ABOVE & BEYOND

Fort Worth Employees' Retirement Fund

A Pension Trust Fund of the City of Fort Worth, Texas

Annual Comprehensive Financial Report

For Fiscal Years Ended September 30, 2023, and 2022

ON THE COVER:

Our impressive skyline. Kayakers on the beautiful Trinity River. A historic bridge. For all of us who love Fort Worth, these are iconic elements of our city. And for local photographer **Brian Luenser**, they are part of his passion project: Over the years, Brian has taken literally hundreds of photos of Cowtown. Many of the shots were taken at street level—but many others were taken with his camera mounted on a drone. The stunning cover image, and all of the aerial photos in this publication, were taken by Brian and generously donated for this edition of our annual report. Interested in seeing more of Brian's incredible work? See the additional photos throughout the book and on the back page. Better yet, check out his Flickr page. The Retirement Fund appreciates Brian's immense talent and is grateful for his generosity. Because for Brian—and for the Fund—the sky really is the limit. We hope you enjoy this memorable edition of our annual report!

FORT WORTH EMPLOYEES' RETIREMENT FUND

A Pension Trust Fund of the City of Fort Worth, Texas

Annual Comprehensive Financial Report

For Fiscal Years Ended September 30, 2023, and September 30, 2022

Prepared by the Staff of the
Fort Worth Employees' Retirement Fund
Linda Webb, Executive Director

FORT WORTH EMPLOYEES' RETIREMENT FUND

3801 Hulen St., Suite 101   Fort Worth, TX 76107
817-632-8900 fwretirement.org

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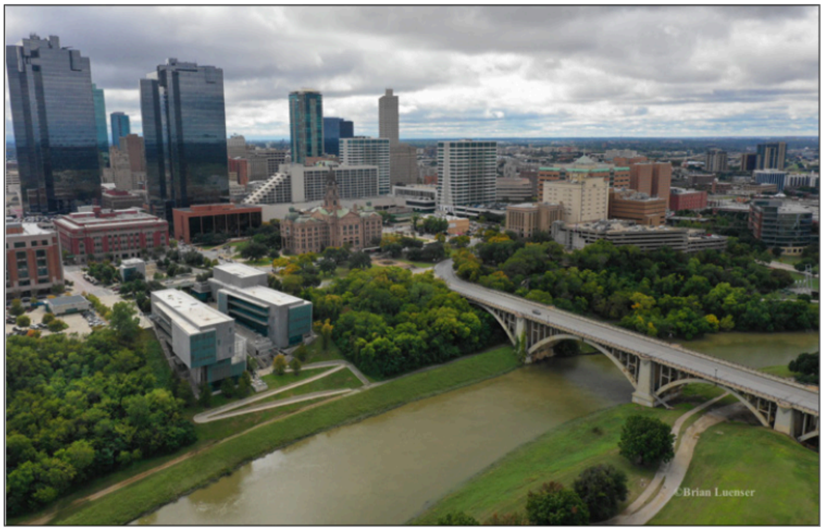

2023

Key Numbers

2023 Investment Rate of Return
8.30%

Rate of Return Since Inception
8.23%

Fund Net Position
$2.6 billion

Benefits Paid
$325.4 million

Refunds Paid
$6.2 million

Contributions from Employers
$148.7 million

Contributions from Members
$72.5 million

Benefits Recipients (City)
5,037 (41%)

Inactive Members (City)
491 (4%)

Active Members (City)
6,656

Active Members (Staff)
22

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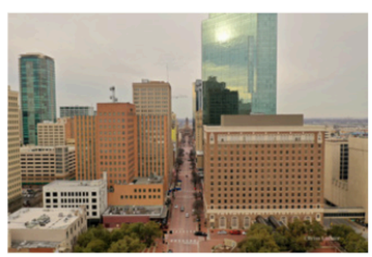
ABOVE & BEYOND



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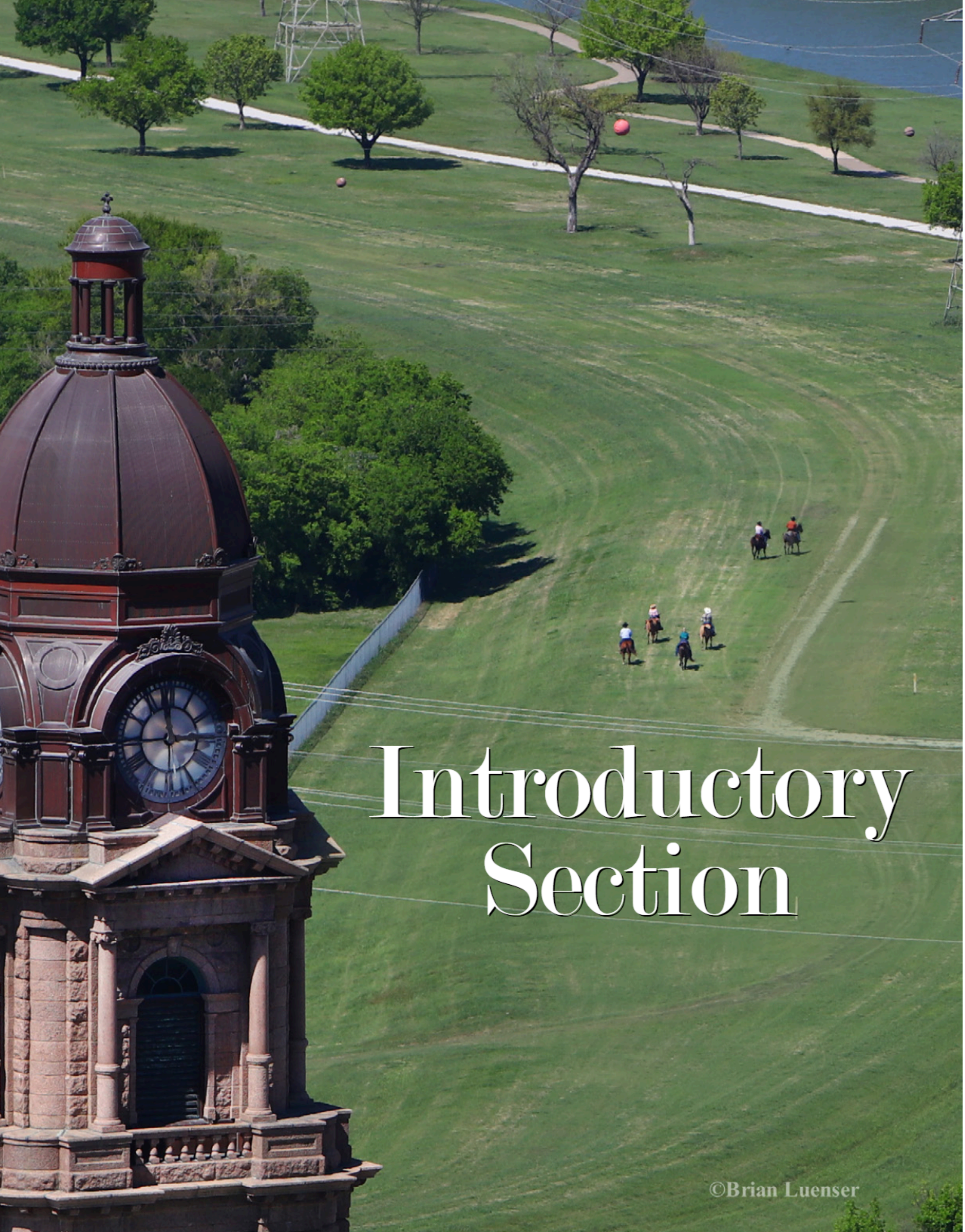
Introductory Section



LETTER OF Transmittal

March 25, 2023

Board of Trustees
Fort Worth Employees' Retirement Fund
3801 Hulen Street, Suite 101
Fort Worth, Texas 76107

Dear Board Members and Plan Participants:

It is my pleasure to submit to you the Annual Comprehensive Financial Report (ACFR) of the Fort Worth Employees' Retirement Fund (the Fund) for the fiscal years ended September 30, 2023, and 2022. Our mission is to provide retirement benefits and exceptional services while sustaining our members' trust. Responsibility for both the accuracy of the data and the completeness and fairness of its presentation rests with me and the staff of the Fund. To the best of my knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the Fund. I trust that you and the members of the Fund will find the ACFR helpful in understanding your retirement plan.

Accounting and Internal Controls

The financial statements have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB) rules. The accompanying financial statements are prepared using the accrual basis of accounting. Member and employer contributions are recognized when due, pursuant to formal commitments as well as statutory or contractual requirements. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

The Fund's independent auditors have audited the financial statements and issued unmodified opinions as of and for the years ended September 30, 2023, and 2022. The purpose of the audit is to give reasonable assurance to users of those financial statements, the Board, and participants of the Fund, that the financial statements present fairly, in all material respects, information regarding the Fund's Fiduciary Net Position in conformity with GAAP.

A significant responsibility of the staff is to ensure that the Fund has in place an adequate system of internal control. A system of internal control is defined as systematic measures instituted by an organization to achieve the following objectives:
1. Conduct its business in an efficient manner;
2. Safeguard its assets and resources;
3. Deter and detect errors, fraud, and theft;
4. Ensure accuracy and completeness of its accounting data;
5. Produce reliable and timely financial and management information; and
6. Promote adherence to management's policies and procedures.

These controls include design of business systems, appropriate segregation of duties and responsibilities, sound practices, and capable personnel. There are limits to internal control, such as the cost to mitigate some risks may outweigh the risk itself, internal controls may be overridden, or collusion may foil control design. I believe the Fund's internal controls are adequate and are working as designed.

Financial Information

An overview of the fiscal operations of the Fund is presented in the Management's Discussion and Analysis (MD&A) preceding the financial statements in the Financial Section. It provides a narrative introduction, overview, and analysis of the basic financial statements. The MD&A complements this letter of transmittal and should be read in conjunction with it.

Fund Overview

The Fund is a pension trust fund of the City of Fort Worth, Texas, which comprises two single defined benefit pension plans. The Fund covers employees of the City of Fort Worth (City Plan) and the employees of the Fund (Staff Plan). The City Plan was established by City Ordinance in 1945 and the Staff Plan was established through Administrative Rules in 2007. The Fund provides retirement, disability, and death benefits to its members. All employees of the City of Fort Worth and the Fund are members except elected officers and non-salaried appointed members of administrative boards and commissions, part-time, temporary and contract employees, and employees paid in part by another governmental agency. The two plans are comingled for investment purposes and are both administered by the 13-member Retirement Fund Board of Trustees. Each plan has a separate actuarial valuation completed each year and its own funded status based on current and projected assets and liabilities.

The Retirement Fund Board of Trustees (the Board) is comprised of four active members of the Fund, three retired members of the Fund, and six Trustees appointed by the City Council of Fort Worth, Texas. All Board members serve a two-year term commencing on September 1st; there are no term limits. The Board selects a chairperson and a vice-chairperson annually, in September.

Investments

The Fund's primary investment objective is to establish a stable, diversified investment portfolio that in the long-term, will meet or exceed the Board approved assumed actuarial rate of return in order to maintain or improve the funded status of the Fund and provide sufficient liquidity to timely pay benefits. The Trustees adopted the following key investment objectives:

• The Board's investment objective is to achieve an average long-term total rate of return which satisfies the actuarial assumed rate of return. The target actuarial rate of return is set at 7.00% including an assumed inflation rate of 2.50% and a target actuarial real rate of return of 4.50%.

• The Fund shall prudently manage overall risk through diversification, by establishing and updating a strategic asset allocation using an asset allocation model that balances return expectations and risk exposures related to institutionally investible geographies, asset classes, and investment strategies.

• The Fund shall periodically rebalance the total assets to manage active risk relative to the strategic asset allocation and various benchmarks, as well as liquidity. Rebalancing activities shall consider both the impact on the Fund and transaction cost of the activity.

• The investment activities of the Fund shall be executed in a cost-effective manner.

The Fund ended the fiscal year with a $2.6 billion fund balance and an annualized net return of 8.30%. Additionally, the Fund outperformed the actuarial assumed rate of 7.0%. For the three-year, five-year, and ten-year periods, the Fund has returned 6.55%, 5.50%, 6.12 annualized, respectively.

Actuarial Funding Status

Pursuant to the provisions of the Fund, the Board engages an independent actuarial firm to perform annual actuarial valuations. The Fund's funding objective is to ensure contributions, when combined with present assets and future investment returns, will be sufficient to meet the financial obligations to present and future retirees and beneficiaries.

Annual actuarial valuations measure the progress toward these goals, as well as the adequacy of the contribution rate. The Fund's actuary assumes that the Fund's investments will return 7.0% over the long-term. The differences between the assumed and the actual investment return are phased in (smoothed) over five years yielding an actuarial value of assets.

The Actuarial Value of Assets (AVA), Actuarial Accrued Liability (AAL), and the Funded Ratio of the City and Staff Plans, based on the actuarial valuation, as of December 31, 2022, are as follows:

AVA, AAL and Funded Ratio

December 31, 2022

Plan	Assets (AVA)	Liabilities (AAL)	Funded (Ratio)
City	$ 2,740,773,791	$ 4,998,115,041	54.8%
Staff	$ 8,787,499	$ 11,397,916	77.1%

A schedule of funding progress is included in the actuarial section. The funded status of the Fund is reviewed annually. Experience studies are conducted every three to five years, with the most recent being completed December 31, 2018. The Fund will complete another experience study within the five-year window.

Certificate of Achievement

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the Fund for its Annual Report for the fiscal year ended September 30, 2022. This was the thirteenth year that the Fund has earned this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Annual Report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current Annual Report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Public Pension Standards Award

For 2023, the Fund earned the Public Pension Coordinating Council Recognition Award for Funding and Administration. This is the ninth year that the Fund has received this award. This award is in recognition of meeting professional standards for plan administration as set forth by the Council. The standards serve as a benchmark by which to measure public defined benefit plans.

Acknowledgments

The preparation of the Annual Report in a timely manner is made possible by the dedicated teamwork of the Fund's staff, under the leadership, dedication, and support of the Board. I am sincerely grateful to the Board and staff, as well as to all our professional service providers, who perform so diligently to ensure the successful operation and financial soundness of the Fund.

Respectfully submitted,

Linda Webb

Linda Webb
Executive Director

Awards & Recognition

Public Pension Coordinating Council

Recognition Award for Administration

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022

Board of Trustees

As of September 30, 2023.

PLACE 9
Doug Wilson
Appointed Trustee
CHAIR

PLACE 1
Lloyd Cook
Active Employee
Police Dept.
(Elected seat)
VICE-CHAIR

PLACE 2
Stephen Stegint
Fire Dept. Active Employees
(Elected seat)

PLACE 3
Loraine Coleman
Active Employee
General Employees, Group C
(Elected seat)

PLACE 4
Andrea Wright
Active Employee General Employees, Group D
(Elected seat)

PLACE 5
Landon Stallings
Fire Dept. Retired Employees
(Elected seat)

PLACE 6
Kevin Foster
Police Dept.
Retired Employees
(Elected seat)

PLACE 7
Marsha Anderson
Retired Employee
General Employees
(Elected seat)

PLACE 8
Jesus Payán
Appointed Trustee

PLACE 10
Steve Litke
Appointed Trustee

PLACE 11
Steve Purvis
Appointed Trustee

PLACE 12
Jim Lacamp
Appointed Trustee

PLACE 13
Reginald Zeno
Fort Worth CFO and Interim Assistant City Manager
(Standing seat)

Administrative Organization

As of September 30, 2023.

Linda Webb
Executive Director

Mary Chang
General Counsel

Annette Connor
Executive/Legal Assistant

Derrick Dagnan
Chief Investment Officer

Branden George
Investment Analyst

Rebecca Earley
Investments Assistant/Portfolio Analyst

Janice Body
Director of Operations

Karen Epp
Accounting Manager

Christian Wetshi
Senior Accountant

Charles Henry
IT Systems Administrator

Melissa Welsh
Operations Assistant

Eleza Bennett
Chief Benefits Officer

Toccara Oxford
Benefits Analyst

Mary Braddock
Member Services Specialist

Carla Thom
Member Services Specialist

Brad Duckworth
Member Services Assistant

Desireé Negrete
Member Services Assistant

Joanna White
Member Services Assistant

Sudie Sherrard
Administrative Assistant

Jeff Rodriguez
Communications Specialist

Professional Service Providers

Actuary
Gabriel, Roeder, Smith & Company

Auditors
Eide Bailly, LLP

Custodian
Northern Trust

Legal Counsel
DLA Piper, LLP
Jackson Walker, LLP
Ice Miller, LLP

Investment Consultants
Aksia, LLC
Verus Advisory, Inc.

Complete list of Investment Management Fees: Page 55, Investment Managers: Page 65;
Investment Management, Performance, and Brokers' Fees by Asset Class: Page 70;
Schedule of Brokers' Fees: Page 71.

SUMMARY OF KEY PROVISIONS
City Plan

Membership

An employee becomes a member upon regular employment with the City and contributes to the Fund.

Definitions

Key Terms:

- Final Average Compensation (FAC): average annual earnings over the member's highest three or five calendar years of service.
- Credited Service: length of time employed by the City of Fort Worth and making contributions to the Fund or purchased service.
- Group I – General employees hired prior to July 1, 2011.
- Group II – General employees hired on or after July 1, 2011.
- Group III – Police Officers hired prior to January 1, 2013.
- Group IV – Police Officers hired on or after January 1, 2013.
- Group V – Firefighters hired prior to January 10, 2015.
- Group VI – Firefighters hired on or after January 10, 2015.

Contributions

Contributions from Employer (City):

- Contributes 25.44% for Group I General employees and Group V Firefighters on regular retirement eligible earnings, overtime, vacation sellback, and wellness.
- Contributes 25.44% for Group II General employees and Group VI Firefighters on regular retirement eligible earnings only.
- Contributes 26.16% for Group III Police Officers on regular retirement eligible earnings, overtime, vacation sellback, and wellness.
- Contributes 26.16% for Group IV Police Officers on regular retirement eligible earnings only.

Contributions from Member (Regular City Employee):

On or after July 19, 2019:

- A Group I General employee contributes 9.35% on regular retirement eligible earnings, vacation sellback, overtime, and wellness. In addition, for the length of time the employee has service prior to October 1, 2013, they contribute an additional 0.7% on the same earnings.
- A Group II General employee contributes 9.35% on regular retirement eligible earnings and overtime.
- A Group III Police Officer contributes 10.53% on regular retirement eligible earnings, vacation sellback, overtime, and wellness.
- A Group IV Police Officer contributes 10.53% on regular retirement eligible earnings and overtime.
- A Group V Firefighter contributes 10.05% on regular retirement eligible earnings, built-in overtime, regular overtime, vacation sellback, and wellness.
- A Group VI Firefighter contributes 10.05% on regular retirement eligible earnings, built-in overtime and regular overtime.

On or after January 1, 2020:

- A Group I General employee contributes 9.35% on regular retirement eligible earnings, vacation sellback, overtime, and wellness. In addition, for the length of time the employee has service prior to October 1, 2013, they contribute an additional 0.7% on the same earnings.

- A Group II General employee contributes 9.35% on regular retirement eligible earnings and overtime.
- A Group III Police Officer contributes 12.53% on regular retirement eligible earnings, vacation sellback, overtime, and wellness.
- A Group IV Police Officer contributes 12.53% on regular retirement eligible earnings and overtime.
- A Group V Firefighter contributes 12.05% on regular retirement eligible earnings, built-in overtime, regular overtime, vacation sellback, and wellness.
- A Group VI Firefighter contributes 12.05% on regular retirement eligible earnings, built-in overtime and regular overtime.

On or after January 1, 2021:

- A Group I General employee contributes 9.35% on regular retirement eligible earnings, vacation sellback, overtime, and wellness. In addition, for the length of time the employee has service prior to October 1, 2013, they contribute an additional 0.7% on the same earnings.
- A Group II General employee contributes 9.35% on regular retirement eligible earnings and overtime.
- A Group III Police Officer contributes 13.13% on regular retirement eligible earnings, vacation sellback, overtime, and wellness.
- A Group IV Police Officer contributes 13.13% on regular retirement eligible earnings and overtime.
- A Group V Firefighter contributes 12.05% on regular retirement eligible earnings, built-in overtime, regular overtime, vacation sellback, and wellness.
- A Group VI Firefighter contributes 12.05% on regular retirement eligible earnings, built-in overtime and regular overtime.

On or after January 1, 2022:

- A Group I General employee contributes 10.15% on regular retirement eligible earnings, vacation sellback, overtime, and wellness. In addition, for the length of time the employee has service prior to October 1, 2013, they contribute an additional 0.7% on the same earnings.
- A Group II General employee contributes 10.15% on regular retirement eligible earnings and overtime.
- A Group III Police Officer contributes 13.93% on regular retirement eligible earnings, vacation sellback, overtime, and wellness.
- A Group IV Police Officer contributes 13.93% on regular retirement eligible earnings and overtime.
- A Group V Firefighter contributes 12.85% on regular retirement eligible earnings, built-in overtime, regular overtime, vacation sellback, and wellness.
- A Group VI Firefighter contributes 12.85% on regular retirement eligible earnings, built-in overtime and regular overtime.

On or after January 1, 2023:

- A Group I General employee contributes 10.95% on regular retirement eligible earnings, vacation sellback, overtime, and wellness. In addition, for the length of time the employee has service prior to October 1, 2013, they contribute an additional 0.7% on the same earnings.
- A Group II General employee contributes 10.95% on regular retirement eligible earnings and overtime.

- A Group III Police Officer contributes 14.73% on regular retirement eligible earnings, vacation sellback, overtime, and wellness.
- A Group IV Police Officer contributes 14.73% on regular retirement eligible earnings and overtime.
- A Group V Firefighter contributes 13.65% on regular retirement eligible earnings, built-in overtime, regular overtime, vacation sellback, and wellness.
- A Group VI Firefighter contributes 13.65% on regular retirement eligible earnings, built-in overtime and regular overtime.

Vesting

Vesting occurs following five years of credited service.

Retirement Pension

Eligibility:
Normal Retirement – A member's age and years of service equal 80 points. For Group II members, the minimum retirement age is 55.
Attainment of age 65 with five or more years of service.
Early Retirement – Groups I, III, IV, V, and VI may elect an early retirement and receive a reduced pension at age 50 with five or more years of service. For Group II members, the minimum retirement age is 55 for early retirement.
Special Retirement – Groups III and IV members may retire after completing 25 years of service regardless of age or points.

Benefit Calculation:
- Groups I and III – Benefits are calculated using a multiplier of 3% of the high three FAC earnings multiplied by total credited years of service prior to October 1, 2013. From October 1, 2013 forward, benefits are calculated using a multiplier of 2.5% of the high five FAC multiplied by total credited years of service on or after October 1, 2013.
- Group V – Benefits are calculated using a multiplier of 3% of the high three FAC earnings multiplied by total credited years of service prior to January 10, 2015. From January 10, 2015 forward, benefits are calculated using a multiplier of 2.5% of the high five FAC multiplied by total credited years of service on or after January 10, 2015.
- Groups II, IV, and VI – Benefits are calculated using a multiplier of 2.5% of the high five FAC multiplied by total credited years of service.
- For members in Groups I, III, and V that were not hired or vested by October 23, 2007, the high three FAC is capped by using their fourth highest year and limiting each higher year to 12% above the preceding amount.

Payment Options:
Under normal or special retirement, a member may elect to receive between 5% and 25% of the actuarial value of their retirement benefit in a lump sum and receive a reduced monthly pension benefit.

Deferred Retirement

A member who has attained the normal retirement date may elect to remain in active service with the City and defer retirement by participating in the Deferred Retirement Option Program (DROP).
- DROP allows a member to accrue a monthly amount in their DROP account equal to what they would have received if they had retired (Retirement Pension).
- The member will receive the balance of that account at actual separation from active City employment.

- If a member remains in DROP for more than 72 months, there will no longer be accruals made to their DROP account.

Deferred Disabilty Retirement Pension

When a member is injured on or off the job, they have the option to apply for the disability benefit. Disability benefits are subject to Board approval. For Disability, the multiplier used for Groups I and III on credited service prior to October 1, 2013, and Group V on credited service prior to January 10, 2015 is 2.75%, and on or after the respective dates the multiplier on credited service is 2.25%. For Groups II, IV, and VI, the multiplier is 2.25% on credited service. If the disability was in the line of duty, the years of service are projected to normal or special retirement.

Early Retirement Pension

A vested member may elect to retire early after meeting the age requirements (see Eligibility). The multiplier for Groups I and III prior to October 1, 2013, and Group V prior to January 15, 2015 is 2.75%. On or after the respective dates the multiplier is 2.25%. For Groups II, IV, and VI, the multiplier is 2.25%. There is a penalty of 5% per year for electing this option prior to normal retirement eligibility.

Vested Terminated Pension

A member with at least five years of credited service (vested) who separates from service may choose to leave their contributions with the Fund and receive a vested termination pension benefit at a later date. Members who take a vested termination pension are not eligible to take an actuarial equivalent lump sum.

Death Benefits

Death Before Retirement:

- If a member dies in the line of duty, the surviving spouse will receive a monthly pension of 75% of the member's accrued pension benefit projected to normal retirement.
- If the death is not in the line of duty, but occurs after a member is vested, the surviving spouse will receive a monthly pension of 75% of the member's accrued unreduced pension based on actual years of credited service.

If the death is not in the line of duty and occurs before the member is vested, the surviving spouse or designated beneficiary will receive a refund of the member's contributions plus interest.

Death After Retirement:

- If a Group I, III, or V member dies after retiring, provided that member and the surviving spouse have been married for at least one year prior to member's retirement date, the surviving spouse will receive 75% of the member's current pension.
- A Group II, IV, or VI member does not have any automatic survivor benefits. They may elect to take an actuarially reduced pension at retirement to provide survivor benefits to a designated beneficiary.
- All members may elect to take an actuarially reduced pension to provide survivor benefits to a designated beneficiary, if they are unmarried at the time of retirement.

Upon Retirement:
Groups I and III for service prior to October 1, 2013, and Group V for service prior to January 10, 2015, who retire or enter DROP by January 1, 2021, by election have one of the following two options:

Cost of Living Adjustment (COLA)

- Simple 2% COLA – An annual 2% fixed increase is awarded January 1st of every year. The 2% is calculated on the original base pension and will not change.
- Ad-Hoc COLA – The annual increase is awarded on January 1st and may vary each year from 0% to 4%. The COLA amount is based on the funding status of the plan and is compounded.

Groups I and III for service on or after October 1, 2013 through July 19, 2019 and Group V on or after January 10, 2015 through July 19, 2019, have the Simple 2% COLA, if they retire or enter DROP by January 1, 2021.

Groups I, III and V for all service prior to July 19, 2019, who are not retired or enrolled in DROP on or before January 1, 2021, have a Variable COLA or 13th check subject to actuarial conditions and approval of the Fund Board of Trustees and City Council. There is no COLA for service after July 19, 2019.

Groups II, IV, and VI are not eligible for any COLA.

SUMMARY OF KEY PROVISIONS
Staff Plan

Membership

An employee becomes a member upon regular employment with the Fort Worth Employees' Retirement Fund (the Fund) and contributes to the Fund.

Definitions

Key Terms:
- Final Average Salary: average annual salary over the member's highest three calendar years of service.
- Credited Service: length of time employed by the Fund and making contributions to the Fund or purchased service.

Contributions

Employer and Member:
The Fund contributes the actuarially determined amount each year.
Members shall contribute 10.50% of their annual salary each year.

Vesting

Vesting occurs following five years of credited service.

Retirement Pension

Eligibility:
Normal Retirement - A member's age and years of service equal 80 points.
Attainment of age 65 with five or more years of service.
Early Retirement - Attainment of age 50 with five or more years of service may elect an early retirement and receive a reduced pension.

Benefit Calculation:
Benefits are calculated using a multiplier of 3% of the three-year highest average salary multiplied by total credited years of service.

Payment Options:
Under normal retirement, a member may elect to receive between 5% and 25% of the actuarial value of their retirement benefit in a lump sum and receive a reduced monthly pension benefit.

Deferred Retirement

Deferred Retirement
A member who has attained the normal retirement date may elect to remain in active service with the Fund and defer retirement by participating in DROP.
DROP allows a member to accrue a monthly amount in their DROP account equal to what they would have received if they had retired.
- The member will receive the balance of that account at actual separation from service date.
- If a member remains in DROP for more than 60 months, there will no longer be accruals made to their DROP account.

Disabiltiy Retirement Pension

When a member is injured on or off the job, they have the option to apply for the disability benefit. Disability benefits are subject to Board approval and use a 2.75% multiplier in the benefit calculation.

Early Retirement Pension

A vested member may elect to retire early after meeting the age requirements. Early retirement benefits are subject to Board approval. The multiplier is 2.75% and there is a penalty of 5% per year for electing this option prior to normal retirement eligibility.

Vested Terminated Pension

A member with at least five years of credited service (vested) who separates from service may choose to leave their contributions with the Fund and receive a vested termination pension benefit at a later date. Members who take a vested termination pension are not eligible to take an actuarial equivalent lump sum.

Death Benefits

Death Before Retirement:

- If a member dies in the line of duty, the surviving spouse will receive a monthly pension of 75% of the member's accrued pension benefit projected to normal retirement.
- If the death is not in the line of duty, but occurs after a member is vested, the surviving spouse will receive a monthly pension of 75% of the member's accrued unreduced pension based on actual years of credited service.
- If the death is not in the line of duty and occurs before the member is vested, the surviving spouse or designated beneficiary will receive a refund of the member's contributions plus interest.

Death After Retirement:

- If a member, who retired on or before September 30, 2019, dies after retiring, provided that member and the surviving spouse have been married for at least one year prior to member's retirement date, the surviving spouse will receive 75% of the member's current pension.
- If a member, who retired on or after October 1, 2019, dies after retiring, provided that member and the surviving spouse have been married for at least one year prior to member's retirement date, the surviving spouse will receive 50% of the member's current pension.
- A member who retires after October 1, 2019, may elect to take an actuarially reduced pension at retirement to increase the surviving spouse benefit.

Cost of Living Adjustment (COLA)

Upon Retirement:

As of October 1, 2019, all active employees and new hires will receive the 1% COLA beginning at age 60. Members who retired prior to October 1, 2019 receive the 2% COLA unless they were terminated prior to February 24, 2016. Terminated Vested members prior to February 24, 2016 will receive the Ad-Hoc COLA.

- Simple 2% COLA – An annual 2% fixed increase is awarded January 1st of every year. The 2% is calculated on the original base pension and will not change.

Simple 1% COLA – An annual 1% fixed increase is awarded January 1st of every year after the retired member reaches age 60. The 1% is calculated on the original base pension and will not change.

- Ad-Hoc COLA – The annual increase is awarded on January 1st and may vary each year from 0% to 4%. The COLA amount is based on the funding status of the plan and is compounded.

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Financial Section

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INDEPENDENT Auditor's Report

CPAs & BUSINESS ADVISORS

To the Board of Trustees of the
Employees' Retirement Fund of the
City of Fort Worth, Texas

Report on the Audit of the Combined Financial Statements

Opinions

We have audited the combined financial statements of the Employees' Retirement Fund of the City of Fort Worth, Texas (the Fund), a pension trust fund of the City of Fort Worth, Texas, as of and for the years ended September 30, 2023 and 2022, and the related notes to the combined financial statements, which collectively comprise the Fund's basic combined financial statements as listed in the table of contents.

In our opinion, the accompanying combined financial statements referred to above present fairly, in all material respects, the respective fiduciary net position of the Fund, as of September 30, 2023 and 2022, and the respective changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States (Government Auditing Standards). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Combined Financial Statements section of our report. We are required to be independent of the Fund and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Combined Financial Statements

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

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

Auditor's Responsibilities for the Audit of the Combined Financial Statements

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

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the combined financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the combined financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the combined financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Fund's ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in net pension liability (City and Staff), schedule of net pension liability, schedule of actuarially determined employer contributions, and schedule of combined money-weighted investment returns (collectively the required supplementary information) be presented to supplement the basic combined financial statements. Such information is the responsibility of management and, although not a part of the basic combined 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 combined financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, 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 combined financial statements, and other knowledge we obtained during our audit of the basic combined financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the combined financial statements that collectively comprise the Fund's basic combined financial statements. The other supplementary information accompanying financial information listed as other supplemental information in the table of contents are presented for purposes of additional analysis and are not a required part of the basic combined financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic combined financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic combined financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combined financial statements or to the basic combined financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplementary information accompanying financial information listed as other supplemental schedules in the table of contents are fairly stated, in all material respects, in relation to the basic combined financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic combined financial statements and our auditor's report thereon. Our opinions on the basic combined financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic combined financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic combined financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 22, 2023, on our consideration of the Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Fund's internal control over financial reporting and compliance.

Eide Bailly LLP

Boise, Idaho
December 22, 2023

MANAGEMENT'S Discussion & Analysis

(UNAUDITED)

The Board of Trustees (the Board) of the Employees' Retirement Fund of the City of Fort Worth, Texas (the Fund) is pleased to provide this overview and analysis of the financial performance and activities of the Fund for the fiscal years ended September 30, 2023, and 2022. We encourage readers to consider the information presented here in conjunction with the financial statements that follow.

Overview of Financial Statements

The Management's Discussion and Analysis is intended to serve as an introduction to the Fund's basic financial statements. The Fund's financial statements are composed of financial statements and notes to the financial statements. This report also contains required supplementary information in addition to the basic financial statements.

Financial Statements

There are two basic financial statements presented within this annual report. The Combined Statements of Fiduciary Net Position as of September 30, 2023, and 2022, give a snapshot of the financial position of the Fund at a particular point in time. The Combined Statements of Changes in Fiduciary Net Position for the fiscal years ended September 30, 2023, and 2022, provide a view of the fiscal years' additions to and deductions from net position.

Notes to Financial Statements

The notes are an integral part of the basic financial statements and provide additional background information that is essential to gain a complete understanding of the data provided within the Fund's financial statements.

Required Supplementary Information

The required supplementary information consists of the Schedule of Changes in Net Pension Liability – City Plan, Schedule of Changes in Net Pension Liability – Staff Plan, the Schedule of Net Pension Liability, the Schedule of Actuarially Determined Employer Contributions and Schedule of Combined Money-Weighted Investment Returns and Notes to Required Supplementary Information.

Other Supplementary Information

The other supplementary information consists of the Schedule of Administrative Expenses, the Schedule of Investment Management Fees, and the Schedule of Professional Services.

Financial Highlights

The Fund's net position increased by $101,571,922 in fiscal year 2023, compared to a decrease of ($326,701,765) in 2022 and an increase of $464,294,918 in 2021. The Fund's increase in net position is a result of contributions and investment income exceeding benefit payments and refunds paid out by the Fund.

In 2023, investment income and contributions exceeded benefits payments and refunds by $108,926,163, compared to a 2022 difference of ($319,818,734), and a 2021 difference of $470,415,743. During fiscal year 2023, investment income (loss) totaled $219,250,407, compared to ($257,553,091) in 2022 and $525,425,305 in 2021.

The following table shows a summary of the Fund's net position.

Combined Fiduciary Net Position

Septemberr 30, 2023, 2022, and 2021

	2023	2022	2021
Assets			
Cash	$ 269,800	$ 200,631	$ 107,585
Due from Broker Securities Sold	196,413,593	157,790,865	155,072,129
Other Receivables and Prepaid Expenses	4,336,624	15,930,918	15,800,600
Investments	2,814,123,201	2,820,202,103	3,015,428,655
Capital Assets, Net	7,565,084	6,837,792	4,524,627
Total Assets	3,022,708,302	3,000,962,309	3,190,933,596
Liabilities			
Due to Broker Securities Purchased	242,441,929	181,436,851	177,845,110
Obligations Under Securities Lending	165,031,454	306,215,799	174,422,862
Other Liabilities	1,906,149	1,552,811	207,011
Total Liabilities	409,379,532	489,205,461	352,474,983
Net Position Restricted for Pensions	$ 2,613,328,770	$ 2,511,756,848	$ 2,838,458,613

The following table shows a summary of the combined changes in net position.

Combined Changes in Fiduciary Net Position

For Fiscal Years Ended September 30, 2023, 2022, and 2021

	2023	2022	2021
Additions			
Contributions	$ 221,252,980	$ 203,313,198	$ 189,153,625
Investment Income (Loss), Net	219,250,407	(257,553,091)	525,425,305
Total Additions	440,503,387	(54,239,893)	714,578,930
Deductions			
Benefit Payments	325,372,952	259,572,108	238,975,451
Refund of Contributions	6,204,272	6,006,733	5,187,736
Administrative Expenses	6,501,412	6,782,659	5,999,639
Depreciation	852,829	100,372	121,186
Total Deductions	338,931,465	272,461,872	250,284,012
Increase (Decrease) in Net Position	101,571,922	(326,701,765)	464,294,918
Net Position Restricted for Pensions, Beginning of Year	2,511,756,848	2,838,458,613	2,374,163,695
Net Position Restricted for Pensions, End of Year	$ 2,613,328,770	$ 2,511,756,848	$ 2,838,458,613

Financial Analysis

During fiscal year 2023, the Fund's investment portfolio returned 8.30% net of fees, compared to a negative 8.80% for 2022 and a positive 22.44% for 2021. The Fund's 2023 performance was impacted by the dramatic pace of interest rate increases by the U.S. Federal Reserve (the Fed), which are aimed at controlling the highest levels of inflation that global developed markets have seen in 40 years.

The Fund's equity portfolio returned 18.61% in fiscal year 2023, versus a 20.80% return for the Global ACWI Index. This represents a strong recovery over the disappointing performance experienced in fiscal year 2022. The Fed's actions to raise interest rates from essentially 0% in early 2022 to over 5.25% by mid-2023 have significantly reduced inflation risks. With substantial government fiscal stimulus, the U.S. economy posted solid growth over this period and fears of a recession abated. This presented a favorable environment for risk assets like public equities. Of note, for the trailing year, growth stocks significantly outperformed value stocks, U.S. stocks outperformed international stocks, and large caps outperformed small caps.

With continued elevated inflation and interest rate hikes, the Fund's fixed income portfolio posted another disappointing year at 0.52%. In comparison, the Bloomberg U.S. Aggregate Bond index was up 0.64%. The last two years represent one of the worst periods in history for fixed-income returns. The impact of the Fed actions can be seen in the difference in returns for long-duration bonds, which were down around 11%, and short-duration bonds, which were up around 4%. Of note, long-duration bonds began to perform much better as the pace of interest rate hikes slowed.

The Fund's alternative asset classes provided significant diversification from the liquid traditional asset classes, but the performance was not as beneficial as in years past. Private equity had a positive return of 2.91%, which underperformed the benchmark slightly.

Diversified Opportunities also returned a positive 8.20%, driven by hedge funds and the high interest rates experienced in private credit lending. While the net return was beneficial overall, on a relative basis, this portfolio underperformed the benchmark return, which was 10.07%.

Real assets returned a negative 5.27%, as high interest rates impacted credit availability, valuations, and transaction activity in real estate. Private real estate experienced a year of adjustment, where valuations and expectations were lowered. However, exposure to commodities and infrastructure assets provided support to the real assets portfolio, which on a relative basis significantly outperformed the benchmark return of negative 12.88%.

Funding Progress

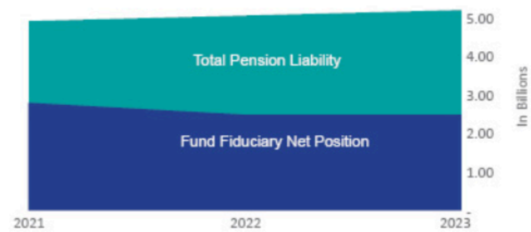
The actuarial reporting measurements as required by Governmental Accounting Standards Board (GASB) are the total pension liability, net pension liability, and fund fiduciary net position as a percentage of the total pension liability. The census data used is as of December 31, 2022, and all other measurements are calculated as of December 31, 2022, and rolled forward to September 30, 2023.

For the **City Plan**, these measurements are shown in the chart below:

Funding Progress: City Plan

Fiscal Years Ending September 30 - in billions

Year	Total Pension Liability	Fund Fiduciary Net Position	Net Pension Liability	Net Position as a Percent of Total Pension Liability
2023	$ 5.10	$ 2.60	$ 2.50	51.04%
2022	5.04	2.50	2.54	49.69%
2021	4.89	2.83	2.06	57.85%

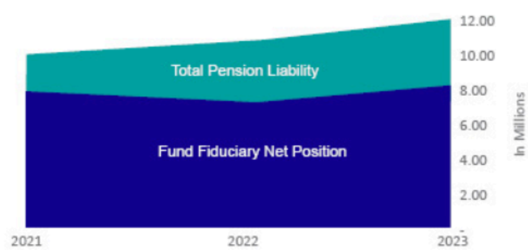


The **Staff Plan** will also continue to be measured using an annual valuation performed at calendar year end as well as evaluated with GASB required disclosures at statement of fiducary net postion date. For the Staff Plan, these measurements are shown in the chart below:

Funding Progress: Staff Plan

Fiscal Years Ending September 30 - in millions

Year	Total Pension Liability	Fund Fiduciary Net Position	Net Pension Liability	Net Position as a Percent of Total Pension Liability
2023	$ 12.12	$ 8.72	$ 3.40	71.93%
2022	11.10	7.70	3.40	69.41%
2021	9.96	8.02	1.95	80.47%



Requests for information: This financial report is designed to provide a general overview of the Fund's finances. Questions concerns any of the information provided should be addressed to the Employees' Retirement Fund of the City of Fort Worth, 3801 Hulen St., Suite 101, Fort Worth, TX. 76107.

Combined Statements of Fiduciary Net Position

September 30, 2023 and 2022

	City Plan 2023	Staff Plan 2023	Combined Totals 2023	City Plan 2022	Staff Plan 2022	Combined Totals 2022
Assets						
Investments in Trust, at Fair Value						
Government Obligations	$ 141,065,693	$ 471,507	$ 141,537,200	$ 86,225,178	$ 266,163	$ 86,491,341
U.S. Treasuries	83,085,272	277,709	83,362,981	93,725,000	289,315	94,014,315
Short-term Marketable Securities	190,015,026	635,118	190,650,144	82,878,227	255,832	83,134,059
Corporate Obligations	68,244,789	228,106	68,472,895	128,238,877	395,854	128,634,731
Asset and Mortgage Backed Obligations	43,029,503	143,824	43,173,327	58,660,970	181,077	58,842,047
International Obligations	13,714,344	45,840	13,760,184	4,046,849	12,492	4,059,341
Corporate Stocks	264,777,314	885,008	265,662,322	258,521,935	798,016	259,319,951
Exchange Traded Funds (ETF)	454,735,234	1,519,935	456,255,169	469,813,131	1,450,239	471,263,370
Commingled Funds	798,070,372	2,667,520	800,737,892	772,470,742	2,384,495	774,855,237
Alternative Investments	583,529,209	1,950,424	585,479,633	551,668,997	1,702,915	553,371,912
Securities Lending Collateral	164,525,718	505,736	165,031,454	305,350,640	865,159	306,215,799
Total Investments	2,804,792,474	9,330,727	2,814,123,201	2,811,600,546	8,601,557	2,820,202,103
Receivables						
Employee Contributions	-	-	-	3,774,467	-	3,774,467
Employer Contributions	-	-	-	7,858,652	-	7,858,652
Other	9,647	-	9,647	1,222	-	1,222
Accrued Income	4,292,669	13,195	4,305,864	4,256,903	12,061	4,268,964
Due From Broker Securities Sold	195,811,687	601,906	196,413,593	157,345,050	445,815	157,790,865
Total Receivables	200,114,003	615,101	200,729,104	173,236,294	457,876	173,694,170
Prepaid Expenses	21,048	65	21,113	27,535	78	27,613
Cash	268,973	827	269,800	200,064	567	200,631
Capital Assets						
Building	3,731,329	11,470	3,742,799	3,621,677	10,261	3,631,938
Land	403,759	1,241	405,000	403,856	1,144	405,000
Furniture and Equipment	266,779	820	267,599	266,843	756	267,599
Software	5,303,647	16,303	5,319,950	3,839,810	10,879	3,850,689
Total Capital Assets	9,705,514	29,834	9,735,348	8,132,186	23,040	8,155,226
Accumulated Depreciation	(2,163,613)	(6,651)	(2,170,264)	(1,313,712)	(3,722)	(1,317,434)
Capital Assets, Net	7,541,901	23,183	7,565,084	6,818,474	19,318	6,837,792
Total Assets	3,012,738,399	9,969,903	3,022,708,302	2,991,882,913	9,079,396	3,000,962,309
Liabilities						
Due to Broker Securities Purchased	241,698,970	742,959	242,441,929	180,924,233	512,618	181,436,851
Other	1,900,308	5,841	1,906,149	1,548,424	4,387	1,552,811
Obligations Under Securities Lending	164,525,718	505,736	165,031,454	305,350,640	865,159	306,215,799
Total Liabilities	408,124,996	1,254,536	409,379,532	487,823,297	1,382,164	489,205,461
Net Position Restricted for Pensions	$ 2,604,613,403	$ 8,715,367	$ 2,613,328,770	$ 2,504,059,616	$ 7,697,232	$ 2,511,756,848

The Notes to Combined Financial Statements are an integral part of these statements.

Combined Statements of Changes in Fiduciary Net Position

For Fiscal Years Ended September 30, 2023 and 2022

	City Plan	Staff Plan	Combined Totals	City Plan	Staff Plan	Combined Totals
		2023			2022	
ADDITIONS						
Investment Income (Loss)						
Net Appreciation(Depreciation) in Fair Value	$ 177,112,646	$ 550,197	$ 177,662,843	$ (294,950,964)	$ (903,191)	$ (295,854,155)
Interest and Dividend Income	34,863,091	113,903	34,976,994	30,065,149	90,037	30,155,186
Less: Investment Management Fees	(4,010,079)	(13,101)	(4,023,180)	(5,815,511)	(17,195)	(5,832,706)
Other Income	10,002,382	32,814	10,035,196	13,327,572	39,531	13,367,103
Investment Income Before Securities Lending	217,968,040	683,813	218,651,853	(257,373,754)	(790,818)	(258,164,572)
Securities Lending Activities						
Securities Lending Income	745,658	2,422	748,080	761,957	2,290	764,247
Securities Lending Expenses	(149,042)	(484)	(149,526)	(152,308)	(458)	(152,766)
Net Securities Lending Income	596,616	1,938	598,554	609,649	1,832	611,481
Total Investment Income (Loss), Net	218,564,656	685,751	219,250,407	(256,764,105)	(788,986)	(257,553,091)
Contributions						
Employee Contributions	72,322,732	203,740	72,526,472	65,593,975	224,122	65,818,097
Employer Contributions	148,281,745	444,763	148,726,508	137,012,301	482,800	137,495,101
Total Contributions	220,604,477	648,503	221,252,980	202,606,276	706,922	203,313,198
TOTAL ADDITIONS	439,169,133	1,334,254	440,503,387	(54,157,829)	(82,064)	(54,239,893)
DEDUCTIONS						
Benefit Payments						
Retirement	209,237,733	234,835	209,472,568	197,964,463	199,979	198,164,442
Disability	5,015,207	-	5,015,207	5,076,806	-	5,076,806
Surviving Spouse	22,845,611	-	22,845,611	21,882,859	-	21,882,859
Children	-	-	-	46,439	-	46,439
Actuarial Equivalent	459,238	-	459,238	734,241	-	734,241
DROP Payouts	87,580,328	-	87,580,328	33,667,321	-	33,667,321
Total Benefit Payments	325,138,117	234,835	325,372,952	259,372,129	199,979	259,572,108
Other Deductions						
Refunds/Terminations	6,149,920	54,352	6,204,272	5,994,097	12,636	6,006,733
Depreciation	852,380	449	852,829	100,064	308	100,372
Administrative	6,474,929	26,483	6,501,412	6,755,309	27,350	6,782,659
Total Other Deductions	13,477,229	81,284	13,558,513	12,849,470	40,294	12,889,764
TOTAL DEDUCTIONS	338,615,346	316,119	338,931,465	272,221,599	240,273	272,461,872
Increase (Decrease) in Net Position	100,553,787	1,018,135	101,571,922	(326,379,428)	(322,337)	(326,701,765)
Net Position Restricted for Pensions, Beginning of Year	2,504,059,616	7,697,232	2,511,756,848	2,830,439,044	8,019,569	2,838,458,613
Net Position Restricted for Pensions, End of Year	$ 2,604,613,403	$ 8,715,367	$ 2,613,328,770	$ 2,504,059,616	$ 7,697,232	$ 2,511,756,848

The Notes to Combined Financial Statements are an integral part of these statements.

Note 1. Plan Description

The following description of the Employees' Retirement Fund of the City of Fort Worth, Texas (the Fund), is provided for general information purposes only. The Fund is a pension trust fund of the City of Fort Worth, Texas. Participants (or members) should refer to the Plan Documents for more information.

General

The Fund comprises two single employer defined benefit plans with commingled investments. The Fund covers employees of the City of Fort Worth (City Plan) and the employees of the Fort Worth Employees' Retirement Fund (Staff Plan). The Fund and City Plan were established by City Ordinance on September 12, 1945. The Staff Plan was established through Administrative Rules in 2007 and both plans are governed by State statute (Vernon's Civil Statutes, Title 109, Article 6243i) effective June 15, 2007. The City Plan is included in the financial statements of the City of Fort Worth.

The Fund provides retirement, disability, and death benefits to its members and beneficiaries. All employees of the City of Fort Worth and the Retirement Fund are members, except elected officers and non-salaried appointed members of administrative boards and commissions, part-time, temporary, and contract employees, and employees paid in part by another governmental agency. The plans are commingled for investment purposes and both are administered by the 13-member Retirement Fund Board of Trustees. Each plan has a separate actuarial valuation completed each year.

The Retirement Fund Board of Trustees (the Board) is comprised of four active members of the Fund, three retired members of the Fund, and six trustees appointed by the Fort Worth City Council. All Board members serve a two-year term commencing on September 1st and annually select a chairperson and a vice-chairperson.

The Staff Plan was designed as a carve-out plan, with benefits identical to those of the General City employees (City of Fort Worth employees who are not civil service, police, or fire) in August 2007, and continues with those benefits. The Staff Plan was established in August of 2007, there were three Fund employees who were vested in the City Plan. At retirement, those employees will receive part of their retirement from the City Plan and the rest from the Staff Plan.

Since the creation of the Staff Plan, other vested members of the City Plan have been hired by the Fund. These employees also will receive part of their retirement from the respective Plan in which they earned credit. The remaining Fund employees will receive any retirement benefits due to them from the Staff Plan only. The first actuarial valuation for the Staff Plan was completed as of January 1, 2008. Changes to the Staff Plan are determined by the Board.

The City has received a favorable letter of determination from the Internal Revenue Service (IRS) that its Plan is qualified under Section 401(a) of the Internal Revenue Code. The authority to define or amend employer and employee contribution rates or benefits is given to the Fort Worth City Council (the City Council). The City Plan is considered part of the City's financial reporting entity and is included in the City's basic financial statements.

Effective June 15, 2007, article 6243i of the Texas Revised Civil Statutes (Article 6243i) redefined the composition and structure of the Board, providing authority to the Board for benefit administration, asset investment and actuarial assumptions and authority to the Fund sponsor for benefit design and contribution percentage. Article 6243i also permitted the Board to create administrative rules that govern the administration of benefits of the Fund.

The Board may change the administrative operation of the Fund without the City's approval, while any increases to the benefit structure must be approved by the City, following an actuarial assessment. A reduction in benefits must be approved by the City and the City must notify the Board 90 days in advance of such benefit reduction.

As of September 30, 2023, and 2022, the Fund's membership consisted of the following members:

Combined Planned Membership

Years ended September 30

	City Plan		Staff Plan	
	2023	**2022**	**2023**	**2022**
Retirees currently receiving benefits	4,213	4,088	5	4
Beneficiaries currently receiving benefits	824	818	0	0
Terminated employees entitled to benefits but not yet receiving them	491	437	7	6
Terminated employees entitled to a refund	1,247	1,051	3	3
Total Non-Active Members	6,775	6,394	15	13
Active Members				
Vested	4,546	4,603	8	10
Non-vested	2,110	2,023	14	9
Total Active Members	6,656	6,626	22	19
Total Plan Membership	13,431	13,020	37	32

Vesting

Members vest in the Fund after five years of credited service. Vested members are eligible for normal retirement on the last day of the month in which the earlier of the following occurs: the member's age plus years of credited service equals 80 (Rule of 80), or the vested member reaches age 65. Members terminating employment prior to vesting are entitled to receive their contributions plus interest. Members who are vested have the option of receiving their contributions plus interest or leaving their contributions in the Fund and receiving retirement benefits as described above.

Pension Benefits

In October 2012, the City passed an ordinance change, amending the benefits for new hire Police Civil Service, and split the benefits for existing Police Civil Service and General Employees, making changes similar to the November 2010 ordinance. Existing Police and General Employees now have a different benefit calculation based on their hire date and dates of service. On September 16, 2014, and October 21, 2014, the City passed ordinance amendments, making similar changes for new hire firefighters and existing firefighters, respectively, who previously had been unchanged. On December 11, 2018, the City passed another ordinance, amending the benefits for all members. In February 2019, City employees voted to increase employee contributions.

The City Plan consists of six groups, described generally as follows:

Group I – General Employees hired prior to July 1, 2011.
Group II – General Employees hired on or after July 1, 2011.
Group III – Police Officers hired prior to January 1, 2013.
Group IV – Police Officers hired on or after January 1, 2013.
Group V – Firefighters hired prior to January 10, 2015.
Group VI – Firefighters hired on or after January 10, 2015.

A member's normal retirement date is determined using the Rule of 80, or age 65 with at least 5 years of credited service. The City has adopted a 25-year-and-out program for police officers, which allows for full (unreduced) retirement after 25 years of service, regardless of age. Group II requires a minimum age of 55 at Rule of 80 to be eligible to retire. Each of the benefits are calculated by using an average annual compensation value multiplied by years of service and a multiplier percentage. The table below describes the variables for each group:

Group Number	Multiplier for Service prior to 10/01/2013	Multiplier for Service on or after 10/01/2013	Average Annual Compensation for service prior to 10/01/2013	Average Annual Compensation for service on or after 10/01/2013	Credited years of benefit service
Group I	3%	2.5%	Average of highest 3 (overtime included)	Average of highest 5 (overtime excluded)	Actual years and months of credited service
Group II	2.5%	2.5%	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Actual years and months of credited service
Group III	3%	2.5%	Average of highest 3 (overtime included)	Average of highest 5 (overtime excluded)	Actual years and months of credited service
Group IV	2.5%	NA	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Actual years and months of credited service

Group Number	Multiplier for Service prior to 10/01/2015	Multiplier for Service on or after 10/01/2015	Average Annual Compensation for service prior to 10/01/2015	Average Annual Compensation for service on or after 10/01/2015	Credited years of benefit service
Group V	3%	2.5%	Average of highest 3 (overtime included)	Average of highest 5 (overtime excluded)	Actual years and months of credited service
Group VI	NA	2.5%	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Average of highest 5 (overtime, wellness, vacation, and sellback excluded)	Actual years and months of credited service

Cost of Living Adjustment (COLA)

Members of Groups I, III and V, as defined in the City ordinance, receive COLAs based on their selection of either simple 2% COLA or the ad-hoc COLA for service prior to either October 1, 2013, or January 10, 2015, depending on the group, provided they are retired or enrolled in the Deferred Retirement Option Program (DROP) on or before January 1, 2021. For members of Groups I, III and V, service on or after October 1, 2013, or January 10, 2015, through January 19, 2019, depending on the group, receives a simple 2% COLA, if retired or enrolled in DROP on or before January 1, 2021. Ad-hoc COLAs are compound and granted if the amortization period required to pay-off the unfunded liability is 28.0 years or less. If the amortization period falls between 24.1 - 28.0 years to pay off the unfunded liability the member will receive a 2% COLA, if the amortization period falls between 18.1 - 24.0 years the COLA is 3% and an amortization period below 18.0 years pays a 4% COLA.

Members who are eligible to receive a COLA, are granted that COLA on January 1 of that year. The member must be retired by September 30 of the preceding year (or in DROP) in order to be eligible. For members of Groups I, III and V who are not retired or enrolled in DROP on or before January 1, 2021, there is a Variable COLA or 13th check that applies to service prior to July 19, 2019, which is subject to actuarial conditions and approval by the Fund Board of Trustees and City Council. Groups II, IV and VI are not eligible for a COLA. There is no COLA for service after July 19, 2019, for any Group.

Deferred Retirement Option Program

If a member continues to work after the normal retirement date, the member is required to make contributions to the Fund until the date of actual retirement. Members continue to accrue credited service until they retire unless they are enrolled in the Deferred Retirement Option Program (DROP). A member who has attained the normal or special retirement date may elect to remain in active service with the City and defer retirement by participating in the DROP.

The DROP allows a member to accrue a monthly amount, into a notional account that does not earn interest, equal to what they would have received if they had retired. Retirement benefits are calculated at the DROP entry date and service and compensation beyond that date do not accrue to the benefit calculation but contributions on wages continue. The DROP account is payable when service ends and the only changes to the benefit upon the DROP exit are credit for unused applicable leave and eligible COLA increases. DROP is limited to 72 months.

In September 2007, the Board voted to allow members that have entered the DROP to leave a part or all of their DROP balance with the Fund. Members that elect this option are credited the same earnings as the Fund on a monthly basis and are subject to losses if the Plan incurs negative earnings on Fund assets. On September 8, 2022, the Board voted to revise the DROP distribution payment options and no longer apply monthly investment returns to member's DROP accounts. DROP balances for all active and inactive City Plan participants totaled $105.6 million for the fiscal year ending in 2023 and $150.1 million for the fiscal year ending in 2022.

Cash Balance

General City employees hired after July 1, 2011, will not have overtime in their high five salary calculation. Alternatively, their contributions from overtime are placed in a cash balance account and the City pays 100% matching dollars plus interest at retirement. However, as of October 1, 2013, the cash balance plan is closed, and no new contributions will be added to existing account balances.

Death and Disability Benefits

Upon the death of a retired member in Group I, III or V, the surviving spouse shall receive a monthly pension equal to 75% of the amount being paid to the retired member. If a vested member dies before retirement, the surviving spouse shall receive a monthly pension equal to 75% of the member's accrued pension, subject to certain minimum benefits. Active employees who become totally disabled while in the line of duty receive annual disability benefits that are equal to normal retirement benefits that would have accrued had the member worked to their normal retirement date. Members who become totally disabled while not in the line of duty receive disability benefits that are equal to retirement benefits that have accumulated as of the time, they become disabled, provided the member was vested. Non-vested members who become totally disabled while not in the line of duty receive a refund of contributions, plus interest.

Groups II, IV, VI and unmarried members of any group have no joint survivorship benefit, they only have the designated beneficiary actuarially neutral option. Any member may elect to have a designated beneficiary survivor benefit at 25%, 50%, 75% or 100% by reducing their current benefit, making the cost to the plan actuarially neutral.

Obligation to Contribute to the Fund

Effective the first payroll of fiscal year 2011, the City contributed to the Fund an amount equal to 19.74% of the salaries of General Employees and sworn firefighters, and 20.46% of the salaries of sworn police officers.

Effective the first payroll of calendar year 2019, the City contributed to the Fund an amount equal to 24.24% of the salaries of General Employees and sworn firefighters, and 24.96% of the salaries for sworn police officers.

Prior to July 19, 2019, as a condition of their employment and commencing on the effective date of their membership in the Fund, General Employees and sworn firefighters contributed 8.25% of their salary to the Fund, with sworn police officers contributing 8.73% of their salary.

Beginning July 19, 2019, as a condition of employment and commencing on the effective date of their membership in the Fund, General Employees contributed 9.35% of their salary to the Fund, with sworn firefighters contributing 10.05% of their salary, and sworn police officers contributing 10.53% of their salary. In addition, General employees with service prior to October 1, 2013, paid an additional 0.7% of their salary to the Fund for the length of that service until the date of their actual retirement or termination of employment.

Beginning with the first pay day after January 1, 2020, General Employees of the City contributed 9.35% of their salary to the Fund, with sworn firefighters contributing 12.05% of their salary, and sworn police officers contributing 12.53% of their salary. In addition, General employees with service prior to October 1, 2013, paid an additional 0.7% of their salary to the Fund for the length of that service.

Beginning with the first pay day after January 1, 2021, General Employees of the City contributed 9.35% of their salary to the Fund, with sworn firefighters contributing 12.05% of their salary, and sworn police officers contributing 13.13% of their salary. In addition, General employees with service prior to October 1, 2013, paid an additional 0.7% of their salary to the Fund for the length of that service.

Effective the first payroll of calendar year 2022, the City contributed to the Fund an amount equal to 25.44% of the salaries of General Employees and sworn firefighters, and 26.16% of the salaries of sworn police officers. As a condition of employment and commencing on the effective date of their membership in the Fund, General Employees contributed 10.15% of their salary to the Fund, with sworn firefighters contributing 12.85% of their salary and sworn police officers contributing 13.93% of their salary. In addition, General employees with service prior to October 1, 2013, paid an additional 0.7% of their salary to the Fund for the length of that service until the date of their actual retirement or termination of employment.

Effective the first payroll of calendar year 2023, the City began contributing to the Fund an amount equal to 26.64% of the salaries of General Employees and sworn firefighters, and 27.36% of the salaries of sworn police officers.

At the same time, as a condition of employment and commencing on the effective date of their membership in the Fund, General Employees began contributing 10.95% of their salary to the Fund, with sworn firefighters contributing 13.65% of their salary, and sworn police officers contributing 14.73% of their salary. In addition, General employees with service prior to October 1, 2013, continue to pay an additional 0.7% of their salary to the Fund for the length of that service until the date of their actual retirement or termination of employment.

The City Council, through its budget appropriation, has the right to contribute an additional amount over and above the members' contributions. The employer and employee contribution rates are not used when the actuary determines the annual required contributions to the Fund.

Note 2. Summary of Significant Accounting Policies

The following are the significant accounting policies followed by the Fund:

Basis of Accounting

The Fund's Combined Financial Statements are prepared using the accrual basis of accounting in accordance with the standards of the Governmental Accounting Standards Board for pension trust funds. Employer and employee contributions are recognized when due, pursuant to formal commitments as well as statutory or contractual requirements. Benefits and refunds of the plan are recognized when due and payable in accordance with the terms of the plan. Purchases and sales of investments are recorded on a trade-date basis.

Cash and Cash Equivalents

For cash deposits and cash equivalents, the custodial credit risk is the risk that in the event of a bank failure, the Fund's deposits may not be returned. The Fund's deposits are held by Northern Trust and Frost Bank. As of September 30, 2023, and 2022, the Fund had bank balances of $269,800 and $200,631, respectively, that are in demand accounts subject to coverage by Federal Deposit Insurance Corporation (FDIC) but are not collateralized. The Fund does not have a deposit policy for custodial credit risk; however, management believes that the Fund's custodial credit risk exposure is mitigated by the financial strength of the banking institutions in which the deposits are held.

Capital Assets

Capital Assets are reported on the cost basis. The Fund provides for depreciation on the straight-line method over the estimated useful lives of the assets.

The following estimated useful lives are used in providing for depreciation and amortization:

Building: 40 years
Furniture and Equipment: 5-7 years
Software: 5 years

Capital Assets

September 30, 2023

Asset Class	10/1/2022	Additons	Retirements	9/30/2023	Beginning Depreciation/ Amortization	Current Depreciation/ Amortization	Retirements	Accumulated Depreciation/ Amortization
Building	$ 3,631,938	$ 110,861	$ -	$ 3,742,799	$ 1,186,534	$ 98,850	$ -	$ 1,285,384
Land	405,000	-	-	405,000	-	-	-	-
Furniture and Equipment	267,599	-	-	267,599	130,900	35,830	-	166,730
Software	3,850,689	1,469,261	-	5,319,950	-	718,150	-	718,150
Total	$ 8,155,226	$ 1,580,122	$ -	$ 9,735,348	$ 1,317,434	$ 852,830	$ -	$ 2,170,264

Capital Assets

September 30, 2022

Asset Class	10/1/2021	Additons	Retirements	9/30/2022	Beginning Depreciation/ Amortization	Current Depreciation/ Amortization	Retirements	Accumulated Depreciation/ Amortization
Building	$ 3,508,647	$ 184,797	$ 61,506	$ 3,631,938	$ 1,162,411	$ 85,629	$ 61,506	$ 1,186,534
Land	405,000	-	-	405,000	-	-	-	-
Furniture and Equipment	167,784	116,602	16,787	267,599	132,944	14,743	16,787	130,900
Software	1,738,551	2,112,138	-	3,850,689	-	-	-	-
Total	$ 5,819,982	$ 2,413,537	$ 78,293	$ 8,155,226	$ 1,295,355	$ 100,372	$ 78,293	$ 1,317,434

Investment Policy Statement

The Board of Trustees (The Board) of the Fort Worth Employees' Retirement Fund (The Fund) has adopted an Investment Policy Statement as a framework for the investment of the Fund's assets. The authority to amend that statement rests entirely with the Board. The Investment Policy Statement was amended by the Board on August 24, 2022. A copy of the Investment Policy Statement can be found in its entirety on the Fund's website.

Valuation of Investments

Investments are stated at fair value. When available, quoted market prices are used to value investments. Investments that do not have quoted market prices are priced from information received from the external manager.

In these cases, external managers are independent investment managers that manage assets that are not held directly by the Fund. Examples of these kinds of investments are pooled real estate funds, pooled private equity investments and hedge funds. These assets are pooled and managed on behalf of a number of investors. The underlying partnerships allow for withdrawals at various times during the year as provided for by the respective underlying agreements, which may include an initial lockup period, or be subject to a gate provision or suspension of redemptions.

The Fund utilizes a variety of financial instruments in their trading strategies, which contain varying degrees of off-balance sheet risk. However, due to the nature of the Fund's investments, such risks are limited to the Fund's capital balance in each underlying partnership. Below is a listing and description of the various investments used by the Fund:

- **Broad US Equity:** Equity securities listed on a recognized US securities exchange or quoted on the NASDAQ National Market System are priced at the regular trading session's closing price on the exchange or system in which such securities are principally traded. Securities not traded on the valuation date are priced at the most recent quoted bid price.

- **Broad International Equity:** Global securities' prices are based upon primary local market quotations. Depending upon local convention or regulation, the price may represent the last sale price or the mean between the last bid and ask price at the close of the appropriate exchange or at other designated times as determined by the appropriate governing body.

- **Exchange Traded Fund (ETF):** Exchange-traded funds, or ETFs, are funds traded on exchanges that generally track a specific index. The funds are priced daily based on supply and demand.

- **Fixed Income - Bank Loans:** Bank Debt and Syndicated loans that are traded in the secondary market will be priced using a pricing vendor quote, or if unavailable, a broker quote as directed by the client or delegate. Structured loans which are bilateral or multilateral agreements between the lender and the borrower will be priced at a level to be determined by the investment manager and approved by the Fund. Based on information available to the investment manager, the Fund will rely on the investment manager to indicate the current value of the loan/debt.

- **Fixed Income - Government/Corporate Bonds:** These securities are priced by a pricing vendor on the basis of bid or mid evaluations in accordance with a region's market convention, using factors which include but are not limited to market quotations, yields, maturities, and the bond's terms and conditions. The pricing vendors use proprietary methods to arrive at the evaluated price. These prices represent the price a dealer would pay for a security (typically in an institutional round lot).

- **Real Assets, Private Equity, Diversified Opportunities:** The Fund's investments in limited partnerships are valued at estimated fair value based on the Fund's proportionate share of the partnerships' fair value as recorded by the partnership. The Fund uses information provided by the limited partnership, such as audited financial statements, periodic information on the holdings and activities and periodic statements of fair value of the limited partnership and other information accumulated by management pertinent to the investment to estimate fair value.

The limited partnerships allocate gains, losses and expenses to the partners based on the ownership percentage as described in the partnership agreements. It is the Fund's policy to use the most recent available valuation, adjusting for cash flows as necessary up until the period is closed. The closing date is consistent each year. Estimates are used by management in determining the fair value of the Fund's investments in limited partnerships. The amount received upon sale of the investments may differ significantly from the recorded amount.

There are certain market risks, credit risks, foreign exchange currency risks, or events that may subject the Fund's investment portfolio to economic changes occurring in certain industries, sectors, or geographies. Net investment income includes net appreciation in the fair value of investments, interest income, dividend income, and investment expenses. Investment expenses include custodian and management fees, and all other significant investment-related costs.

Rate of Return
The Fund uses two approaches for calculating investment returns for reporting purposes. For the fiscal years ended September 30, 2023, and 2022, the annual money-weighted return on the Fund assets, net of investment expenses, was 8.38% and -8.67%, respectively. The money-weighted return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested. In addition, for the fiscal years ended September 30, 2023, and 2022, the time-weighted return on Fund assets net of fees was 8.30% and -8.80%, respectively. The time-weighted rate of return is defined as the compounded growth rate of $1 over the period being measured and is not sensitive to contributions or withdrawals.

Interest and Dividends Receivable and Due to/from Broker
Interest income is recorded on an accrual basis. Dividends are recorded on the ex-dividend date. Recording activity in such a manner results in interest and dividends receivable. The balance due to broker securities purchased and due from broker securities sold represents trades pending settlement and amounts due to foreign currency contracts.

Foreign Currency Transactions
The Fund is a party to financial instruments with off balance sheet risk, primarily foreign currency forward contracts. Forward transactions are contracts or agreements for delayed delivery of commodities, securities, or money market instruments in which the seller agrees to make delivery at a specified future date of a specified commodity or instrument, at a specified price or yield. Entering into these investments involves not only the risk of dealing with counterparties and their ability to meet the terms of the contracts, but also the risk associated with market fluctuations.

Gains and losses resulting from foreign exchange contracts (transactions denominated in a currency other than the Fund's functional currency-US dollars) are recorded by the Fund based on changes in fair values and are combined with similar transactions in the accompanying combined statements of changes in fiduciary net position and are included in net investment income (loss). The Fund structures its foreign exchange contracts and enters into certain transactions to substantially mitigate the Fund's exposure to fluctuations in foreign exchange rates.

Investment and broker accounts denominated in foreign currencies outstanding on September 30, 2023, and 2022, were converted to the Fund's functional currency at the foreign exchange rates quoted on September 30, 2023, and 2022. These foreign exchange gains and losses are included in net appreciation (depreciation) in fair value of investments in the accompanying combined statements of changes in fiduciary net position.

Use of Estimates
The preparation of Combined Financial Statements and required supplementary information in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of net positions, and changes therein, the net pension liability at the date of the Combined Financial Statements, and changes therein. Actual results could differ from those estimates.

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the combined statements of fiduciary net position.

The net pension liability is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near-term would-be material to the Combined Financial Statements.

Expenses

The Fund staff is responsible for providing or contracting with vendors to provide all administrative functions necessary for operation of the Fund. The Board approves an annual budget for the administration of the Fund and these expenses are paid from current Fund assets.9

New Accounting Pronouncements

GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*, is effective for all reporting periods starting on or after July 15, 2022. The Fund has adopted the provisions of GASB Statement No. 96, and it was determined that there was no material effect on the Combined Financial Statements.

Note 3. Net Pension Liability

The net pension liability is measured using the total pension liability less the pension plan's fiduciary net position. The total pension liability as of September 30 is based on the results of the actuarial valuation dated December 31 and rolled forward using generally accepted actuarial procedures. The total pension liability for the City Plan is calculated using the long-term expected rate of return.

For the City Plan, the net position was projected to be available to make all projected future benefit payments of current plan members. The long-term expected rate of return on Retirement Fund investments, with adjustment to account for administrative expenses, was applied to the projected benefit payments.

The following table reflects the Net Pension Liability for the City Plan:

Schedule of Net Pension Liability: City Plan

Years Ended September 30

Fiscal Year Ending 09/30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a Percent of Total Pension Liability
City Plan				
2022	$ 5,039,105,797	$ 2,504,059,616	$ 2,535,046,181	49.69%
2023	5,103,442,085	2,604,613,403	2,498,828,682	51.04%

For the Staff Plan, the net position was projected to be available to make all projected future benefit payments of current plan members. The long-term expected rate of return on Retirement Fund investments, with adjustment to account for administrative expenses, was applied to the projected benefit payments.

The table below reflects the Net Pension Liability for the Staff Plan:

Schedule of Net Pension Liability: Staff Plan

Years Ended September 30

Fiscal Year Ending 09/30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a Percent of Total Pension Liability
Staff Plan				
2022	$ 11,090,045	$ 7,697,232	$ 3,392,813	69.41%
2023	12,116,537	8,715,367	3,401,170	71.93%

Actuarial Methods and Assumptions

Actuarial valuations involve projections of benefit payments, contributions, and other amounts decades into the future. These projections are based on actuarial assumptions and methods adopted by the Fund's Board of Trustees. Assumptions such as salary increases, investment rates of return, retirement and disability rates, mortality, and inflation are compared against actual experience by actuarial experience studies conducted every three years. These studies assist the Fund's Board in evaluating the accuracy with which the assumptions predict actual experience. A three-year experience study was completed in the first quarter of 2019 for the period January 1, 2016, through December 31, 2018.

Schedule of Significant Actuarial Assumptions

As of December 31, 2022

	City Plan	Staff Plan
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percentage of Payroll, 30-year closed beginning in 2018	Leveled Dollar, Layered
Remaining Amortization Period	26 years	30 years for new layers
Asset Valuation Method	Five-year smoothed fair value	Five-year smoothed fair value
Inflation	2.50%	2.50%
Salary Increases	3.25% - 28.25%	2.75% - 5.35%
Investment Rate of Return, Net of Investment Expenses	7.00%	7.00%
Retirement Age	Experience-based table of rates based on job classification and number of years since first retirement eligibility.	Experience-based table of rates based on job classification and number of years since first retirement eligibility.
Mortality	PubG-2010 Mortality Tables for General Employees and PubS-2010 Healthy Retiree Mortality Table for Police Officers and Firefighters. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.	PubG-2010 Mortality Tables. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.
Cost-of-Living Adjustment	A 2% cost-of-living adjustment (COLA) is assumed for all members in the guaranteed COLA program. No COLAs are assumed for members with a variable COLA. Timing of conditional Ad-Hoc COLAs is based on an open group projection.	4.0% COLAs are assumed for members participating in the Ad-Hoc COLA program.

Schedule of Significant Actuarial Assumptions

As of December 31, 2021

	City Plan	Staff Plan
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percentage of Payroll, 30-year closed beginning in 2018	Leveled Dollar, Layered
Remaining Amortization Period	27 years	30 years for new layers
Asset Valuation Method	Five-year smoothed fair value	Five-year smoothed fair value
Inflation	2.50%	2.50%
Salary Increases	3.25% - 28.25%	2.75% - 5.35%
Investment Rate of Return, Net of Investment Expenses	7.00%	7.00%
Retirement Age	Experience-based table of rates based on job classification and number of years since first retirement eligibility.	Experience-based table of rates based on job classification and number of years since first retirement eligibility.
Mortality	PubG-2010 Mortality Tables for General Employees and PubS-2010 Healthy Retiree Mortality Table for Police Officers and Firefighters. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.	PubG-2010 Mortality Tables. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.
Cost-of-Living Adjustment	A 2% cost-of-living adjustment (COLA) is assumed for all members in the guaranteed COLA program. No COLAs are assumed for members with a variable COLA. Timing of conditional Ad-Hoc COLAs is based on an open group projection.	4.0% COLAs are assumed for members participating in the Ad-Hoc COLA program.

Expected Return Arithmetic Basis

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2023, and 2022, are summarized in the following tables:

Target Asset Allocation and Arithmetic Real Rate of Return

As of September 30

2023

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	42.00%	7.40%
Fixed Income	16.00%	4.30%
Diversifed Opportunities	10.00%	5.17%
Real Assets	13.00%	5.80%
Private Equity	18.00%	10.20%
Cash Equivalents	1.00%	3.30%
Total	100.00%	

2022

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	42.00%	5.70%
Fixed Income	16.00%	2.20%
Real Return	3.00%	6.60%
Real Estate	10.00%	6.50%
Absolute Return	10.00%	3.80%
Private Equity	18.00%	10.50%
Cash	1.00%	0.80%
Total	100.00%	

Sensitivity of Net Pension Liability

The following tables present the net pension liability of the City Plan and the Staff Plan using their respective discount rates in 2023 and 2022, plus or minus 1%. The City Plan and the Staff Plan were calculated using the expected rate return of 7.00% net of investment expenses, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (6.00%) or one percentage-point higher (8.00%) than the current rate.

Sensitivity of Net Pension Liability to Changes in Discount Rate

Years Ended September 30

		City Plan		Staff Plan	
Net Pension Liability		**2023**	**2022**	**2023**	**2022**
1% Decrease	**6.00%**	$ 3,121,880,253	$ 3,146,635,982	$ 5,200,196	$ 5,016,214
Discount Rate	**7.00%**	2,498,828,682	2,535,046,181	3,401,170	3,392,813
1% Increase	**8.00%**	1,980,582,409	2,027,061,400	1,935,477	2,063,335

Note 4. Fair Value Measurement

The Fund categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The three levels of the fair value hierarchy are based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets. Level 2 inputs are quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable. Level 3 valuations are derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. Investments that use inputs that are of different levels are categorized based on the lowest level of input used to determine the fair value of the investment.

Equity investments that are classified as Level 1 are valued using prices quoted in active markets for those securities. Level 1 debt securities are US Treasuries. Commingled debt funds that are publicly traded are also included in Level 1.

Debt and derivative securities classified as Level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices. These debt and derivative securities have non-proprietary information that was readily available to market participants, from independent sources, which are known to be actively involved in the market. Cash and cash equivalents are short-term investments valued based on cost and accrued interest which approximates fair value. Equity securities classified as Level 2 are derived from associated traded security values or convertible securities valued similar to debt securities through a bid evaluation process.

Debt and derivative securities classified in Level 3 are valued similar to Level 2 securities but have limited bids, limited trade information, limited trade activity, pricing from multiple sources but differences in prices above an acceptable level or pricing provided by a single source. Equity securities classified as Level 3 have limited trade information. These securities are priced off last trade price or estimated off recent trades and corporate actions.

Assets listed in the Investments Measured at NAV (Net Asset Value) table are invested with managers in structures that the Fund receives values for shares held in the investment structure with the manager. The liquidity of these structures is listed in the table.

Equity Investments – This consists of two Commingled Global Equity Funds that are passive institutional investment funds that invest in global equities diversified across all sectors focused on large to mid-cap equities. One of the global equity funds is based on a cap weighted MSCI ACWI index and the second fund tracks the investment results of the Russell 1000 Growth Index, composed of large- and mid-capitalization U.S. equities that exhibit growth characteristics. There is also one active Commingled Emerging Market Equity Fund that is an institutional investment fund that invests in emerging market equities diversified across all sectors focused on large to mid-cap equities.

Real Asset Funds – This category consists of several different styles of funds as well as different liquidity structures. When redeeming from these funds, there is typically a notice period ranging from one to three months' notice and funds can hold back a small portion of the assets until an annual audit is conducted. In some cases, managers designate particular investments as longer hold periods than the funds liquidity schedule, in these cases they side pocket the investment, and these assets are not available immediately upon redemption.

Directional funds include an investment in one fund that invests in a directional nature based on their views of markets, at times this fund may invest without a directional bias. The directional fund is redeemable on a quarterly basis.

Equity Long/Short funds include investments in two funds. Equity long/short funds maintain some level of market exposure by investing in US or global equities both long and short with the level of exposure varying over time.

Event-driven funds include investments in three funds. These funds seek to gain an advantage from pricing inefficiencies that may arise based on corporate actions or events which may change the nature of the underlying investment. The nature of event driven investments often restricts the liquidity of those investments.

Multi-Strategy funds include investments in four funds. These funds invest in multiple strategies in order to diversify risks and reduce volatility. Three funds in this category have been redeemed, with the remaining assets either audit holdback or side-pocketed assets waiting for liquidation.

Alternative Assets – This category consists of limited partnership structures that invest in companies or real estate which allow for limited or no liquidity for the investor. Private Equity partnerships consists of funds that invest in buyouts, growth equity, venture capital, special situations, mezzanine, and distressed debt. There are 91 partnerships in this category and these partnerships are typically structured with a life from 7-12 years and are considered illiquid.

As investments are sold out of the partnerships, assets are returned to the investors. These funds' fair value is determined using net asset values one quarter in arrears and adjusted for cash flows of the most recent quarter. There are three investments in Real Estate - Core partnerships which invest in highly leased lower leverage properties that provide consistent income to the investors. These funds allow quarterly liquidity to the investors.

A redemption has been submitted from one of these managers, however a gate has been implemented by the manager restricting the flow of redemption proceeds as the manager pursues liquidation of some of the fund assets to meet the investors that have requested redemptions.

Real Estate – Non-Core partnerships invest in properties that require some kind of development or improvements to improve the position of the property. There are 17 partnerships in this category and these partnerships are typically structured with a life from 7-12 years and are considered illiquid. As properties are sold out of the partnership, assets are returned to the investors. These funds' fair value is determined using net asset values one quarter in arrears and adjusted for cash flows of the most recent quarter.

Investments and Derivative Instruments Measured at Fair Value

September 30, 2023

Investments by Fair Value Level	Fair Value	Level 1	Level 2	Level 3
Short-Term Securities	$ 355,681,598	$ 15,107,225	$ 340,574,373	$ -
Debt Securities				
Collateralized Debt Obligations	24,023,401	-	17,016,706	7,006,695
Commercial Mortgage-Backed Securities	19,149,926	-	15,505,416	3,644,510
Corporates	68,472,895	-	68,472,297	598
Exchange Traded Funds (ETF)	28,052,115	28,052,115	-	-
Municipals	2,586,992	-	2,586,992	-
Non U.S. Government	13,760,184	-	13,760,184	-
U.S. Government Agencies	138,950,208	-	137,055,598	1,894,610
U.S. Treasuries	83,362,981	83,362,981	-	-
Total Debt Securities	378,358,702	111,415,096	254,397,193	12,546,413
Equity Securities				
Communication Services	5,602,653	5,602,653	-	-
Consumer Discretionary	23,026,177	23,026,177	-	-
Consumer Staples	6,921,205	6,921,205	-	-
Energy	19,463,500	19,463,500	-	-
Equity Other	17,994,290	17,994,290	-	-
Exchange Traded Funds (ETF)	428,203,055	428,203,055	-	-
Financials	31,570,625	31,570,625	-	-
Health Care	25,680,955	25,680,955	-	-
Industrials	37,441,908	37,350,062	-	91,846
Information Technology	32,073,691	32,073,691	-	-
Materials	9,425,900	9,425,900	-	-
Real Estate	2,193,980	2,193,980	-	-
Utilities	2,807,563	2,807,563	-	-
Total Equity Securities	642,405,502	642,313,656	-	91,846
Investments Measured at Net Asset Value				
Commingled Global Equity Fund	445,803,580			
Commingled Emerging Market Equity Fund	51,459,874			
Absolute Return	192,885,332			
Private Equity	357,184,036			
Private Credit	35,410,265			
Real Estate - Core	166,630,844			
Real Estate - Non Core	188,303,468			
Total Investments Measured at Net Asset Value	**1,437,677,399**			
Total Investments by Fair Value Level	**$ 2,814,123,201**	**$ 768,835,977**	**$ 594,971,566**	**$ 12,638,259**
Investment Derivative Instruments				
Swaps	$ 546,106	$ 546,106	$ -	$ -
Rights and Warrants	18,344	18,344	-	-
Futures	(5,500)	(5,500)	-	-
FX Forwards	(6,860)	-	(6,860)	-
Total Investment Derivative Instruments	**$ 552,090**	**$ 558,950**	**$ (6,860)**	**$ -**

Investments and Derivative Instruments Measured at NAV

September 30, 2023

Investments Measured at Net Asset Value	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Equity Investments				
Commingled Global Equity Fund	$ 445,803,580	$ -	Daily	1 day
Commingled Emerging Market Equity Fund	51,459,874	-	Daily	1 day
Total Equity Investments	497,263,454	-		
Absolute Return				
Directional	28,732,090	-	Quarterly	75 days
Equity Long/Short	53,756,364	-	Quarterly	45 days
Event Driven	84,364,270	-	Quarterly, Annually, 3 years	45-90 days
Multi-Strategy	26,032,608	-	Annually, Biennial	45-90 days
Total Absolute Return Investments	192,885,332	-		
Other Assets at Net Asset Value				
Private Equity	357,184,036	253,875,714	Not eligible	N/A
Private Credit	35,410,265	94,078,850	Not eligible	N/A
Real Estate - Core	166,630,844	-	Quarterly	60-90 days
Real Estate - Non Core	188,303,468	101,440,663	Not eligible	N/A
Total Other Assets at Net Asset Value	747,528,613	449,395,227		
Total Investments Measured at Net Asset Value	**$ 1,437,677,399**	**$ 449,395,227**		

Investments and Derivative Instruments Measured at Fair Value

September 30, 2022

Investments by Fair Value Level	Fair Value	Level 1	Level 2	Level 3
Short-Term Securities	$ 389,349,858	$ 8,313,122	$ 381,036,736	$ -
Debt Securities				
Collateralized Debt Obligations	38,503,338	-	26,840,194	11,663,144
Commercial Mortgage-Backed Securities	20,338,709	-	15,949,157	4,389,552
Corporates	128,630,331	-	128,039,675	590,656
Debt Other	32,605,573	32,601,173	4,400	-
Exchange Traded Funds (ETF)	37,491,708	37,491,708	-	-
Municipals	6,008,419	-	6,008,419	-
Non U.S. Government	4,059,341	-	4,059,341	-
U.S. Government Agencies	80,482,922	-	75,494,674	4,988,248
U.S. Treasuries	94,014,315	94,014,315	-	-
Total Debt Securities	442,134,656	164,107,196	256,395,860	21,631,600
Equity Securities				
Communication Services	7,806,934	7,244,484	562,450	-
Consumer Discretionary	22,360,552	22,228,500	-	132,052
Consumer Staples	7,857,987	7,857,987	-	-
Energy	39,605,559	39,605,559	-	-
Equity Other	16,377,596	16,377,596	-	-
Exchange Traded Funds (ETF)	433,771,662	433,771,662	-	-
Financials	20,498,989	20,498,989	-	-
Health Care	27,663,283	27,663,283	-	-
Industrials	25,647,625	25,347,940	-	299,685
Information Technology	26,922,186	26,922,186	-	-
Materials	7,054,823	7,054,823	-	-
Real Estate	4,327,152	4,327,152	-	-
Utilities	3,662,921	3,662,921	-	-
Total Equity Securities	643,557,269	642,563,082	562,450	431,737
Investments Measured at Net Asset Value				
Commingled Global Equity Fund	363,986,100			
Commingled Emerging Market Equity Fund	49,534,344			
Absolute Return	190,379,664			
Private Equity	340,903,741			
Private Credit	22,088,507			
Real Estate - Core	189,922,588			
Real Estate - Non Core	188,345,376			
Total Investments Measured at Net Asset Value	**1,345,160,320**			
Total Investments by Fair Value Level	**$ 2,820,202,103**	**$ 814,983,400**	**$ 637,995,046**	**$ 22,063,337**
Investment Derivative Instruments				
Swaps	$ (182,788)	$ (182,788)	$ -	$ -
Rights and Warrants	19,445	19,445	-	-
Futures	(134,275)	(134,275)	-	-
FX Forwards	877,775	-	877,775	-
Total Investment Derivative Instruments	**$ 580,157**	**$ (297,618)**	**$ 877,775**	**$ -**

Investments and Derivative Instruments Measured at NAV

September 30, 2022

Investments Measured at Net Asset Value	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Equity Investments				
Commingled Global Equity Fund	$ 363,986,100	$ -	Daily	1 day
Commingled Emerging Market Equity Fund	49,534,344	-	Daily	1 day
Total Equity Investments	413,520,444	-		
Absolute Return				
Directional	31,312,060	-	Quarterly	75 days
Equity Long/Short	49,353,768	-	Quarterly	45 days
Event Driven	107,551,843	-	Quarterly, Annually, 3 years	45-90 days
Multi-Strategy	2,161,993	-	Annually, Biennial	45-90 days
Total Absolute Return Investments	190,379,664	-		
Other Assets at Net Asset Value				
Private Equity	340,903,741	193,595,555	Not eligible	N/A
Private Credit	22,088,507	62,155,614	Not eligible	N/A
Real Estate - Core	189,922,588	-	Quarterly	60-90 days
Real Estate - Non Core	188,345,376	95,731,900	Not eligible	N/A
Total Other Assets at Net Asset Value	741,260,212	351,483,069		
Total Investments Measured at Net Asset Value	**$ 1,345,160,320**	**$351,483,069**		

Note 5. Investments

Substantially all of the Fund's investments are held by its custodian. The Retirement Fund Board of Trustees authorizes various external managers to manage investments within certain policies as set forth by the Board. These policies mandate a diversified portfolio, which includes investments, either directly or in commingled accounts, in real estate, fixed income securities, and equity securities.

Governmental Accounting Standards Board Statement No. 40 "Deposit and Investment Risk Disclosures – an amendment to GASB Statement No. 3" (GASB 40), addresses common deposit and investment risks including custodial credit risk, credit risk, concentration of credit risk, interest rate risk, and foreign currency risk. Required disclosures related to these risks are presented below:

Custodial Credit Risk

Custodial credit risk is the risk that in the event of failure of the counterparty, the Fund would not be able to recover the value of its investments. The Fund does not have a formal policy for custodial credit risk. As of September 30, 2023, and 2022, all investments are registered in the name of the Employees' Retirement Fund of the City of Fort Worth or in the name of the Fund's custodian, established through a master trust custodial agreement, with the exception of investments in alternative investments and commingled funds.

Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund's investment policy requires that fixed income securities have a weighted average of no less than investment grade, as rated by Moody's or Standard & Poor's (S&P). However, the policy does provide for high yield fixed income managers to invest in securities with S&P ratings between BB+ and CCC. The policy limits 25% of a manager's portfolio to be rated CCC or lower. Unrated securities should be limited to no more than 20% of a manager's portfolio.

GASB 40, Deposit and Investment Risk Disclosures, does not require disclosure of US government obligations explicitly guaranteed. The table below shows the credit ratings of the Fund's investments as of September 30, 2023, and 2022.

Credit Risk Analysis

September 30, 2023 and 2022

Investment Type	S&P Rating	2023 Fair Value	2022 Fair Value
Asset and Mortgage Backed Obligations	AAA	$ 26,114,439	$ 33,349,574
Asset and Mortgage Backed Obligations	AA	2,126,762	3,520,525
Asset and Mortgage Backed Obligations	A	4,594,157	7,403,994
Asset and Mortgage Backed Obligations	BBB	1,191,502	2,477,808
Asset and Mortgage Backed Obligations	BB	843,366	316,497
Asset and Mortgage Backed Obligations	B	5,270	577,596
Asset and Mortgage Backed Obligations	CCC	246,543	359,698
Asset and Mortgage Backed Obligations	NR	8,051,288	10,836,355
Total Asset and Mortgage Backed Obligations		43,173,327	58,842,047
Corporate Obligations	AAA	43,833	943,410
Corporate Obligations	AA	1,466,465	2,129,390
Corporate Obligations	A	29,933,696	35,096,130
Corporate Obligations	BBB	33,962,556	51,420,138
Corporate Obligations	BB	1,935,851	20,595,960
Corporate Obligations	B	-	13,599,530
Corporate Obligations	CCC	-	2,949,299
Corporate Obligations	D	-	239,832
Corporate Obligations	NR	1,130,494	1,661,042
Total Corporate Obligations		68,472,895	128,634,731
Government Agency Obligations	AAA	136,541,456	80,025,246
Government Agency Obligations	AA	3,158,010	4,401,924
Government Agency Obligations	A	1,485,049	2,064,171
Government Agency Obligations	BBB	352,685	-
Total Government Agency Obligations		141,537,200	86,491,341

Credit Risk Analysis, Cont.

September 30, 2023 and 2022

Investment Type	S&P Rating	2023 Fair Value	2022 Fair Value
International Obligations	AAA	10,338,292	$ 857,747
International Obligations	AA	1,044,957	694,007
International Obligations	A	357,421	369,875
International Obligations	BBB	378,196	403,434
International Obligations	BB	1,553,306	1,734,278
International Obligations	NR	88,012	-
Total International Obligations		13,760,184	4,059,341
Securities Lending Collateral	AAA	-	4,171,114
Securities Lending Collateral	AA	17,725,165	82,276,087
Securities Lending Collateral	A	142,467,493	218,841,836
Securities Lending Collateral	NR	4,838,796	926,762
Total Securities Lending Collateral		165,031,454	306,215,799
Total Fixed Income Subject to Credit Risk		431,975,060	584,243,259
U.S. Treasuries (no credit risk)		83,362,981	94,014,315
Short-term Marketable Securities		190,650,144	83,134,059
Corporate Stock		265,662,322	259,319,951
Alternative Investments		585,479,633	553,371,912
Commingled Funds		800,737,892	774,855,237
Exchange Traded Funds (ETF)		456,255,169	471,263,370
Total Fair Value of Investments		**2,814,123,201**	**$ 2,820,202,103**

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. The Fund’s investment policy addresses concentration limits on a manager basis. As of September 30, 2023, the Fund did not have any investments where the underlying assets which were registered in the Fund’s name totaled more than 5% of assets of the Fund.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment. The Fund does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from changing interest rates. As of September 30, 2023, and 2022, the maturities of investments subject to interest rate risk are as follows:

Interest Rate Risk

September 30, 2023

Investment Type	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years	Total Fair Val
Asset and Mortgage	$ 61,002	$ 2,760,400	$ 5,666,527	$ 34,685,398	$ 43,173,32
Corporate Obligations	3,083,194	25,183,703	25,056,281	15,149,717	68,472,89
Government Obligations	-	5,077,572	908,816	135,550,812	141,537,20
International Obligations	-	10,659,944	1,604,026	1,496,214	13,760,18
Securities Lending Collateral	165,031,454	-	-	-	165,031,45
U.S. Treasuries	5,153,906	14,373,403	27,633,176	36,202,496	83,362,98
Total	**$ 173,329,556**	**$ 58,055,022**	**$ 60,868,826**	**$ 223,084,637**	**$ 515,338,04**

Interest Rate Risk

September 30, 2022

Investment Type	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years	Total Fair Val
Asset and Mortgage	$ -	$ 5,157,880	$ 6,271,001	$ 47,413,166	$ 58,842,04
Corporate Obligations	1,406,734	62,892,761	46,026,564	18,308,672	128,634,73
Government Obligations	-	4,512,189	456,645	81,522,507	86,491,34
International Obligations	-	1,734,278	1,631,056	694,007	4,059,34
Securities Lending Collateral	306,215,799	-	-	-	306,215,79
U.S. Treasuries	991,289	12,487,224	41,231,727	39,304,075	94,014,31
Total	**$ 308,613,822**	**$ 86,784,332**	**$ 95,616,993**	**$ 187,242,427**	**$ 678,257,57**

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. The Fund has no formal investment policy with regard to foreign currency risk as it is considered an intrinsic risk associated with the investment strategy. The Fund's exposure to foreign currency risk on September 30, 2023, and 2022, is presented in the table on the following page.

Foreign Currency Exposure

	September 30, 2023				September 30, 2022			
Currency	Debt	Equity	Alternatives	Total	Debt	Equity	Alternatives	Total
Argentine Peso	$ 1,677	$ -	$ -	$ 1,677	$ 3,986	$ -	$ -	$ 3,986
Australian Dollar	1,747,012	-	-	1,747,012	(1,550,946)	2,534,398	-	983,452
Brazilian Real	203,446	1,642,586	-	1,846,032	483,771	1,393,871	-	1,877,642
British Pound Sterling	93,251	27,009,261	-	27,102,512	(817,646)	16,809,356	136,867	16,128,577
Canadian Dollar	(645,704)	4,715,698	-	4,069,994	663	6,084,387	-	6,085,050
Chilean Peso	1,503,113	-	-	1,503,113	237	-	-	237
Columbian Peso	(1,507,378)	-	-	(1,507,378)	-	-	-	-
Danish Krone	96	7,695,833	-	7,695,929	(98,932)	5,404,043	-	5,305,111
Euro Currency Unit	(831,646)	40,964,846	65,623,037	105,756,237	(874,878)	30,319,245	66,366,226	95,810,593
HK Offshore Chinese Yuan Renminbi	(516,901)	879,095	-	362,194	(3,901)	-	-	(3,901)
Hong Kong Dollar	136	6,069,267	-	6,069,403	1,523,015	13,698,598	-	15,221,613
Hungarian Forint	1,384	-	-	1,384	-	-	-	-
Indonesian Rupiah	205,084	-	-	205,084	-	1,961,082	-	1,961,082
Indian Rupee	206,084	-	-	206,084	-	-	-	-
Japanese Yen	1,076,226	17,182,654	-	18,258,880	32,260	15,082,882	-	15,115,142
Mexican New Peso	(1,291,913)	-	-	(1,291,913)	15,630	-	-	15,630
New Israeli Shekel	1,554,906	-	-	1,554,906	-	-	-	-
New Taiwan Dollar	(477,778)	3,856,012	-	3,378,234	31,552	-	-	31,552
New Zealand Dollar	714,987	-	-	714,987	748,471	-	-	748,471
Norwegian Krone	205,473	1,854,543	-	2,060,016	527,489	2,190,439	-	2,717,928
Peruvian Nuevo Sol	-	-	-	-	(13,969)	-	-	(13,969)
Polish Zloty	88	-	-	88	2,209	-	-	2,209
Singapore Dollar	46	-	-	46	44	-	-	44
South African Rand	24,227	-	-	24,227	(92,813)	-	-	(92,813)
South Korean Won	-	2,953,964	-	2,953,964	-	2,321,784	-	2,321,784
Swedish Krona	(1,578,488)	4,036,159	-	2,457,671	-	4,026,829	-	4,026,829
Swiss Franc	1,389	11,225,349	-	11,226,738	1,291	16,118,866	-	16,120,157
Thai Baht	205,507	1,805,279	-	2,010,786	-	1,947,757	-	1,947,757
Total	**$ 894,324**	**$ 131,890,546**	**$ 65,623,037**	**$ 198,407,907**	**$ (82,466)**	**$ 119,893,536**	**$ 66,503,093**	**$ 186,314,163**

Foreign Currency Exchange Transactions

To manage the foreign currency exchange risks associated with foreign investments, the Fund enters into forward currency contracts. The Fund had net foreign currency contracts with fair value of approximately and ($6,860) and $877,775 on September 30, 2023, and 2022, respectively, which contractually obligates the Fund to deliver currencies at a specified date. The Fund could be exposed to risk of loss if the counterparty is unable to meet the terms of a contract or if the value of currency changes unfavorably. On September 30, 2023, and 2022, the fair value of these contracts is included in due to/from broker.

Note 6. Derivative Financial Instruments

The Fund's investment managers are permitted to invest in derivatives subject to guidelines established by the Board. Derivatives are financial instruments that derive their value, usefulness, and marketability from an underlying instrument which represents direct ownership of an asset or an obligation of an issuer. The Fund's derivative positions are marked to market daily and managers may only trade with counterparties with a credit rating of A-/A3 as defined by Standard & Poor's (S&P) and Moody's, respectively. Substitution and risk control are the only strategies permitted; speculation is strictly prohibited. Derivatives are carried as a receivable when the fair value is positive and as a payable when the fair value is negative on the Combined Statements of Fiduciary Net Position. Fair value is determined based on quoted market prices, if available, or based on differences in cash flows between the fixed and variable rates in each contract as of the measurement date. Gains and losses from derivatives are included in net investment income. The Fund was in possession of the following types of derivatives on September 30, 2023, and 2022:

Futures Contracts

A futures contract is a standardized contract between two parties to buy or sell a specified asset of standardized quantity and quality for a price agreed upon today with delivery and payment occurring at a specified future date, the delivery date. The contracts are negotiated at a futures exchange, which acts as an intermediary between the two parties and to minimize the risk of default by either party.

Forward Contracts

A forward contract represents an agreement to buy or sell an underlying asset at a specified date in the future at a specified price. Payment for the transaction is delayed until the settlement or expiration date. A forward contract is a non-standardized contract that is tailored to each specific transaction. Forward contracts are privately negotiated and are intended to be held until the settlement date. Currency forward contracts are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions.

Options

Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. The option's price is usually a small percentage of the underlying asset's value. As a buyer of financial options, the Fund receives a premium at the outset of the agreement and bears the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the Fund pays a premium at the outset of the agreement and the counterparty bears the risk of an unfavorable change in the price of the financial instrument underlying the option.

Rights and Warrants

A right is a special type of option that has a short market life, usually existing for no more than a few weeks. Essentially, rights originate when corporations raise money by issuing new shares of common stock. From an investor's perspective, a right enables a stockholder to buy shares of the new issue at a specified price, over a specified, fairly short time period. Rights not executed by their expiration date cease to exist and become worthless. A warrant is a long-term option that gives the holder the right to buy a certain number of shares of stock in a certain company for a certain period of time. Like most options, warrants are found in the corporate sector of the market. Occasionally, warrants can be used to purchase preferred stock or even bonds, but common stock is the leading redemption vehicle. Warrants, like rights, cease to exist and become worth less if they are not executed by their expiration date.

Swap Agreements

A swap is an agreement between two or more parties to exchange a sequence of cash flows over a period of time in the future based on an underlying asset. No principal is exchanged at the beginning of the swap. The cash flows the counterparties exchange are tied to a "notional" amount. A swap agreement specifies the time period over which the periodic payments will be exchanged. The fair value represents the gains or losses as of the prior marking-to-market.

The Investment Derivatives schedule that follows reports the fair value and changes in fair value and notional amounts of derivatives outstanding as of September 30, 2023, and 2022 is as follows:

Investment Derivatives

As of and for year ended September 30, 2023

Derivative Type	Notional Value	2023 Fair Value	Changes in Fair Value
Investment Derivatives			
Futures Contracts	$ 87,304,268	$ (5,500)	$ 128,775
Forward Contracts	78,620,547	(6,860)	(884,635)
Swap Agreements	58,230,628	546,106	728,894
Rights and Warrants	18,344	18,344	(1,101)
Totals	**$224,173,787**	**$ 552,090**	**$ (28,067)**

Investment Derivatives

As of and for year ended September 30, 2022

Derivative Type	Notional Value	2022 Fair Value	Changes in Fair Value
Investment Derivatives			
Futures Contracts	$ 41,111,898	$ (134,275)	$ (134,275)
Forward Contracts	93,165,343	877,775	921,454
Swap Agreements	58,235,617	(182,788)	(1,103,772)
Options	-	-	714
Rights and Warrants	18,344	19,445	(35,587)
Totals	**$192,531,202**	**$ 580,157**	**$ (351,466)**

Credit Risk

The Fund is exposed to credit risk on investment derivatives that are traded over the counter and reported in asset positions. Derivatives exposed to credit risk include currency forward contracts, rights and warrants, and swap agreements. To minimize credit risk exposure, the Fund's managers monitor the credit ratings of the counterparties. Should there be a counterparty failure, the Fund would be exposed to the loss of the fair value of derivatives that are in the asset positions and any collateral provided to the counterparty, net of the effect of applicable netting arrangements. Netting arrangements provide the Fund with a right of offset in the event of bankruptcy or default by the counterparty. Collateral provided by the counterparty reduces the Fund's credit risk exposure.

The following Credit Risk Analysis schedule discloses the counterparty credit ratings of the Fund's investment derivatives by type, as of September 30, 2023, and 2022. These amounts represent the maximum loss that would be recognized if all counterparties fail to perform as contracted, without respect to any collateral or other security or netting arrangement. The schedule displays the fair value of the investments by credit rating in increasing magnitude of risk. Investments are classified by S&P rating. If the investment does not have an S&P rating, the Moody's rating that corresponds to the S&P rating is used. As of September 30, 2023, and 2022, the Fund's credit risk to these investments is disclosed on the following table:

Investment Derivatives Credit Risk Analysis

September 30, 2023

Derivative Type	AA	A	BBB	Not Rated	Fair Value
Futures Contracts	$ -	$ -	$ -	$ (5,500)	$ (5,500)
Forwards Contracts	-	-	-	(6,860)	(6,860)
Swap Agreements	-	(109,358)	-	655,464	546,106
Rights and Warrants	-	-	-	18,344	18,344
Total	**$ -**	**$ (109,358)**	**$ -**	**$ 661,448**	**$ 552,090**

Investment Derivatives Credit Risk Analysis

September 30, 2022

Derivative Type	AA	A	BBB	Not Rated	Fair Value
Futures Contracts	$ -	$ -	$ -	$ (134,275)	$ (134,275)
Forwards Contracts	-	-	-	877,775	877,775
Swap Agreements	-	(169,827)	-	(12,961)	(182,788)
Rights and Warrants	-	-	-	19,445	19,445
Total	**$ -**	**$ (169,827)**	**$ -**	**$ 749,984**	**$ 580,157**

Interest Rate Risk

The interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Interest rate swaps are an example of an investment that has a fair value that is highly sensitive to interest rate changes. These investments, as of September 30, 2023, and 2022, are disclosed on the following table:

Investment Derivatives Interest Rate Risk Analysis

September 30, 2023 and 2022

	2023		2022	
Derivative Type	Total Notional Value	Total Fair Value	Total Notional Value	Total Fair Value
Interest Rate Swaps	$ 48,930,628	$ 624,365	$ 49,035,617	$ (142,691)
Swaptions	9,300,000	(78,259)	9,200,000	(40,097)
Total	**$ 58,230,628**	**$ 546,106**	**$ 58,235,617**	**$ (182,788)**

Foreign Currency Risk

For those forward contracts and swap agreements that are securities issued by foreign countries and foreign businesses there is an exposure to foreign currency risk. Currency forward contracts represent foreign exchange contracts that are used to control currency exposure and facilitate the settlement of international security purchase and sale transactions. The net exposure column of the following schedule indicates the Fund's net foreign currency risk related to derivatives as of September 30, 2023, and 2022.

All values shown in Note 6 are for the positions that the Fund holds directly. The Fund may also have an indirect exposure to derivatives via its commingled funds and its alternative investments. The Fund owns an interest in the commingled and alternative investment funds which in turn holds the actual positions. Indirect exposures via these types of investments are not shown here. Please see the table on the following page.

Investment Derivatives Foreign Currency Risk Analysis

	2023			2022		
Currency	Forward Contracts	Swap Agreements	Net Exposure	Forward Contracts	Swap Agreements	Net Exposure
Australian Dollar	$ 9,536	$ -	9,536	$ 3,266	$ -	$ 3,266
Brazilian Real	(1,945)	-	(1,945)	(11,449)	69,014	57,565
British Pound Sterling	141,264	-	141,264	121,025	377,367	498,392
Canadian Dollar	(14,725)	(123,337)	(138,062)	2,130	-	2,130
Chilean Peso	(18,049)	-	(18,049)	152,594	-	152,594
Chinese Yuan Onshore	-	-	-	47,825	-	47,825
Chinese Yuan Offshore	(840)	-	(840)	9,300	-	9,300
Colombian Peso	(3,728)	-	(3,728)	36,049	-	36,049
Czech Koruna	(5,090)	-	(5,090)	-	-	-
Danish Krone	-	-	-	7,013	-	7,013
Euro Currency Unit	78,693	1,570	80,263	112,237	(789,582)	(677,345)
Hong Kong Dollar	(93)	-	(93)	(4,167)	-	(4,167)
Hungarian Forint	(26,573)	-	(26,573)	-	-	-
Indian Rupee	9	-	9	2,736	-	2,736
Indonesian Rupiah	(1,619)	-	(1,619)	-	-	-
Israeli New Shekel	(464)	-	(464)	43,858	-	43,858
Japanese Yen	(38,565)	335,451	296,886	12,428	159,047	171,475
Mexican Peso	(17,582)	-	(17,582)	-	-	-
New Taiwan Dollar	8,189	-	8,189	-	-	-
New Zealand Dollar	(93,096)	-	(93,096)	164,561	-	164,561
Norwegian Krone	(3,854)	-	(3,854)	21,238	-	21,238
Peruvian Sol	-	-	-	(26,443)	-	(26,443)
Polish Zloty	17,361	-	17,361	-	-	-
South African Rand	(697)	-	(697)	149,287	-	149,287
Swedish Krona	(30,787)	-	(30,787)	-	-	-
Swiss Franc	-	-	-	598	-	598
Thai Baht	(4,205)	-	(4,205)	33,689	-	33,689
Total	**$ (6,860)**	**$ 213,684**	**$ 206,824**	**$ 877,775**	**$ (184,154)**	**$ 693,621**

Note 7. Securities Lending

The Fund is authorized to contractually lend securities to borrowers in accordance with the policy established by the Board. The Fund is currently contracted with Northern Trust to establish, manage, and administer a securities lending program. Northern Trust facilitates lending the Fund’s domestic and international equity and fixed income securities in return for collateral consisting of cash, U.S. government securities and irrevocable letters of credit issued by banks independent of the borrower. As of September 30, 2023, and 2022, all securities lending collateral held is cash. At a loan’s inception, the value of collateral is equal to 102% for securities of United States issuers, and 105% in the case of securities of non-United States issuers, of the fair value of any securities to be loaned, plus any accrued interest.

Cash collateral is to be invested in government securities, bank and corporate notes, bank certificates of deposit, time deposits, bankers’ acceptances, repurchase agreements, commercial paper, and asset-backed securities. The contract with Northern Trust specifies guidelines for allowable investments, maturities, and diversification. The Fund does not have the ability to pledge or sell collateral securities without borrower default. The amount of cash collateral held exceeds the value of the assets on loan on September 30, 2023, and 2022.

The Fund earns income from fees paid by the borrowers and interest earned from investing the cash collateral. The contract requires the custodian bank to purchase any loaned securities with collateral provided, however, if the collateral is insufficient to cover the loss, the Fund is liable for the loss. The cash collateral received on each loan was invested in the collateral pool at Northern Trust. Because the loans are terminable at will, their duration generally did not match the duration of the investments made with cash collateral.

In addition, the Plan had no credit risk exposure to borrowers. As of September 30, 2023, and 2022, the value of the cash collateral held was $165,031,454 and $306,215,799, respectively, and the value of securities out on loan on September 30, 2023, and 2022, was $160,952,882 and $297,796,821, respectively. The Fund earned $598,554 and $611,481 net, on its securities lending activity for the fiscal years ended September 30, 2023, and 2022, respectively.

Note 8. Tax Status

The City Plan obtained its latest determination letter on December 8, 2014, in which the Internal Revenue Service (IRS) stated that the Fund, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code (IRC). The Staff Plan obtained its latest determination letter on April 7, 2017, in which the Internal Revenue Service (IRS) stated that the Fund, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code (IRC).

No federal, state, or local income taxes have been provided on the operations of the Fund since the IRS approved the Fund determination letter to be designed and operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income taxes has been included in the Fund's Combined Financial Statements.

The Fund evaluates tax positions taken or expected to be taken in the course of preparing the Fund's tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained by the applicable tax authority. Tax positions deemed to meet a more-likely-than-not threshold should be recorded as a tax expense in the current year. The Board has analyzed the Fund's tax positions for all open tax years and has concluded that, as of September 30, 2023, and 2022, no provision for income taxes is required in the Combined Financial Statements.

As of and during the years ended September 30, 2023, and 2022, the Fund did not have any liabilities for any unrecognized tax positions. The Fund recognizes interest and penalties, if any, related to unrecognized tax positions as tax expense in the statements of changes in fiduciary net position. During the years, the Fund did not incur any tax-related interest or penalties.

Note 9. Plan Termination

City Plan

While the City has not expressed any intent to discontinue its contributions, it may terminate the City Plan at any time. In the event the City Plan terminates, the net position shall be allocated among the participants and beneficiaries of the City Plan as follows:

- First, benefits that former employees or their beneficiaries are receiving or that employees eligible for retirement would have been receiving had they retired
- Next, other vested benefits
- Finally, all other accrued benefits

If assets remain after the above allocations, they shall be distributed to the City.

Staff Plan

While the Board has not expressed any intent to discontinue its contributions, it may terminate the Staff Plan at any time. In the event the Staff Plan terminates, the net position shall be allocated among the participants and beneficiaries of the Staff Plan as follows:

- First, benefits that former employees or their beneficiaries are receiving or that employees eligible for retirement would have been receiving had they retired
- Next, other vested benefits
- Finally, all other accrued benefits

If assets remain after the above allocations, they shall be distributed to the Board.

Required Supplementary Information

Schedule of Changes in Net Pension Liability: City Plan

Years ended September 30; unaudited

City Plan	2014	2015	2016	2017	2018
Total Pension Liability					
Service Cost	$ 92,189,100	$ 85,592,978	$ 98,173,277	$ 123,792,923	$ 113,947,000
Interest	234,701,479	246,292,813	252,240,071	251,645,608	274,954,967
Benefit Changes	110,187,898	(1,828,408)	-	-	-
Difference Between Actual and Expected Experience	(106,951,077)	(10,817,086)	4,177,731	186,853,574	62,114,429
Assumption Changes	-	364,494,287	1,022,192,887	(327,287,818)	(165,300,608)
Benefit Payments and Refunds	(161,158,600)	(167,065,955)	(185,819,878)	(198,611,599)	(217,801,696)
Net Change in Total Pension Liability	168,968,800	516,668,629	1,190,964,088	36,392,688	67,914,092
Total Pension Liability - Beginning	3,441,705,595	3,610,674,395	4,127,343,024	5,318,307,112	5,354,699,800
Total Pension Liability - Ending	$3,610,674,395	$ 4,127,343,024	$ 5,318,307,112	$ 5,354,699,800	$ 5,422,613,892
Plan Fiduciary Net Position					
Contributions - Member	$ 31,929,289	$ 32,541,773	$ 33,977,411	$ 35,963,200	$ 37,618,303
Contributions - Employer	78,165,049	80,820,598	84,746,991	89,408,134	93,504,064
Net Investment Income (Loss)	159,994,300	(20,635,550)	166,305,791	250,912,773	145,408,403
Benefit Payments and Refunds	(161,158,600)	(167,065,955)	(185,819,878)	(198,611,599)	(217,801,696)
Administrative Expense	(3,738,927)	(3,823,331)	(4,521,503)	(4,867,413)	(4,915,335)
Other	(130,935)	(143,220)	(241,634)	-	-
Net Change in Plan Fiduciary Net Position	$ 105,060,176	$ (78,305,685)	$ 94,447,178	$ 172,805,095	$ 53,813,739
Plan Fiduciary Net Position - Beginning	$1,976,515,071	$ 2,081,575,247	$ 2,003,269,563	$ 2,097,716,741	$ 2,270,521,836
Plan Fiduciary Net Position - Ending	2,081,575,247	2,003,269,563	2,097,716,741	2,270,521,836	2,324,335,575
Net Pension Liability Ending	**$1,529,099,148**	**$ 2,124,073,461**	**$ 3,220,590,371**	**$ 3,084,177,964**	**$ 3,098,278,317**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	57.65%	48.54%	39.44%	42.40%	42.86%
Covered Payroll	$ 391,216,461	$ 404,507,497	$ 424,371,512	$ 447,488,158	$ 467,754,197
Net Pension Liability as a Percentage of Covered Payroll	390.86%	525.10%	758.91%	689.22%	662.37%

Please see Notes to Required Supplementary Information.

Schedule of Changes in Net Pension Liability: City, Cont.

Years ended September 30; unaudited

City Plan	2019	2020	2021	As Restated 2022	2023
Total Pension Liability					
Service Cost	$ 111,950,763	$ 70,650,037	$ 69,156,958	$ 73,040,581	$ 76,529,318
Interest	290,020,564	316,896,226	327,263,445	338,326,248	346,499,377
Benefit Changes	(1,543,331,519)	-	-	-	-
Difference Between Actual and Expected Experience	(18,487,311)	(476,723)	12,410,191	230,544	(27,404,370)
Assumption Changes	536,393,855	-	-	-	-
Benefit Payments and Refunds	(227,239,084)	(230,964,518)	(243,982,126)	(265,366,226)	(331,288,037)
Net Change in Total Pension Liability	(850,692,732)	156,105,022	164,848,468	146,231,147	64,336,288
Total Pension Liability - Beginning	5,422,613,892	4,571,921,160	4,728,026,182	4,892,874,650	5,039,105,797
Total Pension Liability - Ending	$ 4,571,921,160	$ 4,728,026,182	$ 4,892,874,650	$ 5,039,105,797	$ 5,103,442,085
Plan Fiduciary Net Position					
Contributions - Member	$ 40,634,725	$ 56,250,684	$ 60,281,553	$ 65,593,975	$ 72,322,732
Contributions - Employer	113,109,911	124,743,976	128,046,174	137,012,301	148,281,745
Net Investment Income (Loss)	67,729,548	110,570,539	524,024,718	(256,764,105)	218,564,656
Benefit Payments and Refunds	(227,239,084)	(230,964,518)	(243,982,126)	(265,366,226)	(331,288,037)
Administrative Expense	(5,707,390)	(5,303,296)	(6,091,945)	(6,855,373)	(7,327,309)
Other	-	-	-	-	-
Net Change in Plan Fiduciary Net Position	$ (11,472,290)	$ 55,297,385	$ 462,278,374	$ (326,379,428)	$ 100,553,787
Plan Fiduciary Net Position - Beginning	$ 2,324,335,575	$ 2,312,863,285	$ 2,368,160,670	$ 2,830,439,044	$ 2,504,059,616
Plan Fiduciary Net Position - Ending	2,312,863,285	2,368,160,670	2,830,439,044	2,504,059,616	2,604,613,403
Net Pension Liability Ending	**$ 2,259,057,875**	**$ 2,359,865,512**	**$ 2,062,435,606**	**$ 2,535,046,181**	**$ 2,498,828,682**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	50.59%	50.09%	57.85%	49.69%	51.04%
Covered Payroll	$ 484,410,754	$ 509,575,065	$ 523,064,436	$ 539,843,582	$ 557,869,620
Net Pension Liability as a Percentage of Covered Payroll	466.35%	463.10%	394.30%	469.59%	447.92%

Please see Notes to Required Supplementary Information.

Schedule of Changes in Net Pension Liability: Staff Plan

Years ended September 30; unaudited

Staff Plan	2014	2015	2016	2017	2018
Total Pension Liability					
Service Cost	$ 286,870	$ 303,626	$ 284,929	$ 252,967	$ 274,978
Interest	252,813	337,668	335,753	422,610	462,281
Benefit Changes	-	-	(786,759)	-	-
Difference Between Actual and Expected Experience	510,965	(650,524)	300,333	(159,693)	229,191
Assumption Changes	-	-	965,041	-	-
Benefit Payments and Refunds	-	(16,747)	(11,754)	(35,933)	(16,074)
Net Change in Total Pension Liability	1,050,648	(25,977)	1,087,543	479,951	950,376
Total Pension Liability - Beginning	3,105,816	4,156,464	4,130,487	5,218,030	5,697,981
Total Pension Liability - Ending	$ 4,156,464	$ 4,130,487	$ 5,218,030	$ 5,697,981	$ 6,648,357
Plan Fiduciary Net Position					
Contributions - Member	$ 296,093	$ 126,984	$ 130,973	$ 124,339	$ 131,067
Contributions - Employer	225,536	242,270	249,881	237,224	250,059
Net Investment Income(Loss)	209,544	(30,772)	286,116	500,246	303,812
Benefit Payments and Refunds	-	(16,747)	(11,754)	(35,933)	(16,074)
Administrative Expense	(4,897)	(5,702)	(7,779)	(14,988)	(27,963)
Other	(172)	(214)	(19,791)	-	-
Net Change in Plan Fiduciary Net Position	$ 726,104	$ 315,819	$ 627,646	$ 810,888	$ 640,901
Plan Fiduciary Net Position - Beginning	$ 2,046,297	$ 2,772,401	$ 3,088,220	$ 3,715,866	$ 4,526,754
Plan Fiduciary Net Position - Ending	2,772,401	3,088,220	3,715,866	4,526,754	5,167,655
Net Pension Liability Ending	**$ 1,384,063**	**$ 1,042,267**	**$ 1,502,164**	**$ 1,171,227**	**$ 1,480,702**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	66.70%	74.77%	71.21%	79.44%	77.73%
Covered Payroll	$ 1,432,884	$ 1,539,199	$ 1,587,554	$ 1,507,141	$ 1,588,685
Net Pension Liability as a Percentage of Covered Payroll	96.59%	67.71%	94.62%	77.71%	93.20%

Please see Notes to Required Supplementary Information.

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Schedule of Changes in Net Pension Liability: Staff, Cont.

Years ended September 30; unaudited

Staff Plan	2019	2020	2021	2022	2023
Total Pension Liability					
Service Cost	$ 226,297	$ 293,767	$ 362,723	$ 419,199	$ 430,707
Interest	525,209	576,978	653,429	719,557	796,331
Benefit Changes	(588,078)	-	-	-	-
Difference Between Actual and Expected Experience	279,208	332,572	68,899	197,405	88,641
Assumption Changes	1,142,887	-	-	-	-
Benefit Payments and Refunds	(195,528)	(179,160)	(181,061)	(212,615)	(289,187)
Net Change in Total Pension Liability	1,389,995	1,024,157	903,990	1,123,546	1,026,492
Total Pension Liability - Beginning	6,648,357	8,038,352	9,062,509	9,966,499	11,090,045
Total Pension Liability - Ending	$ 8,038,352	$ 9,062,509	$ 9,966,499	$ 11,090,045	$ 12,116,537
Plan Fiduciary Net Position					
Contributions - Member	$ 127,207	$ 124,619	$ 328,077	$ 224,122	$ 203,740
Contributions - Employer	241,316	353,767	497,821	482,800	444,763
Net Investment Income (Loss)	170,225	278,161	1,400,587	(788,986)	685,750
Benefit Payments and Refunds	(195,528)	(179,160)	(181,061)	(212,615)	(289,187)
Administrative Expense	(54,449)	(30,788)	(28,880)	(27,658)	(26,932)
Other	-	-	-	-	-
Net Change in Plan Fiduciary Net Position	$ 288,771	$ 546,599	$ 2,016,544	$ (322,337)	$ 1,018,134
Plan Fiduciary Net Position - Beginning	$ 5,167,655	$ 5,456,426	$ 6,003,025	$ 8,019,569	$ 7,697,232
Plan Fiduciary Net Position - Ending	5,456,426	6,003,025	8,019,569	7,697,232	8,715,367
Net Pension Liability Ending	**$ 2,581,926**	**$ 3,059,484**	**$ 1,946,930**	**$ 3,392,813**	**$ 3,401,170**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	67.88%	66.24%	80.47%	69.41%	71.93%
Covered Payroll	$ 1,533,139	$ 1,510,527	$ 2,061,061	$ 2,134,492	$ 2,024,822
Net Pension Liability as a Percentage of Covered Payroll	168.41%	202.54%	94.46%	158.95%	167.97%

Please see Notes to Required Supplementary Information.

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Schedule of Net Pension Liability

Years ended September 30; unaudited

Fiscal Year Ending 09/30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a Percent of Total Pension Liability	Covered Payroll	Net Pension Liability as a Percent of Covered Payroll
City Plan						
2014	$ 3,610,674,395	$ 2,081,575,247	$ 1,529,099,148	57.65%	$391,216,461	390.86%
2015	4,127,343,024	2,003,269,563	2,124,073,461	48.54%	404,507,497	525.10%
2016	5,318,307,112	2,097,716,741	3,220,590,371	39.44%	424,371,512	758.91%
2017	5,354,699,800	2,270,521,836	3,084,177,964	42.40%	447,488,158	689.22%
2018	5,422,613,892	2,324,335,575	3,098,278,317	42.86%	467,754,197	662.37%
2019	4,571,921,160	2,312,863,285	2,259,057,875	50.59%	484,410,754	466.35%
2020	4,728,026,182	2,368,160,670	2,359,865,512	50.09%	509,575,065	463.10%
2021	4,892,874,650	2,830,439,044	2,062,435,606	57.85%	523,064,436	394.30%
2022 As Restated	5,039,105,797	2,504,059,616	2,535,046,181	49.69%	539,843,582	469.59%
2023	5,103,442,085	2,604,613,403	2,498,828,682	51.04%	557,869,620	447.92%
Staff Plan						
2014	$ 4,156,464	$ 2,772,401	$ 1,384,063	66.70%	$ 1,432,884	96.59%
2015	4,130,487	3,088,220	1,042,267	74.77%	1,539,199	67.71%
2016	5,218,030	3,715,866	1,502,164	71.21%	1,587,554	94.62%
2017	5,697,981	4,526,754	1,171,227	79.44%	1,507,141	77.71%
2018	6,648,357	5,167,655	1,480,702	77.73%	1,588,685	93.20%
2019	8,038,352	5,456,426	2,581,926	67.88%	1,533,139	168.41%
2020	9,062,509	6,003,025	3,059,484	66.24%	1,510,527	202.54%
2021	9,966,499	8,019,569	1,946,930	80.47%	2,061,061	94.46%
2022	11,090,045	7,697,232	3,392,813	69.41%	2,134,492	158.95%
2023	12,116,537	8,715,367	3,401,170	71.93%	2,024,822	167.97%

Please see Notes to Required Supplementary Information.

Schedule of Actuarially Determined Employer Contributions

Years ended September 30; unaudited

Fiscal Year Ended September 30	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency (Excess)	Covered Payroll	Percentage Contributed
City Plan					
2014	$ 82,937,890	$ 78,165,049	$ 4,772,841	$391,216,461	19.98%
2015	93,562,584	80,820,598	12,741,986	404,507,497	19.98%
2016	101,339,917	84,746,991	16,592,926	424,371,512	19.97%
2017	112,185,281	89,408,134	22,777,147	447,488,158	19.98%
2018	131,766,357	93,504,064	38,262,293	467,754,197	19.99%
2019	136,167,863	113,109,911	23,057,952	484,410,754	23.35%
2020	160,159,443	124,743,976	35,415,467	509,575,065	24.48%
2021	165,706,813	128,046,174	37,660,639	523,064,436	24.48%
2022 As Restated	174,315,493	137,012,301	37,303,192	539,843,582	25.38%
2023	175,059,487	148,281,745	26,777,742	557,869,620	26.58%
Staff Plan					
2014	$ 114,917	$ 225,536	$ (110,619)	$ 1,432,884	15.74%
2015	95,276	242,270	(146,994)	1,539,199	15.74%
2016	244,007	249,881	(5,874)	1,587,554	15.74%
2017	169,101	237,224	(68,123)	1,507,141	15.74%
2018	244,499	250,059	(5,560)	1,588,685	15.74%
2019	243,462	241,316	2,146	1,533,139	15.74%
2020	353,767	353,767	-	1,510,527	23.42%
2021	497,821	497,821	-	2,061,061	24.15%
2022	482,800	482,800	-	2,134,492	22.62%
2023	444,763	444,763	-	2,024,822	21.97%

Please see Notes to Required Supplementary Information.

Schedule of Money-weighted Investment Returns

Years ended September 30; unaudited

For Years Ended 9/30	Annual Investment Returns*
2023	8.38%
2022	-8.67%
2021	22.52%
2020	4.79%
2019	2.92%
2018	6.50%
2017	12.15%
2016	8.43%
2015	-1.06%
2014	8.25%

*Annual money-weighted rate of return, net of investment fees and adjusted for the changing amounts actually invested.
The City and Staff plans are commingled for investment purposes and both plans experience the same return.
Please see notes to Required Supplementary Information.

Please see Notes to Required Supplementary Information.

*This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Required Supplementary Information

Restatement of 2022 Actuarial Information

Certain information in the preceding schedules for the City of Fort Worth 2022 data has been restated. Information in these schedules is based on actuarial determinations. Subsequent to the issuance of the September 30, 2022, combined financial statements, the actuarially determined calculations for the City of Fort Worth 2022 were updated to incorporate a 2022 contribution rate change. The below table summarizes the restatement of the City of Fort Worth 2022 actuarial information.

Fiscal Year Ended September 30	Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Percentage Contributed	NPL as a Percent of Covered Payroll
City Plan					
2022 as Reported	180,724,150	43,711,849	559,690,772	24.48%	452.94%
2022 As Restated	174,315,493	37,303,192	539,843,582	25.38%	469.59%

Notes to Required Supplementary Information

Methods and Assumptions Used in Calculations of Actuarially Determined Contributions

The actuarially determined contribution is equal to the total calculated contribution rate in the prior actuarial valuation, minus the portion expected to be covered by employee contributions, multiplied by the covered- employee payroll. City and member contribution rates are established by ordinance. Employer and member contribution rates for the staff plan are established in the administrative rules.

The assumptions and methods summarized below were adopted by the Board of Trustees on May 27, 2019, based on the experience investigation that covered the three-year period from January 1, 2016, through December 31, 2018. These assumptions first applied for actuarial valuation as of December 31, 2018, and the actuarially determined contribution for fiscal year ending September 30, 2019. Please see the table below.

As of December 31, 2022

	City Plan	Staff Plan
Valuation Date	December 31, 2022	December 31, 2022
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percentage of Payroll, 30-year closed beginning in 2018	Level Dollar, Layered
Remaining Amortization Period	26 years	30 years for new layers
Asset Valuation Method	Five-year smoothed fair value	Five-year smoothed fair value
Inflation	2.50%	2.50%
Salary Increases	3.25% - 28.25%	2.75% - 5.35%
Investment Rate of Return, Net of Investment Expenses	7.00%	7.00%
Retirement Age	Experience-based table of rates based on job classification and number of years since first retirement eligibility.	Experience-based table of rates based on either number of years since first retirement eligibility or age.
Mortality	PubG-2010 Mortality Tables for General Employees and PubS-2010 Healthy Retiree Mortality Table for Police Officers and Firefighters. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.	PubG-2010 Mortality Table. Generational mortality improvements from the year 2010 using the ultimate mortality improvement rates in the 2014-2019 MP tables.
Cost-of-Living Adjustment	A 2% cost-of-living adjustment (COLA) is assumed for all members in the Guaranteed COLA program, No COLAs are assumed for members with a Variable COLA. Timing of conditional Ad Hoc COLAs is based on an open group projection.	4.0% COLAs are assumed for members participating in the ad-hoc COLA program.
Notes	The covered-employee payroll was estimated based on the actual employer contributions received and a weighted average contribution rate.	The covered-employee payroll was estimated based on the actual employer contributions received and actual contribution rate.

Notes to Required Supplementary Information

As of December 31, 2021

	City Plan	Staff Plan
Valuation Date	December 31, 2021	December 31, 2021
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Amortization Method	Level Percentage of Payroll, 30-year closed beginning in 2018	Level Dollar, Layered
Remaining Amortization Period	27 years	30 years for new layers
Asset Valuation Method	Five-year smoothed fair value	Five-year smoothed fair value
Inflation	2.50%	2.50%
Salary Increases	3.25% - 28.25%	2.75% - 5.35%
Investment Rate of Return, Net of Investment Expenses	7.00%	7.00%
Retirement Age	Experience-based table of rates based on job classification and number of years since first retirement eligibility.	Experience-based table of rates based on either number of years since first retirement eligibility or age.
Mortality	PubG-2010 Mortality Tables for General Employees and PubS-2010 Healthy Retiree Mortality Table for Police Officers and Firefighters. Generational mortality improvements from the year 2010 using the ultimate mortality improvements rates in the 2014-2019 MP tables.	PubG-2010 Mortality Table. Generational mortality improvements from the year 2010 using the ultimate mortality improvement rates in the 2014-2019 MP tables.
Cost-of-Living Adjustment	A 2% cost-of-living adjustment (COLA) is assumed for all members in the Guaranteed COLA program, No COLAs are assumed for members with a Variable COLA. Timing of conditional Ad Hoc COLAs is based on an open group projection.	4.0% COLAs are assumed for members participating in the ad-hoc COLA program.

Other Supplementary Information

Schedule of Administrative Expenses

Years Ended September 30, 2023 and 2022

	2023	2022
Administrative Office		
Staff and Benefits	$ 2,576,418	$ 3,145,606
Contributions to Retirement Fund	445,107	483,754
Due Diligence	9,898	4,940
Medical Reviews	9,690	5,754
Insurance	178,658	177,192
Office Expense	117,366	134,872
Building Expenses	231,175	274,444
Conferences and Training	30,100	31,423
Strategic Planning	28,705	22,296
Pension Administration Hosting	263,651	300,919
Pension Administration Programming	478,727	304,222
Equipment and Supplies	172,100	128,068
Total Administrative Office	4,541,595	5,013,490
Professional Services		
Actuarial Services	82,118	130,044
Accounting and Auditing	58,550	58,550
Consulting	1,274,135	1,140,612
Legal Services	379,404	334,513
Other Consulting	165,610	105,450
Total Professional Services	1,959,817	1,769,169
Total Administrative Expenses	**$ 6,501,412**	**$ 6,782,659**

Schedule of Investment Management Fees

As of September 30

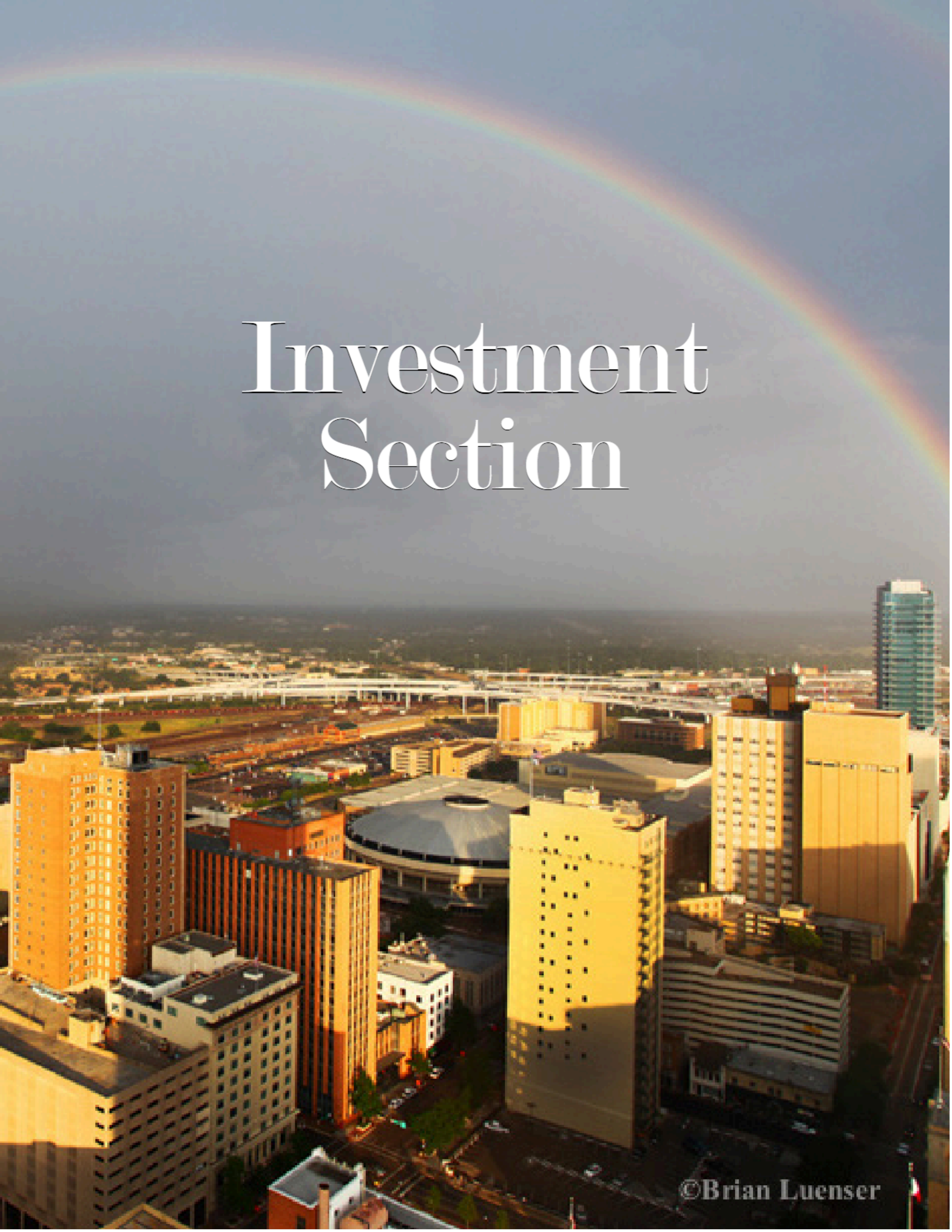
	2023	2022
Domestic Fixed Income		
Aberdeen Asset Management	$ -	$ 88,672
American Century	438,164	356,890
Garcia Hamilton	160,823	170,754
Pacific Investment Management	226,333	510,685
Total Domestic Fixed Income	825,320	1,127,001
International Fixed Income		
Loomis Sayles	192,002	198,025
Total International Fixed Income	192,002	198,025
Real Estate		
Hammes		
Heitman Core	480,477	509,149
Prologis	191,225	475,666
UBS Trumball	206,578	237,385
Total Real Estate	878,280	1,222,200
Domestic Equities		
Frontier Capital	-	5
Westwood	-	290,875
Total Domestic Equities	-	290,880
International Equities		
Franklin Templeton	-	321,577
Northern Trust	59,063	135,156
Wellington Horizons	600,437	668,326
WCM Focused	673,798	409,087
William Blair	408,930	485,665
Total International Equities	1,742,228	2,019,811
Real Return		
Harvest	173,601	240,424
Total Real Return	173,601	240,424
Alternative		
Albourne America	475	452
ERF Private Equity Program	(212,248)	(65,962)
Hamilton Lane	-	111,817
Total Alternative	(211,773)	46,307
Custody Fees		
Northern Trust	423,522	688,058
Total Custody Fees	423,522	688,058
Total Investment Expenses	**$ 4,023,180**	**$ 5,832,706**

Schedule of Professional Services

As of September 30

	2023	2022
Professional Fees		
Aksia Chicago, LLC	$ 943,177	$ 802,482
Brown, Pruitt, Wambsganss, Ferrill & Dean, PC	9,223	7,494
Cascade Investment Compliance & Verification	24,000	33,000
DLA Piper, LLP	181,452	117,895
Eide Bailly, LLP	58,550	58,550
Gabriel, Roeder, Smith & Company	82,118	130,044
Hamilton Lane Advisors, LLC	-	127,540
Ice Miller, LLP	42,037	66,344
Jackson Walker, LLP	78,049	64,500
McElvaney Public Affairs, LLC	66,000	40,213
RVK, Inc.	-	15,240
Seyfarth Shaw, LLP	68,643	-
Strategic Government Resources	26,485	-
Verus	370,958	297,917
Whitney Smith Company	9,125	7,950
Total Professional Fees	**$ 1,959,817**	**$ 1,769,169**

Investment Section



FISCAL YEAR

Market Overview

In comparison to the volatility of the previous three years, the 2023 Fiscal Year represented a return to normalcy. After the early 2020 economic shutdowns related to COVID-19, developed governments enacted a series of massive fiscal spending initiatives and central banks implemented monetary stimulus in the form of quantitative easing and interest rate cuts. These initiatives drove the recovery and growth experienced after the economic and societal disruptions related to COVID-19.

However, these efforts also resulted in significant increases in government debt levels and the excess cash circulating in the monetary system resulted in multi-decade high inflation by mid-2022. At this time, it appears that the U.S. Federal Reserve has effectively confronted this high inflation, by increasing the Fed Funds Rate from 0% to over 4.25% in 2022 and up to over 5.25% in 2023. The Fed also shifted from quantitative easing to quantitative tightening by reducing the balance sheet and removing liquidity. These rate hikes and balance sheet measures have resulted in high borrowing costs, but also a deceleration in the rate of inflation growth. The continued flow of fiscal stimulus and above trend population growth (related to immigration) has bolstered consumer spending and the labor market in the U.S. It appears the economy will navigate this period of high inflation without entering a recession. Europe and developed Asia have also been able to navigate this period with a measure of success.

Over the last four years stock and bond markets have reacted appropriately, with volatility to match the various periods of optimism and pessimism. Looking forward, there is less uncertainty. To be sure, the U.S. Treasury yield curve remains severely inverted, debt levels are elevated, and borrowing costs are elevated, making for a difficult investment environment for leveraged finance and real estate. However, with inflation levels stabilized, policymakers now have the flexibility to cut rates to support growth if economies falter. Bottom-line: compared to the beginning of fiscal year 2023, our concerns regarding inflation, economic recession, credit risk, and interest rate risk have been reduced. This normalization makes for a favorable environment for security prices.

The performance of stock and bond markets reflected this normalization with global stocks up 20.8% and U.S. bonds slightly up 0.6% during fiscal 2023. As inflation was subdued, the uncharacteristically positive correlation between stocks and bonds in 2022 began to normalize in 2023. And with liquid markets outperforming illiquid private investments, a diversified portfolio of liquid stocks and bonds alongside illiquid private investments, once again rewarded investors with solid returns.

3801 Hulen Street, Suite 101 ★ Fort Worth, Texas 76107
Phone/Fax/Text: 817.632.8900 ★ fwretirement.org

Despite fears of a global recession in 2023, the U.S. economy posted solid year-over-year growth in Real GDP: 0.7% in Q4 2022, 1.7% in Q1 2023, 2.4% in Q2, and 2.9% in Q3. With a deceleration in inflation levels, we note that real growth is accelerating.

Looking forward, a minority of economists are forecasting a recession in calendar 2024. Recession risks do remain. We previously mentioned the yield curve, but other forward-looking indicators like the ISM Manufacturing Index and the Conference Board's Leading Economic Indicators still point to economic contraction in the US. Furthermore, commercial real estate is struggling with a mismatch of supply and demand as well as the burden of debt servicing costs. However, lagging indicators, like the labor market, remain strong, and the U.S. Federal Reserve has clearly signaled that it may transition from a rate hiking cycle to a rate cutting cycle over the next one or two years. The risks to global economic growth have narrowed to 1) contagion from commercial real estate, 2) contagion from Chinese real estate weakness, and 3) geopolitics (war) in the Middle East and Eastern Europe. As a result, optimism rules the day for developed market investors and liquid stocks and bonds have continued to perform well in the early days of Fiscal Year 2024.

The Fund ended the fiscal year with a net return of 8.3%, underperforming the strategic asset allocation policy index but exceeding the Fund's target return.

With respect to the Fort Worth Employees' Retirement Fund investment program, during Fiscal Year 2023, the Fund submitted the Investment Practices and Performance Review report, which was completed by the Fund's general consultant, Verus Investments. This report is required by the Texas State Pension Review Board once every three years. The report offered a few suggestions, which Staff is implementing. The report included no significant adverse findings. Additionally, Staff has further refined the compliance program with Cascade Compliance.

With respect to returns, the Fort Worth Employees' Retirement Fund ended Fiscal Year 2023 with a balance of $2.6 billion and posted a net one-year return of 8.3%. While the one-year return exceeded the target actuarial return of 7.0%, it underperformed the strategic asset allocation policy index by 0.4% and ranked in the bottom tenth percentile compared to public pensions with assets of $1 billion or greater according to Verus. In comparison to peers, the Fund has a relatively high allocation to private market investments, which proved to be a benefit in Fiscal Year 2022, but represented a detriment to returns in Fiscal Year 2023.

For the year, the total return was primarily driven by public equities and diversified opportunities. The Fund experienced positive contributions from public equities, diversified opportunities, cash, private equity, and fixed income, which returned 18.6%, 8.2%, 6.6%, 2.9%, and 0.5%, respectively. Real assets was the only asset class that detracted, returning -5.3%, as real estate markets deteriorated.

In comparison to benchmarks, real assets and cash posted positive relative returns of 7.6% and 2.2% respectively. On a relative basis, the public equity and diversified opportunities portfolios underperformed the benchmark by -0.8% and -1.9%, respectively. All other asset classes slightly underperformed benchmarks.

Over longer time periods, the Fund has posted a three-year net return of 6.6%, a five-year net return of 5.5%, and a ten-year net return of 6.1%. The net return since inception is 8.2%. The Fund's investment returns have benefitted significantly from high returns in private equity and diversified sources of return and income from real assets and diversified opportunities.

At the end of the Fiscal 2023, the asset allocation remained in compliance with the strategic asset allocation and within ranges approved by the Board. The asset allocation reflected a 4.7% underweight to private equity offset by a 3.5% overweight to cash. Other deviations from the strategic asset allocation are within 2%.

Since inception, the Fund has a net return of 8.2%.

These tactical shifts away from the strategic asset allocation changed significantly over the year. At the beginning of Fiscal Year 2023., the Fund was significantly overweight real assets, resulting from strong performance of that asset class and underperformance in liquid markets. During the year the overweight was significantly reduced through asset sales, a rebound in liquid market performance, and underperformance in real assets. An underweight in fixed income at the beginning of the year was reduced and the Fund built overweights in cash and public equities over the course of Fiscal Year 2023. The asset allocation deviations from the target for private equity and diversified opportunities were influenced by transitory investment activities, the changes in the IPS strategic asset allocation, and a lag in the deployment of capital into these illiquid markets.

The Fund's investment policies, procedures, goals, objectives, performance of the assets, and transaction costs are regularly monitored in whole or in part by the staff, Cascade, Verus, Aksia, Northern Trust, the Investment Committee, and the Fund's Board. This includes quantitative and qualitative evaluations of vendors and investment managers that serve the Fund.

The investment performance listed above is calculated using a time-weighted rate of return methodology net of fees and based on market values and cash flows. Staff utilizes a monitoring process to compare the performance of individual managers to relevant benchmarks, the performance reports of the custodian, and the performance reports of the investment consultants. To the best of our knowledge, these performance statements are accurate and reliable.

Prepared by Derrick Dagnan, Chief Investment Officer

Investment Summary

As of September 30, 2023

Asset Class		Fair Value	Fair Value %
Public Equities	**$**	**1,132,935,715**	**43.45%**
Global Equities		336,529,522	
Domestic Large Cap		534,960,299	
International Developed		191,991,730	
Emerging Markets		69,454,164	
Fixed Income		**390,716,290**	**15.00%**
Core		138,600,981	
Core Plus		252,115,309	
Private Equity		**347,395,357**	**13.32%**
Venture Capital Private Equity		17,682,056	
Other Private Equity		329,713,301	
Diversified Opportunities		**228,838,310**	**8.78%**
ERF Hedge Funds		192,885,332	
Opportunistic Credit		35,605,213	
Public Credit		347,765	
Real Assets		**390,012,664**	**14.96%**
Core Real Estate		167,070,983	
Non Core Real Estate		188,421,145	
Other Real Assets		34,520,536	
Cash Equivalents		**117,123,550**	**4.49%**
Transitions		**347,389**	**0.00%**
Total Asset Allocation	**$**	**2,607,369,275**	**100.00%**

Reconciling Items to Statement of Net Position		
Accrued Income	$	(4,305,864)
Broker Receivables		(196,413,593)
Broker Payables		242,441,929
Securities Lending Collateral		165,031,454
Total Investments Statement of Net Position	**$**	**2,814,123,201**

Schedule of Asset Allocations and Returns

September 30, 2023

Asset Class	Long-Term Allocation Target	Actual Allocation	Investment Performance (%)*		
			1 Yr	3 Yr	5 Yr
Global Equity	42.00%	43.45%	18.61	6.13	4.71
MSCI ACWI Index			20.80	6.89	6.46
Fixed Income	16.00%	15.00%	0.52	-4.97	0.43
Bloomberg US Aggregate Index			0.64	-5.21	0.1
Diversified Opportunities	10.00%	8.78%	8.20	5.90	3.82
Diversified Opportunities Custom Index			10.07	3.34	3.36
Real Assets	13.00%	14.96%	-5.27	9.41	6.12
NCREIF ODCE Index			-12.88	6.19	4.72
Private Equity	18.00%	13.32%	2.91	22.42	15.87
Private Equity Custom Benchmark			3.00	10.71	10.82
Cash	1.00%	4.49%	6.64	2.69	2.3
90 Day T-Bill			4.47	1.7	1.72
Total Portfolio	100.00%	100.00%	8.30	6.55	5.50
Target Allocation Index			8.68	6.32	5.40

*The basis for investment return calculations: A time-weighted rate of return based on the market rate of return.

Investment Managers

Cash
Ares
Ascribe
BC Partners
Cerberus
Comvest
DE Shaw
Falcon
H.I.G.
ICG
Iguazu Investors
Indus
King Street
Luxor*
Marlin
Northern Trust Asset Management
OHA
PIMCO
Sculptor*
Southpoint
American Century
WCM
Wellington
William Blair
3i
Garcia Hamilton
Loomis Sayles
PIMCO
Advent
AEW
Altaris
American Securities Partners
Apollo
Arlington
Bay City
BC Partners
Brazos
Cinven
Clearlake
CVC
Essex Woodlands
General Catalyst
GF Capital
GGV
Gores
Green
Greenspring
Gridiron
Hellman & Friedman
High Road
Ignition
JMI
Kelso
KPS
KRG
Landmark Equity
LittleJohn
Madison Dearborn
Man AHL
NEA
Parthenon
Platinum
Providence
Riverside
Scale
TCV
TPG
Vector
Veritas
Vitruvian
Waterland
Welsh, Carson, Anderson & Stowe
Wynnchurch
American Landmark
Ascentris
Blackstone
Campus-Clarion
Energy Capital
Focus Senior Housing
Hammes
Harvest
Heitman
IPI
Liquid Realty
M&G
Prologis
Quantum
Real Estate Capital Asia Partners
Realterm
SC Capital
Stratford
UBS
WestRiver

Investment Policies Summary Statement

The Board of Trustees (Board) of the Fort Worth Employees' Retirement Fund (the Fund) has adopted an Investment Policy Statement as a framework for the investment of the Fund's assets. The purpose of the Investment Policy Statement is to assist the Board in effectively guiding, supervising, and monitoring the ongoing operations and performance of the Fund. The authority to amend that statement rests solely with the Board. The following provides a brief outline of that statement. A copy of the Investment Policy Statement in its entirety can be found on the Fund's website.

Investment Objectives

The Fund's primary investment objective is to establish a stable, diversified investment portfolio that in the long-term, will meet or exceed the Board approved assumed actuarial rate of return in order to maintain or improve the funded status of the Fund and provide sufficient liquidity to timely pay benefits. The Trustees adopted the following key investment objectives:

• The Boards' investment objective is to achieve an average long-term total rate of return which satisfies the actuarial assumed rate of return. The target actuarial rate of return is set at 7.00% including an assumed inflation rate of 2.50% and a target actuarial real rate of return of 4.50%.
• The Fund shall prudently manage overall risk through diversification, by establishing and updating a strategic asset allocation using an asset allocation model that balances return expectations and risk exposures related to institutionally investible geographies, asset classes, and investment strategies.
• The Fund shall periodically rebalance the total assets to manage active risk relative to the strategic asset allocation and various benchmarks, as well as liquidity. Rebalancing activities shall consider both the impact on the Fund and transaction cost of the activity.
• The investment activities of the Fund shall be executed in a cost-effective manner.
Board of Trustees

The Board is primarily responsible for establishing the long-term vision of the Fund, oversight, and adopting an Investment Policy Statement (IPS). The IPS is intended to establish prudent investment criteria, set clear objectives, and guide selection of the asset classes and the strategic asset allocation. Management of the Fund assets must be done solely in the financial interest of the beneficiaries of the Fund. It also must be done in a manner consistent with Section 802.2203 of the Texas Government Code, the Fund's Ethics Policy, the ethical guidelines of the CFA Institute, and all applicable domestic and international securities laws, rules, and regulations. The Board, to the extent permitted by Texas law, delegates the operational, program management, and administration of the Fund's investment program to the Executive Director (ED) and Chief Information Officer (CIO). The Board delegates the review and approval of the Investment Implementation Procedures (IIP) employed by the Fund staff to the Investment Committee. At least annually, the Board reviews the actions of the ED and CIO in order to monitor performance and compliance with the terms of delegation, the IPS, and other policies and procedures.

Investment Committee

The Investment Committee is established by the Board and is delegated the responsibility to oversee and provide commentary and recommendations to the Board regarding investment activities, portfolio implementation, and sustainable management of the Fund's investment processes. The Investment Committee assists in development and provides recommendations for both the IPS and IIP. The Investment Committee reviews and provides feedback on significant preliminary actions related to service providers. The committee also evaluates the investment performance, including selected asset classes and external managers, in detail, using reports supplied by the ED, CIO, investment staff, and service providers. At least annually, the Investment Committee reviews the appropriateness of the investment activities delegated to the CIO, including performance of service providers, operating expenses and budgets, asset allocation changes and the rationale for tactical asset allocation positioning.

Executive Director (ED)

The ED assumes executive responsibility and authority, as delegated, for all administrative, operational, and other aspects of managing the Fund. The ED monitors compliance of the investment program with the IPS, the Ethics Policy, and any laws, rules, or regulations that may apply. Additionally, the ED reviews and authorizes the use of service providers and employment of Investment Staff. The ED further evaluates the investment performance, processes and procedures through reports provided by the CIO, investment staff, and service providers. Finally, the ED takes emergency, investment-related actions that are deemed essential to protect assets of the FWERF, with such actions being promptly reported to the Executive Committee of the Board.

Chief Investment Officer (CIO)

The CIO assumes executive responsibility and authority, as delegated for the investment operations, ongoing evaluation, and management of the assets of the Fund. The CIO ensures compliance with the IPS, IIP, and any laws, rules, or regulations that may apply while operating ethically as a fiduciary with a duty of loyalty, investing and managing Fund assets solely in the financial interest of members and beneficiaries. The CIO collaborates with the ED, Investment Committee, and Board on development and implementation of investment strategies, procedures, the IPS and IIP. The CIO establishes sourcing approaches for the efficient review, selection or termination, and negotiation of contracts with investment related Service Providers, including but not limited to, External Investment Managers, Discretionary External Investment Advisors, External Investment Advisors, General Consultant, and other Service Providers related to the investment program. The CIO periodically reports to the Board, Investment Committee, and Executive Director on administrative, organizational, investment activities, and the outcome of fully executed decisions related to investment actions or service providers.

Compliance

The Fund's General Counsel, in consultation with the ED and CIO, shall maintain a compliance effort, which can be performed by internal resources and/or an external service provider. The compliance function shall maintain a degree of separation from the key investment decision-makers to effectively operate as an unbiased third-party observer with the authority to initiate reports and recommend actions to the ED, Investment Committee and Board, when deemed appropriate. The compliance function will maintain regulatory knowledge and assess investment program adherence and risk related to laws, rules, and regulations. These individuals also will perform an assessment of the Fund's compliance with relevant laws, rules, and regulations, and prepare quarterly and annual reports documenting adherence to policies and procedures.

Asset Allocation

The Fund's asset allocation policy is intended to reflect and be consistent with the return objective and risk tolerance expressed by the Fund. It is designed to provide the highest probability of meeting or exceeding the Fund's long-term objectives at a level of risk acceptable to the Board. The Board and Investment Committee have reviewed the risk, return, liquidity, and cost characteristics of a wide range of asset allocation approaches (conservative to aggressive). Based on input from the CIO, investment staff, and General Consultant, the Board establishes a strategic asset allocation target and acceptable asset class ranges for investment of the Total Assets. The Board recognizes that market events or other circumstances may dictate that investing above or below the target allocation is desired.

Rebalancing

Because the asset classes do not move in concert, allocation deviations will occur through normal market activity. The CIO and investment staff should evaluate the asset classes, risk exposures, and return opportunities at least quarterly, and rebalance the portfolio to the strategic asset allocation target or an alternative tactical asset allocation within defined ranges. The CIO should evaluate the impact of rebalancing, along with the transaction cost of rebalancing and any specific market or timing factors that may influence the outcome of trading activity. This evaluation may suggest the planned rebalancing activity is undesired.

Portfolios that drift from the strategic asset allocation target and tactical asset allocation adjustments represent an active risk compared to the strategic asset allocation target; therefore, they should be based on a specific investment thesis or rationale that is communicated to the Investment Committee. Tactical asset allocation shifts should remain within allowable asset class ranges. Asset class exposures that drift outside of the asset class ranges should be rebalanced within the stated range prior to the end of a quarter.

Schedule of Top Ten Investments

*As of September 30, 2023**

Name of Investment	Fair Value	Percent of Portfolio
Northern Trust Collective All Country World Investable	$ 336,529,522	14.26%
Vanguard Index FDS Total Stock Market ETF	152,840,040	6.48%
Vanguard Value ETF	128,105,798	5.43%
Northern Trust Collective Russell 1000 Growth Index Fund	109,274,058	4.63%
Vaneck Morningstar Wide Moat ETF	56,771,094	2.41%
William Blair Emerging Leaders Growth CIT Fund	51,459,874	2.18%
Iguazu Investors (Cayman) LP	51,401,122	2.18%
Heitman America Real Estate Trust LP FD	47,752,460	2.02%
Realterm Logistics Income Fund, LP	43,542,234	1.85%
American Landmark Fund III, LP	38,255,574	1.62%

*A complete list of the Fund's holdings is available at the Fund's office by appointment.

Schedule of Investment Management, Performance, and Brokers' Fees by Asset Class

For the Fiscal Year Ended September 30, 2023

Asset Class	Fair Value Assets Under Management	Fees Paid from the Pension Trust Fund: Management Fees	Fees Paid from the Pension Trust Fund: Performance Fees	Fees Netted Against Returns: Brokers Fees	Fees Netted Against Returns: Management Fees	Fees Netted Against Returns: Performance Fees/Carried Interest	Total Fees Direct and Indirect
Public Equity	$ 1,132,935,715	$ 1,742,228	$ -	$ 129,542	$ 216,676	$ -	$ 2,088,446
Fixed Income	390,716,290	1,017,322	-	8,161	89,892	-	1,115,375
Private Equity	347,395,357	(212,248)	-	-	4,679,180	3,945,538	8,412,470
Diversified Opportunties	228,838,310	475	-	-	3,577,894	5,074,364	8,652,733
Real Assets	390,012,664	1,051,881	-	19,593	3,193,276	2,421,363	6,686,113
Cash Equivelents	117,123,550	-	-	-	-	-	-
Transitions	347,389	-	-	-	-	-	-
Totals	$ 2,607,369,275	$ 3,599,658	$ -	$ 157,296	$ 11,756,918	$ 11,441,265	$ 26,955,137

Reconciling Items to Statrement of Net Position	
Accrued Income	$ (4,305,864)
Broker Receivables	(196,413,593)
Broker Payables	242,441,929
Securities Lending Collateral	165,031,454
Statement of Net Position	**$ 2,814,123,201**

Total Investment Expenses

Investment Services	
Total Direct and Indirect Fees	26,955,137
Custodial	423,522
Investment Consulting	1,274,135
Legal	250,096
Total Investment Expenses	**$ 28,902,890**

* Diversified Opportunites include hedge funds, private credit and public credit.

Schedule of Brokers' Fees

As of September 30, 2023

Broker Name	Number of Shares	Commission Paid	Commission per Share
Northern Trust Securities, Inc.	3,719,892	$ 74,398	$ 0.02
Morgan Stanley And Co., LLC	967,913,234	7,541	0.00
Merrill Lynch International Limited	48,141,158,266	7,237	0.00
CLSA Limited	7,593,817	6,673	0.00
B. Riley And Co., LLC	186,200	5,586	0.03
Wells Fargo Bank Minnesota NA	3,466,321	4,485	0.00
J.P. Morgan Securities PLC	2,239,880	3,924	0.00
Jefferies LLC	15,170,215	3,292	0.00
Exane S.A.	238,107	3,285	0.01
Daiwa Capital Markets America Inc.	2,181,592	2,869	0.00
Goldman, Sachs And Co.	181,332,390	2,767	0.00
RBC Capital Markets, LLC	21,236,288	2,181	0.00
UBS Securities Asia Limited	484,373	2,148	0.00
Liquidnet Europe Limited	155,670	2,033	0.01
Barclays Capital	47,393,321	1,964	0.00
UBS AG	22,319	1,704	0.08
Joh. Berenberg,Gossler Und Co.Kg	26,723	1,704	0.06
Citigroup Global Markets Europe AG	106,924	1,358	0.01
Smbc Nikko Securities America, Inc	10,260	1,314	0.13
Parel	8,885	1,251	0.14
Caceis Bank France	4,471	1,234	0.28
Pershing Securities Limited	36,595	1,085	0.03
Macquarie Capital Limited	23,215	974	0.04
Instinet Europe Limited	38,953	964	0.02
Sanford C. Bernstein And Co., LLC	140,989	837	0.01
JP Morgan Securities Australia Ltd	3,358	823	0.25
Citigroup Global Markets Limited	642,111	817	0.00
UBS AG Stamford Branch	2,950,002	761	0.00
UBS AG London Branch	85,449	759	0.01
JP Morgan Securities (Asia Pacific)	140,514	702	0.00
Carnegie Investment Bank AB	2,374	652	0.27
Instinet Investment Services Limited	21,512	645	0.03
Liquidnet Inc.	54,672	547	0.01
Citigroup Global Markets Inc.	105,457,497	509	0.00
Sanford C. Bernstein Ltd	10,322	504	0.05
J.P. Morgan Securities LLC	264,881,427	491	0.00
Credit Lyonnais Secs(Asia) Taiwan	133,000	463	0.00
Bank Of America Corporation	4,003,998	433	0.00
Cowen and Company LLC	12,940	388	0.03
Various Brokers	4,094,116,710	5,994	0.00
Total	**53,867,404,786**	**$ 157,296**	**$ 0.00**

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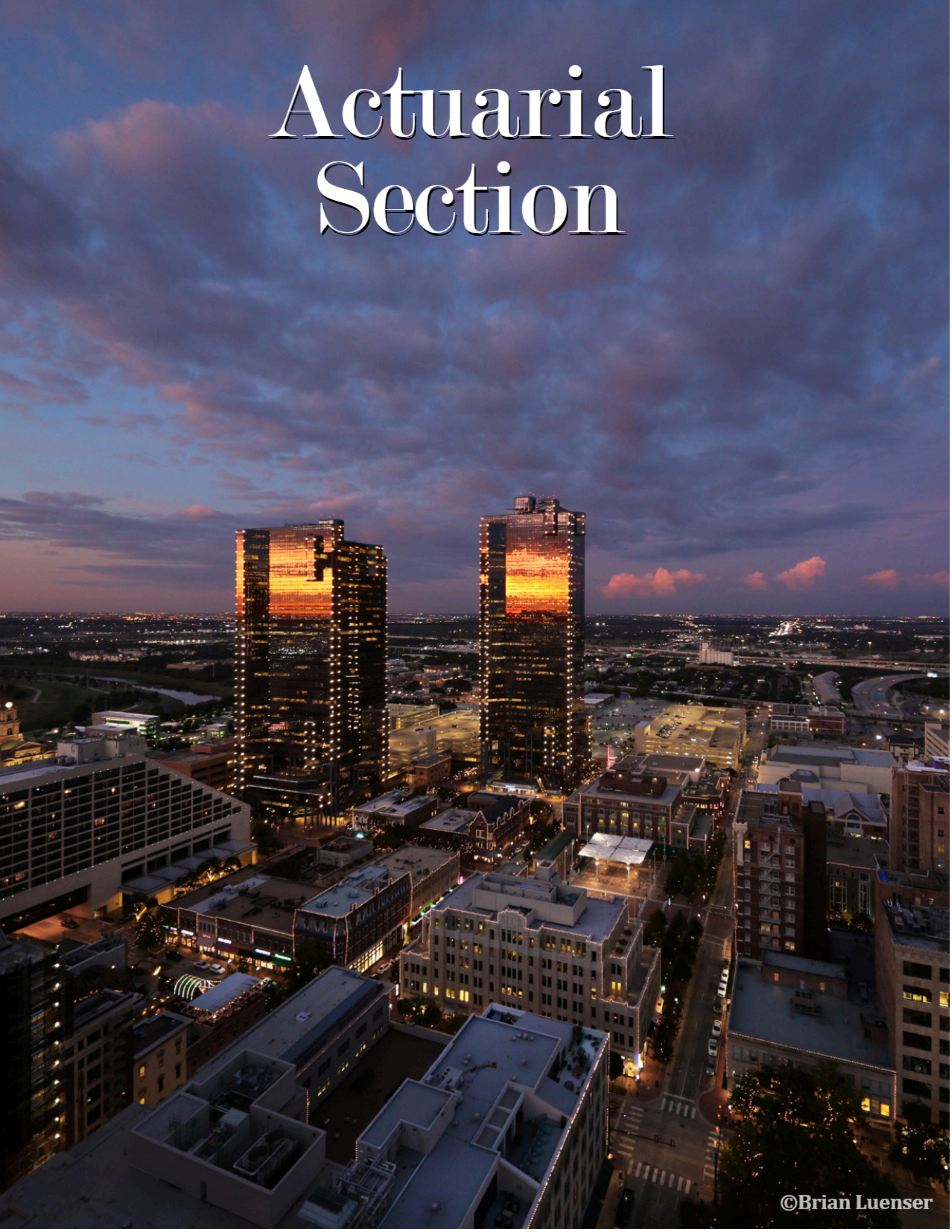
Actuarial
Section
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December 2, 2023

Board of Trustees
Employees' Retirement Fund of the City of Fort Worth
3801 Hulen Street, Suite 101
Fort Worth, TX 76107

Subject: Actuarial Valuations as of December 31, 2022

Members of the Board,

At the request of the Employees' Retirement Fund of the City of Fort Worth (FWERF), Gabriel Roeder Smith & Company (GRS) has performed the actuarial valuations of the Employees' Retirement Fund of the City of Fort Worth (City Plan) and the City of Fort Worth Employees' Retirement Fund Staff Retirement Plan (Staff Plan). The information in the Actuarial Section is based on our annual actuarial valuation reports for the two plans, with the most recent valuations conducted as of December 31, 2022, and is intended to be used in conjunction with the full reports. FWERF is a pension trust fund of the City of Fort Worth and a defined benefit pension plan covering employees of the City of Fort Worth and employees of the Employees' Retirement Fund of the City of Fort Worth.

This letter and the schedules listed below represent GRS' certification of the funded status as required for the financial report for the fiscal year ended September 30, 2023, for the City Plan and the Staff Plan.

In the Financial Section, GRS prepared the following:

- Sensitivity of the Net Pension Liability to Changes in Discount Rate,
- Schedule of Changes in the Net Pension Liability, and
- Schedule of Actuarially Determined Employer Contributions.

In the Actuarial Section, GRS prepared the following:

- Executive Summary,
- Schedule of Funding Progress,
- Development of Actuarial Value of Assets,
- Actuarial Gain or Loss,
- Analysis of Normal Cost by Component,
- Retirees, Beneficiaries, and Disabled Participants Added to and Removed from Rolls,
- Solvency Test, and
- Distribution of Active Members by Age and Years of Service.

5605 North MacArthur Boulevard | Suite 870 | Irving, Texas 75038-2631

Data

The valuation was based upon information as of December 31, 2022, furnished by FWERF staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by FWERF staff.

Actuarial Assumptions and Methods

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on March 27, 2019 based on the experience investigation that covered the three-year period from January 1, 2016 through December 31, 2018. In accordance with the Administrative Rules of FWERF, all actuarial assumptions and methodologies must be adopted by the Board upon the advice of the actuary. We believe the assumptions for the funding valuation are internally consistent and are reasonable, based on the actual experience of FWERF, and meet the parameters of the Actuarial Standards of Practice issued by the Actuarial Standards Board. The actuarial assumptions and methods used to develop the *Schedules of Changes in the Net Pension Liability* and the *Schedule of Actuarially Determined Employer Contributions*, noted above, also meet the parameters set forth in the disclosures presented in the Financial Section by Governmental Accounting Standards Board Statement No. 67.

The actuarial accrued liability and corresponding normal cost rate for the City Plan are based on the Entry Age Normal actuarial cost method where the benefits are based on the benefits payable to each individual active member. The same actuarial cost method was selected for financial reporting purposes.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. A review of the impact of a different set of assumptions on the funded status of the City Plan and the Staff Plan are outside the scope of this actuarial valuation.

The current actuarial assumptions are outlined in the section of the ACFR titled "Actuarial Assumptions and Methods."

Benefits

There were no changes to the plan provisions of the City Plan and the Staff Plan during the past year. The current benefit provisions are outlined in the section of the ACFR titled "Summary of Key Provisions."

Funding Policy and Objectives – City Plan

As outlined in the City Code and the Funding Policy adopted by the Board, the funding objective of the City Plan is to fund the sum of the normal cost, the assumed administrative expenses, and an amount necessary to eliminate the UAAL over a closed 30-year period beginning on December 31, 2018 with the goal of eliminating the UAAL by December 31, 2048. Contribution rates should be established which, over time, will remain level as a percent of payroll. As a result, the Actuarially Determined Employer Contribution (ADEC) is based on a closed 30-year amortization of the UAAL as of December 31, 2018 (26 years remaining as of December 31, 2022) and is being amortized as a level percentage of payroll. This ADEC will be equal to the City's portion of the total contributions that are necessary to meet this funding objective and this ADEC is appropriate for use by the Board to monitor progress towards these funding goals.

FWERF receives member contributions of 9.35% of the Member Contributory Payroll for General members, 13.13% of the Member Contributory Payroll for Police members, and 12.05% of the Member Contributory Payroll for Fire members. Based on the current composition of the active plan population, the average member rate is approximately 11.14% of the Member Contributory Payroll.

The City contributes 24.24% of the City Contributory Payroll for General and Fire members and 24.96% of the City Contributory Payroll for Police members to FWERF, as set by City ordinance. Based on the current composition of the active plan population, the average City rate is approximately 24.48% of the City Contributory Payroll. The ADEC for 2023 is 31.59% of City Contributory Payroll, or $175.7 million, which exceeds the expected City contribution by 7.11% of City Contributory Payroll. As a result, the stated funding objective is not being met.

City Contributory Payroll includes unscheduled overtime for Tier 1 members and does not include unscheduled overtime for Tier 2 members.

Based on the current statutory contribution rates, the funding period on the valuation date, excluding projected Risk-Sharing Contributions and Ad Hoc COLAs, is 55 years. Incorporating projected Risk-Sharing Contributions and Ad Hoc COLAs, the funding period is 36 years. The funding period incorporating the projected Risk-Sharing Contributions and Ad Hoc COLAs is the most reasonable estimate for the time until the UAAL is eliminated.

The City Code specifically defines an actuarially determined contribution (ADC) as a contribution "based on a closed 30-year funding of unfunded liabilities." In this context, the ADC is the sum of the anticipated member contributions and the City contributions. Since the City and the members contribute on a different payroll basis, it would not be accurate to add the City and member contribution <u>rates</u> together. As a result, the actuarial valuation will focus on the Actuarially Determined <u>Employer</u> Contribution (ADEC) for purposes of reporting required contribution <u>rates</u> so it is clear which payroll basis is being considered. However, the ADEC will simply be determined as the projected ADC less the anticipated member contributions.

The unfunded actuarial accrued liability (UAAL) of the City Plan increased from $2.20 billion as of December 31, 2021 to $2.26 billion as of December 31, 2022. The UAAL was expected to increase to $2.24 billion as of December 31, 2022 but the plan incurred a net experience loss of $20 million which increased the UAAL to $2.26 billion. The primary sources of the experience changes were a $25.7 million loss on the actuarial valuation of assets and a $5.4 million gain on liabilities.

Additionally, the funded ratio of the City Plan—actuarial value of assets divided by the actuarial accrued liability—decreased from 55.0% to 54.8% as of December 31, 2022. The funded status is one of many metrics used to show trends and develop future expectations about the health of a retirement system. The funded status measure itself is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations or assessing the need for or the amount of future contributions since it does not reflect normal cost contributions, the timing of amortization payments, or future experience other than expected.

Funding Policy and Objectives – Staff Plan

On August 28, 2019, the FWERF Board of Trustees adopted the current funding policy for the Staff Plan. Under the current funding policy, the Total Funding Policy Contribution is determined as the sum of the normal cost, the assumed administrative expenses, and a structured payment towards eliminating the unfunded actuarial accrued liability (UAAL). The payments to the UAAL will be based on layered amortization where each layer is based on a 30-year level-dollar amortization schedule. The Actuarially Determined Employer Contribution (ADEC) is the Total Funding Policy Contribution minus the expected member contributions. The current funding policy directs the employer to contribute the ADEC to the Staff Plan each year.

The Staff Plan receives member contributions of 10.50% of payroll and employer contributions equal to the ADEC, as set by the current funding policy for the Staff Plan. The ADEC for 2023 is $474,278. On an actuarial value of assets basis, the current funding policy should be sufficient to first amortize the UAAL in 27 years.

The unfunded actuarial accrued liability (UAAL) of the Staff Plan increased from $2,526,442 as of December 31, 2021 to $2,610,417 as of December 31, 2022. The funded ratio of the Staff Plan—actuarial value of assets divided by the actuarial accrued liability—increased from 75.6% to 77.1% as of December 31, 2022. The funded status is one of many metrics used to show trends and develop future expectations about the health of a retirement system. The funded status measure itself is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations or assessing the need for or the amount of future contributions since it does not reflect normal cost contributions, the timing of amortization payments, or future experience other than expected.

Certification

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Governmental Accounting Standards Board, the Internal Revenue Code and ERISA.

The signing actuaries are independent of the plan sponsor. Mr. Newton is an Enrolled Actuary, a Fellow of the Society of Actuaries, and a Member of the American Academy of Actuaries. Mr. Detweiler is an Enrolled Actuary, an Associate of the Society of Actuaries, and a Member of the American Academy of Actuaries. They meet the Qualification Standards of the American Academy of Actuaries. Finally, each of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

Joseph Newton, FSA, EA, MAAA	Bill Detweiler, ASA, EA, FCA, MAAA
Pension Market Lead and Actuary	Consultant and Actuary

Executive Summary

For years ended December 31

	City Plan		Staff Plan	
	2022	2021	2022	2021
Membership				
• Number of				
- Active members	6,656	6,626	22	19
- Retirees and beneficiaries	5,037	4,906	5	4
- Inactive, vested	491	437	7	6
- Inactive, nonvested	1,247	1,051	3	3
- Total	13,431	13,020	37	32
• Member Contributory Payroll	$ 571,796,707	$ 548,574,824	$ 2,139,526	$ 2,115,114
• Employer Contributory Payroll	556,072,446	534,927,039	2,139,526	2,115,114
Effective Contribution Rates				
• Members (after phase-in)	11.14%	11.14%	10.50%	10.50%
• Employer	24.48%	24.48%	22.17%	21.53%
Actuarially Determined Employer Contribution	$ 175,663,286	$ 167,860,105	$ 474,278	$ 455,471
• % of Employer Contributory Payroll	31.59%	31.38%	22.17%	21.53%
• Amortization Period	26 years	27 Years	27 years	27 years
Assets				
• Fair value (FVA)	$ 2,576,294,075	$ 2,912,495,617	$ 8,295,941	$ 8,518,005
• Actuarial value (AVA)	2,740,773,791	$ 2,692,751,013	$ 8,787,499	$ 7,848,613
• Return on fair value	-7.9%	15.8%	-7.7%	15.7%
• Return on actuarial value	6.0%	9.5%	6.1%	10.0%
Actuarial Information on AVA (smoothed)				
• Normal cost % (exclude admin)	15.86%	15.89%	21.31%	20.98%
• Total normal cost	$ 90,686,958	$ 87,168,540	$ 455,933	$ 443,751
• Actuarial accrued liability	4,998,115,041	4,891,936,665	$ 11,397,916	$ 10,375,055
• Unfunded actuarial accrued liability (UAAL)	2,257,341,250	2,199,185,652	$ 2,610,417	$ 2,526,442
• Funded ratio	54.8%	55.0%	77.1%	75.6%
Actuarial Information on FVA				
• Unfunded actuarial accrued liability (UAAL)	$ 2,421,820,966	$ 1,979,441,048	$ 3,101,975	$ 1,857,050
• Funded ratio	51.5%	59.5%	72.8%	82.1%

Actuarial Assumptions and Methods: City Plan

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on March 27, 2019 based on the experience investigation that covered the three-year period from January 1, 2016 through December 31, 2018. In accordance with the Administrative Rules of FWERF, all actuarial assumptions and methodologies must be adopted by the Board upon the advice of the Actuary.

I. Valuation Date

The valuation date is December 31 of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation is used to determine the adequacy of the current City contribution rate, describe the current financial condition of FWERF, analyze changes in the condition of FWERF, and provide various summaries of the data.

The actuarial valuation uses the Entry Age Normal (EAN) actuarial cost method. Under this method, the first step is to determine the contribution rate (level as a percentage of pay) required to provide the benefits to each member, or the normal cost rate. The normal cost rate consists of two pieces: (i) the member's contribution rate, and (ii) the remaining portion of the normal cost rate which is the employer's normal cost rate. Further, the total normal cost was determined using the "replacement life" application of EAN where the normal cost is based on each member's current benefit structure as though it has always been in place.

The Unfunded Actuarial Accrued Liability (UAAL) is the liability for future benefits which is in excess of (i) the actuarial value of assets, and (ii) the present value of future normal costs. The employer contribution provided in excess of the employer normal cost is applied to amortize the UAAL.

The projected funded status and the ADEC are calculated based on the assumption that: (a) future market earnings, net of investment-related expenses, will equal 7.00% per year, (b) there will be no liability gains/losses or changes in assumptions, (c) active members who leave employment will be replaced by new entrants each year such that the Member Contributory Payroll grows at the same rate as the payroll growth assumption, and (d) contributions will remain the same percentage of payroll as described in the Appendix titled Summary of Plan Provisions.

The Entry Age actuarial cost method is an "immediate gain" method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment returns in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continuing to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). In no event will this amount exceed 120% of market value or be less than 80% of market value.

IV. Actuarial Assumptions

Investment Return: 7.00% per year, net of investment-related expenses (composed of an assumed 2.50% inflation rate and a 4.50% real rate of return)

Mortality Decrements:
Pre-retirement
PubG-2010 Employee Mortality Table for General Employees and PubS-2010 Employee Mortality Table for Police Officers and Firefighters. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables.

Healthy Annuitants
PubG-2010 Healthy Retiree Mortality Table for General Employees and PubS-2010 Healthy Retiree Mortality Table for Police Officers and Firefighters. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables. The mortality for all surviving beneficiaries will be based on the PubG-2010 Healthy Retiree Mortality Table.

Disabled Annuitants
PubG-2010 Disability Mortality Table for General Employees and PubS-2010 Disability Mortality Table for Police Officers and Firefighters. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables.

In Line of Duty Death
The percentage of pre-retirement deaths assumed to be in the line of duty are:
General Employees: 0%
Police Officers: 10%
Firefighters: 10%

Service Retirement Decrements:

Members Who Reach 80 Points Before Age 65
The following rates reflect the member's expected departure from active service and are applied based on years since first becoming eligible for Normal Retirement:

Year of Eligibiility	General Employees	Police Officers	Firefighters
1st	30%	30%	30%
2nd	15	15	15
3rd	20	20	20
4th	25	25	25
5th	25	25	25
6th	35	35	35
7th	35	35	35
8th	35	35	35
9th	35	35	35
10th	100	100	100

Tier II General Employees who reach 80 points (age plus years of eligibility service) prior to age 55 will have their retirement rate increased by 20% in their first year of eligibility.

Members Who Do Not Reach 80 Points Before Age 65
The following rates reflect the member's expected departure from active service and are applied based on the member's age:

Age	General Employees	Police Officers	Firefighters
65-69	27.5%	100%	100%
70+	100	100	100

Early (Reduced) Retirement
Police Officers and Firefighters have zero assumed probability of retiring prior to eligibility for Normal (Unreduced) Retirement. The age-based rates at right apply for General Employees:

Age	General Employees
50-56	1.5%
57-58	2.5
59-61	3.5
62	8.0
63-34	2.5

Deferred Retirement Option Program (DROP)
Every member who reaches Normal (Unreduced) Retirement eligibility prior to age 65 is assumed to enter DROP, leave active service in accordance with the assumed retirement rates, and have participated in DROP for the maximum possible period upon departure from active service. Members are assumed to take an immediate distribution of their entire DROP balance at retirement.

Inactive Vested Participants
Members that terminate with a vested benefit are assumed to choose the most valuable option available to them at the time of termination: withdrawal of contributions or deferred annuity. Dependents of vested members that die prior to reaching Normal Retirement are assumed to elect a withdrawal of contributions.

Disability Retirement Decrements:
Disability Rates
Rates for males and females at selected ages are shown at right:

Age	Rate
20	0.005%
25	0.006
30	0.009
35	0.013
40	0.018
45	0.027
50	0.044
55	0.076
60	0.100

In Line of Duty Disability
The percentage of disability retirements assumed
to be in the line of duty are:
General Employees: 0%
Police Officers: 40%
Firefighters: 15%

Termination Decrements for Reasons Other Than Death or Retirement:
Withdrawal Rates
The following service-based rates apply:

Years of Service	General Employees	Police Officers	Firefighters
0	22.0%	7.0%	3%
1	15	2.0	0.5
2	14	1.8	0.5
3	11	1.6	0.5
4	9.0	1.5	0.5
5	**See age-based termination rates after five years of employment.**	1.4	0.5
6		1.3	0.5
7		1.2	0.5
8		1.1	0.5
9-11		1.0	0.5
12-16		1.0	0.4
17+		0.6	0.4

After the first five years of employment, age-based rates apply as shown at right for General Employees:

All rates of termination are zero for members eligible for Normal Retirement.

Age	Rate
25-29	11.5%
30-34	7.5
35-39	6.0
40-44	5.0
45-49	4.5
50-54	3.2
55-59	2.3
60-64	2.0

Salary Increases: Increases are assumed to occur at the beginning of the valuation year and vary by employee group. Salary increases include an underlying inflation component of 2.50% and a productivity component of 0.75%.

Years of Service	General Employees	Police Officers	Firefighters
0	5.85%	28.25%	18.25%
1	5.65	18.25	15.25
2	5.45	8.25	8.25
3	5.25	8.25	9.75
4	5.05	8.25	5.75
5	4.85	5.75	5.75
6	4.65	4.50	3.25
7	4.45	4.50	3.25
8	4.25	4.50	4.75
9	4.05	4.50	4.75
10	3.85	4.50	3.25
11	3.65	4.50	3.25
12	3.45	4.50	3.25
13	3.25	4.50	4.75
14	3.25	5.75	4.75
15	3.25	5.75	3.25
16	3.25	5.75	3.25
17	3.25	5.75	3.25
18	3.25	4.50	3.25
19+	3.25	3.25	3.25

Valuation Payroll is the expected Regular Earnings for the calendar year following the valuation date. It is generally based on the actual pay for the prior year and increased with one year of expected salary increase.

Overtime Pay: Pay for Blue Service benefits for the upcoming year is based on the Valuation Payroll and increased by the following loads to account for unscheduled overtime pay:
General Employees: 3.50%
Police Officers: 7.00%
Firefighters: 18.00%

Average Earnings Overtime Load: Blue Service benefits are loaded by the following percentages to account for higher than usual overtime worked during the final average earnings period:
General Employees: 0.00%
Police Officers: 2.00%
Firefighters: 6.00%

Sick Leave Service Conversions: Retirement and terminated vested benefits are loaded by the following percentages to account for additional service accrued for unused sick and major medical leave:

General Employees:	3.75%
Police Officers:	2.00%
Firefighters:	2.50%

Due to the elimination of future accruals of excess sick leave used toward service and FAC at retirement, these load percentages are phased out for each individual member over a 20-year period based on their service as of December 31, 2018.

Cost-of-Living Adjustments (COLA): Members who have the Guaranteed 2% COLA are assumed to receive a 2% increase of their base pension amount. The open group projection associated with this valuation incorporates the provisions of the Conditional Ad Hoc COLA and the liability associated with future expected Conditional Ad Hoc COLAs.

Administrative Expenses: $6,600,000 for 2023. This amount is reviewed annually based on input from FWERF staff.

Payroll Growth: Member Contributory Payroll is assumed to grow at 3.00% per year. Future City Contributory Payroll incorporates the expected transition of the City contributing on Earnings with Overtime for Tier I members to the City contributing on Regular Earnings for Tier II members. As a result, the City Contributory Payroll is expected to increase by approximately 2.8% over the next 30 years.

Marital Assumptions: 80% of male members and 60% of female members are assumed to be married. Male member is assumed to be four years older than female beneficiary; and female member is assumed to be the same age as male beneficiary.

Decrement Timing: All decrements – mortality, service retirement, disability retirement, and termination of employment for reasons other than death or retirement – are assumed to occur at the middle of the valuation year.

Census Data and Assets
• The valuation was based on members of FWERF as of the actuarial valuation date and does not take into account future members.
• All census data was supplied by FWERF and was subject to reasonable consistency checks.
• There were data elements that were modified for some members as part of the valuation in order to make the data complete. However, the number of missing data items was immaterial.
• Asset data was supplied by FWERF.

Actuarial Model: This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation.

Actuarial Assumptions and Methods: Staff Plan

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on March 27, 2019 based on the experience investigation that covered the three-year period from January 1, 2016 through December 31, 2018.

I. Valuation Date

The valuation date is December 31 of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation is used to determine the employer contributions, describe the current financial condition of the Staff Plan, analyze changes in the condition of the Staff Plan, and provide various summaries of the data.

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the first step is to determine the contribution rate (level as a percentage of pay) required to provide the benefits to each member, or the normal cost rate. The normal cost rate consists of two pieces: (i) the member's contribution rate, and (ii) the remaining portion of the normal cost rate which is the employer's normal cost rate. The total normal cost rate is based on the plan provisions that apply to each individual member.

The Unfunded Actuarial Accrued Liability (UAAL) is the liability for future benefits which is in excess of (i) the actuarial value of assets, and (ii) the present value of future normal costs. The employer contribution provided in excess of the employer normal cost is applied to amortize the UAAL.

The funding period is the earliest date that the UAAL is expected to be less than or equal to zero based on the UAAL amortization schedule.

The Entry Age actuarial cost method is an "immediate gain" method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment returns in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continuing to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). In no event will this amount exceed 120% of market value or be less than 80% of market value.

IV. Actuarial Assumptions

Investment Return: 7.00% per year, net of investment-related expenses (composed of an assumed 2.50% inflation rate and a 4.50% real rate of return)

Mortality Decrements:
Pre-retirement
PubG-2010 Employee Mortality Table. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables.

Healthy Annuitants
PubG-2010 Healthy Retiree Mortality Table. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables.

Disabled Annuitants
PubG-2010 Disability Mortality Table. Generational mortality improvements projected from the year 2010 using the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables.

In Line of Duty Death
0% of pre-retirement deaths are assumed to be in the line of duty.

Service Retirement Decrements:
Members Who Reach 80 Points by Age 65
The rates at right reflect the members' expected departure from active service and are applied based on years since first becoming eligible for Normal Retirement:

Year of Eligibiility	General Employees
1st	30%
2nd	15
3rd	20
4th	25
5th	25
6th	35
7th	35
8th	35
9th	35
10th	100

Upon reaching age 70, all eligible members are assumed to retire even if they are less than 10 years past first eligibility for Normal Retirement.

Employees hired on or after September 30, 2019 who reach 80 points (age plus years of eligibility service) prior to age 55 will have their retirement rate increased by 20% in their first year of eligibility.

Members Who Do Not Reach 80 Points by Age 65
The rates at right reflect the members' expected departure from active service and are applied based on the member's age:

Age	Rate
65-69	27.5%
70+	100

Early (Reduced) Retirement
Members have zero assumed probability of retiring prior to eligibility for Normal (Unreduced) Retirement.

Deferred Retirement Option Program (DROP)
Every member who reaches Normal (Unreduced) Retirement eligibility prior to age 65 is assumed to enter DROP, leave active service in accordance with the assumed retirement rates, and have participated in DROP for the maximum possible period upon departure from active service.

Inactive Vested Participants
Members that terminate with a vested benefit are assumed to choose the most valuable option available to them at the time of termination: withdrawal of contributions or deferred annuity. Dependents of vested members that die prior to reaching Normal Retirement are assumed to elect a withdrawal of contributions.

Disability Retirement Decrements:
Members have zero assumed probability of retirement due to disability.

Termination Decrements for Reasons Other Than Death or Retirement:
Withdrawal Rates
The service-based rates at right apply:

Years of Service	Rate
0	22.0%
1	15
2	14
3	11
4	9.0

After the first five years of employment, age-based rates apply as shown at right:

All rates of termination are zero for members eligible for Normal Retirement.

Age	Rate
25-29	11.5%
30-34	7.5
35-39	6.0
40-44	5.0
45-49	4.5
50-54	3.2
55-59	2.3
60-64	2.0

Salary Increases: Increases are assumed to occur at the beginning of the valuation year. Salary increases include an underlying inflation component of 2.50% and a productivity component of 0.25%.

Years of Service	Rate
0	5.35%
1	5.15
2	5.95
3	5.75
4	4.35
5	4.35
6	4.15
7	3.95
8	3.75
9	3.55
10	3.35
11	3.15
12	2.95
13	2.75
14	2.75
15	2.75
16	2.75
17	2.75
18	2.75
19+	2.75

Contributory Payroll is the expected Regular Earnings for the calendar year following the valuation date and limited by IRC Section 401(a)(17). It is generally based on the anticipated salary for the upcoming year as reported by ERF Staff.

Overtime Pay: Members are not assumed to receive compensation to account for unscheduled overtime pay.

Cost-of-Living Adjustments (COLA): Members who have the Conditional Ad Hoc COLA are assumed to receive 4% annual increases.

Administrative Expenses: $30,000 for 2023. This amount is reviewed annually.

Payroll Growth: Total payroll is assumed to grow at 2.50% per year.

Marital Assumptions: 100% of members are assumed to be married. Male member is assumed to be four years older than female beneficiary; and female member is assumed to be the same age as male beneficiary.

Decrement Timing: All decrements – mortality, service retirement, disability retirement, and termination of employment for reasons other than death or retirement – are assumed to occur at the middle of the valuation year.

Census Data and Assets
• The valuation was based on members of the Staff Plan as of the valuation date and does not take into account future members.
• All census data was supplied by FWERF staff and was subject to reasonable consistency checks.
• There were data elements that were modified for some members as part of the valuation in order to make the data complete. However, the number of missing data items was immaterial.
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Actuarial Model: This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation.

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL)	% Funded Ratio	Annual Covered Payroll	UAAL as a Percentage of Covered Payroll
City Plan						
January 1, 2014	$ 1,995,112,935	$ 3,124,079,563	$ 1,128,966,628	63.80%	$ 375,687,978	30050.65%
December 31, 2014*	2,094,381,418	3,365,534,522	1,271,153,104	62.23	373,848,113	340.02
December 31, 2015*	2,154,874,311	3,553,200,981	1,398,326,670	60.65	389,527,874	358.98
December 31, 2016*	2,209,893,867	3,780,554,300	1,570,660,433	58.45	404,303,585	388.49
December 31, 2017*	2,288,265,169	3,956,724,359	1,668,459,190	57.83	433,956,825	384.48
December 31, 2018*	2,324,698,216	4,438,326,161	2,113,627,945	52.38	460,564,650	458.92
December 31, 2019*	2,400,393,264	4,586,884,563	2,186,491,299	52.33	485,336,445	450.51
December 31, 2020*	2,522,727,631	4,745,801,026	2,223,073,395	53.16	504,398,247	440.74
December 31, 2021*	2,692,751,013	4,891,936,665	2,199,185,652	55.04	534,927,039	411.12
December 31, 2022*	2,740,773,791	4,998,115,041	2,257,341,250	54.80	556,072,446	405.90
Staff Plan						
January 1, 2014	2,286,404	2,327,578	41,174	98.23	1,293,628	3.18
December 31, 2014*	2,850,030	3,843,480	993,450	74.15	1,541,518	64.45
December 31, 2015*	3,363,797	4,563,466	1,199,669	73.71	1,639,398	73.18
December 31, 2016*	3,878,837	5,072,901	1,194,064	76.46	1,476,583	80.87
December 31, 2017*	4,533,706	5,874,460	1,340,754	77.18	1,582,239	84.74
December 31, 2018*	5,189,502	7,531,496	2,341,994	68.90	1,494,667	156.69
December 31, 2019*	5,746,116	8,519,648	2,773,532	67.45	1,525,870	181.77
December 31, 2020*	6,592,997	9,327,374	2,734,377	70.68	1,862,109	146.84
December 31, 2021*	7,848,613	10,375,055	2,526,442	75.65	2,115,114	119.45
December 31, 2022*	8,787,499	11,397,916	2,610,417	77.10	2,139,526	122.01

* For the regular actuarial valuation the City of Fort Worth requested the date be changed from 1/1 to 12/31 effective 1/1/2015 valuation.

Development of Actuarial Value of Assets: City Plan

As of December 31, 2022

Fair Value of Assets at the beginning of the year	$ 2,912,495,617
Net New Investments	
A. Contributions	205,935,771
B. Disbursements	(316,787,932)
C. Subtotal	(110,852,161)
Fair Value of Assets at the end of year	$ 2,576,294,075
Net Earnings (3-1-2c)	(225,349,381)
Assumed Rate of Return	7.00%
Expected Return	199,994,868
Excess Return	(425,344,249)
Development of amounts to be recognized as of December 31, 2022	

Period End	Deferrals of Excess(Shortfall) Investment Income	Offsetting of Gains/ (Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this Valuation	Net Deferrals Remaining
December 31, 2018	$ -	$ -	$ -	1	$ -	$ -
December 31, 2019	-	-	-	2	-	-
December 31, 2020	40,043,847	(40,043,847)	-	3	-	-
December 31, 2021	179,700,757	(179,700,757)	-	4	-	-
December 31, 2022	(425,344,249)	219,744,604	(205,599,645)	5	(41,119,929)	(164,479,716)
Total	$ (205,599,645)	$ -	$ (205,599,645)		$ (41,119,929)	$ (164,479,716)

Preliminary Actuarial Value of Assets (3-8)	$ 2,740,773,791
80 Percent of Fair Value	2,061,035,260
120 Percent of Fair Value	3,091,552,890
Actuarial Value of Assets (9 not less than 10 or greater than 11)	$ 2,740,733,791
Actuarial Value as a percentage of Fair Value	106.4%
Estimated Actuarial Value Yield	6.0%

Development of Actuarial Value of Assets: Staff Plan

As of December 31, 2022

Fair Value of Assets at the beginning of the year	$	8,518,005
Net New Investments		
A. Contributions		687,309
B. Disbursements		(237,536)
C. Subtotal	$	449,773
Fair Value of Assets at the end of year	$	8,295,941
Net Earnings (3-1-2c)		(671,837)
Assumed Rate of Return		7.00%
Expected Return		612,002
Excess Return		(1,283,839)
Excess Return on Assets for last four years		

Period End	Deferrals of Excess(Shortfall) Investment Income	Offsetting of Gains/ (Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this Valuation	Net Deferrals Remaining
December 31, 2018	$ -	$ -	$ -	1	$ -	$ -
December 31, 2019	53,759	(53,759)	-	2	-	-
December 31, 2020	120,771	(120,771)	-	3	-	-
December 31, 2021	494,862	(494,862)	-	4	-	-
December 31, 2022	(1,283,839)	669,392	(614,447)	5	(122,889)	(491,558)
	$ (614,447)	$ -	$ (614,447)		$ (122,889)	$ (491,558)

Preliminary Actuarial Value of Assets (3-8)	$	8,787,499
80 Percent of Fair Value		6,636,753
120 Percent of Fair Value		9,955,129
Actuarial Value of Assets (9 not less than 10 or greater than 11)		8,787,499
Actuarial Value as a percentage of Fair Value		105.9%
Estimated Actuarial Value Yield		6.1%

Actuarial Gain or Loss

For Year Ended December 31, 2022

Calculation of Total Acturarial Gain or Loss		City Plan		Staff Plan
Unfunded Actuarial Accrued Liability (UAAL) for prior year		$ 2,199,185,652		$ 2,526,442
Normal cost for the year (excluding administrative expenses)		87,168,540		443,751
Actual Administrative Expenses		6,601,506		30,000
Actual Contributions		$ (205,935,771)		$ (677,558)
Interest at 7.00%				
a On UAAL		$ 153,942,996		$ 176,851
b On Normal Cost		3,281,952		16,301
c On Contributions		(7,207,752)		(23,313)
d Total		$ 150,017,196		$ 169,839
Assumption Change (Gains)/Losses		-		-
Plan Changes		-		-
Expected UAAL		2,237,037,123		2,492,474
Actual UAAL		2,257,341,250		2,610,417
Total (Gain)/Loss for the year		$ 20,304,127		$ 117,943
SOURCE OF GAINS AND LOSSES	% of AAL		% of AAL	
Asset (Gain)lLoss for the year	0.51%	$ 25,737,806	0.70%	$ 76,032
Pay Increases (Less)/Greater than expected	0.27%	13,365,987	0.90%	107,937
Non-Retired Demographic (Gains)/Losses	0.15%	(7,513,151)	0.40%	(50,738)
Post-Retirement Mortality (Gains)/Losses	0.21%	(10,297,990)	0.11%	13,377
Other (Gains)/Losses	0.02%	(988,525)	0.30%	(28,665)
Total (Sum of Items 11 through 15)	1.16%	$ 20,304,127	2.41%	$ 117,943

Analysis of Normal Cost by Component

As of December 31, 2022 and 2021

	City Plan		Staff Plan	
	2022	**2021**	**2022**	**2021**
Gross Normal Cost				
Retirement Benefits	12.93%	12.95%	15.89%	15.34%
Termination Benefits	2.68%	2.68%	5.20%	5.42%
Death Benefits	0.18%	0.18%	0.22%	0.22%
Disability Benefits	0.07%	0.08%	0.00%	0.00%
Totals	15.86%	15.89%	21.31%	20.98%

Retirees, Beneficiaries, and Disabled Participants Added to and Removed from Rolls

	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS-END OF YEAR			
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
City Plan								
January 1, 2014	274	$ 11,046,752	160	$ 3,648,176	3,820	$ 134,496,892	6.8%	$ 35,209
December 31, 2014*	246	10,347,634	160	3,619,256	3,906	143,316,261	6.6%	36,691
December 31, 2015*	259	10,091,083	123	3,230,266	4,042	152,284,728	6.3%	37,676
December 31, 2016*	325	15,697,903	115	2,430,574	4,252	167,629,136	9.9%	39,353
December 31, 2017*	238	11,397,587	99	2,334,641	4,391	178,611,771	6.7%	40,677
December 31, 2018*	283	13,192,872	91	2,299,308	4,583	191,775,783	7.4%	41,845
December 31, 2019*	207	8,348,201	111	2,773,120	4,679	199,693,044	4.1%	42,679
December 31, 2020*	278	12,468,018	128	3,427,537	4,829	211,070,412	5.7%	43,709
December 31, 2021*	221	11,228,199	144	3,684,373	4,906	220,900,172	4.7%	45,027
December 31, 2022*	253	12,112,940	122	3,091,235	5,037	232,694,901	5.3%	46,197
Staff Plan								
December 31, 2018**	1	$ 4,270	-	$ -	1	$ 4,270	0.0%	$ 4,270
December 31, 2019*	3	173,378	-	-	4	177,733	4062.4%	44,433
December 31, 2020*	-	-	-	-	4	179,635	1.1%	44,909
December 31, 2021*	-	-	-	-	4	181,537	1.10%	45,384
December 31, 2022*	1	34,032	-	-	5	217,470	19.80%	43,494

Solvency Test

Valuation Date	Active and Inactive Members' Contributions	Retirees and Beneficiaries	Active/Inactive Members (Employer's Financed Portion)	Reported Assets	Portions of Accrued Liabilities Covered by Reported Assets		
CITY PLAN							
January 1, 2014	$ 529,079,160	$ 1,469,007,750	$ 1,125,992,653	$ 1,995,112,935	100%	100%	0%
December 31, 2014*	554,657,382	1,579,267,555	1,231,609,585	2,094,381,418	100%	97%	0%
December 31, 2015*	589,185,131	1,713,648,693	1,250,367,157	2,154,874,311	100%	91%	0%
December 31, 2016*	505,886,072	1,912,833,490	1,361,834,738	2,209,893,867	100%	89%	0%
December 31, 2017*	522,640,298	2,056,348,215	1,377,735,846	2,288,265,169	100%	86%	0%
December 31, 2018*	522,128,181	2,492,013,634	1,424,184,346	2,324,698,216	100%	72%	0%
December 31, 2019*	538,305,419	2,577,229,846	1,471,349,298	2,400,393,264	100%	72%	0%
December 31, 2020*	549,298,756	2,729,704,927	1,466,797,343	2,522,727,631	100%	72%	0%
December 31, 2021*	568,513,616	2,844,467,721	1,478,955,328	2,692,751,013	100%	75%	0%
December 31, 2022*	610,650,039	2,931,141,246	1,456,323,756	2,740,773,791	100%	73%	0%
STAFF PLAN							
January 1, 2014**	$ 1,206,532	$ -	$ 1,121,046	$ 2,286,404	100%	100%	96%
December 31, 2014*	1,378,942	-	2,464,538	2,850,030	100%	100%	60%
December 31, 2015*	1,551,657	-	3,011,809	3,363,797	100%	100%	60%
December 31, 2016*	1,711,324	-	3,361,577	3,878,837	100%	100%	64%
December 31, 2017*	2,000,288	-	3,874,172	4,533,706	100%	100%	65%
December 31, 2018*	2,184,114	56,334	5,291,048	5,189,502	100%	100%	56%
December 31, 2019*	1,703,296	2,826,643	3,989,709	5,746,116	100%	100%	30%
December 31, 2020*	1,900,836	2,792,708	4,633,830	6,592,997	100%	100%	41%
December 31, 2021*	2,267,182	2,756,739	5,351,134	7,848,613	100%	100%	53%
December 31, 2022*	2,419,521	3,235,275	5,743,120	8,787,499	100%	100%	55%

Distribution of Active Members by Age and Years of Serviced: City Plan

As of December 31, 2022

	Years of Service									
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
Under 25	191	1	-	-	-	-	-	-	-	192
	50,159	99,814	-	-	-	-	-	-	-	50,419
25-29	451	108	2	-	-	-	-	-	-	561
	65,161	88,084	45,908	-	-	-	-	-	-	69,506
30-34	397	327	62	4	-	-	-	-	-	790
	66,754	88,463	95,390	117,234	-	-	-	-	-	78,243
35-39	291	299	202	154	5	-	-	-	-	951
	68,098	89,917	100,646	107,933	105,626	-	-	-	-	88,519
40-44	203	252	150	249	89	3	-	-	-	946
	63,307	85,528	96,243	110,414	106,198	98,796	-	-	-	90,995
45-49	160	129	107	215	199	59	-	-	-	869
	64,731	77,337	93,877	105,453	114,923	111,402	-	-	-	94,929
50-54	170	131	83	158	223	172	30	-	-	967
	65,140	77,151	78,929	95,128	113,298	120,415	129,278	-	-	95,778
55-59	126	105	72	127	140	125	56	5	-	756
	66,239	69,062	69,828	79,079	98,855	119,041	120,026	122,202	-	88,255
60-64	86	72	56	83	41	64	12	7	1	422
	66,624	75,625	69,044	78,004	89,205	101,488	107,523	130,022	113,569	80,527
Over 64	35	47	24	44	25	14	7	3	3	202
	66,436	60,154	61,579	78,350	80,011	106,012	113,695	137,553	154,849	75,423
Total Number	2,110	1,471	758	1,034	722	437	105	15	4	6,656
Average Comp	$ 64,440	$ 83,335	$ 89,368	$ 98,889	$107,496	$ 115,423	$ 120,818	$ 128,922	$ 144,529	$ 85,907

Historical Active Participant Data

City Plan

Valuation Date	Active Count	Average Age	Average Service	Covered Payroll *	Average Salary	Percent Change
1/1/2014	6,199	44.5	11.4	$ 373.848	$ 60,308	2.1%
12/31/2014**	6,198	44.6	11.4	389.528	62,847	4.2%
12/31/2015**	6,280	44.6	11.3	404.304	64,380	2.4%
12/31/2016**	6,414	44.3	11.1	415.728	64,816	0.7%
12/31/2017**	6,579	44.1	10.8	442.445	67,251	3.8%
12/31/2018**	6,589	44.2	10.7	494.152	74,997	11.5%
12/31/2019**	6,709	44.2	10.7	514.765	76,727	2.3%
12/31/2020**	6,515	44.3	11.0	523.486	80,351	4.7%
12/31/2021**	6,626	44.2	10.9	548.574	82,791	7.9%
12/31/2022**	6,656	44.1	10.8	571.796	85,907	6.9%

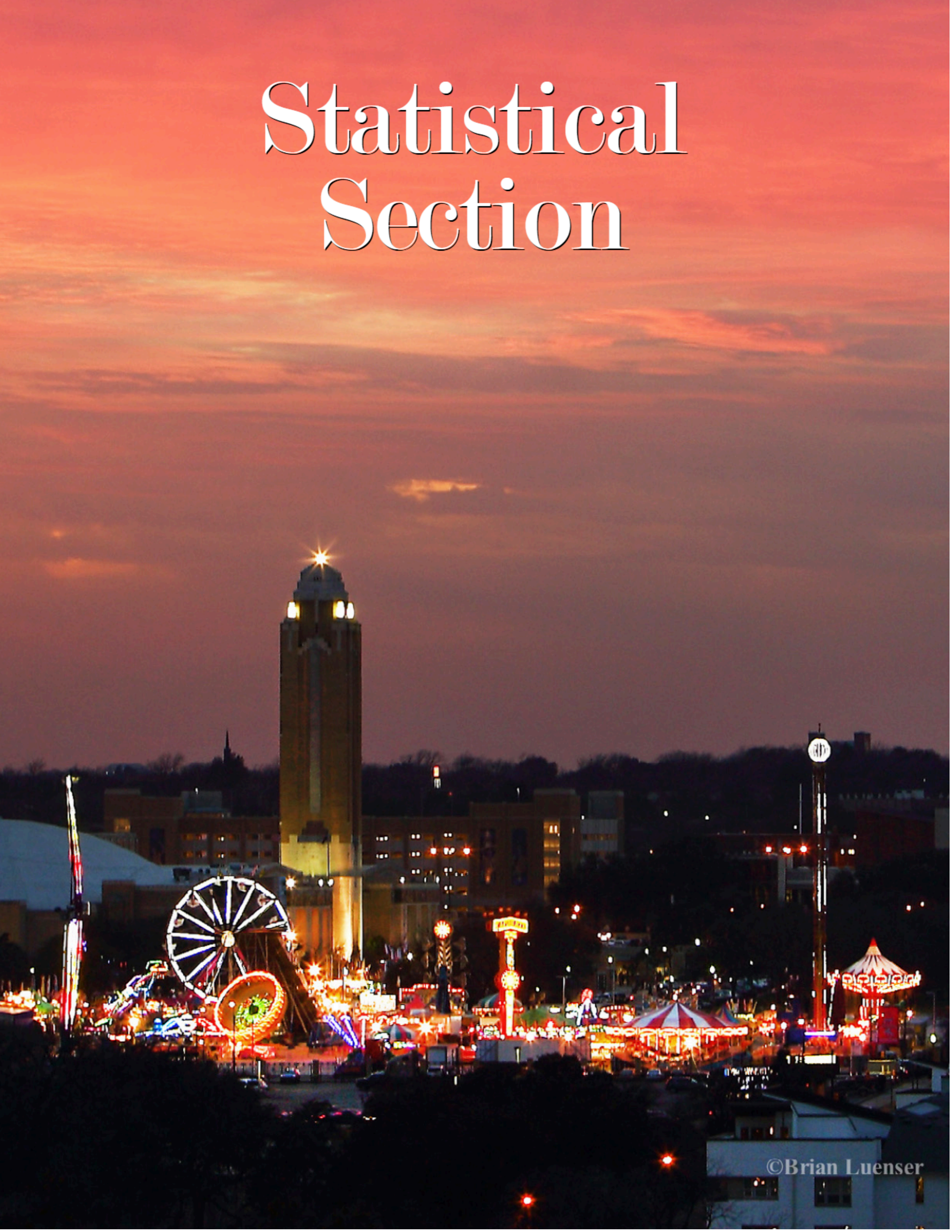
*Covered payroll in millions.
**The City of Fort Worth requested a change in the date of the evaluation from 1/1/2015 to 12/31/2014.

Staff Plan

Valuation Date	Active Count	Average Age	Average Service	Covered Payroll	Average Salary	Percent Change
1/1/2014	18	47.8	7.9	$1,293,628	$ 71,868	-6.9%
12/31/2014*	19	49.3	8.5	1,541,518	81,133	12.9%
12/31/2015*	19	47.2	8.7	1,639,398	86,284	6.3%
12/31/2016*	18	49.2	9.4	1,476,583	82,032	-4.9%
12/31/2017*	18	51.3	9.8	1,582,239	87,902	7.2%
12/31/2018*	16	46.8	10.2	1,494,667	93,417	6.3%
12/31/2019*	17	46.6	8.8	1,525,870	89,757	-3.9%
12/31/2020*	18	47.5	9.2	1,862,109	103,451	15.3%
12/31/2021*	19	48.9	9.6	2,115,114	111,322	7.6%
12/31/2022*	22	50.8	7.4	2,139,526	93,023	-16.4%

*The City of Fort Worth requested a change in the date of the evaluation from 1/1/2015 to 12/31/2014.

Statistical Section



Statistical Information Overview

The objective of the Statistical Section is to provide financial statement users with additional historic perspective, context, and detail to assist in using the information in the Basic Financial Statements, Notes to the Basic Financial Statement, Required Supplementary Information, and Other Supplementary Information to understand and assess the Fund's economic condition. The information contained in the statistical section is divided into two distinct sections, financial trends and participant information. All information was derived from Audited Annual Financial Statements and/or our Benefit Administration System.

Financial Trends
The Financial trends section is intended to assist readers in understanding how the Fund's financial position has changed over time. The Changes in Plan Net Position for the last ten fiscal years presents additions by source, deductions by type, and total change in plan net position for each year. Additions to net position include member and city contributions. In addition to contributions, additions also include earnings for the Fund's investment activities. Deductions from Net Position are primarily benefit payments and refunds paid to participants.

Participant Data
Participant data can be found following the financial data in this section. The schedules include data on member population, age, years of service, and various levels of benefit payment analysis.

Schedule of Changes in Net Position: City Plan

City Plan	2023	2022	2021	2020	2019
Additions					
Employee Contributions	$ 72,322,732	$ 65,593,975	$ 60,281,553	$ 56,250,684	$ 40,634,725
Employer Contributions	148,281,745	137,012,301	128,046,174	124,743,976	113,109,911
Investment Income	218,564,656	(256,764,105)	524,024,718	110,570,539	67,729,548
Total Additions to Plan Net Position	439,169,133	(54,157,829)	712,352,445	291,565,199	221,474,184
Deductions					
Retirement	209,237,733	197,964,463	188,161,116	178,887,438	171,687,119
Disability	5,015,207	5,076,806	5,136,081	5,191,272	5,261,167
Survivors	22,845,611	21,929,298	20,548,531	19,151,120	17,899,384
DROP Payouts	87,580,238	33,667,321	24,372,952	23,236,549	25,734,915
Actuarial Equivalent	459,328	734,241	575,710	724,957	920,891
Refund of Contributions					
Separation	6,149,920	5,759,361	5,044,077	3,590,965	5,517,169
Death	-	234,736	143,659	182,217	218,439
Depreciation	852,380	100,064	120,844	118,393	122,282
Administrative Expenses	6,474,929	6,755,309	5,971,101	5,184,903	5,585,108
Total Deductions from Plan Net Position	338,615,346	272,221,599	250,074,071	236,267,814	232,946,474
Total Change in Plan Net Position	100,553,787	(326,379,428)	462,278,374	55,297,385	(11,472,290)
Net Position September 30	$ 2,604,613,403	$ 2,504,059,616	$ 2,830,439,044	$ 2,368,160,670	$ 2,312,863,285

City Plan	2018	2017	2016	2015	2014
Additions					
Employee Contributions	$ 37,618,303	$ 35,963,200	$ 33,977,411	$ 32,541,773	$ 31,929,289
Employer Contributions	93,504,064	89,408,134	84,746,991	80,820,598	78,165,049
Investment Income	145,408,403	250,912,773	166,305,791	(20,635,550)	159,994,300
Total Additions to Plan Net Position	276,530,770	376,284,107	285,030,193	92,726,821	270,088,638
Deductions					
Retirement	160,170,170	149,317,259	136,814,999	127,146,361	118,458,335
Disability	5,285,218	5,324,746	5,349,863	5,400,724	5,320,505
Survivors	17,231,458	16,706,717	16,447,307	15,746,605	15,282,876
DROP Payouts	28,978,582	21,871,121	21,903,824	13,397,352	13,745,000
Actuarial Equivalent	875,608	1,548,691	1,524,938	1,369,546	3,260,271
Refund of Contributions					
Separation	4,439,624	3,793,510	3,618,760	3,952,620	4,953,166
Death	821,036	49,555	160,187	52,747	138,447
Depreciation	107,178	114,971	113,526	143,219	130,935
Administrative Expenses	4,808,157	4,752,442	4,649,611	3,823,331	3,738,927
Total Deductions from Plan Net Position	222,717,031	203,479,012	190,583,015	171,032,505	165,028,462
Total Change in Plan Net Position	53,813,739	172,805,095	94,447,178	(78,305,684)	105,060,176
Net Position September 30	$ 2,324,335,575	$ 2,270,521,836	$ 2,097,716,741	$ 2,003,269,563	$ 2,081,575,247

Schedule of Changes in Net Position: Staff Plan

Staff Plan	2023	2022	2021	2020	2019
Additions					
Employee Contributions	$ 203,740	$ 224,122	$ 328,077	$ 124,619	$ 127,207
Employer Contributions	444,763	482,800	497,821	353,767	241,316
Investment Income	685,751	(788,986)	1,400,587	278,161	170,225
Total Additions to Net Position	1,334,254	(82,064)	2,226,485	756,547	538,748
Deductions					
Retirement	234,835	199,979	181,061	179,160	55,314
Disability	-	-	-	-	-
Survivors	-	-	-	-	-
DROP Payouts	-	-	-	-	140,214
Actuarial Equivalent	-	-	-	-	-
Refund of Contributions	-	-	-	-	-
Death	-	-	-	-	-
Separation	54,352	12,636	-	-	-
Depreciation	449	308	342	300	288
Administrative Expenses	26,483	27,350	28,538	30,488	54,161
Total Deductions from Plan Net Position	316,119	240,273	209,941	209,948	249,977
Total Change in Plan Net Position	1,018,135	(322,337)	2,016,544	546,599	288,771
Net Position September 30	$8,715,367	$7,697,232	$8,019,569	$6,003,025	$5,456,426

Staff Plan	2018	2017	2016	2015	2014
Additions					
Employee Contributions	$ 131,067	$ 124,339	$ 130,973	$ 126,984	$ 296,093
Employer Contributions	250,059	237,224	249,881	242,270	225,536
Investment Income	303,812	500,246	286,116	(30,772)	209,544
Total Additions to Net Position	684,938	861,809	666,970	338,482	731,173
Deductions					
Retirement	1,780	-	-	-	-
Disability	-	-	-	-	-
Survivors	-	-	-	-	-
DROP Payouts	-	-	-	-	-
Actuarial Equivalent	-	-	-	-	-
Refund of Contributions	-	-	-	-	-
Death	-	-	-	-	-
Separation	14,294	35,933	11,754	16,747	-
Depreciation	238	228	196	214	172
Administrative Expenses	27,725	14,760	27,374	5,702	4,897
Total Deductions from Plan Net Position	44,037	50,921	39,324	22,663	5,069
Total Change in Plan Net Position	640,901	810,888	627,646	315,819	726,104
Net Position September 30	$5,167,655	$4,526,754	$3,715,866	$3,088,220	$2,772,401

Schedule of Revenue by Source

For the Ten Years Ended September 30

Fiscal Year Ended	Member Contributions	Employer Contributions	Investment Income	Total Revenue
City Plan				
September 30, 2014	$ 31,929,289	$ 78,165,049	$ 159,994,300	$ 270,088,638
September 30, 2015	32,541,773	80,820,598	(20,635,550)	92,726,821
September 30, 2016	33,977,411	84,746,991	166,305,791	285,030,193
September 30, 2017	35,963,200	89,408,134	250,912,773	376,284,107
September 30, 2018	37,618,303	93,504,064	145,408,403	276,530,770
September 30, 2019	40,634,725	113,109,911	67,729,548	221,474,184
September 30, 2020	56,250,684	124,743,976	110,570,539	291,565,199
September 30, 2021	60,281,553	128,046,174	524,024,718	712,352,445
September 30, 2022	65,593,975	137,012,301	(256,764,105)	(54,157,829)
September 30, 2023	72,322,732	148,281,745	218,564,656	439,169,133
Staff Plan				
September 30, 2014*	$ 296,093	$ 225,536	$ 209,544	$ 731,173
September 30, 2015	126,984	242,270	(30,772)	338,482
September 30, 2016	130,973	249,881	286,116	666,970
September 30, 2017	124,339	237,224	500,246	861,809
September 30, 2018	131,067	250,059	303,812	684,938
September 30, 2019	127,207	241,316	170,225	538,748
September 30, 2020	124,619	353,767	278,161	756,547
September 30, 2021*	328,077	497,821	1,400,587	2,226,485
September 30, 2022	224,122	482,800	(788,986)	(82,064)
September 30, 2023	203,740	444,763	685,751	1,334,254

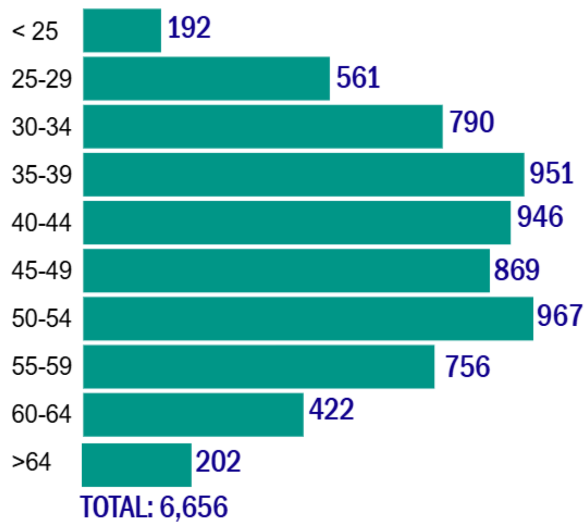
*Member contributions are greatly increased due to employee service purchases.

Membership Population

Year Ended	Active Members	Vested Terminated Members	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
City Plan				
September 30, 2012	6,281	279	3,636	0.62
September 30, 2013	6,278	277	3,706	0.63
September 30, 2014	6,199	296	3,820	0.66
September 30, 2015	6,198	317	3,906	0.68
September 30, 2016	6,280	355	4,042	0.70
September 30, 2017	6,414	363	4,252	0.72
September 30, 2018	6,579	375	4,391	0.72
September 30, 2019	6,589	375	4,583	0.75
September 30, 2020	6,709	398	4,679	0.76
September 30, 2021	6,515	401	4,829	0.80
September 30, 2022	6,626	437	4,906	0.81
Staff Plan				
September 30, 2012	19	-	-	-
September 30, 2013	18	1	-	0.06
September 30, 2014	19	1	-	0.05
September 30, 2015	19	2	-	0.11
September 30, 2016	18	3	-	0.17
September 30, 2017	18	5	-	0.28
September 30, 2018	18	7	1	0.39
September 30, 2019	16	7	4	0.69
September 30, 2020	17	6	4	0.59
September 30, 2021	18	6	4	0.56
September 30, 2022	19	6	4	0.53

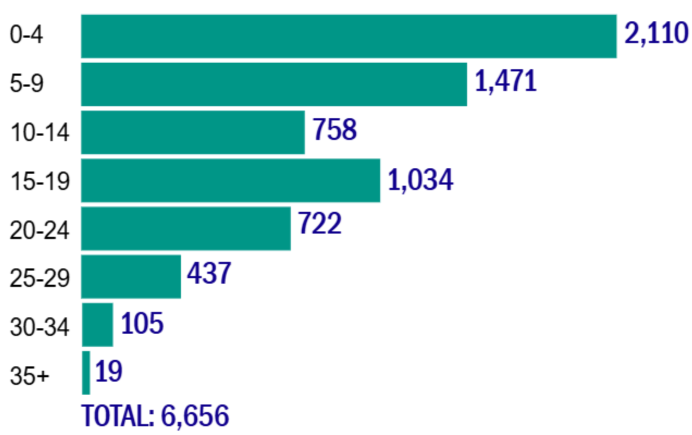
Distribution of Active Participants by Age: City Plan

As of December 31, 2022



Distribution of Active Participants by Service: City Plan

As of December 30, 2022



Distribution of Retired Members by Type of Benefit: City Plan

As of September 30, 2023

Amount of Monthly Benefit	Number of Retirees	Type of Retirement				
		1	2	3	4	5
$ 1 - 500	188	62	11	78	7	30
$ 501 - 1,000	431	107	-	287	10	27
$ 1,001 - 1,500	429	104	-	272	21	32
$ 1,501 - 2,000	417	109	-	265	30	13
$ 2,001 - 2,500	412	103	-	270	28	11
$ 2,501 - 3,000	400	79	-	295	18	8
$ 3,001 - 3,500	381	68	-	284	22	7
$ 3,501 - 4,000	336	69	-	250	15	2
$ 4,001 - 4,500	279	48	-	222	9	-
$ 4,501 - 5,000	231	21	-	206	4	-
$ 5,001 - 5,500	232	23	-	206	3	-
$ 5,501 - 6,000	236	14	-	222	-	-
$ 6,001 - 6,500	205	6	-	198	-	1
$ 6,501 - 7,000	192	4	-	186	2	-
Over $7,000	668	7	-	661	-	-
	5,037	824	11	3,902	169	131

1 - Surviving Spouse
2 - Dependent Child
3 - Regular Retirement
4 - Disability Retirement
5 - QDRO/Alternate Payee

Schedule of Average Benefit Payments by Years of Service & Final Avg. Salary: City Plan

Retirement Effective Dates	Years of Credited Service						
	0-4	5-9	10-14	15-19	20-24	25-29	30+
Period 01/01/2011 to 12/31/2011							
*Average Monthly Benefits	$0	$838	$1,233	$1,942	$3,758	$5,311	$6,172
Average Final Salary	$0	**	**	**	**	**	**
Number of Active Retirees	0	26	15	22	36	64	15
Period 01/01/2012 to 12/31/2012							
*Average Monthly Benefits	$0	$655	$1,182	$2,405	$3,567	$5,439	$5,410
Average Final Salary	$0	**	**	**	**	**	**
Number of Active Retirees	0	16	13	16	31	64	21
Period 01/01/2013 to 12/31/2013							
*Average Monthly Benefits	$0	$873	$1,222	$2,536	$3,645	$5,439	$6,185
Average Final Salary	$0	**	**	**	**	**	**
Number of Active Retirees	0	26	23	28	32	78	24
Period 01/01/2014 to 12/31/2014							
*Average Monthly Benefits	$0	$770	$1,492	$2,251	$4,146	$5,800	$6,047
Average Final Salary	$0	$49,262	$48,382	$53,096	$69,814	$83,750	$76,030
Number of Active Retirees	0	36	20	26	22	75	22
Period 01/01/2015 to 12/31/2015							
*Average Monthly Benefits	$0	$864	$1,602	$2,263	$3,261	$5,679	$6,312
Average Final Salary	$0	$58,356	$55,376	$54,451	$58,034	$80,967	$72,302
Number of Active Retirees	0	29	20	39	26	74	13
Period 01/01/2016 to 12/31/2016							
*Average Monthly Benefits	$0	$760	$1,744	$2,297	$3,551	$5,941	$6,909
Average Final Salary	$0	$45,589	$61,381	$60,057	$65,422	$83,454	$85,556
Number of Active Retirees	0	26	29	29	33	108	24
Period 01/01/2017 to 12/31/2017							
*Average Monthly Benefits	$0	$1,099	$1,184	$2,302	$3,903	$6,110	$6,576
Average Final Salary	$0	$54,331	$47,988	$57,059	$70,913	$90,146	$80,756
Number of Active Retirees	$0	10	30	37	41	83	16
Period 01/01/2018 to 12/31/2018							
*Average Monthly Benefits	$0	$777	$1,518	$2,240	$3,538	$6,584	$7,198
Average Final Salary	$0	$52,255	$59,151	$58,463	$63,532	$91,902	$88,223
Number of Active Retirees	0	27	28	45	47	90	21
Period 01/01/2019 to 12/31/2019							
*Average Monthly Benefits	$0	$1,071	$1,393	$2,683	$3,516	$5,977	$7,845
Average Final Salary	$0	$64,210	$55,938	$63,321	$67,818	$87,347	$95,520
Number of Active Retirees	0	26	37	28	33	65	12
Period 01/01/2020 to 12/31/2020							
*Average Monthly Benefits	$0	$961	$1,437	$2,771	$4,114	$6,220	$7,087
Average Final Salary	0	$70,079	$51,620	$69,111	$77,107	$94,672	$85,742
Number of Active Retirees	$0	27	32	39	47	65	12

Continued on next page.

Schedule of Average Benefit Payments: City - cont.

Retirement Effective Dates	Years of Credited Service						
	0-4	5-9	10-14	15-19	20-24	25-29	30+
Period 01/01/2021 to 12/31/2021							
*Average Monthly Benefits	$250	$1,006	$1,301	$2,692	$3,989	$6,544	$7,203
Average Final Salary	$14,737	$67,831	$48,931	$66,523	$75,160	$99,755	$87,542
Number of Active Retirees	1	20	22	34	40	75	25
Period 01/01/2022 to 12/31/2022							
*Average Monthly Benefits	$0	$916	$1,696	$2,348	$4,725	$6,937	$8,094
Average Final Salary	$0	$65,176	$61,902	$62,463	$85,202	$105,294	$93,104
Number of Active Retirees	0	31	36	41	51	79	4
Period 01/01/2023 to 12/31/2023							
*Average Monthly Benefits	$0	$908	$1,680	$2,437	$4,354	$6,261	$8,236
Average Final Salary	0	$58,018	$60,450	$62,778	$77,592	$93,570	$98,818
Number of Active Retirees	0	24	20	37	41	80	11

* Monthly benefits are actual benefits received during first year of retirement. These benefits may be higher than initial benefit for those that received COLAs while in DROP or converted DROP balance to a monthly annuity. Balances may be reduced for those that took a lump sum actuarial equivalent or elected a survivor option at the time of retirement.

** Final Average Salary not available for previous years, history will be built during future financial statements.

Schedule of Average Benefit Payments by Years of Service & Final Avg. Salary: Staff Plan

Retirement Effective Dates	Years of Credited Service				
	0-4	5-15	16-25	26-29	30+
Period 01/01/2018 to 12/31/2018					
*Average Monthly Benefits	-	$ 356	-	-	-
Average Final Salary	-	$ 19,410	-	-	-
Number of Active Retirees	-	1	-	-	-
Period 01/01/2019 to 12/31/2019					
*Average Monthly Benefits	-	$ 4,816	-	-	-
Average Final Salary	-	$ 146,515	-	-	-
Number of Active Retirees	-	3	-	-	-
Period 01/01/20 to 12/31/2020					
*Average Monthly Benefits	-	-	-	-	-
Average Final Salary	-	-	-	-	-
Number of Active Retirees	-	-	-	-	-
Period 01/01/21 to 12/31/2021					
*Average Monthly Benefits	-	-	-	-	-
Average Final Salary	-	-	-	-	-
Number of Active Retirees	-	-	-	-	-
Period 01/01/22 to 12/31/2022					
*Average Monthly Benefits	-	$ 2,836	-	-	-
Average Final Salary	-	$ 226,878	-	-	-
Number of Active Retirees	-	1	-	-	-
Period 01/01/23 to 12/31/2023					
*Average Monthly Benefits	-	$ 4,745	$ 10,925	-	-
Average Final Salary	-	$ 117,813	$ 202,679	-	-
Number of Active Retirees	-	1	1	-	-

* Monthly benefits are actual benefits received during first year of retirement. These benefits may be higher than initial benefit for those that received COLAs while in DROP or converted DROP balance to a monthly annuity. Balances may be reduced for those that took a lump sum actuarial equivalent or elected a survivor option at the time of retirement.

Since the Staff Plan was separated from the City plan in 2007 some members are in both the City Plan and the Staff Plan. This represents only the years as part of the Staff Plan and the benefit paid by the Staff Plan. The portion attributed to the City Plan is counted under the amounts reported for the City Plan.

Schedule of Benefits by Type

As of September 30, 2023

Fiscal Year Ended	Retirement Benefits	Actuarial Equivalent	Disability Benefits	Survivor Benefits	DROP Payments	Total Benefits
City Plan						
September 30, 2014	$ 118,458,335	$ 3,260,271	$ 5,320,505	$ 15,282,876	$ 13,745,000	$ 156,066,987
September 30, 2015	127,146,361	1,369,546	5,400,724	15,746,605	13,397,352	163,060,588
September 30, 2016	136,814,999	1,524,938	5,349,863	16,447,307	21,903,824	182,040,931
September 30, 2017	149,317,259	1,548,691	5,324,746	16,706,717	21,871,121	194,768,534
September 30, 2018	160,170,170	875,608	5,285,218	17,231,458	28,978,582	212,541,036
September 30, 2019	171,687,119	920,891	5,261,167	17,899,384	25,734,915	221,503,476
September 30, 2020	178,887,438	724,957	5,191,272	19,151,120	23,236,549	227,191,336
September 30, 2021	188,161,116	575,710	5,136,081	20,548,531	24,372,952	238,794,390
September 30, 2022	197,964,463	734,241	5,076,806	21,929,298	33,667,321	259,372,129
September 30, 2023	209,237,733	459,238	5,015,207	22,845,611	87,580,328	325,138,117
Staff Plan						
September 30, 2018	$ 1,780	$ -	$ -	$ -	$ -	$ 1,780
September 30, 2019	55,314	-	-	-	140,214	195,528
September 30, 2020	179,160	-	-	-	-	179,160
September 30, 2021	181,061	-	-	-	-	181,061
September 30, 2022	199,979	-	-	-	-	199,979
September 30, 2023	234,835	-	-	-	-	234,835

*Prior to 2018, no benefits payments were made from the Staff Plan.

Schedule of Average Benefit Payment Amounts

As of September 30, 2023

Year	Number of Retirees	Benefits Paid During the Year	Average Monthly
City Plan			
2014	3,820	156,066,987	3,405
2015	3,906	163,060,588	3,479
2016	4,042	182,040,931	3,753
2017	4,252	194,768,534	3,817
2018	4,391	212,541,036	4,034
2019	4,583	221,503,476	4,028
2020	4,679	227,191,336	4,046
2021	4,829	238,794,390	4,121
2022	4,906	259,372,129	4,406
2023	5,037	325,138,117	5,379
Staff Plan			
2018	1	1,780	356
2019	4	195,528	4,074
2020	4	179,160	3,733
2021	4	181,061	3,772
2022	4	199,979	4,166
2023	5	234,835	3,914

*Prior to 2018, no benefits payments were made from the Staff Plan.

Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on Audit of Financial Statements Performed in Accordance with *Governmental Auditing Standards*

To the Board of Trustees
Employees' Retirement Fund of the
City of Fort Worth, Texas

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*), the combined financial statements of the Fort Worth Employee's Retirement Fund (the Fund), a fiduciary fund of the City of Fort Worth, as of and for the year ended September 30, 2023, and the related notes to the combined financial statements, which collectively comprise the Fund's basic combined financial statements, and have issued our report thereon dated December 22, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the combined financial statements, we considered the Fund's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the combined financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the Fund's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's combined financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We identified a certain deficiency in internal control, described in the accompanying Schedule of Findings and Responses, as item 2023-001 that we consider to be a significant deficiency.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Fund's combined financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the combined financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

The Fund's Response to Findings

Government Auditing Standards requires the auditor to perform limited procedures on the Fund's response to the findings identified in our audit and described in the accompanying Schedule of Findings and Responses. The Fund's response was not subjected to the other auditing procedures applied in the audit of the combined financial statements and, accordingly, we express no opinion on the response.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Eide Bailly LLP

Boise, Idaho
December 22, 2023

The Sky Was the Limit

A few more of the amazing photos from **Brian Luenser.** Much of his work is available for purchase—to learn more, please check out his Flickr page. Thanks again to Brian for sharing his talents and see you next year!


FORT WORTH EMPLOYEES'
RETIREMENT FUND
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