

BOARD OF TRUSTEES MEETING REGULAR MEETING AGENDA

Friday, February 23, 9:00am

The regular meeting will be held in the **Board and Commissions Room at Austin City Hall, 301 W 2nd Street, Austin, Texas 78701** and will be open to the public. The meeting will also be available to the public through **signin.webex.com/join** with **meeting number 2553 725 1269** and **password Feb2024,** or through a telephone conference call, **toll-free dial-in number 408-418-9388** with **access code 3322024.** Some non-routine agenda items will have the trustee or individual who requested the item in parentheses.

Public Comments

Members of the public may address the Board of Trustees on any matter during this portion of the meeting. Public comments may be provided in person at the physical location of the regular meeting, virtually through WebEx, or through the toll-free dial-in number provided above. A sign-up sheet will be available at the physical location of the meeting. The Board requests that any member of the public who desires to address the Board virtually sign up to speak in advance by contacting the Fund at staff@AFRFund.org no later than 5:00 p.m. on February 22, 2024. All parties are asked to limit comments to 3 minutes. No discussion or action will be taken by the Board during public comments.

To Approve

- 1. Consent Agenda for the following:
 - a. Minutes of regular meeting of January 29, 2024
 - b. Service retirement benefits for new retirees, beneficiaries, and alternate payees

To Discuss and Possibly Act On

- 2. Meketa 4Q23 Investment Performance review, including the following:
 - a. Economic and Market Update
 - b. 4Q23 Investment Report
 - c. Asset Allocation Review: 2024 Asset Study vs. 2023 Asset Study
 - d. Passive Investment Framework Review and Update
 - e. Proposed updates to the Investment Policy Statement (IPS) and Operating Procedures
 - f. Roadmap
- 3. Update on 2024 Experience Study, including discussion of economic assumptions

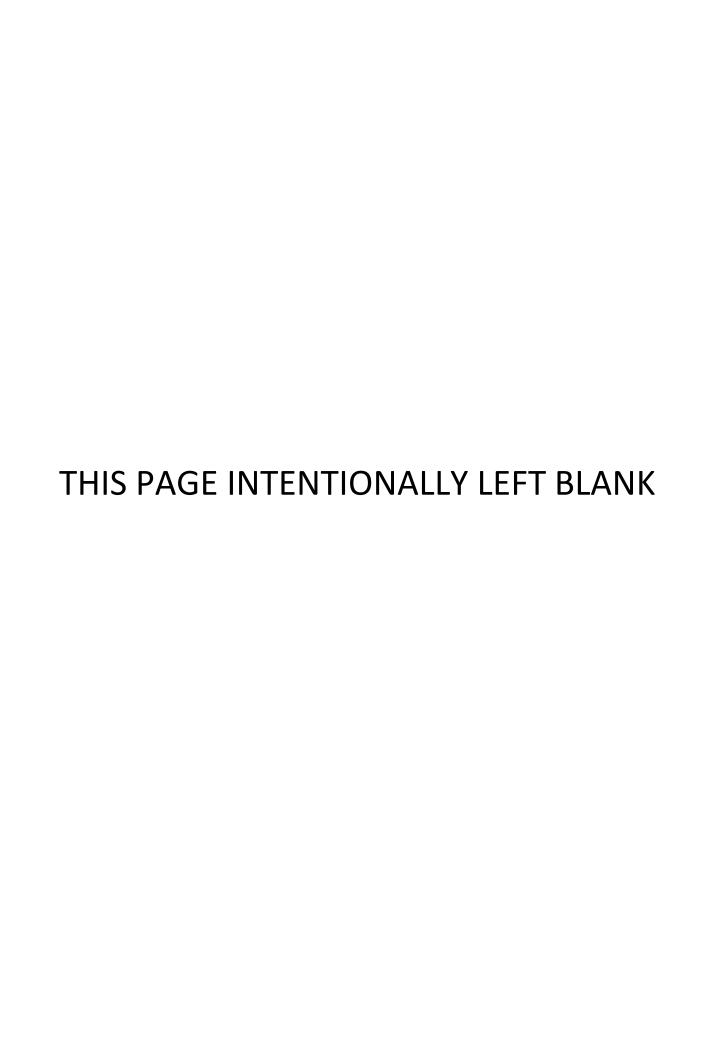


- 4. Executive Director Report, including the following (Discussion Only)
 - a. General comments
 - b. Report on member comments to proposed changes to Personnel Policy
 - c. Update on City of Austin Actuarial Audit
 - d. Update on internal administrative procedures, including staff response time
 - e. Winter Newsletter
 - f. 2024 Board Meeting Dates
 - Internal financial statements, transactions, and Fund expense reports for month ending January 31, 2024
- 5. Roadmap for future meetings
- 6. Call for future agenda items

Austin Firefighters Retirement Fund 4101 Parkstone Heights Drive, Suite 270 Austin, TX 78746 (512) 454-9567

NOTE: The Board of Trustees of the Austin Firefighters Retirement Fund may meet in Executive Session on any item listed above in accordance with and as authorized by the Texas Open Meetings Act, Texas Government Code Ch. 551.

NOTE: The City of Austin is committed to compliance with the American with Disabilities Act. Reasonable modifications and equal access to communications will be provided upon request. Meeting locations are planned with wheelchair access. If requiring Sign Language Interpreters or alternative formats, please give notice at least 2 days (48 hours) before the meeting date. Please contact our office at (512) 454-9567 for additional information; TTY users route through Relay Texas at 711.





MINUTES BOARD OF TRUSTEES MEETING MONDAY JANUARY 29, 2024, 9:00AM

Board Members Present

Doug Fowler, Outgoing Vice Chair John Bass, Incoming Vice Chair Belinda Weaver, Treasurer Aaron Woolverton, Trustee

Staff and Consultants Present

Anumeha Kumar, AFRF Executive Director
John Perryman, AFRF CFO
Debbie Hammond, AFRF Benefits Manager
Gina Gleason, AFRF Board & Operations Specialist
Shira Herbert, AFRF Accounting & QC Specialist
Amy Thibaudeau, AFRF Benefits Specialist
Alyca Garrison, Jackson Walker
Lori Messer, Logic Compensation Group (virtual)
Nichole Arko, Logic Compensation Group (virtual)
Elizabeth Wiley, Cheiron

Community Members Present

Rene Vallejo Donald Lowe Eric Pederson Virtual attendees not listed

Vice Chair Fowler called the meeting to order at 9:02am.

Public Comments:

Rene Vallejo introduced himself as the president of the Austin Retired Fire Fighters Association (ARFFA). Mr. Vallejo raised a concern regarding some members who participate in two retiree Facebook groups by providing partial reports on Fund meetings, which have stirred up negative comments regarding the Board and staff, including a recent suggestion for a vote of no-confidence in their leadership. Mr. Vallejo encouraged members to obtain information directly by attending the board meetings and informational sessions hosted by the Fund or by referring to the recordings of those meetings, rather than basing their opinions on a secondhand report from a single member.

- I. Consent Agenda for the following:
 - a. Minutes of the regular meeting of December 11, 2023
 - b. Service retirement benefits for new retirees, beneficiaries, and alternate payees

Trustee Weaver motioned to approve the consent agenda. Trustee Bass seconded the motion. The motion passed unanimously.

II. Election of the Vice Chair for 2024

Vice Chair Fowler voiced his appreciation for everything the Board and staff had accomplished during his three years as Vice Chair. He nominated Trustee Bass to take over the role of Vice Chair for 2024. Trustee Weaver seconded the nomination and thanked Vice Chair Fowler for his time and leadership, noting that the Fund had experienced a lot of improvement over that time, which had included the hiring of Executive Director Anumeha Kumar. The motion to elect Trustee Bass as Vice

Chair passed unanimously. Trustee Bass thanked the Board and acknowledged Vice Chair Fowler for a job well done.

III. Review and consideration of application to continue the disability retirement benefits for Applicant #2024-02 (Closed Session)

The Board entered closed session at 9:09am pursuant to Texas Government Code Section 551.0785 for deliberations involving medical records for a continuation of disability retirement application. The Board resumed open session at 9:56am with no action taken during the closed session. Vice Chair Bass indicated that after a lengthy discussion, the Board had directed staff to hire a vocational expert to determine the amount the applicant would be capable of earning in an occupation either within or outside of the fire department. No motion necessary.

IV. Discuss and consider Logic Compensation Survey update, including Executive Director salary review and conforming updates to the Personnel Policy (Closed Session)

The Board entered closed session at 9:57am pursuant to Texas Government Code Section 551.074 to discuss personnel matters. The Board resumed open session at 10:53am with no action taken during the closed session. Trustee Fowler motioned to adopt the Executive Director salary range as presented to the Board by the Logic Compensation in their Executive Director Market Salary Survey report update, without geographic differences. He clarified that his motion would include an update to the Personnel Policy. Trustee Weaver seconded the motion. The motion passed unanimously.

V. Update on City of Austin Actuarial Audit

Anumeha Kumar informed the Board about the preliminary draft report from Athena, the City of Austin's actuarial consultant. She explained that the audit reviewed the Fund's actuarial valuations over a five-year period from 2018-2022, as required by state law, and their only significant finding pertained to the Fund's increased amortization period of 35.7 years which exceeded the 30-year period recommended by the Pension Review Board. The next step, Ms. Kumar continued, would be to provide a response to the draft report to Athena by mid-February, which would be included in the final report presented to City Council's Audit and Finance Committee and then submitted to the Pension Review Board. Ms. Kumar explained that the Fund's response would highlight the Board's awareness and proactivity regarding the amortization period, including their pursuit of developing a voluntary FSRP. She noted that the response would also acknowledge some economic and demographic assumptions that Athena had included in their report, which the Board is currently in the process of reviewing with Cheiron through the actuarial experience study. No motion necessary.

VI. Update on the Funding Soundness Restoration Plan (FSRP) / Pension Review Board (PRB) Actuarial Committee Meeting

Anumeha Kumar reviewed the presentation she gave to the Pension Review Board at their Actuarial Committee meeting, explaining that her intention was to acknowledge that the Fund was aware of its "at-risk" status and to inform the PRB that the Board had taken a proactive stance in pursuing the development of a voluntary FSRP. She emphasized the importance of partnering with both the Fund's membership and the City of Austin to come up with a shared solution that is agreeable for all stakeholders, then stated that the goal was well-received by the PRB. Ms. Kumar informed the Board that a recording of the meeting could be viewed on the PRB website. Trustee Weaver noted that she had watched the meeting live and praised Ms. Kumar for her presentation

and proactivity. Vice Chair Bass echoed the sentiment. Ms. Kumar provided an update on the Working Group, which was currently in the process of considering different options with the Fund's actuary, Cheiron. She stated that she would provide an update to the Board and schedule another member informational session as soon as more concrete information became available, which she hoped would be sometime in March. No motion necessary.

- VII. Executive Director Report, including the following (Discussion Only)
 - **a.** General comments

No general comments.

b. Annual DROP Account Statements Update

Anumeha Kumar notified the Board that the annual DROP account statements had been mailed out to DROP participants and would likely be delivered by the end of the week.

c. Winter Newsletter Update

Anumeha Kumar stated that the winter newsletter was targeted for publication during the first week of February and would be posted to the Fund's website.

d. Update on 2024 pension conferences

Anumeha Kumar informed the Board of the TEXPERS, NCPERS and NASRA conferences that they would be eligible to attend in 2024. She directed the trustees to request arrangements from staff in advance of any conferences they wanted to attend.

e. Final internal financial statements, transactions and Fund expense reports for month ending November 30, 2023

Anumeha Kumar reminded the Board that the November financial statements had been presented in draft form at the December meeting. She indicated that the investment reports had been updated to reflect final numbers, but no Fund expense-related numbers had changed.

f. Internal financial statements, transactions, and Fund expense reports for month ending December 31, 2023

Anumeha Kumar reported that the final expenses for the 2023 fiscal year came in under budget, having only expended approximately 95% of the approved budget. Ms. Kumar explained that a contributing factor was the Fund's investment management fees, which decreased with the implementation of the Board's passive investment strategy. Ms. Kumar highlighted a few areas which had exceeded budget, including the legal fees and actuarial fees, but noted these expenses were due to one-time projects that had previously been discussed with the Board. Additionally, she explained, some fees were misaligned with the intended payment schedule, including remaining 2022 payments for the prior actuary that were paid in 2023, and cyber security and liability insurances which were anticipated to be paid in 2023 but will instead be paid in 2024 following fee negotiations.

Vice Chair Bass followed up on the conversations of budgetary improvements and Executive Director performance by recognizing the amount of work that had been performed both at the Executive Director and staff levels, emphasizing how dramatically their roles have expanded from prior years. Vice Chair Bass noted that anyone who had been paying attention through watching the meetings or reading the minutes could see the ongoing improvements, which he attributed to a lot of hard work. He expressed his gratitude for the initiative taken by Ms. Kumar and her staff and praised them for a job well done.

VIII. Roadmap for future meetings

Anumeha Kumar stated that all known items for 2024 were included in the roadmap and welcomed any additions from the trustees. The trustees had no questions or requests.

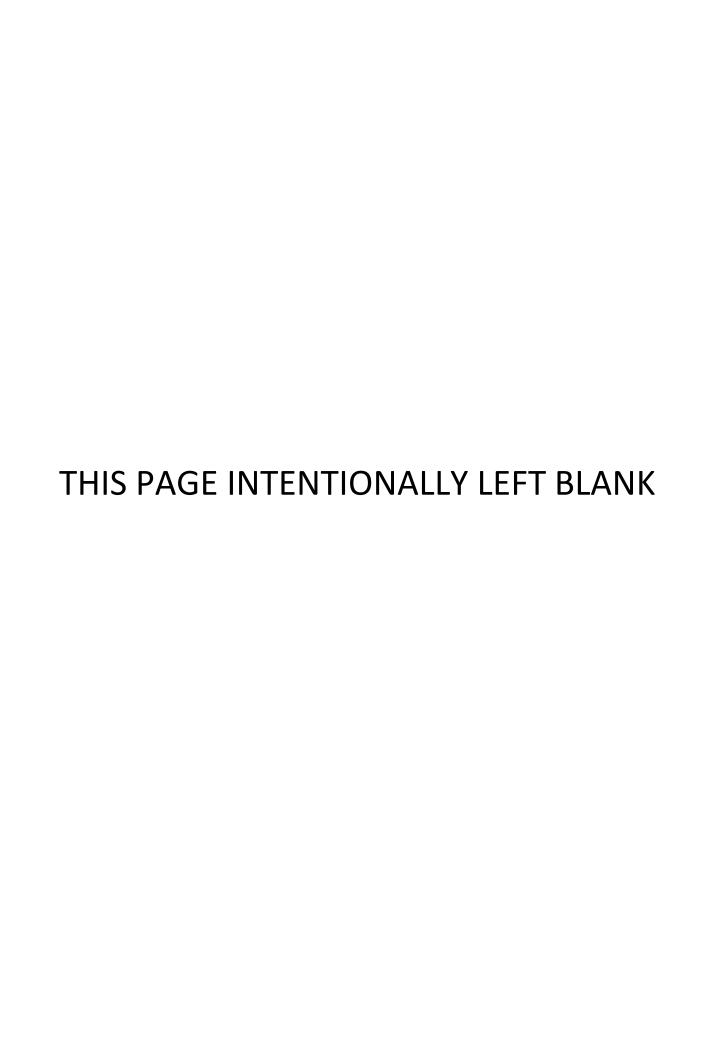
IX. Call for future agenda items

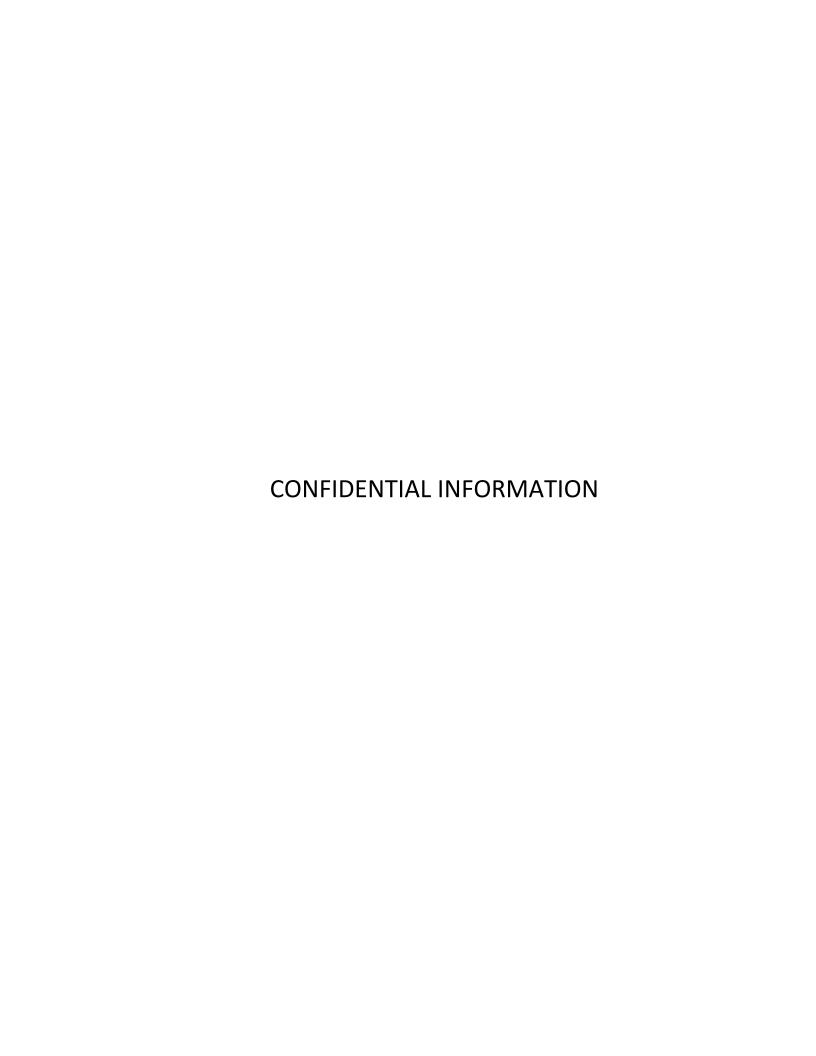
No future agenda items were called for.

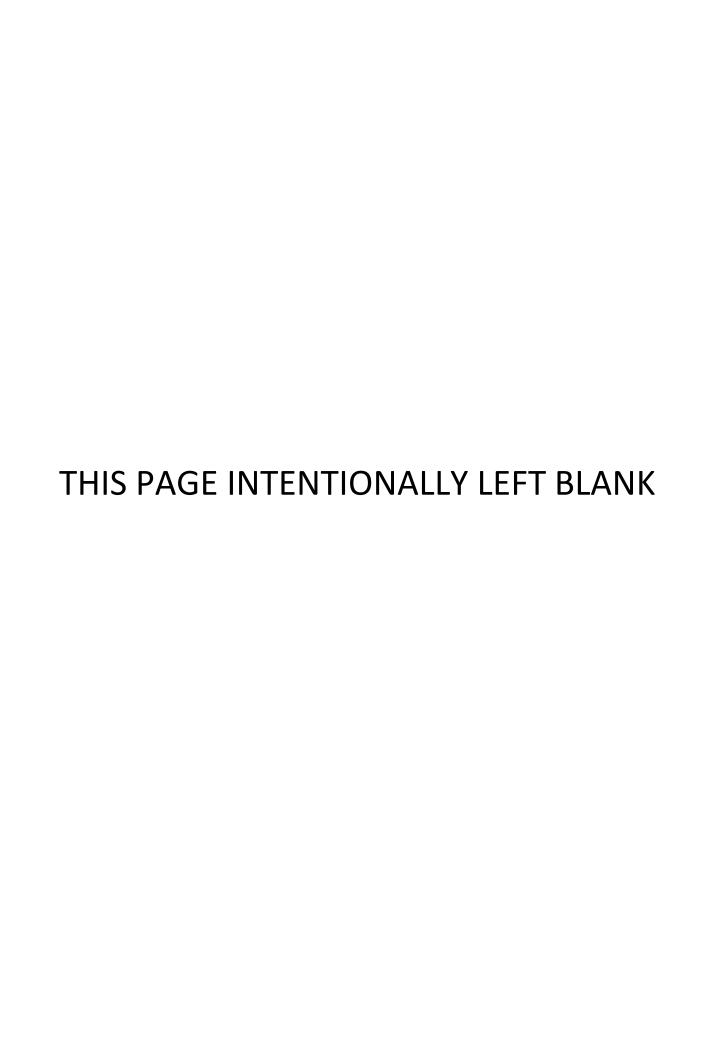
Hearing no objections, Vice Chair Bass adjourned the meeting at 11:10am.

Board Members

Mayor Kirk Watson, Chair John Bass, Vice Chair Belinda Weaver, Treasurer Doug Fowler, Trustee Aaron Woolverton, Trustee









February 23, 2024

Board Meeting



Agenda

Agenda

- 1. Executive Summary
- 2. 4Q23 Investment Report
- 3. Asset Allocation Review: 2023 Asset Study vs. 2024 Asset Study
- 4. Passive framework update
- 5. IPS and Operating Procedures Update on revisions in progress
- 6. Economic and Market Update
- 7. The Magnificent Seven
- 8. Roadmap
- 9. Appendix
 - Disclaimer, Glossary and Notes



Executive Summary

4Q 23 Executive Summary

Category	Results	Notes
Total Fund Performance	Positive	+6.1% (+\$68.7mm net investment change)
Performance vs. Benchmarks	Outperformed	6.1% vs. 5.7% (static) and 5.5% (dynamic)
Performance vs. Peers	Underperformed	6.1% vs. 6.6% median (64th percentile)
Asset Allocation Attribution Effects	Negative	Underweight int'l equity and overweight private equity were detractive
Active Public Managers vs. Benchmarks	Outperformed	8 of 12 active managers beat respective benchmarks (after fees)
Active Public Managers vs. Peer Groups	Outperformed	6 of 11² active managers beat peer group median (after fees)
Compliance with Targets	In Compliance	All exposure within policy ranges

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¹ InvMetrics Public DB >\$1B net.

² Excludes Aberdeen EMD. No appropriate peer group for Aberdeen blended currency emerging market debt. Peer groups only exist for local currency or USD strategies.



Peer Rankings

→ The Fund has outperformed peers over all long term trailing periods. We have noticed the Fund tends to lag over shorter, strong US equity driven quarters, presumably based on the asset allocation.

	4Q	23 (S&P 500 v	was +11. 7 %)		
As of 12/31/23	4Q 23	1 YR	3 YR	5 YR	10 YR
Peer Ranking	64	93	55	46	25
	3Q	23 (S&P 500	was -3.3%)		
As of 9/30/23	3Q 23	1 YR	3 YR	5 YR	10 YR
Peer Ranking	72	96	44	29	33
	2Q	23 (S&P 500)	was +8. 7 %)		
As of 6/30/23	2Q 23	1 YR	3 YR	5 YR	10 YR
Peer Ranking	93	99	43	30	34
	1Q2	23 (S&P 500 v	vas +7.5%)		
As of 3/31/23	1Q 23	1 YR	3 YR	5 YR	10 YR
Peer Ranking	84	72	67	36	25
	40	22 (S&P 500)	was +7.6%)		
As of 12/31/22	4Q 22	1 YR	3 YR	5 YR	10 YR
Peer Ranking	75	54	23	28	30

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Peer Rankings (continued)

3Q22 - - (S&P 500 was -4.9%)

	341	(55:	Wd5 4.570)		
As of 9/30/22	3Q 22	1 YR	3 YR	5 YR	10 YR
Peer Ranking	88	59	34	34	29
	2Q	22 (S&P 500	was -16.1%)		
As of 6/30/22	2Q 22	1 YR	3 YR	5 YR	10 YR
Peer Ranking	29	31	9	15	14
	1Q2	22 (S&P 500	was -4.6%)		
As of 3/31/22	1Q 22	1 YR	3 YR	5 YR	10 YR
Peer Ranking	55	30	17	19	21
	40	21 (S&P 500	was +11.0%)		
As of 12/31/21	4Q 21	1 YR	3 YR	5 YR	10 YR
Peer Ranking	79	10	24	12	20
	3Q2	21 (S&P 500	was +0.6%)		
As of 9/30/21	3Q 21	1 YR	3 YR	5 YR	10 YR
Peer Ranking	5	6	5	11	19
	2Q:	21 (S&P 500	was +8.5%)		
As of 6/30/21	2Q 21	1 YR	3 YR	5 YR	10 YR
Peer Ranking	17	20	14	12	27

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Peer Rankings (continued)

1Q21 - - (S&P 500 was +6.2%)

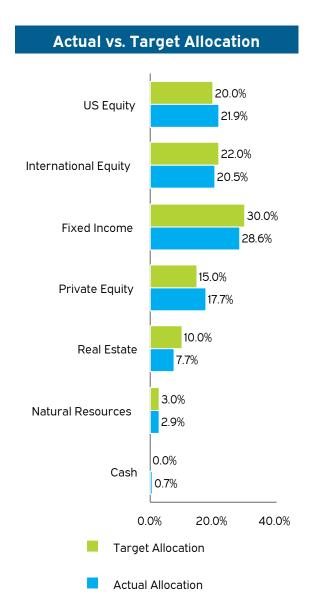
	191	-1 (54) 555	Wd5 . C.E/0)		
As of 3/31/21	1Q 21	1 YR	3 YR	5 YR	10 YR
Peer Ranking	28	66	35	25	41
	402	20 (S&P 500	was +12.1%)		
As of 12/31/20	4Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	35	20	20	22	34
	3Q2	20 (S&P 500	was +8.9%)		
As of 9/30/20	3Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	22	44	34	25	41
	2Q2	0 (S&P 500	was +20.5%)		
As of 6/30/20	2Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	99	62	54	38	54
	1Q2	20 (S&P 500	was -19.6%)		
As of 3/31/20	1Q 20	1 YR	3 YR	5 YR	10 YR
Peer Ranking	5	8	8	8	25
	4Q1	9 (S&P 500) was +9.1%)		
As of 12/31/19	4Q 19	1 YR	3 YR	5 YR	10 YR
Peer Ranking	71	73	19	19	45

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4Q23 Investment Report



Total Fund | As of December 31, 2023



	Alloca	tion vs. Targe	ts and Poli	су	
	Current Balance	Current Allocation(%)	Policy (%)	Policy Range(%)	Within IPS Range?
US Equity	\$254,664,703	21.9	20.0	13.0 - 27.0	Yes
International Equity	\$237,994,009	20.5	22.0	15.0 - 29.0	Yes
Fixed Income	\$332,054,144	28.6	30.0	20.0 - 40.0	Yes
Private Equity	\$204,955,665	17.7	15.0	5.0 - 25.0	Yes
Real Estate	\$89,565,404	7.7	10.0	0.0 - 20.0	Yes
Natural Resources	\$33,647,745	2.9	3.0	0.0 - 5.0	Yes
Cash	\$8,038,916	0.7	0.0	0.0 - 5.0	Yes
Total	\$1,160,920,585	100.0	100.0		

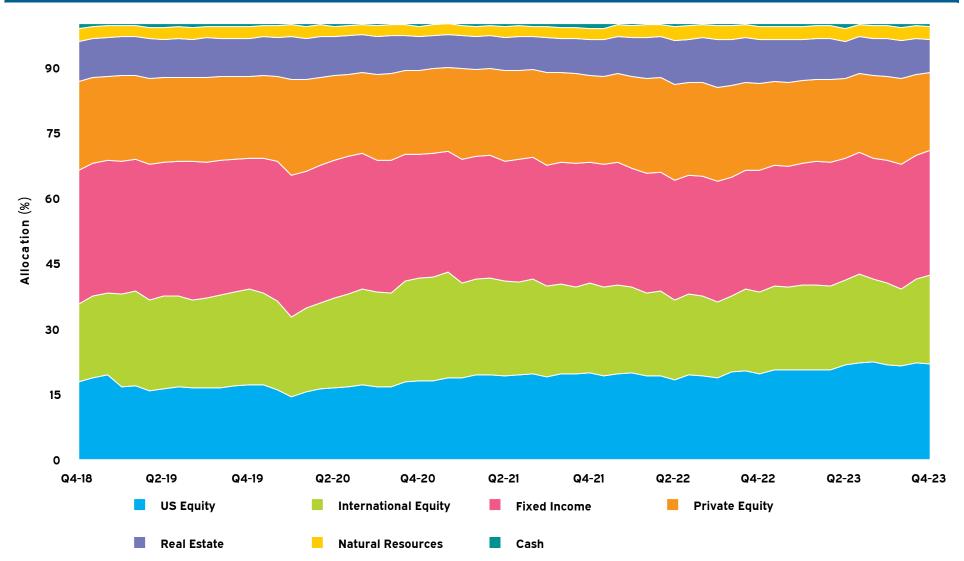
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Total Trust | 5 Years Ending December 31, 2023

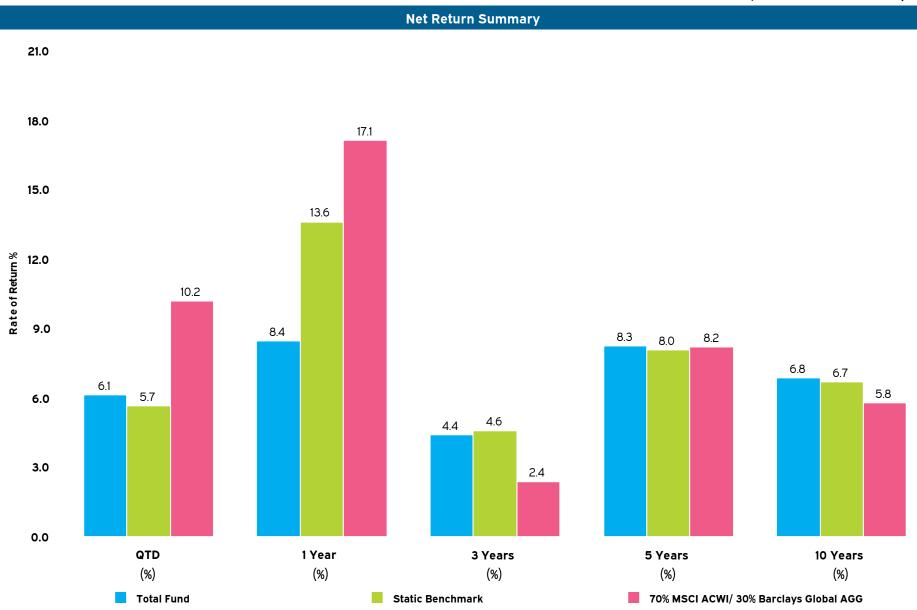






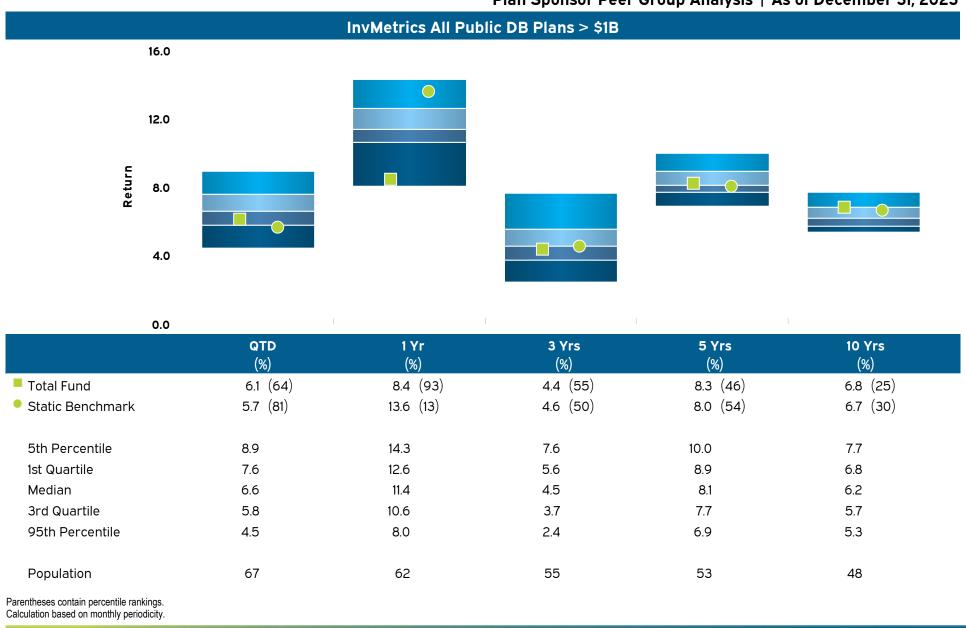


Total Fund Performance | As of December 31, 2023





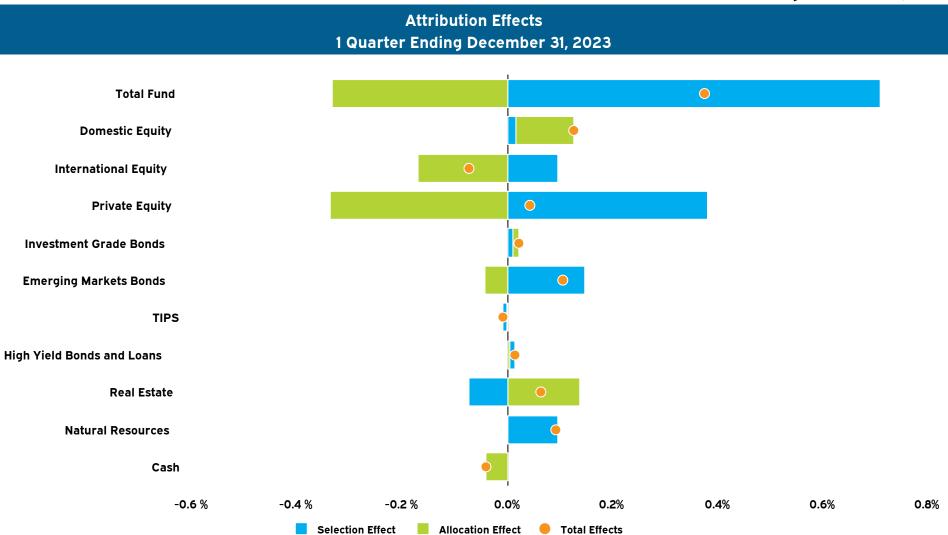
Plan Sponsor Peer Group Analysis | As of December 31, 2023







Total Plan Attribution | 1 Quarter Ending December 31, 2023

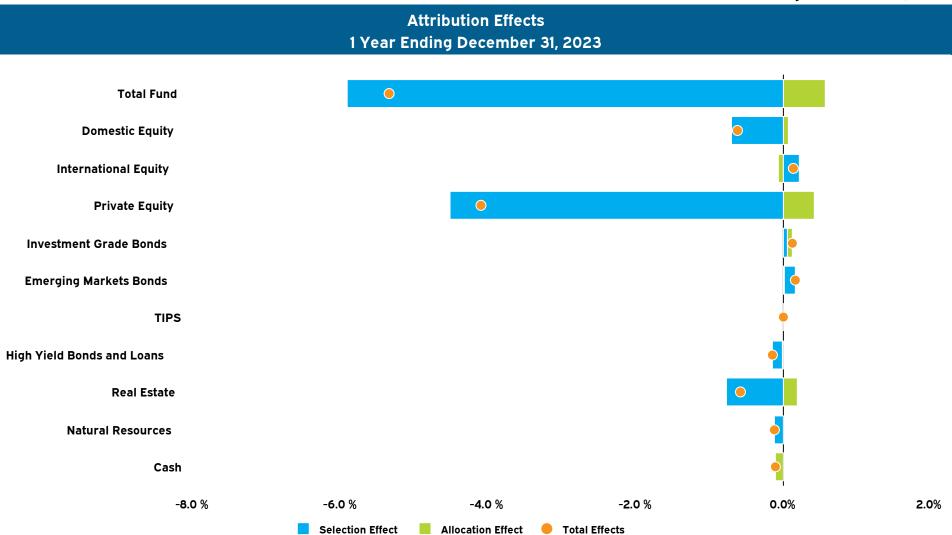


The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

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Total Plan Attribution | 1 Year Ending December 31, 2023



The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

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InvMetrics All Public DB Plans > \$1B | As of December 31, 2023



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Asset Allocation & Performance | As of December 31, 2023

	Asset Class I										
	Market	% of	QTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	20 Yrs	25 Yrs	Inception	Inception
	Value \$	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Total Fund	1,160,920,585	100.0	6.1	8.4	4.4	8.3	6.8	7.5	6.4	6.9	Apr-97
Static Benchmark			<i>5.7</i>	13.6	4.6	8.0	6.7	7.2			
Dynamic Benchmark			<i>5.5</i>	14.5	4.5	7.7	6.4				
70% MSCI ACWI/30% Barclays Agg			9.8	17.1	3.1	8.7	6.3	7.3	6.1	6.4	
Domestic Equity	254,664,703	21.9	12.0	22.1	8.5	14.0	10.1	10.3	7.7	8.6	Apr-97
Russell 3000 Index			12.1	26.0	8.5	15.2	11.5	10.6	8.3	9.2	
International Equity	237,994,009	20.5	10.3	16.6	-1.4	6.6	4.1	6.7	5.3	5.6	Apr-97
Spliced International Equity Benchmark			9.8	15.6	1.5	7.1	3.8	7.1	<i>5.3</i>	5.3	
Private Equity	204,955,665	17.7	-0.6	0.8	15.9	16.8	16.2			16.0	Jun-10
Private Equity Benchmark			-2.9	23.2	9.0	8.6	10.9			13.7	
Fixed Income	332,054,144	28.6	6.9	7.7	-2.0	2.4	2.3	3.5	4.1	4.3	Apr-97
Blmbg. U.S. Aggregate Index			6.8	<i>5.5</i>	-3.3	1.1	1.8	3.2	4.0	4.3	
Real Estate	89,565,404	7.7	-3.9	-15.0	3.5	3.1	6.2			3.0	Jan-08
NCREIF Property Index			-3.0	-7.9	4.6	4.3	6.8	7.8	8.3	5.6	
Natural Resources	33,647,745	2.9	1.8	0.8	6.1	-1.4	1.8			1.7	Mar-13
S&P North American Natural Res Sector Index (TR)			-1.2	3.7	24.8	13.1	2.8	8.1	6.2	3.6	
Cash	8,038,916	0.7									

Static Benchmark consists of 20% Russell 3000, 22% MSCI ACWI ex US net, 13% Bloomberg Agg, 5% Bloomberg US TIPS, 2.5% ICE BofA US High Yield TR, 2.5% Credit Suisse Leveraged, 1.75% JPM GBI, 3.5% JPM EMBI, 1.75% JPM CEMBI 15% MSCI ACWI + 2% (Quarter Lagged), 5% NCREIF Property Index, 5% NCREIF ODCE Equal Weighted Net, 3% S&P North American Natural Resources TR.

Dynamic Benchmark consists of each asset class benchmark multiplied by actual asset class weight at the end of each preceding month.

The Spliced International Equity Benchmark consists of MSCI EAFE from 1/1/1997 to 12/31/1998. From 1/1/1999 to present it consists of MSCI ACWI ex US net.

The Private Equity Benchmark consists of the S&P 500 + 3% from 4/30/2010 to 3/31/2018. From 4/1/2018 to present it consists of MSCI ACWI + 2% (Quarter Lagged).

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Asset Allocation & Performance | As of December 31, 2023

	Trailing Net Pe	rforman	ce						
	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	1,160,920,585	100.0	6.1	8.4	4.4	8.3	6.8	6.9	Apr-97
Static Benchmark			5.7	13.6	4.6	8.0	6.7		
Dynamic Benchmark			5.5	14.5	4.5	7.7	6.4		
70% MSCI ACWI/30% Barclays Agg			9.8	17.1	3.1	8.7	6.3	6.4	
InvMetrics All Public DB Plans > \$1B Median			6.6	11.4	4.5	8.1	6.2	6.9	
InvMetrics All Public DB Plans > \$1B Rank			64	93	55	46	25	47	
Domestic Equity	254,664,703	21.9	12.0	22.1	8.5	14.0	10.1	8.6	Apr-97
Russell 3000 Index			12.1	26.0	8.5	15.2	11.5	9.2	
eV All US Equity Median			11.8	18.1	8.0	13.0	9.2	9.6	
eV All US Equity Rank			46	36	44	37	38	81	
SSgA S&P 500	117,529,529	10.1	11.7	26.2	10.0	15.6	12.0	9.6	Feb-04
S&P 500 Index			11.7	26.3	10.0	15.7	12.0	9.6	
eV US Large Cap Equity Median			11.4	20.1	8.8	14.0	10.5	9.3	
eV US Large Cap Equity Rank			45	34	34	30	24	42	
Westwood Capital Large Cap Value	12,288,128	1.1	8.3	8.4	8.1	10.8	8.9	8.6	Oct-01
Russell 1000 Value Index			9.5	11.5	8.9	10.9	8.4	8.0	
eV US Large Cap Value Equity Median			9.8	12.2	9.9	11.9	8.8	8.5	
eV US Large Cap Value Equity Rank			81	78	80	72	48	46	
Westfield Small/Mid Cap Growth	58,988,982	5.1	11.5	18.4	1.7	13.8	9.5	12.3	Nov-02
Russell 2500 Growth Index			12.6	18.9	-2.7	11.4	8.8	11.0	
eV US Small-Mid Cap Growth Equity Median			11.6	17.6	-1.2	12.4	9.1	10.8	
eV US Small-Mid Cap Growth Equity Rank			53	42	26	31	37	16	

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Asset Allocation & Performance | As of December 31, 2023

		7,0000	111000		1 61101	mane	1 75 01	01, 2020	
	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Vaughan Nelson Small Cap Value	65,858,063	5.7	14.7	25.7	14.1	15.3		10.7	Jan-16
Russell 2000 Value Index			15.3	14.6	7.9	10.0	6.8	9.0	
eV US Small Cap Value Equity Median			12.6	16.3	9.7	11.6	7.3	9.3	
eV US Small Cap Value Equity Rank			19	4	15	8		25	
International Equity	237,994,009	20.5	10.3	16.6	-1.4	6.6	4.1	5.6	Apr-97
Spliced International Equity Benchmark			9.8	15.6	1.5	7.1	3.8	5.3	
SSgA MSCI EAFE Fund	108,293,527	9.3	10.4	18.6	4.3	8.5	4.6	5.7	Feb-13
MSCI EAFE (Net)			10.4	18.2	4.0	8.2	4.3	5.4	
eV EAFE Core Equity Median			10.2	17.1	3.0	8.1	4.6	5.8	
eV EAFE Core Equity Rank			45	31	30	43	50	58	
Baillie Gifford International Growth Fund	33,087,432	2.9	12.7	14.3	-12.1	8.7	5.4	9.3	May-09
MSCI AC World ex USA (Net)			9.8	15.6	1.5	7.1	3.8	6.8	
eV ACWI ex-US All Cap Growth Eq Median			12.6	16.7	-2.5	8.9	5.2	9.0	
eV ACWI ex-US All Cap Growth Eq Rank			46	80	95	53	45	26	
Highclere International Small Cap	40,454,960	3.5	11.9	13.2	-2.4	4.8	4.2	6.6	Dec-09
MSCI EAFE Small Cap (Net)			11.1	13.2	-0.7	6.6	4.8	6.9	
eV EAFE Small Cap Equity Median			10.5	13.8	0.3	7.0	4.9	7.4	
eV EAFE Small Cap Equity Rank			22	57	73	82	65	75	
DFA Emerging Markets Value	26,293,547	2.3	7.2	16.5	5.3	5.7	3.7	3.1	Dec-09
MSCI Emerging Markets Value (Net)			8.1	14.2	0.0	3.4	1.9	2.1	
eV Emg Mkts All Cap Value Equity Median			8.5	15.1	2.4	5.9	3.7	3.5	
eV Emg Mkts All Cap Value Equity Rank			73	41	25	56	49	65	
TT Emerging Markets Equity	29,864,543	2.6	8.5	5.6	-8.6			-0.1	Apr-19
MSCI Emerging Markets (Net)			7.9	9.8	-5.1	3.7	2.7	1.8	
eV Emg Mkts Equity Median			7.9	12.0	-3.3	5.1	3.3	3.2	
eV Emg Mkts Equity Rank			38	91	85			93	

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Asset Allocation & Performance | As of December 31, 2023

	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Equity	204,955,665	17.7	-0.6	8.0	15.9	16.8	16.2	16.0	Jun-10
Private Equity Benchmark			-2.9	23.2	9.0	8.6	10.9	13.7	
57 Stars Global Opportunity 3	7,603,950	0.7							
Blue Bay Direct Lending	1,450,240	0.1							
Constitution Capital Partners	14,867,075	1.3							
Cross Creek Capital Partners II - B	11,032,543	1.0							
Cross Creek Capital Partners III	11,030,295	1.0							
Deutsche Bank SOF III	1,847,180	0.2							
Dover Street X, L.P.	32,854,997	2.8							
HarbourVest 2013 Direct	3,673,270	0.3							
HarbourVest Co-Investment Fund IV	7,514,732	0.6							
HighVista Private Equity V, L.P.	4,651,962	0.4							
HighVista Private Equity VI, L.P.	12,502,701	1.1							
LGT Crown Asia II	7,867,368	0.7							
LGT Crown Europe Small Buyouts III	3,411,480	0.3							
LGT Crown Global Opportunities VI	35,527,712	3.1							
LGT Crown Global Secondaries II	97,161	0.0							
LGT Crown Global Secondaries III	2,184,889	0.2							
Partners Group Emerging Markets 2015	8,587,593	0.7							
Partners Group U.S. Distressed Private Equity 2009	185,561	0.0							

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Asset Allocation & Performance | As of December 31, 2023

		,					1 7 10 0.	01, 2020	
	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Advisors Co-Investment Fund III	1,552,604	0.1							
Private Equity Investors V	1,225,244	0.1							
StepStone Global Partners V	7,530,663	0.6							
StepStone Global Partners VI	13,173,290	1.1							
SVB Strategic Investors Fund IX, L.P.	14,583,154	1.3							
Fixed Income	332,054,144	28.6	6.9	7.7	-2.0	2.4	2.3	4.3	Apr-97
Blmbg. U.S. Aggregate Index			6.8	<i>5.5</i>	-3.3	1.1	1.8	4.3	
SSgA Bond Fund	119,503,018	10.3	6.7	5.6	-3.4	1.1	1.8	3.1	Jan-04
Blmbg. U.S. Aggregate Index			6.8	<i>5.5</i>	-3.3	1.1	1.8	3.2	
eV US Core Fixed Inc Median			6.8	5.9	-3.1	1.4	2.0	3.4	
eV US Core Fixed Inc Rank			61	66	73	84	80	84	
SSgA TIPS	56,664,578	4.9	4.5	3.9	-1.1	3.1		1.8	Aug-14
Blmbg. U.S. TIPS			4.7	3.9	-1.0	3.2	2.4	2.0	
eV US TIPS / Inflation Fixed Inc Median			4.5	3.9	-1.0	3.2	2.3	1.9	
eV US TIPS / Inflation Fixed Inc Rank			47	53	64	64		66	
Loomis Sayles Core Plus Fixed Income	46,259,605	4.0	7.3	6.4	-2.8	2.3		2.4	Jul-15
Blmbg. U.S. Aggregate Index			6.8	5.5	-3.3	1.1	1.8	1.5	
eV US Core Plus Fixed Inc Median			7.0	6.6	-2.8	1.9	2.4	2.0	
eV US Core Plus Fixed Inc Rank			28	64	48	28		24	
Aberdeen Emerging Markets Bond Fund	60,268,738	5.2	11.0	13.8	-3.1	2.0		2.2	Dec-14
JPM EMBI Global Diversified			9.2	11.1	-3.6	1.7	3.2	2.5	
50% JP Morgan EMBI / 25% JP Morgan GBI-EM / 25% JP Morgan CEMBI			8.0	10.9	-3.0	1.9			

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Asset Allocation & Performance | As of December 31, 2023

							1 75 01	0., 2020	
	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Pyramis Tactical Bond Fund 2	6,504,769	2.3	7.1	7.0	-1.2	3.6	3.7	3.7	Aug-13
Blmbg. U.S. Aggregate Index			6.8	<i>5.5</i>	-3.3	1.1	1.8	1.8	
eV US Core Plus Fixed Inc Median			7.0	6.6	-2.8	1.9	2.4	2.4	
eV US Core Plus Fixed Inc Rank			38	31	5	2	3	2	
Aristotle Pacific 2	22,853,437	2.0	3.1	14.0	6.0			5.3	Dec-19
Credit Suisse Leveraged Loan Index			2.9	13.0	5.6	5.6	4.4	5.2	
eV US Securitized Fixed Inc Median			5.8	5.9	-1.5	1.2	2.2	-0.2	
eV US Securitized Fixed Inc Rank			82	4	1			1	
Real Estate 89	9,565,404	7.7	-3.9	-15.0	3.5	3.1	6.2	3.0	Jan-08
NCREIF Property Index			-3.0	-7.9	4.6	4.3	6.8	5.6	
Clarion Partners Lion Properties Fund 7	0,093,043	6.0	-4.6	-16.3	3.6	3.7	7.2	5.4	Apr-05
NCREIF Fund Index-ODCE (EW) (Net)			-5.4	-13.3	4.3	3.8	6.7	5.8	
Portfolio Advisors Real Estate Fund V	6,364,141	0.5							
Partners Group Global RE 2011	612,226	0.1							
Partners Group Distressed RE 2009	48,639	0.0							
Partners Group Real Estate Secondary 2017	12,447,355	1.1							

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Asset Allocation & Performance | As of December 31, 2023

	Market Value \$	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Natural Resources	33,647,745	2.9	1.8	8.0	6.1	-1.4	1.8	1.7	Mar-13
S&P North American Natural Res Sector Index (TR)			-1.2	3.7	24.8	13.1	2.8	3.6	
Aether Real Assets V	10,434,859	0.9							
Aether Real Assets IV	10,935,857	0.9							
Aether Real Assets III	9,942,456	0.9							
Aether Real Assets II	2,334,573	0.2							
Cash	8,038,916	0.7							
Cash	8,038,916	0.7							

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Asset Allocation & Performance | As of December 31, 2023

	Calendar Year Performance										
	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)
Total Fund	8.4	-10.8	17.6	12.9	15.7	-2.0	17.0	7.1	1.3	4.8	16.1
Static Benchmark	13.6	-12.0	14.4	11.2	15.8	-3.6	16.4	9.6	-O.1	5.7	15.1
Dynamic Benchmark	14.5	-13.2	14.9	10.5	14.6	-3.1	16.1	8.4	0.4	5.4	21.2
70% MSCI ACWI/30% Barclays Agg	17.1	-16.6	12.2	14.3	21.2	-6.5	17.5	6.4	-1.3	4.8	14.9
Domestic Equity	22.1	-16.0	24.6	16.5	29.4	-7.9	21.8	9.9	0.2	10.0	31.3
Russell 3000 Index	26.0	-19.2	25.7	20.9	31.0	-5.2	21.1	12.7	0.5	12.6	33.6
SSgA S&P 500	26.2	-18.1	28.6	18.3	31.5	-4.4	21.8	12.0	1.4	13.7	32.3
S&P 500 Index	26.3	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4
Westwood Capital Large Cap Value	8.4	-5.9	23.8	3.9	27.3	-5.7	20.4	10.9	-0.1	11.9	29.6
Russell 1000 Value Index	11.5	-7.5	25.2	2.8	26.5	-8.3	13.7	17.3	-3.8	13.5	32.5
Westfield Small/Mid Cap Growth	18.4	-23.4	16.2	34.2	35.2	-7.6	31.0	3.4	-4.1	7.8	37.2
Russell 2500 Growth Index	18.9	-26.2	5.0	40.5	32.7	-7.5	24.5	9.7	-0.2	7.1	40.6
Vaughan Nelson Small Cap Value	25.7	-9.8	31.0	9.6	25.0	-14.1	6.8	20.7			
Russell 2000 Value Index	14.6	-14.5	28.3	4.6	22.4	-12.9	7.8	31.7	-7.5	4.2	34.5
International Equity	16.6	-21.1	4.1	17.6	22.4	-15.9	34.0	5.0	-4.4	-4.4	19.7
Spliced International Equity Benchmark	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3
SSgA MSCI EAFE Fund	18.6	-14.1	11.4	8.2	22.4	-13.5	25.3	1.3	-0.6	-4.7	
MSCI EAFE (Net)	18.2	-14.5	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8
Baillie Gifford International Growth Fund	14.3	-34.4	-9.4	63.0	37.3	-17.3	45.5	1.4	-2.9	-6.4	29.9
MSCI AC World ex USA (Net)	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3
Highclere International Small Cap	13.2	-24.2	8.3	10.2	23.5	-18.8	30.9	10.3	6.5	-4.4	24.6
MSCI EAFE Small Cap (Net)	13.2	-21.4	10.1	12.3	25.0	-17.9	33.0	2.2	9.6	-4.9	29.3

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Asset Allocation & Performance | As of December 31, 2023

				7 1000	71110001			1100 710			.,
	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)
DFA Emerging Markets Value	16.5	-10.7	12.4	2.7	9.6	-11.9	33.8	19.8	-18.8	-4.4	-4.4
MSCI Emerging Markets Value (Net)	14.2	-15.8	4.0	5.5	12.0	-10.7	28.1	14.9	-18.6	-4.1	-5.1
TT Emerging Markets Equity	5.6	-26.9	-1.0	19.8							
MSCI Emerging Markets (Net)	9.8	-20.1	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6
Private Equity	0.8	-1.7	57.0	20.4	16.1	15.8	17.7	9.4	12.7	23.3	7.7
Private Equity Benchmark	23.2	-19.0	29.9	12.6	3.4	5.4	25.4	15.3	4.4	17.1	36.3
57 Stars Global Opportunity 3											
Blue Bay Direct Lending											
Constitution Capital Partners											
Cross Creek Capital Partners II - B											
Cross Creek Capital Partners III											
Deutsche Bank SOF III											
Dover Street X, L.P.											
HarbourVest 2013 Direct											
HarbourVest Co-Investment Fund IV											
HighVista Private Equity V, L.P.											
HighVista Private Equity VI, L.P.											
LGT Crown Asia II											
LGT Crown Europe Small Buyouts III											
LGT Crown Global Opportunities VI											
LGT Crown Global Secondaries II											

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Asset Allocation & Performance | As of December 31, 2023

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)
LGT Crown Global Secondaries III											
Partners Group Emerging Markets 2015											
Partners Group U.S. Distressed Private Equity 2009											
Private Advisors Co-Investment Fund III											
StepStone Global Partners V											
StepStone Global Partners VI											
SVB Strategic Investors Fund IX, L.P.											
Private Equity Investors V											
Fixed Income	7.7	-12.7	0.0	8.3	10.5	-2.0	5.6	6.9	-2.1	3.1	-2.4
Blmbg. U.S. Aggregate Index	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
SSgA Bond Fund	5.6	-13.2	-1.6	7.5	8.7	0.0	3.5	2.6	0.5	5.9	-2.2
Blmbg. U.S. Aggregate Index	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
SSgA TIPS	3.9	-12.0	5.9	10.9	8.3	-1.3	3.0	4.6	-1.5		
Blmbg. U.S. TIPS	3.9	-11.8	6.0	11.0	8.4	-1.3	3.0	4.7	-1.4	3.6	-8.6
Loomis Sayles Core Plus Fixed Income	6.4	-12.7	-1.1	11.3	9.4	-0.4	5.4	6.9			
Blmbg. U.S. Aggregate Index	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
Aberdeen Emerging Markets Bond Fund	13.8	-16.6	-4.0	5.0	15.1	-7.5	13.0	13.3	-2.7		
JPM EMBI Global Diversified	11.1	-17.8	-1.8	5.3	15.0	-4.3	10.3	10.2	1.2	7.4	-5.2
Pyramis Tactical Bond Fund	7.0	-10.9	1.2	9.3	13.2	-0.9	5.9	10.4	-1.8	5.3	
Blmbg. U.S. Aggregate Index	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0
Aristotle Pacific	14.0	-0.6	5.2	2.6							
Credit Suisse Leveraged Loan Index	13.0	-1.1	5.4	2.8	8.2	1.1	4.2	9.9	-0.4	2.1	6.2

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Asset Allocation & Performance | As of December 31, 2023

	2222 (21)	2222 (24)	2224 (24)	2222 (24)	2222 (24)	2222 (24)	(or)	(01)	2247 (24)	224 (24)	
	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)
Real Estate	-15.0	8.3	20.2	-0.6	5.6	8.6	7.5	7.8	13.1	10.5	10.5
NCREIF Property Index	-7.9	5.5	17.7	1.6	6.4	6.7	7.0	8.0	13.3	11.8	11.0
Clarion Partners Lion Properties Fund	-16.3	8.7	22.4	1.4	6.3	9.2	8.0	9.3	15.7	12.3	11.8
NCREIF Fund Index-ODCE (EW) (Net)	-13.3	7.6	21.9	0.8	5.2	7.3	6.9	8.4	14.2	11.4	12.4
Portfolio Advisors Real Estate Fund V											
Partners Group Global RE 2011											
Partners Group Distressed RE 2009											
Partners Group Real Estate Secondary 2017											
Natural Resources	0.8	2.2	15.9	-9.9	-13.4	2.1	15.7	8.6	-6.3	6.7	
S&P North American Natural Res Sector Index (TR)	3.7	34.1	39.9	-19.0	17.6	-21.1	1.2	30.9	-24.3	-9.8	16.5
Aether Real Assets V											
Aether Real Assets IV											
Aether Real Assets III											
Aether Real Assets II											
Cash											
Cash											

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MPT Stats By Group | As of December 31, 2023

		Otato by Group As or December of, 202
	Risk Return Statistics	
		5 Yrs
	Total Fund	Static Benchmark
RETURN SUMMARY STATISTICS		
Maximum Return	6.3	7.5
Minimum Return	-6.7	-7.9
Return	8.3	8.0
Excess Return	6.5	6.4
Excess Performance	0.2	0.0
RISK SUMMARY STATISTICS		
Beta	0.9	1.0
Down Capture	83.9	100.0
Up Capture	91.8	100.0
RISK/RETURN SUMMARY STATISTICS		
Standard Deviation	9.1	9.9
Sortino Ratio	1.1	1.0
Alpha	1.3	0.0
Sharpe Ratio	0.7	0.6
Excess Risk	9.2	10.0
Tracking Error	3.5	0.0
Information Ratio	0.0	-
CORRELATION STATISTICS		
R-Squared	0.9	1.0
Actual Correlation	0.9	1.0

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Financial Reconciliation | Quarter To Date Ending December 31, 2023

	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
57 Stars Global Opportunity 3	7,952,236	-	-217,779	-217,779	-130,507	7,603,950
Aberdeen Emerging Markets Bond Fund	54,258,471	-	-	-	6,010,267	60,268,738
Aether Real Assets II	2,452,130	-	-153,814	-153,814	36,257	2,334,573
Aether Real Assets III	10,278,285	155,942	-332,175	-176,233	-159,596	9,942,456
Aether Real Assets IV	10,744,837	-	-	-	191,020	10,935,857
Aether Real Assets V	9,657,402	242,395	-	242,395	535,062	10,434,859
Aristotle Pacific	22,177,023	-	-	-	676,414	22,853,437
Baillie Gifford International Growth Fund	29,348,812	-	-	-	3,738,620	33,087,432
Blue Bay Direct Lending	1,684,609	-	-	-	-234,369	1,450,240
Cash	4,883,582	47,772,756	-44,617,422	3,155,334	-	8,038,916
Clarion Partners Lion Properties Fund	75,074,827	-	-1,620,000	-1,791,456	-3,190,328	70,093,043
Constitution Capital Partners	14,809,781	-	-1,048,110	-1,048,110	1,105,404	14,867,075
Cross Creek Capital Partners II - B	11,593,429	-	-256,678	-256,678	-304,208	11,032,543
Cross Creek Capital Partners III	11,643,853	-	-	-	-613,558	11,030,295
Deutsche Bank SOF III	1,948,437	-	-54,420	-54,420	-46,837	1,847,180
DFA Emerging Markets Value	34,981,456	-	-10,000,000	-10,000,000	1,312,091	26,293,547
Dover Street X, L.P.	32,586,597	800,000	-	800,000	-531,600	32,854,997
HarbourVest 2013 Direct	4,724,347	-	-301,950	-301,950	-749,127	3,673,270
HarbourVest Co-Investment Fund IV	7,930,262	-	-187,074	-187,074	-228,456	7,514,732
Highclere International Small Cap	36,161,933	-	-	-94,035	4,387,062	40,454,960
HighVista Private Equity V, L.P.	5,011,563	-	-274,652	-274,652	-84,949	4,651,962
HighVista Private Equity VI, L.P.	13,815,953	-	-763,883	-763,883	-549,369	12,502,701
LGT Crown Asia II	8,272,052	-	-300,514	-300,514	-104,170	7,867,368
LGT Crown Europe Small Buyouts III	3,359,674	-	-302,325	-302,325	354,132	3,411,480
LGT Crown Global Opportunities VI	37,738,560	640,000	-4,976,783	-4,336,783	2,125,935	35,527,712
LGT Crown Global Secondaries II	118,577	305	-28,160	-27,855	6,439	97,161
LGT Crown Global Secondaries III	1,991,780	-	-95,443	-95,443	288,552	2,184,889

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Financial Reconciliation | Quarter To Date Ending December 31, 2023

	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
Loomis Sayles Core Plus Fixed Income	43,090,377	-	-	-	3,169,228	46,259,605
Partners Group Distressed RE 2009	52,282	-	-	-	-3,643	48,639
Partners Group Emerging Markets 2015	8,556,771	-	-	-	30,822	8,587,593
Partners Group Global RE 2011	719,410	-	-	-	-107,185	612,226
Partners Group Real Estate Secondary 2017	12,742,526	-	-	-	-295,171	12,447,355
Partners Group U.S. Distressed Private Equity 2009	389,092	-	-102,335	-102,335	-101,196	185,561
Portfolio Advisors Real Estate Fund V	6,220,427	-	-	-	143,714	6,364,141
Private Advisors Co-Investment Fund III	1,509,295	-	-	-	43,309	1,552,604
Private Equity Investors V	1,242,856	-	-	-	-17,612	1,225,244
Pyramis Tactical Bond Fund	24,717,732	-	-	-	1,787,037	26,504,769
SSgA Bond Fund	111,890,676	-	-7,285	-7,285	7,619,627	119,503,018
SSgA MSCI EAFE Fund	78,728,779	20,000,000	-9,998	19,990,002	9,574,746	108,293,527
SSgA S&P 500	98,554,754	10,000,000	-3,002,664	6,997,336	11,977,439	117,529,529
SSgA TIPS	54,200,727	-	-4,129	-4,129	2,467,980	56,664,578
StepStone Global Partners V	7,658,411	-	-	-	-127,748	7,530,663
StepStone Global Partners VI	13,120,839	-	-	-	52,451	13,173,290
SVB Strategic Investors Fund IX, L.P.	14,882,227	128,000	-	128,000	-427,073	14,583,154
TT Emerging Markets Equity	27,520,708	-	-	-	2,343,834	29,864,543
Vaughan Nelson Small Cap Value	57,296,092	-	-	-	8,561,971	65,858,063
Westfield Small/Mid Cap Growth	52,850,083	-	-	29,121	6,109,779	58,988,982
Westwood Capital Large Cap Value	30,195,923	-	-20,000,000	-20,000,000	2,092,204	12,288,128
Total	1,101,340,455	79,739,398	-88,657,592	-9,154,565	68,734,694	1,160,920,585

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Private Equity Assets

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Private Equity Assets

Partnership	Focus	Туре	Vintage Year
Partners Group Distressed Private Equity 2009	Special Situations	Fund of Funds	2009
LGT Crown Global Secondaries II	Secondary Market	Fund of Funds	2009
Private Equity Investors V	Secondary Market	Fund of Funds	2009
Cross Creek Capital Partners II - B	Venture	Fund of Funds	2010
LGT Crown Asia II	Buyout	Fund of Funds	2011
StepStone Global Partners V	Venture	Fund of Funds	2011
57 Stars Global Opportunity 3	Diversified	Fund of Funds	2011
LGT Crown Europe Small Buyouts III	Buyout	Fund of Funds	2012
LGT Crown Global Secondaries III	Secondary Market	Fund of Funds	2012
Private Advisors Co-Investment Fund III	Co-investments	Fund of Funds	2013
HarbourVest 2013 Direct	Co-investments	Fund of Funds	2013
Cross Creek Capital Partners III	Venture	Fund of Funds	2013
Flag Private Equity V	Buyout	Fund of Funds	2012
StepStone Global Partners VI	Venture	Fund of Funds	2013
Constitution Capital Partners Ironsides III	Buyout	Fund of Funds	2014
Deutsche Bank Secondary Opportunities Fund III	Secondary Market	Fund of Funds	2014
Flag Private Equity VI	Buyout	Fund of Funds	2015
Blue Bay Direct Lending Fund II	Private Debt	Direct Fund	2015
Partners Group Emerging Markets 2015	Special Situations	Fund of Funds	2015
LGT Crown Global Opportunities VI	Diversified	Fund of Funds	2016
HarbourVest Co-Investment Fund IV	Co-investments	Fund of Funds	2017
SVB Strategic Investors Fund IX	Venture	Fund of Funds	2018
Dover Street X	Secondary Market	Fund of Funds	2020

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Private Equity Assets

Partnership	Committed (\$mm)	Called (\$mm)	Distributed (\$mm)	Fair Value (\$mm)	nIRR¹ (%)	Vintage Year	TVPI Multiple
Partners Group Distressed Private Equity 2009	7.0	6.2	8.8	\$0.1	10.4	2009	1.4x
LGT Crown Global Secondaries II ²	3.0	2.5	4.3	\$0.2	17.7	2009	1.8x
Private Equity Investors V	3.0	3.0	1.4	\$1.2	-1.8	2009	0.9x
Cross Creek Capital Partners II – B	12.5	11.7	28.3	\$11.0	19.1	2010	3.4x
LGT Crown Asia II ²	10.0	9.5	11.1	\$7.9	11.2	2011	2.0x
StepStone Global Partners V	7.5	6.9	18.7	\$7.5	23.6	2011	3.8x
57 Stars Global Opportunity 3	10.0	10.5	6.3	\$7.6	4.6	2011	1.3x
LGT Crown Europe Small Buyouts III²	8.4	7.9	11.6	\$3.4	15.8	2012	1.9x
LGT Crown Global Secondaries III ²	10.0	7.7	9.8	\$2.2	12.1	2012	1.6x
Private Advisors Co-Investment Fund III	10.0	10.6	17.2	\$1.6	12.2	2013	1.8x
HarbourVest 2013 Direct	10.0	9.7	16.9	\$3.7	17.6	2013	2.2x
Cross Creek Capital Partners III	7.5	6.9	9.2	\$11.0	20.3	2013	3.5x
HlghVista Private Equity V	10.0	10.0	17.3	\$4.7	17.2	2012	2.4x
StepStone Global Partners VI	7.5	6.8	10.8	\$13.2	21.5	2013	3.5x
Constitution Capital Partners Ironsides III	15.0	17.6	27.7	\$14.9	25.23 20.974	2014	2.4x
Deutsche Bank Secondary Opportunities Fund III	10.0	8.8	10.4	\$1.8	11.0	2014	1.4x
HighVista Private Equity VI	15.0	14.2	16.4	\$12.5	21.8	2015	2.0x
Blue Bay Direct Lending Fund II	20.0	19.4	21.7	\$1.5	7.5	2015	1.2x
Partners Group Emerging Markets 2015	10.0	8.8	5.3	\$8.6	8.3	2015	1.6x
LGT Crown Global Opportunities VI ²	40.0	34.9	28.1	\$35.5	15.7	2016	1.8x
HarbourVest Co-Investment Fund IV	10.0	8.1	8.2	\$7.5	15.9	2017	1.9x
SVB Strategic Investors Fund IX	10.0	9.0	0.0	\$14.6	20.25	2018	1.6x
Dover Street X	40.0	28.2	10.2	\$32.9	29.4	2020	1.5x
Total	\$286.4	\$258.9	\$299.70	\$205.10			1.9x

¹ All performance figures are reported directly from managers, net of fees, as of 9/30/2023, unless otherwise noted.
² Performance figures are as of 12/31/2023.

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³ Constitution Capital Ironsides Partnership Fund III, as of 9/30/2023.

⁴ Constitution Capital Ironsides Co-Investment Fund III, as of 9/30/2023.

⁵ Net IRR is as of 6/30/2023



Real Estate Assets





Closed-Ends Funds

Partnership	Focus	Type	Vintage Year	TVPI Multiple
Partners Group U.S. Distressed 2009	U.S. Distressed	Fund of Funds	2009	1.4x
Partners Group Global RE 2011	Global	Fund of Funds	2011	1.3x
Portfolio Advisors Global Real Estate V	Global	Fund of Funds	2015	1.3x
Partners Group RE Secondary 2017	Global	Fund of Funds	2017	1.4x
Crow Holdings Realty Partners X	U.S.	Value Add	2023	NA
				1.3x

Partnership	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	nIRR¹ (%)
Partners Group U.S. Distressed 2009	\$12.0	\$11.2	\$15.1	\$0.1	7.2
Partners Group Global RE 2011	\$6.7	\$5.4	\$6.4	\$0.6	5.8
Portfolio Advisors Global Real Estate V	\$15.0	\$12.6	\$10.0	\$6.4	6.0
Partners Group RE Secondary 2017	\$15.0	\$9.2	\$0.2	\$12.4	8.3
Crow Holdings Realty Partners X	\$20.0	\$0.0	\$0.0	\$0.0	NA
Total	\$68.7	\$38.4	\$31.7	\$19.5	

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¹ Performance figures are reported directly from manager, net of fees, as of 9/30/2023.



Natural Resources Assets



Natural Resources Assets

Partnership	Vintage Year	Committed (mm)	Called (mm)	Distributed (mm)	Fair Value (mm)	Net IRR ¹ %	TVPI Multiple ²
Aether Real Assets II	2012	\$7.5	\$7.6	\$4.9	\$2.3	-1.1	0.9x
Aether Real Assets III	2013	\$15.0	\$15.7	\$4.5	\$9.9	-1.4	0.9x
Aether Real Assets IV	2016	\$10.0	\$10.2	\$1.7	\$10.9	4.9	1.2x
Aether Real Assets V	2018	\$10.0	\$7.4	\$0.5	\$10.4	15.2	1.4x
Total		\$42.5	\$40.9	\$11.6	\$33.5		1.1x

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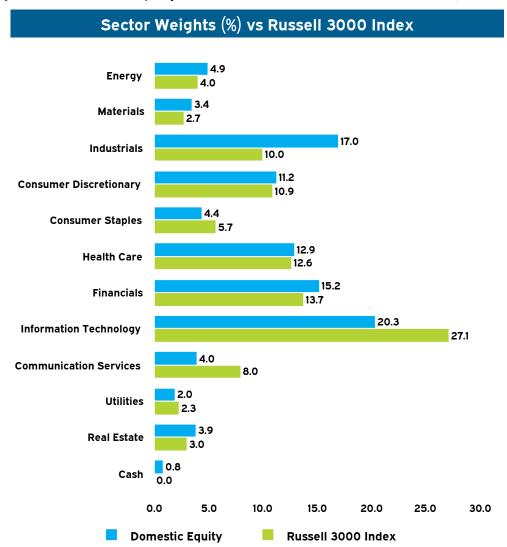
¹ Performance figures are reported directly from manager, net of fees, as of 9/30/2023.



Composite Domestic Equity Characteristics | As of December 31, 2023

Chara	acteristics	
	Portfolio	Benchmark
Number of Holdings	621	2,976
Wtd. Avg. Mkt. Cap \$B	353.9	618.1
Median Mkt. Cap \$B	23.2	2.2
Price To Earnings	21.6	22.8
Price To Book	3.6	4.1
Return on Equity (%)	9.3	8.4
Yield (%)	1.5	1.5
Beta (5 Years, Monthly)	1.0	1.0
R-Squared (5 Years, Monthly)	1.0	1.0

Top Holdings (%)					
Microsoft Corp	3.4				
Apple Inc	3.3				
Amazon.com Inc	1.5				
NVIDIA Corporation	1.3				
Alphabet Inc Class A	1.2				
Berkshire Hathaway Inc	1.0				
Insight Enterprises Inc	0.9				
JPMorgan Chase & Co	0.8				
CASH	0.8				
Meta Platforms Inc	0.8				



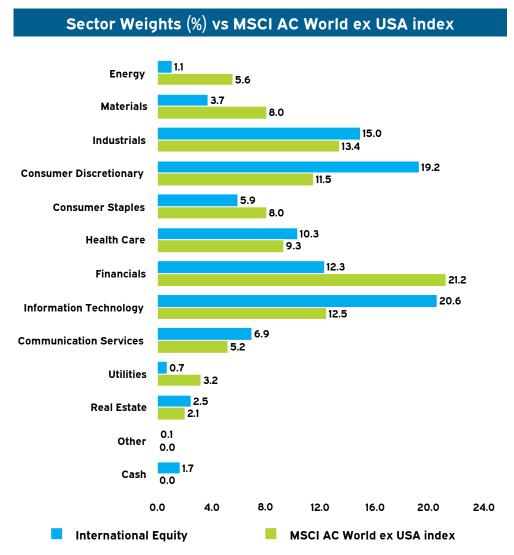
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Composite International Equity Characteristics | As of December 31, 2023

Chara	acteristics	
	Portfolio	Benchmark
Number of Holdings	4,301	2,312
Wtd. Avg. Mkt. Cap \$B	69.0	90.3
Median Mkt. Cap \$B	1.1	9.8
Price To Earnings	19.6	13.6
Price To Book	3.5	2.5
Return on Equity (%)	4.4	5.9
Yield (%)	1.5	3.1
Beta (5 Years, Monthly)	1.1	1.0
R-Squared (5 Years, Monthly)	1.0	1.0

Top Holdings (%)					
MercadoLibre Inc	4.3				
ASML Holding NV	3.8				
Taiwan Semiconductor Manufacturing	2.9				
Ferrari NV	2.8				
Spotify Technology S.A	2.6				
Adyen N.V	2.4				
CASH	2.3				
Atlas Copco AB	2.3				
LOreal SA	2.1				
arGEN-X SE	2.0				



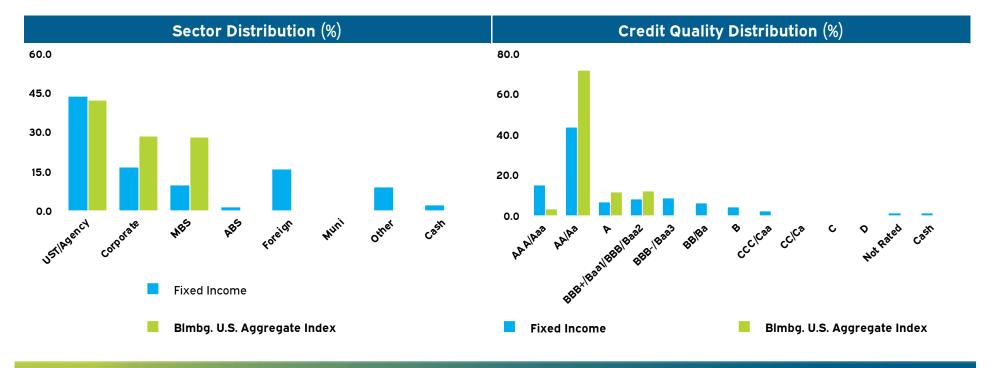
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Composite Fixed Income Characteristics | As of December 31, 2023

	Total Fund		
	\$	%	
SSgA Bond Fund	119,503,018	36	
SSgA TIPS	56,664,578	17	
Loomis Sayles Core Plus Fixed Income	46,259,605	14	
Aberdeen Emerging Markets Bond Fund	60,268,738	18	
Pyramis Tactical Bond Fund	26,504,769	8	
Aristotle Pacific	22,853,437	7	
Total Fixed Income	332,054,144	100	

Portfolio
6.1
6.0
А
8.9



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Manager Equity | As of December 31, 2023

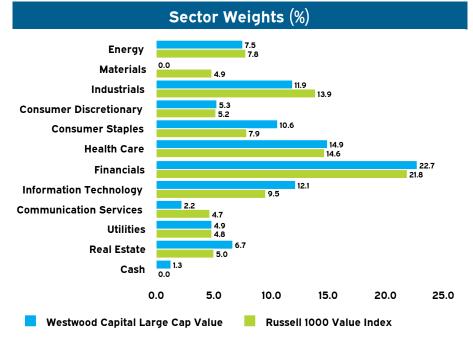
Top Holdings	
Microsoft Corp	3.3
Johnson & Johnson	3.2
Bank of America Corp	3.0
Abbott Laboratories	2.9
JPMorgan Chase & Co	2.7
Goldman Sachs Group Inc (The)	2.7
American International Group Inc	2.6
Eaton Corporation plc	2.6
Progressive Corp (The)	2.6
UnitedHealth Group Incorporated	2.6

Account Information					
Account Name	Westwood Capital Large Cap Value				
Account Structure	Separate Account				
Inception Date	10/01/2001				
Asset Class	US Equity				
Benchmark	Russell 1000 Value Index				
Peer Group	eV US Large Cap Value Equity				

Equity Characteristics vs Russell 1000 Value Index						
	Portfolio	Benchmark				
Number of Holdings	48	849				
Wtd. Avg. Mkt. Cap \$B 362.2 139.5						
Median Mkt. Cap \$B	123.2	12.5				
P/E Ratio	20.0	16.8				
Yield (%)	2.1	2.3				
EPS Growth - 5 Yrs. (%)	18.0	11.4				
Price to Book	3.1	2.5				

% of Portfolio	28.2
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Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Westwood Capital Large Cap Value	8.3	8.4	8.1	10.8	8.9	8.6	10/01/2001
Russell 1000 Value Index	9.5	11.5	8.9	10.9	8.4	8.0	10/01/2001



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Manager Equity | As of December 31, 2023

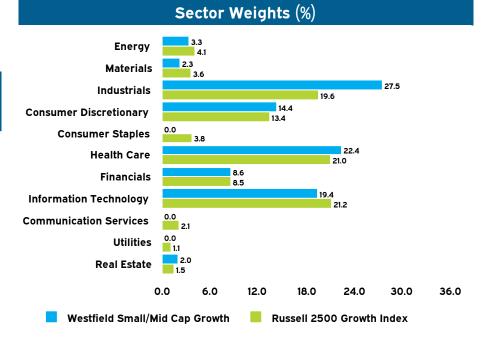
Top Holdings	
Ascendis Pharma AS	3.6
Builders FirstSource Inc	3.1
Axon Enterprise Inc	2.7
M/I Homes Inc	2.5
Lincoln Electric Holdings Inc	2.4
Hubbell Inc	2.4
Avery Dennison Corp	2.3
PTC Inc	2.2
Option Care Health Inc	2.2
Saia Inc	2.2

Account Information					
Account Name	Westfield Small/Mid Cap Growth				
Account Structure	Separate Account				
Inception Date	11/01/2002				
Asset Class	US Equity				
Benchmark	Russell 2500 Growth Index				
Peer Group	eV US Small-Mid Cap Growth Equity				

Equity Characteristics vs Russell 2500 Growth Index						
	Portfolio	Benchmark				
Number of Holdings	64	1,268				
Wtd. Avg. Mkt. Cap \$B	11.0	6.5				
Median Mkt. Cap \$B	9.3	1.6				
P/E Ratio	24.3	23.7				
Yield (%)	0.6	0.6				
EPS Growth - 5 Yrs. (%)	21.7	17.1				
Price to Book	4.4	4.9				

% of F	Portfolio	25.6

Portfolio Performance Summary							
QTD 1 Yr 3 Yrs 5 Yrs 10 Yrs Since Incepti (%) (%) (%) (%) (%) Inception Date							
Westfield Small/Mid Cap Growth	11.5	18.4	1.7	13.8	9.5	12.3	11/01/2002
Russell 2500 Growth Index	12.6	18.9	-2.7	11.4	8.8	11.0	11/01/2002



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Manager Equity | As of December 31, 2023

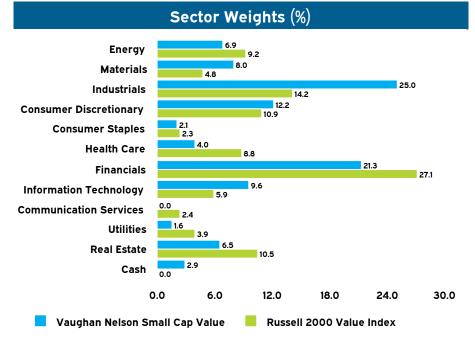
Top Holdings	
Insight Enterprises Inc	3.6
Element Solutions Inc	3.4
First American Financial Corp	2.3
Western Alliance Bancorporation	2.3
Core & Main Inc	2.2
Installed Building Products Inc	2.2
Comerica Incorporated	2.2
Fabrinet	2.0
Beacon Roofing Supply Inc	1.9
Zions Bancorporation National Association	1.9

Account Information					
Account Name	Vaughan Nelson Small Cap Value				
Account Structure	Separate Account				
Inception Date	12/01/2015				
Asset Class	US Equity				
Benchmark	Russell 2000 Value Index				
Peer Group	eV US Small Cap Value Equity				

Equity Characteristics vs Russell 2000 Value Index					
	Portfolio	Benchmark			
Number of Holdings	72	1,431			
Wtd. Avg. Mkt. Cap \$B	5.4	2.7			
Median Mkt. Cap \$B	5.2	8.0			
P/E Ratio	17.3	11.4			
Yield (%)	2.1	2.2			
EPS Growth - 5 Yrs. (%)	10.1	9.1			
Price to Book	2.5	1.6			

% of Portfolio	24.0
70 01 1 01 110110	∠¬.∪

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Vaughan Nelson Small Cap Value	14.7	25.7	14.1	15.3	-	10.7	01/01/2016
Russell 2000 Value Index	15.3	14.6	7.9	10.0	6.8	9.0	01/01/2016



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Manager Equity | As of December 31, 2023

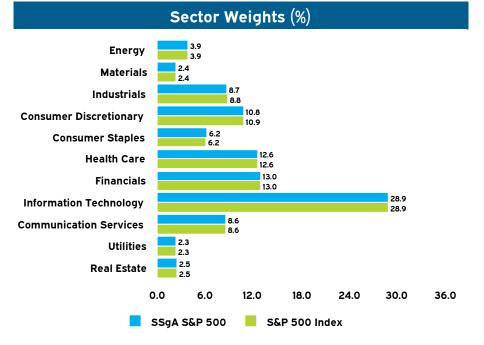
Top Holdings					
Apple Inc	7.0				
Microsoft Corp	7.0				
Amazon.com Inc	3.5				
NVIDIA Corporation	3.1				
Alphabet Inc Class A	2.1				
Meta Platforms Inc	2.0				
Alphabet Inc Class C	1.8				
Tesla Inc 1					
Berkshire Hathaway Inc 1.					
JPMorgan Chase & Co	1.2				

Acco	unt Information
Account Name	SSgA S&P 500
Account Structure	Commingled Fund
Inception Date	01/01/2004
Asset Class	US Equity
Benchmark	S&P 500 Index
Peer Group	eV US Large Cap Equity

Equity Characteristics vs S&P 500 Index					
	Portfolio	Benchmark			
Number of Holdings	501	503			
Wtd. Avg. Mkt. Cap \$B	715.5	714.1			
Median Mkt. Cap \$B	33.5	33.5			
P/E Ratio	24.1	24.0			
Yield (%)	1.5	1.5			
EPS Growth - 5 Yrs. (%)	16.9	16.9			
Price to Book	4.4	4.4			

% of Portfolio	31.0
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Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
SSgA S&P 500	11.7	26.2	10.0	15.6	12.0	9.6	02/01/2004
S&P 500 Index	11.7	26.3	10.0	15.7	12.0	9.6	02/01/2004



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Manager Equity | As of December 31, 2023

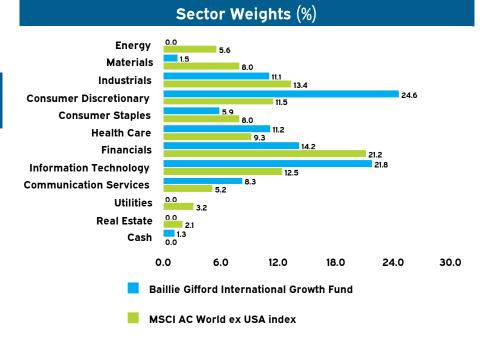
Top Holdings	
MercadoLibre Inc	7.0
ASML Holding NV	6.5
Ferrari NV	4.9
Spotify Technology S.A	4.5
Adyen N.V	4.1
Atlas Copco AB	4.0
Taiwan Semiconductor Manufacturing	3.6
LOreal SA	3.6
arGEN-X SE	3.4
Genmab A/S	3.1

Account Information				
Account Name	Baillie Gifford International Growth Fund			
Account Structure	Mutual Fund			
Inception Date	05/01/2009			
Asset Class	International Equity			
Benchmark	MSCI AC World ex USA (Net)			
Peer Group	eV ACWI ex-US All Cap Growth Eq			

Equity Characteristics vs MSCI AC World ex USA index				
	Portfolio	Benchmark		
Number of Holdings	55	2,312		
Wtd. Avg. Mkt. Cap \$B	93.3	90.3		
Median Mkt. Cap \$B	21.1	9.8		
P/E Ratio	28.3	13.6		
Yield (%)	0.7	3.1		
EPS Growth - 5 Yrs. (%)	28.1	10.4		
Price to Book	6.0	2.5		

% of Portfolio	44.7
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Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Baillie Gifford International Growth Fund	12.7	14.3	-12.1	8.7	5.4	9.3	05/01/2009
MSCI AC World ex USA (Net)	9.8	15.6	1.5	7.1	3.8	6.8	05/01/2009



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Manager Equity | As of December 31, 2023

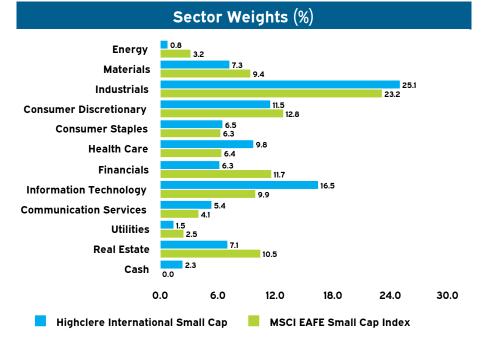
Top Holdings	
Eiken Chemical Co Ltd	1.0
As One Corp	1.0
Aica Kogyo Co Ltd	0.9
Centuria Capital Ltd	0.9
Nohmi Bosai Ltd	0.9
Ste Virbac SA	0.9
Babcock International Group PLC	0.9
Anritsu Corp	0.8
Mayr-Melnhof Karton AG	8.0
Ansell Ltd	0.8

Account Information				
Account Name	Highclere International Small Cap			
Account Structure	Commingled Fund			
Inception Date	12/01/2009			
Asset Class	International Equity			
Benchmark	MSCI EAFE Small Cap (Net)			
Peer Group	eV EAFE Small Cap Equity			

Equity Characteristics vs MSCI EAFE Small Cap Index					
Portfolio Benchmark					
Number of Holdings	194	2,173			
Wtd. Avg. Mkt. Cap \$B	1.6	2.8			
Median Mkt. Cap \$B	1.0	1.3			
P/E Ratio	15.8	13.5			
Yield (%)	2.9	3.1			
EPS Growth - 5 Yrs. (%)	2.9	8.0			
Price to Book	1.9	2.1			

% of Portfolio 8	.9
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Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Highclere International Small Cap	11.9	13.2	-2.4	4.8	4.2	6.6	12/01/2009
MSCI EAFE Small Cap (Net)	11.1	13.2	-0.7	6.6	4.8	6.9	12/01/2009



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Manager Equity | As of December 31, 2023

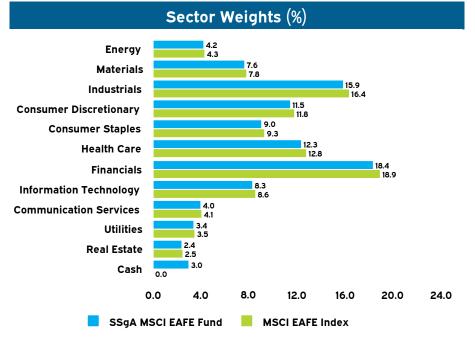
Top Holdings	
Novo Nordisk A/S	2.0
ASML Holding NV	1.9
Nestle SA, Cham Und Vevey	1.8
LVMH Moet Hennessy Louis Vuitton SE	1.3
Shell Plc	1.3
Astrazeneca PLC	1.3
Novartis AG	1.2
Roche Holding AG	1.2
Toyota Motor Corp	1.2
BHP Group Ltd	1.1

Account Information				
Account Name	SSgA MSCI EAFE Fund			
Account Structure	Commingled Fund			
Inception Date	02/01/2013			
Asset Class	International Equity			
Benchmark	MSCI EAFE (Net)			
Peer Group	eV EAFE Core Equity			

Equity Characteristics vs MSCI EAFE Index				
	Portfolio	Benchmark		
Number of Holdings	817	783		
Wtd. Avg. Mkt. Cap \$B	88.4	88.5		
Median Mkt. Cap \$B	13.5	13.4		
P/E Ratio	12.4	13.7		
Yield (%)	3.1	3.2		
EPS Growth - 5 Yrs. (%)	9.9	9.9		
Price to Book	2.6	2.6		

0/ 5 5 15 1:	440
% of Portfolio	14.3

Po	rtfoli	o Pei	forma	ance S	umma	ry	
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
SSgA MSCI EAFE Fund	10.4	18.6	4.3	8.5	4.6	5.7	02/01/2013
MSCI EAFE (Net)	10.4	18.2	4.0	8.2	4.3	5.4	02/01/2013



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Manager Equity | As of December 31, 2023

Top Holdings	
Reliance Industries Ltd	3.1
China Construction Bank Corp	2.1
Samsung Electronics Co Ltd	2.0
Alibaba Group Holding Ltd	1.4
Hon Hai Precision Industry Co Ltd	1.4
Petroleo Brasileiro Sa	1.3
Axis Bank Ltd	1.2
Ping An Insurance Group	1.0
Industrial & Commercial Bank of China	1.0
Bank of China Ltd	1.0

Account Information				
Account Name	DFA Emerging Markets Value			
Account Structure	Mutual Fund			
Inception Date	12/01/2009			
Asset Class	International Equity			
Benchmark	MSCI Emerging Markets Value (Net)			
Peer Group	eV Emg Mkts All Cap Value Equity			

Equity Characteristics						
vs MSCI Emergir	vs MSCI Emerging Markets Index					
	Portfolio	Benchmark				
Number of Holdings	3,227	1,441				
Wtd. Avg. Mkt. Cap \$B	36.4	103.8				
Median Mkt. Cap \$B	0.5	7.0				
P/E Ratio	8.4	12.9				
Yield (%)	4.1	2.8				
EPS Growth - 5 Yrs. (%)	11.1	12.3				
Price to Book	1.6	2.5				

% of Portfolio	15.5

Portf	olio F	erfo	rman	ce Sui	nmary	y	
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
DFA Emerging Markets Value	7.2	16.5	5.3	5.7	3.7	3.1	12/01/2009
MSCI Emerging Markets (Net)	7.9	9.8	-5.1	3.7	2.7	3.0	12/01/2009



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Manager Equity | As of December 31, 2023

Top Holdings	
Taiwan Semiconductor Manufacturing	9.4
Axis Bank Ltd	4.3
Samsung Electronics Co Ltd	4.1
Samsung Electronics Co Ltd	3.8
Grupo Financiero Banorte	3.7
Emaar Properties	2.9
MercadoLibre Inc	2.8
Icici Bank Ltd	2.8
Tencent Holdings LTD	2.6
Unimicron Technology Corp	2.5

TT Emerging Markets Equity
Commingled Fund
03/25/2019
International Equity
MSCI Emerging Markets (Net)
eV Emg Mkts Equity
(

Equity Characteristics					
vs MSCI Emergir	ng Market	s Index			
	Portfolio	Benchmark			
Number of Holdings	83	1,441			
Wtd. Avg. Mkt. Cap \$B	139.0	103.8			
Median Mkt. Cap \$B	19.9	7.0			
P/E Ratio	10.9	12.9			
Yield (%)	2.0	2.8			
EPS Growth - 5 Yrs. (%)	31.0	12.3			
Price to Book	2.6	2.5			

38.9

Portf	olio F	erfo	rman	ce Su	mmar	у	
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
TT Emerging Markets Equity	8.5	5.6	-8.6	-	-	-0.1	04/01/2019
MSCI Emerging Markets (Net)	7.9	9.8	-5.1	3.7	2.7	1.8	04/01/2019



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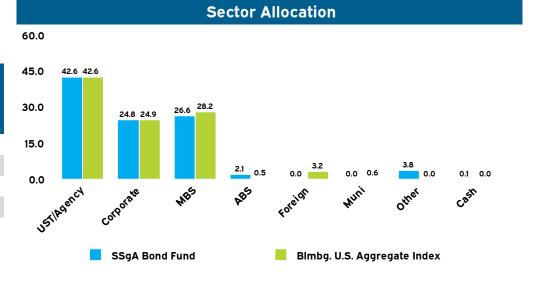
Manager Fixed Income | As of December 31, 2023

	Account Information
Account Name	SSgA Bond Fund
Account Structure	Commingled Fund
Inception Date	01/01/2004
Asset Class	US Fixed Income
Benchmark	Blmbg. U.S. Aggregate Index
Peer Group	eV US Core Fixed Inc

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
SSgA Bond Fund	6.7	5.6	-3.4	1.1	1.8	3.1	01/01/2004
Blmbg. U.S. Aggregate Index	6.8	5.5	-3.3	1.1	1.8	3.2	

		Cre	edit Quality	/ Allocatio	n	
80.0		71.3 72.6				
60.0						
40.0						
20.0			11.6 10.7	12.7 13.4		
0.0	3.7 3.2				0.0 0.1	0.7 0.0
	AAAIAZZ	AAIA2	A BBR HEAR	ABBIBERE	BEIRE	Hot Rated
			BBBX			
	SSg.	A Bond Fund		_	Aggregate Ind	ex

Portfolio Fixed Income Characteristics						
	Q	Q3-23				
	Portfolio	Benchmark	Portfolio			
Yield To Maturity	4.5	4.5	5.4			
Average Duration	6.2	6.2	6.1			
Average Quality	AA	AA	AA/Aa			
Weighted Average Maturity	8.6	8.5	8.6			



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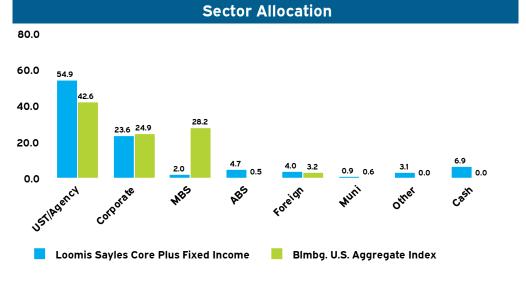
Manager Fixed Income | As of December 31, 2023

	Account Information					
Account Name	Loomis Sayles Core Plus Fixed Income					
Account Structure	Commingled Fund					
Inception Date	06/01/2015					
Asset Class	US Fixed Income					
Benchmark	Blmbg. U.S. Aggregate Index					
Peer Group	eV US Core Plus Fixed Inc					

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Loomis Sayles Core Plus Fixed Income	7.3	6.4	-2.8	2.3	-	2.4	07/01/2015
Blmbg. U.S. Aggregate Index	6.8	5.5	-3.3	1.1	1.8	1.5	

					Credit Quality Allocation	
80.0	66.6			72.6		
60.0						
40.0						
20.0					9.2 10.7	
0.0		3.2	2.1		0.0 0.0 3.9 0.1 0.5 0.0	0.0 0.0
Þ	AAIAaa	•	AAIAS	•	BEE ¹ HEEIHEE BEE ² BEE ¹ BEE ³ BEE ⁸	Casin
	Looi	mis Sa	ayles (Core	Plus Fixed Income Blmbg. U.S. Aggregate Index	

Portfolio Fixed Income Characteristics							
	Q4-23 Q3-23						
	Portfolio	Benchmark	Portfolio				
Yield To Maturity	6.0	4.5	6.0				
Average Duration	6.8	6.2	7.4				
Average Quality	Α	AA	А				
Weighted Average Maturity	8.7	8.5	9.3				



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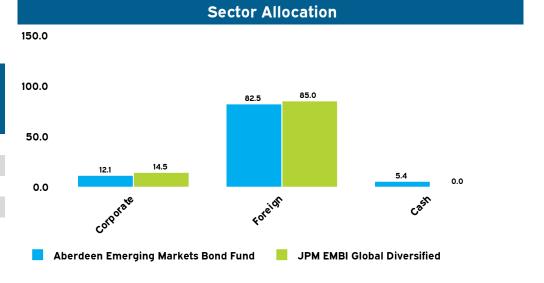
Manager Fixed Income | As of December 31, 2023

Account Information					
Account Name	Aberdeen Emerging Markets Bond Fund				
Account Structure	Commingled Fund				
Inception Date	12/01/2014				
Asset Class	International Fixed Income				
Benchmark	JPM EMBI Global Diversified				
Peer Group					

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Aberdeen Emerging Markets Bond Fund	11.0	13.8	-3.1	2.0	-	2.2	12/01/2014
JPM EMBI Global Diversified	9.2	11.1	-3.6	1.7	3.2	2.5	

Credit Quality Allocation
40.0
30.0
20.0 15.8 17.0 17.8 14.8 13.1
10.0 2.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Ad Alasa Anha Anha Babi Babi Babi Babi Babi Babi Babi Bab
Aberdeen Emerging Markets Bond Fund JPM EMBI Global Diversified

Portfolio Fixed Income Characteristics						
	Q4-23 Q3-23					
	Portfolio	Benchmark	Portfolio			
Yield To Maturity	9.8	8.4	11.2			
Average Duration	6.7	6.8	6.4			
Average Quality	BB	BB+	BB/Ba			
Weighted Average Maturity	11.5	11.4	11.8			



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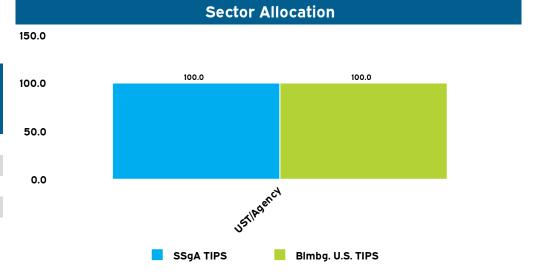
Manager Fixed Income | As of December 31, 2023

Account Information				
Account Name	SSgA TIPS			
Account Structure	Commingled Fund			
Inception Date	07/01/2014			
Asset Class	US Fixed Income			
Benchmark	Blmbg. U.S. TIPS			
Peer Group	eV US TIPS / Inflation Fixed Inc			

Portfolio Performance Summary									
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date		
SSgA TIPS	4.5	3.9	-1.1	3.1	-	1.8	08/01/2014		
Blmbg. U.S. TIPS	4.7	3.9	-1.0	3.2	2.4	2.0			

Credit Quality Allocation							
150.0							
100.0	100.0	100.0					
50.0							
0.0							
		Adika					
	SSgA TIPS	Bimbg. U.S. TIPS					

Portfolio Fixed Income Characteristics								
	Q4-23 Q3-23							
	Portfolio	Benchmark	Portfolio					
Yield To Maturity	4.2	4.0	5.0					
Average Duration	5.9	6.6	5.0					
Average Quality	AA	AA	AAA/Aaa					
Weighted Average Maturity	7.1	7.1	7.1					



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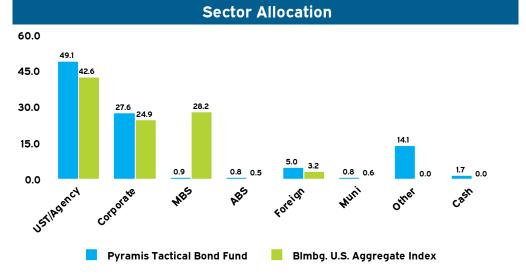
Manager Fixed Income | As of December 31, 2023

Account Information					
Account Name	Pyramis Tactical Bond Fund				
Account Structure	Commingled Fund				
Inception Date	08/01/2013				
Asset Class	US Fixed Income				
Benchmark	Blmbg. U.S. Aggregate Index				
Peer Group	eV US Core Plus Fixed Inc				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Pyramis Tactical Bond Fund	7.1	7.0	-1.2	3.6	3.7	3.7	08/01/2013
Blmbg. U.S. Aggregate Index	6.8	5.5	-3.3	1.1	1.8	1.8	

Credit Quality Allocation						
80.0						
60.0 50.4						
40.0						
20.0						
0.0 0.1 0.0 0.0 0.0 0.0 0.0 1.6 0.0 1.7 0.0						
AAAIRAR AAIRA AAIRA BEBIRARARARARARARARARARARARARARARARARARARA						
Pyramis Tactical Bond Fund Blmbg. U.S. Aggregate Index						

Portfolio Fixed Income Characteristics								
	Q4-23 Q3-23							
	Portfolio	Benchmark	Portfolio					
Yield To Maturity	5.9	4.5	6.8					
Average Duration	6.9	6.2	6.4					
Average Quality	Α	AA	Α					
Weighted Average Maturity	13.3	8.5	13.3					



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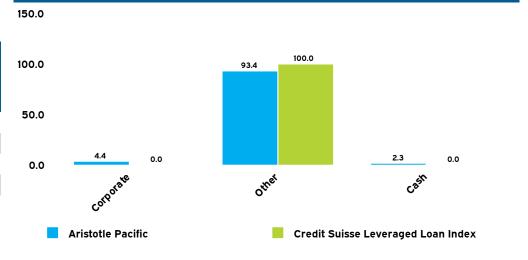
Manager Fixed Income | As of December 31, 2023

Account Information					
Account Name	Aristotle Pacific				
Account Structure	Commingled Fund				
Inception Date	11/27/2019				
Asset Class	US Fixed Income				
Benchmark	Credit Suisse Leveraged Loan Index				
Peer Group	Bank Loan				

Portfolio Performance Summary							
	QTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Since Inception	Inception Date
Aristotle Pacific	3.1	14.0	6.0	-	-	5.3	12/01/2019
Credit Suisse Leveraged Loan Index	2.9	13.0	5.6	5.6	4.4	5.2	

	Credit Quality Allocation					
80.0	67.2					
60.0	52.8					
40.0	32.7					
20.0	12.1					
0.3 0.0	0.0 0.0 0.8 2.7 2.3 0.0					
St. Real Rep Bas2 Rep. Rag3	Balles & Ciclist O Maj Rajed Caest					
Aristotle Pacific	Aristotle Pacific Credit Suisse Leveraged Loan Index					

Portfolio Fixed Income Characteristics								
	Q4-23 Q3-23							
	Portfolio Be							
Yield To Maturity	9.5	9.7	9.2					
Average Duration	0.4	0.3	0.3					
Average Quality	В	В	В					
Weighted Average Maturity	3.9	4.3	3.8					



Sector Allocation

Credit Quality Allocations are not available for Credit Suisse Leveraged Loan Index.

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Fee Schedule | As of December 31, 2023

Public Manager Annual Investment Expense Analysis							
	Market Value (\$)	% of Portfolio	Estimated Annual Fee (%)	Estimated Expense (\$)			
Westwood Capital Large Cap Value	12,288,128	1.49	0.50	61,441			
Westfield Small/Mid Cap Growth	58,988,982	7.15	0.68	401,125			
Vaughan Nelson Small Cap Value	65,858,063	7.99	0.81	536,006			
SSgA S&P 500	117,529,529	14.25	0.01	14,253			
Baillie Gifford International Growth Fund	33,087,432	4.01	0.61	198,525			
Highclere International Small Cap	40,454,960	4.91	1.14	462,277			
SSgA MSCI EAFE Fund	108,293,527	13.13	0.05	58,317			
DFA Emerging Markets Value	26,293,547	3.19	0.38	141,985			
TT Emerging Markets Equity	29,864,543	3.62	0.80	238,916			
SSgA Bond Fund	119,503,018	14.49	0.03	33,901			
Loomis Sayles Core Plus Fixed Income	46,259,605	5.61	0.29	135,649			
Aberdeen Emerging Markets Bond Fund	60,268,738	7.31	0.45	271,209			
SSgA TIPS	56,664,578	6.87	0.03	16,999			
Pyramis Tactical Bond Fund	26,504,769	3.21	0.34	90,116			
Aristotle Pacific	22,853,437	2.77	0.41	93,699			
Total	824,712,856	100.00	-	2,754,419			

Estimated fees are based off of public investments only and are calculated by multiplying manager fee schedules by each fund's market value as of the report date. Estimated fees do not take into consideration potential performance based fees, fur expenses or charges. Private market fees are reported annually in separate report.

Westfield has a performance based fee. The fee ranges from minimum of 0.20% to a maximum of 1.30% based on the relative performance over the trailing three years. Included here is the average actual fee paid over the past three years.

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Asset Study Comparison: 2023 vs. 2024 Projections



Asset Study Comparison: 2023 vs. 2024 Projections

Asset Allocation Review Introduction

- → The purpose of this review is to ensure the Fund's asset allocation targets are still reasonable moving forward.
- → The backbone of the analysis is based on a modeling technique called Mean Variance Optimization (MVO).
- → MVO analysis seeks to predict what the long term expected return will be based on a selected asset mix.
- → MVO is a very useful tool, but it is imperfect. Qualitative analysis must be applied when evaluating the forecasts.
- → In the first quarter of each year, Meketa Investment Group typically prepares its capital market assumptions which serve as the backbone of the MVO analysis.
- → The capital market assumptions seek to predict individual asset class returns and volatility over the next twenty year period.
- → They do not predict returns or volatility in any given single year.

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Asset Study Comparison: 2023 vs. 2024 Projections

Building our forecasts

- → Each return assumption is based on the most important factors that drive returns for that asset class.
- \rightarrow The common components are income, growth and valuation.

Asset Class Category	Major Factors		
Equities	Dividend Yield, GDP Growth, Valuation		
Bonds	Yield to Worst, Default Rate, Recovery Rate		
Real Estate	Cap Rate, Income Yield, Growth		
Private Equity	EBITDA Multiple, Leverage, Public VC Valuation		

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Asset Study Comparison: 2023 vs. 2024 Projections

Current Asset Allocation Policy

	Target (%)	Ranges (%)
Public US Equity	20	13-27
Public International Equity	22	15-29
Private Equity ¹	15	5-25
Investment Grade Bonds	13	10-20
TIPS	5	0-10
High Yield/Bank Loans	5	0-10
Emerging Market Debt	7	0-10
Core Real Estate	5	0-10
Value Add Real Estate	5	0-10
Natural Resources	3	0-10
Total	100	

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¹ Fund of funds.



Asset Study Comparison: 2023 vs. 2024 Projections

Annual Asset Study

→ The following table illustrates the changes in expected return for each sub asset class that the Fund is invested in.

Expected Return¹ Assumptions

	2023 Study Return Assumptions (%)	2024 Study Return Assumptions (%)	Return Difference (%)	Notes
US Equity	8.7	8.5	-0.2	Higher valuations
International Developed Non-US Equity	9.8	8.9	-0.9	Higher valuations, smaller currency tailwind
Emerging Markets Equity	10.0	8.9	-1.1	Higher valuations, lower earnings, smaller currency
Private Equity Fund of Funds	9.8	9.9	+0.1	Mixed valuations and lower borrowing costs
Investment Grade Bonds	4.7	4.8	+0.1	Slightly higher yields
Emerging Markets Bonds	6.4	6.8	+0.4	Higher yields
TIPS	4.5	4.7	+0.2	Slightly higher yields
Bank Loans	7.0	6.6	-0.4	Tighter Spreads
High Yield	7.3	6.8	-0.5	Tighter Spreads
Core Real Estate	6.5	6.9	+0.4	Higher cap rates
Value-add Real Estate	8.3	9.0	+0.7	Higher cap rates
Private Natural Resources	9.8	9.3	-0.5	Higher valuations
Austin Fire's 20 Year Expected Return	8.6%	8.4%	-0.2%	

¹ Twenty-year annualized return assumptions.

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Asset Study Comparison: 2023 vs. 2024 Projections

Expected Risk Assumptions

- → There have been minimal changes in our expected standard deviation assumptions.
- → Our expectations are based on historical 20-year averages, with subjective adjustments.

Expected Risk Assumptions¹

	2023 Study Risk Assumptions (%)	2024 Study Risk Assumptions (%)	Risk Difference
US Equity	18.0	17.0	-1.0
International Developed Non-US Equity	19.0	18.0	-1.0
Emerging Markets Equity	23.0	22.0	-1.0
Private Equity Fund of Funds	27.0	26.0	-1.0
Investment Grade Bonds	4.0	4.0	-
Emerging Markets Bonds	12.0	12.0	-
TIPS	7.0	7.0	-
Bank Loans	10.0	10.0	-
High Yield	11.0	11.0	-
Core Real Estate	12.0	12.0	-
Value-add Real Estate	20.0	20.0	-
Private Natural Resources	24.0	22.0	-2.0
Austin Fire's 20 YR Expected Standard Deviation	13.9%	13.4%	-0.5%

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¹ Twenty-year annualized standard deviation assumptions.



Asset Study Comparison: 2023 vs. 2024 Projections

Summary

- → Return expectations changed as follows:
 - Higher valuations for public equities and lower earnings growth expectations result in lower forward looking return expectations.
 - Return expectations of investment grade bonds are similar as the yield curve ended 2023 similar to where it started.
- → Risk expectations decreased for most equities (public and private) based on observed volatility over the last twenty years.

2023 vs. 2024 Asset Study Comparison

	Expectations based on 2023 Asset Study (%)	Expectations based on 2024 Asset Study (%)	Difference (%)
Expected Return	8.6%	8.4%	-0.2%
Expected Standard Deviation	13.9%	13.3%	-0.5%

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¹ Twenty-year annualized assumptions.



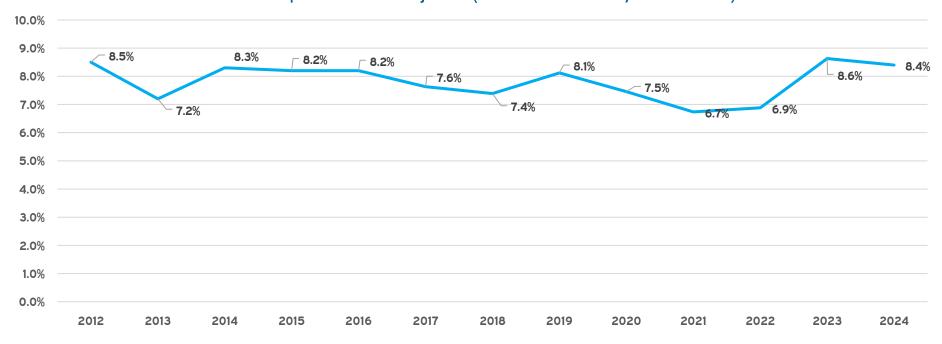
Thoughts



Asset Study Comparison: 2023 Projections vs. 2024 Projections

Historical Perspective

20 Year Expected Return Projection (Based on Asset Study in Given Year)



- → Expectations typically fluctuate up/down ~0.30% (on average) per year
- → Expectations are still up significantly (in 2023 and 2024 studies) vs. 2021/2022 studies given the yield curve.



Austin Firefighters Retirement Fund

Asset Study Comparison: 2023 Projections vs. 2024 Projections

Recommendation

- → We are comfortable with the existing policy target and its risk/return profile.
- → The current projections provide a substantial "cushion" relative to the target actuarial return.
- \rightarrow We see no need to make any changes at this time.

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Passive Framework Progress Report



Austin Firefighters Retirement Fund

Passive Framework Progress Report

Executed Transactions

Month	Amount	From	То
March 2023	\$10 mm	Westfield Small/Mid Growth	S&P 500 Index
April 2023	\$10 mm	Vaughan Nelson Small Cap Value	S&P 500 Index
May 2023	\$10 mm	Sanderson International Value	MSCI EAFE Index
June 2023	\$10 mm	Pyramis Tactical Bond Fund	Barclays Agg Index
July 2023	\$34 mm	Sanderson International Value	MSCI EAFE Index
August 2023	\$10 mm	Loomis Sayles Core Plus Barclays Agg Index	
September 2023	\$10 mm	Aberdeen Emerging Markets Debt Barclays Agg Index	
October 2023	\$10 mm	DFA Emerging Markets Value	MSCI EAFE Index
November 2023	\$10 mm	Westwood Large Cap Value	S&P 500 Index
December 2023	\$10 mm	Westwood Large Cap Value	MSCI EAFE Index
January 2024 ¹	\$10 mm	Highclere International small Cap	MSCI EAFE Index
Total	\$134 mm		

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¹ Trades submitted in January but strategy only has monthly liquidity with ½ month pre notice required so transaction will be executed at end of February 2024



Austin Firefighters Retirement Fund

Passive Framework Progress Report

Strategies we Have Not Redeemed From

Strategy	General Thoughts
Baillie Gifford International Growth	Very good performance for many years, but weaker over past few years. Will do well when growth, tech, consumer and China outperform.
TT Emerging Market Equity	Emerging market equity strategy. Challenging performance (overall in EM) but particularly growth EM and China exposure.
Aristotle Bank Loans	Bank loans strategy. Very good long term performance. Only ~\$24 mm in the strategy. Only dedicated bank loan exposure for AFRF.

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Investment Policy Statement and Operating Procedures: Update on revisions in progress



Austin Firefighters Retirement Fund

IPS and Operating Procedures - Updates

Overview

- \rightarrow We are not seeking any action from the Board today.
- → Over the past 4-6 months, Meketa, Staff and Trustee Bass have been re-evaluating the language in the Investment Policy Statement and Operating Procedures.
- → We plan to wait to seek Board approval until we have any additional recommendations that come from the Investment Practices and Performance Evaluation (IPPE report).
- \rightarrow In addition, the Texas PRB is anticipated to provide general IPS guidance in 2024.

Key Focus Areas Thus Far

- → Investment beliefs
- → Performance objectives
- → Policy benchmark language

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Investment Policy	Revised February 2022
Revi	ised February 2022 2024
Statement of In	vestment Policies and Objectives
Statement of In	for
A	
Austin Firefighters Fire	re Fighters Relief and Retirement Fund
	-Retirement Fund

Table of Contents

I.	Statement of Policy		
II.	Investment Objectives		
III.	Investment Constraints		
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VI.	Available Asset Classes and Investment Guidelines		
VII.	Investment Beliefs		
VIII.	Asset Allocation		
 -	Evaluation and Review		
ĮX.	Securities Lending		
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	Investment Costs		

Austin Firefighters Fire Fighters Relief and Retirement Fund

1

Statement of Investment Policies and Objectives

for

Austin Firefighters Fire Fighters Relief and Retirement Fund

Original Adoption Date: 12/10/2002

Revised: 12/12/2006
Revised: 6/29/2009
Revised: 10/25/2010
Revised: 8/24/2012
Revised: 9/16/2014
Revised: 2/11/2016
Revised: 2/26/2018
Revised: 6/28/2021
Revised: 2/28/2022
Revised: 2/ /2024

I. STATEMENT OF POLICY

Purpose

This document is the official policy governing the investment practices of the Austin Firefighters Fire Fighters Relief and Retirement Fund (the "Fund"). These policies and objectives (the "Policy") have been adopted by the Board of Trustees of the Fund (the "Board"), which has the fiduciary duty of overseeing Fund investments. The Policy is not to be deviated from by any responsible party without the prior written permission of the Board. All previous Fund investment policies and objectives are superseded by this document. Any revisions to this document will be promptly supplied to the appropriate parties in written format.

Investment Goals

The purpose of the Fund is to accumulate the financial reserves necessary to provide for the retirement pension benefits and other benefits set forth in the Fund's governing statute (e.g., COLAs) for eligible members of the Fund and their beneficiaries. A primary investment goal of the Fund is to emphasize consistency of growth in a manner that protects the Fund from excessive volatility in market value from year to year, while achieving its performance objective over a long-term horizon.

The Board, with consultation, advice, and assistance from the investment consultant, will use the Fund's asset allocation as the primary tool to achieve this goal. As this is a long-term projection and investments are subject to short-term volatility, the main investment review focus of the Board will be to emphasize total return of the Fund over a long-term time horizon. Each manager-strategy selected by the Board is expected to maintain a consistent philosophy and style, perform well versus others utilizing the same

Austin Firefighters Fire Fighters Relief and Retirement Fund

style, add incremental value after costs, and provide investment management in compliance with this document and the manager's contract with the Fund or other operating documents.

Austin Firefighters Fire Fighters Relief and Retirement Fund

Investment Policy

2

II. INVESTMENT OBJECTIVES

The primary <u>investment</u> objective of the Fund is to provide sufficient return and liquidity to pay the benefit obligations of the Fund on a timely and regular basis. The Fund is a permanent one and there is currently no expectation of need for significant liquidity from the Fund's portfolio. The Fund shall be considered a total return fund, with appropriate recognition given to both current income and capital appreciation. The Board accepts the risks associated with investing in public and private capital markets (market risks), but will minimize wherever possible those risks for which the Fund is unlikely to be compensated (non-market or diversifiable risks). The risk and return investment objectives of the Fund are set forth below and should strive to be achieved in a manner consistent with the goals stated in Section I above.

A. Risk Objectives

- To accept the minimum level of risk required to achieve the Fund's return objective as stated immediately below.
- To minimize the likelihood of experiencing a loss over any full market cycle.
- To use diversification to minimize exposure to company and industry-specific risks in the aggregate investment portfolio.

B. Return Objective

 To manage the Fund's assets so as to achieve a high likelihood of attaining a 7.3% nominal return over long-term time horizon.

C. Performance Objective

• To manage the Fund's assets so as to achieve a high likelihood of meeting or exceeding of outperforming the Policy Benchmark. The Policy Benchmark is defined as follows: A combination of cheaply investable index returns that matches the subject return series as well or better than others in terms of (1) measures of statistical fit and (2) market exposures. The Policy Benchmark should be fully investable and transparent, making it feasible to invest in. The subcomponents and weights will be determined by the Board (with the assistance of the Consultant) and detailed in the Operating Procedures. The Policy Benchmark will only be revised if there is a fundamental change in risk/return preferences. the total return of an index composed of a mix of asset class benchmarks over a market cycle. The benchmarks used for each asset class, as well as the mix of such benchmarks to determine the Fund's composite index, will be determined by the Board and set forth in its Operating Procedures.

III. INVESTMENT CONSTRAINTS

A. Legal and Regulatory

The Board intends that the assets of the Fund at all times are invested in accordance with applicable federal and Texas law and regulations, including its governing statute, its governing instruments, and applicable fiduciary standards. The Board will retain

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legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

B. Time Horizon

The Fund will be managed on a going-concern basis. The assets of the Fund will be invested with a long-term horizon (twenty years or more), consistent with the participant demographics and the purpose of the Fund.

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C. Liquidity

The Board intends to maintain sufficient liquidity to meet at least three years of anticipated beneficiary payments. To this end, the Board intends to invest no more than 40% of the Fund's assets in illiquid vehicles. Illiquid vehicles are defined as those vehicles that do not allow withdrawals to occur on at least a quarterly basis.

D. Over-Concentration

The securities representing equity of any one company shall not exceed 6% of the market value of the Fund. Fixed income securities of any one corporation shall be limited to 6%, at market, of the Fund.

IV. ALLOCATION OF INVESTMENT RESPONSIBILITIES

A. Board of Trustees

The Board has the fiduciary responsibility for managing the investment process. In fulfilling this responsibility, the Board will establish and maintain investment policies and objectives. Trustees are tasked primarily with setting the overall risk/return preferences, and weighing total portfolio return against a properly constructed policy benchmark.

Within this framework, the Board will select, contract with, monitor, and evaluate the investment consultant, investment managers, bank custodian, and other parties to ensure that actual results meet objectives.

B. Fund Staff

The Staff of the Fund is responsible for oversight and management of the day-to-day operations of the Fund. This includes, but is not limited to, oversight of Fund policies and procedures, working closely with the investment consultant and investment managers, executing and reconciling all private market cash flows for the Fund, oversight of budget, oversight of manager fee payment and reconciliation, Board meeting preparation and coordination. Staff is responsible for direct communication with Fund participants related to all retirement calculations.

C. Investment Consultant

The investment consultant's duty is to render competent, professional advice and assistance and to work with the Board with respect to the investment process. This includes meeting at least quarterly with the Board to provide perspective as to the Fund's goals and analysis of the Fund's investments. The consultant will advise, consult, and work with the Board to develop and maintain a properly diversified portfolio.

The investment consultant will perform its duties and obligations to the Board in conformance with generally accepted industry standards and its contract with the Fund.

Fund allocation and performance will be regularly reviewed and recommendations will be made as appropriate. The consultant will assist the Board in investment manager selection, when needed, and will promptly inform the Board and discuss the impact of material changes taking place within any current manager's organization and/or

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investment process. Within this process, the investment consultant assumes fiduciary responsibility for advice given regarding the management of the investment process.

D. Investment Managers

The investment managers for separately managed accounts will construct and manage investment portfolios consistent with the investment philosophy and disciplines they were hired to implement and which are specified in this document and in their respective investment management agreement (IMA) they execute with the Fund. Investment managers will select specific securities, buy and sell such securities, and manage the investment portfolio within their guidelines. The Board also believes that investment decisions are best made when not restricted by excessive procedure. Therefore, full discretion is delegated to the investment managers to carry out the investment of the respective portfolios within stated guidelines.

The Board may also invest in pooled investment vehicles or private market investment vehicles. The governing instruments of these vehicles should specify the applicable investment philosophy and disciplines and provide the investment guidelines for the investment.

E. Custodian Bank

The custodian bank will hold all cash and securities, and will regularly value, list and summarize these holdings for the Board's review. In addition, a bank or trust depository arrangement will be utilized to accept and hold cash prior to allocating it to the investment manager, and to invest such cash in liquid, interest-bearing instruments.

V. FIDUCIARY CONDUCT

An investment fiduciary includes, but is not limited to, a person who exercises discretionary authority or control in the investment of the assets of the Fund or who renders, for a fee, advice for the Fund. The term investment fiduciary includes, but is not limited to the members of the Board, the Fund Administrator, the investment consultant, and investment managers. An investment fiduciary shall discharge his or her duties in accordance with the fiduciary standards set forth in Section 802.203 of the Texas Government Code and other applicable law.

VI. AVAILABLE ASSET CLASSES AND INVESTMENT GUIDELINES

In consultation with the investment consultant and after proper consideration of the Board's investment objectives and asset allocation plan as discussed herein, the Board will determine the asset classes available for investment of Fund assets. The list of asset classes available for investment will be set forth in the Fund's Operating Procedures and updated as necessary. The specific degrees of diversification within each asset class will also be addressed in the Fund's Operating Procedures or each manager's investment guidelines, as applicable.

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The investment guidelines for available asset classes, if applicable, are reflected in the Fund's Operating Procedures. In addition, specific investment guidelines for investment managers of separately managed accounts will be incorporated in the agreement with the Fund. Within their investment guidelines, each investment manager will also be furnished with a list of asset types and investment strategies that are forbidden. Investment guidelines for pooled investment vehicles or private market investment vehicles will be set forth in the governing instruments of such vehicles.

VII. INVESTMENT BELIEFS

Equity exposure within an asset allocation is a key determinant of portfolio risk. The use of the term "effective equity exposure" addresses the fact that reported equity allocations often resemble an incomplete picture of the true equity like exposure in a portfolio.

Assets such as Private Equity, Venture Capital, Real Estate, High Yield Bonds, etc., have high positive correlations to public equity, and exhibit equity like beta. This is especially true in times of market stress. As such, they offer limited ability to reduce portfolio risk. It is necessary to control effective equity exposure so as to be in compliance with the spirit of this policy.

When considering the inclusion of active management, it is important to recognize that while actively managed funds offer the potential to outperform a benchmark, the likelihood they can, over long time periods, is low. Investing in actively managed funds typically involves much higher fee structures, and consistent with finance theory, active managers, in aggregate, tend to lose to their respective benchmarks by an amount equal to their fees. Due to the structural advantages index funds offer, the inclusion of active managers should be judged through appropriate caution and healthy skepticism. Only in compelling circumstances should active managers be considered. Their inclusion should be re-evaluated periodically, and their fees should be reasonable.

VII. ASSET ALLOCATION

The Fund's achievement of its risk and return objectives is a function, in large part, of the Fund's asset allocation. The Board recognizes that the allocation of monies to various asset classes will be the major determinant of the Fund's return and risk experience over time. Therefore, the Board will allocate investments across available asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the Fund's investment objectives.

In determining the appropriate asset allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio are to be considered. These "market assumptions" are to be determined and considered by the Board when establishing the asset allocation of the Fund. The Board, with the assistance of the investment consultant, will determine the approve the applicable market assumptions, including the expected return, volatility, and correlations for each asset class, which will be set forth in the Fund's Operating Procedures.

The most efficient way to meet market exposures, identified by a desired asset allocation, is by utilizing broad based, low fee, passive index funds. Due to the highly efficient and

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competitive nature of public markets, passive index investments, developed from and consistent with financial theory, is the natural starting point for investment in public asset classes. Active management will be considered when there is belief that given strategy is capable of achieving excess returns. While some public proxies exist for private assets, private asset investment is active by nature, and will present better opportunities for utilizing active strategies.

A. Long-Term Allocation Ranges

Based on its determination of the appropriate risk posture for the Fund and its long term return expectations, the Board and investment consultant have established the following asset mix guidelines for the Fund:

	Fund Guidelines
Equity Investments	30-55%
Fixed Income Investments	20-40%
Alternatives	10.40%
7 Michian ves	10-10/0

Unneeded cash reserves can be a drag on the Fund's performance and the overall level of cash held by the Fund shall typically remain under 5% unless extraordinary circumstances warrant otherwise.

B.A. Long-Term Allocation Targets

Based on the investment objectives and constraints of the Fund, and on the expected behavior of the available asset classes, the Board will specify a long-term target allocation for each available asset class. These targets will be expressed as a percentage of the Fund's overall market value. These targets will be selected in conjunction with the appropriate ranges listed above to accommodate permissible variation resulting from market forces. The Fund's target allocations are listed in the Operating Procedures. The Board will review its asset allocation targets and ranges at least annually or sooner if warranted by a material event in either the liability structure of the plan or the capital markets.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall Fund's asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the Fund. Deviations from targets that occur due to capital market changes are discussed below.

C.B. Rebalancing

In general, cash flows to and from the Fund will be allocated in such a manner as to move each asset class toward its target allocation.

The Board recognizes that, periodically, market forces may move the Fund's allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the Fund's structure and risk posture. Consequently, the Board has established a process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to the target range. The specific plan

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for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

VIII. EVALUATION AND REVIEW

As a function of its fiduciary responsibilities to monitor the investment decisions it makes on behalf of the Fund, the Board will regularly review the investments of the Fund. This review and evaluation of investments will be conducted in accordance with the following:

- On a quarterly basis, the Board, through the report of the investment consultant, will
 review the overall investment performance of the Fund and individual investment
 managers. This report will include a review of performance generally and in relation
 to the composite and asset class benchmarks established by the Board.
- The investment consultant will continually monitor the investment managers and other investments of the Fund to ensure that managers or such investments performed in accordance with applicable investment guidelines and the expected philosophy, methodology and style. The investment consultant will report to the Board on a quarterly basis any material deviation from the applicable guidelines or any other structural, organizational, philosophical, or other material change that warrants the Board's attention.
- At least annually, the Board will review the asset allocation of the Fund to determine
 if it remains appropriate in order to achieve the investment objectives of the Fund. This
 review will include an evaluation of market assumptions utilized in establishing the
 asset allocation to determine if any changes to these assumptions are warranted, as well
 as if any other asset classes should be made available for investment.
- At least annually, the Board will formally review this Policy to determine whether it
 continues to be appropriate in light of the Board's investment goals and objectives and
 changes in the capital markets and/or the Fund's condition or circumstances.

IX. SECURITIES LENDING

The Board may select an agent to lend the financial securities of the Fund, but has no obligation to do so. The securities lending program shall in no way inhibit the trading activities of the investment managers of the Fund.

X. TRADING

In accordance with the legal and fiduciary obligations imposed on investment managers by either their agreements with the Fund or applicable federal or Texas law, all trades executed by managers must be for the exclusive benefit of the Fund's participants and beneficiaries. Managers are expected to seek best execution on all trades.

XI. VOTING OF PROXIES

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The Board has delegated the responsibility of voting all proxies to the investment managers. The Board expects that managers will execute all proxies in a timely fashion. Also, the Board expects the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions.

XII. INVESTMENT COSTS

The Board intends to monitor and control investment costs at every level of the Fund through the following:

- Professional fees will be negotiated whenever possible.
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- The Fund may enter into performance-based fees with specific managers.
- If possible, assets will be transferred in-kind during manager transitions and Fund restructurings to eliminate unnecessary turnover expenses.
- Managers are instructed to seek best execution.

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I. Available Asset Classes

In accordance with Section VI of the Statement of Investment Policies and Objectives (the "Policy") for the Austin <u>FireFighters Fire Fighters Relief and Retirement Fund</u> (the "Fund"), the Board of Trustees of the Fund (the "Board"), with advice from the investment consultant, has determined the following asset classes will be available for investment by the Fund.

Asset Class

Public Domestic Equity

Public Foreign Equity

Emerging Market Equity

Frontier Market Equity

Private Equity

Private Debt

Real Estate

Investment Grade Bonds

TIPS

High Yield Bonds

Bank Loans

Developed Market Bonds

Emerging Market Bonds

Natural Resources

Infrastructure

Commodities

Hedge Funds

Cash

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II. Market Assumptions

In accordance with Section VII of the Policy, the Board has adopted the following market assumptions for use in determining the asset allocation plan for the Fund, including the various asset class targets set forth in these Operating Procedures. These expected return and standard deviation assumptions are based on a twenty-year forecast for broad asset classes and sub-asset classes from Meketa Investment Group's 2022-2023 Annual Asset Study. Expected returns are annualized compounded-returns.

A 6	Annualized Average Return	Annualized Standard Deviation
Asset Class	(%)	(%)
Fixed Income		
Cash Equivalents	1.7 2.9	1.0
Investment Grade Bonds	2.4 4.7	4.0
Long-term Government Bonds	2.8 <u>5.4</u>	12.0
TIPS	2.4 4.5	7.0
High Yield Bonds	4.4 <u>7.3</u>	11.0
Bank Loans	4.0 7.0	10.0
Emerging Market Bonds (local; unhedged)	4.6 6.0	13.0 12.0
Emerging Market Bonds (major)	4 <u>.26.4</u>	12.0
Mezzanine Debt	7.2	16.0
Distressed Debt	7.7	21.0
Equities		
Public U.S. Equity	6.8 8.7	18.0
Public Developed Market Equity	7.5 9.8	19.0
Public Emerging Market Equity	8.4 10.0	24.0 23.0
Public Frontier Market Equity	8.7 10.7	21.0
Private Equity	10.0 11.0	28.0 27.0
Private Equity Fund of Funds	8.6 9.8	24.0 27.0
Long-Short Hedge Funds	4.1 <u>5.5</u>	10.0
Real Assets		
Core Private Real Estate	6.1 6.5	12.0
Value Added Real Estate	8.1 8.3	20.0
Opportunistic Real Estate	9.6	26.0
Natural Resources (Private)	8.5 9.8	24.0
Commodities	4.6 5.7	17.0
Infrastructure (Core)	7.3 7.8	14.0
Infrastructure (Non-Core)	9.3 9.5	22.0
Other		
Hedge Funds	4.4 <u>6.1</u>	7.0
Hedge Fund of Funds	3.6 5.3	7.0

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III. Asset Allocation Targets

In accordance with Section VI of the Policy, the Board has established its strategic asset allocation mix so as to achieve its long term investment goal of accumulating reserves necessary to provide the established benefits to the participants and their beneficiaries.

Market movements may cause a portfolio to differ from this strategic mix. The desire to maintain this constant strategic mix must be balanced with the real cost of portfolio rebalancing. Therefore, a range has been set for the actual asset allocation of the Fund's assets to allow for the fluctuations that are inherent in marketable securities.

The target allocations and rebalancing trigger percentages are:

Broad Asset Classes Low Trigg	<u>er Target</u>	High Trigger	
- Equities	30%	42%	55%
Fixed Income	20%	30%	40%
- Alternatives*	10%	28% 4	0%

*(Including Private Equity, Real Estate, and Natural Resources)

It is the responsibility of the custodian to calculate market values and report these to staff and consultant monthly.

Commented [A1]: Most language is duplicative of IPS.

Removal of the broad asset class buckets - limited value add given everything is monitored quarterly at the more defined sub targets on following page

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IV.<u>III.</u> Asset Class Diversification: Sub-Asset Class Targets Target Asset Allocation and Ranges

Within the broad definition of equities and fixed income for allocation purposes, the Trustees, with advice from the consultant, believe it is prudent to diversify within asset classes. The sub-asset class categories, as well as the asset allocation among such sub-asset classes, are set forth below, along with each asset class benchmark. The Policy Benchmarks set forth below are used to determine the composite Policy Index described in Section VII of these Operating Procedures.

	Target	Range (%)	Policy Asset Class Benchmarks
Public Domestic Equity	20	13-27	Russell 3000
Public Foreign Equity	22	15-29	MSCI ACWI (ex. U.S.)
Private Equity	15	5-25	MSCI ACWI +2% on a 3 Month Lag
Investment Grade Bonds	13	10-20	Bloomberg Barclays Aggregate
TIPS	5	0-10	Bloomberg Barclays U.S. TIPS
High Yield/Bank Loans	5	0-10	50% Merrill Lynch High Yield 50% Credit Suisse Leverage Loan Index
Emerging Market Debt	7	0-10	Custom EMD Benchmark ¹
Core Real Estate	5	0-10	NCREIF ODCE Equal Weighted (net)
Value Add Real Estate	5	0-10	NCREIF Property NPI
Private Natural Resources	3	0-5	S&P North American NR
Cash	0	0-5	

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 $^{^{\}rm l}$ Custom EMD Benchmark is 50% JPMorgan EMBI Global Diversified, 25% JPMorgan GBI-EM Global Diversified (unhedged), and 25% JPMorgan CEMBI Broad.

IV. Policy Benchmark

The Policy Benchmark is defined as follows: A combination of cheaply investable index returns that matches the subject return series as well or better than others in terms of (1) measures of statistical fit and (2) market exposures. The Policy Benchmark should be fully investable and transparent, making it feasible to invest in. The subcomponents and weights will be determined by the Board (with the assistance of the Consultant). The Policy Benchmark will only be revised if there is a fundamental change in risk/return preferences.

Policy Benchmark

Weight	Passive Index
<u>42%</u>	Russell 3000 Index
28%	ACWI (ex US) Index
<u>30%</u>	Bloomberg Barclays Aggregate Index
100%	

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V. Investment Manager Selection and Termination

When hiring or terminating investment managers, the Fund Staff, in consultation with the investment consultant, will summarize in the Board meeting minutes, the key factors that led to the decision.

VI. Investment Manager Fee Reconciliation and Payment

Fund Staff is primarily responsible for reconciliation and payment of all investment manager fees. Independently a pre-identified Trustee shall verify each requested manager fee payment.

If either party identifies a discrepancy relative to the invoice, Fund Staff shall request additional explanation from the investment manager prior to payment.

If an error is found, Fund Staff must request a correction from the investment manager prior to payment.

VII. Performance Objectives

In accordance with Section II.C. of the Policy, the overall performance objective of the Fund is to achieve a high likelihood of outperforming the total return of an index composed of a mix of asset class benchmarks over a market cycle. This composite "Static Policy Index" will be calculated using the sub-asset class target percentages and the Policy Benchmarks set forth in Section IV of these Operating Procedures. The investment consultant will set forth the composition of the Static Policy Index in its quarterly reports to analyze the overall performance of the Fund.

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With respect to investment manager performance, over a market cycle or five years, whichever is shorter, the performance objective for each manager is to add value after fees to a specified benchmark representing a particular investment style, net of fees. These specific style benchmarks for <u>public</u> investment managers are set forth in <u>Appendix A</u>. Short term examination of each manager's performance will also focus on style adherence and peer comparisons.

Passive investment products are expected to match the return of their respective benchmark, gross of fees.

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VIII. Asset Class Guidelines

In accordance with Section VI of the Policy, set forth below are the investment guidelines applicable to each broad asset class available for investment by the Fund. Additional investment guidelines are contained within each agreement between the Fund and individual investment managers (for separately managed accounts).

A. Public Equities

1. Eligible holdings:

The portfolios will be invested in publicly traded marketable securities. Restricted or letter stock are not permitted.

2. Style Adherence:

Managers are expected to not deviate from the particular style they were selected to manage. Quarterly, fundamental portfolio characteristics and style benchmarks comparisons will be monitored for adherence to a manager's identified style. The capitalization of each stock in an equity manager's portfolio shall be within the cap range of the above identified style benchmark when purchased. Managers are expected to stay within the cap range of their dedicated strategy and are instructed to provide notification of any material changes to strategy. Currency management is at the discretion of active international managers.

B. Public Fixed Income

Eligible holdings:

The portfolios shall be invested in publicly traded marketable securities. Private placement bonds are not permitted. 144(a) fixed income securities are allowable.

2. Portfolio Quality - Core:

Dedicated core fixed income products should be predominantly invested in investment grade securities, as defined by market ratings agencies (e.g. Moody's, Standard & Poor's). Money market instruments shall have a minimum quality rating comparable to an A3 (Moody's) or A (standard & Poor's) bond rating and commercial paper shall be rated A1/P1 unless held in a diversified short term commingled fund.

C. Closed End Alternatives (Private Equity, Real Estate, Natural Resources)

1. Management:

Investments in closed end vehicles shall be made only through professionally managed, institutional limited partnerships or limited liability corporate vehicles.

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2. Diversification:

The closed end alternatives portfolio will be prudently diversified. Further, the private equity portfolio in aggregate shall be diversified by: industry groups, company, number of transactions, stage of company maturity, form of investment, geography and vintage year. Investment in non-U.S. limited partnerships is permitted. The long-term nature of private equity investments and vintage year diversification shall be emphasized so that the Fund, as a long-term investor, may properly take advantage of the private negotiation of transactions and the liquidity premium associated with private markets investments.

3. Over-commitment:

The implementation of a private markets program by the Fund shall be made over time so as to increase vintage year diversification. The timing of new commitments shall be spread out so as to avoid undue concentration of commitments in any one-year. The Board recognizes that it will be necessary to make capital commitments in excess of the target allocation for private markets investments in order to achieve the target allocation and subsequently maintain it. The Investment Consultant shall monitor the amount of capital committed, drawn, invested and distributed and make recommendations to the Board of Trustees as needed.

4. Monitoring:

The Staff, Board and Consultant will collectively monitor and administer the underlying limited partnership investments in a prudent manner, in part, by:

- 1. administering capital calls and distributions,
- 2. employing financial monitoring and reporting systems,
- maintaining an understanding of the limited partnership's holdings and activities, including periodic discussions with the general partners and attending partnership investor meetings as appropriate,
- 4. attending to partnership amendments or other matters related to the underlying partnerships in the best interest of the Fund, and
- 5. liquidating stock distributions.

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IX.VIII. Class Action Lawsuit Policy

From time to time, the Board may determine, with the advice and assistance of the Fund's Outside Counsel (if requested), that it is in the best interest of the Fund's participants and beneficiaries to participate in securities class action lawsuits where the Fund has been harmed due to securities fraud or other violations that negatively impact the value of securities held by the Fund.

A. Monitoring Securities Litigation Matters

It shall be the Fund custodian's primary responsibility to monitor all securities class action litigation matters on behalf of the Fund, to manage the timely and effective filing of proofs of claim in securities class action litigation matters that have already reached settlement in respect of investments held by the Fund, and to report to the Fund Administrator as necessary. In addition, the Fund Administrator shall notify the investment manager(s) who manage the affected securities of any potential or pending legal action.

However, in those securities class action lawsuits or other securities litigation matters in which the Fund has retained a law firm to represent the Fund as lead plaintiff or class representative or to actively monitor the progress of the case in accordance with Section D, then the law firm shall be responsible for the timely and effective filing of proofs of claim in such lawsuits on behalf of the Fund and will notify, in writing, the Fund Administrator, the Fund's custodian and any applicable investment manager(s) of the proofs of claim that have been filed on behalf of the Fund.

B. Active Involvement in Securities Litigation Cases

In addition to the routine filing of proofs of claim as described above, the Fund at its sole discretion may consider and assess whether and under what circumstances it may choose to become more actively involved in securities class action litigation or other securities litigation matters from time to time.

To this end, the Fund may at its discretion retain one or more law firms experienced in securities litigation matters to review and monitor potential and filed securities class action lawsuits and/or other securities litigation lawsuits and to bring to the attention of the Fund meritorious cases that the law firm concludes are worthy of further monitoring or involvement by the Fund and for which the Fund has suffered losses on its investment.

Generally, the Fund will not seek lead plaintiff status, opting instead for filing a proof of claim when appropriate, unless after consultation with the Fund's Outside Counsel and any law firm retained by the Fund to monitor and report securities litigation to the Fund, the Board believes that serving as lead plaintiff would be in the best interest of the Fund. It is within the sole discretion of the Board to determine if and when it would be in the best interest of the Fund to seek lead plaintiff status or to become more actively involved in a securities litigation case.

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If one of the Fund's retained law firms believes that a securities litigation case has merit and the Fund would be a good candidate to serve as the lead plaintiff in the case, the law firm shall present its recommendations in writing to the Fund Administrator, including a statement as to whether the law firm would recommend that the Fund actively monitor the case, seek lead plaintiff status or class representative status, or take some other course of action with respect to the particular securities class action lawsuit or other securities litigation lawsuit.

The Fund Administrator, in consultation with the Fund's Outside Counsel, will review all such recommendations and will evaluate the case and the law firm's recommendation considering the factors listed below. After such review and further consultation with the securities litigation law firm, the Fund Administrator will present, or may request that the law firm present, to the Board a recommendation regarding the Fund's involvement in the case if the securities litigation firm continues to recommend active involvement after consultation with the Fund Administrator.

After receiving the presentation described above, the Board shall have sole authority and discretion to decide whether the Fund should actively monitor the case, seek lead plaintiff status or class representative status, or take some other course of action. The Board may seek the advice of its Outside Counsel on such matters.

In evaluating any securities litigation case, the Board shall consider all relevant factors related to the Fund's participation in such lawsuit, including, without limitation, the following:

- 1. Strength of the merits of the claims and defenses involved in the case;
- Alleged losses or damages to the Fund equal or exceed a minimum of \$250,000, unless there are unique or special circumstances about the Fund's interest in the case or the losses sustained by the Fund that may support the Fund's involvement at a lesser threshold;
- Facts unique to the Fund that make it well-suited to serve as lead plaintiff, including the Fund's standing to represent a broad class of claimants or investors;
- 4. The estimated time and expense required of Fund staff and the Fund's Outside Counsel in order for the Fund to serve as lead plaintiff (i.e., certification of the class, assistance with discovery, review of pleadings and court filings, monitoring litigation and outside securities litigation counsel, settlement negotiations, etc.) and the ability to recover such costs through a favorable judgment or otherwise;
- 5. Estimated court costs;
- 6. Venue of litigation;
- Reasonable potential for monetary recovery under a judgment (i.e., available resources of defendants, insurance coverage, possibility of bankruptcy, other suitable lead plaintiffs, etc.);

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- 8. Whether the Fund is involved in other litigation; and
- 9. Qualifications of the law firm (or firms) bringing the recommendation based on the factors set forth in <u>Section D</u> below.

C. Securities Litigation Matters in Foreign Jurisdictions

The Fund may consider participating in securities litigation lawsuits that are brought or filed in foreign jurisdictions. The Fund will follow the same process set forth in Section B above in evaluating an international case and its involvement in such case.

In addition to the factors set forth in <u>Section B</u> above, the Board shall also consider all applicable foreign laws and regulatory requirements and the related risks that may apply to securities litigation claims brought in the particular jurisdiction, including without limitation, any unique jurisdictional requirements to prove the claim, the level of participation required by the Fund pursuant to foreign law, and the identity and qualifications of foreign counsel, if any, and their experience in pursuing litigation of this nature.

D. Selection of Securities Litigation Law Firm to Actively Represent the Fund

If the Board decides to seek lead plaintiff status or become actively involved in a case, the Board may hire one of the Fund's retained securities litigation law firms or another law firm experienced in securities litigation matters to advise and represent the Fund as lead plaintiff or otherwise in the case.

Generally, the Board will select the law firm (or one of the law firms) that brought the case to its attention to actively represent the Fund in the case. In the event more than one law firm recommends that the Fund actively seek participation in a case, the Board will select the firm that the Board believes will best represent the interests of the Fund in such case after considering all relevant factors, including, without limitation, the firm's:

- 1. Prior experience and demonstrated success in similar cases;
- 2. Experience and prior appearances in the particular venue of the case;
- 3. Quality of the analysis and presentation of the case to the Board, including the analysis of the factors relevant to the Fund's participation in the case as set forth in Section B above; and
- 4. Willingness and financial security of the firm to fund the cost of the litigation on a contingent fee arrangement (i.e., availability and timing of reimbursements for Fund staff time and expense and/or Outside Counsel involvement, specific terms of fee or reimbursement arrangement, sufficient level of malpractice insurance, etc.).

Austin Firefighters Fire Fighters Relief and Retirement Fund

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Appendix A: Style Benchmarks

Asset Class and Style	Index Benchmark
Core Fixed Income	Bloomberg Barclays Aggregate Bond Index
Core Plus Fixed Income	Bloomberg Barclays Aggregate Bond Index
TIPS	Bloomberg Barclays U.S. Treasury TIPS Index
Emerging Market Debt	JPM EMBI Global Diversified or Custom Benchmark
High Yield	Merrill Lynch High Yield
Bank Loans	Credit Suisse Leveraged Loan Index
Large Cap Core	S&P 500 or Russell 1000
Large Cap Value	Russell 1000 Value
Large Cap Growth	Russell 1000 Growth
Mid Cap Core	Russell Mid Cap
Mid Cap Value	Russell Mid Cap Value
Mid Cap Growth	Russell Mid Cap Growth
Smid Cap Core	Russell 2500
Smid Cap Value	Russell 2500 Value
Smid Cap Growth	Russell 2500 Growth
Small Cap Core	Russell 2000
Small Cap Value	Russell 2000 Value
Small Cap Growth	Russell 2000 Growth
Micro Cap	Russell Micro Cap
International Developed	MSCI EAFE
International Developed w/ EM exposure	MSCI ACWI ex - US
International Developed Small Cap	MSCI EAFE Small Cap
Emerging Market Equity	MSCI Emerging Markets
Real Estate	NCREIF ODCE Equal Weighted (net) or NCREIF Property NPI
Private Equity	MSCI ACWI +2% on a Three Month Lag
Natural Resources	S&P North American NR

Austin Firefighters Fire Fighters Relief and Retirement Fund
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Operating Procedures

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4Q Market Review

Data as of December 31, 2023



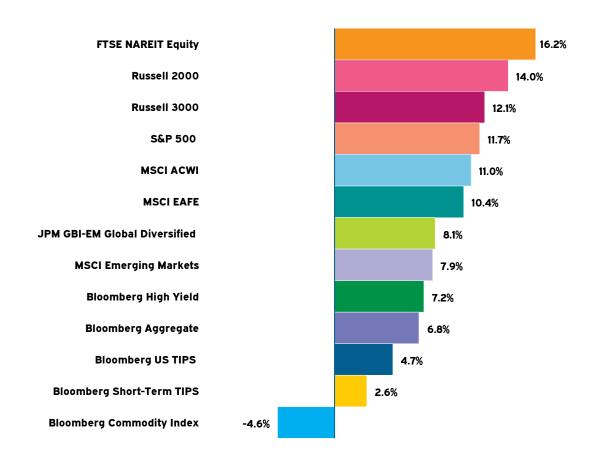
Commentary

- → Most markets rallied in the fourth quarter in anticipation that policy rates cuts were ahead in 2024.
 - Major central banks have largely paused interest rates hikes. Markets are now largely expecting the FOMC to maintain interest rates at the current levels and begin cutting rates as soon as Q1 2024.
 - Inflation rose in December in the US and Europe, but both finished the year much lower than where they started. China remained in deflationary territory (-0.3%) at year-end.
 - US equity markets (Russell 3000 index) posted strong gains for the quarter (12.1%), raising full year results to +26.0%. Most sectors rallied, with more defensive sectors lagging.
 - Non-US developed equity markets also rallied in the fourth quarter (MSCI EAFE 10.4%), with the weakening of the US dollar contributing meaningfully (10.4% versus 5.0% ex.-US dollar influence). The performance difference between US and international developed equities for the year remained wide (26.0% versus 18.2%).
 - Emerging market equities were up 7.9% in the fourth quarter and 9.8% for calendar 2023 but trailed developed markets due to lagging returns in China (-4.2% Q4/-11.2% one-year). Emerging market equities ex.-China returned 20% in 2023.
 - Interest rates generally fell in the fourth quarter, particularly for longer-dated maturities. The broad US bond market rallied (6.8%) for the quarter, lifting 2023 returns into positive territory (5.5%).
- → Looking to 2024, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, and the wars in Ukraine and Israel, will be key.

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4Q 23 Index Returns

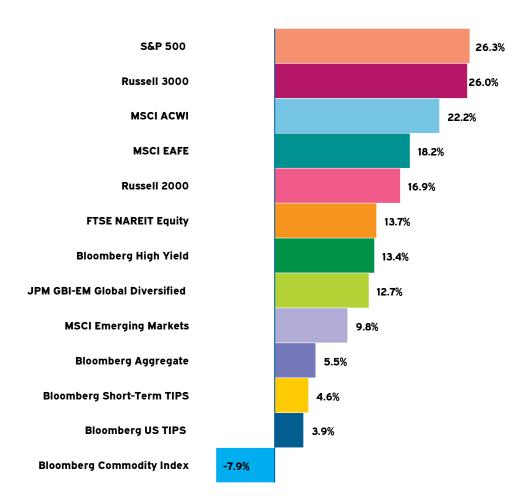


→ Nearly all asset classes were positive in 4Q23. Equities produced double digit returns.

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2023 Index Returns

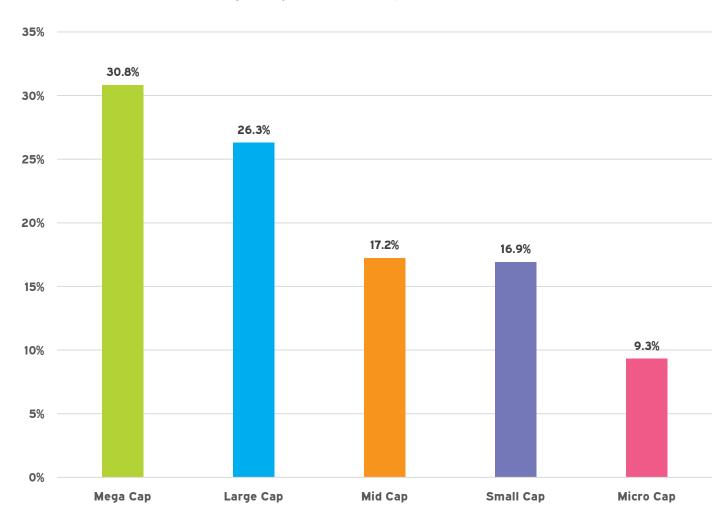


 \rightarrow Led by the strong results in 4Q23, returns for the full 2023 calendar year look similar, led by US equities .

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Large Cap Led the Way – 2023 Returns

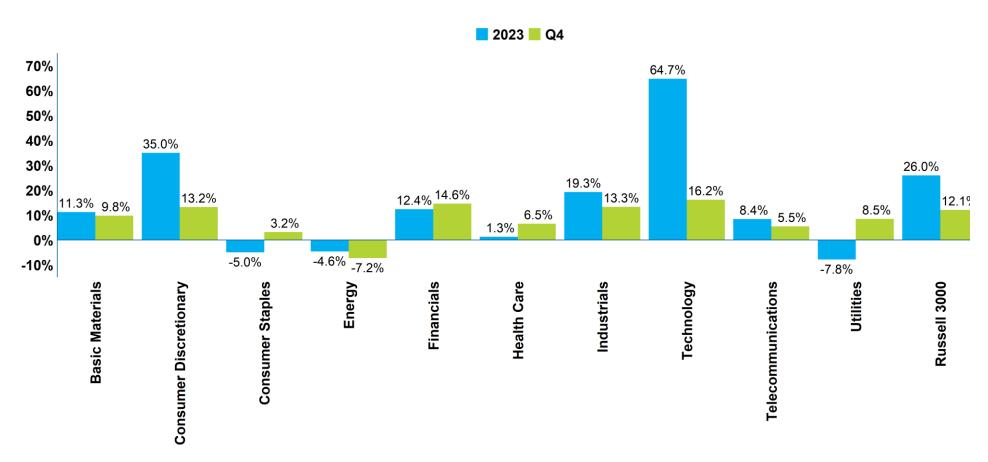


ightarrow Performance was very different for mega/large cap US companies vs. small cap US companies in 2023. .

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Russell 3000 Sector Returns¹

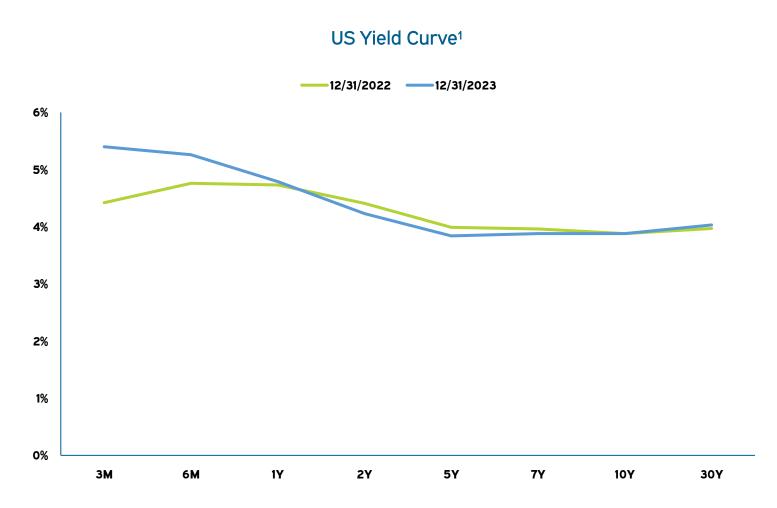


 \rightarrow All sectors posted gains for the fourth quarter, except for energy (-7.2%) given oil's recent declines..

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¹ Source: Bloomberg. Data is as of December 31, 2023.





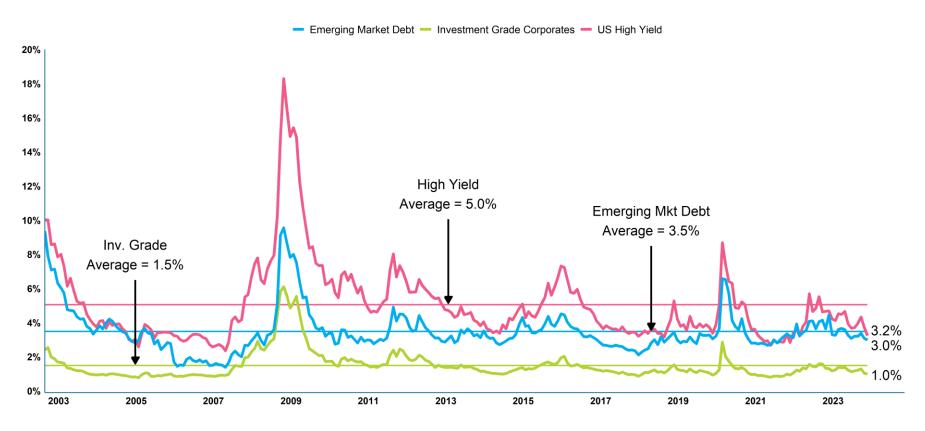
→ The more policy sensitive short-term maturities were higher this year while longer-term maturities finished the year where they started.

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¹ Source: Bloomberg. Data is as of December 31, 2023.



Credit Spreads vs. US Treasury Bonds¹



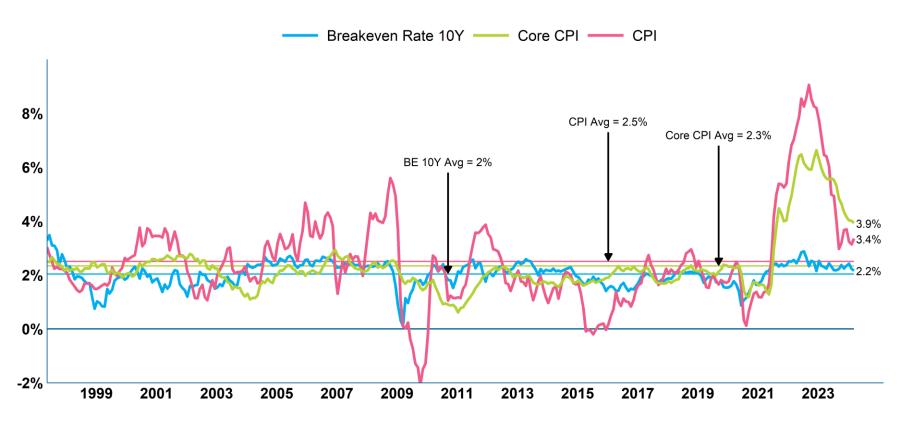
→ All spreads remain below their respective long run averages. Expectations of peaking policy rates and the corresponding increase in risk appetite benefited credit in the fourth quarter with spreads (the added yield above a comparable maturity Treasury) narrowing.

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¹ Sources: Bloomberg. Data is as of December 31, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.



US Ten-Year Breakeven Inflation and CPI¹



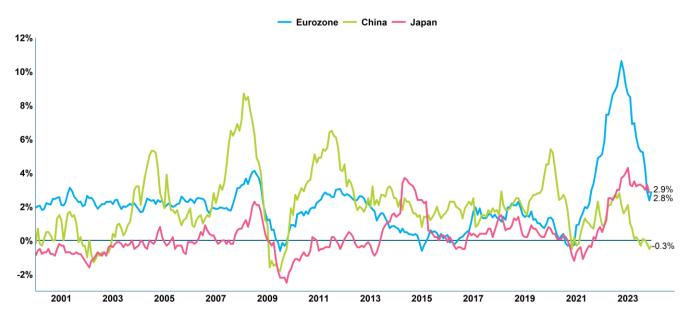
- → Both CPI and Core CPI declined meaningfully in 2023.
- → Inflation expectations (breakevens the blue line) have remained relatively stable despite the significant volatility in inflation.

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¹ Source: FRED. Data is as December 2023. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.



Global Inflation (CPI Trailing Twelve Months)¹



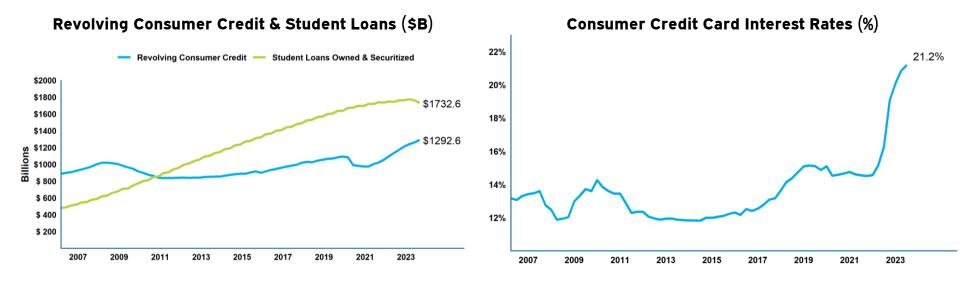
→ Outside the US, inflation is also falling across major economies with China slipping into deflation.

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¹ Source: FRED for United States CPI and Eurozone CPI. Source: Bloomberg for Japan CPI, China CPI, and Eurozone December flash estimate. Data is as December 31, 2023, except Japan which is as of November 30, 2023.



US Consumer Under Stress?1



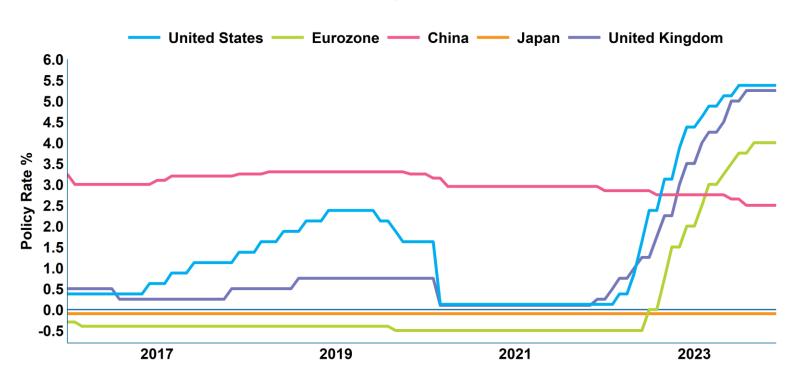
- → Despite the strong labor market and higher wages, pressures have started to build on the US consumer. This is an important consideration as consumer spending has been a key driver of economic growth.
- → Revolving consumer credit surged to new highs in 2023 even as credit card interest rates hit levels not seen before (the prior peak was around 19% in the 1980s).
- → The return of student loan repayments after a three-year pandemic-related reprieve could add to pressures on consumers' budgets. This might be partially mitigated by recently initiated repayment and forgiveness programs.
- → As we look ahead, the strength of the US consumer will remain key as this sector makes up most of the domestic economy (GDP).

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¹ Source: FRED. Data is as of September 30, 2023. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.







- \rightarrow The Fed has been on hold since July 2023 when it raised rates to a range of 5.25%-5.50%.
- → Markets are pricing in six rate cuts next year given the track of economic data and recent comments from the Fed, while the Fed itself is only predicting three.
- → How this discrepancy is resolved will be key in 2024.

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¹ Source: Bloomberg. Data is as of December 2023.

The Magnificent Seven



What are the Magnificent Seven?

- → The Magnificent Seven are a basket of mega-cap stocks that dominated the equity market in 2023.
 - Five of the seven companies are considered leaders in the technology industry.
 - The other two (Amazon and Tesla) are heavily intertwined with technology and also generally considered leaders in the industry.
- → They include:
 - Alphabet (Google)
 - Amazon
 - Apple
 - Meta (Facebook)
 - Microsoft
 - Nvidia
 - Tesla



A Brief History of the Acronyms

- → FAANG, originally FANG, was a term used to describe some of the highest-growth tech stocks of the 2000's.
 - It included Facebook (now Meta), Amazon, Apple (added later), Netflix, and Google (now Alphabet).
- → A changing market environment and re-branding of several companies prompted a shift in acronyms in 2021.
 - Netflix was dropped and Microsoft was added, changing the acronym to MAMAA.
- → In 2023, this group of MAMAA stocks was expanded to include Nvidia and Tesla, which together became the Magnificent Seven.

Timeline of Tech Stock Acronyms

2013	2017	2021	2023
 → The term FANG is coined. ● Facebook (now Meta) ● Amazon ● Netflix ● Google (now Alphabet) 	→ Apple is added to FANG, expanding it to FAANG.	 → FAANG drops Netflix, adds Microsoft, and rebrands to MAMAA. ● Meta ● Amazon ● Microsoft ● Alphabet ● Apple 	 → The Magnificent Seven term emerges. (also known as MAMA ANT) Alphabet Amazon Apple Meta Microsoft Nvidia Tesla (Also called MAMA ANT)

¹ Source: Forbes, "What Happened to FAANG Stocks? They Became MAMAA Stocks," November 2023.

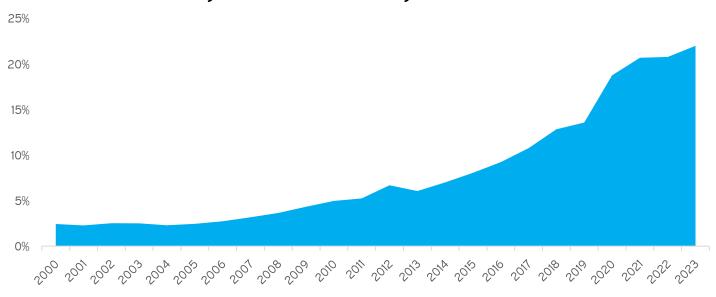
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What is the Magnificent Seven's Relative Weight?

- \rightarrow As of December 31, 2023, the Magnificent Seven cumulatively represented 22% of the Russell 3000 index.
- → However, these seven stocks were not always as dominant as they are today.

The Magnificent Seven's Index Weight in the Russell 3000²



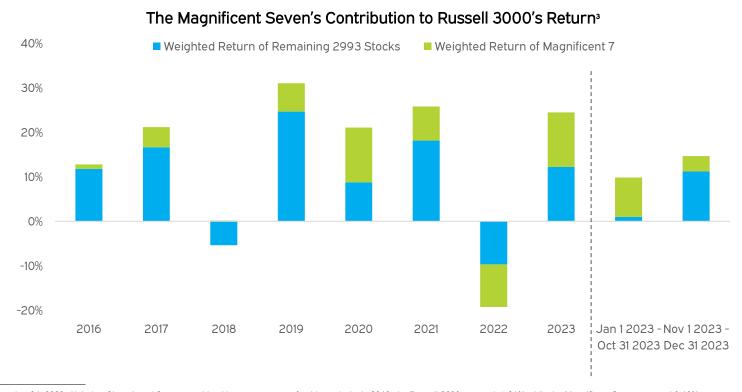
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² Source: FactSet, as of December 31, 2023. Note that Alphabet Class A and C were combined into one category for this analysis. Includes all seven stocks at their weight in the index at that time; note that not all seven companies were publicly listed for the full period shown.



Is the Magnificent Seven Driving the Stock Market?

- \rightarrow It is not unusual for the largest stocks in the market to represent an outsized share of performance.
- → The Magnificent Seven represented nearly all of the Russell 3000's return from January to October 2023.
 - This was somewhat atypical and has led to concerns about market concentration.
 - However, in the rally at the end of 2023 (November through December), their influence declined.



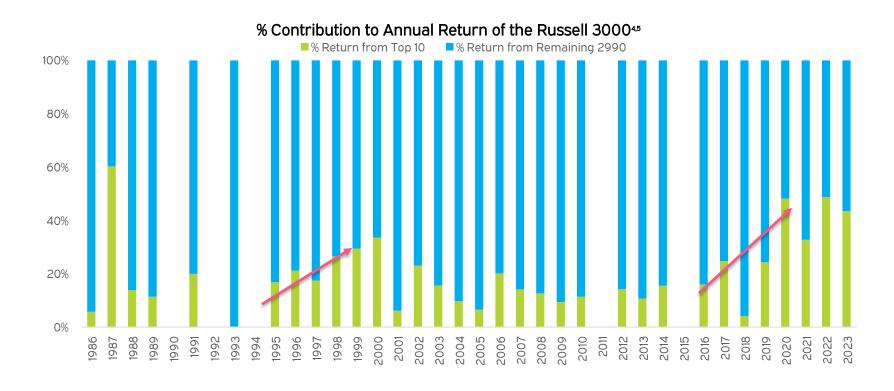
³ Source: FactSet, as of December 31, 2023. Alphabet Class A and C were combined into one category for this analysis. In 2018, the Russell 3000 returned -5.21% while the Magnificent Seven returned 0.16%.

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Historical Influence of the Top 10 Constituents on US Equity Returns

- → Since 2018, the top ten constituents' influence on the Russell 3000's returns has grown, coinciding with the rise of the Magnificent Seven.
- → The dot-com bubble was the last time the top ten's influence on returns was this high for a sustained period.



⁴ Source: FactSet, as of December 31, 2023. Note that Alphabet Class A and C were combined into one category for this analysis.

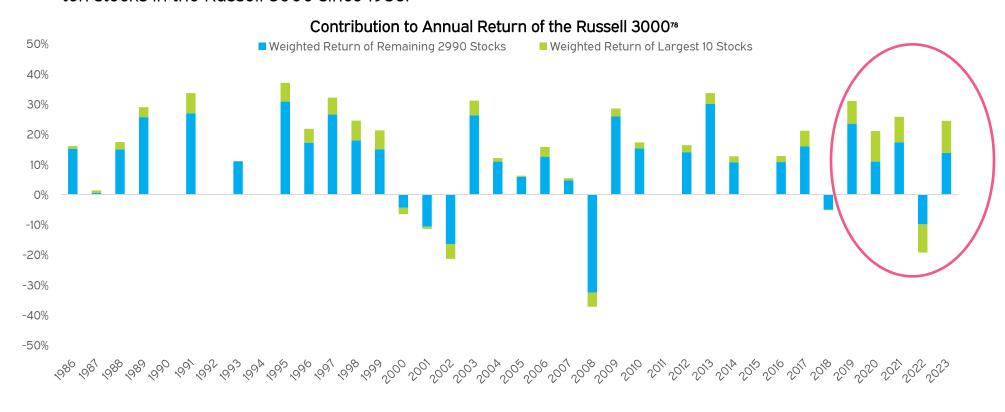
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⁵ In years 1990, 1992, 1994, 2011, and 2015, the top 10 and the rest moved in opposite directions, making the stacked column not meaningful; hence they were excluded from the chart.



Historical Contribution of the Top 10 Constituents to US Equity Returns

- → While 2023 stands out for the top ten contributing such a large share of returns, it is part of a trend.
 - The last five years have all been in the top ten years ranked by absolute contribution to return by the largest ten stocks in the Russell 3000 since 1986.



⁶ Ranking excludes years 1994, 2011, and 2015 due to the top 10 stocks having higher returns than the Russell 3000.

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⁷ Source: FactSet, as of December 31, 2023. Note that Alphabet Class A and C were combined into one category for this analysis.

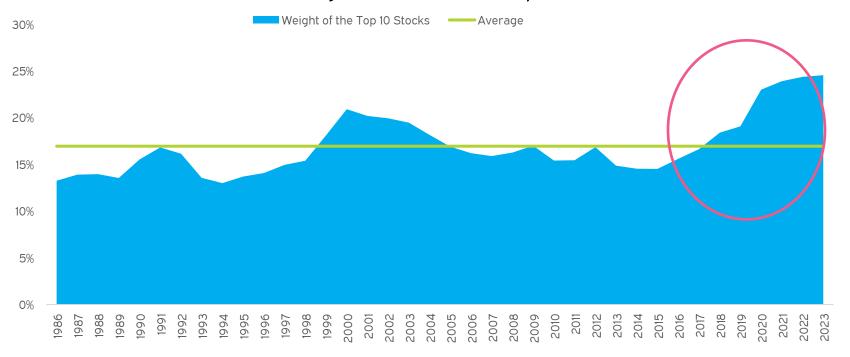
⁸ In years 1990, 1992, 1994, 2011, and 2015, the top 10 and the rest moved in opposite directions, making the stacked column not meaningful; hence they were excluded from the chart.



How Concentrated is the Market in Historical Context?

- → The index weight of the ten largest constituents has been cyclical, with periods of both peaks and troughs.
- → Since 1986, the average combined weight of the ten largest constituents in the Russell 3000 is ~17%.
- → There have only been two periods above this average: 1999 to 2004 and 2018 to 2023.

Historical Total Weight of the Russell 3000's Top 10 Constituents9



⁹ Source: FactSet, as of December 31, 2023. Note that Alphabet Class A and C were combined into one category for this analysis.

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What if we Look Back Even Further?

- → In the longer history of the US stock market, there have been many companies at different periods who accumulated a larger than average share of market cap.
- → But this was often concentrated in just one or two companies, such as US Steel or AT&T (aka, Ma Bell).
 - It is unprecedented for the ten largest names to have such a large weight.
- → There have been periods where the market was even more concentrated in a single sector.
 - Railroads dominated the US stock market from the Civil War until World War I.

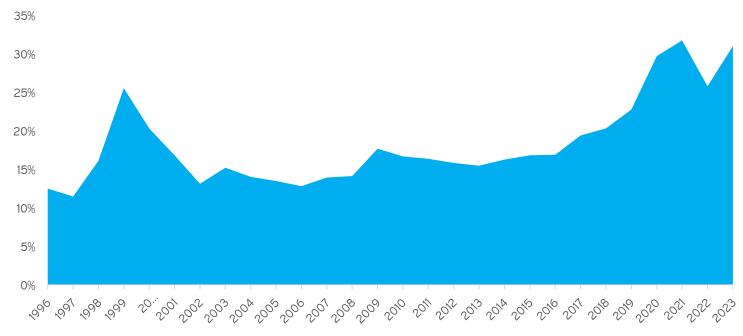
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Top Heavy in Tech

- → The sharpest increases in market concentration coincided with an affinity for stocks in the technology industry.
- → The first of these periods the late 1990s' through early 2000s was the peak of the dot-com era.
 - After the dot-com bubble burst, the weight of the tech industry in the index dropped.
- → In recent years, the technology industry's relative weight has surpassed that of the dot-com era.

Tech Industry Composition of the Russell 3000[®]



¹⁰ Source: FactSet, as of December 31, 2023. See the Appendix for more details on the sectors and sub-sectors included in Technology. Note that Alphabet Class A and C were combined into one category for this analysis.

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Why These Stocks? Why Now?

- → The common theme of the FAANG stocks and the Magnificent Seven has been technology.
 - These companies are on the leading edge of figuring out how best to use emerging technology to provide services demanded by their customers.
 - Importantly, many have built diverse business models and/or shown an ability to adapt to change.
- → The COVID-19 pandemic further boosted the demand for these stocks.
 - Many of these companies offered solutions for remote work, e-commerce, entertainment, and communication in a socially distanced world.
- → The release of ChatGPT in late 2022 made generative AI an overnight sensation.
 - It has ignited the race for companies to develop and bring their own, unique generative AI products to market.

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Might History be Repeating Itself?

- → Might this period resemble the dot-com period, where many of the most-hyped stocks were ultimately not those who benefitted the most from the emergent technology?
- → Or might the Magnificent Seven maintain their growth trajectory, continuing to evolve and learning how to use new technologies?

Dot-Com Bubble Today

- → The unprecedented growth in widespread internet adoption led to exponential demand for online services and products.
- → This benefited firms who provided these internet services.
- → It also benefited those companies who were building the "infrastructure" needed for the internet, such as Cisco, Intel, IBM, and Microsoft.
- → The bubble burst when many of smaller internet-based companies failed to generate profits or revenues, and investors lost confidence in their future.

- → Generative AI is a potentially transformative technology, like the internet.
- → This benefits firms who make generative AI tools, such as Microsoft, Meta, and Alphabet.
- → It also benefits companies who make the components necessary for AI, like Nvidia, the largest US designer of the high-end chips needed to power AI.

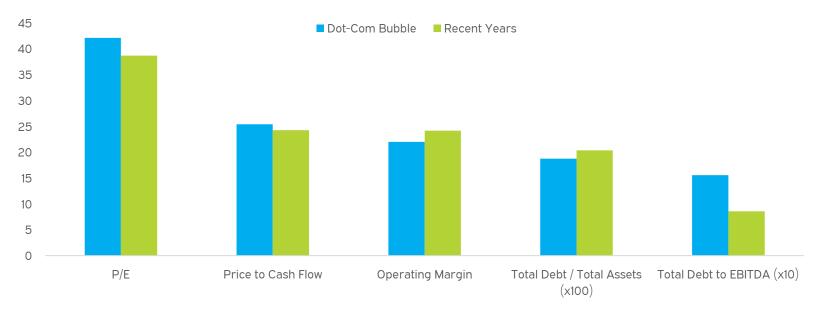
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How do the Financials Match Up?

- → When comparing several key financial ratios of the ten largest stocks during the dot-com bubble to those of recent years, they are relatively in line with each other.
- → One key takeaway is both periods have a similar debt to assets, but recent years have a lower debt to income.
 - This may signify that the top ten companies are more financially stable now than during the dot-com bubble.

Average Financial Metrics of the Top 10 Stocks in the Russell 3000"



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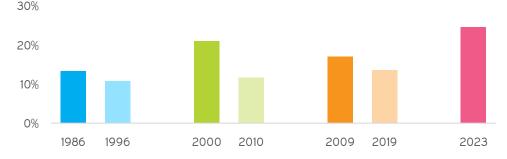
¹¹ Source: FactSet. Period for the Dot-Com Bubble is 1998 to 2002. Period for Recent Years is 2018 to 2023. Total Debt / Total Assets and Total Debt / EBITDA are as of December 31, 2023, and are multiplied by 100 and 10, respectively, for the purposes of viewing this chart. All other ratios are as of September 30, 2023.



What is the Risk?

- → If history is any guide, only a few of the Magnificent Seven will continue to outperform.
 - The inherent "creative destruction" of capitalism has a history of dethroning the largest companies. 2
- → Some will be among the "winners" who learn how to adapt to and benefit from emerging technological trends.
 - Microsoft is worth more than 6x its peak value from the dot-com era.
- → Others will fail to evolve or execute, and they will likely fall behind.
 - Cisco Systems has never regained its peak value from 2000.
- → With so much of the market concentrated in such a small number of stocks, the decline of even a few would be painful for all investors in the stock market.
- → Yet investors have survived many past cycles of concentration and changes in market leadership.

Weight of the Top 10 Largest Stocks in the Russell 3000 & Weight of Same 10 Stocks a Decade Later¹³



¹² According to MSCI, only one-quarter of stocks have historically kept pace with the market after reaching the top ten.

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¹³ Source: FactSet, as of December 31, 2023. Note that Alphabet Class A and C were combined into one category for this analysis.



Summary

- → The Magnificent Seven is not the first time that concentration in the market has spiked. The last major peak coincided with the dot-com bubble.
- → Parallels between today and the exuberance of the dot-com era beg the question of whether these companies will be the ones who benefit most from emerging technologies such as Al.

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Appendix



Disclaimer, Glossary, and Notes



Disclaimer, Glossary, and Notes

WE HAVE PREPARED THIS REPORT FOR THE SOLE BENEFIT OF AUSTIN FIREFIGHTERS RETIREMENT FUND.

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM", "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

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Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta*(market return-Risk Free Rate)].

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

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Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

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Disclaimer, Glossary, and Notes

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a guarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

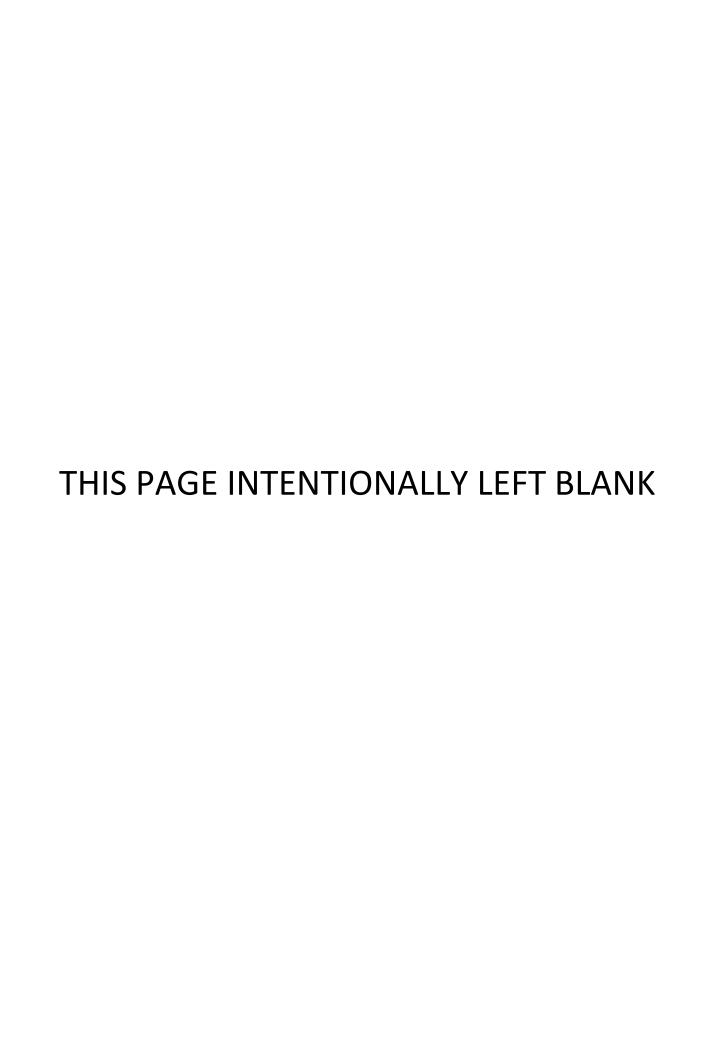
The Russell Indices, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

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Experience Study Economic Assumptions

February 23, 2024

Heath Merlak, FSA, EA, MAAA, FCA Elizabeth Wiley, FSA, EA, MAAA, FCA

Agenda









ECONOMIC ASSUMPTIONS



EXPERIENCE STUDY ROAD MAP



Assumption Impact on Actual Costs



Assumptions impact the *timing* of costs not the *ultimate* cost of the Fund

$$C + I = B + E$$



Overview



2013

Section 802.1014 requiring Texas public retirement systems with \$100+ million in assets to conduct experience study at least every 5 years

2015

Experience Study covering 11/1/2004 through 12/31/2014

2020

Experience Study covering 11/1/2010 through 12/31/2019

2024

Board decided to accelerate next Experience Study

Methods

Economic Assumptions

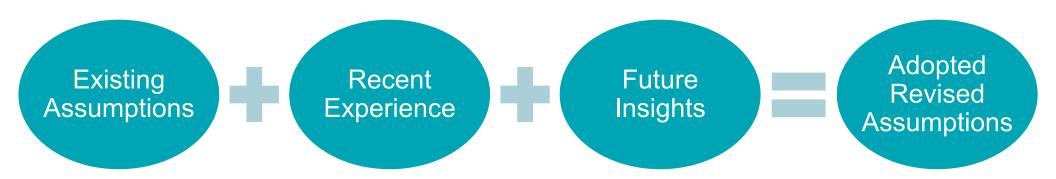
Demographic Assumptions



Process and Timing









Experience Study Goal



Valuation model should provide a reasonable and appropriate basis for evaluating the Fund

- Actual experience determines the ultimate benefits cost
- Expected experience affects valuation results, which estimate the Fund's financial condition
- While assumption updates do not directly alter the benefits paid or their costs, they should aim to minimize future gains and losses

Model will never be exactly right, but ideal is relatively small gains and losses from deviations with an offsetting pattern

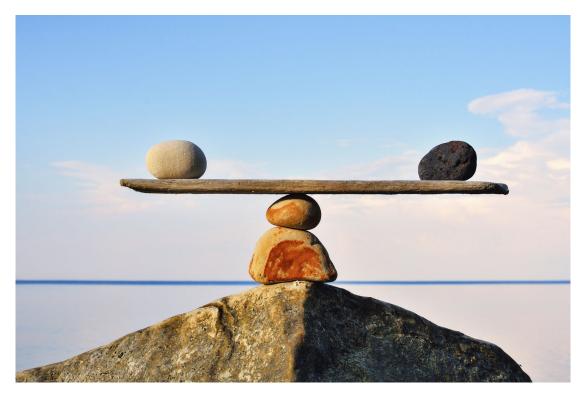


Experience Study Goal



Basis Model:

- ☐ Long-term
- ☐ Forward looking
- □ Reasonable
 - □ Individually
 - ☐ In aggregate
- Reflect client specific information where appropriate







Economic Assumptions

Inflation
Future COLA
Investment Return
Administrative Expenses



Actuarial Assumptions – Economic



Inflation Assumptions



What will price inflation be?

Future COLAs



How does inflation impact wages? COLA?

What will investment earnings be?



Assumed Rate of Return (ROR)

How much payroll will be needed for admin?



Administrative Expense Assumption

Inflation Overview



Inflation is a core building block of AFRF assumptions:

- Base Wage Growth (Wage Inflation):
 Inflation + Real Wage Growth (productivity)
- Expected Return (Nominal):
 Inflation + Real Return
- Real ROR : Nominal Return - Inflation
- Future COLA:
 Inflation reflecting Statute/Rules

Current Assumptions

Assumption	Current
Price Inflation	2.5%
Wage Inflation	3.0%
ROR (nominal)	7.3%
Real ROR	4.8%
Future COLAs	0.0%



Inflation – Analysis



- Context
 - Historical data
 - Industry trends

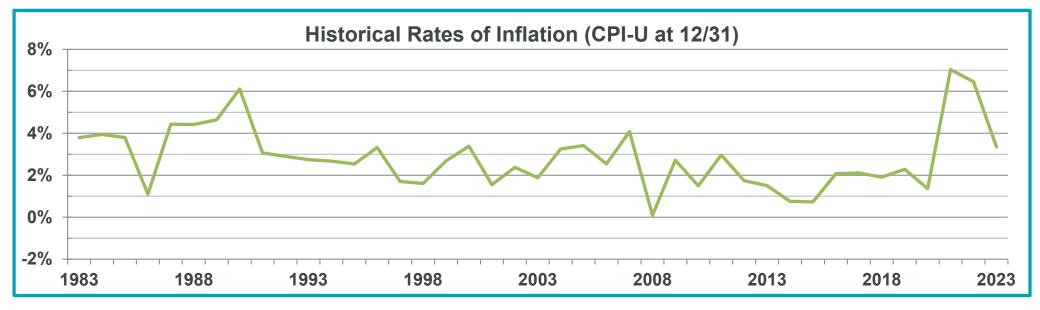


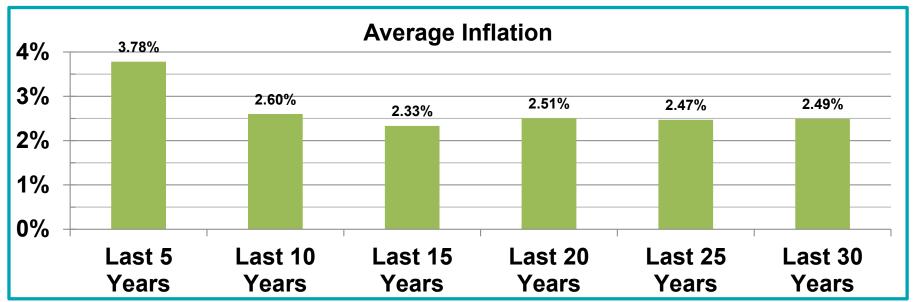
- Primary basis for recommendations
 - Current market expectations breakeven inflation rates
 - Forecasts
 - Investment consultant assumptions



Inflation – Historical CPI





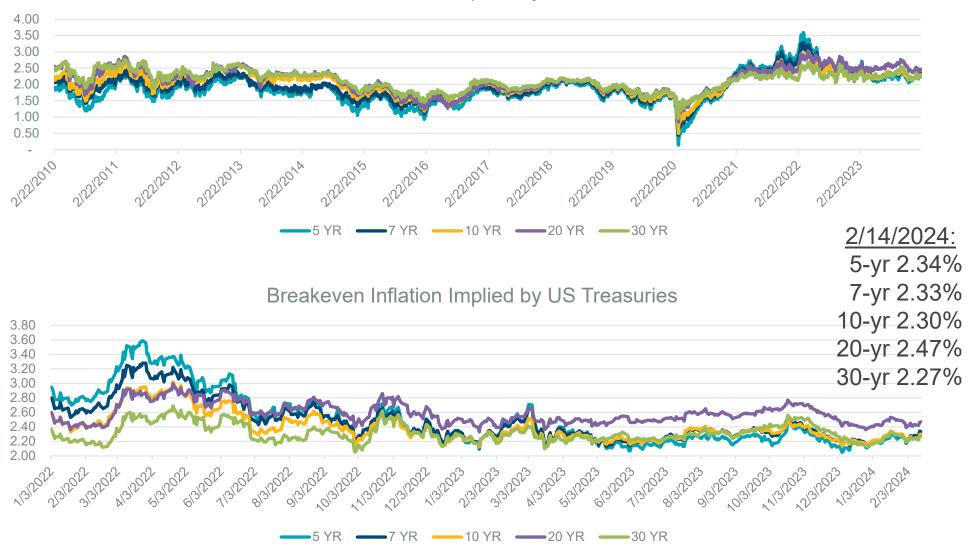




Inflation – Market Conditions





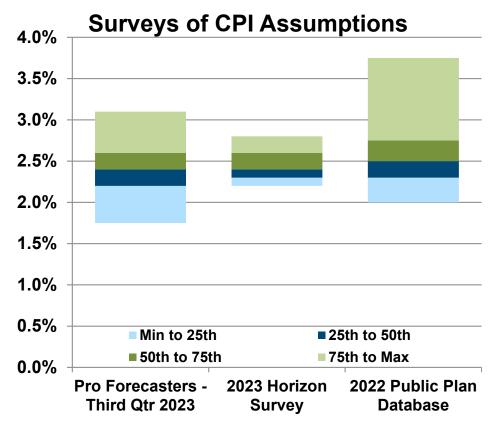


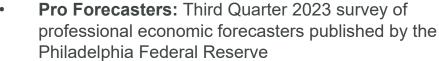
Graphs and data including updates available at https://bit.ly/BEI_Now



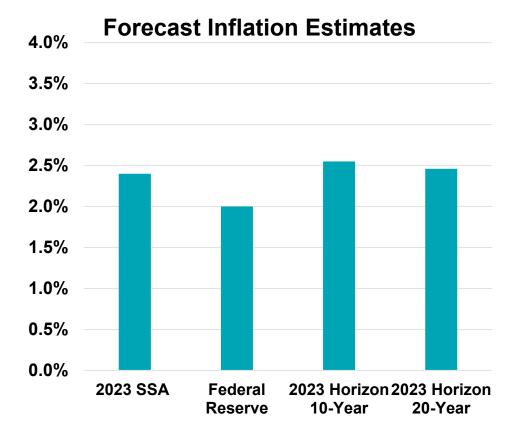
Inflation Rate – Expectations







- **2023 Horizon:** survey of investment consultant capital market assumptions (20-year)
- 2022 Public Plans: inflation assumptions used by plans in the Public Plans Data database



- **2023 SSA:** March 2023 Social Security Administration OASDI report intermediate cost assumption (2.4%)
- Federal Reserve: long-term inflation target (2%)
- 2023 Horizon 10-Year: average 10-year inflation assumption of financial firms included in 2023 (2.55%)
- **2023 Horizon 20-Year**: average 20-year inflation assumption of financial firms included in 2023 (2.46%)



Wage Growth – Overview



Pay for members expected to grow by

- Base wage growth (economic assumption)
- Plus individual merit based on longevity and promotion (demographic assumption)

Wage growth (in aggregate)

- Inflation, plus real-wage factor (productivity)
- Current assumption: 3.00% with assumed 0.50% real-wage growth above price inflation



Wage vs. Price Historical Data







Comparison of Year-End Comparison of Wage (AHE) and Price (CPI-U) from 2006

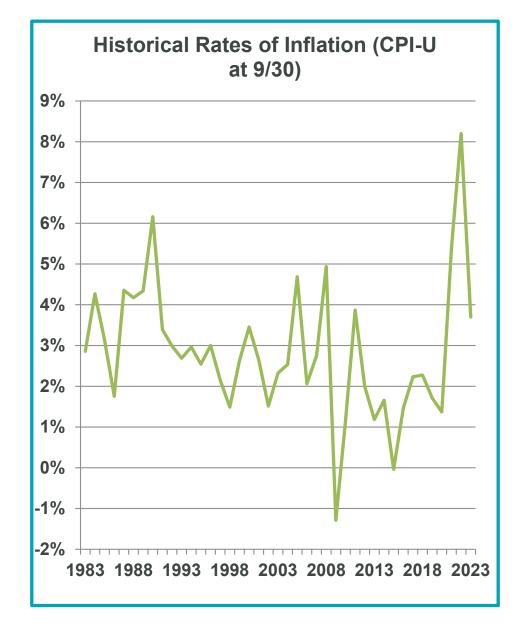




COLA Assumption Overview



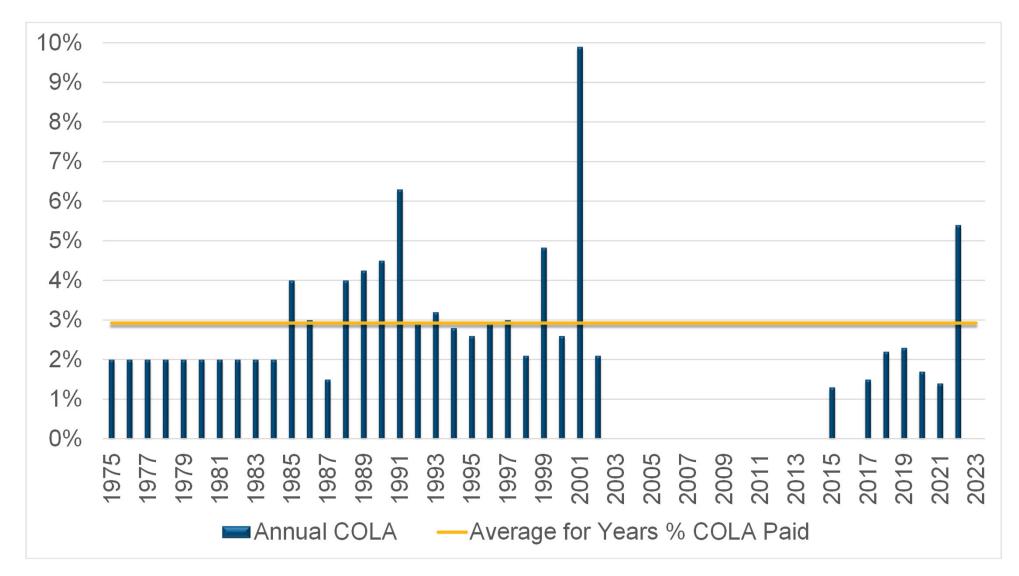
- Cost-of-living adjustments (COLAs) for this Fund designed to relate to inflation and purchasing power protection, so inflation is a key consideration
- However, COLAs subject to financial stability limitations that must be considered in setting the assumption for future COLAs
- COLAs previously granted for those who elect a DROP and are eligible are included in the valuation model





COLA Assumption – Historical Data





^{*} Additionally, dollar per month increases: 2005 \$32, 2006 \$100, 2013 \$93, 2014 \$64

^{**} Includes additional 3.33% in 1999 and 6.45% in 2001 with multiplier increases



COLA Assumption Review



- COLAs governed by <u>Article 6243e.1</u> and the <u>Fund Rules</u>
- Based on these provisions and the Fund's current and projected status, we are currently not anticipating any future COLAs being granted
- As such, the current COLA assumption is 0%
- Were the Fund in such a condition that COLAs could be paid, this assumption would also relate to the inflation assumption



Investment Return



Most powerful single assumption

- Current rate is 7.30%, net of investment and administration expenses
- Lower rate → higher expected contributions
- Over time, actual contributions necessary based on <u>actual</u> experience and benefits paid (not those expected)

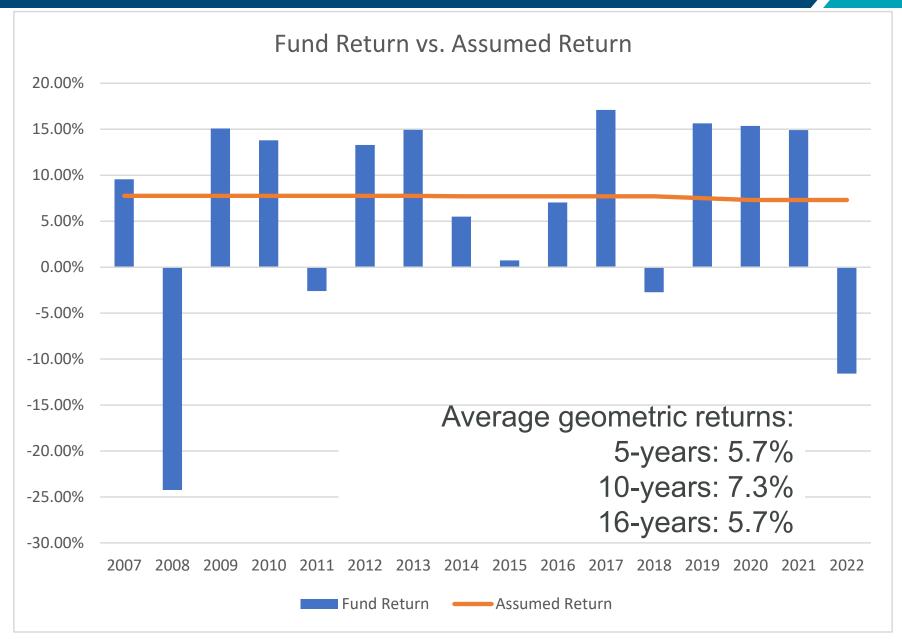
Factors considered in selecting the rate of return:

- Context
 - Historical experience
 - Asset allocation (current and future)
 - Industry trends
- Expectations for the future
- Board's tolerance for risk



Investment Return – History





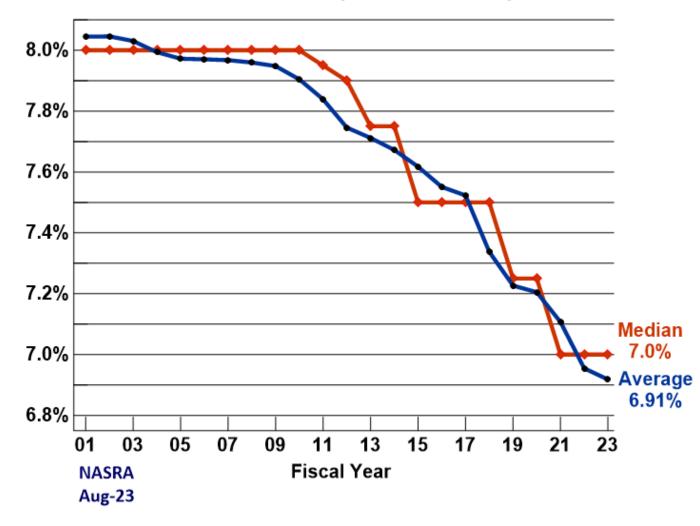


Investment Return – Industry Trends



- Since 2009, many plans have reduced their investment return assumption
- The median assumption is now 7.00%
- The number of plans assuming 7.00% or lower has increased significantly

Change to Average and Median Investment Return Assumption, FY 01 to present

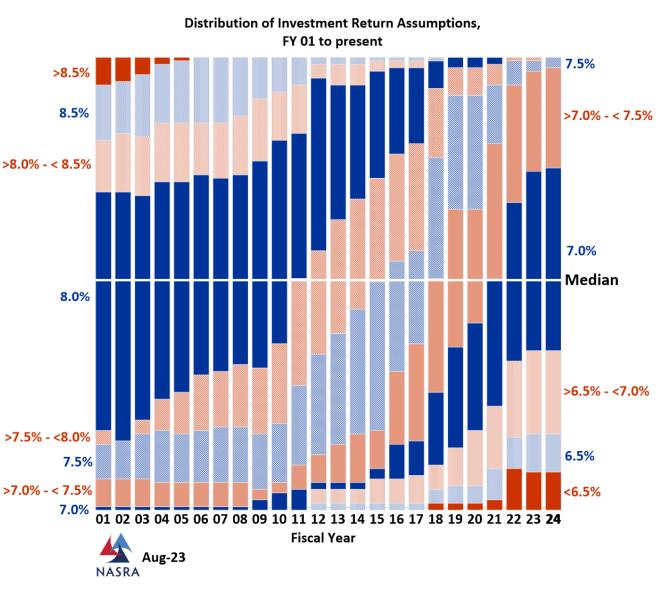




Investment Return – Industry Trends



- Distributions
 provide additional insights to the medians
- AFRF's current
 7.3% is now in the
 top quartile of plans
 in the PPD
 database
- And the majority of the plans shown are not net of administrative expenses

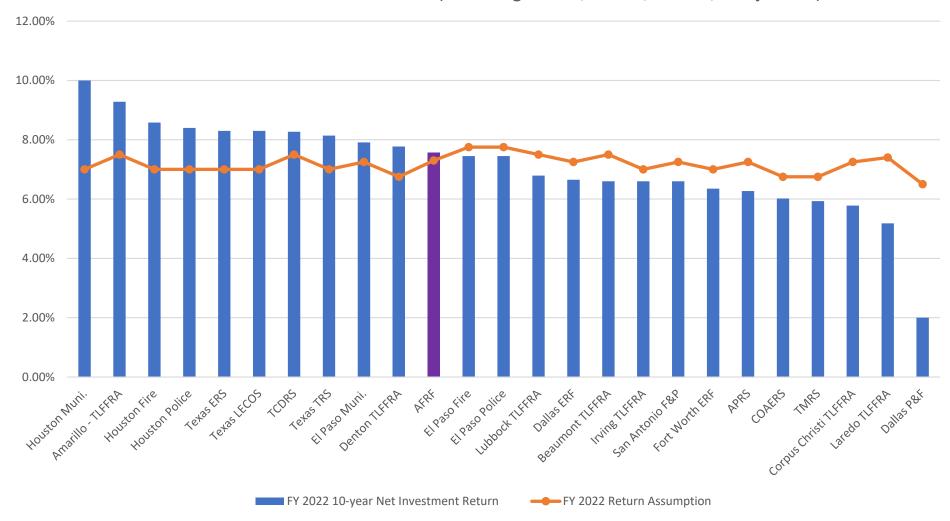




Texas Historical Data



PRB FY 2022 10-year Net Investment Returns vs. Assumed Discount Rate Funds with \$100 Million + in Assets (excluding transit, health, vol fire, and judicial)



AFRF's 10-Year Net Return of 7.57% compared to a 7.30% Return Assumption Average for the Group shown is 7.08% 10-Year Net Return and 7.18% Return Assumption

February 23, 2024



Investment Return – Future Outlook



- Gathered data from the Fund's investment consultant, Meketa, and from the 2022 and 2023 Horizon Surveys
- Expected returns based on target asset allocation
- Horizon Survey is conducted each year and gathers capital market assumptions from 30+ firms
 - 42 are included in the 2023 survey
 - Survey provides averages of capital market assumptions from participating firms



Asset Allocation



- Forecasts of returns reflect asset allocation in addition to capital market assumptions
- If the actual allocation deviates from that which is targeted, this will thus result in different forecasts
- Information on the current allocations provided by Meketa provided below for reference

Target Asset Allocations - Meketa					
	Allocation				
Asset Class	as of 6/30/2023 Policy Policy Range				
US Equities	22%	20%	13-27%		
International Equity	20%	22%	15-29%		
Fixed Income	28%	30%	20-40%		
Private Equity	18%	15%	5-25%		
Real Estate	8%	10%	0-20%		
Natural Resources	3%	3%	0-5%		
Cash	1%	0%	0-5%		



Asset Allocation



- Horizon data based on specific asset classes
- Using 6/30/2023
 allocation
 information from
 Meketa, we
 developed target
 allocations with
 these asset classes
- Forecasts will vary with different allocations

Target Asset Allocations used with Horizon Data

Asset Class	Target Allocation
US Equity - Large Cap	10.8%
US Equity - Small/Mid Cap	9.2%
Non-US Equity - Developed	15.4%
Non-US Equity - Emerging	6.6%
US Corp Bonds - Core	15.2%
US Corp Bonds - High Yield	4.4%
Non-US Debt - Emerging	5.2%
TIPS	5.2%
Real Estate	10.0%
Commodities	3.0%
Private Equity	15.0%



Investment Return – Future Outlook



Time Horizon	2023 Meketa	2023 Horizon Survey	2022 Horizon Survey
10-year	8.16%	7.50%	6.34%
20-year	8.63%	7.84%	7.04%

- Capital market expectations increased significantly for most asset classes from 2022 to 2023
- Although capital market expectations are long-term assumptions they are updated annually and can fluctuate significantly based on current market conditions
- Forecasts reflect assumed asset allocations



Investment Return – Future Outlook



Based on the capital market assumptions and asset allocations, the likelihood of achieving certain return thresholds over specified projection periods can be calculated

Source	Probability of Return Thresholds				
	At least 6.5%	At least 7.0%	At least 7.5%		
Meketa: 10-year	68.6%	59.9%	55.2%		
Meketa: 20-year	75.3%	69.8%	63.9%		
2023 Horizon Survey: 20-year	68.8%	62.0%	54.9%		

2023 and 2022 Horizon Surveys indicate the probability of achieving returns at least equal to or greater than the current assumption of 7.30% would be 57.8% and 46.2%, respectively, over a 20-year time period.

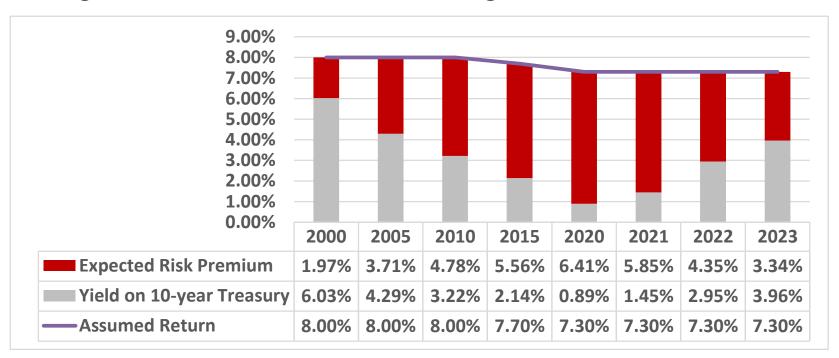
These reflect current asset allocations.



Investment Return – Risk Tolerance



- Until the recent increase in market interest rates, with market conditions, increased investment risk was generally required to achieve a given expected return
- Pension plans have met this challenge both by adjusting their investment strategies and by reducing their assumed returns
- Both the expected returns and the risks should be considered in setting asset allocations and selecting a discount rate





Administrative Expenses



- Administrative expenses are currently included in the investment return assumption
 - 7.30% return assumption is net of administration expenses as well as investment expenses
 - Five-year average of administration expenses indicates approximately 9 basis points of return
- Majority of systems pay administration expenses as a percentage of payroll, which is typically added to normal cost in determining contributions
- For GASB purposes, rate of return is only net of investment expenses



Administrative Expenses



- 5-year average of administration expenses approximately 1% of payroll historically for administration expenses
- Forward-looking expectation?

Year	۸dm	nin. Expense	Expected Payroll	Admin. Expense as a % of Exp. Payroll
Teal		IIII. Expense	Payron	Payron
2022	\$	1,283,215	\$ 102,887,082	1.25%
2021	\$	970,731	\$ 98,222,771	0.99%
2020	\$	1,092,299	\$ 95,642,391	1.14%
2019	\$	852,192	\$ 92,083,218	0.93%
2018	\$	704,903	\$ 88,209,122	0.80%
Average	\$	980,668	\$ 95,408,917	1.02%



Texas Municipal Safety Admin. Info



AFRF	System	APRS	DPFP	El Paso - Fire	El Paso - Police	Houston Fire	Houston Police	San Antonio F&P
2022	FY basis	2022	2021	2021	2021	2022	2022	2022
1.3	Admin Expense (\$millions)	3.0	6.4	1.0	1.0	5.2	4.2	3.3
N/A	Admin Expense Assumption (as % payroll)	0.90%	1.00% (7mil min.)	1.35%	1.00%	1.25%	0.84%	0.92%
1.1	Assets (billions)	0.9	2.2	0.7	1.0	6.1	7.2	3.6
0.12%	Admin Exp as % Assets	0.32%	0.30%	0.15%	0.10%	0.10%	0.06%	0.09%

- Ft. Worth does not publish this information divided by member type, so not included
- Note that El Paso Police and Fire share many administrative features
- Sources: valuation reports on system website and data.prb.texas.gov



Economic Assumptions Summary



Assumption	Current	Adopted for 2023
Price Inflation	2.50%	%
Wage Inflation	3.00%	%
Future COLAs	0.0%	%
Rate of Return	7.30%, net of administration and investment fees	%, net of investment fees
Administration Expense	Paid from asset return	% of payroll added to normal cost



Experience Study Road Map



- Demographic Assumptions
- Actuarial Methods
- Initial Recommendations
- Final Assumptions and Methods Adopted by Board for Use in 12/31/2023 Valuation



Required Disclosures



The purpose of this presentation is to present the results of the 2023 experience study for the Austin Firefighters Retirement Fund (AFRF) and propose assumptions for the December 31, 2023 actuarial valuation. This presentation is for the use of AFRF and its Board in selecting assumptions for ongoing actuarial valuations.

In preparing our presentation, we relied on information, some oral and some written, supplied by the AFRF. This information includes, but is not limited to, the plan provisions, employee data from December 31, 2016 to December 31, 2022 and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Cheiron utilizes and relies upon ProVal, an actuarial valuation software leased from Winklevoss Technologies for the intended purpose of calculating liabilities and projected benefit payments. Projected expected results of future valuations in this presentation were developed using P-scan, our proprietary tool for the intended purpose of developing projections. As part of the review process for this presentation, we have performed a number of tests to verify that the results are reasonable and appropriate. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations or known weaknesses that would affect this presentation.

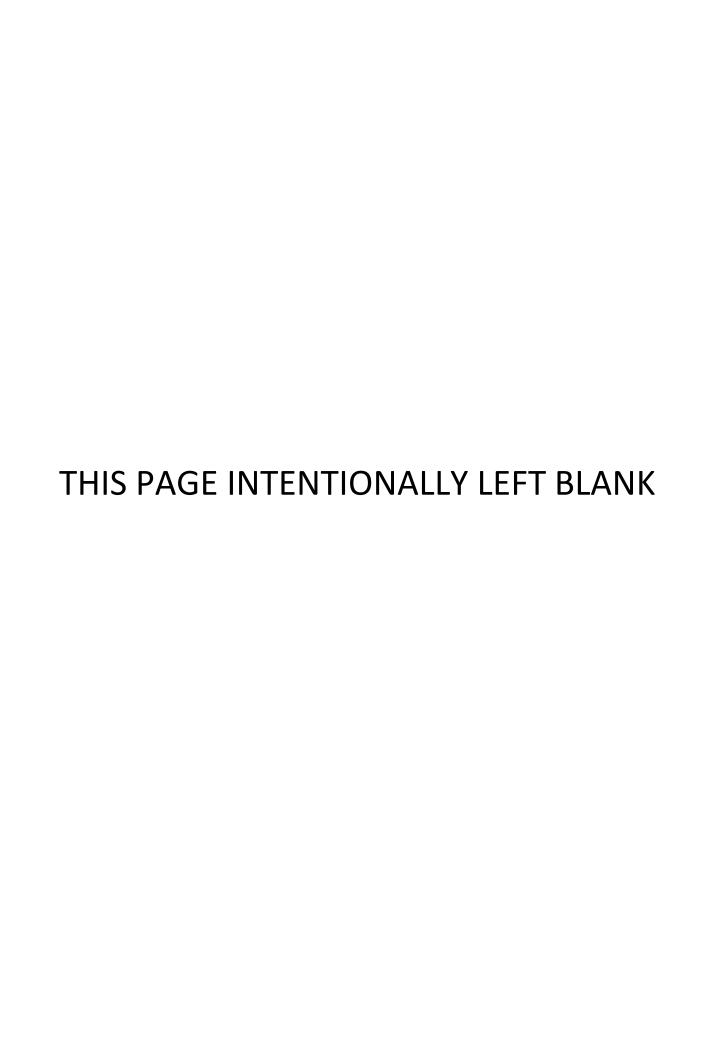
This presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable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

This presentation was prepared exclusively for the AFRF for the purpose described herein. This presentation is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Elizabeth Wiley, FSA, EA Consulting Actuary

Heath Merlak, FSA, EA Principal Consulting Actuary





AFRF News

Austin Firefighters Retirement Fund

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Member Services Important Dates Connect with Us



Letter from the Board

- By Vice Chairman Doug Fowler

Over the past year, the Fund experienced significant successes as well as some setbacks. Internally, the Fund staff made great progress in the development of our new Pension Administration System and the Board successfully implemented a passive investment strategy that resulted in notable fee savings for the Fund. Externally, the financial markets remained volatile, which resulted in a low investment return for the Fund through September 2023 and contributed to some difficult Board decisions.

Due in part to investment performance and corrections to actuarial assumptions, our amortization period increased to 35.7 years as of the 2022 Actuarial Valuation. The Fund's actuary projected that the amortization period will continue to rise and could become infinite by 2025. The increase in the amortization period has impacted the Fund in two major ways. First, the Pension Review Board issued a notice that AFRF was at risk of triggering a Funding Soundness Restoration Plan requirement in 2025, which would call for mandatory reform to the Fund. Second, the Board was unable to grant a COLA to retirees for 2024, which came as a serious disappointment to both the Board and to Fund members during this period of ongoing high inflation. Finding a solution to offer purchasing power protection to our retirees, while preserving the long-term financial health of the Fund, remains a top priority for the Board in the coming year. I am proud to serve on this Board for another term and would like to thank the membership for their continued trust and support. With confidence, I pass the role of Vice Chair on to Trustee John Bass and look forward to what we can accomplish together in 2024.



Letter from the Fund

- By Executive Director Anumeha Kumar

Providing exceptional customer service was an area of focus among many competing priorities for the Fund staff in 2023. While 2024 continues to present a great deal of work for both the Board and staff, I am confident in our ability to progress toward a more financially stable future for the Fund while continually modernizing services and providing consistent high-quality support to our members.

Over the course of a busy and highly productive year, the Fund staff focused on correcting past benefits administration errors. To ensure similar errors would not happen in the future, we implemented a robust system of quality controls and audits, resulting in zero retirement processing errors in 2023. The staff was also proactive in taking on additional workloads to lead and manage the development of the new pension software. In doing so, they reduced costs allocated for external consulting services for the PAS implementation project. Additional long-term fee-savings were achieved through a new flat-rate contract with the Fund's legal counsel and the successful implementation of a passive investment framework, bringing the Fund's total annual budget down by a full 2%.

One of the biggest challenges of 2023 was receiving the FSRP "at-risk" notification from the Pension Review Board. While this is a concern, the Fund is not in crisis. We are, and will continue to be, on a stable financial footing for the near future. Our funded ratio remains strong at 86.9% and our market value of assets continues to exceed \$1 billion. However, our actuary's projections indicated that some changes should be considered to help maintain the long-term financial health of the plan. Over the course of next year, the Board will engage with the membership and the City in careful consideration of different aspects of the retirement system, while honoring the core mandate of the Fund, which is to provide benefit security to current and future members. More information about the FSRP can be found within this newsletter and on the Fund's website at AFRFund.org.

Board of Trustees Election Update

Austin Firefighters Retirement Fund held an annual election to select an active or retired firefighter to serve on the Board of Trustees. The election was conducted by an outside vendor, Yes Elections, and offered the same online voting option that had been implemented in the previous year. The election ran from October 17th through November 6th, 2023. Out of three candidates, incumbent Doug Fowler won 59% of the 606 total votes cast. Chief Fowler began his renewed three-year term in January 2024.

Chief Fowler retired from the Austin Fire Department in 2017 with over 31 years of service. He has served on the AFRF Board of Trustees for a total of three years, holding the position of Vice Chair since February 2021. Chief Fowler ran for re-election on a platform of progress and transparency within the Fund. He has also expressed determination to find a solution to protect retiree purchasing power while maintaining the financial health and stability of the Fund. During his tenure, Chief Fowler advocated for members impacted by past benefit errors and aided in the reform of the pension office, including expanding the staff to fully meet the needs of the Fund and working with the Board to approve an overdue upgrade to the pension administration software.



Image courtesy of Doug Fowle

Voluntary Funding Soundness Restoration Plan (FSRP)

In September, the Fund received a notice from the Pension Review Board indicating AFRF was at risk of triggering an FSRP in 2025 if the Fund's amortization period continued to exceed the 30-year limit for two more subsequent valuations. As a proactive response, the Board created a working group comprised of Trustees Doug Fowler and John Bass to analyze the funding health of the plan alongside the Fund's actuary, Cheiron. The working group and Executive Director Anumeha Kumar hosted two informational sessions for members and invited City of Austin's Chief Financial Officer, Ed Van Eenoo, to present the City's perspective at the December board meeting. The City of Austin serves as the AFRF plan sponsor and is required under state law to share joint responsibility in developing the FSRP. The working group determined that developing a Voluntary FSRP would be the most cost-effective solution and would better situate the Fund for future success, with the knowledge that refraining from corrective action would inevitably trigger the mandatory FSRP in 2025. Details of the Voluntary FSRP are still under development. The working group will host additional informational sessions as they progress through Voluntary FSRP process and will continue to welcome feedback from members. Please see AFRFund.org for updates, notifications of future events, or to view recordings of the December meetings referenced herein.

The Year Ahead

At the January Board Meeting, the AFRF Board of Trustees elected Trustee John Bass to serve in the Vice Chair position for 2024. Trustee Bass contributes a wealth of investment knowledge to the Board and championed the development of the passive framework strategy implemented in 2023. This strategy resulted in significant investment fee savings for the Fund without impact to returns on the public assets side of the Fund's investment program.

This year, the Board will focus on the development of a Voluntary FSRP. Additionally, AFRF will be reviewing many of their policies and procedures, including the Personnel Policy, Investment Policy Statement, Operating Procedures, Ethics Policy, and Governing Policy. They will also develop administrative policies and procedures, including internal controls, to align with the new PAS and EDMS systems. The Fund will conduct an Actuarial Experience Study and an Investment Practices and Performance Evaluation (IPPE) to inform future financial and actuarial decisions of the Fund, including the development of the Voluntary FSRP.

The State of the Fund

Investment Performance | The economy experienced mild improvement in 2023 over the challenges of the prior year. The Fund's investments return remained low at 2.2% as of September 30, 2023, with a total market value of assets at \$1.1 billion. Despite its volatility, 2023 concluded with a more positive return outlook. The final 2023 investment return numbers will be reported to the Board at its February meeting. Over the course of the year, the Board implemented a passive investment framework, reallocating over \$100 million in public funds from high-fee active managers to passive strategies. This decision resulted in significant fee-savings for the Fund and aided the achievement of an overall budget decrease of 2%.

2024 COLA Update In November, the Fund's actuary presented a Cost-of-Living Adjustment (COLA) Analysis in accordance with the Fund's Benefits Adjustment Policy. Based on the results of the analysis, the actuary recommended that no COLA be granted for 2024 due to the Fund's amortization period exceeding the 25-year maximum set forth in the policy for financial stability assessment. The Board followed the actuary's recommendation in order to preserve the actuarial soundness and financial stability of the Fund. Vice Chair Fowler and the Board trustees continue to work toward an alternative solution to protect the purchasing power of AFRF retirees.

PAS Software Update | AFRF successfully implemented the Electronic Document Management System (EDMS) and now retains all member forms in digital format, lending to both streamlined management and more robust security. Following the EDMS implementation, the AFRF staff engaged in an in-depth analysis of the initial Pension Administration System (PAS) software designs to customize the Pension Gold IV base system according to the statutory requirements of AFRF benefits administration. The AFRF staff has been hard at work with the vendor, Levi Ray & Shoup (LRS) to ensure the project remains on schedule and within budget. Completion of the project, including the member portal, remains on target for late 2025.

In Rememberance

To the families and friends of those who passed away in 2023, the AFRF Board and staff would like to extend our deepest sympathies for your loss and express our gratitude for the years of service they provided to the citizens of Austin.

Calvin Banks | 1958-2023

William Dailey | 1938-2023

William Durfor | 1945-2023

Charles Erlandson | 1946-2023

Earl Hestilow | 1930-2023

Frederic Kelly | 1940-2023

Travis Maher | 1973-2022

Doug McCarty | 1929-2023

Danny Richards | 1954-2023

Tommy Rutledge | 1942-2023

Freddie Smith | 1931-2023

Gary Walker | 1943-2023



The State of the Fund, Continued

Cyber Security | Ensuring the protection of member data is always a top priority for the Fund. To enhance cyber security protection, staff engages in thorough training and encourages Fund members to utilize a secure portal when submitting personal information. The Fund's contracted IT service also conducts routine penetration testing to identify risks and vulnerabilities and promptly address concerns to deter any potential crises that may arise.



Congratulations 2023 Retirees!

The AFRF Staff would like to formally congratulate you on your retirement. We thank you for your many years of service to the citizens of Austin! AFD will host its annual retirement party on May 7, 2024, at the Creedmoor Community Center. Please join us in honoring these new retirees!

Donald Bissell	Randall Freytag	Mason O'Neal
David Brietzke	Jay Grooms	Tye Prange
Lance Carsno	John Gunn	Alvin Rosales-Thompson
Carmen Coursey	Julie Hall	Matthew Rush
Preston Curtis	Toby Heidel	Vicente Serrano
Erin Dempsey	Blaine Kruger	Brent Sjolseth
Elizabeth Donelson	Allen Mynk	Brandon Wade
Scott Esau	Bob Nicks	Keith Wilhelm
Clifton Farmer	Danny Nixon	David Williams
Jorge Felix	Marlon McCormick	Christopher Wilson

Member Services

Contact Information | Please keep your contact information up to date with the AFRF staff, including your phone number, mailing address, and personal email address.

1099-Rs | State Street Retiree Services has completed the mailing of 1099-Rs for 2023. Please contact AFRF if you require a digital copy or a correction to be made to your 1099-R. Members who moved out of state in 2023 will likely receive two 1099-Rs to reflect income earned while in each state. Combining the totals reported on both forms will provide the annual amount needed for tax filing. If there is any issue with the time periods reported for two states, please contact AFRF for state code correction.

Annual DROP Statements | For members who participate in the DROP program and have an active balance in their account, an annual DROP Statement was mailed to your address on file with AFRF in January. If you did not receive your statement, please contact the pension office to confirm that your contact information is up to date.

Website | As a reminder, AFRF released a completely redesigned website in 2023. AFRFund.org is easy to navigate and contains helpful resources for members, including current news, upcoming pension payment dates, member service forms, benefit guides, financial reports, board meeting information and recordings, answers to FAQs, and more!

Considering Retirement? | Contact us for retirement benefit estimates or to schedule a benefits counseling session. Counseling can be conducted virtually or at the AFRF office.

Important Dates

February

- 02 | 1099-R Corrections Begin
- 15 | Deadline for February DROP Request
- 19 | Office Closed for Presidents' Day
- 23 | February Regular Board Meeting

March

- 15 | Deadline for March DROP Request
- 25 | March Regular Board Meeting

April

- 15 | Deadline for April DROP Request
- 26 | April Regular Board Meeting

Mav

- 07 | Annual AFD Retirement Party
- 15 | Deadline for May DROP Request
- 27 | Office Closed for Memorial Day
- 24 | May Regular Board Meeting

June

- 15 | Deadline for June DROP Request
- 19 | Office Closed for Juneteenth
- 21 | June Regular Board Meeting

July

- **04** | Office Closed for Independence Day
- 15 | Deadline for July DROP Request
- 29 | July Regular Board Meeting

August

- **15** | Deadline for August DROP Request
- 23 | August Regular Board Meeting

September

- 02 | Office Closed for Labor Day
- **15** | Deadline for September DROP Request
- **30** | September Regular Board Meeting

Updates to this calendar can be found on AFRFund.org.



Connect with Us

Austin Firefighters Retirement Fund 4101 Parkstone Heights Drive, Suite 270 Austin, TX 78741

Office Hours | 8am - 5pm, Monday - Friday

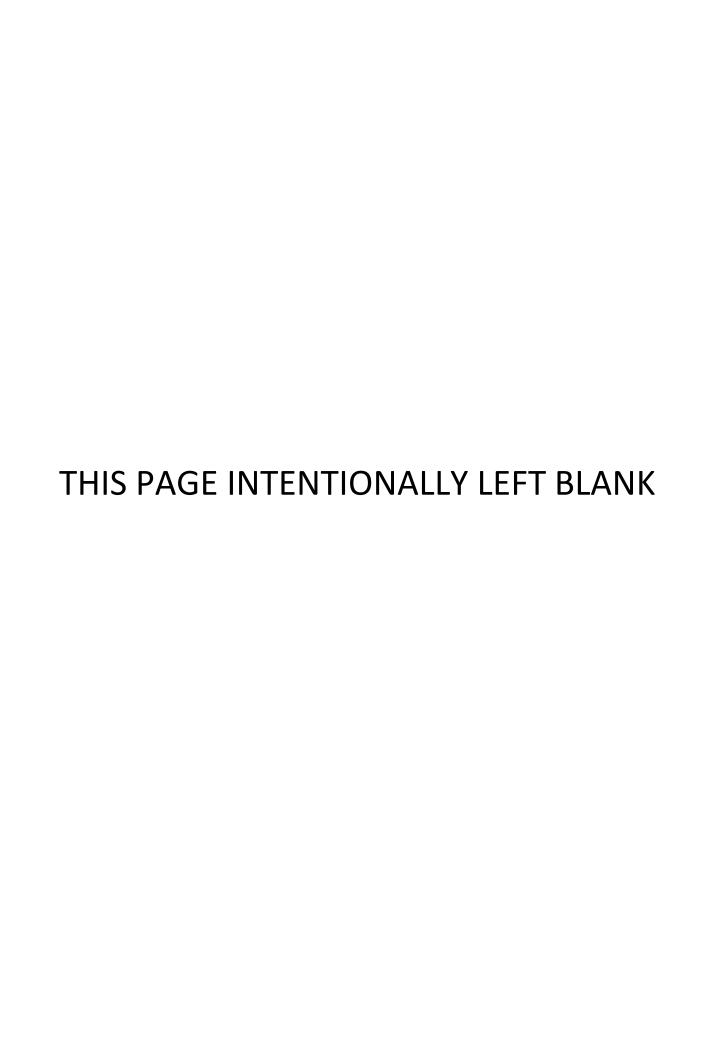
Web | AFRFund.org

Email | Staff@AFRFund.org

Phone | 512-454-9567

Fax | 512-453-7197

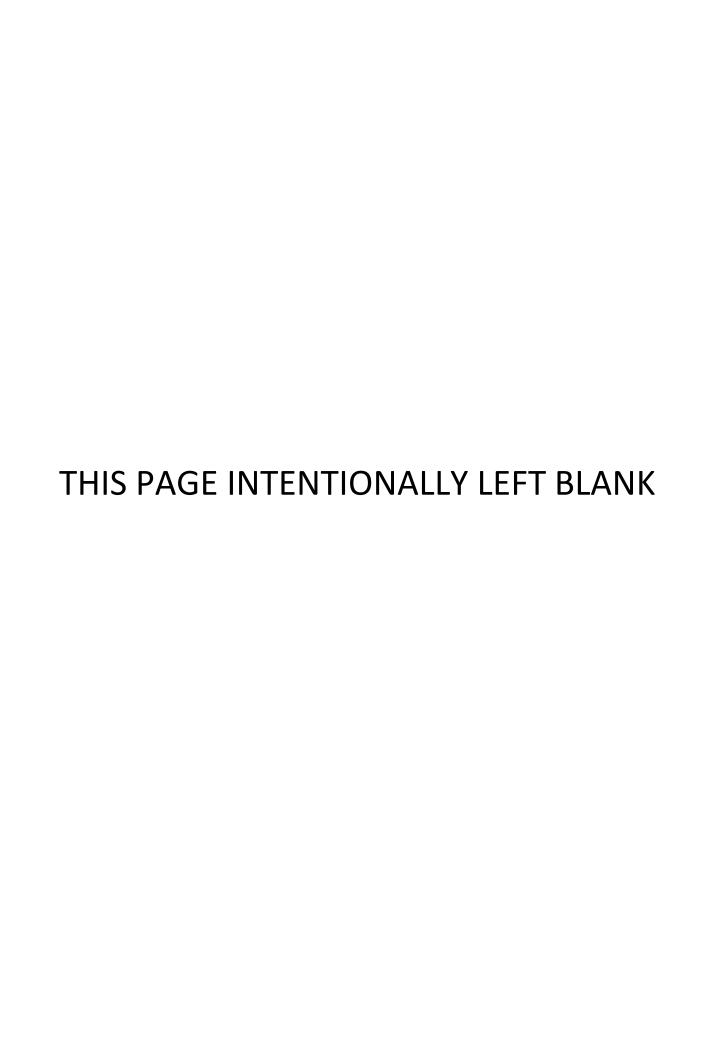
Disclaimer: This newsletter is provided as a courtesy to AFRF members and their beneficiaries. While AFRF has made every effort to provide correct information, it does not offer a legal guarantee of the accuracy of the information contained or referenced herein. All images are credited to Gina Gleason unless noted otherwise.





2024 BOARD MEETING DATES

MONTH	DATE	TIME
January	Monday, January 29	9:00am
February	Friday, February 23	9:00am
March	Monday, March 25	9:00am
April	Friday, April 26	9:00am
May	Friday, May 24	8:30am
June	Friday, June 21	9:00am
July	Monday, July 29	9:00am
August	Friday, August 23	9:00am
September	Monday, September 30	9:00am
October	Monday, October 28	9:00am
November	Friday, November 22	9:00am
December	Friday, December 13	9:00am



Austin Firefighters Retirement Fund Operating Budget Fiscal Year 2024

Administrative Expenses Salaries and Benefits Salary - Executive Director Salary - Staff Health Insurance Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Accounting Actuarial Fees	00,000.00 36,500.00 27,310.00 9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	16,666.67 38,250.00 11,356.98 134.40 4,491.12 13,729.17 84,628.34	9,765.60	8.33% 7.86% 8.92% 1.36% 8.49% 8.30%
Salaries and Benefits Salary - Executive Director Salary - Staff Health Insurance Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	36,500.00 27,310.00 9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	38,250.00 11,356.98 134.40 4,491.12 13,729.17 84,628.34	448,250.00 115,953.02 9,765.60 48,428.88 151,645.83 957,376.66	7.86% 8.92% 1.36% 8.49% 8.30%
Salary - Executive Director Salary - Staff Health Insurance Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	36,500.00 27,310.00 9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	38,250.00 11,356.98 134.40 4,491.12 13,729.17 84,628.34	448,250.00 115,953.02 9,765.60 48,428.88 151,645.83 957,376.66	7.86% 8.92% 1.36% 8.49% 8.30%
Salary - Staff Health Insurance Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	36,500.00 27,310.00 9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	38,250.00 11,356.98 134.40 4,491.12 13,729.17 84,628.34	448,250.00 115,953.02 9,765.60 48,428.88 151,645.83 957,376.66	7.86% 8.92% 1.36% 8.49% 8.30%
Health Insurance Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	27,310.00 9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	11,356.98 134.40 4,491.12 13,729.17 84,628.34	115,953.02 9,765.60 48,428.88 151,645.83 957,376.66	8.92% 1.36% 8.49% 8.30%
Health Insurance - Retired Staff Payroll Taxes SEP Contribution Subtotal Subtotal 1,04 SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	9,900.00 52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	134.40 4,491.12 13,729.17 84,628.34	9,765.60 48,428.88 151,645.83 957,376.66	1.36% 8.49% 8.30%
Payroll Taxes SEP Contribution Subtotal SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	52,920.00 55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	4,491.12 13,729.17 84,628.34	48,428.88 151,645.83 957,376.66	8.49% 8.30%
SEP Contribution Subtotal 16 Subtotal 1,04 SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	55,375.00 12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	13,729.17 84,628.34	151,645.83 957,376.66	8.30%
SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	12,005.00 34,000.00 9,783.00 6,525.00 18,450.00	84,628.34	957,376.66	
SS Retiree Payroll Process Fees Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	34,000.00 9,783.00 6,525.00 18,450.00	-	-	8.12%
Building Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Accounting Actuarial Fees	9,783.00 6,525.00 18,450.00	- 508 02	34 000 00	
Utilities Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Accounting Actuarial Fees	6,525.00 18,450.00	508 02	34,000.00	0.00%
Office Expenses Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	18,450.00	330.32	9,184.08	6.12%
Computer and Software Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Accounting Actuarial Fees	-	341.58	6,183.42	5.23%
Insurance Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees		672.80	17,777.20	3.65%
Travel Operational Cost Investment Expenses Financial Consulting Fee Investment Management Fees Bank Custodian Services Professional Services Expenses Accounting Actuarial Fees	33,200.00	1,241.77	31,958.23	3.74%
Operational Cost 2 Investment Expenses Financial Consulting Fee 21 Investment Management Fees 1,80 Bank Custodian Services 11 Professional Services Expenses Accounting 2 Actuarial Fees	11,500.00	-	41,500.00	0.00%
Investment Expenses Financial Consulting Fee 21 Investment Management Fees 1,80 Bank Custodian Services 11 Professional Services Expenses Accounting 2 Actuarial Fees	23,500.00	92.19	23,407.81	0.39%
Financial Consulting Fee 21 Investment Management Fees 1,80 Bank Custodian Services 11 Professional Services Expenses Accounting 2 Actuarial Fees	23,300.00	9,452.13	13,847.87	40.57%
Investment Management Fees 1,80 Bank Custodian Services 11 Professional Services Expenses Accounting 2 Actuarial Fees				
Investment Management Fees 1,80 Bank Custodian Services 11 Professional Services Expenses Accounting 2 Actuarial Fees	18,000.00	17,557.48	200,442.52	8.05%
Professional Services Expenses Accounting Actuarial Fees	00,000.00	151,638.95	1,648,361.05	8.42%
Accounting 2 Actuarial Fees	10,000.00	28,523.05	81,476.95	25.93%
Actuarial Fees				
Actuarial Fees	25,000.00	-	25,000.00	0.00%
Actuarial Valuation 4				
	15,100.00	-	45,100.00	0.00%
	14,000.00	-	14,000.00	0.00%
Experience Study 2	23,000.00	-	23,000.00	0.00%
•	70,000.00	10,250.00	59,750.00	14.64%
	50,000.00	, -	50,000.00	0.00%
Legal Fees	•		,	
-	08,000.00	9,000.00	99,000.00	8.33%
	18,000.00	1,500.00		8.33%
_	10,000.00	_,555.66	40,000.00	0.00%
	20,000.00	_	20,000.00	0.00%
•	75,000.00	-	75,000.00	0.00%
	24,000.00	2,000.00	22,000.00	8.33%
Medical Disability Review	3,000.00	_,555.56	3,000.00	0.00%
•	00,000.00	_	700,000.00	0.00%
	2,000.00	1,434.38	58,565.62	2.39%
Total Expenses \$ 4,63	50,000.00	\$ 318,931.59	\$ 4,316,431.41	6.88%

Austin Firefighters Retirement Fund Contributions and Deductions (Unaudited) as of January 31, 2024

Additions

City of Austin Contribution (22.05%)	1,961,193.63
Fire Fighter Contribution (18.7%)	1,663,234.50
Interest -Bank	40,690.75
Commission Recapture	954.03
Class Action Proceeds	262.75
Securities Litigation Recovery	
Total Contributions	\$ 3,666,335.66

Deductions

Retirees Monthly Annuity	4,450,739.36
Medical Ins.	295,473.90
Dental Ins	37,430.97
Vision Ins.	3,735.16
Retiree W/H Tax Payable	623,444.78
State Tax	4,997.42
Benevolent Fund	-
Union Dues	2,092.50
Misc.	1,649.94
PAC Dues	723.00
Museum	6.00
Total Retiree Payroll Expenses	\$ 5,420,293.03

Pension Lump Sum Expenses

Ġ	1,857,345.40
	1,857,345.40
	-
	<u> </u>

Austin Firefighters Retirement Fund Profit & Loss vs Actual January 2024

	Total		
	Jan	Budget	% of Budge
linary Income/Expense			
Income			
City of Austin Contrib (22.05%)	1,961,193.63	25,700,000.00	7.63%
Commission Recapture	954.03	5,000.00	19.08%
Fire Fighter Contrib (18.7%)	1,663,234.50	21,800,000.00	7.63%
Securities Litigation Recovery	0.00		
Other Income			
Class Action Proceeds	262.75	5,000.00	5.269
Interest - State Street	39,904.05	250,000.00	15.969
Interest - Sunflower Bank	489.56	4,000.00	12.249
Securities Lending - State St.	297.14	9,000.00	3.30
Total Income	3,666,335.66	47,773,000.00	7.679
Operating Expenses			
Administrative Expenses			
Payroll Expenses			
Payroll Expenses - Other	54,916.67	686,500.00	8.00
Health Insurance - Staff	11,356.98	127,310.00	8.92
Health Insurance - Retired Staff	134.40	9,900.00	1.36
Taxes	4,491.12	52,920.00	8.49
SEP Contribution	13,729.17	165,375.00	8.30
Total Payroll Expenses	84,628.34	1,042,005.00	8.12
SS Retiree Payroll Process Fees	0.00	34,000.00	0.00
Building Expenses			
Assessment toward 2019 Project	156.86	1,883.00	8.33
Building Maintenance/Improvemen		2,500.00	0.00
Condo Association Dues	442.06	5,400.00	8.19
Utilities			
Electric	168.77	2,000.00	8.44
HVAC Program	0.00	50.00	0.00
Internet & Cable & Telephone	124.27	3,500.00	3.55
Water, Waste, Drainage	48.54	975.00	4.98
Total Utilities	341.58	6,525.00	5.23
Total Building Expenses	940.50	16,308.00	5.77
Office Expenses			
Furniture (FFE)	0.00	2,000.00	0.00
Meeting Refreshments	144.49	1,600.00	9.03
Notary Services		250.00	0.00
Office Maintenance	514.00	3,100.00	16.58
Office Supplies (Office supplies expense)	14.31	2,500.00	0.579

Austin Firefighters Retirement Fund Profit & Loss vs Actual January 2024

	Jan	Budget	% of Budget
Postage and Delivery	0.00	5,000.00	0.00%
Printing and Reproduction	0.00	4,000.00	0.00%
Total Office Expenses	672.80	18,450.00	3.65%
Computer and Internet Expenses			
Hosting & Other Expenses	42.59	3,000.00	1.42%
Laptop/Computer	0.00	3,000.00	0.00%
Software/IT Services	1,199.18	27,200.00	4.41%
Total Computer and Internet Expenses	1,241.77	33,200.00	3.74%
Insurance Expense			
Board & Directors Liability Ins	0.00	28,500.00	0.00%
Commercial	0.00	2,000.00	0.00%
Cybersecurity Ins.	0.00	10,000.00	0.00%
Workers Comp Ins. (Workers Comp)	0.00	1,000.00	0.00%
Total Insurance Expense	0.00	41,500.00	0.00%
Travel Expense			
Lodging/Transportation/Per Diem	92.19	16,000.00	0.58%
Registration fees	0.00	7,500.00	0.00%
Total Travel Expense	92.19	23,500.00	0.39%
Operational Cost			
Association Fees (TXPERS /NCEPRS)	9,010.00	9,100.00	99.01%
Election Services	0.00	4,000.00	0.00%
Death Verification Services	0.00	4,200.00	0.00%
Operational Cost - Other	442.13	6,000.00	7.37%
Total Operational Cost	9,452.13	23,300.00	40.57%
Investment Expenses			
Bank Custodian Services	28,523.05	110,000.00	25.93%
Financial Consulting Fee	17,557.48	218,000.00	8.05%
Investment Management Fees	151,638.95	1,800,000.00	8.42%
Total Investment Expenses	197,719.48	2,128,000.00	9.29%
Professional Fees			
Audit	0.00	25,000.00	0.00%
Actuarial Fees			
Actuarial Valuation	0.00	45,100.00	0.00%
COLA & Additional Travel	0.00	14,000.00	0.00%
Experience Study	0.00	23,000.00	0.00%
Pension Funding Research	10,250.00	70,000.00	14.64%

Austin Firefighters Retirement Fund Profit & Loss vs Actual January 2024

	Jan	Budget	% of Budget
Total Actuarial Fees	10,250.00	152,100.00	6.74%
Investment Performance Evaluation (IPPE)	0.00	50,000.00	0.00%
Legal Fees			
Administrative	9,000.00	108,000.00	8.33%
Board Meeting	1,500.00	18,000.00	8.33%
Investment Review	0.00	40,000.00	0.00%
Summary Plan Descr, Records Retention & Forms	0.00	20,000.00	0.00%
Pension Funding Research/Legislation (2024/2025)	0.00	75,000.00	0.00%
Total Legal Fees	10,500.00	261,000.00	4.02%
Legislative Consulting	2,000.00	24,000.00	8.33%
Medical Disability Review	0.00	3,000.00	0.00%
Pension Software			
Pension Software PG I	0.00	50,000.00	0.00%
Pension Software PG IV	0.00	650,000.00	0.00%
Total Pension Software	0.00	700,000.00	0.00%
Pension Software Oversight	1,434.38	60,000.00	2.39%
Total Professional Fees	24,184.38	1,275,100.00	1.90%
Total Operating Expenses	318,931.59	4,635,363.00	6.88%
Monthly Pension Retiree Payroll			
Retirees Monthly Annuity	4,450,739.36	53,000,000.00	8.40%
Medical Ins.	295,473.90	3,900,000.00	7.58%
Dental Ins	37,430.97	425,000.00	8.81%
Vision Ins.	3,735.16	43,000.00	8.69%
Retiree W/H Tax Payable	623,444.78	7,500,000.00	8.31%
State Tax	4,997.42	60,000.00	8.33%
Benevolent Fund	0.00	50,000.00	0.00%
Misc.	1,649.94	20,000.00	8.25%
PAC Dues	723.00	8,200.00	8.82%
Union Dues	2,092.50	25,000.00	8.37%
Museum	6.00	72.00	8.33%
Total Monthly Pension Retiree Payroll	5,420,293.03	65,031,272.00	8.33%
Pension Lump Sum			
Contribution Refunds	0.00	1,000,000.00	0.00%
DROP Distributions	1,857,345.40	23,000,000.00	8.08%
Total Pension Lump Sum	1,857,345.40	24,000,000.00	7.74%
·	, ,	, ,	
Total Expense	7,596,570.02	93,666,635.00	8.11%
t Income	-3,930,234.36		

Austin Firefighters Retirement Fund Assets & Liabilities Report (Unaudited) as of January 31, 2024

Assets

Checking/Savin	gs	
	Sunflower Bank - Operating	101,912.45
	Sunflower Bank - Benefits	11,089.17
	State Street T009-Cash Agg	7,038,896.61
Total Checking/	/Savings	7,151,898.23
Investments, at		
	Domestic Equites	255,279,502.48
	Fixed Income Securities	331,726,441.58
	International Equities	235,307,255.97
	Real Asset	33,175,733.23
	Private Equity	202,237,247.60
	Real Estate	87,681,824.56
Total Investments		1,145,408,005.42
Total Assets		\$ 1,152,559,903.65
TOTAL ASSETS		3 1,132,333,303.03
	Liabilities	
Current Liabiliti	ies	
	Payroll Liabilities	8,767.57
	Operating Admin Liabilities	8,491.92
	Investment Liabilities	302,502.22
	Professional Liabilities	17,557.48
Long Term Liab	ilities	
	DROP (Guaranteed 5%)	156,891,526.29
	% of Total Assets	13.61%
Total Liabilities		\$ 157,228,845.48

Austin Firefighters Retirement Fund Balance Sheet As of January 31, 2024

January

ASSETS	
Current Assets	
Checking/Savings	
State Street T009-Cash Agg	7,038,896.61
Sunflower Bank - Operating	101,912.45
Sunflower Bank - Benefits	11,089.17
Total Checking/Savings	7,151,898.23
Other Current Assets	
Investments	
DEQ	
SSgA S&P 500 Flagship Fund	119,503,854.01
VAUGHAN NELSON	64,481,216.46
Westfield Capital Management	58,965,767.52
Westwood Capital	12,328,664.49
Total DEQ	255,279,502.48
FI	
ABERDEEN	59,953,053.77
Loomis Sayles Core Plus Bond	46,315,205.62
Pacific Asset Management	22,853,438.50
Pyramis Tactical Bond (Fidelity	26,451,688.00
SSgA Bond Fund	119,289,110.79
SSGA TIPS	56,863,944.90
Total FI	331,726,441.58
IEQ	
Baillie Gifford	31,912,160.66
DFA Emerging Markets	25,614,542.89
Highclere	39,963,318.39
SSgA MSCI EAFE Fund	108,891,352.85
TT International	28,925,881.18
Total IEQ	235,307,255.97
NR	
Aether Real Assets II	2,195,681.80
Aether Real Assets III	10,040,721.38
Aether Real Assets IV	10,293,127.52
Aether Real Assets V	10,646,202.53
Total NR	33,175,733.23
PE	
57 Stars Global Opportunity	7,462,765.20
Arcmont (Bluebay)Direct Lending	1,754,007.79
Constitution	12,685,211.81
Cross Creek Capital Partners II	11,032,543.37
Cross Creek Capital Parts III	11,030,294.97
Deutsche Bank SOF III	1,824,188.70
Dover Street X	32,854,994.02
Flag V	4,651,962.19

Austin Firefighters Retirement Fund Balance Sheet As of January 31, 2024

Flag VI 6	12,502,701.00
Greenspring Global Partners V	7,530,663.02
GREENSPRING VI	13,173,289.91
Harbourvest 2013 Direct	3,673,269.92
HarbourVest Coinvestment 4	7,514,731.97
LGT C Europe Small Buyouts 3	3,090,947.88
LGT Crown Asia 2	7,867,367.98
LGT Crown Global Secondaries 2	97,161.00
LGT Crown Global VI	35,527,712.02
LGT Global Secondaries III	2,017,163.79
Partners Group EM 2015	8,390,130.36
Partners Group US Dist PE 2009	185,561.04
Private Advisors Co-Inv FundIII	1,552,604.01
Private Equity Investors V	1,234,822.02
SVB Strategic Investors Fund IX	14,583,153.63
Total PE	202,237,247.60
RE	
Clarion Partners	68,635,043.01
Partners Group Distressed '09	48,638.99
Partners Group RE Second 2011	563,039.17
Partners Group RE Second 2017	12,445,478.20
Portfolio Advisors Fund 5	5,989,625.19
Total RE	87,681,824.56
Total Investments	1,145,408,005.42
Total Other Current Assets	1,145,408,005.42
Total Current Assets	1,152,559,903.65
TOTAL ASSETS	1,152,559,903.65
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Other Current Liabilities	
Payroll Liabilities	8,767.57
Operating Admin Liabilities	8,491.92
Investment Liabilities	302,502.22
Professional Liabilities	17,557.48
Total Other Current Liabilities	337,319.19
Total Current Liabilities	337,319.19
Long Term Liabilities	
DROP (Guaranteed 5%)	156,891,526.29
% of Total Assets	13.61%
Total Long Term Liabilities	156,891,526.29
Total Liabilities	157,228,845.48

Austin Firefighters Relief & Retirement Fund General Ledger

January 2024

Date	Name	Memo/Description	Split	Amount	Balance
unflower Ba	nk - Benefits				
Beginning B	alance				127,038.76
01/05/2024	City of Austin	City and Member's Contributions	-Split-	1,814,848.54	1,941,887.30
01/09/2024	Austin FF Relief & Retirement Fund	Transfer to State Street	State Street T009-Cash Agg	-1,700,000.00	241,887.30
01/09/2024	Sunflower Bank	Wire Fee	Operational Cost:Bank Service Charges	-22.00	241,865.30
01/19/2024	City of Austin	City and Member's Contributions	-Split-	1,809,579.59	2,051,444.89
01/23/2024	Austin FF Relief & Retirement Fund	Transfer from Benefits to Operations	Sunflower Bank - Operating	-100,000.00	1,951,444.89
01/23/2024	Austin FF Relief & Retirement Fund	Transfer to State Street	State Street T009-Cash Agg	-1,700,000.00	251,444.89
01/23/2024	Sunflower Bank	Wire Fee	Operational Cost:Bank Service Charges	-22.00	251,422.89
01/30/2024	Austin FF Relief & Retirement Fund	Transfer from Benefits to Operations	Sunflower Bank - Operating	-150,000.00	101,422.89
01/31/2024	Sunflower Bank	Interest Jan 2024	Interest:Interest - Sunflower Bank	489.56	101,912.45
otal for Sunf	flower Bank - Benefits			-\$ 25,126.31	101,912.45
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Sunflower Bank - Operating

Beginning Balance 50,155.30

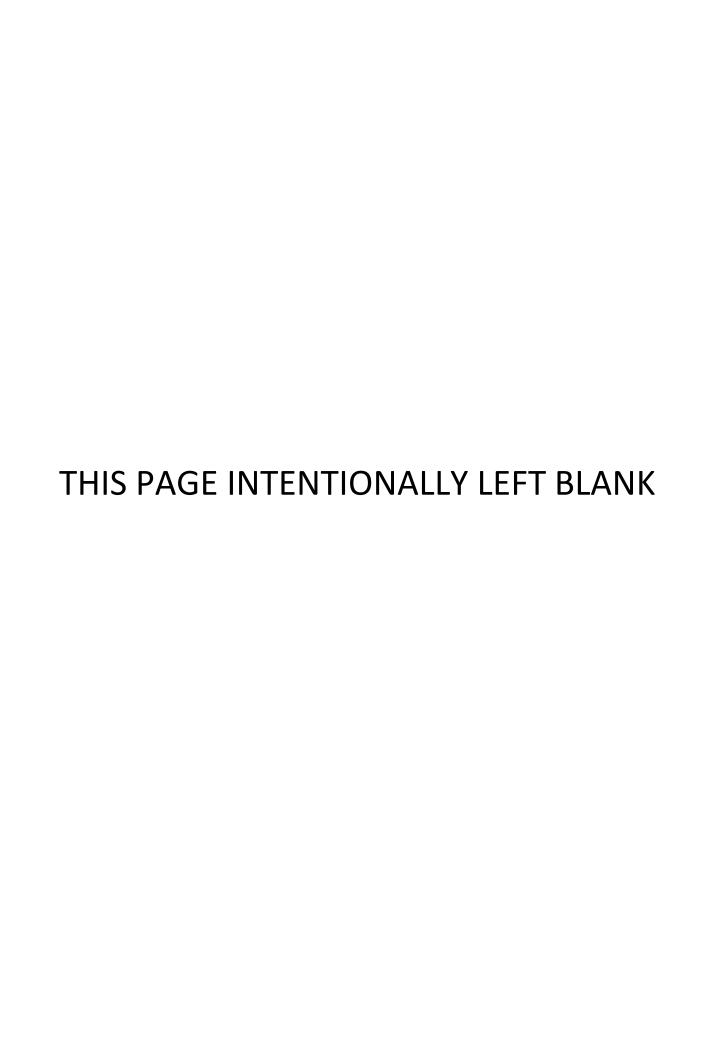
01/05/2024	Jani-King of Austin	Jan 2024	Office Expenses:Office Maintenance	-257.00	49,898.30
01/08/2024	American Express	Amex Jan 2024	Operational Cost:Association Fees	-9,010.00	40,888.30
01/09/2024	Austin FF Relief & Retirement Fund	Union Reimbursement for Legislative Consulting	Professional Fees:Legislative Consulting	2,000.00	42,888.30
01/10/2024	Austin FF Relief & Retirement Fund	Deposit: Virtu Americas	Commission Recapture	954.03	43,842.33
01/10/2024	Sunflower Bank	Service Charge Dec 2023	Operational Cost:Bank Service Charges	-289.91	43,552.42
01/11/2024	Parkstone Office Condominium Com	_n Jan-24	-Split-	-816.23	42,736.19
01/11/2024	Schlueter Group	Legislative Consulting	Professional Fees:Legislative Consulting	-4,000.00	38,736.19
01/12/2024	United States Treasury	United States Treasury Refund	Payroll Expenses:Payroll Taxes:941 FUTA Tax	50.29	38,786.48
01/22/2024	Shira K. Herbert	IRS Meeting SA	Travel Expense:Lodging/Transportation/Per Diem	-92.19	38,694.29
01/22/2024	Perry Office Supplies	Office Supplies	Office Expenses:Office Supplies	-14.31	38,679.98
01/22/2024	Provaliant	Dec 2023	Operational Cost:Project Management Services	-1,434.38	37,245.60
01/23/2024	Austin FF Relief & Retirement Fund	L. Adney Health Insurance Payment Jan 2024	Payroll Expenses:Health Insurance - Retired Staff	218.90	37,464.50

01/23/2024	Austin FF Relief & Retirement Fund	Transfer From Benefits to Operations	Sunflower Bank - Benefits	100,000.00	137,464.50
01/29/2024	Payroll	Created by Payroll Service	Direct Deposit Liabilities	-43,337.41	94,127.09
01/29/2024	City of Austin	Jan-24	Payroll Expenses:Health Insurance - Staff	-11,569.22	82,557.87
01/29/2024	TASC (FSA Health Care)	FSA Jan 2024	Payroll Expenses:Health Insurance - Staff	-200.00	82,357.87
01/29/2024	Jani-King of Austin	Feb 2024	Office Expenses:Office Maintenance	-257.00	82,100.87
01/29/2024	Jackson Walker	Dec-23	Professional Fees:Legal Fees:Board Meeting	-1,500.00	80,600.87
01/29/2024	City of Austin	Jan-24	Payroll Expenses:Health Insurance - Retired Staff	-478.30	80,122.57
01/30/2024	Austin FF Relief & Retirement Fund	L. Adney Reimbursement Payment	Payroll Expenses:Health Insurance - Retired Staff	125.00	80,247.57
01/30/2024	Austin FF Relief & Retirement Fund	Transfer From Benefits to Operations	Sunflower Bank - Benefits	150,000.00	230,247.57
01/31/2024	Fidelity	SEP Jan 2024	Payroll Expenses:SEP Contribution	-13,729.17	216,518.40
01/31/2024	Cheiron	Actuarial Cost Analysis	Professional Fees:Actuarial Fees:Pension Funding R	-10,250.00	206,268.40
01/31/2024	Loomis Sayles Co.	Q4	Fees:Investment Management Fees	-32,617.17	173,651.23
01/31/2024	Payroll	Payroll Services from 01/01/2024-01/31/2024	Payroll Liabilities:Federal Taxes (941/943/944)	-15,364.05	158,287.18
01/31/2024	Fidelity Institutional Asset Mgmt	Q4	Fees:Investment Management Fees	-20,330.94	137,956.24
01/31/2024	Jackson Walker	Dec 2023	Professional Fees:Legal Fees:Administrative	-9,000.00	128,956.24
01/31/2024	American Express	Amex Jan 2024	-Split-	-1,618.75	127,337.49
01/31/2024	Westwood Holdings Group	Q4	Fees:Investment Management Fees	-34,351.61	92,985.88
01/31/2024	Aberdeen Asset Mgmt.	Q4	Fees:Investment Management Fees	-64,339.23	28,646.65
01/31/2024	Meketa Investments	Dec 2023	Fees:Financial Consulting Fee	-17,557.48	11,089.17
	January Barels Organistics			¢ 20.066.42	

Total for Sunflower Bank - Operating

-\$ 39,066.13

11,089.17





Road Map of Items for Board Meetings

February 2024 Board Meeting

- Meketa 4Q23 Investment Report
 - o 2024 Asset Study
 - o Passive Investment Framework review and update
 - Updates on proposed changes to the Investment Policy Statement (IPS) and Operating Procedures, including addition of passive framework justification and updates to the policy benchmark
- Actuarial Experience Study update
- Personnel Policy second reading

March 2024 Board Meeting

- Actuarial Experience Study update
- Annual Ethics and Governance Policy Review
- Personnel Policy third reading and approval
- Discussion regarding retired Fund staff health insurance benefits
- Funding Soundness Restoration Plan (FSRP) update
- Fund Rules review

April 2024 Board Meeting

- Investment Practices and Performance Evaluation (IPPE) Update
- Funding Soundness Restoration Plan (FSRP) Update
- Update on development of Administrative Policies and Procedures, including internal controls
- Pension Administration System (PAS) software update
- Actuarial Experience Study update
- Disability applicant review

May 2024 Board Meeting

- Meketa 1Q24 Report
- Investment Practices and Performance Evaluation (IPPE) Update
- Operating Procedures Review
- Board approval of Actuarial Experience Study

June 2024 Board Meeting

- Preliminary results of the 2023 Actuarial Valuation
- Pension Administration System (PAS) implementation update
- Retirement Seminar update
- Funding Soundness Restoration Plan (FSRP) update

July 2024 Board Meeting

- 2023 Actuarial Valuation
- 2023 Financial Audit Report
- 2023 Annual Report
- Pension Review Board Report Submissions

August 2024 Board Meeting

- Meketa 2Q24 Investment Report
- Meketa 2023 Fee Review
- Summer Newsletter
- Pension Administration System (PAS) implementation update

September 2024 Board Meeting

- Board Trustee Election update
- Priorities for 2025 Legislative Session

October 2024 Board Meeting

Priorities for 2025 Legislative Session

November 2024 Board Meeting

- Meketa 3Q24 Investment Report
- Discussion and Consideration of 2025 COLA
- Update on Trustee Election and possible election certification

December 2024 Board Meeting

- End-of-year Budget Report
- 2024 Board Meeting Dates
- Pension Administration System (PAS) implementation update
- ED Evaluation
- Consideration and approval of 2025 Budget