

2023 ANNUAL REPORT

AUSTIN FIREFIGHTERS RETIREMENT FUND

AFRFund.org



AUSTIN FIREFIGHTERS RETIREMENT FUND

AUSTIN FIREFIGHTERS RETIREMENT FUND

4101 Parkstone Heights Drive, Suite 270 Austin, TX 78746

Staff@AFRFund.org

(512) 454–9567

Anumeha Kumar, Executive Director

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INTRODUCTORY SECTION

Letter to Membership Board of Trustees Organizational Chart Consultants / Advisors Investment Managers Investment Overview



July 29, 2024

Dear Members,

The Board of Trustees and staff of the Austin Firefighters Retirement Fund (*AFRF* or *the Fund*) would like to present the Annual Report for the fiscal year ended December 31, 2023. We hope this Report will provide important information to help you stay abreast of AFRF's finances, including investment performance, funding health, operation, and management of the Fund. The Annual Report is divided into the following four sections:

- Introductory Section This section contains information on administrative organization and investment performance provided by the Fund's general investment consultant.
- **Financial Section** This section contains the Independent Auditor's report, Management's Discussion and Analysis (MD&A), basic financial statements, and certain required supplementary information.
- Actuarial Section This section contains the Actuary's Certification letter and the Annual Actuarial Valuation Report.
- **Plan Provision Section** This section contains historical information on plan provision changes, including any COLAs granted, and a summary of the benefit guide.

This past year, the financial markets made a positive rebound following the significant economic challenges of 2022. AFRF produced a positive annual net investment return of 8.4%, exceeding its actuarial rate of return. Along with strong investment performance, the funded status of AFRF remained stable at 85.6% with a \$1.16 billion total market value of assets. However, due in part to the poor market returns of 2022 and actuarial assumption changes that were adopted as part of the experience study performed this year to more accurately reflect the Fund's current cost, the amortization period increased from 35.7 years to 48.6 years, exceeding the 30-year funding guideline established by the Texas Pension Review Board for the second consecutive year.

The AFRF Board of Trustees has been proactively pursuing the development of a Voluntary Funding Soundness Restoration Plan (FSRP) in lieu of waiting to potentially trigger the requirement in 2025. The AFRF Board created the Pension Funding Working Group comprised of two trustees who have been working with the Fund's actuary since fall of 2023 to assess the financial health of the plan and project any future funding concerns. The Working Group has been developing the Voluntary FSRP in collaboration with the City of Austin, while also keeping the membership apprised of the situation and soliciting their feedback for consideration. I firmly believe that both the AFRF Board and the City of Austin share the same goal to guarantee the stability of the Fund for all current and future members.

I value and am honored by the opportunity to serve as Board Chair of the Austin Firefighters Retirement Fund. I appreciate the opportunity to serve alongside a dedicated group of trustees and appreciate their hard work as well as that of office staff and our advisors to ensure continued successful operation of AFRF. The responsible stewardship of the AFRF Board, office staff, and our professional consultants will help us continue to focus on fulfilling our mission to safeguard and manage the Fund in the sole interest of the members and their beneficiaries.

Lastly, I want to extend my appreciation to the firefighters of the Austin Fire Department, both active and retired, for the courageous and dedicated service you provide or have provided to the residents of Austin.

Sincerely,

Mil Watron

Mayor Kirk Watson Board Chair

BOARD OF TRUSTEES



Mayor Kirk Watson Board Chair City of Austin Mayor



John Bass Vice Chair Term Expires 12/2024



Belinda Weaver Trustee City of Austin Treasurer





Doug Fowler Trustee Term Expires 12/2026

Aaron Woolverton Trustee Term Expires 12/2025

ORGANIZATION CHART



CONSULTANTS / ADVISORS

Actuary

Cheiron - McLean, VA

Custodian Bank

State Street - Boston, MA

Investment Consultant Meketa Investment Group - Boston, MA

Auditor

Montemayor Britton Bender - Austin, TX

Legal Counsel Jackson Walker, LLC - Austin, TX

INVESTMENT MANAGERS

Domestic Equites

State Street Global Advisors - Boston, MA Vaughan Nelson Investment Management – Houston, TX Westfield Capital Management – Boston, MA Westwood Holding Group, Inc. – Dallas, TX

Fixed Income Securities

Aberdeen Asset Management, Inc. – Philadelphia, PA Aristotle Capital Management – Los Angeles, CA Loomis Sayles – Boston, MA Pyramis Global Advisors – Smithfield, RI State Street Global Advisors – Boston, MA

International Equities

Baillie Gifford – Edinburgh, Scotland Deutsche Alternative Asset Management – London, England Highclere International – London, England Sanderson Asset Management – Chicago, IL State Street Global Advisors – Boston, MA TT International – Dublin, Ireland

Real Asset Aether Investment Partners – Denver, CO

Real Estate

Clarion Partner – Auburn, CA Crow Holdings Capital Partners – Dallas, TX Metropolitan Real Estate Management – Boston, MA Partner Group Inc. – New York, NY Portfolio Advisors LLC – Darien, CT

INVESTMENT MANAGERS

Private Equity

57 Stars Investor Services – Washington D.C. Arcmont Lending – London, England Constitution Capital Partners – Andover, MA Cross Creek Capital Partners – Salt Lake City, UT DWS Alternatives Global Limited – London, England Dimensional Fund Advisors – Austin, TX HarbourVest – Boston, MA HighVista – Boston, MA LGT Capital Partners Inc. – New York, NY Partner Group Inc. – New York, NY Private Advisors – Richmond, VA Private Equity Investors – New York, NY StepStone Group Inc – New York, NY SVB Capital – San Francisco, CA

INVESTMENT OVERVIEW



5200 Blue Lagoon Drive Suite 120 Miami, FL 33126 305.341.2900 Meketa.com

Board of Trustees, Austin Fire Fighters' Relief and Retirement Fund
Leo Festino, Aaron Lally, Colin Kowalski, Meketa Investment Group
June 28, 2024
Investment Consultant's Statement for Annual Financial Report

This letter reviews the global capital markets in 2023 and the investment performance of the Austin Fire Fighters' Relief and Retirement Fund (the "Fund" or "Austin Fire") for the year ending December 31, 2023.

MEMORANDUM

Austin Fire produced a return of 8.4% in the calendar year, underperforming both its policy benchmarks. The Fund ranked in the fourth quartile of its peer group¹.

The Fund rates of return are represented using a net-of-fees time-weighted methodology based upon monthly market values and cash flows. Consistent with industry best practices, Austin Fire's private market valuations are included on a one-quarter lag, cash flow adjusted basis, to account for the typical 60-90 day delayed reporting cycle for most private market investments. Data was provided by State Street Bank, Austin Fire's custodian, and investment manager valuation statements.

Meketa Investment Group, Austin Fire's general investment consultant, works with the Board of Trustees and Staff, to assist with performance evaluation, asset allocation, manager selection, governance, and other industry best practices.

Calendar Year 2023 Year in Review

Coming into 2023 many experts were calling for a recession, following the aggressive monetary policy tightening by the Federal Reserve in 2022 (they increased rates by over 4% in 2022). Optimism was building that interest rates could peak in 2023 given slowing inflation. The continued strength of the US consumer due to a strong labor market, rising wages, and pandemic related savings also had many thinking that if the US economy did hit a recession in 2023, it would be mild. No recession occurred in 2023.

¹ InvMetrics Public DB >\$1 bb net.

Remarkably, despite a calendar year in which a recession was the consensus forecast, GDP growth and unemployment remained unexpectedly robust, and inflation continued to decline closer to the Federal Reserve's target. GDP growth in the US was 2.2%, 2.1%, 4.9% and 3.2% for the first, second, third, and fourth quarters, respectively, for calendar year 2023. Unemployment increased slightly over the calendar year, starting at 3.5% and ending at 3.7%⁻ but remained remarkably low. All of this occurred while the headline year-over-year inflation number decreased from 6.5% in December 2022 to 3.4% by year-end. Outside the US, unemployment and inflation painted a more mixed picture. The Eurozone ended calendar year 2023 with unemployment numbers at 6.5%¹, down from 6.7%¹ at the beginning of the year.

Despite a number of material events in the year (failure of Silicon Valley Bank, Israel-Palestine war) the year ended with positive returns for nearly all public market asset classes.

In equity markets, dispersion of contributors was very narrow in 2023 with notably relatively few stocks (mainly large technology companies) accounting for most of the gains driven by optimism over artificial intelligence ("AI") technology. Large cap stocks led the way, significantly outpacing smaller cap stocks.



2023 Equity Returns by Market Cap

Equity markets started the year in positive territory and never looked back despite some pullback in the third quarter. Most fixed income was in negative territory 3/4s through the year (as the Fed continued to raise rates) but finished the year in positive territory as the result of Fed rhetoric in fourth quarter of 2023. The fourth quarter was the best quarter for both fixed income and equity markets as economic data started to come in below expectations and optimism built that major central banks could start cutting rates in 2024. This shift in sentiment rekindled the broad risk-on environment experienced earlier in 2023.



¹ InvMetrics public DB >\$1 bb net.

Austin Fire's 2023 Performance Commentary

Austin Fire ended 2023 with approximately \$1.2 billion in investment assets. The Fund's allocation to Public Equity benefited from a strong year with US and International Equity having the highest absolute asset class returns, +22.1% and +16.6% respectively. Real Estate was the weakest performing asset class for the year, producing a net return of -15.0%. In public equity markets, 2023 was a tough year for active management, only two of seven active public equity managers outperformed benchmarks. However, all four active bond funds outperformed their respective benchmarks.

	Calendar Year 2023 Return
Austin Fire (net of fees)	8.4%
Static Benchmark ¹	13.6%
Dynamic Benchmark ²	14.5%
Peer Median Return ³	11.4%

**Returns are time-weighted, net of fees. Austin Fire's private market valuations are included on a one-quarter lag, cash flow adjusted basis, to account for the typical 60-90 day delayed reporting cycle for most private market investments.

Austin Fire's longer-term net returns (5-year and 10-year) all exceeded policy benchmarks. Strong manager selection, stable asset allocation, and sizable allocation to strong performing private markets have been the biggest drivers of long-term performance.

2024 Capital Markets through 5/31/2024

The first five months of 2024 have been favorable to public market investments. The US Equity market (S&P 500 Index) is up 11.3% year-to-date through 5/31/2024. The international equity market (MSCI EAFE index) is up 7.1% year-to-date through 5/31/2024. Investment grade bonds (Barclays Aggregate Index) are negative, -1.6% year-to-date as uncertainty around when the Fed will ultimately cut interest rates has weighed on bond returns.

Meketa, Staff and the Board of Trustees continue to diligently monitor the macro environment and its impact on the Fund.

Leandro Festino, CFA, CAIA Managing Principal

Aaron Lally, CFA, CAIA Managing Principal

Coll Moust

Colin Kowalski Investment Analyst

¹ Policy target weights multiplied by each respective asset class's benchmark.

² Actual asset class weight (each prior month end) multiplied by each respective asset class's benchmark.
³ InvMetrics Public DB >\$1 bb net.





Asset Growth 2013-2023



Asset Allocation vs. Target as of December 31, 2023





FINANCIAL SECTION

Independent Auditor's Report Fiduciary Net Position Notes to Financial Statements Schedule of Changes in Pension Liability and Related Ratios Schedule of Employer Contributions Schedule of Direct and Indirect Fees and Commissions GASB Statement No. 67 and No. 68

INDEPENDENT AUDITOR'S REPORT



Montemayor Britton Bender PC

CERTIFIED PUBLIC ACCOUNTANTS

AUSTIN FIRE FIGHTERS' RELIEF AND RETIREMENT FUND DBA AUSTIN FIREFIGHTERS RETIREMENT FUND

> FINANCIAL STATEMENTS WITH SUPPLEMENTARY INFORMATION AND INDEPENDENT AUDITOR'S REPORT

> > 31 DECEMBER 2023



Montemayor Britton Bender PC

CERTIFIED PUBLIC ACCOUNTANTS

Arturo Montemayor III CPA, President & CEO | Stacy Britton CPA, Shareholder | Sean Bender CPA, Shareholder Danielle Guerrero, Shareholder | Sara Carey CPA, Shareholder

Board of Trustees Austin Firefighters Retirement Fund

INDEPENDENT AUDITOR'S REPORT

Opinion

We have audited the accompanying statement of fiduciary net position of the Austin Firefighters Retirement Fund (the Fund) as of 31 December 2023 the related statement of changes in fiduciary net position for the year then ended, which collectively comprise the Fund's financial statements, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Fund as of 31 December 2023 and the changes in its fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Fund's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that main raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misinterpretations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing our audit in accordance with generally accepted auditing standards, we:

• Exercise professional judgment and maintain professional skepticism throughout the audit.

• Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

• Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion of the effectiveness of the Fund's internal control. Accordingly, no such opinion is expressed.

• Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

• Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Fund's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that are identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 7 and the supplemental schedules of changes in the net pension liability and related ratios, schedule of employer contributions, and schedule of investment returns on pages 20 through 21 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and

comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the Fund's financial statements. The supplementary schedule of direct and indirect fees and commissions on page 22 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information referred to above is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Montenayo Britter Bude

22 July 2024 Austin, Texas

2110 Boca Raton Drive Building B, Suite 102 Austin TX 78747 512.442.0380 www.montemayor.team

Our discussion and analysis of the Austin Firefighters Retirement Fund's (the Fund) financial performance provides an overview of the Fund's activities for the calendar years 2023 and 2022 This information is provided in conjunction with our financial statements that follow.

FINANCIAL HIGHLIGHTS

• Fiduciary net position of the Fund increased by \$46,861,522 or 4.20% in 2023, due to increased market returns, and decreased fund payouts. The fiduciary net position of the Fund decreased by \$187,711,635 or -14.40% in 2022, due to negative market returns, and increased fund payouts.

• Total contributions by the members and the City of Austin increased by 5.24% in 2023 and increased by 3.27% in 2022. The increase for 2023 over 2022 reflects wage increase amongst participants.

• The amount of benefits paid directly to retired members and their beneficiaries increased by \$5,466,010 in 2023 and increased by \$10,787,197 in 2022. The number of pension recipients and lump sum distributions increased for both years.

• The funding objective of the Fund is to meet long-term benefit obligations through contributions by the members and the City of Austin as well as from the investment income. As of 31 December 2023, the most recent actuarial measurement date, the Fund's actuarial funded ratio of actuarial assets as a percentage of actuarial liabilities was 85.6%, compared to 86.9% as of 31 December 2022.

OVERVIEW OF THE FINANCIAL STATEMENTS

The Fund's financial statements consist of the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position, with accompanying Notes to the Financial Statements. The information available in each is summarized below:

The Statement of Fiduciary Net Position presents the Fund's assets and liabilities and the resulting net position, which are held in trust for pension benefits. This statement provides a snapshot as of year-end of the Fund's investments, stated at fair value, along with cash and short-term investments, receivables, and other assets and liabilities. Over time, increases or decreases in Fund net position may serve as a useful indicator of whether the financial position of the Fund is improving or deteriorating.

The Statement of Changes in Fiduciary Net Position presents information showing additions to and deductions from the Fund during a twelve-month period, using the accrual basis of accounting. Thus, additions are reported when earned and deductions when incurred, regardless of when cash is received or paid. The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

FINANCIAL ANALYSIS

Our analysis below focuses on the fiduciary net position and changes in fiduciary net position of the Fund.

Summary of Fiduciary Net Position 31 December 2023, 2022 and 2021

	<u>2023</u>	<u>2022</u>	<u>2021</u>
Cash and receivables	\$10,179,737	\$7,409,903	\$24,361,041
Investments	1,152,514,655	1,108,752,080	1,280,210,826
Other assets	<u>0</u>	<u>0</u>	<u>0</u>
Total assets	<u>1,162,694,392</u>	<u>1,116,161,983</u>	<u>1,304,571,867</u>
Total liabilities	<u>0</u>	<u>329,113</u>	<u>1,027,362</u>
Fiduciary net position for pension benefits	<u>\$1,162,694,392</u>	<u>\$1,115,832,870</u>	<u>\$1,303,544,505</u>

Net position: The net position of the Fund increased by \$46,861,522 in 2023 and decreased by \$187,711,635 in 2022. The increase in 2023 reflects positive investment returns and continued contributions to the fund, as well as decreased payouts from the Fund. The decrease in 2022 reflects poor financial markets, and increased payouts from the Fund. The increase in 2021 and over prior years reflects positive investment returns due to stronger financial markets, as well as continued contributions to the Fund.

Liabilities: The Fund's liabilities decreased by \$329,113 in 2023 and decreased by \$698,249 in 2022 due to the timing of payment to the investment managers for their investment fees. The Fund's liabilities increased by \$1,027,362 in 2021 due to larger accounts payable balance to the investment managers for their investment fees.

Summary of Changes in Fiduciary Net Position 31 December 2023, 2022 and 2021

	<u>2023</u>	<u>2022</u>	<u>2021</u>
Additions:			
Contributions	\$44,275,845	\$42,071,919	\$40,738,694
Investment income (loss)	90,830,776	(147,628,167)	171,861,712
Other income	<u>400,453</u>	<u>97,917</u>	<u>74,049</u>
Total additions	<u>135,507,074</u>	<u>(105,458,331)</u>	<u>212,674,455</u>
Deductions:			
Benefit payments and			
contribution refunds	86,436,099	80,970,089	70,182,892
Administrative expenses	<u>2,209,453</u>	<u>1,283,215</u>	<u>970,731</u>
Total deductions	<u>88,645,552</u>	<u>82,253,304</u>	<u>71,153,623</u>
Net increase (decrease)	46,861,522	(187,711,635)	141,520,832
Fiduciary net position for pension benefits			
Beginning of year	<u>1,115,832,870</u>	<u>1,303,544,505</u>	<u>1,162,023,673</u>
End of year	<u>\$1,162,694,392</u>	<u>\$1,115,832,870</u>	<u>\$1,303,544,505</u>

Additions: Total contributions by the members and City of Austin for 2023 and 2022 were \$44,275,845 and \$42,071,919 respectively. The increase of 2,203,926 in 2023 represents a 5.24% increase from 2022. The increase of \$1,333,225 in contributions for 2022 represents a 3.27% increase. The net investment income/(loss) was approximately \$91 million and (\$148 million) for 2023 and 2022 respectively.

Deductions: The expenses paid by the pension plan include the benefit payments, refunds of member contributions, administrative and other expenses. Benefits paid directly to retired members and their beneficiaries and contribution refunds in 2023 were \$86,436,099 compared to \$80,970,089 in 2022. The amount of benefits paid increased by \$5,466,010 in 2023 from 2022 and increased by \$10,787,197 in 2022 from 2021. The increases in both 2023 and 2022 over prior years were due to the increases in the both number of retirees receiving benefits and in amount of lump sum distributions.

See independent auditor's report.

Overall Analysis: As of 31 December 2023, fiduciary net position increased by \$46,861,523 over 2022. As of December 2022, fiduciary net position decreased by \$181,711,635 or 4.2% over the prior year. The most recent actuarial measurement date of 31 December 2023 shows the Fund's actuarial funded ratio to be 85.6% compared to 86.9% from prior year. The 31 December 2023 valuation shows the Fund continues to be actuarially sound and has taken positive steps to continue that course.

REQUEST FOR INFORMATION

This financial report is intended to provide a general overview of the Fund's finances and to demonstrate the Fund's accountability for the money it receives. Any questions regarding this report may be addressed to the fund administration at: 4101 Parkstone Heights Dr., Suite 270, Austin, TX 78746.

See independent auditor's report.

AUSTIN FIREFIGHTERS RETIREMENT FUND STATEMENT OF FIDUCIARY NET POSITION

31 DECEMBER 2023

ASSETS

Cash and cash equivalents	<u>\$9,926,468</u>
Investments at fair value:	
Public domestic equities	254,473,069
Public international equities	237,993,931
Private equity fund investments	203,403,057
Public fixed income investments	331,716,446
Real estate fund investments	91,280,409
Private natural resources fund investments	<u>33,647,743</u>
	<u>1,152,514,655</u>
Interest and dividends receivable	<u>253,269</u>
	<u>1,162,694,392</u>
LIABILITIES	
Accounts payable	<u>0</u>
FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS	<u>\$1,162,694,392</u>

The accompanying notes are an integral part of this financial statement presentation.

AUSTIN FIREFIGHTERS RETIREMENT FUND STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED 31 DECEMBER 2023

ADDITIONS TO FIDUCIARY NET POSITION

Contributions:	
Fire fighter contributions	\$20,317,995
City of Austin contributions	<u>23,957,850</u>
	44,275,845
Net investment income:	
Net increase/(decrease) in the fair value of investments	26,231,445
Interest and dividends	10,137,190
Net gain on sale of investments	57,519,639
Investment expenses	(3,057,498)
	90,830,776
Other	400,453
	135,507,074
DEDUCTIONS FROM FIDUCIARY NET POSITION	
Retirement benefit payments	86,436,099
General and administrative expenses	2,209,453
	88,645,552
NET INCREASE (DECREASE) IN FIDUCIARY NET POSITION	46,861,522
BEGINNING OF YEAR FIDUCIARY NET POSITION	<u>1,115,832,870</u>
END OF YEAR FIDUCIARY NET POSITION	<u>\$1,162,694,392</u>

The accompanying notes are an integral part of this financial statement presentation.

NOTE 1: ORGANIZATION

A. FUND DESCRIPTION

The Board of Trustees of the Firefighters Retirement Fund (the Fund) is the administrator of a singleemployer defined benefit pension plan covering fire fighters employed by the City of Austin, Texas. The Fund is open solely to active fire fighters in the City of Austin (the City). The Fund is considered a part of the City of Austin's financial reporting entity and is included in the City's financial statements as a pension fund trust. The Fund was originally established, and may be amended, by acts of the Texas Legislature. The current governing statute is Article 6243e.1, Vernon's Texas Civil Statutes. The Fund is governed by a Board of Trustees, which is composed of five members: the mayor of the municipality; the City's treasurer or, if there is no treasurer, a person who by law, charter provision, or ordinance performs the duty of the City Treasurer, and three active members of the retirement Fund elected by vote of the fire fighters and retirees.

The table below summarizes the membership of the Fund as of 31 December 2023:

Retirees and Beneficiaries Currently Receiving Benefits	995
Terminated Members Entitled to Benefits but Not Yet Receiving Them	36
Active Participants (Vested and Nonvested)	<u>1,246</u>
	<u>2,277</u>

The Fund provides service retirement, death, disability, and termination benefits. When a member has completed ten years of credited service after entrance into the Fund, the member's account becomes vested and non-forfeitable. Under the terms of the Fund agreement, members or their beneficiaries are eligible for distributions of benefits upon attaining a normal retirement age of 50 with ten years of service, or upon completing 25 years of service regardless of age. In addition, members are eligible for early retirement benefits upon reaching age 45 with at least ten years of service or twenty years of creditable service, regardless of age. Distributions to members or their beneficiaries are also available in the event of total and permanent disability or upon death including survivor (spousal) benefits at 75% of retiree benefits. Members are eligible to enter the Deferred Retirement Option Plan (DROP) upon satisfaction of normal retirement eligibility, not to exceed seven years. DROP provides eligible participants the ability to designate benefits to be disbursed in a single payment or not more than four payments upon leaving active service.

The term of benefit payments are determined by the member's level of earnings and length of service. With the exception of payments under the DROP feature, distributions of payments are made in a series of equal installments over a period of time. Payments to members or their beneficiaries may be increased annually by the amount of increase in the Consumer Price index. Cost-of-living increases must be approved by the Board of Trustees and actuary of the Fund. There was not a cost-of-living adjustment (COLA) for the year ending 31 December 2023. The contribution refunds are paid with 5% interest.

B. FUNDING POLICY

The contribution provision of this Fund is authorized by Article 6243e.1, Vernon's Texas Civil Statutes, which provides the authority and procedure to change the amount of contributions determined as a percentage of pay by each member and a percentage of payroll by the City.

The Fund is maintained by biweekly contributions from the earnings of fire fighters and from the City. For the year ended 31 December 2023, the City's contribution rate was 22.05% and fire fighters contribution rate was 18.70% of their earnings excluding overtime, educational incentive pay, assignment pay, and temporary pay in higher classifications.

While the contribution requirements are not actuarially determined, state law requires that each plan of benefits adopted by the Fund be approved by a qualified actuary. The actuary must certify that the contribution commitment by fire fighters and the City provides an adequate financing arrangement.

C. NET PENSION LIABILITY

The Fund's net pension liability measured as of 31 December 2023 was as follows:

Total pension liability	\$1,647,501,672
Plan fiduciary net position	<u>(1,162,694,392)</u>
Net pension liability	<u>\$484,807,280</u>
Plan fiduciary net position as a percentage of total pension liability	<u>70.6%</u>

1. Actuarial Assumptions

The total pension liability in the 31 December 2023 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Price inflation assumption: 2.5% per year.

Rate of Investment Return: 7.30% compounded annually, net of investment and administration expenses.

Municipal bond rate: 3.25%, based on 20-Bond GO Index at the measurement date.

Rates of Salary Increase: Salary increases are split into a wage inflation assumption of 2.50% and a merit scale based on service.

Disability:

<u>Age</u>	<u>Rate</u>
Under 30	0.013%
30-39	0.040%
40-49	0.067%
50+	0.033%

Mortality Rates:

Active and Vested Terminated Lives: PubS(A)-2010 Mortality Table for Employees.

Retiree Lives: PubS(A)-2010 Mortality Table for Healthy Retirees.

Contingent Survivor Lives: PubS(A)-2010 Mortality Table for Contingent Survivors.

Disabled Lives: PubS(A)-2010 Mortality Table for Disabled Retirees.

Generational mortality improvements are projected from 2010 using Scale MP-2021.

Withdrawal rates are based on department and service.

Retirement Rates are based on probability of retirement and years past early retirement eligibility.

DROP Election: Members are assumed to elect either normal retirement or DROP with the DROP period that maximizes the present value of their retirement benefits, including reflecting the impact of previously granted COLAs the member would be eligible for during the assumed DROP period.

Existing DROP Balances: Members with existing DROP balances are assumed to withdraw their balances over the next eight years, but no later than age 70½.

Future Cost-of-Living Adjustment Assumption: 0%

Active Payment Form Assumption: Life Annuity with 75% continued to the Surviving Spouse (or designated beneficiary.

Percent Married: 100% of actives are assumed to be married.

Spouse Age: A Male member is assumed to be three years older than his beneficiary and A Female member is assumed to be one year younger than her beneficiary.

Dependent Children: 50% of active members are assumed to have dependent children and the youngest child is assumed to be one year.

Administrative Expenses: Administrative expenses of 1.25% of payroll are added to the normal cost.

The target allocation and the expected arithmetic net real rates of return for each major asset class are summarized in the following table:

Asset Class	Target <u>allocation</u>	Expected real rate <u>of return</u>
US Equity	20.0%	5.8%
Developed Market Equity (non-US)	10.0%	6.1%
Emerging Market Equity	12.0%	6.1%
Private Equity (Fund of Funds)	15.0%	7.1%
Investment Grade Bonds	13.0%	2.1%
TIPS	5.0%	2.0%
High Yield Bonds	2.5%	4.1%
Bank Loans	2.5%	3.9%
Emerging Markets Bonds	7.0%	4.1.%
Core Real Estate	5%	4.2%
Value Add Real Estate	5.0	6.2%
Private Natural Resources	3%	6.5%

2. Discount Rate

The discount rate used to measure the Total Pension Liability was 6.01%. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions to the Fund will continue to follow the required contributions as described by Vernon's Texas Civil Statute, Article 6243e.1. The City's contribution rate is 22.05% of compensation and members' contribution is 18.70% of compensation. Based on the 31 December 2023 measurement date, the fiduciary net position is projected to be greater than or equal to the benefit payments projected

for each future period. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on Fund investments was applied to all periods of projected benefit payments to determine the total pension liability.

3. Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Fund, calculated using the discount rate of 6.01%, as well as what the Fund's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.01%) or one percentage point higher (7.01%) than the current rate:

	1% Decrease	Discount Rate	1% Increase
	<u>(5.01%)</u>	(6.01%)	<u>(7.01%)</u>
Fund's net pension liability	<u>\$662,769,538</u>	<u>\$484,807,280</u>	<u>\$336,357,806</u>

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING

The Fund's financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Fire fighter and City contributions are recognized as revenues in the period which the related employees' payroll is earned. Benefits are recognized when the employee becomes eligible for retirement and elects to retire under the system and is paid a benefit. Employee contribution refunds are recognized when the employee leaves the City and elects to withdraw a contribution.

METHOD USED TO VALUE INVESTMENTS

Cash and short-term investments include deposits in a custodian-managed investment pool from which the Fund may make deposits and withdrawals at any time without prior notice or penalty. The market value of such deposits is equal to cost. The Board of Trustees has adopted a Statement of Investment Policies and Objectives (Investment Policy) to set forth factors involved in the management of investment assets for the Fund. By statute, the Board of Trustees in its sole discretion may invest, reinvest, or change the assets of the Fund.

METHOD USED TO VALUE INVESTMENTS

The Board of Trustees shall invest in funds in whatever instruments or investments are considered prudent. In making investments for the Fund, the Board of Trustees shall discharge its duties with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with such matters would use in the conduct of an enterprise of a similar character and with similar aims.

Investments are reported at fair value. Securities traded on a national or international exchanges are valued at the last reported sales price at current exchange rates. Investments that do not have an established market are reported at estimated fair value. Realized and unrealized gains and losses as well as other investment adjustments are reported as net appreciation (depreciation) in the fair value of investments.

ESTIMATES

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions to the net position restricted for pension benefits during the reporting period. Actual results could differ from those estimates.

FUND EXPENSES

All Fund administrative costs are the responsibility of the Fund and are financed through investment earnings.

SUBSEQUENT EVENTS

Management has evaluated subsequent events through the date of the Independent Auditor's Report, the date the financial statements were available to be issued.

BUDGET

The Fund is not legally required to adopt a budget.

NOTE 3: FEDERAL INCOME TAXES

The Fund is a Public Employee Retirement Fund and is exempt from Federal income taxes and the provisions of the Employee Retirement Income Security Act of 1974.

NOTE 4: DEPOSIT AND INVESTMENT RISK

CUSTODIAL CREDIT RISK

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Fund will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. Deposits are exposed to custodial credit risk if they are uninsured and unsecured.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Fund will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Fund and are held by either the counterparty or the counterparty's trust department or agent but not in the Fund's name. As of 31 December 2023, the Fund's investment securities are not exposed to custodial credit risk because all securities are held by the Fund's custodial bank in the Fund's name.

CREDIT RISK

Credit risk is the risk that an issuer or other counter party to an investment will not fulfill its obligations to the Fund. It is the Fund's policy to maintain fixed income securities within its portfolio at an average credit rating of investment grade or better.

As of 31 December 2023, the Fund had the following investments subject to interest rate risk and credit risk:

		Weighted	
	Weighted	Average	
	Average	Credit	
Investment	<u>Maturity</u>	<u>Rating</u>	<u>Fair Value</u>
SSgA Bond Fund	8.6 years	AA	\$119,503,018
SSEA DOILD LUID	0.0 years		JIIJ,J03,018
Loomis Sayles Core Plus Fixed Income	8.7 years	А	\$46,259,605
Aberdeen Emerging Markets Bond Fund	11.5 years	BB	\$60,268,738
SSGA TIPS	7.1 years	AA	\$56,664,578
Pyramis Tactical Bond Fund	13.3 years	А	\$26,504,769
Aristotle Pacific	3.9 years	В	\$22,853,437

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributed to the magnitude of the Fund's investment in a single issuer. As of year end, the Fund had no investments with a single issuer that exceeded 5% of the Fund's net position. The Fund's investment policy established asset allocation targets for major classes of invested assets as listed below. The Fund is authorized to invest in the following:

Class	Target Range
Equity	30-55%
Fixed Income Investments	20-40%
Alternatives	10-40%

FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. Although the Fund does have a formal investment policy, it does not specifically address the Fund's exposure related to foreign currency risk. The Fund had the following exposure to foreign currency risk as of 31 December 2023:

Denomination by Investment Type	<u>Market Value (USD)</u>
Private Equity Fund Investments Euro	<u>\$35,527,712</u>
Real Estate Fund Investments	
Euro	<u>612,266</u>
Public Fixed Income Investments	
Brazilian Real	34,874,220
Euro	39,720,584
South African Rand	13,528,479
Indian Rupee	18,267,304
Mexican Peso	5,867,203
Colombian Peso	12,352,603
Uraguay Peso	3,537,680
Rupiah	10,885,344
Sol	5,647,740
	<u>144,681,157</u>
	<u>\$180,821,135</u>

INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect an investment's fair value. Although the Fund does have a formal investment policy, it does not specifically limit investment maturities as a means of managing its exposure to potential fair value losses from future changes in interest rates. the Fund's custodial bank in the Fund's name

NOTE 5: SCHEDULE OF INVESTMENT RETURNS

The money-weighted rate of return expresses investment performance, net of investment expenses, that reflects the estimated effect of the contributions received and the benefits paid during the year.

8.80%

Fiscal Year Annual Money-Weighted Net Real Rate of Return

31 December 2023

NOTE 6: FAIR VALUE MEASUREMENT

	Quoted Prices In Active Markets for Identical Assets <u>(Level 1)</u>	Significant Other Observable Inputs <u>(Level 2)</u>	Significant Unobservable Inputs <u>(Level 3)</u>
Public domestic equities	<u>\$254,473,069</u>	<u>\$0</u>	<u>\$0</u>
Public international equities	<u>\$237,993,931</u>	<u>\$0</u>	<u>\$0</u>
Private equity fund investments	<u>\$0</u>	<u>\$0</u>	<u>\$203,403,057</u>
Public fixed income investments	<u>\$0</u>	<u>\$331,716,446</u>	<u>\$0</u>
Real estate fund investments	<u>\$0</u>	<u>\$0</u>	<u>\$91,280,409</u>
Private natural resources fund	<u>\$0</u>	<u>\$0</u>	<u>\$33,647,743</u>

Level 2 investments are valued based on quoted market prices in active markets as well as market valuation methodologies using discounted cash flows and observable credit ratings. Level 3 investments include investments in a group of non-registered private equity investment partnerships, private equity real estate, and private natural resources funds. Fair value determinations by the underlying funds take into consideration the operating results, financial conditions, real estate appraisals, and recent sales prices of issuers' securities.

NOTE 7: SECURITIES LENDING

The Fund is authorized under its investment policy to participate in securities lending programs through State Street Bank and Trust Company (State Street) under which, for an agreed-upon fee, investments owned by the Fund are loaned to a borrowing financial institution. Under this agreement, when the
AUSTIN FIREFIGHTERS RETIREMENT FUND NOTES TO THE FINANCIAL STATEMENTS

loan closes, the borrowed securities are returned to the Fund and the collateral is returned to the borrower. During the fiscal year, State Street lent, on behalf of the Fund, certain US Equity securities of the Fund held by State Street as custodian and received cash or other collateral including securities issued or guaranteed by the United States government (USD collateral). State Street does not have the ability to pledge or sell collateral securities delivered absent a borrower default.

The lending agreement requires securities to be collateralized by cash, US government securities or irrevocable letters of credit with a total market value of at least 100% of the market value of the loaned securities.

Pursuant to the Securities Lending Authorization Agreement, State Street had an obligation to indemnify the Fund in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default of the Borrower.

During the fiscal year, the Fund and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment fund comprised of a liquidity pool. As of 31 December 2023 the liquidity pool had an average duration of 24.56 days and an average weighted final maturity of 108.91 days for USD collateral. On 31 December 2023 the Fund had no credit risk exposure to borrowers. The market value of collateral held and the market value of securities on loan for the Fund as of 31 December 2023 was \$2,908,596 and \$2,793,811 respectively.

NOTE 8: COMMITMENTS AND CONTINGENCIES

The Fund's investments include investment in partnership interests, which are closed end private markets strategies. In connection with those investments, the Fund still has remaining commitments as of 31 December 2023 of \$59.40 million pursuant to the terms of the respective interest.

At 31 December 2023, the total accumulated lump sum benefit due to DROP participants was \$155,152,918.

AUSTIN FIREFIGHTERS RETIREMENT FUND

Schedule of Changes in Net Pension Liability and Related Ratios

Last Ten Years

Total Pension Liability	Year ending Year ending 12/31/2014 12/31/2015	Year ending 12/31/2015	Year ending 12/31/2016	Year ending 12/31/2017	Year ending 12/31/2018	Year ending 12/31/2019	Year ending 12/31/2020	Year ending 12/31/2021	Year ending 12/31/2022	Year ending 12/31/2023
Service Cost	\$ 25,318,456 \$ 23,309,543	\$ 23,309,543	\$ 24,322,417	\$ 23,830,495	\$ 25,130,502	\$24,322,417 \$ 23,830,495 \$ 25,130,502 \$ 26,191,723 \$ 26,169,522 \$ 28,111,860 \$ 31,101,116 \$ 32,382,154	\$ 26,169,522	\$ 28,111,860	\$ 31,101,116	\$ 32,382,154
Interest	62,976,839 66,404,730	66,404,730	70,892,708	75,812,099	80,552,018	84,547,315	86,820,853	91,654,965	94,234,349	99,834,897
Changes of Benefit Terms	0	0	5,491,908	8,963,689	10,188,417	8,058,934	7,158,834	30,096,465	0	0
Differences between Expected										
and Actual Experience	0	7,192,645	8,893,371	4,360,239	(735,314)	(9,834,830)	(1,670,701)	3,265,825	13,460,814	(6,339,940)
Changes of assumptions	4,883,207	0	0	0	(4,778,539)	12,707,469	21,410,890	0	20,949,282	213,908,378
Benefit Payments, including Refunds										
of Employee Contributions	(37,992,903)	(44,756,847)	(45.495.681)	(51.888.455)	(55.979.294)	(37,992,903) (44,756,847) (45,495,681) (51,888,455) (55,979,294) (58,824,392)		(63.483.649) (70.182.892)	(80,970,089)	(86,436,099)
Net Change in Total Pension Liability	55,185,599	55,185,599 52,150,071	64,104,723	61,078,067	54,377,790	62,846,219	76,405,749	82,946,223	78,775,472	253,349,390
Total Pension Liability-Beginning of year (2)	806,282,369	861.467.968	913,618,039	977,722,762	1.038.800.829	1.093,178,619	1,156,024,838	1.232,430,587	1,315,376,810	1,394,152,282
Total Pension Liability-Ending (a)	\$861,467,968	\$913.618.039	\$977,722,762	\$1,038,800,829	\$1,093,178,619	\$1,156,024,838	\$1,232,430,587	\$1,315,376,810	\$1,394,152,282	\$1,647,501,672

Plan Fiduciary Net Position

Contributions-Employer	\$18,669,944 \$19,222,329	\$19,222,329	\$19,103,891	\$19,242,205	\$20,084,617	\$21,057,765	\$21,311,021	\$22,041,592	22,765,290	23,957,850
Contributions- Employee	14,659,946	15,546,979	15,884,261	16,318,769	17,033,213	17,858,397	18,073,292	18,697,102	19,306,629	20,317,995
Net Investment Income	42,005,227	6,328,063	55,569,165	141,915,000	(25,114,064)	141,535,432	147,025,907	171,935,761	(147,530,250)	91,231,229
Benefit Payments, including Refunds										
of Employee Contributions	(37,992,903) (44,756,847)	(44,756,847)	(45,495,681)	(51,888,455)	(55,979,294)	(58,824,392)	(63,483,649)	(70,182,892)	(80,970,089)	(86,436,099)
Administrative Expenses	(530,816)	(562,687)	(662,501)	(1, 399, 488)	(704,903)	(852,192)	(1,092,299)	(970,731)	(1,283,215)	(2,209,453)
Net Change in Plan Fiduciary Net Position	36,811,398	36,811,398 (4,222,163)	44,399,135	124,188,031	(44,680,431)	120,775,010	121,834,272	141,520,832	(187,711,635)	46,861,522
Plan Fiduciary Net Position - Beginning	752,621,826 789,433,2	789,433,224	785,211,061	829,610,196	953,798,227	909,117,796	1,029,892,806	1,162,023,673	1,303,544,505	1,115,832,870
Adjustment to Beginning Net Position	0	0	0	0	0	0	10,296,595	0	0	0
Plan Fiduciary Net Position - Ending (b)	\$789,433,224 \$785,211	\$785,211,061	\$\$29,610,196	\$953,798,227	S909,117,796	\$1,029,892,806	\$1,162,023,673	S1 303 544 505	S1 115 832 870	1 162 694 392
Net Pension Liability (Asset) - Ending (a) -										
(9)	\$72,034,744 \$128,406,978 \$148,112,566	\$128.406.978	\$148,112,566	\$85,002,602	\$184,060,823	\$126.132.032	\$70,406,914	\$11,832,305	\$11,832,305 \$ 278,319,412 \$	\$ 484,807,280
Plan Fiduciary Net Position as a Percentage of										

5

the												
Total Pension Liability	91.6%	86.0%	84.9%	9	91.8%	83.2%	89.	89.1%	94.3%	99.1%	80.0%	70.6%
Covered Payroll	\$ 84,670,948	\$ 84,670,948 \$ 87,836,040	\$ 86,638,961	\$ 87,266,236		\$ 91,086,698	\$ 95,500,068		\$ 96,648,621 \$	\$ 99,961,868	99,961,868 \$ 103,243,946 \$ 108,652,381	\$ 108,652,381
Net Pension Liability as a Percentage of Covered Payroll	85.1%	146.2%	171.0%	6	97.4%	202.1%	132.1%	%1	72.9%	11.8%	269.6%	446.2%

See Independent Auditor's Report.

AUSTIN FIREFIGHTERS RETIREMENT FUND

Schedule of Employer Contributions

Last 10 Years

		Contributions				
		in relation to				
	Actuarially	the Actuarially	Contribution			Contributions as a
	Determined	Determined	Deficiency			percentage of
 Fiscal Year Ended	Contribution	Contributions	(Excess)	Со	vered Payroll	Covered Payroll
 12/31/2023	N/A	N/A	N/A	\$	108,652,381	22.05%
12/31/2022	N/A	N/A	N/A	\$	103,243,946	22.05%
12/31/2021	N/A	N/A	N/A	\$	99,961,868	22.05%
12/31/2020	N/A	N/A	N/A	\$	96,648,621	22.05%
12/31/2019	N/A	N/A	N/A	\$	95,500,068	22.05%
12/31/2018	N/A	N/A	N/A	\$	91,086,698	22.05%
12/31/2017	N/A	N/A	N/A	\$	87,266,236	22.05%
12/31/2016	N/A	N/A	N/A	\$	86,638,961	22.05%
12/31/2015	N/A	N/A	N/A	\$	87,836,040	21.88%
12/31/2014	N/A	N/A	N/A	\$	84,670,948	22.05%

Schedule of Investment Returns

Last 10 Years

Fiscal Year	Annual Money- Weighted Rate of
Ended	Return Net of
Linded	Investment
	Expense
12/31/2023	8.80%
12/31/2022	-10.40%
12/31/2021	18.00%
12/31/2020	15.46%
12/31/2019	15.75%
12/31/2018	-2.66%
12/31/2017	17.29%
12/31/2016	7.13%
12/31/2015	0.81%
12/30/2014	5.60%
12/31/2013	13.30%

See independent auditor's report.

AUSTIN FIREFIGHTERS RETIREMENT FUND

Schedule of Direct and Indirect Fees and Commissions

ASSET CLASS	 ANAGEMENT S PAID FROM FUND	М	IANAGEMENT FEES REDUCED FROM INVESTMENT	M. (Ma	DTAL INVESTMENT ANAGEMENT FEES magement Fees Reduced from Investment + Management Fees Paid From Fund)	BROKERAGE EES/COMMISSIONS REDUCED FROM INVESTMENT	IN	DTAL DIRECT AND DIRECT FEES AND COMMISSIONS (Management Fees + Brokerage Fees/Commissions)
Public Equity	\$ 1,342,662	\$	1,191,871	\$	2,534,533	\$ 170,260	\$	2,704,793
Fixed Income	537,192		121,453		658,645	0		658,645
Real Assets	0		1,374,951		1,374,951	0		1,374,951
Alternative/Other	0		1,827,349		1,827,349	0		1,827,349
TOTAL	\$ 1,879,854	\$	4,515,624	\$	6,395,478	\$ 170,260	\$	6,565,738

Total Investment Expenses

Total Direct and Indirect	
Fees and Commissions	\$ 6,565,738
Investment Services	
Custodial	\$ 107,515
Investment Consulting	\$ 208,909
Legal	\$ 59
Total	\$ 316,483
Total Investment	
Expenses	
(Total Direct and Indirect	
Fees and Commissions +	
Investment Services)	\$ 6,882,221

See independent auditor's report.

GASB STATEMENT NO. 67 and NO. 68





Classic Values, Innovative Advice

Austin Firefighters Retirement Fund

GASB 67/68 Report as of December 31, 2023

Produced by Cheiron July 2024



Via Electronic Mail

July 15, 2024

Board of Trustees Austin Firefighters Retirement Fund 4101 Parkstone Heights Drive, Suite 270 Austin, Texas 78746

Dear Trustees of the Board:

This report provides accounting and financial reporting information for the City of Austin for the Austin Firefighters Retirement Fund. This information includes:

- Total Pension Liability,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Changes in the Net Pension Liability,
- Schedule of Employer Contributions,
- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Annual Pension Expense for the City of Austin.

Please let us know if you have any questions about the report.

Sincerely, Cheiron

Heath Merlak, FSA, EA, MAAA, FCA Principal Consulting Actuary

Elizabeth Wiley, FSA, EA, MAAA, FCA Consulting Actuary

SECTION I – BOARD SUMMARY

Highlights

The Measurement Date for the Austin Firefighters Retirement Fund is December 31, 2023. Measurements as of the Reporting Date are based on the fair value of assets as of December 31, 2023 and the Total Pension Liability as of the Measurement Date, December 31, 2023. The Total Pension Liability as of December 31, 2023 is based on Cheiron's valuation as of December 31, 2023.

Summary of Results **Measurement Date** 12/31/2023 12/31/2022 Net Pension Liability \$ 484,807,280 \$ 278,319,412 Deferred Outflows (316,712,096) (151, 337, 983)Deferred Inflows 11,449,323 8,029,299 Net Impact on Statement of Net Position \$ 179,544,507 \$ 135,010,728 Pension Expense (\$ Amount) \$ 68,491,629 \$ 45,171,569 Pension Expense (% of Payroll) 63.04% 43.75%

The table below summarizes the key results during this measurement period.

The Net Pension Liability (NPL) increased by approximately \$206 million since the prior Measurement Date, primarily due to assumption changes. These assumption changes include those adopted with the experience study completed during this period, increasing the NPL by approximately \$27 million. Additionally, the assumed discount rate required under GASB Nos. 67/68 decreased from 7.30% to 6.01%, increasing the NPL by \$187 million. Please see Section III for more information related to the discount rate change.

Investment losses are recognized over five years, and the actuarial gains and assumption changes are recognized over the average remaining service life, currently eight years. Unrecognized amounts are reported as deferred inflows and deferred outflows. As of the end of the current reporting year, the City of Austin would report a Net Pension Liability of \$484,807,280, Deferred Inflows of \$11,449,323, and Deferred Outflows of \$(316,712,096). Consequently, the net impact on the City of Austin's statement of net position due to AFRF would be \$179,544,507 at the end of the reporting year. In addition, any contributions between the Measurement Date and the Reporting Date would be reported as deferred outflows to offset the cash outflow reported.

For the measurement year ending December 31, 2023, the annual pension expense is \$68,491,629, or 63.04% of covered-employee payroll. This amount represents the change in the net impact on the City of Austin's statement of net position plus employer contributions (\$179,544,507 – \$135,010,728 + \$23,957,850). Pension expense volatility from year to year is to be expected and will largely be driven by investment gains or losses, but other changes can also have a significant impact. Section VII of the report shows a breakdown of the pension expense.



SECTION II – CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under Governmental Accounting Standards Board Statement No. 67 (GASB 67) for the Austin Firefighters Retirement Fund (AFRF) and under GASB No. 68 for the City of Austin. This report is for the use of AFRF, the City of Austin, and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for AFRF.

In preparing our report, we relied on information, some oral and some written, supplied by AFRF. 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*.

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.

This report was prepared for AFRF for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Heath Merlek

Heath Merlak, FSA, EA, MAAA, FCA Principal Consulting Actuary

Elizabeth Wiley, FSA, EA, MAAA, FCA Consulting Actuary



SECTION III – DETERMINATION OF DISCOUNT RATE

The projection of cash flows used to determine the discount rate assumes that member and city contributions to the Fund will continue to follow the required contributions as described by Vernon's Texas Civil Statute, Article 6243e.1. These rates of compensation are 22.05% for the city and 18.70% for the members.

Based on the December 31, 2023 Measurement Date and the requirements of GASB Nos. 67 and 68, including the continuation of these contribution rates, the Fiduciary Net Position is projected to be depleted before all benefit payments projected for the current membership are paid. To determine the discount rate for calculating the Total Pension Liability, a single discount rate is calculated that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following (as stated in GASB Nos. 67 and 68):

- 1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension plan's fiduciary net position is projected to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, should be determined using the long-term expected rate of return on pension plan investments.
- 2. The actuarial present value of projected benefit payments not included in (1) above, calculated using the municipal bond rate.

AFRF's long-term expected rate of return is 7.30% and the yield on the Bond Buyer 20-Bond GO Index adopted by AFRF for the municipal bond rate is 3.26% at the Measurement Date. The resulting discount rate for GASB Nos. 67 and 68, reflecting this definition, is 6.01%.



SECTION IV – NOTE DISCLOSURES

The table below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of Fund assets), and the Net Pension Liability (NPL) during the measurement year. Note that the city will report this information for the fiscal year ending September 30, 2024.

Change in	Net Pension Lia	ability	
		Increase (Decrease)	
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 12/31/2022	\$ 1,394,152,282	\$ 1,115,832,870	\$ 278,319,412
Changes for the year:			
Service cost, middle of year	32,382,154		32,382,154
Interest	99,834,897		99,834,897
Changes of benefits	0		0
Differences between expected and actual			
experience	(6,339,940)		(6,339,940)
Changes of assumptions	213,908,378		213,908,378
Contributions - employer		23,957,850	(23,957,850)
Contributions - member		20,317,995	(20,317,995)
Net investment income		91,231,229	(91,231,229)
Benefit payments	(86,436,099)	(86,436,099)	0
Administrative expense		(2,209,453)	2,209,453
Net changes	\$ 253,349,390	\$ 46,861,522	\$ 206,487,868
Balances at 12/31/2023	\$ 1,647,501,672	\$ 1,162,694,392	\$ 484,807,280

During the measurement year, the NPL increased by approximately \$206 million. The service and interest costs increased the NPL by approximately \$132 million, investment income and administrative expenses decreased the NPL by approximately \$89 million, and contributions decreased the NPL by approximately \$44 million.

Demographic and economic assumptions were changed from the prior measurement year to reflect the experience study completed by Cheiron to be effective for the December 31, 2023 actuarial valuation and adopted by the Board on March 25, 2024. The combination of these assumption changes and the decrease in the discount rate required under GASB Nos. 67 and 68 increased the TPL by approximately \$214 million. There were actuarial experience gains during the year of approximately \$6 million.



SECTION IV – NOTE DISCLOSURES

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table below shows the sensitivity of the NPL to the discount rate.

Sensitivity of Net Pension	Liability to Cha	nges in Discour	nt Rate
	1% Decrease 5.01%	Discount Rate 6.01%	1% Increase 7.01%
Total Pension Liability Plan Fiduciary Net Position Net Pension Liability	\$ 1,825,463,930 1,162,694,392 \$662,769,538	\$ 1,647,501,672 	\$ 1,499,052,198
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	63.7%	70.6%	77.6%

A one percentage point decrease in the discount rate increases the TPL by approximately 11% and the NPL by approximately 37%. A one percentage point increase in the discount rate decreases the TPL by approximately 9% and the NPL by approximately 31%.

Asset Allocation and Expected Long-Term Real Rates of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The following table summarizes the best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2023:



Asset Allocation and Ex	pected Real Rate o	f Return ¹
Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	20.0%	5.8%
Developed Market Equity (non-US)	10.0%	6.1%
Emerging Market Equity	12.0%	6.1%
Private Equity	15.0%	7.1%
Investment Grade Bonds	13.0%	2.1%
TIPS	5.0%	2.0%
High Yield	2.5%	4.1%
Bank Loans	2.5%	3.9%
Emerging Market Bonds	7.0%	4.1%
Core Real Estate	5.0%	4.2%
Value Add Real Estate	5.0%	6.2%
Private Natural Resources	3.0%	6.5%
Total	100.00%	

SECTION IV – NOTE DISCLOSURES

¹ Source: Meketa

For the year ending December 31, 2023, the actual money-weighted rate of return on plan assets was calculated by Meketa to be 8.80%, net of investment expense.



SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

The schedules of Required Supplementary Information generally start with information as of the implementation of GASB 67, and will show up to 10 years of information. The schedule below and on the following page shows the changes in NPL and related ratios required by GASB for the ten years since the implementation of GASB No. 67.

Schedu		0				Liability an Ending Dece		Related Ratio	S	
	ru	2023	su	2022		2021		2020		2019
Total Pension Liability (TPL)										
Service cost (MOY)	\$	32,382,154	\$	31,101,116	\$	28,111,860	\$	26,169,522	\$	26,191,723
Interest		99,834,897		94,234,349		91,654,965		86,820,853		84,547,315
Changes of benefit terms		0		0		30,096,465		7,158,834		8,058,934
Differences between expected										
and actual experience		(6,339,940)		13,460,814		3,265,825		(1,670,701)		(9,834,830)
Changes of assumptions Benefit payments, including		213,908,378		20,949,282		0		21,410,890		12,707,469
refunds		(86,436,099)	_	(80,970,089)	_	(70,182,892)	_	(63,483,649)		(58,824,392)
Net change in TPL	\$	253,349,390	\$	78,775,472	\$	82,946,223	\$	76,405,749	\$	62,846,219
TPL - beginning	1	1,394,152,282	_	1,315,376,810	_	1,232,430,587	_	1,156,024,838	_	1,093,178,619
TPL - ending	\$ 1	1,647,501,672	\$	1,394,152,282	\$	1,315,376,810	\$	1,232,430,587	\$	1,156,024,838
Plan fiduciary net position										
Contributions - employer	\$	23,957,850	\$	22,765,290	s	22.041.592	\$	21.311.021	\$	21,057,765
Contributions - member		20,317,995		19,306,629		18,697,102		18,073,292		17,858,397
Net investment income		91,231,229		(147,530,250)		171,935,761		147.025.907		151.832.027 1
Benefit payments, including										
refunds		(86,436,099)		(80,970,089)		(70,182,892)		(63,483,649)		(58,824,392)
Administrative expense		(2,209,453)	_	(1,283,215)	_	(970,731)	_	(1,092,299)		(852,192)
Net change in plan fiduciary										
net position	\$	46,861,522	\$	(187,711,635)	\$	141,520,832	\$	121,834,272	\$	131,071,605
Plan inductory net position -										
beginning]	1,115,832,870	_	1,303,544,505	_	1,162,023,673	_	1,040,189,401		909,117,796
Plan fiduciary net position - ending	\$ 1	1,162,694,392	\$	1,115,832,870	\$	1,303,544,505	\$	1,162,023,673	\$	1,040,189,401 1
Net pension liability - ending	\$	484,807,280	\$	278,319,412	\$	11,832,305	\$	70,406,914	\$	115,835,437
Plan fiduciary net position as a percentage of the TPL		70.6%		80.0%		99.1%		94.3%		90.0%
Covered payroll	\$	108,652,381	\$	103,243,946	\$	99,961,868	\$	96,648,621	\$	95,500,068
Net pension liability as a percentage of covered payroll		446.2%		269.6%		11.8%		72.8%		121.3%

¹ Includes one-time adjustment to beginning Net Position per Foster & Foster of \$10,296,595.



SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

		<u> </u>		let Pension I nent Year E					5	
r	or		en		, mo	-	bei			203 4
		2018		2017		2016		2015		2014
Total Pension Liability (TPL)										
Service cost (MOY)	\$	25,130,502	\$	23,830,495	\$	24,322,417	\$	23,309,543	\$	25,318,456
Interest		80,552,018		75,812,099		70,892,708		66,404,730		62,976,839
Changes of benefit terms		10,188,417		8,963,689		5,491,908		0		0
Differences between expected										
and actual experience		(735,314)		4,360,239		8,893,371		7,192,645		0
Changes of assumptions Benefit payments, including		(4,778,539)		0		0		0		4,883,207
refunds	_	(55,979,294)	_	(51,888,455)		(45,495,681)		(44,756,847)		(37,992,903)
Net change in TPL	\$	54,377,790	\$	61,078,067	\$	64,104,723	\$	52,150,071	\$	55,185,599
TPL - beginning		1,038,800,829		977,722,762		913,618,039		861,467,968		806,282,369
TPL - ending	\$	1,093,178,619	\$	1,038,800,829	\$	977,722,762	\$	913,618,039	\$	861,467,968
Plan fiduciary net position										
Contributions - employer	\$	20.084.617	s	19.242.205	\$	19,103,891	s	19.222.329	s	18,669,944
Contributions - member	Ť	17.033.213	Ť	16,318,769	Ť	15,884,261	*	15,546,979	Ť	14.659.946
Net investment income		(25,114,064)		141,915,000		55,569,165		6,328,063		42,005,227
Benefit payments, including		(25,114,004)		141,213,000		55,565,165		0,520,005		42,005,227
refunds		(55,979,294)		(51,888,455)		(45,495,681)		(44,756,847)		(37,992,903)
Administrative expense	_	(704,903)	_	(1,399,488)		(662,501)		(562,687)		(530,816)
Net change in plan fiduciary										
net position	\$	(44,680,431)	\$	124,188,031	\$	44,399,135	\$	(4,222,163)	\$	36,811,398
Plan fiduciary net position -										
beginning	_	953,798,227	_	829,610,196		785,211,061		789,433,224		752,621,826
Plan fiduciary net position -										
ending	\$	909,117,796	\$	953,798,227	\$	829,610,196	\$	785,211,061	\$	789,433,224
Net pension liability - ending	\$	184,060,823	\$	85,002,602	\$	148,112,566	\$	128,406,978	\$	72,034,744
Plan fiduciary net position as a percentage of the TPL		83.2%		91.8%		84.9%		85.9%		91.6%
Covered payroll	\$	91,086,698	\$	87,266,236	\$	86,638,961	\$	87,836,040	\$	84,670,948
Net pension liability as a percentage of covered payroll		202.1%		97.4%		171.0%		146.2%		85.1%



SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

The following table compares the Statutorily Required Contribution to the actual contributions for the ten years since the initial implementation of GASB No. 67.

Schedule of Emplo	oyer Contribu	tions For Ye	ear Ending I	December 31	,
	2023	2022	2021	2020	2019
Statutorily Required Contribution Contributions in Relation to the	\$ 23,957,850	\$ 22,765,290	\$ 22,041,592	\$ 21,311,021	\$ 21,057,765
Statutorily Required Contributions	23,957,850	22,765,290	22,041,592	21,311,021	21,057,765
Contribution Deficiency/(Excess)	\$ 0	\$ 0	\$ 0	\$ 0	<u>\$0</u>
Covered Payroll	\$108,652,381	\$103,243,946	\$ 99,961,868	\$ 96,648,621	\$ 95,500,068
Contributions as a Percentage of Covered Payroll	22.05%	22.05%	22.05%	22.05%	22.05%
	2018	2017	2016	2015	2014
Statutorily Required Contribution Contributions in Relation to the	\$ 20,084,617	\$ 19,242,205	\$ 19,103,891	\$ 19,222,329	\$ 18,669,944
Statutorily Required Contributions	20,084,617	19,242,205	19,103,891	19,222,329	18,669,944
Contribution Deficiency/(Excess)	\$ 0	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Covered Payroll	\$ 91,086,698	\$ 87,266,236	\$ 86,638,961	\$ 87,836,040	\$ 84,670,948
Contributions as a Percentage of Covered Payroll	22.05%	22.05%	22.05%	21.88%	22.05%



SECTION VI – EMPLOYER REPORTING AMOUNTS

We understand the city has elected to use the Measurement Date of December 31 within the fiscal year for their Reporting Date. As a result, the schedules in this section will be used by the City of Austin for its September 30, 2024 reporting.

The table below summarizes the current balances of Deferred Outflows and Deferred Inflows of Resources, net recognition over the next five years, and the total amount recognized thereafter.

Schedule of Deferred Inflows and O	utflo	ows of Resou	irces	
		Deferred Dutflows of Resources]	Deferred Inflows of Resources
Differences between expected and actual experience Changes in assumptions Net difference between projected and actual earnings on	\$	12,136,750 218,352,539	\$	10,254,689 1,194,634
pension plan investments Total	\$	86,222,807 316,712,096	\$	0 11,449,323
Amounts reported as deferred outflows and deferred inflows of expense as follows:	resou	rces will be reco	gnized	in pension
Measurement year ended December 31	:			
2024 2025 2026 2027 2028 Thereafte		46,979,915 61,125,642 79,458,509 30,849,787 30,655,544 56,193,376		

The tables on the following pages provide details on the current balances of deferred inflows and outflows of resources, along with the recognition of each base for the current and following five years and the total for any years thereafter.



SECTION VI – EMPLOYER REPORTING AMOUNTS

					Recognitio	n of Expe	rien	ce (Gains) a	nd Losses						
Experience Year	Recognition Period	Tot Amo		Beginning Fiscal Year Amount	Ending Fiscal Year Amount	2023		2024	2025		Recogni 2026	itio	n Year 2027	2028	Thereafter
2023	8.0	\$ (6,3	39,940)	\$ (6,339,940)	\$ (5,547,447)	\$ (792,49	3) \$	(792,493)	\$ (792,493) \$	(792,493)	\$	(792,493)	\$ (792,493)	\$ (1,584,982)
2022	8.0	13,40	60,814	11,778,212	10,095,610	1,682,60	2	1,682,602	1,682,602		1,682,602		1,682,602	1,682,602	1,682,600
2021	8.0	3,20	65,825	2,449,368	2,041,140	408,22	8	408,228	408,228		408,228		408,228	408,228	0
2020	8.0	(1,6	70,701)	(1,044,190)	(835,352)	(208,83	8)	(208,838)	(208,838)	(208,838)		(208,838)	0	0
2019	8.0	(9,8	34,830)	(4,917,416)	(3,688,062)	(1,229,35	4)	(1,229,354)	(1,229,354)	(1,229,354)		0	0	0
2018	8.0	(7	35,314)	(275,742)	(183,828)	(91,91	4)	(91,914)	(91,914)	0		0	0	0
2017	7.0	4,30	60,239	622,891	0	622,89	1	0	0		0		0	0	0
2016	8.0	8,8	93,371	1,111,671	0	1,111,67	1	0	0	_	0		0	 0	0
Deferred Out	tflows			15,962,142	12,136,750	3,825,39	2	2,090,830	2,090,830		2,090,830		2,090,830	2,090,830	1,682,600
Deferred (Int	flows)			(12,577,288)	(10,254,689)	(2,322,59	9)	(2,322,599)	(2,322,599) _	(2,230,685)	_	(1,001,331)	 (792,493)	(1,584,982)
Net Change i	in Pension Exp	ense		\$ 3,384,854	\$ 1,882,061	\$ 1,502,79	3 \$	§ (231,769)	\$ (231,769) \$	(139,855)	\$	1,089,499	\$ 1,298,337	\$ 97,618

	Recognition of Assumption Changes										
Change	Recognition	Total	Beginning Fiscal Year	Ending Fiscal Year	2022	2024	2025		ition Year	2020	Thereselves
Year	Period	Amount	Amount	Amount	2023	2024	2025	2026	2027	2028	Thereafter
2023	8.0	\$ 213,908,378	\$ 213,908,378	\$ 187,169,831	\$ 26,738,547	\$ 26,738,547	\$ 26,738,547	\$ 26,738,547	\$ 26,738,547	\$ 26,738,547	\$ 53,477,096
2022	8.0	\$ 20,949,282	18,330,622	15,711,962	2,618,660	2,618,660	2,618,660	2,618,660	2,618,660	2,618,660	2,618,662
2020	8.0	\$ 21,410,890	13,381,805	10,705,444	2,676,361	2,676,361	2,676,361	2,676,361	2,676,361		0
2019	8.0	\$ 12,707,469	6,353,736	4,765,302	1,588,434	1,588,434	1,588,434	1,588,434		0	0
2018	8.0	\$ (4,778,539)	(1,791,951)	(1,194,634)	(597,317)	(597,317)	(597,317)	0	0	0	0
Deferred Ou	atflows		251,974,541	218,352,539	33,622,002	33,622,002	33,622,002	33,622,002	32,033,568	29,357,207	56,095,758
Deferred (In	nflows)		(1,791,951)	(1,194,634)	(597,317)	(597,317)	(597,317)	0	0	0	0
Net Change	in Pension Exp	ense	\$ 250,182,590	\$ 217,157,905	\$ 33,024,685	\$ 33,024,685	\$ 33,024,685	\$ 33,622,002	\$ 32,033,568	\$ 29,357,207	\$ 56,095,758

	Recognition of Investment (Gains) and Losses										
Experience Year	Recognition Period	Total Amount	Beginning Fiscal Year Amount	Ending Fiscal Year Amount	2023	2024	2025	Recogni 2026	tion Year 2027	2028	Thereafter
2023	5.0	\$ (11,366,400)	\$ (11,366,400)	\$ (9,093,120)	\$ (2,273,280)	\$ (2,273,280)	\$ (2,273,280)	\$ (2,273,280)	\$ (2,273,280) \$	0	\$ 0
2022	5.0	\$ 241,248,210	192,998,568	144,748,926	48,249,642	48,249,642	48,249,642	48,249,642	0	0	0
2021	5.0	\$ (88,218,178)	(52,930,908)	(35,287,272)	(17,643,636)	(17,643,636)	(17,643,636)	0	0	0	0
2020	5.0	\$ (70,728,633)	(28,291,454)	(14,145,727)	(14,145,727)	(14,145,727)	0	0	0	0	0
2019	5.0	\$ (72,332,638)	(14,466,528)	0	(14,466,528)	0	0	0	0	0	0
Net Change	in Pension Exp	ense	\$ 85,943,278	\$ 86,222,807	\$ (279,529)	\$ 14,186,999	\$ 28,332,726	\$ 45,976,362	\$ (2,273,280) \$	0	\$ 0



SECTION VI – EMPLOYER REPORTING AMOUNTS

The annual pension expense recognized by the City of Austin can be calculated in two different ways. First, it can be calculated as the change in the amounts reported on the city's statement of net position related to AFRF that are not attributable to employer contributions. That is, it is the sum of the change in NPL, the changes in deferred outflows and inflows, and city contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest organizing the individual components shown in the table below, doing so helps to understand the level and volatility of pension expense.

	Measurement 2023	Year	Ending 2022
	2023		2022
Change in Net Pension Liability	\$ 206,487,868	\$	266,487,107
Change in Deferred Outflows	(165,374,113)		(119,569,268)
Change in Deferred Inflows	3,420,024		(124,511,560)
Employer Contributions	 23,957,850		22,765,290
Pension Expense	\$ 68,491,629	\$	45,171,569
Operating Expenses			
Service cost	\$ 32,382,154	\$	31,101,116
Employee contributions	(20,317,995)		(19,306,629
Administrative expenses	 2,209,453		1,283,215
Total	\$ 14,273,612	\$	13,077,702
Financing Expenses			
Interest cost	\$ 99,834,897	\$	94,234,349
Expected return on assets	 (79,864,829)		(93,717,960
Total	\$ 19,970,068	\$	516,389
Changes			
Benefit changes	\$ 0	\$	0
Recognition of assumption changes	33,024,685		6,828,716
Recognition of liability gains and losses	1,502,793		3,194,367
Recognition of investment gains and losses	 (279,529)		21,554,395
Total	\$ 34,247,949	\$	31,577,478
Pension Expense	\$ 68,491,629	\$	45,171,569

The measurement year ending December 31, 2023 is for the city's fiscal year ending September 30, 2024.



SECTION VI – EMPLOYER REPORTING AMOUNTS

Operating expenses are items directly attributable to the plan's operation during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating AFRF for the year.

Financing expenses equal the interest on the Total Pension Liability less the expected return on assets. Since the discount rate is equal to the long-term expected return on investments, the financing expense is primarily the interest on the Net Pension Liability with an adjustment for the difference between the interest on the Service Cost and contributions.

The recognition of changes will drive most of the volatility in pension expense from year to year. Changes include any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.



APPENDIX A – MEMBERSHIP INFORMATION

A. Active Membership Data

		ble A-2 nbers Statistics						
Decemb	er 31, 2023	December 31, 2022	% Change					
Active Members in Valuation								
Count								
Total	1,246	1,199	3.92%					
Average Current Age	e							
Total	41.1	41.2	-0.17%					
Average Service								
Total	11.9	11.9	0.00%					
Average Reported Pa	ıy							
Total	\$85,943	\$87,220	-1.46%					



APPENDIX A – MEMBERSHIP INFORMATION

B. Inactive Membership Data

Decem	Table A Inactive Membe ber 31, 2023 Dec	r Statistics	% Change
Vested Terminated	-		
Count Total	36	35	2.86%
Average Current Ag Total	ge 39.1	39.4	-0.79%
Retirees, including I	OROP Members		
Count Total	809	793	2.02%
Average Current Ag Total	ge 66.0	65.7	0.52%
Average Monthly Bo Total	enefit \$6,004	\$5,956	0.81%
Disability Retirees			
Count Total	15	15	0.00%
Average Current Ag			
Total	64.5	67.1	-3.82%
Average Monthly Bo Total	enefit \$3,820	\$3,825	-0.14%
Beneficiaries and Al	ternate Payees		
Count Total	171	171	0.00%
Average Current Ag Total	ge 68.7	68.1	0.93%
Average Monthly Be Total	enefit \$2,940	\$2,825	4.09%



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Below is a summary of the actuarial assumptions and methods used to calculate the Total Pension Liability as of December 31, 2023.

A. Actuarial Assumptions

1. Measurement Date

December 31, 2023

2. Valuation Date

December 31, 2023

3. Rate of Investment Return

7.30%, net of investment expenses only

4. Municipal Bond Rate

3.26%, based on the Bond Buyer 20-Bond GO Index at the Measurement Date

5. Discount Rate

6.01%

6. Price Inflation

2.50% per year



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

7. Rates of Salary Increase

Salary increases are split into a wage inflation assumption of 2.50% and a merit scale based on service, shown below.

Years of Service	Merit Increase
0	7.00%
1	7.00%
2	6.50%
3	1.50%
4	0.50%
5	4.50%
6-7	1.00%
8	4.50%
9	0.50%
10	1.00%
11	3.50%
12	1.50%
13	1.00%
14	3.50%
15-16	1.00%
17	3.50%
18-19	1.00%
20	3.50%
21	0.50%
22+	0.00%

For fiscal 2024 and 2025, the salary increase assumption reflects additional base increases of 5.7% and 1.5%, respectively, based on the latest agreement between the City of Austin and the Austin Firefighters Association Local 975.

8. Aggregate Payroll Growth

2.50% per year

9. Disability

Age	Rate
Under 30	0.013%
30-39	0.040%
40-49	0.067%
50+	0.033%



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

10. Mortality Rates

Active and Vested Terminated Lives: PubS(A)-2010 Mortality Table for Employees.

Retiree Lives: PubS(A)-2010 Mortality Table for Healthy Retirees.

Contingent Survivor Lives: PubS(A)-2010 Mortality Table for Contingent Survivors.

Disabled Lives: PubS(A)-2010 Mortality Table for Disabled Retirees.

Generational mortality improvements are projected from 2010 using Scale MP-2021.

11. Withdrawal

Withdrawal rates are based on service, shown below.

Years of Service	Rate
0-4	1.50%
5-14	0.75%
15+	0.00%

12. Retirement Rates

Age	Rate
42 and under	0.00%
43-48	3.00%
49-51	4.00%
52-53	7.00%
54	12.00%
55-57	20.00%
58-60	35.00%
61-62	50.00%
63 and up	100.00%

13. DROP Election

Members are assumed to elect either normal retirement or DROP, with the DROP period maximizing the present value of their retirement benefits, including reflecting the impact of previously granted COLAs the member would be eligible for during the assumed DROP period.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

14. Existing DROP Balances

Members with existing DROP balances are assumed to withdraw their balances over the next eight years, but no later than age 70%.

15. Future Cost-of-Living Adjustments

0% for future years.

16. Active Payment Form Assumption

Life Annuity with 75% continued to the Surviving Spouse (or designated beneficiary).

17. Percent Married

100% of actives are assumed to be married.

18. Spouse Age

A Male member is assumed to be three years older than his beneficiary.

A Female member is assumed to be one year younger than her beneficiary.

19. Dependent Children

50% of active members are assumed to have dependent children, the youngest of whom is one year old.

20. Administrative Expenses

Administrative expenses of 1.25% of payroll are added to the normal cost.

21. Technical and Miscellaneous Assumptions

Decrement timing: Beginning of year.

Terminated vested members: All terminated vested members are assumed married and assumed to retire at normal retirement eligibility.

The limits in IRC sections 415(b) and 401(a)(17) are assumed to increase 2.5% per year.

22. Disclosures regarding Models Used

In accordance with Actuarial Standard of Practice (ASOP) No. 56 *Modeling*, the following disclosures are made related to the valuation software and projection models:



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Valuation Software

Cheiron utilizes ProVal, an 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 the assumptions or output of ProVal that would affect this valuation. We have reviewed the underlying workings of this model to the degree feasible and consistent with ASOP No. 56 and believe them to be appropriate for the valuation purposes.

Projection Model

This valuation report includes projections of future contributions and funded status for the purpose of assisting the Board of Trustees and the sponsors of the Fund with the management of the Fund.

The projections are based on the same census data and financial information as of December 31, 2023 as disclosed in this actuarial valuation. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of December 31, 2023. They do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after December 31, 2023.

The projections assume that all future assumptions are met except where specifically indicated. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections. Further, for the purpose of these projections, we have only reflected the impact of new entrants entering the plan in aggregate and have not developed individual liabilities or detailed profiles related to these potential new entrants. We feel this is appropriate for the purpose of these projections, but if they were to be used for other purposes, this may not be appropriate and alternative projections may need to be developed.

23. Changes since Last Valuation

Demographic and economic assumptions were changed from the prior valuation to reflect the experience study completed by Cheiron to be effective for the December 31, 2023 actuarial valuation and adopted by the Board on March 25, 2024.

24. Rationale for Assumptions

The actuarial assumptions were chosen by the Board of Trustees, upon the recommendation of the actuaries, based on an experience study issued by Cheiron on March 25, 2024, based on data through December 31, 2022, and adopted by the Board at the March 25, 2024 meeting.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Membership Requirement

All commissioned civil service and Texas state-certified firefighters with at least six months of service employed by the City of Austin fire department.

2. Salary

Salary (compensation) means base pay and longevity pay. No other forms of pay are included within the pensionable salaries.

3. Average Monthly Compensation

The average of the member's compensation for the 36 months of highest compensation.

4. Service Credit

One month of service credit is earned for each month the member makes the required contribution to the Fund.

5. Member Contributions

18.70% of Salary

6. Normal Retirement

Eligibility:	Age 50 with 10 years of service or 25 years of service regardless of age.
Amount:	3.3% of average monthly compensation for each year of service with a minimum of \$2,000 per month.
Normal Form of Payment:	Life Annuity with 75% continuing to the Surviving Spouse (or designated beneficiary if the participant is unmarried).

7. Early Retirement

Eligibility:	Age 45 with 10 years of service or 20 years of service regardless of				

Amount: 3.3% of average monthly compensation for each year of service.

8. Disability Retirement

Eligibility:	Upon approval of disability by the Board of Trustees.					
Amount:	3.3% of average monthly compensation for each year of service (but not less than 20 years).					



APPENDIX C – SUMMARY OF PLAN PROVISIONS

9. Death while an Active Employee

- Eligibility: Termination of employment due to death
- Amount:The surviving spouse or designated beneficiary will receive 75% of the member's accrued
benefit based on the greater of their service at death or 20 years of service.

Each dependent child of a surviving spouse will receive 15% of the Member's accrued benefit but not less than 9.9% of Average Monthly Compensation with a reduction if there are more than five surviving dependent children.

10. Deferred Retirement

Eligibility:	Ten years of service. Must also elect to leave their member contributions in the Fund.
Amount:	The accrued benefit is payable at Normal Retirement eligibility, with such eligibility determined as if the member had remained employed.

11. Non-Vested Termination

- Eligibility: Less than ten years of service.
- Amount: A lump sum of member contributions with accumulated interest.

12. Deferred Retirement Option Plan (DROP)

Under this program, a member eligible for service retirement may elect to continue in active service as a firefighter but have the fund begin crediting "payments" to a deferred retirement option plan (DROP) account. The monthly "payments" would be an amount equal to what the member's monthly annuity would have been if the member had retired as of that eligible DROP date. Any eligible cost-of-living adjustments (COLAS) would be applied to the monthly annuity during this DROP period. During the DROP period, the member would have all their pension contributions and applicable annual interest of 5% compounded monthly credited to their account. When the member retires, by terminating their active service in the fire department, an accumulated lump sum balance may be available to be distributed (all or part) to the member from the DROP account.

In lieu of electing to participate in the DROP before actual retirement, a member who is eligible for normal service retirement may elect to terminate active service as a firefighter and establish the DROP account at termination. Under this "RETRO or BACK DROP," the firefighter's DROP account reflects the accrual from the actual termination date back to a date on or after the date they become eligible for normal service retirement.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

The maximum period under which a firefighter can participate in a DROP is seven years. A firefighter may elect to establish a DROP account after reaching normal or early service retirement eligibility. Twelve total withdrawals are allowed while the retiree's DROP account balance remains in the pension plan with a maximum of four withdrawals in any year. These limits on withdrawals can be altered by board policy as long as such change is determined to be feasible. The withdrawals can either be in the form of a distribution to the retiree (provided the retiree reaches age 50 before retiring) or a rollover into a qualified IRA. The entire DROP balance must be withdrawn from the fund by April 1st of the calendar year following the year the retiree reaches age 70½.

13. Cost of Living Adjustments (COLA)

When deemed affordable, eligible pension recipients are entitled to annual cost-of-living adjustments (COLA). COLAs are approved only when the fund's actuary has advised the Board that such adjustment would not impair the fund's financial stability based on the COLA Adjustment Policy approved by the Board. The COLAs are to be based on the annual percentage increase in the Consumer Price Index (CPI-U).

Members who retire under Early Retirement are only eligible for COLAs once they would have reached Normal Service Retirement eligibility had they continued their employment. The COLAs provided over the last ten years are as follows:

Effective Date	COLA
12/31/2023	0.00%
12/31/2022	0.00%
12/31/2021	5.40%
12/31/2020	1.40%
12/31/2019	1.70%
12/31/2018	2.30%
12/31/2017	2.20%
12/31/2016	1.50%
12/31/2015	0.00%
12/31/2014	1.30%

14. Changes since the Last Valuation

None



APPENDIX D – CROSSOVER TEST

	Projected Beginning			Projected	Projected	Projected Ending
	Fiduciary Net	-	Projected Benefit		Investment	Fiduciary Net
	Position	Contributions	Payments	Expenses	Earnings	Position
Year	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)- (d)+(e)
2024	\$1,162,694,392	\$46,721,198	\$128,393,931	\$1,433,166	\$81,896,751	\$1,161,485,244
2025	1,161,485,244	47,367,153	121,483,736	1,468,995	82,078,141	1,167,977,807
2026	1,167,977,807	47,407,857	122,370,176	1,505,720	82,520,455	1,174,030,223
2027	1,174,030,223	47,281,520	123,662,113	1,543,363	82,910,077	1,179,016,344
2028	1,179,016,344	47,147,170	122,124,405	1,581,947	83,323,000	1,185,780,163
2029	1,185,780,163	47,041,065	122,807,860	1,621,495	83,787,030	1,192,178,903
2030	1,192,178,903	46,899,354	122,291,096	1,662,033	84,266,132	1,199,391,260
2031	1,199,391,260	46,816,056	123,410,627	1,703,583	84,748,015	1,205,841,121
2032	1,205,841,121	46,640,212	111,434,196	1,746,173	85,640,463	1,224,941,427
2033	1,224,941,427	46,421,859	113,987,873	1,789,827	86,933,823	1,242,519,409
2034	1,242,519,409	46,188,154	116,360,017	1,834,573	88,121,973	1,258,634,946
2035	1,258,634,946	45,879,028	119,214,282	1,880,437	89,183,332	1,272,602,587
2036	1,272,602,587	45,514,630	122,011,371	1,927,448	90,087,922	1,284,266,319
2037	1,284,266,319	45,097,073	125,271,698	1,975,635	90,805,769	1,292,921,829
2038	1,292,921,829	44,556,660	128,461,389	2,025,025	91,302,099	1,298,294,173
2039	1,298,294,173	44,038,584	131,366,771	2,075,651	91,569,709	1,300,460,044
2040	1,300,460,044	43,396,979	134,680,572	2,127,542	91,584,128	1,298,633,037
2041	1,298,633,037	42,660,787	138,388,780	2,180,731	91,289,486	1,292,013,799
2042	1,292,013,799	41,838,519	141,903,939	2,235,249	90,648,799	1,280,361,929
2043	1,280,361,929	40,885,381	145,667,185	2,291,130	89,627,092	1,262,916,087
2044	1,262,916,087	39,874,220	149,708,924	2,348,409	88,170,310	1,238,903,285
2045	1,238,903,285	38,809,160	152,875,590	2,407,119	86,263,532	1,208,693,268
2046	1,208,693,268	37,680,413	156,066,525	2,467,297	83,901,152	1,171,741,011
2047	1,171,741,011	36,583,955	158,043,065	2,528,979	81,091,236	1,128,844,158
2048	1,128,844,158	35,581,231	160,522,377	2,592,204	77,832,643	1,079,143,451
2049	1,079,143,451	34,644,461	161,390,388	2,657,009	74,137,454	1,023,877,969
2050	1,023,877,969	33,828,639	161,383,117	2,723,434	70,071,699	963,671,756
2051	963,671,756	33,153,592	160,877,557	2,791,520	65,668,127	898,824,398
2052	898,824,398	32,605,573	159,213,951	2,861,308	60,971,769	830,326,481
2053	830,326,481	32,211,424	156,875,636	2,932,841	56,038,569	758,767,997
2054	758,767,997	31,973,778	153,778,676	3,006,162	50,914,697	684,871,635
2055	684,871,635	31,885,042	150,237,400	3,081,316	45,641,366	609,079,328
2056	609,079,328	31,945,395	147,166,808	3,158,349	40,218,032	530,917,599
2057	530,917,599	32,107,340	142,554,802	3,237,307	34,680,575	451,913,405
2058	451,913,405	32,414,833	138,310,613	3,318,240	29,073,577	371,772,962
2059	371,772,962	32,836,105	133,775,649	3,401,196	23,398,066	290,830,288
2060	290,830,288	33,365,556	129,248,138	3,486,226	17,667,530	209,129,010
2061	209,129,010	33,990,929	125,228,598	3,573,381	11,866,765	126,184,724
2062	126,184,724	34,686,424	120,679,544	3,662,716	5,996,684	42,525,572
2063	42,525,572	35,461,827	117,014,383	3,754,284	45,508	(42,735,759)



APPENDIX E – GLOSSARY OF TERMS

1. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the Measurement Date and up to 30 months prior to the employer's Reporting Date.

2. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

3. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

4. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future Service Costs is called the Total Pension Liability.

5. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

6. Net Pension Liability

The liability of employers and nonemployer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

7. Plan Fiduciary Net Position

The fair or market value of assets.



APPENDIX E – GLOSSARY OF TERMS

8. Reporting Date

The last day of the plan or employer's fiscal year.

9. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and 68. The Service Cost is the normal cost calculated under the Entry Age Actuarial Cost Method.

10. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the Actuarial Liability calculated under the Entry Age Actuarial Cost Method. This measurement generally is not appropriate for estimating the cost to settle the Plan's liabilities.



ACTUARIAL SECTION

Actuarial Valuation Report as of December 31, 2023

ACTUARIAL VALUATION REPORT



Classic Values, Innovative Advice

Austin Firefighters Retirement Fund

Actuarial Valuation Report as of December 31, 2023

Produced by Cheiron

July 2024

Via Electronic Mail

July 22, 2024

Board of Trustees Austin Firefighters Retirement Fund 4101 Parkstone Heights Drive, Suite 270 Austin, Texas 78746

Dear Trustees of the Board:

We are pleased to submit the December 31, 2023 Actuarial Valuation Report of the Austin Firefighters Retirement Fund ("Fund"). This report contains information on Fund assets, liabilities, and contributions. Financial disclosures are provided in a separate Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 report.

In preparing our report, we relied on information, some oral and some written, supplied by the Fund's staff. This information includes, but is not limited to, Fund provisions, member 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 actuarial assumptions reflect our understanding of the likely future experience of the Fund and represent our best estimate, in cooperation with the views of the Board of Trustees (Board), for the future experience of the Fund. These assumptions are based on the most recent experience study dated March 25, 2024 based on data through December 31, 2022. The liability and contributions developed in this report rely on future Fund experience conforming to the underlying assumptions. Future results may differ significantly from the current results presented in this report due to such factors as the following: Fund experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law. To the extent that actual Fund experience deviates from the underlying assumptions, the results will vary accordingly.

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, including Texas pension statutes. 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. Austin Firefighters Retirement Fund July 22, 2024 Page ii

This actuarial valuation report was prepared exclusively for the Austin Firefighters Retirement Fund and the Fund auditors for the purposes described herein and in preparing financial reports in accordance with applicable law and annual report requirements. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely, Cheiron

Elizabeth Wiley, FSA, EA, MAAA, FCA Consulting Actuary

Heath Merlick

Heath Merlak, FSA, EA, MAAA, FCA Principal Consulting Actuary


FOREWORD

Cheiron is pleased to provide the annual actuarial valuation report of the **Austin Firefighters Retirement Fund (Fund)** as of December 31, 2023. The purpose of this report is to:

- 1) Measure and disclose the Fund's financial condition as of the valuation date.
- 2) **Report** on past and expected financial trends.
- 3) Determine the funding period required to amortize any existing Unfunded Actuarial Liability (UAL).
- 4) Assess risks to the Fund's financial condition.

An actuarial valuation establishes and analyzes Fund assets and liabilities on a consistent basis and traces the progress of both from one year to the next. It includes measurement of the Fund's investment performance and an analysis of actuarial liability gains and losses. This valuation report is organized as follows:

Section I summarizes the valuation and compares this year's results to last year's.

Section II identifies the primary risks to the Fund, including background information and an assessment of these risks.

Section III contains exhibits relating to the valuation of assets.

Section IV shows the various measures of liabilities and analyzes the experience gains and losses over the past year and the source of changes to the UAL.

Section V shows the development of the Actuarially Determined Contribution Benchmark and a Reasonable Actuarially Determined Contribution.

The appendices to this report contain a summary of the Fund's membership at the valuation date, a summary of the major provisions of the Fund, and the actuarial methods and assumptions used in developing the valuation.



SECTION I – SUMMARY

General Comments

This is the second actuarial valuation report prepared for the Fund by Cheiron. The results before December 31, 2022 in the historical trend charts are those produced by the Fund's former actuary.

Vernon's Texas Civil Statute, Article 6243e.1, sets the employer and member contributions to this Fund. An Actuarially Determined Contribution Benchmark ("ADC Benchmark") is provided in this report for comparison to the current contribution rates based on the Funding Policy adopted by the Board as of December 16, 2019. In addition, this report provides two other contribution rates to assess the fixed statutory contributions rates:

- 1. A tread water contribution rate: This contribution rate represents the contribution level required to cover the cost of benefits accruing during the year and interest on the Unfunded Actuarial Liability(UAL), and thus anticipated to keep the UAL at the same dollar amount if all assumptions are exactly met.
- 2. A reasonable actuarially determined contribution rate ("reasonable ADC"): As defined by Actuarial Standards of Practice No. 4, a reasonable actuarially determined contribution rate is provided that reflects a 20-year closed, layered amortization method effective with the December 31, 2023 actuarial valuation. In our opinion, the ADC Benchmark outlined in the Funding Policy does not meet the definition of a reasonable ADC since it uses a 30-year open amortization method, which does not fully amortize the Unfunded Actuarial Liability within a reasonable time period. Please see Section V for more details on the reasonable ADC.

The key results of the December 31, 2023 actuarial valuation are as follows:

- The Fund's funded ratio based on the Actuarial Value of Assets (AVA) decreased from 86.9% as of December 31, 2022 to 85.6% as of December 31, 2023. On a market value of assets (MVA) basis, the funded ratio decreased from 80.0% as of December 31, 2022 to 79.6% as of December 31, 2023.
- The Unfunded Actuarial Liability(UAL) on an Actuarial Value of Assets (AVA) basis [actuarial liability (AL) AVA] increased from \$183.4 million as of December 31, 2022 to \$210.5 million on December 31, 2023.
- Investments earned 8.1% on a market value basis for the year ending December 31, 2023, resulting in an investment gain on the market value of assets of \$9.1 million.
- Due to the smoothing of investment gains and losses, the AVA return was 6.8%, producing a loss of \$5.9 million to the Fund for the year on that basis. Both returns are measured against the prior year's 7.30% expected return.
- The Fund experienced a liability gain of \$6.9 million. The sources of the liability gain are listed in Table IV-3.
- The actuarial liability increased by \$27.0 million due to assumption changes from the recent experience study adopted effective with the December 31, 2023 actuarial valuation.



SECTION I – SUMMARY

The tables below provide a summary of the actuarial valuation. The prior year's valuation results are shown for comparison purposes, as well as a column looking at the change in each value as a percentage of the prior year's values.

Table I-1 Austin Firefighters Retirement Fund									
	mary of Principal Results								
			%						
	December 31, 2023	December 31, 2022	Change						
Assets and Liabilities									
Actuarial Liability (AL)	\$1,460,581,730	\$1,394,695,732	4.7%						
Actuarial Value of Assets (AVA)	1,250,115,476	1,211,321,297	3.2%						
Unfunded Actuarial Liability (UAL)	\$210,466,254	\$183,374,435	14.8%						
Funded Ratio (AVA basis)	85.6%	86.9%	(1.3%)						
Market Value of Assets (MVA)	\$1,162,694,392	\$1,115,832,870	4.2%						
Funded Ratio (MVA basis)	79.6%	80.0%	(0.4%)						
Amortization Period	48.6	35.7	36.0%						
Statutory Contribution Rates									
City Contribution Rate	22.05%	22.05%	0.0%						
Member Contribution Rate	18.70%	<u>18.70%</u>	0.0%						
Total Contribution Rate	40.75%	40.75%	0.0%						
Current Normal Cost as % of Payroll	<u>31.21%</u>	<u>30.73%</u>	1.6%						
Contribution Rate Remaining to Pay UAL	9.54%	10.02%	(4.8%)						
City Rate Based on ADC Benchmark	23.29%	22.76%	2.3%						
City Rate Surplus/(Deficit)	(1.24%)	(0.71%)	74.5%						
Treadwater City Contribution Rate	26.39%	25.19%	4.8%						
City Rate Surplus/(Deficit)	(4.34%)	(3.14%)	38.2%						
Reasonable ADC	26.70%	N/A							
City Rate Surplus/(Deficit)	(4.65%)	N/A							
Participant Information									
Actives	1,246	1,199	3.9%						
Service Retirees, including DROP	809	793	2.0%						
Beneficiaries	171	171	0.0%						
Disability Retirees	15	15	0.0%						
Terminated Vested	36	35	2.9%						
Total Participants	2,277	2,213	2.9%						
Expected Payroll	\$114,653,245	\$105,372,248	8.8%						



SECTION I – SUMMARY

Historical Trends

It is important to take a step back from these latest results and view them in the context of the Fund's recent history. Below, we present a series of charts displaying key factors in the valuations since 2014.

Assets and Liabilities



The bars represent the actuarial liability (AL) as measured for funding purposes in the valuations. The lines represent the Fund's assets, with the green line showing the market value of assets (MVA) that is reported in the Fund's financials and the blue line showing the smoothed Actuarial Value of Assets (AVA). The liabilities are compared to the assets to develop funding ratios for each valuation date. The ratio of the AL to the AVA is the AVA funded ratio, which are the blue percentages shown in the chart along the top of each bar. Similarly, the ratio of the AL to the MVA is the MVA funded ratio, the green percentages shown on the bars.

As shown, the Fund has had an AVA funded ratio of 85% or higher during this period, with the highest funded ratio in 2014 at 90.9%. The MVA funded ratio has been more variable, reflecting the market volatility, from a high of 99.3% as of 2021 to a low of the current 79.6%.



SECTION I – SUMMARY

Contributions versus Tread Water

The next chart compares the fixed city and member contribution rates, shown by the bars, to the normal cost and tread water rates as of each valuation date. The normal cost rate, the orange line, is the percentage of salary needed to fund the benefits earned in a year for the active members. The tread water rate, the teal line, is that rate of payroll which, if contributed, would result in the UAL remaining the same in the following year if all experience exactly matched the assumptions. The tread water rate is equal to the normal cost rate plus interest on the UAL.

As shown below, the fixed total contributions exceed the normal cost rate for all years shown. The difference between the tops of the bars and the orange line represents the portion of contributions that are available to fund the UAL. The chart also shows that the normal cost rate has been relatively stable over this period, staying within approximately one percentage point of 30%.

The stacked bars show that the sum of the city's and members' fixed contribution rates has been greater than the tread water rate for most years over this period. However, since the 2022 asset loss began being recognized, the tread water rate has been higher than the fixed contribution rates for 2022 and 2023.





SECTION I – SUMMARY

Amortization Periods

The chart below shows the effective amortization period for funding the UAL based on the Actuarial Value of Assets as of each valuation date since the Fund began performing annual actuarial valuations in 2014. Due to leveraging, the amortization period can vary significantly from year to year.

The Pension Review Board (PRB) provides funding guidelines for public pensions in Texas, including that the contributions received by funds should be sufficient to pay the normal cost each year as well as amortize the fund's UAL over a period not to exceed 30 years and with 10-25 years being the preferred range. While the Fund's amortization period as of the current valuation of 48.6 years is greater than the guideline-recommended maximum of 30 years, this amortization period does not trigger a Funding Soundness Restoration Plan (FSRP) for the current year. Based on the legislation for FSRPs that is currently in effect, the Fund and the City of Austin would be required to formulate an FSRP if the Fund's amortization period exceeds 30 years for three consecutive annual valuations.



While an FSRP is not currently triggered, it is important to note that in baseline projections where all assumptions are exactly met, as shown on page 8, it is anticipated that an FSRP will be triggered with the next valuation, as of December 31, 2024, unless the Fund experiences a significant gain in the next year. Because the amortization period is calculated based on the smoothed Actuarial Value of Assets that recognizes gains over five years, the 2024 return would have to be at least 31% for the amortization period calculated as of December 31, 2024 not to exceed 30 years, assuming all other assumptions are exactly met.



SECTION I – SUMMARY

Member Trends

The following chart shows the membership counts of the Fund at successive valuations. The numbers that appear above each bar represent the ratio of the number of inactive members, those currently receiving benefits (red bars) and terminated vested members (yellow bars), to active members (green bars) as of each valuation date, referred to as the support ratio.

The number of inactives per active has generally steadily increased during the period shown. An increasing ratio is a sign of plan maturity and should continue to be monitored. As a plan becomes more mature, the assets backing the retiree benefits become large relative to the contribution base, i.e., the active member payroll. As assets grow relative to the pensionable payroll, any experience gain or loss can significantly impact the actuarial valuation results. This maturity risk is discussed further in Section II of this report.





SECTION I – SUMMARY

Projections

This baseline projection is based on the December 31, 2023 valuation, including the 7.30% rate of return assumption. It is important to note that the Fund's actual experience will not conform exactly to the assumptions every year. As a result, in addition to the baseline projection of 7.30% investment returns, we provide additional projections, or stress testing, in Section II based on varying returns in the future, as variation in this assumption is typically the most significant driver of variation in valuation results.

The projections, both the baseline in this section and the varying returns in Section II, assume there will be no future gains or losses on the liability, and that the Fund receives the statutory contribution rates (18.70% for members and 22.05% for city) each year. As such, these projections assume all valuation assumptions are exactly met, including the long-term rates of return specified and assumed for each scenario and the covered payroll increasing by 2.50% per year in all scenarios.

For each projection, there is a table of assumed asset returns and two charts showing the projected condition of the Fund based on returns equal to those shown in the table, assuming all other assumptions are exactly met.

This first chart compares the market value of assets (MVA) (blue line) and the actuarial or smoothed value of assets (AVA) (green line) to the Fund's actuarial liabilities (AL) (gray bars). In addition, at the top of each chart, we show the Fund's AVA funded ratio (ratio of AVA to AL). The years shown in the chart signify each labeled year's valuation date as of December 31.

The second chart provides the effective amortization period based on the statutory contributions of 18.70% of pay for active members and 22.05% of pay for the city. When the bars expand to 100 years, this indicates that the city and member contributions are not expected to be sufficient to pay down the UAL. This occurs when the amount of contribution available to amortize the UAL is not sufficient to cover the interest on the UAL.

The baseline chart below shows that if all actuarial assumptions, including the current 7.3% rate of investment return assumption, are exactly met, the Fund's AVA funded ratio, shown along the top of the chart, is projected to decrease from the current level of 86% to 74% by the 2043 valuation. The AVA funded ratio is expected to decrease over the 20-year projection period, and the decrease is more pronounced early in the projection period as the 2022 asset loss is fully recognized in the valuation. Similar to last year's valuation, the effective amortization period is expected to increase to 100 years in 2025. Section II explores further how these metrics can vary when returns deviate from the expected 7.3%.





SECTION I – SUMMARY



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Actuarial valuations are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, these assumptions represent a reasonable estimate of future experience. However, actual future experience will never conform exactly to the assumptions and may differ significantly. This deviation is the risk that pension plan sponsors undertake in relying on a pension plan's actuarial valuation results.

This section of the report is intended to identify the primary drivers of these risks to the Fund, provide background information and assessments about these risks and drivers, and communicate the significance of these risks to the Fund and its sponsors.

Identification of Risks

As we have discussed with the Board, the fundamental risk to the Fund is that the contributions needed to pay the desired benefits become insufficient. While there are many factors that could lead to current contribution rates becoming insufficient, we believe the primary risks are:

- Investment risk
- Interest rate risk
- Longevity and other demographic risks
- Assumption change risk
- Plan change risk

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment return assumption used in the actuarial valuation, the Unfunded Actuarial Liability will increase from what was expected and will require higher contributions than otherwise anticipated. However, when actual returns exceed the assumption, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. The Fund's asset allocation determines the potential volatility of future investment returns. The affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsor or other contribution base. As seen in the following historical section, this risk has been a significant driver of deviations in the actual measurements for this Fund from those expected by the prior valuations.

Interest Rate Risk is the potential for interest rates to be different than expected. For public plans, short-term fluctuations in interest rates have little or no effect, as the Fund's liability is usually measured based on the expected return on assets. Longer-term trends in interest rates, however, can have a powerful effect.

Longevity and Other Demographic Risks are the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from what is expected. In addition, the extensive number of assumptions related to longevity



and other demographic experience often result in offsetting factors contributing to the Fund's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to investment returns.

Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different from the current assumptions. For example, declines in interest rates over time due to economic factors may result in a change in the assumed investment rates of return used in the valuations. In terms of demographic factors, a healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. In addition, mortality rates are adjusted to account for members living longer and receiving more years of their retirement benefits. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment resulting in the current assumption no longer being reasonable.

Plan Change Risk represents the possibility of legislated changes made to the statutes governing the Fund. This includes any changes to the benefits paid by the Fund or the contributions that must be paid by the city and the members to the Fund. Over the history of this Fund, these changes have included granting cost-of-living adjustments (COLAs), which increase the benefits paid to members designed to provide purchasing power protection from inflation, changes to the multipliers and minimums used to determine the amount of member benefits, and changes to the contributions that the city and members must pay. As shown in the chart that follows, plan changes, principally the granting of COLAs, have been a significant driver of liability changes for the Fund over the last ten years.

Based on the Board's communicated intent, the most likely plan changes in the future are also COLAs. It is important to note that the Fund's policies, which require the Fund to meet certain funding conditions before plan changes can be granted, provide protection from this risk. The current valuation assumption for future COLAs is that none will be granted based on the Fund's current condition and these financial stability tests

The chart below shows the components of changes in the Unfunded Actuarial Liability (UAL) for the Fund over the last ten years, including investment gains and losses on the Actuarial Value of Assets, liability gains and losses, assumption and method changes, and the paying down of the UAL. Amounts below the horizontal axis are gains or decreases to the UAL, while amounts above the axis are losses or increases to the UAL. The dark blue line shows the net UAL change.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK



Historical Changes in UAL 2014-2023

On a smoothed asset basis, the investment gains and losses (gold bars) from 2014 to 2023 reflect investment losses on a smoothed or AVA basis in seven of the ten years shown. However, two of these years, 2020 and 2021, had significant gains such that over the 10-year period, in aggregate, investment losses and gains decreased the UAL by approximately \$14 million.

On the liability side (teal bars), the Fund has experienced a net liability experience loss that increased the UAL by approximately \$26 million over this period. Assumption and method changes (purple bars) have increased the UAL by approximately \$79 million over the 10-year period. The assumption changes have included lowering the discount rate from 7.75% to 7.30%, updating the mortality assumptions, and updating other demographic assumptions. The assumption changes implemented with this valuation increased liability by \$27 million.

Benefit changes noted by the green bar reflect the increase in liability for COLAs granted in the last ten years. Over this period, the granted COLAs have added \$70 million to the UAL.

Finally, each year, the UAL is expected to decrease/(increase) as the total contributions received by the Fund exceed/(are less than) the contributions needed to pay the normal cost for the benefits earned in the current year. In aggregate, the contributions received by the Fund in excess of normal cost have decreased the UAL by approximately \$11 million over the last ten years. Most of these amounts are below the x-axis, meaning the contributions were sufficient to pay the normal cost and reduce the UAL by some amount. With the 2022 asset loss, the 2023 total fixed contributions were less than the tread water contribution, so the UAL increased for 2023. It is anticipated that the UAL paid amount for the 2024 plan year will also be above the x-axis since the actual contributions will be insufficient to amortize or pay down any portion of the existing UAL.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of this Fund compared to other plans and how the maturity has changed over time.

Plan maturity can be measured in various ways. Still, all focus on one basic dynamic—the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. The measures below have been selected as the most important in understanding the primary risks identified for this Fund.

Inactives per Active (Support Ratio)

One simple measure of plan maturity is the ratio of the number of inactive members, those currently receiving benefits and terminated vested members, to the number of active members. The revenue base supporting the plan is usually proportional to the number of active members, so a relatively high number of inactives compared to actives indicates a larger plan relative to its revenue base as well.

The Boston College's Center for Retirement Research, the National Association of State Retirement Administrators (NASRA), MissionSquare, and the Government Finance Officers Association (GFOA) maintain the Public Plan Database, which contains the majority of state plans (121) and many (108) large municipal plans. It covers over 95% of the membership in public plans and over 95% of the assets held by public pension plans.

The following chart shows the support ratio for all plans in this database since 2014. The colored bars represent the central 90% of the support ratios for the plans in the database. The Austin Firefighters Retirement Fund is represented in the chart by gold diamonds.





SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

This chart shows that the Fund is not as mature as other plans in this database. The support ratios for the universe of public plans shown have increased over the period as they mature, with the Fund's support ratio increasing at a similar pace. The Fund has remained below the 50th percentile for the entire period.



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SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Net Cash Flow

The net cash flow of the plan as a percentage of the beginning-of-year assets indicates the Fund's sensitivity to short-term investment returns. Net cash flow is equal to contributions less benefit payments and administrative expenses. Mature plans can have large amounts of benefit payments compared to contributions, particularly if they are well-funded. Investment losses in the short-term are compounded by the net withdrawal from the plan, leaving a smaller asset base to try to recover from the investment losses. Large negative cash flows can also create liquidity issues.



The chart above shows the distribution of net cash flow as a percent of assets, again with the bars showing the 5th to 95th percentile for the plans in the Public Plans Database. The gold diamonds show the Fund's experience for this metric, allowing comparison to the other plans. Up until 2020, the Fund was generally consistently above the 50th percentile. However, in 2021, the Fund's cash flow as a percent of assets decreased, putting the Fund in the 25th to 50th percentile. The decrease in this percentage is primarily due to the Fund maturing and the timing of the measurement. The Fund uses a measurement date of December 31, so the 2023 calendar returns are fully reflected. In contrast, most of the universe uses measurement dates during the calendar year, thus only reflecting a portion of the 2023 calendar year returns in the 2023 fiscal year returns.

Additionally, as DROP payments increase relative to the size of the Fund, this will likely create additional volatility in this measurement from year to year. The chart below shows the percentage of assets attributable to DROP balances since this information was first reported with the 2015 valuation.





SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

This graph is provided because the Fund's assets must be invested considering the liquidity needed to pay out DROP accounts to members. This is a specific risk applicable to this Fund due to the structure of the benefits provided.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Actuarial Standards of Practice No. 4 – Disclosures

Low Default Risk Obligation Measure (LDROM)

The Fund invests in a diversified portfolio to maximize investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default- risk fixed income securities whose cash flows match the benefit cash flows of the Fund. Such a portfolio, however, would have a lower expected rate of return than the diversified portfolio. The Low-Default-Risk Obligation Measure (LDROM) represents the funding liability if the Fund invested its assets in such a portfolio. As of December 31, 2023, we estimate that such a portfolio based on the FTSE Pension Liability Index would have an expected return of 4.81% compared to the Fund's discount rate of 7.30%, and the LDROM would be \$1,865,295,217 compared to the Actuarial Liability of \$1,460,581,730. The \$404,713,487 difference represents the expected savings from bearing the risk of investing in the diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

If the Fund were to invest in the LDROM portfolio, the reported funded status would decrease, and employer contributions would need to increase. Benefit security for Fund members relies on a combination of the assets in the Fund, the investment returns generated from those assets, and the promise of future contributions. If the Fund were to invest in the LDROM portfolio, it would not change the amount of assets currently in the Fund, but it would reduce expected future investment returns and decrease the Fund's funded ratio. However, the variability of future investment returns would narrow significantly.

Implications of Contribution Allocation Procedure on Funded Status

Based on the December 31, 2023 actuarial valuation (and assuming all actuarial assumptions are met) and the statutory contributions of 18.7% for members and 22.05% for the city, it is expected that:

- The Unfunded Actuarial Liability will increase from \$210 million as of December 31, 2023 to \$619 million as of December 31, 2043,
- The unfunded actuarial accrued liabilities will never be fully amortized, and
- The Fund's funded status will decrease gradually from 86% as of December 31, 2023 to 74% as of December 31, 2043.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Deterministic Scenarios/Stress Testing

We developed several hypothetical scenarios to illustrate how deviations from the assumed investment returns may impact future funded ratios and amortization periods. The scenarios presented are illustrative and intentionally balanced between positive and negative scenarios. They are intended to illustrate the importance of both the return itself and the timing of such returns.

The charts on the following pages show the projections under each of these theoretical scenarios:

Scenario	Description
А	Asset returns that are 1% higher than the expected return of 7.3% annually
В	Asset returns that are 1% lower than the expected return of 7.3% annually
С	Asset return for 2024 that is 10% higher than the expected return of 7.3% and then equal to the expected 7.3% for each year thereafter
D	Asset return for 2024 that is 10% lower than the expected return of 7.3% and then equal to the expected 7.3% for each year thereafter

The following table shows a few selected points in the projected results under these scenarios compared to the baseline scenario presented in the prior section.

Scenario	2033 Funded	2043 Funded	Year Amortization		
	Ratio	Ratio	Period is less than 30		
Baseline (7.3%)	76%	74%	After 2043		
A (8.3%)	84%	97%	2036		
B (6.3%)	68%	54%	After 2043		
C (+10% in 2024)	88%	92%	2029		
D (-10% in 2024)	63%	55%	After 2043		

The following pages provide the individual scenario projection charts in the same format as those included for the baseline scenario in the prior section. The top projection chart compares the market value of assets (MVA) (gold line) and the actuarial or smoothed value of assets (AVA) (blue line) to the Fund's actuarial liabilities (AL) (gray bars). In addition, at the top of each chart, we show the Fund's AVA funded ratio (ratio of AVA to AL). The second chart provides the effective amortization period based on the statutory contributions of 18.70% of pay for members and 22.05% of pay for the city. All assumptions are assumed to be exactly met, including the asset returns specified for each scenario.

In addition to showing the variability of valuation results with different returns, these scenarios highlight how volatile the amortization period metric is to returns.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK



Fund Earns 8.3% for Each Year Over the Projection Period

Under this scenario, the Fund will reach 97% funding by the end of the projection period. In 2036, the amortization period is expected to be below 30 years.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK



Fund Earns 6.3% for Each Year Over the Projection

In this reduced investment earning scenario, the AVA funded ratio is expected to be 54% at the end of the 20-year period, and the amortization period will exceed 30 years throughout the projection period.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK



Fund Earns 17.3% for 2024 (10% above the expected return), then 7.3% per year each year thereafter

Under this scenario, the AVA funded ratio is expected to be 92% at the end of the 20-year period, and the amortization period is expected to be lower than 30 years beginning in 2029 and then gradually decline.



SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK



Fund Earns -2.7% for 2024 (10% below the expected return), then 7.3% per year each year thereafter

Under this scenario, the AVA funded ratio is expected to be 55% at the end of the 20-year period, and the amortization period will exceed 30 years throughout the projection period.



SECTION III – ASSETS

Assets play a key role in the Fund's financial operation and in the decisions that the Board of Trustees may make regarding future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, employer contributions, and the ultimate security of members' benefits.

In this section, we present detailed information on the Fund's assets, including:

- Disclosure of the Fund's assets as of December 31, 2023
- Statement of the changes in market values during the year
- Development of the Actuarial Value of Assets
- A comparison of the year's investment performance to the return assumption

Disclosure

The market values of assets represent "snap-shot" or "cash-out" values, which provide the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with corresponding swings in the marketplace. As a result, smoothed market values are usually used when reviewing a plan's financial condition,

The Actuarial Value of Assets is based on market values that have smoothed in investment gains and losses. Current methods employed by this Fund set the actuarial value equal to the market value, adjusted for a five-year phase-in of investment experience gains and losses.



SECTION III – ASSETS

The assets below are based upon audited financial data furnished by the Fund's staff. The components of the market value of assets as of the current and immediately prior valuation year, as well as the change in these categories and the total market value of assets during the valuation year ending December 31, 2023 is summarized below.

Tab	le III	-1			
Statement of Market Value	e of A	Assets as of Decen	nber	31,	
		2023		2022	% Change
Assets					
Cash & Short-Term Investments	\$	9,926,468	\$	7,245,787	37.00%
Receivables		253,269		164,116	54.32%
Fixed Income		331,716,446		310,744,525	6.75%
Domestic Equities		254,473,069		219,699,040	15.83%
International Equities		237,993,931		209,977,146	13.34%
Real Estate		91,280,409		112,168,625	(18.62%)
Natural Resources		33,647,743		33,428,837	0.65%
Private Equities		203,403,057		222,733,907	(8.68%)
Total Assets	\$	1,162,694,392	\$	1,116,161,983	4.17%
Liabilities					
Securities Purchased and Other Investment Liabilities	\$	0	\$	0	0.00%
Accrued Expenses and Other Liabilities		0		329,113	(100.00%)
Total Liabilities	\$	0	\$	329,113	(100.00%)
Market Value of Assets	\$	1,162,694,392	\$	1,115,832,870	104.20%

Numbers may not add due to rounding



SECTION III – ASSETS

The chart below shows the calculation of the investment gain/loss. On a market value basis, the Fund earned a 8.13% return during 2023, a total investment gain of \$89.0 million, resulting in a net Fund asset gain on a market value of assets basis of \$9.1 million. On an Actuarial Value of Assets basis, the Fund had a lower return for the year of 6.80%, which is below the 7.30% return assumed in the prior year's valuation, producing a loss of \$6.0 million to the Fund on that basis.

Т	Table III-2									
Changes	Changes in Value of Assets Market Value of Assets Actuarial Value of Assets									
	Actual	rial Value of Assets								
1. Value of Assets - December 31, 2022	\$	1,115,832,870	\$	1,211,321,297						
2. Calculation of Net Cash Flow										
(a) Member Contributions	\$	20,317,995	\$	20,317,995						
(b) Employer Contributions		23,957,850		23,957,850						
(c) Benefit Payments and Refunds		(86,436,099)		(86,436,099)						
(d) Net Cash Flow	\$	(42,160,254)	\$	(42,160,254)						
3. Value of Assets - December 31, 2023	\$	1,162,694,392	\$	1,250,115,476						
4. Net Investment Income [3 1 2.(d)]	\$	89,021,776	\$	80,954,433						
5. Average Value of Assets [1. + 1/2 x 2.(d)]	\$	1,094,752,743	\$	1,190,241,170						
6. Rate of Return [4. / 5.]		8.13%		6.80%						
7. Assumed Rate of Return		7.30%		7.30%						
8. Expected Net Investment Income	\$	79,944,054	\$	86,914,709						
9. Investment Gain/(Loss) [4 8.]	\$	9,077,722	\$	(5,960,276)						



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SECTION III – ASSETS

The next table shows how the Actuarial Value of Assets is developed. The Actuarial Value of Assets represents a "smoothed" value developed by the actuary to reduce or eliminate erratic results that could develop from short-term fluctuations in the market value of assets.

The Fund's Actuarial Value of Assets is based on the market value of assets adjusted by a five- year smoothing of gains and losses on a market value basis. Additional details regarding this methodology are included in Appendix C of the report.

Table III-3							
Development of Actuarial Value of Assets							
Original							
		Gain/(Loss)	De	eferred Portion			
Defer 0% of 2019 Gain	\$	71,447,637	\$	0			
Defer 20% of 2020 Gain		79,891,968		15,978,394			
Defer 40% of 2021 Gain		87,212,015		34,884,806			
Defer 60% of 2022 Loss		(242,577,437)		(145,546,462)			
Defer 80% of 2023 Gain		9,077,722		7,262,178			
Total Deferred Gain/(Loss) for AVA Calculation			\$	(87,421,084)			
Market Value of Assets at December 31, 2023			\$	1,162,694,392			
Total Unrecognized Gain/(Loss)				(87,421,084)			
Actuarial Value of Assets at December 31, 2023			\$	1,250,115,476			
Actuarial Value as a Percent of Market Value				107.5%			



SECTION III – ASSETS

The final table in this section summarizes the annual returns on both a market and Actuarial Value of Assets value for the last ten years and provides averages over the last five and ten years for these two metrics.

Table III-4 Historic Investment Return								
Year Ending December 31,	Market Value	Actuarial Value						
2023	8.1%	6.8%						
2022	-11.6%	6.3%						
2021	14.9%	12.0%						
2020	15.4%	10.2%						
2019	15.7%	7.1%						
2018	-2.7%	6.2%						
2017	17.1%	7.8%						
2016	7.0%	5.8%						
2015	0.7%	6.3%						
2014	5.5%	7.6%						
Average Returns								
Last 5 years:	8.0%	8.5%						
Last 10 years:	6.6%	7.6%						



SECTION IV – LIABILITIES AND EXPERIENCE GAINS/(LOSSES)

In this section, we provide detailed information related to the Fund's liability measurements, including:

- Disclosure of the Fund's liabilities,
- Development of the experience gains and losses from liabilities; and
- Detailed development of the sources of the liability gains and losses during the year.

The table that follows presents the present value of future benefits and the actuarial liabilities by membership status for the current and immediately preceding valuations. It also includes the normal cost for both valuations, as a dollar amount and as a percentage of the total pensionable payroll.

1	Fable IV	7 -1		
Present Value of Future Benefit	s (PVFI	3) Detail and Liability	Alloc	ations
		December 31, 2023		December 31, 2022
Present Value of Future Benefits (PVFB)				
Active Member Benefits	\$	929,544,905	\$	885,237,218
Service Retirees, including DROP		809,962,511		795,346,099
Beneficiaries		55,478,855		55,477,984
Disability Retirees		7,371,979		7,256,265
Terminated Vested		4,240,326		5,039,375
Total Present Value of Future Benefits	\$	1,806,598,576	\$	1,748,356,941
<u>Actuarial Liability</u>				
Active Member Benefits	\$	583,528,059	\$	531,576,009
Service Retirees, including DROP		809,962,511		795,346,099
Beneficiaries		55,478,855		55,477,984
Disability Retirees		7,371,979		7,256,265
Terminated Vested		4,240,326		5,039,375
Total Actuarial Liability (AL)	\$	1,460,581,730	\$	1,394,695,732
	\$	877,053,671	\$	863,119,723
Total Normal Cost, middle of year	\$	34,350,082	\$	32,382,154
Total Normal Cost as a % of Expected Payroll		29.96%		30.73%
Administration Expenses		<u>1.25%</u>		<u>0.00%</u>
Total Normal Cost Plus Admin. Expenses				
as a % of Expected Payroll		31.21%		30.73%
Expected Payroll	\$	114,653,245	\$	105,372,248



SECTION IV – LIABILITIES AND EXPERIENCE GAINS/(LOSSES)

The table below presents the changes in actuarial liability during the plan year. In general, the actuarial liability of any retirement Fund is expected to change at each subsequent valuation for various reasons. In each valuation, we report on those elements of the change in the liabilities that are of particular significance, potentially affecting the long-term financial outlook of the Fund. The first table summarizes the expected and actual liability as of December 31, 2023. The second table provides more details on the year's liability (gain)/loss.

Table IV-2 Changes in Actuarial Liabilit	y	
Actuarial Liability as of December 31, 2022	\$	1,394,695,732
Normal Cost		31,261,216
Benefit Payments		(86,436,099)
Interest		100,995,507
Assumption Changes		26,988,435
Benefit Changes		0
Expected Actuarial Liability as of December 31, 2022	\$	1,467,504,791
Actual Actuarial Liability as of December 31, 2023	\$	1,460,581,730
Actuarial Liability (Gain)/Loss	\$	(6,923,061)

Table IV-3 Actuarial Liability (Gain)/Loss by Source as of December 31, 2023							
Salary/Service Increase	\$	(5,383,478)					
Retirement		2,397,382					
Termination		271,895					
Disability		189,793					
Retiree Mortality		(808,689)					
DROP Balances		(3,515,955)					
Data Updates		329,153					
Other Experience		(403,162)					
Experience (Gain)/Loss	\$	(6,923,061)					



SECTION V – ACTUARIALLY DETERMINED CONTRIBUTION BENCHMARK

Actuarially Determined Contribution Benchmark ("ADC Benchmark")

Since the city and members each contribute to the Fund at a fixed rate as outlined in Vernon's Texas Civil Statute, Article 6243e.1, the Board developed an Actuarially Determined Contribution (ADC) benchmark for comparative purposes in the Fund's Funding Policy dated December 16, 2019. This ADC benchmark is developed using the actuarial assumptions and methods identical to those disclosed in this report, except as follows:

Amortization Period—The ADC benchmark is the contribution rate that, if in effect as of the valuation date, would amortize the UAL as of the valuation date in 30 years. Note that while the Fund's Funding Policy only specifies this 30-year open amortization period benchmark, a similar benchmark based on amortizing the UAL as of the valuation date fully over 20 years is provided for informational purposes.

Payroll Growth Assumption—The ADC benchmark will be calculated using a payroll growth assumption of the lesser of 3.0% and the Austin Fire Department's average payroll growth over the last ten (10) years. This assumption is specified in the Fund's Funding Policy. Since the 10- year average as of December 31, 2023 is 3.02%, a payroll growth assumption of 3.0% is used for this valuation's ADC Benchmark calculations.

Reasonable Actuarially Determined Contribution ("Reasonable ADC")

Actuarial Standards of Practice No. 4 (ASOP 4) requires the actuary to calculate and disclose a reasonable actuarially determined contribution. In our opinion, the ADC Benchmark described above does not meet the ASOP 4 definition of a reasonable actuarially determined contribution because it uses a 30-year open amortization method that does not fully amortize the Unfunded Actuarial Liability within a reasonable time period.

The "Reasonable ADC" provided in this report reflects all the same assumptions and methods as the "ADC Benchmark" with two differences:

- (1) Assumes a payroll growth of 2.5% per year as adopted in the recent experience study, and
- (2) Utilizes a 20-year closed, layered amortization method beginning with the December 31, 2023 actuarial valuation.

The chart on the next page shows the "ADC Benchmark" and the "Reasonable ADC" results.



SECTION V – ACTUARIALLY DETERMINED CONTRIBUTION BENCHMARK

Table V	-1							
Development of Actuarially Determined Contribution Benchmark and								
Reasonable Actuarially Determined Contribution								
For Plan Year Beginning 12/31 of:20232022								
Valuation Results								
Actuarial Liability Actuarial Value of Assets Unfunded Actuarial Liability (UAL)	\$ \$	1,460,581,730 1,250,115,476 210,466,254	\$ \$	1,394,695,732 1,211,321,297 183,374,435				
Total Normal Cost ¹	\$	35,783,248	\$	32,382,154				
Expected Payroll	\$	114,653,245	\$	105,372,248				
Member Contribution Rate Current City Contribution Rate Total Statutory Contribution Rate		18.70% 22.05% 40.75%		18.70% 22.05% 40.75%				
ADC Benchmark								
Normal Cost Rate ¹ Amortization of UAL Rate Total Cost Rate		31.21% 10.78% 41.99%		30.73% 10.73% 41.46%				
City Contribution Rate Based on ADC Benchmark City Rate Surplus/(Deficit)		23.29% (1.24%)		22.76% (0.71%)				
Reasonable ADC								
Normal Cost Rate ¹ Amortization of UAL Rate Total Cost Rate		31.21% 14.19% 45.40%		N/A N/A N/A				
City Contribution Rate Based on Reasonable ADC City Rate Surplus/(Deficit)		26.70% (4.65%)		N/A N/A				

¹ Middle of the year and includes 1.25% of payroll for administration expenses effective December 31, 2023.

If determined to amortize the UAL fully over 20 years instead of the 30 years specified in the Fund's Funding Policy, the city contribution rate based on the "ADC Benchmark" as of December 31, 2023 would be 26.15%, producing a (4.10%) deficit relative to the current 22.05% statutory city contribution rate.



APPENDIX A – FUND MEMBERSHIP

The data for this valuation was provided electronically in Excel format by the Fund's office. Cheiron did not audit any of the data, but we did perform 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 data for active and inactive members is as of December 31, 2023.

The following pages contain a summary of the data provided:

- Member status reconciliation from December 31, 2022 to December 31, 2023
- Active member statistics, including age, service, and salary
- Age and service distribution for active members as of December 31, 2023
- Inactive member statistics, including age and average benefit amounts
- DROP statistics and DROP balance reconciliation



APPENDIX A – FUND MEMBERSHIP

			N	Table A-1 Iember Status Reconcil	iation			
				Term Vested		Disability	Beneficiaries	
			Actives	Or Awaiting Refund	Retirees	Retirees	and Alt Payees	Total
1.	Decen	nber 31, 2022 Valuation	1,199	35	793	15	171	2,213
2.	Additi	ons						
	a.	New Entrants	80	2				82
	b.	DROP Balance Only ¹					4	4
	c.	Total	80	2	-	-	4	86
3.	Reduc	tions						
	a.	Benefits Expired						-
	b.	Refunds	(2)	(2)				(4)
	c.	Deaths with no Beneficiaries					(13)	(13)
	d.	Total	(2)	(2)	-	-	(13)	(17)
4.	Chang	es in Status						
	a.	Surviving Spouse						-
	b.	Disabled	(1)			1		-
	c.	Non Vested Termination	(3)	3				-
	d.	Retired	(27)		27			-
	e.	Terminated Vested	(1)	1				-
	f.	Disabled						-
	g.	Death with Beneficiaries			(9)	(1)	10	-
	h.	Rehire	1	(1)				-
	i.	Data Corrections		(2)	(2)		(1)	(5)
	j.	Total	(31)	1	16	-	9	(5)
5.	Decen	nber 31, 2023 Valuation	1,246	36	809	15	171	2,277

¹ Alternate Payees with DROP balance only.



APPENDIX A – FUND MEMBERSHIP

Table A-2 Active Members Statistics						
Decemb	er 31, 2023	December 31, 2022	% Change			
Active Members in Valuation						
Count						
Total	1,246	1,199	3.92%			
Average Current Age						
Total	41.1	41.2	-0.17%			
Average Service						
Total	11.9	11.9	0.00%			
Average Reported Pay	7					
Total	\$85,943	\$87,220	-1.46%			



APPENDIX A – FUND MEMBERSHIP

AGE/SERVICE DISTRIBUTION OF ACTIVE MEMBERS ACTIVE MEMBERS AS OF DECEMBER 31, 2023

COUNTS BY AGE/SERVICE											
Service											
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	18	20	0	0	0	0	0	0	0	0	38
25 to 29	31	61	14	0	0	0	0	0	0	0	106
30 to 34	24	103	72	10	0	0	0	0	0	0	209
35 to 39	7	83	93	53	7	0	0	0	0	0	243
41 to 44	0	7	65	86	43	14	0	0	0	0	215
45 to 49	0	0	4	53	48	71	8	0	0	0	184
50 to 54	0	0	0	6	39	69	44	2	0	0	160
55 to 59	0	0	0	0	5	19	43	14	0	0	81
60 to 64	0	0	0	0	0	2	5	2	1	0	10
65 to 69	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0
Total	80	274	248	208	142	175	100	18	1	0	1,246

Average Age = 41.1

Average Service = 11.9



APPENDIX A – FUND MEMBERSHIP

Table A-3 Inactive Member Statistics							
Dece			% Change				
December 31, 2023 December 31, 2022 % Change Vested Terminated Members and Awaiting Refund							
Count							
Total	36	35	2.86%				
Average Current A	ge						
Total	39.1	39.4	-0.79%				
Retirees, including DROP Members							
Count							
Total	809	793	2.02%				
Average Current A	0						
Total	66.0	65.7	0.52%				
Average Monthly H							
Total	\$6,004	\$5,956	0.81%				
Disability Retirees							
Count							
Total	15	15	0.00%				
Average Current A	0		2.020/				
Total	64.5	67.1	-3.82%				
Average Monthly I		¢2.925	0.140/				
Total	\$3,820	\$3,825	-0.14%				
Beneficiaries and A	<u>Iternate Payees</u>						
Count Total	171	171	0.00%				
	171	171	0.00%				
Average Current A Total	.ge 68.7	68.1	0.93%				
		00.1	0.2370				
Average Monthly H Total	\$2,940	\$2,825	4.09%				


APPENDIX A – FUND MEMBERSHIP

Table A-4 DROP Statistics and DROP Balance Reconciliation			
	December 31, 2023	December 31, 2022	% Change
Number of DROP	330	331	-0.30%
Total DROP Balance	\$155,823,975	\$157,393,946	-1.00%
As a % of Trust Assets	13.40%	14.10%	-5.00%
Average DROP Balance	\$472,194	\$475,510	-0.70%
Reconciliation of DROP Bal	ances		
12/31/2022 Balance		\$157,393,946	
Deposits			
Interest	7,747,328		
Withdrawals	wals (22,807,057)		
Data Updates 9,469			
12/31/2023 Balance	-	\$155,823,975	



APPENDIX B – SUMMARY OF PLAN PROVISIONS

1. Membership Requirement

All commissioned civil service and Texas state-certified firefighters with at least six months of service employed by the City of Austin fire department.

2. Salary

Salary (compensation) means base pay and longevity pay. No other forms of pay are included within the pensionable salaries.

3. Average Monthly Compensation

The average of the member's compensation for the 36 months of highest compensation.

4. Service Credit

One month of service credit is earned for each month the member makes the required contribution to the Fund.

5. Contributions

	Members: City of Austin:	18.70% of Salary 22.05% of Salary
6.	Normal Retirement	
	Eligibility:	Age 50 with 10 years of service or 25 years of service regardless of age.
	Amount:	3.3% of average monthly compensation for each year of service with a minimum of \$2,000 per month.
	Normal Form of Payment:	Life Annuity with 75% continued to the Surviving Spouse (or designated beneficiary if the participant is unmarried).
7.	Early Retirement	
	Eligibility:	Age 45 with 10 years of service or 20 years of service regardless of age.
	Amount:	3.3% of average monthly compensation for each year of service.
8.	Disability Retirement	
	Eligibility:	Upon approval of disability by the Board of Trustees.
	Amount:	3.3% of average monthly compensation for each year of service (but not



APPENDIX B – SUMMARY OF PLAN PROVISIONS

9. Death while an Active Employee

- Eligibility: Termination of employment due to death
- Amount:The surviving spouse or designated beneficiary will receive 75% of the member's accrued
benefit based on the greater of their service at death or 20 years of service.

Each dependent child of a surviving spouse will receive 15% of the Member's accrued benefit but not less than 9.9% of Average Monthly Compensation with a reduction if there are more than five surviving dependent children.

10. Deferred Retirement

Eligibility:	Ten years of service. Must also elect to leave their member contributions in the Fund.
Amount:	The accrued benefit is payable at Normal Retirement eligibility, with such eligibility determined as if the member had remained employed.

11. Non-Vested Termination

- Eligibility: Less than ten years of service.
- Amount: A lump sum of member contributions with accumulated interest.

12. Deferred Retirement Option Plan (DROP)

Under this program, a member eligible for service retirement may elect to continue in active service as a firefighter but have the fund begin crediting "payments" to a deferred retirement option plan (DROP) account. The monthly "payments" would be an amount equal to what the member's monthly annuity would have been if the member had retired as of that eligible DROP date. Any eligible cost-of-living adjustments (COLAS) would be applied to the monthly annuity during this DROP period. During the DROP period, the member would have all their pension contributions and applicable annual interest of 5% compounded monthly credited to their account. When the member retires, by terminating their active service in the fire department, an accumulated lump sum balance may be available to be distributed (all or part) to the member from the DROP account.

In lieu of electing to participate in the DROP before actual retirement, a member who is eligible for normal service retirement may elect to terminate active service as a firefighter and establish the DROP account at termination. Under this "RETRO or BACK DROP," the firefighter's DROP account reflects the accrual from the actual termination date back to a date on or after the date they become eligible for normal service retirement.



APPENDIX B – SUMMARY OF PLAN PROVISIONS

The maximum period under which a firefighter can participate in a DROP is seven years. A firefighter may elect to establish a DROP account after reaching normal or early service retirement eligibility. Twelve total withdrawals are allowed while the retiree's DROP account balance remains in the pension plan, with a maximum of four withdrawals in any year. These limits on withdrawals can be altered by board policy as long as such change is determined to be feasible. The withdrawals can either be in the form of a distribution to the retiree (provided the retiree reaches age 50 before retiring) or a rollover into a qualified IRA. The entire DROP balance must be withdrawn from the fund by April 1st of the calendar year following the year the retiree reaches age 70½.

13. Cost of Living Adjustments (COLA)

When deemed affordable, eligible pension recipients are entitled to annual cost-of-living adjustments (COLA). COLAs are approved only when the fund's actuary has advised the Board that such adjustment would not impair the fund's financial stability based on the COLA Adjustment Policy approved by the Board. The COLAs are to be based on the annual percentage increase in the Consumer Price Index (CPI-U).

Members who retire under Early Retirement are only eligible for COLAs once they would have reached Normal Service Retirement eligibility had they continued their employment. The COLAs provided over the last ten years are as follows:

Effective Date	COLA
12/31/2023	0.00%
12/31/2022	0.00%
12/31/2021	5.40%
12/31/2020	1.40%
12/31/2019	1.70%
12/31/2018	2.30%
12/31/2017	2.20%
12/31/2016	1.50%
12/31/2015	0.00%
12/31/2014	1.30%

14. Changes Since Last Valuation

None.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Rate of Investment Return

7.30%, net of investment expenses only

2. Price Inflation

2.5% per year

3. Rates of Salary Increase

Salary increases are split into a wage inflation assumption of 2.50% and a merit scale based on service, shown below.

	Merit
Years of Service	Increase
0	7.00%
1	7.00%
2	6.50%
3	1.50%
4	0.50%
5	4.50%
6-7	1.00%
8	4.50%
9	0.50%
10	1.00%
11	3.50%
12	1.50%
13	1.00%
14	3.50%
15-16	1.00%
17	3.50%
18-19	1.00%
20	3.50%
21	0.50%
22+	0.00%

For fiscal 2024 and 2025, the salary increase assumption reflects additional base increases of 5.7% and 1.5%, respectively, based on the latest agreement between the City of Austin and Austin Firefighters Association Local 975.

4. Aggregate Payroll Growth

2.50% per year



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

5. Disability

Age	Rate
Under 30	0.013%
30-39	0.040%
40-49	0.067%
50+	0.033%

6. Mortality Rates

Active and Vested Terminated Lives: PubS(A)-2010 Mortality Table for Employees.

Retiree Lives: PubS(A)-2010 Mortality Table for Healthy Retirees.

Contingent Survivor Lives: PubS(A)-2010 Mortality Table for Contingent Survivors.

Disabled Lives: PubS(A)-2010 Mortality Table for Disabled Retirees.

Generational mortality improvements are projected from 2010 using Scale MP-2021.

7. Withdrawal

Withdrawal rates are based on department and service, as shown below.

Years of	D (
Service	Rate
0-4	1.50%
5-14	0.75%
15+	0.00%

8. Retirement Rates

Age	Rate
Under 43	0.00%
43-48	3.00%
49-51	4.00%
52-53	7.00%
54	12.00%
55-57	20.00%
58-60	35.00%
61-62	50.00%
63+	100.00%



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

9. DROP Election

Members are assumed to elect either normal retirement or DROP, with the DROP period maximizing the present value of their retirement benefits, including reflecting the impact of previously granted COLAs the member would be eligible for during the assumed DROP period.

10. Existing DROP Balances

Members with existing DROP balances are assumed to withdraw their balances over the next eight years, but no later than age 70 ½.

11. Future Cost-of-Living Adjustment Assumption

0% for future years. COLAs are subject to financial stability requirements, and based on current valuation results, they are not anticipated to be granted for at least the next twenty years.

12. Active Payment Form Assumption

Life annuity with 75% continued to the surviving spouse (or designated beneficiary).

13. Percent Married

100% of actives are assumed to be married.

14. Beneficiary Age

A Male participant is assumed to be three years older than his beneficiary.

A Female participant is assumed to be one year younger than her beneficiary.

15. Dependent Children

50% of active members are assumed to have dependent children, and the youngest child is assumed to be one year old.

16. Administrative Expenses

Administrative expenses of 1.25% of payroll are added to the normal cost.

17. Technical and Miscellaneous Assumptions

Decrement timing: Beginning of year

Terminated vested members: All terminated vested members are assumed married and assumed to retire at normal retirement eligibility.

The limits in IRC sections 415(b) and 401(a)(17) are assumed to increase 2.5% per year.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

18. Low-Default-Risk Obligation Measure (LDROM) Discount Rate

The discount rate for LDROM is based on the FTSE yield curve as of December 31, 2023 and the Fund's expected future benefit cash flows.

19. Disclosures regarding Models Used

In accordance with Actuarial Standard of Practice (ASOP) No. 56 *Modeling*, the following disclosures are made related to the valuation software:

A. Valuation Software

Cheiron utilizes ProVal, an 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 the assumptions or output of ProVal that would affect this valuation. We have reviewed the underlying workings of this model to the degree feasible and consistent with ASOP No. 56 and believe them to be appropriate for the purposes of the valuation.

B. Projections

Projections in this report were developed using P-Scan, our proprietary tool for the intended purpose of developing projections. The projections shown in this report cover multiple individual scenarios and the variables are not necessarily correlated. We are not aware of any material inconsistencies, unreasonable output resulting from aggregation of assumptions, material limitations or known weaknesses that would affect the projections shown in this report.

The projections are based on the same census data and financial information as of December 31, 2023 as disclosed in this actuarial valuation. The projections assume continuation of the plan provisions, actuarial assumptions in effect as of December 31, 2023, and active membership remains at current levels. They do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after December 31, 2023.

The projections assume that all future assumptions are met except where specifically indicated. Future outcomes become increasingly uncertain over time; therefore, general trends and not absolute values should be considered when reviewing these projections. Further, for the purpose of these projections, we have only reflected the impact of new entrants entering the Fund in aggregate and have not developed individual liabilities or detailed profiles related to these potential new entrants. We feel this is appropriate for the purpose of these projections, but if they were to be used for other purposes, this may not be appropriate, and alternative projections may need to be developed.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

20. Changes since Last Valuation

Demographic and economic assumptions were changed from the prior valuation to reflect the experience study completed by Cheiron to be effective for the December 31, 2023 actuarial valuation and adopted by the Board at the March 25, 2024 meeting.

21. Rationale for Assumptions

The actuarial assumptions were chosen by the Board of Trustees, upon the recommendation of the actuaries, based on an experience study issued by Cheiron on March 25, 2024, based on data through December 31, 2022, and adopted by the Board at the March 25, 2024 meeting.



APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Funding Method

Liabilities and contributions shown in this report are computed using the entry age normal funding method. Under this funding method, a normal cost rate is determined as a level percentage of pay for each active member. The normal cost rate times payroll equals the total normal cost for each member. The normal cost plus member contributions will pay for projected benefits at retirement for each active Fund member.

The actuarial liability is that portion of the present value of future benefits that will not be paid by either future employer normal cost contributions or member contributions. The difference between this liability and the assets accumulated as of the same date is referred to as the Unfunded Actuarial Liability (UAL).

2. Asset Valuation Method

The actuarial value has been calculated by taking the market value of assets less 80% of the investment gain (loss) during the preceding year, less 60% of the investment gain (loss) during the second preceding year, less 40% of the investment gain (loss) during the third preceding year, and less 20% of the investment gain (loss) in the fourth preceding year.

The investment gain (loss) is calculated by taking the difference between the expected market value of assets based on an investment return assumption and the actual market value of assets.

3. Amortization Method

State Statute sets the city contribution rate that is actually paid. Therefore, this method is only applicable for AFRF as it relates to contribution amounts calculated in the valuation to support evaluating the adequacy of the statutory contributions.

For the Actuarially Determined Contribution (ADC) Benchmark, the amortization method is an open 30-year level percentage of pensionable pay amortization based on a payroll growth assumption of 3.00% per the Board's Funding Policy.

For the Reasonable ADC, the amortization method is a 20-year closed, layered amortization as a level percentage of pay, assuming 2.5% aggregate payroll growth, beginning with the December 31, 2023 actuarial valuation.

4. Changes since Last Valuation

None.



PLAN PROVISION SECTION

Historical Plan Provision Changes Summary of Plan Benefits

HISTORICAL PLAN PROVISION CHANGES

Fund History

The Austin Firefighters Retirement Fund (*AFRF* or *the Fund*) was first created in 1937 by an Act of the 45th Legislature under the Texas Local Fire Fighters Retirement Act (Article 6243e, Vernon's Texas Civil Statutes). In 1975, the 64th Legislature enacted Article 6243e.1, to establish the Fund independently in state statute. AFRF is a single employer contributory defined benefit pension plan that provides retirement, disability, death, and survivor benefits to approximately 2200 active and retired firefighters of the City of Austin and their beneficiaries.

Plan Provision Changes

Significant changes in plan provisions including benefit enhancements since 1975 are as follows:

1975

- 2.0% COLA approved.
- The retirement calculations changed from using the highest 5 years' average salary to using the highest 3 years' average salary.
- The minimum monthly disability benefit changed from \$100 to \$200.
- The contribution rate by the firefighters increased from 11.85% to 13.7% of salary.
- State statute Article 6243e.1 is created pertaining only to the Austin Firefighters Pension Fund, allowing the plan to branch away from the former statewide system.

1976

• 2.0% COLA approved.

1977

• 2.0% COLA approved.

1978

- 2.0% COLA approved.
- The retirement multiplier increased from 2.0% to 2.1%

- 2.0% COLA approved.
- The minimum monthly spousal benefit increased from \$100 to \$200.
- The minimum children's benefit increased from \$50 to \$100.

• 2.0% COLA approved.

1981

• 2.0% COLA approved.

1982

- 2.0% COLA approved.
- The retirement multiplier increased from 2.1% to 2.2%

1983

• 2.0% COLA approved.

1984

- 2.0% COLA approved.
- The retirement multiplier increased from 2.2% to 2.3%.
- An actuarial study was conducted to increase all retirees' benefits to offset against inflation.

1985

- 4.0% COLA approved.
- The retirement multiplier increased from 2.3% to 2.5%.
- Early retirement eligibility set at age 50 and 25 years of service.
- The City of Austin contribution rate increased from 14.0% to 14.05%.
- Employee contributions treated as employer contributions for federal income tax purposes. Contributions are paid pre-taxed, creating more take home pay.
- A benefit increase for all retirees was approved to "catch benefits up" with inflation since the time of retirement. If the resulting monthly benefit for a retiree was less than \$500, then a \$500 minimum monthly benefit was approved.

1986

• 3.0% COLA approved.

- 1.5% COLA approved.
- The retirement multiplier increased from 2.50% to 2.65%.
- Normal retirement eligibility remains at age 55, while normal retirement eligibility at any age was lowered from 35 years of service to 30 years of service.

- 4.0% COLA approved.
- The retirement multiplier increased from 2.65% to 2.90%.

1989

- 4.25% COLA approved.
- The workers' compensation offset for disability benefits was eliminated.
- Actuarial assumption adopted that 12% of firefighters were assumed to be single at retirement.

1990

• 4.50% COLA approved.

1991

- 6.3% COLA approved.
- The minimum monthly pension benefit for eligible retirees and beneficiaries increased from \$500 to \$850.
- Normal retirement eligibility was lowered from age 55 to age 53. Normal retirement eligibility at any age was lowered from 30 years of service to 28 years of service.
- Surviving children became eligible for full spousal benefits in the event there is no surviving spouse.
- Actuarial assumption for salary growth decreased from 6.50% to 5.50% annually.

1992

- 2.9% COLA approved.
- The minimum monthly pension benefit for eligible retirees and beneficiaries increased from \$850 to \$1000.
- The actual assumption for a 5% anticipated COLA was extended through 1996.

- 3.2% COLA approved.
- Normal retirement eligibility was lowered from age 53 to age 52. Normal retirement eligibility at any age was lowered from 28 years of service to 27 years of service.
- Early retirement eligibility lowered from age 50 with 25 years of service to age 50 OR 25 years of service, regardless of age.
- The survivor benefit changed to a flat 75% of retiree's benefit.
- Contribution refunds are paid with 5% interest.
- Actuarial assumption for payroll growth no longer assumed a 1% growth in membership annually.
- The actuarial assumption for a 5% anticipated COLA was extended through 1998.

- 2.80% COLA approved.
- The minimum monthly pension benefit for eligible retirees and beneficiaries increased from \$1,000 to \$1,200.
- The City of Austin contribution rate increased from 14.05% to 16.05%. The firefighter contribution rate remained at 13.7% of pay.

1995

- 2.6% COLA approved.
- The retirement multiplier increased from 2.90% to 3.0%.
- Early retirement eligibility was lowered from age 50 to age 48 with at least 10 years of service. Early retirement eligibility at any age was lowered from 25 years of service to 23 years of service.
- Normal retirement eligibility was lowered from age 52 to age 50 with at least 10 years of service. Normal retirement eligibility at any age was lowered from 27 years of service to 25 years of service. A Deferred Retirement Option Plan (DROP) was added, allowing up to 2 years of service designated for DROP participation.
- The City of Austin contribution rate increased from 16.05% to 18.05%. The firefighter contribution rate remained at 13.7% of pay.
- An actuarial assumption for a 5% anticipated COLA was extended through 2002.

1996

• 2.90% COLA approved.

1997

- 3.0% COLA approved.
- Early retirement eligibility was lowered from age 48 to age 45 with at least 10 years of service. Early retirement eligibility at any age was lowered from 23 years of service to 20 years of service.
- COLA eligibility was delayed until normal retirement eligibility is met.
- The Deferred Retirement Option Plan (DROP) was extended from a maximum of 2 years to a maximum of 5 years of service.
- Benefits were made available to surviving spouses of retirees married after retirement. The requirement that a spouse's benefits terminate after remarriage was eliminated.
- The "meet and confer" agreement "bought down" firefighter contributions to 11.70%, while City contributions increased to 20.05%. Firefighters continued to get contribution credit for 13.70% per statutory requirements.
- An actuarial assumption for a 5% anticipated COLA was extended through 2004.

- 2.10% COLA approved.
- The actuarial assumption for DROP participation rate was revised to 100% of the members to retire and elect a 5-year DROP one year following the age first eligible for a 5-year DROP.

- 1.5% COLA approved.
- The retirement multiplier increased from 3.0% to 3.1%, to be used in all retirement and DROP calculations regardless of DROP date, effective September 1, 1999.
- The Deferred Retirement Option Plan (DROP) benefits are made available to eligible survivors of members who die before retirement but after becoming eligible for a DROP.
- A 3.33% benefit increase was approved effective September 1, 1999, for all retirees at the time based on the percentage increase of the retirement multiplier from 3.0% to 3.10%.
- After 2004, annual COLAs of 0.5% would be granted to retirees and beneficiaries if inflation was at least 0.5%. The COLA was not limited to 0.5%, but the idea was to determine required funding in advance. If inflation exceeded 0.5%, the Board and actuary would have to approve any portion above 0.5% based on the financial health of the Fund.
- Mortality rate assumption for actives and non-disabled annuitants were updated to the 1994 Group Annuity Mortality tables, to reflect industry standards.
- The Fund made an actuarial assumption of 3.50% anticipated COLA through 2004 (which was less than the 5% anticipated COLA previously assumed).

2000

• 2.60% COLA approved.

2001

- 3.4% COLA approved.
- The retirement multiplier increased from 3.10% to 3.30%, to be used in all retirement and DROP calculations regardless of the Deferred Retirement Option Plan (DROP) date, effective September 1, 2001.
- DROP extended from a maximum of 5 years to a maximum of 7 years of service.
- A survivor benefit was made available for all unmarried retirees and for unmarried firefighters who die after becoming eligible to retire per statutory provisions. The percentage is an actuarial equivalent of 75% of the firefighter's accrued benefit and is tied to the age difference of the firefighter and the designated beneficiary.
- A 6.45% benefit increase was approved, effective September 1, 2001, for all retirees at the time based on the percentage increase of the retirement multiplier from 3.10% to 3.30%.

2002

• 2.1% COLA approved.

2003

• The firefighter contribution rate increased from 13.7% to 15.7%, effective June 1, 2003. The City of Austin contribution rate remained at 18.05%.

• A \$32.00 per month increase in benefits was approved for all eligible retirees.

2006

• A \$100.00 per month increase in benefits was approved for all eligible retirees.

2010

• The City of Austin contribution rate increased from 18.05% to 22.05%, completed in four 1% increments by 2013. The firefighter contribution rate increased from 15.7% to 18.7%, completed in six 0.5% increments by 2016.

2012

• The minimum monthly pension increased to \$2,000 for all annuitants who were members of the Fund in 1994 when the last adjustment of this type was made.

2013

• \$93.00 per month increase in benefits for all eligible retirees.

2014

• \$64.00 per month increase in benefits for all eligible retirees.

2015

• 1.3% COLA approved.

2016

 New fund rules (Section VI of Fund Rules as posted on website) were adopted for both active and retired firefighters regarding survivor and beneficiary designations. New optional forms of benefits (Section X of Fund Rules as posted on website) were adopted which now include the Single Life Annuity (SLA) option.

- 1.5% COLA approved.
- New fund rules (Section VI of Fund Rules as posted on website) were adopted regarding the number of beneficiary designation changes allowed for unmarried retirees. New fund rules (Section XI of Fund Rules as posted on website) were adopted regarding possible retirement benefits and procedures upon indefinite suspension.

• 2.2% COLA approved.

2019

• 2.3% COLA approved.

2020

• 1.7% COLA approved.

2021

• 1.4% COLA approved.

2022

• 5.4% COLA approved.

No significant plan provision changes or benefit enhancements have been implemented since 2022.

SUMMARY OF PLAN BENEFITS

This section provides a general overview of AFRF's benefit provisions. If there is any discrepancy between this general overview and state or federal law, those governing statutes will take precedence. The full <u>AFRF Benefits</u> <u>Guide</u> is available on the Fund's website.

ELIGIBILITY

All commissioned civil service firefighters of the Austin Fire Department who have been certified by the State of Texas as a firefighter become members of the Fund as a condition of employment. Once a firefighter has become a member, they will remain a member of the Fund unless they terminate service and receive a refund of accumulated contributions. Fire Cadets are not eligible to be members of the Fund while in the Fire Academy. Cadets do not make contributions to the Fund, nor do they earn service credit under the Fund during the period of training prior to becoming a commissioned civil service firefighter.

CONTRIBUTIONS

Members of the Fund contribute 18.70% of their "Compensation" to the Fund each pay period through a payroll deduction. All contributions a member makes to the Fund are considered their accumulated contributions but become part of the overall assets of the Fund. The City contributes an amount equal to 22.05% of the compensation of all members of the Fund each pay period and are not attributable to an individual member.

COMPENSATION CONSIDERED

"Compensation" for purposes of contributions to the Fund include a member's base pay and any longevity pay. Compensation does not include any amount earned from overtime pay, temporary pay in higher classifications, educational incentive pay, assignment pay, Christmas Day bonus pay, or pay for automobile and clothing allowance, if applicable.

SERVICE CONSIDERED

Members earn one month of service credit in the Fund for each month that they make a contribution to the Fund. Members do not earn service credit for any time during which they are receiving a disability retirement annuity from the Fund or during participation in the Deferred Retirement Option Plan (DROP). Military service, only which interrupts fire department service, may be considered for service credit under certain circumstances.

RETIREMENT BENEFIT

The Fund is a defined benefit plan that provides monthly retirement annuity benefits that are payable for a member's lifetime based on service credit, the average of their highest 36 months of compensation, and a 3.30% multiplier. Members become eligible for normal service retirement upon either (1) attaining age 50 with at least 10 years of service credit, or (2) accruing 25 years of service credit, regardless of age. The Fund offers multiple forms of benefits for members to choose from, including a Normal Retirement Annuity with a Joint & Survivor (75%) Benefit and an actuarially adjusted Single Life Annuity with no Survivor Benefit. Upon retirement, members receive a monthly retirement annuity benefit less required deductions for tax withholding. Additional deductions are made for members who choose to enroll in health, dental, and vision insurance offered by the City of Austin or elect other voluntary deductions in accordance with the procedures adopted by the Fund.

EARLY RETIREMENT BENEFIT

Members qualify for early retirement upon either (1) attaining age 45 and accruing at least 10 years of credited service in the Fund or (2) accruing at least 20 years of credited service in the Fund, regardless of age. Early retirement annuity benefits are calculated the same as a normal service retirement, but the member will not be eligible for any cost-of-living adjustments (COLAs) granted by the Board until they either attain age 50 or would have accrued 25 years of credited service in the Fund, had they remained in active service through such date.

DEFERRED RETIREMENT OPTION PLAN

The Deferred Retirement Option Plan (DROP) is an alternative form of benefit that members may elect once they become eligible for retirement. The purpose of the DROP is to provide financial planning flexibility to members upon retirement by providing a reduced monthly retirement annuity benefit <u>and</u> a lump-sum benefit, as opposed to only a monthly retirement annuity benefit. At the time a member elects to participate in the DROP, they must select an effective date for their DROP participation, which cannot be more than 7 years prior to the actual date of termination with the Fire Department. A member is considered "retired" for purposes of the Fund during the period between the DROP effective date and the actual date of termination from the Fire Department.

When a member elects to participate in the DROP, an account is established and maintained in the records of the Fund and is credited with (1) the amount of the monthly retirement annuity benefit that the member would have received had they retired on their DROP effective date, multiplied by the number of months in their elected DROP period, (2) member contributions that they make or made to the Fund during the DROP period, and (3) interest. DROP account balances are credited at the end of each month with interest equaling one-twelfth of five percent (5%). DROP participants are eligible to receive any COLAs that are granted by the Board during their DROP period, which will be applied to the monthly retirement annuity benefits that are being credited to the DROP account, as applicable. DROP participants are <u>not</u> eligible to receive credit for any additional service credit or salary increases that they may receive after their DROP effective date.

DROP participants may not receive a distribution from their DROP account before termination of active service as a firefighter. Upon terminating active service and beginning to receive a monthly retirement benefit annuity, DROP participants may choose to receive the amount credited to their DROP account through a single-payment distribution, or up to 12 total payments not to exceed 4 payments per year, either of which must occur prior to April 1 of the year following the year in which the participant attains age 70 ½. Different distribution requirements apply to DROP beneficiaries and alternate payees who participate in DROP through a Qualified Domestic Relations Order. All distributions are subject to a mandatory 20% federal income tax withholding unless the distribution is transferred directly by the Fund to an Individual Retirement Account (IRA) or another eligible retirement plan through a direct rollover.

VESTED BENEFIT

A member is considered vested once they accrue at least 10 years of service credit in the Fund. A member is considered "vested terminated" if they terminate service with the Fire Department after becoming vested but before becoming eligible to retire. Vested terminated members have the right to receive a monthly retirement annuity benefit on the date they attain age 50 or would have accrued at least 25 years of service credit had they remained in service with the Fire Department through such date, provided that they left their accumulated member contributions in the Fund. Vested terminated annuity benefits are calculated the same as a normal service retirement, based on service credit and highest average compensation at the time of termination.

SEVERANCE

If a member terminates employment with the Fire Department but is not eligible to retire, they may request a refund of their accumulated member contributions plus interest. In connection with the refund of accumulated member contributions, all accumulated service credit is canceled, and the member forfeits all rights to future benefits from the Fund. Members are not entitled to withdraw any contributions made by the City of Austin. If a member withdraws their contributions and is later rehired by the Fire Department, they will be treated as a new hire and will not be eligible to purchase or reinstate any service credit with the Fund.

COST-OF-LIVING ADJUSTMENTS

Each year, the Board determines whether a COLA may be granted to retired members in accordance with its COLA Adjustment Policy. A COLA may only be granted if the Board's actuary determines that granting a COLA will not impair the financial stability of the Fund. The amount of any COLA is based on the annual percentage increase in the Consumer Price Index (CPI-U), which measures inflation, and adjusted according to Fund policy.

DISABILITY BENEFIT

If a member becomes disabled while in active service with the Fire Department, regardless of whether the disability occurred while on-duty or off-duty, they will be eligible to retire and receive a disability retirement annuity if the Board, under the guidance of an independent medical board, determines that they are unable to perform the duties of a firefighter or an accommodating job within the Fire Department with comparable pay. The disability retirement annuity benefit is calculated the same as a normal service retirement, based on a minimum of 20 years of service credit.

Disability retirement benefits are subject to annual reviews following the initial 2 ½ years of receiving the benefit, or earlier if the Board reasonably believes that the member has recovered and is no longer disabled. During an eligibility review, the disability retirement benefit may be continued, reduced, or discontinued according to criteria adopted by the Board regarding the member's earning capacity, financial status, and medical records. All disability reviews are conducted under the guidance of an independent medical board.

ACTIVE DEATH BENEFIT

If a member dies while in active service, their surviving spouse is entitled to receive a lifetime monthly survivor annuity benefit from the Fund equal to 75% of the normal monthly retirement annuity benefit that the member would have received if they had retired on the date of their death, based on a minimum of 20 years of service credit. Surviving dependent children may also be eligible to receive a benefit if qualified under the Fund Rules.

SURVIVORS BENEFIT

The normal form of benefit under the Fund is a joint and survivor annuity which provides the survivor with a lifetime monthly survivor annuity benefit equal to 75% of the member's normal monthly retirement annuity benefit. Marital status and children will impact who is considered a member's "survivor" for purposes of the Fund and may be subject to an actuarial benefit reduction based on any applicable Fund Rules. The survivor is:

- Spouse, if married at time of retirement or active death
- Spouse, if married after retirement for at least 24 consecutive months prior to death
- All unmarried children under age 22 (eligible with or without a surviving spouse; benefit will vary)
- Designated beneficiary, only if no surviving spouse or children are eligible (age reduction may apply)
- Dependent parent, only if no surviving spouse or children are eligible and no beneficiary was designated

