their performance reports, they include a comparison, by asset class, between the Plan's asset management fees and the industry average. The July 2023 MTA Union Flash includes a Fee Schedule which shows the expense ratios are .30% compared to the 2019 Marquette Associates Investment Management Fee Study-Industry Median of .41%. Fees include investment management fees, participant reporting and portfolio administration. The Plan does invest in core open-end real estate; however, the funds do not invest in alternative investments such as private equity and private credit. As a result, the sometimes-substantial performance-based fees, known as carried interest, to manage those investments have not been experienced by the System.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The IPS clearly delineates roles and responsibilities of those involved in governance, investing, consulting, monitoring, and custody. The responsibility for decisions rests with the Board/Committee. The procedures and requirements for Investment Consultants and Investment Managers are included. The System does not have a written governance policy statement outlining the governance structure; however, the IPS outlines some of the governance structure by including the roles and responsibilities of the Board/Committee, staff, and external participants in oversight and control of the System. The members have strong educational backgrounds. Four (4) of the members are employed by METRO, the remaining three (3) work in the private sector. All of the METRO representatives maintain high-level positions. Many of the Board/Committee members have strong financial backgrounds (including portfolio management); some of which hold positions in the financial and/or investment area. The Non-Union Committee's and the Union Board's usual practice is to meet together, so expertise of Union members is available to Non-Union members and vice versa. **Strengths:** - The System has an Ethics and Conflicts of Interest Policy. The Policy includes all of the recommended areas to be covered under Ethical and Fiduciary Conduct in the American Federation of State, County and Municipal Employees, AFL-CIO (AFSCME) Best Practices Policies for Trustees and Pension Systems except for Prohibitions of Campaign Contributions. - The Non-Union Committee's and the Union Board's usual practice is to meet together, so expertise of Non-Union members is available to Union members and vice versa. **Recommendations:** - Make additional information available to the public. At a minimum this information should include the Investment Policy Statement, meeting minutes, and the Union one-page Flash Report from Marquette.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The System does not have a formal investment professional selection policy; however, the selection would occur under the procurement guidelines of METRO with the use of an RFP. The Investment Consultant has the responsibility for searching for and screening potential Investment Managers. In conjunction with the Plan, Marquette develops the criteria for the selection process based on the circumstances and allocation preferences. Marquette's research analysts will then identify candidates who best meet these criteria. The Investment Consultant is responsible for monitoring individual and overall fund performance. Besides performance, they monitor changes in an investment manager's portfolio characteristics, deviation from investment style, change in philosophy, change in ownership, and departure of key investment professionals. Each Investment Manager and asset class composite has an appropriate benchmark that it is measured against. The Board/Committee is provided with monthly performance reports by the Investment Consultant. The monthly performance reports provide net-of-fee and gross fee performance.

Full Investment Practices and Performance Evaluation

Investment Practices and Performance Evaluations performed by Investment Consultant

Amarillo Firemen's Relief & Retirement Fund

PRB Analysis of Evaluation

The evaluation conducted by the investment consultant only describes the policies and practices performed by the system and states, "The Policy follows industry best practices except it does not include language about fees." However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

In general, the statements describing the system's policies and practices provide minimal commentary, explanation, or comparison to peers. For example, the evaluation states that the system does not have a policy for investment fees and that the board has engaged Abel Noser to provide an analysis of the commissions paid on a majority active managed portfolio. However, no analysis of investment fees or any details about fees paid by the system are provided in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $234,343,561

Evaluator: Alpha Consulting Group of Wells Fargo Advisors

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 31

House District: 87

Investment Policy Statement
The Amarillo Firemen's Relief and Retirement Fund has a written Statement of Investment Policy ("Policy"). The Policy is to be reviewed at least annually for its appropriateness. Roles and Responsibilities are covered for the Board of Trustees ("Board"), Investment Managers, Custodian, and Investment Consultant. The Policy does not take into consideration the current funded status but is does include the contribution amounts for the City and the participants. The Policy follows industry best practices except it does not include language about fees. The Policy is written in a manner that a new Board could come in and understand how AFFRF manages their investment portfolio. **Recommendations:** - Language should be added to the Investment Policy Statement regarding the evaluation of Plan expenses at least annually. - A fully executed Investment Policy Statement should be available on the internal website for the AFRRF participants.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The Investment Policy Statement covers the strategic asset allocation. At every monthly meeting the Board reviews the asset allocation. The Board last reviewed an asset allocation study from the Investment Consultant in December of 2020. That study was based on Efficient Frontier Modeling. The purpose of Efficient Frontier Modeling is to determine the mix of assets that will produce the optimal return for different levels of risk. For each asset class selected, the following data is included in the model: the expected return, the volatility risk (as measured by standard deviation of returns), and the correlation coefficient. The model produces the most efficient portfolios utilizing the approved asset classes and any restraints applied. The Board has discussed alternative investments, but they have not been inclined to perform any searches. AFFRF's asset allocation differs from other Plans of their size because they do not use Alternative Investments.

Investment Fees
The Policy does not speak to investment fees. The Policy does allow the Board to direct commissions on behalf of the Board and Plan. The Board has engaged Abel Noser to provide an analysis of the commissions paid by their separate account managers.

Governance
The Board does not have a stand-alone governance policy but the Investment Policy Statement does cover the Board's responsibilities. The Board does follow the recommendations of the Pension Review Board ("PBR") and the Texas Local Firefighter Retirement Act. The Board is made up of three firefighter representatives, the Mayor (or the Mayor's representative), a city employee (usually an assistant City Manager or Chief Financial Officer) and two civilian members. They recruit members who have an understanding of investing or financial background. The civilian members of the Board include bankers, financial advisors and former City employees with specific pension experience. Board members must meet the minimum educational requirements set forth by the PRB. The Board and system administrators are required to complete the 7-hour Core training requirement within their first year of service, and the 4-hour Continuing Education requirement every 2 years thereafter. The Core training from the PRB includes courses on fiduciary responsibility and ethics. The full Board makes decisions regarding the investments, there is not a separate Investment Committee. The Policy is not available on the City's or the Firemen's website, but it is available upon request.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The Board in consultation with the Investment Consultant is responsible for selecting and retaining investment managers. When an additional asset class is approved or an investment manager is under-performing, the Investment Consultant will present to the Board investment managers that are recommended by their Global Manager Research ("GMR") analysts. GMR analyzes investment managers using qualitative and quantitative data that looks at the firm, investment personnel, investment philosophy & process, and product performance & viability. These four foundational components are broken down into 13 major components and 75 sub-sectors. When the Board is comparing multiple managers, emphasis is placed on managers with attractive risk-adjusted returns, who protect assets in down-markets and have consistent returns. Conflicts of interest for both investment managers and Board members are considered when evaluating managers. A City Attorney reviews all contracts with investment managers. Manager performance is reviewed gross-of-fee since the benchmark indexes do not include an investment cost. Investment managers will be reviewed for replacement when there is a meaningful change to the primary portfolio management team, sustained under-performance, a change in expenses which the Board deems to be unacceptable, an increase in risk in the portfolio, or for any other reason the Board feels making a change would be in the best interest of the participants and the beneficiaries.

Full Investment Practices and Performance Evaluation

Austin Police Retirement System

PRB Analysis of Evaluation

Plan Assets:[1] $1,014,902,702

Evaluator: Mariner[2]

Evaluator Disclosures:[3]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 21

House District: 51

The evaluation provides a review of policy practices, clearly documents the sources used as comparative best practices, and also provides detailed explanations where appropriate. However, aside from listing recent IPS changes the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluator notes that the existing investment consultant makes recommendations for improvement proactively on an ongoing basis and the recommendations are already incorporated in the existing practices. Therefore, the evaluator makes only general recommendations for the system to "maintain its robust processes to both review the current investment portfolio while also seeking to identify new investments that can improve the system's long-term expected risk and return while maintaining liquidity to meet its benefit obligations."

The evaluation supports the system's consistent practice of improving by stating "Since our engagement in 2013, the System has undergone several reviews of the asset allocation. The results of these activities have been revisions to the System's investment policy statement, investment manager changes, and the addition of new asset classes. The changes implemented by the System have improved the risk/return profile of the System while also increasing portfolio diversification."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
We analyzed the system's investment policy statement (IPS) and the board's compliance with the IPS. While different IPS structures exist, Mariner Institutional, as an independent, professional investment consulting firm, has determined that the system's IPS, and the board's compliance with the IPS, is appropriate and comparable with what Mariner Institutional considers best practice, industry standards, and comparable to the structure of an effective investment policy statement as laid out by the CFA Institute. **Strengths:** - Mariner Institutional recommends the system maintain its ongoing review of the IPS. The system has traditionally used its February board meeting to formally review the IPS, however additional updates/changes are made if and when Mariner Institutional and the board feels a change is warranted and in the best interest of the system. We feel that reviewing the policy statement annually is a strong practice and should be continued. - Mariner Institutional recommends that the system continue to track the changes to the investment policy and report them in a clear and transparent manner. **Recommendations:**

[1] As of 12/31/2023

[2] Formerly known as AndCo, the investment consultant group was acquired by Mariner to create Mariner Institutional.

[3] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- To enhance the use of the IPS and its guidelines for manager oversight, Mariner Institutional has developed a watch list report that is shared with the board each quarter. The summary illustrates each manager's performance against IPS criteria, its status regarding the watchlist, and how long the manager has been on the watchlist.
- APRS maintains a goal of retaining two months worth of benefit payments in cash at all times, and this is reflected in the system's Internal Control Policy. Mariner Institutional recommends the system also consider adding the same language into the IPS.

Investment Asset Allocation

The system has set the targeted investment rate of return at 7.25 percent. The return is comprised of an inflation estimate of 2.50 percent and a real rate of return of 4.75 percent. The investment consultant utilizes the 10- to 15-year forward-looking asset class return and risk assumptions produced by a third-party provider, JP Morgan. These 10- to 15-year assumptions are updated annually and have been consistently published for use by asset allocators for 24 years. The investment consultant also maintains an internally developed, stable, long-term (50+ years) building block return methodology for supplemental, long-term asset return assessments.

The system is moving toward a cash flow negative position and to supply needed cash flow for benefits payments the system actively engages with the consultant to conduct periodic rebalance actions to maintain an overall asset allocation that remains in compliance with long term allocation ranges when necessary. If needed, the system will reduce allocations to investment managers that have demonstrated outperformance to not be overexposed to any individual asset class.

Strengths:

- In addition, Mariner Institutional believes that the system is in accordance with the process best practices laid out by the Government Finance Officers Association (GFOA) for selecting third-party investment professionals for pension fund assets.
- Mariner Institutional recommends that the system maintain its investment process for investment manager search and selection which relies on its investment consultant, Investment Committee, and board in selecting new investment managers for use within the pension fund's investment portfolio.
- Mariner Institutional recommends that the system continue to work with the consultant to rebalance the portfolio actively to provide any needed cash flow and maintain its long-term target allocations.
- Mariner Institutional recommends that the system maintain its existing asset class diversification and its willingness to explore and implement new asset classes as opportunities arise.
- Mariner Institutional also recommends that the system continue to pursue institutional quality, diversified options within its alternative asset allocations with reasonable fee structures.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- Mariner Institutional also recommends that the system conduct an asset liability study as soon as practicable for the system.

Investment Fees
The fees for the system's portfolio contained in the most recent quarterly investment review reflect a cost of 0.48 percent. Based on the 2023 NCPERS Public Retirement Systems Study, the average fee for the survey's 195 state and local government pension respondents was 0.64 percent. It is important to note the system also considers fees an important part of the decision-making process and evaluates the potential fee impact for each new investment manager and strategy considered for inclusion in the system's portfolio. The system considers the current fee of 0.48 percent reasonable and appropriate for its portfolio. Mariner Institutional reviewed the fees paid to administer the system's portfolio and the underlying investment manager fees. While high or low fees do not guarantee failure or success for an investment portfolio, Mariner Institutional, as an independent, professional investment consulting firm, has determined that the system's fees are appropriate and comparable with what Mariner Institutional considers best practice, industry standards. No changes are recommended at this time.

Governance
The system's IPS contains clear definitions of the board's responsibilities as well as the role of the board's professional advisors in assisting the board in fulfilling its fiduciary duties to the system with respect to the investment of assets. Direct investment authority for the system's assets lies with the board. As such, all decisions regarding the system's portfolio including return objectives, risk tolerance, investment guidelines, asset allocation targets and manager selection and retention reside with the board. Mariner Institutional reviewed the system's governance processes related to investment activities, investment decision-making, delegation of investment authority, and education. While different governance structures exist around investment decision making, delegation of investment authority, and education, Mariner Institutional, as an independent, professional investment consulting firm, has determined that the system's processes are appropriate. No changes are recommended at this time.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The consultant is completely independent from the investment management community and receives no compensation for reviewing or including any managers in the search process, nor does the consultant receive any compensation from any investment manager or investment products. Regardless of whether an existing portfolio strategy is being replaced or a new strategy is being considered for the system's portfolio, the investment consultant will prepare and present a comprehensive manager evaluation report to the board that includes candidates for consideration, discussion and subsequent interviews with the Board. From this group, finalists are selected by the board with input from the investment consultant for presentation and ultimate selection by the system. While the investment consultant may make recommendations regarding investment strategies, the ultimate decision to select a specific strategy for inclusion in the system's portfolio resides with the board. Once a decision is made by the board, legal counsel reviews and assists the board in the execution of necessary agreements. In addition, if the selection is a separately managed account, the investment consultant will draft an addendum to the IPS for approval by the board, and signature by the investment manager, that outlines specific objectives, constraints and benchmarks for the portfolio under the discretionary authority of the investment manager. **Strengths:** - Mariner Institutional believes that the manager selection process in place at the Austin Police Retirement System is robust and is in accordance with industry best practices. - All performance calculations supplied by the consultant to the board meet the guidelines of the CFA institute. - Mariner Institutional believes that the system is in accordance with the process best practices laid out by the GFOA for selecting third-party investment professionals for pension fund assets. - Mariner Institutional recommends that the system maintain its investment process for investment manager search and selection which relies on its investment consultant, investment committee, and board in selecting new investment managers for use within the pension fund's investment portfolio.

Full Investment Practices and Performance Evaluation

Beaumont Firemen's Relief & Retirement Fund

PRB Analysis of Evaluation

Plan Assets:[1] $115,144,028
Evaluator: AndCo
Evaluator Disclosures:[2]
Relationship: Investment Consultant
Investment Discretion: None
Conflicts of Interest: None
Senate District: 4
House District: 21

The evaluation provides a review of policy practices, clearly documents the sources used as comparative best practices, and provides detailed explanations where appropriate. However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluator notes that the existing investment consultant makes recommendations for improvement proactively and the recommendations are already incorporated in the existing practices. Therefore, only general recommendations for the system are made in this evaluation to "maintain its robust processes to both review the current investment portfolio while also seeking to identify new investments that can improve the Fund's long-term expected risk and return while maintaining liquidity to meet its benefit obligations."

The evaluation supports the system's consistent practice of improving by stating "Since our engagement in 2011, the Fund has undergone several reviews of the asset allocation. The results of these activities have been revisions to the Fund's investment policy statement, investment manager changes, and the addition of new asset classes. The changes implemented by the Fund have improved the risk/return profile of the Fund while also increasing portfolio diversification."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
We analyzed the system's investment policy statement (IPS) and the board's compliance with the IPS. While different IPS structures exist, AndCo, as an independent, professional investment consulting firm, has determined that the system's IPS, and the board's compliance with the IPS, is appropriate and comparable with what AndCo considers best practice, industry standards, and comparable to the structure of an effective investment policy statement as laid out by the CFA Institute. **Strengths:** - AndCo recommends the fund maintain its ongoing review of the IPS. We feel that reviewing the policy statement annually is a strong practice and should be continued. - AndCo recommends that the fund continue to track the changes to the investment policy and report them in a clear and transparent manner. **Recommendations:** - Furthermore, AndCo recommends the system consider adding polices regarding investment manager selection and ethics.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The Fund's process for determining asset allocation targets is executed and implemented through frequent and thorough discussions between the board and the investment consultant. Each year, the board's investment consultant uses a combination of 10- to 15-year forward-looking asset class return assumptions, risk and correlation assumptions, historical asset class return and risk data, and a long-term (50+ years) building block return methodology to determine a target allocation that the investment consultant believes will have the highest probability of achieving the fund's return objectives. Any changes to the fund's strategic asset allocation targets and ranges are then recommended to the board for consideration. This was last done in February 2023. The fund's cash flow and liquidity needs are reviewed by the board each quarter as part of the investment consultant's quarterly performance review. This review includes discussions regarding the current, expected, and known timing variances of future contributions to, and withdrawals from, the fund. Based on the fund's current expectation that cash flow (net contributions less withdrawals) will be negative for the foreseeable future without a change in the contribution rate and the fact that a meaningful portion of the fund's investable assets are post-retirement option plan (PROP) balances that may leave the fund unexpectedly, the portfolio has been positioned to include higher allocations to public, liquid assets. **Strengths:** - AndCo recommends that the board continue regular asset allocation reviews with its investment consultant. - AndCo also recommends that the board maintain its policy of educating themselves on new asset classes that could be beneficial to the investment portfolio. - AndCo recommends that the fund continue to work with the consultant to actively rebalance the portfolio to provide the required liquidity levels and maintain its long-term target allocations.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The board reviews the fees (stated in both dollars and basis points) paid to administer the fund's portfolio on a quarterly basis for each of its underlying investment managers and strategies in the quarterly investment review prepared and presented by the investment consultant. The fees for the fund's portfolio contained in the most recent quarterly investment review reflect a cost of 0.55 percent. Based on the 2023 NCPERS Public Retirement Systems Study, the average fee for the survey's 195 state and local government pension respondents was 0.64 percent. It is important to note the fund also considers fees an important part of the decision-making process and evaluates the potential fee impact for each new investment manager and strategy considered for inclusion in the fund's portfolio. The fund considers the current fee of 0.55 percent reasonable and appropriate for its portfolio. We reviewed the fees paid to administer the fund's portfolio and the underlying investment manager fees. While high or low fees do not guarantee failure or success for an investment portfolio, AndCo, as an independent, professional investment consulting firm, has determined that the fund's fees are appropriate and comparable with what AndCo considers best practice, industry standards. No changes are recommended at this time.

Governance
The Board utilizes an investment consultant to assist with setting the fund's strategic policy and asset allocation targets, as well as, investment manager strategy evaluation and selection. The investment consultant is a fiduciary to the system, and all third-party separate account investment managers are required to be fiduciaries to the system. In addition, all comingled fund investment managers must be fiduciaries to the fund that they manage in which the fund has invested. The fund does not perform any portfolio management functions internally apart from overseeing the operations of the buildings that houses the fund's administrative offices and a similar adjacent property which is leased, as well as administrative activities including legal review and execution of agreements as listed below. We reviewed the fund's governance processes related to investment activities, investment decision making, delegation of investment authority, and education. While different governance structures exist around investment decision -making, delegation of investment authority, and education, AndCo, as an independent, professional investment consulting firm, has determined that the fund's processes are appropriate and comparable with what AndCo considers best practice, industry standards. No changes are recommended at this time.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
While the investment consultant may make recommendations regarding investment strategies, the ultimate decision to select a specific strategy for inclusion in the Fund's portfolio resides with the board. Once a decision is made by the board, legal counsel reviews and assists the board in the execution of necessary agreements. In addition, if the selection is a separately managed account, the investment consultant will draft an addendum to the IPS for approval by the Board, and signature by the investment manager, that outlines specific objectives, constraints and benchmarks for the portfolio under the discretionary authority of the investment manager. The investment consultant's reports highlight portfolio and investment manager performance and risk relative to the various performance measurement standards established in the IPS. The criteria established in the IPS tracks managers on both a qualitative and quantitative basis. Strategies that repeatedly fail to meet these standards will be placed on a watchlist or terminated. The criteria are not designed to remove the decision process from the Board, but rather are intended to add objectivity and enhanced scrutiny on managers who are underperforming the criteria contained in the IPS. While the investment consultant may make recommendations regarding the continued retention or termination of an investment strategy in the fund's portfolio, the ultimate decision to retain or terminate an investment strategy (within the bindings of the strategy's agreement) resides with the Board. **Strengths:** - AndCo recommends that the fund maintain its investment process for investment manager search and selection which relies on its investment consultant and board in selecting new investment managers for use within the fund's investment portfolio. - All performance calculations supplied by the consultant to the board meet the guidelines of the CFA institute.

Full Investment Practices and Performance Evaluation

City of Austin Employees' Retirement System

PRB Analysis of Evaluation

The evaluation provides a well-balanced summary of information in easily understandable graphics, while also providing detailed explanations where appropriate, specifically, the helpful explanations of the asset allocation and investment manager selection processes. The evaluation models transparency by clearly identifying the internal documentation, third-party analyses and benchmarking sources used in the thorough review.

The evaluation also includes an additional section on the internal proxy voting policies and procedures. The evaluator notes "COAERS' proxy voting policies and procedures as stated in Section XII of the [Investment Implementation Policy] IIP are appropriate for delegating proxy voting to each Investment manager and documented in the individual contracts. Section XII allows flexibility for the Board to revoke its delegation and provides a process for monitoring and reporting by Investment Staff through the Executive Director."

Plan Assets:[1] $3,278,692,316

Evaluator: RVK

Evaluator Disclosures:[2]

Relationship: Investment Consultant[3]

Investment Discretion: None

Conflicts of Interest: None

Senate District: 14

House District: 48

While the evaluation was conducted by the same firm as the investment general consultant, the team evaluating the practices is separate from the team that normally interacts with the system. This separation allows for an enhanced independent review which is supported by the level of detail in the analysis and recommendations made in the report.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The IPS and especially the IIP are very clear with respect to fiduciary conduct, Investment manager responsibilities, guidelines, permissible investments, reporting, and evaluation. The IIP is also very transparent with COAERS' process for selection, contracting, retention, and monitoring. Process and expectations are clearly defined. By design and best practice, COAERS' Investment Staff and Investment Consultant probe investment scenarios that clearly challenge the achievement of current stated objectives. That is the most important purpose of stress testing. As for the frequency with which key policies are reviewed, the IPS and the IIP are formally reviewed by the Board at least annually to determine whether it remains appropriate considering the Board's investment philosophy and objectives, changes in the capital markets, and/or Fund structure. A review of Investment Committee and Board materials confirms the policy review requirement is being met. **Strengths:** - The IPS is consistent with industry best practices. - The IIP represents a clear and workable extension of the IPS and is consistent with industry best practices. **Recommendations:**

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

[3] RVK serves as the general consultant for the system, however, a separate team at RVK with no connection to the system or RVK staff performed the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- The power to designate the institutions and individuals who hold the responsibilities, as described in Section II, is a critical aspect of clarifying the ownership of both governance authority and the fulfillment of fiduciary responsibility. COAERS should consider noting the process by which these responsibilities are assigned and periodically reviewed.
- Asset/Liability merits either its own section in the IPS or to be added to Section V preceding any discussion of Strategic Asset Allocation.
- Consider removing the specificity of sub-asset class structure from the Policy Benchmark in Section VII of the IPS and make it part of a routine asset class structure discussion. For example, the Policy Benchmark specifies the benchmark index for fixed income as the Bloomberg Global Aggregate Bond TR, yet each of the sub-asset classes under fixed income are US (US Page 11 City of Austin Employees' Retirement System IPPE Treasuries, US Mortgages, and US Credit). This appears quite granular and could inhibit broader thinking about the structure of the fixed income asset class as conditions warrant
- The Board should consider reviewing their Policy Benchmarks, targeting alignment with actual mandates. For example, close to 60% of the real estate composite is a private core real estate fund which is a mismatch with the Policy Benchmark for Real Estate which is the FTSE NAREIT Equity REITS TR, a publicly traded index. This will become more evident as the System moves into additional private asset classes.
- Consider adding a subsection in Section II for Investment Counsel since the position is referenced within the IIP.
- Consider including the Investment Committee, its role, responsibilities, and any authority held independent of the Board as a whole as its own subsection of Section II. We understand the Investment Committee is a subset of the Board; however, best practice would give the Investment Committee a strong advisory role to vet and recommend to the Board, so actions requiring Board approval can be addressed as a consent item or a motion based on an Investment Committee written summary of the process taken.
- With the understanding that the Board may delegate authority for strategic and operational aspects of the Fund to Staff, consider adding clarity to the degree of delegation by the Board to its Investment Committee and Staff in Section II – Responsibilities of the IPS. Although clarity for the degree of delegation may be stated later in the IPS or in the IIP, we believe it is important to lay it out upfront when addressing the responsibilities of fiduciaries to the System.
- We do find the treatment of [assets/liabilities] in the IPS merits review. The IPS currently states that an [Asset/Liability] Study determines as one of its objectives the "maximum and minimum ranges (Rebalancing Ranges)" around the SAA targets. Having a rebalancing policy and process is a best practice in our view. And COAERS has adopted both. But while rebalancing policy and process should be informed by the risk target set for the total fund in an A/L Study, its design also reflects a host of other considerations related more to asset class liquidity, transaction costs, and more. We suggest that the implied link between A/L Studies and rebalancing in the IPS be reconsidered. Indeed, if it were eliminated, we do not think it would in any way reduce the robustness of the IPS.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- Add clarity to the degree of delegation by the Board to its Investment Committee, and to Staff in the Section II – Responsibilities of the IPS. Although clarity for the degree of delegation may be stated later in the IPS or in the IIP, we believe in the importance of laying it out upfront when addressing the responsibilities of fiduciaries to the System. If the work of the Investment Committee is not distinctive from and additive to the Board's final decisions and ongoing monitoring, its contribution is debatable.
- We strongly suggest the Board remove performance relative to peers as a specific objective/benchmark for the System. First, peer comparison offers little, indeed almost no, information about whether the fund is achieving its core mission—funding benefits for COAERS plan participants. Second, COAERS is unique with its own contribution policy, benefit structure, ARoR, cash flow, size, objectives, etc. In our view, these differentiators render the very notion of "peers" questionable, and while a group of public funds can be assembled with somewhat more "peer-like" attributes, it will likely be a small universe that is far from statistically robust. The Board's Investment Consultant can and should continue to provide the COAERS Board with peer comparisons of this data, as it is prudent to at least remain generally aware of the performance other funds deliver.
- COAERS might consider adding investment manager benchmarks to the IPS or reference in the IPS their inclusion in the Premier List, particularly for any investment manager actually implementing a funded "active" mandate (note: investment managers may be selected for inclusion in the Premier List but not necessarily be awarded funds to manage at any given point in time).

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The strategic asset allocation is reviewed at least annually. In periods where warranted, asset allocation may be reviewed more often, such as following large shifts in CMAs. An Asset/Liability Study is revisited at least every five years. Major changes to CMAs, contribution policy, liabilities, etc., may result in more frequent reviews. The actuarial ARoR plays a critical role in setting the contribution rate of the System and incorporates a variety of factors and risks that affect the System's long-term ability to fund benefits. Among those factors is the Board's asset allocation and expected long-term returns and associated variability based (as noted above) on the CMA's of the System's independent Investment Consultant (as well as others the actuary chooses to utilize). The Board, in its consideration of asset allocation, is aware of the actuary's recommendation of a prudent level of contributions (based in part on the asset allocation). However, like the actuary's decision, the Board's decision must take into account other factors, most notably prudent levels of risk in the management of the Fund's assets, pragmatic considerations associated with investing, maintaining sufficient near-term liquidity, and more. Thus, the decision on the ARoR (and thus prudent levels of contributions over time) and the decision on asset allocation (reflecting the Board's view of prudent levels of risk to the System's assets in the pursuit of investment returns over time) are two different, albeit related, decisions in the management of the System as a whole. The actuarial ARoR is set independently of an asset allocation and reflects a pursuit of prudent long-term contributions. Asset allocation is driven by the targeted risk level rather than an obligatory fitting to the ARoR. In the end, these must bear a reasonable relationship to one another, and our review of the Asset Allocation studies conducted for and discussed by the COAERS Investment Committee and Board are consistent with that objective. **Recommendations:** - Asset/Liability merits either its own section in the IPS or to be added to Section V preceding any discussion of Strategic Asset Allocation. - Consider adding a separate section for the selection and evaluation of private equity and private credit mandates, if implemented. Reporting and benchmarking of private investments should also be added. - Consider consolidating explanations for how tactical and strategic sub-asset class ranges are set. - Consider removing 10 – 12% risk targets for the portfolio/adding metrics that more directly align with the Asset/Liability Study and the goals of the portfolio. - Consider setting capacity/risk contribution constraints in place of 4% dollar-weight constraints for sub- asset class thresholds. - Consider revisiting tracking error target. - Consider reaffirming Investment Staff's authority to execute rebalancing decisions—without Board approval—should circumstances require such action. - Consider adding a separate section for the selection and evaluation of private equity and private credit mandates, if implemented. Reporting and benchmarking of private investments should also be added.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The duty to review fees is inherent in the Board's oversight role per the IPS and its monitoring provisions. The Investment Committee and the Board review fees for each of the investment managers and strategies in the reports provided by the independent Investment Consultant and the Investment Staff. Total fund performance in these reports is shown on both a gross-of-fees basis and net-of-fees basis and includes 'Cash Activity – Investment Operations' and 'COAERS Investment Manager Fees' reports, which detail direct and indirect fees paid to the investment managers quarterly. RVK's analysis included review and confirmation of fee schedules of all investment managers, review of investment manager agreements, comparison to similar mandates, as well as a comprehensive peer group fee analysis. These peer groups are routinely used by RVK to benchmark fees and are comprised of both active and passive managers specific to the mandate's vehicle type. Each investment manager was ranked against an appropriate eVestment peer group based on mandate type and overall asset size. The eVestment fee database is considered the broadest and most frequently updated in the industry. Lower fees are represented by lower percentile rank (i.e., the 1st percentile is the lowest fee and conversely the 99th percentile is the highest fee in the relevant investment manager peer group). As shown in the table below, 94% of the System's public fund managers have effective annual fees that fall well below the industry median for each respective mandate. As stated above, COAERS favors passive implementation, as appropriate, which leads to low fees in general, but we observed that even fees paid to passive managers are below the industry average. The System's utilization of mainly separately managed accounts (SA), followed by collective funds (CFs and CITs) and small usage of mutual funds also contribute to its low fees. **Recommendations:** - Continue to utilize passive management in asset classes with higher efficiency. - Consider adding a section on management and control of investment management and service provider cost in the IPS or IIP. - Consider adding a periodic frequency for conducting plan fee reviews similar to the minimum frequency noted in the IPS for Asset/Liability Studies and Asset Allocation Studies.

Governance
Based on our review, the investment decision-making process for the System broadly reflects a comprehensive implementation of best practices. The COAERS IPS, while not specifying required processes in detail, provides a strong foundation for investment decision-making. The IPS clearly addresses key investment principles that are industry standards for best practices in institutional investment decision-making. The outcome of individual investment decisions is always uncertain, but we believe COAERS' policy foundation goes a long way to mitigate that risk. At least quarterly, the Investment Committee and Board review materials provided by the Board's independent Investment Consultant and Investment

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Staff. The reports begin with compliance with the SAA and are followed by performance evaluation beginning with the total fund, then asset class composite performance, and finally performance for investment managers. Fees are also included in the materials. Investment Staff provides a thorough IPS compliance review. Investment Staff and the Investment Consultant provide the Investment Committee and Board with multiple monthly performance summaries and comprehensive quarterly performance reports to aid with the ongoing evaluation and monitoring of investment managers and the total fund.

Strengths:

- The investment decision-making process for the System broadly reflects a comprehensive implementation of best practices.

Recommendations:

- Regarding Delegation of Authority, we suggest the Board carefully review Recommendations 6, 7, and 9, which are addressed in Section I of this Evaluation.
- Consider adopting and documenting a schedule for reviewing service providers, including a potential RFP after five to seven years.

Investment Manager Selection and Monitoring

The Board, with recommendation from the Investment Committee and advice from Investment Staff and Investment Consultant, is ultimately responsible for the selection, retention, monitoring, and evaluation of investment managers. All investment manager contracts, side letters, other agreements, and service provider agreements are evaluated, reviewed, and finalized by the Executive Director, as delegated by the Board, in consultation with the General and/or Investment Counsel.

Individual investment manager performance directly impacts total fund performance. Investment decisions regarding the structuring of the investment program, asset classes, and allocations based on the System's return objectives, risk budgets, liquidity constraints, and other considerations are all related and integrated.

Recommendations:

- Consider adding language for the investment manager selection process for private market asset classes.
- Consider updating investment manager reporting requirements for metrics and data that are relevant to private asset class managers.

Full Investment Practices and Performance Evaluation

Corpus Christi Fire Fighters' Retirement System

PRB Analysis of Evaluation

Plan Assets:[1] $183,259,960
Evaluator: UBS Financial Services, Inc.
Evaluator Disclosures:[2]
Relationship: Investment Consultant
Investment Discretion: None
Conflicts of Interest: None
Senate District: 20
House District: 34

The evaluation concludes that the system is following industry best practices and based upon the consultant's experience in the industry. The evaluation also includes data on the expected risk and return of the system's current portfolio and detail on the investment expenses incurred. However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluator notes that two sections in the governance category have been provided by the system's board for inclusion in the report, but those items were not evaluated or verified by the consultant. This note is the same as what was provided in the previous 2020 evaluation. Additionally, in the previous evaluation the retirement system requested to add the following clarification to this statement: "These sections include Transparency: a description of the regular public monthly meetings of the Board of Trustees, some of which the evaluator does not attend; Investment Knowledge/Expertise: a description of the completion by the Board of Trustees of applicable education requirements, which the evaluator did not audit to confirm; and Accountability: a description of the allocation of authority between the trustees, internal staff and investment consultant, some of which occurs administratively and in meetings which the evaluator does not attend."

The evaluator also provides additional commentary on the practices of the system based on their first-hand knowledge as the investment consultant and the tasks for which they are responsible. The evaluation also includes statements such as "The Board and I strive to improve the investment strategies of the IPS. Pursuant to client confirmation and to the best of our knowledge, the IPS' stated objectives are being met."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The retirement system's current investment policy statement (IPS) was adopted on May 16, 2024 by the Board of Trustees. The Board of Trustees and I worked in concert to develop the current IPS using an approach that encompassed standards provided by UBS (including strategic and tactical intellectual investment capital provided by UBS's Chief Investment Office) and those based on my long-tenured history providing investment consulting solutions to similar retirement systems. The IPS and the board's review procedures are sufficient based on my experience working with similar clients at UBS. When and where applicable, the board and I have reviewed the IPS, its policies, and procedures, to determine what areas, if any, need improvement, and have developed and executed plans to implement the same. **Strengths:** - Continue to follow the provisions of the investment policy statement that the IPS should be reviewed biennially or more often as necessary to meet investment objectives.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- In the most recent review of the IPS, the consultant and Board of Trustees reviewed the minimum and maximum target allocation guidelines. The consultant and Board of Trustees will continue to review and strive to improve the IPS to better develop and execute investment strategies and processes while keeping the document flexible and fluid. The Board of Trustees recently updated the JPS to reflect the current actuarial return assumption of 7.15 percent as of the actuarial valuation of December 31, 2022 completed November 10, 2023.

Recommendations:

- Clarifications, enhancements, additions and or revisions to the investment policy statement should always be under review and consideration.
- State the approximate current funding status in the IPS and update when reviewed. Consider the cost/benefit of a comprehensive asset liability study provided by a third-party advisor with expertise in this area.

Investment Asset Allocation

Corpus Christi's recommended strategic asset allocation (SAA) has been tailored to the guidelines outlined in the IPS and reflects UBS' research on the expected future risk and return potential of each asset category and a combination of managers that complement each other within and across asset classes. The board and I have periodically reviewed the allocation for asset rebalancing to adjust asset allocations to comply with strategic levels indicated in the IPS. Systematic portfolio rebalancing augments asset allocation by keeping the portfolio from drifting too far off the mark. Together, asset allocation and rebalancing help you establish and adhere to a long-term investment strategy and avoid "style drift".

The consultant along with the Board of Trustees monitor and compare the asset performance relative to: absolute and relative objectives, respective benchmarks for each asset class or strategy invested, per the asset allocation table, representative group of peer institutions identified by the Board of Trustees and representative group of peer investment managers. The Board of Trustees with the consultant review the asset performance, portfolio standard deviation and peer group rankings on a quarterly basis.

Strengths:

- Continue to follow the provisions of the investment policy statement that the asset allocation will be reviewed at least biennially or more often if the retirement system's strategic objectives, anticipated investment returns, spending policy or risk tolerance changes or if consultant determines that such a review is needed based upon changes in consultant's capital market assumptions.
- Continue to foster communication between the actuary and consultant regarding actuarial assumptions and asset allocation decision-making.
- Continue to follow the provisions of the IPS that direct the asset allocation targets to be utilized when liquidity events occur.

Recommendations:

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- To specifically provide in the IPS for a review of the expected return assumptions, expected risk assumptions, portfolio standard deviation and peer group rankings at least annually or more often if consultant determines that such a review is needed based upon changes in consultant's capital market assumptions.

Investment Fees
The UBS Institutional Consulting fee for Corpus Christi was negotiated between both parties prior to the execution of the Consulting Services Agreement and agreed to by both parties when the Consulting Services Agreement was executed. Based on our internal UBS Institutional Consulting pricing schedule, this relationship was priced below our average pricing at the inception of the relationship and continues to be below our average pricing of 0.13 percent for a client with assets in the range of $100 million - $250 million. Our pricing schedule was created by analyzing the fee schedules for our institutional client base within investment advisory programs at UBS. The recommended pricing range for UBS Institutional Consulting clients in the $100 million - $250 million threshold is 0.09 - 0.20 percent although we may charge up to a maximum of 0.90 percent in the Institutional Consulting Program. On a quarterly basis, the Board of Trustees reviews a fee analysis report for each of the investment managers in the portfolio. The report is prepared by the plan administrator of the retirement system. The information included within the report is based on periodic billing statements based on agreements with each investment manager. The report includes the fee charged by each manager based on their contract, including foreign tax withholding fees, custodial bank fees, security trade fees and applicable consultant fee. Other fees incurred by the retirement system that are not directly related to the management of the portfolio include fiduciary insurance, continuing professional education, administration staff salaries and other operating expenses.

Governance
Documentation and communication are important factors in fulfilling the board's fiduciary responsibilities. UBS provides advice and materials to help Corpus Christi address its fiduciary duties and document its processes. The advice and materials provided to help Corpus Christi address its fiduciary duties and document its processes provide a framework for the fiduciaries to effectively govern investment activities. The officers of the board are selected by the Board of Trustees. All decisions regarding investments, including investment consultant selection and retention, investment manager selection and retention, and asset allocation are made by the Board of Trustees. The board also allocates authority between the trustees and internal staff. The board is consistent in its use of delegation of authority. The review of the IPS ensures policies are being followed. The policy also gives direction and oversight to the Board of Trustees for the overall management of the portfolio including the establishment of investment policies and procedures to monitor the investment performance of the portfolio.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Strengths:

- Continue to follow the provisions of the Investment policy which provides for a review biennially or more often as necessary to meet investment objectives and review investment governance processes for appropriateness.

Investment Manager Selection and Monitoring
I provide the board with quarterly performance evaluation data for the retirement system's investment managers to enable the board to determine and evaluate the strategic asset allocation as well as to identify and engage (or terminate) its investment managers. As investment consultant, I sift through an extensive amount of data, analyze and interpret its importance, augment it with my experiences and observations, and assemble it in a concise and meaningful fashion for the board's consideration. When a search for a new investment manager is needed, I consider Corpus Christi's risk tolerance, return objectives and liquidity needs, together with how well the various managers selected for consideration blend with the existing managers. The manager recommendations take those approved by UBS and screen them further to create a targeted list that reflects Corpus Christi's needs and investment policy. The Board of Trustees and consultant review the investment performance, risk, style and suitability of each of the investment managers in the portfolio before the trustees make the decision to engage or replace an investment manager. The board also reviews the consultant's quantitative assessment of the manager, the economic market conditions, the investment market cycles and the defined investment manager criteria set forth in the IPS. **Strengths:** - Continue to follow the provisions of the investment policy statement regarding the criteria when a manager is to be under "watch" due to any event, transaction, or other variable in the manager's investment performance or structure.

Full Investment Practices and Performance Evaluation

Dallas Area Rapid Transit Retirement Plan

PRB Analysis of Evaluation

The evaluation provides brief explanations outlining the System's processes and supporting arguments for the conclusions drawn, with explanations of several topics related to managing the System's assets. The explanation provides insight into the System's practices as well as outlining the considerations and philosophies that guide the investment consultant. However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluation provides details around the fund net cash outflows and the overall plan investment liquidity levels. Stating that "Liquidity is maintained with 1 percent to 3 percent in cash in most periods. Additionally, 91 percent of the portfolio has daily liquidity. Approximately 9 percent of the portfolio is invested in long liquidity partnerships. This allows the portfolio to remain close to fully invested and still meet cash flow needs."

The evaluator also states that "Based upon our review of these materials and our working knowledge of the process employed, it is our opinion that the investment practices, governance, and investment activities are in line with the best practices of public pension plans."

Plan Assets:[1] $205,597,000

Evaluator: CBIZ Investment Advisory Services

Evaluator Disclosures:[2]

Relationship: Investment consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 23

House District: 114

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
Within the Statement of Investment Objectives and Guidelines, a plan funding philosophy is delineated, liquidity requirements are discussed, and permissible asset allocation ranges as well as current strategic targets by asset class are defined.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
In the asset allocation study approved in early 2016, a schedule was constructed to have a reasonable probability of achieving a fully funded plan by the year 2036. At the time of the study, a new funding target of $10 million per year was adopted by the committee and has been agreed to each subsequent year. This $10 million funding level has been consistently larger than the actuarial required contribution. For example, the current annual required contribution is $4.1 million. At year-end 2023, the expected market value from the original glide path was $177.8 million. As a result of both overfunding and strong markets, the actual market value on December 31, 2023, was $214.3 million. The actuarial expected return assumption was lowered, in 2023, to 6.25 percent. Based on the most recent statistics from the Texas Pension Review Board plan compilation, 56 percent of Texas public plans have an actuarial return assumption at 7 percent or less. Since the last report, the Funded Ratio (AVA/AL) has increased to 87.3 percent. Per the GASB 68 reporting requirements the schedule of changes in net pension liability for the current period is 85.22 percent of total pension liability, with a net projected pension liability of $35.66 million. The pension plan has net cash outflow. Liquidity is maintained with 1 percent to 3 percent in cash in most periods. Additionally, 91 percent of the portfolio has daily liquidity. Approximately 9 percent of the portfolio is invested in long liquidity partnerships. This allows the portfolio to remain close to fully invested and still meet cash flow needs. Macro outlook is discussed with the investment consultant at all meetings they are in attendance. These discussions can lead to small tactical shifts away from the target allocations but still within policy ranges. These are most often implemented in conjunction with cash flow events such as investment distributions, benefit payments and the annual contribution. **Recommendations:** - We recommend that an updated asset allocation study should be performed. The purpose will be to analyze the asset allocation considering the current actuarial projections and review an updated glidepath.

Investment Fees
No written section was included in the evaluation report nor recommendations concerning investments fees such as those made in 2020.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The DART Statement of Investment Objectives and Guidelines were last updated in January of 2020. They are frequently reviewed and have had no significant updates in the past four years. The guidelines include purpose, objectives and guidelines for the plan and all external vendors. It further discusses Committee expectations for all these parties. Formal committee meetings occur 4 to 5 times per year. Minutes are taken at each meeting and the minutes are approved and adopted at each subsequent meeting. Within the corporate structure of DART normal attendance at the Committee meetings include representative from human resources, treasury, and legal. Additionally, the external investment consultant normally attends and on an as needed basis different external investment manager may be asked to provide an update. The external auditor and actuary normally attend one meeting per year. This allows for the direct implementation of approved actions as well as reporting on the normal course of business. This process provides the Committee the support function needed to fulfill their fiduciary responsibilities.

Investment Manager Selection and Monitoring
Within this section we analyze the duties to investigate asset classes and managers, prudently select investment managers, and incur reasonable expenses. The focus of the review for this section is the plan investment guidelines, asset allocation study, current asset allocation, meeting minutes, investment consultant research guidelines, consultant research organizational chart, recent investment manager search documents, manager contracts, and quarterly performance reports. DART retains CBIZ IAS to assist with the manager search and selection process within the plan investment guidelines. CBIZ IAS has a deep research team. Professionals, by designation include 10 CFA, 4 CAIA, 7 CPA. Additionally, the consulting firm has formal research guidelines, research organization structure, and formal research meetings. The investment consultant provides detailed quarterly reports and may request abbreviated monthly reporting that corresponds with client meetings. The reports are designed to tie in all the plan investment guideline metrics. The metrics in the quarterly reporting include compliance to asset allocation ranges, performance to listed benchmarks, total fund performance versus goals, peer group rankings by investment manager and by fund, sector concentration, security concentration, country exposure, and credit quality detail. Performance is presented net of investment manager fees. The investment performance reporting system used by the investment consultant is PARis. A broadly utilized institutional performance reporting software system.

Full Investment Practices and Performance Evaluation

Dallas Police & Fire Pension System

PRB Analysis of Evaluation

The evaluation offers a balanced approach to both summarizing key aspects of the system while also including detailed analysis from studies conducted by the system. The evaluation provides summary points for each section and recommendations are supported with details and comparison to leading practices.

The evaluation provides and explains a recent 2021 stress test that includes analysis of the risks to the system given different investment return scenarios including a weak five-year return period and how that could delay full funding or lead to insolvency.

The evaluation also confirms the investment expenses blended average fee of 0.54 percent in 2021 were in line with the industry average and have decreased significantly over the past three years. The evaluator noted that increasing passive investment strategies could further reduce overall investment fees.

The evaluation also includes a detailed table from the system's board addressing the various recommendations made by the evaluator to which the board agreed with the majority.

Plan Assets:[1] $1,806,567,341

Evaluator: Meketa

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 23

House District: 100

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
A well-developed IPS thoughtfully merges client-specific goals with the realities of the capital markets. The IPS should be long term and stable in nature and should focus on core total fund-level policy issues. DPFP's IPS meets all these criteria. The IPS is well thought-out and in line (or better) than industry standards. It is consistent with guidance from the CFA Institute. **Strengths:** - Overall: the existing investment policy statement appears appropriate, adequate, and effective. - The "Core Beliefs and Long-Term Acknowledgments" is thoughtful and should be reviewed any time significant investment changes are considered. It offers good guidance without being overly prescriptive or prohibitive. - DPFP Staff, the Board, and the Consultant reviews the IPS annually.

[1] As of 12/31/2022

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
According to the IPS, "a formal asset allocation study will be conducted as directed by the Board, but at least every three years. Asset allocation targets will be reviewed annually for reasonableness in relation to significant economic and market changes or to changes in the investment objectives". DPFP uses capital markets assumptions developed by its Consultant. Maketa recommends its client use the 20-year projections. The board has engaged specialists (where appropriate) to work out of many private markets investments at best possible exit price available. To be proactive DPFP has been tracking the computation pay relative to the city's hiring plan because if hiring and pensionable compensation do not keep pace with projections, lower contributions will go into DPFP starting in 2025 after the contribution floor is lifted. Net expected cash flows are expected to average approximately -$139 million per year over the next five years (based on the contributions, benefit payments and administrative expenses in the actuarial valuation report). On an average plan size of approximately $1.8 billion, net expected cash outflows per year are approximately -7.7$. (-$139 / $1,800 ≈ -7.7$). **Strengths:** - The approach DPFP takes to formulate asset allocation is sound, consistent with best practices, and leads to a well-diversified portfolio. **Recommendations:** - The Board should consider increasing passive exposure in efficient asset classes where the likelihood of risk-adjusted outperformance, net of fees, is lowest. Based on our experience, DPFP has below average passive exposure. - DPFP Staff should continue its process of working with the Board of Trustees and external advisors to prudently exit illiquid investments to the extent possible. - The Board should remain patient with asset allocation as the portfolio is transitioned and not feel obligated to conduct comprehensive asset allocation overhaul every year. (Surveys have shown many large state plans are moving towards once every three - five years). - The Board and Staff should closely monitor contribution levels and maintain constructive and open dialogue with the City. If (based on the actuary's advice) it becomes likely that DPFP is not on track to meet targets by 2024, the Board should act as soon as reasonably possible to discuss and implement additional plan design changes to avoid delaying and compounding any known shortfalls.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
DPFP publishes summary fee information in its annual financial report in a clear and understandable way. As is expected, private market strategies represent a larger proportion of fees than their pro-rata market value exposure. DPFP paid a blended average fee of 0.54% in calendar year 2021. this is on par with the industry average of 0.54% (according to the latest available NCPERS survey conducted). Fees have come down significantly over the past three years. DPFP paid a blended average fee of 0.74% in calendar year 2018. **Strengths:** - DPFP's tracking and monitoring of fees appears in-line with industry standards. - Staff, the Board, and the Consultant are diligent in monitoring fees. - We recommend continued efforts on seeking no fee or discounted fee arrangements on private market investments that enter extension periods. **Recommendations:** - Passive strategies could reduce overall investment related fees for DPFP.

Governance
DPFP is as transparent, if not more, than most similar sized pension public plans. Any action by the board, except those where the plan specifically requires approval by 2⁄3 (eight affirmative votes) of all the trustees of the board (e.g. Benefit or contribution changes, new commitments to alternative investments), is required to be approved by a majority of all the trustees of the board, i.e. At least six trustees must approve any board action regardless of the number trustees present. Currently, there is requirement for the board to conduct a competitive selection process for each advisor to the board at least once every five years (on a rotational basis). However, the board has the authority to postpone or waive the five-year requirement. **Strengths:** - DPFP's website and transparency are better than most similar sized public pension plans. **Recommendations:** - To the extent possible, we would like to see increased continuity of Trustees on the Board.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
Investment manager search and selection criteria is detailed in section 7 of the IPS. According to the IPS, "staff and consultant shall define and document the search process, including evaluation criteria, prior to initiating the search process." DPFP's total fund performance and individual manager performance is monitored by staff, Consultant, IAC and the board of trustees. The Consultant produces a quarterly performance report that is shared with staff, board of trustees, and IAC. **Strengths:** - The evaluation process for new investment manager hires is comprehensive, thorough, transparent and conducted in an inclusive manner. - Staff prepares deep dive reviews into each asset class with the goal of covering the entire portfolio in each calendar year. - Staff documents the rationale for all hiring and firing decisions. **Recommendations:** - Staff and consultant should conduct a formal benchmark review for each public investment manager on set frequency (perhaps once every three years).

Full Investment Practices and Performance Evaluation

Dallas/Fort Worth Airport Board

PRB Analysis of Evaluation

The evaluation provides a review of policy practices, clearly documents the sources used as comparative best practices, and also provides detailed explanations where appropriate. However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluator notes that the existing investment consultant makes recommendations for improvement proactively and the recommendations are already incorporated in the existing practices, therefore only general recommendations for the system are made in this evaluation to "maintain its robust processes to both review the current investment portfolio while also seeking to identify new investments that can improve the Fund's long term expected risk and return while maintaining liquidity to meet its benefit obligations."

The evaluation supports the system's consistent practice of improving by stating "Since our engagement in 2010, the Fund has undergone several reviews of the asset allocation. The results of these activities have been revisions to the Fund's investment policy statement, investment managers changes, and the addition of new asset classes. The changes implemented by the Fund have improved the risk/return profile of the Fund while also increasing portfolio diversification."

Plan Assets:[1]

Retirement Plan: $627,516,000
DPS Retirement Plan: $271,051,000

Evaluator: AndCo Consulting LLC

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 22

House District: 98

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
We analyzed the System's IPS and the Board's compliance with the IPS. While different IPS structures exist, AndCo, as an independent, professional investment consulting firm, has determined that the System's IPS, and the Board's compliance with the IPS, is appropriate and comparable with what AndCo considers best practice, industry standards, and comparable to the structure of an effective investment policy statement as laid out by the CFA Institute (ELEMENTS OF AN INVESTMENT POLICY STATEMENT FOR INSTITUTIONAL INVESTORS, Copyright 2010 by the CFA Institute). **Strengths:** – Maintaining its ongoing review of the IPS. – Reviewing the policy statement annually is a strong practice. – Tracking the changes to the investment policy and report them in a clear and transparent manner **Recommendations:** – System considers adding policies regarding Investment Manager Selection and Ethics.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The Fund's process for determining asset allocation targets is executed and implemented through frequent and thorough discussions between the staff and the investment consultant. Each year, the investment consultant uses a combination of 10- to 15-year forward-looking asset class return assumptions, risk and correlation assumptions, historical asset class return and risk data, and a long-term (50+ years) building block return methodology to determine a target allocation that the investment consultant believes will have the highest probability of achieving the Fund's return objectives. Any changes to the Fund's strategic asset allocation targets and ranges are then recommended to the Board for consideration. The Fund's cash flow and liquidity needs are reviewed each quarter as part of the investment consultant's quarterly performance review. This review includes discussions regarding the current, expected, and known timing variances of future contributions to, and withdrawals from, the Fund. Based on the Fund's expectations of future cashflows, the portfolio has been positioned to include reasonable allocations to private assets. The Fund's pacing models are reviewed regularly by staff and the investment consultant to ensure liquidity needs are appropriately addressed. **Strengths:** – Continued regular asset allocation reviews with its investment consultant. – Maintained policy of educating themselves on new asset classes that could be beneficial to the investment portfolio. – Continued work with the Consultant to actively rebalance the portfolio to provide the required liquidity levels and maintain its long-term target allocations.

Investment Fees
We reviewed the fees paid to administer the Fund's portfolio and the underlying investment manager fees. The management fees for the portfolio as of September 30, 2023, estimated strategy market values reflect a weighted-average cost of 0.82%. The fees for the portfolio, while slightly higher than the average, are reasonable based on the amount allocated to private funds. In addition, the underlying manager fees, with only a few exceptions, are reasonable when compared to peers. The marginally higher weighted average portfolio fees are driven by the portfolio's use of predominantly active managers, and as previously stated, the amount allocated to private investments (alternatives). Both approaches command higher fees with the expectation to generate higher returns. While high or low fees do not guarantee failure or success for an investment portfolio, AndCo, as an independent, professional investment consulting firm, has determined that the Fund's fees are appropriate and comparable with what AndCo considers best practice, industry standards. **Strengths:** – Ongoing review of the investment fees.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- Continue to consider the use of passive strategies to lower investment management fees.

Governance
The Fund's IPS contains clear definitions of the Board's responsibilities as well as the role of the Board's professional advisors and investment staff in assisting the Board in fulfilling its fiduciary duties to the Fund with respect to the investment of assets. Direct investment authority for the Fund's assets lies with the Board. As such, all decisions regarding the Fund's portfolio, including return objectives, risk tolerance, investment guidelines, asset allocation targets and manager selection and retention reside with the Board. We reviewed the Fund's governance processes related to investment activities, investment decision-making, delegation of investment authority, and education. While different governance structures exist around investment decision-making, delegation of investment authority, and education, AndCo, as an independent, professional investment consulting firm, has determined that the Fund's processes are appropriate and comparable with what AndCo considers best practice, industry standards. **Strengths:** – Continuing to follow the IPS. – Engaging investment experts as appropriate. – Continuing to seek ongoing educational opportunities consistent with Texas Administrative Code, Chapter 607.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The investment manager selection process for the Fund is conducted in collaboration with the Fund's investment consultant and staff. Whether a specific investment strategy review is directed by the Board, staff, or the strategy idea comes from the investment consultant, all potential investment strategies must go through the investment consulting firm's due diligence process and subsequently be presented and approved by the investment consultant's Investment Policy Committee before being shown as potential strategies for the Board to consider for the Fund's portfolio. The investment consultant's reports highlight portfolio and investment manager performance and risk relative to the various performance measurement standards established in the IPS. The criteria established in the IPS tracks managers on both a qualitative and quantitative basis. Strategies that repeatedly fail to meet these standards will be placed on a watchlist or terminated. The criteria are not designed to remove the decision process from the Board, but rather are intended to add objectivity and enhanced scrutiny of managers who are underperforming the criteria contained in the IPS. While the investment consultant may make recommendations regarding the continued retention or termination of an investment strategy in the Fund's portfolio, the ultimate decision to retain or terminate an investment strategy (within the bindings of the strategy's agreement) resides with the Board. **Strengths:** – The Fund maintains its investment process for investment manager search and selection which relies on its investment consultant, staff, and Board in selecting new investment managers for use within the Fund's investment portfolio. – The Fund is in line with the best practices laid out by the Government Finance Officers Association for selecting third party investment professionals for pension fund assets.

Full Investment Practices and Performance Evaluation

Denton Firemen's Relief & Retirement Fund

PRB Analysis of Evaluation

The evaluation utilizes a question and answer format describing the system policies and practices in a short and direct manner but includes detail to help support the conclusions. It also includes a helpful summary of its primary conclusions at the end of the document. However, the evaluation offers little new information compared to the previous evaluation completed in 2020 and the concluding summary with recommendations is an exact match.

The evaluation concludes the funds policies and practices are in-line with best practices and its approach can be a model for others, stating "DFRRF's solid investment choices, lowering of its actuarial rate of return, and no debt practice for real estate investments make it a benchmark for other funds."

The evaluation indicates the System has elected to use a more conservative assumed rate of return than required, noting "the assumed rate of return was lowered by the Board to 6.75% from 7%, although the rate of return was lowered, the allocation was not changed. The rate was lowered to take a more conservative approach to future plan performance and liability."

Plan Assets:[1] $152,072,995

Evaluator: Gary Calmes, PLLC

Evaluator Disclosures:[2]

Relationship: Plan Administrator

Investment Discretion: None

Conflicts of Interest: None

Senate District: 30

House District: 64

The evaluation was completed by the System's current third-party plan administrator which is identified as a financial services firm that provides "tax and financial planning services as well as, consulting services for institutional clients." The evaluation states the "firm's principal is a CPA, CFP®, and Investment Advisor Representative."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The policy is reviewed on an as needed basis. The Investment Policy was last update February 20, 2020. We found the fund to be very solid with good policies and practices. The DFRRF's solid investment choices, lowering of its actuarial rate of return, and no debt practice for real estate investments make it a benchmark for other funds. **Strengths:** - The policy is clearly written, and objectives stated in such a way for anyone to manage the portfolio. - The Fund has consistently met its goals over the history of the Plan. The Plan holds 9.94% of its assets in illiquid assets. The fund contains no debt on any of its assets.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The system does not have a written policy for determining the asset allocation, the investment policy does include an allocation requirement. The Fund uses no formal stress testing model. All decisions are made at the Board level, based on qualitative discussion not quantitative. In 2015 the assumed rate of return was lowered by the Board to 6.75% from 7%, although the rate of return was lowered, the allocation was not changed. The last review would be the 12/31/2023 actuarial study and the 12/31/2023 annual audit. The Fund does not perform a formal separate asset-liability study. **Strengths:** - The rate was lowered to take a more conservative approach to future plan performance and liability. - The long-term performance of the fund has been sufficient to meet the needs of the fund as well as maintain an amortization period of less than 20 years.

Investment Fees
The investment consultant monitors and reports investment fees to the board. The fees are approved by the Board and paid separately and not withdrawn by the advisor. The Board is responsible for the monitoring of all other fees incurred by the plan. **Strengths:** - DFRRF remains one of the lower cost funds in TLFFRA.

Governance
The IPS does not specifically identify Board policies and procedures. As it relates to risk, the roles and responsibilities of each party involved in the management of the plan is clearly defined in the IPS. In short, the Board is responsible for developing the investment objectives of the plan, hiring of all parties, allocating assets, review of investment results and investment policy. This structure is very common throughout the industry and serves as a good system of checks and balances. **Strengths:** - DFRRF's strongest area is its stable environment including long term Board members. The two citizen members have been on the Board for over ten years. The Board has seen little turnover in the past 10 years including the firefighter members/officers. The current investment advisor has been with the plan since 2018, the previous advisor managed the plan for approximately 30 years. The investment advisor is not a

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

large firm but an individual, which means the consistent nature has not changed. The current advisor also worked with the previous advisor for two years before taking over.

Investment Manager Selection and Monitoring
The Board is ultimately responsible for measuring the performance of the plan with the advisor's input. The manager reports to the Board on a monthly basis, if performance were to not meet actuarial rates of return over a long period the Board would review the manager for replacement. **Strengths:** - Performance is reviewed based on gross-of-fee monthly and net-of-fee during the annual audit. **Recommendation:** - One area we would recommend the Board review is the process by which investments are presented to the Board. The investment advisor presents investment opportunities to the Board, but there does not exist a matrix by which these are chosen. We do not recommend a change in policy but at a minimum discussion as to why and how various investments are chosen.

Full Investment Practices and Performance Evaluation

El Paso Firemen & Policemen's Pension Fund

PRB Analysis of Evaluation

The evaluation provides a review of policy practices, clearly documents the sources used as comparative best practices, and also provides detailed explanations where appropriate. However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

The evaluator notes that the existing investment consultant makes recommendations for improvement proactively and the recommendations are already incorporated in the existing practices. Therefore, the evaluator took the approach of making only general recommendations for the system to "maintain its robust processes to both review the current investment portfolio while also seeking to identify new investments that can improve the Fund's long term expected risk and return while maintaining liquidity to meet its benefit obligations."

The evaluation supports the system's consistent practice of improving by stating "Since our engagement in 2019, the Fund has undergone a comprehensive asset allocation review as part of an Asset Liability Study. The results of this have been revisions to the Fund's investment policy statement, investment manager changes, and the addition of new asset classes. The changes implemented by the Fund have improved the risk/return profile of the Fund while also increasing portfolio diversification."

Plan Assets:[1]

Fire: $740,283,478
Police: $1,054,931,421

Evaluator: AndCo

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 29

House District: 77

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The IPS defines that the board of trustees (board) is responsible for making decisions regarding the fund's investment portfolio. All recommendations for actions in the investment portfolio are reported to and voted on by the board after being recommended by the Investment Committee. The board has hired an outside investment consultant to assist the board in their decisions regarding the fund's IPS, strategic asset allocation, manager selection, ongoing manager evaluation, and IPS compliance monitoring. While different IPS structures exist, AndCo, as an independent, professional investment consulting firm, has determined that the system's IPS, and the board's compliance with the IPS, is appropriate and comparable with what AndCo considers best practice, industry standards, and comparable to the structure of an effective investment policy statement as laid out by the CFA Institute. **Strengths:** - The fund maintain its ongoing annual review of the IPS. We believe that a periodic review of the investment policy statement is a strong practice for the Fund and should be continued. AndCo recommends that the Fund continue to track the changes to the investment policy and report them in a clear and transparent manner. - The system maintain its robust processes to both review the current investment portfolio while also seeking to identify new investments that can improve the System's long term expected risk and return while maintaining liquidity to meet its benefit obligation.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Recommendations:

- AndCo recommends the system consider adding language regarding investment manager selection and refer to the system's separate Ethics Policy within the Investment Policy Statement.

Investment Asset Allocation
We believe a robust asset/liability study helps the consultant and board review asset allocation mixes to determine those allocation strategies which could potentially best serve to protect or increase funding levels, while providing adequate liquidity for benefit payments and minimizing associated risks. AndCo believes that through a comprehensive discussion over the asset/liability study results clients can have a clearer understanding of practical plan investment expectations. **Strengths:** - The system maintain its long-term asset allocation structure and tolerance ranges. To this point the system has been responsive when presented with recommendations for expanding the asset classes in use within the portfolio and AndCo recommends the system continue the process of active review. - The board continue regular asset allocation reviews with its investment consultant. - The board maintain its policy of continuing education on new asset classes that could be beneficial to the investment portfolio. - The fund continue to work with the consultant to actively rebalance the portfolio to provide the required liquidity levels and maintain its long-term target allocations.

Investment Fees
The fees for the fund's traditional asset portfolio contained in the most recent quarterly investment review reflect an estimated annual cost of 0.47 percent. Based on the 2023 NCPERS Public Retirement Systems Study, the average fee for the survey's 195 state and local government pension respondents was 0.64 percent. It is important to note the fund also considers fees an important part of the decision-making process and evaluates the potential fee impact for each new investment manager and strategy considered for inclusion in the fund's portfolio. The fund considers the current fee of 0.47 percent reasonable and appropriate for its portfolio. We reviewed the fees paid to administer the fund's portfolio and the underlying investment manager fees. While high or low fees do not guarantee failure or success for an investment portfolio, AndCo, as an independent, professional investment consulting firm, has determined that the fund's fees are appropriate and comparable with what AndCo considers best practice, industry standards. No changes are recommended at this time.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
We reviewed the fund's governance processes related to investment activities, investment decision-making, delegation of investment authority, and education. While different governance structures exist around investment decision-making, delegation of investment authority, and education, AndCo, as an independent, professional investment consulting firm, has determined that the fund's processes are appropriate and comparable with what AndCo considers best practice, industry standards. **Strengths:** - The fund continue to follow the IPS, engage investment experts as appropriate, and continue to seek ongoing educational opportunities consistent with Texas Administrative Code, Chapter 607.

Investment Manager Selection and Monitoring
The investment consultant is completely independent from the investment management community and receives no compensation for reviewing or including any managers in the search process, nor does the investment consultant receive any compensation from any investment manager or investment products. Regardless of whether an existing portfolio strategy is being replaced or a new strategy is being considered for the fund's portfolio, the investment consultant will prepare and present a comprehensive manager evaluation report to the Investment Committee that includes candidates for consideration, discussion and subsequent interviews with the Investment Committee. From this group, finalists are selected by the Investment Committee with input from the investment consultant for presentation, onsite due diligence, and ultimate selection by the fund. While the investment consultant and Investment Committee make recommendations regarding investment strategies, the ultimate decision to select a specific strategy for inclusion in the fund's portfolio resides with the board. All performance calculations supplied by the consultant to the board meet the guidelines of the CFA institute. **Strengths:** - The manager selection process in place at the fund is robust and is in line with industry best practices. - The fund is in line with the best practices laid out by the GFOA for selecting third party investment professionals for pension fund assets. - The fund should maintain its investment process for investment manager search and selection which relies on its investment consultant, staff, and board in selecting new investment managers for use within the fund's investment portfolio.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Full Investment Practices and Performance Evaluation

Employees Retirement System of Texas

PRB Analysis of Evaluation

The evaluation covers the Employee Retirement System of Texas (ERS), the Judicial Retirement System of Texas Plan Two (JRS II) and the Law Enforcement and Custodial Officer Supplemental Retirement Plan (LECOSRF) (collectively referred to as ERS or system.) It includes detailed and useful explanations that help stakeholders understand how ERS operates as well as provide insight into effective best practices. This evaluation provides not only a review of the investment practices but also a progress report on the recommendations made during the previous 2020 evaluation.

The evaluator noted in reviewing the asset allocation and investment assumptions that "the ERS Investment Implementation Plan adopted on January 10, 2023 is an industry prevailing best practice document and is an enhancement over previous versions of related documentation." Additionally, the evaluator provides a brief analysis on the "positive impact of the state's commitment to pension funding in the 2023 legislative session."

Plan Assets:[1]

ERS: $34,049,730,384
JRS II: $585,550,741
LECOSRF: $1,040,702,271

Evaluator: NEPC

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

The evaluation also included a unique recommendation for staff to review the impact of the statutorily required procurement process. More specifically, the evaluator suggested to the extent permitted under Texas law, ERS should seek procurement flexibility to allow for additional operational flexibility when there is a need to quickly replace a struggling investment manager or take prompt advantage of an opportunistic investment. This was also recommended in 2020, as it was noted that any potential changes to this process would likely require legislative approval.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
ERS has made significant revisions to the Investment Policy Statement since 2020 that have improved clarity of the document. The most recent revision became effective on September 1, 2023. This revision was a collaborative effort between the ERS executive director, chief investment officer, investment staff, Office of the General Counsel, Board of Trustees and Investment Advisory Committee (IAC). NEPC was consulted for review. Notably, ERS also introduced in January 2023 an Investment Implementation Plan that improves consistency in connecting the standard operating procedures of each functional part of the investment organization to the investment policy statement (IPS). In the role of general investment consultant, NEPC has directly observed that ERS is adhering to the governance and compliance guidelines set forth in the IPS. ERS has taken the necessary steps to diversify its portfolio and put in place prudent risk controls. Under normal market conditions, the trust should be able to sustain a commitment to the IPS policies under most likely foreseeable market environments and the investment managers should be able to maintain fidelity to their respective policies. However, it is important to note that ERS may not achieve stated objectives over significant periods of time given persistently abnormal circumstances (including, but not limited to, low or negative interest rates, deflation, liquidity traps, global recession, heightened barriers to trade, breakdown of financial markets, or exogenous geopolitical turmoil). **Strengths:**

[1] As of 8/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- The ERS IPS compares favorably with the investment policy statements NEPC examined from the peer group of similar investors.

Recommendations:

- ERS may wish to consider including total public markets portfolio tracking error, including a curing period, in future revisions of the IPS. This would be consistent with the IPS documents of peer institutions that reflect best practices.

Investment Asset Allocation
ERS has developed a clear process that allows for routine setting, monitoring, and review of both the asset allocation of the portfolio and the assets and liabilities of ERS. This process is consistent with prevailing practice among peer public pension funds. The importance of asset allocation codified in ERS' IPS as central to the investment philosophy of the ERS portfolio. An actuarial experience study shall be conducted every four years pursuant to Sec. 815.206(c) of the Texas Government Code. The general investment consultant shall conduct formal asset/liability studies in connection with each actuarial experience study. Such studies also shall include a detailed review of the asset allocation parameters and a comprehensive assessment of the liquidity needs of the Trust as compared to the potential trajectories of the asset base. These periodic studies shall provide the primary basis upon which significant changes may be made to the SAA parameters for the trust. The executive director may direct that additional actuarial studies take place as needed. Reviews of the adopted SAA parameters using updated capital market assumptions and other market-related inputs shall also be provided to the board by staff at least annually. ERS has adapted the risk matrix set forth in Statements of Key Investment Risk and Common Practices to Address Those Risks, June 2000. This standard is endorsed by the Government Finance Officers Association (GFOA) and Association of Public Pension Fund Auditors (APPFA).

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The direct and indirect fees and commissions paid by the system include fees that are paid by the system and fees that are netted against returns. The system pays management fees, performance/carried interest, and brokerage fees. Additionally, the system pays custodian fees, security lending agent fees, investment consultant fees, internal staff salaries and investment banking fees. Fees charged to the system are reported annually in the annual comprehensive financial report (ACFR) and should encompass all forms of manager compensation. According to the policies and procedures provided, fees are checked for reasonableness monthly for external advisors for public equity, and on a quarterly basis for private markets. This is done by reconciling the reported and paid management fees provided by the general partner quarterly in account statements to the fee calculated internally by ERS staff based on the LP Agreement or other similar agreement with the external advisor. The Investment Operations Team requests the Asset Class Team follow up with general partners when there are differences greater than ±10% for an explanation of the differences. This ±10% check is an appropriate reasonableness check. **Recommendations:** - ERS should periodically re-evaluate the most useful fee benchmarks and universes of manager data when reporting on manager fees. - ERS should also periodically re-evaluate the current practice of bundling the cost of research with total trade costs. NEPC acknowledges that ERS considered this same recommendation in the 2020 IPPE report and decided not to make a change because the current practice is best suited for the trust. While permissible in the current regulatory environment, a growing number of public funds no longer use a soft dollar program. Instead, many have unbundled from the payment for research from trade execution. We acknowledge that ERS has an understandably larger appetite for research than most public funds given the trust's larger percentage of assets under internal active management in comparison with peers. Paying for research directly can be a challenge in an unbundled environment.

Governance
As stated in ERS' IPS, the ERS Board is responsible for formulating, adopting, and overseeing the investment policies of the trust. Pursuant to Section 815.3016, Texas Government Code, the board retains responsibility to approve alternative investments over 0.6 percent of the total market value of the retirement system's assets as reported in the most recent ERS ACFR. NEPC finds the structural composition of the ERS Board to be consistent with prevailing practice among U.S. public fund trustee boards. The presence of members appointed by elected representatives of the plan sponsor (State of Texas) as well as elected members (who are two active participants in the plan and one retiree from the plan) demonstrates an alignment of interest in the success of achieving the goal of ERS to prudently administer the trust and pay retirement benefits. The three current appointed board members are financial professionals with many years of experience in the investment industry.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

The size and composition of the ERS Board is also consistent with prevailing practice among the 17 government-sponsored allocators that ERS names as peers. The boards of the peer group range in size from three to 20 members. In most cases, some board members are elected, and some are appointed by state officials. SBA Florida is an outlier with the state governor, chief financial officer and attorney general serving directly as the ex-officio trustees, with ultimate authority and oversight for the SBA's overall strategy. Texas Treasury and Safekeeping Trust Company is a unique entity, with the Texas Comptroller of Public Accounts serving as the chief steward. At the other end of the spectrum among the peer group Tennessee Consolidated Retirement System and Colorado Public Employees Retirement System have the largest boards with 20 and 16 members, respectively. Among the 17 allocators identified as peers by ERS, only five appear to have similar advisory councils of investment professionals to serve as a resource to their board.

Strengths:

- NEPC finds the structural composition of the ERS Board to be consistent with prevailing practice among U.S. public fund trustee boards.
- The IAC members offer an impressive breadth and depth of practitioner experience.

Recommendations:

- ERS should consider reviewing staffing levels for the investment compliance team as currently there is only one team member.
- The development of standard operating procedures for the investment compliance function would assist with any personnel departure risks on the investment compliance team as well as further codify and enhance existing processes.
- For the September 2022 IPS, ERS added a section regarding standards of conduct and added an additional pre-clearance requirement exception for "less than $500.00 of any applicable security transacted over a rolling 30-day period." ERS may want to consider whether the new additional pre-clearance requirement exception is necessary, desired, and consistent with the goal of the compliance program.
- Where applicable, NEPC identifies suggestions that can bring ERS closer in line with industry best practice or improve operational efficiency.

Investment Manager Selection and Monitoring

NEPC repeats its observation from the 2020 IPPE report that the trust would benefit from seeking to have flexibility to deviate from current state procurement regulations that are broadly applied to hiring all vendor contracts. Circumstances can change quickly in the economy and investment markets. In that dynamic environment, it is important to have the flexibility to act quickly on opportunistic hires of new strategies and replacement of struggling investments. The issuance of a formal request for proposal (RFP) is mandated by Title 10, Subtitle D of the Texas Government Code.

But the current RFP process can take up to a year to complete, during which time the investment opportunity that was identified may no longer be available. In addition, pursuant to ERS's sunset review and under state procurement guidance (see the Procurement and Contract Management Guide),

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

contracts should be periodically resolicited, regardless of the performance of the investment manager under the current relationship. Ideally, these contracts would be evergreen and only resolicited for poor performance, which would be evaluated regularly by staff.

Regarding the monitoring of managers, it was noted during NEPC interviews with staff that there may be a tendency to let poorly performing managers run. There appears to be a need for a more rigorous manager monitoring process. Performance is monitored on an ongoing basis at the asset class level and at the trust level. It is reviewed through regularly scheduled meetings of investment staff, investment directors and the Risk Committee. It is reported to the board monthly and quarterly through reporting and board meeting presentations.

The issue of recruiting and retaining investment staff was identified as perhaps the single most important constraint, going forward. In the past, ERS has been able to recruit highly qualified professionals from the private sector because they were attracted to the perceived advantages in lifestyle and cost of living in Austin, Texas. These advantages have faded as housing costs have risen dramatically over the last decade and remote work options have proliferated.

Recommendations:

- To the extent permitted under Texas law, ERS should seek procurement flexibility to allow for additional operational flexibility when there is a need to quickly replace a struggling investment manager or take prompt advantage of an opportunistic investment.
- NEPC recommends regular review of asset class benchmarks. This is particularly important for asset classes like private markets and hedge funds that, by their nature, do not have benchmarks that meet the investable and reflective characteristics of CFA Institute's SAMURAI model. For these asset classes, there is no perfect benchmark. Therefore, it is reasonable to periodically assess the appropriateness of other existing benchmark options in wide use by peer institutions and to evaluate new benchmarks that are being developed.
- ERS should consider establishing a more rigorous manager monitoring process. The purpose is to guard against holding on to poorly performing strategies longer than necessary when performance has been a struggle. An example of best practice would be to codify a policy that strategies trailing their benchmarks over a rolling three-year period will be assessed to see if the original thesis for hiring the manager still holds. One tool that is often used in this process is factor analysis to test for whether the strategy has undergone style drift. Another tool is to use a realized alpha analysis. This should not be the only tool used since more than seven years of data is required to show statistical significance, but it can be a useful supplement to the rolling three-year factor analysis.
- ERS should continue to develop innovative policies focused on recruiting, compensation, and career development to secure and retain investment talent. The ability to hire, retain and offer competitive compensation to investment professionals is a key requirement for achieving the trust's investment objectives with optimal efficiency.

Full Investment Practices and Performance Evaluation

Fort Worth Employees' Retirement Fund

PRB Analysis of Evaluation

The evaluation is well-balanced and summarizes information into easily understandable graphics. It also provides detailed explanations where appropriate, specifically, the sections that evaluate governance and investment policies.

The evaluation provides capital market analysis for the current policy allocation that helps confirm the asset allocation is "well-aligned with FWERF's policy objectives, particularly to exceed the Fund's discount rate assumption (7.0%)." This analysis along with the performance comparison to peers helps confirm that the asset allocation can meet the return objectives identified by the system.

The performance analysis also provides a risk-adjusted comparison to peers over a 1-, 3-, 5-, and 10-year period. The analysis reveals that the fund performed just under their policy benchmark. It has performed better than most peers on a 10-yr risk-adjusted basis where the fund's Sharpe ratio was 0.8 compared to the peer median of 0.65.

Plan Assets:[1] $2,604,613,403

Evaluator: Verus

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: N/A

Conflicts of Interest: N/A

Senate District: 9

House District: 99

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
In our view, FWERF is a well-managed pension fund with a disciplined adherence to their policies and procedures, a strong and ethical culture, clear decision-making processes, and a reasonable investment strategy. We found no critical impairments that would jeopardize the health of the Fund. FWERF recently conducted a review of the Investment Policy Statement and has implemented best in class policies and procedures for the Fund. The Board delegated investment manager selection and due diligence to staff, which is a common theme among large public pension plans. The Board maintains oversight through an outsourced third-party investment compliance monitoring firm. This third party conducts ongoing discussions and reviews with staff; specifically, the CIO and Executive director, and reports to the Board annually unless more time sensitive issues arise. Compliance oversight is critical when the Board delegates investment manager decisions due to possible conflicts of interest; however, FWERF avoids these conflicts through external compliance checks. **Recommendations:** - Add fiduciary language for the Board, Investment Committee, and Executive Director detailing each needs to make decisions in the best economic interests of the Fund's participants and their beneficiaries. - Add language to review the policy every 5-years to confirm the policy is up to date.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

- Language should be included if an external service provider is utilized, they have authority to create compliance reporting (Board confirmed reviewing in next IPS revision).

Investment Asset Allocation
Strategic asset allocation is widely viewed as the primary driver of institutional investor's returns. As such, FWERF's IPS identifies the Board as having ultimate responsibility for the asset allocation with guidance from investment staff, consultant, and general counsel. The Investment Committee will review asset allocation at least annually. The strategic asset allocation is reviewed every 3-5 years through an in-depth Asset Liability Study to evaluate the risks and return profiles of several asset allocations ranging from conservative to aggressive. The study is conducted to determine if FWERF's current asset allocation is still in line with the risk/return objectives of the Fund, and to make any changes to the strategic allocation for the upcoming 3–5 year time period. Annually, FWERF reviews the asset allocation through the general consultant's Capital Market Assumptions. The capital market assumptions utilize the general consultant's 10-year forecasted risks, returns, and correlations for all of FWERF's asset classes. The resulting analysis is reviewed by investment staff to determine if the Investment Committee needs to review and decide on interim adjustments to the asset allocation. FWERF has focused their allocation to illiquid asset classes such as Real Estate, Hedge Funds, and Private Equity. The Fund is in or close to the top quartile for those asset class exposures. The result is less Public Equity and Fixed Income than peers. **Strengths:** - Based on mean-variance analysis, the Fund's expected average annualized return for the next 10 years is 7.5% with a 13.0% standard deviation and a Sharpe Ratio of 0.37. These metrics indicate a strategic asset allocation that is well-aligned with FWERF's policy objectives, particularly to exceed the Fund's discount rate assumption (7.0%). - The Fund returned 180 bps above the median peer, while taking less risk (i.e., a standard deviation of 10.31% vs 13.35%).

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
FWERF believes in the value add of active management but does have meaningful passive exposure within its public equities in recognition of the high degree of market efficiency in this asset class. The Fixed Income, Real Estate, Diversified Opportunities, Private Equity, and Real Assets asset classes are 100% active management. This is due to the nature of private investments, and opportunities for potential alpha within Fixed Income. Verus' believes FWERF's investment management fees are reasonable based upon our review and knowledge of fees incurred by other public funds. Trading costs were not evaluated in our review as trading within separate accounts is delegated to investment managers. FWERF does not conduct any internal portfolio management or trading activities. **Strengths:** - Fees are in line with expectations for each asset class.

Governance
Managing key person risk is one concern which arose during our review. During the review process two key executives left the organization. FWERF does not have a policy around key person risk but might benefit from such a policy should the unlikely event of having multiple employees leave in a short period of time occur again. Furthermore, Verus believes having a formalized performance review process for the Executive Director and CIO should be considered to avoid any ambiguity in the process. **Weaknesses:** - There has previously been no Investment Implementation Procedures document, but it was recently created and scheduled for review in 2023/2024. **Recommendations:** - Create a policy around key person risk. - Establish formal procedure to review the Chief Investment Officer & Executive Director, which can be articulated in a separate policy document related to operational risk management.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
A former Due Diligence Policy which guided the manager selection process was replaced by the detailed Investment Implementation Procedures which directs the CIO to use delegated authority for manager selection, sourcing, monitoring, and oversite functions. Manager selection and sourcing is unique to three asset groupings (traditional assets, liquid alternative assets, and private assets). Each asset grouping has its own criteria outlined in the Investment Implementation Procedures. Verus' assessment of the Investment Implementation Procedures indicate there is sufficient criteria and risk controls to guide the CIO to making decisions for each individual asset class. Furthermore, there is sufficient communication and reporting criteria outlined within the Investment Implementation procedures to allow the Investment Committee to oversee the CIO in their delegated authority. This includes monthly reporting on pipeline, watch lists, quarterly third-party performance reporting, and quarterly reviews of asset allocation, risk, performance, and costs of the Fund. The Total Fund uses a blended benchmark based on the individual strategy benchmarks, weighted by the policy allocation to each. This is a typical approach that we believe is reasonable and appropriate. **Strengths:** - Benchmarking is reviewed periodically with the Investment Committee, with the latest review conducted in 2022. **Weaknesses:** - Policy references investment return section which is only related to total fund and not individual strategies or asset classes **Recommendations:** - Update a manager benchmark in Emerging Markets to better reflect their opportunity set. - Change the William Blair Emerging Markets Small Cap Growth benchmark to the MSCI Emerging Markets Small Cap Growth Index to ensure the manager is evaluated versus an appropriate style benchmark.

Full Investment Practices and Performance Evaluation

Harris County Hospital District Pension Plan

PRB Analysis of Evaluation

The evaluation provides a helpful summary of the information in each section and identifies the system as following best practices. The evaluation answers the questions provided in the PRB's *Guidance for Investment Practices and Performance Evaluations*, providing detailed descriptions in several areas.

The evaluation describes the insights provided by the 2021 asset liability study. The evaluation states that the "Asset-liability studies analyze the impact of various asset allocations and risk levels on required contributions and funded status to identify future trends in the financial health of the plan under a range of different macro-economic scenarios," which is aligned with industry best practices.

The evaluation notes that "while [the system] does not have a written investment management fee policy, investment management fees are compared to peer universes on a regular basis." The evaluation supports this statement by confirming the system and the investment consultant issued a request for proposal in 2021 to evaluate the competitiveness and reasonableness of fees incurred.

Plan Assets:[1] $948,342,881

Evaluator: Aon Investments USA Inc.

Evaluator Disclosures:[2]

Relationship: Investment consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 13

House District: 146

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The Plan has an IPS document that was last reviewed and updated in November 2023 and is continually reviewed on an annual basis. The document provides a thorough, yet succinct overview of the roles and responsibilities for each applicable group associated with investment decisions and oversight. The Plan's IPS is quite comprehensive. Overall, we think the level of detail and the readability of the document is appropriate given the context of HHS. Based on our review, we believe the IPS follows best practice. Based on our review of the meeting minutes and various other documents (performance reports, board reports, etc.), we believe the IPS and other policies are being followed. The IPS contains measurable outcomes for the Plan as well as the underlying asset classes. The document contains measurable risk/return outcomes for investment managers. As detailed in the report, the Plan has been successful in meeting its stated objectives. **Strengths:** - The Investment Policy Statement ("IPS") is comprehensive and follows best practice, it contains appropriate measurable outcomes, and it is being followed.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The Harris County Hospital District Pension & Disability Committee ("Committee") is responsible for making decisions regarding the strategic asset allocation of the Plan. The Plan's asset allocation guidelines are clearly outlined in the Plan's IPS and determine the policy for evaluating the investment program. Based on our review of the most recent evaluation they are following this process. The strategic asset allocation development process occurring in practice is robust, and we believe represents a practice in line with peers. As stated in the IPS, a formal asset allocation study is to be conducted every five to seven years. The most recent asset-liability study was conducted in August 2021. The approach to setting investment policy begins with the evaluation of the target asset allocation and risk level in the context of a plan's liabilities. Asset-liability studies analyze the impact of various asset allocations and risk levels on required contributions and funded status to identify future trends in the financial health of the plan under a range of different macro-economic scenarios. It is our belief that this approach aligns with industry best practice. **Strengths:** - The Plan is following common practice in its process for establishing and evaluating asset allocation, assets are well diversified, and risk positioning is being measured and managed appropriately.

Investment Fees
One of the outlined investment objectives of the Plan is to ensure the assets of the Plan are invested in a manner that controls the costs incurred in administering and managing the assets. The system pays direct and indirect investment fees to each of the investment firms managing an account/strategy within the Plan. While HHS does not have a written investment management fee policy, investment management fees are compared to peer universes on a regular basis. The review and competitiveness of investment management fees is a regular part of the ratings process by the investment consultant. Fees are reviewed on an ongoing basis for reasonableness. **Strengths:** - Fees, both for administering and managing the assets, are appropriately monitored through regular reporting processes.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The governance of the investment-decision making process is documented in the IPS. The IPS outlines the roles and responsibilities of all parties involved in the investment program, including, but not limited to, the Board of Trustees ("Board"), the Committee, the Investment Consultant, and investment managers. The Committee is generally responsible for developing, implementing and managing the investment program, employing service providers, monitoring and evaluating the effectiveness of service providers in carrying out their respective duties under the investment program and evaluating the effectiveness of the investment program. The Committee is responsible for outlining general investment guidelines for the investment program, including the asset allocation guidelines, investment manager structure guidelines, appointing investment managers to fulfill specific roles, monitoring and evaluating each investment manager, approving the termination and, if appropriate, replacement of an investment manager. **Strengths:** - The structure and breadth of the investment decision-making governance process is in line with best practices, with clearly delineated roles and responsibilities, monitoring, reporting, and transparency.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
The Committee, with guidance from the investment consultant, is responsible for selecting investment managers. The investment consultant conducts a prudent investment manager search process, as needed, to identify appropriate candidates for investment manager positions for review and selection by the Committee. The IPS details the guidelines that all investment managers presented to the Committee for selection should meet. The process of monitoring investment manager performance is an on-going process. On a periodic basis, the Committee may meet to review performance of the investment managers. The Committee may review each investment manager against the selection criteria set forth in the IPS to determine whether they continue to meet the selection standards. In evaluating all investment managers, the Committee will consider qualitative factors likely to impact the future performance of the Plan's assets managed by an investment manager in addition to current and historical rates of return. The Plan's investment consultant is responsible for measuring and reporting net of fee investment performance to assist in evaluating investment guidelines and the investment program as a whole. Such reports will evaluate the performance and risk characteristics of the Plan's investments. We believe that the performance reports are appropriately formatted and presented to allow Committee Members of all investment acumen and expertise to evaluate the investment success associated with the implementation of the investment policy. Given the complex nature of the topic, the additional opportunity to discuss the reports with the Committee's investment consultant further alleviates any concern that the reports are overly complex. **Strengths:** - The manager selection process is well defined and robust. Returns are calculated by the Plan's consultant, and all performance is reported net of external investment management fees.

Full Investment Practices and Performance Evaluation

Houston Municipal Employees Pension System

PRB Analysis of Evaluation

As allowed by Sec. 802.109 of the Texas Government Code, the evaluation was prepared in accordance with the Houston Municipal Employees Pension System's governing statute.[1] However, the evaluation offers little new information compared to the previous evaluation completed in 2020.

Plan Assets:[2] $4,072,345,338

Evaluator: Wilshire Associates, Inc.

Evaluator Disclosures: [3]

Relationship: Investment consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 13

House District: 147

The following table recreates the review section of the report in its entirety.

Review of HMEPS' investments as set forth in its governing Statute, Article 6243h, Tex. Rev. Civ. Stats., §2D(a)(1-8)

Subsection 2D(a):	Information Reviewed	Finding
(1) the pension system's compliance with its investment policy statement, ethics policies, including policies concerning the acceptance of gifts, and policies concerning insider trading	- HMEPS IPS (Appendix I rev. 5/18/2023) - HMEPS Ethics Policy, rev. 10/22/15 - Gifts: § 107 - Prohibition on Insider Trading: § 105.05 - Ethics Policy Acknowledgements by Trustees and Executive Director (2020-2023) and HMEPS-identified Key Staff (2020-2023) - Chapter 171 and 176, Tex. Local Gov't Code disclosures; CIS and CIQ disclosures available on HMEPS website: http://www.hmeps.org/cis.html; http://www.hmeps.org/ciq.html	HMEPS' IPS states that it was adopted by the HMEPS Board in 2011 with the following purpose: "The purpose of this Investment Policy Statement (IPS) is to delineate the investment policies and objectives of the System. These policies and objectives are intended to allow for sufficient flexibility in the management process to capture investment opportunities, yet provide parameters that will ensure prudence and care in the execution of the investment program. Specifically, these policies should assist the fiduciaries of the System in effectively monitoring and evaluating the investments of the fund." Based on Wilshire's review of the IPS, including the items reviewed with respect to §2D(a)(2)-(8), Wilshire has determined that HMEPS maintains documents showing that it is in compliance with the IPS.

[1] Section 802.109(k)(1), Texas Government Code, authorizes HMEPS to use the report required by Section 2D, Article 6243h, to satisfy the evaluation requirement.

[2] As of 6/30/2023

[3] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table recreates the review section of the report in its entirety below.

Subsection 2D(a):	Information Reviewed	Finding
		The HMEPS Ethics Policy states it was adopted by the HMEPS Board in 2015 and includes provisions regarding receipt of gifts and a prohibition of insider trading. Based solely on materials and assertions provided by HMEPS, Wilshire has determined that HMEPS maintains documents demonstrating that Trustees and key people identified by HMEPS are in compliance with the Ethics Policy.
(2) the pension system's asset allocation, including a review and discussion of the various risks, objectives, and expected future cash flows	- IPS, Appendix I rev. 5/18/2023 - Wilshire Asset/Liability Analysis and Recommendations, 5/18/2023	Wilshire reviewed the IPS and the asset allocation review provided by HMEPS. Wilshire has determined that the HMEPS Board reviewed available asset classes and discussed the objectives, risks, and expected returns and cash flows of these asset classes. The HMEPS Board reviewed several potential policies for consideration, and approved changes to the asset allocation that included a reduction of global equity, high yield bonds, emerging market debt, and hedge funds, and increase to fixed income, private credit, and inflation linked assets. Wilshire finds the process taken to update the target allocation to be prudent and consistent with HMEPS' fiduciary duty.
(3) the pension system's portfolio structure, including the pension system's need for liquidity, cash income, real return, and inflation protection and the active, passive, or index approaches for different portions of the portfolio	- IPS, Appendix I rev. 5/18/2023 - Wilshire Asset/Liability Analysis and Recommendations, 5/18/2023 - Wilshire HMEPS 2022 ACFR, 2021 ACFR and 2020 ACFR - HMEPS 2022 Financial Statements, 2021 Financial Statements and 2020 Financial Statements	HMEPS' portfolio structure is contained in each of the reviewed documents. Additionally, Wilshire has determined that HMEPS considered the pension system's need for liquidity, cash income, and real return in determining the asset allocation. The asset allocation review also considered active, passive and/or index approaches for different portions of the portfolio.

The following table recreates the review section of the report in its entirety below.

Subsection 2D(a):	Information Reviewed	Finding
(4) investment manager performance reviews and an evaluation of the processes used to retain and evaluate managers	- IPS, Appendix I rev. 5/18/2023 - Wilshire Quarterly Executive Summary reports, September 30, 2020 to May 31, 2023 - Wilshire Quarterly Managers on Probation reviews, September 30, 2020 to May 31, 2023, and Board actions	Wilshire confirmed that the HMEPS Board reviews a performance Executive Summary and recommendations on Managers on Probation on a quarterly basis.
(5) benchmarks used for each asset class and individual manager	- IPS, Appendix I rev. 5/18/2023 - Manager guidelines	Wilshire reviewed the IPS and related manager guidelines and has determined HMEPS has defined benchmarks for individual managers.
(6) an evaluation of fees and trading costs	- IPS, Appendix I rev. 5/18/2023 - HMEPS 2022 CAFR, 2021 CAFR and 2020 CAFR, Investment Section, Schedule of Fees and Commissions Paid - HMEPS 2022 Financial Statements, 2021 Financial Statements and 2020 Financial Statements	Wilshire reviewed the IPS and determined that an evaluation of fees is part of HMEPS' manager selection process. Wilshire also reviewed HMEPS' ACFR and Financial Statements and determined that investment related expenses and trading costs are disclosed.
(7) an evaluation of any leverage, foreign exchange, or other hedging transaction	- HMEPS 2022 CAFR, 2021 CAFR and 2020 CAFR - HMEPS 2022 Financial Statements, 2021 Financial Statements and 2020 Financial Statements	Wilshire reviewed HMEPS' Comprehensive Annual Financial Reports and Financial Statements and determined that HMEPS evaluates the use of leverage, foreign exchange and other hedging transactions.
(8) an evaluation of investment-related disclosures in the pension system's annual reports	- HMEPS 2022 CAFR(pp. 54-56; 60-68) - HMEPS 2021 CAFR (pp. 60-62; 66-72) - HMEPS 2020 CAFR (pp. 59-61; 64-71)	Wilshire reviewed HMEPS' ACFRs and determined that the ACFRs provide investment-related disclosures. HMEPS is responsible for the accuracy of these disclosures.

The following table recreates the review section of the report in its entirety below.

Full Investment Practices and Performance Evaluation

Irving Firemen's Relief and Retirement Fund

PRB Analysis of Evaluation

The evaluation offers a balanced approach, summarizing key aspects of the system while also providing more detailed analysis from studies. Each section contains summarized analysis that describes what the system is doing well and supports recommendations made in the evaluation.

Irving Fire has also faced cash flow issues as a result of its DROP program. The evaluator in the past recommended changes to the program to better align it with the system's long-term financial needs, and the system has implemented those changes. The evaluator included cash flow analysis that shows the results from additional changes and an influx of cash from an $80 million pension obligation bond.

The evaluation includes several clear recommendations to improve practices while also identifying numerous practices already happening that are consistent with industry standards.

Plan Assets:[1] $262,961,207

Evaluator: Meketa

Evaluator Disclosures:[2]

Relationship: Investment consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 16

House District: 105

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The most recent review occurred in 2023. The Consultant presented a red-lined version to the Board for review and discussion. The IPS is well thought-out and in line with industry standards. It is consistent with guidance from the CFA Institute. Roles and responsibilities of all key parties involved are clearly outlined (Board of Trustees, Staff, Investment Consultant, Investment Managers, Custodian Bank). There is no evidence of any known compliance violations with the IPS at this time. **Strengths:** - Overall: The existing Investment Policy Statement appears appropriate, adequate, and effective. **Recommendations:** - The Investment Policy Statement meets industry best practices. The Texas Pension Review Board is currently working on guidance for Texas pension plans. The Board and Consultant should review and incorporate any applicable relevant guidance from the PRB once published, while keeping in mind the goal of a high-level policy document that is not overly prescriptive.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Current passive exposure as of December 31, 2023 is ~30%. Passive index funds are used in efficient areas of the market (US Large Cap equities, investment grade bonds) complemented by active strategies. Irving Fire uses capital markets assumptions developed by its Consultant. Irving Fire values its alternative investments based on fair value determinations provided by audited financial statements or appraisals provided to Irving Fire from its alternative investment managers. The Fund adopted a number of new actuarial changes (contribution rates, benefit payments, actuarial assumptions) over the past few years, and issued Pension Obligation Bonds. All have resulted in a more favorable funded status and better funding plan for the Fund. The Board actively reduced the actuarial assumed rate of return in 2019 and 2020. The assumed rate of return is currently 7.0%. This is in line with national averages and the State of Texas. Through a combination of benefit changes, issuance of $80M Pension Obligation Bond, and a reduction in DROP withdrawals, the net annual cash outflow has reduced to a manageable percentage of assets. **Strengths:** - The Fund adopted a number of new actuarial changes (contribution rates, benefit payments, actuarial assumptions) over the past few years, and issued Pension Obligation Bonds. All have resulted in a more favorable funded status and better funding plan for the Fund. - Actuarial improvements over the past 4+ years have improved the solvency of the Fund. - Continue to monitor the net negative cash flows as a percentage of total Fund market value. - Continue to monitor the appropriate balance of active to passive - Continues to follow its asset allocation policy and evaluate the risk/reward trade-offs for the pension relevant to its liability situation. - Continue to conduct an Actuarial Valuation Report annually. This is industry best practice

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
Most fees are deducted from manager account or NAV. The Consultant monitors investment manager fees and appropriateness relative to similar investment strategies. An investment manager fee summary is included in every quarterly report. It shows each manager's effective annual fee in both basis points and dollars. **Strengths:** - Staff, the Board, and the Consultant are all diligent in monitoring fees. - Irving Fire's use of passive index funds and elimination of high fee hedge funds, along with below median investment management fees, results in a very cost-effective total Fund structure. **Recommendations:** - Irving Fire staff should document its internal process for fee reconciliation and payment in a formal policy document. - Fund counsel should review all legal contracts when the Fund hires a new vendor or investment strategy.

Governance
Meketa Investment Group serves as a non-discretionary investment advisor. Meketa does not custody any assets. Meketa receives a hard dollar fee (specified in advance) from Irving Fire and does not receive any additional fees (unless pre-approved by the Board of Trustees for projects beyond the scope of the investment advisory agreement). Many Board members participate in the TEXPERs conferences as well as some national pension conferences (e.g. NCPERS). Irving Fire adopted a Board of Trustees Code of Ethics in November 2019. It was last updated in March 2021. It is signed by all Trustees on the Board. **Strengths:** - Information on the website is current. This is an improvement from the IPPE report analysis in 2020. - Irving Fire's board members appear to work well together. The size of the board is appropriate relative to other pension plans.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
A number of minimum criteria is listed in the IPS for consideration when the Board is considering hiring an investment manager. The criteria is rules based in nature (e.g., must be registered investment advisor, must be registered to do business in Texas, must provide ADV, etc.) Search criteria looked at both quantitative data (performance, fees, size of team, size of AUM) and qualitative data (philosophy, process, investment strategy, etc.). Two active manager searches occurred in the past four years. In both instances Irving Fire received better discounted investment management fee through negotiation on behalf of the consultant. The Consultant is primarily responsible for monitoring the performance of the investment managers and reporting to the Board. **Strengths:** - Performance monitoring and benchmarking is in-line with industry best practices. **Recommendations:** - Irving Fire should formally document the rationale for all hiring and firing decisions in concise meeting minutes.

Full Investment Practices and Performance Evaluation

Laredo Firefighters Retirement System

PRB Analysis of Evaluation

The evaluation provides a thorough background of the System and its current practices. The evaluation provides helpful summary findings for each section and detailed explanations where appropriate that elaborate on practices.

The evaluation did mention that in 2023, the Laredo Firefighters Retirement System (LFRS) hired Dr. Mary Campion of Champion Capital Research to independently review the IPS. From that independent review several changes were identified which helps support the evaluators review of the practices in this report being consistent with best practices.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Plan Assets:[1] $197,901,632

Evaluator: FEG Investment Advisors (FEG)

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 21

House District: 42

Investment Policy Statement
FEG undertook a thorough evaluation of the LFRS Investment Policy Statement (IPS) and affirms LFRS is in compliance with the policies defined within the document. The IPS is reviewed annually and was last changed in 2023 and approved at the December 26, 2023 Board Meeting. The IPS was initially written in 2001 and has been amended ten times since that date. The version adopted in December 2023 added a section on illiquid investments, limiting the overall exposure to illiquid investments to 25% of the portfolio value. The IPS establishes formal yet flexible investment guidelines and investment structure for managing LFRS assets; structure includes various asset classes, investment management styles, asset allocation, and acceptable ranges expected to produce an appropriate level of overall diversification and total investment return over the investment time horizon, in order to incorporate prudent risk parameters, appropriate asset guidelines and realistic return goals. The IPS provides rate-of-return and risk characteristics for the total portfolio. Relative performance benchmarks are set forth in a "Monitoring" section. **Strengths:** - The IPS is written clearly, well organized, and in line with industry standards.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The LFRS IPS defines the process for determining and evaluating its asset allocation. While it is the Board that ultimately establishes asset allocation ranges and investment guidelines, the investment consultant is tasked with making recommendations as to the appropriate target portfolio weightings among the various major asset classes (e.g., stocks, bonds, and cash) within the portfolio. These recommendations are to be supported with materials including asset class performance expectations (risk, return and correlations) for broad and various asset classes within the portfolio. The LFRS asset allocation is strategic and reviewed annually, although it does not change every year. LFRS does not approve of short-term, tactical asset allocation changes. Return differences between active and passive strategies are not modelled in asset allocation assumptions. FEG's philosophy incorporates both active and passive investment strategies but applies them to different aspects of portfolio construction. Although active management has the potential to add value over strictly passive means, FEG believes it should be applied appropriately. FEG also believes incentives should be aligned so that investors are paying for outperformance (alpha), as opposed to beta gained inexpensively through passive strategies. Ultimately, FEG focuses on active management strategies in less efficient asset classes to help drive alpha. LFRS has a 20% target asset allocation to alternative investments, defined as either hedge funds (10%) or private capital investments (10%). As of March 31, 2024, the actual allocation was 15.0% (hedge funds: 8.7%, private equity: 2.3%, private energy: 1.4%, private real estate: 0.2%, and private debt: 2.4%). As of September 30, 2023, the Plan Fiduciary Net Position as a Percentage of the Total Pension Liability was 56.8%. At that funding level, the Trustee's focus has been on maximizing investment returns for an acceptable level of risk. As the System approaches full funding, a less risky asset allocation would likely be adopted.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
LFRS places great emphasis on monitoring investment fees. However, LFRS recognizes its mission is to provide benefits to its members and their beneficiaries, requiring a 7.4% required rate-of-return, net of fees. In seeking this return, LFRS has chosen to invest in many actively managed investment portfolios, some of which can have above average investment fees. LFRS's Board has historically chosen investments based on the highest expected net-of-fees return, not the lowest fee. However, LFRS also invests in private partnerships (hedge funds and private capital funds). The managers of these funds are paid a management fee based on the market value, but also are paid an incentive fee based on fund performance. In addition, in some instances, fund-of-funds are utilized. In these funds, fees are also paid to underlying investment managers. These fees are disclosed to LFRS at least annually but can be obtained from the investment managers upon request. For hedge funds, incentive fees are typically 15% to 20% of returns greater than 0%. A high-water mark structure often exists to ensure fees are only paid on new returns, not the recovery of prior losses. For private equity funds, incentive fees are also typically 15% to 20%, but only on returns greater than a hurdle rate. There are many ways to define a hurdle rate, but rates are typically around 6% to 8%.

Governance
The System has a number of governance policies separate from policies embedded within the Investment Policy Statement. These policies cover long term Board goals, elections, funding, gifts, attendance, travel and expense reimbursement. Additional policies cover non-endorsements, non-participation in entities employed the System, and a separate code of ethics. Collectively, these documents, along with adherence to Texas Pension Review Board and Texas Local Fire Fighters Retirement Act requirements and guidance, create a strong governance structure. These documents are all available on the System's website. Additionally, the website contains all meeting agendas and minutes, actuarial valuations, financial reports, investment reports, and other reports required by the Pension Review Board. The System is transparent in all activities. Board meetings are open to public and the public is invited to make comments at each meeting. The System Board meets monthly to discuss Plan financials and expected cash flows over the next month. Estimated investment results are reviewed, but no actions are typically taken. On average, monthly meetings last about an hour. Once a quarter, the investment consultant presents the investment performance evaluation report and makes recommendations on asset allocation or investment managers, using the process defined in the IPS. These quarterly meetings tend to last about two hours. The investment portfolio is externally managed and the Board and Staff do not select individual securities. The Board relies on its investment consultant for advice and recommendation on the investment portfolio. As defined in the IPS, the investment consultant is to be independent and not take

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

discretion over portfolio investments. The investment consultant is paid a percentage of overall investment assets and is not allowed to receive brokerage commissions, soft dollar payments, or any compensation from investment managers or marketing firms representing managers.

Investment Manager Selection and Monitoring
Investment managers are selected by the Board of Trustees, with guidance from the investment consultant. To reduce conflicts of interest between the investment consultant and investment managers, the Investment Policy Statement clearly defines a manager selection criterion. This includes an eleven-step screening process to eliminate from consideration managers who are not “institutional” in quality (i.e. lack of track record, experience of managers, assets under management, and various performance metrics). Using this screening process, the investment consultant typically presents two to four different investment managers to the Board for discussion. The Board can choose to interview each investment manager. Following discussion, the Board chooses one or more investment managers. The System staff works with the investment consultant, custodian, and investment managers to transition to the new investment manager(s). The process is similar for “alternative” investment managers, but depending on the asset class, multiple managers may not be reviewed, particularly with regards to private capital managers. Performance measurement is driven by the investment consultant. Following industry return calculation guidelines, the investment consultant calculates the returns of all investment managers, asset class composites, and the overall investment portfolio on a monthly basis. Working with the Board, and defined in the IPS, each manager, asset class, and the overall portfolio are compared to appropriate benchmark indexes.

Full Investment Practices and Performance Evaluation

San Antonio Fire & Police Pension Fund

PRB Analysis of Evaluation

The evaluation provides a thorough review of the system's practices. In each subject area, it describes the review process and standard of comparison (i.e., industry standards or best practices) followed by the findings and enhancement recommendations. This structure allows the reader to follow along with the evaluator's work as they build to findings and recommendations, providing clear explanations for the conclusions.

The evaluation also provides a useful scenario analysis from the system's liquidity study conducted in 2023 that examined the impacts of a shifting economic and market regimes on the fund. The inclusion of this analysis from various studies conducted by the system help improve the usefulness of the evaluation to stakeholders.

In addition to reviewing the practices of the system, the evaluator also provided a status update on all previously recommended improvements from the 2020 evaluation. This provides additional detail into the improvements made by the system and its practices that the recommendations were implemented which support no new recommendations for this evaluation.

Plan Assets:[1] $3,923,604,000

Evaluator: NEPC, LLC

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 25

House District: 121

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The latest revisions to the IPS took place in March 2023, with input from NEPC, Staff and the Board. NEPC, as General Consultant, reviewed and endorsed the IPS. The IPS is generally consistent with the following elements recommended by GFOA, the CFA Institute and the NEPC IPS template. Going back through SAFPPF Board Meeting minutes, we can see that the Plan is following the IPS in terms of pursuit of objectives, delegation of authority, decision making process, as well as the frequency and detail of monthly, quarterly, annual and other periodic reporting to the Board. As SAFPPF's General Investment Consultant, NEPC has directly observed, that the Board is adhering to the governance and compliance guidelines set forth in the IPS. **Strengths:** - As noted, SAFPPF has a thorough and thoughtful IPS and there were no new recommendations.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
SAFPPF has developed a clear process that allows for routine setting, monitoring, and review of both the asset allocation of the portfolio and the assets and liabilities of the SAFPPF. This process is consistent with prevailing practice among peer public pension funds. The strategic allocations can be found in the Executive Summary and General Investment Policies and Guidelines sections of the IPS. NEPC's capital market assumptions provided to SAFPPF are developed by NEPC's asset allocation team which consists of senior investment professionals as well as licensed actuaries. These assumptions are forward-looking and fundamentally based forecasts developed with proprietary valuation models to generate both an intermediate and long-term outlook. As a percentage of total Plan assets, SAFPPF is expected to experience net cash flow of approximately -2.0%, per annum, over the next 10 years. Over 30 years, net cash flow is expected to maintain a similar range and rate. Net cash flow for calendar year 2023 was approximately -2.0%. Negative cash flow, and the degree of it (i.e., 2%) is not uncommon for mature pension plans.

Investment Fees
The direct and indirect fees and commissions paid by the Fund include fees that are paid by the Fund and fees that are netted against returns. The Fund pays management fees, performance/carried interest, and brokerage fees. Additionally, the System pays custodian fees, security lending agent fees, investment consultant fees, and internal staff salaries. The Board, Staff and Investment Consultants place an emphasis on fee savings in a variety of ways, including negotiations with managers during the selection process, leveraging existing relationships (e.g., fee break for certain asset levels), as well as leveraging their size and standing in the industry (both the Consultants and the Fund). It should be noted that differences between SAFPPF's investment structure and that of the broad universes don't allow for an exact comparison, but in general we find SAFPPF's fees to be appropriate and within industry standards.

Governance
The Board of Trustees of the Fund is obligated to administer its pension fund for the exclusive benefit of fire fighters and police officers of the City of San Antonio, Texas, their qualified survivors and dependents. In performance of this obligation, the Board of Trustees is required to administer the Fund in accordance with Article 6243o, Vernon's Texas Civil Statutes, and other applicable state and federal laws and regulations.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

To execute the Investment Policy Statement, SAFPPF has established a governance structure that includes a Board of Trustees, which delegates authority to the Committees (investment, legislative, personnel, financial disclosures, etc.), Investment Staff (executive director, chief investment officer, analysts), and to external vendors hired by the Board including Investment Consultants (general and specialty), a Retirement Actuary and a Custodian.

Investment Manager Selection and Monitoring
The IPS describes the Board's investment philosophy (risk/return objectives, time horizon, etc.) which guides the Board's asset allocation and investment decisions. These philosophy statements place emphasis on making long-term asset allocation and investment decisions that are geared towards meeting the Fund's liabilities by achieving its long-term return goals and diversifying across asset classes and investment managers to maintain an appropriate level of risk to meet these objectives, as well as the management of costs. The SAFPPF retains Specialty Consultants for Private Equity, Private Debt, Real Assets and Real Estate. In addition to the above [four-step process for manager selection], analysis in this category will also focus on different aspects and characteristics of the strategies given the nature of Alternative Assets. Review of documents and prior searches reveal that the selection process is consistent with what is described above. Performance is measured on an ongoing basis (monthly and quarterly) at the individual manager, asset class, and Fund level by the General Consultant. The Custodian and Specialty Consultants also calculate performance for their respective asset classes. Quarterly results are reviewed through regularly scheduled meetings with the Investment Committee and Staff. **Strengths:** - In general, SAFPPF has thorough policies and processes in place with regards to investment manager selection and monitoring.

Full Investment Practices and Performance Evaluation

San Antonio Metropolitan Transit Retirement Plan

PRB Analysis of Evaluation

The evaluation describes the plan's existing policies and procedures, providing detailed descriptions in several areas. While the report does not reference outside sources for best practices, the explanations generally suggest what the evaluator considers best practices and how they compares to the plan's current practices. Additionally, the evaluation offers minimal new details compared to the 2020 evaluation.

The evaluator notes that because the plan no longer accepts new participants it will continue to mature which will further increase the drain on assets as to be expected with more beneficiaries retiring. The evaluator notes that "Currently, this deficit is modest, accounting for less than 2% of the Plan's total corpus, but it is anticipated to gradually grow over time."

The evaluator states that "In conclusion, Dahab Associates' evaluation finds the VIA Defined Benefit Plan's investment policies, procedures, and practices to be compliant and appropriate when compared to industry norms."

Plan Assets:[1] $338,073,463

Evaluator: Dahab Associates

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 26

House District: 123

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
We reviewed the eight sections of the Investment Policy Statement (IPS) and believe that the document is easy to comprehend and closely aligned with the objectives of the plan. It outlines the necessary objectives to achieve and defines the policy index as an objective performance measure. Additionally, it highlights that the plan aims to meet or exceed the actuarial assumption rate over a trailing three or five-year period, a time frame which generally captures a full market cycle, although recent past has been less emblematic of typical market cycles. Regarding manager expectations, although no specific period serves as a performance standard, the IPS mandates regular performance reviews and reports to VIA and the consultant. Managers are expected to surpass their benchmarks and rank above the median in style-appropriate universes. These measurement techniques offer clear, simple tests for the board to assess manager success and set achievable goals. As the plan's investment consultant, we consistently monitor managers' compliance through quarterly performance reviews. **Recommendations:** - We would consider refreshing the IPS to ensure it remains aligned with current objectives and market conditions.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The IPS undergoes continuous reevaluation, highlighting its status as a "living document" that requires regular updates. At least quarterly, the plan's asset allocation is reviewed against the strategic asset allocation outlined in the IPS to ensure alignment and adherence to the defined strategy. The asset allocation is reviewed as part of the quarterly evaluation presented to the board. It remains sound; still capable of achieving the target rate of return with a reasonable amount of risk. The plan has generated strong returns over multiple trailing periods, ranking in the 21st percentile for the trailing year (relative to a comparable public funds universe, where the 1st percentile represents the highest rank), 44th percentile for the trailing three years, 10th percentile for the trailing five years and 4th percentile for the trailing ten years. The plan ceased accepting new participants by the end of 2012. Similar to other mature plans, it experiences negative cash flow, with benefit payments surpassing contributions. Currently, this deficit is modest, accounting for less than 2 percent of the plan's total corpus, but it is anticipated to gradually grow over time. As the plan's membership increasingly transitions to receiving benefits and fewer contributions are made, the asset allocation strategy will progressively adopt a more conservative stance. Periodically, we will conduct asset allocation assessments to monitor and adapt to this evolving condition.

Investment Fees
The IPS of the VIA Metropolitan Transit Retirement Plan outlines the oversight of both direct and indirect compensation disbursed to investment managers. While the IPS does not explicitly detail the ongoing monitoring and reporting of these fees, it is understood within the consultant's responsibilities to the board that such oversight is provided. We diligently track all types of compensation distributed to the managers and furnish this information to the board. Broker commissions in fiscal year 2023 averaged $0.018 per share. The total commission was $19,725.15 on $143,089,462.42 of transactions for a percent commission to transaction amount of 0.0138 percent.

Governance
The board strives to maintain transparency regarding the plan's investments, with its governance structure outlined in the IPS. Monthly board meetings are held publicly, with agendas and minutes accessible to all. Comprising of 11 members, the board is appointed to staggered two-year terms by various entities: five by the San Antonio City Council, three by the Bexar County Commissioners Court, and two by the suburban mayors. Board members fulfill their duties in accordance with Texas Pension Review Board requirements, including completing a Minimum Educational Training course within their first year and subsequently retaking it every two years.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

While the board values the impartial guidance of the investment consultant, selected through a bidding process every five years, ultimate investment decisions rest with the board. The consultant's role includes updating the Board on investment progress, educating them on asset classes and market trends, and assisting with manager changes. Quarterly performance presentations and annual audits further ensure adherence to governance processes.

Investment Manager Selection and Monitoring
In our role as consultants to the plan, Dahab Associates aids the board in the vetting, retention, and recruitment of managers. We rigorously follow a selection process designed to avoid conflicts of interest. The board can be assured that our recommendations are entirely impartial, as we maintain no affiliations with the firms we suggest; our independence is absolute. We refrain from managing funds and engaging in any other lines of business that might pose conflicts of interest. Dahab Associates is wholly owned by its employees, and our sole source of income stems from providing advisory services to our clients. Throughout the manager search process, our focus is on aligning the client's investment objectives with the capabilities of potential investment managers, ensuring a suitable match that meets the client's specific needs. We do not limit our search to a pre-existing list of preferred investment managers. Instead, we initiate each search assignment by screening both our proprietary and purchased databases to identify candidates that align with the client's specified criteria. Our performance evaluation reports feature comprehensive capital markets analysis, absolute and relative performance comparisons, and peer benchmarking. Returns are consistently presented on both a gross and net of fee basis. Leveraging our proprietary software, we meticulously craft quarterly performance reports tailored to highlight critical performance factors.

Full Investment Practices and Performance Evaluation

Teacher Retirement System of Texas

PRB Analysis of Evaluation

The evaluation provides a detailed review of both policies and practices used in TRS' investment program. The evaluation enhances transparency by identifying key policies, summarizing studies and reports, and providing conclusions that further elaborates context or key points.

The evaluation also provides supporting evidence of best practices and robust analysis from various studies that are performed by the system regularly. As an example, the evaluation noted that, "During the Asset Allocation Study performed in 2019 (with similar analysis expected in 2024), the Board was provided with many types of analysis that were meant to be representative of stress testing or stressed market representation."

The evaluator concluded that "the Teacher Retirement Plan of Texas ("Plan") is performing in a manner consistent with best-in-class peers." The evaluator further supported the claim by identifying sections following best practices and further expanding upon the conclusions.

Plan Assets:[1] $187,170,535,558

Evaluator: Aon Hewitt Investment Consulting

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The Plan has an IPS document that was last reviewed September 2023 and is reviewed at a minimum of every 3 years per the IPS, but in practice, this review has been done on an annual basis. The document provides a thorough, yet succinct overview of the roles and responsibilities for each applicable group associated with investment decisions and oversight. The IPS itself contains distinct and measurable outcomes for the Plan, as well as the underlying asset classes. Additionally, the IPS contains measurable risk/return outcomes for investment managers. As detailed throughout this report, the Plan has had mixed results in meeting its stated objectives over the trailing 10-year period, given the difficult market environment in 2022. Additionally, the current policy would have provided desirable returns relative to the stated performance objectives if they were implemented 20 years ago, which is a time period the Board evaluates during Asset Allocation Studies. **Strengths:** - The creation and ongoing review of the IPS document for the Plan is comprehensive. - The IPS of the Plan is quite robust. The level of detail and outlined responsibilities of each respective party is appropriate given the context of TRS, which is that of a large and sophisticated institutional investor. - The IPS follows industry best practices.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The Board has established a process for how they will determine and evaluate the asset allocation of the Plan with in the IPS (occurring every 5 years). We have found during our review of the most recent asset allocation study, the processes established by the Board are being followed. Additionally, the asset allocation development process (which includes the asset liability analysis and stress testing) in practice is robust and we believe the process represents a leading-edge practice. The Plan's overall risk tolerance is expressed and measured in multiple ways. The Board's primary expression of risk tolerance is the selection of the long-term strategic asset allocation. The Board has determined that the current allocation represents a palatable level of risk positioning to achieve the objectives established by the Board for the Plan. Risk positioning is managed through the Plan's tracking error targets and asset allocation policy ranges, which have both been adopted within the Plan's IPS. We have found the process to determine the asset allocation of the Plan to be robust, and there was no evidence in our findings that would position us to state that a different asset allocation would be most suitably positioned to meet the investment return and risk objectives of the Plan. We believe the Plan's alternative investments are more than appropriate given the size of the Plan and the level of investment expertise by those that managed said assets. **Strengths:** - The process in practice is comprehensive, and we believe the process represents a leading-edge practice in developing a strategic asset allocation. - The process performed to determine the appropriate long-term strategic asset allocation was robust. - The size of TRS, the duration of its liabilities, the depth of the Investment Management Division (IMD), and the support of the Board give TRS a competitive advantage in achieving alpha in the alternative investment space.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
The Plan dedicates the appropriate amount of review and reporting on investment fees and commissions. The Plan does not have a written policy with regards to rules for fee negotiations. Through our conversations with IMD this is due to the unique nature of each investment and how fees are structured and negotiated. IMD stressed during our interactions that they strive for the lowest fees possible with each investment opportunity. A written policy on rules for fee negotiations is uncommon across peer institutional investors. IMD maintains procedures for the payment of management and incentive fees. The procedure document outlines the process for receiving, reconciling, paying, and documenting the payment of management and incentive fees. The investment fees and commissions paid by the Plan include management fees, performance-based fees, carried interest, and broker commissions. These fees are outlined within the Plan's Annual Comprehensive Financial Report ("ACFR") in the Investment Section. The IMD operating expenses are included in the ACFR Statement of Changes in Fiduciary Net Position and also reported annually to the Board as part of the annual budget review and approval process. The Plan participates in the CEM Benchmarking Report. The CEM Benchmarking Report is the industry standard for objective fee benchmarking relative to peer institutions. CEM maintains a database of pertinent fee data on relevant peers of TRS to perform its analysis. The December 31, 2022 report found that investment costs of the Trust were lower (-0.32%) than the CEM benchmark costs. Fees are reported to the Board in multiple ways, including its Annual Budget Exercise, monthly Transparency reports, the annual ACFR as part of the annual Texas State Auditor's Office audit. The CEM Benchmarking Report is the industry standard for objective fee benchmarking relative to peer institutions. The December 31, 2022 report found that the investment costs of the Plan were below the CEM benchmarked costs. The benchmark cost developed by CEM represents the median cost of peers of each underlying invested asset class weighted to reflect the Plan's actual asset allocation.

Governance
Aon found TRS to have extensive and detailed documentation of its governance related to the investment-decision making process. The IPS and Board Bylaws show alignment with best practices by stating what authority has been retained by the Board and what has been delegated, as well as clearly articulating roles and responsibilities of the Board and staff. Aon determined that the level of delegation from the Board is compatible with its peers and best practices, given the size and complexity of the Plan. It was further determined that TRS is progressive in terms of its transparency, surpassing those of many public retirement Plans. In addition to posting the IPS and Board Bylaws on the TRS website, stakeholders also have access to committed webpages outlining IMD teams, Investment Strategy, Beliefs, Diversification Framework, Risk Management, and Making and Managing Investments. The website also has information for stakeholders concerning Board meetings, with detailed board minutes, web broadcasting of open portions of Board and Committee meetings, Board packets back to 2013,

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Trustee biographies, listing of Board Committees and Officers, Board of Trustee Ethics Policy, Board of Trustees External Communication Policy, and Board Meeting calendar. Aon believes the governance structure is consistent with best practices for a fund the size and complexity of TRS. The Board establishes policy and ensures appropriate monitoring, reporting, accountability, and compliance with its policies. Staff is able to appropriately implement the Board's directives within the parameters set by the Board. The policies, procedures, practices, and interviewees' commentaries all support a strong, stable governance framework for TRS to fulfill its mission and purpose.

Investment Manager Selection and Monitoring
The Investment Management Division (IMD) bears the responsibility of selecting and authorizing proposed investments and external managers, operating within the parameters established in the Plan's Investment Policy Statement (IPS) and as delegated by the Board of Trustees. In this capacity, IMD will utilize an array of resources to compile a list of candidate managers that warrant further due diligence. Examples of these resources include discussions with existing managers, outreach from managers not currently part of the investment portfolio, opportunities learned through discussion with industry professionals, participation in industry conferences, and outside resources such as eVestment/Preqin/etc. or investment consultants/advisors. The process for further screening the list of potential managers is robust and is outlined in detail within the report as well as the process for ongoing monitoring and the process for coming to a termination decision. The Plan's custodian, State Street, is responsible for measuring and calculating investment performance. A diverse range of performance reports, as outlined in the report, are provided to the Board. These reports are thoughtfully formatted and presented to enable Board members of varying investment acumen to evaluate the success associated with the implementation of the investment policy. Investment results reported to the Board by the investment consultant and IMD are net of external investment management fees and are compared to benchmarks and peers.

Full Investment Practices and Performance Evaluation

Texas County & District Retirement System

PRB Analysis of Evaluation

The evaluation includes useful descriptions of the practices implemented by the Texas County and District Retirement System (TCDRS) and how being a cash-balance pension plan differs from many pensions. The investment consultant evaluating the policies provides a detailed explanation across all required subject areas, including the use of data tables where appropriate.

The evaluation also emphasizes the importance of TCDRS' fee transparency stating "TCDRS reports all investment returns 'net of fees'. Because of this, the investment results reported on tcdrs.org and in publications and financial reports are the actual values available for TCDRS use." Additionally, "TCDRS provides full transparency on fees by reporting both management and carried interest fees on tcdrs.org and in their annual financial report."

Plan Assets:[1] $46,170,026,367

Evaluator: Cliffwater LLC

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: Statewide

House District: Statewide

While no recommendations were made in this evaluation, the evaluator did provide a justification. "There are no recommendations for any of the evaluated areas in the report as TCDRS has a disciplined and systematic process of formally reviewing all aspects of its investment policy each quarter. The process of which has been described in detail in the discussion section of the evaluated areas. Changes to the policy, if required, are subsequently made and reviewed by all relevant parties, including the Board."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The IPS, attached as Exhibit 1, contains the major categories typically included in an institutional quality investment policy. The policy is clearly written and contains measurable objectives for the asset allocation, asset classes and investment managers. The IPS is reviewed by the Board's fiduciary counsel. The IPS is reviewed quarterly and is modified, as appropriate, at the Board's discretion. The last revision to the IPS was in September 2022 when the IPS was updated to include updated benchmark names.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The primary means through which the Board ensures that the System achieves the System Investment Objective is through an asset allocation plan. This is documented in the IPS and is updated on an annual basis. The asset allocation plan is developed based on a set of capital market assumptions adopted by the Board as set forth in the IPS in Table 3 of Exhibit A. These assumptions provide the primary basis from which the Board can determine whether the selected asset allocation plan is designed to attain the System Investment Objective. TCDRS provides the public with full transparency, including a video on its website and description of the allocation process and a listing of the current capital market assumptions on tcdrs.org. On a quarterly basis, the Investment Officer provides the Board with a report on the status of the System's asset allocation plan, and the Board formally reviews the System's asset allocation plan not less than annually. In the course of its review, the Board considers current capital market assumptions, the existing allocation percentages and priorities, and possible modification to the asset allocation plan and the list of asset classes. Each year, Cliffwater conducts a study of state pension performance, included as an attachment. Due to its unique construct, the TCDRS asset allocation differs from the typical state pension plan and is more comparable to a large endowment. Unlike the typical public defined benefit pension plan that relies on annual contributions approved by the respective contributing body, TCDRS is a savings plan whereby any shortfall/excess versus the 7.5% annual crediting rate is automatically amortized into the participating system's annual rate reset. Additionally, unlike most state pensions that are in a net cash outflow situation, TCDRS is in a slightly negative cash flow position such that TCDRS can withstand a higher level of illiquidity than a typical state pension plan.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Fees
TCDRS is focused on ensuring that their resources (e.g., investment management fees, personnel time, etc.) will be expended in the asset classes where there is a higher probability of consistent manager outperformance or where index funds are not available (e.g., alternative investments). Given this, the entire TCDRS US equity exposure is in index funds, over 60% of the developed non-US equity exposure is in index funds and approximately 10% of emerging markets exposure is in index funds. For the remaining public market asset classes, active management is used in global equity, core fixed income, MLPs, REITs, and credit. The public market managers, along with their fee schedules, are formally reviewed every three years. TCDRS uses active management in alternative investments (e.g., private equity, distressed debt, direct lending, strategic credit, hedge funds, real assets, real estate). Because of the level of diligence and operational flexibility required to make certain alternative investments in a timely and prudent manner, the Board has established a process for the approval of alternative investments that is documented in the IPS. TCDRS collects and reviews all fees and expenses annually. TCDRS provides full transparency on fees by reporting both management and carried interest fees on tcdrs.org and in their annual financial report. **Strengths:** - TCDRS provides full transparency on fees by reporting both management and carried interest fees on tcdrs.org and in their annual financial report.

Governance
The TCDRS Board of Trustees provides leadership for the system and is responsible for overseeing the investment of TCDRS assets. The Board adopts the investment policy, allocates assets, hires legal firms, consultants, custodians, investment managers and monitors performance. They receive assistance from the Investment Officer and staff, along with professional firms they have hired in carrying out that responsibility. TCDRS investments are managed by an experienced team with diverse skills and responsibilities. The internal team is supported by consultants, custodians, legal firms and external managers. Both staff and consultants work together to make informed, responsible decisions about TCDRS investments. Staff and consultants perform extensive due diligence for the Board before recommending the hiring of investment managers and monitor those investment managers as they work toward specific goals, investing funds according to TCDRS investment policy. Oversight of investment managers includes reviews of operations, on-site visits, background checks, reviews of financial information and continuous monitoring after hire. All board-hired contracts, including the investment consultant, are reviewed annually as part of the governance policy process with an in-depth contract review conducted every four years.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Both passive and active styles of asset management are used. Funds managed in the passive style, seek to match the performance of an established market index (e.g., the Dow Jones U.S. Total stock Market Index) by investing in the same securities as the index. Asset classes that are passively managed include: U.S. equities, International developed equities (partial), and International emerging equities (partial).

Investment Manager Selection and Monitoring
The Board is ultimately responsible for the selection of investment managers to manage the portfolios within the asset classes. However, the Investment Officer and appropriate investment consultants/legal advisors will assist the Board in the selection process. In terms of performance monitoring, the Board retains a performance measurement analyst to report performance of the System's investments based upon a total return using time-weighted rate of return calculations. Performance is calculated on a monthly basis on a gross and net of fee basis. These reports (a) set forth the overall investment performance of the System's investments and the performance of individual investment managers within asset classes and (b) compare the overall performance of the System's investments with the System's Investment Objective set forth in the IPS and the TCDRS Policy Index. The Board formally reviews these reports on a quarterly basis. These reports are provided on a summary and detailed level with verbal explanation to address differing levels of investment knowledge/expertise.

Full Investment Practices and Performance Evaluation

Texas Municipal Retirement System

PRB Analysis of Evaluation

The evaluation provides a thorough review of the system's practices. In each subject area, it describes the review process and standard of comparison (i.e., industry standards or best practices) followed by the findings and enhancement recommendations. This structure allows the reader to follow along with the evaluator's work as they build to findings and recommendations, providing clear explanations for the conclusions.

The evaluation acknowledged the prudence in cost management as TMRS engaged an outside vendor to analyze trading costs of the equity portfolios. Further, the evaluator states "NEPC recognizes that this is a prudent approach as part of the System's fiduciary responsibility to monitor costs and understand performance results from its investment managers."

Plan Assets:[1] $39,486,341,713

Evaluator: NEPC

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

The evaluation also identified the re-assumed proxy voting responsibility by the system in 2023 and reviewed the policies. While the evaluator recommended finalizing the investment compliance process for proxy voting it also notes that "TMRS may have significantly less risk of misstep in proxy voting because TMRS neither internally trades, nor has developed a custom proxy voting policy which requires higher order monitoring."

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The most recent version of the investment policy statement (IPS) was adopted on December 14, 2023, and went into effect as of January 1, 2024. The IPS reflects the new asset allocation policy and benchmarks that were approved by the board in June and September 2023, respectively. The most recent version also reflects modest amendments made to the IPS to clarify the roles and responsibilities of different entities. To ensure TMRS remains in compliance with its investment policy statement and other procedures, on a weekly and quarterly basis, the investment compliance staff is responsible for testing TMRS' portfolio for all testable parameters that have been identified in the IPS to ensure the system remains in compliance. The results of these tests are reported to the board at quarterly meetings. A review of the board meeting materials confirmed that TMRS was in compliance with the testable parameters in the Investment Policy Statement in each quarter since investment compliance testing began to be reported to the board in Q3 2021. NEPC's own testing of TMRS's portfolio also confirmed that the system was in compliance with the IPS as of 9/30/2023. In 2023, TMRS re-assumed proxy voting responsibility and adopted a proxy voting policy that states "Investment staff will vote proxies to maximize the long-term investment returns consistent with the Board's fiduciary duty and the laws of the State of Texas." As part of this change, in early 2023, TMRS engaged Institutional Shareholder Services ("ISS") to act as its proxy advisor for its SMAs and for other investment with external managers, proxy voting has been delegated to those managers. TMRS worked with ISS to set the guidelines for how ISS should vote on corporate actions to ensure that TMRS votes according to the System's best interest and consistent with fiduciary duties. At the time of NEPC's review, TMRS did not have a process in place for systematically reviewing or auditing the votes ISS submitted on its behalf but was in the process of establishing a process. It is likely that investment compliance will be responsible for auditing a selection of votes submitted by ISS to ensure compliance with the guidelines set by TMRS. NEPC notes

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

that TMRS may have significantly less risk of misstep in proxy voting because TMRS neither internally trades, nor has developed a custom proxy voting policy which requires higher order monitoring.

Recommendations:

- NEPC encourages TMRS to finalize the investment compliance process for auditing proxy votes that ISS submits on the system's behalf. In response to NEPC's preliminary report, staff indicated they will implement a process for reviewing consistency of voting with TMRS' adopted proxy voting policy.
- TMRS may wish to review the personal trading policy and consider whether lowering the $2000 exemption and increasing the frequency of brokerage account statement review is appropriate. In its response to NEPC's preliminary report, staff indicated that TMRS does not conduct internal trading and that investment processes in use provide little to no opportunity for insider trading. Staff indicated they will perform a review of the internal trading policy in 2024.

Investment Asset Allocation
NEPC confirmed that TMRS has a formal written policy for determining and evaluating a long-term asset allocation that is expected to be successful in meeting its objectives over long periods of time. TMRS has developed a process that allows for the periodic setting of asset allocation, monitoring and review by the staff, general investment consultant and ultimately the Board of Trustees. Importantly, the asset allocation of the portfolio is considered after a careful assessment and within context of the plan's liabilities. This process is consistent with prevailing practice among peer public pension funds. Investment managers hired by TMRS are responsible for valuing the assets in the funds they manage according to applicable accounting standards and provide regular portfolio valuation updates, as well as annual audited financial statements. Investment managers may take different approaches to valuing the assets and some may utilize independent valuation firms to value the assets in the funds and mitigate inherent conflicts of interest. We can speak to how the system is handling its future cash flow and liquidity needs versus our clients as we have a more holistic view of what is being done by them. As a result, we asked our asset allocation team who have the perspective of seeing what all our public fund clients are doing to address these issues and have actuarial backgrounds to speak to the processes and methodologies being used. Primarily, NEPC has observed that TMRS remains in a well-funded position and is projected to maintain current funding levels over the next 10 years given the current IPS-established asset allocation. Funded status is 89 percent on an actuarial basis and 82 percent on a market value basis. Relative to the public pension plan universe, TMRS has lower overall plan risk and better funded position; 6.75 percent investment return assumption vs. 7.00 percent public fund median. Improved financial stability due to less reliance on returns and reduced potential of future contribution increases, noting a 1.5 ratio of actives to retirees vs. 1.3 public fund median. A higher ratio means lower cost of amortizing unfunded liability as a percentage of payroll.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Strengths:

- The TMRS Investment Guidelines and Investment Process Manual outline objectives, permissible investments and risk management principles. NEPC finds these documents to be reasonable and within industry prevailing standards for completeness, depth and compare well to peer public funds.

Investment Fees
The direct and indirect fees and commissions paid by the system include fees that are paid by the system and fees that are netted against returns. The system pays management fees, performance/carried interest, and brokerage fees. Additionally, the system pays custodian fees, investment consultant fees, internal staff salaries, and other administrative and investment-related expenses. TMRS engaged with an outside vendor to analyze trading costs coming from the system's public equity portfolios. NEPC recognizes that this is a prudent approach as part of the system's fiduciary responsibility to monitor costs and understand performance results from its investment managers. NEPC reviewed the most recently available report, which was prepared by Global Trading Analytics and covers the one-year period ending June 30, 2023. The report provides the overall fee in addition to a detailed breakout by manager, fund, country, broker, sector, and individual trade. NEPC notes that the total cost for the period was found to be low within an acceptable range.

Governance
There are six members of the TMRS Board of Trustees, with one seat currently vacant. TMRS trustees are appointed for six-year terms by the governor with the consent of the Senate. The governor appoints three executive trustees and three employee trustees. To be eligible to serve as an executive trustee a person must be a chief executive officer, chief finance officer, or other officer, executive or department head of a participating municipality. To be eligible to serve as an employee trustee a person must be an employee of a participating municipality. A trustee is immediately disqualified from serving as a trustee if the trustee ceases to satisfy (these) requirements. Since 2020, TMRS has continued to implement changes to their processes to further delegate the identification, documentation, and implementation of specific processes down to those who perform them on a regular basis. As part of this, the Investment Department – Internal Procedures Manual was revised extensively in 2022 in order to delegate responsibility for oversight of a number of granular investment procedures from the chief investment officer (CIO) to the Investment Operations staff and other Investment Department teams. The result of this revision was to split the original

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

document into the Investment Operational Procedures Manual, consisting of 17 pages, and the Investment Standard Operating Procedures ("SOPs"), consisting of 67 pages.

Since NEPC began its evaluation of the system and before issuance of this final report, NEPC notes that TMRS has made changes that bring the system's processes in line with NEPC's recommendation. Since March 2024, the investment operations function reports to the chief financial officer independent of CIO oversight, and the investment data, performance, and risk ("DPR") function reports to the deputy CIO. The Investment Operational Procedures Manual that NEPC initially reviewed for this evaluation included procedures for both investment operations and DPR functions. Since then, the Manual has been divided into two components: i) an Investment Operational Procedures Manual under the oversight of the chief financial officer (CFO); and ii) an Investment Data Procedures Manual under the oversight of the deputy CIO. Both components are being updated to require formal periodic review consistent with NEPC's recommendation.

Recommendations:

- Based on NEPC's initial evaluation, it was noted that TMRS should implement a process for a more formal review of the Investment Operational Procedures Manual and dissemination of all standard operating procedures (SOPs) to investment team members on at least an annual basis.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Manager Selection and Monitoring
TMRS has developed six due diligence principles which are used to inform staff how to objectively identify, analyze, and select investment managers and strategies. The principles emphasize the importance of completing all required due diligence steps and gathering all required consultant support prior to recommending a strategy to best protect the system's assets. Alignment of interests between investment managers and the system is a key consideration during the due diligence process with net returns earned by TMRS being important when reviewing strategy results and fees charged by investment managers is a prominent consideration. TMRS seeks to avoid performance-chasing behavior and focuses instead on attempting to identify an investment manager's edge over their competitors. Post-investment, TMRS actively monitors investment managers ability to maintain their edge. The principles state that TMRS should choose to redeem from or not rehire an investment manager if staff loses conviction in that manager's ability to outperform. Given that recent performance data is a lagging indicator, staff are instructed to be cognizant that a loss of confidence may come from other qualitative assessments of an investment manager. Investment staff is responsible for monitoring the investments and the investment managers. The monitoring program is made up of three components: 1) annual asset class review for the board and the staff Investment Committee, 2) annual administrative review dealing with operational matters; and 3) ongoing monitoring dealing with manager/investment vehicle culminating in the completion of a manager scorecard. The asset class review presentation for the board includes said manager scorecards prepared by investment staff presenting an overview of the manager, recent and long-term performance, terms and guideline changes, and any significant changes at the manager, including any changes in rating by the investment consultant. The annual asset class administrative review is a thorough review which includes a manager/investment checklist to be completed by staff, regulatory reviews (i.e., review of Form ADV and other regulatory filings), audited financial statement reviews, annual compliance certifications, and other items. In addition to the above steps, investment staff has regular check-ins with Albourne, the specialized investment consultant, who communicates any significant findings from reviews of TMRS' investment strategies or any changes at the investment managers of which they become aware. **Strengths:** - NEPC found that TMRS' investment manager selection and monitoring process is well documented in the IPS and the Due Diligence Procedures Manual.

Full Investment Practices and Performance Evaluation

THA Master Trust for Member Hospitals

PRB Analysis of Evaluation

The evaluation covers the Texas Hospital Association (THA) Master Trust for Member Hospitals, which includes two public retirement systems with assets of at least $100 million subject to the requirements of Texas Government Code §802.109 - JPS Pension Plan/Tarrant County Hospital District (JPS), and Retirement Plan for Citizens Medical Center (Citizens) - as well as several other, smaller, public retirement systems.

The evaluation provides balance by clearly identifying the policies, summarizing information in an easily digestible format including tables and charts that explain the data for conclusions in detail where appropriate.

THA is unique in its design given the assets are pooled and invested similar to a multi-employer plan, but the participating plans can have significantly disparate benefit structures. The evaluation, therefore, provides a detailed review of existing policies and practices utilized by THA at the trust level, but does not provide a comprehensive analysis at the plan level. The evaluator does note that an asset allocation decision applicable to all plans is to not include illiquid asset classes, such as alternatives, because the cash flow and liquidity needs of the underlying plan sponsors vary.

Plan Assets:[1]

JPS: $312,711,970
Citizens: $114,454,921

Evaluator: Aon Hewitt Investment Consulting (AHIC)

Evaluator Disclosures:[2]

Relationship: Investment consultant[3]

Investment Discretion: None

Conflicts of Interest: None

Senate District: JPS: 10 Citizens: 18
House District: JPS: 90 Citizens: 30

In multiple sections the evaluation states THA is following or demonstrating best practices. The evaluation mentions that the board adopted additional bylaws to further document demonstrated governance best practices by the plan in 2020 which was when the first IPPE was conducted.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The Plan has an IPS document that was last reviewed in May of 2024. The IPS generally followed best practice prior to our review and following the implementation of our modest recommendations we consider the document to be in-line with best practice. The document is written sufficiently clear that anyone could manage the portfolio and generally conform to the desired intentions of the Board. The IPS includes investment objectives for the Plan and individual managers, with manager level benchmarks articulated within the performance reporting materials. **Strengths:** - The IPS generally follows best practice, as it contains appropriate measurable outcomes. **Recommendations:** - The IPS could be enhanced by adding a section articulating the duties of the investment consultant and actuary. - The IPS could be enhanced by including a more formal schedule of reviewing the IPS with the Board within the document. This would be recommended to be at least annually.

[1] As of 9/30/2023 and 2/28/2023, respectively

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

[3] A separate group within AHIC ("Fiduciary Services Practice") is providing this evaluation at the plan's request.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
The THA Board selects the strategic asset allocation of the asset mixes that are intended to represent the range of risk that would be desired by Plan Sponsors. THA then works in conjunction with the actuary and the investment consultant to recommend the appropriate asset mix to each Plan Sponsor. The Plan Sponsor then evaluates the recommendation, in conjunction with their own risk preference, and selects an appropriate asset mix. Discount rates are not explicitly reviewed when determining the asset allocation of the offered mixes, but they are considered when recommending an appropriate asset mix to each Plan Sponsor. It has been determined that illiquid asset classes (alternatives) are not currently part of the investable opportunity set for this Plan, due to liquidity requirements. The asset allocation of the Plan is the result of the underlying Plan Sponsors selecting from the 4 offered asset mixes, and not a direct decision made by the Board. **Strengths:** - THA is following common practice in its process for establishing and evaluating asset allocation. Assets are well diversified (given the restricted use of alternatives for liquidity reasons), and risk positioning is being managed on a Plan Sponsor Basis.

Investment Fees
THA does not have a written investment management fee policy. However, investment management fees are compared to peer universes and provided to the Board on a quarterly basis. This type of policy is not common across peer institutional investors. The Plan does not pay indirect compensation. Direct compensation includes fees paid for administration (general plan administration, custodian, actuary, investment consultant, legal, audit, insurance, etc.) as well as investment management fees paid to the underlying investment managers. The detail of all expenses is outlined in the Plan's financial reports and performance reporting, which are provided to the Board on a quarterly basis. Investment management fees compare favorably at the Plan level as well as by individual investment strategy. This is primarily due to the meaningful use of passive management and no exposure to alternative investments. On a quarterly basis, the Plan's investment consultant provides analysis which compares the investment expense of each investment mandate against that of a peer group. **Strengths:** - The Total fee is low given the heavy use of passive management and no alternative investments.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Governance
The governance of the investment-decision making process is documented in the IPS and the Master Trust document. The IPS outlines the roles and responsibilities for the Trustees and investment managers. The Master Trust document outlines plan administration, funding, investment of the trust, powers and fiduciaries responsibilities, and delegation to investment managers. The 2003 Master Trust was temporary, pending the completion of the IRS approval under Rev. Rul. 81-100. Once that approval was obtained, the trust was amended in 2005 to conform to the changes IRS requested during their approval process. These documents are available to stakeholders upon request. The Successor Trustee Board, currently comprised of nine appointed members, are appropriately vetted for qualifications and upon appointment, receive sound orientation. The orientation includes the important topics of fiduciary duties, prudence, diversification, adherence to plan documents, and conflicts of interest. There are also mandatory continuing education requirements. The Board meets on a quarterly basis and spends sufficient time on investment matters. There are detailed minutes of the meetings and appropriate support, guidance and education provided by the investment consultants and legal counsel. The Board adopted Bylaws to further document the already demonstrated governance best practices by the Plan in 2020. **Strengths:** - The Plan demonstrates best governance practices of an efficient, effective structure, with appropriate meetings and oversight of the Plan.

Investment Manager Selection and Monitoring
The Board has hired an investment consultant to support the selection of investments made by the Plan. The Board's investment consultant produces recommendations to the Board for selecting investment managers. The Board reviews the investment manager candidates and makes a selection decision, using both the consultant's presentation materials and verbal advice. The Plan's investment program is continually monitored by the investment consultant, who provides performance reports to the Board. The Board uses these reports, along with quarterly discussions with the investment consultant, to ensure that the program is being managed in accordance with the investment policy statement. **Strengths:** - The investment performance reports provided to the Board provide sufficient information to monitor the plan in accordance with the IPS.

Full Investment Practices and Performance Evaluation

University Health System Pension Plan

PRB Analysis of Evaluation

The evaluation provides extensive explanations outlining the evaluation methodology used and supporting arguments for the conclusions drawn. The evaluation also provides a useful summary matrix that covers both the recommendations and important practices for each section.

The evaluation included in the appendix an investment manager fee study. This analysis helps support the report finding and that investment fees are reviewed regularly and are reasonable compared to peers.

The evaluation provides a summary and concludes with, "the Pension Trust's investment policy, asset allocation, investment fees and commissions, governance process, and manager search and monitoring procedures appear sufficient with no material issues at this time."

Plan Assets:[1] $595,586,123

Evaluator: Callan

Evaluator Disclosures:[2]

Relationship: Investment Consultant

Investment Discretion: None

Conflicts of Interest: None

Senate District: 26

House District: 116

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Policy Statement
The University Health System Pension Trust (the "Pension Trust") maintains a written Investment Policy Statement (the "IPS") that includes the following five components: 1. roles and responsibilities; 2. investment objectives; 3. statement of investment policy; 4. administrative and review procedures; and 5. investment guidelines. Compliance with the IPS appears adequate. The IPS is clearly and thoroughly written, and serves as an effective guide that offers an objective course of action to be followed during periods of market disruption when emotional responses might otherwise motivate less prudent actions. **Strengths:** - The IPS is aligned with industry best practices. **Recommendations:** - Consider adding a description of the roles and responsibilities of the custodian, actuary and legal counsel to the IPS.

[1] As of 12/31/2023

[2] Section 802.109, Texas Government Code authorizes the selection of a firm that has an existing relationship with the system, as long as the firm does not directly or indirectly manage investments. The PRB's *Guidance for Investment Practices and Performance Evaluations* covers the statutorily required disclosures in the evaluation.

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

Investment Asset Allocation
Strategic asset allocation is reviewed every three to five years. The last asset-liability study was completed in 2023. The asset-liability study is used to test the current asset allocation target (and its accompanying expected return and risk) against the current rate environment, growth in liabilities, and market risks, and then compares that allocation to alternate asset mixes with higher and lower levels of risk and return. The Pension Trust is a well-diversified portfolio which has withstood challenging market conditions while achieving the target rate of return on assets. The asset-liability evaluation process is aligned with industry best practices. The investment consultant conducts an asset-liability study for the Pension Trust approximately every three to five years. The asset allocation that has been adopted by Board is a balance between risk management, return goals and management of expected contributions. The Pension Trust maintains a target allocation to domestic equity that is below median (less risk seeking), but a domestic fixed income allocation that is also below median (less risk averse). The remainder of the portfolio is highly diversified with allocations to real estate, private equity, alternative beta investments and international (non-U.S. equity).

Investment Fees
The Pension Trust maintains appropriate policies & procedures to account for and control investment expenses. The Board conducts an investment management fee review every three years. The last fee review was completed in 2023. Investment management fees are reasonable in comparison to industry peers. Over the last five years the Board has reduced investment management fees on over 60% of the Trust assets. The Pension Trust employs one separate account investment manager that generates commissions. In 2023, the total commission dollars and cents-per-share reported were $9,218 and $0.02, respectively. For the partial year 2022, the total commission dollars and cents-per-share reported were $26,226 and $0.018, respectively. This higher dollar amount was associated with the initial funding of the account. **Strengths:** - Total commissions generated appear reasonable and aligned with industry norms.

Governance
The Pension Trust is administered by a Board of Trustees, approved by the System's Board of Managers, and consists of nine professionals. Two Trustees are appointed from System Administrative Staff, two Trustees are appointed from the System Board of Managers, and five Trustees are appointed who either reside or work in Bexar County. The qualifications & career experience of the leadership team and Board continue to be considered high relative to industry peers. The University Health System Pension Bylaws state that Trustees may not serve more than four consecutive four-year terms, or more

The following table presents excerpts from each section of the evaluation including any recommendations for improvement made by the evaluator.

than sixteen years. It is recommended that the term status of each Board member is noted annually at the same meeting that the Board officers are elected in order to maintain compliance with the term limits.

Recommendations:

- Consider adopting the PRB's educational training requirements and drafting a "Continuing Educational Requirements" policy summarizing the hours of education required and method to report compliance.

Investment Manager Selection and Monitoring
The Board utilizes a process for investment manager selection that embodies the principles of procedural due diligence. Accordingly, when selecting investment managers, the Board employs a competitive search process. Compliance with the selection process is satisfactory. The Board reviews both net-of-fee and gross-of-fee manager performance on a quarterly basis relative to benchmarks and peers. The quarterly monitoring process includes both quantitative and qualitative criteria, and appears adequate. All Trustees are required to disclose any actual or potential conflict of interest and refrain from voting or using his or her influence on the manager selection and monitoring process, if a conflict exists. The investment consultant's performance measurement calculation for US equity separate accounts and all mutual funds utilizes a daily, timeweighted rate of return methodology that is consistent with the CFA Institute's Global Investment Performance Standards (GIPS). For all other account types, the consultant calculates returns based on the Modified BAI (Bank Administration Institute) methodology which also is consistent with GIPS standards and recommendations. **Strengths:** - Overall, the conflict of interest policy is reasonable. - The Board reviews both net- and gross-of-fee manager performance on a quarterly basis relative to benchmarks and peers over multiple annualized and annual periods. **Recommendations:** - Upon any decisions to hire or terminate an investment manager, consultant, auditor, or actuary of the Trust each Board member should disclose any potential conflicts of interest.

Full Investment Practices and Performance Evaluation

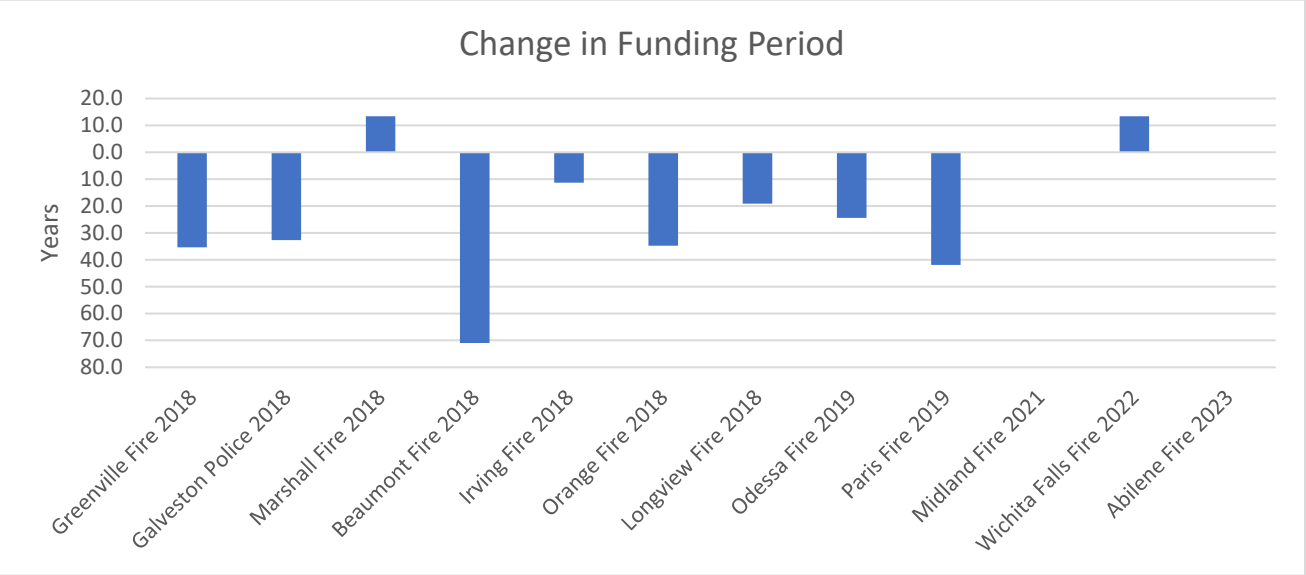
Appendix F – Intensive Review Updates

Funding Improvement Following Intensive Reviews

Since 2018, the PRB has conducted a dozen intensive reviews of systems suffering from long funding periods, unreasonable expectations, and low funded ratios. The charts below show how the 12 systems have improved on each of those three metrics since the PRB published the intensive review.

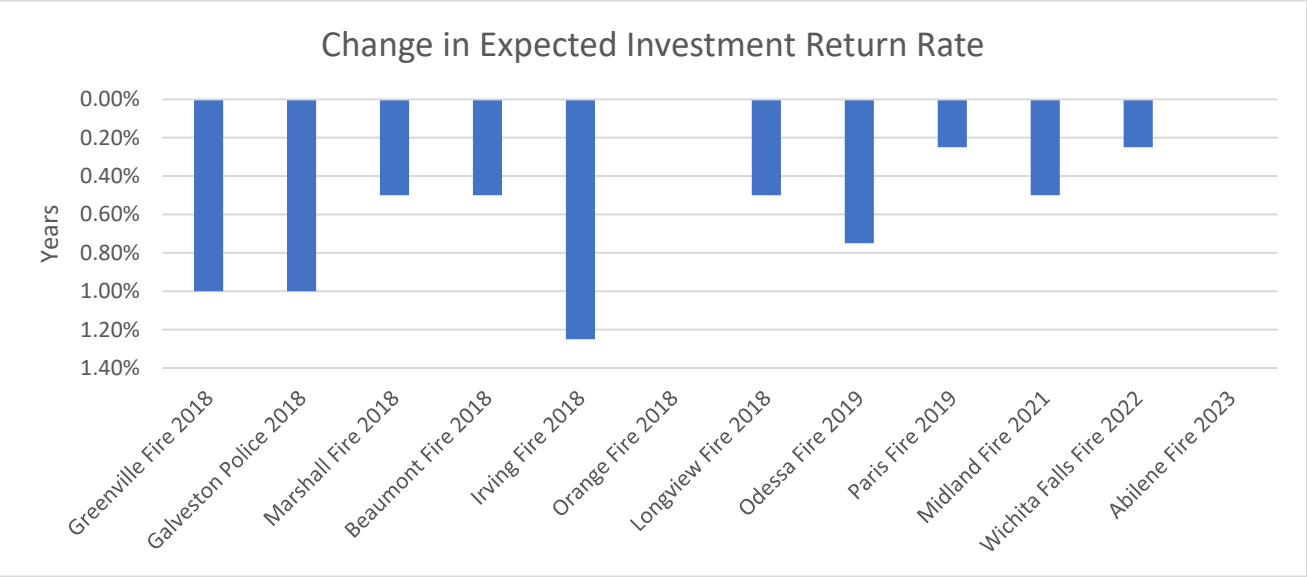
Change in Funding Period

The funding period has improved for eight out of the 12 systems following the intensive review.



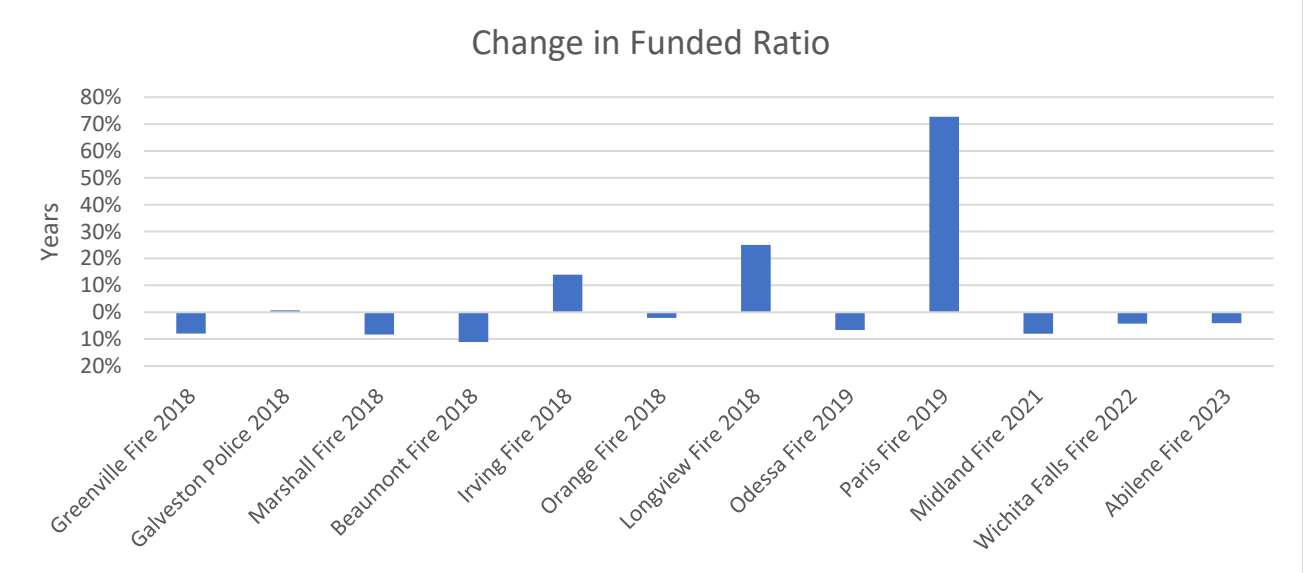
Change in Expected Investment Return Rate

Ten out of the 12 intensive review systems have decreased their expected investment return rates, making assumptions more achievable.



Change in Funded Ratio

One consequence of lowering expected investment returns is an increase in the unfunded liability. Pension liabilities generally increase by 10 to 15 percent for each 1 percent change in assumed returns. The three systems with improved funded ratios received proceeds from pension obligation bonds since the intensive reviews.



Details By System

Abilene Firemen's Relief and Retirement Fund		
Review Date:		September 2023
Initial Metrics (2021 AV)		Funding period: 29.4 years Funded ratio: 49.38%
PRB Recommendations		• Consider adjusting benefits to an affordable and sustainable level and increasing contributions based on reasonable plan assumptions. • Conduct regular asset liability studies to match assumptions and investment strategy to funding needs. • Improve transparency by updating the investment policy to reflect actual asset allocation or making quarterly reports available on the system website. • Adjust or remove benefit cap as part of determining the long term contribution level. • Use periodic experience studies to adjust assumptions, estimate future changes, and determine necessary long term contribution level. • Conduct a voluntary Funding Soundness Restoration Plan and update funding policy. • Improve use of the system website to increase transparency and facilitate stakeholder engagement and communication. • Become compliant with Minimum Educational Training requirements as soon as possible.
Updates since intensive review		
2023-2024	**Changes**	• None reported to PRB
	Metrics (2023 AV)	Funding period: 29.4 years Funded ratio: 45.28%

Wichita Falls Firemen's Relief and Retirement Fund		
Review Date:		October 2022
Initial Metrics (2020 AV)		Funding period: 43.3 years Funded ratio: 56.78%
PRB Recommendations		• Consider options to increase contributions to offset previous underfunding. • Adjust or remove the benefit cap as part of determining long term contribution level. • Use an experience study and asset liability study to adjust assumptions, estimate future changes, and determine necessary long term contribution level. • Submit a new FSRP before Sept. 1, 2025, to avoid stricter revised FSRP requirements. • Consider using a smoothed actuarial value of assets.
Updates since intensive review		
2023-2024	**Changes**	• Lowered assumed rate of return from 7.75% to 7.5% • Lowered payroll growth assumption from 4% to 3% • Removed from legacy FSRP list, triggered new FSRP
	Metrics (2024 AV)	Funding period: 56.7 years Funded ratio: 52.54%

Midland Firemen's Relief and Retirement Fund		
Review Date:		November 2021
Initial Metrics (2019 AV)		Funding Period: Infinite Funded Ratio: 51.1%
PRB Recommendations		• Conduct independent third party forensic audit of system's financial records to enhance investment program efficiency with increased focus on transparency and accountability. • Conduct a governance audit by an independent third party. • Make use of professional expertise to guide investment program. • Develop a robust FSRP and funding policy that is sustainable and achievable. • Commit to inform plan members of issues facing the fund, including distributing the intensive review report. • Keep the PRB and the legislature informed of the progress.
Updates since intensive review		
2021-2022	**Changes**	• Investment policy statement updated. • Selected current auditor to perform the forensic audit and governance audit recommended as part of the PRB Intensive Review. Audit reports finalized Dec. 2022.
	Metrics	Funding period: No update Funded ratio: No update
2023-2024	**Changes**	• Completed audit reports. • Changed pay definition to exclude overtime and to use highest consecutive 60 months rather than highest 60 months. • Increased city contributions from 22.2% to 24.2%
	Metrics (2023 AV)	Funding period: Infinite Funded ratio: 43.06%

Paris Firefighters Relief and Retirement Fund		
Review Date:		October 2019
Initial Metrics (2016 AV)		Funding period: 41.9 years Funded ratio: 35.64%
PRB Recommendations		• Consider increasing contributions to meet short term funding needs. • Develop a strong funding policy to prevent address long term funding issues. • Work with actuaries to select an appropriate investment assumption. • Review investment processes to improve asset returns. • Complete the minimum education requirements, seek advice from peer systems, and seek other educational opportunities for board members. • Seek advice from professional advisors and regularly review their performance.
Updates since intensive review		
2019-2020	**Changes**	• Lowered assumed rate of return from 7.5% to 7.25%. • Made several investment portfolio changes including adding passive investments.
	Metrics (2018 AV)	Funding period: 32.1 years Funded ratio: 30.5%
2021-2022	**Changes**	• Plan frozen and all current and future members moved into the Texas Municipal Retirement System (TMRS) as of October 1, 2022. • City issued $12.15M in pension obligation bonds (POBs) to pay down unfunded liabilities.
	Metrics (2020 AV)	Funding period: 33.6 years Funded ratio: 28.79%
2023-2024	**Changes**	• No changes reported to the PRB.
	Metrics (2022 AV)	Funding period: 0 years Funded ratio: 108.38%

Odessa Firemen's Relief and Retirement Fund		
Review Date:		October 2019
Initial Metrics (2018 AV)		Funding period: 47.1 years Funded ratio: 43.08%
PRB Recommendations		• Evaluate the appropriate balance of contribution increases and benefit reductions. • Perform scenario testing of different combinations of plan design changes and payment options. • Develop a strong funding policy to restore and maintain fiscal health. • Monitor investment managers performance against benchmarks. • Regularly review outside consulting services. • Adopt an asset allocation plan.
Updates since intensive review		
2019-2020	**Changes**	• Increased city contributions from 20% to 26% and lowered employee contributions from 18% to 16%. • Lowered assumed rate of return from 7.75% to 7.5%.
	Metrics (2020 AV)	Funding period: 37.5 years Funded ratio: 36.81%
2021-2022	**Changes**	• Lowered assumed rate of return from 7.5% to 7.0%. • Lowered payroll growth assumption from 3.5% to 3%.
	Metrics (2022 AV)	Funding period: 34.3 years Funded ratio: 36.48%
2023-2024	**Changes**	• Increased city contributions from 26% to 28% • City agreed to fund a 20 year actuarially determined contribution going forward.
	Metrics (2024 AV)	Funding period: 22.7 years Funded ratio: 36.42%

Longview Firemen's Relief and Retirement Fund		
Review Date:		October 2018
Initial Metrics (2016 AV)		Funding period: 50.7 years Funded ratio: 45.53%
PRB Recommendations		• Regularly review actuarial assumptions against experience. • Closely monitor investment performance including expenses and evaluate asset allocation decisions, particularly based on risk. • Develop a more robust investment policy. • Adopt a strong funding policy with an actuarially determined contribution (ADC) structure. • Create a formal risk /cost sharing agreement and help reduce uncertainty for stakeholders.
Updates since intensive review		
2017-2018	**Changes**	• Removed deployment pay from benefit calculation and contributions.
	Metrics (2017 AV)	Funding period: 40.2 years Funded ratio: 46.05%
2019-2020	**Changes**	• Assumed rate of return lowered from 8% to 7.5%. • City contributions increased from 18% to 19%.
	Metrics (2019 AV)	Funding period: Infinite Funded ratio: 39.35%
2021-2022	**Changes**	• City issued $45.6M in POBs to pay down unfunded liabilities. • With the POB, the amortization period is 27.5 years and city contributions were lowered from 19% of payroll to 12% effective July 21, 2022. • Memorandum of understanding between plan and city agreeing to: ○ no plan changes until funding period is less than 5 years, and ○ no plan changes can result in an increase in the funding period of more than 10 years
	Metrics (2021 AV)	Funding period: Infinite Funded ratio: 40.54%
2023-2024	**Changes**	• Submitted FSRP based on previous POB and memorandum of understanding • City contributed additional $305,000 in 2024 to maintain expected full funding date prior to September 1, 2055
	Metrics (2023 AV)	Funding period: 31.6 years Funded ratio: 70.55%

Orange Firemen's Relief and Retirement Fund		
Review Date:		October 2018
Initial Metrics (2017 AV)		Funding period: 69.3 years Funded ratio: 49.86%
PRB Recommendations		• Closely monitor investment performance including expenses and evaluate asset allocation decisions. • Regularly review outside consulting services. • Regularly review actuarial assumptions against experience. • Develop written funding, investment, and benefit policies to create formal risk /cost sharing agreement and help reduce uncertainty for stakeholders. • Ensure contributions are sufficient for funding needs, consider an ADC structure.
Updates since intensive review		
2017-2018	**Changes**	• Agreed to consult peer pension systems for possible guidelines or examples of governance policies to help develop governance policy between system and the city. • Agreed to request the actuary to explain benefit reduction proposals to members. • Adopted a motion to craft a request for proposal (RFP) for investment consultant services.
	Metrics (2018 FSRP analysis)	Funding period: 47 years Funded ratio: 54.12%
2019-2020	**Changes**	• Changed investment consultant to lower costs. • Lowered payroll growth assumption from 4% to 2.5%. • Increased city contributions from 14% to 14.5%, and member contributions from 12% to 12.5%. • Actuary performed a benefit analysis on impact of potential changes in Oct 2019 which projects all the benefit and contribution changes to lower the funding period from infinite to 43.4 years.
	Metrics (2019 AV)	Funding period: Infinite Funded ratio: 46.28%
2021-2022	**Changes**	• Increased city contributions to 18.8% and member contributions to 13.8%.
	Metrics (2021 AV)	Funding period: 20.7 years Funded ratio: 56.59%
2023-2024	**Changes**	• No changes reported to the PRB.
	Metrics (2023 AV)	Funding period: 34.5 years Funded ratio: 47.76%

Irving Firemen's Relief and Retirement Fund		
Review Date:		October 2018
Initial Metrics (2015 AV)		Funding period: 33 years Funded ratio: 74.92%
PRB Recommendations		• Conduct asset liability study of potential risks associated with existing asset mix and liabilities. Perform scenario testing of large DROP withdrawals coupled with potential adverse investment experience. • Develop written funding, investment, and benefit policies to create formal risk /cost sharing agreement and help reduce uncertainty for stakeholders. • Ensure contributions are sufficient for funding needs, consider an ADC structure.
Updates since intensive review		
2017-2018	**Changes**	• Lowered assumed rate of return from 8.25% to 7.5%. • Lowered payroll growth assumption from 4.25% to 3.5%.
	Metrics (2017 AV)	Funding period: Infinite Funded ratio: 71.61%
2019-2020	**Changes**	• Lowered assumed rate of return from 7.5% to 7%. • Lowered payroll growth assumption from 3.5% to 2.75%. • Lowered the interest rate on the DROP (currently: 3.3%, from: 6.25%). • Members no longer receive interest on their DROP account when they leave the department. • Final average salary raised from 3 years to 5 years. • Added a second tier benefit. • City increased contributions from 16.75% to 20.25%.
	Metrics (2019 AV)	Funding period: 43.6 years Funded ratio: 65.41%
2021-2022	**Changes**	• City issued $80M in POBs to pay down unfunded liabilities. • City increased its contributions from 20.25% to 26% starting in 2022 and has agreed that any time the ADC is lower than 26%, the city and fund will equally share in payment of the ADC. Any time the ADC is greater than or equal to 26% the members will contribute 13% with the city funding the remaining amount. • Increases to ADC due to benefit enhancements will be paid by the members.
	Metrics (2021 AV)	• Funding period: 37 years (estimated 23 years after changes) • Funded ratio: 63.82% (estimated 91% after changes)
2023-2024	**Changes**	None
	Metrics (2023 AV)	Funding period: 21.7 years Funded ratio: 88.87%

Beaumont Firemen's Relief and Retirement Fund		
Review Date:		April 2018
Initial Metrics (2016 AV)		Funding period: 104 years Funded ratio: 67.53%
PRB Recommendations		• Develop a funding policy that requires payment of an ADC. • Conduct an asset liability study of potential risks associated with existing asset mix and liabilities. • Perform scenario testing of large PROP withdrawals coupled with potential adverse investment experience. • Adopt a formal risk/cost sharing framework to guide stakeholders in how benefit and contribution levels will be modified under different economic conditions.
Updates since intensive review		
2019-2020	**Changes**	• Employee and city contributions will increase from 15.5% to 18% in steps until 2023. • Lowered assumed rate of return from 8% to 7.5%
	Metrics (2018 AV)	Funding period: Infinite Funded ratio: 55.8%
2021-2022	**Changes**	• Added a new benefit tier for employees hired after January 1, 2022.
	Metrics (2020 AV)	Funding period: Infinite Funded ratio: 55.44%
2023-2024	**Changes**	• Increased payroll growth assumption from 3% to 3.25%
	Metrics (2023 AV)	Funding period: 33 years Funded ratio: 56.42%

Marshall Firemen's Relief and Retirement Fund		
Review Date:		April 2018
Initial Metrics (2016 AV)		Funding period: 56.4 years Funded ratio: 42.02%
PRB Recommendations		• Adopt a formal risk/cost sharing framework with trigger mechanisms that guide stakeholders in how benefit and contribution levels will be modified under different economic conditions. • Develop a funding policy that requires payment of an ADC, or at minimum, that fully funds the plan over 30 years or less. • Regularly review actuarial assumptions against experience. • Closely monitor investment performance including expenses and evaluate asset allocation decisions.
Updates since intensive review		
2018	**Changes**	• Retirement eligibility age moved from 50 to 53 for new hires after Dec 31, 2018. • Increased 10 year vesting period to 20 year period for new hires after 12/31/2018. • City approved contributions to be made to the fund at the end of the year for vacancies that exist throughout the year effective December 31, 2018. • 0.75% city contribution increase effective January 1, 2019.
	Metrics	Funding period: No change. Funded ratio: No change.
2019-2020	**Changes**	• Employee contributions increased from 14% to 16% on January 1, 2021.
	Metrics (2018 AV)	Funding period: 59 years Funded ratio: 36.66%
2021-2022	**Changes**	• Lowered assumed rate of return from 7.5% to 7.25%. • Lowered payroll growth assumption from 4% to 3.75%.
	Metrics (2020 AV)	Funding period: 41 years Funded ratio: 40.19%
2023-2024	**Changes**	• Lowered payroll growth assumption from 3.75% to 3.25% • Removed from legacy FSRP list, triggered new FSRP
	Metrics (2022 AV)	Funding period: 72 years Funded ratio: 33.69%

Galveston Employees' Retirement Plan for Police		
Review Date:		January 2018
Initial Metrics (2017 AV)		Funding period: 48.7 years Funded ratio: 42.1%
PRB Recommendations		• Use the **FSRP** process to develop a **funding policy** that requires payment of an ADC, or at minimum, that fully funds the plan over **30 years or less.** • Regularly **review actuarial assumptions** against experience. • Closely **monitor investment performance** including expenses and evaluate asset allocation decisions, including from a risk perspective.
Updates since intensive review		
2017-2018	**Changes**	• At the September 2018 PRB Actuarial Committee meeting, both the city and the plan provided the PRB with preliminary proposals for a funding policy that would include paying an ADC with a closed 30 year funding period.
	Metrics (2018 AV)	Funding period: 31.4 years Funded ratio: 39.31%
2019-2020	**Changes**	• House Bill 2763 (86R) made statutory funding policy and governance updates to the plan. The bill set member and city contribution rates at 12% and 18%, respectively, through 2024, after which a contribution policy based on an ADC rate will begin. The system adopted a funding policy with an ADC based on a closed layered 30 yr period targeting full funding by 2049.
	Metrics (2020 AV)	Funding period: 28 years Funded ratio: 36.44%
2021-2022	**Changes**	• No changes reported to the PRB.
	Metrics (2021 AV)	Funding period: 27 years Funded ratio: 38.01%
2023-2024	**Changes**	• No changes reported to the PRB.
	Metrics (2023 AV)	Funding period: 16 years Funded ratio: 42.8%

Greenville Firemen's Relief and Retirement Fund		
Review Date:		January 2018
Initial Metrics (2014 AV)		Funding period: 70.4 years Funded ratio: 48.94%
PRB Recommendations		• Develop and maintain robust FSRP (when necessary) and a funding policy that requires payment of an ADC, or at minimum, that fully funds the plan over 30 years or less. • Regularly review actuarial assumptions against experience. • Closely monitor investment performance including expenses and evaluate asset allocation decisions, including from a risk perspective.
Updates since intensive review		
2017-2018	**Changes**	• System informed the PRB that an RFP had been issued for actuarial services.
	Metrics (2016 AV)	Funding period: 55 years Funded ratio: 47.69%
2019-2020	**Changes**	• City contributions increased from 19.3% to 21.3%. • Removed deployment pay from benefit calculation and contributions.
	Metrics (2018 AV)	Funding period: 40.7 years Funded ratio: 46.61%
2021-2022	**Changes**	• Lowered assumed rate of return from 7.75% to 7.5%.
	Metrics (2020 AV)	Funding period: 36.6 years Funded ratio: 42.64%
2023-2024	**Changes**	• Lowered assumed rate of return from 7.5% to 7.25%
	Metrics (2022 AV)	Funding period: 35 years Funded ratio: 40.96%

Appendix G – September 25, 2024 AV Report Presentation

Item 11a: AV Report and Item 11b: FSRP Report

David Fee

Summary

- AV report
  - Changes since July board meeting
    - System news
    - Major assumption changes
  - Funding progress
  - System overview
  - Systems with funding periods over 40 years
- FSRP Report
  - FSRP status changes since July board meeting
  - FSRP status by category

Actuarial Valuation Report

Texas Public Pension System News

- Beaumont Fire
  - Reduced funding period to 33 years
- Dallas ERF
  - Updated preliminary FSRP
  - Member contribution increases for Tier A but not Tier B
  - 12/31/24 UAAL amortized over 30 years with 5-year phase in
  - Future gains/losses amortized over later of 20 years or 2054
  - Guardrails in place on city contribution rate could result in future FSRP
    - City council has discretion to waive the guardrails when funding period > 30 years
- Denison Fire
  - Removed flat dollar cap on benefits
  - Funding period is 15.3 years after the benefit enhancement
- Floresville Electric
  - Created new tier with smaller benefits for new hires

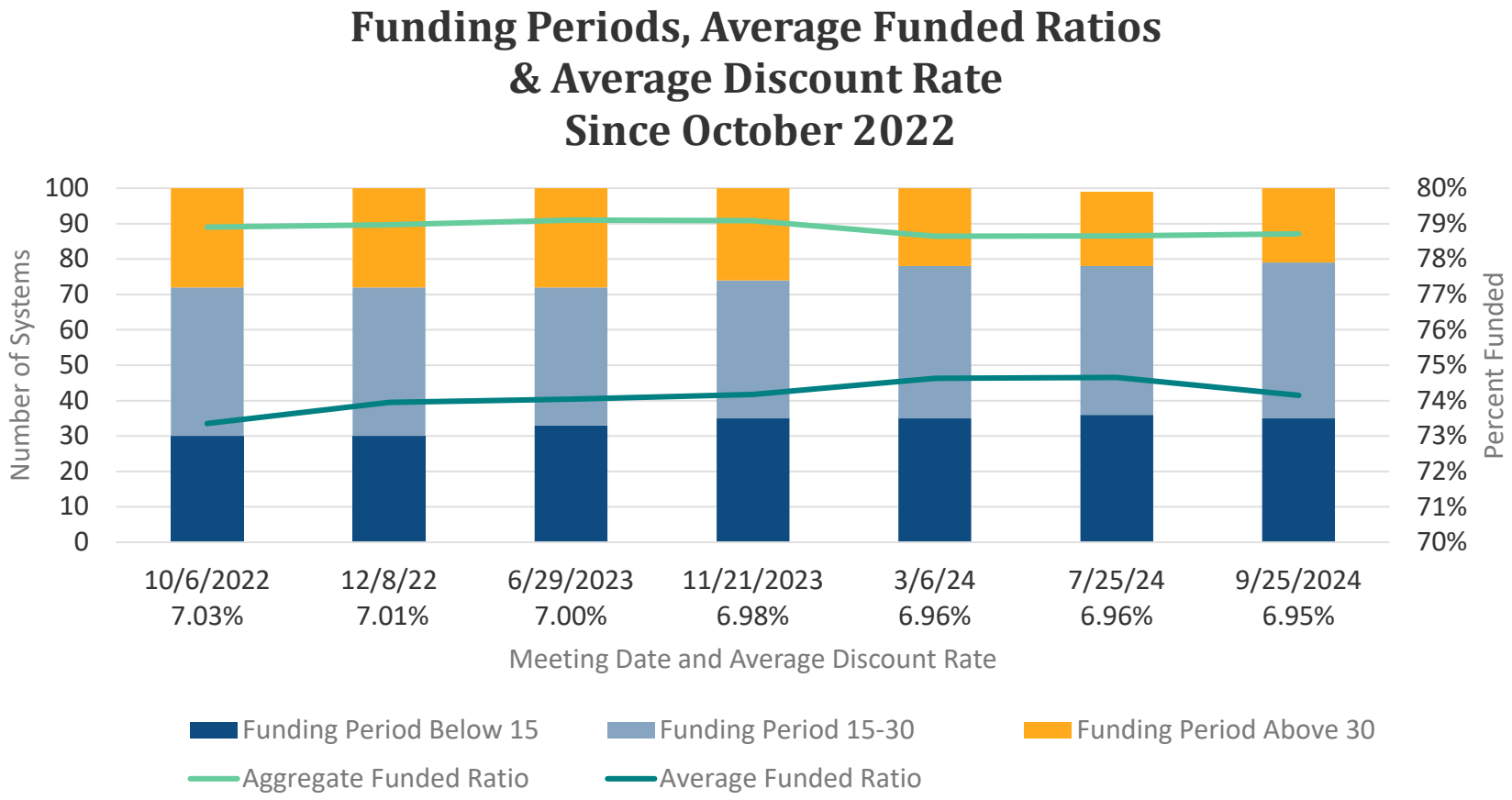
Texas Public Pension System News

- Irving Fire
  - Both city and member contributions decreased under shared ADC
- Nacogdoches County Hospital District
  - Triggered FSRP
- Sweetwater Fire
  - Sent FSRP update
  - Considering $90,000 flat dollar cap on annual benefits
- Wichita Falls Fire
  - Triggered FSRP

Significant Economic Assumption Changes

	Changed Discount Rate 7/25/24 → 9/25/24		Changed Payroll Growth Rate 7/25/24 → 9/25/24	
System	Current Rate	Prior Rate	Current Rate	Prior Rate
Austin Police			2.50%	3.00%
Beaumont Fire			3.25%	3.00%
Colorado River MWD	6.00%	5.75%		
Denison Fire	7.25%	7.50%		
Galveston Wharves	7.00%	7.25%		
Wichita Falls Fire	7.50%	7.75%	3.00%	4.00%

Funding Progress 2022-2024



System Overview By Type

System Type	System Count	Median Expected Return	Median Funding Period	Median Funded Ratio
Statewide	7	7.00%	14	89%
TLFFRA	42	7.25%	27	63%
Muni	17	7.00%	24	77%
810	34	6.50%	11	85%
Total	**100**	**7.00%**	**20**	**76%**

Numbers in **teal** denote improvements from the previous report

Systems With Funding Periods > 40 Years

System Name	Funding Period	System Type	Notes
Nacogdoches County Hospital District	**Infinite**	810	Expected to terminate plan
Midland Firemen's Relief & Retirement Fund	**Infinite**	TLFFRA	Proposed $47M city contribution
Sweetwater Firemen's Relief & Retirement Fund	**Infinite**	TLFFRA	Increased city contributions
Dallas Police & Fire Pension System-Combined Plan	82.0	Muni	Proposed 30-yr funding in budget
Marshall Firemen's Relief & Retirement Fund	72.0	TLFFRA	Recently triggered FSRP
Wichita Falls Firemen's Relief & Retirement Fund	56.7	TLFFRA	Recently triggered FSRP
Brownwood Firemen's Relief & Retirement Fund	52.8	TLFFRA	Completed FSRP
Dallas Employees' Retirement Fund	51.0	Muni	Submitted preliminary FSRP
Austin Fire Fighters Relief & Retirement Fund	48.6	Muni	Could trigger FSRP with 2024 AV
Harlingen Firemen's Relief & Retirement Fund	45.0	TLFFRA	Could trigger FSRP with 2025 AV

Wichita Falls Fire and Austin Fire were added to the list since the previous report
Beaumont Fire was removed from the list since the previous report

FSRP Updates

September 25, 2024

FSRP Status Changes

Status	Added	Removed
Systems Immediately Subject to 30-Year FSRP Formulation Requirement	Nacogdoches Memorial Hospital, Wichita Falls Fire	
Systems at Risk of 30-Year FSRP Formulation Requirement	Longview Fire	
Systems with Amortization Periods between 30-40 Years (not yet at risk)	N/A	
Previously Submitted FSRPs – Legacy FSRPs	N/A	Wichita Falls Fire
Systems That Previously Completed FSRP Requirement		N/A

Systems Immediately Subject to 30-Year FSRP Formulation Requirement

These systems had amortization periods above the applicable threshold (40 years prior to September 1, 2021 and 30 years thereafter) for three consecutive annual actuarial valuations (AVs), or two consecutive non-annual AVs. An FSRP must now be developed under the new law, **targeting 30 years by Sept. 1, 2025,** and must be developed by the public retirement system and the associated governmental entity in accordance with the system's governing statute.

Systems Immediately Subject to an FSRP Formulation Requirement							
Retirement System	Am Period	Date of AV	Am Period	Date of AV	Am Period	Date of most recent AV	FSRP Due Date
Midland Firemen's Relief & Retirement Fund[1,3]	Infinite	12/31/2019	Infinite	12/31/2021	Infinite	12/31/2023	9/1/2025
Beaumont Firemen's Relief & Retirement Fund[1,5]	Infinite	12/31/2020	67	12/31/2022	33	12/31/2023	9/1/2025
Dallas Employees' Retirement Fund[1,4]	51	12/31/2020	50	12/31/2021	51	12/31/2022	9/1/2025
Sweetwater Firemen's Relief & Retirement Fund[2]	63.3	12/31/2018	68.9	12/31/2020	Infinite	12/31/2022	9/1/2025
Dallas Police & Fire Pension System (Combined Plan)	63.0	1/1/2021	68.0	1/1/2022	82.0	1/1/2023	9/1/2025
Marshall Firemen's Relief & Retirement Fund[1,6]	59.0	12/31/2018	41.0	12/31/2020	72.0	12/31/2022	9/1/2025
Nacogdoches County Hospital District	Infinite	7/1/2021	Infinite	7/1/2022	Infinite	7/1/2023	9/1/2025
Wichita Falls Firemen's Relief & Retirement Fund[6]	43.3	1/1/2020	32.1	1/1/2022	56.7	1/1/2024	1/1/2026

[1] Previously submitted an FSRP or Revised FSRP under previous law.
[2] Previously completed an FSRP or Revised FSRP under previous law.
[3] Triggering valuation was 12/31/2017
[4] Triggering valuation was 12/31/2019
[5] Triggering valuation was 12/31/2018
[6] Previously adhering to Legacy FSRP

Orange font indicates the triggering valuation.

Systems at Risk of 30-Year FSRP Formulation Requirement

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

Systems at Risk of an FSRP - Not Yet Subject to FSRP Requirement							
Retirement System	Am Period	Date of AV	Am Period	Date of AV	Am Period	Date of AV	Funded Ratio
Austin Fire Fighters Relief & Retirement Fund	23.3	12/31/2020	35.7	12/31/2022	48.6	12/31/2023	85.6%
Greenville Firemen's Relief & Retirement Fund	40.7	12/31/2018	36.6	12/31/2020	35.0	12/31/2022	41.0%
Harlingen Firemen's Relief & Retirement Fund	38.0	9/30/2019	23.0	9/30/2021	45.0	9/30/2023	62.3%
Longview Firefighter's Relief & Retirement Fund	Infinite	12/31/2021	27.6	12/31/2022	32.0	12/31/2023	70.5%
McAllen Firemen's Relief & Retirement Fund	Infinite	9/30/2018	27.7	9/30/2020	34.6	9/30/2022	68.7%
San Benito Firemen Relief & Retirement Fund	26.1	9/30/2019	16.9	9/30/2021	32.0	9/30/2023	62.2%

Orange font indicates the amortization period above the applicable threshold.
Teal font indicates funded ratio less than 65%

Systems with Amortization Periods between 30-40 Years (not yet at risk)

These systems have not yet triggered the requirement to notify their sponsors that their amortization period is above the FSRP threshold of 30 years. This list is intended to keep the board apprised of systems that may receive a subsequent AV showing an amortization period above 30 years, thus becoming at-risk of triggering the FSRP requirement.

Systems not yet at Risk of an FSRP - Not Subject to FSRP Requirement							
Retirement System	Am Period	Date of AV	Am Period	Date of AV	Am Period	Date of AV	Funded Ratio
Galveston Firemen's Relief & Retirement Fund[1]	Completed FSRP		30.9	12/31/2022	31.6	12/31/2023	65.3%
Laredo Firefighters Retirement System[1]	Completed FSRP prior to 9/30/22 AV				31.1	9/30/2022	**59.1%**

[1] System remains on track to be fully funded by 9/1/2055 according to pre-9/1/2025 FSRP requirement.

Teal font indicates funded ratio less than 65%

Progress Report on Previously Submitted FSRPs – Legacy FSRPs

The following systems formulated and submitted an FSRP before Sept. 1, 2021. The table below outlines their progress towards the FSRP requirement.

Systems Still Working Towards Meeting the Target Amortization Period Requirement						
Retirement System	FSRP Trigger		Current Progress[1]			
	Am Period	Date	Am Period	Date	Target Date[2]	Next AV Expected
Plainview Firemen's Relief & Retirement Fund	79.7	12/31/2019	33.0	12/31/2021	2031	2025
Fort Worth Employees' Retirement Fund	72.5	12/31/2015	32.0	12/31/2023	2029	2025

[1] Based on the most recent actuarial valuation or FSRP.

[2] The year in which a system must reach an amortization period target.

Systems That Previously Completed FSRP Requirement

The following systems have submitted an FSRP or subsequent actuarial valuation that has demonstrated projected full funding prior to September 1, 2055.

Systems that Have Submitted Post-FSRP Actuarial Valuations Showing Amortization Period at or Below 30 Years				
Retirement System	FSRP Trigger		Completed Progress[1]	
	Am Period	Date	Am Period	Date
Atlanta Firemen's Relief & Retirement Fund	Infinite	12/31/2020	26.6	12/31/2022
Brownwood Firemen's Relief & Retirement Fund	52.8	12/31/2021	31[2]	12/31/2021
Galveston Employees' Retirement Plan for Police	55.1	1/1/2014	27	1/1/2021
Galveston Firefighter's Relief & Retirement Fund	51.6	12/31/2021	30[2]	12/31/2021
Irving Firemen's Relief & Retirement Fund - Revised FSRP	63.4	1/1/2014	27.3[3]	12/31/2021
Laredo Firefighters Retirement System	56.8	9/30/2020	26[2]	9/30/2020
Longview Firefighter's Relief & Retirement Fund	Infinite	12/31/2018	27.5[2]	12/31/2021
Orange Firemen's Relief & Retirement Fund – Second Revised FSRP	Infinite	1/1/2019	20.7	1/1/2021
University Park Firemen's Relief & Retirement Fund – Revised FSRP	81.3	12/31/2012	26.8	12/31/2020

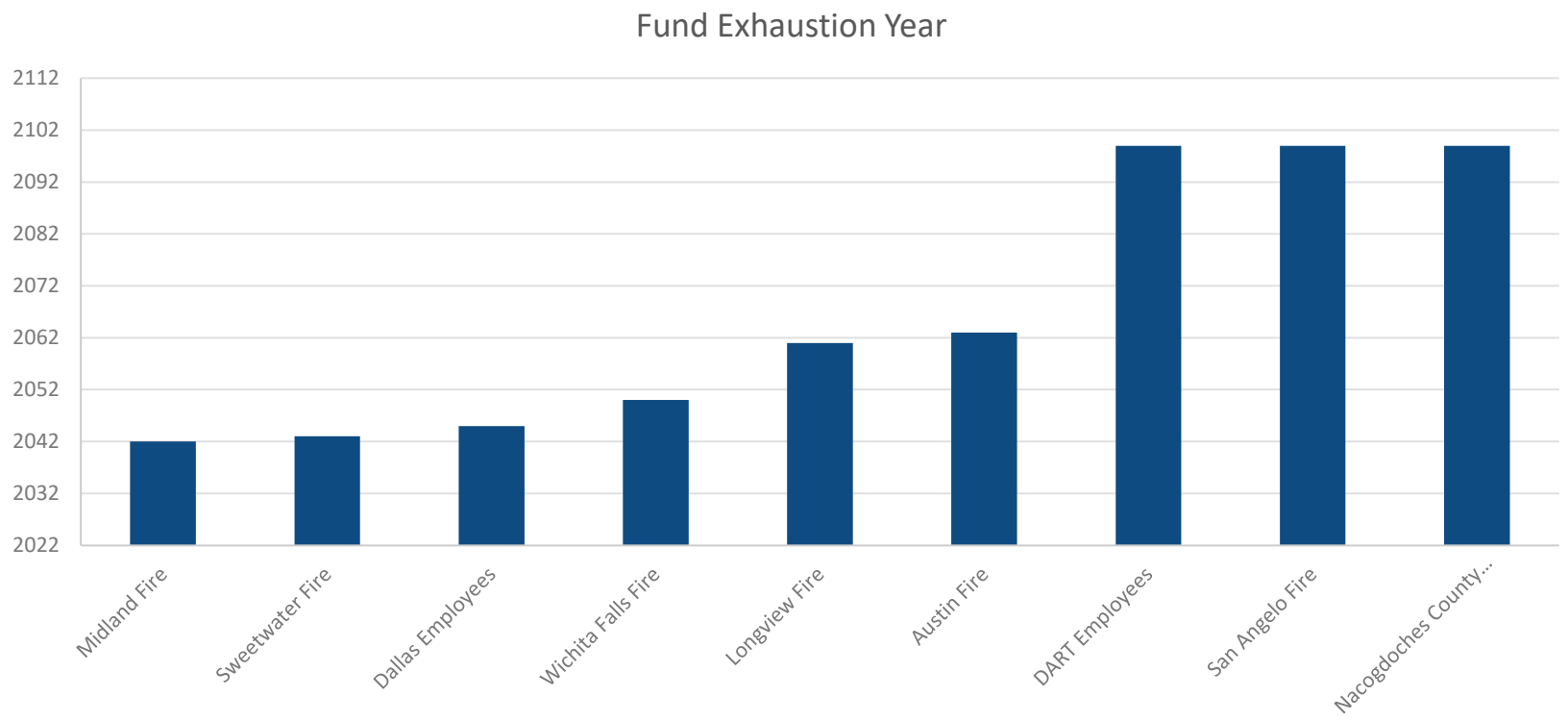
[1] Based on the valuation in which the system completed its FSRP requirement.

[2] Based on the additional analysis provided with the FSRP submission

[3] Based on the market value of assets

Appendix

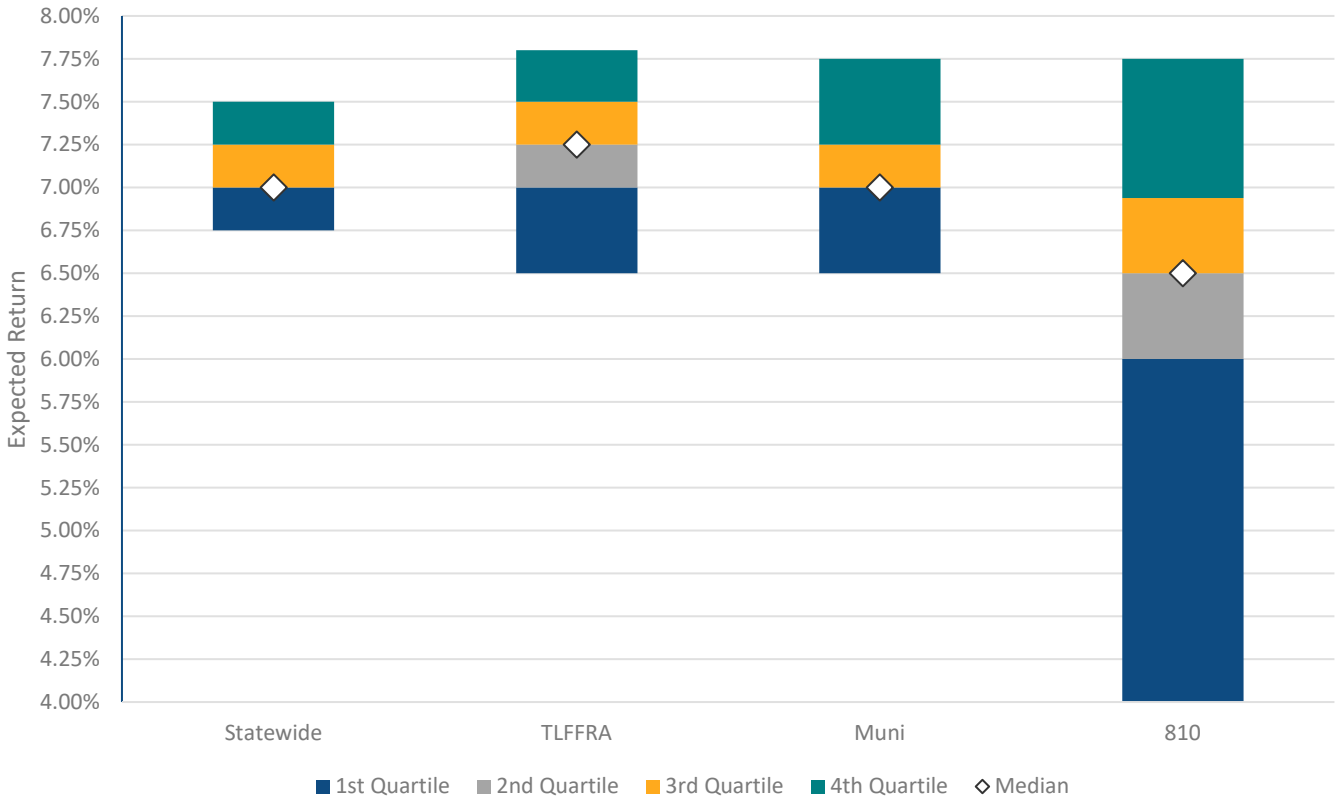
Systems With Fund Exhaustion Year



Longview Fire and Austin Fire were added to the list since the previous report.
LECOSRF, JRS II, Austin Employees and Beaumont Fire were removed since the previous report.

2099 is a placeholder for DART, San Angelo Fire, and Nacogdoches

Expected Return on Assets (Discount Rate)

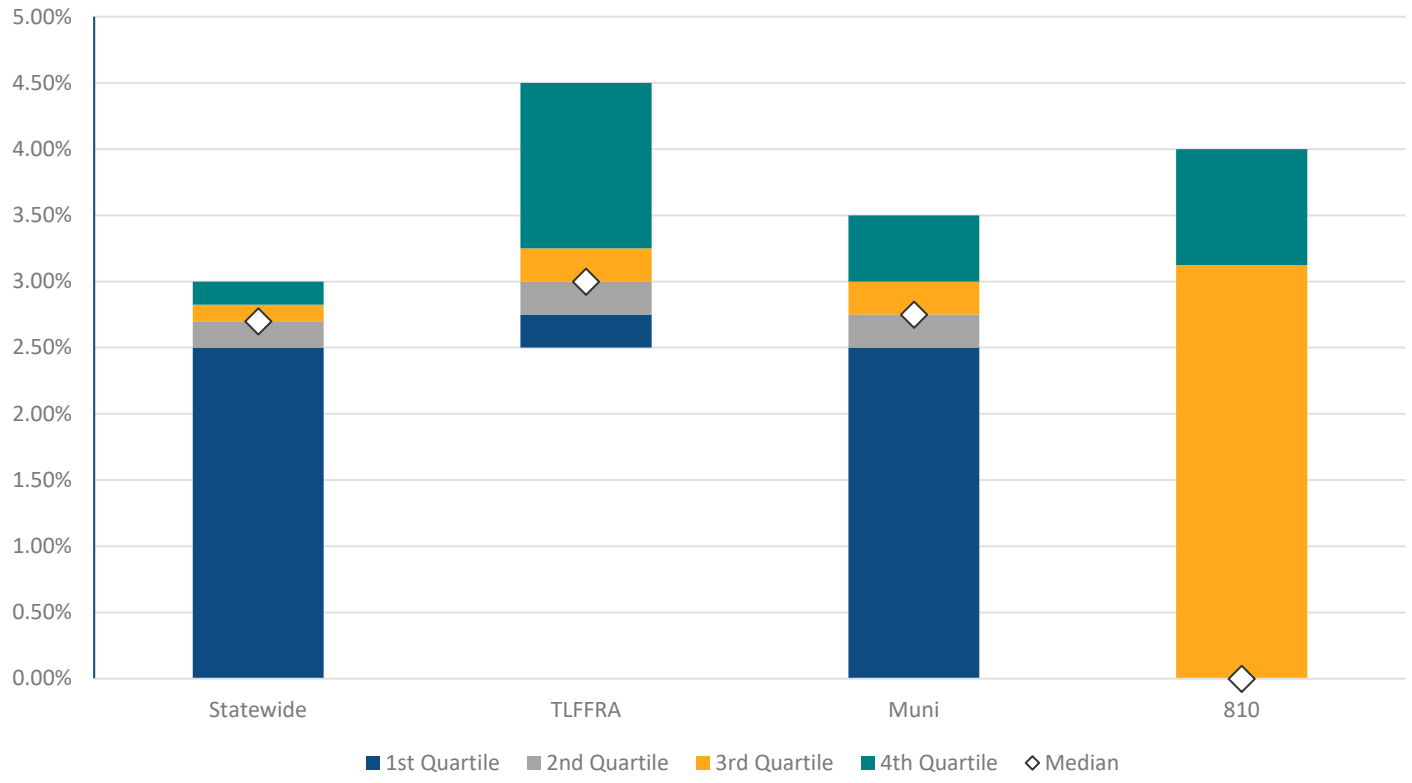


Systems with Discount Rate Above 7.5 Percent

System Name	Discount Rate	System Type
San Angelo Firemen's Relief & Retirement Fund	7.80%	TLFFRA
Big Spring Firemen's Relief & Retirement Fund	7.75%	TLFFRA
El Paso Firemen & Policemen's Pension Staff Plan	7.75%	810
El Paso Firemen's Pension Fund	7.75%	Muni
El Paso Police Pension Fund	7.75%	Muni
Harlingen Firemen's Relief & Retirement Fund	7.75%	TLFFRA
Orange Firemen's Relief & Retirement Fund	7.75%	TLFFRA
Temple Firemen's Relief & Retirement Fund	7.75%	TLFFRA

Wichita Falls Fire was removed from the list since the previous report

Expected Payroll Growth Rate



Systems With Actual 10-Year Payroll Growth Missing Expectations by More Than 75 bp

System Name	Expected Payroll Growth Rate	Actual Payroll Growth Rate	City Population Growth Rate[1]	Expected Inflation[2]	System Type
Arlington Employees	3.00%	1.10%	0.76%	2.50%	810
Austin Police	2.50%	0.88%	2.33%	2.50%	Muni
Big Spring Fire	4.50%	3.57%	-0.43%	3.00%	TLFFRA
Harlingen Fire	3.50%	2.58%	1.03%	2.50%	TLFFRA
Houston Fire	3.00%	0.59%	0.94%	2.50%	Muni
Marshall Fire	3.25%	2.43%	-0.06%	2.50%	TLFFRA
San Antonio Fire & Police	3.00%	2.10%	0.78%	3.00%	Muni
San Benito Fire	3.00%	2.09%	1.51%	2.50%	TLFFRA
Texarkana Fire	2.90%	1.05%	-0.06%	2.90%	TLFFRA

[1] A growing city supports a higher payroll growth assumption

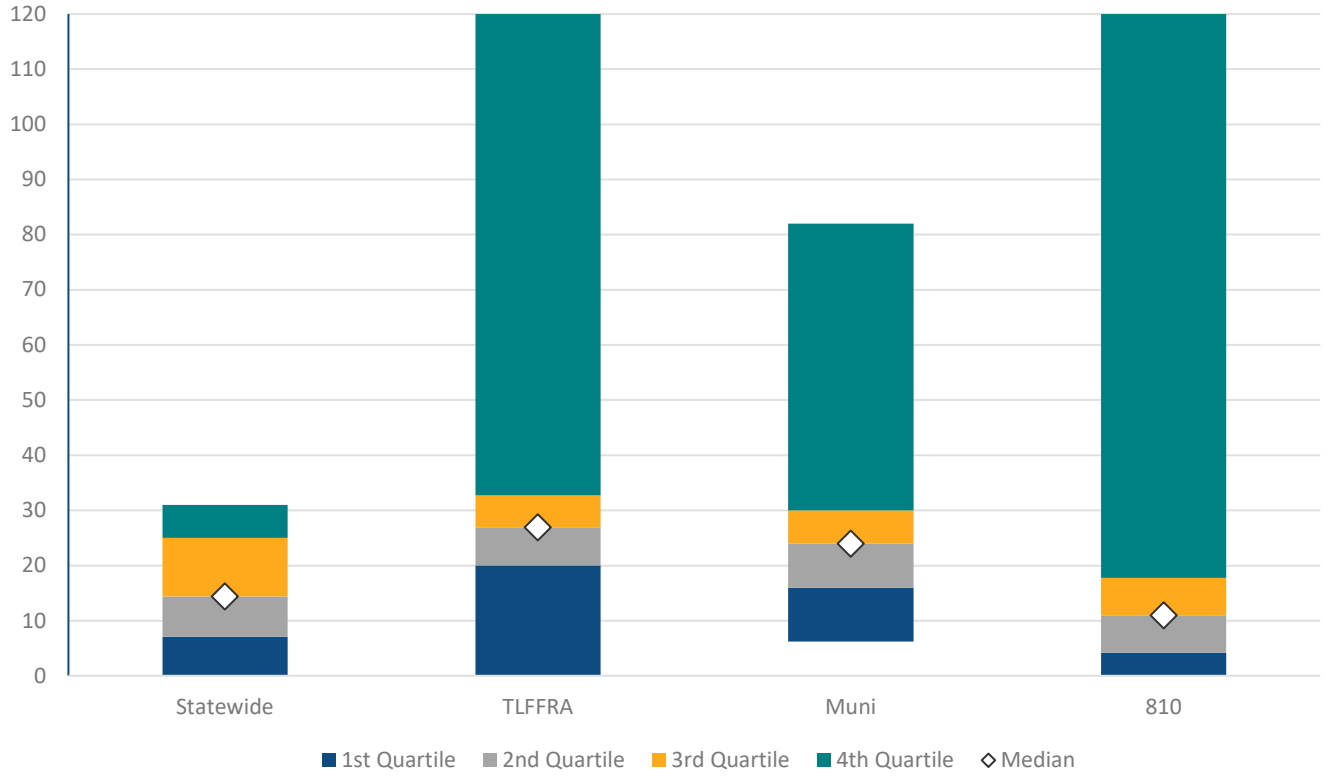
[2] A payroll growth assumption equal to expected inflation may not be considered aggressive

Funding Period To Avoid Negative Amortization

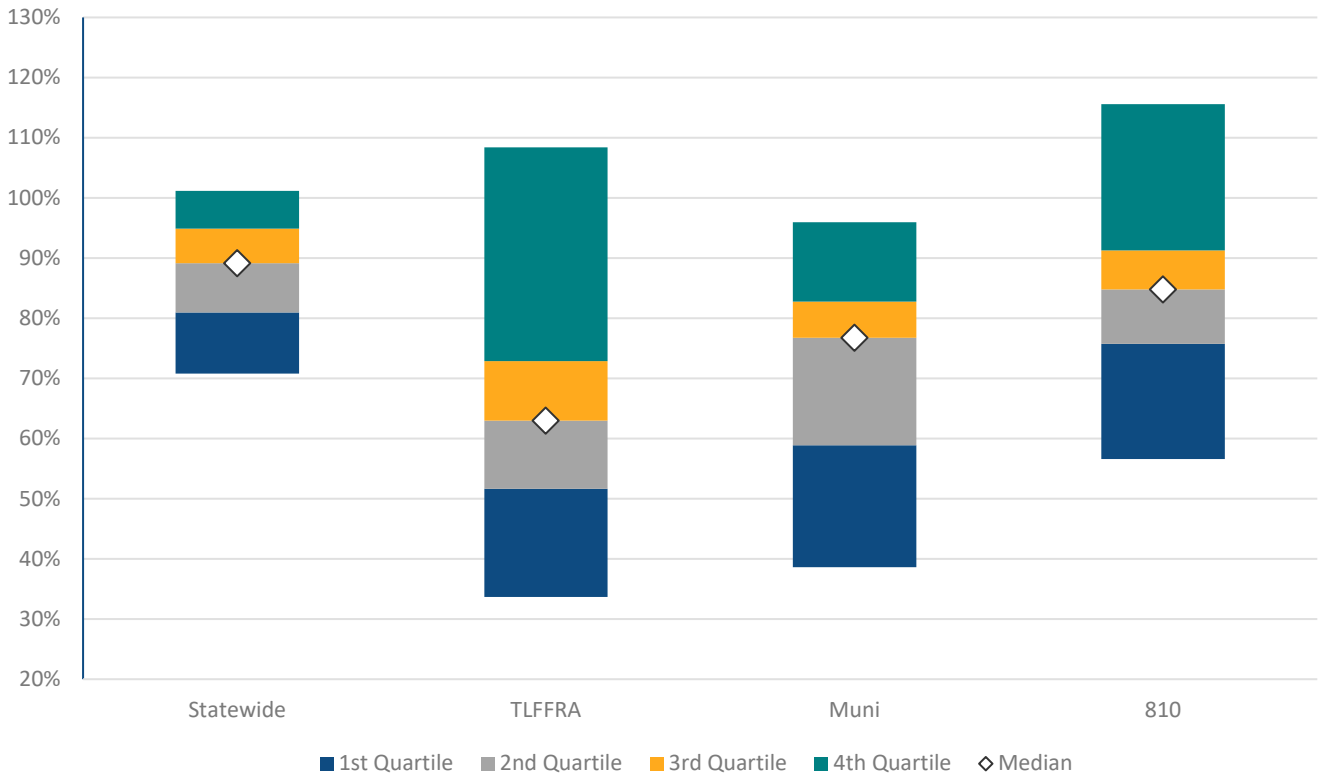
Expected Return

Expected Payroll Growth	6.75%	7.00%	7.25%	7.50%	7.75%
4.25% 4.50%	18	18	18	18	(18) Big Spring Fire
4.00%	20	(19) Waxahachie Fire	(19) Greenville Fire, Conroe Fire	18	18
3.75%	20	20	19	19	(19) Temple Fire
3.50%	(21) Citizens Medical Ctr	(20) DFW Airport, Galveston Police	(20) Paris Fire	20	(19) Harlingen Fire, San Angelo Fire
3.25%	21	(21) San Antonio Metro, University Health	(21) Weslaco Fire, Marshall Fire	(20) Lubbock Fire, Plainview Fire, Beaumont Fire	20
3.00%	(22) Denton Fire	(22) FWERF, Houston Fire, Midland Fire, Odessa Fire	(21) Austin Police, San Antonio F&P, Texas City Fire	(21) Abilene Fire, Cleburne Fire, Longview Fire, San Benito Fire, Sweetwater Fire, TCDRS, Wichita Falls Fire	21
2.75%	(23) Irving Supplemental, Plano, TMRS	(23) Atlanta Fire, Brownwood Fire, Houston Muni, Houston Police, Irving Fire, Tyler Fire	(22) Galveston Employees, Killeen Fire, Lufkin Fire, Port Arthur Fire	(22) Amarillo Fire, Galveston Fire, Laredo Fire	(21) El Paso Fire, El Paso Police, El Paso Staff

Funding Period



Funded Ratio



Systems with Funded Ratios < 50 Percent

System Name	Total Funded Ratio	Retiree Funded Ratio	System Type
Marshall Firemen's Relief & Retirement Fund	33.7	61.5	TLFFRA
Odessa Firemen's Relief & Retirement Fund*	36.4	51.2	TLFFRA
Dallas Police & Fire Pension System-Supplemental*	38.7	51.4	Muni
Dallas Police & Fire Pension System-Combined Plan	39.1	57.6	Muni
Greenville Firemen's Relief & Retirement Fund	41.0	77.1	TLFFRA
Texas City Firemen's Relief & Retirement Fund*	42.2	59.1	TLFFRA
Galveston Employees' Retirement Plan for Police*	42.8	70.8	Muni
Midland Firemen's Relief & Retirement Fund	43.1	78.3	TLFFRA
Plainview Firemen's Relief & Retirement Fund	43.6	72.1	TLFFRA
University Park Firemen's Relief & Retirement Fund*	44.9	77.4	TLFFRA
Abilene Firemen's Relief & Retirement Fund*	45.3	66.5	TLFFRA
Brownwood Firemen's Relief & Retirement Fund	46.2	78.9	TLFFRA
Orange Firemen's Relief & Retirement Fund	47.8	73.2	TLFFRA

Paris Fire was removed since the previous report.

*Amortization period is under 30

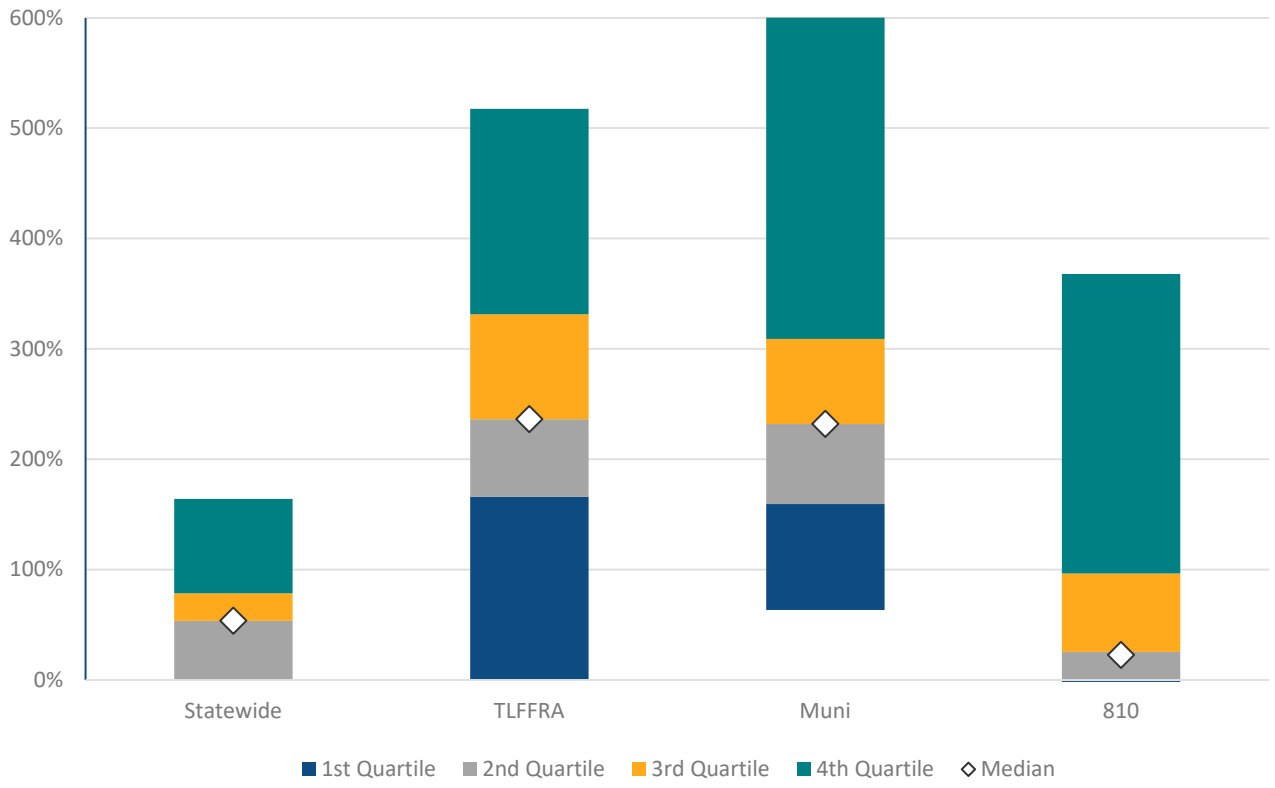
Additional Systems with Retiree Funded Ratios < 100 Percent

System Name	Total Funded Ratio	Retiree Funded Ratio	System Type
Sweetwater Firemen's Relief & Retirement Fund	55.1	76.2	TLFFRA
Capital MTA Bargaining*	63.4	77.6	810
Beaumont Firemen's Relief & Retirement Fund	55.4	92.4	TLFFRA
Fort Worth Employees' Retirement Fund	55.1	94.6	Muni
Brazos River Authority Retirement Plan*	73.5	96.7	810

DART Employees was removed from the list since the previous report.
No systems were added to the list

*Amortization period is under 30

UAAL as Percentage of Payroll

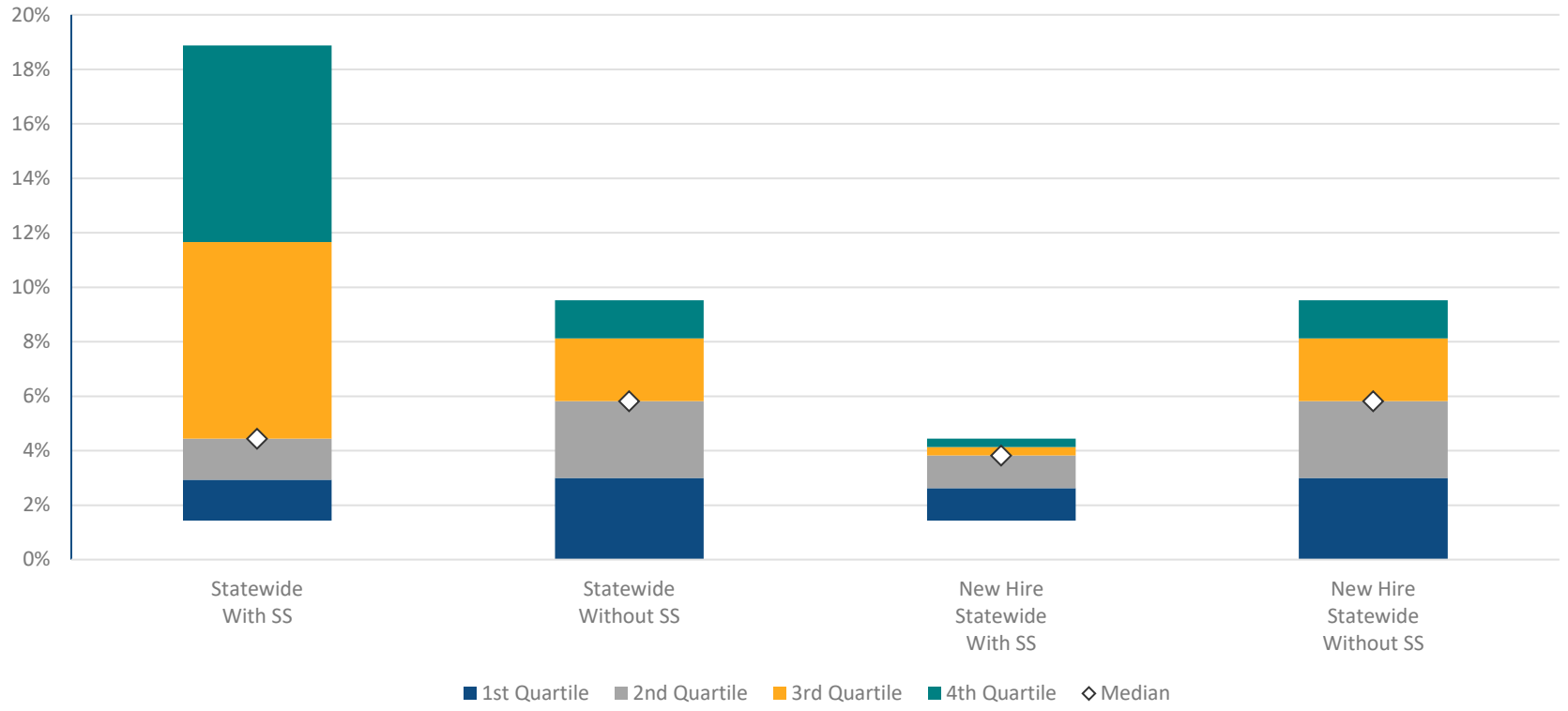


Systems With UAAL as Percent of Pay > 300 Percent and Funding Period >30

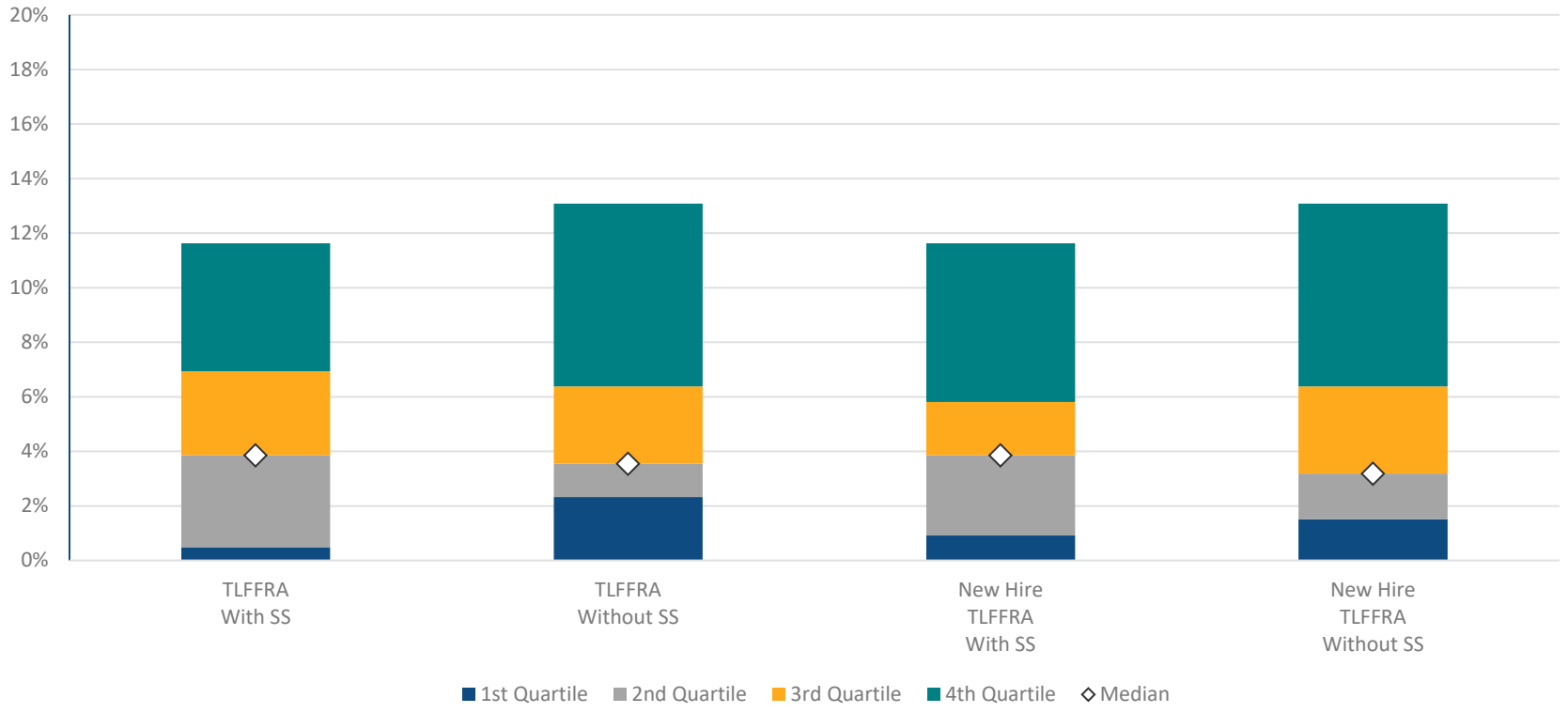
System Name	UAAL % of Pay	Funding Period	System Type
Midland Firemen's Relief & Retirement Fund	467%	Infinite	TLFFRA
Sweetwater Firemen's Relief & Retirement Fund	440%	Infinite	TLFFRA
Dallas Police & Fire Pension System-Combined Plan	690%	82.0	Muni
Marshall Firemen's Relief & Retirement Fund	517%	72.0	TLFFRA
Wichita Falls Firemen's Relief & Retirement Fund	368%	56.7	TLFFRA
Brownwood Firemen's Relief & Retirement Fund	304%	52.8	TLFFRA
Greenville Firemen's Relief & Retirement Fund	380%	35.0	TLFFRA
Orange Firemen's Relief & Retirement Fund	321%	34.5	TLFFRA
Plainview Firemen's Relief & Retirement Fund	451%	33.0	TLFFRA
Beaumont Firemen's Relief & Retirement Fund	374%	33.0	TLFFRA
Fort Worth Employees' Retirement Fund	393%	32.0	Muni
Laredo Firefighters Retirement System	314%	31.1	TLFFRA

Wichita Falls Fire was added to the list since the previous report.

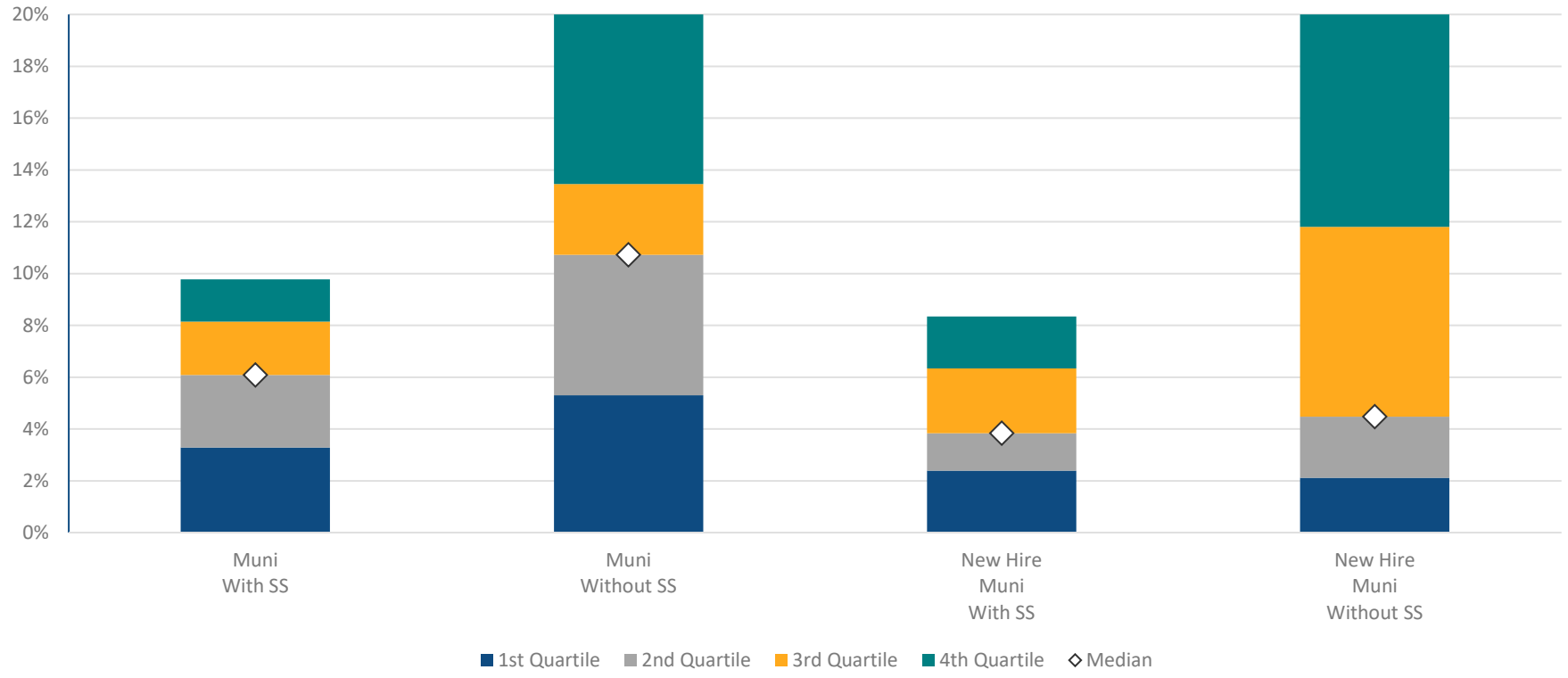
Employer Normal Cost – Statewide Systems



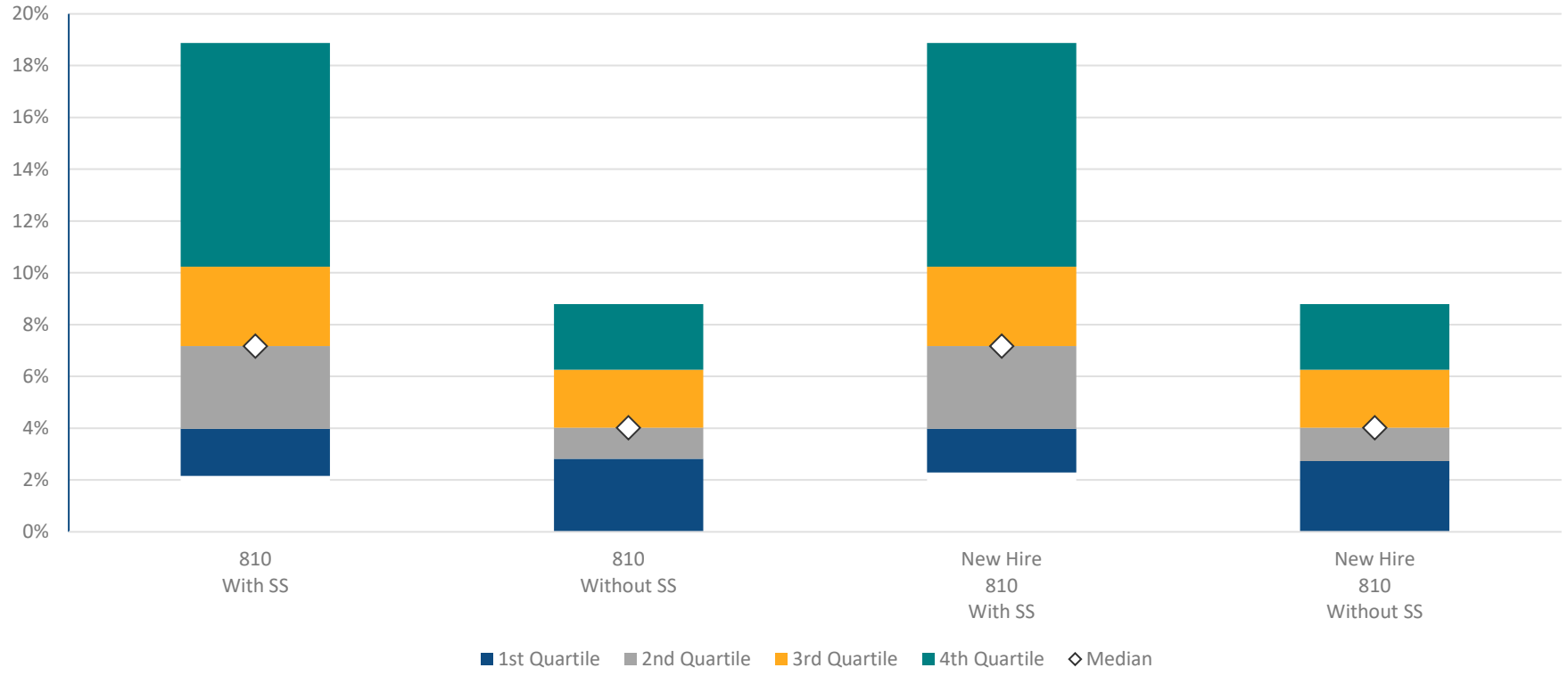
Employer Normal Cost – TLFFRA Systems



Employer Normal Cost – Municipal Systems



Employer Normal Cost – 810 Systems



Systems With Employer Normal Costs < 1 Percent

System Name	Employer Normal Cost	Normalized Employer Normal Cost	Social Security	System Type
El Paso Police	-3.3%	-1.1%	N	Muni
Texas City Fire	-1.9%	-1.1%	N	TLFFRA
Galveston Police	-0.9%	-0.9%	Y	Muni
Orange Fire	-0.9%	1.1%	Y	TLFFRA
Abilene Fire	-0.5%	1.0%	N	TLFFRA
Longview Fire	0.0%	1.7%	N	TLFFRA
Odessa Fire	0.3%	0.3%	Y	TLFFRA
Corsicana Fire	0.3%	0.3%	Y	TLFFRA
Plainview Fire	0.4%	2.0%	N	TLFFRA
Wichita Falls Fire	0.5%	1.8%	Y	TLFFRA
El Paso Fire	0.0%	2.7%	N	Muni

Normalized employer normal cost is based on an estimated normal cost if the system had assumed 7% expected returns

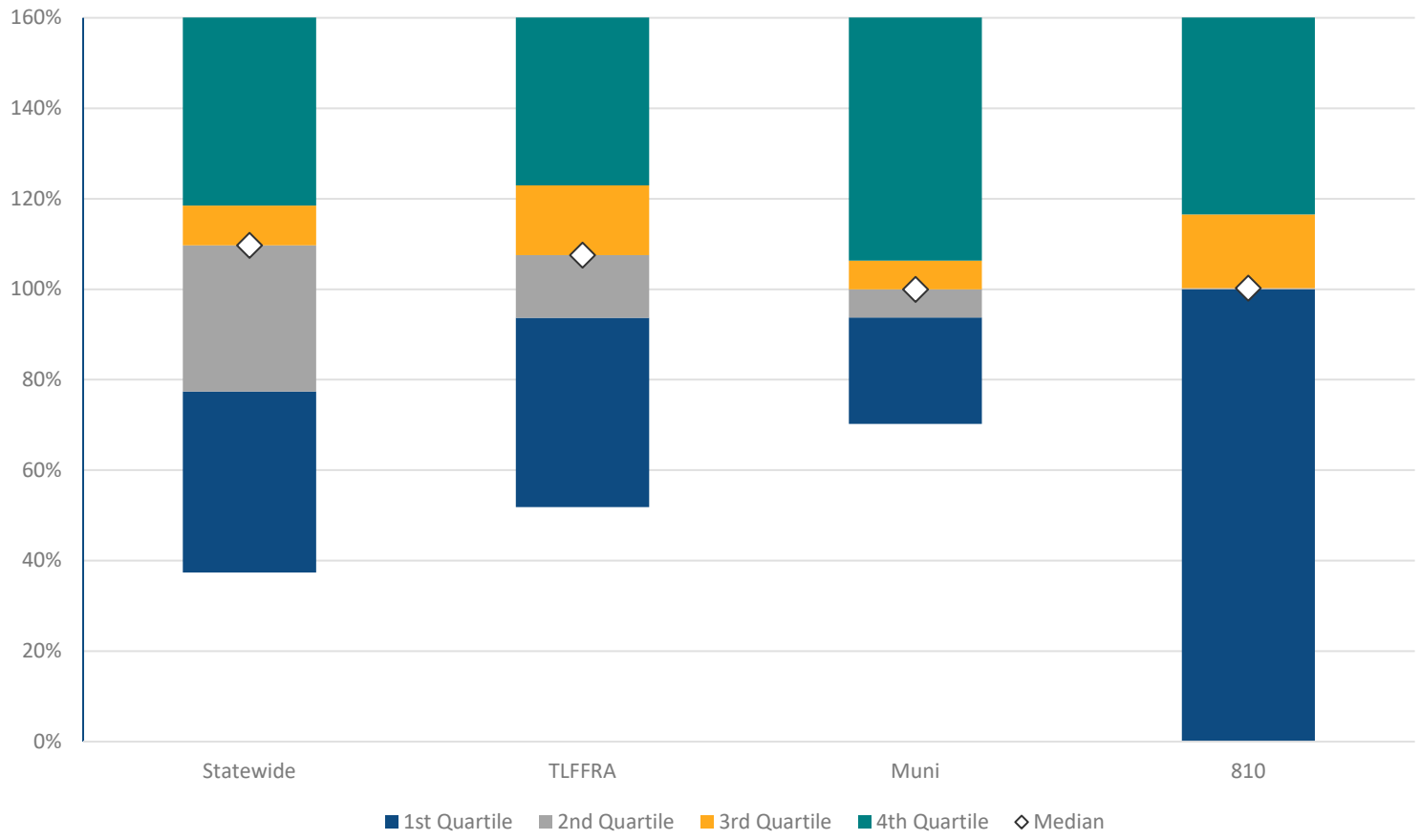
Systems With Employer Normal Costs for New Hires at or Below Zero Percent

System Name	Employer Normal Cost	Normalized Employer Normal Cost	Social Security	System Type
Abilene Fire	-4.5%	-3.4%	N	TLFFRA
Galveston Police	-2.6%	-2.6%	Y	Muni
Texas City Fire	-1.9%	-1.1%	N	TLFFRA
Wichita Falls Fire	-1.6%	0.1%	Y	TLFFRA
Orange Fire	-0.9%	1.1%	Y	TLFFRA
Beaumont Fire*	-0.8%	0.9%	N	TLFFRA
Longview Fire	-0.7%	0.7%	N	TLFFRA
El Paso Police	-0.4%	2.3%	N	Muni
Marshall Fire*	0.0%	0.8%	N	TLFFRA

* Not on previous list

Normalized employer normal cost is based on an estimated normal cost if the system had assumed 7% expected returns

Employer Percent of Recommended Contribution



Employers Contributing < 90 Percent of Recommended Contribution

System Name	Employer Portion	System Type
Nacogdoches Memorial Hospital	0%	810
Midland Firemen's Relief & Retirement Fund	52%	TLFFRA
Beaumont Firemen's Relief & Retirement Fund	76%	TLFFRA
Dallas Employees' Retirement Fund	70%	Muni
Dallas Police & Fire Pension System – Combined Plan	74%	Muni
Fort Worth Employees' Retirement Fund	84%	Muni
Galveston Firefighters Relief & Retirement Fund	82%	TLFFRA
Sweetwater Firemen's Relief & Retirement Fund	85%	TLFFRA
Atlanta Firemen's Relief & Retirement Fund	86%	TLFFRA
Brownwood Firemen's Relief & Retirement Fund	87%	TLFFRA
Austin Employees' Retirement System	88%	Muni
Laredo Firefighters Retirement System	88%	TLFFRA

Illustration of 30-Year Amortization Period

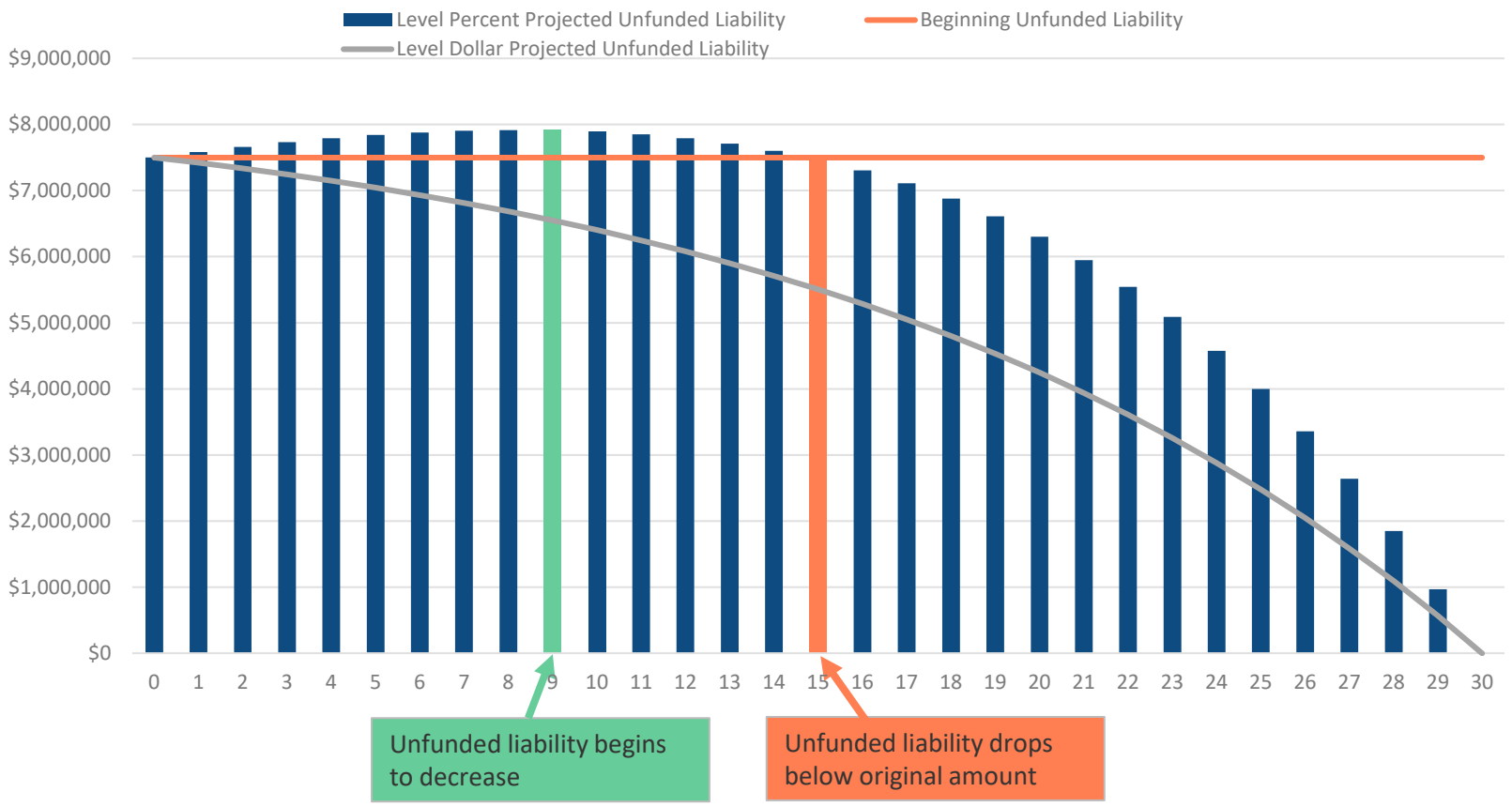
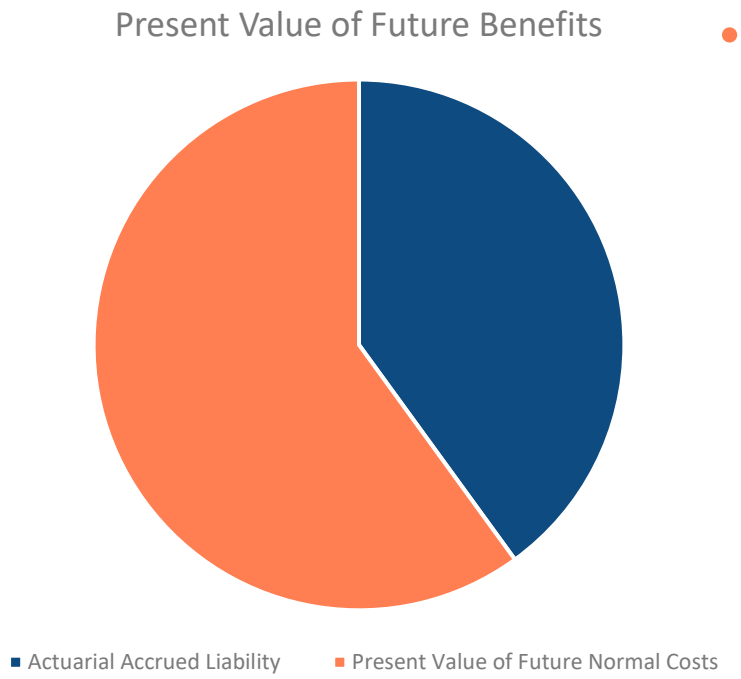


Chart illustrates amortization of $7.5 million unfunded liability using 7 percent expected returns and 3 percent payroll growth

Actuarial Terminology



- Example: Member with 10 years of service
  - Expected to retire with 25 years of service
  - Present value of future benefits (PVFB) is the whole pie (25 years)
  - Actuarial accrued liability is the blue section of pie only (10 years)
  - The remainder of the PVFB will be recognized over 15 future years through normal cost

What if payroll growth is less than expected?

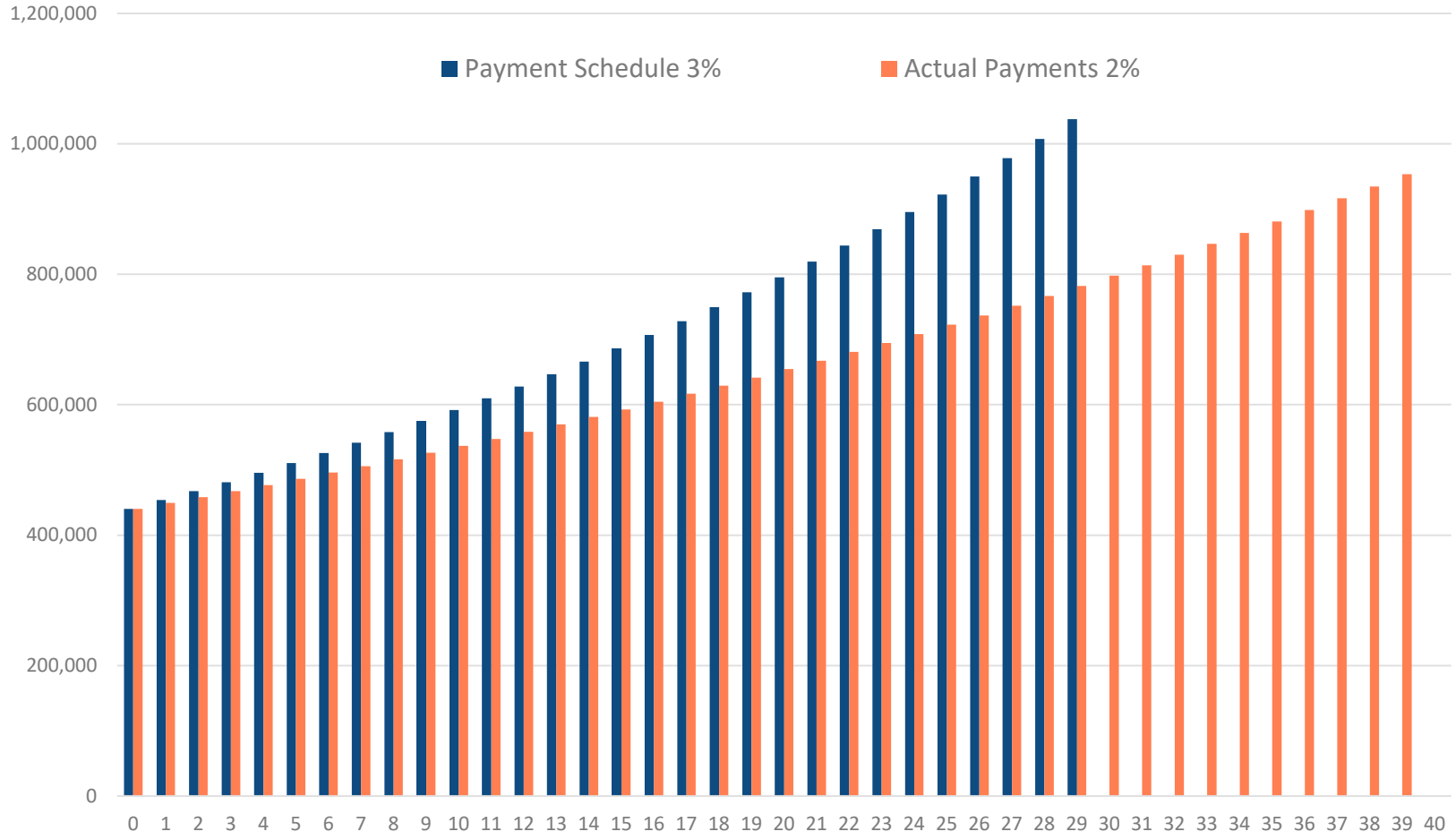


Chart illustrates amortization of $7.5 million unfunded liability using 7 percent expected returns and 3 percent payroll growth

Avoiding Negative Amortization

- Unfunded liability growth over next year
  - The unfunded liability will grow with:
    - Interest
    - Normal cost
  - The unfunded liability will decrease with:
    - Contributions
- To avoid an expected increase in unfunded liability
  - Expected contributions must cover
    - Interest on the unfunded liability
      - To avoid growth in the existing unfunded liability
    - Normal cost
      - To avoid creating new unfunded liability

Appendix H – Public Retirement System Compliance with Minimum Educational Training Requirements

Public Retirement System Compliance with Minimum Educational Training Requirements
Texas Pension Review Board
As of November 15, 2024

This report contains MET compliance for Texas public retirement system trustees and system administrators. Compliance is determined by reports submitted to the PRB.

Compliant: has successfully completed previous training cycle
Not Compliant: has been not compliant in one or more previous training cycles
In Progress: working toward completion of current training cycle
Exempt: systems that have met the criteria for their system administrators to be exempt from MET requirements

Abilene Firemen's Relief & Retirement Fund		**62.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Cadon Barrett	Active	Not Compliant
Chad Hoes	Citizen	Not Compliant
Brian Yates	Mayor Designee	Not Compliant
Marjorie Knight	CFO	In Progress
Baker Bryant	Active	Compliant
Ken Dozier	Citizen	Compliant
Kevin Johnson	Active	Compliant
Rodney Goodman	**System Administrator**	Compliant

Amarillo Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Rodney Ruthart	Citizen	Not Compliant
Dean Frigo	Citizen	In Progress
Cole Stanley	Mayor Designee	In Progress
Laura Storrs	CFO	In Progress
Chris Shelburne	Active	Compliant
Jeffrey Loyless	Active	Compliant
Timothy Rankin	Active	Compliant
Katrina Owens	**System Administrator**	In Progress

Arlington Employees Deferred Income Plan		**42.86% Compliant**
Name	**Trustee Type**	**Compliance Status**
Pete Jamieson	Retired	Not Compliant
Jake Medrano	Active	Not Compliant
Lemuel Randolph	Active	Not Compliant
Gincy Thoppil	Active	Not Compliant
Alexander Jones	Active	In Progress
April Nixon	Active	In Progress
Alissa Pierce	**System Administrator**	In Progress

Atlanta Firemen's Relief & Retirement Fund		**71.43% Compliant**
Name	**Trustee Type**	**Compliance Status**
Daniel Camp	Active	Not Compliant
Mark Hill	Active	Not Compliant
James Brooks	Mayor	In Progress
Darrell Godwin	Citizen	In Progress
Alisha Long	CFO	In Progress
Curtis Whitlow	Citizen	In Progress
Ricky Draper	Active	Compliant
	System Administrator	Exempt

City of Austin Employees' Retirement System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Kelly Crook	City Council Appointed Citizen	In Progress
Leslie Pool	City Council Member	In Progress
Michael Benson	Elected Retiree	Compliant
Michael Granof	Board Appointed Citizen	Compliant
Dick Lavine	City Council Appointed Citizen	Compliant
Yuejiao Liu	Elected Active	Compliant
Chris Noack	Elected Active	Compliant
Anthony Ross, Sr.	Elected Retiree	Compliant
Brad Sinclair	Elected Active	Compliant
Diana Thomas	City Manager Designee	Compliant
Ed Van Eenoo	Appointed Member	Compliant
Chris Hanson	**System Administrator**	In Progress

Austin Firefighters Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
John Bass	Active	In Progress
Doug Fowler	Retired	In Progress
Kirk Watson	Mayor	In Progress
Aaron Woolverton	Retired	In Progress
Belinda Weaver	City Representative	Compliant
Anumeha Kumar	**System Administrator**	Compliant

Austin Police Retirement System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Michael Burgeson	Active	In Progress
Keith Harrison	Retired	In Progress
Shelly Holmstrom	Active	In Progress
Mackenzie Kelly	City Council Member	In Progress
Kerri Lang	City Manager Designee	In Progress
Christopher Salacki	Active	In Progress
Sheldon Askew	Active	Compliant
Michael Cowden	Retired	Compliant
Michael Granof	City Council Appointee	Compliant
Diana Thomas	Director of Finance Designee	Compliant
Chelsey Wood	Board Appointee	Compliant
Pattie Featherston	**System Administrator**	Compliant

Beaumont Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Charles Heare	Mayor Designee	In Progress
Kevin Dectoux	Citizen	In Progress
Cheryl Ray	CFO	In Progress
William Cheshire	Active	Compliant
Laura Clark	Citizen	Compliant
Brian Herbet	Active	Compliant
Luke Skelton	Active	Compliant
Joni Hanley	**System Administrator**	Not Compliant

Big Spring Firemen's Relief & Retirement Fund		**83.33% Compliant**
Name	**Trustee Type**	**Compliance Status**
Todd Darden	Mayor Designee	Not Compliant
Paul Brown	Citizen	In Progress
Chanley Delk	Active	In Progress
Chad Pederson	Active	In Progress
Jake Sparks	Active	In Progress
Cecil Cevallos	Citizen	Compliant
	System Administrator	Exempt

Brazos River Authority Retirement Plan		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Christine Glese	Trustee	In Progress
Jen Henderson	Trustee	In Progress
Helen Jimenez	Trustee	In Progress
Judy Krohn	Trustee	In Progress
Ford Taylor	Trustee	In Progress
Michele Giroir	**System Administrator**	In Progress

Brownwood Firemen's Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
John Cadenhead	Active	Compliant
William Campbell	Active	Compliant
Melanie Larose	CFO	Compliant
Jesse Mendoza	Mayor's Designee	Compliant
Robert Myers	Retired Citizen	Compliant
Chad Sauceda	Citizen	Compliant
Joe Stieber	Active	Compliant
	System Administrator	Exempt

Capital MTA Retirement Plan for Administrative Employees		**40% Compliant**
Name	**Trustee Type**	**Compliance Status**
Donna Simmons	Active	Not Compliant
Gardner Tabon	Active	Not Compliant
Cheyenne Krause	Active	Not Compliant
Nadia Nahvi	Active	In Progress
Virginia Keeling	Retired	Compliant
	System Administrator	Exempt

Capital MTA Retirement Plan for Bargaining Unit Employees		**50% Compliant**
Name	**Trustee Type**	**Compliance Status**
Kerri Butcher	Employer	Not Compliant
Donna Simmons	Employer	Not Compliant
Greg Talley	Active	Not Compliant
Michael Conlan	Employer	In Progress
Brent Payne	Retiree	Compliant
Lawrence Prosser	Active	Compliant
	System Administrator	Exempt

City of El Paso Employees Retirement Trust		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Karina Brasgalla	Active	In Progress
Art Fierro	City Representative	In Progress
Deborah Hamlyn	Citizen	In Progress
Matt Kerr	Citizen	In Progress
Joe Molinar	City Representative	In Progress
Rene Pena	Citizen	In Progress
Karl Rimkus	Active	In Progress
Robert Studer	Active	In Progress
Isaura Valdez	Active	In Progress
Robert Ash	**System Administrator**	Compliant

Cleburne Firemen's Relief & Retirement Fund		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Rhonda Daugherty	CFO	Not Compliant
Sean Herren	Active	Not Compliant
Howard Lilagore	Active	Not Compliant
Eddie Norton	Citizen	Not Compliant
John Harrell	Active	Not Compliant
Steve Polasek	Mayor Designee	Not Compliant
	System Administrator	Exempt

Colorado River Municipal Water District Defined Benefit Retirement Plan & Trust		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Karla Olivia	Active	Not Compliant
John Grant	Active	Not Compliant
Anna DeLeon	Active	In Progress
Dan Hollman	Employer	In Progress
Steve Mackey	Employer	In Progress
Richard Steel	Employer	In Progress
Cole Walker	Active	In Progress
John Womack	Active	In Progress
	System Administrator	Exempt

Conroe Fire Fighters' Retirement Fund		**71.43% Compliant**
Name	**Trustee Type**	**Compliance Status**
Marcus Winberry	Mayor Designee	Not Compliant
Cary Wortham	Citizen	Not Compliant
Collin Boothe	Citizen	Compliant
Steve Cottar	Active	Compliant
Tom Garvey	Active	Compliant
Gordon Mizrany	Active	Compliant
Lon Nesom	Citizen	Compliant
	System Administrator	Exempt

Corpus Christi Fire Fighters' Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Michael Gilley	Active	In Progress
Christopher Guilianelle	Active	In Progress
Heather Hulbert	CFO	In Progress
Ernest Rivas	Active	In Progress
Darron Bergstrom	Citizen	Compliant
Laurelyn Pohlmeier	Citizen	Compliant
Penn Thomas	Mayor Designee	Compliant
Gracie Flores	**System Administrator**	Compliant

Corpus Christi Regional Transportation Authority		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Gabi Canales	City Appointed Active	Not Compliant
Patricia Dominguez	Active	Not Compliant
Eloy Salazar	City Appointed Active	Not Compliant
Philip Skrobarczyk	Active	Not Compliant
Matthew Woolbright	Active	Not Compliant
Edward Martinez	Citizen	Not Compliant
Dan Leyendecker	Active	Not Compliant
Lynn Alison	Active	Not Compliant
Anna Jimenez	Active	Not Compliant
	System Administrator	Exempt

Corsicana Firemen's Relief & Retirement Fund		**42.86% Compliant**
Name	**Trustee Type**	**Compliance Status**
Travis Ellington	Active	Not Compliant
Mike Fletcher	Mayor	Not Compliant
Adam Huntsman	Active	Not Compliant
Johnny Pattison	Active	Not Compliant
Bobby Willingham	Citizen	In Progress
Ricky McGraw	Citizen	In Progress
Val Rich	CFO	In Progress
	System Administrator	Exempt

CPS Energy Pension Plan		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
James Boston	Active	In Progress
Marian Braggs	Active	In Progress
Benjamin Jordan	Active	In Progress
Annamarie Rangel	Active	In Progress
Belinda Siller	Retired	In Progress
Domingo Villarreal	Active	In Progress
Debra Wainscott	Active	In Progress
Rodney Jones	Active	Compliant
Guatam Shringarprue	Active	Compliant
Cheryl Yager	**System Administrator**	In Progress

Dallas County Hospital District Retirement Income Plan		**72.73% Compliant**
Name	**Trustee Type**	**Compliance Status**
Ramon Migiuez	Active	Not Compliant
Elizabeth Palacios	Active	Not Compliant
Marjorie Petty	Active	Not Compliant
Eric Bing	Active	In Progress
Bryon Cryer	Active	In Progress
Todd Furniss	Active	In Progress
Reina Gonzalez	Active	In Progress
Vincent Hall	Active	In Progress
Farida Minner	Active	In Progress
John Proctor	Active	In Progress
Lisa Sutter	Active	In Progress
	System Administrator	Exempt

Dallas Employees' Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
John Jenkins	Member Appointed	In Progress
Sunil King	Member Appointed	In Progress
T. Dupree Scovell	Council Appointed Citizen	In Progress
Mark Swan	City Auditor	In Progress
Dr. John Peavy III	Council Appointed Citizen	Compliant
Tina Richardson	Member Appointed	Compliant
Henry Talavera	Council Appointed Citizen	Compliant
Cheryl Alston	**System Administrator**	Compliant

Dallas Police and Fire Pension System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Michael Brown	Citizen	In Progress
Tina Hernandez Patterson	Mayoral Appointee	In Progress
Steve Idoux	Citizen	In Progress
Nicholas Merrick	Mayor Appointed Citizen	In Progress
Nancy Rocha	Elected Non-Member	In Progress
Anthony Scavuzzo	Elected Non-Member	In Progress
Matthew Shomer	Active Firefighter	In Progress
Marcus Smith	Elected Non-Member	In Progress
Michael Tanglienti	Active Police	In Progress
Tom Tull	Citizen	In Progress
Kelly Gottschalk	**System Administrator**	In Progress

Dallas/Fort Worth Airport Board DPS Retirement Plan		**83.33% Compliant**
Name	**Trustee Type**	**Compliance Status**
Henry Borbolla III	Active	Not Compliant
Joel Burns	Citizen	Not Compliant
Vernon Evans	Citizen	In Progress
Ben Leal	Citizen	In Progress
Vincent Hall	Citizen	In Progress
Angela Hunt	Citizen	In Progress
Eric Johnson	Dallas Mayor	In Progress
Mattie Parker	Fort Worth Mayor	In Progress
Mario Quintanilla	Citizen	In Progress
Demaris Simpson	Citizen	In Progress
Gloria Tarpley	Citizen	In Progress
Maruchy Cantu	**System Administrator**	In Progress

DART Employees' Defined Benefit Retirement Plan & Trust		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Marc Abraham	Member	In Progress
Jamie Adelman	Employer	In Progress
Bernard Jackson	Employer	In Progress
Alan Richardson	Active Elected Non-Operator	In Progress
Gilbert Thorpe	Active Elected Operator	In Progress
James Duff	**System Administrator**	In Progress

Denison Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Adam Doty	Citizen	Not Compliant
Laurie Alsabbagh	CFO	In Progress
Ross Brown	Active	In Progress
Robert Crawley	Mayor	In Progress
Mark Escamilla	Active	In Progress
Brenden McCloud	Active	In Progress
Lee Thornton	Citizen	In Progress
Zera Taylor	**System Administrator**	In Progress

Denton Firemen's Relief & Retirement Fund		**14.29% Compliant**
Name	**Trustee Type**	**Compliance Status**
Donald Manes	Active	Not Compliant
Derek Oswald	Active	Not Compliant
Charlie Parker	Citizen	Not Compliant
David Reeder	Active	Not Compliant
Richard Smith	Citizen	Not Compliant
Jessica Williams	CFO	In Progress
Gary Calmes	**System Administrator**	Not Compliant

El Paso Firemen & Policemen's Pension Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Lee Banks	Mayor Appointee	In Progress
Gary Borsch	City Manager Appointee	In Progress
Timothy Burns	Active Fire	In Progress
Leila Melendez	Mayor Appointee	In Progress
Bryan Silva	Active Fire	In Progress
Susanna Visconti	Mayor Appointee	In Progress
Jerry Armendariz	Active Police	Compliant
John Schneider	Active Police	Compliant
Sean Shelton	Active Police	Compliant
Paul Thomas	Active Fire	Compliant
William Veliz	City Manager Appointee	Compliant
Tyler Grossman	**System Administrator**	In Progress

Employees Retirement System of Texas		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Brian Barth	Elected Member	In Progress
Neika Clark	Elected Member	In Progress
Stuart Greenfield	Elected Member	In Progress
Catherine Melvin	Elected Member	In Progress
Craig Hester	Appointed Member	Compliant
James Kee	Appointed Member	Compliant
Porter Wilson	**System Administrator**	Compliant

Fort Worth Employees' Retirement Fund		**84.62% Compliant**
Name	**Trustee Type**	**Compliance Status**
James Lacamp	Appointed Citizen	Not Compliant
Jesus Payan	Appointed Citizen	Not Compliant
Michael Baggott	Retired Police	In Progress
Loraine Coleman	Active Municipal	In Progress
David Cook	Active Police	In Progress
Steve Purvis	Appointed Citizen	In Progress
Kara Shuror	Retired Municipal	In Progress
Landon Stallings	Retired Fire	In Progress
Stephen Stegint	Active Fire	In Progress
Doug Wilson	Appointed Citizen	In Progress
Reginald Zeno	Chief Financial Officer	In Progress
Andrea Wright	Active Municipal	Compliant
Linda Webb	**System Administrator**	In Progress

Galveston Employees' Retirement Fund		**22.23% Compliant**
Name	**Trustee Type**	**Compliance Status**
Don Davison	Citizen	Not Compliant
Rodney Low	Active	Not Compliant
Csilla Ludyani	Employer	Not Compliant
James Patterson	Citizen	Not Compliant
Lewis Rosen	Citizen	Not Compliant
Robert Simmons	Active	Not Compliant
Roland Bassett	Citizen	In Progress
Trina Jankowski	Employer	In Progress
Jacque Vasquez	**System Administrator**	Not Compliant

Galveston Employees' Retirement Plan for Police		**25% Compliant**
Name	**Trustee Type**	**Compliance Status**
Daniel Buckley	Active	Not Compliant
Geoffrey Gainer	Active	Not Compliant
Csilla Ludyani	Employer	Not Compliant
Hal Rochkind	Citizen	Not Compliant
Destin Sims	Active	Not Compliant
Roland Bassett	Citizen	In Progress
Scott Gordon	Citizen	In Progress
Jacque Vasquez	**System Administrator**	Not Compliant

Galveston Firefighter's Relief & Retirement Fund		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Clint Brown	Mayor Representative	Not Compliant
Csilla Ludyani	Employer	Not Compliant
Carol Gaylord	Citizen	In Progress
Corey Gibson	Active	In Progress
Travis Hill	Active	Compliant
John Ovalle	Citizen	Compliant
Gregg Riley	Active	Compliant
Rebecca Johnson	**System Administrator**	Compliant

Galveston Wharves Pension Plan		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Dr. Craig Brown	Active	Not Compliant
Willy Gonzalez	Trustee	Not Compliant
Shella Lidstone	Retired	Not Compliant
Harry Maxwell, Jr.	Active	Not Compliant
Mark Murchinson	Chief Financial Officer	Not Compliant
Jeff Patterson	Retired	Not Compliant
Victor Pierson	Trustee	Not Compliant
Rodger Rees	Active	Not Compliant
James Yarbrough	Retired	Not Compliant
	System Administrator	Exempt

Greenville Firemen's Relief & Retirement Fund		**28.57% Compliant**
Name	**Trustee Type**	**Compliance Status**
Bryan Ausmus	Active	Not Compliant
G. P. Ippolito	CFO	Not Compliant
Jerry Ransom	Mayor	Not Compliant
Brandon Suane	Active	Not Compliant
Howard Winans	Citizen	Not Compliant
Greg Parsons	Citizen	In Progress
Derek Sheets	Active	Compliant
	System Administrator	Exempt

Guadalupe-Blanco River Authority		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
William Carbonara	Employer	Compliant
Anna Daniels	Active	In Progress
Scott Kolbe	Active	In Progress
Jesi Mann	Active	In Progress
Emanual Valdez	Employer	In Progress
Lauren Willis	Active	In Progress
Randy Staats	**System Administrator**	Compliant

Harlingen Firemen's Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Cirilo Rodriquez Jr.	Citizen	In Progress
Samuel Albritton	Active	Compliant
Mario Alvarado	Active	Compliant
Gabriel Gonzalez	Employer	Compliant
Robert Rodriguez	Employer	Compliant
Gary Tipton	Active	Compliant
Elvia Trevino	Citizen	Compliant
Nanette Fox	**System Administrator**	Compliant

Harris County Hospital District Pension Plan		**80% Compliant**
Name	**Trustee Type**	**Compliance Status**
Andrea Caracostis	Active	Not Compliant
Jennifer Tijerina	Active	Not Compliant
Afsheen Davis	Active	In Progress
Sima Ladjevardian	Active	In Progress
Carol Paret	Active	In Progress
Cody Pyke	Active	In Progress
Jim Robinson	Active	In Progress
Ingrid Robinson	Active	In Progress
Elizabeth Viera-Bland	Active	In Progress
Victoria Nikitin	**System Administrator**	In Progress

Houston Firefighters' Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Albertino Mays	Citizen	In Progress
Pete Ng	Active	In Progress
Arif Rasheed	City Treasurer Designee	In Progress
David Riegor	Active	In Progress
Ernest Wotring	Mayor Representative	In Progress
Brett Besselman	Active	Compliant
Gerard Daniels	Active	Compliant
David Lantrip	Retired	Compliant
Edward Llewellyn	Active	Compliant
Lisa Slagle	Citizen	Compliant
Timothy Schauer	**System Administrator**	Compliant

Houston MTA Non-Union Pension Plan		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Reynaldo Reza	Citizen	Not Compliant
Jason Simpson	Citizen	Not Compliant
Sheron Blaylock	Employer	In Progress
George Fotinos	Employer	In Progress
Thomas Jasien	Active	In Progress
Debbie Sechler	Active	In Progress
Marcus Smith	Citizen	In Progress
Daniel Weber	**System Administrator**	In Progress

Houston MTA Workers Union Pension Plan		**71.43% Compliant**
Name	**Trustee Type**	**Compliance Status**
John Bland	Retired	Not Compliant
Arthur Smiley, III	Active	Not Compliant
Auturo Jackson	Employer	In Progress
Horace Marves	Active	In Progress
Debbie Sechler	Employer	In Progress
J. Cruz Torres	Retired	In Progress
Daniel Weber	**System Administrator**	In Progress

Houston Municipal Employees Pension System		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
David Donnelly	Mayor Appointee	Not Compliant
Adrian Patterson	City Council Appointee	Not Compliant
Rhonda Smith	Active	Not Compliant
Denise Castillo-Rhodes	City Council Appointee	In Progress
Felix Chevalier	Appointed	In Progress
Roderick Newman	Retired	In Progress
Carole Snyder	Appointed	In Progress
Sherry Mose	Active	Compliant
Lenard Polk	Active	Compliant
Roy Sanchez	Active	Compliant
Lonnie Vara	Retired	Compliant
David Long	**System Administrator**	In Progress

Houston Police Officers' Pension System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Melissa Dubowski	CFO Designee	In Progress
Don Sanders	Mayor Representative	In Progress
Thomas Spjut	Retired	In Progress
Terry Bratton	Retired	Compliant
David Coleman	Active	Compliant
George Guerrero	Active	Compliant
Steven Le	Active	Compliant
Patrick Franey	**System Administrator**	In Progress

Irving Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Dan Post	Citizen	Not Compliant
Jill McAdams	Mayor Designee	In Progress
Jacob Rives	Active	In Progress
David Florance	Active	Compliant
Micah Johnson	Active	Compliant
Bret Starr	CFO	Compliant
Kenneth Wallace	Citizen	Compliant
Kelly Slater	**System Administrator**	In Progress

Irving Supplemental Benefit Plan		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Andrew Bah	Active	In Progress
Jill McAdams	Appointed	In Progress
Kyle Taylor	City Council Representative	In Progress
Rodney Adams	Active	Compliant
David Cardenas	Active	Compliant
James Donovan	Active	Compliant
Brad Duff	Active	Compliant
Lori Herrera	Active	Compliant
Kuruvilla Oommen	Appointed	Compliant
Bret Starr	Appointed	Compliant
	System Administrator	Exempt

Killeen Firemen's Relief & Retirement Fund		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Darren Morphis	Active	Not Compliant
Judith Tangalin	CFO	Not Compliant
Daniel Corbin	Mayor Designee	Compliant
Otis Evans	Citizen	Compliant
Gerald Pittman	Active	Compliant
Timothy Rabroker	Active	Compliant
Jerry Sutton	Citizen	Compliant
Jennifer Hanna	**System Administrator**	Compliant

Laredo Firefighters Retirement System		**12.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Robert Santos	Citizen	Not Compliant
Oscar Delgado	Active	In Progress
Jesus Esparza	CFO	In Progress
Joaquin Rodriguez	Mayor Designee	In Progress
Jesus Tapia III	Active	In Progress
Alberto Chapa	Citizen	Compliant
Alfredo Robledo	Active	Compliant
Jaime Jasso	**System Administrator**	Compliant

Longview Firemen's Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Maria Milla	Citizen	In Progress
John Nustad	Mayor Designee	In Progress
James Parker	Active	In Progress
Kolby Beckham	Active	Compliant
Vickie Boggio	Citizen	Compliant
Angela Coen	CFO	Compliant
Logan Ledkins	Active	Compliant
Pam Randolph	**System Administrator**	In Progress

Lower Colorado River Authority Retirement Plan		**85.71% Compliant**
Name	**Trustee Type**	**Compliance Status**
Michael Allen	Board of Directors Appointee	Not Compliant
Dale Jurecka	Employee Representative	In Progress
Ravindra Lakamraju	Employee Representative	In Progress
David Smith	CFO	In Progress
Jim Travis	Executive Appointee	In Progress
Stephen Kellicker	Employee Representative	Compliant
Laura Flores	**System Administrator**	In Progress

Lower Neches Valley Authority Employees Benefit Plan		**50% Compliant**
Name	**Trustee Type**	**Compliance Status**
Scott Halls	Active	Not Compliant
Steve Lucas	Active	Not Compliant
Nancy Conway	Active	In Progress
Annette Purington	**System Administrator**	In Progress

Lubbock Fire Pension Fund		**62.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Blu Kostelich	CFO	Not Compliant
Eric McDonald	Citizen	Not Compliant
David McEndree	Citizen	Not Compliant
Adam Moore	Active	In Progress
Greg Taylor	Mayor Designee	In Progress
Kevin Pounds	Active	Compliant
Jon Wheeler	Active	Compliant
Elizabeth Adelmann	**System Administrator**	In Progress

Lufkin Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Brent Watkins	Mayor Designee	Not Compliant
Kevin Gee	CFO	In Progress
Markus Manning	Active	In Progress
Christopher Moss	Citizen	In Progress
John Thannisch	Citizen	In Progress
Levi Cole	Active	Compliant
William Gates	Active	Complaint
Cristi Elmore	**System Administrator**	Compliant

Marshall Firemen's Relief & Retirement Fund		**62.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Jeff Henderson	Citizen	Not Compliant
Dawn Jones	CFO	Not Compliant
Amy Ware	Mayor	Not Compliant
Jordy Gaddis	Active	In Progress
Justin Stanley	Active	In Progress
David Scholl	Citizen	Compliant
Tanner Lane	Active	Compliant
Debra Jones	**System Administrator**	Compliant

McAllen Firemen's Relief & Retirement Fund		**50% Compliant**
Name	**Trustee Type**	**Compliance Status**
Thomas Brooks IV	Active	Not Compliant
Abel Leal	Citizen	Not Compliant
Leocadio Mendoza	Active	Not Compliant
Sam Moreno	Citizen	Not Compliant
Edgar Rios	Active	In Progress
Isaac Tawil	Mayor Designee	In Progress
David Vasquez	CFO	In Progress
Debra Jones	**System Administrator**	Compliant

Midland Firemen's Relief & Retirement Fund		**62.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Lori Blong	Mayor	Not Compliant
Chad Clark	Citizen	Not Compliant
Justin Graham	Active	Not Complaint
Matt Marshall	Active	In Progress
Morgan Rittenberry	Citizen	In Progress
Eric Stewart	Active	In Progress
Christy Weakland	CFO	In Progress
Shera Crow	**System Administrator**	Compliant

Nacogdoches County Hospital District Retirement Plan		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Farrar Bentley	Active	Not Compliant
Fred Groover	Active	Not Compliant
Ryan Head	Active	Not Compliant
Sean Hightower	Active	Not Compliant
Lisa King	Active	Not Compliant
Anita Kite	Active	Not Compliant
Rhonda McCabe	Employer	Not Compliant
James Stockman, Jr.	Active	Not Compliant
	System Administrator	Exempt

Odessa Firemen's Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Erik Brown	Active	In Progress
Travis Jones	Active	In Progress
James Kirk	Citizen	In Progress
Kathy McIntyre	Citizen	In Progress
Craig Stoker	Mayor Designee	In Progress
Kaylie Banda	CFO	Compliant
Ben Marts	Active	Compliant
Jill Contreras	**System Administrator**	In Progress

Orange Firemen's Relief & Retirement Fund		**37.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Jordan Bennett	Active	Not Compliant
Donald Gravett	Active	Not Compliant
Sarah Hunter	Mayor Designee	Not Compliant
Walter Riedel	Citizen	Not Compliant
Cheryl Zeto	CFO	Not Compliant
David Frenzel	Citizen	In Progress
Jason Maddox	Active	In Progress
Sam Meyer	**System Administrator**	In Progress

Paris Firefighters' Relief & Retirement Fund		**28.57% Compliant**
Name	**Trustee Type**	**Compliance Status**
Gene Anderson	CFO	Not Compliant
Kenny Dority	Citizen	Not Compliant
Thomas McMonigle	Active	Not Compliant
Casey Ressler	Citizen	Not Compliant
Austin Sugg	Active	Not Compliant
Sandy Collard	Mayor Designee	In Progress
Bob Rast	Active	Compliant
	System Administrator	Exempt

Plainview Firemen's Relief & Retirement Fund		**42.86% Compliant**
Name	**Trustee Type**	**Compliance Status**
Bobby Gipson	Active	Not Compliant
Albert Perez	Citizen	Not Compliant
Seth Stephens	Active	Not Compliant
Kevin Whisenant	Citizen	Not Compliant
David Sells	Active	In Progress
Charles Starnes	Mayor	In Progress
Amber Garcia	**System Administrator**	In Progress

Plano Retirement Security Plan		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Chris Biggerstaff	Active	In Progress
Abby Owens	Active	In Progress
Karen Rhodes-Whitley	Active	In Progress
Jerry Smith	Retiree	In Progress
Sean Sullivan	Citizen	In Progress
Susan Ohman	Citizen	Compliant
Jenny Zeilfelder	Active	Compliant
Teresa Exley	**System Administrator**	In Progress

Port Arthur Firemen's Relief & Retirement Fund		**28.57% Compliant**
Name	**Trustee Type**	**Compliance Status**
Bernard Brown	Citizen	Not Compliant
Kandy Daniel	CFO	Not Compliant
Brian Jones	Citizen	Not Compliant
Dall Kole	Active	Not Complaint
Paul Washburn	Active	Not Compliant
Mercer Nessour	Active	Compliant
Debra Jones	**System Administrator**	Compliant

Port of Houston Authority Retirement Plan		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Alan Robb	Active	Not Compliant
Richard Campo	Active	In Progress
Wendolynn Cloonan	Active	In Progress
Dean Corgey	Active	In Progress
Stephen DonCarlos	Active	In Progress
Clyde Fitzgerald	Active	In Progress
Thomas Jones, Jr.	Active	In Progress
Roland Gonzalez	**System Administrator**	In Progress

Refugio County Memorial Hospital District Retirement Plan		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Lydia Aguirre	Active	Not Compliant
Brad Gillespie	Active	Not Compliant
Richard Shaw	Active	Not Compliant
	System Administrator	Exempt

Retirement Plan for Employees of Brownsville Navigation District		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
John Wood	Employer	In Progress
Yessenia Gonzalez	Active	In Progress
William Dietrich	Active	Compliant
Margia Recio	Active	Compliant
Zeus Yanez	Active	Compliant
	System Administrator	Exempt

San Angelo Firemen's Relief & Retirement Fund		0% Compliant
Name	**Trustee Type**	**Compliance Status**
Michael Anderson	Active	Not Compliant
Steve Cecil	Citizen	Not Compliant
Tina Dierschke	CFO	Not Compliant
Ana Henderson	Citizen	Not Compliant
Cory Word	Active	Not Compliant
Vincent Young	Active	Not Compliant
Brian Dunn	Mayor Designee	Not Compliant
Ron Partusch	**System Administrator**	Not Compliant

San Antonio Fire & Police Pension Fund		90% Compliant
Name	**Trustee Type**	**Compliance Status**
Dean Peason	Active Fire	Not Compliant
Shawn Griffin	Active Fire	In Progress
James Smith	Active Fire	In Progress
Marc Whyte	Employer	In Progress
Adriana Garcia	City Council Member	Compliant
Harry Griffin	Retired Police	Compliant
Larry Reed	Retired Fire	Compliant
Justin Rodriguez	City Council Member	Compliant
Amanda Viera	Active Police	Compliant
Warren Schott	**System Administrator**	Compliant

San Antonio Metropolitan Transit Retirement Plan		16.67% Compliant
Name	**Trustee Type**	**Compliance Status**
Paul Basaldua	County Appointee	Not Compliant
Akeem Brown	County Appointee	Not Compliant
Laura Cabanilla	City Appointee	Not Compliant
Louis Cooper	Council of Cities Appointee	Not Compliant
Robert Comeaux	City Appointee	Not Compliant
Athalie Malone	City Appointee	Not Compliant
Fernando Reyes	Elected Member	Not Compliant
Melanie Tawil	City Appointee	Not Compliant
Kevin Wolff	Council of Cities Appointee	Not Compliant
Ayda Gonzalez	County Appointee	In Progress
Javier Paredes	City Appointee	In Progress
Cathy Schnitzer	**System Administrator**	Not Compliant

San Benito Firemen Relief & Retirement		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Christina Sanchez	Citizen	Not Compliant
Stephanie Sarrionandia	CFO	Not Compliant
Adan Gonzalez	Active	In Progress
Rafael Perez	Active	In Progress
Boris Esparza	Active	Compliant
Ida Martinez	Citizen	Compliant
Belen Pena	Mayor Designee	Compliant
Ana Tinsley	**System Administrator**	In Progress

Sweetwater Firemen's Relief & Retirement Fund		**25% Compliant**
Name	**Trustee Type**	**Compliance Status**
Devon DeLeon	Active	Not Compliant
Chris Kiser	Citizen	Not Compliant
Krista Koennecke	CFO	Not Compliant
Preston Peacock	Active	Not Compliant
Jason Shipp	Citizen	Not Compliant
James Smith	Mayor Designee	Not Compliant
Tad Baird	Active	Compliant
Debra Jones	**System Administrator**	Compliant

Teacher Retirement System of Texas		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Michael Ball	Active Nominee	In Progress
Robert Walls, Jr.	Governor Appointee	In Progress
Brittny Allred	Board of Education Nominee	Compliant
David Corpus	Board of Education Nominee	Compliant
John Elliott	Governor Appointee	Compliant
James Nance	Retired Member	Compliant
John Rutherford	Governor Appointee	Compliant
Nannette Sissney	Member Nominee	Compliant
Elvis Williams	Active Nominee	Compliant
Brian Guthrie	**System Administrator**	Compliant

Temple Firemen's Relief & Retirement Fund		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Matthew Byrd	Active	In Progress
Bryan Daniel	CFO	In Progress
Patrick Kelly	Citizen	In Progress
Randy Ramsey	Mayor Designee	In Progress
Blake Stapp	Citizen	In Progress
Jason Haltom	Active	Compliant
Daniel Meyer	Active	Compliant
	System Administrator	Exempt

Texarkana Firemen's Relief & Retirement Fund		**62.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
David Cook	Citizen	Not Compliant
Jodie Lee	CFO Designee	Not Compliant
Rick Wisdom	Mayor Designee	Not Compliant
Clay Roberts	Citizen	Compliant
Scott Daniel	Active	Compliant
Tim Martin	Active	Compliant
Lane Peeples	Active	Compliant
Debra Jones	**System Administrator**	Compliant

Texas City Firemen's Relief & Retirement Fund		**50% Compliant**
Name	**Trustee Type**	**Compliance Status**
Andrew Blue	Active	Not Compliant
Dedrick Johnson	Mayor	Not Compliant
Jennifer Price	CFO	Not Compliant
Bob Senter	Citizen	Not Compliant
Joe Tumbleson	Active	Compliant
Andrew Marcellus	Active	Compliant
Royce Medina	Active	Compliant
Debra Jones	**System Administrator**	Compliant

Texas County & District Retirement System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Tammy Biggar	Active	In Progress
Susan Fletcher	Active	In Progress
Kara Sands	Active	In Progress
Chris Davis	Active	Compliant
Sammy Farias	Active	Compliant
Debra Hunt	Active	Compliant
Mary Louise Nicholson	Active	Compliant
Chris Taylor	Active	Compliant
Holly Williamson	Active	Compliant
Amy Bishop	**System Administrator**	Compliant

Texas Emergency Services Retirement System		**60% Compliant**
Name	**Trustee Type**	**Compliance Status**
Edward Keenan	Active	Not Compliant
Brad Landi	Active	Not Compliant
Pilar Rodriquez	Active	Not Compliant
Rupal Chaudhari	Finance	In Progress
Nathan Douglas	Active	In Progress
Matthew Galves	Retiree	In Progress
Rodney Ryalls	Active	In Progress
Brian Smith	Investment	In Progress
Jerry Romero	Finance	Compliant
Jessica O'Brien	**System Administrator**	Not Compliant

Texas Hospital Association		**80% Compliant**
Name	**Trustee Type**	**Compliance Status**
Adam Apolinar	Active	Not Compliant
Nancy Cooke	Active	Not Compliant
David Bryom	Active	In Progress
Kody Gann	Active	In Progress
John Henderson	Active	In Progress
Brett Kirkham	Active	In Progress
Rory McCrady	Active	In Progress
David Neiger	Active	In Progress
Mike Olson	Active	Compliant
Lea Anne Porter	**System Administrator**	Compliant

Texas Municipal Retirement System		**100% Compliant**
Name	**Trustee Type**	**Compliance Status**
Tomas Gonzalez	Active	In Progress
Jim Parrish	Active	In Progress
Robert Scott	Active	In Progress
David Landis	Active	Compliant
Tricia Mirabelle	Active	Compliant
Bill Philibert	Active	Compliant
David Wescoe	**System Administrator**	In Progress

The Woodlands Firefighters' Retirement System		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Karen Dempsey	Mayor Designee	Not Compliant
Andrew Pitre	Citizen	Not Compliant
Kellan Shaw	CFO	In Progress
Doug Adams	Active	Compliant
Jeff Bondi	Active	Compliant
Anthony Fasone	Citizen	Compliant
Jeff Johnston	Active	Compliant
Jennifer Hanna	**System Administrator**	Compliant

Travis County ESD #6 Firefighter's Relief & Retirement Fund		**50% Compliant**
Name	**Trustee Type**	**Compliance Status**
Sharon Smith	CFO	Not Compliant
Jeffrey Timlin	Citizen	Not Compliant
Taylor Wade	Active	Not Compliant
Rick White	Citizen	Not Compliant
Scott Falltrick	Active	In Progress
Shiloh Newman	Commissioners Board President	In Progress
Graham Taylor	Active	In Progress
Ana Tinsley	**System Administrator**	In Progress

Tyler Firefighters' Relief & Retirement Fund		**37.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Leesa Hedge	Citizen	Not Compliant
Steve Kean	Mayor Designee	Not Compliant
Darren McCawley	Active	Not Compliant
Steve Roosth	Citizen	Not Compliant
Keidric Trimble	CFO	Not Compliant
David Admire	Active	In Progress
James Branch	Active	In Progress
James Mullicane	**System Administrator**	In Progress

University Health System Pension Plan		**11.1% Compliant**
Name	**Trustee Type**	**Compliance Status**
Andrea Casas	Active	Not Compliant
Anita Fernandez	Active	Not Compliant
Ryan Griffin	Active	Not Compliant
Kevin Harris	Citizen	Not Compliant
James Hasslocher	Active	Not Compliant
Robert Landry	Active	Not Compliant
Christa Maxwell	Active	Not Compliant
Carlos Resendez	Citizen	Not Compliant
Christopher Hurley	**System Administrator**	In Progress

University Park Firemen's Relief & Retirement Fund		**0% Compliant**
Name	**Trustee Type**	**Compliance Status**
Robert Abel	Active	Not Compliant
Ashley Cook	Citizen	Not Compliant
Brandon Furgeson	Active	Not Compliant
Dustin Lewis	Active	Not Compliant
Tom Tvardzik	CFO	Not Compliant
Mike Williams	Citizen	Not Compliant
Civic Yip	Mayor Designee	Not Compliant
	System Administrator	Exempt

Waxahachie Firemen's Relief & Retirement Fund		**37.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Jeff Aycock	Active	Not Compliant
Lee Stratham	Citizen	Not Compliant
Chad Tustison	CFO	Not Compliant
Chris Wright	Mayor Designee	Not Compliant
Philip Young	Citizen	Not Compliant
Shane Petty	Active	In Progress
Scott Safford	Active	In Progress
Gary Myers	**System Administrator**	Compliant

Weslaco Firemen's Relief & Retirement Fund		**75% Compliant**
Name	**Trustee Type**	**Compliance Status**
Jim Hiebert	Citizen	Not Compliant
David Suarez	Mayor Designee	Not Compliant
Mary Garcia	Citizen	In Progress
Florentino Vela	Active	In Progress
David Cuellar	Active	Compliant
Jaime Hernandez	Active	Compliant
Fred Reyes	CFO Designee	Compliant
Debra Jones	**System Administrator**	Compliant

Wichita Falls Firemen's Relief & Retirement Fund		**87.5% Compliant**
Name	**Trustee Type**	**Compliance Status**
Tim Short	Mayor	Not Compliant
Stephen Calvert	CFO	In Progress
John Luig	Citizen	In Progress
Trent Mays	Active	Compliant
Michelle Riggins	Citizen	Compliant
Travis Skelton	Active	Compliant
Ray Wood	Active	Compliant
James Duncan	**System Administrator**	Compliant

Appendix I – September 19, 2024 House Pensions, Investments, and Financial Services Committee Presentations

Texas Pension Review Board

House Pensions, Investments, and
Financial Services Committee
Interim Hearing
Pension Update: Dallas Police and Fire Pension System
September 19, 2024

PENSION REVIEW BOARD

Summary

- PRB overview
- PRB reports, analysis, and resources
- System reporting requirements
- Funding Soundness Restoration Plans
- Dallas Police and Fire Pension System Update
  - Key Statistics
  - Statutory Funding Requirements – HB 3158 and FSRP
  - Progress Update

PRB Overview

- Oversees Texas public retirement systems and provides information to help ensure they are properly managed and actuarially sound.
- Provides technical assistance, collects and reviews reports, and provides data and research to stakeholders.
- Develops guidelines and best practices and works with systems to encourage statutory compliance.
- Makes recommendations and provides information and analysis of pension bills and issues to the Legislature.

PRB Reports, Analysis and Resources

- Actuarial Valuation Report
- New: Investment Data Report
- Intensive Reviews
- *Guide to Public Retirement Systems in Texas*
- Texas Public Pension Data Center
- Legislative session:
  - Pension Basics Legislative Seminar
  - Pension bill tracking report
  - Actuarial Impact Statements

System Reporting Requirements

Systems Required	Report	How often
All	• Annual Financial Report (audited) • Investment Returns and Assumptions Report (PRB-1000) • Membership report • MET form to report training (PRB-2000)	Annually
All	• Actuarial Valuation	Every three years
Systems with assets over $100 million	• Investment Practices and Performance Evaluation	Every three years
Systems with assets over $100 million	• Actuarial Experience Study • Actuarial Audit	Every five years
Systems with assets over $30 million	• Investment Practices and Performance Evaluation	Every six years
All	• Funding Policy • Investment Policy • Summary Plan Description • Registration/board information (Form PRB-150)	Upon change
All non-statewide systems	• Funding soundness restoration plan	If necessary

Funding Soundness Restoration Plans (FSRPs)

- Minimum funding standard established in state law for Texas retirement systems
- 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 in 2021
  - Maximum funding period reduced from 40 to 30; additional triggers created
  - More direct sponsor involvement and tied to funding policy requirement
  - More time to create FSRP, shorter time to reach target
  - Additional changes to process and material requirements

Dallas Police and Fire Pension System (DPFP)

Key DPFP Statistics

- Active members: 5,085
- Annuitants (retired members and beneficiaries): 5,142
- Assets: $2.05 billion (actuarial value)
- Actuarial accrued liability: $5.2 billion
- Funding period: 82 years
- Funded ratio: 39.12%
- Retiree funded ratio: 57.6%
- Investment returns (as of 12/31/23):
    - 1-year return: 10.27%
    - 3-year return: 4.27%
    - 10-year return: 2.24%

** Statistics as of 1/1/2024, reflecting 2023 Actuarial Valuation (AV), unless otherwise specified*

Statutory Funding Requirements – HB 3158

- **H.B. 3158 (85R)** passed in 2017 to address DPFP funding crisis. Made significant changes to benefits and contributions and modified board composition.
- **H.B. 3158 (85R) Independent Actuarial Analysis Requirement**
  - Created Section 2.025 in DPFP's statute (Art. 6243a-1, V.T.C.S.)
  - Requires the PRB to select an independent actuary for DPFP to hire to perform an actuarial analysis and make recommendations to meet funding guidelines
  - Requires a plan be adopted by 11/1/24 to bring funding period to 30 years or less
  - PRB required to report on review and plan by 12/1/24

Statutory Funding Requirements - FSRP

- Funding Soundness Restoration Plan (FSRP)
  - Statutory requirement created in 2015 and updated in 2021 (802.2015, 802.2016, Gov't Code)
  - Systems trigger the FSRP requirement based on objective measures outlined in statute and reported in AV
  - Requires system and sponsoring entity to jointly develop a plan to meet 30-year funding period requirement
  - PRB sets rules and procedures, verifies compliance, and approves FSRPs; and reports on FSRP status to board, legislature, and governor
  - DPFP triggered FSRP requirement with 2022 AV, due 9/1/25
    - 1/1/21 AV – 63 years
    - 1/1/22 AV – 68 years
    - 1/1/23 AV – 82 years

Progress Update

- May-July 2023 - PRB conducted a competitive procurement and selected Cheiron as independent actuary
- Cheiron conducted its work in two phases:
  - Nov. 2023 – Prelim review and recs based on 2022 AV
  - Feb. 2024 – Updated review and recs based on 2023 AV
- Jan. 2024 - Cheiron, DPFP, and City of Dallas provided a progress update to the PRB Actuarial Committee.
- Nov. 2023-Present – DPFP board and Dallas Pensions Committee each met ~monthly to discuss DPFP funding. Key points of contention:
  - ADC step-up: 3-year (DPFP) vs. 5-year (city)
  - COLA provisions
  - Governance provisions
  - Past DPFP investment performance

Progress Update (Cont'd)

- Aug. 2024 - Cheiron provided final report. Key recommendations:
  - Adopt an actuarially determined contribution (ADC).
  - Reduce employee contribution rate as funding improves.
  - Provide some cost-of-living adjustment (COLA) earlier than current provisions permit.
- Aug. 8, 2024 – DPFP board adopts plan under 2.025.
  - Adopt an ADC funding model with a three-year step-up.
  - Modify the COLA to provide an earlier COLA:
    - Below 70% funding: Annual, immediate partial COLA based on funded status and inflation, not to exceed 1.5 percent.
    - Above 70% funding: COLA unchanged from language currently in statute (based on investment returns, not to exceed 4 percent).
- Aug. 8, 2024 – DPFP files declaratory action in state court seeking clarity on statutory roles of both DPFP and city in developing a funding plan.

Progress Update(Cont'd)

- Sept. 11, 2025 - City of Dallas approves funding plan, incorporated in city budget:
  - ADC with five-year step-up
  - Governance provisions, including:
    - City approval of assumptions, benefit increases, and lawsuit settlements that increase fund liability
    - Process for reconciling ADC calculations by system and city
    - Guardrails to smooth ADC changes year-over-year
- Dallas is exploring monetization of city assets, issuance of pension obligation bonds, and tax changes that could generate funds for DPFP.

Progress Update(Cont'd)

- Deadline for HB 3158 plan is 11/1/24; deadline for FSRP is 9/1/25.
- PRB will provide statutorily required report in *Biennial Report* in November 2024.

Texas Pension Review Board

House Pensions, Investments, and
Financial Services Committee
Interim Hearing
Pension Amortization Periods
September 19, 2024

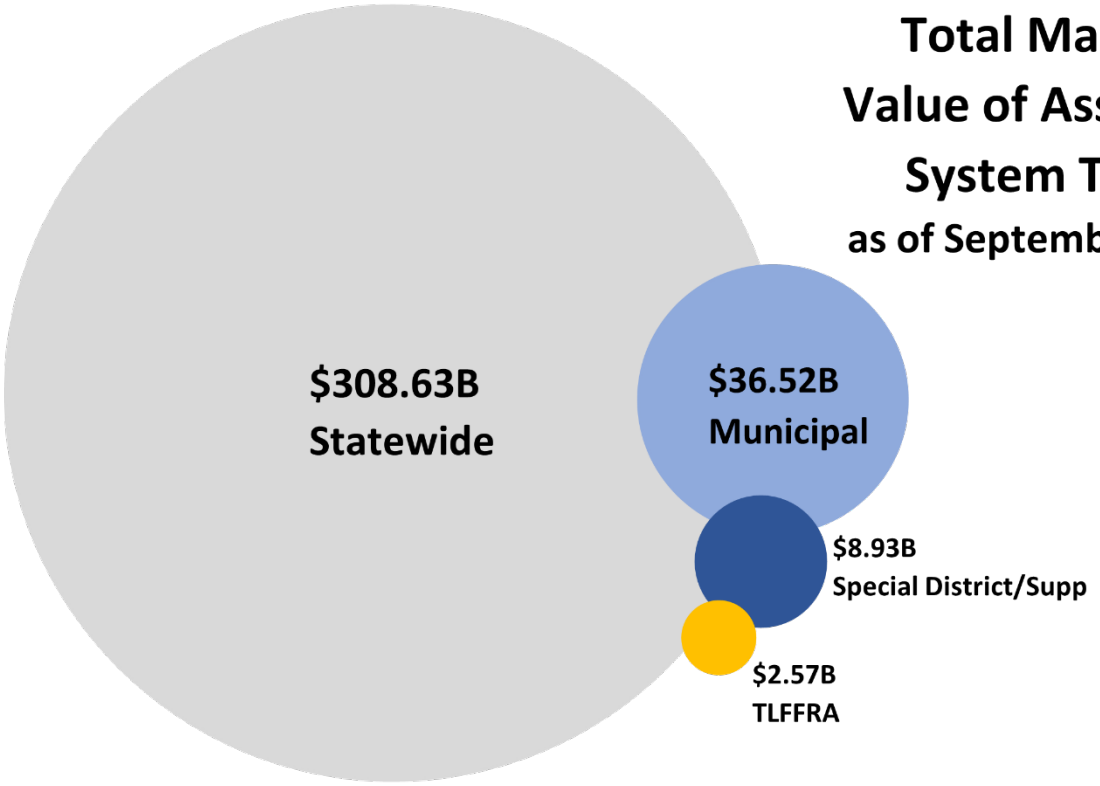
PENSION REVIEW BOARD

Summary

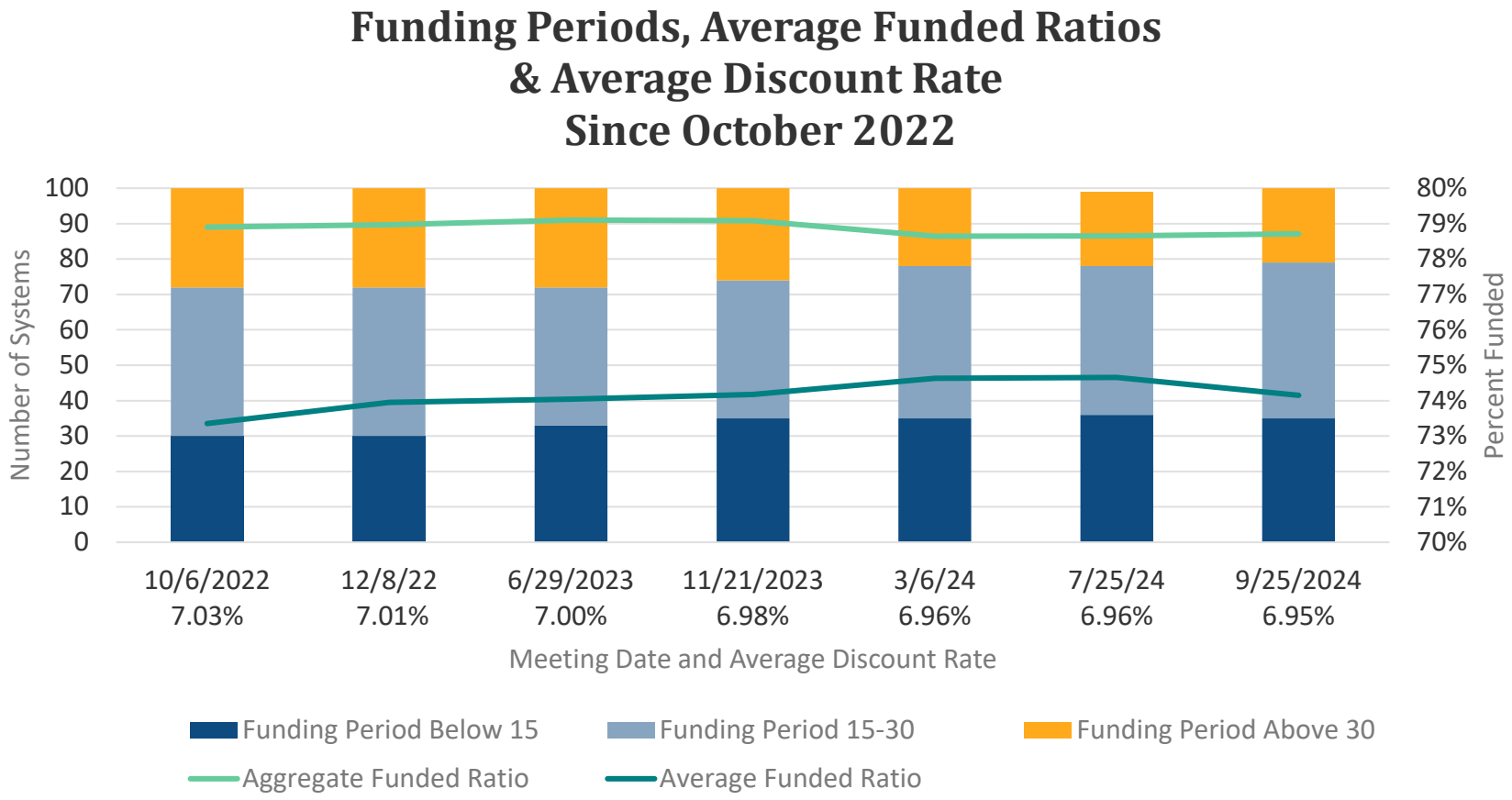
- Texas pensions overview
- Funding progress 2022-2024
- Key metrics for Texas retirement systems
  - System overview by type
  - Funded ratio <50 percent
  - Funding period >40 years
  - Systems subject to the FSRP requirement due September 1, 2025

Texas Pensions Overview

- 351 public retirement systems
- 100 actuarially funded defined benefit plans with approx. $357B in assets and three million members.



Funding Progress 2022-2024



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.

System Overview By Type

System Type	System Count	Median Expected Return	Median Funding Period	Median Funded Ratio
Statewide	7	7.00%	14	89%
TLFFRA	42	7.25%	27	63%
Muni	17	7.00%	24	77%
810	34	6.50%	11	85%
Total	**100**	**7.00%**	**20**	**76%**

Numbers in **teal** denote improvements from the previous report

Systems with Funded Ratios < 50 Percent

System Name	Total Funded Ratio	Retiree Funded Ratio	System Type
Marshall Firemen's Relief & Retirement Fund	33.7	61.5	TLFFRA
Odessa Firemen's Relief & Retirement Fund*	36.4	51.2	TLFFRA
Dallas Police & Fire Pension System-Supplemental*	38.7	51.4	Muni
Dallas Police & Fire Pension System-Combined Plan	39.1	57.6	Muni
Greenville Firemen's Relief & Retirement Fund	41.0	77.1	TLFFRA
Texas City Firemen's Relief & Retirement Fund*	42.2	59.1	TLFFRA
Galveston Employees' Retirement Plan for Police*	42.8	70.8	Muni
Midland Firemen's Relief & Retirement Fund	43.1	78.3	TLFFRA
Plainview Firemen's Relief & Retirement Fund	43.6	72.1	TLFFRA
University Park Firemen's Relief & Retirement Fund*	44.9	77.4	TLFFRA
Abilene Firemen's Relief & Retirement Fund*	45.3	66.5	TLFFRA
Brownwood Firemen's Relief & Retirement Fund	46.2	78.9	TLFFRA
Orange Firemen's Relief & Retirement Fund	47.8	73.2	TLFFRA

*Amortization period is under 30

Systems With Funding Periods > 40 Years

System Name	Funding Period	System Type	Notes
Nacogdoches County Hospital District	**Infinite**	810	Expected to terminate plan
Midland Firemen's Relief & Retirement Fund	**Infinite**	TLFFRA	Proposed $47M city contribution
Sweetwater Firemen's Relief & Retirement Fund	**Infinite**	TLFFRA	Increased city contributions
Dallas Police & Fire Pension System-Combined Plan	82.0	Muni	Proposed 30-yr funding in budget
Marshall Firemen's Relief & Retirement Fund	72.0	TLFFRA	Recently triggered FSRP
Wichita Falls Firemen's Relief & Retirement Fund	56.7	TLFFRA	Recently triggered FSRP
Brownwood Firemen's Relief & Retirement Fund	52.8	TLFFRA	Completed FSRP
Dallas Employees' Retirement Fund	51.0	Muni	Submitted preliminary FSRP
Austin Fire Fighters Relief & Retirement Fund	48.6	Muni	Could trigger FSRP with 2024 AV
Harlingen Firemen's Relief & Retirement Fund	45.0	TLFFRA	Could trigger FSRP with 2025 AV

Systems Immediately Subject to 30-Year FSRP Formulation Requirement

These systems had amortization periods above the applicable threshold (40 years prior to September 1, 2021 and 30 years thereafter) for three consecutive annual actuarial valuations (AVs), or two consecutive non-annual AVs. An FSRP must now be developed under the new law, **targeting 30 years by Sept. 1, 2025,** and must be developed by the public retirement system and the associated governmental entity in accordance with the system's governing statute.

Systems Immediately Subject to an FSRP Formulation Requirement							
Retirement System	Am Period	Date of AV	Am Period	Date of AV	Am Period	Date of most recent AV	FSRP Due Date
Midland Firemen's Relief & Retirement Fund[1,3]	Infinite	12/31/2019	Infinite	12/31/2021	Infinite	12/31/2023	9/1/2025
Beaumont Firemen's Relief & Retirement Fund[1,5]	Infinite	12/31/2020	67	12/31/2022	33	12/31/2023	9/1/2025
Dallas Employees' Retirement Fund[1,4]	51	12/31/2020	50	12/31/2021	51	12/31/2022	9/1/2025
Sweetwater Firemen's Relief & Retirement Fund[2]	63.3	12/31/2018	68.9	12/31/2020	Infinite	12/31/2022	9/1/2025
Dallas Police & Fire Pension System (Combined Plan)	63.0	1/1/2021	68.0	1/1/2022	82.0	1/1/2023	9/1/2025
Marshall Firemen's Relief & Retirement Fund[1,6]	59.0	12/31/2018	41.0	12/31/2020	72.0	12/31/2022	9/1/2025
Nacogdoches County Hospital District	Infinite	7/1/2021	Infinite	7/1/2022	Infinite	7/1/2023	9/1/2025
Wichita Falls Firemen's Relief & Retirement Fund[6]	43.3	1/1/2020	32.1	1/1/2022	56.7	1/1/2024	1/1/2026

[1] Previously submitted an FSRP or Revised FSRP under previous law.
[2] Previously completed an FSRP or Revised FSRP under previous law.
[3] Triggering valuation was 12/31/2017
[4] Triggering valuation was 12/31/2019
[5] Triggering valuation was 12/31/2018
[6] Previously adhering to Legacy FSRP

Orange font indicates the triggering valuation.

Appendix J – TLFFRA Governance Staff Recommendations

TEXAS PENSION REVIEW BOARD

TLFFRA Governance Recommendations

September 2024

Type	Option	Recommendation	Staff Rec	Board Action
Topic Area 1: System Funding and Decision-Making Practices				
Legislative	1.1	Require the governing body of the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote. This recommendation would ensure sponsors and systems work collaboratively on potential changes before going to a member vote and could change the incentive structure to make it more likely sponsors would be less hesitant to provide necessary employer contributions.	**No action**	**Adopted**
Legislative	1.1a	Require the governing body of the sponsoring entity to first approve any ballot options concerning benefit or contribution changes prior to a member vote if the system and sponsor solely utilizes a closed actuarially determined contribution (ADC) rate. This recommendation would allow for sponsors paying an ADC, who experience higher levels of risk associated with changes to plan provisions, to have direct input on benefit and member contribution changes.	**Adopt**	**No action**
Legislative	1.2	Authorize the system and the governing body of the sponsoring entity to enter into a separate agreement defining parameters for member contribution and benefit decisions. These agreements may be reflected in a jointly developed and adopted funding policy as required by Section 802.2011, Texas Government Code. This recommendation would allow for both parties to proactively define conditions in which contribution and benefit changes could be made, ensuring mutual agreement especially for those systems for which the sponsoring entity pays an ADC.	**Adopt**	**Adopted**
Legislative	1.3	Proposed benefit changes must be approved by a majority of the board plus one member.	**Adopt**	**Adopted**
Guidance/ Technical Assistance	1.4	The PRB may publish guidance based on experiences of multiple TLFFRA systems for improving overall plan governance. This may take the form of best practices for creating a joint working agreement (and ultimately jointly adopted funding policies) between the system and sponsor, encouraging the use of guardrails to limit the system's ability to enact benefit increases or contribution decreases without consideration of factors which may include sponsor agreement and the plan's actuarial health. Such guidance could also highlight methods for effectively educating members in preparation for a vote on plan changes. Included in this effort could be compiling actual agreements and funding policies as examples and making them publicly available.	**Adopt**	**Adopted**
Guidance/ Technical Assistance	1.5	The PRB may create a continuing education (CE) course on successful system reforms, potentially featuring a panel of TLFFRA stakeholders.	**Adopt**	**Adopted**
Topic Area 2: Board Structure and Membership				

Legislative	2.1	Consider changes to statutory TLFFRA board structure. A potential option could be to eliminate one citizen seat and make it a mayoral appointee and retain one citizen seat. Such a change would provide even representation between city and plan members but still retain one citizen member meant to represent taxpayers.	**No action**	**No action**
Legislative	2.1a	Provide statutory authorization for TLFFRA boards to adopt a policy that would allow for the conversion of one citizen seat to a city appointee position if both citizen seats are unable to be filled within 120 days. Authorize TLFFRA boards to adopt a policy that adjusts the number of days after which a position is deemed unfilled so long as the number is fewer than 120 days. The policy must include the length of time the agreement is effective and specify the term length for the converted city appointee seat. Additionally, remove the exclusion from the TLFFRA statute that prevents a city employee from participating as a citizen trustee.	**Adopt**	**Adopted**
Legislative	2.2	Allow for one active member seat to be filled by either an active or retired system member.	**No action**	**Adopted**
Legislative	2.3	Require citizen members be elected by a minimum of four members of the system board. Four members constitute a supermajority of the five board members that vote to select citizen members	**Adopt**	**Adopted**
Legislative	2.4	Update the citizen seat provision to specify that a retired member of the plan may not serve in a citizen position. This recommendation would not prohibit retired members of other systems from serving on a particular TLFFRA board.	**Adopt**	**Adopted**
Legislative	2.5	Formalize in statute that it is a ground for removal from the board when a member attends less than 75 percent of the regularly scheduled board meetings that the member is eligible to attend during a calendar year without an excuse approved by a majority vote of the board. If the member is an ex-officio member, then they may be requested by the board to select a designee to serve in their position.	**Adopt**	**Adopted**
Legislative	2.6	Provide statutory authorization for boards to adopt a policy for removing a board member noncompliant with Minimum Educational Training (MET) requirements.	**Adopt**	**Adopted**
Legislative	2.7	Include statutory language specifying the mayor may appoint a designee from city council or city staff. Also specify that the CFO of the sponsoring entity, or the individual acting in that capacity, may appoint a designee from city council or city staff who has a financial background.	**Adopt**	**Adopted**
Guidance/ Technical Assistance	2.8	The PRB may compile information and guidance on processes used by TLFFRA systems for identifying citizen members with qualifications and example policies used by systems to set standards for engagement of their board members, including attendance policies and education policies. This recommendation would provide information and assistance to TLFFRA systems while not mandating specific qualifications for citizen members, which may be difficult for some systems to comply with.	**Adopt**	**Adopted**
Topic Area 3: Transparency and Communication				
Legislative	3.1	Require the sponsoring entity of a TLFFRA system to make publicly available on their website reports submitted to the PRB by the system. The sponsoring entity may link to the report on the system's website if the report is already posted by the system. This change would facilitate access to information about TLFFRA systems even in situations where the system is unable to maintain an independent website.	**Adopt**	**Adopted**

Guidance/ Technical Assistance	3.2	The PRB may issue guidance or conduct continuing education on transparency and communication topics. Such guidance or education may include recommending system boards provide regular updates to the governing body of the sponsoring entity, such as presentations regarding the system's funding condition with each actuarial valuation report.	**Adopt**	**Adopted**
Topic Area 4: Additional Areas for Consideration and Research				
Legislative	4.1	Propose language authorizing boards to adopt an education policy.	**Adopt**	**Adopted**
Guidance/ Technical Assistance	4.2	The PRB could create a new core or CE course on reporting requirements and the role of the PRB for new administrators and trustees. The PRB may also consider other topics based on TLFFRA stakeholder requests, including additional education on actuarial matters. Such a course could help trustees and administrators more easily learn statutory reporting and education requirements and make compliance easier.	**Adopt**	**Adopted**
Guidance/ Technical Assistance	4.3	The PRB could implement a process to collect, share and regularly update example polices, requests for proposal, and other relevant resources. This process would ultimately make it easier for systems to access useful examples since they would just have to go to one place. Making such materials available could be incorporated into other efforts outlined in this document to develop best practices and guidance.	**Adopt**	**Adopted**