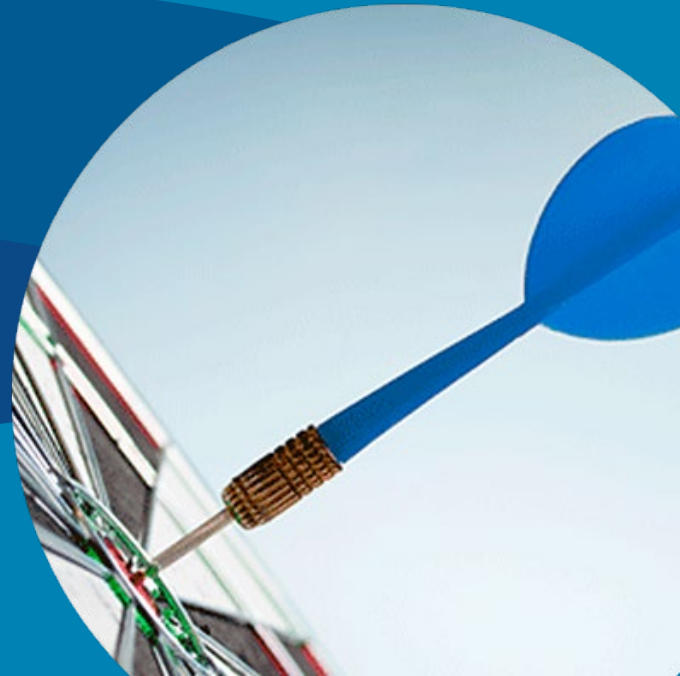




City of Dallas Employees' Retirement Fund

December 31, 2020

Preliminary Valuation Results



Key Issues and Changes

- ERF's investment return was below its investment target of 7.25% on both a market value and actuarial value basis in 2020
 - Return on market value was 5.16%
 - Dollar-weighted return
 - Versus Wilshire's time-weighted return of 5.42%
 - Shortfall in investment income of \$75 million
 - \$15 million recognized in this valuation and the remainder deferred
- Significant liability experience gains in 2020
 - Salary increases, cost of living adjustment, retiree mortality

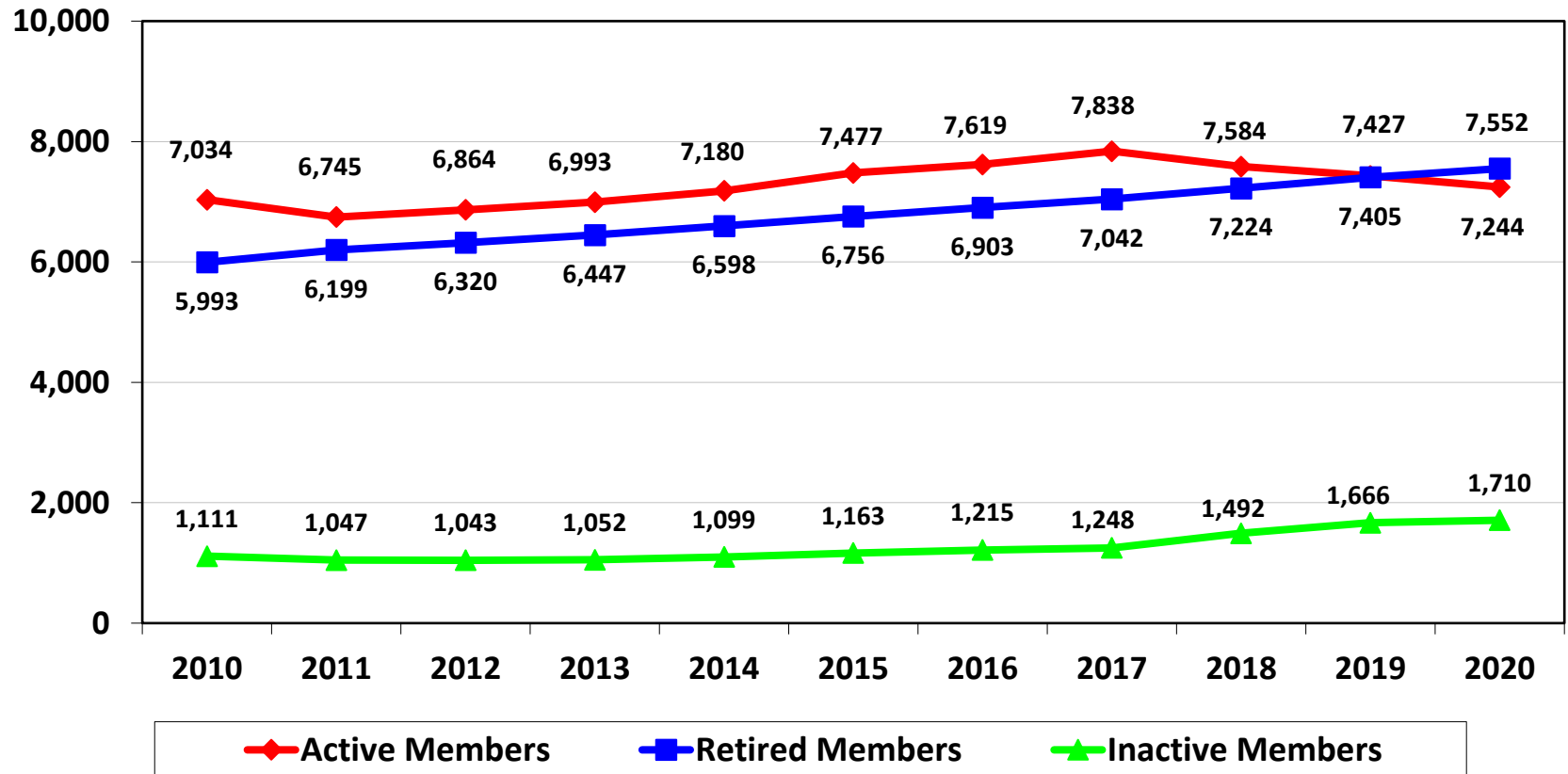
Key Issues and Changes

- Drop in active membership resulted in payroll decreasing instead of growing as expected
 - 1.2% decrease versus the assumption of a 2.50% increase
- Current Total Obligation Rate exceeds 36% of pay cap
 - CATOR is 36.00%
 - City contribution rate is 22.68%
 - Member rate is 13.32%
- The new Tier became effective January 1, 2017
 - Over 2,400 employees in new Tier at December 31, 2020
 - New Tier is approximately 33% of the active employees
 - NC% decreased from 20.50% last year to 20.11% this year

Membership

- The number of active members decreased from 7,427 to 7,244, a 2.5% decrease
- Payroll for active members decreased from \$433.9 million to \$428.8 million, a 1.2% decrease
- The number of members in payment status increased by a net 147, from 7,405 to 7,552, a 2.0% increase
- There are 1.0 active members for each retiree compared to 1.2 in 2010

Active Members and Retired Members

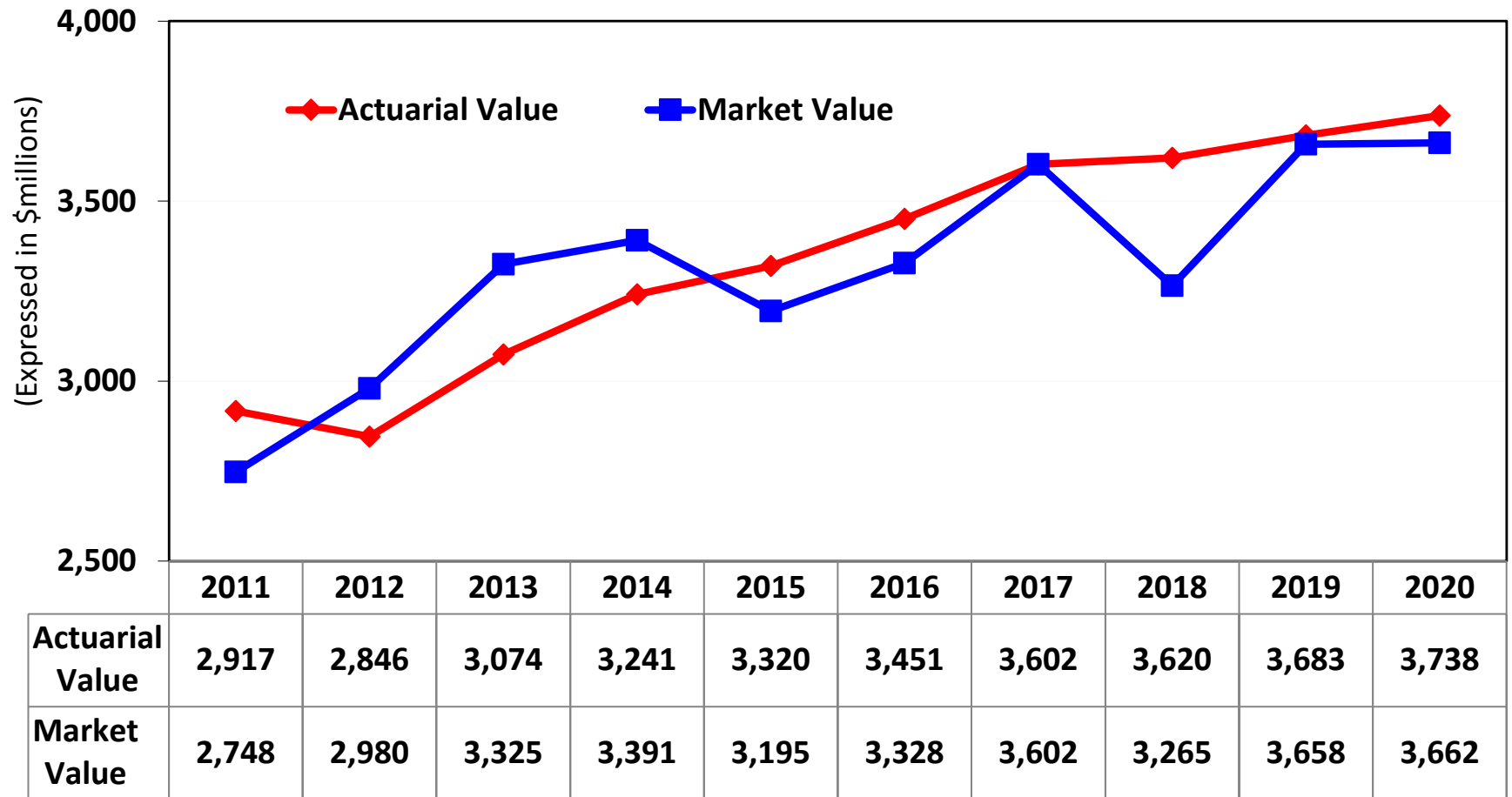


Note: active membership decreased 2.5% versus last year

Assets

- Fair market value (unaudited) increased from \$3.658 billion to \$3.662 billion
- Return on market value of assets was approximately 5.16% in 2020
- Actuarial value is \$3.738 billion, compared to \$3.683 billion last year
- Actuarial rate of return was 6.56% in 2020
 - Less than 7.25% assumed rate
- Actuarial value is 102.1% of fair market value
- Net deferred investment shortfall of \$76 million still to be recognized in actuarial value of assets

Historical Asset Values



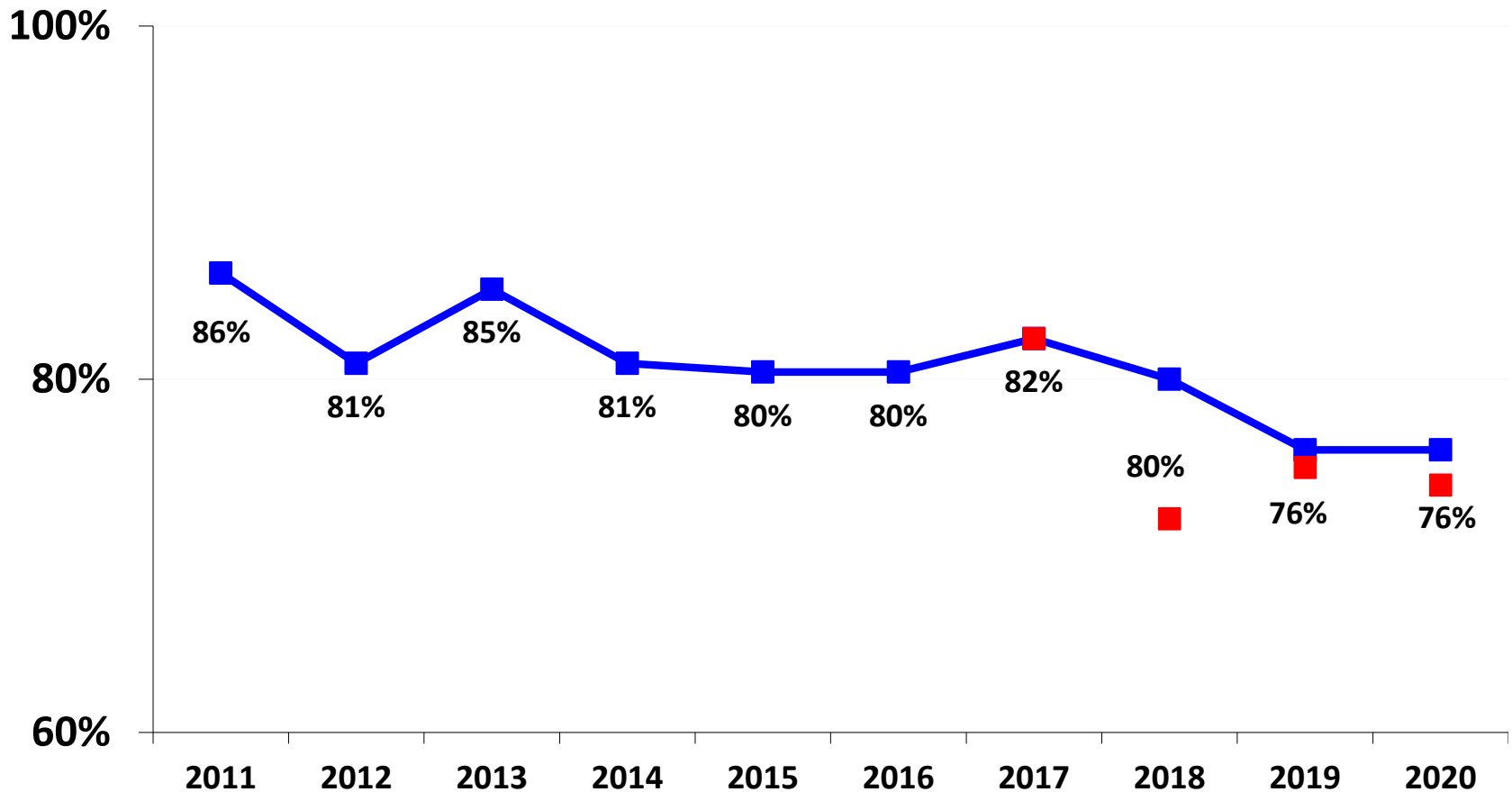
Actuarial Results

- Actuarial Accrued Liability (AAL) of benefits is now \$4.933 billion
- Unfunded Actuarial Accrued Liability (UAAL) increased from \$1,180 million to \$1,195 million
 - Expected to increase to \$1,206 million
 - Reflects \$25 million loss on actuarial value of assets and \$70 million gain on liabilities
 - UAAL increased \$34 million due to difference between calculated contribution rate and actual contribution rate

Actuarial Results

- Funded ratio (actuarial assets divided by actuarial accrued liability) increased from 75.73% in 2019 to 75.78% in 2020
- Funded ratio using market value is 74.2%
 - Was 75.2% last year
- Total 30-year contribution rate is 34.94%
 - Does not include POB debt service payments
 - Based on open group projection
 - 35.38 % last year

Historical Funded Ratios



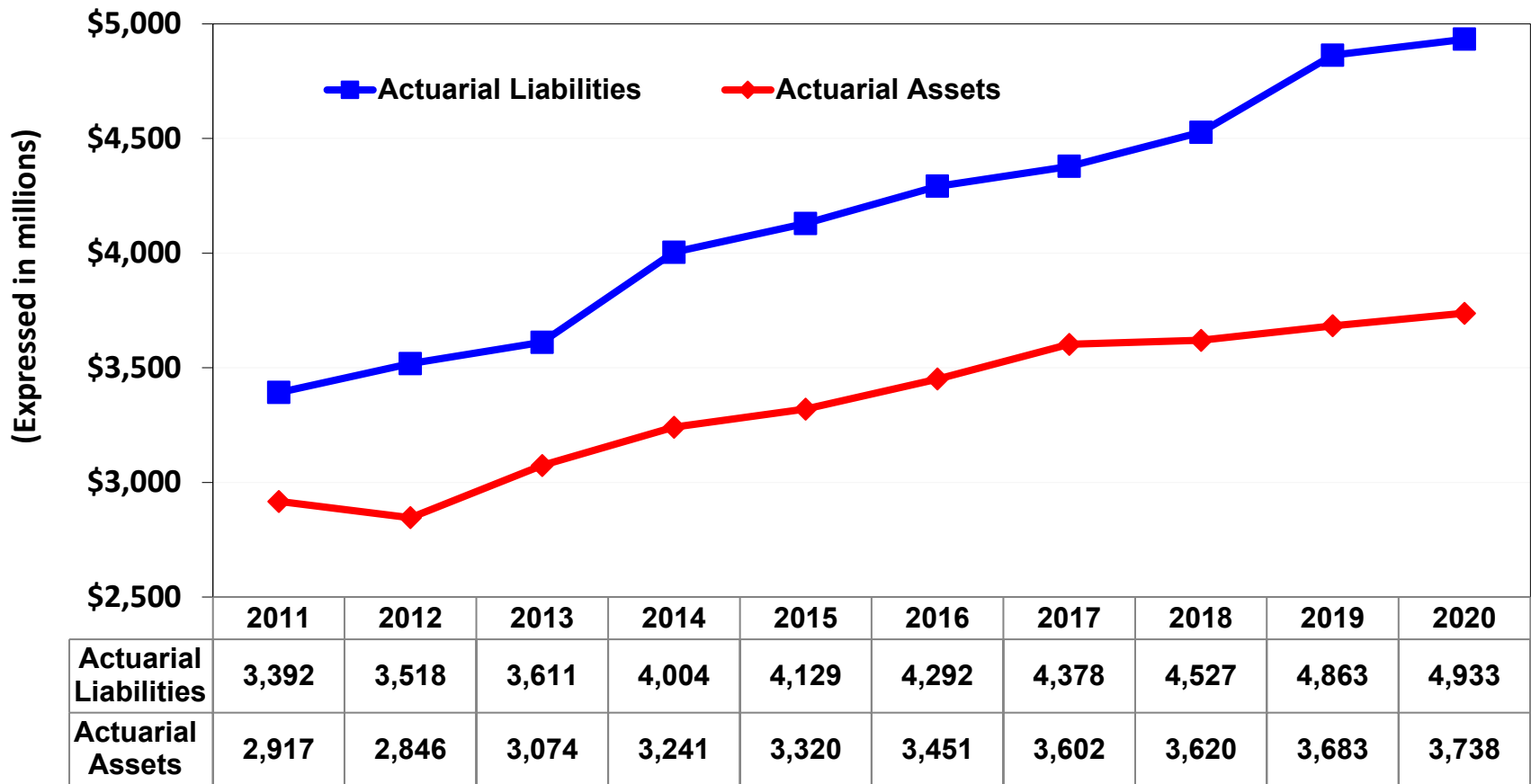
Funded ratio using market value of assets as of December 31, 2018 is 72%.

Funded ratio using market value of assets as of December 31, 2019 is 75%.

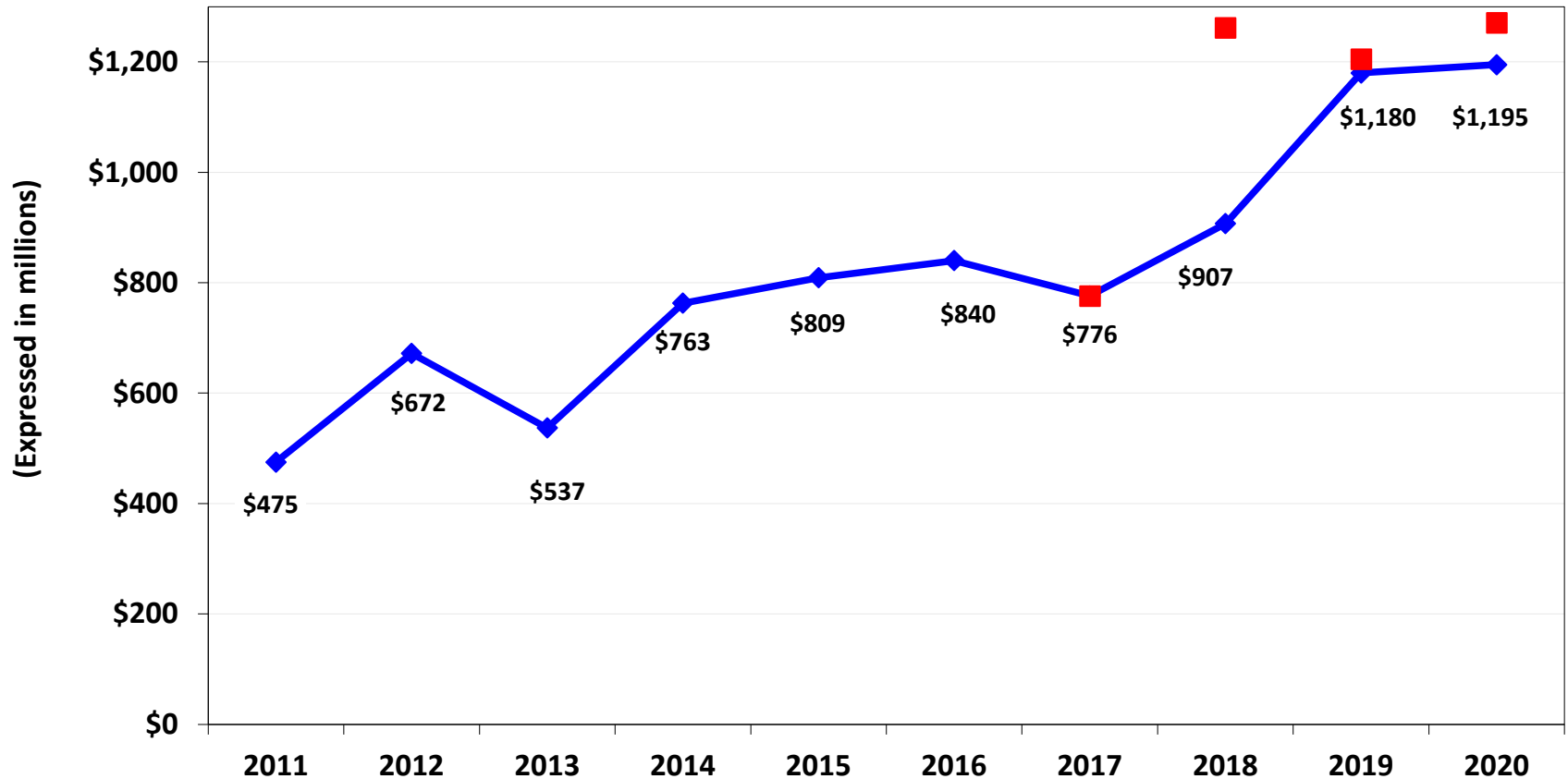
Funded ratio using market value of assets as of December 31, 2020 is 74%.



Liabilities vs. Assets



Unfunded Actuarial Accrued Liability (UAAL)



UAAL based on market value of assets as of December 31, 2018 is \$1,262 million.

■ UAAL based on market value of assets as of December 31, 2019 is \$1,205 million.

UAAL based on market value of assets as of December 31, 2020 is \$1,271 million.



Actuarial Required Contribution Rate

- We now use an Open Group projection to determine the Actuarially Required Contribution Rate (ARC)
 - Reflects declining average Normal Cost % over time due to new tier of benefits
 - Rate is determined as level percentage of pay so amortization rate is increasing over time
 - 30-year funding period is used

Actuarial Required Contribution Rate

- ARC as of December 31, 2020 is 34.94%
 - Decrease from 35.38% in prior year
 - Compares to actual rate expected to be contributed in fiscal year 2022 of 27.08%
 - Total rate of 36.00% of pay less POB Credit of 8.92%
 - Decrease is due to liability gains offsetting impact of investment losses and lower than expected payroll growth

Fiscal Year Beginning October 1st

	<u>2020</u>	<u>2021</u>
1. Prior Adjusted Total Obligation Rate	36.00%	36.00%
2. Actuarially Required Contribution Rate	35.38%	34.94%
3. Debt Service		
a) Scheduled Debt Service Payment	\$ 37,987,077	\$ 39,200,283
b) Projected Payroll	\$444,737,003	\$439,544,160
c) Pension Obligation Bond Credit (a/b)	8.54%	8.92%
4. Current Total Obligation Rate (2+3c)	43.92%	43.86%
5. Current Adjusted Total Obligation Rate	36.00%	36.00%
6. Allocation of Contribution Rates for Fiscal Year Beginning 1 st		
a) Employee (5 x .37)	13.32%	13.32%
b) City (5 x .63)	22.68%	22.68%
7. City Contribution to Fund (6.b. – 3.c)	14.14%	13.76%

The formula for contributions are based on Dallas City Code 40A originally established with City ordinance 25695



Determination of Current Adjusted Total Obligation Rate

1. Prior Adjusted Total Obligation Rate (PATOR) 36.00%
2. Current Total Obligation Rate (CTOR) 43.86%
3. If $(-3.00\% < \text{PATOR} - \text{CTOR} < 3.00\%)$ Then
Current Adjusted Total Obligation Rate (CATOR) = PATOR (36.00%)
Else Go to Step 4
4. CATOR = Lowest of (a), (b), & (c) where:
 - a. $\text{PATOR} + [0.5 * (\text{CTOR} - \text{PATOR})] = 39.93\%$
 - b. $110\% * \text{PATOR} = 39.60\%$
 - c. 36.00% Maximum limit = 36.00%
 - d. Lowest of (a), (b), and (c) is: = 36.00%

Valuation Summary

- The Actuarially Required Contribution to the Fund decreased from 35.38% to 34.94%
- The total contribution rate including the debt service decreased from 43.92% to 43.86%
- \$76 million in deferred investment losses still to be recognized or offset

Valuation Summary

- Calculated contribution rate is projected to remain relatively level until POBs are paid off
 - Assuming all assumptions are met including 7.25% return on AVA
 - Impact of shortfall in contributions because of 36.00% maximum rate is being somewhat offset by
 - 30-year rolling amortization period
 - Decrease in average normal cost due to new tier of benefits
- Actual contribution rate will remain at 36% cap for foreseeable future



Employees' Retirement Fund
of the City of DALLAS

Employees' Retirement Fund of the City of Dallas

Marketable Alternatives Search Update

April 13, 2021



ERF Marketable Alternatives manager search

- As per Trustee approval at the November 2019 Board meeting, this search is to fulfill the 2.5% allocation to Marketable Alternatives
- The purpose of the allocation is to invest in a diversified set of strategies to achieve outcomes which are integrated and consistent with the ERF asset allocation policy: drive returns; mitigate risk; and provide uncorrelated sources of return (diversifiers)
- ERF received 26 RFPs that met minimum qualifications; that list was then narrowed down to 4 managers for on-site (virtual) due diligence based on the following scoring criteria:
 - Investment philosophy and process (30 points)
 - Organization and team (20)
 - Resources/ implementation (20)
 - Performance/ attribution (20)
 - Fees (10)



The following 8 managers were narrowed down to 4 for on-site (virtual) due diligence

- Arena Special Opportunities Fund LP
- Brevan Howard Fund
- Brevet Direct Lending Short Duration Fund
- Ceres Farms, LLC
- Crabel Advanced Trend Fund
- FORT Global Contrarian L.P.
- Maniyar Macro Portfolio
- TIG Arbitrage Enhanced



A review of the 4 managers for due diligence

Brevan Howard

- Brevan Howard is a multi-PM macro shop headquartered in the U.K. with five additional offices globally; founded in 2002 by former members of the CSFB Developed Markets Rates trading team led by Alan Howard. The firm manages \$12.2B in AUM and distributes capital across multi- and single-PM funds, currently employing 57 portfolio managers, 38 execution traders, 6 risk officers, 7 economists, and 1 strategist. Each offering at the firm has the explicit goal of capital appreciation through global macro and relative value trading across predominantly fixed income and FX instruments, with lesser allocations to equities, commodities, and credit.
- The Master Fund strategy was launched in early 2003 as a multi-trader, global macro/relative value absolute return fund. The Fund allocates to single-PM funds, opportunistic vehicles, multi-PM funds, and individual traders, with the goal of giving investors exposure to the best traders across the Brevan Howard platform and balancing macro directional and macro relative value strategies. The result is a diversified multi-strategy offering with an underlying global macro trading philosophy and convex return profile, with positive expected returns during difficult market environments for equity hedge, event-driven, and relative value multi-strategy peers.

Brevet Capital Management

- Brevet is an alternative investment firm founded in 1998 and based in New York City with approximately \$2.1B in AUM; founders pursued similar strategies at Principal Finance Groups at Goldman Sachs, Lehman Brothers, and Deutsche Bank. The Firm's flagship strategy, Brevet Direct Lending – Short Duration Fund, currently has \$829 million in assets and was launched in an evergreen comingled structure in January 2009 following three years of operation as a separate account solution. Brevet employs 62 professionals of which 17 are dedicated to the investment sourcing, structuring, and underwriting efforts.
- The strategy focuses on creating asset-based finance solutions, with a strong bias towards middle market companies whose growth is catalyzed by a federal, state, or municipal government program. The inefficiencies the strategy seeks to capitalize on are driven by sub-optimal capital allocation by governments as well as the perceived complexity of working with governments as a counterparty.



A review of the 4 managers for due diligence (continued)

Ceres Partners, LLC

- Ceres is an alternative investment firm based in South Bend, IN with approximately \$1.2 billion of assets under management; founded in 2007 by Perry Vieth, who left his post after 10+ years as CIO of Fixed Income & Currency at PanAgora Asset Management. Ceres employs 21 professionals of which 10 are dedicated to investments in food and agriculture through Ceres Farms LLC, a strategy launched in January 2008.
- The strategy Ceres Farms with \$926M in assets, focuses on acquiring undervalued, high-quality farmland, improving these assets, and leasing the assets to professional farmer-partners; leases are generally 3-5 years, paid annually in cash and have a upside participation tied to CBOT prices.
- The Fund provides investors with exposure to an evergreen, real-asset based alternative income strategy with relatively stable cash yields, upside optionality, inflation-hedging characteristics, and diversification to equity and fixed income asset classes. The allocation parameters for the Fund stipulate significant diversification by state, tenant, farm size, and crop type.

FORT Global Contrarian L.P.

- FORT LP is a systematic alternative investment manager with \$6.2 billion in assets under management. Founded in 1993, owned by two co-founders who act as portfolio managers for the Firm's investment strategies and have worked together for over 30 years dating back to The World Bank in 1987. The Firm employs over 60 individuals, including 35 research and investment professionals, across the FORT's headquarters in Maryland and a support office in New York.
- FORT Global Contrarian Fund with \$2.9B in assets was launched in October 2002 as a systematic, trend-anticipating strategy to capitalize on short to medium-term trends across the major asset classes. As a trend-anticipating strategy, the Fund will typically take positions to enter/exit trends prior to other traditional trend-following strategies. The strategy evaluates various past highs and lows in order to generate buy levels below market close and sell levels above market close. This will result in the strategy often taking positions contrary to current market direction but allows FORT to identify trends prior to the rest of the trend-following landscape. The strategy will also anticipate trends during apparent "direction-less" periods, where traditional trend followers tend to struggle.



Recommendations & next steps

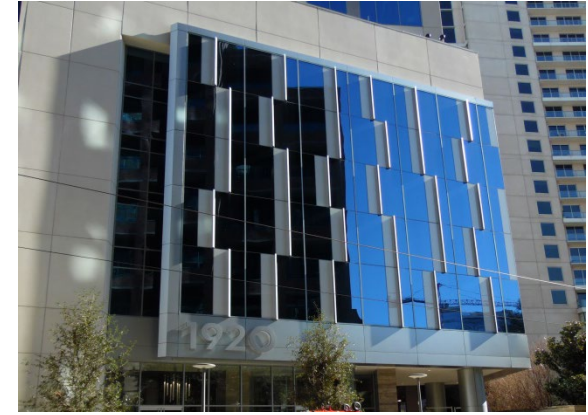
Timeline

- ✓ As per Board approval in December 2020, staff issued the Marketable Alternatives RFP in January 2021
- ✓ RFP responses sent to ERF by February deadline
- ✓ February/ March – Staff and Wilshire reviewed all RFP responses
 - April 13th – Review managers for due diligence with the Board
 - April/ May – Staff and Wilshire conduct manager due diligence meetings (virtually)
 - May 11th – Review list of managers for final presentations to the Board
 - June 8th – Finalists present to the Board; Trustees make final decision on manager selection



Appendix – RFP Scorecard

Investment Manager Strategy	Brevet Direct Lending Short Duration Fund, L.P. Alternative Income	Ceres Farms LLC Alternative Income	FORT Global Contrarian L.P. CTA - Trend	Brevan Howard Fund Limited Macro - Multi-Strategy
ERF Staff 1	77	60	71	82
ERF Staff 2	93	80	80	92
ERF Staff 3	63	81	62	72
ERF Staff 4	74	70	77	80
Total Average Points	77	73	73	82



EMPLOYEES' RETIREMENT FUND

BOARD OF TRUSTEES MEETING

ACTUARIAL SERVICES REQUEST FOR PROPOSAL PROCESS

APRIL 13, 2021 9:00 AM

Overview

Project Objective

- Request for Proposal (RFP) to provide actuarial services to ERF. The intent of the proposal process is to establish an ongoing contractual relationship between the Fund and the selected firm for the purpose of providing ERF with actuarial services.

Project Scope:

- The firm selected will perform the following services for the Fund in accordance with actuarial standards as defined by the Actuarial Standards Board, the requirements of the Governmental Accounting Standards Board and the Government Finance Officers Association. The firm will perform the following services:
 - Prepare an annual actuarial valuation.
 - Prepare a letter summary of the annual actuarial valuation for reproduction in the Fund's annual report.
 - Prepare actuarial cost studies, asset and liability projections, and proposals relating to benefit changes.
 - Prepare a five-year experience study.
 - Assist in implementation of law changes and modification of actuarial tables, as required.
 - Make recommendations for possible improvements to the plan operations based upon new developments in retirement planning and administration.
 - Attend Trustee meetings and other relevant meetings as required from time to time.
 - Provide relevant training or educational programs for Trustees and staff, as requested from time to time.
 - Notify ERF of changes, proposed changes to laws and practices that impact actuarial issues.
 - Perform other services related to the Fund's benefit activities (e.g., Section 415 and QDRO calculations), as requested.

Proposal Evaluation

Proposals will be reviewed to determine whether or not they meet the requirements of the RFP.

Proposals will be evaluated on the following criteria:

❖ Proposer's Organization, Staff Qualifications, and Relevant Experience	30 points
❖ Approach to Actuarial Services	20 points
❖ Reporting and Firm Resources	20 points
❖ MBE/WBE Participation	10 points
❖ Fee Proposal	<u>20 points</u>
Total Points Possible:	100 points

Proposed Actuarial Firms

Proposed actuarial firms (in alphabetical order) are:

1. Foster & Foster
2. Gabriel Roeder Smith & Company
3. Mercer
4. Milliman
5. Towers Watson

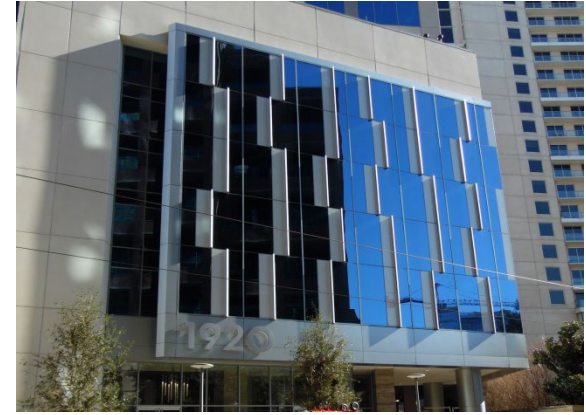
Timeline

Schedule of Events

- Board approves Request for Proposal Process April 13, 2021
- Proposals due date May 19, 2021
- Due diligence conducted by staff, virtually May 20-25, 2021
- Board Finalist(s) Presentation and selection June 8, 2021

Recommended Motion

Motion to approve the release of the Actuarial Request for Proposals (RFP); approval for designated staff to conduct a diligence process virtually; and to present the proposed Finalist(s) at the June 8, 2021 ERF Board meeting.



QUESTIONS



TEXPERS Annual Conference

Sunday, May 23, 2021 to Wednesday, May 26, 2021

Please note: If you paid for and kept your registration active for our 2020 Annual Conference your registration will automatically roll over to our 2021 Annual Conference, you will not need to register again. If you requested a cancellation and refund or had an invoice that was not paid for the 2020 Annual Conference you will need to register and pay to attend the 2021 Annual Conference. For questions regarding your registration please [contact us](#).



If you are having trouble reading this email, read the online version [here](#).



Registration for the 18th Annual Consortium Is Open!

June 8 + 10 | Virtual Event

In its 18th year, Consortium continues to be *the* meeting place for institutional investors and their consultants seeking exposure to performance-focused diverse and women alternative investment managers. This year, Consortium focuses on real **action** by showcasing **leaders** in the space while highlighting practical steps we can all take toward a more inclusive industry.

REGISTER

WHO SHOULD ATTEND CONSORTIUM

- Diverse and women investment managers
- Institutional investors seeking a more inclusive investment program
- Investment consultants
- Other industry partners

ENRICHED PROGRAM CONTENT

GP Bootcamp

The New Pitch – What LPs Look for Today

A panel of top institutional investors, consultants, and GCM Grosvenor investment teams review video pitches submitted by qualifying GPs and provide live feedback to a select number during Consortium.

VIP Connect

Tailored 1:1 meetings

A hallmark of Consortium, these sessions bring together LPs, consultants, and diverse managers. This year will feature a more curated approach to matching meeting participants, for an extra-tailored experience.

[VIEW AGENDA](#)

[REGISTER](#)

Registration for GPs, fee-earning LPs, and service providers is \$250.

Questions? Email us at events@gcmlp.com

GCM GROSVENOR'S COMMITMENT TO SMALL, EMERGING, AND DIVERSE MANAGERS

GCM Grosvenor promotes equal access to capital in alternatives by driving increased investment with small, emerging, and diverse managers. We have over \$21 billion invested and committed to these managers across private equity, infrastructure, real estate, and absolute return strategies. Our experienced team leverages a network of contacts built over decades to source the next generation of talent, helping to drive a more diverse and inclusive industry. To further accelerate growth, we host multiple industry-leading annual conferences that train, educate and promote small, emerging, and diverse managers while connecting institutional investors to these managers. [Learn more >>](#)

 GCM GROSVENOR

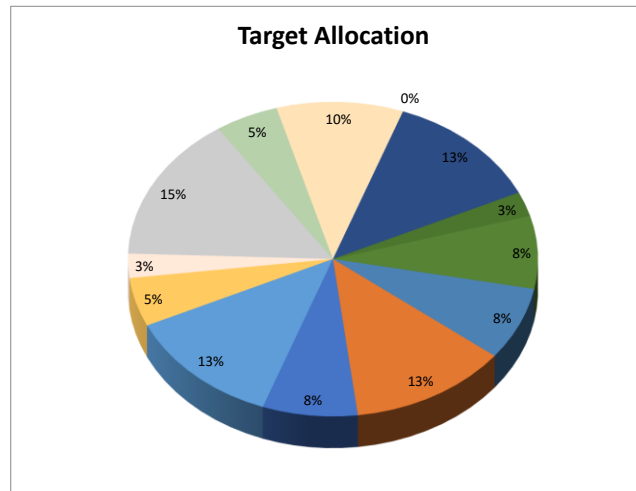
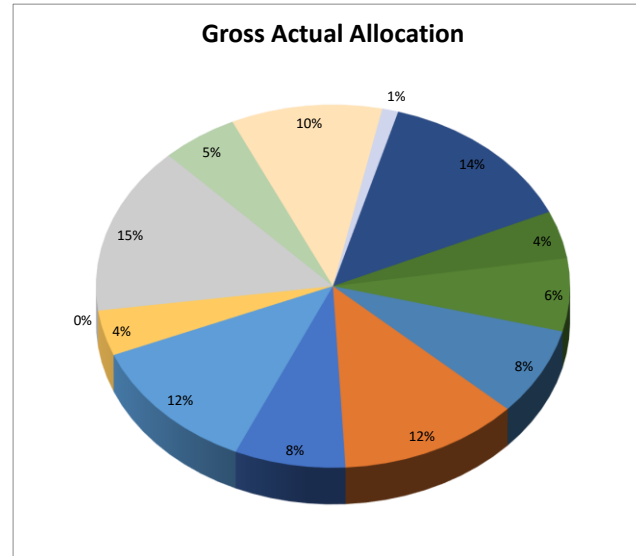
Consortium2021
June 8 + 10 | Virtual Event

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900 North Michigan Avenue Suite 1100 | Chicago, IL 60611
gcmgrosvenor.com | inquiries@gcmlp.com | (312) 506-6500

Asset Allocation: Actual vs. Target

February 28, 2021

	Market Value	Gross Actual Allocation	Target Allocation	% Difference from Allocation
EQUITY				
CHANNING CAPITAL	45,898,549.37	1.24		
REDWOOD- SL	44,575,855.19	1.20		
SYSTEMATIC	83,575,220.04	2.26		
<i>Total Small Cap</i>	174,049,624.60	4.71		
SMITH GRAHAM	84,405,247.78	2.28		
T. ROWE PRICE	152,595,852.84	4.13		
<i>Total Domestic/Enhanced equity</i>	237,001,100.62	6.41		
NTGI S&P 500 EQUITY INDEX	154,266,705.44	4.17		
<i>Total Index</i>	154,266,705.44	4.17		
<i>Total Domestic</i>	565,317,430.66	15.28	12.50	2.78
ADELANTE CAPITAL	67,176,430.51	1.82		
CENTERSQUARE-SL	67,841,450.78	1.83		
<i>Total REITS</i>	135,017,881.29	3.65	2.50	1.15
HEITMAN	82,461,169.93	2.23		
INVESCO	70,162,002.00	1.90		
INVESCO - SA	69,261,964.72	1.87		
VIRTUS REAL ESTATE CAP	23,534,721.00	0.64		
<i>Total Real Estate</i>	245,419,857.65	6.63	7.50	-0.87
FAIRVIEW CAPITAL	50,217,116.00	1.36		
GROSVENOR GCM - CFG	150,141,885.00	4.06		
HAMILTON LANE	88,546,750.00	2.39		
<i>Total Private Equity</i>	288,905,751.00	7.81	7.50	0.31
ACADIAN	125,069,492.91	3.38		
AQR CAPITAL	129,670,875.25	3.51		
ATIVO	39,008,123.88	1.05		
BAILLIE GIFFORD	90,739,147.92	2.45		
BLACKROCK ACW-EXUS-SL	0.62	0.00		
EARNST PARTNERS	92,828,106.06	2.51		
GLOBAL TRANSITION ACCOUNT	940.39	0.00		
<i>Total International</i>	477,316,687.03	12.90	12.50	0.40
ARIEL	110,093,655.17	2.98		
NORTHERN TRUST INTL EQ ACWI INDEX	25,278,723.37	0.68		
WELLINGTON MGMT	129,700,348.98	3.51		
<i>Total Global Equity</i>	265,072,727.52	7.17	7.50	-0.33
ACADIAN-LVG	214,523,881.89	5.80		
BLACKROCK	217,515,050.73	5.88		
<i>Total Global Low Volatility Equity</i>	432,038,932.62	11.68	12.50	-0.82
ATLANTIC TRUST	62,836,282.16	1.70		
HARVEST FUND	62,133,781.72	1.68		
COHEN & STEERS	58,821,771.21	1.59		
<i>Total Global Listed Infrastructure</i>	183,791,835.09	4.97	5.00	-0.03
<i>Total Marketable Alternatives</i>	-	0.00	2.50	-2.50
TOTAL EQUITY	2,592,881,102.86	70.09	70.00	0.09
FIXED INCOME				
ABERDEEN ASSET MGMT	219,793,027.59	5.94		
GARCIA HAMILTON	66,600,544.91	1.80		
SECURIAN ASSET MANAGEMENT	220,255,239.94	5.95		
<i>Total Investment Grade</i>	506,648,812.44	13.70	15.00	-1.30
NEUBERGER BERMAN	179,306,359.59	4.85		
<i>Total Opportunistic Credit</i>	179,306,359.59	4.85	5.00	-0.15
BLACKROCK-HY	179,616,642.26	4.86		
OAKTREE	181,898,665.15	4.92		
<i>Total High Yield</i>	361,515,307.41	9.77	10.00	-0.23
CASH ACCOUNT	58,894,435.45	1.59		
<i>Total Short Term</i>	58,894,435.45	1.59	0.00	1.59
TOTAL FIXED INCOME	1,106,364,914.89	29.91	30.00	-0.09
TOTAL FUND	\$ 3,699,246,017.75			



ASSET ALLOCATION COMPARISON

March 31, 2021

	Market Value	% of Total Fund	Allocation Policy	% Difference from Allocation	Prior Period Market Value	Prior Period % of Total Fund
EQUITY						
CHANNING CAPITAL	47,061,035.10	1.25			45,898,549.37	1.24
REDWOOD- SL	44,282,878.02	1.18			44,575,855.19	1.20
SYSTEMATIC	89,039,178.87	2.37			83,575,220.04	2.26
<i>Total Small Cap</i>	180,383,091.99	4.80			174,049,624.60	4.71
SMITH GRAHAM	91,895,019.51	2.44			84,405,247.78	2.28
T. ROWE PRICE	159,205,025.82	4.23			152,595,852.84	4.13
<i>Total Domestic/Enhanced equity</i>	251,100,045.33	6.68			237,001,100.62	6.41
NTGI S&P 500 EQUITY INDEX	161,016,229.28	4.28			154,266,705.44	4.17
<i>Total Index</i>	161,016,229.28	4.28			154,266,705.44	4.17
<i>Total Domestic</i>	592,499,366.60	15.76	12.50	3.26	565,317,430.66	15.28
ADELANTE CAPITAL	70,539,203.93	1.88			67,176,430.51	1.82
CENTERSQUARE-SL	71,305,335.85	1.90			67,841,450.78	1.83
<i>Total REITS</i>	141,844,539.78	3.78	2.50	1.28	135,017,881.29	3.65
AEW PARTNERS	1,672,103.00	0.04				
HEITMAN	82,461,169.93	2.19			82,461,169.93	2.23
INVESCO	70,113,010.00	1.86			70,162,002.00	1.90
INVESCO - SL	69,261,964.72	1.84			69,261,964.72	1.87
VIRTUS REAL ESTATE CAP	23,534,721.00	0.63			23,534,721.00	0.64
<i>Total Real Estate</i>	247,042,968.65	6.57	7.50	-0.93	245,419,857.65	6.63
FAIRVIEW CAPITAL	50,217,116.00	1.34			50,217,116.00	1.36
GROSVENOR GCM - CFGI	150,591,885.00	4.00			150,141,885.00	4.06
HAMILTON LANE	85,100,886.00	2.26			88,546,750.00	2.39
<i>Total Private Equity</i>	285,909,887.00	7.60	7.50	0.10	288,905,751.00	7.81
ACADIAN	130,196,893.15	3.46			125,069,492.91	3.38
AQR CAPITAL	133,240,987.71	3.54			129,670,875.25	3.51
ATIVO	40,551,831.46	1.08			39,008,123.88	1.05
BAILLIE GIFFORD	90,087,787.67	2.40			90,739,147.92	2.45
BLACKROCK ACW-EXUS-SL	0.62	0.00			0.62	0.00
EARNEST PARTNERS	92,928,731.07	2.47			92,828,106.06	2.51
GLOBAL TRANSITION ACCOUNT	940.39	0.00			940.39	0.00
<i>Total International</i>	487,007,172.07	12.94	12.50	0.44	477,316,687.03	12.90
ARIEL	111,127,435.18	2.96			110,093,655.17	2.98
NORTHERN TRUST INTL EQ ACWI INDEX	25,955,986.29	0.69			25,278,723.37	0.68
WELLINGTON MGMT	131,075,424.72	3.49			129,700,348.98	3.51
<i>Total Global Equity</i>	268,158,846.19	7.14	7.50	-0.36	265,072,727.52	7.17
ACADIAN-LVG	226,062,536.59	6.01			214,523,881.89	5.80
BLACKROCK	227,734,381.65	6.06			217,515,050.73	5.88
<i>Total Global Low Volatility Equity</i>	453,796,918.24	12.07	12.50	-0.43	432,038,932.62	11.68
ATLANTIC TRUST	66,648,783.12	1.77			62,836,282.16	1.70
HARVEST FUND	66,320,942.65	1.76			62,133,781.72	1.68
COHEN & STEERS	62,516,066.40	1.66			58,821,771.21	1.59
<i>Total Global Listed Infrastructure</i>	195,485,792.17	5.19	5.00	0.19	183,791,835.09	4.97
<i>Total Marketable Alternatives</i>	-	0.00	2.50	-2.50	-	0.00
TOTAL EQUITY	2,671,745,490.70	71.05	70.00	1.05	2,592,881,102.86	70.09
FIXED INCOME						
ABERDEEN ASSET MGMT	217,284,054.27	5.78			219,793,027.59	5.94
GARCIA HAMILTON	65,896,084.90	1.75			66,600,544.91	1.80
SECURIAN ASSET MANAGEMENT	218,353,797.59	5.81			220,255,239.94	5.95
<i>Total Investment Grade</i>	501,533,936.76	13.34	15.00	-1.66	506,648,812.44	13.70
NEUBERGER BERMAN	179,206,164.18	4.77			179,306,359.59	4.85
<i>Total Opportunistic Credit</i>	179,206,164.18	4.77	5.00	-0.23	179,306,359.59	4.85
BLACKROCK-HY	180,108,405.10	4.79			179,616,642.26	4.86
OAKTREE	182,675,822.25	4.86			181,898,665.15	4.92
<i>Total High Yield</i>	362,784,227.35	9.65	10.00	-0.35	361,515,307.41	9.77
CASH ACCOUNT	45,049,733.20	1.20			58,894,435.45	1.59
<i>Total Short Term</i>	45,049,733.20	1.20	0.00	1.20	58,894,435.45	1.59
TOTAL FIXED INCOME	1,088,574,061.49	28.95	30.00	-1.05	1,106,364,914.89	29.91

TOTAL FUND \$ 3,760,319,552.19

\$ 3,699,246,017.75

Market Value YE 2020 \$ 3,662,162,799.23

Market Value Variance

Change from YE 2020: \$ 98,156,752.96

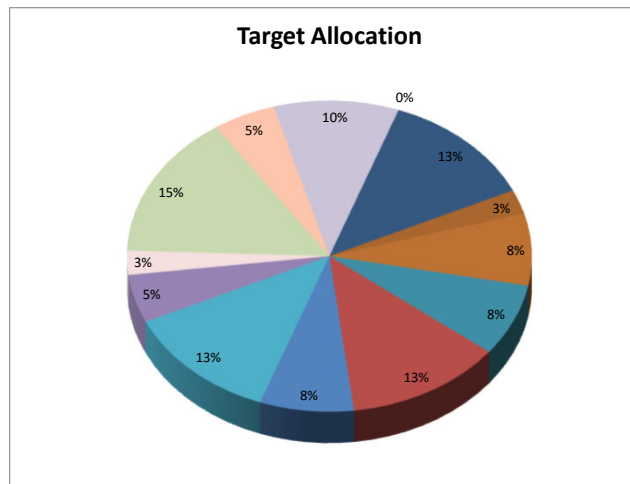
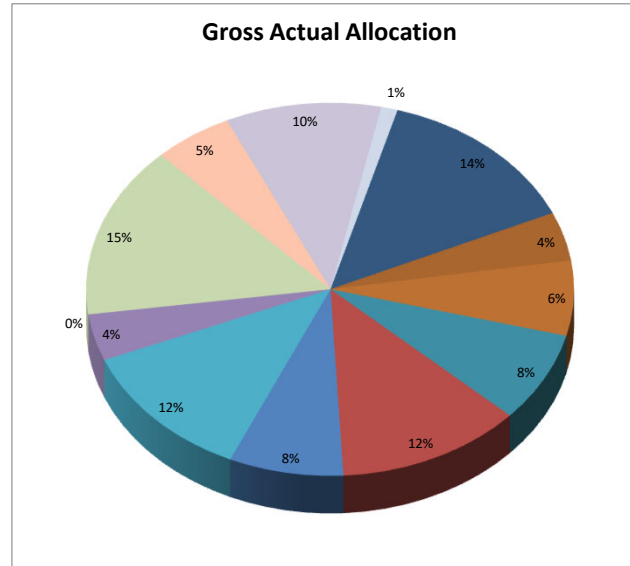
\$ 3,699,246,135.82

Change from prior month: \$ 61,073,534.44

Asset Allocation: Actual vs. Target

March 31, 2021

	Market Value	Gross Actual Allocation	Target Allocation	% Difference from Allocation
EQUITY				
CHANNING CAPITAL	47,061,035.10	1.25		
REDWOOD-SL	44,282,878.02	1.18		
SYSTEMATIC	89,039,178.87	2.37		
<i>Total Small Cap</i>	180,383,091.99	4.80		
SMITH GRAHAM	91,895,019.51	2.44		
T. ROWE PRICE	159,205,025.82	4.23		
<i>Total Domestic/Enhanced equity</i>	251,100,045.33	6.68		
NTGI S&P 500 EQUITY INDEX	161,016,229.28	4.28		
<i>Total Index</i>	161,016,229.28	4.28		
<i>Total Domestic</i>	592,499,366.60	15.76	12.50	3.26
ADELANTE CAPITAL	70,539,203.93	1.88		
CENTERSQUARE-SL	71,305,335.85	1.90		
<i>Total REITS</i>	141,844,539.78	3.78	2.50	1.28
A&W PARTNERS	1,672,103.00	0.04		
HEITMAN	82,461,169.93	2.19		
INVESCO	70,113,010.00	1.86		
INVESCO - SA	69,261,964.72	1.84		
VIRTUS REAL ESTATE CAP	23,534,721.00	0.63		
<i>Total Real Estate</i>	247,042,968.65	6.57	7.50	-0.93
FAIRVIEW CAPITAL	50,217,116.00	1.34		
GROSVENOR GCM - CFG	150,591,885.00	4.00		
HAMILTON LANE	85,100,886.00	2.26		
<i>Total Private Equity</i>	285,909,887.00	7.60	7.50	0.10
ACADIAN	130,196,893.15	3.46		
AQR CAPITAL	133,240,987.71	3.54		
ATIVO	40,551,831.46	1.08		
BAILLIE GIFFORD	90,087,787.67	2.40		
BLACKROCK ACW-EXUS-SL	0.62	0.00		
EARNEST PARTNERS	92,928,731.07	2.47		
GLOBAL TRANSITION ACCOUNT	940.39	0.00		
<i>Total International</i>	487,007,172.07	12.95	12.50	0.44
ARIEL	111,127,435.18	2.96		
NORTHERN TRUST INTL EQ ACWI INDEX	25,955,986.29	0.69		
WELLINGTON MGMT	131,075,424.72	3.49		
<i>Total Global Equity</i>	268,158,846.19	7.13	7.50	-0.36
ACADIAN-LVG	226,062,536.59	6.01		
BLACKROCK	227,734,381.65	6.06		
<i>Total Global Low Volatility Equity</i>	453,796,918.24	12.07	12.50	-0.43
ATLANTIC TRUST	66,648,783.12	1.77		
HARVEST FUND	66,320,942.65	1.76		
COHEN & STEERS	62,516,066.40	1.66		
<i>Total Global Listed Infrastructure</i>	195,485,792.17	5.19	5.00	0.19
<i>Total Marketable Alternatives</i>	-	0.00	2.50	-2.50
TOTAL EQUITY	2,671,745,490.70	71.05	70.00	1.05
FIXED INCOME				
ABERDEEN ASSET MGMT	217,284,054.27	5.78		
GARCIA HAMILTON	65,896,084.90	1.75		
SECURIAN ASSET MANAGEMENT	218,353,797.59	5.81		
<i>Total Investment Grade</i>	501,533,936.76	13.34	15.00	-1.66
NEUBERGER BERMAN	179,206,164.18	4.77		
<i>Total Opportunistic Credit</i>	179,206,164.18	4.77	5.00	-0.23
BLACKROCK-HY	180,108,405.10	4.79		
OAKTREE	182,675,822.25	4.86		
<i>Total High Yield</i>	362,784,227.35	9.65	10.00	-0.35
CASH ACCOUNT	45,049,733.20	1.20		
<i>Total Short Term</i>	45,049,733.20	1.20	0.00	1.20
TOTAL FIXED INCOME	1,088,574,061.49	28.95	30.00	-1.05
TOTAL FUND	\$ 3,760,319,552.19			



DISCUSSION SHEET

Employees' Retirement Fund
Board of Trustees Meeting

April 13th, 2021

- Issue:** First & Second Quarter of 2021 Cash Rebalance
- Attachment:** None, informational purposes only
- Discussion:** During the month of February, ERF Staff rebalanced fund managers taking \$60 million in cash to pay benefits for the months of March, April, May, and June.
- Redemptions were as follows: \$11 million from Baillie Gifford; \$9 million from Ariel; \$9 million from AQR; \$9 million from Earnest; \$8 million from CIBC; \$8 million from Harvest; and \$6 million from Wellington.



WILSHIRE ASSOCIATES

Wilshire Consulting



Employees' Retirement Fund of the City of Dallas

Monthly Investment Summary

February 28, 2021

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Global Equity Composite	2.92	7.72	2.37	27.80	8.88	13.58	10.18	9/1/2012	265,072,728	7.19
Global Low Volatility Composite	-1.33	0.39	-2.34	5.67	4.90	8.30	7.24	7/1/2015	432,038,933	11.72
Domestic Equity Composite	6.07	12.02	6.46	37.96	13.24	16.55	10.55	1/1/1990	565,317,431	15.34
International Equity Composite	3.54	10.52	3.68	34.29	6.25	12.45	6.00	1/1/1990	477,925,720	12.97
Global Fixed Income Composite	-1.40	-1.33	-1.86	2.85	5.55	4.26	5.09	10/1/1995	506,648,812	13.75
High Yield Composite	-0.12	2.03	0.24	9.20	5.89	7.69	6.51	1/1/1997	361,515,307	9.81
Credit Opportunities Composite	-0.24	1.25	-0.21	5.78	5.05	6.63	6.77	2/1/2016	179,370,957	4.87
Total Real Estate Composite	0.88	2.70	0.75	1.80	6.55	5.71	6.43	1/1/1990	379,426,843	10.30
Global Listed Infrastructure Composite	3.58	8.19	6.52	-8.48	-6.32	0.86	1.35	1/1/2012	183,791,835	4.99
Private Equity Composite	1.03	2.63	1.58	1.84	10.04	10.34	12.50	6/1/2009	274,991,704	7.46
Managed Short Term Composite	0.01	0.03	0.02	0.40	1.54	1.20	2.84	1/1/1990	58,894,435	1.60
Dallas Total Fund	1.54	4.65	1.60	13.06	6.70	9.18	9.00	1/1/1985	3,684,994,704	100.00
Policy Index	1.62	4.09	1.40	15.41	7.50	9.57	9.62			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Systematic Financial Russell 2000 Index	10.07 6.23	21.44 21.23	13.06 11.58	37.28 51.00	8.57 14.87	15.18 17.92	11.20 10.56	8/1/2003	83,575,220	14.78
Redwood Investments * Russell 2000 Growth Index	6.70 3.30	17.78 18.40	10.03 8.28	65.01 58.88	18.34 18.95		15.77 18.92	10/1/2016	44,575,855	7.89
Channing Capital * Russell 2000 Value Index	13.52 9.39	21.46 24.27	12.07 15.15	52.43 41.06	11.15 10.14	14.69 14.22	8.90 8.39	12/1/2013	45,898,549	8.12
Domestic Equity Small Cap Composite	10.06	20.49	12.01	48.56	11.86	16.24	10.44	6/1/2003	174,049,625	30.79
Smith Graham * Russell Midcap Index	10.57 5.57	21.88 10.22	15.35 5.29	39.77 36.11	8.83 13.74		8.63 12.78	1/1/2018	84,405,248	14.93
T. Rowe Price S&P 500	2.84 2.76	5.32 5.63	1.18 1.72	31.70 31.29	14.70 14.14	17.62 16.82	10.34 9.76	4/1/2006	152,595,853	26.99
Northern Trust S&P 500 (Lending) S&P 500	2.76 2.76	5.63 5.63	1.72 1.72	31.10 31.29	14.11 14.14	16.81 16.82	10.56 10.52	1/1/1995	154,266,705	27.29
Domestic Equity Composite Custom Benchmark	6.07 3.05	12.02 7.31	6.46 2.71	37.96 35.16	13.24 14.96	16.55 17.46	10.55 10.64	1/1/1990	565,317,431	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Adelante Capital Management	2.95	7.17	4.05	5.79	9.71	6.93	9.46	10/1/2001	67,176,431	17.70
Wilshire U.S. Real Estate Securities Index	3.34	6.76	3.84	2.90	8.77	6.26	9.60			
CenterSquare	3.86	6.83	3.38	5.66			7.90	6/1/2018	67,841,451	17.88
Wilshire U.S. Real Estate Securities Index	3.34	6.76	3.84	2.90			6.09			
REIT Composite	3.40	7.00	3.71	5.72	10.06	6.85	9.57	10/1/2001	135,017,881	35.58
Wilshire U.S. Real Estate Securities Index	3.34	6.76	3.84	2.90	8.77	6.26	9.60			
Heitman America Real Estate Trust, LP	0.00	1.61	0.00	-1.89	1.93	4.12	8.86	12/1/2010	81,863,243	21.58
NCREIF ODCE NOF	0.00	1.10	0.00	0.34	3.99	5.27	9.14			
Invesco Core Real Estate USA, LLC	0.00	1.64	0.00	-1.59	4.72	6.34	9.57	12/1/2010	68,848,995	18.15
NCREIF ODCE NOF	0.00	1.10	0.00	0.34	3.99	5.27	9.14			
Virtus Real Estate Capital III	0.00		-3.88				-3.88	1/1/2021	23,534,721	6.20
NCREIF ODCE NOF	0.00		0.00				0.00			
Private Core Real Estate Composite	-0.47	0.20	-0.88	-0.55	4.19	4.87	8.69	10/1/2010	244,408,961	64.42
Custom Benchmark	-0.35	0.50	-0.35	1.28	4.90	5.11	8.32			
Total Real Estate Composite	0.88	2.70	0.75	1.80	6.55	5.71	6.43	1/1/1990	379,426,843	100.00
Custom Benchmark	1.49	3.60	1.74	3.09	7.36	6.08	8.37			

Employees' Retirement Fund of the City of Dallas
 Private Equity & Direct Private Real Estate Monthly Performance and Market Value Summary



Periods Ended 02/28/21

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple ³
Invesco II	70,162,202	65,188,333	65,188,333	7,557,229	Jan-14	3.9%	1.2
Total Direct Private Real Estate	70,162,202	65,188,333	65,188,333	7,557,229	Jan-14	3.9%	1.2

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple ³
Hamilton Lane Secondary Fund II	529,889	25,000,000	22,058,532	31,007,605	Jul-09	13.6%	1.4
Hamilton Lane Secondary Fund III	7,251,045	30,000,000	23,372,292	23,142,322	Nov-12	9.9%	1.3
Hamilton Lane Secondary Fund IV	22,892,451	30,000,000	25,907,343	9,112,329	Mar-17	13.2%	1.2
Hamilton Lane Secondary Fund V	15,254,269	40,000,000	11,375,000	-	Mar-20	60.6%	1.3
Hamilton Lane Fund VII Composite	21,104,677	50,000,000	45,600,834	44,960,261	Jan-10	5.7%	1.4
Hamilton Lane Fund VIII (Global)	19,810,459	30,000,000	22,131,848	7,865,459	Nov-12	5.1%	1.3
GCM Grosvenor - Partnership, L.P.	33,198,856	75,000,000	84,967,430	102,385,430	Jun-11	13.9%	1.6
GCM Grosvenor - Partnership II, L.P. (2014)	53,491,585	60,000,000	68,196,751	35,323,333	Jul-14	11.1%	1.3
GCM Grosvenor - Partnership II, L.P. (2015)	35,038,623	30,000,000	30,173,182	5,824,948	Dec-15	13.0%	1.2
GCM Grosvenor - Partnership II, L.P. (2017)	16,202,734	30,000,000	16,979,304	794,423	Jan-18	0.5%	1.0
Fairview Capital - Lone Star Fund I	40,174,157	40,000,000	34,003,847	3,616,399	Aug-15	10.1%	1.3
Fairview Capital - Lone Star Fund II	10,042,959	30,000,000	8,747,396	-	Dec-18	-6.0%	1.1
Total Private Equity Composite	274,991,704	470,000,000	393,513,759	264,032,508	Jul-09	11.6%	1.4

Public Market Equivalent (PME) ² **438,443,273** **18.2%**

* Next Generation Manager

¹ Total Value to Paid-in Capital ("TVPI") multiple calculation = *(market value + distributions) / capital called*

² The Public Market Equivalent (PME) approach creates a hypothetical investment vehicle that mimics the private equity composite cash flows. The performance difference between the PME vehicle and the private equity portfolio is determined by their net asset value (NAV) at the end of the benchmarking period. The performance of the "public market" is simulated using the monthly S&P 500 index returns, plus a 300 BPs annual hurdle rate.

³ Private Equity cash account

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian International Custom Benchmark	4.60 3.62	12.75 10.67	4.58 3.44	36.98 34.33	4.14 5.49	13.36 11.81	8.66 6.33	4/1/1989	125,069,493	26.17
Ativo International * MSCI EAFE Index (Net)	2.25 2.24	4.70 5.86	0.68 1.15	13.63 22.46	3.44 4.59		3.04 4.43	1/1/2018	39,008,124	8.16
AQR Capital Management Custom Benchmark	3.11 1.98	9.98 7.73	4.00 2.20	31.57 26.18	4.32 5.44	11.06 11.21	4.36 3.81	4/1/2006	129,670,875	27.13
Baillie Gifford MSCI AC World ex USA (Net)	2.19 1.98	7.89 7.73	2.54 2.20	42.18 26.18			24.49 12.15	4/1/2019	90,739,148	18.99
Earnest Partners MSCI AC World ex USA (Net)	4.69 1.98	13.71 7.73	4.46 2.20	34.16 26.18			14.73 12.15	4/1/2019	93,437,139	19.55
BlackRock ACWI Ex U.S.									1	0.00
International Equity Composite Custom Benchmark	3.54 2.20	10.52 8.12	3.68 2.37	34.29 27.24	6.25 5.44	12.45 11.29	6.00 4.94	1/1/1990	477,925,720	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Ariel Global *	2.17	9.91	3.20	19.76	6.73		7.00	1/1/2018	110,093,655	41.53
MSCI AC World Index (Net)	2.32	6.58	1.85	30.25	10.29		10.14			
Wellington	3.64	5.89	1.64	33.96	10.32	14.35	13.01	9/1/2012	129,700,349	48.93
MSCI AC World Index (Net)	2.32	6.58	1.85	30.25	10.29	14.24	10.88			
Northern Trust Global Equity	2.67	7.60	2.41	31.52	10.85	14.78	13.14	10/1/2015	25,278,723	9.54
MSCI AC World IMI (Net)	2.66	7.57	2.48	31.49	10.25	14.29	12.66			
Global Equity Composite	2.92	7.72	2.37	27.80	8.88	13.58	10.18	9/1/2012	265,072,728	100.00
MSCI AC World Index (Net)	2.32	6.58	1.85	30.25	10.29	14.24	10.88			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian Global Low Vol.	-1.50	1.23	-1.89	5.47	3.53	7.80	6.60	7/1/2015	214,523,882	49.65
MSCI AC World Index (Net)	2.32	6.58	1.85	30.25	10.29	14.24	10.12			
MSCI ACWI Minimum Volatility Index (Net)	-1.19	-0.46	-2.78	6.65	6.23	8.55	7.61			
BlackRock Global Low Vol.	-1.17	-0.42	-2.77	5.87	6.27	8.79	7.88	7/1/2015	217,515,051	50.35
MSCI ACWI Minimum Volatility Index (Net)	-1.19	-0.46	-2.78	6.65	6.23	8.55	7.61			
Global Low Volatility Composite	-1.33	0.39	-2.34	5.67	4.90	8.30	7.24	7/1/2015	432,038,933	100.00
MSCI ACWI Minimum Volatility Index (Net)	-1.19	-0.46	-2.78	6.65	6.23	8.55	7.61			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Atlantic Trust CIBC Alerian MLP Index	6.17 7.77	12.75 16.93	10.65 14.07	0.47 0.26	-3.89 -7.37	2.81 -1.04	2.40 -2.50	1/1/2012	62,836,282	34.19
Harvest Fund Advisors MLP Alerian MLP Index	5.30 7.77	12.71 16.93	11.20 14.07	1.32 0.26	-2.65 -7.37	2.84 -1.04	2.15 -2.50	1/1/2012	62,133,782	33.81
C&S Global Listed Infrastructure FTSE Global Core Infrastructure 50/50 (Net)	-1.16 -0.92	-1.26 -1.49	-2.66 -2.79				5.15 6.19	11/1/2020	58,821,771	32.00
Global Listed Infrastructure Composite Global Listed Infrastructure Benchmark	3.58 5.60	8.19 12.16	6.52 9.73	-8.48 -6.93	-6.32 -9.64	0.86 -2.51	1.35 -3.29	1/1/2012	183,791,835	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Securian Asset Management	-1.24	-1.03	-1.63	1.50	5.25	4.30	4.72	7/1/2007	220,255,240	43.47
Blmbg. Barc. U.S. Aggregate	-1.44	-2.02	-2.15	1.38	5.32	3.55	4.37			
Aberdeen Global Fixed Income	-1.59	-1.44	-2.00	4.34	6.10	4.55	4.96	5/1/2007	219,793,028	43.38
Blmbg. Barc. U.S. Aggregate	-1.44	-2.02	-2.15	1.38	5.32	3.55	4.24			
Garcia Hamilton *	-1.32	-1.96	-2.13	2.37	4.76	3.28	3.74	11/1/2013	66,600,545	13.15
Blmbg. Barc. U.S. Aggregate	-1.44	-2.02	-2.15	1.38	5.32	3.55	3.46			
Global Fixed Income Composite	-1.40	-1.33	-1.86	2.85	5.55	4.26	5.09	10/1/1995	506,648,812	100.00
Blmbg. Barc. U.S. Aggregate	-1.44	-2.02	-2.15	1.38	5.32	3.55	5.15			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Neuberger Berman	-0.24	1.25	-0.21	5.78	5.05	6.63	6.77	2/1/2016	179,370,957	
Custom Benchmark	-0.54	1.33	-0.38	5.08	5.01	6.90	6.91			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees							Allocation		
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Oaktree Capital Management	-0.62	2.07	0.08	9.61	5.40	7.52	6.68	2/1/1997	181,898,665	50.32
FTSE High Yield Cash Pay	0.28	2.53	0.57	8.69	6.10	8.70	6.86			
BlackRock	0.38	1.99	0.41	8.75	6.36	7.85	6.50	10/1/2006	179,616,642	49.68
FTSE High Yield Cash Pay	0.28	2.53	0.57	8.69	6.10	8.70	6.94			
High Yield Composite	-0.12	2.03	0.24	9.20	5.89	7.69	6.51	1/1/1997	361,515,307	100.00
FTSE High Yield Cash Pay	0.28	2.53	0.57	8.69	6.10	8.70	6.87			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended February 28, 2021

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Cash Account	0.01	0.03	0.02	0.40	1.54	1.20	3.19	1/1/1988	58,894,435	100.00
Managed Short Term Composite	0.01	0.03	0.02	0.40	1.54	1.20	2.84	1/1/1990	58,894,435	100.00



WILSHIRE

Wilshire Consulting

A horizontal banner image showing a close-up of a modern building's facade with white architectural details and a blue sky background.

Employees' Retirement Fund of the City of Dallas

Monthly Investment Summary

March 31, 2021

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Global Equity Composite	1.17	3.56	45.41	9.99	12.29	10.22	9/1/2012	268,158,846	7.13
Global Low Volatility Composite	5.04	2.58	26.41	6.79	8.03	8.11	7/1/2015	453,796,918	12.07
Domestic Equity Composite	4.81	11.57	72.99	15.46	16.07	10.69	1/1/1990	592,499,367	15.76
International Equity Composite	2.04	5.67	62.26	7.54	11.18	6.04	1/1/1990	487,007,172	12.95
Global Fixed Income Composite	-1.01	-2.85	6.08	5.04	3.80	5.03	10/1/1995	501,533,937	13.34
High Yield Composite	0.23	0.41	21.73	6.13	6.99	6.50	1/1/1997	362,784,227	9.65
Credit Opportunities Composite	-0.05	-0.30	23.58	4.96	6.22	6.64	2/1/2016	179,206,164	4.77
Total Real Estate Composite	1.80	2.56	11.66	6.33	5.01	6.48	1/1/1990	387,876,612	10.32
Global Listed Infrastructure Composite	6.36	13.30	62.01	-2.69	0.38	2.01	1/1/2012	195,485,792	5.20
Private Equity Composite	-0.02	6.67	6.99	11.08	11.34	12.87	6/1/2009	285,909,887	7.61
Managed Short Term Composite	0.01	0.02	0.12	1.50	1.19	2.84	1/1/1990	45,049,733	1.20
Dallas Total Fund	2.05	4.05	30.86	7.74	8.61	9.05	1/1/1985	3,759,308,656	100.00
Policy Index	2.14	3.59	35.20	8.67	8.84	9.67			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Systematic Financial Russell 2000 Index	6.54 1.00	20.45 12.70	86.06 94.85	10.20 14.76	14.82 16.35	11.55 10.57	8/1/2003	89,039,179	15.03
Redwood Investments * Russell 2000 Growth Index	-0.66 -3.15	9.30 4.88	81.76 90.20	17.84 17.16		15.29 17.70	10/1/2016	44,282,878	7.47
Channing Capital * Russell 2000 Value Index	2.53 5.23	14.91 21.17	101.93 97.05	11.84 11.57	13.42 13.56	9.17 9.05	12/1/2013	47,061,035	7.94
Domestic Equity Small Cap Composite	3.64	16.09	89.35	12.72	15.27	10.61	6/1/2003	180,383,092	30.44
Smith Graham * Russell Midcap Index	8.87 2.71	25.58 8.14	111.33 73.64	12.14 14.73		11.27 13.37	1/1/2018	91,895,020	15.51
T. Rowe Price S&P 500	4.33 4.38	5.56 6.17	57.83 56.35	17.26 16.78	17.12 16.29	10.59 10.02	4/1/2006	159,205,026	26.87
Northern Trust S&P 500 (Lending) S&P 500	4.38 4.38	6.17 6.17	56.11 56.35	16.75 16.78	16.27 16.29	10.71 10.67	1/1/1995	161,016,229	27.18
Domestic Equity Composite Custom Benchmark	4.81 3.67	11.57 6.49	72.99 62.23	15.46 17.18	16.07 16.71	10.69 10.74	1/1/1990	592,499,367	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Adelante Capital Management	5.01	9.26	35.55	10.12	5.95	9.69	10/1/2001	70,539,204	18.19
Wilshire U.S. Real Estate Securities Index	4.81	8.83	34.89	9.02	5.15	9.82			
CenterSquare	5.11	8.66	37.84			9.57	6/1/2018	71,305,336	18.38
Wilshire U.S. Real Estate Securities Index	4.81	8.83	34.89			7.67			
REIT Composite	5.06	8.96	36.69	10.48	5.85	9.81	10/1/2001	141,844,540	36.57
Wilshire U.S. Real Estate Securities Index	4.81	8.83	34.89	9.02	5.15	9.82			
Heitman America Real Estate Trust, LP	0.00	0.00	0.19	1.28	3.67	8.78	12/1/2010	81,863,243	21.11
NCREIF ODCE NOF	0.00	0.00	-0.41	3.32	4.87	9.06			
Invesco Core Real Estate USA, LLC	0.00	0.00	-3.18	3.87	6.03	9.49	12/1/2010	68,848,995	17.75
NCREIF ODCE NOF	0.00	0.00	-0.41	3.32	4.87	9.06			
Virtus Real Estate Capital III	0.00	-3.88				-3.88	1/1/2021	23,534,721	6.07
NCREIF ODCE NOF	0.00	0.00				0.00			
AEW Partners Real Estate Fund IX	0.00					0.00	3/1/2021	1,672,103	0.43
NCREIF ODCE NOF	0.00					0.00			
Private Core Real Estate Composite	0.00	-0.88	-1.13	3.68	4.54	8.62	10/1/2010	246,032,072	63.43
Custom Benchmark	0.00	-0.35	0.08	4.39	4.79	8.25			
Total Real Estate Composite	1.80	2.56	11.66	6.33	5.01	6.48	1/1/1990	387,876,612	100.00
Custom Benchmark	2.40	4.18	16.56	7.23	5.36	8.43			

Employees' Retirement Fund of the City of Dallas
 Private Equity & Direct Private Real Estate Monthly Performance and Market Value Summary



Periods Ended 03/31/21

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple ³
Invesco II	70,113,010	65,188,333	65,188,333	7,606,221	Jan-14	3.9%	1.2
Total Direct Private Real Estate	70,113,010	65,188,333	65,188,333	7,606,221	Jan-14	3.9%	1.2

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple ³
Hamilton Lane Secondary Fund II	529,889	25,000,000	22,058,532	31,007,605	Jul-09	13.6%	1.4
Hamilton Lane Secondary Fund III	6,654,920	30,000,000	23,372,292	23,738,447	Nov-12	9.8%	1.3
Hamilton Lane Secondary Fund IV	24,134,855	30,000,000	25,907,343	9,573,885	Mar-17	15.7%	1.3
Hamilton Lane Secondary Fund V	15,254,269	40,000,000	11,375,000	-	Mar-20	56.6%	1.3
Hamilton Lane Fund VII Composite	19,613,405	50,000,000	45,600,834	46,451,533	Jan-10	5.7%	1.4
Hamilton Lane Fund VIII (Global)	18,913,548	30,000,000	22,162,244	8,792,766	Nov-12	5.0%	1.3
GCM Grosvenor - Partnership, L.P.	35,978,512	75,000,000	85,417,430	102,385,430	Jun-11	13.9%	1.6
GCM Grosvenor - Partnership II, L.P. (2014)	59,456,668	60,000,000	68,196,751	35,323,333	Jul-14	11.1%	1.4
GCM Grosvenor - Partnership II, L.P. (2015)	38,207,689	30,000,000	30,173,182	5,824,948	Dec-15	13.0%	1.2
GCM Grosvenor - Partnership II, L.P. (2017)	16,949,016	30,000,000	16,979,304	794,423	Jan-18	0.5%	1.0
Fairview Capital - Lone Star Fund I	40,174,157	40,000,000	34,053,847	3,616,399	Aug-15	9.7%	1.3
Fairview Capital - Lone Star Fund II	10,042,959	30,000,000	8,747,396	-	Dec-18	-5.5%	1.1
Total Private Equity Composite	285,909,887	470,000,000	394,044,155	267,508,768	Jul-09	11.8%	1.4

Public Market Equivalent (PME) ²

452,653,677

18.4%

* Next Generation Manager

¹ Total Value to Paid-in Capital ("TVPI") multiple calculation = $(\text{market value} + \text{distributions}) / \text{capital called}$

² The Public Market Equivalent (PME) approach creates a hypothetical investment vehicle that mimics the private equity composite cash flows. The performance difference between the PME vehicle and the private equity portfolio is determined by their net asset value (NAV) at the end of the benchmarking period. The performance of the "public market" is simulated using the monthly S&P 500 index returns, plus a 300 BPs annual hurdle rate.

³ Private Equity cash account

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian International Custom Benchmark	4.10 2.03	8.86 5.53	71.19 69.82	6.13 6.61	12.28 10.40	8.77 6.38	4/1/1989	130,196,893	26.73
Ativo International * MSCI EAFE Index (Net)	3.96 2.30	4.66 3.48	43.63 44.57	5.17 6.02		4.19 5.05	1/1/2018	40,551,831	8.33
AQR Capital Management Custom Benchmark	2.79 1.26	6.91 3.49	56.82 49.41	5.88 6.51	10.05 9.76	4.53 3.87	4/1/2006	133,240,988	27.36
Baillie Gifford MSCI AC World ex USA (Net)	-0.72 1.26	1.81 3.49	62.44 49.41			22.91 12.31	4/1/2019	90,087,788	18.50
Earnest Partners MSCI AC World ex USA (Net)	0.11 1.26	3.95 3.49	65.06 49.41			13.79 12.31	4/1/2019	92,928,731	19.08
BlackRock ACWI Ex U.S.								1	0.00
International Equity Composite Custom Benchmark	2.04 1.37	5.67 3.77	62.26 51.94	7.54 6.51	11.18 9.84	6.04 4.97	1/1/1990	487,007,172	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees						Allocation		
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Ariel Global * MSCI AC World Index (Net)	0.94 2.67	4.17 4.57	30.59 54.60	7.51 12.07		7.12 10.76	1/1/2018	111,127,435	41.44
Wellington MSCI AC World Index (Net)	1.06 2.67	2.72 4.57	56.68 54.60	11.63 12.07	13.13 13.21	13.02 11.11	9/1/2012	131,075,425	48.88
Northern Trust Global Equity MSCI AC World IMI (Net)	2.68 2.59	5.15 5.14	57.93 57.58	12.34 11.90	13.70 13.21	13.47 12.98	10/1/2015	25,955,986	9.68
Global Equity Composite MSCI AC World Index (Net)	1.17 2.67	3.56 4.57	45.41 54.60	9.99 12.07	12.29 13.21	10.22 11.11	9/1/2012	268,158,846	100.00

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian Global Low Vol.	5.38	3.39	27.92	5.68	7.51	7.58	7/1/2015	226,062,537	49.82
MSCI AC World Index (Net)	2.67	4.57	54.60	12.07	13.21	10.47			
MSCI ACWI Minimum Volatility Index (Net)	4.64	1.72	24.36	7.84	8.30	8.35			
BlackRock Global Low Vol.	4.70	1.79	24.94	7.90	8.53	8.62	7/1/2015	227,734,382	50.18
MSCI ACWI Minimum Volatility Index (Net)	4.64	1.72	24.36	7.84	8.30	8.35			
Global Low Volatility Composite	5.04	2.58	26.41	6.79	8.03	8.11	7/1/2015	453,796,918	100.00
MSCI ACWI Minimum Volatility Index (Net)	4.64	1.72	24.36	7.84	8.30	8.35			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Atlantic Trust CIBC	6.07	17.36	82.62	-0.22	2.13	3.03	1/1/2012	66,648,783	34.09
Alerian MLP Index	6.91	21.95	103.13	-2.98	-1.30	-1.77			
Harvest Fund Advisors MLP	6.74	18.69	75.14	1.21	2.55	2.86	1/1/2012	66,320,943	33.93
Alerian MLP Index	6.91	21.95	103.13	-2.98	-1.30	-1.77			
C&S Global Listed Infrastructure	6.28	3.46				11.76	11/1/2020	62,516,066	31.98
FTSE Global Core Infrastructure 50/50 (Net)	7.07	4.08				13.69			
Global Listed Infrastructure Composite	6.36	13.30	62.01	-2.69	0.38	2.01	1/1/2012	195,485,792	100.00
Global Listed Infrastructure Benchmark	6.95	17.35	88.62	-5.35	-2.75	-2.55			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Securian Asset Management	-0.86	-2.48	7.09	4.81	3.92	4.63	7/1/2007	218,353,798	43.54
Blmbg. Barc. U.S. Aggregate	-1.25	-3.38	0.71	4.65	3.10	4.25			
Aberdeen Global Fixed Income	-1.14	-3.12	6.01	5.54	3.95	4.85	5/1/2007	217,284,054	43.32
Blmbg. Barc. U.S. Aggregate	-1.25	-3.38	0.71	4.65	3.10	4.12			
Garcia Hamilton *	-1.06	-3.16	3.08	4.19	3.01	3.55	11/1/2013	65,896,085	13.14
Blmbg. Barc. U.S. Aggregate	-1.25	-3.38	0.71	4.65	3.10	3.24			
Global Fixed Income Composite	-1.01	-2.85	6.08	5.04	3.80	5.03	10/1/1995	501,533,937	100.00
Blmbg. Barc. U.S. Aggregate	-1.25	-3.38	0.71	4.65	3.10	5.08			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Neuberger Berman	-0.05	-0.30	23.58	4.96	6.22	6.64	2/1/2016	179,206,164	
Custom Benchmark	-0.26	-0.64	20.00	4.92	6.11	6.74			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees						Allocation		
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Oaktree Capital Management	0.18	0.76	23.09	5.83	6.83	6.69	2/1/1997	182,675,822	50.35
FTSE High Yield Cash Pay	0.30	0.87	23.29	6.43	7.81	6.85			
BlackRock	0.27	0.56	20.94	6.58	7.25	6.47	10/1/2006	180,108,405	49.65
FTSE High Yield Cash Pay	0.30	0.87	23.29	6.43	7.81	6.92			
High Yield Composite	0.23	0.41	21.73	6.13	6.99	6.50	1/1/1997	362,784,227	100.00
FTSE High Yield Cash Pay	0.30	0.87	23.29	6.43	7.81	6.86			

Asset Allocation & Performance

Dallas Total Fund

Periods Ended March 31, 2021

	Performance (%) net of fees							Allocation	
	1 Month	1 Quarter	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Cash Account	0.01	0.02	0.12	1.50	1.19	3.19	1/1/1988	45,049,733	100.00
Managed Short Term Composite	0.01	0.02	0.12	1.50	1.19	2.84	1/1/1990	45,049,733	100.00

At A Glance

For period ended February 28, 2021

	2020		2021	
	This Month	YTD	This Month	YTD
Retirements				
Age	19	24	29	42
Service	2	3	8	9
Rule of 78	12	18	13	19
QDRO	0	1	0	0
<i>Total</i>	33	46	50	70
Disability Retirements				
Service	0	0	0	0
Non-service	3	3	0	3
<i>Total</i>	3	3	0	3
Benefits Paid	\$ 23,539,047.30	\$ 46,899,465.26	\$ 24,301,775.74	\$ 48,718,077.28
Refunds	\$ 780,661.38	\$ 1,555,021.35	\$ 653,445.60	\$ 1,360,090.36
Number of refunds	61	112	27	75
*Contributions	\$ 9,362,493.51	\$ 23,195,358.32	\$ 9,200,144.43	\$ 18,300,054.16

	Members on record at month end				
	Retirees & beneficiaries	Disabilities	Actives	Tier A actives	Tier B Actives
Jan	7,534	151	7,280	4,762	2,518
Feb	7,584	151	7,268	4,706	2,562
Mar					
April					
May					
June					
July					
Aug					
Sep					
Oct					
Nov					
Dec					

At A Glance

For period ended March 31, 2021

	2020		2021	
	This Month	YTD	This Month	YTD
Retirements				
Age	22	46	17	59
Service	5	8	1	10
Rule of 78	8	26	9	28
QDRO	0	1	0	0
<i>Total</i>	35	81	27	97
Disability Retirements				
Service	0	0	0	0
Non-service	0	3	0	3
<i>Total</i>	0	3	0	3
Benefits Paid	\$ 23,771,879.99	\$ 70,671,345.25	\$ 24,642,551.34	\$ 73,360,628.62
Refunds	\$ 593,342.73	\$ 2,148,364.08	\$ 525,167.32	\$ 1,885,257.68
Number of refunds	41	153	36	111
*Contributions	\$ 9,257,772.62	\$ 32,453,130.94	\$ 9,132,679.73	\$ 27,432,733.89

Members on record at month end					
	Retirees & beneficiaries	Disabilities	Actives	Tier A actives	Tier B Actives
Jan	7,534	151	7,280	4,762	2,518
Feb	7,584	151	7,268	4,706	2,562
Mar	7,547	148	7,258	4,655	2,603
April					
May					
June					
July					
Aug					
Sep					
Oct					
Nov					
Dec					