






































May 2023 IC Meeting





Schedule	Friday, May 19, 2023 10:00 AM — 2:00 PM CDT
Venue	6850 Austin Center Blvd., Suite 320, Austin, TX 78731
Organizer	Sarah McCleary

Agenda

10:00 AM	1. Call roll of Committee members	1
	Presented by Committee Chair Liu	
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10:05 AM	2. Review order of business and establish meeting objectives	3
	Presented by Committee Chair Liu	
	 02A Item #2 Summary.docx	4
	 02B Agenda with time frames.pdf	5
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10:10 AM	3. Receive public comments	6
	Presented by Committee Chair Liu	
	 Item #3 Summary.docx	7
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10:15 AM	4. Consider approval of the April 21, 2023 Investment Committee minutes	8
	Presented by Committee Chair Liu	
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10:20 AM	5. Review investment performance including strategy, compliance, and delegation of authority Presented by David Stafford and RVK	13
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10:50 AM	6. Discuss and consider Investment Risk Framework Process Presented by David Stafford	32
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	 06E Manager Strategy 2023-Q1 CONFIDENTIAL.docx	41
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11:20 AM	7. Receive educational presentation on Functionally Focused Portfolios Presented by David Stafford	42
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11:50 AM	8. Discuss and consider investment implementation including Premier List for Fixed Income and Cash and Equivalents Presented by David Stafford, Ty Sorrel and RVK	70
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12:20 PM	9. Receive educational presentation on Private Credit Presented by RVK and Ty Sorrel	104
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	 9D Evaluation Form.docx	149
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1:20 PM	10. Discuss and consider Investment Consultant annual review Presented by David Kushner	150
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	 10B Staff Review of RVK 2023.docx	153
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1:35 PM	11. Discuss and consider consultant selection for 2023 PRB Investment Practices and Performance Evaluation report Presented by Christopher Hanson and David Kushner	160
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1:55 PM	12. Receive key meeting takeaways and call for future agenda items Presented by Committee Chair Liu	172
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1. Call roll of Committee members

Presented by Committee Chair Liu



**COMMITTEE MEETING
Agenda Item Information Sheet**

**AGENDA ITEM 1:
Call roll of Committee members**

AGENDA ITEM OBJECTIVE

The objective of the agenda item is to determine for the record which Trustees are present at the start of the meeting.

Each Trustee should respond to the roll call, and it will be noted for the minutes which Trustees are present in person and which Trustees have joined via video conference.

2. Review order of business and establish meeting objectives

Presented by Committee Chair Liu



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 2:

Review order of business and establish meeting objectives

AGENDA ITEM OBJECTIVE

This agenda item provides Trustees the opportunity to review the order of business and to express a desire to take an agenda item out of order, and to discuss the key objectives of the meeting. The time frames on the agenda are for informational purposes only.

RELEVANCE TO STRATEGIC PLAN

This agenda item meets **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management**. It is an industry best practice to establish meeting objectives and review them at the outset of each meeting.

MEETING OBJECTIVES

1. The Committee will review reports on investment performance including strategy, compliance, and delegation of authority.
2. The Committee will review the Investment Risk Framework.
3. The Committee will discuss and consider the Premier Lists for Fixed Income and Cash & Equivalents with potential recommendations to the Board.
4. The Committee will receive education on Private Credit focusing on types of strategies and implementation options.
5. The Committee will receive an educational presentation on Functionally Focused Portfolios.
6. In its oversight capacity, the Committee will perform its annual review of the Investment Consultant.
7. The Committee will discuss and consider consultant options for the PRB Investment Practices and Performance Evaluation report with a possible recommendation to the Board.

ATTACHMENT

1. Proposed timeline of agenda items with potential time frames

Agenda Timeframes

May 19, 2023

Committee:
Investment Committee

Agenda Number	Agenda Item	Duration	Start	End
1	Call roll of Committee members – Committee Chair Liu	0:05	10:00 AM	10:05 AM
2	Review order of business and establish meeting objectives – Committee Chair Liu	0:05	10:05 AM	10:10 AM
3	Receive public comments – Committee Chair Liu	0:05	10:10 AM	10:15 AM
4	Consider approval of the April 21, 2023 Investment Committee minutes – Committee Chair Liu	0:05	10:15 AM	10:20 AM
5	Review investment performance including strategy, compliance, and delegation of authority – David Stafford and RVK	0:30	10:20 AM	10:50 AM
6	Discuss and consider Investment Risk Framework Process – David Stafford	0:30	10:50 AM	11:20 AM
7	Receive educational presentation on Functionally Focused Portfolios – David Stafford	0:30	11:20 AM	11:50 AM
8	Discuss and consider investment implementation including Premier List for Fixed Income and Cash and Equivalents – David Stafford, Ty Sorrel, and RVK	0:30	11:50 AM	12:20 PM
9	Receive educational presentation on Private Credit – RVK and Ty Sorrel	1:00	12:20 PM	1:20 PM
10	Discuss and consider Investment Consultant annual review – David Kushner	0:15	1:20 PM	1:35 PM
11	Discuss and consider consultant selection for 2023 PRB Investment Practices and Performance Evaluation report – Christopher Hanson and David Kushner	0:20	1:35 PM	1:55 PM
12	Review key meeting takeaways and call for future agenda items – Committee Chair Liu	0:05	1:55 PM	2:00 PM
		4 Hr & 0 Min		

3. Receive public comments

Presented by Committee Chair Liu



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 3: Receive public comments

AGENDA ITEM OBJECTIVE

This standing agenda item allows System members and members of the public the opportunity to provide comments to the Board.

RELEVANCE TO STRATEGIC PLAN/CORE COMPETENCIES

This agenda item meets the core competency established in the **COAERS Strategic Plan** "*Transparency: Complying with open meeting and public information laws to ensure the decision-making process is clear to members and the public.*"

The Chair will recognize any person who wishes to comment for up to three minutes per person.

4. Consider approval of the April 21, 2023
Investment Committee minutes
Presented by Committee Chair Liu



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 4:

Consider approval of the April 21, 2023 Investment Committee minutes

AGENDA ITEM OBJECTIVE

This standing agenda item seeks approval of the minutes from the prior quarterly Investment Committee meeting. The charter for the Investment Committee requires the Committee to keep minutes of its meetings.

RELEVANCE TO STRATEGIC PLAN

This agenda item meets the core competency established in the **COAERS Strategic Plan** “*Transparency: Complying with open meeting and public information laws to ensure the decision-making process is clear to members and the public.*”

RECOMMENDATION FOR COMMITTEE ACTION

Staff recommends approval of the minutes of the April 21, 2023 Investment Committee meeting.

ATTACHMENT

1. Draft minutes of April 21, 2023 Investment Committee meeting



MINUTES

INVESTMENT COMMITTEE

Public Meeting held in person and videoconference
on April 21, 2023 at 10:00 a.m. CT

Pursuant to Texas Govt. Code 551.127
6850 Austin Center Blvd., Suite 320, Austin, TX 78731

Committee Member Present/(Absent)

Yuejiao Liu, Committee Chair
Michael Granof
Amy Hunter
Dick Lavine
Diana Thomas

Guests:

Ian Bray, RVK†
Spencer Hunter, RVK†
Paige Saenz, General Counsel
Cyril Espanol,
WithIntelligence*
Zack Cziryak, Financial
Investment News*

Other Board Trustees Present/(Absent)

Michael Benson*
(Kelly Crook)
Chris Noak
(Leslie Pool)
Anthony Ross
Brad Sinclair*

Others Present

Staff:

Christopher Hanson
David Kushner
David Stafford
Ty Sorrel
Kelly Doggett
Sarah McCleary
Mehrin Rahman
Jenni Bonds
Yun Quintanilla
Amy Kelley*
Jay Inghram

* present telephonically

† present via videoconference

1 Call roll of Committee members

Committee Chair Liu called the meeting to order at 10:01 a.m. The following Committee members were present in person: Liu, Granof, Hunter, Lavine, and Thomas. Trustees Benson and Sinclair were not on camera thus not considered present at this meeting.

2 Review order of business and establish meeting objectives

Committee Chair Liu reviewed the order of business and meeting objectives with the Committee. No changes were made to the order of business.

3 Receive public comments

Committee Chair Liu asked if any members of the public wished to speak, either now or during an agenda item. There were no comments.

4 Consider approval of the February 24, 2023 Investment Committee minutes

Committee Chair Liu asked the Committee to review the Investment Committee minutes. Mr. Dick Lavine moved approval of the February 24, 2023 Investment Committee minutes. Mr. Michael Granof seconded, and the motion passed unanimously.

5 Discuss and consider Asset Allocation Study

Mr. David Kushner discussed with the Committee the ongoing process of the Asset-Liability Study and Asset Allocation Study. Mr. Kushner explained that this agenda item was intended for discussion purposes because the Asset-Liability Study would not be completed until COAERS knew if its pension legislation had passed the 88th Texas Legislative Session. Mr. Kushner informed the Committee that this Asset Allocation Study was to be considered a starting point for information and discussion; once the Legislative Session was complete, Staff and RVK would finalize the Asset-Liability Study for final Committee review.

Mr. Ian Bray from RVK discussed the results of the preliminary Asset Allocation Study and the impact of broadening the opportunity set of investments included in the Strategic Asset Allocation. He compared the results of four efficient frontier graphs: one showing current asset class exposures, one introducing private credit, one introducing private equity, and one introducing a broad range of other asset classes. In comparing these efficient frontiers, he showed data that indicated better risk-adjusted returns could be achieved through the introduction of new asset classes, with the largest benefits coming from the addition of private credit and private equity.

6 Receive educational presentation on Functionally Focused Portfolio asset allocation approach

****This agenda item is considered in-house training provided by COAERS, an accredited sponsor of Minimum Educational Training (MET) for purposes of fulfilling the Pension Review Board's MET Program requirements.**

(For PRB purposes, this presentation began at 10:44 a.m. and ended at 11:29 a.m.)

Mr. David Stafford led an educational presentation which examined the investment decision-making process whereby the structure of the Strategic Asset Allocation could be viewed by the roles that each investment serves in the total portfolio context: growth, diversification, and liquidity. He shared data that showed the importance of asset allocation decisions and the history of the approaches used by the System. Mr. David Kushner demonstrated how asset classes can be viewed through a variety of

lenses: return, risk, access and structure, liquidity and pricing, administrative burden, and ease of oversight. Mr. Stafford discussed the expected benefits of such an approach including simplifying decision making, aligning portfolio evaluation with intended goals, and broadening the opportunity set. Mr. Stafford also laid out some of the considerations for implementing such an approach.

7 Receive educational presentation on private investments

****This agenda item is considered in-house training provided by COAERS, an accredited sponsor of Minimum Educational Training (MET) for purposes of fulfilling the Pension Review Board's MET Program requirements.**

(For PRB purposes, this presentation began at 10:30 a.m. and ended at 12:12 p.m.)

Mr. Ty Sorrel led an educational presentation on private market investments. He provided background information on COAERS historical asset allocation and showed that the Fund has very limited exposures to the private credit and private equity markets. He shared data that showed the benefits many investors expect by allocating to these types of investments including strong risk-adjusted, net of fees returns, enhanced diversification, and access to new investment opportunities. Additionally, he discussed the market dynamics in private credit and explained the various ways to implement such an allocation.

Trustees directed Staff to proceed as discussed during the May Committee meeting, as well as continuing work for the Asset Allocation Study and private equity and credit education.

8 Review key meeting takeaways and call for future agenda items

Committee Chair Liu summarized the actions taken and information discussed at the meeting and provided an opportunity to add future agenda items.

As there were no further items to address, the meeting adjourned at 12:16 p.m.

5. Review investment performance including strategy, compliance, and delegation of authority

Presented by David Stafford and RVK



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 5:

Review investment performance including strategy, compliance, and delegation of authority.

AGENDA ITEM OBJECTIVE

This agenda item is for the Committee to review the Fund's performance through March 31, 2023, as well as receive reports on the investment program related to strategy, compliance, delegation of authority, and cash management.

RELEVANCE TO STRATEGIC PLAN

This item allows the Committee to review Fund performance and assess the extent to which the System is meeting **COAERS Strategic Plan Goal 1: Achieve and maintain a funding level that ensures the long-term sustainability of the retirement system** since long-term investment performance consistent with the investment program's goals is central to long-term system sustainability. Additionally, the agenda item allows the Committee to review the approved risk parameters and compliance requirements to ensure the System is fulfilling **COAERS Strategic Plan Goal 2: Responsibly Manage the Risks of the System**.

BACKGROUND

Staff and Consultant will review the performance of the Fund and major asset classes through the most recent quarter, which is summarized below for the period ended March 31, 2023:

as of 2023-Q1

	QTD	1Y	3Y	5Y	10Y
Fund return - gross of fees	4.77	-6.61	9.61	5.08	6.31
<i>* Percentile Rank vs. all peers (1=highest)</i>	26	91	78	85	78
<i>* Percentile Rank vs. small peers (1=highest)</i>	13	93	88	86	77
Fund return - net of fees	4.71	-6.82	9.33	4.80	5.98
Policy Index - gross return	5.40	-8.50	10.70	4.86	5.89
Passive Index - gross return	5.58	-7.50	7.69	3.83	5.00
Realized risk – standard deviation	<i>N/A</i>	14.30	12.62	12.38	9.95
<i>* Percentile Rank vs. all peers (1=highest)</i>	<i>N/A</i>	<i>N/A</i>	28	26	22

* Peer Return Data is provided by RVK and is preliminary as of 5/10/2023.



**COMMITTEE MEETING
Agenda Item Information Sheet**

ATTACHMENTS

1. COAERS Investment Strategy Dashboard as of 2023-Q1
2. COAERS Investment Compliance Dashboard as of 2023-Q1
3. COAERS Staff Report on Status of Delegated Authority as of 2023-Q1
4. RVK Summary of Fund Performance for 2023-Q1
5. COAERS Investment Operations Cash Activity Detail for 2023-Q1

SUPPLEMENTAL MATERIALS PROVIDED VIA CONVENE APP

1. RVK Quarterly Investment Performance Analysis for 2023-Q1
2. RVK Capital Markets Review for 2023-Q1
3. Callan Periodic Tables of Investment Returns for March 2023

COAERS Investment Strategy Dashboard

as of 2023-Q1

COAERS

INVESTMENT GOALS

1. Achieve long-term, annualized nominal rate of return net of fees that:

- Meets or exceeds the assumed actuarial rate of return for the System

	3Y	5Y	10Y
COAERS Fund - Net Return	9.33%	4.80%	5.98%
COAERS Actuarially Assumed Rate of Return	6.75%	6.75%	6.75%
Difference	2.58%	-1.95%	-0.77%
Status	ABOVE	BELOW	BELOW

2. Achieve a long-term, risk-adjusted relative rate of return net of fees that:

- Meets or exceeds the Passive Index (i.e. the Reference Portfolio)

Passive Index: 60% MSCI ACWI Net USD Unhedged/40% Bloomberg Global Agg USD Unhedged

	3Y	5Y	10Y
COAERS Fund - Net Return	9.33%	4.80%	5.98%
COAERS Passive Index - Gross Return	7.69%	3.83%	5.00%
Difference	1.64%	0.97%	0.98%
Status	ABOVE	ABOVE	ABOVE

Incorporating fee levels for the Passive Index that are consistent with best COAERS Premier List fees (11 bps)

	3Y	5Y	10Y
COAERS Passive Index - Net Return	7.58%	3.72%	4.89%
Difference	1.75%	1.08%	1.09%
Status	ABOVE	ABOVE	ABOVE

- Meets or exceeds the Policy Index (i.e. the Strategic Benchmark)

Policy Index: Target weighted composite of the benchmarks for the major asset classes in the SAA

	3Y	5Y	10Y
COAERS Fund - Net Return	9.33%	4.80%	5.98%
COAERS Policy Index - Gross Return	10.70%	4.86%	5.89%
Difference	-1.37%	-0.06%	0.09%
Status	BELOW	BELOW	ABOVE

Assuming fee levels for the Policy Index that are consistent with best COAERS Premier List fees (11 bps)

	3Y	5Y	10Y
COAERS Policy Index - Net Return	10.59%	4.75%	5.78%
Difference	-1.26%	0.05%	0.20%
Status	BELOW	ABOVE	ABOVE

Investment returns are presented in an annualized net basis unless otherwise noted

- Ranks in the top quartile of peer comparisons consistently

*Versus **all plans** and incorporating fee levels equal to the CEM Benchmarking median of 80 bps*

	3Y	5Y	10Y
COAERS Fund - Net Return	9.33%	4.80%	5.98%
Top Quartile Net Return - All Peers *	11.20%	5.95%	6.77%
Difference	-1.87%	-1.15%	-0.79%
Status	BELOW	BELOW	BELOW

*Versus **small plans** and incorporating fee levels equal to the CEM Benchmarking median of 99 bps*

	3Y	5Y	10Y
COAERS Fund - Net Return	9.33%	4.80%	5.98%
Top Quartile Net Return - Small Peers *	11.57%	5.85%	6.60%
Difference	-2.24%	-1.05%	-0.62%
Status	BELOW	BELOW	BELOW

* Peer Return Data is provided by RVK and is preliminary as of 5/10/2023.

INVESTMENT GOALS (continued)**3. Achieve these strategic objectives via fiduciary best practices that:**

- Ensure proper diversification of asset classes and factor exposures
 - Staff and Consultant continue to assess the diversification of Fund's Strategic Asset Allocation including Functionally Focused portfolio construction concepts.
 - Staff is evaluating current portfolio hedging strategies to ensure the Fund maintains appropriate diversification against adverse regimes.
- Maintain appropriate long-term risk and return expectations
 - CMAs reviewed each year with IC/Board to assess outlook and market conditions.
 - Key Investment Manager views and asset allocation strategies are analyzed to inform outlook.
- Adapt the asset allocation to changing market conditions
 - Staff regularly evaluates current market conditions via the Investment Risk Framework to guide recommendations to the IC/Board regarding changes to SAA parameters based upon current market conditions and their impact to return and risk expectations.
 - Delegated authority to implement strategy within SAA parameters approved by Board.
 - Investment Risk Framework approved by Board, regular reporting provided to IC.

RISK BUDGET

ABSOLUTE RISK (aka VOLATILITY)						
	POLICY			REALIZED		
	MIN	TARGET	MAX	3Y	5Y	10Y
COAERS Fund - Volatility	10%	-	12%	12.6%	12.4%	10.0%
Status				ABOVE	ABOVE	BELOW
	MIN	TARGET	MAX	3Y	5Y	10Y
COAERS Fund - Sharpe Ratio	-	0.50	-	0.72	0.35	0.58
Status				ABOVE	BELOW	ABOVE
RELATIVE RISK (aka TRACKING ERROR)						
	POLICY			REALIZED		
	MIN	NEUTRAL	MAX	3Y	5Y	10Y
COAERS Fund - Tracking Error	-	150	300	182	183	178
Status				WITHIN	WITHIN	WITHIN
	MIN	TARGET	MAX	3Y	5Y	10Y
COAERS Fund - Information Ratio	-	0.50	-	0.94	0.66	0.70
Status				ABOVE	ABOVE	ABOVE

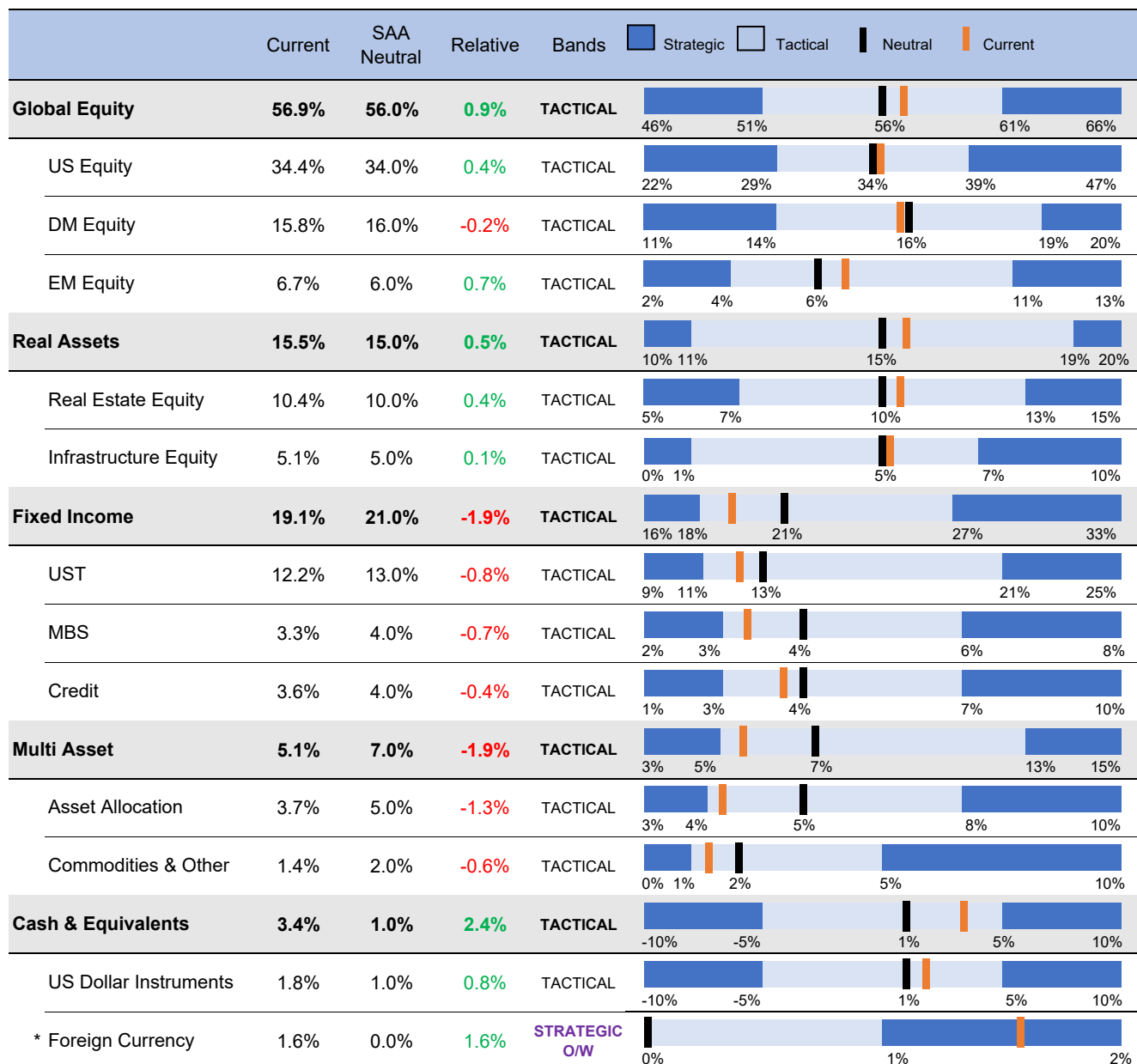
ASSET ALLOCATION

COAERS Fund Positioning

YTD Return: 4.71%

as of 2023-Q1

AUM: \$3.038 Bn



* Strategic Positioning Approved at December 15, 2022 Board Meeting

COAERS Compliance Dashboard

as of 2023-Q1



INVESTMENT STRATEGY

1. Pursue a superior investment strategy by conducting:

- Formal Asset/Liability Study every 5 years or upon major changes to contributions, benefits, or capital markets.

Asset/Liability Study:	Completion Date	As of Date	Service Provider
	February 2023	December 2022	RVK

- Formal Asset Allocation Study every 3 years.

Strategic Asset Allocation Study:	Completion Date	As of Date	Service Provider
	April 2023	December 2022	RVK

- Review of Strategic Asset Allocation parameters at least every 1 year.

Strategic Asset Allocation Review:	Completion Date	As of Date
	February 2023	December 2022

- Review of IPS and IIP at least annually or upon major changes in capital markets or industry practices.

	Last Review Date	Last Revision Date
Investment Policy Statement:	March 30, 2023	March 30, 2023
Investment Implementation Policy:	March 30, 2023	March 30, 2023

ASSET DIVERSIFICATION

2. Maintain proper diversification of assets by:

- Reviewing investment concentration levels in any single public corporation.

Individual Holding Concentration Limits:	Company Name	Level	Status
3% of the Fund in the securities of any one company:	EQUINIX INC	0.5%	OK
5% of the Fund of any class of voting security of any one company:	EQUINIX INC	0.5%	OK

- Reviewing investment concentration levels in any single investment manager or investment vehicle.

Investment Manager Concentration Limits:	Manager/Vehicle	Level	Status
≤15% of Fund assets with any active manager:	Newton IM	8.3%	OK
≤30% of Fund assets with any passive manager:	Agincourt	12.4%	OK
≤20% of firm assets for any manager:	Agincourt	4.9%	OK
≤20% of fund/vehicle assets unless a seed investment:	LGIMA MSCI USA	17.2%	OK
Board approved Seed Investments:	PGIM IG Credit	46.6%	Seed

FUND LIQUIDITY

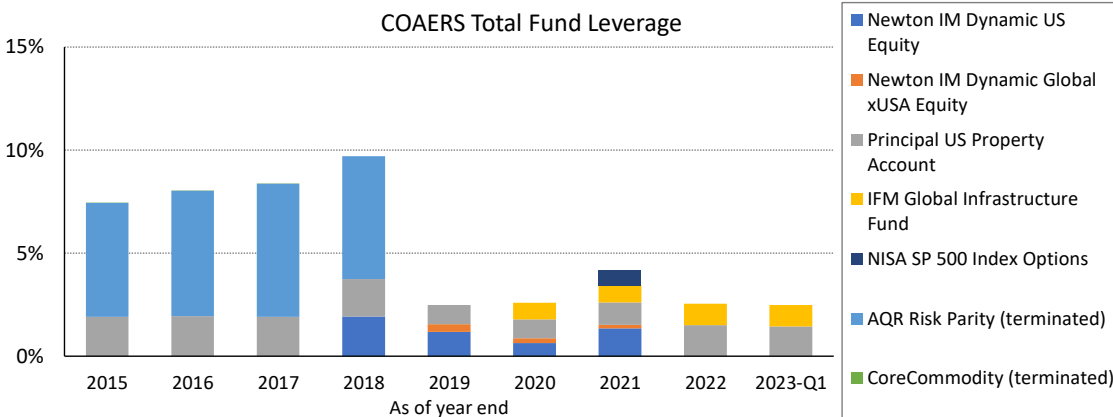
3. Ensure sufficient liquidity to meet benefit payment and other obligations by:

- Review allocation to highly liquid investments quarterly.

Liquidity:	\$ millions	% of Fund	Accounts Included
0 - 5 Days	2,275	75%	All except those listed below
5-30 Days	493	16%	1607, PGIM, DoubleLine, Fidelity, Agincourt
30+ Days	269	9%	Principal, IFM

FUND LEVERAGE

4. Monitor level of risk associated with leverage at the Fund level and within portfolios.



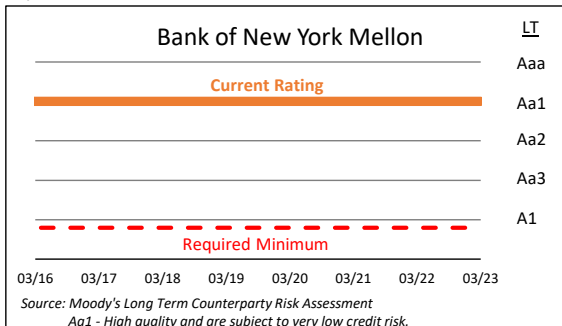
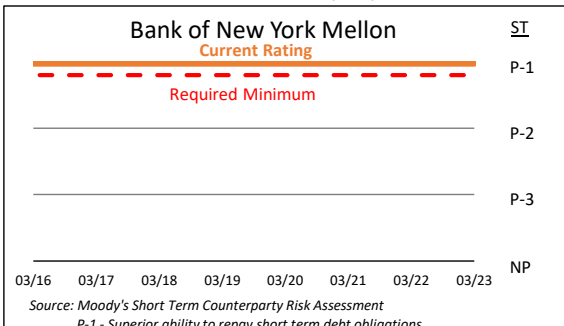
COAERS Compliance Dashboard

as of 2023-Q1

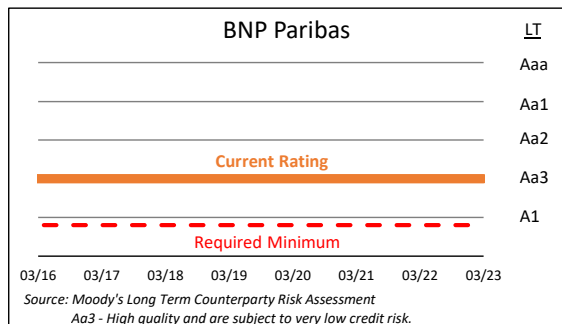
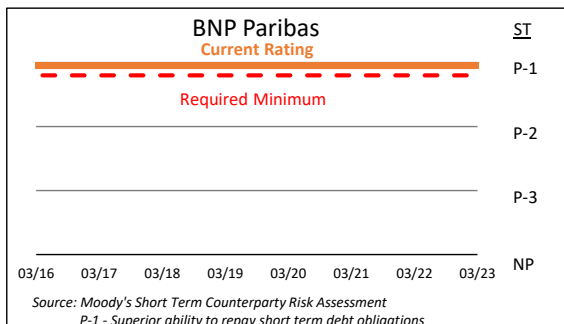
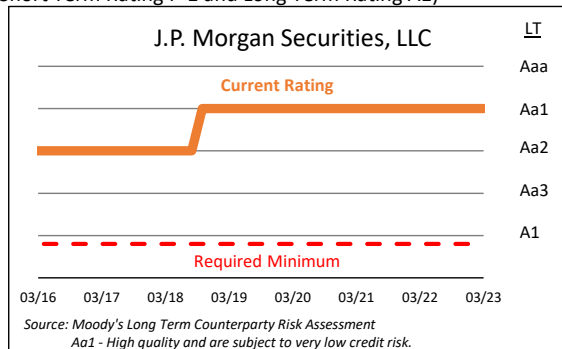
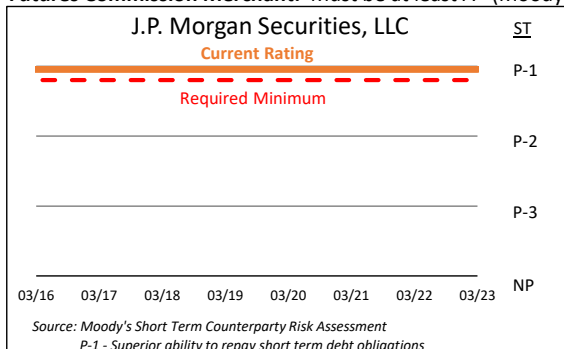


COUNTERPARTY MANAGEMENT

5. Monitor risk of loss from counterparty default and/or insolvency



Futures Commission Merchant: Must be at least A+ (Moody's Short Term Rating P-1 and Long Term Rating A1)



Status of Authority Delegated To COAERS Staff

Source	Nature of Delegated Authority	Status during 2023-Q1
IPS Section I	Executive Director may approve variances to further compliance	Unused
IPS Section I	Executive Director may update policies for administrative items	Unused
IPS Section II	Executive Director may act to protect System assets	Unused
IPS Section V	Fund positioning may be rebalanced due to market drift	Unused
IPS Section V	Fund positioning may be rebalanced for risk management	Unused
IPS Section V	Fund positioning may be rebalanced due to phased transition	Unused
IPS Section VI	Staff may move between lending and non-lending shares to manage risk	Unused
IIP Section I	Executive Director may update policies for administrative items	Unused
IIP Section IV	Staff may transition between approved Premier List managers	Unused
IIP Section V	Emergency termination of managers by Executive Director	Unused
IIP Section VIII	Staff may select Money Market Funds for cash investments.	Unused



Summary of Fund Performance

City of Austin Employees' Retirement System

Period Ended: March 31, 2023



City of Austin Employees' Retirement System Executive Summary

As of March 31, 2023

Capital Markets Review						Market Performance																																																					
<ul style="list-style-type: none"> Market price action, investor sentiment and headlines were, in large part, driven by the failure of three US banks, the most prominent being Silicon Valley Bank (SVB) which represented the second largest bank failure in US history. Following the bank failures, the Federal Open Market Committee selected to increase the federal funds rate to a target range between 4.75% - 5.00%. This represents the second straight monthly increase of 0.25% following a string of 0.50% increases. The IMF revised its global GDP growth forecast at the end of the quarter to 2.8%, a decline from its January 2023 forecast of 2.9%. 						<table border="1"> <thead> <tr> <th></th> <th>QTD</th> <th>1 Year</th> <th>3 Years</th> <th>5 Years</th> <th>10 Years</th> </tr> </thead> <tbody> <tr> <td>S&P 500 (Mkt Cap Wtd)</td> <td>7.5</td> <td>-7.7</td> <td>18.6</td> <td>11.2</td> <td>12.2</td> </tr> <tr> <td>Russell 2000</td> <td>2.7</td> <td>-11.6</td> <td>17.5</td> <td>4.7</td> <td>8.0</td> </tr> <tr> <td>MSCI EAFE (Net)</td> <td>8.5</td> <td>-1.4</td> <td>13.0</td> <td>3.5</td> <td>5.0</td> </tr> <tr> <td>MSCI Emg Mkts (Net)</td> <td>4.0</td> <td>-10.7</td> <td>7.8</td> <td>-0.9</td> <td>2.0</td> </tr> <tr> <td>Bbrg US Agg Bond</td> <td>3.0</td> <td>-4.8</td> <td>-2.8</td> <td>0.9</td> <td>1.4</td> </tr> <tr> <td>Bbrg Cmnty (TR)</td> <td>-5.4</td> <td>-12.5</td> <td>20.8</td> <td>5.4</td> <td>-1.7</td> </tr> <tr> <td>NCREIF ODCE (Net)</td> <td>-3.4</td> <td>-3.9</td> <td>7.5</td> <td>6.6</td> <td>8.5</td> </tr> </tbody> </table>							QTD	1 Year	3 Years	5 Years	10 Years	S&P 500 (Mkt Cap Wtd)	7.5	-7.7	18.6	11.2	12.2	Russell 2000	2.7	-11.6	17.5	4.7	8.0	MSCI EAFE (Net)	8.5	-1.4	13.0	3.5	5.0	MSCI Emg Mkts (Net)	4.0	-10.7	7.8	-0.9	2.0	Bbrg US Agg Bond	3.0	-4.8	-2.8	0.9	1.4	Bbrg Cmnty (TR)	-5.4	-12.5	20.8	5.4	-1.7	NCREIF ODCE (Net)	-3.4	-3.9	7.5	6.6	8.5
	QTD	1 Year	3 Years	5 Years	10 Years																																																						
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Total Fund Performance																																																											
	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018																																															
Total Fund	4.7	4.7	-6.8	9.3	4.8	6.5	6.0	-15.6	13.0	10.8	20.7	-5.9																																															
Policy Benchmark	5.4	5.4	-8.5	10.7	4.9	6.4	5.9	-17.3	14.4	10.9	21.6	-6.8																																															
Excess Return	-0.7	-0.7	1.7	-1.4	-0.1	0.1	0.1	1.7	-1.4	-0.1	-0.9	0.9																																															
Total Fund Risk Metrics																																																											
	1 Year	3 Years	5 Years	7 Years	10 Years	2022	2021	2020	2019	2018																																																	
Sharpe Ratio	-0.5	0.7	0.3	0.5	0.5	-1.2	1.9	0.6	2.3	-0.9																																																	
Standard Deviation	15.6	12.6	10.8	12.4	9.9	14.3	6.7	17.4	7.3	8.3																																																	
Tracking Error	2.3	1.8	1.8	1.7	1.8	2.1	1.2	2.0	1.0	1.8																																																	
Asset Class Performance						Performance Commentary																																																					
	QTD	CYTD	1 Year	3 Years	Since Incep	Inception Date	<ul style="list-style-type: none"> The Total Fund returned 4.7% net of fees during the quarter, underperforming the Policy Benchmark which returned 5.4%. Developed Markets Equity was the best performing asset class on an absolute basis, net of fees, returning 9.0%. Emerging Markets Equity had strong relative returns, outpacing its benchmark in Q1 by 2.0% 																																																				
Total Fund	4.7	4.7	-6.8	9.3	9.3	06/01/1982																																																					
Policy Benchmark	5.4	5.4	-8.5	10.7	N/A																																																						
Excess Return	-0.7	-0.7	1.7	-1.4	N/A																																																						
US Equity	5.4	5.4	-9.3	16.7	10.4	06/01/1988																																																					
US Equity Benchmark	7.6	7.6	-8.9	18.0	10.5																																																						
Excess Return	-2.2	-2.2	-0.4	-1.3	-0.1																																																						
Developed Markets Equity	9.0	9.0	-3.2	12.3	4.8	01/01/2008																																																					
Developed Market Equity Benchmark	8.0	8.0	-2.7	13.5	2.3																																																						
Excess Return	1.0	1.0	-0.5	-1.2	2.5																																																						
Emerging Markets Equity	6.0	6.0	-9.6	7.2	0.7	03/01/2008																																																					
Emerging Market Equity Benchmark	4.0	4.0	-10.7	7.8	1.3																																																						
Excess Return	2.0	2.0	1.1	-0.6	-0.6																																																						
Real Estate Equity	-0.2	-0.2	-10.7	9.7	6.9	09/01/2004																																																					
Real Estate Equity Benchmark	2.7	2.7	-19.2	12.1	7.8																																																						
Excess Return	-2.9	-2.9	8.5	-2.4	-0.9																																																						
Infrastructure Equity	2.9	2.9	1.5	10.9	2.1	01/01/2020																																																					
Infrastructure Equity Benchmark	3.7	3.7	-4.3	14.7	2.0																																																						
Excess Return	-0.8	-0.8	5.8	-3.8	0.1																																																						
Global Fixed Income	3.4	3.4	-6.1	-4.1	5.0	02/01/1991																																																					
Global Fixed Income Benchmark	3.0	3.0	-8.1	-3.4	4.8																																																						
Excess Return	0.4	0.4	2.0	-0.7	0.2																																																						
Asset Allocation	5.5	5.5	-5.0	6.1	6.3	05/01/2020																																																					
Multi-Asset Benchmark	5.6	5.6	-7.5	9.7	7.0																																																						
Excess Return	-0.1	-0.1	2.5	-3.6	-0.7																																																						
Commodities & Other	9.0	9.0	1.8	5.9	N/A	07/01/2017																																																					
Commodities & Other Benchmark	-5.4	-5.4	-12.5	20.8	5.9																																																						
Excess Return	14.4	14.4	14.3	-14.9	N/A																																																						
Asset Allocation vs. Target Allocation																																																											
	Market Value (\$000)	Allocation (%)	Target (%)																																																								
US Equity	1,044,705	34.4	34.0																																																								
DM Equity	481,281	15.8	16.0																																																								
EM Equity	202,093	6.7	6.0																																																								
Real Estate Equity	315,262	10.4	10.0																																																								
Infrastructure Equity	155,213	5.1	5.0																																																								
Global Fixed Income	581,489	19.1	21.0																																																								
Asset Allocation	113,159	3.7	5.0																																																								
Commodities & Other	41,347	1.4	2.0																																																								
Cash & Equivalents	103,248	3.4	1.0																																																								
Total Fund	3,037,799	100.0	100.0																																																								
Schedule of Investable Assets																																																											
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return																																																						
CYTD	2,941,251,159	-41,510,050	138,057,581	3,037,798,691	4.71																																																						

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly. Tracking Error shown is relative to the Passive Benchmark. Risk statistics shown are less meaningful for periods less than one year. Please see the addendum for custom benchmark definitions.

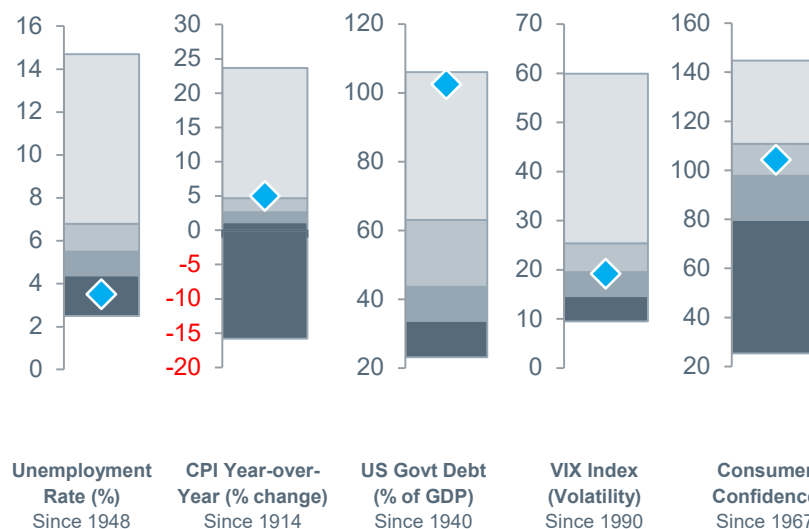


Capital Markets Review

First Quarter Economic Environment

During Q1, both defensive and risk assets generally provided positive returns, following a difficult environment in 2022 characterized by geopolitical risk and rising interest rates. Although, capital markets continued to experience bouts of volatility. Despite this volatility, broad equity market indexes finished Q1 in positive territory. The broad bond market delivered positive returns in Q1 as market participants changed expectations on future interest rate moves from pricing in rate hikes to discounting rate pauses, or in some circumstances, cuts. Internationally, moderate winter temperatures helped to ease energy price inflation in Europe, but the uncertainty around supply shortages persisted due to the ongoing war in Ukraine. The FOMC decided to increase the federal funds rate in Q1 to a target range between 4.75% - 5.00%, representing a second straight monthly increase of 0.25% after a string of 0.50% to 0.75% increases. The FOMC's actions demonstrated continued focus on combating inflation, although FOMC data indicated that most officials expect only one more rate hike in 2023. The most recent data release indicated that Headline CPI for March came in slightly below average expectations, with estimated year-over-year inflation of 5.00%. Recessionary risks remained a concern, and recent FOMC minutes indicated that members thought it was increasingly likely that the US will enter a recession later in 2023 due to banking sector stresses. The IMF revised its global GDP growth forecast at the end of the quarter to 2.80%, a decline from its January 2023 forecast of 2.90%.

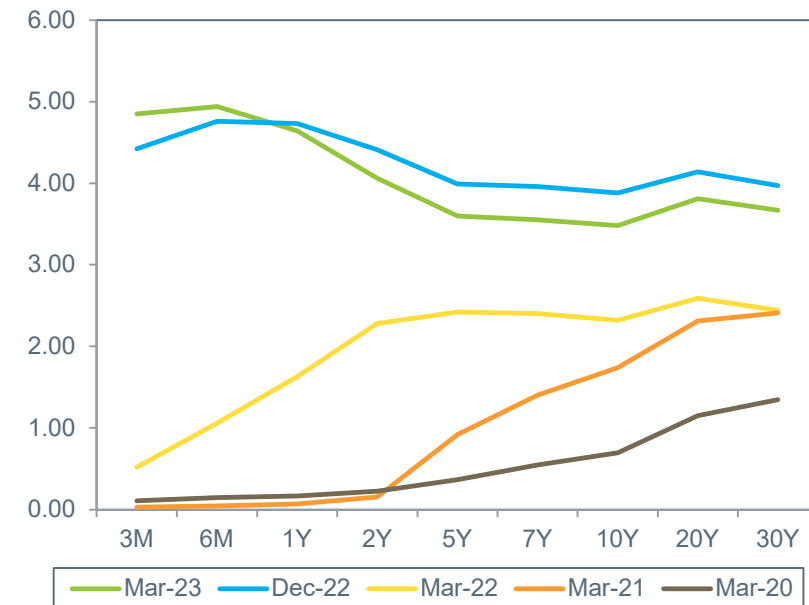
Key Economic Indicators



Economic Indicators

	Mar-23	Dec-22	Mar-22	Mar-20	20 Yr
Federal Funds Rate (%)	4.83 ▲	4.33	0.33	0.08	1.34
Breakeven Infl. - 5 Yr (%)	2.47 ▲	2.38	3.43	0.53	1.93
Breakeven Infl. - 10 Yr (%)	2.33 ▲	2.30	2.83	0.93	2.09
CPI YoY (Headline) (%)	5.0 ▼	6.5	8.5	1.5	2.5
Unemployment Rate (%)	3.5 —	3.5	3.6	4.4	6.0
Real GDP YoY (%)	1.6 ▲	0.9	3.7	0.8	2.0
PMI - Manufacturing	46.3 ▼	48.4	57.1	49.1	53.6
USD Total Wtd Idx	119.48 ▼	121.40	115.35	122.55	103.40
WTI Crude Oil per Barrel (\$)	75.7 ▼	80.3	100.3	20.5	68.4
Gold Spot per Oz (\$)	1,979 ▲	1,824	1,937	1,577	1,179

Treasury Yield Curve (%)



Market Performance (%)

	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	7.50	7.50	-7.73	11.19	12.24
Russell 2000	2.74	2.74	-11.61	4.71	8.04
MSCI EAFE (Net)	8.47	8.47	-1.38	3.52	5.00
MSCI EAFE SC (Net)	4.92	4.92	-9.83	0.87	5.86
MSCI Emg Mkts (Net)	3.96	3.96	-10.70	-0.91	2.00
Bloomberg US Agg Bond	2.96	2.96	-4.78	0.90	1.36
ICE BofAML 3 Mo US T-Bill	1.07	1.07	2.50	1.41	0.87
NCREIF ODCE (Gross)	-3.16	-3.16	-3.07	7.52	9.45
FTSE NAREIT Eq REIT (TR)	2.68	2.68	-19.19	6.02	5.97
HFRI FOF Comp	0.71	0.71	-1.94	3.10	3.24
Bloomberg Cmdty (TR)	-5.36	-5.36	-12.49	5.36	-1.72



City of Austin Employees' Retirement System

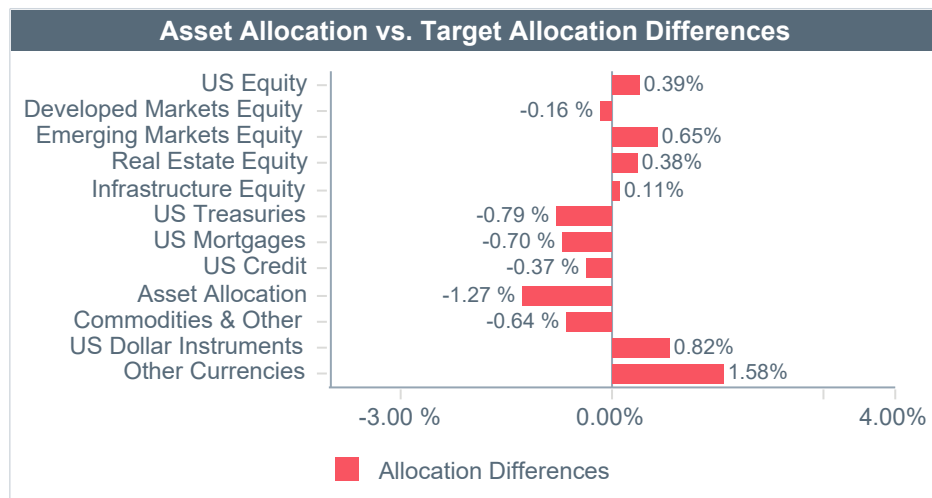
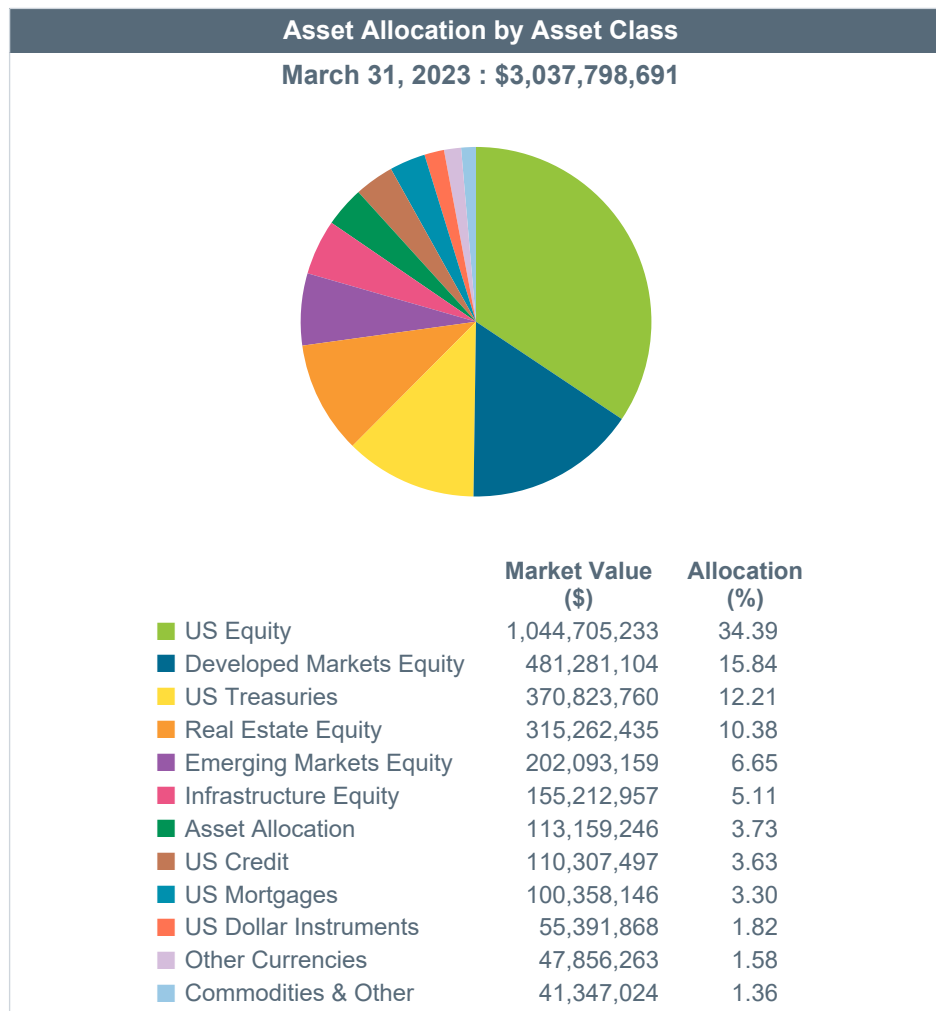
As of March 31, 2023

Composite: Total Fund

Asset Alloc. by Asset Class, Asset Alloc. vs. Target, and Schedule of Investable Assets

Schedule of Investable Assets					
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,941,251,159	-41,510,050	138,057,581	3,037,798,691	4.71
1 Year	3,341,635,687	-74,719,823	-229,117,173	3,037,798,691	-6.82
3 Years	2,456,797,738	-172,634,213	753,635,166	3,037,798,691	9.33

Asset Allocation vs. Target Allocation					
	Market Value (\$)	Allocation (%)	Neutral (%)	Min. (%)	Max. (%)
Total Fund	3,037,798,691	100.00	100.00	-	-
US Equity	1,044,705,233	34.39	34.00	29.00	39.00
Developed Markets Equity	481,281,104	15.84	16.00	13.50	18.50
Emerging Markets Equity	202,093,159	6.65	6.00	4.00	10.50
Real Estate Equity	315,262,435	10.38	10.00	7.00	13.00
Infrastructure Equity	155,212,957	5.11	5.00	1.00	7.00
US Treasuries	370,823,760	12.21	13.00	11.00	21.00
US Mortgages	100,358,146	3.30	4.00	3.00	6.00
US Credit	110,307,497	3.63	4.00	2.50	7.00
Asset Allocation	113,159,246	3.73	5.00	3.50	7.50
Commodities & Other	41,347,024	1.36	2.00	1.00	5.00
US Dollar Instruments	55,391,868	1.82	1.00	0.00	5.00
Other Currencies	47,856,263	1.58	0.00	0.00	1.00

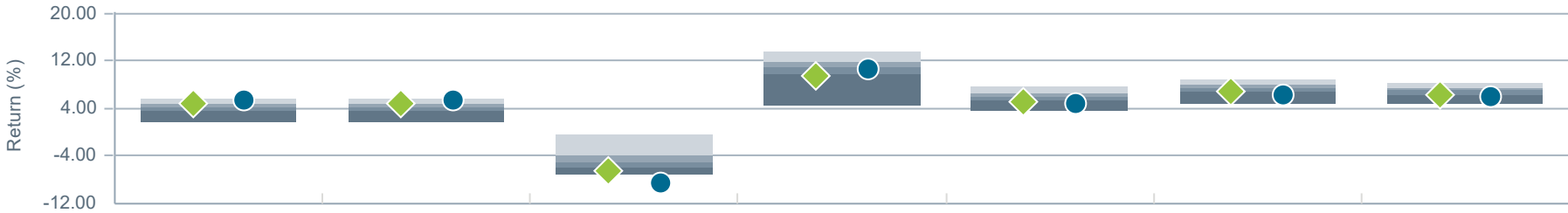


Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Total Fund market value does not include \$465,300.81 in assets remaining at Northern Trust - representing accruals, cash, tax reclaims, and some assets that were restricted from being delivered due to a liquidation or pending corporate action.



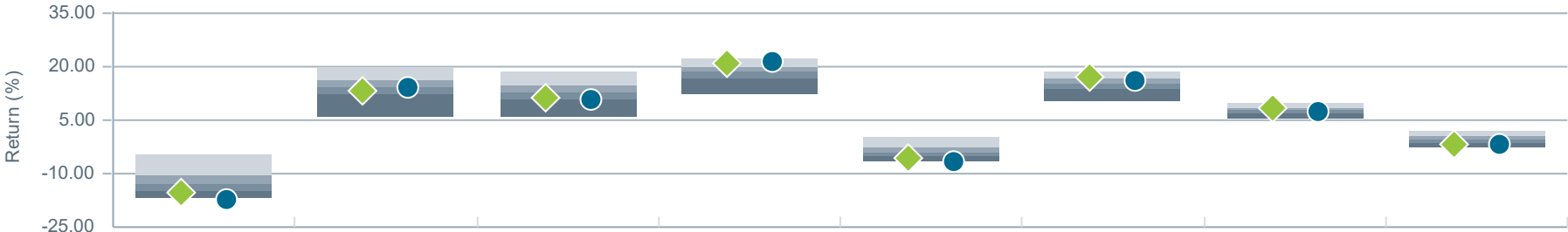
Composite: Total Fund
Benchmark: Policy Benchmark
Peer Group: All Public Plans - Total Fund

Rate of Return - Trailing



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
◆ Composite	4.77 (26)	4.77 (26)	-6.61 (91)	9.61 (78)	5.08 (85)	6.84 (76)	6.31 (78)
● Benchmark	5.40 (11)	5.40 (11)	-8.50 (99)	10.70 (57)	4.86 (88)	6.42 (88)	5.89 (88)
5th Percentile	5.82	5.82	-0.35	13.48	7.78	8.91	8.30
1st Quartile	4.77	4.77	-3.83	12.00	6.75	8.04	7.57
Median	4.17	4.17	-4.92	10.97	6.18	7.46	7.06
3rd Quartile	3.65	3.65	-5.80	9.70	5.39	6.85	6.37
95th Percentile	1.76	1.76	-7.10	4.72	3.58	4.97	4.80

Rate of Return - Calendar



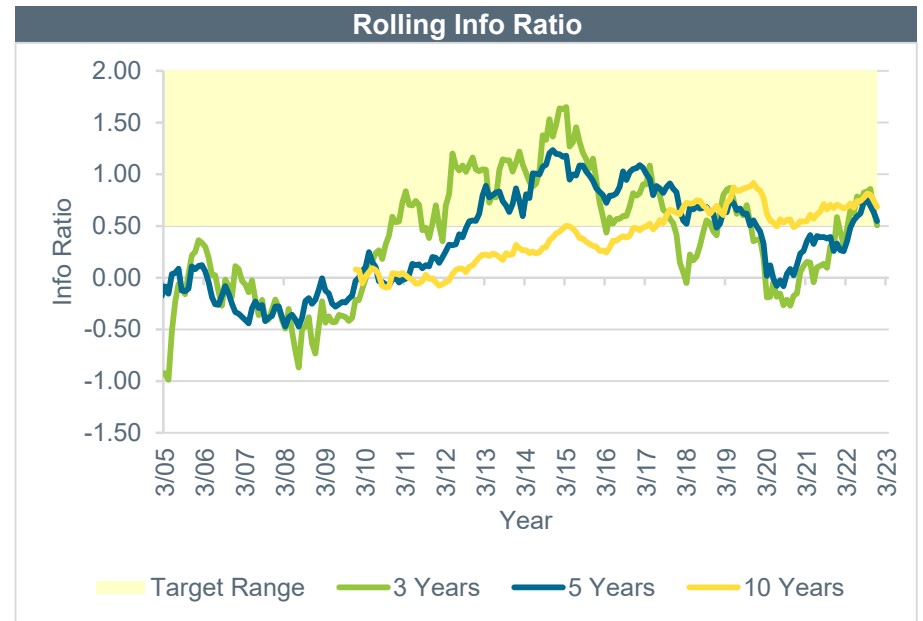
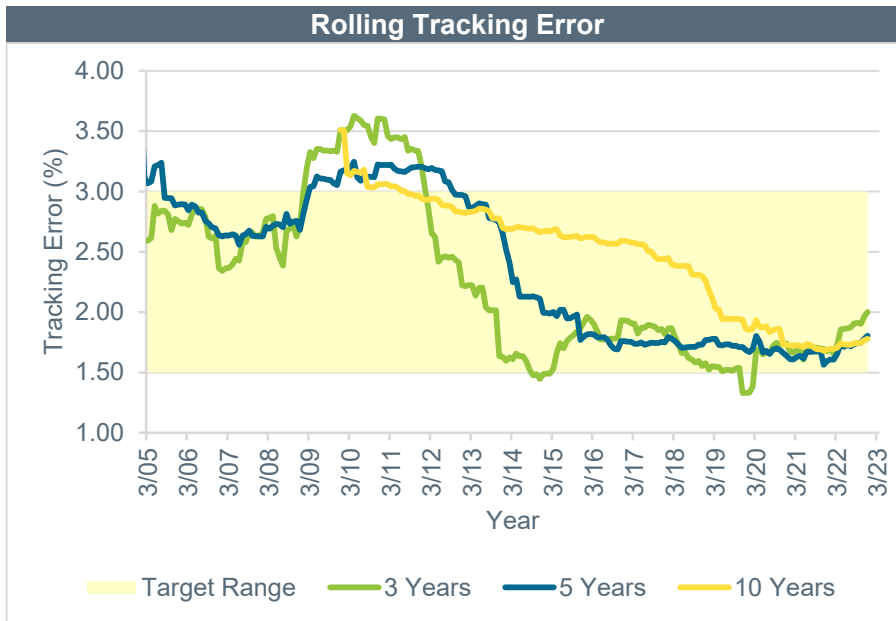
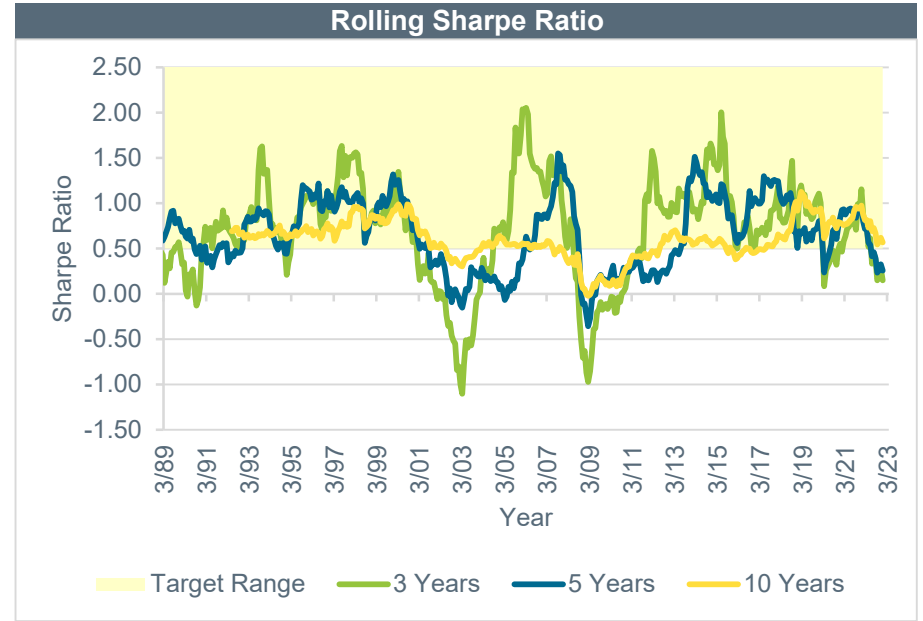
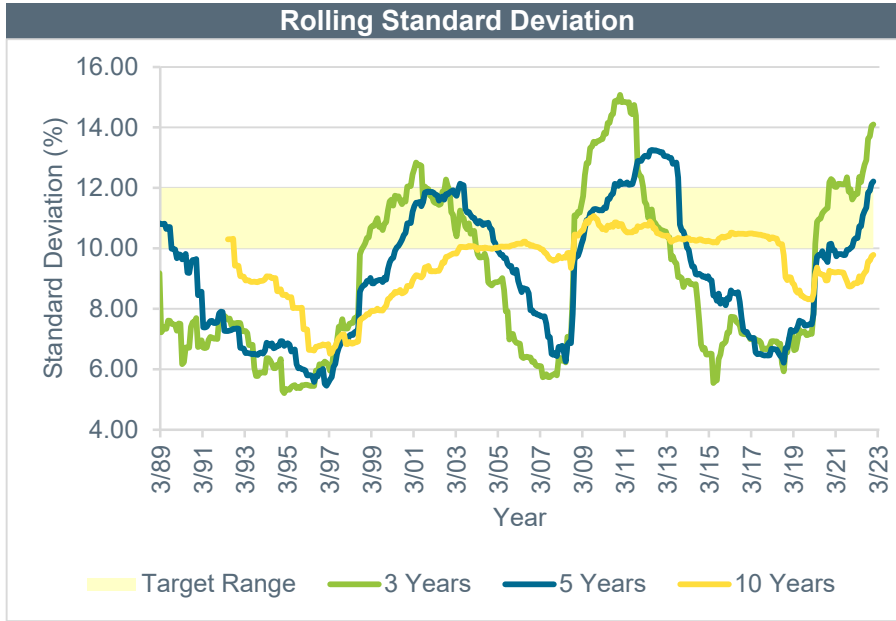
	2022	2021	2020	2019	2018	2017	2016	2015
◆ Composite	-15.40 (84)	13.32 (61)	11.07 (74)	20.97 (17)	-5.63 (86)	16.96 (17)	8.44 (27)	-1.55 (81)
● Benchmark	-17.32 (98)	14.38 (44)	10.92 (76)	21.57 (10)	-6.79 (97)	15.97 (35)	7.55 (54)	-1.92 (88)
5th Percentile	-4.59	19.52	18.43	22.21	-0.07	18.60	9.97	2.10
1st Quartile	-10.68	16.09	14.71	20.21	-2.88	16.44	8.51	0.73
Median	-12.77	14.01	12.54	18.57	-4.02	15.16	7.69	-0.10
3rd Quartile	-14.68	12.21	10.93	16.64	-5.11	13.87	6.92	-1.16
95th Percentile	-16.65	5.94	5.82	12.49	-6.65	10.13	5.28	-2.64

Performance shown is gross of fees and is annualized for periods greater than one year. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Composite: Total Fund
Rolling Risk Statistics (Net of Fees)

As of March 31, 2023



Performance shown is net of fees. Tracking Error and Info Ratio shown are relative to the Passive Benchmark.



Composite: Total Fund
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
Total Fund	3,037,798,691	100.00	4.71	4.71	-6.82	9.33	4.80	5.98	9.34	06/01/1982
Policy Benchmark			5.40	5.40	-8.50	10.70	4.86	5.89	N/A	
Excess Return			-0.69	-0.69	1.68	-1.37	-0.06	0.09	N/A	
Passive Benchmark			5.58	5.58	-7.50	7.69	3.83	5.00	N/A	
Excess Return			-0.87	-0.87	0.68	1.64	0.97	0.98	N/A	
Global Equity	1,728,079,496	56.89	6.43	6.43	-7.73	14.08	5.77	7.63	8.77	06/01/1988
Global Equity Benchmark			6.95	6.95	-7.68	15.64	6.58	7.95	N/A	
Excess Return			-0.52	-0.52	-0.05	-1.56	-0.81	-0.32	N/A	
US Equity	1,044,705,233	34.39	5.36	5.36	-9.27	16.74	8.58	10.44	10.42	06/01/1988
US Equity Benchmark			7.59	7.59	-8.93	17.95	10.47	11.74	10.49	
Excess Return			-2.23	-2.23	-0.34	-1.21	-1.89	-1.30	-0.07	
Developed Markets Equity	481,281,104	15.84	9.03	9.03	-3.19	12.32	4.32	5.77	4.81	01/01/2008
Developed Market Equity Benchmark			8.02	8.02	-2.74	13.49	3.80	4.91	2.33	
Excess Return			1.01	1.01	-0.45	-1.17	0.52	0.86	2.48	
Emerging Markets Equity	202,093,159	6.65	5.98	5.98	-9.57	7.17	-1.70	1.47	0.71	03/01/2008
Emerging Market Equity Benchmark			3.96	3.96	-10.70	7.83	-0.91	2.00	1.32	
Excess Return			2.02	2.02	1.13	-0.66	-0.79	-0.53	-0.61	
Real Assets	470,475,392	15.49	0.78	0.78	-6.97	10.00	5.84	7.15	6.16	09/01/2004
Real Assets Benchmark			3.10	3.10	-14.19	13.15	5.82	5.96	7.52	
Excess Return			-2.32	-2.32	7.22	-3.15	0.02	1.19	-1.36	
Real Estate Equity	315,262,435	10.38	-0.21	-0.21	-10.68	9.69	5.72	8.49	6.87	09/01/2004
Real Estate Equity Benchmark			2.68	2.68	-19.19	12.08	4.39	7.19	7.75	
Excess Return			-2.89	-2.89	8.51	-2.39	1.33	1.30	-0.88	
Infrastructure Equity	155,212,957	5.11	2.86	2.86	1.49	10.87	2.92	N/A	2.07	01/01/2020
Infrastructure Equity Benchmark			3.73	3.73	-4.25	14.69	4.97	5.47	2.00	
Excess Return			-0.87	-0.87	5.74	-3.82	-2.05	N/A	0.07	

Performance shown is net of fees and is annualized for periods greater than one year. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.

As of March 31, 2023

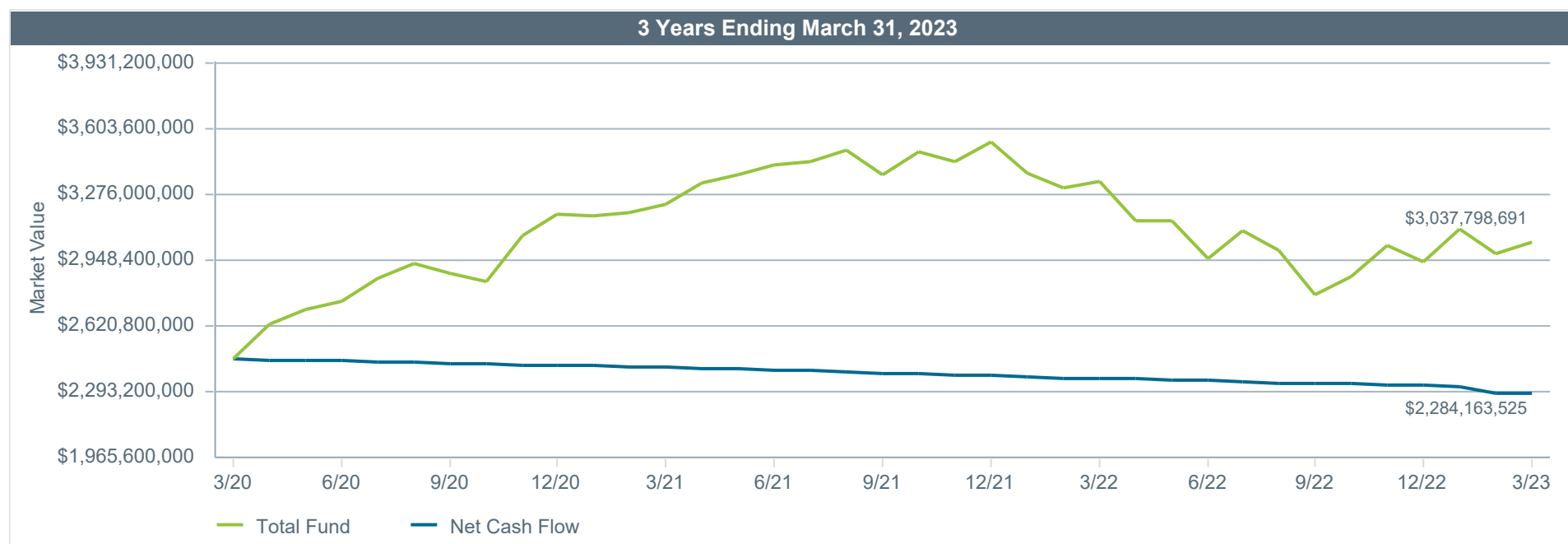
Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
Global Fixed Income	581,489,403	19.14	3.39	3.39	-6.09	-4.14	0.51	1.20	5.03	02/01/1991
Global Fixed Income Benchmark			3.01	3.01	-8.07	-3.43	-0.50	0.66	4.78	
Excess Return			0.38	0.38	1.98	-0.71	1.01	0.54	0.25	
US Treasuries	370,823,760	12.21	3.42	3.42	-6.42	-5.94	N/A	N/A	0.28	05/01/2019
US Treasuries Benchmark			3.01	3.01	-4.51	-4.20	0.74	0.90	-0.05	
Excess Return			0.41	0.41	-1.91	-1.74	N/A	N/A	0.33	
US Mortgages	100,358,146	3.30	2.77	2.77	-4.89	-3.31	N/A	N/A	-1.60	08/01/2019
US Mortgages Benchmark			2.53	2.53	-4.85	-3.31	0.20	1.00	-1.53	
Excess Return			0.24	0.24	-0.04	0.00	N/A	N/A	-0.07	
US Credit	110,307,497	3.63	3.90	3.90	-5.83	0.28	N/A	N/A	-0.17	08/01/2019
US Credit Benchmark			3.45	3.45	-5.31	-0.70	1.54	2.18	-0.50	
Excess Return			0.45	0.45	-0.52	0.98	N/A	N/A	0.33	
Multi-Asset	154,506,270	5.09	6.44	6.44	-3.28	12.09	6.08	N/A	4.93	02/01/2014
Multi-Asset Benchmark			5.58	5.58	-7.50	9.74	3.73	4.95	4.68	
Excess Return			0.86	0.86	4.22	2.35	2.35	N/A	0.25	
Asset Allocation	113,159,246	3.73	5.54	5.54	-5.02	6.13	N/A	N/A	6.31	05/01/2020
Multi-Asset Benchmark			5.58	5.58	-7.50	9.74	3.73	4.95	6.99	
Excess Return			-0.04	-0.04	2.48	-3.61	N/A	N/A	-0.68	
Commodities & Other	41,347,024	1.36	8.99	8.99	1.81	5.93	N/A	N/A	8.42	04/01/2021
Commodities & Other Benchmark			-5.36	-5.36	-12.49	20.82	5.36	-1.72	14.29	
Excess Return			14.35	14.35	14.30	-14.89	N/A	N/A	-5.87	
Cash & Equivalents	103,248,131	3.40	1.25	1.25	2.94	0.99	1.38	N/A	1.34	07/01/2017
Cash & Equivalents Benchmark			1.09	1.09	2.60	0.91	1.38	0.84	1.35	
Excess Return			0.16	0.16	0.34	0.08	0.00	N/A	-0.01	
US Dollar Instruments	55,391,868	1.82	1.31	1.31	3.02	1.01	1.40	0.83	1.10	09/01/2015
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	1.10	
Excess Return			0.22	0.22	0.42	0.10	0.02	-0.01	0.00	
Other Currencies	47,856,263	1.58	1.20	1.20	2.84	N/A	N/A	N/A	2.16	12/01/2021
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	1.97	
Excess Return			0.11	0.11	0.24	N/A	N/A	N/A	0.19	

Performance shown is net of fees and is annualized for periods greater than one year. Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.

Composite: Total Fund
Total Fund Asset Growth Summary

As of March 31, 2023



Schedule of Investable Assets - Quarter To Date

Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
QTD	2,941,251,159	41,638,067	83,148,117	-41,510,050	138,057,581	3,037,798,691

Schedule of Investable Assets - Year To Date

Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
CYTD	2,941,251,159	41,638,067	83,148,117	-41,510,050	138,057,581	3,037,798,691

Schedule of Investable Assets - 1 Year

Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
1 Year	3,341,635,687	606,278,315	680,998,137	-74,719,823	-229,117,173	3,037,798,691

Schedule of Investable Assets - 3 Years

Periods Ending	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)
3 Years	2,456,797,738	3,224,944,770	3,397,578,983	-172,634,213	753,635,166	3,037,798,691

Cash flows shown are net of fees. Net cash flow shown in the line chart represents the beginning market value, adjusted for cash flows. Contributions and withdrawals detail shown includes intra-portfolio cash flows.

Cash Activity - Investment Operations

01 January 2023 - 31 March 2023

DATE	FROM	TO	PURPOSE	AMOUNT
BENEFIT PAYMENTS				
01/25/23	AGINCOURT 1-3M US TREASURIES	COAERS CASH	WITHDRAW TO FUND BENEFITS	\$5,000,000.00
01/25/23	COAERS CASH	CHASE OPERATING ACCOUNT	TRANSFER TO FUND BENEFITS	(\$5,000,000.00)
02/23/23	AGINCOURT 1-3M US TREASURIES	COAERS CASH	WITHDRAW TO FUND BENEFITS	\$6,500,000.00
02/23/23	COAERS CASH	CHASE OPERATING ACCOUNT	TRANSFER TO FUND BENEFITS	(\$6,500,000.00)
02/23/23	AGINCOURT 1-3M US TREASURIES	COAERS CASH	WITHDRAW TO FUND BUILDING	\$30,000,000.00
02/23/23	COAERS CASH	CHASE OPERATING ACCOUNT	TRANSFER TO FUND BUILDING	(\$30,000,000.00)
SUBTOTAL				\$0.00
MANAGEMENT FEES				
01/31/23	COAERS CASH	AGINCOURT 10 YR UST	MANAGEMENT FEE	(\$4,239.12)
01/31/23	AGINCOURT 1-3 YR UST	AGINCOURT 1-3 YR UST	MANAGEMENT FEE	(\$15,390.93)
01/31/23	AGINCOURT 1-3M US TB	AGINCOURT 1-3M US TB	MANAGEMENT FEE	(\$4,531.31)
01/31/23	AGINCOURT 1-5YR USTP	AGINCOURT 1-5YR USTP	MANAGEMENT FEE	(\$6,236.11)
01/31/23	AGINCOURT FTSENAREIT	AGINCOURT FTSENAREIT	MANAGEMENT FEE	(\$962.46)
01/31/23	AGINCOURT PASSIV IND	AGINCOURT PASSIV IND	MANAGEMENT FEE	(\$10,722.39)
01/31/23	HOISINGTON MACROECON	HOISINGTON MACROECON	MANAGEMENT FEE	(\$66,514.11)
01/31/23	COAERS CASH	NTAM INTL SMALL CAP	MANAGEMENT FEE	(\$5,244.42)
02/09/23	PGIM US IG CORP BOND	PGIM US IG CORP BOND	MANAGEMENT FEE	(\$61,348.77)
02/28/23	1607 CAPITAL EAFE EQ	1607 CAPITAL EAFE EQ	MANAGEMENT FEE	(\$143,007.00)
02/28/23	DOUBLELINE MBS	DOUBLELINE MBS	MANAGEMENT FEE	(\$48,340.62)
02/28/23	MELLON SCIBETA US DC	MELLON SCIBETA US DC	MANAGEMENT FEE	(\$40,526.57)
02/28/23	NEWTON DYNAMIC US EQ	NEWTON DYNAMIC US EQ	MANAGEMENT FEE	(\$184,197.58)
02/28/23	COAERS CASH	NEWTON DYNAMIC XUSEQ	MANAGEMENT FEE	(\$22,577.22)
02/28/23	COAERS CASH	NISA 10 YR UST FUTUR	MANAGEMENT FEE	(\$4,384.33)
02/28/23	NISA 30 YR UST FUTUR	NISA 30 YR UST FUTUR	MANAGEMENT FEE	(\$2,489.19)
02/28/23	NISA CASH AND CARRY	NISA CASH AND CARRY	MANAGEMENT FEE	(\$6,037.67)
02/28/23	NISA FX HEDGED EAFE	NISA FX HEDGED EAFE	MANAGEMENT FEE	(\$9,550.51)
02/28/23	NISA GOLD FUTURES	NISA GOLD FUTURES	MANAGEMENT FEE	(\$5,643.34)
02/28/23	NISA MSCI EAFE FUTUR	NISA MSCI EAFE FUTUR	MANAGEMENT FEE	(\$4,591.00)
02/28/23	NISA MSCI EM FUTURES	NISA MSCI EM FUTURES	MANAGEMENT FEE	(\$3,600.57)
02/28/23	NISA S&P 500 FUTURES	NISA S&P 500 FUTURES	MANAGEMENT FEE	(\$9,741.05)
02/28/23	NISA ST SOVEREIGNS	NISA ST SOVEREIGNS	MANAGEMENT FEE	(\$3,150.34)
02/28/23	SSGA MSCI USA EW IND	SSGA MSCI USA EW IND	MANAGEMENT FEE	(\$11,460.36)
02/28/23	COAERS CASH	SSGA MSCI USA SC IND	MANAGEMENT FEE	(\$4,789.64)
02/28/23	WALTER SCOTT EAFE EQ	WALTER SCOTT EAFE EQ	MANAGEMENT FEE	(\$185,457.93)
03/02/23	TOBAM MAXDIV USA	TOBAM MAXDIV USA	MANAGEMENT FEE	(\$70,471.08)
03/31/23	COAERS CASH	LGIMA 5 15 YR US TIP	MANAGEMENT FEE	(\$1,291.89)
03/31/23	LGIMA INFLATION PLUS	LGIMA INFLATION PLUS	MANAGEMENT FEE	(\$26,880.04)
03/31/23	COAERS CASH	LGIMA MSCI EM INDEX	MANAGEMENT FEE	(\$16,890.01)
03/31/23	COAERS CASH	LGIMA MSCI USA INDEX	MANAGEMENT FEE	(\$13,853.89)
SUBTOTAL				(\$994,121.45)
ALLOCATION CHANGES				
01/18/23	NISA 10 YR UST FUTUR	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$69,246.21
01/18/23	AGINCOURT 10 YR UST	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$956.39
01/18/23	LGIMA 5 15 YR US TIP	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$9.81
02/07/23	NISA 10 YR UST FUTUR	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$113.62
02/07/23	AGINCOURT 10 YR UST	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$1.56
03/22/23	NISA 10 YR UST FUTUR	COAERS CASH	SWEEP OF RESIDUAL BALANCES	\$0.06
SUBTOTAL				\$70,327.65
TOTAL EXTERNAL TRANSFERS				
BENEFIT PAYMENTS				(\$11,500,000.00)
BUILDING PURCHASE				(\$30,000,000.00)
MANAGEMENT FEES				(\$994,121.45)
TOTAL				(\$42,494,121.45)

6. Discuss and consider Investment Risk Framework Process

Presented by David Stafford



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 6:

Discuss and consider Investment Risk Framework Process

AGENDA ITEM OBJECTIVE

The Committee will receive a report from Staff on the Investment Risk Framework (IRF) as well as insights from the IRF related to the Fund's investment strategy.

RELEVANCE TO STRATEGIC PLAN

This item meets **COAERS Strategic Goal 2: Responsibly Manage the Risks of the System**. Maintaining appropriate risk and return expectations is critical to meeting strategic goals, and failure to do so raises the risk of large drawdowns and the risk of subpar long-term returns for the Fund.

RECOMMENDATION FOR COMMITTEE ACTION

For discussion and informational purposes only, no action required.

BACKGROUND

The Investment Policy Statement (IPS) requires Staff to develop and maintain the Investment Risk Framework (IRF) to determine when deviations from neutral policy weights are expected to be advantageous to the Fund. The IPS requires that the outputs be reported at regular meetings of the IC and more frequently if needed. The IPS empowers Staff to act upon the outputs of the IRF to rebalance the Fund to further the Board's strategic goals. Any such rebalancing is required to be (1) approved by the Executive Director, (2) reported to the Board within one business day, and (3) reviewed with the IC at its next regular meeting.

Staff will review insights from the current Investment Risk Framework (IRF) dashboard to help inform Fund positioning for the current market environment. This review will include discussion of key questions facing the Fund such as strategic positioning, expected returns, and the potential for regime changes.

ATTACHMENTS

1. Staff Investment Risk Framework Memo 2023-05-05 (CONFIDENTIAL)
2. COAERS Fund Positioning as of 2023-04-30
3. Investment Risk Framework Dashboard 2023-04-30 (CONFIDENTIAL)
4. Investment Manager Strategy Update (CONFIDENTIAL)

SUPPLEMENTAL MATERIALS PROVIDED VIA CONVENE APP

1. IRF Detailed Dashboard 2023-04-30 (CONFIDENTIAL)

ASSET ALLOCATION

COAERS Fund Positioning

As of 4/30/2023



* Strategic Positioning Approved at March 30, 2023 Board Meeting
Positioning is based on best-available custodial data as of 5/10/2023

7. Receive educational presentation on Functionally Focused Portfolios

Presented by David Stafford



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 7: Receive educational presentation on Functionally Focused Portfolios

**This agenda item is considered in-house training provided by COAERS, an accredited sponsor of Minimum Educational Training (MET) for purposes of fulfilling the Pension Review Board's MET Program requirements.

AGENDA ITEM OBJECTIVE

The Committee will receive a presentation on new ways to consider the Fund's Strategic Asset Allocation

RELEVANCE TO STRATEGIC PLAN

This agenda item is central to **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.**

RECOMMENDATION FOR COMMITTEE ACTION

At the Committee's discretion.

BACKGROUND

Setting the Fund's asset allocation parameters is the most important decision in determining total Fund risk and returns over the long term. There are several different frameworks that investors use in this decision-making process. Currently, the System uses the standard asset class definitions to set parameters for the Fund's Strategic Asset Allocation.

Staff will provide a follow up educational session reviewing the implementation of a Functionally Focused Portfolio asset allocation approach including the potential policy considerations.

ATTACHMENTS

1. Staff presentation "Implementing the Strategic Asset Allocation through a Functional Lens"
2. Evaluation form



Implementing the Strategic Asset Allocation through a Functional Lens

David Stafford

Deputy Chief Investment Officer

Determining the Fund's Asset Allocation

Staff will lead a discussion on the below key points as it relates to the process for determining the Fund's Strategic Asset Allocation through updated Asset/Liability and Asset Allocation Studies:

- 1. Using a Functionally Focused Portfolio approach to evaluate and structure the asset allocation could add **incremental flexibility in investment choice***
- 2. Expanding the investable opportunity set for the Fund is likely prudent to consider, consistent with adopted investment beliefs*
- 3. Implementing a Functionally Focused Portfolio and expanding the investable opportunity set is likely to require governance considerations for full implementation*

Key Investment Beliefs for this Discussion

Current Investment Beliefs		Total Responses					
Question	Statement	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know/NMI
2	Clear governance and decision-making structures that promote decisiveness, simplicity, efficiency, and accountability are effective and add value to the Fund.	12	4	0	0	0	0
4	Strategic asset allocation is the most critical aspect of the investment process, with the level of risk assumed by the Fund driven primarily by its allocation to equity investments.	8	6	1	0	0	1
6	Diversification across asset classes and risk factors is central to the System's investment strategy, and investments that may improve the Fund's risk/return profile will be considered.	11	4	1	0	0	0
9	Implementation should occur passively and in public markets unless a high likelihood of success on a risk-adjusted, net-of-fees basis can be expected from other approaches.	9	6	0	0	0	1

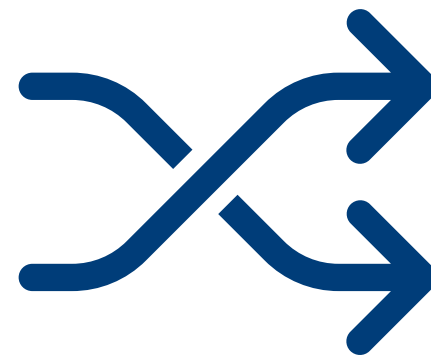
Reframing Investments for Portfolio Role

- Reframing the Strategic Asset Allocation to a “Functionally Focused Portfolio” that focuses on portfolio roles may help to improve the expected outcomes by ensuring the portfolio has the right mixture of investments in each role
- Investments can be broadly categorized by expected role in the total Fund context:

Growth: provide long term returns



Diversifiers: offset some of the risk in the Growth portfolio



Liquidity: provide for benefits payments



Applying this Concept to the Strategic Asset Allocation

- In categorizing the SAA with this approach, the Fund has the majority of its investments in Growth, a meaningful allocation to Diversifying assets, and a small Liquidity position

Functional Portfolio	Neutral Allocation
Growth	71%
Diversifying	28%
Liquidity	1%

Asset Class	Functional Portfolio	Neutral Allocation
Global Equities	Growth	56%
Real Assets	Growth	15%
Fixed Income	Diversifying	21%
Multi-Asset	Diversifying	7%
Cash & Equivalents	Liquidity	1%

Applying this Concept to Fund Implementation

Strategy	Functional Portfolio	Neutral Allocation
Global Equities	Growth	56%
REITs	Growth	5%
Listed Infrastructure	Growth	2.5%
Private Real Estate	Diversifying	5%
Private Infrastructure	Diversifying	2.5%
Fixed Income	Diversifying	21%
Multi-Asset (Equity)	Growth	3%
Multi-Asset (Fixed Income)	Diversifying	2%
Commodities	Diversifying	2%
Cash & Equivalents	Liquidity	1%

- On a “look through” basis that considers the actual implementation of the Fund, this mixture changes somewhat to 66.5% in Growth, 32.5% in Diversifying, and 1% in Liquidity

Functional Portfolio	Neutral Allocation
Growth	66.5%
Diversifying	32.5%
Liquidity	1%

Rethinking the Asset Allocation Process

- Most asset allocation approaches rely on mean variance optimization (MVO), which seeks to maximize the risk-return of the portfolio based on a set of assumptions and constraints
- This approach gives the illusion of precision through mathematical modelling of imprecise, and often incorrect, capital market assumptions

The Asset Allocation Drive-Thru													
	Min	Max	1	2	3	4	5	6	7	8	9	10	Target
Global Equity	46	66	46	46	46	46	46	46	46	46	46	51	56
COAERS Fixed Income	16	33	31	33	31	27	23	20	18	16	16	16	21
COAERS Real Assets	10	20	10	10	10	10	10	10	10	10	10	10	15
COAERS Multi-Asset	2.5	10	3	3	3	3	3	3	3	3	3	3	7
Private Credit	0	10	0	0	1	4	8	10	10	10	10	10	0
Private Equity	0	10	0	0	0	0	0	1	4	7	10	10	0
Multi-Strategy Hedge Funds	0	10	0	0	0	0	0	0	0	0	0	0	0
Managed Futures FoF	0	10	0	5	10	10	10	10	10	9	6	0	0
Commodities	0	10	0	0	0	0	0	0	0	0	0	0	0
Cash Equivalents	0	10	10	4	0	0	0	0	0	0	0	0	1
Total			100	100	100	100	100	100	100	100	100	100	100

I'd like a portfolio #7, hold the hedge funds

That'll be an expected return of 6.3% with risk of 11.2%

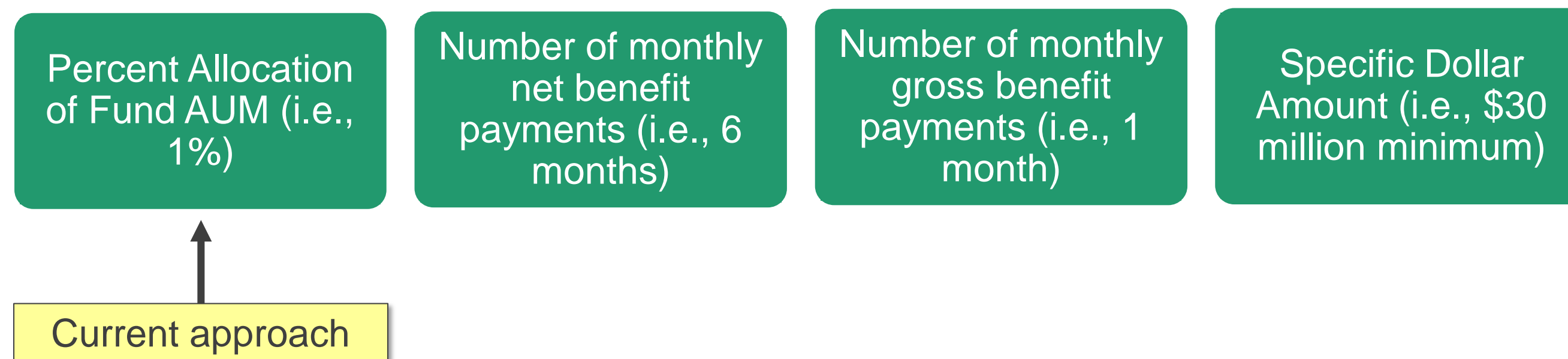


Rethinking the Asset Allocation Process

- Thinking about asset allocation through a functional portfolio approach, the decision-making process could be revamped to think about Growth, Diversification, and Liquidity in a broader context
- Applying this approach would lead to a different decision-making process to build the asset allocation such as:
 1. Determining the liquidity needs of the System to ensure it can meet its obligations
 2. Choosing the right amount of Growth investments to set the total risk of the Fund
 3. Choosing the right mix of Growth investments to maximize returns
 4. Choosing the right mix of Diversifying investments to improve risk-adjusted returns

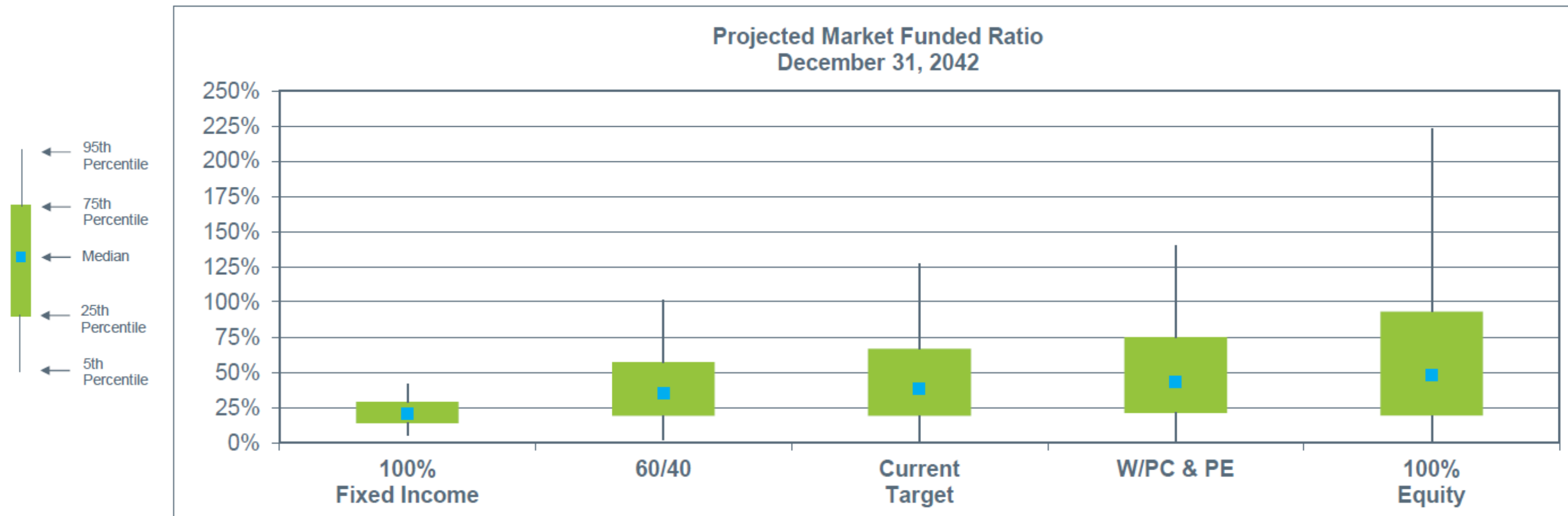
Step 1: Determine the Liquidity Needs of the System

- Given the mission of COAERS is “to provide our members their promised benefits,” ensuring that cash for benefits payments is available is critical
- The Strategic Asset allocation has a 1% neutral allocation to Cash & Equivalents, representing ~\$30 million, and average net monthly cash outflows are ~\$5 million
- In considering the liquidity needs of the System, the Board could consider a range of liquidity measurements or metrics, which could serve as the starting point for the asset allocation and also be incorporated into policy:



Step 2: Determining the Right Amount of Growth Assets

- Currently exposure to Growth assets is near 70% and these investments drive nearly all the expected risk of the total Fund
- In assessing the risk profile of the Fund considering the System's liabilities, the Board can consider increasing or decreasing total exposure to this primary source of risk (and return) for the Fund

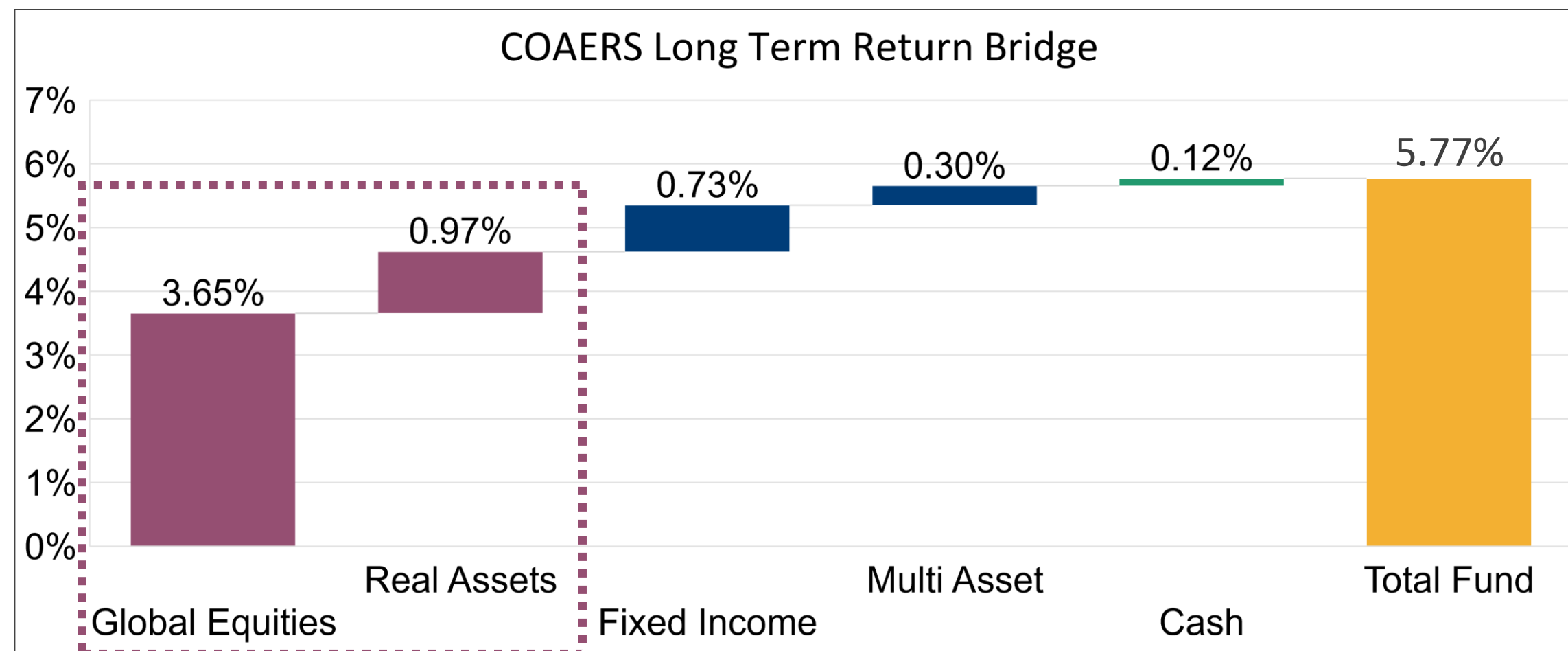


Larger allocations to Growth assets increase the dispersion of outcomes

Step 3: Considering the Mix of Growth Assets

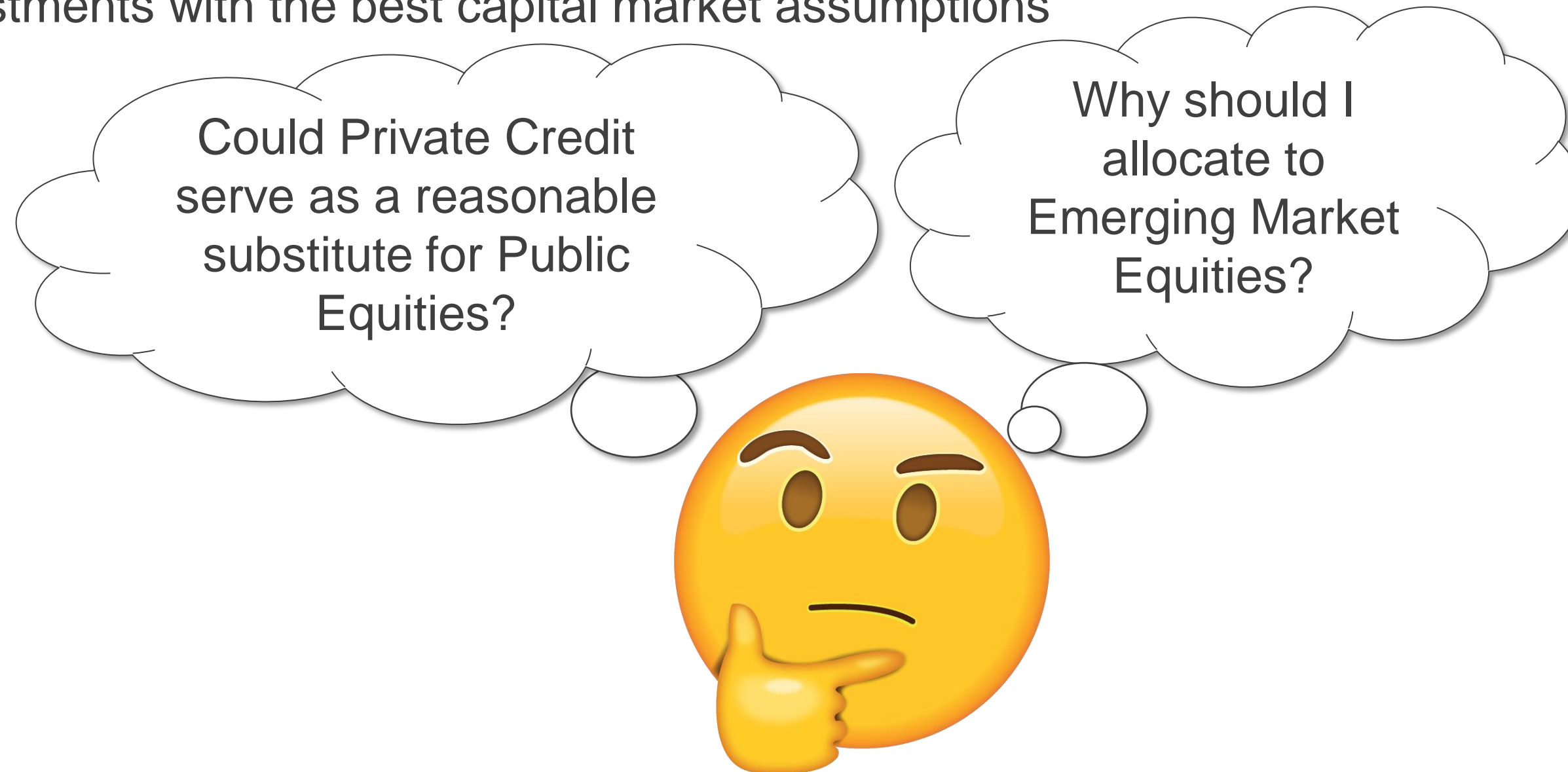
- In pursuing the Fund's primary return objective of exceeding the assumed rate of return (6.75%), current growth exposures are highly reliant on Global Equities and this approach is adopted into the System's investment beliefs
- Using Functionally Focused Portfolios would allow for a more diverse set of return drivers to be considered and to be more directly evaluated against each other

Rethinking the long-term return bridge for the Fund, over 80% of expected returns come from Growth assets



Step 3: Considering the Mix of Growth Assets (cont'd)

- A more principles based decision-making process allows for more consideration of the types of risk to assume in achieving the System's required returns beyond standard deviation
- Mean variance optimization techniques fall short in this regard as these models always allocate to the investments with the best capital market assumptions



Step 4: Consider the Mix of Diversifying Strategies

- The size and expected risk of the Growth portfolio help inform the best mix of diversifying investments
- In choosing this mix, considering expected diversification to the Growth portfolio can help inform the types of strategies that might best improve risk-adjusted returns for the Fund (i.e., interest rates, inflation, private markets, etc.)

Sample Considerations for the Mix of Diversifying Strategies

Correlations

*expected correlation to
Growth Portfolio*

“Hedginess”

*volatility of diversifying
investments*

Source of Returns

*income vs. capital
appreciation*

Regime

*Inflationary vs.
disinflationary*



Key Considerations

Investment Policy Guidelines

What are the right **ranges** for allowable Fund positioning?

What is the right **benchmark** for each functional portfolio?

What is the **best mix of investment strategies** to fulfill this portfolio role?

Illustrative Portfolio	Min.	Neutral	Max.
Growth Portfolio	60%	70%	80%
Global Public Equities	45%	55%	65%
Private Credit	0%	10%	15%
Private Equity	0%	5%	10%
Diversifying Portfolio	10%	29%	35%
Long Duration US Treasuries	10%	20%	30%
Core Real Estate and Infrastructure	5%	9%	15%
TIPS	0%		10%
Commodities	0%		10%
Liquidity Portfolio	-10%	1%	10%
US Dollar Cash	0%	1%	10%
Foreign Currency Cash	0%		5%
Short Duration Fixed Income	0%		5%

(Intended to represent a simple asset allocation for discussion purposes)

Benchmarking: Current Approach

- Benchmarking is the practice of comparing the Fund's realized performance to a mix of indices to evaluate performance relative to the opportunity set
- Currently the Fund has two benchmarks for comparative purposes:

	Passive Benchmark	Policy Benchmark
Composition	60% Stocks, 40% Bonds	Weighted average of the 5 major asset class benchmarks
Philosophy	Naïve, "do-nothing" approach to investing	Reasonable public markets benchmarks for the asset classes in which the Fund is invested
Interpretation	Outperformance shows the value of pursuing a more diversified approach and implementing an investment program	Outperformance shows the value of management activities including manager selection, style choice, Fund positioning, and strategic allocations

Primary focus for asset allocation modeling

Policy Benchmark Options: Functional Portfolio

- Under a Functionally Focused Portfolio, there are a range of benchmarking choices:

Functionally Focused Portfolio Benchmarking Approach

	Single Benchmarks	Mix of Public Benchmarks	Mix of Public/Private Benchmarks
Composition	One representative index for each functional portfolio	A weighted average of public markets indices for underlying asset strategies for each functional portfolio	A weighted average of the benchmarks for each strategy type
Benefits	Simple and easy to understand	Consistent with investment beliefs	Most closely mirrors actual implementation
Considerations	Significant tracking error	Mismatch between implementation and benchmark	Lack of investable private market benchmarks; inconsistent with investment belief preference for passive, public markets default
	Most similar to existing Passive Benchmark	Most similar to existing Policy Benchmark	Not currently adopted in policy

Sub-Strategy Structuring

- Currently, the Board selects asset and sub-asset class targets though the sub-asset classes do not necessarily roll up to the benchmark
- Under a Functional Portfolio, the Board should consider the best approach for sub-strategy structuring including the types of strategies to include and their potential ranges

Asset Class/Sub-Asset Class Policy Weights & Rebalancing Ranges						
	Asset Class	Min ^S	Min ^T	Neutral	Max ^T	Max ^S
Growth-Oriented Assets	Global Equity	46.0%	51.0%	56.0%	61.0%	66.0%
	US Equity	22.0 %	29.0 %	34.0 %	39.0 %	47.0 %
	DM Equity	11.0 %	13.5 %	16.0 %	18.5 %	20.0 %
	EM Equity	2.0 %	4.0 %	6.0 %	10.5 %	13.0 %
	Real Assets	10.0%	11.0%	15.0%	19.0%	20.0%
	Real Estate Equity	5.0%	7.0%	10.0%	13.0%	15.0%
	Infrastructure Equity	0.0%	1.0%	5.0%	7.0%	10.0%
Liquidity & Diversifying Assets	Fixed Income	16.0%	18.0%	21.0%	27.0%	33.0%
	US Treasuries	9.0%	11.0%	13.0%	21.0%	25.0%
	US Mortgages	2.0%	3.0%	4.0%	6.0%	8.0%
	US Credit	1.0%	2.5%	4.0%	7.0%	10.0%
	Multi-Asset	2.5%	4.5%	7.0%	12.5%	15.0%
	Asset Allocation	2.5%	3.5%	5.0%	7.5%	10.0%
	Commodities & Other	0.0%	1.0%	2.0%	5.0%	10.0%
	Cash & Equivalents	-10.0%	-5.0%	1.0%	5.0%	10.0%
	US Dollar instruments	-10.0%	-5.0%	1.0%	5.0%	10.0%
	Other currencies	0.0%	0.0%	0.0%	1.0%	2.0%

T: Tactical Rebalancing Range S: Strategic Rebalancing Range

The sub-asset classes for Fixed Income and Multi-Asset represent strategic deviations from the major asset class benchmark and generate tracking error

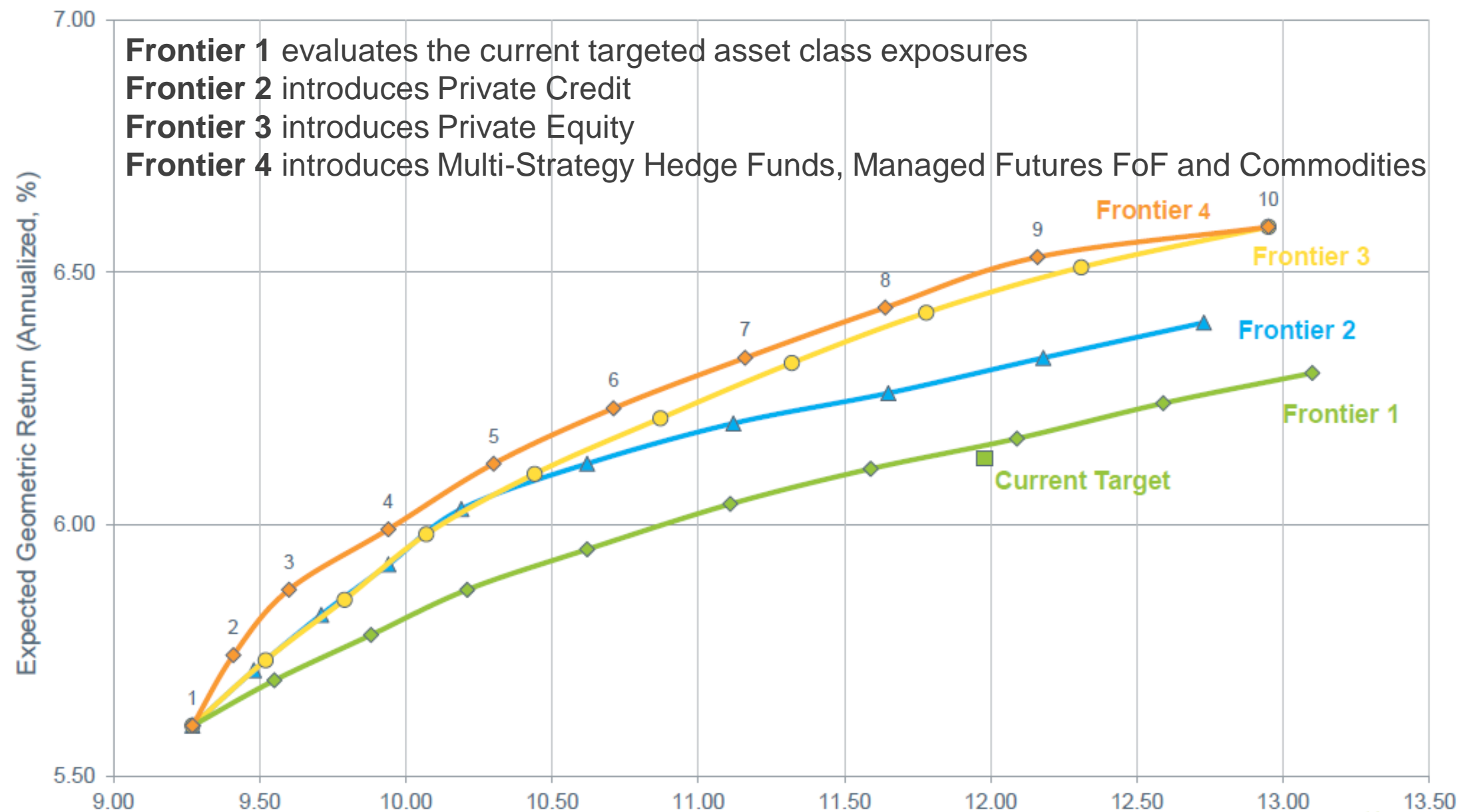
Considering the Range of Sub-Strategy Choices

Asset Class	Return (Nominal Arithmetic)	Risk (Standard Deviation)
Cash and Inflation		
US Inflation	2.50%	2.50%
Cash Equivalents	2.50%	2.00%
Fixed Income		
US Aggregate Fixed Income	4.00%	5.00%
Non-US Developed Sovereign FI (UH)	2.25%	8.50%
TIPS	4.00%	5.50%
Low Duration Fixed Income	3.25%	2.50%
Long Duration Fixed Income	5.00%	10.00%
High Yield	7.25%	10.50%
Bank Loans	6.50%	8.50%
Emerging Markets Debt (Hard)	7.50%	10.00%
Emerging Markets Debt (Local)	6.50%	11.50%
US Equity		
Large/Mid Cap US Equity	6.75%	16.00%
Small Cap US Equity	7.25%	19.00%
Broad US Equity	6.80%	16.10%
International Equity (Non-US)		
Dev'd Large/Mid Cap Int'l Equity	8.50%	17.00%
Dev'd Small Cap Int'l Equity	9.25%	20.00%
Emerging Markets Equity	11.25%	25.00%
Broad International Equity	9.35%	18.70%
Global Equity	7.85%	16.40%
Real Estate		
Core Real Estate	5.75%	12.50%
Global REITs	7.75%	21.00%
Master Limited Partnerships	8.25%	23.00%
Alternative Strategies		
Funds of Hedge Funds	5.00%	9.50%
Multi-Strategy Hedge Funds	5.75%	8.50%
GTAA	6.00%	9.00%
Private Credit	8.00%	13.00%
Senior Secured Direct Lending	7.00%	9.00%
Private Equity	10.00%	22.00%
Commodities	6.00%	17.50%
Diversified Inflation Strategies	5.90%	11.60%

- While the SAA includes a range of diversified asset classes, there are still many strategies either not included or not allowed in the IPS that may be able to add to diversification or expected returns for the Fund
- Most CMAs suggest that higher returns might be available in private markets, despite the governance and resources required to effectively implement

Preliminary Asset Allocation Study

- One of Staff's key takeaways from RVK's asset allocation work in April included the impacts of including additional types of assets in the Fund's asset allocation
- In particular, adding private credit shifted the efficient frontier upward, suggesting higher expected returns for comparable levels of risk



Increasing Exposure to Private Markets

- Staff believes strongly that including **a meaningful allocation to private credit would help improve the risk/return profile of the total Fund** and that implementing such an allocation would be feasible for COAERS
- Additionally, Staff believes that intermediate term allocations to private equity and new diversifying strategies are prudent to include in the Board's asset allocation consideration
- We believe the potential inclusion of these strategies, as well as others, are consistent with adopted investment beliefs to consider investments that will improve the risk/return profile of the Fund on a net-of-fees, risk adjusted basis





Implications for COAERS

Potential Policy Implications

- Implementing a Functionally Focused Portfolio and expanding the opportunity set for the Fund would warrant discussion and consideration of potential policy updates in the below key areas:
 - 1. Investment Goals and Beliefs**
 - *Discussion on investment program goals including use of explicit peer ranking goals*
 - *Potential improvements to investment beliefs through a focused investment beliefs survey*
 - 2. Risk Guidelines**
 - *Discuss goals-based risk guidelines for the Fund that include a broader set of risk measures*
 - *Implement risk guidelines for each functional portfolio*
 - 3. Investment Risk Framework**
 - *Discuss and consider updates required to this framework and related policy considerations*
 - 4. Permissible Investments**
 - *Consider a broader, more principles-based approach to sub-strategy selection for the Fund*
 - 5. Manager Selection through the Premier List**
 - *Discuss and consider the appropriate approach to implementing these strategies and the associated level of delegated authority*

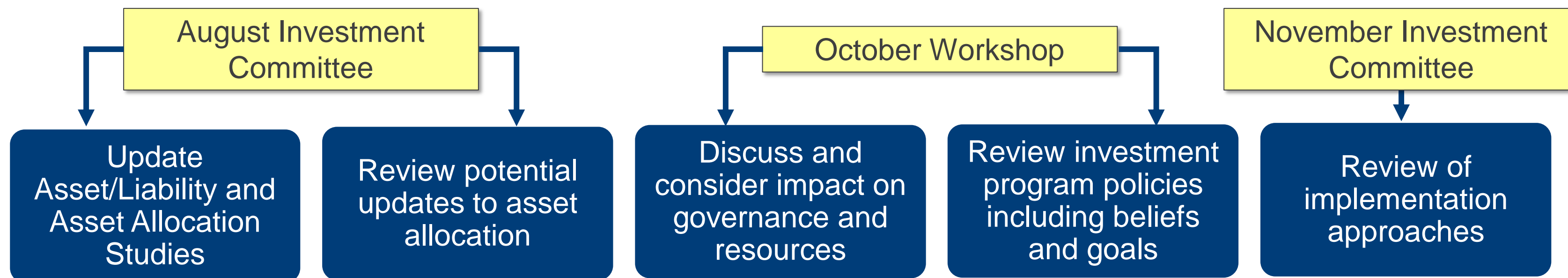
Potential Considerations for this Approach

Policy Considerations	
benchmark comparisons	goals driven outcomes
specific risk guidelines	'mosaic' of risk measures
fixed asset allocation	flexible asset allocation
public markets emphasis	private markets focus
Board driven selection of managers	Staff/Consultant driven manager selection
fewer risk management resources	robust risk management resources

 = Current
 = Potential impact of implementing Functionally Focused Portfolio

Staff Recommendation

If there is continued interest in these approaches, Staff will take direction to continue work on these topics and incorporate them into recommended policy updates for the Board to consider throughout the coming quarters:





Course Evaluation Form

Minimum Required Educational Training (MET)

Course Name: Implementing the Strategic Asset Allocation through a Functional Lens

You have completed a Minimum Educational Training (MET) program offered by the City of Austin Employees' Retirement System (COAERS), a Pension Review Board accredited sponsor. All accredited sponsors must provide participants a process for evaluating the quality of the course.

Course Objectives:

The objective of this course was to review the implementation considerations of a Functionally Focused Portfolio approach including portfolio construction and benchmarking concepts.

Evaluation:

Please take some time to provide a rating on the items below. You may also leave any additional comments that you think may be helpful for future courses.

Please provide a rating on these items	I strongly agree	I agree	I disagree	I strongly disagree
1. These course objectives were met.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The facilities and technology were satisfactory.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The instructor was effective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The program content was relevant and up-to-date.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

Thank you for your feedback.

8. Discuss and consider investment implementation including Premier List for Fixed Income and Cash and Equivalents
Presented by David Stafford, Ty Sorrel and RVK



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 8:
Discuss and consider investment implementation
including Premier List for Fixed Income and Cash and Equivalents

AGENDA ITEM OBJECTIVE

The Committee will conduct the required quarterly review of the implementation of the System's investment strategies and the status of the System's funded investment managers.

RELEVANCE TO STRATEGIC PLAN

This agenda item is part of the core competency set forth in the **COAERS Strategic Plan "Prudent Investment Management: Fulfilling fiduciary duty through monitoring performance within adopted process and stated goals."** Committee review of the implementation of the investment program ensures that Trustees monitor the performance of the portfolio.

RECOMMENDATION FOR COMMITTEE ACTION

Staff recommends that the Committee refer to the Board for approval the proposed Premier List.

BACKGROUND

The Investment Implementation Policy (IIP) requires Staff to develop and maintain a Premier List of viable managers for potential inclusion within each allocation of the Fund. The IIP also requires the Premier List for each asset class to be reviewed with the Board via the Investment Committee on an annual basis.

Staff will lead the required annual review of the current construction and composition of the Fixed Income and Cash & Equivalent allocations, including the associated Premier Lists.

ATTACHMENTS

1. Investment Implementation Update 2023-Q1 [CONFIDENTIAL]
2. Investment Implementation Dashboard [CONFIDENTIAL]
3. Investment Manager Monitoring Dashboard 2023-Q1 [CONFIDENTIAL]
4. Investment Manager Monitoring Report 2023-Q1 [CONFIDENTIAL]
5. RVK Summary of Manager Performance 2023-Q1
6. Investment Manager Fees by Quarter 2023-Q1
7. Cash & Equivalents Market & Portfolio Review 2023-Q1



**COMMITTEE MEETING
Agenda Item Information Sheet**

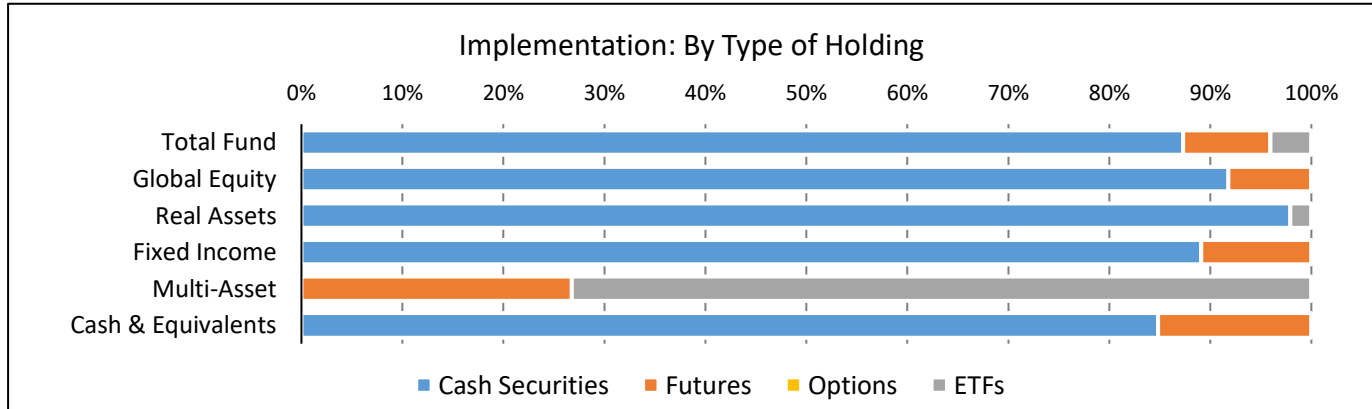
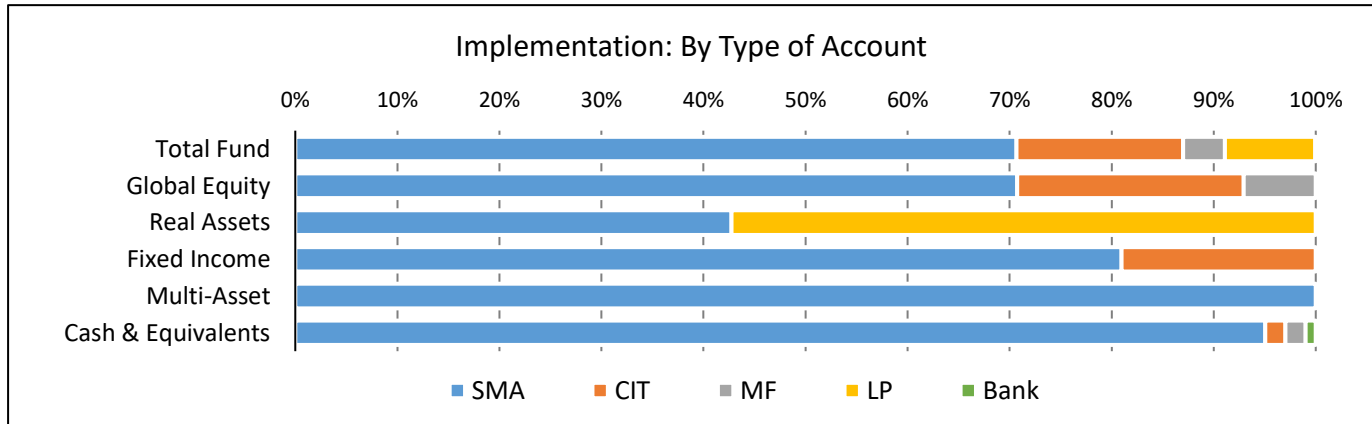
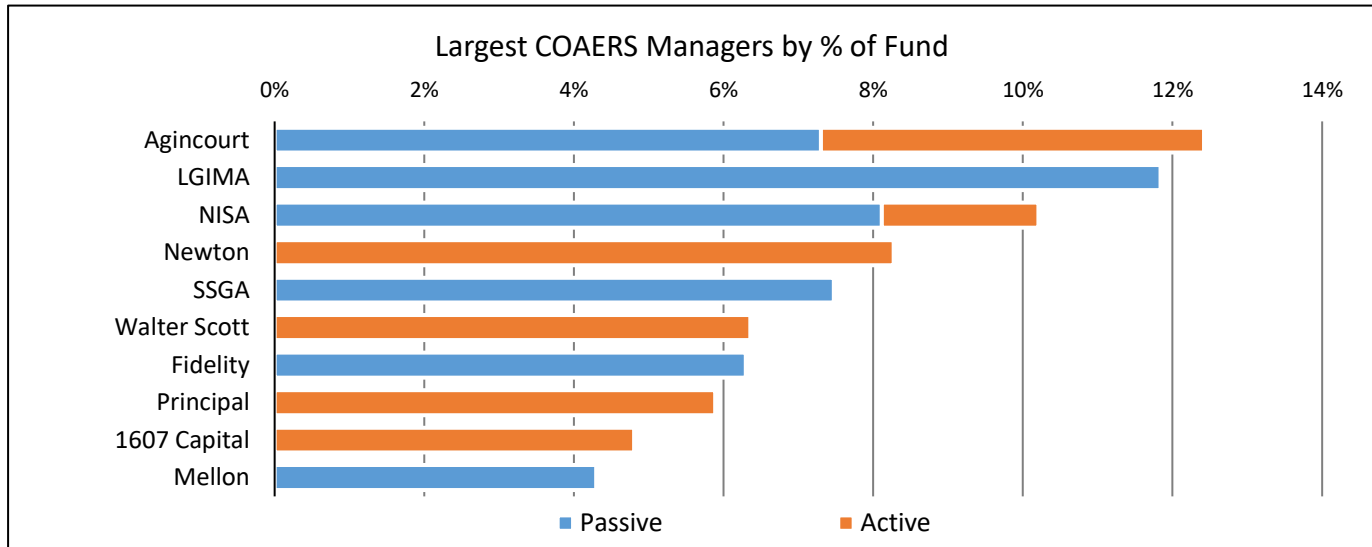
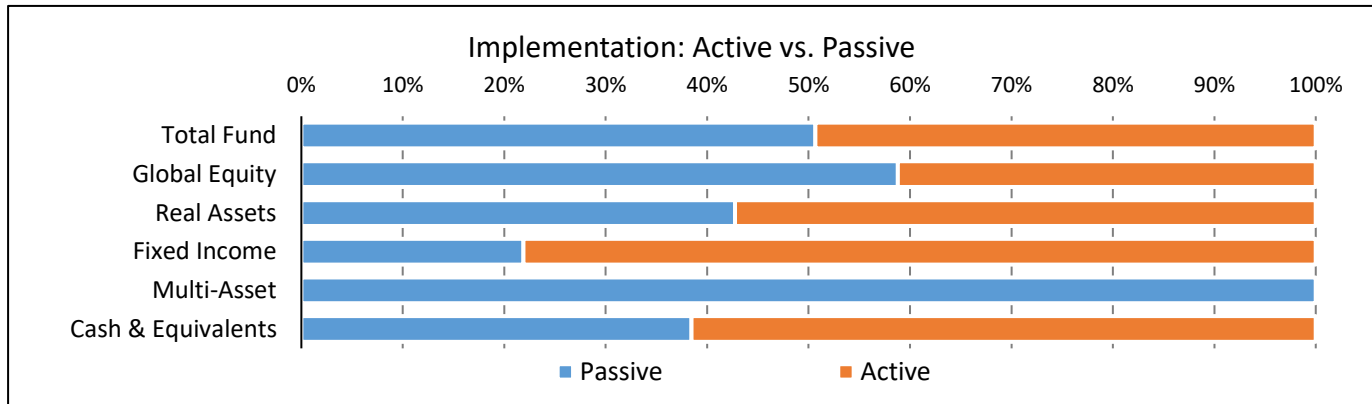
8. Fixed Income Market & Portfolio Review 2023-Q1
9. Current COAERS Premier Lists 2023-Q1 [CONFIDENTIAL]

SUPPLEMENTAL INFORMATION PROVIDED VIA CONVENE APP

1. RVK COAERS Investment Manager Compliance Reports
2. COAERS Funded Investment Manager Strategy Summaries
3. COAERS Proprietary Due Diligence Materials [CONFIDENTIAL]

COAERS Implementation Dashboard

As of 3/31/2023



SMA = Separately Managed Account, CIT = Commingled Investment Trust, MF = Mutual Fund, LP = Limited Partner



Summary of Manager Performance

City of Austin Employees' Retirement System

Period Ended: March 31, 2023

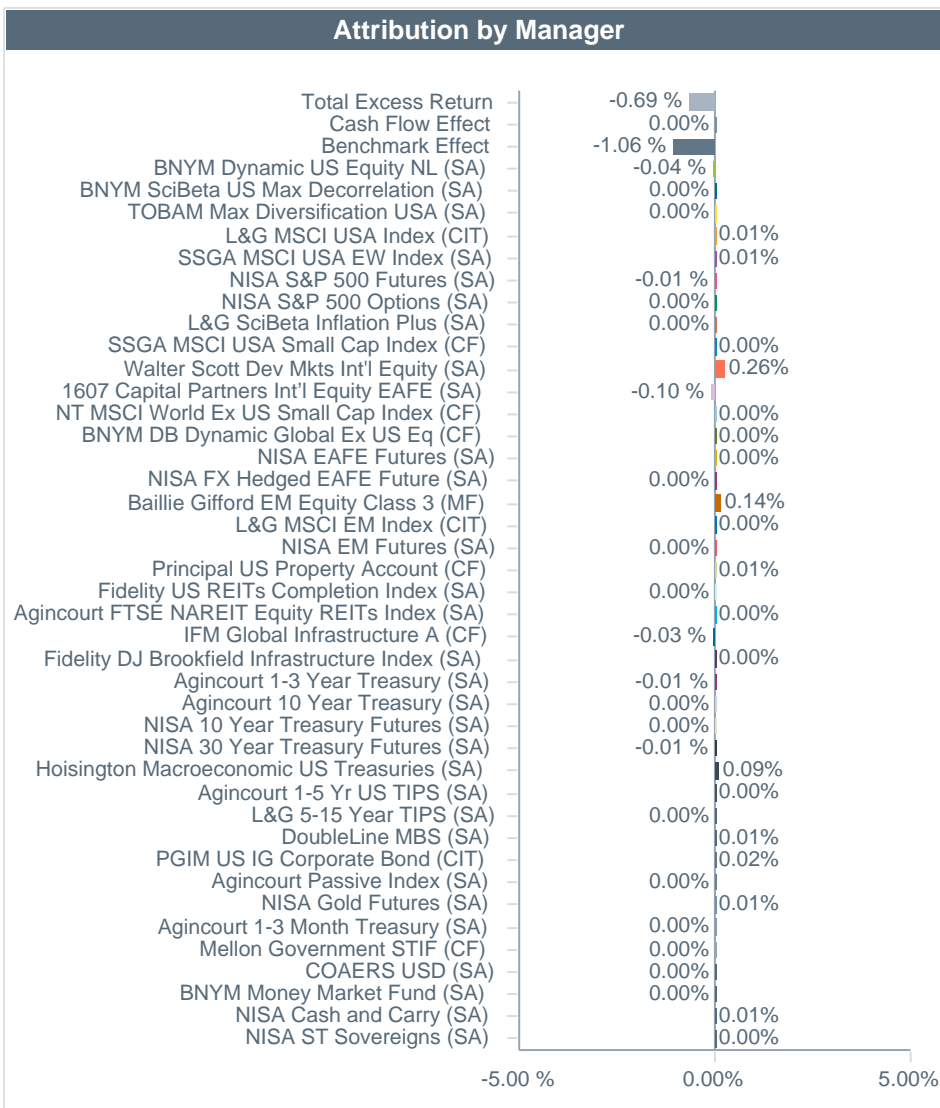


As of March 31, 2023

Composite: Total Fund
Benchmark: Policy Benchmark

	Market Value (\$)	Allocation (%)
BNYM Dynamic US Equity NL (SA)	223,277,038	7.35
L&G MSCI USA Index (CIT)	196,891,755	6.48
Walter Scott Dev Mkts Int'l Equity (SA)	195,065,646	6.42
SSGA MSCI USA EW Index (SA)	183,861,304	6.05
Principal US Property Account (CF)	178,400,499	5.87
Agincourt 1-3 Year Treasury (SA)	156,142,747	5.14
1607 Capital Partners Int'l Equity EAFE (SA)	145,880,077	4.80
BNYM SciBeta US Max Decorrelation (SA)	130,418,252	4.29
Fidelity US REITs Completion Index (SA)	127,008,156	4.18
Baillie Gifford EM Equity Class 3 (MF)	121,576,450	4.00
TOBAM Max Diversification USA (SA)	113,829,099	3.75
Agincourt Passive Index (SA)	113,159,246	3.73
PGIM US IG Corporate Bond (CIT)	110,307,497	3.63
DoubleLine MBS (SA)	100,358,146	3.30
IFM Global Infrastructure A (CF)	90,564,296	2.98
L&G SciBeta Inflation Plus (SA)	89,405,248	2.94
Hoisington Macroeconomic US Treasuries (SA)	87,531,639	2.88
L&G MSCI EM Index (CIT)	72,740,229	2.39
Fidelity DJ Brookfield Infrastructure Index (SA)	64,648,661	2.13
NISA S&P 500 Futures (SA)	64,082,114	2.11
Agincourt 1-5 Yr US TIPS (SA)	63,841,884	2.10
NISA 30 Year Treasury Futures (SA)	63,307,490	2.08
NISA ST Sovereigns (SA)	47,856,263	1.58
SSGA MSCI USA Small Cap Index (CF)	42,877,817	1.41
NT MSCI World Ex US Small Cap Index (CF)	42,727,913	1.41
NISA Gold Futures (SA)	41,347,024	1.36
NISA FX Hedged EAFE Future (SA)	36,739,713	1.21
Agincourt 1-3 Month Treasury (SA)	34,597,988	1.14
NISA EAFE Futures (SA)	33,394,041	1.10
BNYM DB Dynamic Global Ex US Eq (CF)	27,473,713	0.90
NISA Cash and Carry (SA)	15,671,304	0.52
Agincourt FTSE NAREIT Equity REITs Index (SA)	9,853,779	0.32
NISA EM Futures (SA)	7,776,479	0.26
Mellon Government STIF (CF)	2,064,596	0.07
BNYM Money Market Fund (SA)	2,049,539	0.07
COAERS USD (SA)	1,008,442	0.03
NISA S&P 500 Options (SA)	62,606	0.00

Rate of Return	
	QTD
Composite	4.71
Benchmark	5.40
Excess Return	-0.69



Performance shown is net of fees. Calculation is based on monthly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. See glossary for calculation definitions.



As of March 31, 2023

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
US Equity										
BNYM Dynamic US Equity NL (SA)	223,277,038	7.35	6.94	6.94	-10.60	16.28	N/A	N/A	11.32	05/01/2018
S&P 500 Index (Cap Wtd)			7.50	7.50	-7.73	18.60	11.19	12.24	11.30	
Excess Return			-0.56	-0.56	-2.87	-2.32	N/A	N/A	0.02	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	10.41	
Rank			45	45	90	75	N/A	N/A	23	
BNYM SciBeta US Max Decorrelation (SA)	130,418,252	4.29	3.79	3.79	-7.07	N/A	N/A	N/A	11.16	10/01/2020
SciBeta Max Decorrelation Index			3.82	3.82	-6.94	19.12	9.59	11.43	11.33	
Excess Return			-0.03	-0.03	-0.13	N/A	N/A	N/A	-0.17	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	8.93	
Rank			87	87	38	N/A	N/A	N/A	7	
TOBAM Max Diversification USA (SA)	113,829,099	3.75	1.88	1.88	-8.61	N/A	N/A	N/A	2.86	10/01/2020
TOBAM Max Diversification Index			1.91	1.91	-8.48	12.71	7.07	10.56	3.05	
Excess Return			-0.03	-0.03	-0.13	N/A	N/A	N/A	-0.19	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	8.93	
Rank			95	95	68	N/A	N/A	N/A	100	
L&G MSCI USA Index (CIT)	196,891,755	6.48	7.71	7.71	-8.50	N/A	N/A	N/A	9.38	10/01/2020
MSCI USA Index (Net)			7.59	7.59	-8.93	17.95	10.52	11.52	8.72	
Excess Return			0.12	0.12	0.43	N/A	N/A	N/A	0.66	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	8.93	
Rank			24	24	63	N/A	N/A	N/A	37	
SSGA MSCI USA EW Index (SA)	183,861,304	6.05	4.01	4.01	-9.16	N/A	N/A	N/A	11.17	11/01/2020
MSCI USA Equal Weighted Index (Net)			3.87	3.87	-9.66	18.77	7.91	9.91	10.66	
Excess Return			0.14	0.14	0.50	N/A	N/A	N/A	0.51	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	10.41	
Rank			86	86	78	N/A	N/A	N/A	34	
SSGA MSCI USA Small Cap Index (CF)	42,877,817	1.41	3.91	3.91	-8.52	N/A	N/A	N/A	11.25	11/01/2020
MSCI US Sm Cap Index (USD) (Net)			3.78	3.78	-8.97	20.66	6.61	9.09	10.77	
Excess Return			0.13	0.13	0.45	N/A	N/A	N/A	0.48	
IM U.S. Small Cap Equity (MF) Median			3.29	3.29	-9.16	19.98	5.91	8.28	11.98	
Rank			42	42	44	N/A	N/A	N/A	54	

Performance shown is net of fees and is annualized for periods greater than one year.

As of March 31, 2023

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
NISA S&P 500 Futures (SA)	64,082,114	2.11	7.10	7.10	-8.01	18.24	N/A	N/A	9.34	02/01/2020
S&P 500 Index (Cap Wtd)			7.50	7.50	-7.73	18.60	11.19	12.24	9.73	
Excess Return			-0.40	-0.40	-0.28	-0.36	N/A	N/A	-0.39	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	8.89	
Rank			41	41	54	28	N/A	N/A	37	
L&G SciBeta Inflation Plus (SA)	89,405,248	2.94	5.62	5.62	-9.17	N/A	N/A	N/A	-6.16	12/01/2021
SciBeta Inflation Plus Index			5.65	5.65	-9.08	N/A	N/A	N/A	-6.08	
Excess Return			-0.03	-0.03	-0.09	N/A	N/A	N/A	-0.08	
IM U.S. Large Cap Core Equity (MF) Median			6.60	6.60	-7.77	17.55	10.27	11.28	-7.10	
Rank			69	69	78	N/A	N/A	N/A	41	
Developed Markets Equity										
Walter Scott Dev Mkts Int'l Equity (SA)	195,065,646	6.42	12.91	12.91	-0.62	11.04	7.48	7.16	8.31	10/01/1992
MSCI EAFE Index (USD) (Net)			8.47	8.47	-1.38	12.99	3.52	5.00	5.66	
Excess Return			4.44	4.44	0.76	-1.95	3.96	2.16	2.65	
IM All EAFE (MF) Median			8.47	8.47	-0.73	12.86	2.88	4.70	6.67	
Rank			2	2	48	79	1	5	3	
1607 Capital Partners Int'l Equity EAFE (SA)	145,880,077	4.80	6.00	6.00	-6.96	13.62	3.24	5.91	6.94	08/01/2010
90% MSCI EAFE/10% MSCI EM Index			8.02	8.02	-2.28	12.54	3.13	4.74	5.35	
Excess Return			-2.02	-2.02	-4.68	1.08	0.11	1.17	1.59	
IM International Core Equity (MF) Median			7.96	7.96	-2.31	12.94	2.64	4.53	5.15	
Rank			90	90	92	35	31	6	6	
BNYM DB Dynamic Global Ex US Eq (CF)	27,473,713	0.90	7.26	7.26	-6.78	9.88	N/A	N/A	4.18	09/01/2019
MSCI ACW Ex US Index (USD) (Net)			6.87	6.87	-5.07	11.80	2.47	4.17	5.14	
Excess Return			0.39	0.39	-1.71	-1.92	N/A	N/A	-0.96	
IM ACWI Ex US Core (MF) Median			7.30	7.30	-3.87	12.66	2.49	4.45	5.50	
Rank			54	54	85	91	N/A	N/A	87	
NISA EAFE Futures (SA)	33,394,041	1.10	8.49	8.49	-0.43	12.50	N/A	N/A	4.01	02/01/2020
MSCI EAFE Index (USD) (Net)			8.47	8.47	-1.38	12.99	3.52	5.00	4.13	
Excess Return			0.02	0.02	0.95	-0.49	N/A	N/A	-0.12	
IM All EAFE (MF) Median			8.47	8.47	-0.73	12.86	2.88	4.70	4.26	
Rank			50	50	45	58	N/A	N/A	55	

Performance shown is net of fees and is annualized for periods greater than one year.

As of March 31, 2023

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
NT MSCI World Ex US Small Cap Index (CF)	42,727,913	1.41	5.03	5.03	-8.59	13.71	N/A	N/A	2.13	08/01/2018
MSCI Wrld Ex US Sm Cap Index (USD) (Net)			4.99	4.99	-10.13	13.43	1.54	5.54	1.73	
Excess Return			0.04	0.04	1.54	0.28	N/A	N/A	0.40	
IM International SMID Cap Equity (MF) Median			6.38	6.38	-8.38	13.07	1.19	5.15	1.75	
Rank			79	79	54	42	N/A	N/A	41	
NISA FX Hedged EAFE Future (SA)	36,739,713	1.21	8.21	8.21	6.10	N/A	N/A	N/A	1.58	01/01/2022
MSCI EAFE Index (USD) (Net) (Hedged)			8.33	8.33	7.09	16.46	8.33	8.61	2.66	
Excess Return			-0.12	-0.12	-0.99	N/A	N/A	N/A	-1.08	
IM All EAFE (MF) Median			8.47	8.47	-0.73	12.86	2.88	4.70	-6.55	
Rank			58	58	4	N/A	N/A	N/A	5	
Emerging Markets Equity										
Baillie Gifford EM Equity Class 3 (MF)	121,576,450	4.00	7.37	7.37	-8.95	8.24	0.06	N/A	5.78	10/01/2016
MSCI Emerging Markets Index (USD) (Net)			3.96	3.96	-10.70	7.83	-0.91	2.00	3.81	
Excess Return			3.41	3.41	1.75	0.41	0.97	N/A	1.97	
IM Emerging Markets Equity (MF) Median			5.02	5.02	-9.28	7.93	-1.08	1.77	3.49	
Rank			13	13	45	49	29	N/A	12	
L&G MSCI EM Index (CIT)	72,740,229	2.39	3.98	3.98	-10.76	N/A	N/A	N/A	-1.36	10/01/2020
MSCI Emerging Markets Index (USD) (Net)			3.96	3.96	-10.70	7.83	-0.91	2.00	-1.25	
Excess Return			0.02	0.02	-0.06	N/A	N/A	N/A	-0.11	
IM Emerging Markets Equity (MF) Median			5.02	5.02	-9.28	7.93	-1.08	1.77	-2.18	
Rank			72	72	65	N/A	N/A	N/A	43	
NISA EM Futures (SA)	7,776,479	0.26	3.69	3.69	-10.61	7.26	N/A	N/A	0.00	02/01/2020
MSCI Emerging Markets Index (USD) (Net)			3.96	3.96	-10.70	7.83	-0.91	2.00	0.15	
Excess Return			-0.27	-0.27	0.09	-0.57	N/A	N/A	-0.15	
IM Emerging Markets Equity (MF) Median			5.02	5.02	-9.28	7.93	-1.08	1.77	0.08	
Rank			77	77	63	62	N/A	N/A	51	

Performance shown is net of fees and is annualized for periods greater than one year.

As of March 31, 2023

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
Real Estate Equity										
Principal US Property Account (CF)	178,400,499	5.87	-3.17	-3.17	-5.97	7.53	7.08	9.18	7.24	09/01/2004
NCREIF ODCE Index (AWA) (Net)			-3.38	-3.38	-3.91	7.46	6.56	8.47	7.03	
Excess Return			0.21	0.21	-2.06	0.07	0.52	0.71	0.21	
Fidelity US REITs Completion Index (SA)	127,008,156	4.18	4.06	4.06	-13.63	13.17	N/A	N/A	2.13	01/01/2020
Fidelity REITs Completion Index			4.09	4.09	-13.44	13.35	N/A	N/A	2.26	
Excess Return			-0.03	-0.03	-0.19	-0.18	N/A	N/A	-0.13	
Agincourt FTSE NAREIT Equity REITs Index (SA)	9,853,779	0.32	2.38	2.38	-18.42	N/A	N/A	N/A	-2.50	05/01/2021
FTSE NAREIT All Eq REITs Index (TR)			1.74	1.74	-19.37	10.17	6.25	6.45	-4.19	
Excess Return			0.64	0.64	0.95	N/A	N/A	N/A	1.69	
Infrastructure Equity										
IFM Global Infrastructure A (CF)	90,564,296	2.98	2.57	2.57	9.61	11.69	N/A	N/A	11.69	04/01/2020
S&P Gbl Infrastructure Index (Net)			3.73	3.73	-4.25	14.69	4.97	5.47	14.69	
Excess Return			-1.16	-1.16	13.86	-3.00	N/A	N/A	-3.00	
Fidelity DJ Brookfield Infrastructure Index (SA)	64,648,661	2.13	3.27	3.27	-6.39	12.54	N/A	N/A	2.38	01/01/2020
DJ Brookfield Gbl Infrastructure Comp Idx			3.10	3.10	-6.05	12.18	5.75	5.21	2.00	
Excess Return			0.17	0.17	-0.34	0.36	N/A	N/A	0.38	
US Treasuries										
Agincourt 1-3 Year Treasury (SA)	156,142,747	5.14	1.45	1.45	0.07	-0.94	N/A	N/A	0.60	05/01/2019
Bloomberg US Trsy 1-3 Yr Index			1.59	1.59	0.23	-0.84	1.09	0.80	0.65	
Excess Return			-0.14	-0.14	-0.16	-0.10	N/A	N/A	-0.05	
IM U.S. Short Term Treasury/Govt Bonds (MF) Median			1.51	1.51	-0.58	-1.05	0.63	0.44	0.15	
Rank			59	59	22	41	N/A	N/A	24	
Agincourt 1-5 Yr US TIPS (SA)	63,841,884	2.10	2.38	2.38	-1.22	3.33	N/A	N/A	2.99	01/01/2020
Bloomberg US TIPS 1-5 Yr Index			2.26	2.26	-1.14	3.34	2.92	1.48	2.85	
Excess Return			0.12	0.12	-0.08	-0.01	N/A	N/A	0.14	
IM U.S. TIPS (MF) Median			3.05	3.05	-6.09	2.14	2.67	1.12	2.12	
Rank			85	85	9	25	N/A	N/A	11	

Performance shown is net of fees and is annualized for periods greater than one year.

As of March 31, 2023

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
NISA 30 Year Treasury Futures (SA)	63,307,490	2.08	5.66	5.66	-17.74	N/A	N/A	N/A	-12.87	05/01/2020
Bloomberg US Trsy Bellwethers 30 Yr Index			5.99	5.99	-20.19	-13.98	-1.15	0.93	-14.92	
Excess Return			-0.33	-0.33	2.45	N/A	N/A	N/A	2.05	
IM U.S. Long Term Treasury/Govt Bond (MF) Median			2.84	2.84	-5.21	-4.20	0.24	0.75	-4.50	
Rank			22	22	94	N/A	N/A	N/A	95	
Hoisington Macroeconomic US Treasuries (SA)	87,531,639	2.88	6.23	6.23	-18.61	-13.52	N/A	N/A	-1.79	05/01/2019
Bloomberg US Trsy Index			3.01	3.01	-4.51	-4.20	0.74	0.90	-0.05	
Excess Return			3.22	3.22	-14.10	-9.32	N/A	N/A	-1.74	
IM U.S. Long Term Treasury/Govt Bond (MF) Median			2.84	2.84	-5.21	-4.20	0.24	0.75	-0.60	
Rank			18	18	95	97	N/A	N/A	85	
US Mortgages										
DoubleLine MBS (SA)	100,358,146	3.30	2.77	2.77	-4.89	-3.31	N/A	N/A	-1.60	08/01/2019
Bloomberg US MBS Index (Unhgd)			2.53	2.53	-4.85	-3.31	0.20	1.00	-1.53	
Excess Return			0.24	0.24	-0.04	0.00	N/A	N/A	-0.07	
IM U.S. Mortgage Backed Bonds (MF) Median			2.53	2.53	-5.08	-2.81	0.06	0.68	-1.53	
Rank			25	25	43	78	N/A	N/A	58	
US Credit										
PGIM US IG Corporate Bond (CIT)	110,307,497	3.63	3.90	3.90	-5.83	0.71	N/A	N/A	0.08	08/01/2019
Bloomberg US Crdt Index			3.45	3.45	-5.31	-0.70	1.54	2.18	-0.50	
Excess Return			0.45	0.45	-0.52	1.41	N/A	N/A	0.58	
IM U.S. Corporate Bonds (MF) Median			3.61	3.61	-5.92	-0.36	1.32	2.08	-0.55	
Rank			27	27	47	23	N/A	N/A	23	
Asset Allocation										
Agincourt Passive Index (SA)	113,159,246	3.73	5.54	5.54	-5.79	N/A	N/A	N/A	-0.88	01/01/2021
Passive Benchmark			5.58	5.58	-7.50	7.69	3.83	5.00	-2.28	
Excess Return			-0.04	-0.04	1.71	N/A	N/A	N/A	1.40	
Commodities & Other										
NISA Gold Futures (SA)	41,347,024	1.36	8.99	8.99	1.81	N/A	N/A	N/A	5.65	05/01/2020
Bloomberg Gold Sub Index (TR)			8.11	8.11	0.67	5.93	7.14	1.31	3.96	
Excess Return			0.88	0.88	1.14	N/A	N/A	N/A	1.69	

Performance shown is net of fees and is annualized for periods greater than one year.

Composite: Total Fund
Asset Allocation & Performance - Net of Fees

As of March 31, 2023

	Allocation		Rate of Return (%)							
	Market Value (\$)	%	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	Since Incep.	Inception Date
US Dollar Instruments										
Agincourt 1-3 Month Treasury (SA)	34,597,988	1.14	1.06	1.06	2.51	0.84	N/A	N/A	1.12	05/01/2019
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	1.18	
Excess Return			-0.03	-0.03	-0.09	-0.07	N/A	N/A	-0.06	
Mellon Government STIF (CF)	2,064,596	0.07	1.07	1.07	2.55	N/A	N/A	N/A	1.17	02/01/2021
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	1.22	
Excess Return			-0.02	-0.02	-0.05	N/A	N/A	N/A	-0.05	
COAERS USD (SA)	1,008,442	0.03	0.34	0.34	0.83	N/A	N/A	N/A	0.29	05/01/2020
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	0.93	
Excess Return			-0.75	-0.75	-1.77	N/A	N/A	N/A	-0.64	
BNYM Money Market Fund (SA)	2,049,539	0.07	1.05	1.05	2.47	N/A	N/A	N/A	1.98	01/01/2022
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	2.10	
Excess Return			-0.04	-0.04	-0.13	N/A	N/A	N/A	-0.12	
NISA Cash and Carry (SA)	15,671,304	0.52	2.08	2.08	N/A	N/A	N/A	N/A	4.53	09/01/2022
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	2.20	
Excess Return			0.99	0.99	N/A	N/A	N/A	N/A	2.33	
Other Currencies										
NISA ST Sovereigns (SA)	47,856,263	1.58	1.20	1.20	2.84	N/A	N/A	N/A	2.30	01/01/2022
Bloomberg US T-Bills 1-3 Mo Index			1.09	1.09	2.60	0.91	1.38	0.84	2.10	
Excess Return			0.11	0.11	0.24	N/A	N/A	N/A	0.20	

Performance shown is net of fees and is annualized for periods greater than one year.

COAERS Investment Manager Fees For 1Q-2023

DIRECT FEE PAYMENTS & ACCRUALS				
Earned In	1Q22	2Q22	3Q22	4Q22
Paid In	2Q22	3Q22	4Q22	1Q23
1607 Capital Intl Equities	332,341	247,143	203,452	143,007
Agincourt: 1-3M US Treasuries	2,119	3,215	4,812	4,531
Agincourt: 1-3Y US Treasuries	12,595	15,301	15,282	15,391
Agincourt: 10Y US Treasuries	5,299	5,038	4,723	4,239
Agincourt: 1-5Y TIPS	6,463	6,362	6,158	6,236
Agincourt Passive Index	10,865	9,812	10,073	10,722
Agincourt FTSE NAREIT Equity	2,443	1,872	915	962
Doubleline MBS	53,877	51,215	50,339	48,341
Fidelity DJ Brookfield	-	43,852	14,714	-
Fidelity US REITs	-	60,069	23,109	-
Hoisington	80,343	73,401	66,967	66,514
LGIMA 5 15YR US TIPS	1,689	1,583	1,494	1,292
LGIMA Inflation Plus	29,636	26,127	15,688	26,880
LGIMA - MSCI USA	15,672	14,551	14,303	13,854
LGIMA - MSCI EM	20,822	18,853	17,852	16,890
LGIMA - S&P 500	-	-	-	-
Mellon DEXUS	25,347	21,851	19,756	22,577
Mellon DUSE	215,547	178,840	172,714	184,198
Mellon Scibeta US Max Decorr	43,989	38,358	36,937	40,527
NISA Futures	49,016	45,542	46,037	49,188
NT Dev Intl Small Cap Fund ¹	7,612	7,007	5,827	5,244
SSGA MSCI USA Equal Weight	11,387	11,532	11,501	11,460
SSGA MSCI USA SmallCap	4,863	4,718	4,749	4,790
TOBAM Max Decorrelation	77,021	70,371	67,341	70,471
Walter Scott Intl Equities	207,633	191,449	183,744	185,458
TOTAL DIRECT PAYMENTS	1,216,580	1,148,062	998,488	932,773

1 NTAM Management Fees are paid in the quarter they are earned.

INDIRECT FEE PAYMENTS				
Earned In	2Q22	3Q22	4Q22	1Q23
Paid In	2Q22	3Q22	4Q22	1Q23
Baillie Gifford Emerging Market	191,599	180,407	183,574	188,839
Baillie Gifford Multi-Asset	270			
GMO Global Asset Allocation	1,019			
IFM Infrastructure	160,334	164,742	168,173	170,204
PGIM US Credit	67,549	63,479	63,177	61,349
Principal US Property	385,248	394,559	387,031	359,798
SUBTOTAL INDIRECT	806,018	803,186	801,955	780,190
TOTAL FEES	2,022,598	1,951,248	1,800,443	1,712,962
<i>% of AUM</i>	<i>0.06%</i>	<i>0.07%</i>	<i>0.06%</i>	<i>0.06%</i>

* Estimated



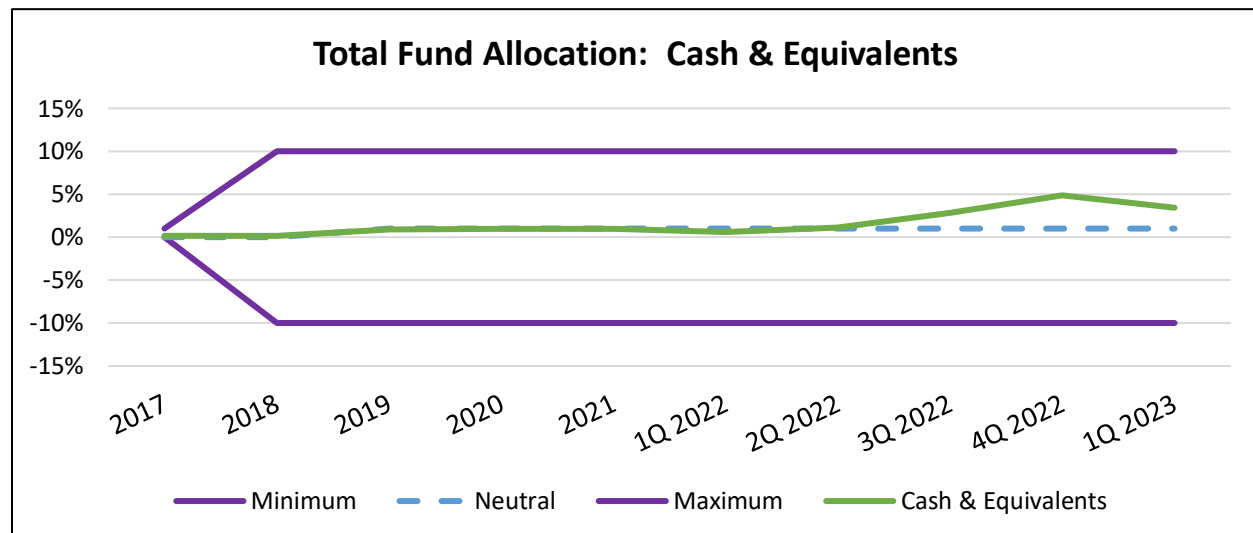
Historical Context of Cash & Equivalents

Cash & Equivalents was added in 2017 to increase overall Fund liquidity and to recognize cash as another strategic investment. The target allocation of 1% ensures there is sufficient, readily available cash to pay the necessary benefits of the Fund, but the maximum allocation of 10% allows Cash to be used strategically should it provide better investment alternatives than other asset classes. Cash & Equivalents consists of two sub-asset classes: US Dollar Instruments and Other Currencies.

Below is a brief timeline of key developments within Cash & Equivalents since inception:

- 2017: Cash was established as a major asset class but had a target allocation of 0%
- 2018: The minimum and maximum cash positions were moved to -10% and 10% respectively
- 2019: Other Currencies added as a sub-asset class and Cash & Equivalents target allocation increased to 1%

The allocation to Cash & Equivalents has been stable, but has risen recently in response to higher short-term rates and increased opportunities within the asset class.



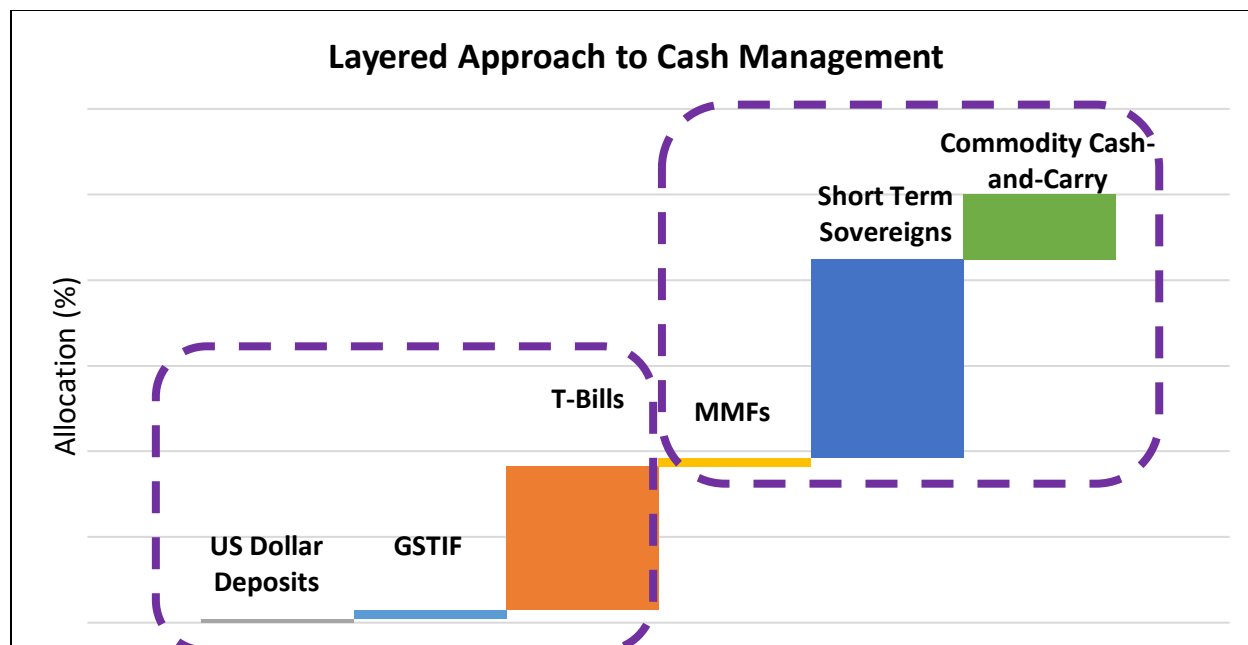
* Subsequent to Q1, Staff implemented the Board-approved rebalance in which cash was increased into the Strategic bands

Portfolio Roles

The main characteristic of the Cash & Equivalents asset class is **liquidity** which serves for the payment of the System's benefits and expenses. From an operational perspective, the Other Currencies sub-asset class allows the Fund **exposure to foreign currencies** and investments. Due to the high quality of these investments, increasing allocations to cash **reduces Fund volatility** and can increase diversification due to the stable and uncorrelated characteristics of

the asset class. As short-term interest rates rise, cash and short-term investments can also provide **yield enhancement** to the overall portfolio.

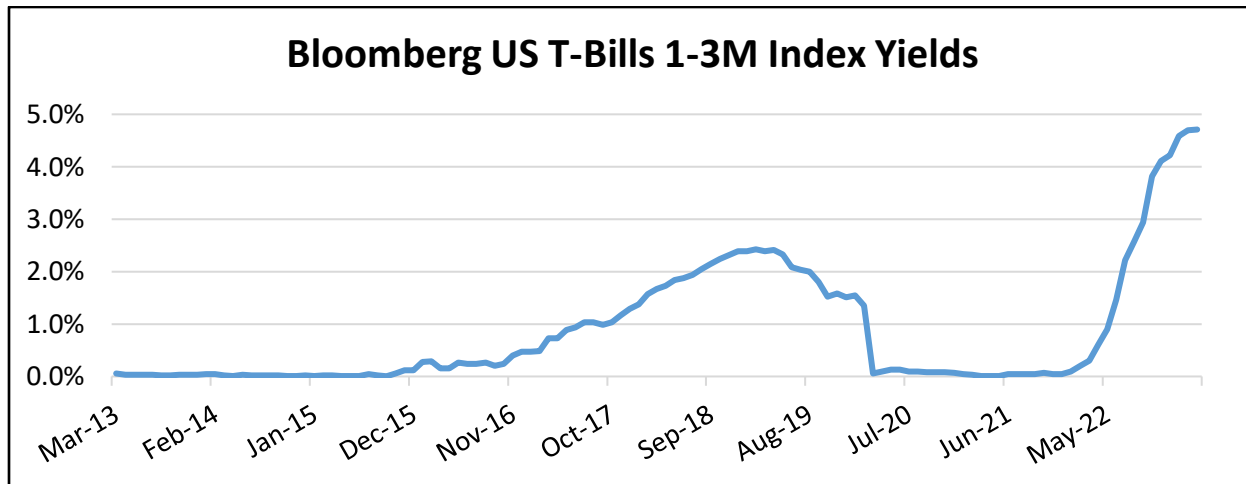
In this context, Staff views Cash & Equivalents in two broad categories: Core Cash and Incremental Cash. Core Cash is comprised of stable, highly liquid investments and vehicles. Core Cash is used to pay the System's benefits and expenses, and each mandate can provide same-day liquidity if needed. Incremental Cash includes money market fund (MMF) investments and other strategies intended to increase expected returns while still maintaining a short-term investment horizon.



Since inception, the Cash & Equivalents asset class has accumulated six different cash mandates in which to invest. Having access to these various “tools” provides the Fund flexibility to adapt to the short-term interest rate environment and/or provide diversification to the rest of the Fund while maintaining appropriate liquidity.

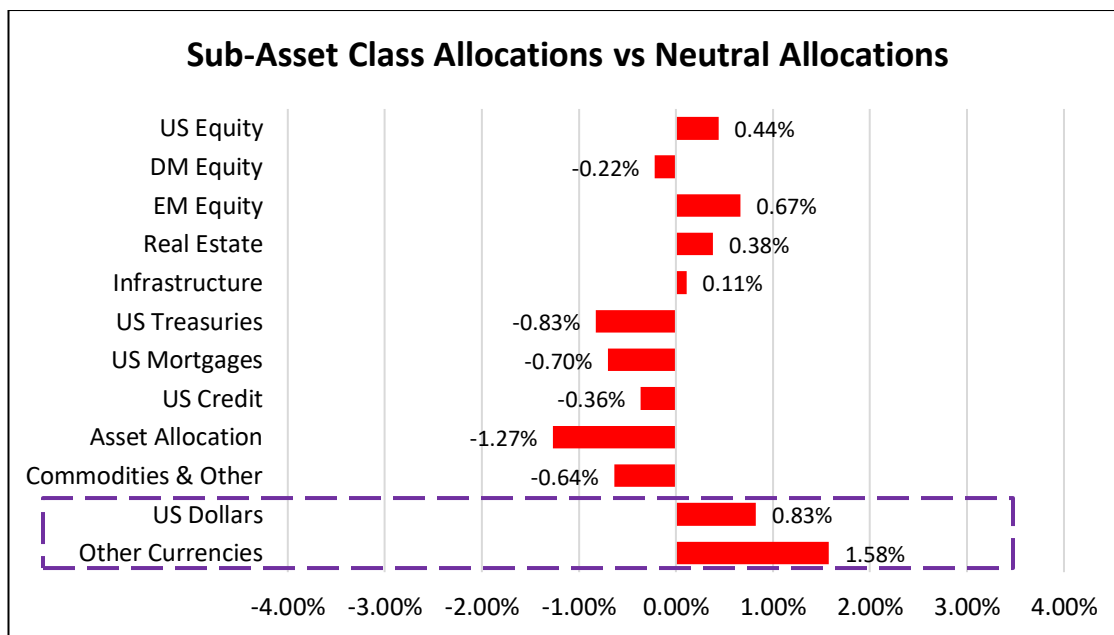
Benchmarking

The benchmark for Cash & Equivalents, as well as the two sub-asset classes, is the Bloomberg US Treasury Bills 1-3 Month Index.



Cash & Equivalents Current Portfolio and Positioning

In the Strategic Asset Allocation, the Fund has a neutral allocation to Cash & Equivalents of 1%, which includes 1% in US Dollar Instruments and 0% in Other Currencies. As of the end of Q1 2023, Fund positioning was modestly overweight Cash & Equivalents at 3.4%. This asset class allocation is comprised of US Dollar Instruments at 1.8% and to Other Currencies at 1.6%.



Risk and Return Characteristics

Market Commentary: At the close of the first quarter of 2023, the US Treasury Bills 1-3 Month Index was up 1.1% year-to-date. The Federal Reserve's aggressive tightening of monetary policy, which began in 2022 in response to heightened inflation, has also increased volatility to short-term rates. Adding to the volatility and uncertainty is the possibility of the US Government defaulting on its debt, which has become a focus of investors and managers of short-term investments.

Returns: The Cash & Equivalents asset class returned 1.7% in 2022 and was the best performing asset class in the total Fund. The asset class outperformed its benchmark in Q1 2023 by returning 1.25% on a net-of-fees basis. Much of the outperformance in Q1 is attributable to the Cash and Carry mandate, which outperformed the index by about 1.0%. This is consistent with the mandate's role of yield enhancement within Incremental Cash.

Summary

The Cash & Equivalents portfolio has evolved over the years since its inception with an increased role in the total Fund, capturing the opportunities presented by the market, specifically the rise in short-term interest rates. After several years of near-zero short-term rates, this asset class fulfills its primary role of liquidity, while recently adding diversification and yield enhancement to the Fund as traditional hedges, such as Fixed Income, have struggled. Short-term interest rate prediction is not part of any current strategy, and the asset class is poised to provide flexibility to the rest of the Fund should the market present more attractive opportunities.

Glossary

- Collective investment trust (CIT): COAERS owns shares in a pooled fund that is sponsored by a bank or trust company and is open only to institutional investors. As such, it is not considered a security under US law and is governed instead by federal and/or state banking laws.
- Exchange Traded Fund (ETF): COAERS owns shares in a pooled fund that is sponsored by a bank or trust company. ETFs are traded on an exchange, and as such, they offer intraday liquidity since they can be bought and sold intraday through a brokerage firm.
- Future: COAERS owns futures on stock indices and bonds. Ownership of a future represents a contractual obligation to take delivery of the underlying stock index, bond, gold warrant, etc., at an agreed upon price and at a future date.
- Limited partnership (LP): COAERS is a limited partner in a legal entity that invests according to a pre-determined strategy and is managed by a general partner.
- Mutual fund (MF): COAERS owns shares in a pooled fund of both institutional and retail investors that is managed by a registered investment advisor according to US securities laws.
- Separately managed account (SMA): the underlying shares are owned directly by COAERS and the manager has authorization to trade that account.
- Warrant: COAERS owns warrants on gold bars. The warrants are registered with the Commodity Exchange Inc. (COMEX) and are claims on individual gold bars stored in vaults throughout the United States.

Appendix

- **Agincourt 1-3 Month US T-Bills:** this passively managed account seeks to track the returns of its benchmark index, the Bloomberg Barclays US Treasury Bills 1-3 Months Index. It is structured as a separately managed account (SMA) that is managed by Agincourt Capital Management, which is based in Richmond, Virginia.
- **Mellon Collective Government Short-Term Investment Fund (GSTIF):** this vehicle is used to invest idle cash. It seeks to offer a competitive rate of return through a portfolio of high-grade, short-term, money market instruments. Principal preservation is the primary objective, with liquidity management also emphasized to provide for redemption of units on any business day at a constant \$1.00 net asset value (NAV) to the extent possible. The investment is held as shares of a collective investment trust (CIT) for which securities lending is not permitted. It is managed by Mellon Capital and the performance benchmark is the return on 90 Day T-Bills.
- **Mellon Money Market Funds:** this vehicle is used to invest idle cash. It seeks to offer a competitive rate of return through a portfolio of high-grade, short-term, money market instruments. Principal preservation is the primary objective, with liquidity management also emphasized to provide for redemption of units on any business day at a constant \$1.00 net asset value (NAV). The funds are managed by various money market managers and the performance benchmark is the return on 90 Day T-Bills.
- **COAERS USD Account:** this account holds settled US dollars in a segregated account for risk management and operational purposes should external liquidity become constrained.
- **NISA Cash and Carry:** this strategy seeks to capture the differences in implied storage and financing costs within gold and silver futures. Simultaneously, the account buys the closest month's contract and sells the contract two months away. Physical gold is delivered as the front month contract expires and is then redelivered later on into the short futures contract. The mandate is managed through a separately managed account and managed by NISA Investment Advisors, which is based in St. Louis, Missouri.
- **COAERS Foreign Currency Account:** this account has the capability to hold foreign currencies in a segregated account for risk management and operational purposes should external liquidity become constrained.
- **NISA Foreign Sovereign:** this strategy seeks to capture the higher cash yields by purchasing foreign sovereign bonds and selling the respective foreign currencies in over-the-counter transactions. Given the nature of foreign sovereign bonds, the strategy does incur fixed income credit risk. The mandate is managed through a separately managed account and managed by NISA Investment Advisors, which is based in St. Louis, Missouri.



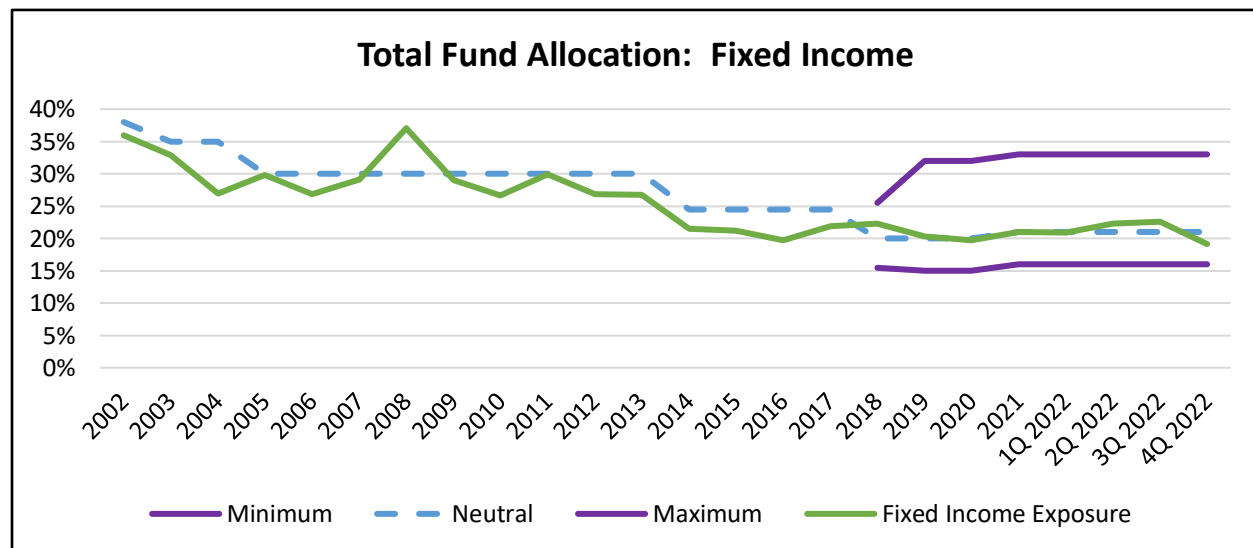
Historical Context of Fixed Income

COAERS has long held exposure to the fixed income market in various forms over the years. In COAERS' earliest years, the Fund invested solely in government bonds as its total investment program. Over the years, the Fund has transformed as markets have changed and the fixed income exposure also reflects this evolution. The current fixed income portfolio is allocated across three sub-asset classes: US Treasuries, US Mortgages, and US Credit.

Fixed Income has changed several times, and below is a timeline that highlights some of the recent moves:

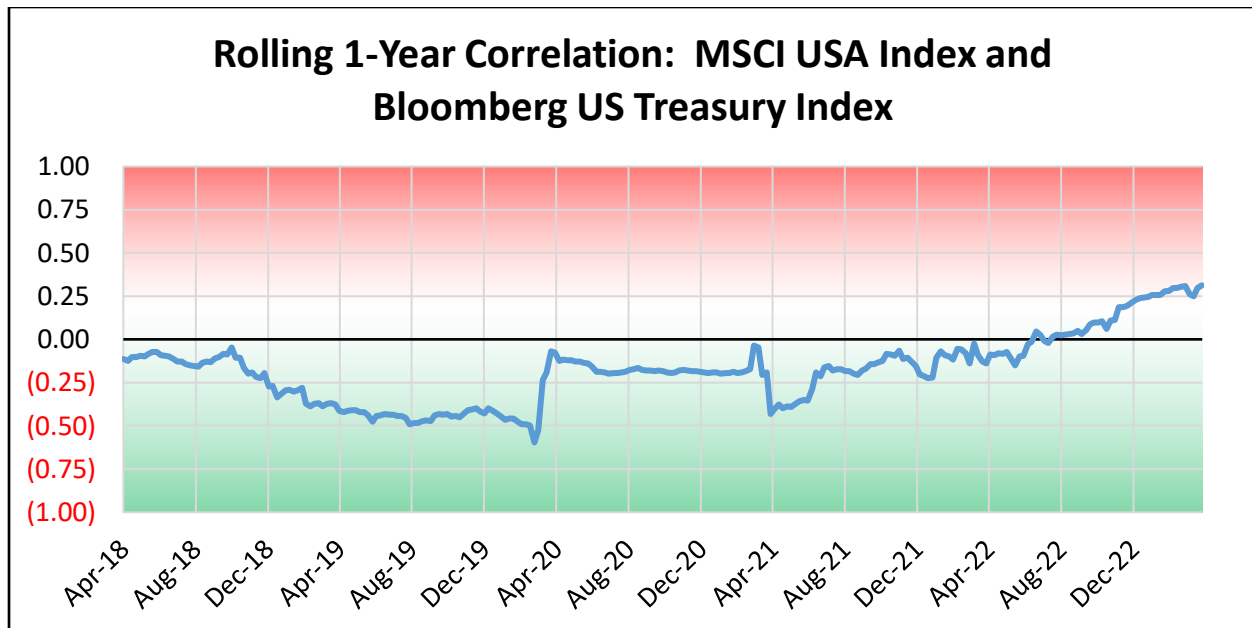
- 2019: Fixed Income portfolio disaggregated into the current three sub-strategies
- 2020: US Treasury futures were added to Fixed Income

The following chart shows the target allocation and funding position within Fixed Income over time.

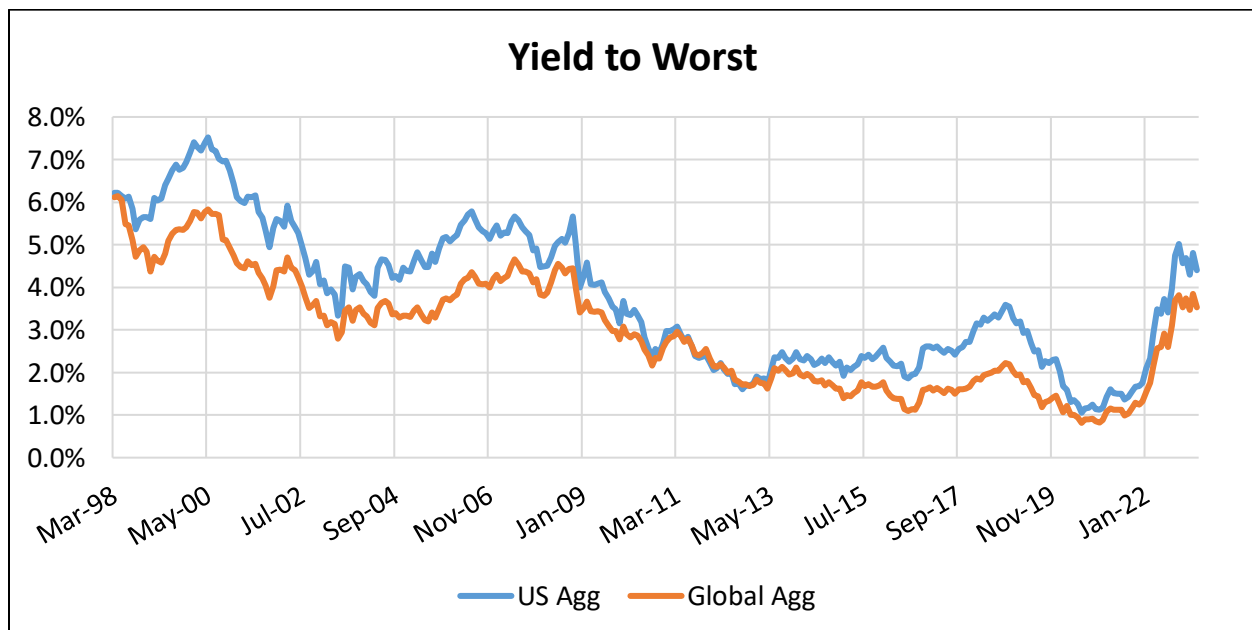


Portfolio Role

Diversification: A core function of COAERS' Fixed Income portfolio is to provide diversification to the overall Fund. Historically, the inverse correlation between stocks and bonds provided diversification benefit to the portfolio. Over the past year, the correlation between the two has trended positive, which means the US Treasury position has not hedged the equity portfolio as well as in the past. As the correlation between stocks and bonds has increased over the past year, the Board has increased allocations to other asset classes to better diversify equity risk.



Income: A key component of Fixed Income expected returns is the income derived from these strategies. As such, in the total Fund context, this asset class is expected to increase the yield of the total Fund as a complement to investments that earn returns primarily from capital appreciation, such as Global Equities. Over the past decade, yields in Fixed Income have been low but recently have seen an increase to near 5% in the US.



Liquidity: Given the high proportion of returns in this asset class coming from income, Fixed Income can serve as a natural source of liquidity for the total Fund in normal market conditions. Additionally, in providing diversification to Global Equities these strategies can be a source of

liquidity in a crisis as they are more likely to rally and can provide an avenue to avoid forced selling of growth assets.

Implementation

Collective Investment Trusts (CITs): CITs have historically been used to gain access to large parts of the fixed income universe with a single investment. These vehicles provided cost-effective exposure to the market while maintaining daily liquidity. Currently, COAERS utilizes a CIT to provide exposure to the investment grade corporate bond market, and this is the only holding within the US Credit sub-asset class.

Futures: COAERS began investing in US Treasury futures in 2020, and since then, has used futures in conjunction with US Treasuries securities. While US Treasury futures provide the ability to assume leverage, COAERS does not currently use these instruments to add leverage and maintains a fully collateralized futures position. Since their addition to the portfolio, the futures have provided the necessary liquidity to effect duration changes in a timely manner.

Securities: All of the US Mortgage exposure and most of the US Treasuries exposure is captured through individual securities held in separately managed accounts (SMAs).

Across the Fixed Income portfolio, the Board has maintained an exclusively US (domestic) implementation approach through the three sub-strategies: US Treasuries, US Mortgages, and US Credit. When comparing the effect of implementing only in the US to the global benchmark, the following chart shows how this decision has added about 580 basis points to the overall return since July 2019.

Cumulative Impact of Fixed Income Implementation Since July 2019	
Global Benchmark Return	-8.9%
<i>Decision to implement only in US</i>	<i>+5.8%</i>
<i>Decision to overweight USTs</i>	<i>-2.0%</i>
<i>Manager selection and allocation effects</i>	<i>+0.7%</i>
COAERS Portfolio Return	-4.9%

Benchmarking

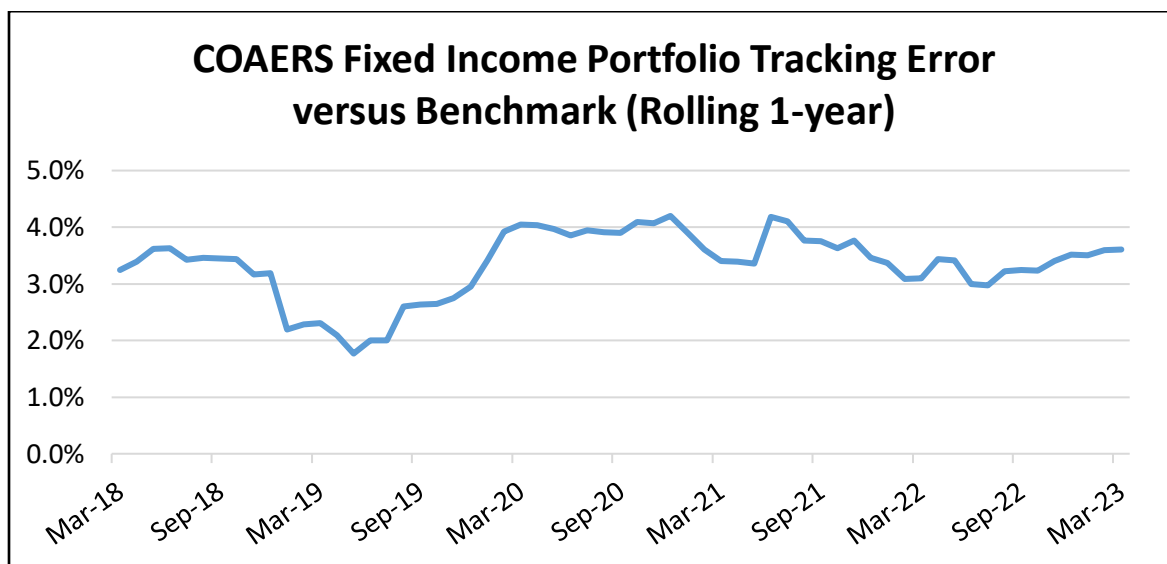
COAERS' Fixed Income benchmark is the Bloomberg Global Aggregate (Global Agg) Index, a global investment grade debt index comprised of government-related, corporate, and securitized fixed-rate bonds which represents the broad opportunity set in public fixed income markets.

At the sub-asset class level, the Investment Policy Statement (IPS) implements the following benchmarks:

- US Treasuries' benchmark is the Bloomberg US Treasuries Index, which is a market value weighted benchmark of the outstanding US Treasuries, but excludes Treasury Bills;

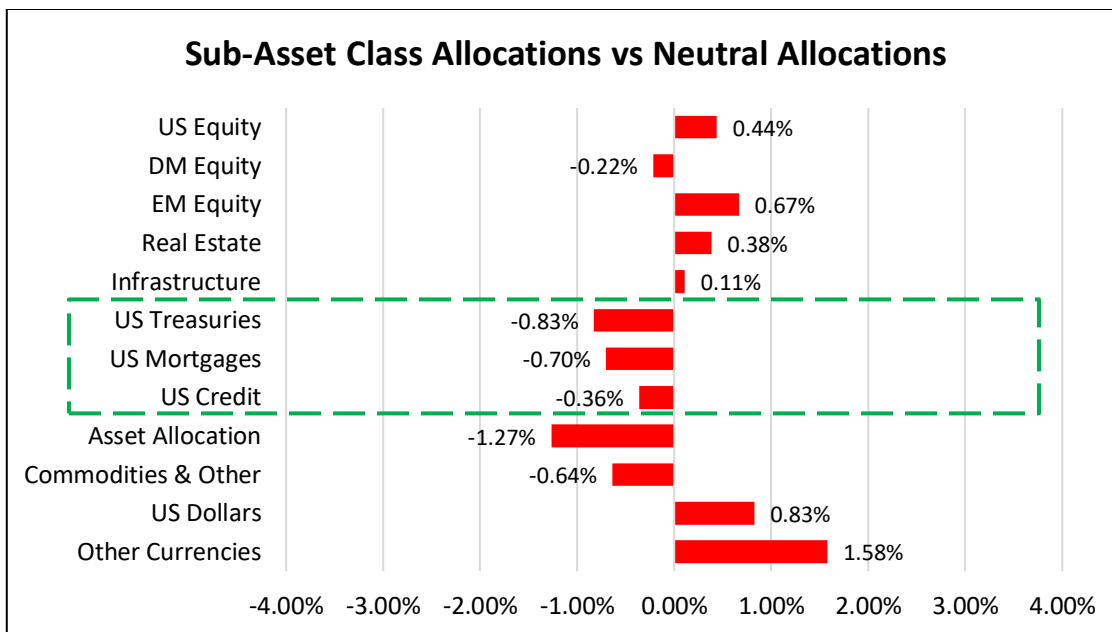
- US Mortgages' benchmark is the Bloomberg US Mortgage-Backed Securities (MBS) Index, which tracks agency MBS securities; and
- US Credit's benchmark is the Bloomberg US Corporate Bond Index, which is a market value weighted index of investment grade (BBB-/Baa3 or better), fixed-rate corporate bonds.

This sub-asset class structuring produces significantly different exposures to the Global Aggregate Bond benchmark. The expected characteristics of this structure include lower expected correlations to equities (i.e., better “hedginess”), higher yields, and better liquidity. As mentioned in the previous section, the implementation decision to invest in only domestic bonds has benefited the Fund, but it has also introduced tracking error to the benchmark. On a rolling 1-year basis, the Fixed Income portfolio's tracking error to the benchmark is about 3.6%

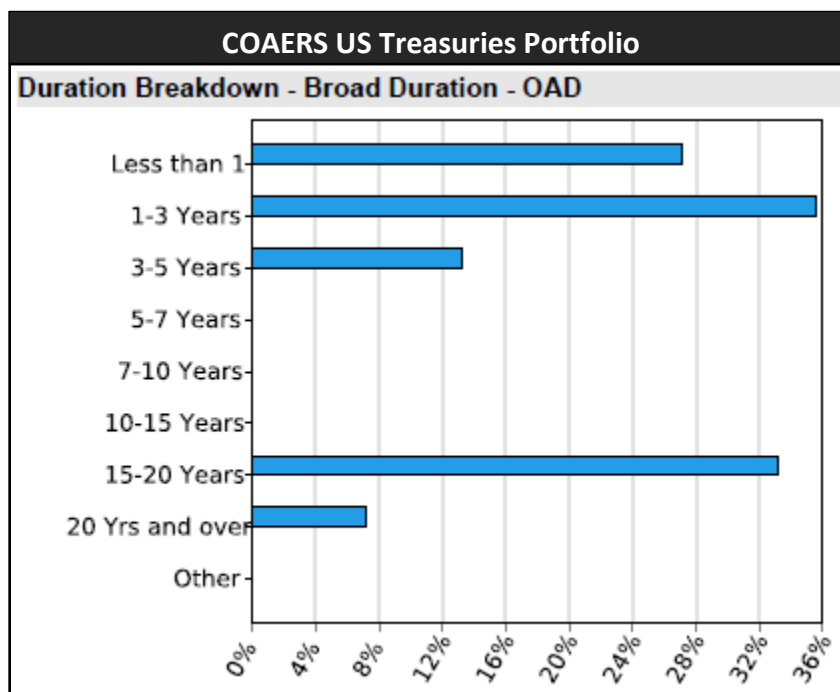


Fixed Income Current Portfolio and Positioning

In the Strategic Asset Allocation, the Fund has a neutral allocation to Fixed Income of 21%, which includes 13% in US Treasuries, 4% in US Mortgages, and 4% in US Credit. As of the end of Q1 2023, Fund positioning was underweight Fixed Income at 19.1%. This asset class underweight is comprised of US Treasuries positioning at 12.2% of the Fund, while US Mortgages and US Credit were at 3.3% and 3.6%, respectively.



As of the end of Q1, the Fund received approximately 11% of its US Treasury exposure using US Treasury futures and the remaining exposure through securities held in SMAs. This implementation style provides a low-cost and liquid exposure with minimal tracking error. The 10-year US Treasury futures mandate was reduced to zero in Q4 2022, which leaves the 30-year US Treasury futures position, in combination with the remaining US Treasuries positions, to serve as the long end of the barbell in managing duration (interest rate sensitivity).



Source: BNYM

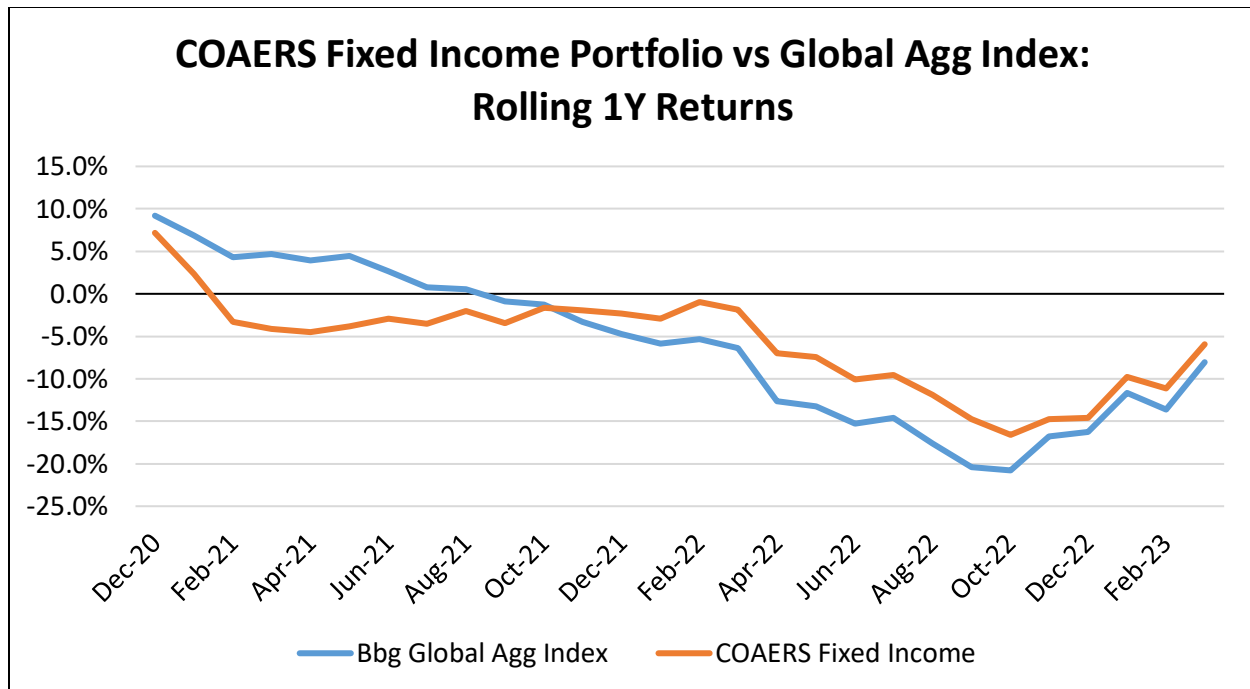
Risk and Return Characteristics

Market Commentary: Both bonds and stocks rallied in the first quarter of 2023, maintaining the positive correlation between the two. The Bloomberg Global Agg Index and the Bloomberg US Agg Index ended up by about 3.0%, after declining 16.1% and 12.9% respectively in 2022. Broad global equity markets were also up for the first quarter. The MSCI All Country World IMI Index was up 7%, and the MSCI USA Index was positive by 7.6%.

Portfolio Returns: COAERS Fixed Income portfolio increased by 3.4% in the first quarter, which outperformed its benchmark, the Global Agg Index, by about 0.4%. Implementing only in the US did not add the extra value this quarter given that the results of the US Agg Index and Global Agg Index were about the same. The Fixed Income portfolio outperformance was mainly due to positioning within the sub-asset classes.

COAERS Fixed Income Portfolio		
Characteristics Summary		
Leverage	Capital Gross Leverage Ratio	0.99
	Capital Net Leverage Ratio	0.99
Credit Quality	Moody's Rating	Aa1
	S&P Rating	A-1+
	Fitch Rating	AA+
	DBRS Rating	AAA
	Average Agency Rating	AA1
Interest Rate Sensitivity	Duration	7.91
	Modified Duration	7.78
	Opt. Adj. Duration	7.73
	Duration to Worst	8.71
	Spread Duration	2.66
	Opt. Adj. Spread	0.46
	Opt. Adj. Convexity	1.36
Yield and Other	Num of Fixed Income Holdings	765
	Average Coupon	2.65%
	Weighted Average Life	9.12
	Current Yield	3.46%
	Yield to Maturity	4.43%
	Effective Yield to Maturity	4.28%
	Yield to Worst	4.11%

Source: BNYM



Summary

The Fixed Income portfolio outperformed the Global Agg benchmark in each of the last two calendar years. The outperformance was driven mostly by the decision to implement the Fixed Income portfolio exclusively in the US, versus replicating its global benchmark. This decision has added about 5.8% of alpha to the portfolio since Fixed Income was disaggregated into the sub-asset strategies in mid-2019. Within the context of the total Fund, US Treasuries have lost much of the diversification to equities that they once provided, which could lead to a shift in their portfolio role should this trend continue. Historically, fixed income's role has included both income and diversification. As rates have risen over the past year, their income role is once again brought to the forefront, but the lack of diversification to equities will need to be considered as the Committee considers portfolio construction during the current Asset Allocation Study.

Glossary

- Collective investment trust (CIT): COAERS owns shares in a pooled fund that is sponsored by a bank or trust company and is open only to institutional investors. As such, it is not considered a security under US law and is governed instead by federal and/or state banking laws.
- Exchange Traded Fund (ETF): COAERS owns shares in a pooled fund that is sponsored by a bank or trust company. ETFs are traded on an exchange, and as such they offer intraday liquidity since they can be bought and sold intraday through a brokerage firm.
- Future: COAERS owns futures on stock indices and bonds. Ownership of a future represents a contractual obligation to take delivery of the underlying stock index, bond, gold warrant, etc., at an agreed upon price and at a future date.
- Limited partnership (LP): COAERS is a limited partner in a legal entity that invests according to a pre-determined strategy and is managed by a general partner.
- Mutual fund (MF): COAERS owns shares in a pooled fund of both institutional and retail investors that is managed by a registered investment advisor according to US securities laws.
- Separately managed account (SMA): the underlying shares are owned directly by COAERS and the manager has authorization to trade that account.
- Warrant: COAERS owns warrants on gold bars. The warrants are registered with the Commodity Exchange Inc. (COMEX) and are claims on individual gold bars stored in vaults throughout the United States.

Appendix

- **Hoisington Macroeconomic Fixed Income:** this actively managed account aims to materially outperform the Bloomberg Barclays U.S. Treasury Index by incorporating macroeconomic analysis of interest rates, economic trends, and other relevant considerations. The manager has discretion to buy, sell, sell short or cover any of the following: U.S. Treasury bonds, bills and notes; Treasury zero coupon bonds; Treasury Inflation Protected Securities; Treasury floating rate notes; and repurchase agreements collateralized by the foregoing. It is structured as a separately managed account (SMA) that is managed by Hoisington Investment Management, which is based in Austin, Texas.
- **Agincourt 1-3 Year US Treasuries:** this actively managed account seeks to track the returns of its benchmark index, the Bloomberg Barclays 1-3Y US Treasury Index. It is structured as a separately managed account (SMA) that is managed by Agincourt Capital Management, which is based in Richmond, Virginia.
- **Agincourt 1-5 Year US TIPS:** this passively managed account seeks to track the returns of its benchmark index, the Bloomberg Barclays US Treasury TIPS 1-5 Years Index. TIPS stands for Treasury Inflation Protected Securities, which is a Treasury bond that enjoys some protection from inflation because its principal payment is linked to the consumer price index. The strategy is structured as a separately managed account (SMA) that is managed by Agincourt Capital Management, which is based in Richmond, Virginia.
- **NISA 30 Year US Treasury Futures:** this strategy seeks to track the total return of the on-the-run 30-year US Treasury Bond through the purchase of 30-year US Treasury futures. The account is fully collateralized with Treasury bills and as a result no leverage is incurred. The mandate is managed through a separately managed account and benchmarked to the Bloomberg Barclays US Treasury Bellwethers 30 Year Total Return. The investment manager is NISA Investment Advisors, which is based in St. Louis, Missouri.
- **DoubleLine Agency Mortgage-Backed Securities (MBS) Portfolio:** through active selection of government and agency issued debt securities, this portfolio seeks to outperform the total return of the Bloomberg Barclays US MBS index. The investment is managed by DoubleLine Capital, which is based in Los Angeles, California. It is structured as a separately managed account (SMA).
- **Prudential US Corporate Bond Fund:** through active management of investment grade US corporate bonds this fund seeks to outperform the total return of the Bloomberg Barclays US Credit Index after fees. The investment is managed by Prudential Trust Company, which is based in Scranton, Pennsylvania. It is held as shares of a collective investment trust (CIT) in which securities lending is permitted.

9. Receive educational presentation on Private Credit

Presented by RVK and Ty Sorrel



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 9:

Receive educational presentation on Private Credit

***This agenda item is considered in-house training provided by COAERS, an accredited sponsor of Minimum Educational Training (MET) for purposes of fulfilling the Pension Review Board's MET Program requirements.*

AGENDA ITEM OBJECTIVE

The Committee will receive education on Private Credit, with a focus on types of strategies and implementation options.

RELEVANCE TO STRATEGIC PLAN

This agenda item is central to **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.**

RECOMMENDATION FOR COMMITTEE ACTION

At the Committee's discretion.

BACKGROUND

Staff and RVK will conduct a presentation on the characteristics of private credit. In this discussion, RVK will present the characteristics of various types of private credit strategies and potential structuring of these sub-strategies in building out a private credit program. Staff will lead a discussion on how the Fund could implement any such allocation with a focus on the types of funds available and considerations for each.

ATTACHMENTS

1. RVK presentation: "Private Credit Education"
2. Staff presentation: "Private Credit – Thinking Through Implementation"



Private Credit Education Slides

City of Austin Employees Retirement System



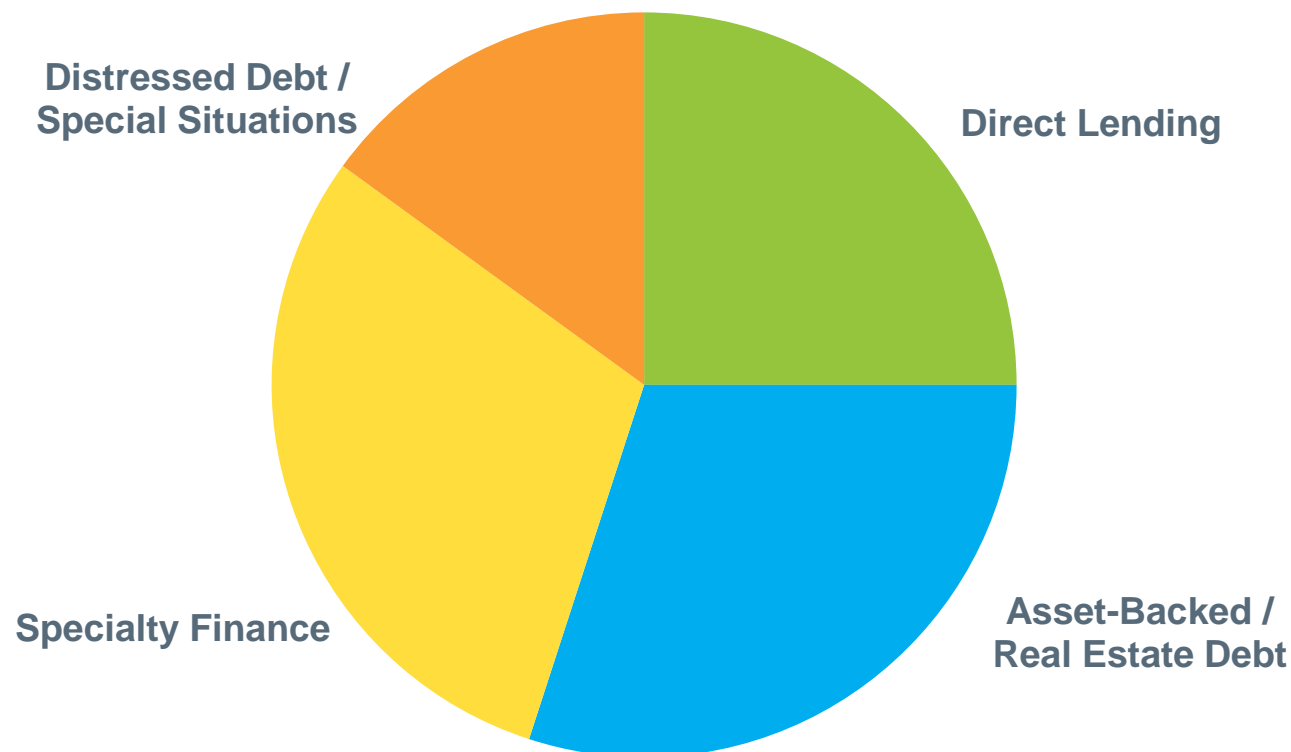
Private Credit Education



Private Credit Education

Introduction

- Since the Global Financial Crisis, the private credit opportunity set has greatly expanded in size, breadth, and complexity.
- RVK sources opportunities across the entire private credit landscape, including a variety of sub-strategies and collateral types with additional diversification across return targets, geographies, and use of fund-level leverage.
- For illustrative purposes, the sample allocation below represents one “typical” diversified institutional investor allocation to private credit:



Private Credit Education

Definition and Characteristics

Private credit refers to debt financing provided by non-bank institutions that are not traded on the public market.

Characteristics

- Investments span a wide range of sub-strategies and collateral types
- High current income component
- Limited dependence on capital gains through price appreciation
- Limited liquidity
- Less efficient, more complex opportunity set than public fixed income
- More defensive profile than public fixed income driven by stronger lender protections
- Bespoke investment structures are typical
- Lower levels of risk and return than private equity
- Higher fees than public fixed income, lower fees than private equity

Sub-strategies include direct lending, asset-backed debt, real estate debt, specialty finance, special situations, and distressed debt, among several other private credit sub-strategies.

Private Credit Education

Benefits and Risks

Benefits

- High and stable cash yields
- Superior risk-adjusted returns vs public fixed income
- Defensive profile with greater lender protections compared to public fixed income
- Bespoke investments are typical
- Low to moderate correlation to other asset classes
- Wide variety of sub-strategies and collateral types
- Diversification available across risk and return targets, geographies, and use of fund-level leverage
- Portfolios can be tailored to meet investors' specific risk/return needs and objectives

Risks

- Long-term, illiquid fund structures
- Lower return potential than some other alternative strategies like private equity
- Occasional use of fund-level leverage
- Higher fees than public fixed income
- Recent record fundraising has driven increased competition
- Managers within over-crowded sub-strategies have recently become “price-takers”
- In some congested markets, lender protections have weakened

Private Credit offers investors portfolio-level diversification and a high risk-adjusted yield with limited dependence on asset price appreciation.

Private Credit Education

Asset Class Comparison

Benefits of Private Credit:

- ✓ Superior risk-adjusted returns due to a less efficient investment space than more liquid, widely traded, and well-understood asset classes, such as public fixed income.
- ✓ Features a heavy income component with limited dependence on asset price appreciation.
- ✓ Typically includes greater lender protections, indicating a more defensive profile.

Drawbacks of Private Credit:

- Illiquid fund structures with investor's capital locked-up for 4-8 years.
- Higher fees than public fixed income as a result of added asset class complexity.
- Lower levels of long-term return vs. higher-risk asset classes, such as private equity.

	Public Fixed Income	Private Credit	Private Equity
Target Net Return	3-6%	6-14%	10-18%
Fund Life	Evergreen	4-8 Years	10-12 Years
Liquidity	Daily	None	None
Income Distributions	Monthly	Quarterly	None
Management Fee	0.25% - 0.75%	0.75% - 1.75%	2%
Incentive Fee	None	15% - 20% over a 6% - 8% Hurdle	20% over an 8% Hurdle
J-Curve	None	Moderate	Drastic

RVK's Approach to Private Credit



RVK's Approach to Private Credit Portfolio Construction

We focus on three components during portfolio construction:

1. Program Size and Return Target	Typical RVK Client Solution
Investor's Objective and Return Target	Augment the long term returns of the Fixed Income or Alt portfolio while providing risk control, diversification, and an attractive risk-adjusted return for the Total Fund
Source of Capital	Fixed Income, Hedge Funds, or Equities, among others
Target Allocation Size	4% - 10% Target Allocation

2. Diversification and Risk	Typical RVK Client Solution
Geographic Diversification	We believe that most investors should allocate opportunistically and globally based on the greatest relative value, as opposed to "set" percentage allocations
Appropriate Strategy Mix	Allocate opportunistically among private credit sub-strategies depending upon market cycle placement and relative value
Target Fund Size	Institutional quality size, typically \$500 million or above
Tolerance for Fund-Level Leverage	RVK will typically avoid recommending funds with high levels of fund-level leverage

3. Pacing, Liquidity, and Structure	Typical RVK Client Solution
Number of Underlying Investments	8-10 fund series over the next 5-8 years
Investment Size	\$25 - \$200 million
Vintage Year Diversification	2 - 3 funds each year
Investment Time Horizon Restrictions	Varies by client
Structural Considerations	Varies by client

RVK's Approach to Private Credit

Opportunity Set

RVK sources opportunities across the entire private credit landscape, including a variety of strategies and collateral types with additional diversification across return targets, geographies, duration, and use of fund-level leverage.



RVK's Approach to Private Credit

Market Cycle

RVK seeks a diversified selection of private credit asset classes across the full market cycle.



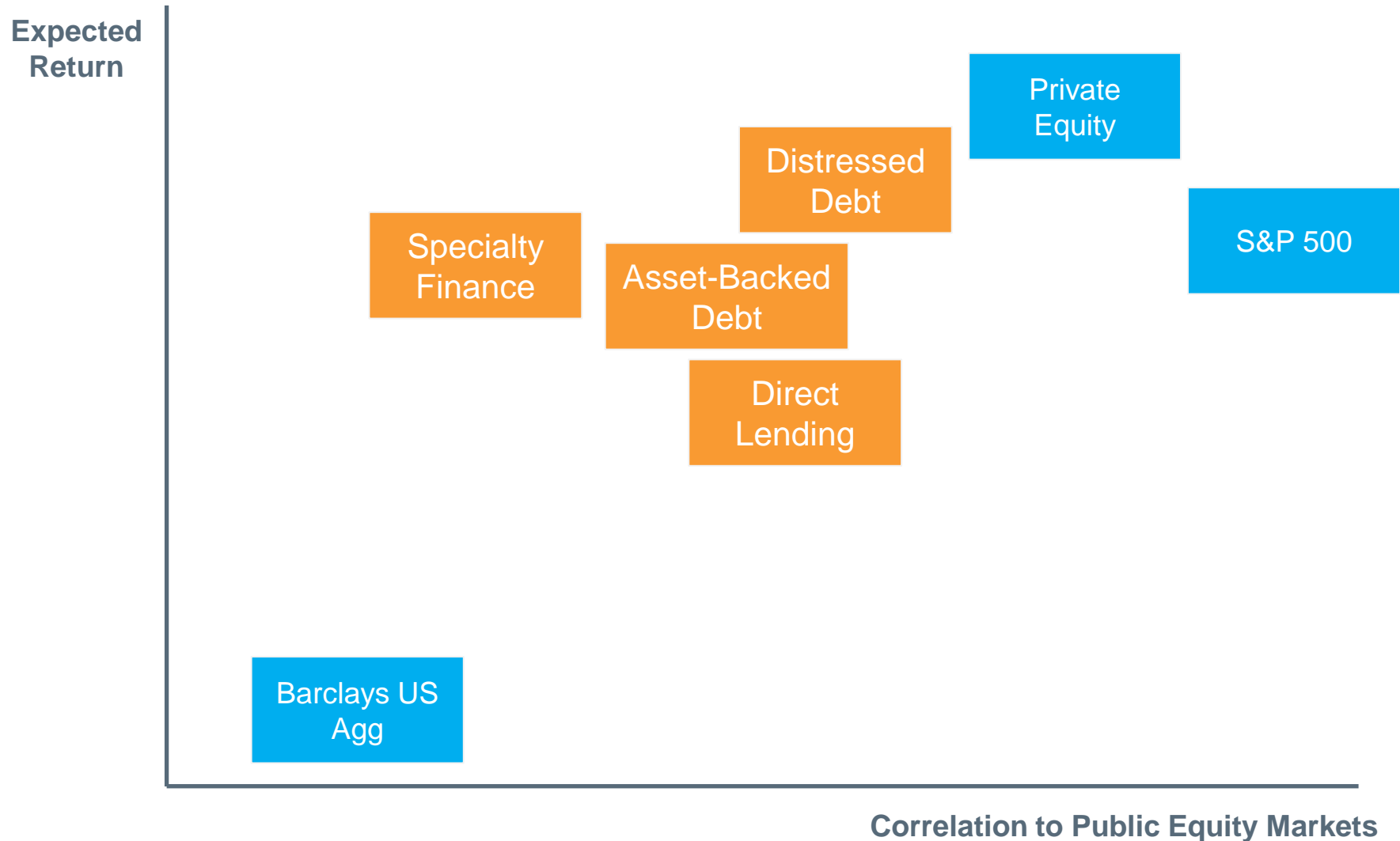
Asset Class	Growth	Slowing	Recession	Recovery	Growth
Direct Lending	35%	10%	5%	25%	35%
Asset-Backed / Real Estate Debt	25%	40%	35%	20%	25%
Specialty Finance	35%	40%	20%	30%	35%
Distressed Debt / Special Situations	5%	10%	40%	25%	5%

Presented for illustrative purposes only. Client specific recommended allocations should depend on individual investment goals and constraints. Please see the Appendix for strategy profiles and typical terms of each asset class.

RVK's Approach to Private Credit

Sub-Asset Class Return & Correlation Spectrum

Private Credit offers a variety of risk, return, and correlation profiles depending on the sub-strategy and collateral type.



Private credit investments are not traded in public markets, and as such, a true correlation to public markets cannot be accurately calculated. Presented for illustrative purposes only.

RVK's Approach to Private Credit

Sub-Asset Class Profile: Direct Lending

- **Definition:** Private loans to stable corporate borrowers which are backed by borrower cash flows.
- **Use of Proceeds:** These loans are typically used to finance investments in areas such as working capital, capital structure refinancings, corporate transactions such as acquisitions or leveraged buyouts, and other related uses of capital expected to increase the earnings and value of the corporate borrower.
- **Typical Target Return:** 5-8% Net IRR (Unlevered), 8-13% Net IRR (Levered)

Sample "RVK Best Idea" Direct Lending Fund

- Strategy Focus: Lower-Middle Market Direct Lending in the US
- Target Return: 6-8% Net IRR (Unlevered), 10-13% Net IRR (Levered)

Key Strategy Attributes

- Defensive strategy through a transaction leadership role and a focus on first lien, senior secured debt
- Large and well-resourced investment team
- Dynamic monitoring capabilities with real-time data tracking
- Diversified portfolio of over 120 loans across various industries

RVK's Approach to Private Credit

Sub-Asset Class Profile: Asset-Backed Debt

- **Definition:** Private loans to established corporate borrowers which are backed by borrower assets, such as pools of receivables, inventory, property, plant and equipment, royalty streams, or portfolios of investments owned by the borrower. This category may also include strategies dedicated exclusively to debt that is collateralized by borrower's real estate.
- **Use of Proceeds:** These loans are typically used to financing investments in areas such as working capital, capital structure refinancings, and other related uses of capital expected to increase the earnings and value of the borrower.
- **Typical Target Return:** 8-10% Net IRR (Unlevered), 10-13% Net IRR (Levered)

Sample "RVK Best Idea" Asset-Backed Debt Fund

- Strategy Focus: Senior-Secured Asset-Backed Lending in the US
- Target Return: 8-10% Net IRR (Unlevered), 11-13% Net IRR (Levered)

Key Strategy Attributes

- Deep industry experience and successful track record
- Defensive strategy posture through highly structured transactions
- Active monitoring and value-add approach
- Strong proprietary sourcing ability with emerging borrowers

RVK's Approach to Private Credit

Sub-Asset Class Profile: Specialty Finance

- **Definition:** Niche investments where targeted borrowers, loan structures, or collateral packages have atypical features. Specialty Finance encompasses an extremely wide range of specialized investments, borrowers, and types of collateral.
- **Use of Proceeds:** This may include, but will not be limited to, a strategy focused on consumer lending, a strategy focused on a single industry, a strategy focused on providing liquidity to other asset managers, or a strategy focused on the purchase of discounted private loan portfolios through secondary market transactions.
- **Typical Target Return:** 10-15% Net IRR (Unlevered)

Sample "RVK Best Idea" Specialty Finance Fund

- Strategy Focus: Asset-Based Specialty Finance in the US and Western Europe
- Target Return: 11-13% Net IRR (Unlevered)

Key Strategy Attributes

- Large and established investment manager
- Substantial team with experience across multiple alternative credit sectors
- Capital preservation focus through strong structural protections
- Excess return potential through complexity

RVK's Approach to Private Credit

Sub-Asset Class Profile: Distressed Debt

- **Definition:** Debt investments in unstable borrowers, where borrower companies may not be expected to persist as going concerns. This may also include investments made in the debt of borrower companies where expected returns are primarily driven by a specific event or series of events.
- **Use of Proceeds:** In many cases, investments are made under the assumption that the investment will appreciate in value following a restructuring of the company's obligations. This may include borrower companies undergoing restructurings both inside Bankruptcy Court and outside through private negotiations.
- **Typical Target Return:** 12-20% Net IRR (Unlevered)

Sample "RVK Best Idea" Distressed Debt Fund

- Strategy Focus: Distressed-for-Control in the US and Western Europe
- Target Return: 15% Net IRR (Unlevered)

Key Strategy Attributes

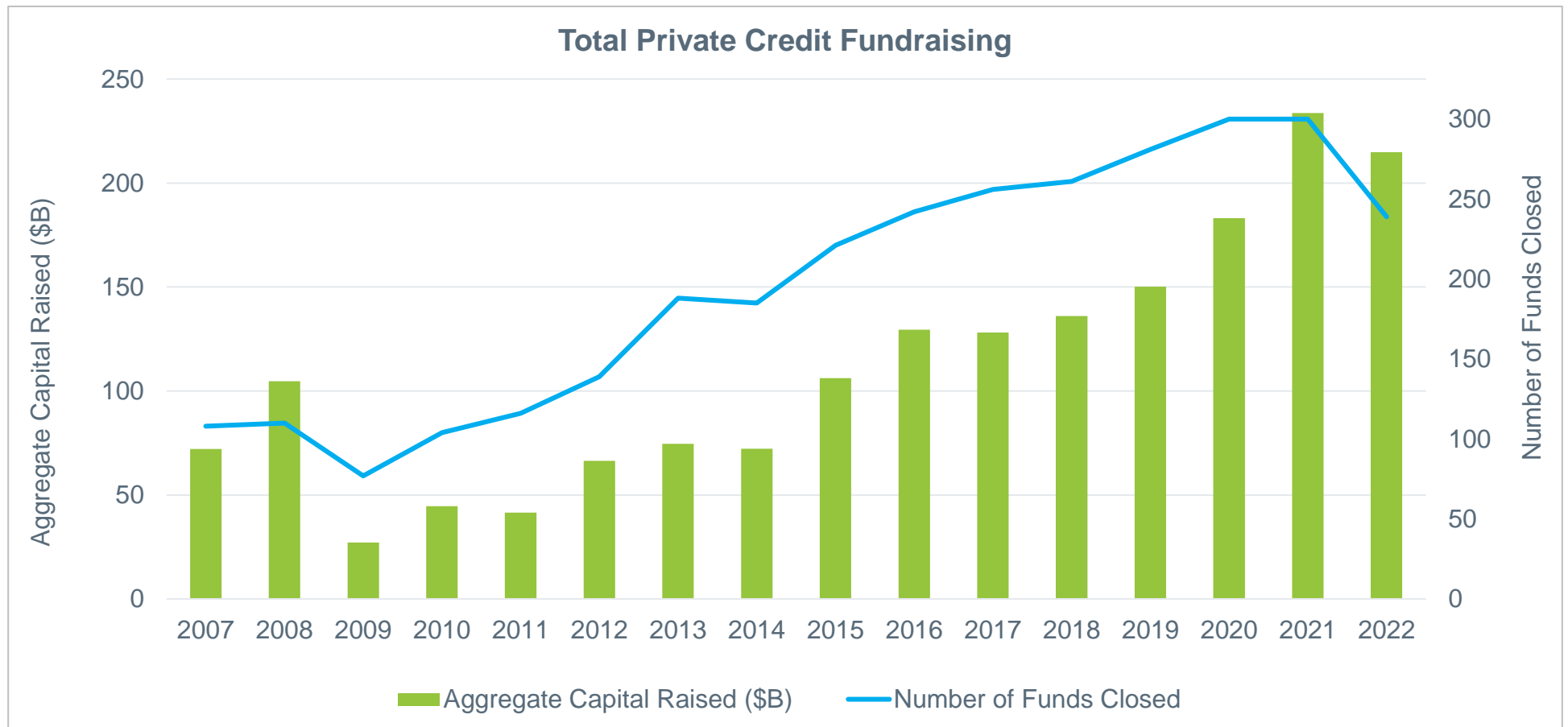
- Significant distressed debt experience and tenure
- Extensive sourcing network
- Strong value creation ability through business operations expertise
- Historically successful track record performance

Private Credit Current Landscape



Private Credit Current Landscape

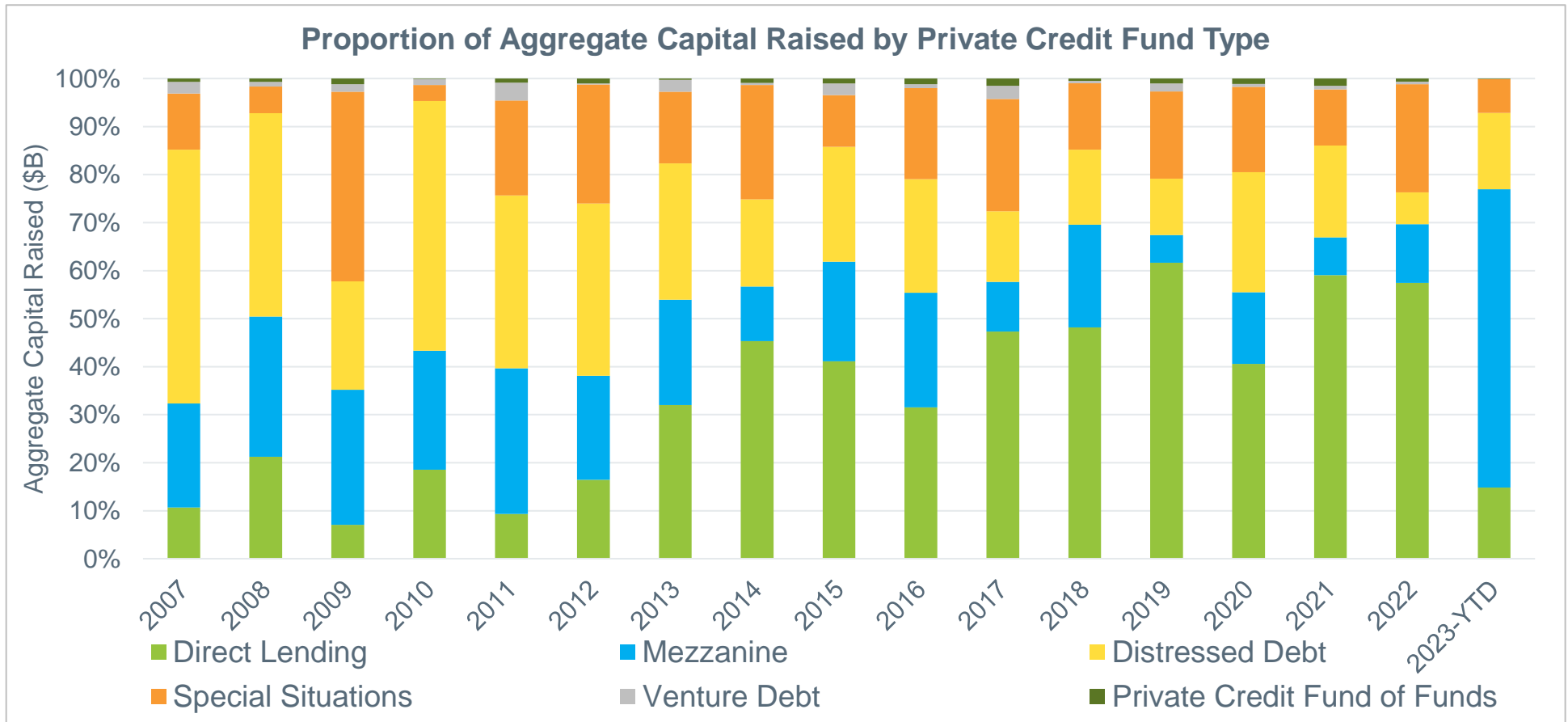
Fundraising



- The size of the private credit asset class has enjoyed consistent growth in recent years as a greater number of investors seek the benefits found in private credit, such as high risk-adjusted yield, low market sensitivity, and meaningful portfolio diversification.
- Since the Global Financial Crisis, fundraising has been robust, leading to overcrowding, compressed yields, and lower investor protections within many private credit strategies.

Private Credit Current Landscape

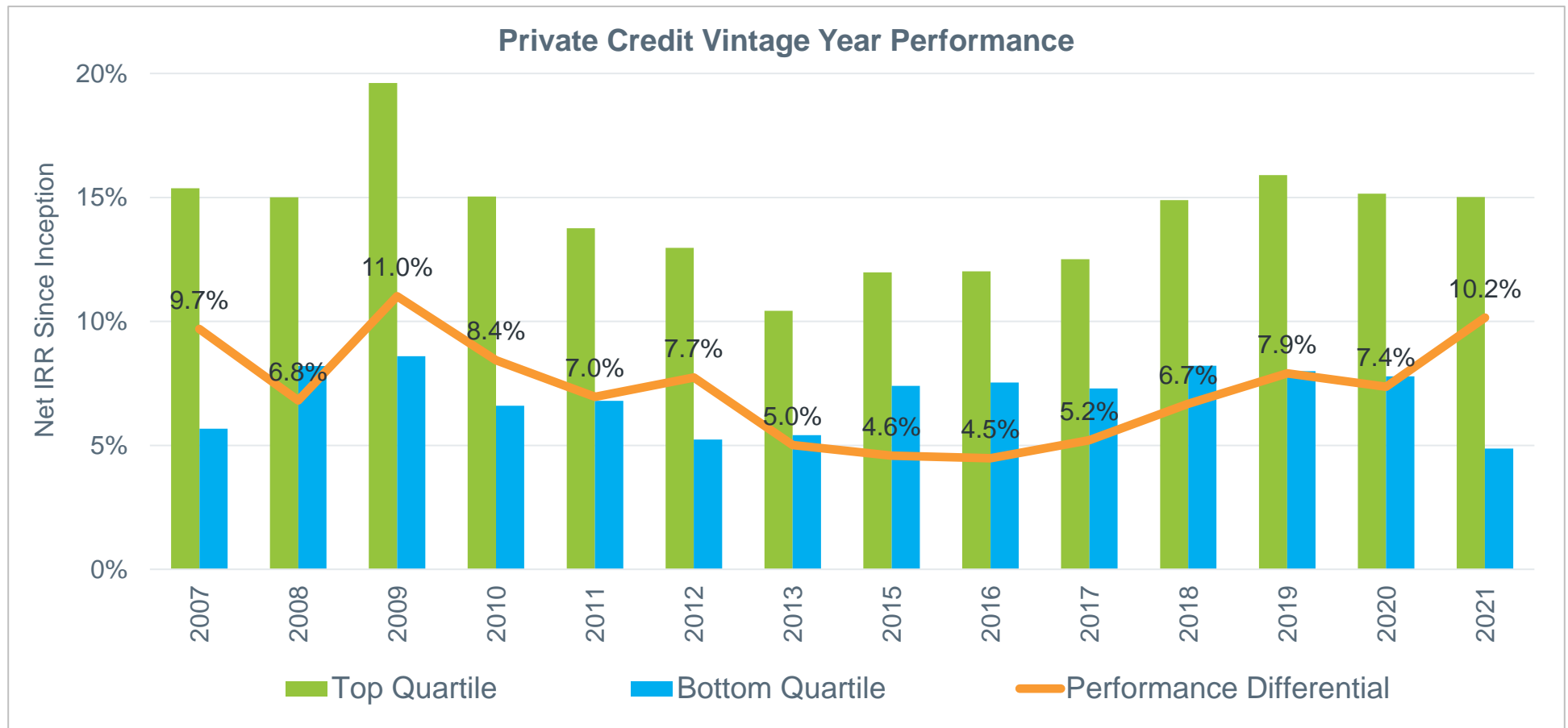
Strategy Specific Fundraising



- Direct Lending continues to be the dominant strategy within Private Credit, as approximately half of the capital raised since 2017 has been committed to Direct Lending managers.
- RVK focuses on direct lending managers which benefit from substantial experience within their market segment, target low levels of borrower and fund-level leverage, and demonstrate a defensive strategy posture by emphasizing senior debt and strong covenants.

Private Credit Current Landscape

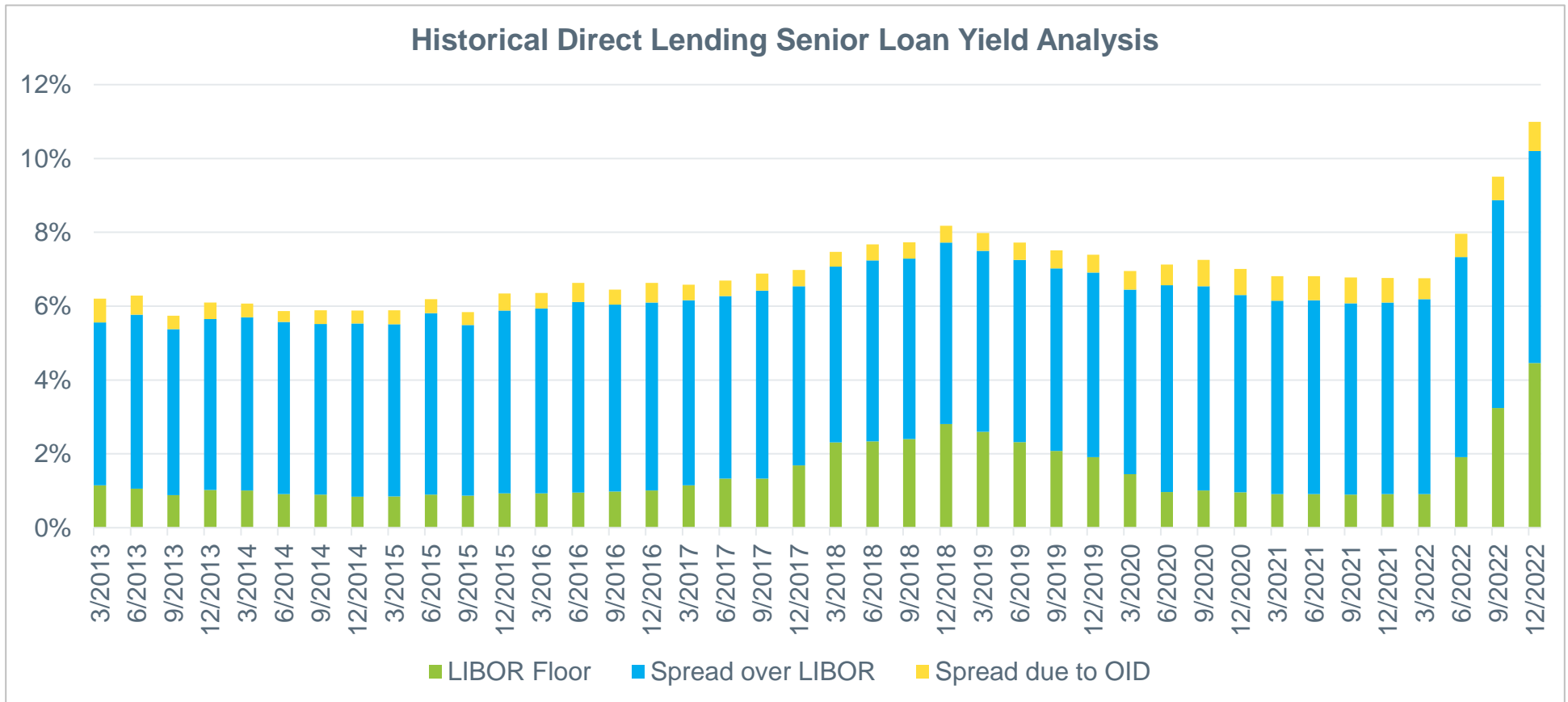
Performance



- Private credit median performance has been approximately 8% to 10% net IRR since 2007.
- Manager selection within private credit is essential, as the spread between the top and bottom performing private credit funds is significant, with an average differential of approximately 7.1% since 2007.

Private Credit Current Landscape

Yield Characteristics



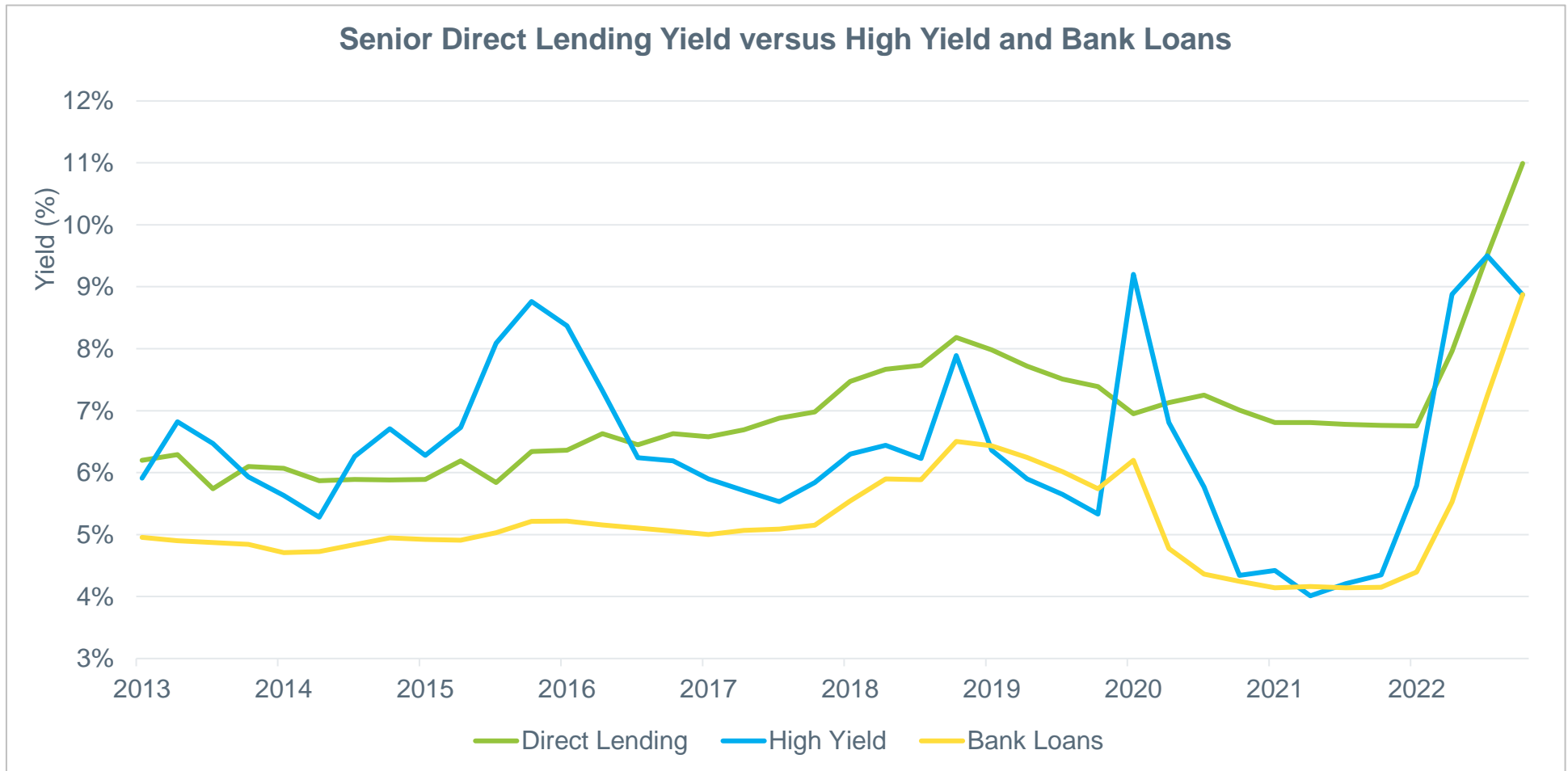
- Investors in private credit can generally expect an increased yield compared to their public fixed income portfolios, as private middle-market loans often provide a yield premium of 1% to 3% over securities of comparable credit quality in public fixed income markets.
- Senior loans in the direct lending market have historically offered lenders consistent all-in yields of between 6% and 8%, with an average yield of 6.7% from 2013 through 3/31/2022.
- Base rate floors, spreads and all-in yields have increased to historic highs, reaching an approximate 11% as of year end 2022.

Source: Refinitiv LPC, RVK. Represents the average first-lien term loan yield with a three-year term. Data is based on private data submissions and excludes unitranche and second lien term loans. Data as of 12/31/2022.

Private Credit Current Landscape

Private Credit Illiquidity Premium

- The yield of senior loans in middle-market direct lending is approximately 11.0% as of 12/31/2022.
- The illiquidity premium in private credit has historically been around 2%.



Source: Refinitiv LPC, Federal Reserve Bank of St. Louis, Ice Data Indices LLC, Credit Suisse, RVK. Direct Lending represents the average first-lien term loan yield with a three-year term. Direct Lending data is based on private data submissions and excludes unitranche and second lien term loans. High Yield represents the effective yield of the ICE BofA US High Yield Index. Bank Loans represent the current yield of the Credit Suisse Levered Loan Index. Data as of 12/31/2022.



Private Credit Current Landscape

RVK's Sub-Strategy Comments

Direct Lending:

- We are once again experiencing overcrowding as more competition floods the market. Many middle and upper-middle market lenders have essentially become “price takers,” willing to accept increased leverage and weaker lender documents.
- We believe a risk-adjusted premium still exists in the lower-middle market, characterized by reduced competition leading to increased lender protections and yield.
- Strong lower-middle market lenders are gaining market share over their weaker competitors due to their performance in protecting investor capital during the pandemic. We expect this dynamic to continue over the course of the year.

Distressed Debt:

- A significant amount of capital entering the distressed debt space paired with low levels of defaults across below investment grade bonds and loans has led to a lack of compelling opportunities in traditional large-cap corporate distress.
- Our focus is on distressed managers with significant experience, compelling track records, the ability to invest in more niche opportunities outside of large-cap distress, and the capability to add value to companies at the operational level.

Private Credit Current Landscape

RVK's Sub-Strategy Comments

Asset-Backed Specialty Finance:

- Banks continue to exit the asset-backed specialty finance lending market, opening the door for private lenders.
- We believe the risk-adjusted relative value of private asset-backed specialty finance strategies remains compelling relative to more traditional and well-trafficked private lending opportunity sets, such as middle market direct lending.
- Top-tier strategies in this space can offer unlevered senior debt returns of 8-10% with strong structural protections and high levels of overcollateralization.

Opportunistic Lending and Special Situations:

- With the overcrowding of more commoditized private credit sub-strategies such as direct lending and distressed debt, RVK has shifted its focus to investment managers that lend to borrowers in niche opportunity sets or some form of complicated transition.
- RVK is seeking opportunistic lending and special situations managers with significant experience in their unique target markets, robust track records, and the ability to navigate complex events to generate expected returns of 10-15%.

Appendix



Private Credit Strategy Profiles and Typical Terms

Fund Strategy	Description	Target Return (Net IRR)	Investment Period	Fund Term	Management Fee	Incentive Fee	Preferred Return
Direct Lending	Private loans to stable corporate borrowers which are backed by borrower cash flows	5 – 13%	2 – 3 years	5-7 years	0.75% – 1.25% on invested capital	15%	5 – 7%
Asset-Backed / Real Estate Debt	Private loans to established borrowers which are backed by assets such as pools of receivables, royalty streams, inventory, or real estate	8 – 13%	3 – 5 years	7-10 years	1.00% – 1.50% on invested capital	15% - 20%	6 – 8%
Specialty Finance	Niche investments where targeted borrowers, loan structures, or collateral packages have atypical features.	10 – 15%	3 – 5 years	5-10 years	1.25% – 1.75% on invested capital	20%	6 – 8%
Distressed Debt / Special Situations	Debt investments in unstable borrowers, where companies may not be expected to persist as going concerns or expect an upcoming event	12 – 20%	3 – 5 years	7-10 years	1.50% – 1.75% on invested capital	20%	8%

Implementation – Closed-End vs. Evergreen Vehicle

	Closed-End Fund (“Traditional”)	Open-Ended Fund (“Evergreen”)
Fund Life	Typically 6 to 10 Years (Typically a 3-5 year investment period followed by a 3-5 year harvest period)	Perpetual (Typically investors have an option to reinvest income, while principal is reinvested automatically)
Vehicle Type Prevalence	High (~600 closed-end funds currently fundraising)	Moderate (~140 open-ended funds currently fundraising)
Strategy Diversification	Low - Moderate (Typically one private credit sector)	Moderate - High (Typically several private credit sectors)
Risk Profile	Similar (Dependent on strategy type)	Similar (Dependent on strategy type)
Return Profile	Similar (Dependent on strategy type)	Similar (Dependent on strategy type)
Illiquidity Premium	High (Entirely private debt)	Moderate - High (Primarily private debt, though some strategies may include some public fixed income securities)
Fee Burden	Similar (Dependent on strategy type)	Similar (Dependent on strategy type)
Liquidity	Low (No liquidity, capital is returned during harvest period)	Low - Moderate (Typically a “slow pay” structure, in which capital is returned over 3-5 years following redemption)
Deployment Speed	Low (Capital invested over 3-5 year investment period)	Low - Moderate (Capital typically invested over 6-18 month period, but may take 2-3 years)
Administrative Burden	High (Must re-commit to each fund in the fund series)	Low (Following the initial commitment, no additional commitment is necessary)

Glossary

Borrower Leverage	A term used in private credit that is generally a reference for the debt/EBITDA of the borrower. A higher amount of borrower leverage (debt/EBITDA) indicates a greater amount of credit risk.
Commitment	The maximum amount of capital an investor expects they would invest during a fund's life. Most funds call between 95% and 100% of commitments.
Contribution	A cash flow into the private market investment, sent by the investor. Also described as 'Paid In (Capital)'.
Distribution	A cash flow out of the private market investment, received by the investor.
Fund Term	Defined length of time for the fund to liquidate any investment interests. Such defined terms are usually subject to extensions, often requiring approval of either the GP or a portion of the LPs.
GP (General Partner)	The legal entity responsible for managing a fund's investments. The GP makes all of the investment decisions for a private markets fund and earns the management fee.
IRR (Internal Rate of Return)	A dollar-weighted measure of return. IRR is defined as the discount rate that reduces the net present value of an investment to zero. IRR almost always represents inception to date annualized returns.
LP (Limited Partner)	Passive investor in a private markets fund, does not take part in active management of the fund.
Preferred Return	The defined return, typically measured by IRR, which the fund must achieve before the General Partner can receive its allowed performance fee.
Vintage Year	Name given to year of inception for a private market investment. For funds, this is typically the first year that the fund calls committed capital.

PORTLAND

BOISE

CHICAGO

NEW YORK

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Private Credit – Thinking Through Implementation

Ty Sorrel

Director of Investment Implementation

May 19, 2023

A Consistent Approach

- Investing in Private Credit represents an evolution of the Fund’s current private investments in infrastructure and real estate into the debt market
- Private Credit is consistent with COAERS’ investment belief that “Implementation should occur passively and in public markets unless a high likelihood of success on a risk-adjusted, net-of-fees basis can be expected from other approaches”

Private Credit is expected to have a greater return with less volatility compared to Global Equity

Asset Class	Arithmetic Return Assumption	Standard Deviation Assumption
Global Equity	7.85	16.40
COAERS Fixed Income	4.00	6.29
COAERS Real Assets	7.08	14.53
COAERS Multi-Asset	6.87	12.32
Private Credit	8.00	13.00
Private Equity	10.00	22.00
Multi-Strategy Hedge Funds	5.75	8.50
Managed Futures FoF	5.25	9.00
Commodities	6.00	17.50
Cash Equivalents	2.50	2.00

Private Credit Within a Functionally Focused Portfolio

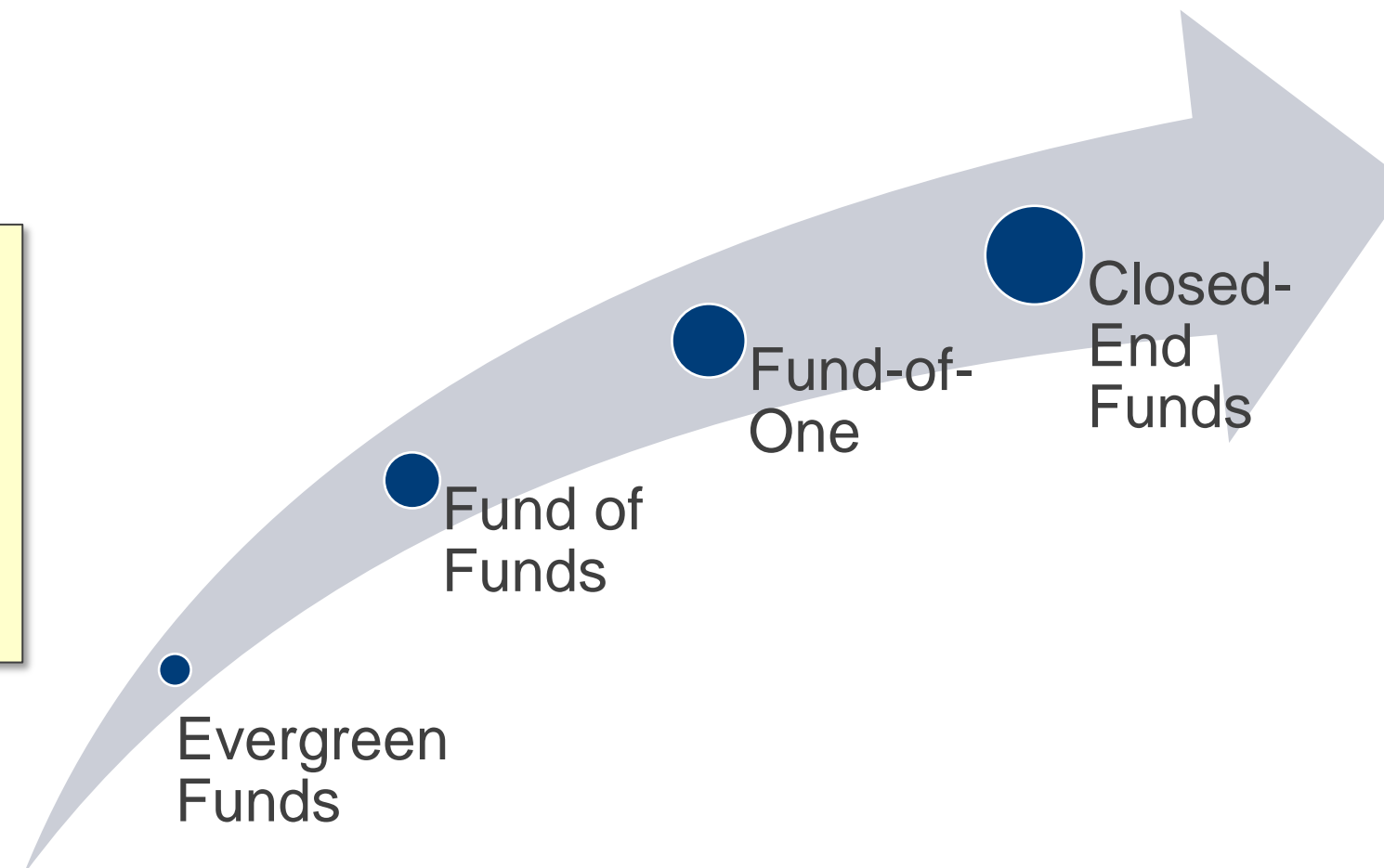
- Within a Functionally Focused Portfolio, Private Credit would be a growth asset given its correlation to equities, which means the two markets generally move together
- Despite these high correlations, Private Credit does offer a differentiated source of returns
- Equity returns mainly consist of capital appreciation while credit return comes from its yield, which is the effective return calculated from its contractual cashflows
- Private Credit also provides exposure to different parts of the capital structure (debt) compared to equity

	Global Equity	COAERS Fixed Income	COAERS Real Assets
Global Equity	1.00	0.00	0.84
COAERS Fixed Income	0.00	1.00	-0.17
COAERS Real Assets	0.84	-0.17	1.00
COAERS Multi-Asset	0.96	0.09	0.89
Private Credit	0.80	-0.29	0.82
Private Equity	0.81	-0.18	0.73
Multi-Strategy Hedge Funds	0.68	0.02	0.72
Managed Futures FoF	0.26	0.03	0.18
Commodities	0.47	-0.09	0.56
Cash Equivalents	-0.08	0.17	-0.08

Different Implementation Structures

- A Private Credit program can be structured to suit the investor's preferences by utilizing implementation structures such as evergreen funds, closed-end ("drawdown") funds, fund-of-ones, fund of funds, etc.
- While COAERS has historically used evergreen structures for their liquidity, the benefits and risks of other implementation styles should also be considered

With COAERS' current capabilities, evergreen funds represent the simplest way to implement; other options have increasing complexity



Implementing with Evergreen Funds

- Evergreen funds provide perpetual investment exposure by continually reinvesting cash flows and typically offer better liquidity profiles than closed-end funds
- Evergreen funds can also mitigate or eliminate the J-Curve, which refers to investors experiencing negative returns shortly after committing capital and then experiencing positive returns later on during the life of the fund

Benefits	Drawbacks & Risks
Greater liquidity than closed-end funds	Significantly smaller universe than closed-end funds
Familiarity (already invest in similar vehicles)	Liquidity may be restricted after initial investment (lock-up)
Natural recycling of more predictable cash flows	Redemption can include “slow pay” which may take years
May reduce blind pool risk	Some credit opportunities not suited to evergreen structure

Implementing with Closed-End Funds

- Closed-end or “drawdown” funds have a limited life and return capital to investors as interest and principal are paid down on the loans in the fund
- Closed-end funds would present some difficulties for COAERS due to the current governance structure and operational capabilities
- Cash distributions from these funds typically increase with the life of the fund; there may be additional policy considerations to reinvest cashflows

Benefits	Drawbacks & Risks
Large universe of private credit funds	Little to no liquidity options
Return of capital by end of fund life	Requires additional operational capabilities
Access to niche managers and strategies	Requires governance changes to meet timelines
Manager can create credit portfolio matching fund life without redemptions	Return can vary greatly by vintage year

Implementing with a Fund of One

- A Fund of One is a customized fund in which there is a single investor who negotiates the terms and investment guidelines of the fund
- This implementation style provides significant flexibility in tailoring a bespoke credit exposure
- These structures can often invest alongside a manager's existing fund, but the Fund of One's guidelines provide the structure to determine an investment's sizing, concentration limits, geographic restrictions, etc.

Benefits	Drawbacks & Risks
Customization around investor credit preferences (i.e., strategies, geographies, etc.)	Larger minimum investments
Diversification across credit universe	Higher initial legal costs and complexity
Single line item in investment reports	Requires additional operational support
Negotiated fees	May have additional fee layer

Implementing with Fund of Funds

- A fund of funds invests in other private credit funds, which can include closed-end or evergreen funds
- This implementation style outsources manager selection, but it can also provide access to otherwise inaccessible managers
- Investors pay an extra layer of fees to invest with a fund of funds and expect to receive scale and diversification as a result

Benefits	Drawbacks & Risks
Access to managers and scale	Added layer of fees
Diversification across credit universe	Lack of transparency into underlying holdings
Able to invest in most vehicles, including closed-end funds	Requires additional operational support
Allocation expertise across credit cycle	Limited or no customization

Summary of Implementation Options

- COAERS has several implementation options are available
- Evergreen structures present a familiar implementation choice, but COAERS may have a smaller universe of investments from which to choose
- Closed-end (draw-down) funds represent the largest opportunity set in private credit, but COAERS would need to make governance changes to fully implement this structure
- Fund of funds provide diversification and access to managers, but the additional fees could reduce some of the incremental benefits relative to other options
- Fund of one investments provide customization and diversification opportunities, but more operational support would be needed

Private Credit Benchmarks

- COAERS has traditionally used public market benchmarks for its Real Assets portfolios, which contain the two private investments
- Under a Functionally Focused Portfolio, a number of Private Credit benchmarks can be implemented that will be consistent with COAERS' overall benchmarking approach

Type of Benchmark	Example	Benefits	Considerations
Stated Objective	Public benchmark (Global Agg) + Premium	Consistent with investment beliefs	May need updating should risk profile change
Private Credit Funds Benchmark	Burgiss Private Credit Funds Index	Covers many private credit funds	Though benchmark is not directly investable, the invested fund may influence benchmark
Public Benchmark	Bloomberg US Corporate Investment Grade	Reflects similar corporate lending	Tracking Error



Private Credit – Next Steps

Continuing Toward a Private Credit Solution

- The April Investment Committee (IC) meeting included discussion regarding some of the benefits of investing in Private Credit which can include:
 - **Increased access to the investable universe:** COAERS currently only has access to about 22% of the US fixed income universe
 - **Enhanced diversification:** the number of companies accessing the public markets has been significantly reduced over the past twenty years
 - **Improved risk-return profile:** the spread between private and public company revenue growth has averaged about 4%
- Staff continues to believe that prudently structuring a Private Credit program would be additive to the overall Fund



Implementation within the Austin Model

One of the key tenets of the Austin Model is a “data-driven approach to investing and markets”.

Adding private credit could be implemented consistently with the Austin Model by focusing on strategic allocations with proven managers and prudent implementation



Examples of Applying a Data-Driven Approach

Improved Risk-Adjusted Returns

Greater Diversification

Reduce Manager Selection Risk

Economics of Implementation

Next Steps

- For the August Investment Committee (IC) meeting, Staff seeks guidance on the interest in pursuing evergreen funds while the organization considers governance structures and operational requirements
- Staff will continue to refine the implementation options available to COAERS in the context of the ongoing Asset/Liability and Asset Allocation Studies and governance discussions
- As Staff continues to research Private Credit, it will discuss with the Committee any additional resources it feels are necessary for successful implementation

Next Steps (cont'd)

- Expectations for Q3 and Q4 of 2023 include:
 - Finalize Asset/Liability Study reflecting the outcome of COAERS pension legislation
 - Presentation of Asset Allocation study and implications for Private Credit and Private Equity allocations
 - Continuing education related to Private Equity market and investments
 - Consideration of Functionally Focused Portfolio policy
 - Discuss potential private credit implementation, including structure, strategies, and managers



Course Evaluation Form

Minimum Required Educational Training (MET)

Course Name: Private Credit – Thinking Through Implementation

You have completed a Minimum Educational Training (MET) program offered by the City of Austin Employees' Retirement System (COAERS), a Pension Review Board accredited sponsor. All accredited sponsors must provide participants a process for evaluating the quality of the course.

Course Objectives:

The objective of this course was to review the characteristics of private credit strategies and potential structuring of sub-strategies when building out a private credit program including different fund types.

Evaluation:

Please take some time to provide a rating on the items below. You may also leave any additional comments that you think may be helpful for future courses.

Please provide a rating on these items	I strongly agree	I agree	I disagree	I strongly disagree
1. These course objectives were met.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The facilities and technology were satisfactory.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The instructor was effective.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The program content was relevant and up-to-date.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional Comments:

Thank you for your feedback.

10. Discuss and consider Investment
Consultant annual review
Presented by David Kushner



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 10:

Discuss and consider Investment Consultant annual review

AGENDA ITEM OBJECTIVE

The Committee will conduct the required annual review of the System's investment consultant.

RELEVANCE TO STRATEGIC PLAN

This agenda item is part of the core competency set forth in the **COAERS Strategic Plan "Prudent Investment Management: Fulfilling fiduciary duty through monitoring performance within adopted process and stated goals."** Committee review of the performance of the investment consultant helps ensure that Trustees monitor the performance of the portfolio and achieve the goal of prudent investment management.

RECOMMENDATION FOR COMMITTEE ACTION

At the Committee's discretion.

BACKGROUND

Best practices for fiduciaries require the regular evaluation of key service providers, particularly those that are engaged in a fiduciary capacity to provide strategic advice to the Board. To that end, Staff has (1) provided its assessment of the services RVK provides to COAERS and (2) conducted a detailed review of the relevant compliance and regulatory documents to gauge the overall health and stability of the firm. An overview of the fees paid to RVK since 2018 is below:

	2018	2019	2020	2021	2022
Base fee	\$250,000	\$250,000	\$253,750	\$264,452	\$283,753
Asset Liability Study	\$40,000	-	-	-	\$55,000
TX 802.109 Report	-	-	\$45,000	-	-
Custodian RFP	-	-	\$35,000	-	-
TOTAL	\$290,000	\$250,000	\$333,750	\$264,452	\$338,753

The contract with RVK included an initial 3-year period that ended on June 30, 2020, and two potential extensions of 2 years. Last year, the second and final 2-year contract extension was executed and continues through June 30, 2024.

ATTACHMENTS

1. Staff Assessment of Investment Consultant Services
2. Staff Review of RVK Firm, Compliance and Regulatory Documents

SUPPLEMENTAL INFORMATION PROVIDED VIA CONVENE APP

1. RVK SEC Forms ADV Part 1, Part 2A and Part 2B



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2. RVK Due Diligence Questionnaire
3. RVK Site Visit Meeting Presentation
4. RVK Site Visit Staff Report
5. COAERS Contract with RVK for Investment Consulting services including amendments
6. RVK Political Contributions Policy
7. RVK Info Security Policy Framework
8. RVK Compliance Manual

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Staff Assessment of Investment Consultant Services

Summary rating: Outstanding. RVK was selected to provide objective, strategic advice to the Board and, in the view of Staff, has contributed meaningfully to the Fund through sound fiduciary recommendations and perspectives.

Governance: RVK perspectives on governance have provided thoughtful views on industry best practices and actively encouraged strategic focus, which avoids the often cookie cutter approach to advice on this subject. As a result, RVK has been able to help the Board solve for and move towards best-in-class Fund governance that is tailored to the needs of the System.

Written materials/communications: RVK has provided committee materials and presentations in advance of deadlines. In response to committee feedback, these materials have become more and more streamlined to help focus conversations on the most meaningful topics. RVK also provides capital market assumptions, detailed investment analysis, monthly performance reporting and materials for the annual comprehensive financial report in a timely and relatively accurate fashion. RVK has a dedicated email address for the COAERS relationship, and individuals are prompt in their responses.

Meeting Attendance: As promised, RVK sends two consultants to be regular attendees of investment committee meetings and important Board meetings with investment-related items. At times, attendance over the past year has been done virtually when scheduling or travel conflicts arise. Despite the challenges with virtual meetings, the consultants still manage to contribute meaningfully to the conversation and provide differentiated perspectives.

Manager Diligence: On the whole, RVK has provided meaningful contributions to manager selection, portfolio construction, and Staff's efforts in the Premier List process. Staff notes that the RVK approach to manager selection and monitoring tends to focus on more customized approaches with fewer, best-in-class managers, which is well aligned with the Premier List philosophy. Staff notes the recent departure of seven individuals from the manager research team, including the head of Private Credit manager research. These departures cause some concern to Staff. Should the Board choose to pursue certain private markets strategies, such as private credit or private equity, it will be prudent to closely review RVK's capabilities and consider whether a specialized consultant could be additive to that approach.

Special Projects: Historically, RVK has aided on a variety of special projects such as the Asset/Liability study, custodial bank RFP, TX 802.109 report and custom peer benchmarking reports with great success. RVK provided an Asset/Liability Study to the Board which suggested that, without significant improvement to the contribution policy, the System's financial health is likely to continue to deteriorate.

Other Considerations: The firm remains strongly committed to its conflict-free business model, which is a rarity in the consulting world and a source of strong alignment with clients. Billing and other operational details have been handled smoothly.

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Staff Review of RVK Diligence Items

Staff reviewed key firm, compliance, ethics, due diligence, and regulatory documents including current and historical SEC Form ADV filings.

In total, Staff concludes that RVK remains a well-managed top-tier investment consulting firm that is keenly focused on providing high quality, strongly aligned strategic advice to institutions. RVK has significantly increased its Assets Under Advisement (AUA) to over \$3T, placing the firm as one of the largest US institutional investment consultants by this measure. Staff notes that this number is skewed higher by project related engagements and full retainer AUA is nearer to \$1.24T. The growth in AUA alongside steady total client counts suggests that RVK continues to focus on organic growth for their firm, instead of the common practice of growth through mergers.

Key Updates from Staff Site Visit to RVK Offices

During a 2022 site visit to the RVK offices, Staff was able to meet with senior personnel at RVK in firm leadership and investment manager research. Becky Gratsinger (CEO) and Jim Voytko (President, COO) discussed the evolution of the firm in line with large growth in AUA. They suggested that the firm continues to focus on generational planning, advising for the long run and maintaining employee ownership of the firm. In the view of Staff, these goals are well aligned with the experienced growth of RVK and structure of the organization. The primary focus of RVK remains non-discretionary investment consulting. New practice areas, notably outsourced chief investment officer (OCIO) search, have generally evolved from existing client needs.

<p style="text-align: center;">General Consulting</p> <ul style="list-style-type: none"> • Trustee Education • Investment Policy Review and Development • Asset Allocation Analysis • Manager Search and Evaluation • Manager Monitoring and Due Diligence • Performance Reporting – Total Fund • Performance Reporting – Alternative Asset Classes • Manager Structure Studies 	<p style="text-align: center;">Specialty Consulting</p> <ul style="list-style-type: none"> • Real Estate Investment Program Development • Targeted Due Diligence on Direct Alternative Investments • Alternative Asset Due Diligence and Pricing <ul style="list-style-type: none"> - Private Equity Fund of Funds - Real Return Strategies - Hedge Fund of Funds • Stochastic Risk Analysis and Modeling • Liability Driven Investing Studies • Asset Liability Modeling • Legislative Issues Support • Strategic Planning and Organization Analysis
<p style="text-align: center;">Investment Operations Solutions Group</p> <ul style="list-style-type: none"> • Securities Lending Program Development • Trade Execution Analysis • Organizational and Compensation Analysis • Custody/Recordkeeper Searches and Evaluation • Prime Brokerage Due Diligence and Selection • Cash Management Program Development • Transition Management 	<p style="text-align: center;">Defined Contribution Solutions Group</p> <ul style="list-style-type: none"> • Plan Structure • Industry Trend Analysis • Third Party Administrator Evaluation • Investment Selection and Monitoring • Plan Operations and Platform Analysis • Fiduciary Policy Development and Implementation • Participant Education

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For COAERS, it is notable that Spencer Hunter (one of the two lead consultants for COAERS) remains a control person of the firm and is a member of RVK's Board of Directors. In addition, Ian Bray (the other of the two lead consultants for COAERS) remains a shareholder of the firm and was promoted from Consultant to Senior Consultant in 2021. Also in 2021, Kevin Wyllie (Backup Consultant for COAERS) was promoted from Associate Consultant to Consultant. Staff views the seniority of these consultants and their success at the firm as evidence that COAERS is receiving insights and analysis from the most talented professionals that RVK has to offer.

Staff also met with Ryan Sullivan (Senior Consultant, Principal) who leads RVK's asset liability (A/L) studies and is a senior member of the RVK team that sets capital market assumptions. Ryan and his team have built out additional A/L capabilities including scenario analysis, deterministic and stochastic modelling, liquidity modeling and risk budgeting. RVK provided meaningful analysis for the System given the ongoing pension modernization efforts. In scenarios where contributions are increased or use an actuarially determined contribution, Ryan suggested that a unique opportunity presents itself to rethink some of the key decisions for the Fund.

RVK discussed their investment manager due diligence process and Staff had the opportunity to meet with Austin Head-Jones (traditional and alternative fixed income), Steve Hahn (private equity) and their respective teams. As the industry and client needs evolved, they noted that there was a need to build sophistication in the firm's direct fund diligence. As such, since 2007 the firm has expanded its headcount in this area to improve their capabilities. In their view, RVK tends to use a more customized approach for each client that look at needs and objectives instead of a "buy list" of funds. Staff notes the recent departure of Austin Head-Jones, who led RVK's manager research effort in Private Credit.

Changes to Staff

A review of the organizational chart highlights a significant number of changes in personnel. RVK has an organizational philosophy to hire and train rather than acquire talent. This is reflected in the number of promotions and lateral moves within the organization year over year as individuals acquire experience in different areas of the organization.

Areas to watch:

1. 9 of 28 individuals on the **Performance Measurement Team** moved to other functions within the organization, while 11 departed the organization. In addition to hiring replacements for these individuals, RVK added four additional personnel, for a total of 32 individuals on this team.
2. The **Consultant Team** lost two individuals year over year, and had a net addition of three **Associate Consultants**. While this increases capacity, it somewhat reduces the experience level of the team.
3. RVK had a net addition of three **Investment Associates**, further enhancing the breadth of the team.
4. The **Manager Research Team** had a net addition of one individual; however, there was significant turnover, with seven individuals leaving the organization. The most notable departure was Austin Head-Jones, who led RVK's efforts in Credit.

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Private Markets Capabilities

COAERS Board has indicated a desire to learn about, and potentially invest in, Private Markets. While RVK has the ability to advise on Private Markets, the recent departure of Austin Head-Jones causes some concern to Staff as it relates to Private Credit. Should there be a need to rely more heavily on RVK's capabilities in Private Credit and Private Equity, Staff will undertake an in-depth analysis of the organization's depth and breadth in an effort to determine whether additional resources may be needed.

Regulatory Assets Under Management (AUM)

As previously noted, in 2020 the firm's SEC Form ADV Part 1 indicated for the first time that the firm has "Regulatory Assets Under Management" in an amount that was disclosed to total \$112 million; this amount has grown to \$828 million in 2021, \$1.3 billion in 2022, and is stated at \$957 million in the 2023 ADV filing. The number of clients served in this area has grown from 22 to 37 year over year.

Regulatory Assets Under Management			Yes	No	
F. (1)	Do you provide continuous and regular supervisory or management services to securities portfolios?			<input checked="" type="radio"/>	<input type="radio"/>
(2)	If yes, what is the amount of your regulatory assets under management and total number of accounts?				
		U.S. Dollar Amount		Total Number of Accounts	
Discretionary:	(a)	\$ 0	(d)	0	
Non-Discretionary:	(b)	\$ 956,814,845	(e)	37	
Total:	(c)	\$ 956,814,845	(f)	37	

Staff monitors this disclosure since any move by an investment consultant to become an asset manager or OCIO provider (and thereby being required to report a nonzero level of AUM) could raise the risk of significant new conflicts of interest. Staff discussions with RVK indicate that the revisions to this disclosure do not suggest a push by the firm into new business areas with risk of significant conflicts, but rather an ongoing administrative recategorization of existing business activity for disclosure purposes.

Specifically, RVK has indicated that the activity now captured under this disclosure involves a handful of small clients with limited staff where RVK has limited power of attorney to complete paperwork and execute trades with prior approval of those clients. Much of this "direct to consultant" business is done for small and legacy relationships, often with charitable organizations, and RVK reports that these clients maintain full discretion over all investment decisions.

Staff finds this explanation credible since the SEC guidance on how to calculate AUM for regulatory purposes makes the determination complicated and somewhat subjective. That process considers a range of facts including the terms of the advisory contract, the nature of the compensation arrangement, and the kinds of management practices applied to the accounts. In past years RVK has determined that the assets involved in these arrangements did not meet the SEC definition of RAUM, but recent consultations with legal counsel and SEC personnel have led RVK to revisit that conclusion.

Based on this research, Staff believes the change in the firm's disclosure is attributable to RVK revisiting its past disclosures alongside asset growth in the markets rather than a new push toward becoming an asset manager. As such, we regard the change as a routine administrative update rather than a worrisome red flag for the relationship.

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Ongoing Litigation

As has been in the news in recent years, RVK is one of 31 organizations named in a fiduciary lawsuit brought in 2017 by eight individuals regarding the Kentucky Retirement System (KRS). In 2021, RVK noted that the original lawsuit had been dismissed by the state supreme court for lack of standing but the case had been resurrected by the state attorney general.

In the ADV Part 1 dated March 28, 2023, RVK discloses the following developments:

- A group of the original private plaintiffs, along with a group of “tier 3” plaintiffs who participate in the KRS plan have made efforts to re-enter the case. These efforts have been opposed and rejected by the courts; the plaintiffs have a pending appeal.
- The “tier 3” plaintiffs have filed substantively similar cases which asserts putative class action allegations and direct breach of trust claims. One of these cases was removed to federal court and the court stayed all proceedings pending resolution of open state cases. RVK and all of the defendants filed motions to dismiss the other case, on which the court has yet to rule.
- The state attorney general filed an amended complaint, which was almost identical to the original. RVK and all defendants have filed motions to dismiss this complaint and the court has yet to rule on this.
- In November 2020, the Kentucky Public Pensions Authority (KPPA, formerly KRS) retained an outside law firm (CALCATERRA POLLACK LLP, OF NEW YORK) to conduct an investigation and issue a report. After receipt of the report, KPPA's Board voted on May 26, 2021 not to “Intervene as a Plaintiff in the Attorney General’s Amended Complaint [CASE 1348]” or “File any litigation against any party...at this time”. KPPA and the AG declined to release the report to the public at the time, and Open Records litigation followed. In August, 2022, a court ordered the release of the report. In short, the report stated that after examining 192,000 documents, reviewing Board Meeting materials and recordings, and conducting several interviews, the firm concluded that RVK “met [its] contractual and fiduciary duties”, “Honestly disclosed the investment challenges KRS faced”, and “Served as a valuable consultant”. The firm found “No indicia of collusions, cover up, or fiduciary failure” by RVK and did not find “Any violations of fiduciary duty or illegal activity” by RVK. The full report is available at <HTTPS://TINYURL.COM/4YNKAH6F>.

Though these developments are notable and worthy of continued monitoring, Staff believes these actions will ultimately prove to be nuisance lawsuits for RVK and does not currently view it to be a material concern for COAERS.

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Changes in Control Persons

The list of the control persons included in the ADV Form 1 is unchanged from 2022.

FULL LEGAL NAME (Individuals: Last Name, First Name, Middle Name)	DE/FE/I	Title or Status	Date Title or Status Acquired MM/YYYY	Ownership Code	Control Person	PR	CRD No. If None: S.S. No. and Date of Birth, IRS Tax No. or Employer ID No.
GRATSINGER, REBECCA A	I	CEO/DIRECTOR/PRINCIPAL	12/2008	C	Y	N	xxx-xx-xxxx
BEARD, MARCIA DENE PANKEY	I	SENIOR CONSULTANT/PRINCIPAL	12/2008	B	N	N	xxx-xx-xxxx
GRATSINGER, SCOTT P	I	CHIEF INFORMATION OFFICER/PRINCIPAL	10/2001	C	N	N	xxx-xx-xxxx
VOYTKO, JAMES MICHAEL	I	COO/PRESIDENT/DIRECTOR/PRINCIPAL	07/2012	B	Y	N	xxx-xx-xxxx
KEVAN, JOSHUA, R	I	SENIOR CONSULTANT/PRINCIPAL	12/2008	A	N	N	5643658
KOWOLIK, JONATHAN, K.	I	SENIOR CONSULTANT/PRINCIPAL	01/2010	A	N	N	5786095
JOHNSON, ANTHONY, KEITH	I	DIRECTOR OF MIDWEST CONSULTING/PRINCIPAL/DIRECTOR	02/2008	NA	Y	N	6270080
MILLER, JEREMY	I	SENIOR CONSULTANT/DIRECTOR/PRINCIPAL	02/2013	NA	Y	N	6322450
BOREK, JOHN, RANDAL	I	CHIEF FINANCIAL OFFICER/PRINCIPAL	01/2016	NA	Y	N	6609895
Healey, Megan, Elena	I	CHIEF COMPLIANCE OFFICER	08/2018	NA	Y	N	7013375
LEDGERWOOD, JOSEPH, MICHAEL	I	DIR. OF INV. MGR. RESEARCH/PRINCIPAL	01/2019	NA	N	N	5088751
Hunter, Spencer, Lewis	I	SENIOR CONSULTANT/DIRECTOR/PRINCIPAL	01/2019	NA	Y	N	7072010
BAUER, MATTHIAS	I	SENIOR CONSULTANT/DIRECTOR/PRINCIPAL	04/2019	NA	Y	N	7243114
Sullivan, Ryan, Patrick	I	SENIOR CONSULTANT/DIRECTOR/PRINCIPAL	04/2021	NA	Y	N	7492670

New Client Type: Health and Welfare Plans

Year over year, the types of clients that RVK serves has increased. In addition to the recent inclusion of insurance companies, RVK now includes health and welfare plans among types of clients served, though there were no updates to their description of services to include any new specific items. It appears likely to Staff that RVK's existing services and expertise could be additive to such plans and believes that this does not represent a material deviation from their overall general investment consulting focus.

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Ethics Policy Remains Consistent with High Standards

Staff's review of the firm's Ethics Policy indicates that it has not changed over the last year and that it remains consistent with the highest industry standards. The firm's ethics policy still makes it clear that RVK employees should not accept anything that may influence their judgement. Indeed, the policy clearly states that employees will not become involved in situations that compromise RVK's or such employee's independence and objectivity. Staff believes this stance continues to align well with that of COAERS toward these matters.



11. Discuss and consider consultant selection for 2023 PRB Investment Practices and Performance Evaluation report

Presented by Christopher Hanson and David Kushner



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 11:

Discuss and consider consultant selection for 2023 PRB Investment Practices and Performance Evaluation report

AGENDA ITEM OBJECTIVE

The Committee will receive a presentation on responses to the request for information (RFI) related to conducting the Pension Review Board (PRB) required investment practices and performance evaluation report (IPPE).

RELEVANCE TO STRATEGIC PLAN

This agenda item is an action item for **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.** The IPPE report includes a review of the retirement system's governance and oversight processes related to investment activities, including investment decision-making processes, delegation of investment authority, and board investment expertise and education.

RECOMMENDATION FOR COMMITTEE ACTION

At the Committee's discretion.

BACKGROUND

This item fulfills the Board's legal requirement under Texas Government Code §802.109, which "requires Texas public retirement systems with assets of at least \$30 million to select an independent firm with substantial experience to evaluate the appropriateness, adequacy, and effectiveness of the system's investment practices and performance and to make recommendations for improving its investment policies, procedures, and practices." COAERS is required to conduct this review at least every three years and the last review was completed in 2020.

Staff will review consultant responses to the RFI including consensus recommendations for the Committee to consider.

ATTACHMENT

1. Staff presentation: "Investment Practices and Performance Evaluation Request for Information Recommendations"

SUPPLEMENTAL INFORMATION PROVIDED VIA CONVENE APP

1. COAERS RFI Questions
2. Consultant RFI Responses
3. 2023 IPPE RFI Consolidated Scoresheet



Investment Practices and Performance Evaluation (IPPE) Request for Information (RFI) Recommendations

IPPE RFI Process 2023

RFI Process Timeline

IC Approval	February 24, 2023
RFI Release Date	March 3, 2023
Deadline for Submission of Proposer Questions	March 17, 2023
Deadline for Submission of Proposals	March 31, 2023
Proposal Review Period Begins	April 3, 2023
Investment Committee Recommendation	May 19, 2023
Board of Trustees Review/Approval	June 29, 2023
Report Provided to Investment Committee	November 17, 2023
Report to Board of Trustees	December 19, 2023

Proposal Responses

Anodos Advisors

RVK

Strategic Retirement Partners (SRP)

Verus

Proposal Response Activities

- Organized COAERS internal review team

Chris Hanson

Executive Director

David Kushner

Chief Investment Officer

David Stafford

Deputy Chief Investment Officer

- Reviewed proposals for responsiveness and substantive merits
- Issued clarification questions and reviewed responses
- Team quantitatively and qualitatively evaluated all proposals
- Scored each response based on:
 - Price 10%
 - Experience 20%
 - Depth of Team 20%
 - Conflicts 20%
 - Scope 30%

Consensus Recommendations

RVK - Proposal Response

Price :	\$30,000 all inclusive
Experience:	Team leaders (2) each have over 40 years investment industry experience <ul style="list-style-type: none">- supported by three additional personnel- current COAERS Consultants would not participate in the review
Depth of Team:	Organization has substantial depth to draw upon if needed
Conflicts:	RVK currently serves as COAERS Investment Consultant
Scope:	Review indicates RVK able to cover full scope of engagement
Prior Reports:	Highest quality of those reviewed

Verus - Proposal Response

Price :	\$45,000 plus reimbursement of travel expenses (not to exceed \$6,000)
Experience:	Three individuals with 21, 15 and 31 years of industry experience
Depth of Team:	Organization has substantial depth to draw upon if needed
Conflicts:	Organization has an OCIO practice Staff does not believe this presents a significant conflict for this engagement
Scope:	Review indicates organization able to cover full scope of engagement
Prior reports:	Good quality; audit-like approach

Key Areas of Similarity for Recommended Proposers

- Team
 - Familiarity with Institutional Investment Practices
 - Recommended lead consultants supported by additional resources
 - Depth of organizational resources to support Consultants
- Firm capabilities
- Independence
- In-person approach
- Prior IPPE evaluation reports comprehensive

Key Area of Differentiation for Recommended Proposers

- Cost differential is significant
- RVK lead consultants have substantially more experience
- RVK serves as current General Consultant to COAERS
- PRB Statute requires selected firm to meet the following qualifications:

Independent firm

*(a) ... A public retirement system shall select an **independent firm** with substantial experience in evaluating institutional investment practices and performance...*

*(c) Provides that a public retirement system, in selecting an **independent firm** to conduct the evaluation described by Subsection (a):*

(1) subject to Subdivision (2), is authorized to select a firm regardless of whether the firm has an existing relationship with the retirement system; and

*(2) is **prohibited** from selecting a firm that **directly or indirectly manages investments** of the retirement system.*

Directly or Indirectly Managing Investments

A firm is considered to be directly or indirectly managing investments if the firm, a subsidiary, or its parent company, has assets of the system under management, or is solely responsible for selecting or terminating investment managers.

Restriction on Performing the Evaluation

If a firm is identified as directly or indirectly managing investments of the system, the firm is not considered an independent firm and is not eligible to perform the evaluation.

Process & Action Items

For the Committee:

- Discuss the recommended firms
- Make recommendation to the Board for approval on June 29, 2023

Following Committee Recommendation:

- Staff to work with recommended firm(s) for engagement letter with best and final offer
- Include appropriate materials in the Board packet

For the Board:

- Trustee review and discussion of IC recommendation at the June meeting
- Board vote to award contract

Following Board Approval:

- Staff and firm to meet to plan needed steps for evaluation and report completion
- Presentation at the November 2023 Investment Committee meeting
- Final report to Board in December 2023

12. Receive key meeting takeaways and
call for future agenda items

Presented by Committee Chair Liu



COMMITTEE MEETING Agenda Item Information Sheet

AGENDA ITEM 12:

Review key meeting takeaways and call for future agenda items

AGENDA ITEM OBJECTIVE

This standing agenda item provides Trustees the opportunity to review the key takeaways from the meeting.

RELEVANCE TO STRATEGIC PLAN

This agenda item meets **COAERS Strategic Plan Goal 4: Identify and implement leading practices in board governance, pension administration, and investment management.** It is an industry best practice to review key meeting takeaways to summarize what was accomplished at the meeting as well as ensure Staff has clear direction on further work and future agenda items.

RECOMMENDATION FOR COMMITTEE ACTION

Trustees will review key meeting takeaways and delineate next steps.

2023 Investment Committee Work Plan

Scheduled Quarterly Meetings

1. February meeting
 - ✓ Quarterly review of investment performance, positioning, strategy, and implementation
 - ✓ Quarterly reports on Premier Lists, delegated authority, manager fees, cash movements
 - ✓ Annual review of Investment Risk Framework process
 - ✓ Annual review of Investment Policy Statement (IPS)/Investment Implementation Policy (IIP)
 - ✓ Annual review of investment goals, assumptions, guidelines, and policies
 - ✓ Annual review of Premier List for Multi-Asset
 - ✓ Discuss and consider Asset/Liability Study
 - ✓ PRB Investment Practices and Performance Evaluation: Scope and RFI
2. April meeting (new)
 - ✓ Discuss and consider Asset Allocation Study
 - ✓ (new) Education on Functionally Focused Asset Allocation
 - ✓ (new) Education on Private Markets
3. May meeting
 - ✓ Quarterly review of investment performance, positioning, strategy, and implementation
 - ✓ Quarterly reports on Premier Lists, delegated authority, manager fees, cash movements
 - ✓ Annual review of Premier Lists for Fixed Income and Cash and Equivalents
 - ~~Discuss and consider Asset Allocation Study (moved to August)~~
 - ✓ Discuss and consider investment program goals and strategy, including policies and governance (Education on Functionally Focused Asset Allocation)
 - ✓ Annual review of Investment Consultant
 - ✓ PRB Investment Practices and Performance Evaluation: Consultant options
4. August meeting
 - Quarterly review of investment performance, positioning, strategy, and implementation
 - Quarterly reports on Premier Lists, delegated authority, manager fees, cash movements
 - Annual review of Premier List for Global Equities
 - Discuss and consider Asset/Liability Study
 - Discuss and consider Asset Allocation Study
 - Discuss and consider investment program goals and strategy, including policies and governance
 - Discussion and consideration of General Consultant RFP and timeline
 - Review of Custody Bank
5. November meeting
 - Quarterly review of investment performance, positioning, strategy, and implementation
 - Quarterly reports on Premier Lists, delegated authority, manager fees, cash movements
 - Annual review of Premier List for Real Assets
 - Annual review of Investment budget

Investment Committee 2023 Work Plan

- Discuss and consider investment program goals and strategy, including policies and governance
- CEM Benchmark report
- PRB Investment Practices and Performance: Evaluation Report
- Discuss Committee work plan for 2024