AUSTIN FIRE FIGHTERS
RELIEF AND RETIREMENT FUND

ANNUAL REPORT

2020

AUSTIN FIRE FIGHTERS

RELIEF AND RETIREMENT FUND

2020

ANNUAL REPORT

AND

PENSION PLAN GUIDE FOR MEMBERS

DECEMBER 31, 2020

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While this report and pension plan guide set forth most of the facts about the plan, it does not attempt to describe all provisions or limitations as they apply in individual situations. In case of any conflict between the report/guide and the statute, the pension statute article 6243e.1, Vernon's Texas Civil Statutes, as amended through the 2015 State Legislature Regular Session, will prevail.

If you have any questions about the plan, please contact the Austin Fire Fighters Relief and Retirement Fund Pension Office, at (512) 454-9567. The Pension Office address is 4101 Parkstone Heights Drive, Suite 270, Austin, Texas 78746. Our email address is: ***Staff@afrs.org***. You can also visit our web site at *AFRS.ORG*.

BOARD		Mayor Steve Adler, Chair
OF		Keith A. Johnson, Vice Chair
TRUSTEES		Belinda Weaver Treasurer
202[illegible]		Jeremy E. Burke, Trustee
		Brad Landi , Trustee
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AUDITOR		Montemayor Britton Bender – Austin, TX
FUND CUSTODIAN		State Street – Boston, MA
INVESTMENT CONSULTANT		Meketa Investment Group – Boston, MA
	INVESTMENT MANAGERS	
Aberdeen Asset Mgmt., Inc.	Aether Investment Partners	Baillie Gifford
Philadelphia, Pennsylvania	Denver, Colorado	Edinburgh, Scotland
Silicon Valley Bank	Arcmont Lending London,	Clarion Partners
San Francisco, CA	England	Auburn, California
Constitution Capital Partners	Cross Creek Capital Partners	Deutsche Alternative Asset Mgmt.
Andover, Massachusetts	Salt Lake City, UT	London, England
Dimensional Fund Advisors	Aberdeen Flag Capital.	57 Stars
Austin, Texas	Stamford, CT	Washington D.C.
Greenspring Associates	HarbourVest	Highclere International
Owings Mills, Maryland	Boston, Massachusetts	London, England
TT International	LGT Capital Partners Inc.	Loomis Sayles
Dublin, Ireland	New York, New York	Boston, Massachusetts
Metropolitan Real Estate Mgmt.	Partners Group (USA) Inc.	Portfolio Advisors
Boston, Massachusetts	New York, New York	Darien, Connecticut
Private Advisors	Private Equity Investors	Pyramis Global Advisors
Richmond, Virginia	New York, New York	Smithfield, Road Island
Sanderson Asset Management	State Street Global Advisors	Vaughan Nelson Investment Mgmt.
Chicago, Illinois	Boston, Massachusetts	Houston, Texas
Pacific Asset Management	Westfield Capital Management	Westwood Holdings Group, Inc.
Newport Beach, California	Boston, Massachusetts	Dallas, Texas
LEGAL COUNSEL		Jackson Walker
		Austin, Texas
PENSION OFFICE STAFF		
William E. Stefka - Administrator	Premal Amin –Deputy Administrator	Kendall Twomey

Austin Fire Fighters Relief and Retirement Fund
4101 Parkstone Heights Drive, Suite 270
Austin, TX 78746
Telephone: (512) 454-9567

July 31, 2020

TO THE MEMBERSHIP:

On behalf of the Austin Fire Fighters Relief and Retirement Fund Pension Board of Trustees, I am pleased to present the 2020 annual report to the membership. The last year has been a challenging one in our community on many levels, and I hope that the financial support that this fund provides and promises the membership has brought comfort and stability to you and your families.

According to the pension plan's investment consultant, the Fund's annual money-weighted net real rate of return for calendar year 2020 was 12.9%, a top quintile performance relative to similar sized public pension plans.

The latest actuarial valuation dated 12/31/20 shows the pension plan has maintained a financially sound position and is 87.5% funded with a 23.3-year amortization period. This compares to the prior year's 12/31/19 valuation when the funded ratio was 86.8%, with a 21.9-year amortization period. This analysis includes the impact of the most recent changes to our actuarial assumptions:

1. Investment Return (lowered from 7.5% to 7.3%)
2. Payroll Growth (increased from 2.0% to 2.5%)

Note that our investment advisor has advised the pension Board of Trustees that the future Fund account anticipated returns (over the next twenty years) are predicted not to be able to match our most recent returns. These future projections and our actual future performance are something the Board will need to watch and consider carefully.

This past year, the pension Board of Trustees approved a cost of living adjustment (COLA) for all eligible retirees and beneficiaries in the amount of 1.4%, effective January 1, 2021. This follows a COLA approved in the prior year in the amount of 1.7%. These adjustments were done in consultation with our actuary.

Please join me and the entire Board of Trustees in thanking recently retired Bill Stefka for his 32 years of service as the Fund Administrator and his steady stewardship and administration of the Fund.

I value and am honored with the opportunity to serve as Mayor of our amazing city and as Chair of the Austin Fire Fighters Relief & Retirement Fund for the past 7 years. I want to also extend my appreciation to all of our firefighters, both active and retired, for the courageous and dedicated service you provide to the residents of Austin.

Sincerely,

Mayor Steve Adler, Chairman
Austin Fire Fighters Relief and
Retirement Fund Board of Trustees

Montemayor Britton Bender PC

CERTIFIED PUBLIC ACCOUNTANTS

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND

FINANCIAL STATEMENTS
WITH SUPPLEMENTARY INFORMATION
AND
INDEPENDENT AUDITOR'S REPORT

31 DECEMBER 2020

Montemayor Britton Bender PC
CERTIFIED PUBLIC ACCOUNTANTS

Board of Trustees
Austin Fire Fighters Relief and Retirement Fund

INDEPENDENT AUDITOR'S REPORT

We have audited the accompanying statement of fiduciary net position of the Austin Fire Fighters Relief and Retirement Fund (the Fund) as of 31 December 2020, 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.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risk of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of the Fund as of 31 December 2020, and the changes in its financial status for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Correction of Error

As discussed in Note 9 to the financial statements, certain errors resulting in understatement of the amounts previously reported for investments as of 31 December 2019 were discovered by management of the Fund during the current year. Accordingly, beginning fiduciary net position restricted for benefits has been restated. Our opinion is not modified with respect to that matter.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 6 and the supplemental schedules on pages 18 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.

Montemayor Britton Bender PC

1 July 2021
Austin, Texas

Our discussion and analysis of the Austin Fire Fighters Relief and Retirement Fund's (the Fund) financial performance provides an overview of the Fund's activities for the calender years 2020 and 2019. This information is provided in conjunction with our financial statements that follow.

FINANCIAL HIGHLIGHTS

- Fiduciary net position of the Fund increased by $121,834,272 or 11.71% in 2020 and increased by $131,071,605 or 14.42% in 2019. The increase in 2020 and 2019 was due to positive financial market returns, as well as continued contributions to the Fund.

- Total contributions by the members and the City of Austin increased by 1.20% in 2020 and 4.84% in 2019. The increase for 2020 over 2019 reflects the increase in the participant wages.

- The amount of benefits paid directly to retired members and their beneficiaries and contribution refunds increased by $4,659,257 in 2020 and by $2,845,098 in 2019. 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 2020, the most recent actuarial measurement date, the Fund's actuarial funded ratio of actuarial assets as a percentage of actuarial liabilities was 87.5%, compared to 86.8% as of 31 December 2019.

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 2020, 2019 and 2018

	2020	2019	2018
Cash and receivables	$10,916,112	$14,157,528	$13,332,934
Investments	1,151,057,947	1,026,415,651	896,509,406
Other assets	49,614	0	0
Total assets	1,162,023,673	1,040,573,179	909,842,340
Total liabilities	0	383,778	724,544
Fiduciary net position for pension benefits	$1,162,023,673	$1,040,189,401	$909,117,796

Net position: The net position of the Fund increased by $121,834,272 in 2020 and increased by $131,071,605 in 2019. The increase between both 2020 and 2019 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 $383,778 in 2020 due to a smaller accounts payable balance to the investment managers for their investment fees. Year-end liabilities decreased by $340,766 in 2019 due to a smaller accounts payable balance to the investment managers for their investment fees.

Summary of Changes in Fiduciary Net Position

31 December 2020, 2019 and 2018

	2020	2019	2018
Additions:			
Contributions	$39,384,313	$38,916,162	$37,117,830
Investment income (loss)	146,906,009	151,743,660	(25,165,684)
Other income	119,898	88,367	51,620
Total additions	186,410,220	190,748,189	12,003,766
Deductions:			
Benefit payments and contribution refunds	63,483,649	58,824,392	55,979,294
Administrative expenses	1,092,299	852,192	704,903
Total deductions	64,575,948	59,676,584	56,684,197
Net increase (decrease)	121,834,272	131,071,605	(44,680,431)
Fiduciary net position for pension benefits			
Beginning of year	1,040,189,401	909,117,796	953,798,227
End of year	$1,162,023,673	$1,040,189,401	$909,117,796

Additions: Total contributions by the members and City of Austin for 2020 and 2019 were $39,384,313 and $38,916,162, respectively. The increase of $468,151 in contributions for 2020 represents a 1.20% increase from 2019. The increase of $1,798,332 in contributions for 2019 represents a 4.84% increase from 2018. The net investment income/(loss) was $147 million for 2020 and $152 million for 2019.

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 2020 were $63,483,649 compared to $58,824,392 in 2019. The amount of benefits paid increased by $4,659,257 in 2020 from 2019 and increased by $2,845,098 in 2019 from 2018. The increases in both 2020 and 2019 over prior years were due to the increases in the both the number of retirees receiving benefits and in the amount of lump sum distributions.

Overall Analysis: As of 31 December 2020, fiduciary net position increased by $121,834,272 or 11.71% over the prior year. As of 31 December 2019, fiduciary net position increased by $$131,071,605 or 14.42% over the prior year. The most recent actuarial measurement date of 31 December 2020 shows the Fund's actuarial funded ratio to be 87.5% compared to 86.8% from prior year. The 31 December 2020 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.

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND

STATEMENT OF FIDUCIARY NET POSITION

31 DECEMBER 2020

ASSETS	
Cash and cash equivalents	$10,710,334
Investments at fair value:	
Public domestic equities	204,544,472
Public international equities	265,016,866
Private equity fund investments	241,194,646
Public fixed income investments	319,903,971
Real estate fund investments	94,126,660
Private natural resources fund investments	26,271,332
	1,151,057,947
Due from broker	205,778
Interest and dividends receivable	49,614
	1,162,023,673
LIABILITIES	0
FIDUCIARY NET POSITION RESTRICTED FOR PENSION BENEFITS	$1,162,023,673

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

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED 31 DECEMBER 2020

ADDITIONS TO FIDUCIARY NET POSITION	
Contributions:	
Fire fighter contributions	$18,073,292
City of Austin contributions	21,311,021
	39,384,313
Net investment income:	
Net increase/(decrease) in the fair value of investments	113,865,807
Interest and dividends	12,724,234
Net gain on sale of investments	23,163,966
Investment expenses	(2,847,998)
	146,906,009
Other	119,898
	186,410,220
DEDUCTIONS FROM FIDUCIARY NET POSITION	
Retirement benefit payments	63,483,649
General and administrative expenses	1,092,299
	64,575,948
NET INCREASE (DECREASE) IN FIDUCIARY NET POSITION	121,834,272
BEGINNING OF YEAR FIDUCIARY NET POSITION	1,040,189,401
END OF YEAR FIDUCIARY NET POSITION	$1,162,023,673

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

NOTE 1: ORGANIZATION

A. FUND DESCRIPTION

The Board of Trustees of the Austin Fire Fighters Relief and Retirement Fund (the Fund) is the administrator of a single-employer 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 2020:

Retirees and Beneficiaries Currently Receiving Benefits	888
Terminated Members Entitled to Benefits but Not Yet Receiving Them	24
Active Participants (Vested and Nonvested)	1,154
	2,066

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 a cost-of-living adjustment (COLA) of 1.7% put into effect for the year ending 31 December 2020. The contribution refunds are paid with 5% interest.

NOTE 1: ORGANIZATION

B. FUNDING POLICY

The contribution provision of this Fund is authorized by Article 6243e.1, Vernon's Texas Civil Statues, 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 2020 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 2020 was as follows:

Total pension liability	$1,232,430,587
Plan fiduciary net position	(1,162,023,673)
Net pension liability	$70,406,914
Plan fiduciary net position as a percentage of the total pension liability	94.29%

1. Actuarial Assumptions

The total pension liability in the 31 December 2019 actuarial valuation, measured as of 31 December 2020, was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
General Wage Inflation	3.00%
Salary increases	Service based
Discount rate	7.30%
Investment rate of return	7.30%, net of pension plan investment expense, including inflation

NOTE 1: ORGANIZATION

C. NET PENSION LIABILITY

Mortality rates were based on the PubS-2010(A) Mortality Tables.

Mortality rates disabled lives: PubS-2010(A) Mortality Table for Disabled Retirees.

The most recent experience study used to review the other significant assumptions was dated 21 April 2020.

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 expenses 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 expected arithmetic net real rates of return for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Net Real Rate of Return
Public domestic equity	4.8%
Public foreign equity	6.0%
Private equity fund of funds	5.6%
Investment grade bonds	0.4%
TIPS	10.3%
High yield/bank loans	2.5%
Emerging market debt	2.1%
Core real estate	3.7%
Non-core real estate	3.7%
Value-add real estate	5.8%
Private natural resources	6.2%

2. Discount Rate

The discount rate used to measure the total pension liability was 7.30%. For purposes of this valuation, the expected rate of return on pension plan investments is 7.30%; the muni'cipal bond rate is 1.93% (based on the weekly rate closest to but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index); and the resulting single discount rate is 7.30%. The projection of cash flows used to determine the discount rate assumed that Fund member contributions will be made at the current contribution rate and that City

NOTE 1: ORGANIZATION

C. NET PENSION LIABILITY

contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. 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 7.30%, 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 (6.30%) or one percentage point higher (8.30%) than the current rate:

	1% Decrease (6.30%)	Current Discount Rate (7.30%)	1% Increase (8.30%)
Fund's net pension liability	$188,243,203	$70,406,914	($29,135,239)

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 statue, the Board of Trustees in its sole discretion may invest, reinvest, or change the assets of the Fund.

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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. As of 31 December 2020, the Fund's cash on deposit was not exposed to custodial credit risk because all amounts were covered by FDIC coverage and the bank's pledged collateral.

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 2020, 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.

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%

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.

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.

NOTE 4: DEPOSIT AND INVESTMENT RISK

As of 31 December 2020, the Fund had the following investments subject to interest rate risk and credit risk:

Investment	Weighted Average Maturity	Weighted Average Credit Rating	Fair Value
SSgA Bond Fund	8.1 years	AA	$76,838,17
Loomis Sayles Core Plus Fixed Income	8.3 years	BBB	$61,161,25
Aberdeen Emerging Markets Bond Fund	11.1 years	BB	$66,536,95
SSGA TIPS	8.1 years	AAA	$58,542,66
Pyramis Tactical Bond Fund	12.3 years	BBB	$37,898,15
Pacific Asset Management Bank Loans	4.5 years	B	$18,926,77

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 2020:

Denomination by Investment Type	Market Value (USD)
Private Equity Fund Investments	
Euro	$6,576,037
Real Estate Fund Investments	
Euro	1,596,275
Public Fixed Income Investments	
Brazilian Real	35,698,301
Colombian Peso	6,969,300
Euro	71,938,216
Indian Rupee	12,070,348
Mexican Peso	12,116,034
Russian Ruble	13,227,693
South African Rand	6,856,288
Uraguay Peso	11,977,195
	170,853,375
	$179,025,687

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.

Fiscal Year	Annual Money-Weighted Net Real Rate of Return
31 December 2020	15.46%

NOTE 6: FAIR VALUE MEASUREMENT

	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Public domestic equities	$204,544,472	$0	$0
Public international equities	$265,016,866	$0	$0
Private equity fund investments	$0	$0	$241,194,646
Public fixed income investments	$0	$319,903,971	$0
Real estate fund investments	$0	$0	$94,126,660
Private natural resources fund	$0	$0	$26,271,332

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 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.

NOTE 7: SECURITIES LENDING

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. There is no formal limit on the amount of loans that can be made, however the securities lending program shall in no way inhibit the trading activities of the Fund's investment managers. 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 and a duration pool. As of 31 December 2020 the liquidity pool had an average duration of 15.83 days and an average weighted final maturity of 75.78 days for USD collateral. As of this date, the duration pool had an average duration of 17.40 days and an average weighted final maturity of 1,539.47 days for USD collateral.

Because the securities lending transactions were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral received from the borrower. On 31 December 2020 the Fund had no credit risk exposure to borrowers. The market values of collateral held and the market value (USD) of securities on loan for the Fund as of 31 December 2020 were $5,002,111 and $4,854,154 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 2020 of $82.8 million pursuant to the terms of the respective interest.

At 31 December 2020 the total accumulated lump sum benefit due to DROP participants was $138,472,897.

NOTE 9: PRIOR PERIOD ADJUSTMENT

At 31 December 2019 the Fund's total fiduciary net position was understated by $10,296,595 due to investment values being understated. A prior period adjustment has been recorded to correct beginning fiduciary net position. The adjustment increased the change in fiduciary net position for the year ended 31 December 2019 by $10,296,595.

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND
Schedule of Changes in Net Pension Liability and Related Ratios
Last Ten Years (1)

Total Pension Liability	Fiscal year ending 12/31/13	Fiscal year ending 12/31/2014	Fiscal year ending 12/31/2015	Fiscal year ending 12/31/2016	Fiscal year ending 12/31/2017	Fiscal year ending 12/31/2018	Fiscal year ending 12/31/2019	Fiscal year ending 12/31/2020
Service Cost	$ 23,497,407	$ 25,318,456	$ 23,309,543	$ 24,322,417	$ 23,830,495	$ 25,130,502	$ 26,191,723	$ 26,169,522
Interest	59,249,151	62,976,839	66,404,730	70,892,708	75,812,099	80,552,018	84,547,315	86,820,853
Changes of Benefit Terms	0	0	0	5,491,908	8,963,689	10,188,417	8,058,934	7,158,834
Differences between Expected and Actual Experience	0	0	7,192,645	8,893,371	4,360,239	(735,314)	(9,834,830)	(1,670,701)
Changes of assumptions	0	4,883,207	0	0	0	(4,778,539)	12,707,469	21,410,890
Benefit Payments, including Refunds of Employee Contributions	(34,943,917)	(37,992,903)	(44,756,847)	(45,495,681)	(51,888,455)	(55,979,294)	(58,824,392)	(63,483,649)
Net Change in Total Pension Liability	47,802,641	55,185,599	52,150,071	64,104,723	61,078,067	54,377,790	62,846,219	76,405,749
Total Pension Liability-Beginning of year (2)	758,479,728	806,282,369	861,467,968	913,618,039	977,722,762	1,038,800,829	1,093,178,619	1,156,024,838
Total Pension Liability-Ending (a)	$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
Plan Fiduciary Net Position								
Contributions-Employer	$17,786,494	$18,669,944	$19,222,329	$19,103,891	$19,242,205	$20,084,617	$21,057,765	$21,311,021
Contributions- Employee	14,000,514	14,659,946	15,546,979	15,884,261	16,318,769	17,033,213	17,858,397	18,073,292
Net Investment Income	101,289,167	42,005,227	6,328,063	55,569,165	141,915,000	(25,114,064)	141,535,432	147,025,907
Benefit Payments, including Refunds of Employee Contributions	(34,943,917)	(37,992,903)	(44,756,847)	(45,495,681)	(51,888,455)	(55,979,294)	(58,824,392)	(63,483,649)
Administrative Expenses	(363,050)	(530,816)	(562,687)	(662,501)	(1,399,488)	(704,903)	(852,192)	(1,092,299)
Net Change in Plan Fiduciary Net Position	97,769,208	36,811,398	(4,222,163)	44,399,135	124,188,031	(44,680,431)	120,775,010	121,834,272
Plan Fiduciary Net Position - Beginning	654,852,618	752,621,826	789,433,224	785,211,061	829,610,196	953,798,227	909,117,796	1,029,892,806
Adjustment to Beginning Net Position	0	0	0	0	0	0	0	10,296,595
Plan Fiduciary Net Position - Ending (b)	$752,621,826	$789,433,224	$785,211,061	$829,610,196	$953,798,227	$909,117,796	$1,029,892,806	$1,162,023,673
Net Pension Liability (Asset) - Ending (a) - (b)	$53,660,543	$72,034,744	$128,406,978	$148,112,566	$85,002,602	$184,060,823	$126,132,032	$70,406,914
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	93.34%	91.64%	85.95%	84.85%	91.82%	83.16%	89.09%	94.29%
Covered Payroll	$ 83,279,101	$ 84,670,948	$ 87,836,040	$ 86,638,961	$ 87,266,236	$ 91,086,698	$ 95,500,068	$ 96,648,621
Net Pension Liability as a Percentage of Covered Payroll	64.43%	85.08%	146.19%	170.95%	97.41%	202.07%	132.08%	72.85%

See Independent Auditor’s Report.

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND

Schedule of Employer Contributions

Last 10 Years (1)

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
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%
12/31/2013	N/A	N/A	N/A	$ 83,279,101	21.36%

Schedule of Investment Returns

Last 10 Years (1)

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
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%

Notes to Schedules:

(1) This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full ten-year trend is compiled, only available information is shown.

(2) Determined from the end of year total pension liability using the roll forward procedure allowed for the initial year of implementation for GASB 67.

Changes of benefit terms:

For measurement date 12/31/2020, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.7% cost-of-living adjustment, effective January 1, 2021.

For measurement date 12/31/2019, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.7% cost-of-living adjustment, effective January 1, 2020.

For measurement date 12/31/2018, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 2.3% cost-of-living adjustment, effective January 1, 2019.

For measurement date 12/31/2017, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 2.2% cost-of-living adjustment, effective January 1, 2018.

For measurement date 12/31/2016, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.5% cost-of-living adjustment, effective January 1, 2017.

Changes of assumptions:

For measurement date 12/31/2020, amounts reported as changes of benefit terms resulted from lowering the investment return from 7.50% to 7.30% per year, compounded annually, net of all expenses. Additionally, the payroll growth rate was increased from 2.00% to 2.50%.

For measurement date 12/31/19, as a result of actuarial experience study dated April 21, 2020, the Board approved the following changes:

- Price Inflation (lowered from 2.75 to 2.5)
- Investment Return (lowered from 7.70% to 7.50%)
- Mortality Rates (MP-2019 improvement scale)
- Salary Increases
- Retirement Rates
- Retro DROP Elections
- Withdrawal Rates
- Disability Rates

For measurement date 12/31/2018, amounts reported as changes of assumptions resulted from the following changes:

- The assumed mortality rates were updated to reflect the PubS-2010 (above-median, amount-weighted) tables.
- The price inflation assumption was lowered from 3.50% to 2.75% per year.

For measurement date 12/31/2014, amounts reported as changes of assumptions resulted from an actuarial experience study dated June 15, 2015; below is a brief overview of the changes:

• A "fresh-start" on the actuarial asset value has been implemented. For all future valuations, the asset valuation method will utilize a new smoothing technique.

• The investment return assumption has been decreased from 7.75% to 7.70% per year compounded annually, net of all expenses.

• The general wage inflation rate has been decreased from 3.5% to 3.0% per year.

• The service-based table attributable to merit and longevity salary increases has been amended.

• The retirement rates have been amended.

• The Retro-DROP election assumptions have been amended.

• The withdrawal rates have been amended.

• The assumed spousal age difference has been amended.

AUSTIN FIRE FIGHTERS RELIEF AND RETIREMENT FUND
Schedule of Direct and Indirect Fees and Commissions

ASSET CLASS	MANAGEMENT FEES PAID FROM FUND	MANAGEMENT FEES REDUCED FROM INVESTMENT	TOTAL INVESTMENT MANAGEMENT FEES (Management Fees Reduced from Investment + Management Fees Paid From Fund)	BROKERAGE FEES/COMMISSIONS REDUCED FROM INVESTMENT	TOTAL DIRECT AND INDIRECT FEES AND COMMISSIONS (Management Fees + Brokerage Fees/Commissions)
Public Equity	$ 838,134	$ 1,477,763	$ 2,315,897	$ 255,053	$ 2,570,950
Fixed Income	703,565	106,213	$ 809,778	0	$ 809,778
Real Assets	0	1,190,696	$ 1,190,696	0	$ 1,190,696
Alternative/Other	0	1,853,119	$ 1,853,119	0	$ 1,853,119
TOTAL	$ 1,541,699	$ 4,627,791	$ 6,169,490	$ 255,053	$ 6,424,543

See Independent Auditor's Report.

AUSTIN FIREFIGHTERS' RELIEF AND RETIREMENT FUND

ACTUARIAL VALUATION
AS OF DECEMBER 31, 2020

GASB 67/68 DISCLOSURE INFORMATION
AS OF DECEMBER 31, 2020

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

June 18, 2021

Board of Trustees
Austin Firefighters'
Relief and Retirement Fund
4101 Parkstone Heights Drive, Suite 270
Austin, TX 78746

Re: Austin Firefighters' Relief and Retirement Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Austin Firefighters' Relief and Retirement Fund (AFRRF). Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the funding period required to amortize any existing Unfunded Actuarial Accrued Liability. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Article 6243e.1, Vernon's Texas Civil Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, financial reports, and asset information supplied by the AFRRF staff, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of January 1, 2020. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster Inc. working on valuations of the program has any direct financial interest or indirect material interest in the city of Austin, nor does anyone at Foster & Foster Inc. act as a member of the Board of Trustees of the AFRRF. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster Inc.

By:

Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #20-6901

Drew D. Ballard, EA, MAAA
Enrolled Actuary #20-8193

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SUMMARY OF REPORT

The actuarial valuation of the Austin Firefighters' Relief and Retirement Fund, performed as of December 31, 2020, has been completed and the results are presented in this Report. The pension costs, compared with those developed in the December 31, 2019 actuarial valuation, are as follows:

Valuation Date	New Assump 12/31/2020	Old Assump 12/31/2020	12/31/2019
Current Normal Cost Rate % of Covered Annual Payroll	29.64%	28.48%	28.38%
Funding Measurements			
Actuarial Accrued Liability (AAL)	1,233,739,575	1,212,411,270	1,154,365,629
Actuarial Value of Assets (AVA)	1,079,202,794	1,079,202,794	1,001,980,211
Unfunded Actuarial Accrued Liability (UAAL = AAL - AVA)	154,536,781	133,208,476	152,385,418
Funded Ratio (AVA / AAL)	87.5%	89.0%	86.8%
Amortization Period [1]	23.3 years	16.8 years	21.9 years
Contributions			
Expected City Contribution Rate	22.05%	22.05%	22.05%
Expected Member Contribution Rate	18.70%	18.70%	18.70%
Total Expected Contribution Rate	40.75%	40.75%	40.75%
Funding Costs			
City 20-Year Funding Cost	23.10%	20.84%	22.68%
City 30-Year Funding Cost [2]	20.70%	18.85%	20.34%
City 40-Year Funding Cost	19.62%	17.98%	19.31%

[1] *If the actuarial smoothing technique was removed and the market value of assets was utilized to determine the amortization period, the result would be 7.9 years as of December 31, 2020.*

[2] *Per Section 802.101(a) of the Texas Government Code, the actuarial valuation must include a recommended contribution rate needed for the system to achieve and maintain an amortization period that does not exceed 30 years.*

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of favorable experience included an investment return of 10.24% (Actuarial Asset Basis) which exceeded the 7.50% assumption and an average salary increase of 3.70% which fell short of the 5.44% assumption. These gains were offset in part by a loss associated with more retirements than expected and the 1.40% COLA granted to eligible retirees effective January 1, 2021.

CHANGES SINCE PRIOR VALUATION

Benefit/Fund Changes

There have been no changes in benefit provisions or contribution rates since the prior valuation. It is important to point out that eligible retirees received a 1.40% cost-of-living adjustment, effective January 1, 2021, in accordance with the Fund's COLA adjustment policy.

Actuarial Assumption/Method Changes

The actuarial assumptions that were changed in conjunction with this valuation are listed below:

- Investment Return (lowered from 7.50% to 7.30%)
- Payroll Growth (increased from 2.00% to 2.50%)

There have been no changes of methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump 12/31/2020	Old Assump 12/31/2020	12/31/2019
A. Participant Data			
Actives	1,154	1,154	1,130
Service Retirees + DROP	732	732	700
Beneficiaries + Alt Payees	139	139	136
Disability Retirees	17	17	18
Terminated Vested	24	24	10
Total	2,066	2,066	1,994
Covered Annual Payroll	98,222,771	98,222,771	95,642,391
Annual Rate of Payments to:			
Service Retirees + DROP	49,263,045	49,263,045	45,668,939
Beneficiaries + Alt Payees	4,541,323	4,541,323	4,371,623
Disability Retirees	748,037	748,037	768,925
Terminated Vested	326,619	326,619	292,601
B. Assets			
Actuarial Value (AVA)	1,079,202,794	1,079,202,794	1,001,980,211
Market Value (MVA)	1,162,023,673	1,162,023,673	1,029,892,806
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement + Termination Benefits	780,968,197	753,980,029	748,148,185
Death Benefits	8,397,761	8,099,163	7,882,158
Disability Benefits	7,040,515	6,791,462	6,599,300
Service Retirees + DROP	699,304,031	689,548,167	629,675,807
Beneficiaries + Alt Payees	40,008,937	39,426,657	38,013,700
Disability Retirees	7,535,897	7,417,310	7,696,375
Terminated Vested	3,049,869	2,961,256	2,280,803
Total	1,546,305,207	1,508,224,044	1,440,296,328

	New Assump 12/31/2020	Old Assump 12/31/2020	12/31/2019
C. Liabilities - (Continued)			
Present Value of Future Salaries	1,097,463,485	1,081,883,592	1,048,081,656
Normal Cost (Entry Age Normal)			
Retirement + Termination Benefits	26,922,942	25,824,678	25,073,812
Death Benefits	573,330	558,338	531,590
Disability Benefits	593,806	579,247	555,327
Total Normal Cost	28,090,078	26,962,263	26,160,729
Present Value of Future Normal Costs	312,565,632	295,812,774	285,930,699
Actuarial Accrued Liability			
Retirement + Termination Benefits	481,202,564	470,468,362	473,974,567
Death Benefits	2,108,494	2,060,545	2,133,475
Disability Benefits	529,783	528,973	590,902
Inactives	749,898,734	739,353,390	677,666,685
Total Actuarial Accrued Liability (AAL)	1,233,739,575	1,212,411,270	1,154,365,629
Unfunded Actuarial Accrued Liability (UAAL)	154,536,781	133,208,476	152,385,418
Funded Ratio (AVA / AAL)	87.5%	89.0%	86.8%
D. Actuarial Present Value of Accrued Benefits			
Inactives	749,898,734	739,353,390	677,666,685
Actives	356,071,466	346,463,446	349,681,286
Total Present Value Accrued Benefits (PVAB)	1,105,970,200	1,085,816,836	1,027,347,971
Funded Ratio (MVA / PVAB)	105.1%	107.0%	100.2%

GAIN/LOSS ANALYSIS

a. Total (Gain)/Loss

1.	Unfunded Actuarial Accrued Liability as of December 31, 2019	$152,385,418
2.	Normal Cost applicable for 2020	26,160,729
3.	Interest on (1) and (2)	13,390,961
4.	Contributions made during 2020	39,384,313
5.	Interest on (4)	1,476,912
6.	Expected UAAL as of December 31, 2020: (1)+(2)+(3)-(4)-(5)	151,075,883
7.	Actual UAAL as of December 31, 2020 (Before Changes)	133,208,476
	Total Actuarial (Gain)/Loss [1]	(17,867,407)

b. (Gain)/Loss on Assets

1.	Actuarial Value of Assets as of December 31, 2019	1,001,980,211
2.	Contributions Less Benefit Payments	(24,099,336)
3.	Expected Investment Earnings	74,244,791
4.	Expected AVA as of December 31, 2020: (1)+(2)+(3)	1,052,125,666
5.	Actual Actuarial Value of Assets as of December 31, 2020	1,079,202,794
	(Gain)/Loss on Assets	(27,077,128)

c. (Gain)/Loss on Liabilities

1.	Expected Actuarial Accrued Liability: a(6)+b(4)	1,203,201,549
2.	Actual Actuarial Accrued Liability (Before Changes)	1,212,411,270
	(Gain)/Loss on Liabilities [1]	9,209,721

[1] Includes increase in liabilities associated with the 1.4% cost-of-living adjustment that was granted to eligible retirees, effective January 1, 2021.

COMPARISON OF CONTRIBUTION RATES TO ACTUARIALLY DETERMINED CONTRIBUTION BENCHMARK

Pursuant to the adopted Funding Policy, an Actuarially Determined Contribution (ADC) benchmark has been created for comparative purposes only and was constructed under the actuarial assumptions and methods identical to those disclosed in this report, except as follows:

Amortization Period – The ADC benchmark is determined in conjunction with each actuarial valuation by determining the fixed-rate contribution rates that would result in a 30-year amortization period as of the valuation date.

Payroll Growth Assumption – The ADC benchmark is calculated using a payroll growth assumption that is the lesser of 3.0% and the average payroll growth of the Austin Fire Department over the last ten (10) years.

Determination of ADC Benchmark Payroll Growth Assumption

Covered Payroll as of:	
12/31/2020	98,222,771
12/31/2009 [1]	78,979,991
(a) Average Annual Rate [1]	2.00%
(b) ADC Assumption	3.00%
Lesser of (a) and (b)	**2.00%**

Valuation as of December 31,	*City of Austin Contribution Rate*	*30-Year ADC Benchmark*	*City Contribution Excess/(Shortfall)*
2020	22.05%	21.24%	0.81%
2019	22.05%	20.42%	1.63%

[1] A valuation was not performed as of December 31, 2010. Therefore, the Average Annual Rate shown is the average payroll growth over the last eleven (11) years.

STATEMENT OF FIDUCIARY NET POSITION
DECEMBER 31, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Cash Equivalents	7,469,870
Cash	3,240,464
Total Cash and Equivalents	10,710,334
Receivables:	
From Broker for Investments Sold	205,778
Investment Income	49,614
Total Receivable	255,392
Investments:	
Domestic Equity	204,544,472
International Equity	265,016,866
Private Equities	241,194,646
Fixed Income	319,903,971
Real Estate Funds	94,126,660
Natural Resources Funds	26,271,332
Total Investments	1,151,057,947
Total Assets	1,162,023,673
LIABILITIES	
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	1,162,023,673

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2020
Market Value Basis

<u>ADDITIONS</u>			
Contributions:			
Member		18,073,292	
City		21,311,021	
Total Contributions			39,384,313
Investment Income:			
Miscellaneous Income	119,898		
Net Realized Gain (Loss)	23,163,966		
Unrealized Gain (Loss)	113,865,807		
Net Increase in Fair Value of Investments		137,149,671	
Interest & Dividends		12,724,234	
Less Investment Expense[1]		(2,847,998)	
Net Investment Income			147,025,907
Total Additions			186,410,220
<u>DEDUCTIONS</u>			
Distributions to Members:			
Benefit Payments		52,802,629	
Lump Sum DROP Distributions		10,474,689	
Refunds of Member Contributions		206,331	
Total Distributions			63,483,649
Administrative Expense			1,092,299
Total Deductions			64,575,948
Net Increase in Net Position			121,834,272
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			1,029,892,806
Adjustment to Beginning of Year assets			10,296,595
End of the Year			1,162,023,673

[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
December 31, 2020

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	Gains/(Losses) Not Yet Recognized Amounts Not Yet Recognized by Valuation Year 2021	2022	2023	2024	2025
12/31/2016	(5,150,047)	0	0	0	0	0
12/31/2017	77,264,135	15,452,827	0	0	0	0
12/31/2018	(98,535,264)	(39,414,105)	(19,707,052)	0	0	0
12/31/2019	71,447,637	42,868,583	28,579,056	14,289,529	0	0
12/31/2020	79,891,968	63,913,574	47,935,180	31,956,786	15,978,392	0
Total		82,820,879	56,807,184	46,246,315	15,978,392	0

Development of Investment Gain/(Loss)

Market Value of Assets, 12/31/2019	1,029,892,806
Contributions Less Benefit Payments	(24,099,336)
Expected Investment Earnings*	76,338,235
Actual Net Investment Earnings	156,230,203
Actuarial Investment Gain/(Loss)	79,891,968

*Expected Investment Earnings = 0.075 * [1,029,892,806 + 0.5 * (24,099,336)]

Development of Actuarial Value of Assets

(1) Market Value of Assets, 12/31/2020	1,162,023,673
(2) Gains/(Losses) Not Yet Recognized	82,820,879
(3) Actuarial Value of Assets, 12/31/2020, (1) - (2)	1,079,202,794
(A) 12/31/2019 Actuarial Assets:	1,001,980,211
(I) Net Investment Income:	
1. Interest and Dividends	12,844,132
2. Realized Gains (Losses)	23,163,966
3. Unrealized Gains (Losses)	124,162,402
4. Change in Actuarial Value	(54,908,284)
5. Investment & Administrative Expenses	(3,940,297)
Total	101,321,919
(B) 12/31/2020 Actuarial Assets:	1,079,202,794
Actuarial Assets Rate of Return = 2I/(A+B-I):	10.24%
Market Value of Assets Rate of Return:	15.35%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	27,077,128
12/31/2020 Limited Actuarial Assets:	1,079,202,794

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2020
Actuarial Asset Basis

REVENUES

Contributions:		
Member	18,073,292	
City	21,311,021	
Total Contributions		39,384,313
Earnings from Investments:		
Interest & Dividends	12,724,234	
Miscellaneous Income	119,898	
Net Realized Gain (Loss)	23,163,966	
Unrealized Gain (Loss)	124,162,402	
Change in Actuarial Value	(54,908,284)	
Total Earnings and Investment Gains		105,262,216

EXPENDITURES

Distributions to Members:		
Benefit Payments	52,802,629	
Lump Sum DROP Distributions	10,474,689	
Refunds of Member Contributions	206,331	
Total Distributions		63,483,649
Expenses:		
Investment related[1]	2,847,998	
Administrative	1,092,299	
Total Expenses		3,940,297
Change in Net Assets for the Year		77,222,583
Net Assets Beginning of the Year		1,001,980,211
Net Assets End of the Year[2]		1,079,202,794

[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.
[2]Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	12/31/2017	12/31/2018	12/31/2019	12/31/2020
Actives				
Number	1,045	1,102	1,130	1,154
Average Current Age	42.5	41.9	41.8	41.6
Average Age at Employment	28.9	29.0	29.1	29.2
Average Past Service	13.6	12.9	12.7	12.4
Average Annual Salary	$89,026	$87,933	$88,328	$88,469
Service Retirees + DROP				
Number		679	700	732
Average Current Age		64.3	64.7	65.2
Average Annual Benefit		$63,500	$65,241	$67,299
Beneficiaries + Alt Payees				
Number		125	136	139
Average Current Age		67.4	67.6	67.9
Average Annual Benefit		$30,462	$32,144	$32,671
Disability Retirees				
Number		18	18	17
Average Current Age		64.9	66.3	66.2
Average Annual Benefit		$42,112	$42,718	$44,002
Terminated Vested				
Number		8	10	24
Average Current Age		42.3	41.1	38.7
Average Annual Benefit [1]		$31,524	$32,511	$36,291

[1] Average Annual Benefit for Terminated Vested members reflects the benefit for members entitled to a future annual benefit from the plan.

AGE AND SERVICE DISTRIBUTION

ATTAINED AGE	PAST SERVICE 0	1-4	5-9	10-19	20-24	25	26	27	28	29	30+	TOTAL
15 - 24	7	2	0	0	0	0	0	0	0	0	0	9
25 - 34	53	167	48	1	0	0	0	0	0	0	0	269
35 - 44	10	98	167	155	16	0	0	0	0	0	0	446
45 - 49	0	0	11	93	56	8	10	1	0	0	0	179
50	0	0	0	18	16	5	2	1	0	0	0	42
51	0	0	1	11	14	2	3	0	0	0	0	31
52	0	0	0	9	13	7	12	1	1	2	0	45
53	0	0	0	8	9	5	4	3	1	0	3	33
54	0	0	0	0	6	4	2	1	1	0	7	21
55 - 59	0	0	0	3	16	4	22	6	3	7	11	72
60+	0	0	0	0	0	0	0	0	0	0	7	7
TOTAL	70	267	227	298	146	35	55	13	6	9	28	1,154

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 12/31/2019	1,130
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested, full lump sum distribution received	(1)
iii. Non-vested, awaiting refund	(3)
c. Deaths	
i. Beneficiary receiving benefits	(1)
ii. No future benefits payable	(1)
d. Disabled	0
e. Retired	(39)
g. Continuing participants	1,084
h. New entrants	70
i. Total active life participants in valuation	1,154

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, DROP Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Receiving QDRO Benefits	Vested Deferred	Total
a. Number prior valuation	700	85	18	51	10	864
Retired	39	0	0	0	0	39
Vested Deferred	0	0	0	0	4	4
Death, With Survivor	(4)	6	(1)	0	0	1
Death, No Survivor	(3)	(3)	0	0	0	(6)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	(2)	0	(2)
Data Corrections	0	0	0	0	10	10
New QDRO	0	0	0	2	0	2
b. Number current valuation	732	88	17	51	24	912

ACTUARIAL ASSUMPTIONS AND METHODS
(Effective December 31, 2020)

Mortality Rates	*Active Lives:* PubS-2010(A) Mortality Table for Employees. *Retiree and Vested Terminated Lives:* PubS-2010(A) Mortality Table for Healthy Retirees. *Contingent Survivor Lives:* PubS-2010(A) Mortality Table for Contingent Survivors. *Disabled Lives:* PubS-2010(A) Mortality Table for Disabled Retirees. The mortality rates for all participants are sex distinct with mortality improvement projected 5 years beyond the valuation date using scale MP-2020 (previously MP-2019) and a base year of 2010. We feel these assumptions sufficiently accommodate anticipated future mortality improvements.
Retirement Elections	See tables below. These assumptions were approved in conjunction with an actuarial experience study dated April 21, 2020.
Termination Rates	See tables below. These assumptions were approved in conjunction with an actuarial experience study dated April 21, 2020.
Disability Rates	See tables below. These assumptions were approved in conjunction with an actuarial experience study dated April 21, 2020.
Interest Rate	7.30% (previously 7.50%) per year, compounded annually, net of all expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	See tables below. These assumptions were approved in conjunction with an actuarial experience study dated April 21, 2020.
General Wage Inflation	3.00% per year. This assumption was reviewed in conjunction with an actuarial experience study dated April 21, 2020.
Inflation	2.50% per year. This assumption was approved in conjunction with an actuarial experience study dated April 21, 2020.

Payroll Growth — 2.50% (previously 2.00%) per year for amortization of the Unfunded Actuarial Accrued Liability. We feel this is reasonable based upon long-term historical experience.

Asset Valuation Method — All assets are valued at market value with an adjustment to uniformly spread investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

Marital Status — 100% of actives are assumed to be married at time of benefit commencement. Females are assumed to be 4 years younger than Males. Additionally, 50% are assumed to have dependent children. The age of the youngest child is assumed to be one year.

These assumptions were approved in conjunction with an actuarial experience study dated June 15, 2015.

Funding Method — Entry Age Normal Actuarial Cost Method.

Termination Rates

Years of Service	Termination Probability
0-7	1.0%
8-13	0.5
14+	0

Retirement Rates

Number of Years After First Eligibility for Early Retirement	Probability of Retirement
0	1.5%
1	1.5
2	1.5
3	1.5
4	2.0
5	4.0
6	5.0
7	5.0
8	7.5
9	10.0
10	16.7
11	16.7
12	20.0
13	20.0
14	30.0
15	30.0
16	30.0
17	50.0
18	100.0

Retro-DROP Elections

Number of Years After First Eligibility for Early Retirement	No-DROP Elected	Duration 1 Election	Duration 2 Election
0	75%	0.5 years (25%)	n/a
1	50%	1 year (50%)	n/a
2	50%	1 year (25%)	2 years (25%)
3	50%	1 year (40%)	3 years (10%)
4	50%	1 year (40%)	3 years (10%)
5	20%	1 year (40%)	3 years (40%)
6	20%	2 years (50%)	6 years (30%)
7	20%	2 years (50%)	6 years (30%)
8	20%	3 years (50%)	6 years (30%)
9	20%	3 years (50%)	6 years (30%)
10	0%	3 years (50%)	7 years (50%)
11	0%	3 years (50%)	7 years (50%)
12	0%	3 years (50%)	7 years (50%)
13	0%	3 years (50%)	7 years (50%)
14	0%	3 years (25%)	7 years (75%)
15	0%	3 years (25%)	7 years (75%)
16	0%	3 years (25%)	7 years (75%)
17	0%	3 years (25%)	7 years (75%)
18	0%	3 years (25%)	7 years (75%)

Disability Rates

Age	Probability of Disablement
<30	0.020%
30-39	0.060
40-49	0.100
50+	0.050

% Increase in Salary*

Years of Service	Increase
0	5.50%
1	7.00
2	7.00
3	2.50
4	0.50
5	4.00
10	1.00
15	1.00
20	4.50
21	0.50
22+	0.25

* Expected increase in salary in addition to general wage inflation assumption.

SUMMARY OF BENEFIT PROVISIONS

<u>Service</u>	Total years and completed months during which a Member makes contributions to the Fund.
<u>Average Monthly Compensation</u>	Average Salary for the highest 36 months of service.
<u>Member Contributions</u>	18.70% of Salary.
<u>City Contributions</u>	22.05% or payroll.
<u>Normal Retirement</u>	
Date	Earlier of age 50 and 10 years of Service, or 25 years of Service, regardless of age.
Benefit	3.30% of Average Monthly Compensation <u>times</u> Service ($1,200 minimum). Effective July 1, 2012, the minimum benefit was increased to $2,000 per month for all retirees and surviving spouses currently receiving normal or disability retirement benefits which commenced prior to January 1, 1994.
Form of Benefit	<u>Married</u>: Life Annuity with 75% continued to Surviving Spouse <u>Single</u>: Life Annuity with 75% continued to designated beneficiary.
<u>Early Retirement</u>	
Date	Earlier of age 45 and 10 years of Service, or 20 years of Service, regardless of age.
Benefit	Same for Normal Retirement as shown above. Members who retire under Early Retirement are not eligible to receive any COLA adjustments until the date they would have met Normal Retirement eligibility requirements.

Vesting

Schedule	100% after 10 years of Service.
Benefit Amount	Member will receive his (her) accrued benefit payable at age 50 or the date they would have completed 25 years of Service had they remained employed. Non-vested members receive a refund of member contributions accumulated with 5.0% interest.

Disability

Eligibility	Disability preventing the Member from performing the duties of a firefighter during the two and one-half years after becoming disabled or any employment after the two and one-half years after becoming disabled.
Benefit	Accrued benefit at date of disability, but not less than 66% of Average Monthly Compensation.
Form of Benefit	Married: Life Annuity with 75% continued to Surviving Spouse Single: Life Annuity

Death Benefits

Surviving Spouse of Member:	75% of Member's accrued benefit at date of death, but not less than 49.5% of Average Monthly Compensation.
Surviving Non-Spousal Beneficiary of Member:	75% of Member's accrued benefit at date of death, but may be actuarially reduced based on the age difference between the Member and the designated beneficiary.
Dependent Children of Member: (with Surviving Spouse)	Each child is entitled to 15% of Member's accrued benefit at date of death, but not less than 9.9% of Average Monthly Compensation.
Dependent Children of Member: (with no Surviving Spouse)	75% of Member's accrued benefit at date of death, but not less than 49.5% of Average Monthly Compensation, split equally among each dependent child.

Cost of Living Adjustment

Eligibility	Normal Retirement.
Amount	Determined by the actuary if providing a COLA will not impair financial stability of the Fund.

Retroactive DROP

Eligibility	Satisfaction of Early or Normal Retirement Eligibility.
Participation Period	Upon election to retroactively enter DROP, the Retro DROP period will not exceed 84 months.
Rate of Return	Fixed interest credited at the end of each calendar month with interest at a rate equal to one-twelfth (1/2) of five percent (5%) on monthly benefits that would have been deposited into a DROP account and Member contributions deposited into the fund between the effective DROP entry date and the actual date of termination.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined under various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss impacts the plan's amortization period. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's amortization period. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization period could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, amortization periods can vary in the future.

- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.

- <u>Payroll Growth</u>: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll does not increase according to the plan's payroll growth assumption, the plan's amortization period can increase significantly even if all assumptions other than the payroll growth assumption are realized since anticipated contributions rely upon membership payroll.

- <u>Demographic Assumptions</u>: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

- DROP Liquidity Risk: This risk results from the provision which allows retired members to continue to accrue a guaranteed rate of interest on their accumulated DROP balances following separation of employment with the City. The ratio of the accumulated DROP balances to the market value of assets as of each valuation date can present potential fund liquidity and actuarial liability risks.

- Amortization Period: Risks associated with the items outlined above will inherently create varying liabilities and assets resulting in volatility in the amortization period. Actuarial losses on assets and liabilities will lead to longer amortization periods, while actuarial gains on assets and liabilities will lead to shorter amortization periods.

- Contribution Risk: This risk results from the potential that the total annual contributions, based on fixed-rates for the City and membership, may deviate from actuarially determined contributions, as illustrated on page 5. The actuarially determined contributions are adjusted in conjunction with each actuarial valuation to take into account the deviation in actual versus expected experience between valuation dates. Fixed-rate contribution structures include the risk that scheduled contributions do not reflect the actual cost of plan benefits, meaning that in order to maintain actuarially sound funding levels, contribution rate increases or benefit reductions may be required.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared among active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on the risk characteristics and risk tolerance of the plan. For example, plans with a large amount of liability attributable to retirees have a shorter time horizon to recover from losses (such as investment experience losses due to lower than expected investment returns) than plans where the majority of the liability is attributable to active members. For this reason, highly mature plans with a substantial liability due to retirees and inactive members have less tolerance for risk. Similarly, mature plans paying substantial retirement benefits resulting in a small positive or negative net cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan and assessing risk, we have provided some relevant metrics in the section titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, is 126.5% and has stayed about the same over the last four years.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan (inclusive of DROP Balances), to the Total Accrued Liability, has increased from 55.3% to 60.8% over the last four years.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, is 87.5% and has stayed about the same over the last four years. If all actuarial assumptions are realized, the funded ratio is expected to increase in the next few years as the most recent investment experience gains are gradually recognized.
- The DROP Asset Ratio, determined as the ratio of the Accumulated DROP Balances to the Market Value of Assets has increased from 9.1% to 11.9% over the last four years.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, is -2.2%. This indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the we have identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the actuarial valuation, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modelling, as well as the identification of additional risks, can be helpful and can be provided upon request of the Board.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	12/31/2017	12/31/2018	12/31/2019	12/31/2020
Support Ratio				
Total Actives	1,045	1,102	1,130	1,154
Total Inactives	795	830	864	912
Actives / Inactives	131.4%	132.8%	130.8%	126.5%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	574,008,210	621,279,137	677,666,685	749,898,734
Total Accrued Liability	1,038,118,085	1,084,533,608	1,154,365,629	1,233,739,575
Inactive AL / Total AL	55.3%	57.3%	58.7%	60.8%
Funded Ratio				
Actuarial Value of Assets (AVA)	916,931,534	954,574,840	1,001,980,211	1,079,202,794
Total Accrued Liability	1,038,118,085	1,084,533,608	1,154,365,629	1,233,739,575
AVA / Total Accrued Liability	88.3%	88.0%	86.8%	87.5%
DROP Asset Ratio				
Accumulated DROP Balances	86,322,683	99,360,841	115,350,197	138,472,897
Market Value of Assets (MVA)	953,798,227	909,117,796	1,029,892,806	1,162,023,673
DROP Balances / MVA	9.1%	10.9%	11.2%	11.9%
Net Cash Flow Ratio				
Net Cash Flow [1]	(17,726,969)	(19,566,367)	(20,760,422)	(25,191,635)
Market Value of Assets (MVA)	953,798,227	909,117,796	1,029,892,806	1,162,023,673
Ratio	-1.9%	-2.2%	-2.0%	-2.2%

[1] Determined as total contributions minus benefit payments and administrative expenses.

VALUATION NOTES

Covered Annual Payroll is the projected rate of pay as of the valuation date of all active participants who are not subject to a 100% probability of retirement in the first year following the valuation date, discounted to take into account the probability of remaining an active participant.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:
  (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
  (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

Market Value of Assets is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets.

STATEMENT OF FIDUCIARY NET POSITION
DECEMBER 31, 2020

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Cash Equivalents	7,469,870
Cash	3,240,464
Total Cash and Equivalents	10,710,334
Receivables:	
From Broker for Investments Sold	205,778
Investment Income	49,614
Total Receivable	255,392
Investments:	
Domestic Equity	204,544,472
International Equity	265,016,866
Private Equities	241,194,646
Fixed Income	319,903,971
Real Estate Funds	94,126,660
Natural Resources Funds	26,271,332
Total Investments	1,151,057,947
Total Assets	1,162,023,673
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	1,162,023,673

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2020
Market Value Basis

ADDITIONS		
Contributions:		
Member	18,073,292	
City	21,311,021	
Total Contributions		39,384,313
Investment Income:		
Net Increase in Fair Value of Investments	137,149,671	
Interest & Dividends	12,724,234	
Less Investment Expense[1]	(2,847,998)	
Net Investment Income		147,025,907
Total Additions		186,410,220
DEDUCTIONS		
Distributions to Members:		
Benefit Payments	52,802,629	
Lump Sum DROP Distributions	10,474,689	
Refunds of Member Contributions	206,331	
Total Distributions		63,483,649
Administrative Expense		1,092,299
Total Deductions		64,575,948
Net Increase in Net Position		121,834,272
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		1,029,892,806
Adjustment to Beginning of Year Assets		10,296,595
End of the Year		1,162,023,673

[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended December 31, 2020)

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

a. The Mayor of the municipality,

b. The city treasurer or, if there is no treasurer, the person who by law, charter provision, or ordinance performs the duty of city treasurer,

c. Three Members of the fund to be selected by vote of the firefighters and retirees.

Plan Membership as of December 31, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	854
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	10
Active Plan Members	1,130
	1,994

Benefits Provided

The Plan provides retirement, disability, termination and death benefits.

The Plan provisions can be found in the December 31, 2019 Actuarial Valuation Report for the Austin Firefighters' Relief and Retirement Fund prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date December 31, 2020 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

Contributions

Member Contributions: 18.70% of Salary.

City Contributions: 22.05% of payroll.

Investment Policy:

The following was the Board's adopted asset allocation policy as of December 31, 2020:

Asset Class	Target Allocation
Public Domestic Equity	20%
Public Foreign Equity	22%
Private Equity Fund of Funds	15%
Investment Grade Bonds	13%
TIPS	5%
High Yield/Bank Loans	5%
Emerging Market Debt	7%
Core Real Estate	5%
Value-Add Real Estate	5%
Private Natural Resources	3%
Total	100%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended December 31, 2020, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 15.46 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

<u>Deferred Retirement Option Program</u>

Retroactive DROP
Eligibility: Satisfaction of Early or Normal Retirement Eligibility.
Participation Period: Upon election to retroactively enter DROP, the Retro DROP period will not exceed 84 months.
Rate of Return: 5.0%, compounded annually, on monthly benefits that would have been deposited into a DROP account and Member contributions deposited into the fund between the effective DROP entry date and the actual date of termination.

The DROP balance as December 31, 2020 is $138,472,897.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on December 31, 2020 were as follows:

Total Pension Liability	$ 1,232,430,587
Plan Fiduciary Net Position	$ (1,162,023,673)
Sponsor's Net Pension Liability	$ 70,406,914
Plan Fiduciary Net Position as a percentage of Total Pension Liability	94.29%

Actuarial Assumptions:
The Total Pension Liability was determined by an actuarial valuation as of December 31, 2019 updated to December 31, 2020 using the following actuarial assumptions:

Inflation	2.50%
General Wage Inflation	3.00%
Salary Increases	Service based
Discount Rate	7.30%
Investment Rate of Return	7.30%

Mortality Rate Acitve Lives:
PubS-2010(A) Mortality Table for Employees.
Mortality Rate Retiree and Vested Terminated Lives:
PubS-2010(A) Mortality Table for Healthy Retirees.
Mortality Rate Contingent Survivor Lives :
PubS-2010(A) Mortality Table for Contingent Survivors.
Disabled Lives:
PubS-2010(A) Mortality Table for Disabled Retirees.
The mortality rates for all participants are sex distinct with mortality improvement projected 5 years beyond the valuation date using scale MP-2020 (previously MP-2019) and a base year of 2010. We feel these assumptions sufficiently accommodate anticipated future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated April 21, 2020.

The Long-Term Expected Rate of Return on Pension Plan investments can be 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 expenses and inflation) are developed for each major asset class.
For 2020, the inflation rate assumption of the investment advisor was 2.60%.
These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2020 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return[1]
Public Domestic Equity	4.8%
Public Foreign Equity	6.0%
Private Equity Fund of Funds	5.6%
Investment Grade Bonds	0.4%
TIPS	0.3%
High Yield/Bank Loans	2.5%
Emerging Market Debt	2.1%
Core Real Estate	3.7%
Value-Add Real Estate	5.8%
Private Natural Resources	6.2%

[1] Source: Meketa Investment Group, Inc.

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.30 percent.
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will continue at the currently negotiated rate of 22.05% of payroll each year. Based on those assumptions, the Pension Plan'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 Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.
For purpose of this valuation, the expected rate of return on pension plan investments is 7.30%; the municipal bond rate is 1.93% (based on the weekly rate closest to but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index); and the resulting single discount rate is 7.30%.

	1% Decrease 6.30%	Current Discount Rate 7.30%	1% Increase 8.30%
Sponsor's Net Pension Liability	$ 188,243,203	$ 70,406,914	$ (29,135,239)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 2 Years

	12/31/2020	12/31/2019
Total Pension Liability		
Service Cost	26,169,522	26,191,723
Interest	86,820,853	84,547,315
Changes of benefit terms	7,158,834	8,058,934
Differences between Expected and Actual Experience	(1,670,701)	(9,834,830)
Changes of assumptions	21,410,890	12,707,469
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	(58,824,392)
Net Change in Total Pension Liability	76,405,749	62,846,219
Total Pension Liability - Beginning	1,156,024,838	1,093,178,619
Total Pension Liability - Ending (a)	$1,232,430,587	$1,156,024,838
Plan Fiduciary Net Position		
Contributions - Employer	21,311,021	21,057,765
Contributions - Employee	18,073,292	17,858,397
Net Investment Income	147,025,907	141,535,432
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	(58,824,392)
Administrative Expense	(1,092,299)	(852,192)
Net Change in Plan Fiduciary Net Position	121,834,272	120,775,010
Plan Fiduciary Net Position - Beginning	1,029,892,806	909,117,796
Adjustment to Beginning of Year Assets	10,296,595	-
Plan Fiduciary Net Position - Ending (b)	$ 1,162,023,673	$ 1,029,892,806
Net Pension Liability - Ending (a) - (b)	$ 70,406,914	$ 126,132,032
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	94.29%	89.09%
Covered Payroll	$ 96,648,621	$ 95,500,068
Net Pension Liability as a percentage of Covered Payroll	72.85%	132.08%

Notes to Schedule:

Changes of benefit terms:

For measurement date 12/31/2020, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.7% cost-of-living adjustment, effective January 1, 2021.

For measurement date 12/31/2019, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.4% cost-of-living adjustment, effective January 1, 2020.

Changes of assumptions:

For measurement date 12/31/2020, amounts reported as changes of assumptions resulted from lowering the investment return from 7.50% to 7.30% per year, compounded annually, net of all expenses.

For measurement date 12/31/2019, as a result of the actuarial experience study dated April 21, 2020, the Board approved the following changes:

- Price Inflation (lowered from 2.75% to 2.50%)
- Investment Return (lowered from 7.70% to 7.50%)
- Mortality Rates (MP-2019 improvement scale)
- Salary Increases
- Retirement Rates
- Retro DROP Elections
- Withdrawal Rates
- Disability Rates

SCHEDULE OF CONTRIBUTIONS

Last 2 Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
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%

SCHEDULE OF INVESTMENT RETURNS

Last 2 Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
12/31/2020	15.46%
12/31/2019	15.75%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2021)

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:
a. The Mayor of the municipality,
b. The city treasurer or, if there is no treasurer, the person who by law, charter provision, or ordinance performs the duty of city treasurer,
c. Three Members of the fund to be selected by vote of the firefighters and retirees.
A person who begins service as a firefighter in a municipality to which this Act applies and who is not ineligible for Membership in the fund becomes a member of the fund as a condition of that person's appointment.

Plan Membership as of December 31, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	854
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	10
Active Plan Members	1,130
	1,994

Benefits Provided

The Plan provides retirement, disability, termination and death benefits.
The Plan provisions can be found in the December 31, 2019 Actuarial Valuation Report for the Austin Firefighters' Relief and Retirement Fund prepared by Foster & Foster Actuaries and Consultants.
Incorporated are the benefit changes for measurement date December 31, 2020 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

Contributions

Member Contributions: 18.70% of Salary.
City Contributions: 22.05% of payroll.

Net Pension Liability

The measurement date is December 31, 2020.
The measurement period for the pension expense was December 31, 2019 to December 31, 2020.
The reporting period is September 30, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of December 31, 2020.
The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of December 31, 2019 updated to December 31, 2020 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.30%
Investment Rate of Return	7.30%

Mortality Rate Acitve Lives:
PubS-2010(A) Mortality Table for Employees.
Mortality Rate Retiree and Vested Terminated Lives:
PubS-2010(A) Mortality Table for Healthy Retirees.
Mortality Rate Contingent Survivor Lives:
PubS-2010(A) Mortality Table for Contingent Survivors.
Disabled Lives:
PubS-2010(A) Mortality Table for Disabled Retirees.
The mortality rates for all participants are sex distinct with mortality improvement projected 5 years beyond the valuation date using scale MP-2020 (previously MP-2019) and a base year of 2010. We feel these assumptions sufficiently accommodate anticipated future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated April 21, 2020.

The Long-Term Expected Rate of Return on Pension Plan investments can be 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 expenses and inflation) are developed for each major asset class.
For 2020, the inflation rate assumption of the investment advisor was 2.60%.
These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2020 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return[1]
Public Domestic Equity	20%	4.8%
Public Foreign Equity	22%	6.0%
Private Equity Fund of Funds	15%	5.6%
Investment Grade Bonds	13%	0.4%
TIPS	5%	0.3%
High Yield/Bank Loans	5%	2.5%
Emerging Market Debt	7%	2.1%
Core Real Estate	5%	3.7%
Value-Add Real Estate	5%	5.8%
Private Natural Resources	3%	6.2%
Total	100%	

[1] Source: Meketa Investment Group, Inc.

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.30 percent.
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will continue at the currently negotiated rate of 22.05% of payroll each year. Based on those assumptions, the Pension Plan'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 Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.
For purpose of this valuation, the expected rate of return on pension plan investments is 7.30%; the municipal bond rate is 1.93% (based on the weekly rate closest to but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index); and the resulting single discount rate is 7.30%.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a)-(b)
Reporting Period Ending September 30, 2020	$1,156,024,838	$ 1,029,892,806	$ 126,132,032
Adjustment to Beginning of Year Assets	-	10,296,595	(10,296,595)
Changes for a Year:			
Service Cost	26,169,522	-	26,169,522
Interest	86,820,853	-	86,820,853
Differences between Expected and Actual Experience	(1,670,701)	-	(1,670,701)
Changes of assumptions	21,410,890	-	21,410,890
Changes of benefit terms	7,158,834	-	7,158,834
Contributions - Employer	-	21,311,021	(21,311,021)
Contributions - Employee	-	18,073,292	(18,073,292)
Net Investment Income	-	147,025,907	(147,025,907)
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	(63,483,649)	-
Administrative Expense	-	(1,092,299)	1,092,299
Net Changes	76,405,749	121,834,272	(45,428,523)
Reporting Period Ending September 30, 2021	$1,232,430,587	$ 1,162,023,673	$ 70,406,914

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	1% Decrease 6.30%	Current Discount Rate 7.30%	1% Increase 8.30%
Sponsor's Net Pension Liability	$ 188,243,203	$ 70,406,914	$ (29,135,239)

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

FISCAL YEAR SEPTEMBER 30, 2020

For the year ended September 30, 2020, the Sponsor has recognized a Pension Expense of $36,488,489.
On September 30, 2020, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	9,635,491	9,156,962
Changes of assumptions	12,746,772	3,583,902
Net difference between Projected and Actual Earnings on Pension Plan investments	-	29,778,774
Employer contributions subsequent to the measurement date	15,447,641	-
Total	$ 37,829,904	$ 42,519,638

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2020.
Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2021	$ (6,910,907)
2022	$ (7,803,315)
2023	$ 7,940,186
2024	$ (13,062,117)
2025	$ (330,151)
Thereafter	$ 28,929

PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

FISCAL YEAR SEPTEMBER 30, 2021

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of $8,281,838.
On September 30, 2021, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	7,001,848	9,297,560
Changes of assumptions	29,350,287	2,986,585
Net difference between Projected and Actual Earnings on Pension Plan investments	-	76,604,705
Employer contributions subsequent to the measurement date	TBD	-
Total	TBD	$ 88,888,850

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2021.
Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2022	$ (19,481,519)
2023	$ (3,738,018)
2024	$ (24,740,321)
2025	$ (12,008,355)
2026	$ 2,137,372
Thereafter	$ 5,294,126

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 2 Fiscal Years

Reporting Period Ending	09/30/2021	09/30/2020
Measurement Date	12/31/2020	12/31/2019
Total Pension Liability		
Service Cost	26,169,522	26,191,723
Interest	86,820,853	84,547,315
Changes of benefit terms	7,158,834	8,058,934
Differences between Expected and Actual Experience	(1,670,701)	(9,834,830)
Changes of assumptions	21,410,890	12,707,469
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	(58,824,392)
Net Change in Total Pension Liability	76,405,749	62,846,219
Total Pension Liability - Beginning	1,156,024,838	1,093,178,619
Total Pension Liability - Ending (a)	$ 1,232,430,587	$ 1,156,024,838
Plan Fiduciary Net Position		
Contributions - Employer	21,311,021	21,057,765
Contributions - Employee	18,073,292	17,858,397
Net Investment Income	147,025,907	141,535,432
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	(58,824,392)
Administrative Expense	(1,092,299)	(852,192)
Net Change in Plan Fiduciary Net Position	121,834,272	120,775,010
Plan Fiduciary Net Position - Beginning	1,029,892,806	909,117,796
Adjustment to Beginning of Year Assets	10,296,595	-
Plan Fiduciary Net Position - Ending (b)	$ 1,162,023,673	$ 1,029,892,806
Net Pension Liability - Ending (a) - (b)	$ 70,406,914	$ 126,132,032
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	94.29%	89.09%
Covered Payroll	$ 96,648,621	$ 95,500,068
Net Pension Liability as a percentage of Covered Payroll	72.85%	132.08%

Notes to Schedule:

Changes of benefit terms:

For measurement date 12/31/2020, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.7% cost-of-living adjustment, effective January 1, 2021.

For measurement date 12/31/2019, amounts reported as changes of benefit terms resulted from a cost-of-living adjustment. Eligible retirees receive a 1.4% cost-of-living adjustment, effective January 1, 2020.

Changes of assumptions:

For measurement date 12/31/2020, amounts reported as changes of assumptions resulted from lowering the investment return from 7.50% to 7.30% per year, compounded annually, net of all expenses.

For measurement date 12/31/2019, as a result of the actuarial experience study dated April 21, 2020, the Board approved the following changes:

- Price Inflation (lowered from 2.75% to 2.50%)
- Investment Return (lowered from 7.70% to 7.50%)
- Mortality Rates (MP-2019 improvement scale)
- Salary Increases
- Retirement Rates
- Retro DROP Elections
- Withdrawal Rates

SCHEDULE OF CONTRIBUTIONS
Last 2 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2021	N/A	N/A	N/A	TBD by City	22.05%
09/30/2020	N/A	N/A	N/A	TBD by City	22.05%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	$ 184,060,823	$ 52,055,120	$ 120,641,570	$ -
Employer Contributions made after 12/31/2019	-	-	15,447,641	-
Total Pension Liability Factors:				
Service Cost	26,191,723	-	-	26,191,723
Interest	84,547,315	-	-	84,547,315
Changes in benefit terms	8,058,934	-	-	8,058,934
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(9,834,830)	9,834,830	-	-
Current year amortization of experience difference	-	(1,321,266)	(2,633,643)	1,312,377
Change in assumptions about future economic or demographic factors or other inputs	12,707,469	-	12,707,469	-
Current year amortization of change in assumptions	-	(597,317)	(2,131,009)	1,533,692
Benefit Payments, including Refunds of Employee Contributions	(58,824,392)	-	-	-
Net change	62,846,219	7,916,247	23,390,458	121,644,041
Plan Fiduciary Net Position:				
Contributions - Employer	21,057,765	-	(15,364,310)	-
Contributions - Employee	17,858,397	-	-	(17,858,397)
Projected Net Investment Income	69,202,794	-	-	(69,202,794)
Difference between projected and actual earnings on Pension Plan investments	72,332,638	72,332,638	-	-
Current year amortization	-	(30,210,027)	(31,263,474)	1,053,447
Benefit Payments, including Refunds of Employee Contributions	(58,824,392)	-	-	-
Administrative Expenses	(852,192)	-	-	852,192
Net change	120,775,010	42,122,611	(46,627,784)	(85,155,552)
Ending Balance	$ 126,132,032	$ 102,093,978	$ 97,404,244	$ 36,488,489

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	$ 126,132,032	$ 102,093,978	$ 97,404,244	$ -
Employer Contributions made after 12/31/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	26,169,522	-	-	26,169,522
Interest	86,820,853	-	-	86,820,853
Changes in benefit terms	7,158,834	-	-	7,158,834
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(1,670,701)	1,670,701	-	-
Current year amortization of experience difference	-	(1,530,103)	(2,633,643)	1,103,540
Change in assumptions about future economic or demographic factors or other inputs	21,410,890	-	21,410,890	-
Current year amortization of change in assumptions	-	(597,317)	(4,807,375)	4,210,058
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	-	-	-
Net change	76,405,749	(456,719)	13,969,872	125,462,807
Plan Fiduciary Net Position:				
Contributions - Employer	21,311,021	-	(15,447,641)	-
Contributions - Employee	18,073,292	-	-	(18,073,292)
Projected Net Investment Income	76,297,274	-	-	(76,297,274)
Difference between projected and actual earnings on Pension Plan investments	70,728,633	70,728,633	-	-
Current year amortization	-	(44,355,754)	(20,453,052)	(23,902,702)
Benefit Payments, including Refunds of Employee Contributions	(63,483,649)	-	-	-
Administrative Expenses	(1,092,299)	-	-	1,092,299
Net change	121,834,272	26,372,879	(35,900,693)	(117,180,969)
Adjustment to Beginning of Year Assets	10,296,595	-	-	-
Ending Balance	$ 70,406,914	$ 128,010,138	TBD	$ 8,281,838

* Employer Contributions subsequent to the measurement date made after December 31, 2020 but made on or before September 30, 2021 need to be added.

AMORTIZATION SCHEDULE - INVESTMENT

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments								
			2020	2021	2022	2023	2024	2025	2026	2027	2028
2020	$ (70,728,633)	5	$ -	$ (14,145,725)	$ (14,145,727)	$ (14,145,727)	$ (14,145,727)	$ (14,145,727)	$ -	$ -	$ -
2019	$ (72,332,638)	5	$ (14,466,526)	$ (14,466,528)	$ (14,466,528)	$ (14,466,528)	$ (14,466,528)	$ -	$ -	$ -	$ -
2018	$ 97,803,222	5	$ 19,560,644	$ 19,560,644	$ 19,560,644	$ 19,560,644	$ -	$ -	$ -	$ -	$ -
2017	$ (78,717,503)	5	$ (15,743,501)	$ (15,743,501)	$ (15,743,501)	$ -	$ -	$ -	$ -	$ -	$ -
2016	$ 4,462,041	5	$ 892,408	$ 892,408	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2015	$ 54,052,112	5	$ 10,810,422	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ 1,053,447	$ (23,902,702)	$ (24,795,112)	$ (9,051,611)	$ (28,612,255)	$ (14,145,727)	$ -	$ -	$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions								
2020	$ 21,410,890	8	$ -	$ 2,676,363	$ 2,676,361	$ 2,676,361	$ 2,676,361	$ 2,676,361	$ 2,676,361	$ 2,676,361	$ 2,676,361
2019	$ 12,707,469	8	$ 1,588,431	$ 1,588,434	$ 1,588,434	$ 1,588,434	$ 1,588,434	$ 1,588,434	$ 1,588,434	$ 1,588,434	$ -
2018	$ (4,778,539)	8	$ (597,317)	$ (597,317)	$ (597,317)	$ (597,317)	$ (597,317)	$ (597,317)	$ (597,317)	$ -	$ -
2014	$ 4,883,207	9	$ 542,578	$ 542,578	$ 542,578	$ 542,578	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ 1,533,692	$ 4,210,058	$ 4,210,056	$ 4,210,056	$ 3,667,478	$ 3,667,478	$ 3,667,478	$ 4,264,795	$ 2,676,361

Average future working lifetime of actives: 13.80

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028
2020	$ (1,670,701)	8	$ -	$ (208,835)	$ (208,838)	$ (208,838)	$ (208,838)	$ (208,838)	$ (208,838)	$ (208,838)	$ (208,838)
2019	$ (9,834,830)	8	$ (1,229,352)	$ (1,229,354)	$ (1,229,354)	$ (1,229,354)	$ (1,229,354)	$ (1,229,354)	$ (1,229,354)	$ (1,229,354)	$ -
2018	$ (735,314)	8	$ (91,914)	$ (91,914)	$ (91,914)	$ (91,914)	$ (91,914)	$ (91,914)	$ (91,914)	$ -	$ -
2017	$ 4,360,239	7	$ 622,891	$ 622,891	$ 622,891	$ 622,891	$ 622,891	$ -	$ -	$ -	$ -
2016	$ 8,893,371	8	$ 1,111,671	$ 1,111,671	$ 1,111,671	$ 1,111,671	$ 1,111,671	$ -	$ -	$ -	$ -
2015	$ 7,192,645	8	$ 899,081	$ 899,081	$ 899,081	$ 899,081	$ -	$ -	$ -	$ -	$ -
Net Increase (Decrease) in Pension Expense			$ 1,312,377	$ 1,103,540	$ 1,103,537	$ 1,103,537	$ 204,456	$ (1,530,106)	$ (1,530,106)	$ (1,438,192)	$ (208,838)

Average future working lifetime of actives: 13.80

PENSION PLAN GUIDE

GOVERNING PENSION LAW

In 1937 an Act of the 45th Texas State Legislature founded a statewide network for firefighter pension plans under Article 6243e, Vernon's Texas Civil Statutes. The Austin firefighters joined this group in 1942 which officially established the Austin Fire Fighters Relief and Retirement Fund. In 1975 a pension bill was passed during the 64th Texas State Legislature which created the current governing statute that pertains only to the Austin firefighters' pension plan under Article 6243e.1, Vernon's Texas Civil Statutes. The pension plan currently provides retirement, disability, death, and survivor benefits to over 1,800 active and retired participants and their beneficiaries.

ADMINISTRATION

The fund is administered by a Board of Trustees consisting of five (5) members. Per the pension plan's governing statute, the Mayor serves as the pension board Chairman and the City Treasurer serves as the Treasurer of the Board. Members of the fund, both active and retired, elect three (3) fellow members to serve on the Board. The Board elects a Vice-Chairman annually from among their number.

An administrative pension office and staff have been established to better serve the firefighters, retirees, and their beneficiaries. Administrative costs and expenses for professional services rendered are paid by the fund.

INVESTMENT OF FUNDS

The Board is required by law to keep separate from all other city funds all money for the use and benefit of the Firefighters Relief and Retirement Fund. The purpose of the fund is to accumulate adequate financial reserves to provide for the retirement benefits set forth in the plan's governing statute.

The fund hired an investment consultant to advise and assist the Board in setting the fund's investment policy and guidelines. The investment consultant is instrumental in the selection of the fund's investment managers.

The fund's holdings include a variety of investments to achieve its performance objective over the long term. The fund's holdings include domestic, international and emerging market equities, fixed income and private equity as well.

The fund has an investment custody account agreement with State Street designating their bank as the master trust custodian for the fund. State Street's home office is in Boston, Massachusetts and has branch offices in Kansas City, Missouri and Jacksonville, Florida which provide various services to our fund.

ELIGIBILITY

All commissioned civil service and Texas state-certified firefighters with at least six (6) months of service who are employed by the fire department pursuant to the Firemen's and Policemen's Civil Service Statute.

CONTRIBUTIONS

The Austin firefighters contribute 18.70% of their salary (compensation) into their pension fund. The City of Austin contributes 22.05% of the firefighters' salary on behalf of the firefighters. According to the firefighters' governing statute and for purposes of this section, compensation means a firefighter's salary including base pay and longevity. It excludes overtime pay, any temporary pay while in higher classifications, bilingual pay, educational incentive pay, assignment pay, Christmas Day bonus pay, and pay for automobile and clothing allowance if applicable.

SERVICE CONSIDERED

The time served in the fire department for which a member is required to make and does make prescribed pension contributions. Military service, only which interrupts fire department service, may also be considered under certain circumstances.

COMPENSATION CONSIDERED IN DETERMINING AVERAGE SALARY

The Austin firefighters and the City of Austin contribute a percentage of the firefighters' salary (compensation) which includes base pay and longevity pay. Overtime, any temporary pay in a higher classification, bilingual pay, educational incentive pay, and lump sum payments for accrued sick leave or vacation are not considered. Also excluded is any assignment pay, Christmas Day bonus pay, and any pay for automobile and clothing allowance, if applicable.

NORMAL RETIREMENT BENEFIT

A firefighter is eligible for a standard Normal Retirement Benefit (Joint and Survivor 75% Annuity) once they either attain age fifty (50) or accrue twenty-five (25) years of service, regardless of age. The monthly annuity, payable for life, is 3.30% of the highest three years' average salary (compensation) multiplied by years of service considered. Average salary is the monthly average of the firefighter's salary (compensation) for the highest thirty-six (36) months of service, excluding overtime pay, any temporary pay in higher classifications, bilingual pay, educational incentive pay, Christmas Day bonus pay, and any automobile and clothing allowances, if applicable.

SINGLE LIFE ANNUITY

Instead of the standard Normal Retirement Benefit a firefighter upon retirement may elect to choose a life annuity with no survivor benefits, or (Single Life Annuity). A Single Life Annuity will provide the retiree a monthly pension (annuity) benefit that is *payable <u>only</u> during the retiree's lifetime.* Since the Single Life Annuity does not provide for any spousal or survivor benefits, the amount of the monthly annuity under the Single Life Annuity form of benefit will be greater than the standard Normal Retirement Benefit. The Single Life Annuity will be actuarially calculated; individually based on the retiree's age. By electing the Single Life Annuity, the retiree is waiving their right to any survivor benefits available under the standard Normal Retirement Benefit. A married retiree must obtain their spouse's consent to elect a Single Life Annuity. No change is allowed once this option has been selected.

EARLY RETIREMENT BENEFIT

A firefighter is eligible for an Early Retirement Benefit at age forty-five (45), with at least (10) years of service, <u>or</u> twenty (20) years of service regardless of age. The early retirement benefit does <u>not</u> include a reduction in the factor. However, firefighters who retire early or who participate in a deferred retirement option plan (DROP), do not become eligible for cost-of-living adjustments (COLA's) until reaching what would have been normal service retirement eligibility (age fifty (50) with at least ten (10) years of service, or twenty-five (25) years of service credit regardless of age; whichever occurs first.)

DEFERRED RETIREMENT OPTION PLAN

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 in the member's name as of their eligible retirement (DROP) date. 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. In addition, during the DROP period, the member would have all their appropriate pension contributions and applicable annual interest of 5% compounded monthly credited to their account during the DROP period as well. 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 if the retiree is eligible for such direct distribution by meeting age requirements according to pension Board policy. Certain penalties could apply for "early distributions," so the pension Board encourages seeking tax advisement when in doubt. A second option is that the DROP account lump sum (all or part) may be "rolled over" into a qualified Individual Retirement Account (IRA). A third option is for the DROP account lump sum (all or part) to remain in the fund in the member's name continuing to draw 5% interest compounded monthly until the retiree is ready to have the funds moved elsewhere. At the time of termination for retirement, the member will then begin receiving their ongoing monthly pension benefit payments from the fund as well.

A member who has remained in active service after becoming eligible for service retirement can retroactively establish such a DROP account. That is, 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. This is commonly referred to as a "RETRO or BACK DROP," whereby the firefighter's DROP account reflects the accrual from theactual termination date back to a date on or after the date which they becomeeligible for normal service retirement. The maximum period under which a firefighter can participate in a DROP is 7 years. A firefighter may elect to establish a DROP account after reaching normal or early service retirement eligibility.

Currently there are a total of 8 draws allowed while the retiree's DROP account balance remains in the pension plan. The number of draws can be set by pension board policy as determined feasible. The draws can either be in the form of a distribution to the retiree (provided the retiree reached agefifty (50) before retiring), or a rollover into a qualified IRA. The entire DROP balance must be withdrawn from the fund by April 1 of the calendar year following the year the retiree reaches age 70 ½. This can simply be done by rolling the funds over into an IRA which would not be a taxable event. Any firefighter eligible for a DROP who dies before retirement, and who is survived by a spouse, shall have such DROP options extended to their surviving spouse.

DISABILITY BENEFIT

A firefighter is eligible for a disability retirement benefit during the first thirty (30) months of their disability if they are unable to perform their duties as a firefighter. After this initial thirty (30) month period, a disability retirement benefit may be continued, reduced, or discontinued according to criteria as established by the American Medical Association and as adopted by the pension Board. The annuity is equal to the firefighter's accrued unreduced pension based on the greater of (1) their years ofservice at time of disability, or (2) twenty (20) years ofservice.

It is the policy ofi the Board that no disability retirement benefit shall commence retroactively more than ninety (90) days prior to the date on which the application is filed with the fund.

DEATH BENEFIT

If a firefighter dies either before or after retirement: Surviving Beneficiary benefit is equal to a percentage ofi the benefiit that you were receiving befiore your death. Your surviving spouse or dependent child will receive 75% of the benefiit you were receiving befiore your death regardless of their age. For a designated benefiiciary the survivor benefiit will typically be 75% of the benefiit that you were receiving upon your death, but may be actuarially reduced based on the difiference in age between you and your designated benefiiciary.

Dependent Children of Member (with Surviving Spouse): Each child is entitled to 15% of Member's accrued benefiit at date of death, but not less than 9.9% of Average Monthly Compensation.

Dependent Children of Member (with no Surviving Spouse): 75% of Member's accrued benefit at date ofi death, but no less than 49.5% of Average Monthly Compensation, split equally among each dependent child.

If the member's employment is terminated by death before retirement and they leave no surviving beneficiary entitled to pension benefits, then the member's estate shall receive their contributions with interest. Any lump sum payments to the member's estate will include 5% interest based on a method of application approved by the Board.

VESTED BENEFIT

If the member has at least ten (10) years ofservice and has terminated their employment with the fire department before reaching early or normal retirement eligibility with the pension plan, the member may elect to leave their accumulated deposits (pension contributions and interest) in the fund to be eligible for a future pension benefit. The member will then be entitled to receive a vested pension benefit upon reaching what wouldhavebeen normal retirement eligibility (age fifty (50) with at least ten (10) years ofservice, or twenty-five (25) years ofservice regardless of age, whichever occurs first.

SEVERANCE

The severance benefit ofa firefighter who subsequently terminates their employment before being eligible for retirement shall be an amount equal to the total of their pension contributions, with interest, which were made while a participating member ofthe fund. Severance benefits for such terminating members will include their pension contributions along with 5% interest and will be based on a method ofapplication approved by the Board.

COST-OF-LIVING ADJUSTMENTS

Eligible pension recipients are entitled to annual cost-of-living adjustments (COLA's) when deemed affordable. COLA's are to be based on the annual percentage increase in the Consumer Price Index (CPI-U) which measures inflation.

COST-OF-LIVING ADJUSTMENTS (Continued)

COLA's are approved only when the fund's actuary has advised the Board that the adjustment would not impair the financial stability of the fund. To offset the effects of inflation on the retirees' pension benefits, providing COLA's, when affordable, remains a top priority of the Board.

BEFORE-TAX CONTRIBUTIONS

Funds available to pay benefits come from three (3) sources....

- Your contributions
- City of Austin contributions, and
- Investment earnings

Firefighters contribute 18.70% of their salary (compensation) into the pension fund. The City of Austin contributes 22.05% of salary (compensation) for each plan participant. For example, if your annual pay is $50,000.00, you will contribute $9,350.00 (18.70%) a year and the City of Austin will contribute $11,025.00 (22.05%). Since January 1, 1986, all firefighter contributions into the plan are being made before taxes are figured. This reduces your taxable income, so you pay less federal income tax and your take-home pay is greater. An example follows:

	BEFORE TAX	AFTER TAX
Assume your pay is	$50,000.00	$50,000.00
Pre-Tax Contributions	-9,350.00	-0.00
Federal Taxes (Assume 15% taxes)	-6,097.50	-7,500.00
	$34,552.50	$42,500.00
After-Tax Contributions	- .00	-9,350.00
Take Home Pay	$34,552.50	$33,150.00

RETIREMENT BENEFIT EXAMPLE

Your retirement benefit is based upon three (3) components...

- Years of credited service in plan, multiplied by
- Retirement factor of 3.30%, multiplied by
- Your highest thirty-six (36) months average salary as of date of retirement

Assume you are a retiring firefighter who is fifty-five (55) years old with twenty-seven (27) years of credited service, and whose highest thirty-six (36) months average salary is $5,000.00. Your pension would be calculated as follows:

- Years	27
- Factor	3.30%
- Salary	$5,000.00
- Monthly Benefit	$4,455.00

EARLY RETIREMENT BENEFIT EXAMPLE

A firefighter is eligible for an early retirement benefit at age forty-five (45), with at least ten (10) years of service, or twenty (20) years of credited service regardless of age. The early retirement benefit does not include a reduction in the factor. However, firefighters who retire early or who participate in a deferred retirement option plan (DROP) do not become eligible for cost-of-living adjustments (COLA's) until reaching normal service retirement eligibility (age fifty (50) with at least (10) years of service, or twenty-five (25) years of service regardless of age; whichever occurs first).

EARLY RETIREMENT BENEFIT EXAMPLE (Continued)

Assume you joined the fire department and pension plan at age twenty-five (25). At age forty-five (45), with twenty (20) years of service, you elect to terminate service to begin receiving an early retirement benefit. Also assume your highest thirty-six (36) months average salary is $5,000.00. The benefit is then calculated as follows:

- Years	20
- Factor	3.30%
- Salary	$5,000.00
- Monthly Retirement Benefit	$3,300.00

DISABILITY RETIREMENT EXAMPLE

If a firefighter is eligible for disability benefits but has less than twenty (20) years of credited service, then twenty (20) years is used in the calculation. A disability benefit is calculated the same way a regular retirement benefit is, using the same three (3) components as follows:

- Years (assume 20 if less)	20
- Factor	3.30%
- Salary (assumed)	$4,000.00
- Monthly Disability	$2,640.00

SURVIVORS BENEFIT

Benefits are available to eligible dependents of all plan participants should such participant die before or after retirement. Eligible dependents include...

- Spouse, if married to you at time of retirement.
- Spouse, if married to you after retirement and you remained married for at least 24 consecutive months prior to your death.
- Spouse, if married to you at time of your death; and you die before retirement.
- All unmarried children under age twenty-two (22), unless the Board determines to the contrary.
- Dependent parent, if no surviving spouse or children are eligible.
- Designated surviving beneficiaries other than a spouse, child, or dependent parent as explained below.

Spousal benefits are paid for life even after remarriage. Spousal benefits eligibility will apply to those who become married to the retiree after such retiree's retirement and remain married to such retiree at least 24 consecutive months prior to the retiree's death. After all payments cease, any remaining balance of the member's total contributions including interest at the date of the member's death, which exceeds any retirement and death benefits paid, shall go to the member's estate.

Active members who are married and/or have dependent children may not designate anyone other than their spouse and/or dependent children for survivor benefits. Active members, who are unmarried with no dependent children, may designate or change beneficiaries under Section 7.09 of the statute as often as they wish. The amount of the survivor benefit for the designated beneficiary is based on the age difference between the retiree and such designated beneficiary.

Single retirees can name anyone but age matters. After retirement if still single can make change 2 times with a cost.

If this same firefighter chooses to marry they can make changes as many times as they choose to marry but will have to wait for coverage for 24 months. But most importantly it will NOT cost the firefighter.

SURVIVORS BENEFIT EXAMPLE (Designated)

Assume you are retired drawing $4,455.00 per month and pass away, leaving a designated beneficiary who is eligible for benefits and have no children. Your beneficiary will receive the following percent of your benefit as follows: -

Your monthly benefit:	$4,455.00	Your monthly benefit:	$4,455.00
Less than 10 years age difference:	75%	Difference of 15-19 years:	40%
Your beneficiary's monthly benefit	$3,341.25	Your beneficiary's monthly benefit:	$1782.00

* May NOT designate a beneficiary if married

**Percentages can be located on *APPENDIX B of the Austin Firefighters Relief and Retirement Fund Rules as amended on August 20, 2017.*

SURVIVORS BENEFIT EXAMPLE (Spouse)

Assume you are retired drawing $4,455.00 per month and pass away, leaving a spouse who is eligible for benefits and have no children. Your spouse will receive seventy-five (75) percent of your benefit as follows:

- Your monthly benefit	$4,455.00
	75.00%
- Your spouse's monthly benefit	$3,341.25

SURVIVORS BENEFIT EXAMPLE (Spouse and Child)

Assume you pass away before retirement and you are survived by an eligible spouse and child. Suppose your average salary for the highest thirty-six (36) months averaged $5,000.00, and you had eight (8) years of service at the time of death.

You first calculate the benefit you would have been entitled to at the date of death and then determine the appropriate amount to be paid to your spouse and child.

Your benefit would have been...

	- Years (assume 20 if less)	20
Your spouse's benefit is...	- Factor	3.30%
	- Salary	$5,000.00
	- Monthly benefit	$3,300.00
	- Firefighter base benefit	$3,300.00
	- Factor	75.00%
	- Spousal monthly benefit	$2,475.00
	- Years (assume 20 if less)	20
Your child's benefit is...	- Child's benefit factor	.495%
	- Average salary	$5,000.00
	- Child's monthly benefit	$495.00

In 1994 the minimum monthly pension was increased from $1,000 to $1,200 for all eligible retirees and spouses. In 2012 the minimum monthly pension was increased to $2,000.00 for those that were on the rolls in 1994 when the last adjustment was approved. This minimum benefit applied only to those eligible per above and does not necessarily apply to benefits paid according to court orders, divorce decrees, qualified domestic relations orders, and for disability and early or vested terminated annuitants, in some instances.

The retirement factor for the child is actuarially designed to be fifteen (15) percent of the regular retirement factor (3.30%), which is .495 percent. The child receives .495 percent (.00495) of the fire fighter's average salary, multiplied by the number of years of service, assuming twenty (20) years if less. The eligible children, collectively, will be entitled to a total amount of seventy-five (75) percent of the fire fighter's accrued benefit at the time of death, if there is no surviving spouse.

PERSONNEL RECORDS

A personnel record (Form 500) is to be completed by all active firefighters. This information furnishes the pension office necessary data regarding age, years of service, beneficiaries, birth dates, social security numbers and marital status. There are other forms available for designating and changing beneficiaries for both active and retired firefighters for various purposes. You can visit our website at AFRS.ORG for all the forms available at the pension office.

RETIREMENT PROCESS

When a firefighter is ready to retire, there are forms available at the pension office to be completed. There will probably be other information to be furnished to the AFD administrative office as well. Upon retirement, the firefighter will receive a monthly annuity. Deductions can be made for withholding tax, as well as any health, dental, and vision insurance available through the City of Austin which the firefighter chooses. Direct deposit is also available. Please contact the pension office with any questions you have regarding your retirement. You can visit our web site at AFRS.ORG for more information about your retirement.

FUND HISTORY

An Act of the 45th Legislature of the State of Texas in 1937 created a statewide network for firefighter pension plans under Article 6243e Vernon's Texas Civil Statutes. This network covered approximately 38 paid and part paid fire departments around the state (known today as TLFFRA or the Texas Local Fire Fighters Retirement Act). The Austin firefighters joined this group in 1942 which officially established the Austin Fire Fighters Relief and Retirement Fund. Through the years, when benefit or eligibility requirement changes were being considered for the Austin firefighters, it was difficult to legislatively revise wording which would not disrupt the other pension funds operating under the same statute. In 1975 the Austin firefighters pension board of trustees went to the State Legislature and passed a pension bill, creating Article 6243e.1, which would pertain only to the Austin Fire Fighters Relief and Retirement Fund. The Austin firefighters pension plan currently provides retirement, disability, death, and survivor benefits to approximately 1,800 active and retired participants and their eligible beneficiaries.

In 1984 an actuarial study was conducted to adjust all the current retirees' benefits based upon the effect of inflation from their original date of retirement. There were some annuitants on the rolls that retired at the original monthly pension of $100. Although these retirees had received cost-of-living increases through the years, they were still losing ground to inflation. After the actuarial changes were made, if a retiree's adjusted monthly benefit was less than $500, then a minimum monthly pension of $500 was implemented. This was approved by the pension board in December 1984 and went into effect March 31, 1985. Since 1985, while they are not automatic, pre-approved, or guaranteed; a full inflation cost-of-living adjustment (COLA) has been approved for all eligible retirees and beneficiaries most of those years. COLA affordability, as determined by the Fund' actuary, is reviewed annually on an ad-hoc basis based on the prior year's inflation. Mitigating the erosion of our retirees' pension benefits due to inflation remains a top priority of the pension board of trustees.

CHRONOLOGY OF PENSION PLAN CHANGES

Significant plan changes and benefit enhancements since 1975 are as follows:

1975

A 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.

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

A 2.0% COLA approved.

1977

A 2.0% COLA approved.

1978

A 2.0% COLA approved.

The retirement multiplier increased from 2.0% to 2.1%

1979

A 2.0% COLA approved.

The minimum monthly spousal benefit increased from $100 to $200.

The minimum children's benefit increased from $50 to $100.

1980

A 2.0% COLA approved.

CHRONOLOGY OF PENSION PLAN CHANGES

1981

A 2.0% COLA approved.

1982

A 2.0% COLA approved.

The retirement multiplier increased from 2.1% to 2.2%.

1983

A 2.0% COLA approved.

1984

A 2.0% COLA approved.

The retirement multiplier increased from 2.2% to 2.3%.

An actuarial study is conducted to adjust all then current retirees' benefits upward to offset the erosion of their benefits to inflation from their date of original retirement.

1985

A 4.0% COLA approved.

Early retirement eligibility set at age 50 and 25 years of service. (Normal retirement eligibility remained at age 55 or 35 years of service, regardless of age, which had been in effect for many years.)

Contribution rate by city increased from 14.0% to 14.05%.

The retirement multiplier increased from 2.3% to 2.5%

Employee contributions treated as employer contributions (pre-taxed) for federal income tax purposes. Contributions are paid pre-taxed creating more take home pay.

A special increase for all current retirees to "catch their benefits up" with inflation from the time of their original retirement. If the resulting monthly benefit was less than $500, then a $500 minimum monthly benefit was approved where applicable.

1986

A 3.0% COLA approved.

1987

A 1.5% COLA approved.

The retirement multiplier increased from 2.50% to 2.65%.

Normal retirement eligibility lowered from age 55 or 35 years of service, regardless of age to age 55 or 30 years of service, regardless of age.

1988

A 4.0% COLA approved.

The retirement multiplier increased from 2.65% to 2.90%.

1989

A 4.25% COLA approved.

The workers' compensation offset for disability benefits was eliminated.

Actuarially, an assumption adopted that 12% of firefighters were assumed to be single at retirement.

1990

A 4.50% COLA approved.

1991

A 6.30% COLA approved.

The minimum monthly pension benefit increased from $500 to $850.

Normal retirement eligibility reduced from age 55 or 30 years of service, regardless of age to age 53 or 28 years of service, regardless of age.

Surviving children eligible for full spousal benefits in the event there is no surviving spouse.

Actuarially, across the board salary increases assumption was decreased from 6.50% to 5.50% annually.

1992

A 2.90% COLA approved.

The minimum monthly pension benefit increased from $850 to $1000.

Actuarially, a 5% anticipated COLA is extended through 1996.

1993

A 3.20% COLA is approved.

Normal retirement eligibility lowered from age 53 or 28 years of service, regardless of age to age 52 or 27 years of service, regardless of age.

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 (spousal) benefit is changed to a flat 75% of retiree's benefit.

Contribution refunds are paid with 5% interest.

Actuarially, growth in payroll no longer assumes 1% growth in membership annually.

Actuarially, a 5% anticipated COLA is extended through 1998.

1994

A 2.80% COLA is approved.

The minimum monthly pension benefit for eligible retirees and beneficiaries is increased from $1,000 to $1,200.

City of Austin contributions increased from 14.05% to 16.05% of pay, while the contribution rate by the firefighters remains at 13.70%.

1995

A 2.60% COLA is approved.

CHRONOLOGY OF PENSION PLAN CHANGES

Normal retirement eligibility reduced from age 52 to 50 (with at least 10 years of service) or with 25 years of service, regardless of age, down from 27 years of service.

Early retirement eligibility reduced from age 50 to age 48 (with at least 10 years of service) or with 23 years of service regardless of age, down from 25 years of service.

The retirement multiplier was increased from 2.90% to 3.0%.

A deferred retirement option plan (DROP) feature was added allowing up to 2 years of service designated for DROP participation.

City of Austin contributions increased from 16.05% to 18.05% of pay, while the contribution rate by the firefighters remains at 13.70%.

Actuarially, a 5% anticipated COLA is extended through 2002.

1996

A 2.90% COLA is approved.

1997

A 3.0% COLA is approved.

Early retirement eligibility (unreduced by the retirement multiplier) lowered from age 48 to age 45 (with at least 10 years of service), or with 20 years of service regardless of age, down from 23 years of service.

COLAs delayed until normal retirement eligibility is met.

The deferred retirement option plan (DROP) feature is extended from a maximum of 2 years to a maximum of 5 years of service designated for DROP participation.

Benefits made available to surviving spouses of retirees married after retirement.

Eliminate the requirement that a spouse's benefit terminate after remarriage.

Firefighter contributions "bought down" by 2% to 11.70%, while the city contributions increase to 20.05% due to the "meet and confer" agreement. (Firefighters continue to get credit for 13.70% per statute requirements.)

Actuarially, a 5% anticipated COLA is extended through 2004.

1998

A 2.10% COLA is approved.

Actuarially, the retirement incident rate 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.

1999

A 1.50% COLA is approved.

A 3.33% benefit increase is approved September 1, 1999 to all then current retirees at the time based on the percentage increase of the retirement multiplier from 3.0% to 3.10%.

The retirement multiplier increased from 3.0% to 3.10%, effective September 1, 1999.
All DROP calculations including "BACKDROPS" will use a 3.10% multiplier after September 1, 1999, regardless of the DROP date.

CHRONOLOGY OF PENSION PLAN CHANGES (Continued)

The deferred retirement option plan (DROP) benefits made available to eligible survivors of members who die before retirement but after becoming eligible for a DROP.

In November 1999, a new "meet and confer" agreement is set whereby firefighters are to receive a 3% salary increase in November 1999 and every six months going forward, beginning in March of 2000 through March 2002.

After 2004, annual COLAs of 0.5% are provided for retirees and beneficiaries going forward (should inflation be at least 0.5%). This does not limit the COLA to 0.5%, but sets the funding in advance. If the needed adjustment exceeds 0.5%, the Board and actuary must approve the portion above 0.5% based on the current financial status of the fund.

Actuarially, mortality tables for actives and non-disabled annuitants were updated to the 1994 Group Annuity Mortality tables, reflecting current industry standards.

Actuarially, a 3.50% anticipated COLA is approved through 2004 (lowered from a 5% anticipated COLA previously assumed, recognizing recent inflation trends.)

2000

A 2.60% COLA approved.

2001

A 3.40% COLA approved.A 6.45% benefit increase is approved September 1, 2001 to all then current retirees at the time based on the percentage increase of the

retirement multiplier from 3.10% to 3.30%.

The retirement multiplier increased from 3.10% to 3.30%.

All DROP calculations including "BACKDROPS" will use a 3.30% multiplier after September 1, 2001, regardless of the DROP date.

Effective September 1, 2001, the deferred retirement option plan (DROP) feature is extended from a maximum of 5 years to a maximum of 7 years of service designated for DROP participation.

A survivor benefit is made available for all unmarried retirees, and for unmarried firefighters who die after becoming eligible to retire, per statute provisions. The percentage will be an actuarial equivalent of 75% of the firefighter's accrued benefit and will be tied to the age difference of the firefighter and the designated beneficiary.

2002

A 2.1% COLA approved.

2003

Effective June 1, 2003 the contribution rate by the firefighters increased from 13.70% to 15.70% of pay, while the contribution rate by the City of Austin remains at 18.05%.

2004

No changes

2005

$32.00 per month increase in benefits for all eligible retirees

CHRONOLOGY OF PENSION PLAN CHANGES

2006

$100.00 per month increase in benefits for all eligible retirees

2007

No changes

2008

No changes

2009

No changes

2010

As a result of an agreement between the firefighters and the City of Austin, the City's pension contributions will increase from 18.05% to 22.05% in a total of four 1% increments by the year 2013. The firefighters' pension contributions will also increase from 15.70% to 18.70% in a total of six ½% increments by the year 2016.

2011

No changes

2012

No changes

The minimum monthly pension is increased to $2,000 for all current annuitants who were on the rolls 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

A 1.3% COLA approved

2016

No COLA approved since the prior year had no inflation based on the CPI-U (all items) index
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.

For the purpose of calculating the Death Benefits for a designated surviving beneficiary please see APPENDIX B of the Austin Firefighters Relief and Retirement Fund Rules as *amended on September 20, 2016.*

**For a designated beneficiary, the survivor benefit will typically be 75% of the benefit that you were receiving upon your death, but may be actuarially reduced based on the difference in age between you and your designated beneficiary.*

2016 (continued)

VI. Beneficiary Designations (as amended, September 20, 2016)

1. Background. Section 7.09 of the Act provides that a retiree or member eligible to retire may designate a beneficiary for a survivor benefit on a form provided by the Fund if the Act does not otherwise provide a benefit payable to a spouse or child of the member or retiree upon his or her death. Pursuant to Section 2.11 of the Act, the Board may adopt rules it considers necessary or desirable for the efficient administration of the Fund. In addition, Section 7.09 of the Act provides that the Board may adopt rules to establish procedures for and requirements governing beneficiary designations. Through this Section VI, the Board adopts rules and procedures for designating beneficiaries under Section 7.09 of the Act, including limiting the circumstances under which such designations can be made. This Section VI is intended to replace and supersede any previous policy relating to beneficiary designations established by the Board.
2. Form. A form established by the staff of the Fund shall be utilized for purposes of designating a beneficiary under-Section 7.09 of the Act, and such form shall be the only method by which a beneficiary may be designated under such section. Any attempt by the member to designate a beneficiary other than through the form established by the Fund's staff, whether electronically, in writing or verbally, shall have no effect.
3. Eligibility-Active Members. An active member may designate or change a beneficiary under Section 7.09 if such member (A) is unmarried and (B) does not have a living child who is unmarried and under the age of twenty-two (a "Dependent Child"). Any form submitted to the Fund following September 1, 2012 that is executed on a date on which the member submitting the form is either married or has a Dependent Child shall have no effect and be null and void. An active member is not subject to a benefit reduction described in paragraph 4 below.
4. Eligibility-Retired Members. Effective November 1, 2016, if such member agrees to the benefit adjustment described in the paragraph below, a retired member may designate or change a beneficiary under Section 7.09 if such member (A) is unmarried,(B) married, but only if the retiree's marriage occurred after retirement and the term of the marriage is less than twenty-four-months, and

(C) does not have a Dependent Child. Notwithstanding the above, a retiree will not be eligible to designate or change a beneficiary after retirement if such retiree has already made two designations or changes following his or her date of retirement, and such two designations or changes occurred on or after January 1, 2017.

A retiree who designates or changes a beneficiary must agree to a benefit reduction for the designation or change to take effect. The benefit reduction will be determined by treating the monthly benefit amount that the retiree is receiving at the time of the designation or change of beneficiary as a single life annuity for the life of the retiree and converting such single life annuity into the form of benefit that the retiree was receiving under the Fund at the time of the designation or change, taking into account the current age of the beneficiary. The method of the conversion described above will be determined by the Fund's actuary and based on the actuarial assumptions in effect under the Fund at the time of the designation or change. The reduction described in this paragraph will apply to any designations or changes in beneficiaries on or after January 1, 2017.

5. Requirements for Beneficiaries. A beneficiary may be any living person selected by the member.
6. Termination of Beneficiary Designation. In the event a member who has previously submitted a valid beneficiary designation subsequently becomes married or has Dependent Children, the previously-submitted form shall be null and void as of (i) in the event of a subsequent marriage, the date that the member's spouse would be eligible for survivor benefits under Article 7 of the Fund (which, in the case of a spouse who married a retiree after his or her retirement, would be twenty-four months following the date of such marriage), or (ii) in the event of the birth or adoption of a Dependent Child, the date that the member's Dependent Child would be eligible for survivor benefits under Article 7 of the Fund. The nullification of a beneficiary designation pursuant to this paragraph 6 shall be permanent and shall not be reinstated.
7. Reduction of Benefit for Beneficiary 10 or More Years Younger. The reduction of a beneficiary's benefit as described in Section 7.09(c) for a beneficiary of a member (active or retired) who is 10 or more years younger than the member at the time of the member's death will determined in accordance with tables provided by the Fund's actuary and approved by the Board, as may be updated from time to time at the recommendation of the Fund's actuary. The tables as approved by the Board are set forth in Appendix B.
8. Administration. The application, administration and interpretation of this Section VI shall be at the full and absolute discretion of the Fund. Any decision relating to a beneficiary designation under this policy by the Fund shall be final and binding.
9. Termination of Provisional Beneficiary Designation. All provisional beneficiary designations made by members during the period beginning May 1, 2016 through June 1, 2016, on the special form provided by the Fund for such purpose (the "Provisional Designations") will expire at 12:00 am on November 1, 2016 (the "Expiration Date") and be null and void. No individual named under Provisional Designations will have any right or interest in the Fund following the Expiration Date solely by virtue of being named in such Provisional Designation. The Board did through action at its meeting of August 18, 2016 extend the survival period for Provisional Designations through the Expiration Date.

2017

A 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.

2018

A 2.2% COLA approved

2019

A 1.7% COLA approved

Recent Changes to Actuarial Assumptions (effective 2019)

1. Price Inflation (lowered from 2.75% to 2.50%
2. Investment Return (lowered from 7.70% to 7.50%)
3. Payroll Growth (lowered from 3.50% to 2.00%)
4. Mortality Rates (MP-2019 improvement Scale)
5. Salary Increases
6. Retirement Rates
7. Retro-DROP Elections
8. Withdrawal Rates
9. Disability Rates

2020

A 1.4% COLA approved

Recent Changes to Actuarial Assumptions (effective 2020)

1. Investment Return (lowered from 7.50% to 7.3%)
2. Payroll Growth (increased from 2.0% to 2.5%)

APPENDIX B

Reduction of Benefit for Beneficiary 10 or More Years Younger

10-Year Rule Joint & Survivor Benefit Forms

Age Difference (Retiree minus Beneficiary)	Percent Continued to Beneficiary
Less than 10	75%
10 - 14	45%
15 - 19	40%
20 - 34	35%
35+	30%

Please note the above table represents the percentage of the retiree's accrued benefit that is payable if the retiree predeceases the selected beneficiary.

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