



MainePERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Board of Trustees

Meeting Packet

November 10, 2022

**MainePERS Board of Trustees
November 10, 2022
139 Capitol Street, Augusta**

AGENDA

9:00 a.m. ¹		CALL TO ORDER		Brian Noyes
9:00 – 9:05 a.m.	1.	<u>CONSIDERATION OF CONSENT CALENDAR</u> <ul style="list-style-type: none">Minutes of October 13, 2022Dismissal, Angela Nelson AppealConsideration of Items Removed	ACTION	Brian Noyes
9:05 – 9:15 a.m.	2.	<u>CEO REPORT</u> <ul style="list-style-type: none">Disability Retirement SurveyBoard Education Update		Dr. Rebecca M. Wyke
9:15 – 9:20 a.m.	3.	<u>BOARD ELECTIONS</u>	ACTION	Dr. Rebecca M. Wyke
9:20 – 9:40 a.m.	4.	<u>CEO ANNUAL REVIEW</u> <ul style="list-style-type: none">Executive Session pursuant to 1 M.R.S. §405(6)(A) <p><i>Board moves out of executive session.</i></p>	ACTION	Brian Noyes
9:40 – 10:40 a.m.	5.	<u>CONSULTANT SEARCH</u> <ul style="list-style-type: none">Albourne PresentationCliffwater PresentationAlternative Investment Consultant Recommendation	ACTION	John Claisse, Heather Christopher, Jennifer Yeung, Arabella Wuchek, Albourne Tom Lynch, George Bumeder, Cliffwater James Bennett Zackery McGuire
10:40 – 10:50 a.m.		<i>BREAK</i>		
10:50 – 11:00 a.m.	6.	<u>PRIVATE MARKETS ACTION</u> <ul style="list-style-type: none">Executive Session pursuant to 1 M.R.S. §405(6)(F); 5 M.R.S. §17057(4) <p><i>Board moves out of executive session.</i></p>	ACTION	Brian Noyes

¹ All times are estimated based upon the anticipated length of each presentation, hearing, discussion, and action. The presiding officer may take agenda items out of order for more efficient or effective conduct of the meeting.

		<ul style="list-style-type: none"> • SLR Private Corporate Lending Fund • GTCR Fund XIV 	ACTION	James Bennett Zackery McGuire
			ACTION	
11:00 – 12:00 p.m.	7.	<u>DIVESTMENT</u> <ul style="list-style-type: none"> • Consultant Report 		Dulari Pancholi, Kristine Pelletier, NEPC
12:00 – 12:05 p.m.	8.	<u>INVESTMENT REVIEW</u> <ul style="list-style-type: none"> • Private Markets Activity • Teacher RHIT Update • Private Markets Quarterly Review • Investment Monthly Review • Investment Quarterly Review • Risk Diversifiers Quarterly Review • Real Estate Quarterly Review 		James Bennett Zackery McGuire Stuart Cameron, Cambridge Assocs.
12:05 – 12:15 p.m.	9.	<u>BOARD POLICY REVIEW</u>	ACTION	Michael Colleran
12:15 – 12:25 p.m.	10.	<u>OPERATIONS AND MEMBER SERVICES REPORT</u>		Michael Colleran Chip Gavin
12:25 – 12:40 p.m.	11.	<u>BOARD SOFTWARE DEMONSTRATION</u>		Joy Childs
12:40 – 12:45 p.m.	12.	<u>LITIGATION UPDATE</u>		Betsy Stivers
12:45 p.m.		<u>ADJOURNMENT</u>		Dick Metivier

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

Minutes

Board of Trustees
Board Meeting
October 13, 2022

MainePERS
Augusta
9:00 a.m.

The Board of Trustees met at MainePERS, 139 Capitol Street, Augusta, ME 04332 at 9:00 a.m. on October 13, 2022. Brian Noyes, Chair, presided. Other Trustees participating were: Henry Beck, Treasurer; Shirrin Blaisdell; John Beliveau, Mark Brunton, John Kimball; and Ken Williams. Joining the Trustees were Dr. Rebecca M. Wyke, Chief Executive Officer; Michael Colleran, Chief Operating Officer and General Counsel; Chip Gavin, Chief Services Officer; Monica Gorman, Secretary to the Board of Trustees; and Betsy Stivers, Assistant Attorney General and Board Counsel. The Board also was joined for select portions of the meeting by James Bennett, Chief Investment Officer; Zackery McGuire, Deputy Chief Investment Officer; Sherry Vandrell, Director of Finance; Kathy Morin, Director of Legislative and Actuarial Affairs; Brian McDonnell, Cambridge Associates; George Bumeder, Cliffwater; Kevin Stone, ORG; Gene Kalwarski, Elizabeth Wiley, and Ryan Benitez, Cheiron; and Mark LaPrade and Leah Clair, Berry Dunn.

Brian Noyes called the meeting to order at 9:00 a.m. John Beliveau participated through video remote access pursuant to 1 M.R.S. § 403-B, having been excused from in-person attendance by the Board Chair due to travel. All other Trustees, except for Dick Metivier, were physically present.

CONSIDERATION OF THE CONSENT CALENDAR

The Chair called for consideration of the Consent Calendar. The action items on the Consent Calendar were:

- Minutes of September 8, 2022
- Dismissal, John York Appeal

- Action. Ken Williams made the motion, seconded by Shirrin Blaisdell, to approve the Consent Calendar. Voted unanimously by six Trustees (Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

CEO REPORT

Dr. Rebecca Wyke shared that Cheiron will be presenting the FY2022 valuation reports for the defined benefit plans and the group life insurance programs. She stated Berry Dunn will present our audited financial statements for the year ending June 30, 2022.

Dr. Wyke shared the first annual report to the Legislature on divestment is due January 1, 2023. She reminded the group that the divestment consultant, NEPC, will be at the November meeting to present their findings. Staff will bring any recommendations to the Board at the December meeting for consideration prior to submitting the report to the Legislature in January.

Dr. Wyke reviewed survey results for active members as well as retired members. The surveys provided an overall rating for satisfaction of MainePERS from each group; suggestions for better communications or more frequent communications; and a desire for more online account capabilities.

Dr. Wyke shared that Jim Dusch, Director of Member Services, will be leaving MainePERS on October 14, 2022. Jim thanked staff and the Trustees for their support and guidance during his tenure. Brian Noyes thanked Jim for his dedication and on behalf of the Trustees wished him well with his new endeavors.

Henry Beck arrived at 9:15 a.m.

BOARD WORK PLAN

Dr. Rebecca Wyke provided a proposed annual Board work plan for 2023. The plan outlines regularly-occurring Board activities and one-time legislative reports.

- **Action.** Motion made by Ken Williams, seconded by Mark Brunton, to approve the Board Work Plan as presented. Voted unanimously by seven Trustees (Beck Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

ACTUARIAL VALUATIONS

Gene Kalwarski, Elizabeth Wiley, and Ryan Benitez reviewed the actuarial valuation results for all programs with the Trustees. Gene, Elizabeth, and Ryan discussed those results and answered questions from the Trustees.

- **Action.** Shirrin Blaisdell made the motion, seconded by Ken Williams to accept the FY22 Actuarial Reports for the State Employee and Teacher Program, the Legislative Program, the Judicial Program, the PLD Consolidated Program, and the Group Life Insurance Program for both active and retired participants as presented. Voted unanimously by seven Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

AUDITED FINANCIAL STATEMENTS

Mark LaPrade and Leah Clair of Berry Dunn, presented the 2022 Audited Financial Statements for the fiscal year ended June 30, 2022. Mark reviewed the various steps taken in the audit process. Leah highlighted the financial statement audit steps and footnotes with the Trustees as well as the required auditor communications responsibilities from management and Berry Dunn. Mark shared the yellow book report, which highlights the internal control piece of the audit.

- **Action.** Motion made by Mark Brunton, seconded by Ken Williams, to accept the FY22 Audited Financial Statements as presented. Voted unanimously by seven Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

Brian Noyes asked a member of the public, Maguette Diop, Capital Strategist, SEIU, to introduce herself to the Trustees.

PRIVATE MARKETS ACTION

- **Action.** Shirrin Blaisdell made the motion, seconded by Henry Beck, to enter into Executive Session pursuant to 1 M.R.S. §405(6)(F); 5 M.R.S. §17057(4) to discuss private market investment information contained in non-public documents. Voted unanimously by seven Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

Board moved out of executive session.

Farallon Capital Management

- **Action.** Henry Beck made the motion, seconded by Shirrin Blaisdell, that MainePERS make a commitment of up to \$100 million to Farallon Capital Institutional Partners, subject to final due diligence, legal review and negotiations; and authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute documents in connection with this commitment. Voted unanimously by seven Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

Audax Senior Debt

- **Action.** Mark Brunton made the motion, seconded by Henry Beck, that MainePERS exit its separately managed account with Audax Senior Debt and authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute documents in connection with this action. Voted unanimously by seven Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Noyes, and Williams).

PRIVATE MARKETS REVIEW

Private Markets Activity

Zack McGuire reviewed the table of private market funds and co-investments that had closed during the past 12 months. Zack shared that the next manager meeting is scheduled for Tuesday, October 25, 2022, in Portland, with presentations by SLR Private Corporate Lending Fund at 9:00 a.m.; GTCR Fund XIV at 10:00 a.m.; and, Blackstone Property Partners at 11:00 a.m.

INVESTMENT REVIEW

Proxy Voting Update

Jim Bennett responded to a question that arose from the July Trustee meeting regarding the System's voting patterns compared to those of other public pension plans. He provided a report to the Trustees that highlighted the findings of a study comparing public pension proxy voting patterns on ESG-related shareholder proposals. Public pensions are more

likely to support ESG resolutions than shareholders in general, which is consistent with MainePERS' proxy votes

Quarterly Rebalancing Activity Report

Jim Bennett shared a memo summarizing rebalancing activity for public markets and risk diversifiers through the third quarter of 2022. Jim answered questions from the Trustees.

Investment Monthly Review

Jim Bennett reported that as of September 30th, the MainePERS fund had a preliminary market value of \$17.8 billion, the preliminary fund return for the month was -2.9%, and the preliminary calendar year-to-date return was -6.4%.

John Beliveau left the meeting at 11:30 a.m.

OPERATIONS AND MEMBER SERVICES REPORT

Michael Collieran stated the Employer Reporting Unit became fully staffed last month. Internal Auditor, CliftonLarsonAllen continues working on their first audit on the Disability Retirement Program. The audit should be completed in November. Human Resources hired a Human Resources Generalist last month. Mike shared that the healthcare premium holiday was extended through November. IT has finished implementation of Enterprise Asset Management software.

Chip Gavin shared that improvement with electronic communications and other member services continues. The use of DocuSign has been on the increase. Chip stated additional information has been added to the member account statements. The statements are mailed the month of the member's birthdate.

Brian Noyes asked if Chip would provide an example of an account statement at next month's meeting.

FIDUCIARY DUTY EDUCATION

Michael Collieran and Betsy Stivers provided the Trustees with a fiduciary duty education presentation.

LITIGATION UPDATE

Betsy Stivers reported that the personnel matter is still in discovery, and the court hasn't provided any new information on the FOA matter.

Brian Noyes thanked the Trustees for completing the CEO evaluation forms which will be an item of discussion at the meeting next month. Brian reminded the Trustees that October 19th is the DEI training session.

STATE OF MAINE
MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

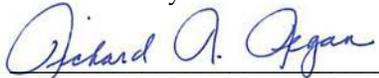
Angela Nelson,)	
)	
Appellant)	ORDER OF DISMISSAL
)	
Appeal of Executive Director's Decision)	
Denying Eligibility for Disability)	
Retirement Benefits)	

Following a multi-episode hearing on the matter, the Director of Member Services reversed the System's prior decision to discontinue disability benefits. Thus, upon request of the System Representative, this appeal is hereby **dismissed with prejudice**.

Board of Trustees
Maine Public Employees Retirement System

By _____
Brian Noyes
Chair, Board of Trustees

Dated: November 1, 2022

Submitted by:

Richard Regan, Esq.
Hearing Officer

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS
FROM: DR. REBECCA M. WYKE, CHIEF EXECUTIVE OFFICER
SUBJECT: DISABILITY RETIREMENT SURVEY RESULTS
DATE: NOVEMBER 7, 2022

POLICY REFERENCE

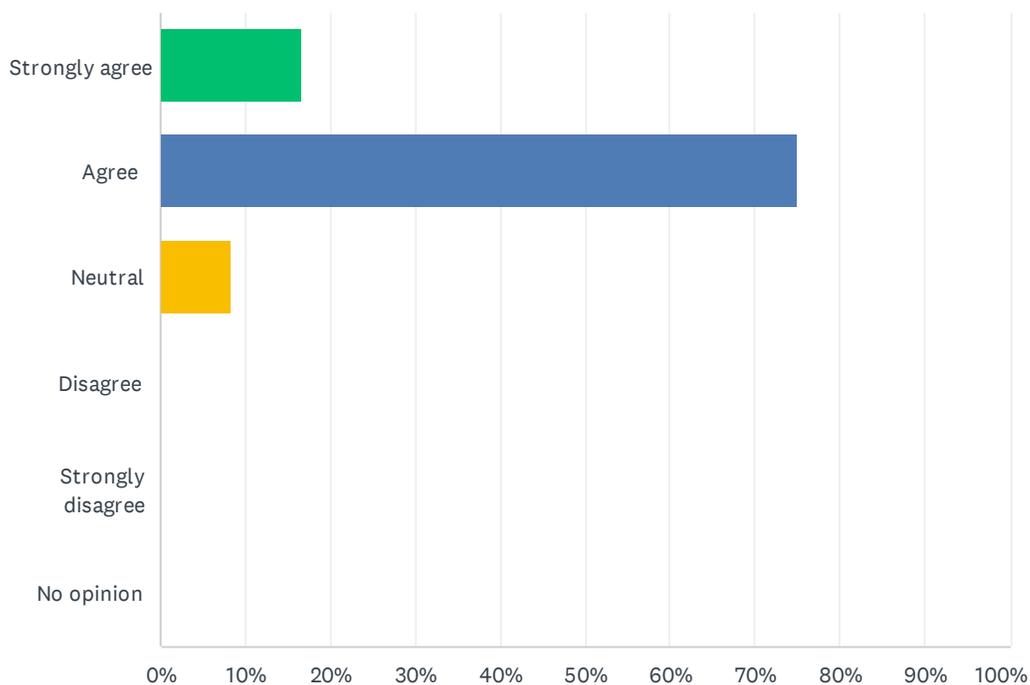
[5.2 - Service to Members, Retirees, Employers and Stakeholders](#)

MainePERS conducted a disability retirement services survey September 22 – October 7, 2022. All members who had completed the disability retirement services application process under the new law (Public Law 2021, c. 277) and received a final outcome on their application were invited to participate in the survey. Letters were sent to thirty (30) individuals inviting them to participate in the email survey, requesting confirmation of their email address, and offering an alternative survey method for those without email addresses or who needed an accommodation. Three (3) individuals did not have an email address on file and none requested an alternative method for completing the survey in response to the letter.

The survey was sent to the twenty-seven (27) individuals with email addresses. Of those who received the survey, sixteen (16) opened the email and of those twelve (12) completed the survey. The survey responses are attached.

Q1 The disability application and process is easy to understand and follow.

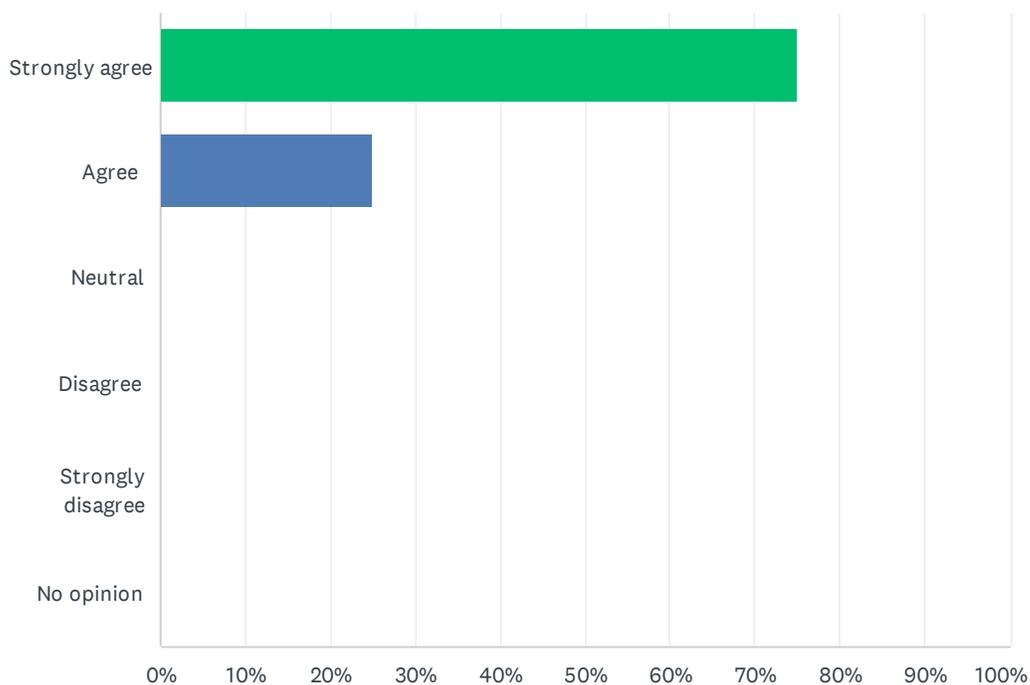
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	16.67%	2
Agree	75.00%	9
Neutral	8.33%	1
Disagree	0.00%	0
Strongly disagree	0.00%	0
No opinion	0.00%	0
TOTAL		12

Q2 I was treated with respect by those handling my application.

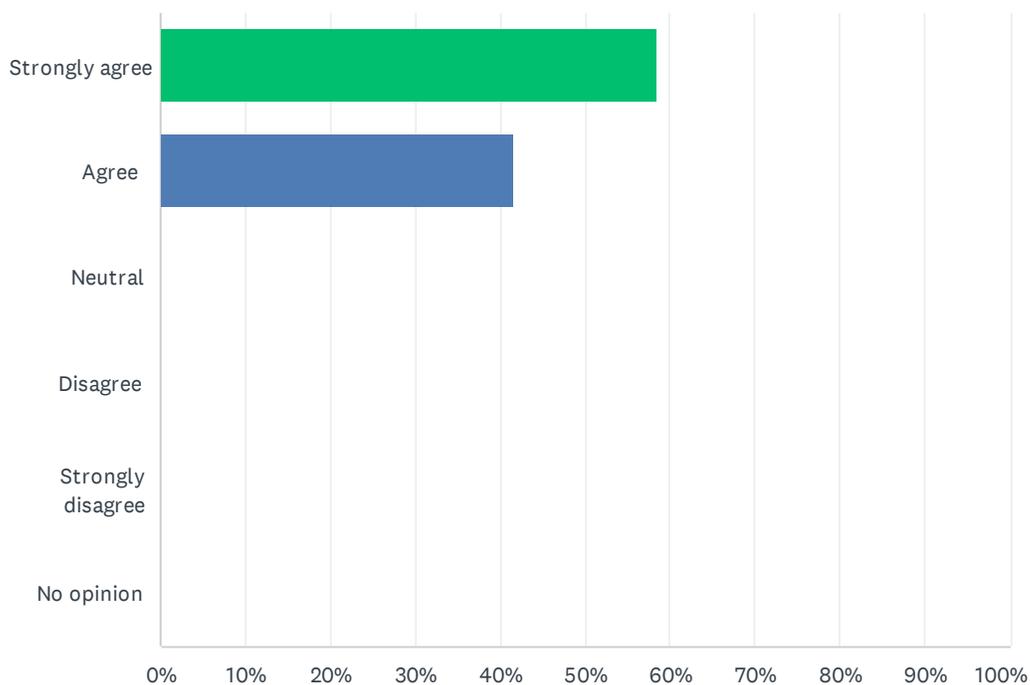
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	75.00%	9
Agree	25.00%	3
Neutral	0.00%	0
Disagree	0.00%	0
Strongly disagree	0.00%	0
No opinion	0.00%	0
TOTAL		12

Q3 MainePERS responded to my questions in a timely manner.

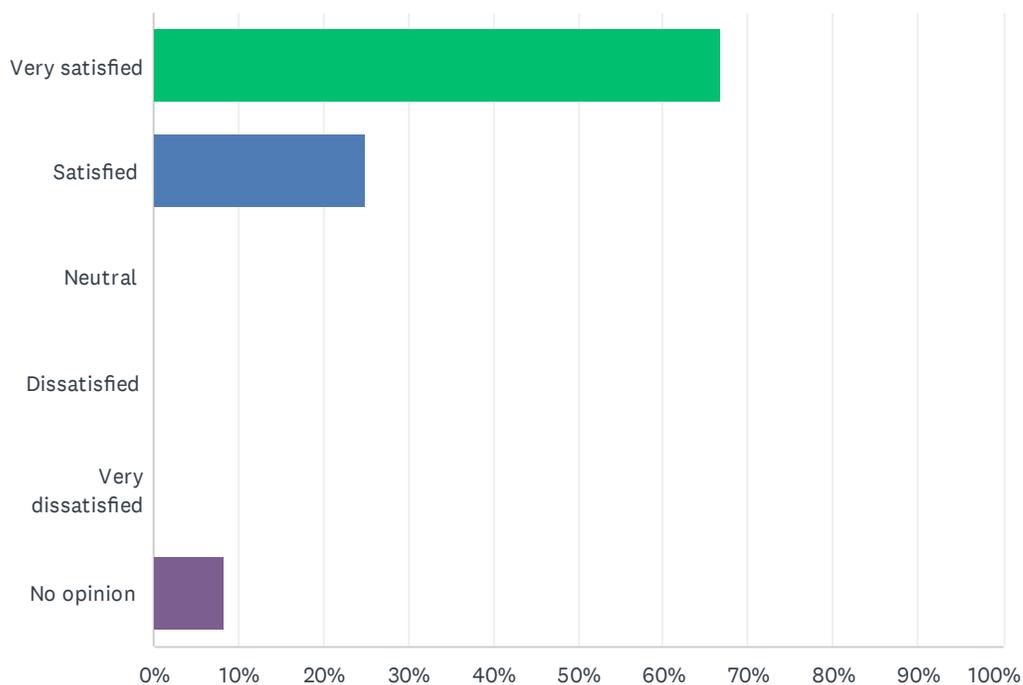
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	58.33%	7
Agree	41.67%	5
Neutral	0.00%	0
Disagree	0.00%	0
Strongly disagree	0.00%	0
No opinion	0.00%	0
TOTAL		12

Q4 The Disability Services process was fairly conducted.

Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very satisfied	66.67%	8
Satisfied	25.00%	3
Neutral	0.00%	0
Dissatisfied	0.00%	0
Very dissatisfied	0.00%	0
No opinion	8.33%	1
TOTAL		12

Q5 Please feel welcome to provide any additional feedback regarding your experience with MainePERS Disability Services Unit.

Answered: 7 Skipped: 5

#	RESPONSES	DATE
1	I felt that the associates at MainePERS were always on my side. Very personable and very professional.	10/6/2022 2:50 PM
2	Well done, thank you very much.	10/4/2022 12:21 PM
3	Thank you	10/4/2022 11:28 AM
4	It was a tedious, lengthy process. Ben Parkhurst was always quick to respond, and helped me to understand each step in the process.	9/22/2022 12:50 PM
5	It took me a long time to address my disability and move forward with the application. I was treated with respect, my medical issues were reflected extremely accurately and my questions were answered well. I am extremely grateful for the thoroughness in my application, it was however (understandable) a lengthy process.	9/22/2022 12:34 PM
6	Even thou I did not qualified for disability you explained everything to me. Thank you	9/22/2022 9:44 AM
7	During my process my Specialist changed and I thought to myself things are going to slow down or get messed up. Not true at all my new Specialist picked the ball up and kept running. Thank you for making my case go so smoothly.	9/22/2022 9:41 AM

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS
FROM: DR. REBECCA M. WYKE, CEO
SUBJECT: BOARD EDUCATION
DATE: NOVEMBER 2, 2022

POLICY REFERENCE

[Board Policy 1.2 Trustee Fiduciary Responsibility](#)

[Board Policy 1.4 Trustee Responsibilities and Position Description](#)

[Board Policy 4.5 Board/Staff Relations](#)

[Board Policy 4.6 Communication and Support to the Board](#)

MainePERS offers a variety of educational opportunities to support Trustees in maintaining current knowledge on issues facing the System.

MainePERS Sponsored Board Education

Quarterly Investment Education delivered by the investment team members
Annual Fiduciary Education delivered by legal counsel and/or governance consultant
Biennial DEI education delivered by a consultant
Ad-hoc Board education as needed

Cambridge Associates Introduction to Investing

A series of short, educational videos and written content prepared by our general investment consultant, Cambridge Associates, provides an overview of the core elements of investing. How Cambridge Associates develops and builds portfolios, and common asset classes used in portfolio construction. <https://view.cambridgeassociates.com/introduction-to-investing-at-cambridge-associates>

**National Conference on Public Employee Retirement Systems
Trustee Educational Seminar – 2023 date & location TBD**

The NCPERS Trustee Educational Seminar assists Trustees in building and strengthening their foundational knowledge of pensions and governance. This two-day program is designed with a clear focus on the educational needs of trustees who are new to a public pension plan board. The curriculum centers on investing principles, understanding actuarial science, board policies, and fundamental concepts that every trustee should know.

**National Council on Teacher Retirement
Annual Trustee Workshop - 2023 date & location TBD**

The NCTR Trustee Workshop is developed with input from Board Trustees on the NCTR Trustee Education Committee. This program is designed by and for public pension board trustees. Workshop agenda items offer a wide range of educational content for both new and experienced Trustees.

Other Resources

Additionally, MainePERS is currently evaluating a new enterprise governance e-learning resource for public pension trustees and executives and will provide additional informational information once that evaluation is complete.

MAINEPERS

BOARD OF TRUSTEES GOVERNANCE MEMORANDUM

TO: BOARD MEMBERS
FROM: MICHAEL COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL
SUBJECT: BOARD ELECTIONS
DATE: NOVEMBER 2, 2022

Board Policy 1.5 calls for annual election of the Board Chair and Vice Chair and lays out a process for conducting the elections. The Board has traditionally conducted the elections at the November meeting and has departed from the policy's paper ballot process based on the circumstances of a particular election, including where Trustees were participating remotely.

POLICY REFERENCE

[Board Policy 1.5 – MainePERS Board Officer Elections and Position Descriptions](#)

RECOMMENDATION

That the Board elect a Chair and Vice Chair for the next year.

Maine Public Employees Retirement System Real Estate and Real Assets Advisory Presentation

November 10, 2022

Agenda

1	INTRODUCTIONS
2	ALBOURNE OVERVIEW
3	RESEARCH & TRENDS
4	CONCLUSION
	APPENDIX

Albourne Presenters



Heather Christopher, Partner and Head of Real Estate

29 years of experience

Heather leads the real estate team and is a Portfolio Analyst for a select number of real estate retainer clients, which mostly include public pension plans. Ms. Christopher has extensive portfolio level experience in the creation and implementation of real estate asset investment policies, strategies, and guidelines. Her experience also includes provision and advice on real estate program structuring across a broad range of risk/return objectives, manager selection and due diligence, and performance analytics and monitoring. Prior to joining Albourne Partners, Ms. Christopher worked for EnnisKnupp + Associates, Hewitt, and Aon on the real estate team performing a role very similar to that at Albourne Partners. Prior to her consulting roles, Ms. Christopher served 14 years at Ohio Public Employees' Retirement System of Ohio. Ms. Christopher is a contributor to NCREIF and PREA and a speaker and moderator at industry and client conferences. Ms. Christopher received a MBA and BS from The Ohio State University.



Jennifer Yeung, Senior Portfolio Analyst

13 years of experience

Jennifer is a real asset expert who, in her role as Portfolio Analyst, provides portfolio advice to a range of clients, including public pension plans. She has over 13 years experience in finance and alternatives. For four years until 2021, Jennifer was a Senior Investment Manager at the State of Michigan, where she oversaw an \$11bn private markets portfolio. Previous roles include three years as a research analyst at 40|86 Advisors, a fixed income investment advisor, and equity research analyst at Wells Capital Management and Driehaus Capital Management. Jennifer holds an MBA from the Marshall School of Business, University of Southern California and both a Master of Accounting and Bachelor of Arts – Honours in Chartered Accountancy from the University of Waterloo. She also holds a CPA (Canada).

Albourne Presenters



Dr. John Claisse, Partner and Chief Executive Officer

27 years of experience

John joined Albourne in July 1996, relocated from London to San Francisco in July 2003 and became Albourne Group CEO in August 2015. John is a member of Albourne's Executive Committee and chairs the firm's Corporate Planning Council, which comprises Albourne's function and region heads. John helped develop the firm's proprietary risk analytics and was formerly the Senior Analyst for quantitative equity strategies and multi-strategy hedge funds. John remains a Portfolio Analyst working with several public and corporate plans, large endowments and foundations. John also serves on the Advisory Board of the Sussex University School of Business, on the Board of Trustees of the Standards Board of Alternative Investments (SBAI), and on the Governing Board of The Robert Toigo Foundation. John holds a first class Mathematics Degree and a PhD from Sussex University.

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Business Model

Our goal is to empower our clients to be the best investors that they can be

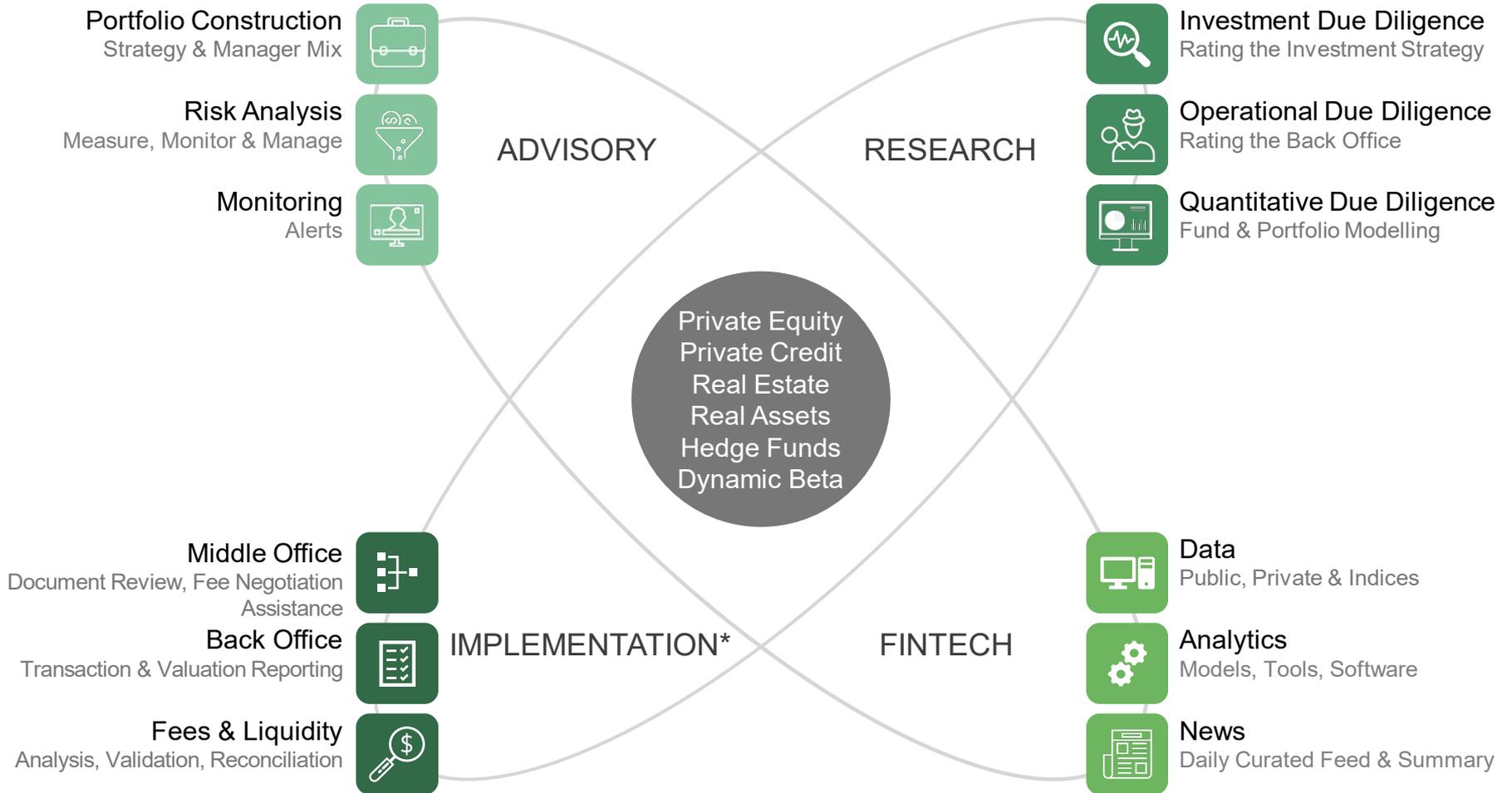
Albourne is committed to:

- Non-discretionary advice
- Transparent pricing
- Independent ownership

Albourne believes in promoting alignment and minimizing conflicts



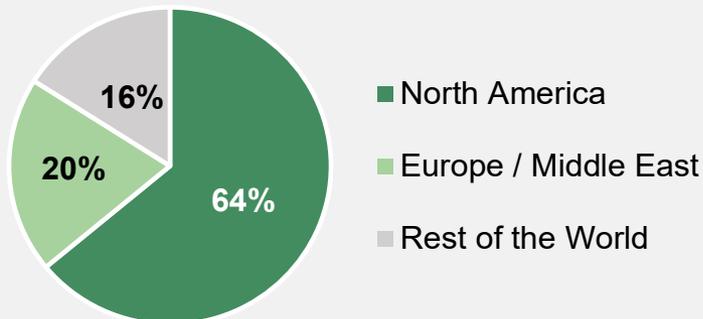
Services



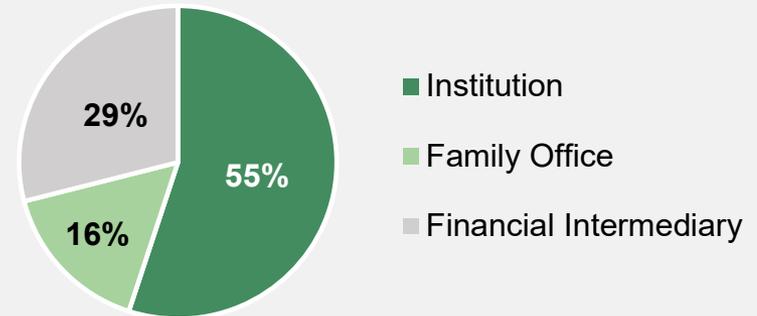
Clients

- >300¹ clients globally
- >\$650bn² in alternatives
- 50 Public Plans
- Advising Public Plans since 2001

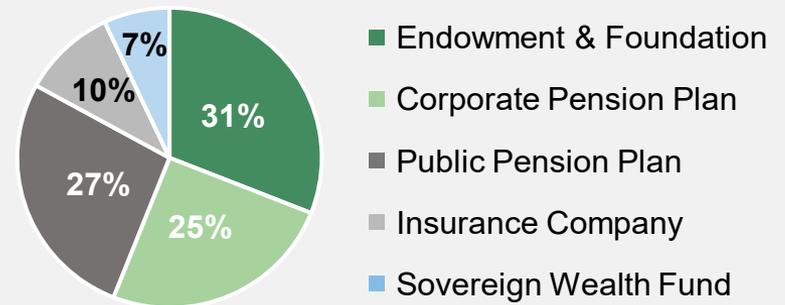
Clients by Region



Clients by Type



Institutions by Type



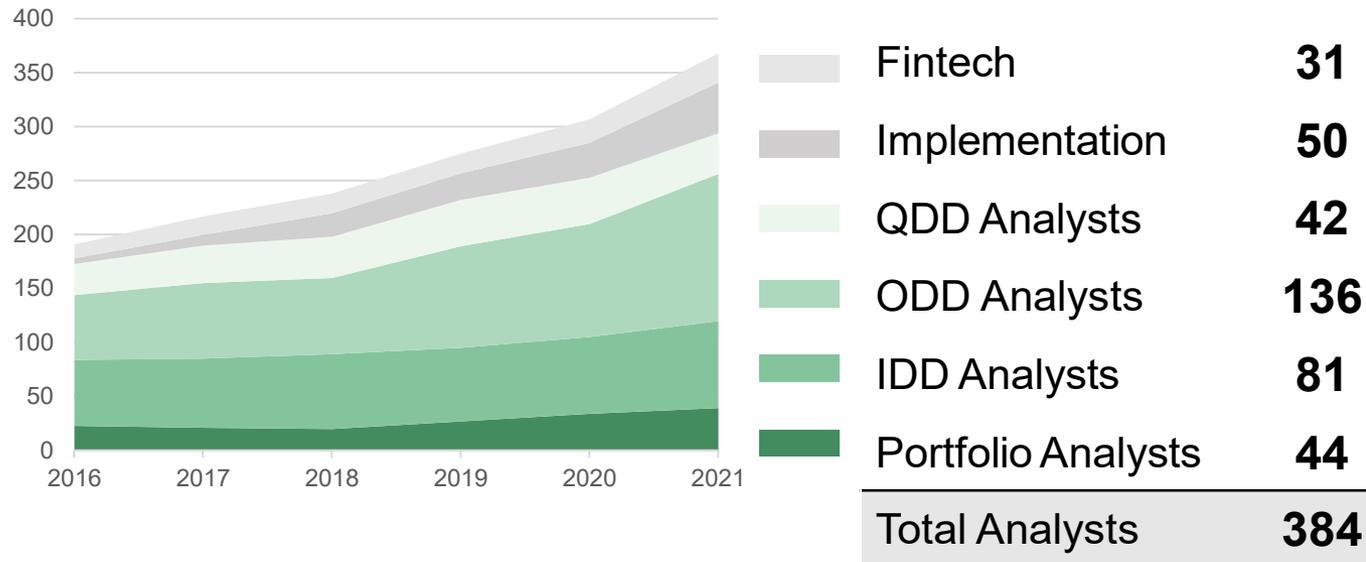
1. The aggregate number of client entities for the Albourne Group worldwide. Clients may be subscribed to multiple services.

2. A conservative aggregation of the estimated investments in alternatives (where known) of Albourne Group clients worldwide, using public sources where possible.

All data as of 1 October 2022

Colleagues

583 Total Headcount ¹	384 Analysts	11 Offices	47%53% Female / Male
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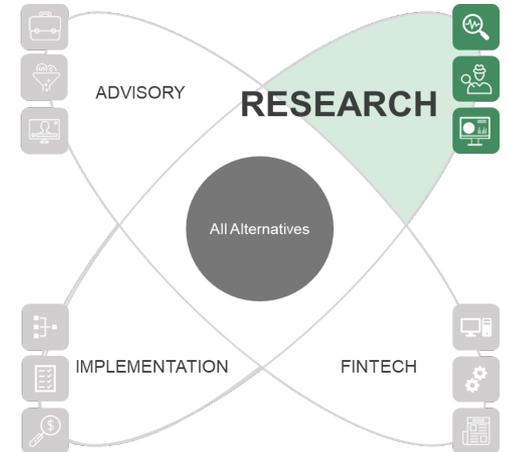
100% Owned by Employees ²	>70 Employee Share & Option Holders	115 Partners	>13 Partners' Average Tenure (Years)
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Research

- Standardized, robust, repeatable & documented due diligence framework
- Strategy specialists
- Transparent & opinionated IDD
- Disciplined & consistent ODD
- Sophisticated & proprietary QDD (risk analysis)
- Albourne is not paid by managers to rate or recommend their funds



Dedicated local team: IDD, ODD & QDD Analysts around the world



Investment Due Diligence

Sourcing

- Scan universe for new opportunities daily via news, announcements, and word of mouth
- Ascertain trends and best practices
- Enter opportunities into Albourne database
- Assign responsibilities
- Screen strategy

Initial Review

- Review Albourne legacy information
- Initiate contact with managers
- Review materials
- Screen against peers
- Have initial call or meeting & log notes
- Begin report draft

Deep Review

- Examine key issues & strengths
- Conduct onsite meeting
- Hold additional calls to answer questions
- Complete report
- Present to Committee(s)
- Refine report as needed
- Publish in database

Monitoring

- Update database for:
 - Monthly/ quarterly data
 - News, periodicals
 - Newsletters & memos
 - Quarterly summary
- Meet top pick managers periodically & log notes
- Update report as needed

Macro Influences upon Real Estate

- **Rising Interest Rates**

Interest rate hikes first impact loans maturing in the short-term and variable-rate financing. Most importantly, they influence the 10-year Treasury yield, which is a threshold for cap rates.

- **Inflation**

Inflation continues to raise key goods and labor costs; though rental rate increases were prevalent in 2021 and 1H 2022 across many property types, they appear to have plateaued in 2H 2022.

- **Denominator Effect**

Some real estate portfolios now exceed their target allocations and some exceed their allocation ranges.

- **Stalled Transaction Activity**

Transaction activity has greatly slowed as buyers and sellers struggle to agree on pricing in the face of rising interest rates and economic uncertainty, which has made real estate valuations more opaque.

- **Bank Pullback**

In 2022, banks have generally pulled back on construction lending and general real estate lending.

- **Economic Uncertainty and Tenant Demand**

Tenants appear more cautious in 2H 2022, putting expansion plans on hold or reducing the scope of their space needs though most of the market remains in good financial shape.

- **Supply Chain Issues + Labor Supply**

Shortages in key goods and labor shortages continue to fuel price pressures, decreasing affordability.

Current Trends and Themes in Real Estate

- **Leverage Concerns and Recapitalization Opportunities**

Landlords are likely to recapitalize once pricing corrects in response to rising interest rates to cure loan-to-value ratio defaults and/or become delinquent due to rising interest rates.

- **Lending Opportunities**

As banks retreat and bridge loans mature, real estate lending opportunities are anticipated to grow.

- **Fundraising Slowing**

Fundraising is slowing and managers already in the market are extending the timing of their final closes.

- **Net Operating Income (“NOI”)**

Many managers site growing NOI is now the primary driver of value gains and returns following the heady returns of 2021; feels a little déjà vu relative to 2005 and 2006.

- **The New Economy**

Related to digital computing technologies, sectors include industrial/logistics, life science, data centers, and cold storage and have grown in investment.

- **Residential**

Residential has grown in its institutional investment across multi-family, single family for sale, single family for rent, workforce housing, affordable housing, manufactured housing, and rent-to-own schemes.

- **The Great Migration and Suburban Shift in the US**

Americans are moving from the Northeast, the Midwest, and California into Sun Belt states; likewise, moves from denser urban areas to suburban living with more space and amenities are also frequent.

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Our Value Proposition

We are an invaluable resource for investors whether they are looking to expand, improve, or add exposure to Real Assets or Real Estate

Independence

By design, we do not manage money nor take LPAC seats. We are employee-owned¹ and charge the same fee to clients of a given service to avoid financial favorites.

Experience

We have practitioner, investor, and public pension knowledge, which allows us to have a deep understanding of each sector and its value drivers, leveraging best practices developed by Albourne over 27 years.

Due Diligence

We utilize an extensive investment due diligence process that allows our team to focus on the most compelling market opportunities alongside on-the-ground operational due diligence.

Access

We cover investment managers across real assets, real estate and a wide array of structures and opportunities, which can have limited capacity.

Technology

Online tools and resources provide instant access to our research and distill knowledge which is vital to understanding the complexities of the underlying strategies.

1. Including the Albourne Employee Benefit Trust and two retired employees

Agenda

1	INTRODUCTIONS
2	ALBOURNE OVERVIEW
3	RESEARCH & TRENDS
4	CONCLUSION
	APPENDIX

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November
2022

Cliffwater Private Market Consulting Services MainePERS



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Founded in 2004, Cliffwater LLC is an **alternative investment advisor** and asset manager, providing research, advisory and investment services across the alternative investment landscape.



We are 100%
employee-owned



Over 100 employees



Locations in New York,
Los Angeles & Chicago

Institutional Advisory & Research

- Asset Allocation
- Portfolio Construction
- Manager Selection, Databases & Ratings
- Cliffwater Direct Lending Index (CDLI)
- Cliffwater BDC Index

Asset Management¹

- Cliffwater Corporate Lending Fund
- Cliffwater Enhanced Lending Fund
- Separately Managed Accounts
- Cliffwater BDC Composite

\$108B

(\$95B AUA and \$13B AUM)
Total Assets¹

¹Total assets as of 9/30/22.

Stephen Nesbitt, CIO

Consultants ¹	Research Heads ¹	Legal & Operations Due Diligence ²
<p>Thomas Lynch (17,41) Senior Managing Director</p>	<p>Gabrielle Zadra (17,21) SMD, US Buyout</p>	<p>Jonathan Rogal (15) SMD, General Counsel</p>
<p>George Bumedel (2,20) Managing Director</p>	<p>Eric Abelson (14,22) MD, Growth and VC</p>	<p>Jonathan Tabak (11) MD, Operations Due Diligence</p>
	<p>Bernie Gehlmann (6,19) MD, Europe Private Equity</p>	<p>Stanley Liu (9) MD, Legal</p>
	<p>Mark Williams (13,31) MD, Real Assets</p>	<p>Jeffery Loeb (6) MD, Legal</p>
	<p>Jeff Topor (8,9) MD, Private Debt</p>	<p>Ian Oliner (3) Director, Operations Due Diligence</p>
	<p>William Dornbrook (7,8) Director, Asia Private Equity</p>	<p>Tyler Holstein (1) Director, Legal</p>
	<p>Andrew Kaminski (2,11) VP, Real Estate</p>	<p>David Wippel (14) MD, Operations</p>

¹ Figures in parentheses are Years at Cliffwater and Years of Investment Experience

² Figure in parentheses is Years at Cliffwater



Focus on Non-Traditional Investments

Alternative investments is Cliffwater's core business



Asset Allocation

Cliffwater has significant expertise in asset allocation and modeling non-traditional investments



Portfolio Construction

Cliffwater has unique capabilities in constructing non-traditional portfolios



Knowledge of Portfolio

Cliffwater has in-depth knowledge of the managers in the existing Strategic Investment portfolio



Experience

Cliffwater has provided similar assessments of non-traditional portfolios for other large institutional investors

The Cliffwater Team



Cliffwater currently has 108 employees between our Los Angeles, New York, and Chicago office locations.

Portfolio Advisory

James Feidler
Senior Managing Director

Kathleen Barchick
Senior Managing Director

Stephen Nesbitt
CEO/CIO

Thomas Lynch
Senior Managing Director

George Bumeder
Managing Director

Client Services

- Philip Hasbrouck, SMD
- Brian Rhone, SMD
- Alex Condrell, MD
- Conor Shalloe, MD
- Matt Brennan, MD
- Rob Campion, MD
- John Brigida, MD
- Rob Bessett, Director
- Amanda Orent, Director
- William Burge, Director
- Chrissy Watson, VP
- Noam Leibovitz, VP
- David Pine, VP
- Jared Baumann, VP
- Maggie Whitney, Sr. Associate
- Quinton Adlesh, Analyst
- Gillian Shaughnessy, Analyst
- Xander Swain, Analyst
- Maxwell Abrams, Analyst
- Stephen Vasturia, Analyst
- Riley Moore, Analyst

Investment Research

- Blake Nesbitt, SMD
- Daniel Stern, SMD
- Gabrielle Zadra, SMD
- Eric Abelson, MD
- Fran Beyers, MD
- Brian Bresnahan, MD
- Bernard Gehlmann, MD
- Caitlin Kammerait, MD
- Michael Cohan, MD
- Sean Castillo, Director
- Kelly McKenna, Director
- Andrew Kaminski, VP
- Lauren Shockley, VP
- Chris Cochran, VP
- Tom Jorgensen, VP
- Kevin Wu, Sr. Associate
- Grant Franklin, Associate
- Evan Chang, Associate
- Jane Wahlig, Analyst
- Conor Cuddy, Analyst
- Rufus Somerby, Analyst
- Blake Israel, Analyst
- Eli Sokolov, MD
- Steve Harvey, MD
- Joaquin Lujan, MD
- Andrew Rudolph, MD
- Jeffrey Topor, MD
- Mark Williams, MD
- Samir Patel, MD
- William Dornbrook, Director
- Jacob Fisher, MD
- Tom O'Sullivan, Director
- Zack Imhoff, Director
- Jordan Kelly, VP
- Joshua Belvedere, VP
- Lauren Villano, VP
- Christopher Mandas, VP
- Nicholas Matthews, Sr. Associate
- Cole Parris, Sr. Associate
- Jamie Horowitz, Associate
- Julian Girod, Analyst
- Seth Morley, Analyst
- Alejandro Maldonado, Analyst

Legal & Operations Due Diligence

- Jonathan Rogal, Gen. Counsel, SMD
- Mario Indelicato, Chief Regulatory Office
- Michael Cowart, CCO
- Stanley Liu, MD
- Jonathan Tabak, MD
- Jeffrey Loeb, Director
- Ian Oliner, Director
- Tyler Holstein, Director
- Matthew Limbert, Director
- Melanie Favela, Paralegal

Operations & Administration

- Lance Johnson, COO/CFO
- Thomas Brown, Chief Tech Officer
- Dave Wippel, MD
- Carol Komesu, Treasurer/Controller
- Steven Lim, Director
- Steve Thomas, Director
- Anthony Barela, Director
- Ramona Peters, HR Manager
- Nico Chavez, VP
- William Leung, VP
- Thidar Maw, VP
- Minh Nguyen, VP
- David Kim, Senior Associate
- Christina Nolan, Sr. Associate
- Jess Pepito, Sr. Associate
- Ray Mongkongllite, Sr. Accountant
- Roman Abulyan, Associate
- Makar Kobylinskyi, Associate
- Victor Urena, Analyst
- Reginald Harbour, Analyst
- Daniel Sandoval, Analyst
- Daniel Zhao, Analyst
- Fiona Roses, Office Manager
- D'Ann Paterson, Office Manager
- Olivia Martinez, Admin

Strategic Review

- Review strategic objectives
- Assessment of current program
- Capital markets assumptions
- Recommend investment plan

Manager Sourcing and Due Diligence

- Sourcing qualified managers/funds
- Investment due diligence
- Operations & Legal due diligence

Investment Program Monitoring

- Capital markets/tactical updates
- Market commentary
- Asset class strategy outlook
- Sub-portfolio assessments and outlook

Manager Monitoring

- Regular monitoring calls
- Review of investor letters and financials
- Periodic on-site meetings
- AGMs & LPAC meeting attendance

Operations Support

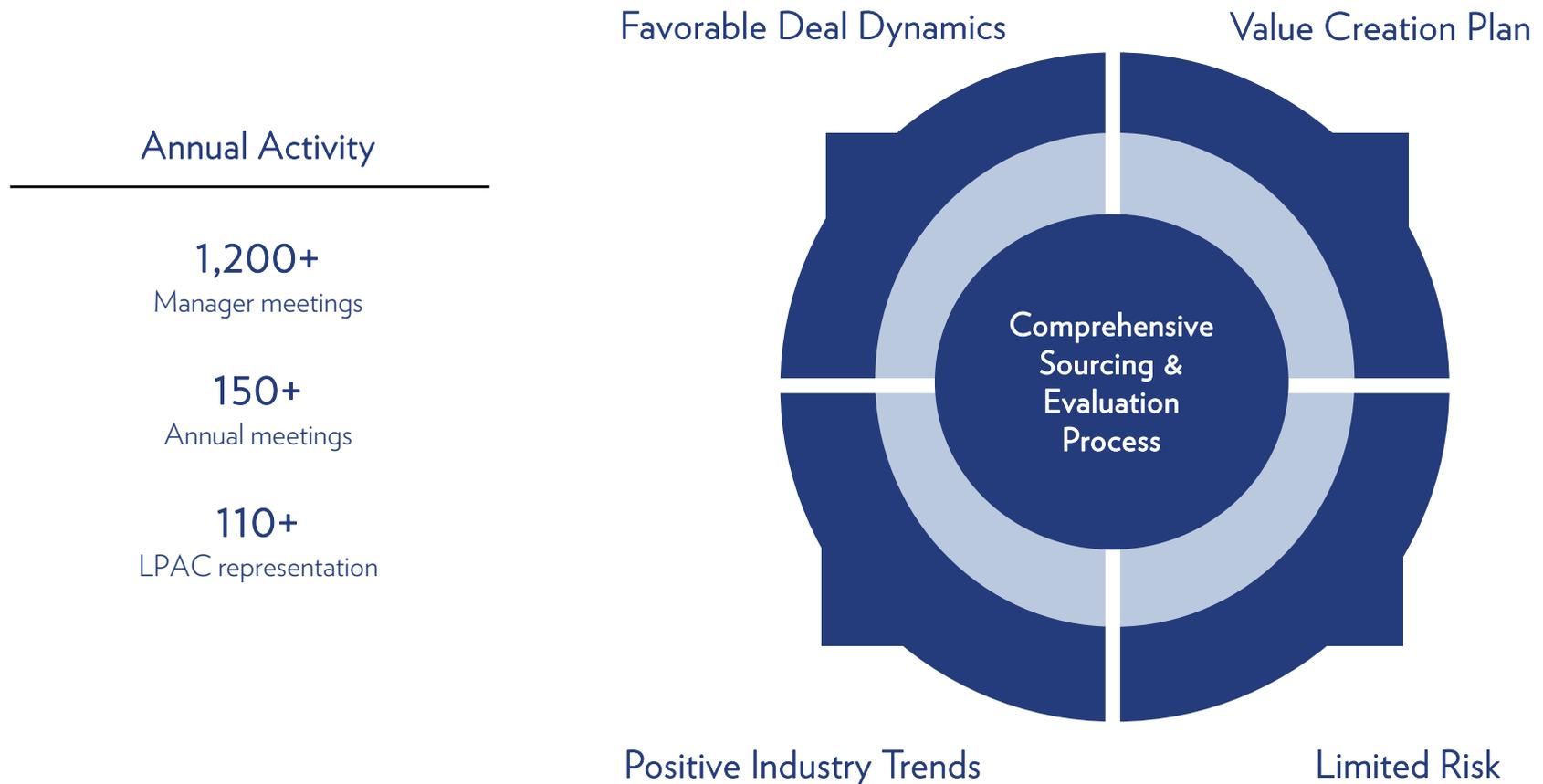
- Review transactions
- Review account statements
- Assistance with annual audit if needed

Staff and Board Meetings

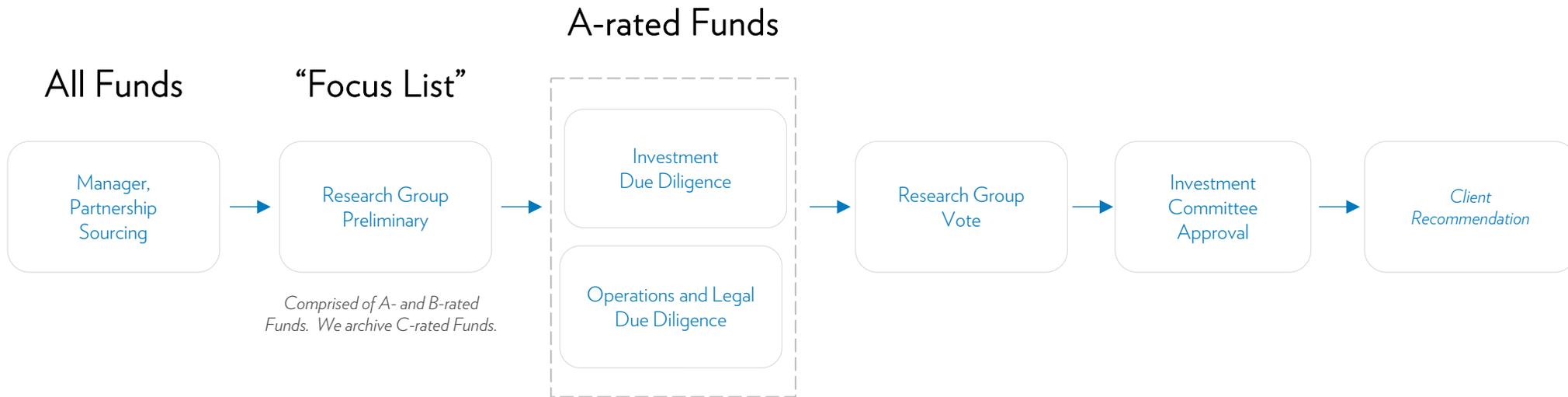
- Calls to update on activity and issues
- Review new investments in process

Education

- Board education
- Staff training



- Track 4,000 Firms
- Ongoing Dialogue with Top Performing Sponsors
- Meet with A-rated managers quarterly
- Client Input



Our approval process is transparent and documented



Preliminary Rating



Full Investment & Operations Due Diligence



Investment Committee Minutes



Investment due diligence is led by senior research team members.

- Research responsibilities organized by strategy
- In-depth diligence typically completed over several months
- Onsite meetings and reference calls conducted
- Multiple senior Cliffwater professionals involved in the due diligence process

Cliffwater utilizes a consistent and thorough diligence process for fund recommendations.



Dedicated, experienced operations due diligence team.

- Independent review
- Evaluate primary areas of business risk
- Compare to industry best practices
- Background checks as needed
- Ongoing evaluation of operational capabilities for recommended managers through monitoring and periodic re-underwriting

Full operations due diligence conducted on private fund recommendations.



Legal team reviews fund documents across multiple dimensions.

- Investor protections
- Fees
- Liquidity
- Alignment of interests

Cliffwater seeks to improve terms in fund documents through side letters on behalf of all clients.

When desired, Cliffwater's team will work together with client's internal and/or outside counsel.



Quarterly Performance Reports

Client private assets portfolio data maintained by Cliffwater. Clients can access and export portfolio data via Cliffwater's secure website.

Cliffwater provides quarterly client reports that include:

- Performance by portfolio, strategy, vintage year, and partnership
- Significant partnership events
- Portfolio characteristics from company level data for funds and for the total portfolio



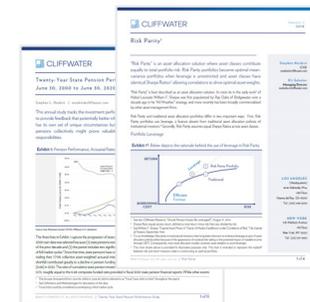
Client Portal Provides:

- Updated contributions and distributions data
- Estimated market values and returns
- Portfolio and partnership analytics
- Holdings data

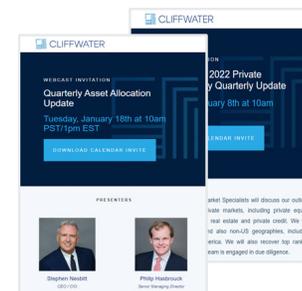


Research and Education

- Research Papers



- Webinars



Experienced Staff

Broad Network

Proactive Sourcing

Focus on Client Access

Transparent Process

Client-driven Approach



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MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: ALTERNATIVE ASSET CONSULTANT SERVICES
DATE: NOVEMBER 1, 2022

MainePERS receives private market consulting services from two firms: ORG for Real Estate, and from Cliffwater for the Alternative Credit, Infrastructure, Natural Resources, and Private Equity asset classes. The Investment Team initiated a review last spring of these services, consistent with Board Policies 2.1 and 4.4. The outcome of this review was a recommendation to initiate a search process for these services, and an RFP was issued in August. This memo contains a recommendation to change the System's consultant lineup and supporting rationale.

POLICY REFERENCE

[Board Policy 4.4 – Board / Consultants / Staff Relations](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

RECOMMENDATION

That MainePERS engage Cliffwater and Albourne as private market asset class consultants as described in this memo, subject to final due diligence and negotiations, and authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute documents as necessary.

REVIEW PROCESS

As noted above, the Investment Team began a review of the System's private market consultants during spring 2022. The Investment Team began this process by identifying six firms that provide private market consulting services to large institutional investors. A series of virtual meetings were held with each firm. The first was typically an hour long and geared toward developing familiarity – allowing the firm to develop an understanding of MainePERS' investment approach and services sought, as well as providing the firm an opportunity to present an overview of its capabilities. An in-depth meeting followed these calls to provide the firms an opportunity to

present their teams and capabilities in more detail. These presentations typically involved senior researchers from each asset class discussing their investment diligence and research processes. Where applicable, the meeting also covered portals and analytical tools made available to clients. Besides the CIO and DCIO, MainePERS attendees usually included heads of each private market asset class and other team members. Each of the incumbent providers participated in similar meetings, where MainePERS was treated as a prospective, rather than existing, client. The CIO and DCIO held a final meeting with each firm to discuss indicative pricing.

This process concluded with a recommendation to Trustees in June that a search process for private market consulting services be initiated. The Investment Team developed an RFP during the summer, and released the RFP on a targeted basis to five firms, including the two incumbents, in late August. The RFP invited firms to submit proposals for consulting services related to:

- A. **Full Mandate:** Private Equity, Alternative Credit, Real Estate, Infrastructure, and Natural Resources;
- B. **Partial Mandate – Hard Assets:** Real Estate, Infrastructure, and Natural Resources;
- C. **Partial Mandate – Private Assets:** Private Equity and Alternative Credit;
- D. **Specialized Mandate:** Single Asset Class (e.g., Real Estate).

Four firms, including the two incumbents, submitted timely responses to the RFP by the September deadline. A committee composed of the CIO, DCIO, and the two Managing Directors with oversight of Real Estate, Infrastructure, and Natural Resources reviewed the RFPs. The committee evaluated the RFPs using the below criteria, as specified in the RFP:

CRITERIA	WEIGHT
Firm Experience and Capabilities	25%
Experience and Qualifications of Team Members	25%
Quality of Proposal (Breadth, Depth, and Consistency with Work Specifications)	25%
Price	25%

Responses included proposals for both full coverage mandates as well as partial mandates. In total, the committee evaluated ten permutations providing full asset class coverage. The highest scoring proposal was a combination of partial mandate proposals submitted by Albourne and Cliffwater, for the assets classes shown below:

Albourne: Infrastructure, Natural Resources, and Real Estate

Cliffwater: Alternative Credit and Private Equity

The committee believes that this combination best meets MainePERS' needs. The System's investments within Hard Assets (Infrastructure, Natural Resources, and Real Estate) have grown to be extremely broad in terms of both geography and industry, and range from Australian mines to Finnish electrical distribution systems to U.S. multifamily housing. Albourne's global scale and resources will enhance MainePERS' ability to monitor the existing portfolio and source and diligence new investments across the Hard Assets universe.

MainePERS has received advice and guidance on Private Equity from Cliffwater since 2009, and this relationship has resulted in an extremely well performing and robust private equity portfolio. MainePERS has experienced a similar level of success in working with Cliffwater in Alternative Credit, an area in which Cliffwater is widely recognized as a market leader. The recommendation to retain Cliffwater for these asset classes is a recognition of the firm's expertise and the committee's belief that the System will be best served by continuing this relationship for these asset classes, currently representing nearly 30% of the total Fund.

MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: PRIVATE MARKETS ACTIONS
DATE: NOVEMBER 1, 2022

POLICY REFERENCE

[Board Policy 2.1 – Investment Policy Statement](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

The Investment Team will make two recommendations for the Board of Trustees consideration at the November 10th meeting:

1. **Alternative Credit:** *That MainePERS make a commitment of up to \$125 million to SLR Private Corporate Lending Fund II, subject to final due diligence, legal review and negotiations, and authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute documents in connection with this commitment.*
2. **Private Equity:** *That MainePERS make a commitment of up to \$50 million to GTCR Fund XIV, subject to final due diligence, legal review and negotiations, and authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute documents in connection with this commitment.*

Investment recommendation memorandums follow this briefing. Cliffwater concurs with these recommendations.

SLR PRIVATE CORPORATE LENDING FUND II (ALTERNATIVE CREDIT)

SLR Capital Partners is a New York-based alternative credit manager seeking to raise \$1.0 billion for its second diversified private corporate lending fund. SLR was founded in 2006 and has approximately \$6.0 billion in assets under management. Since inception, the Firm has invested more than \$12.0 billion in middle market debt, generating a gross IRR of 11.4% with an annualized default rate of just 0.1%. SLR directly originates and underwrites its investment opportunities, and makes a variety of loan types, including cash flow loans to sponsor-backed middle market companies, asset-based loans, specialty finance loans, and life sciences lending.

In Fund II, SLR expects to build a portfolio of 50-60 senior secured loans with a maturity between three and seven years and targets a gross asset level return of 10-12%, with 9-10% of that return coming from cash yield.

An investment in SLR Corporate Lending Fund II will allow MainePERS to continue building upon its partnership with SLR. MainePERS committed \$100 million to SLR in 2019, which while still early in its life, has generated a very attractive risk-adjusted return. The Investment Team is recommending a commitment of up to \$125 million to SLR Corporate Lending Fund II.

GTCR FUND XIV (PRIVATE EQUITY)

GTCR is a Chicago-based private equity firm seeking to raise \$9.5 billion for its fourteenth control-oriented buyout fund. Founded in 1980, the Firm is a pioneer in management-led buyouts of middle market companies in the healthcare, business services, financial services, and technology industries. GTCR employs a long-term oriented, patient approach to investing, which allows for the execution of complex, growth-oriented business plans. This investment approach has allowed GTCR to consistently generate attractive absolute and relative returns for its limited partners.

An investment in Fund XIV will allow MainePERS to continue building upon its relationship with GTCR, who has been a strong partner to the System since 2011. MainePERS has committed \$165 million across GTCR Funds X – XIII and an additional \$11 million across two co-investments to GTCR-backed portfolio companies. The Investment Team is recommending a commitment of up to \$50 million to GTCR Fund XIV.

MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CHIEF EXECUTIVE OFFICER
JAMES A. BENNETT, CHIEF INVESTMENT OFFICER
MICHAEL COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL

SUBJECT: DIVESTMENT UPDATE

DATE: NOVEMBER 2, 2022

NEPC will be attending the November board meeting to present their evaluation of the impact that divestment from fossil fuel and for-profit prison companies would have on the MainePERS portfolio. NEPC's presentation follows this memo, and their final full report will be included as part of next month's board package.

POLICY REFERENCE

[Board Policy 2.1 – Investment Policy Statement](#)

[Board Policy 2.6 – Environmental, Social and Governance Policy](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

LEGISLATION OVERVIEW

Two pieces of divestment-related legislation became effective in October 2021. One requires MainePERS to divest holdings of fossil fuel (FF) companies, in accordance with sound investment criteria and consistent with fiduciary obligations. The other requires divestment from investments in private prisons, also in accordance with sound investment criteria and consistent with fiduciary obligations.

A company is subject to divestment under the fossil fuel legislation if it

- Is among the 200 publicly traded companies with the largest fossil fuel reserves
- Is among the 30 largest public company owners in the world of coal-fired power plants,
- Has as its core business the construction or operation of fossil fuel infrastructure (wells, pipelines, refineries, power plants, storage tanks, export terminals)
- Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels
- Receives more than 50% of its gross revenues from companies meeting the above definitions

The for-profit prison law prohibits MainePERS from investing in any company that “owns or operates prisons for profit.”

DIVESTMENT REVIEW

As a reminder, Trustees approved a recommendation in October 2021 that MainePERS continue with its current approach to investing in the public and private markets and that staff explore financial implications of alternative strategies to avoid fossil fuel and private prison investments. MainePERS decided to engage a specialty consultant in order to assist with the evaluation of these investment implications, and formed a working group to develop an RFP for this engagement. This group consisted of MainePERS staff (CEO, Chief Investment Officer, Deputy CIO, and General Counsel and Chief Operating Officer), MainePERS general consultant (Cambridge Associates), and several external investment professionals with public plan experience related to these issues.

This group held a series of meetings during January and February 2022 to develop an appropriate scope of work for the RFP. One meeting was used to provide stakeholders an opportunity for input, and over two dozen stakeholders spoke or provided written input. MainePERS issued the RFP directly to 13 potential bidders and via public media in March, and five responses were received by the deadline in late April. Following a review of the RFPs, MainePERS engaged NEPC (formerly New England Pension Consultants) for the below scope of work:

- A. Broad review of divestment and the climate change-related risk landscape
- B. Identify and quantify the System’s portfolio holdings subject to divestment
- C. Identify and quantify direct divestment costs
- D. Identify and quantify divestment impact on portfolio

It is important to note that the scope of work is limited to an evaluation of divestment as specified in the legislation. As such, NEPC’s work can be viewed as a necessary first step (Phase 1) in the process of MainePERS’ evaluation of how best to implement the requirements of the divestment legislation.

MAINEPERS FOR-PROFIT PRISON EXPOSURE

As noted on slide 15 of NEPC’s presentation, MainePERS’ investments in companies meeting the definition of the for-profit prison legislation totals around \$200,000, or around 0.0009% of System assets. These investments are contained in the iShares Russell 2000 ETF held by MainePERS.

MAINEPERS FOSSIL FUEL EXPOSURE

As discussed starting on slide 15, MainePERS’ investments in fossil fuel companies are substantial and total 7.6% of the Fund. Of this amount, 5.1% resides in private market asset

classes, with the remaining 2.5% held in the System's public equity and credit allocations. As shown on slide 17, exposure to fossil fuels within public market investments varies from less than 4% by value for Traditional Credit, to nearly 8% for US Equities, and to over 11% in the case of International Equity. Slide 20 shows that MainePERS holds shares in nearly 400 individual fossil fuel companies spread across investments in the Russell 1000, Russell 2000, and ACWI ex US indices. The System also holds nearly 1,000 bonds issued by fossil fuel companies in its Traditional Credit allocation (note that one company will typically have numerous bond issues outstanding).

As can be seen on slide 18, the System's fossil fuel exposure is concentrated in its Infrastructure allocation, which contains a majority (3.9%) of the Fund's total exposure. Private Equity holds most of the remaining private market fossil fuel exposure, with the other private market asset classes have little or no exposure.

PUBLIC MARKET INVESTMENTS: DIVESTMENT IMPLICATIONS AND COSTS

Slide 21 presents the relative performance over different time periods of a global equity portfolio (Benchmark) and a similar portfolio that excludes shares of fossil fuel companies (Divested Portfolio). Returns on the two portfolios differ, with the difference in any period driven by the relative performance of those fossil fuel companies contained in the Benchmark. Tracking Error (TE), as shown in the last row of the table, is a measure of the difference in performance between the two portfolios, and ranges between 1% and 1.5% over the different periods. A tracking error of 1% implies that an investor could expect returns on the Divested Portfolio to differ from Benchmark returns by at least 1% in one out of three years.

Slide 22 presents similar information in a visual fashion for the case of the S&P 500. Fossil fuel companies subject to divestment are primarily found in two sectors of the S&P 500: Utilities and Energy. As shown on this slide, these two sectors typically behave quite differently (better and worse) than average, explaining why returns on a divested portfolio are likely to deviate (both above and below) those of the benchmark.

MainePERS holds its investments in publicly traded assets in both separately managed accounts (SMA) and commingled funds. As discussed beginning on slide 32, public market divestment would likely require shifting all affected asset classes to more operationally intense SMA structures, and would be expected to lead to higher management fees and trading costs.

PRIVATE MARKET INVESTMENTS: DIVESTMENT IMPLICATIONS AND COSTS

Slide 25 shows that private market fossil fuel exposure totals \$930M, or nearly 5.2% of the System's total investments. These private market exposures will naturally "age out" of the portfolio as the private market funds holding these investments progress through their lifecycle. This fact, combined with presumed total Fund growth over time, means that private market exposure can be expected to decrease from the current 5.2% level to around 1.6% by the end

of 2025, assuming the System makes no additional commitments to funds providing fossil fuel exposure. Slide 27 shows this expected progression.

As shown on slide 25, the System currently holds positions in 49 infrastructure funds, with a total NAV of \$2,017M. Around 25 or so of these funds contains some fossil fuel investments, with total fossil fuel exposure of \$703M. Note that the NAV of infrastructure funds with fossil fuel exposure totals \$1,355M, or nearly 70% of the System's total infrastructure investments.

The table on slide 29 shows the impact of removing the Infrastructure asset class from the System's asset allocation, and how this impact can be mitigated by shifting other portfolio weights. The 2nd column in this table contains the Fund's policy weights and the associated expected risk and return of the policy. The 3rd column adjusts these policy weights by proportionately shifting the weight of Infrastructure to the other private market asset classes, leading to an increase in the expected return and risk of the portfolio. The final column contains weights of a portfolio for which public market weights have been adjusted in order to yield a portfolio risk matching that of the policy portfolio.

Finally, NEPC reports on the potential costs associated with exiting private market funds via secondary sales beginning on slide 35. In general, such sales would likely incur costs in excess of 20% of the NAV of the fund being sold.

NEXT STEPS

As noted above, the information in NEPC's report should be viewed as the first step in understanding the financial implications of investment approaches that avoid fossil fuel and for-profit prison investments. We plan to present details on the next steps, including an asset class-by-asset class discussion, at the December Board meeting.



DIVESTMENT CONSULTING PROJECT UPDATE

BOARD OF TRUSTEES MEETING

NOVEMBER 10, 2022



MEETING GOALS

- **Introduce NEPC and Team**
- **Describe process to evaluate portfolio for alignment with legislation**
- **Summarize key components of project**
 1. Industry Trends: What are other institutions doing when it comes to divestment, with a particular focus on public funds?
 2. Portfolio Exposures: What is the existing allocation to securities that would need to be removed under the Maine legislation?
 3. Asset Allocation Review: What are implications of divestment for the existing asset allocation? How does the current portfolio compare to one without an allocation to infrastructure? How would these have performed in historic periods of market stress?
 4. Cost Analysis: How challenging will it be to implement divestment? Describe expected operational complexity.
- **Answer your questions**

ABOUT NEPC

- Our success as a firm is fueled by our love for this business
- We remain independent to prioritize client interests
- We invest heavily in research and people



337 EMPLOYEES



7 REGIONAL OFFICES



EMPLOYEE-OWNED

44 Partners



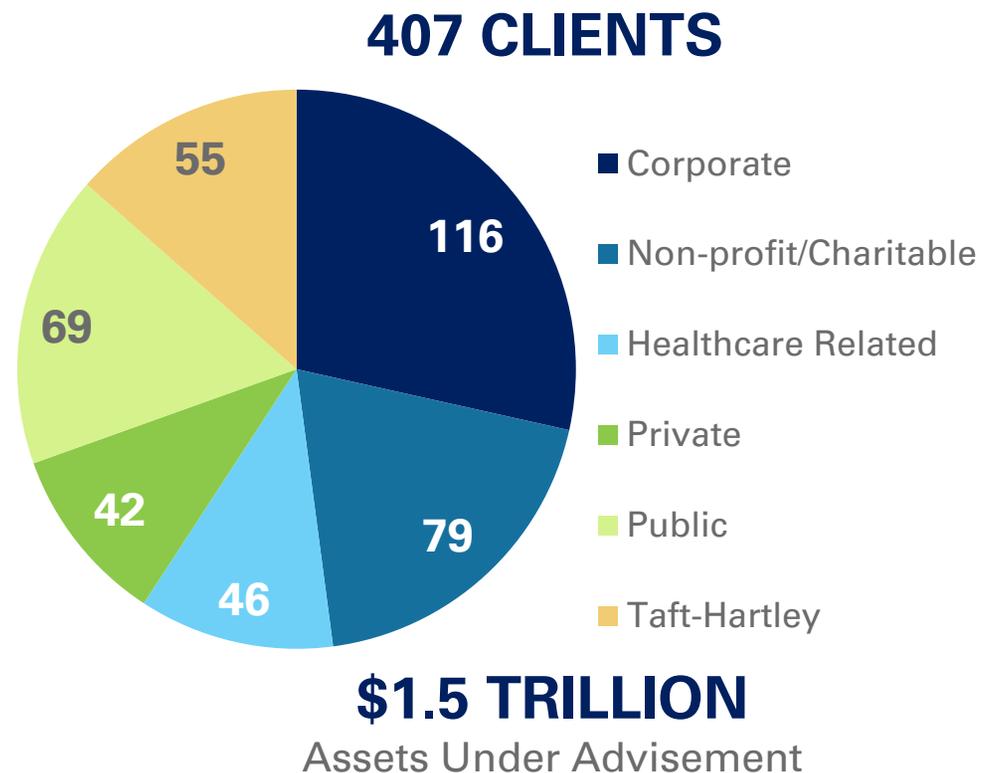
100% OF REVENUE

from advisory consulting and OCIO services



7 PRACTICE TEAMS

deliver expertise by client type



NEPC also has a practice team dedicated to supporting our clients' defined contribution plans across all client types.



As of 7/1/2022

TEAM BIOGRAPHIES

DULARI PANCHOLI, CFA, CAIA
PRINCIPAL, HEAD OF CREDIT AND MULTI-ASSET INVESTMENTS



Dulari's investment career began in 2000 and she joined NEPC in 2006. Dulari is involved in NEPC's hedge fund research and due diligence activities, in addition to providing consulting services for the non-traditional asset classes of NEPC's various clients. Dulari is the Co-Head of NEPC's Impact Investing Committee. Dulari is also frequent speaker at industry conferences on the topic of Impact Investing.

Prior to joining NEPC in August of 2006, Dulari was Vice President of Operations of the Hedge Fund at Venus Capital Management. As Vice President, Dulari was independently responsible for all of the investment operations activity for two funds under management. Her responsibilities included: representing the fund for all operational due diligence conducted by institutional investors, monitoring the portfolio, and assisting the fund manager on risk management for structured products. Prior to that, Dulari was employed as a Research Associate at the Center for International Securities and Derivatives Market (CISDM). As a Research Associate, Dulari's responsibilities included understanding various databases, statistical models, software and analytical tools used for efficient financial analysis. While at CISDM, Dulari authored and co-authored several research papers, one of which was published in the Journal of Alternative Investments in the Spring of 2004. Prior to CISDM, she worked for Kotak Mahindra Asset Management Company in Mumbai, India. Her responsibilities included auditing cash flows and summarizing fund movements for fund managers.

Dulari received her M.B.A. from the University of Massachusetts, Amherst and holds L.L.B. and B.S. degrees from the University of Mumbai. Dulari has attained both of the Chartered Financial Analyst and Chartered Alternative Investment Analyst designations. She is also a member of the Boston Security Analysts Society.

TEAM BIOGRAPHIES

KRISTINE PELLETIER
PARTNER



Krissy joined NEPC in 2008. She is a Partner and senior member of NEPC's Endowment and Foundation practice. She also serves as Co-Head of NEPC's Impact Investing Committee.

Krissy brings nearly 20 years of investment experience, having spent most of her career focused on impact investing, portfolio construction, and the evaluation and selection of investment managers. In her current role, Krissy works with many of NEPC's philanthropic clients that are leading the industry on alignment of mission and money. Krissy is often featured in industry publications and a frequent speaker at conferences on the topic of Impact Investing. At the end of 2019, Krissy published an Op-Ed in Wealth Management titled "New Decade, New Fundamentals for Investing" defining three pillars that will be the largest drivers of investment success: sustainability, diversity and inclusion, and innovation. Krissy was named in CIO magazine's "The Knowledge Brokers 2021" edition as one of the world's most influential investment consultants*.

Prior to joining NEPC, Krissy worked at Wellington Management Company, LLP as a Research Associate, and served as a researcher and grant writer for Think:Kids, of Massachusetts General Hospital.

Krissy earned her M.B.A. from the Darden Graduate School of Business at the University of Virginia, and her B.A. in Finance and Economics from Simmons University (formerly Simmons College).

Krissy serves as a member of NEPC's Women's Leadership Forum, she is also on the Board of Trustees at Cushing Academy, is an active volunteer with her alma mater, Simmons University, and previously served on the board for the Student Leadership Training Program.

* CIO's Most Influential Investment Consultants: CIO Magazine interviews pension and non-profit CIOs, asset managers and former consultants to approximate what it calls "the hierarchy of today's institutional consultant industry". The results should not be considered a recommendation of any specific firm or individual consultant. For more information, please visit CIO Magazine's web site at <https://www.ai-cio.com/lists/>



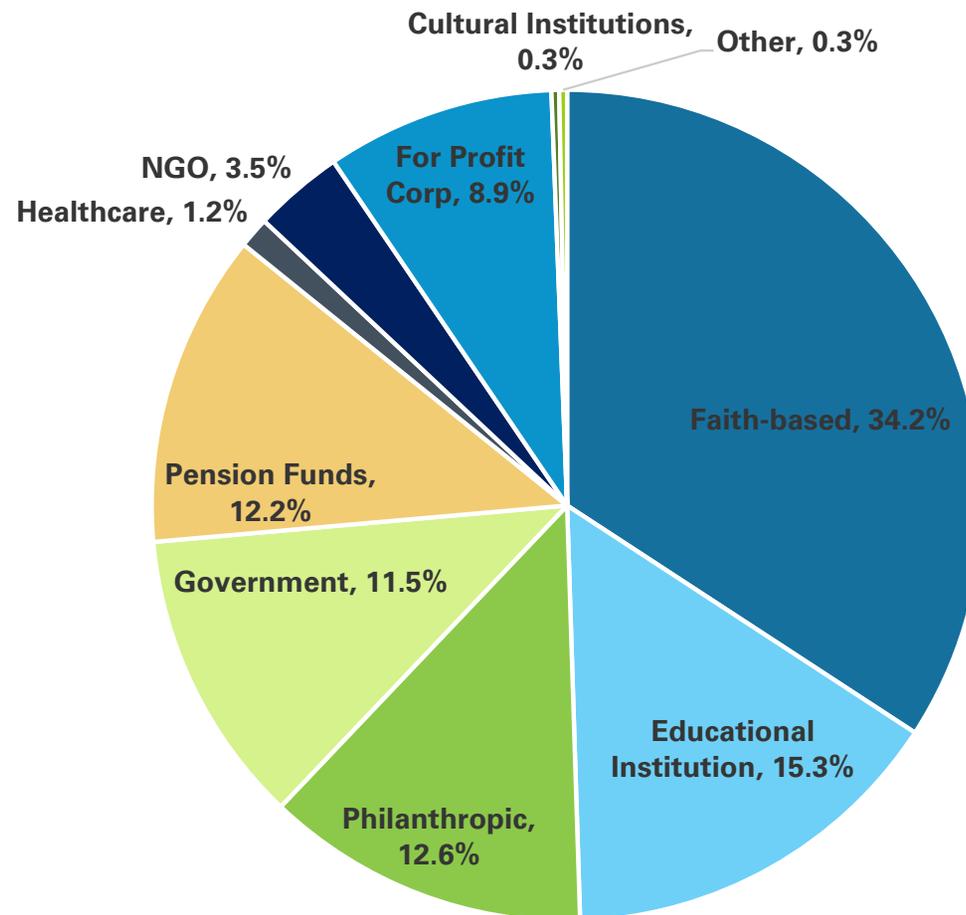
SECTION 1: INDUSTRY TRENDS

What are other institutions doing when it comes to divestment, with a particular focus on public funds?



US FOSSIL FUEL DIVESTMENT MANDATES

- Nearly 1,500 institutions with approximately \$40.56 trillion in assets are considering a spectrum of divestment approaches. Implementation varies widely – on scope, flexibility and timeline to achieve.

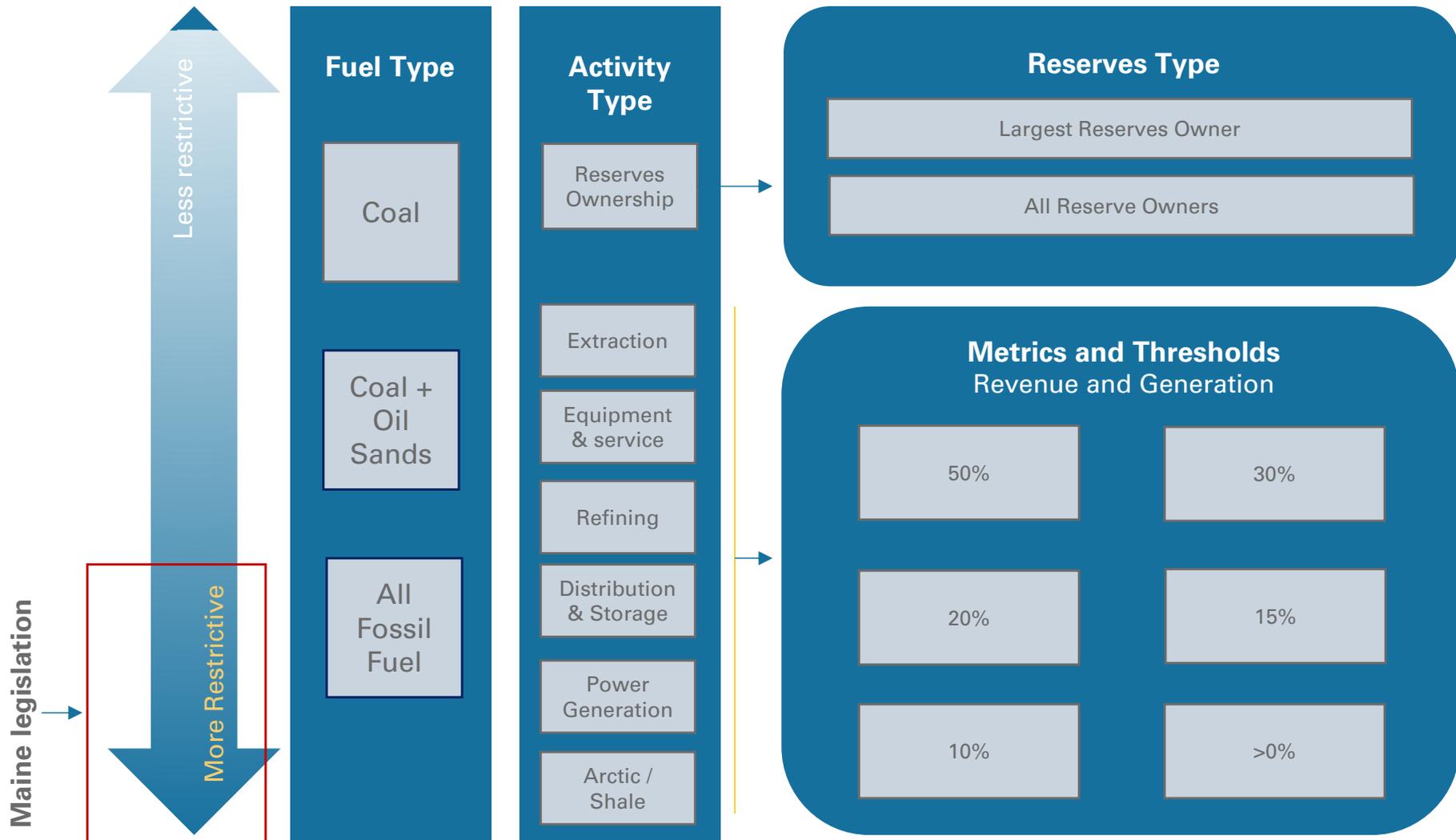


KEY QUESTIONS/CONSIDERATIONS

- **Organizations considering divestment from fossil fuels should assess the potential impact on:**
 - Asset Allocation
 - Portfolio Diversification
 - Inflation Sensitivity
 - Risk Management
 - Manager Selection
 - Investment Performance
 - Investment related fees
 - Investment Policy Statement

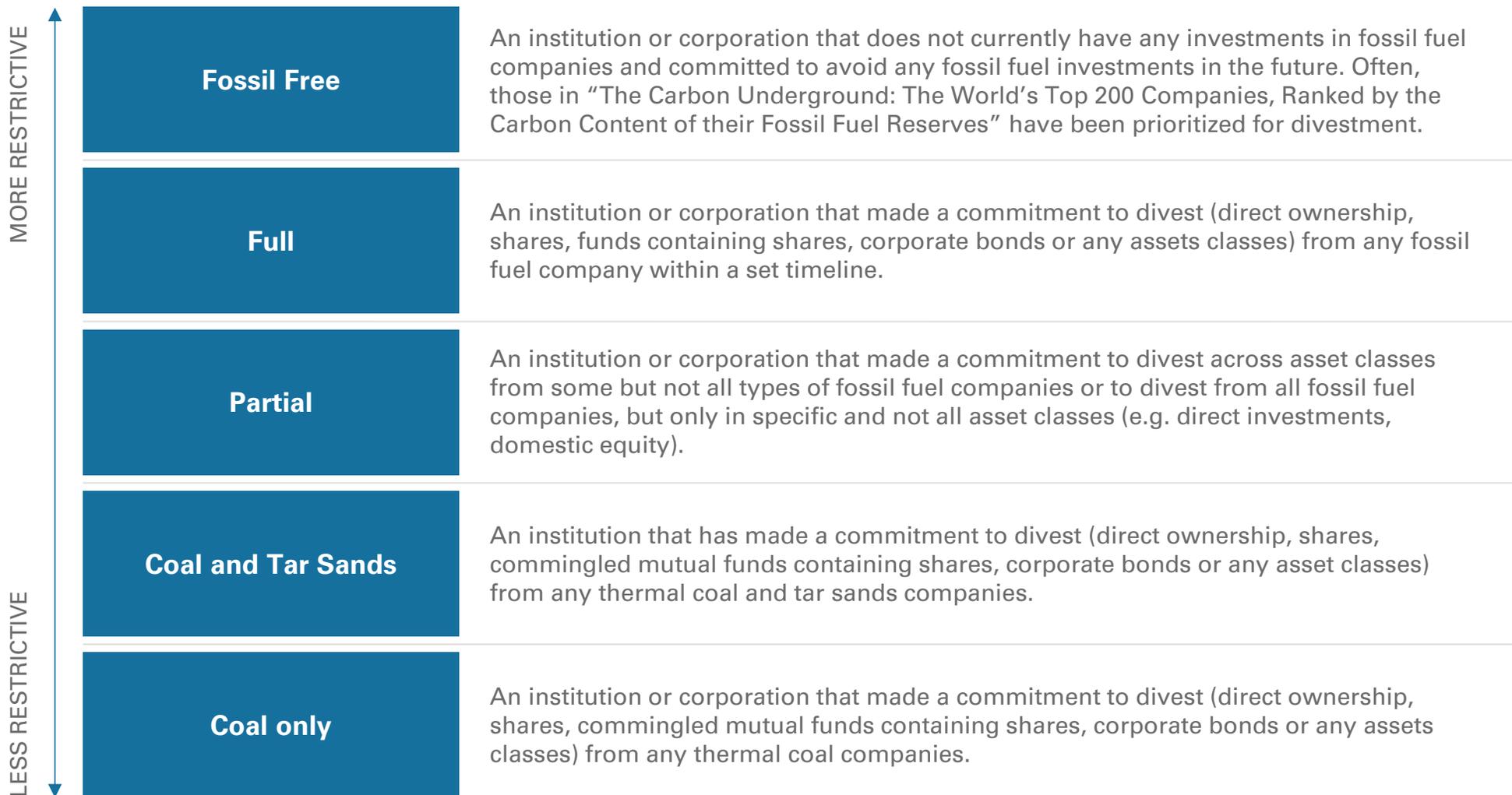
 - **Various factors need to be considered in developing a plan for fossil fuel divestment:**
 - Definition of fossil fuel exposure
 - Level of divestment: full or partial, Separately Managed Accounts (SMAs) only, private markets, etc.
 - Potential costs: selling costs (such as secondary private market), legal costs, portfolio monitoring costs, custody fees, etc.
 - Assess investment alternatives
 - Potential impact on return
 - Tracking error from the index
 - Impact on investment management fees
 - Determine timeframe for an orderly divestment
 - The role of engagement (if at all). Full divestment eliminates the opportunity for engagement.
- **For the purposes of this review, we will focus on the fees and costs associated with the existing Maine legislation that would apply to the portfolio**

APPROACHES TO DIVESTMENT HAVE VARIED



DIVESTMENT COMMITMENT TYPES

SPECTRUM OF APPROACHES ANNOUNCED BY INVESTORS



Source: divestmentdatabase.org

Investments may mean direct ownership, shares, commingled mutual funds containing shares, corporate bonds.

Fossil fuel companies mean thermal coal, oil or gas.



STATE LEGISLATIVE INITIATIVES

ACTIONS PROMOTING DIVESTMENT

- In August 2022, Ropes & Gray released “State Regulation of ESG Investment Decision-Making by Public Retirement Plans: An Updated Survey”. The release highlighted state initiatives adopted or under consideration. A summary of the report:

Topic	Number
States with initiatives	12
Legislative announcements only	3
Initiatives currently referred to committee	8
Initiatives currently in committee	1
Initiatives that died in committee	3
Initiatives currently in effect	2

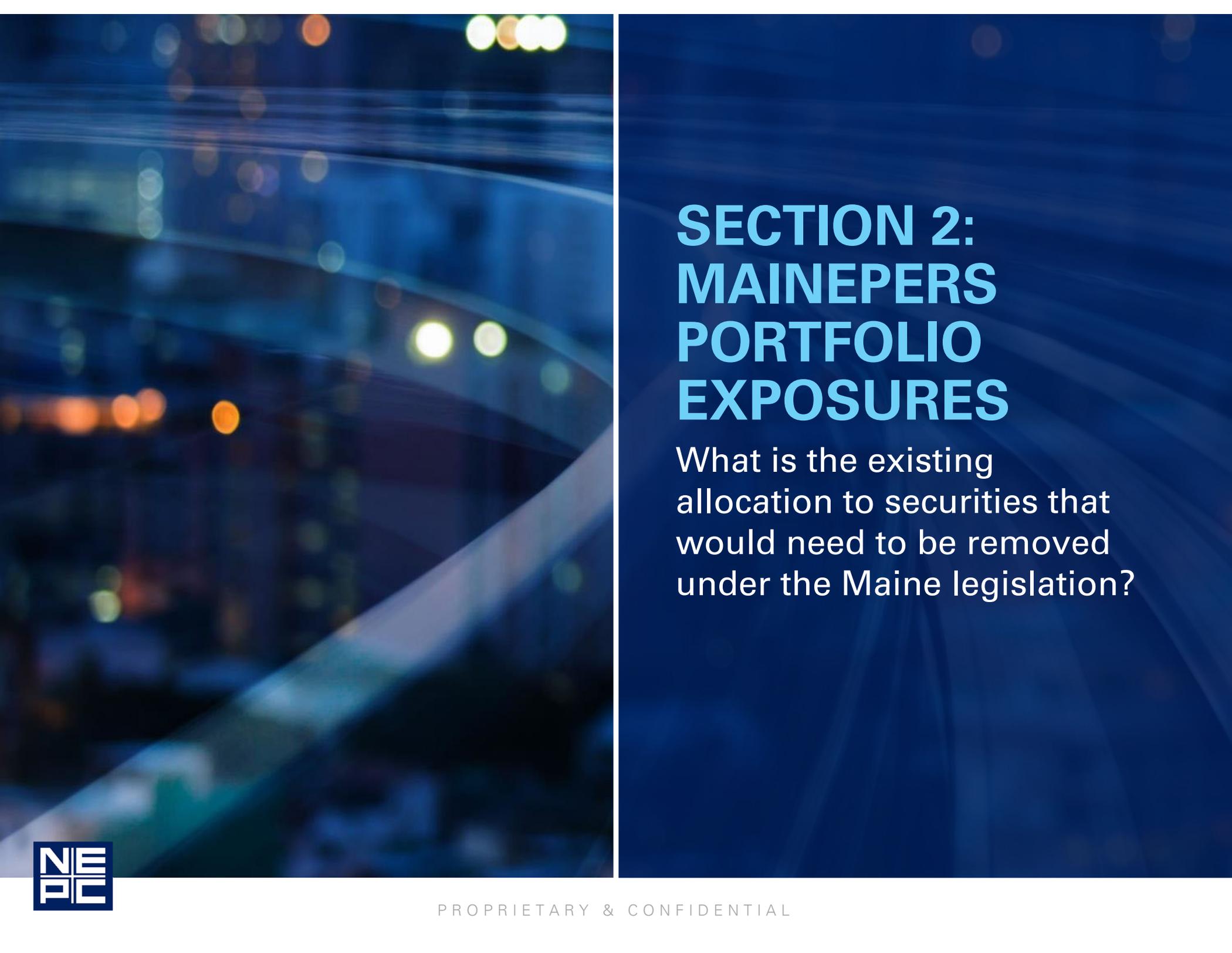
Connecticut: Responsible Gun Policy, applies to Connecticut Retirement Plans and Trust Funds

Maine: Fossil Fuel Limitation; Divestment, applies to the Maine Public Employees Retirement System

Key takeaway: Maine is the only state with enacted fossil fuel divestment legislation

IMPLEMENTATION TRENDS

- **Institutions rely on flexibility in their divestment statements to accommodate implementation challenges – opening a (potential) disconnect between public statements and ultimate action**
- **Areas that require implementation specificity:**
 - Define fossil fuels intended for divestment
 - Set a time horizon – a longer time horizon leaves room for incremental change rather than forced selling
 - Address asset class differences – ability to adopt within an asset class, availability of investment strategies to help achieve goals, the impact that asset classes have on total portfolio construction, etc.
 - Scope of divestment within portfolio – active vs. passive, direct vs. indirect holdings, cost effectiveness of implementation in today’s market
 - Determine if engagement will have a role (or not)
- **As an example, CalSTRS adopted language specific to Passive Investment and Limited Partnerships:**
 - “Divestment does not apply to segments of the portfolio that track market indices, as CalSTRS policies require those segments to invest in all companies included in the index. Additionally, the policy does not apply to investments in a Limited Partnership due to CalSTRS position of limited liability as a Limited rather than General Partner.”



SECTION 2: MAINEPERS PORTFOLIO EXPOSURES

What is the existing allocation to securities that would need to be removed under the Maine legislation?



MAINE LEGISLATION SUMMARY

- **Divestment Legislation: covers fossil fuels and for-profit prison exposures**
- **The law defines fossil fuels as coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel:**
 1. Is among the 200 publicly traded companies with the largest fossil fuel reserves in the world;
 2. Is among the 30 largest public company owners in the world of coal-fired power plants;
 3. Has as its core business the construction or operation of fossil fuel infrastructure [oil or gas wells, oil or gas pipelines and refineries; oil, coal or gas-fired power plants; oil and gas storage tanks; fossil fuel export terminals; and any other infrastructure used exclusively for fossil fuels];
 4. Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or
 5. Receives more than 50% of its gross revenue from companies that meet the definition under (1), (2), (3) or (4).
- **Final report to the joint standing committee regarding completion of divestment is due on January 1, 2026**

TOTAL FUND SUMMARY

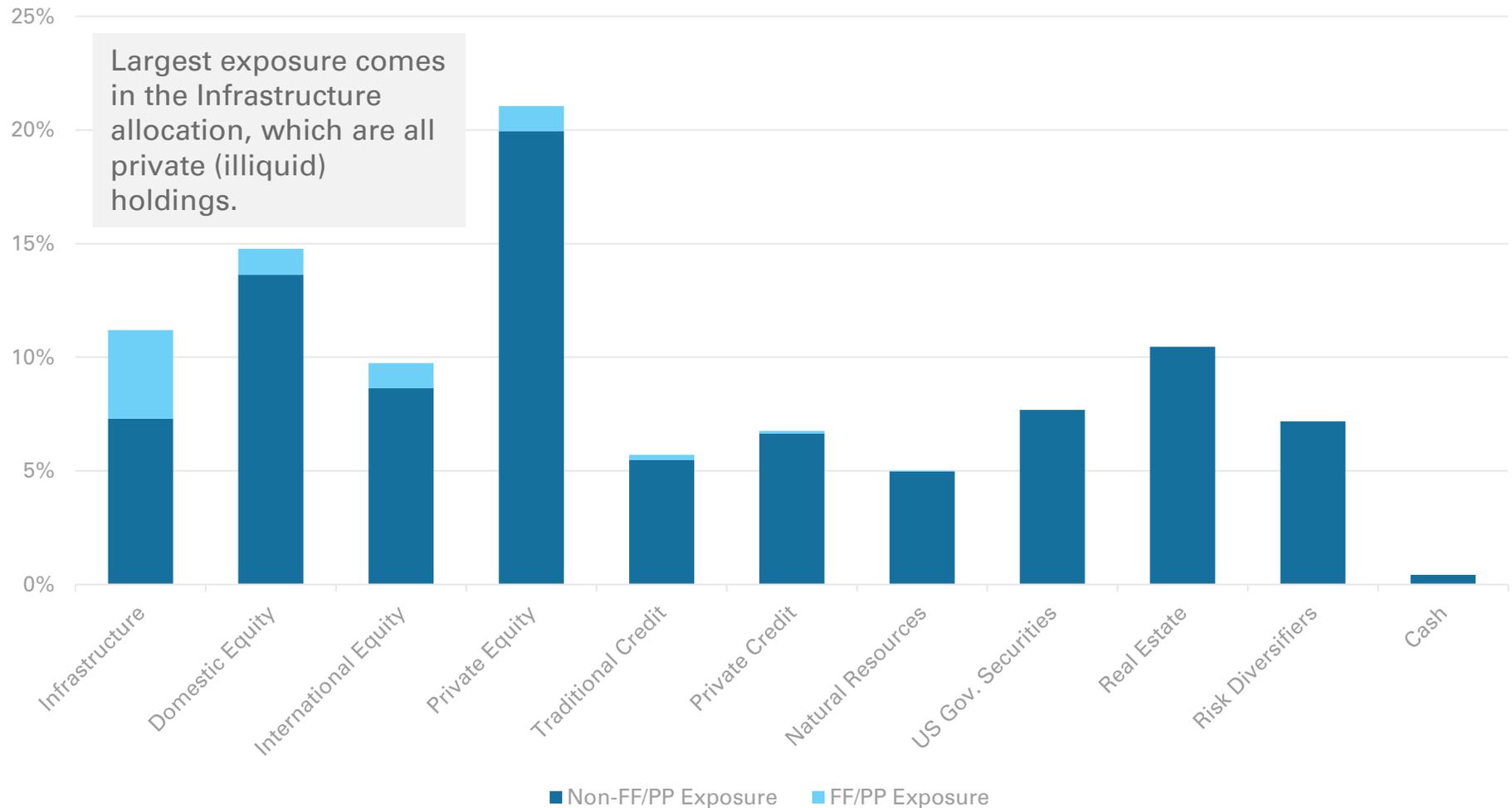
- The MainePERS portfolio is allocated across public and private markets
- NEPC, with support from MSCI ESG Manager, analyzed the public holdings exposure to the listed securities in fossil fuels and private prisons [FF/PP]. Separately, we evaluated the private market holdings in collaboration with Staff.
- The FF/PP exposure across the total Fund is summarized below:

Asset	Estimated FF/PP [\$M]	Weighted Exposure
Public Markets	\$445.5	2.47%
Private Markets	\$930.0	5.16%
Total	\$1,375.5	7.63%

- **Fossil fuel-related investments represent the vast majority of exposure**
 - Private prison exposure accounts for 0.0009% or \$0.2M of total Fund market value
 - In the remainder of this presentation, we will primarily refer to FF exposure

DIVESTMENT EXPOSURE ACROSS TOTAL FUND

HIGHEST TO LOWEST EXPOSURE



Note that the Fund is underweight public equity, and so there would be more FF exposure in that asset class if the Fund were at target weight.

DIVESTMENT EXPOSURE ACROSS PORTFOLIO

PUBLIC MARKETS

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF/PP [% of (B)]	Estimated FF/PP [\$M]	Weighted Exposure	Source
Domestic Equity	18%	14.78%	7.73%	\$205.8	1.14%	MSCI ESG Manager
International Equity	12%	9.74%	11.32%	\$198.7	1.10%	MSCI ESG Manager
TOTAL PUBLIC EQUITY	30%	24.5%		\$404.5	2.24%	
Traditional Credit	5%	5.71%	3.98%	\$41.0	0.23%	MSCI ESG Manager
US Govt. securities	10%	7.68%	No exposure	\$0	0%	Staff
Risk Diversifiers	7.5%	7.17%	No exposure	\$0	0%	Staff
TOTAL PUBLIC MARKETS	52.5%	45.1%		\$445.5	2.47%	

DIVESTMENT EXPOSURE ACROSS PORTFOLIO

PRIVATE MARKETS

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF/PP [% of (B)]	Estimated FF/PP [\$M]	Weighted Exposure	Source
Infrastructure	10%	11.20%	34.86%	\$703.2	3.90%	Staff
Private Equity	12.5%	21.05%	5.20%	\$197.3	1.09%	Staff
Private Credit	10%	6.77%	1.83%	\$22.3	0.12%	Staff
Natural Resources	5%	5.01%	0.80%	\$7.2	0.04%	Staff
Real Estate	10%	10.46%	No exposure	\$0	0%	Staff
TOTAL PRIVATE MARKETS	47.5%	54.5%		\$930.0	5.16%	



PUBLIC MARKETS



PROPRIETARY & CONFIDENTIAL

DIVESTMENT EXPOSURE IN PUBLIC MARKETS

Asset Exposure	Portfolio Allocation (\$M)	Total Number of Holdings	Number of Holdings Tagged for Divestment	Fossil Fuel Exposure (\$M)	Private Prison Exposure (\$M)	Source
Russell 1000	\$2,491.4	1,033	69	\$192.6	\$0.0	MSCI ESG Manager
Russell 2000	\$171.5	1,978	97	\$13.1	\$0.2	MSCI ESG Manager
ACWI ex US	\$1,755.2	2,371	218	\$198.7	\$0.0	MSCI ESG Manager
Traditional Credit	\$1,029.3	14,355	913	\$41.0	\$0.0	MSCI ESG Manager
TOTAL				\$445.4	\$0.2	

Top Holdings

Russell 1000	Russell 2000	ACWI ex US	Traditional Credit
1. Berkshire Hathaway Inc. (\$32.6M)	1. Murphy USA Inc. (\$0.4M)	1. Shell PLC (\$15.6M)	1. Energy Transfer LP (\$2.0M)
2. Exxon Mobil Corporation (\$23.9M)	2. Matador Resources Company (\$0.4M)	2. BHP Group Limited (\$11.4M)	2. Exxon Mobil Corporation (\$2.0M)
3. Chevron Corporation (\$18.8M)	3. Black Hills Corporation (\$0.4M)	3. Total Energies SE (\$10.3M)	3. Enterprise Products Operating LLC (\$1.7M)

HYPOTHETICAL COMPARATIVE PERFORMANCE [PUBLIC EQUITY ONLY]

Performance	1- Year	3-Year	5-Year	10-Year	25-Year
Divested Portfolio*	-17.77%	7.03%	7.87%	10.48%	7.56%
Benchmark**	-15.74%	6.91%	7.75%	9.80%	7.49%
Relative Performance	-2.03%	0.13%	0.12%	0.67%	0.07%

Standard Dev.	1- Year	3-Year	5-Year	10-Year	25-Year
Divested Portfolio*	15.53%	18.05%	16.32%	13.44%	16.14%
Benchmark**	15.37%	18.20%	16.37%	13.46%	15.93%
Relative Vol.	0.16%	-0.15%	-0.05%	-0.02%	0.21%
Tracking Error	1.46%	1.21%	1.03%	1.00%	1.23%

Over the longer term, the hypothetical divested portfolio delivers a marginally **higher** return with a slightly **higher** volatility. In the short term, the hypothetical divested portfolio experiences a **higher** drawdown and a **higher** associated volatility.

- *Divested Portfolio - Benchmark based hypothetical back-tested portfolio with exclusion screens applied and proceeds re-invested
- ** Benchmark: 56.4% Russell 1000 / 3.9% Russell 2000 / 39.7% MSCI ACWI ex US without any screens
- Tracking Error measures the standard deviation of a fund's excess returns over its stated benchmark. A low Tracking Error means less volatility of excess returns.



Note: Hypothetical performance was prepared by Parametric. It represents back-tested historical performance and the opportunity cost based on the exclusion of fossil fuels and private prisons (following Maine's legislative directive), with trailing periods calculated as of June 30, 2022

SECTOR RETURNS BY YEAR

ENERGY RETURNS VARY YEAR TO YEAR

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 ¹
Consumer Discretionary 42.72	Utilities 28.59	Consumer Discretionary 9.94	Energy 28.01	Technology 34.28	Health Care 6.29	Technology 49.97	Technology 43.57	Energy 53.02	Energy 33.87
Health Care 41.24	Health Care 25.18	Health Care 6.86	Financials 22.69	Materials 23.94	Utilities 4.03	Financials 31.90	Consumer Discretionary 29.58	Real Estate 45.97	Utilities -6.58
Industrials 40.44	Technology 17.75	Consumer Staples 6.83	Industrials 19.95	Industrials 23.84	Consumer Discretionary 1.65	S&P 500 31.49	Communication Services 26.82	Financials 34.77	Consumer Staples -11.89
Financials 35.37	Consumer Staples 15.86	Technology 5.63	Materials 16.66	Consumer Discretionary 22.77	Technology -1.57	Communication Services 31.23	Materials 20.34	Technology 34.53	Healthcare -13.12
S&P 500 32.39	Financials 15.03	S&P 500 1.38	Utilities 16.00	Financials 22.04	Real Estate -2.27	Industrials 29.12	S&P 500 18.40	NYSE Equal Sector Weight 29.46	NYSE Equal Sector Weight -18.20
NYSE Equal Sector Weight 30.81	S&P 500 13.69	NYSE Equal Sector Weight -1.37	Technology 14.82	S&P 500 21.83	S&P 500 -4.38	Real Estate 28.84	Healthcare 13.27	S&P 500 28.71	Industrials -20.76
Consumer Staples 26.27	NYSE Equal Sector Weight 13.41	Financials -1.60	NYSE Equal Sector Weight 14.31	Health Care 21.70	NYSE Equal Sector Weight -6.74	Consumer Discretionary 28.42	NYSE Equal Sector Weight 11.29	Consumer Discretionary 27.83	Financials -21.24
Energy 26.16	Industrials 10.45	Industrials -4.25	S&P 500 11.96	NYSE Equal Sector Weight 18.27	Consumer Staples -8.00	NYSE Equal Sector Weight 28.21	Industrials 10.83	Materials 27.43	Materials -23.77
Technology 25.97	Consumer Discretionary 9.49	Utilities -4.86	Consumer Discretionary 5.88	Consumer Staples 12.92	Financials -13.09	Consumer Staples 27.45	Consumer Staples 10.13	Healthcare 25.92	S&P 500 -23.87
Materials 25.83	Materials 7.31	Materials -8.58	Consumer Staples 5.00	Utilities 12.02	Industrials -13.10	Utilities 26.08	Utilities 0.35	Industrials 20.93	Real Estate -28.90
Utilities 13.00	Energy -8.60	Energy -21.46	Real Estate 3.19	Real Estate 10.70	Materials -14.78	Materials 24.18	Financials -1.83	Utilities 17.58	Consumer Discretionary -29.88
			Health Care -2.83	Energy -1.06	Communication Services** -16.98	Health Care 20.65	Real Estate -2.27	Consumer Staples 17.10	Technology -31.23
					Energy -18.15	Energy 11.85	Energy -32.81	Communication Services 15.89	Communication Services -37.92

Source: Bloomberg. Data shown in percentages. 2022 data as of September 30, 2022.

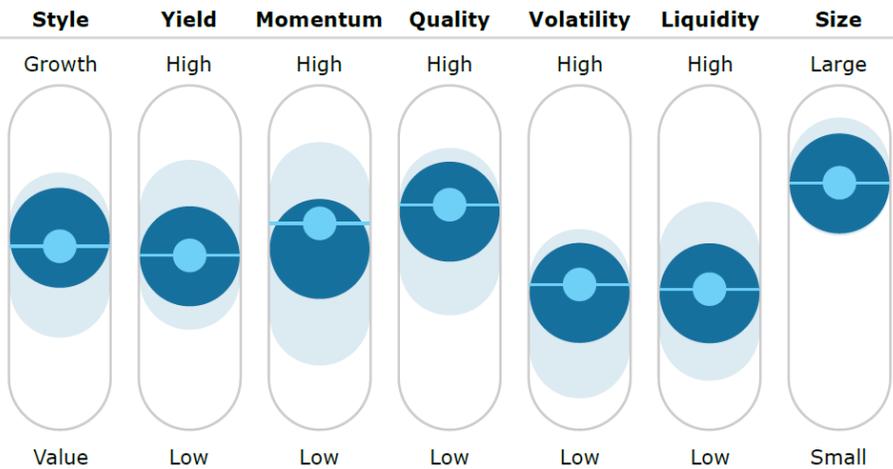


COMPARISON OF EX FF INDEX VS BROAD INDEX

METRICS INDICATE MORE OF A GROWTH TILT TO EX FF

	S&P 500 ex Fossil Fuel	S&P 500
P/E	18.42	17.98
P/B	3.41	3.38
Dividend Yield	1.89%	1.98%
Standard Deviation	18.02	18.07
Sharpe Ratio	0.52	0.51

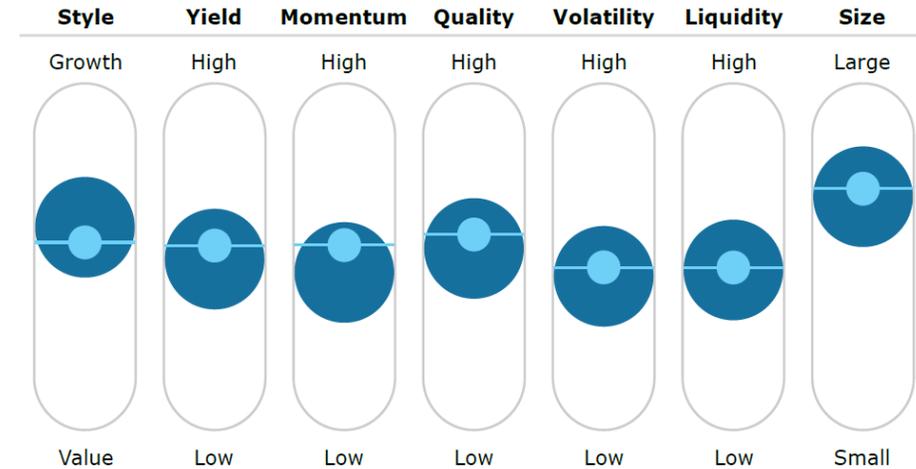
Factor Profile



● S&P 500 Fossil Fuel Free ● Historical Range ● S&P 500 TR USD

	MSCI ACWI ex Fossil Fuel	MSCI ACWI
P/E	15.42	14.51
P/B	2.36	2.27
Dividend Yield	2.66%	2.84%
Standard Deviation	17.07	17.15
Sharpe Ratio	0.27	0.27

Factor Profile



● MSCI ACWI ex Fossil Fuels ● MSCI ACWI NR USD





PRIVATE MARKETS



PROPRIETARY & CONFIDENTIAL

DIVESTMENT EXPOSURE IN PRIVATE MARKETS

- The first component of the evaluation of the private markets allocation was to determine *current* exposure using the Staff assessment of holdings based on fossil fuel Global Industry Classification Standard (GICS) codes. As previously noted, the total Fund exposure is 5.16%, summarized below:

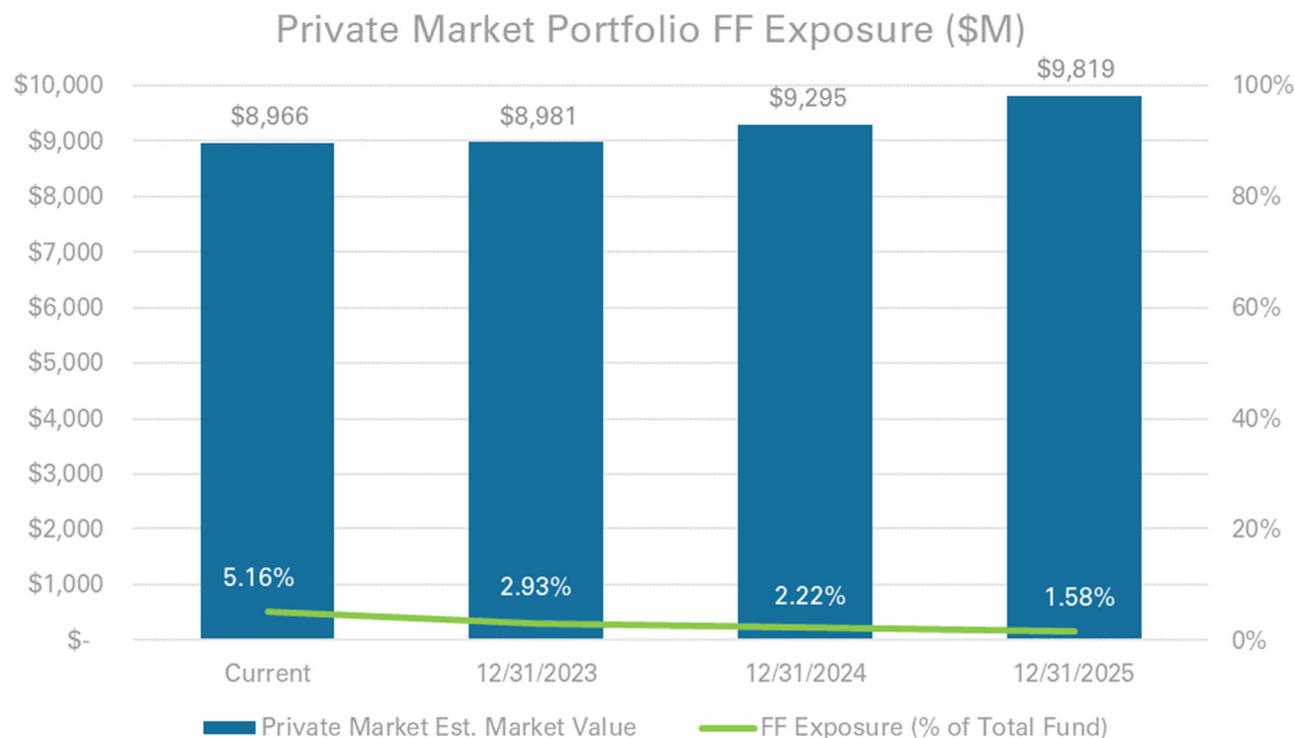
Asset Exposure	Portfolio Allocation (\$M)	Total Number of Funds	Number of Funds Tagged for Divestment	Fossil Fuel Exposure (\$M)	Weighted Exposure	NAV of Funds with FF Exposure (\$M)
Infrastructure	\$2,017.3	49	25	\$703.2	3.90%	\$1,355.4
Private Equity	\$3,793.5	149	22	\$197.3	1.09%	\$648.7
Private Credit	\$1,219.0	45	8	\$22.3	0.12%	\$455.7
Natural Resources	\$902.9	16	3	\$7.2	0.04%	\$26.7
Real Estate	\$1,884.6	43	0	\$0	0%	\$0
TOTAL PRIVATE MARKETS	\$9,817.3	302	58	\$930.0	5.16%	\$2,486.5

FORECASTED EXPOSURE IN PRIVATE MARKETS

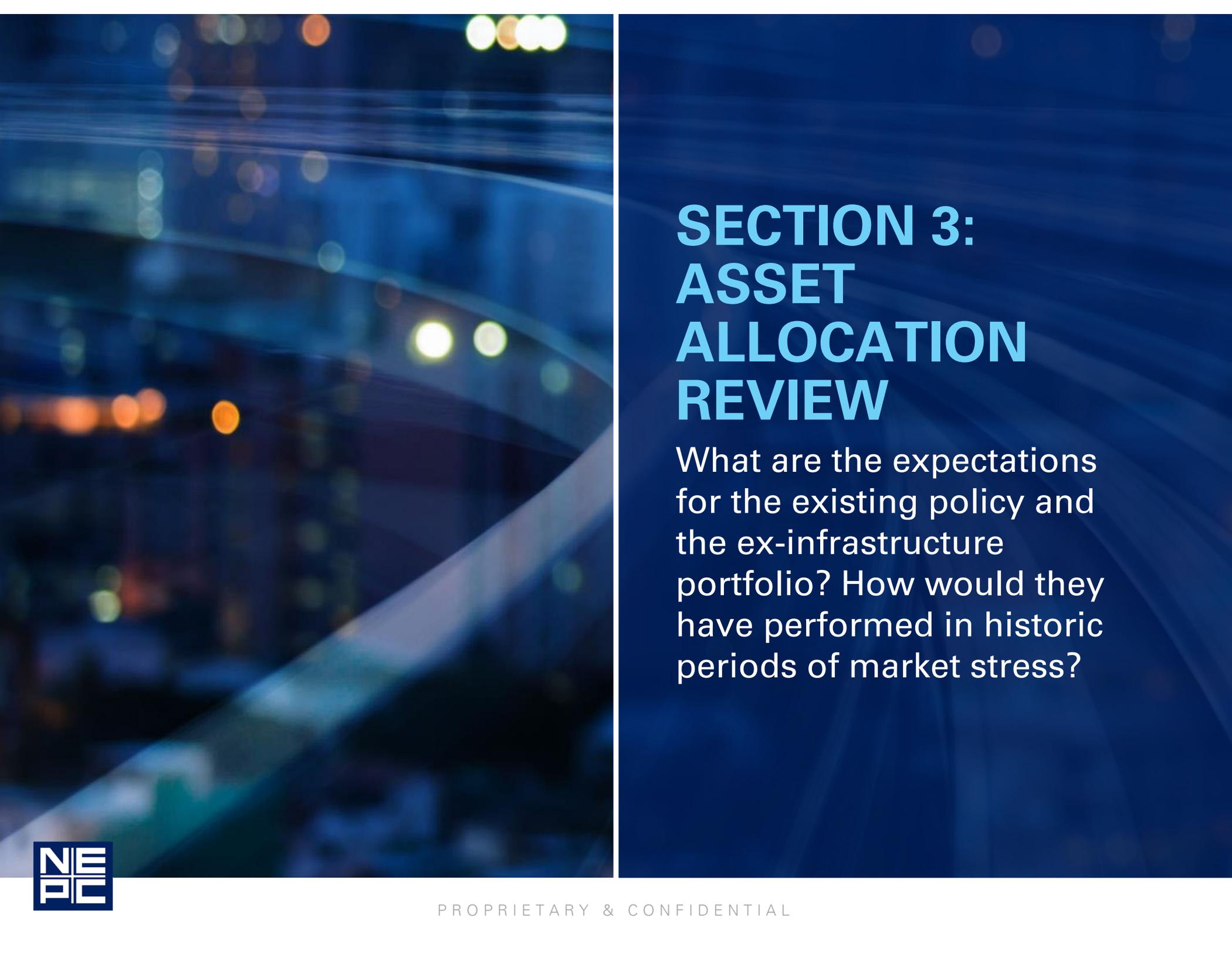
- **Since existing private market fossil fuel exposures are held in fixed-life funds, the second component of the evaluation was to estimate how these holdings are likely to change through year end 2025.**
 - NEPC’s proprietary private markets model enabled us to estimate what exposure will exist over the next three years
- **As of 12/31/2025: fossil fuel exposure estimated at \$327M or 1.58% of the total Fund**
 - Analysis assumes:
 - Continued commitments to private market investment opportunities at the 47.5% target
 - No new commitments to fossil fuel strategies
 - Forecasts based on fund lifecycle and a natural wind down of existing investments
 - Forecasts apply only to current holdings, and not any subsequent commitments
 - No transaction costs are associated with this decline in fossil fuel exposure
 - Additional reductions from closing open-end funds, like KKR Diversified Core Infrastructure Fund are possible. However, transaction costs may occur for such redemptions
- **The following slide summarizes the estimated decline over the next three years**

PRIVATE MARKETS ESTIMATED FF EXPOSURE

	Projected # of Funds with Exposure	Projected FF Exposure (\$M)	Projected Total NAV of FF Funds (\$M)
Current	58	\$930.0	\$2,486.5
12/31/2023	52	\$560.9	\$1,929.2
12/31/2024	50	\$441.7	\$1,548.9
12/31/2025	48	\$327.2	\$1,166.2



"Current" data is as of 6/30/2022



SECTION 3: ASSET ALLOCATION REVIEW

What are the expectations for the existing policy and the ex-infrastructure portfolio? How would they have performed in historic periods of market stress?



ASSET ALLOCATION SUMMARY

Asset Group	MainePERS Policy	MainePERS ex Infrastructure	MainePERS ex Infrastructure (Risk Adjusted)
Global Equity	30.0	30.0	24.0
Private Equity	12.5	15.8	15.8
Equity	42.5	45.8	39.8
IG Credit	5.0	5.0	7.0
US Gov	10.0	10.0	14.0
Private Credit	10.0	12.7	12.7
Fixed Income	25.0	27.7	33.7
Real Estate	10.0	12.7	12.7
Infrastructure	10.0		
Natural Resources	5.0	6.3	6.3
Real Assets	25.0	19.0	19.0
Risk Diversifiers	7.5	7.5	7.5
Multi-Asset	7.5	7.5	7.5

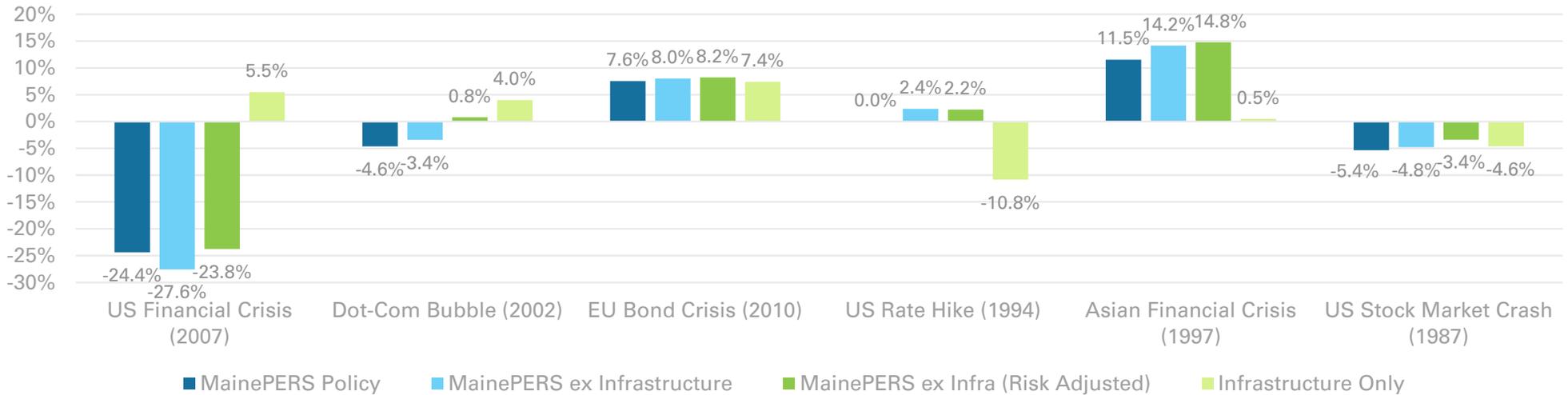
Measure	MainePERS Policy	MainePERS ex Infrastructure	MainePERS ex Infrastructure (Risk Adjusted)
Expected Return 10 Yr (Geometric)	7.4%	7.7%	7.5%
Standard Deviation (Asset)	13.5%	14.5%	13.5%
Sharpe Ratio (10 Years)	0.34	0.33	0.35

- **MainePERS Policy represents policy targets as of 6/30/22**
- **MainePERS ex Infrastructure represents a proportional re-allocation of the infrastructure allocation across the remaining private market asset classes**
 - As previously noted, Infrastructure has a high concentration of FF compared to the other private market segments
- **MainePERS ex Infrastructure (Risk Adjusted) assumes a consistent private market allocation based on the ex Infrastructure mix and adjusts the public equity and fixed income allocations to bring volatility in-line with the Policy portfolio**

SCENARIO STRESS TESTS

Event	Months	Start Date	End Date
US Financial Crisis	18	10/1/2007	3/31/2009
Dot-Com Bubble	30	3/21/2000	9/20/2002
EU Bond Crisis	8	4/1/2010	11/30/2010
US Rate Hike	11	2/1/1994	12/31/1994
Asian Financial Crisis	15	7/1/1997	10/5/1998
US Stock Market Crash	3	10/1/1987	12/31/1987

Cumulative Return





SECTION 4: COST ANALYSIS

How challenging will it be to implement divestment?
Describe expected operational complexity.



CONSIDERATIONS FOR A DIVESTED PORTFOLIO

- **In order to divest completely from FF and PP the following will need to be considered across public and private market allocations**
- **For divestment within the Public Market allocation MainePERS will need to consider Separately Managed Accounts (SMA)**
 - While off-the-shelf Fossil Fuel Free products exist in the market today, these are not based on the definitions contained in Maine’s legislation. In addition, current Fossil Fuel Free products typically do not exclude private prisons.
 - SMAs can incur higher costs and higher tracking error, pose implementation challenges, and demand higher time commitment from the staff.
- **For divestment within existing Private Markets investments, MainePERS will need to explore the secondaries market**
 - Reasonable to expect varying levels of discounts in valuations across different strategies
 - Anticipate additional costs to utilize third-party broker service for best execution in secondaries market

PUBLIC MARKETS COST CONSIDERATIONS

- **Separately managed accounts (SMAs) have additional costs and considerations that need to be evaluated:**

- On average, SMA's will incur higher management fees, higher trading costs, legal paperwork, creating custodian accounts, proxy voting expenses, and increase in time commitment from Staff
- Predicted tracking error will be higher relative to a comparable fund even though the SMA portfolio can be optimized to reduce it
- Other ad-hoc services and licensing expenses such as updated list of securities/screens to provide to SMA manager, on-going reporting on exposures, and monitoring for compliance

Consideration for SMAs	
US Equity	<ul style="list-style-type: none"> • Increase in management fees (on average 1-2 bps) • Own custody account – expect increased transaction costs • Relatively easy to set up and implement
International Equity (ACWI)	<ul style="list-style-type: none"> • Increase in management fees (on average of 2-3 bps higher than US Equity) • Individual custody account in each of the underlying countries; challenging to set up and implement efficiently - estimate 6-12 months to open all custody accounts; licensing requirements to invest directly in some EM countries • Potentially higher tracking error
US Aggregate	<ul style="list-style-type: none"> • Potentially higher trading costs for fixed income • Relatively easy to set up and implement

PUBLIC MARKETS – ITEMS FOR CONSIDERATION

- **Custody and Administrative Fees:** These fees generally cover custody, accounting, and audit fees and accrue in a Fund on a daily basis. MainePERS would be directly responsible for negotiating and paying these fees in a SMA
- **Conversion Costs:** Moving developed non-US assets from a Fund to a SMA will incur operational costs. In addition, the Emerging Market exposure in a Fund may need to be sold and comparable securities re-purchased in SMA, thereby incurring additional transaction costs in current market environment
- **Ongoing Annual Costs:** Management fees will be higher in a SMA over a Fund. Additionally, due to the inability to cross-trade, the ongoing trading costs will typically be higher
- **Predicted Tracking Error:** will be higher in a SMA over a comparable Fund due to lower AUM and screens
- **Securities Lending:** Typically, in a SMA the custodian will be the securities lending agent. MainePERS will need to assume responsibility for comparing relative lending yields
- **Other Administrative Considerations:** MainePERS will be directly responsible for account opening and maintenance with their custodian for all markets, including Emerging Markets (currently 49 in MSCI ACWI) for the SMA. This can be particularly challenging with Emerging Markets where account opening can be time intensive and local tax agents and licensing may be required

PRIVATE MARKETS - INITIAL ASSESSMENT FROM SECONDARIES MANAGERS

- **NEPC contacted four established secondary buyers to obtain tentative valuation ranges for the private markets portfolio**
- **Initial feedback from these managers:**
 - Infrastructure funds hold value relatively well as assets remain attractive
 - Energy fund interest is low, but - for those few managers with dedicated Energy or Real Asset secondary funds - interest varies based on the quality of the assets (discounts of 30%-50%+)
 - General Private Equity (PE) funds can expect discounts of 20%-30%
 - This is higher than usual due to the lag in PE valuations fully reflecting current public market and economic outlook
- **If MainePERS decides to explore this avenue, it should be noted that the best practice would dictate retaining services of a third-party broker service for best execution (additional cost)**

INITIAL PRICING ESTIMATES ON THE PRIVATE MARKETS PORTFOLIO

	Infrastructure	Energy PE & Natural Resources	General PE	Private Credit and Special Situations
Fossil Fuel Exposure (\$M)	\$703.2	\$154.0	\$50.5	\$22.3
Pricing Range	70%-90%	40%-80%	70%-80%	60%-80%

Note: Feedback based on NAVs that were communicated as 3/31/2022 GP valuations cash adjusted through end of Q2 2022. Also, keep in mind that the above percentages estimated were percentages of these cash adjusted Q2 2022 NAV values – actual proceeds received in any sale would be further adjusted to reflect any capital calls or distributions that have occurred after 6/30/2022.



INITIAL PRICING ESTIMATES ON THE PRIVATE MARKETS PORTFOLIO

	Infrastructure	Energy PE & Natural Resources	General PE	Private Credit and Special Situations	Total (\$M)
Fossil Fuel Exposure (\$M)	\$703.2	\$154.0	\$50.5	\$22.3	\$930.0
Fund NAV (\$M)	\$1,355.4	\$154.8	\$520.6	\$455.7	\$2,486.5
Average Discount	~19%	~39%	~23%	~29%	Average: ~28%
Estimated Discount* (\$M)	\$254.1	\$60.0	\$120.4	\$131.0	\$565.5

Important Note: For Maine to capture the full \$930M FF exposure through secondary transactions, it would require selling off the entire \$2,486.5M of NAV



*Estimated Discount was calculated using the middle of each offered range where applicable.



SUMMARY

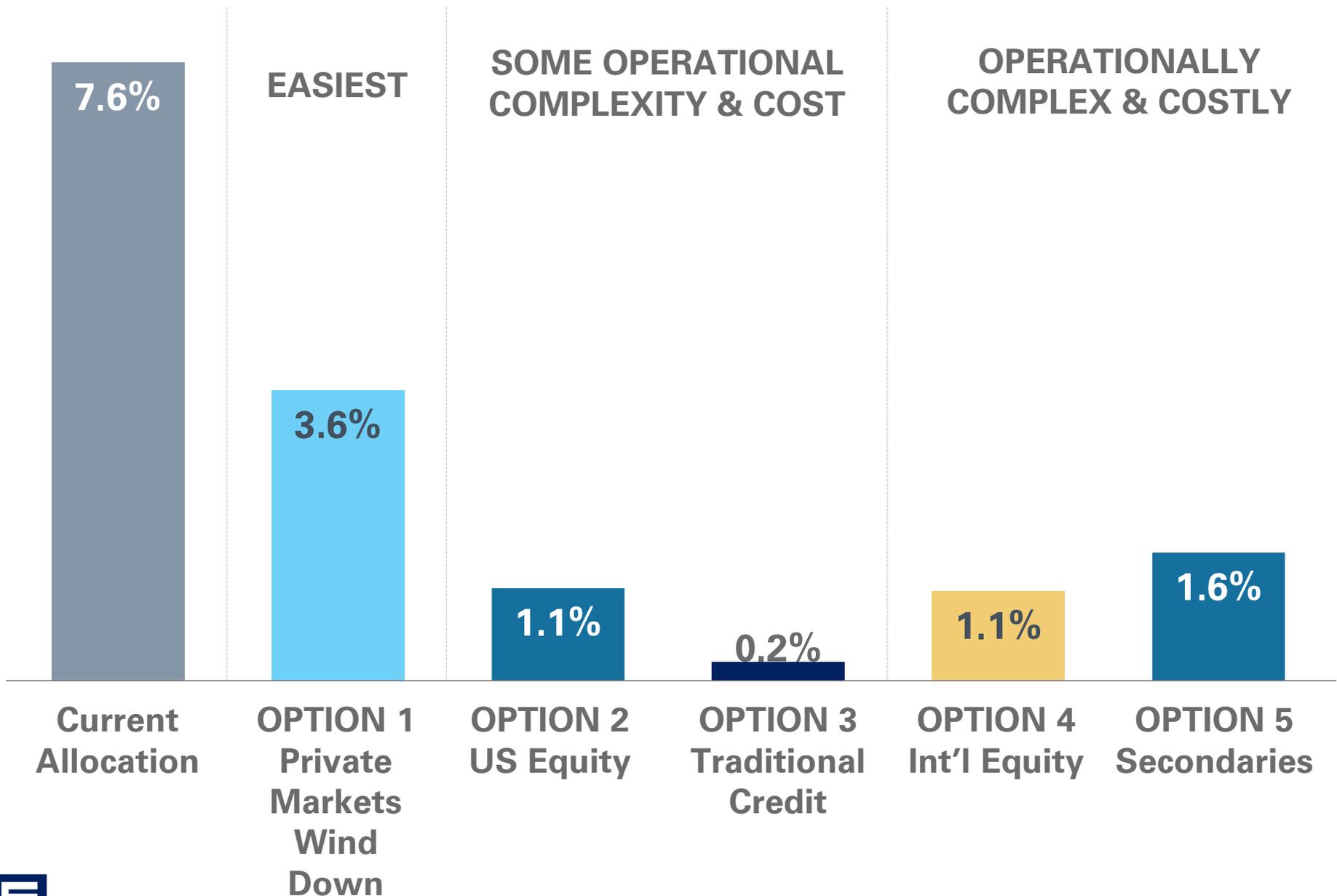


SUMMARY OF ANALYSIS

MainePERS currently has 7.63% in divestment exposure

- **Options to reduce the exposure, in order of ease of implementation, are the following:**
 1. Allow existing Private Markets to wind down
 2. Restructure US Equity with specific screening
 3. Restructure Traditional Credit with specific screening
 4. Restructure International Equity with specific screening
 5. Explore secondaries sale of Private Markets holdings
- **The following slide illustrates the reduction in exposure that could be achieved by implementing each of these options**

POTENTIAL REDUCTIONS IN FF EXPOSURE



INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Some of the information presented herein has been obtained from external sources NEPC believes to be reliable. While NEPC has exercised reasonable professional care in preparing this content, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

This presentation contains summary information regarding the investment management approaches described herein but is not a complete description of the investment objectives, portfolio management and research that supports these approaches. This analysis does not constitute a recommendation to implement any of the aforementioned approaches.

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MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: INVESTMENT REVIEW
DATE: NOVEMBER 1, 2022

Following this memo, Trustees will find materials related to the System's monthly and quarterly investment reporting as well as an update on the Teacher RHIT. The materials for the investment review are listed below. Please note that due to time constraints at the November meeting, the consultants will present their reports in December.

- Private Markets Activity Memo
- Teacher RHIT Update – a brief memo updating Trustees on the status of these assets
- Private Markets Quarterly Review – Cliffwater's quarterly review of MainePERS' private markets assets
- Investment Monthly Review
- Investment Quarterly Review – Cambridge Associates quarterly review of MainePERS' investment performance and portfolio positioning
- Risk Diversifiers Quarterly Review – Cambridge Associates quarterly review of MainePERS' Risk Diversifiers allocation
- Real Estate Quarterly Review – ORG's quarterly review of MainePERS' Real Estate allocation

POLICY REFERENCE

[Board Policy 2.1 – Investment Policy Statement](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
**SUBJECT: RETIREE HEALTH INSURANCE POST-EMPLOYMENT BENEFITS
INVESTMENT TRUST FUND**
DATE: NOVEMBER 2, 2022

As a reminder, at the September 2022 Board of Trustees meeting the asset allocation of the Retiree Health Insurance Post-Employment Benefits Investment Trust Fund (“RHIT”) was briefly discussed. The RHIT currently invests funds for retired state employee health insurance pursuant to Board Policy 2.1-B, the Investment Policy Statement (“IPS”) for the RHIT. Trustees inquired about reviewing the IPS in light of the additional retired teacher health insurance funds that are expected to be received and invested in the coming months.

The Investment Team and the Chief Operating Officer and General Counsel met with the State Treasurer and State Controller on October 24, 2022 to initiate discussion of factors relevant to the IPS review. An actuarial valuation is currently being performed on the retiree plans by Deloitte. Results are expected to be available by year end, at which time we anticipate having the information necessary to review the IPS to determine if any changes are recommended.

POLICY REFERENCE

[Board Policy 2.1-B – Investment Policy Statement](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

RECOMMENDATION

No Board action is recommended at this time.

MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: INVESTMENT REVIEW
DATE: NOVEMBER 1, 2022

Following this memo is the Monthly Investment Review for October.

POLICY REFERENCE

[Board Policy 2.1 – Investment Policy Statement](#)

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

MONTHLY INVESTMENT REVIEW: HIGHLIGHTS AND OBSERVATIONS

Preliminary Fund results for the month include:

- Month-end fund value of \$17.9 billion.
- Monthly return of 1.5%.
- Calendar year-to-date return of -5.6%.
- Fiscal year-to-date return of -1.6%.



Investment Review

November 10, 2022



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Investment Objective

MainePERS' investment objectives balance the System's twin goals of generating investment returns (to ensure growth of the trust funds) and minimizing investment risks (loss of capital and cash flow shortfalls).

The Board recognizes and accepts that these goals are in opposition, and that a trade-off exists between expected risk and return. The Board balances these goals by seeking to optimize portfolio returns consistent with an established targeted portfolio risk level.

Additionally, by optimizing investment returns on trust assets, rather than attempting to maximize them, the Board seeks to maintain contribution rate and funding level volatility at acceptable levels that have been determined from time to time during strategic asset allocation planning and asset/liability reviews.

October 2022 Performance (Preliminary)

The **preliminary** fund value at the end of October is \$17.9 billion.



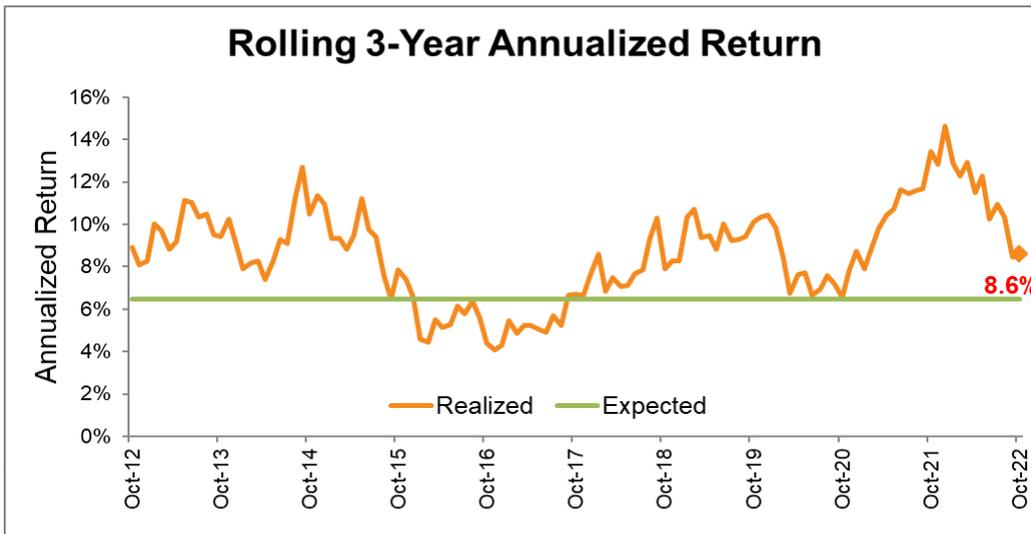
Fund and Benchmark Returns

	Oct-22	CYTD 2022	FYTD 2022
Total Fund	1.5%	-5.6%	-1.6%
Russell 3000	8.2%	-18.4%	3.4%
MSCI ACWI ex-USA	3.0%	-24.3%	-7.2%
Barclays Agg. Bond Index	-1.3%	-15.7%	-6.0%

Investment Objective Measurement: Risk and Return



Despite a volatile year-to-date in 2022, observed risk at the Fund level remains below targeted risk on a rolling 3-year annualized basis.



On a rolling 3-year annualized basis, investment returns have exceeded expected values and the System's discount rate.

Note: Rolling 3-year return and standard deviation are calculated at each point in time based on returns over prior 36 months. All figures are annualized.

October 2022 Asset Allocation (Preliminary)

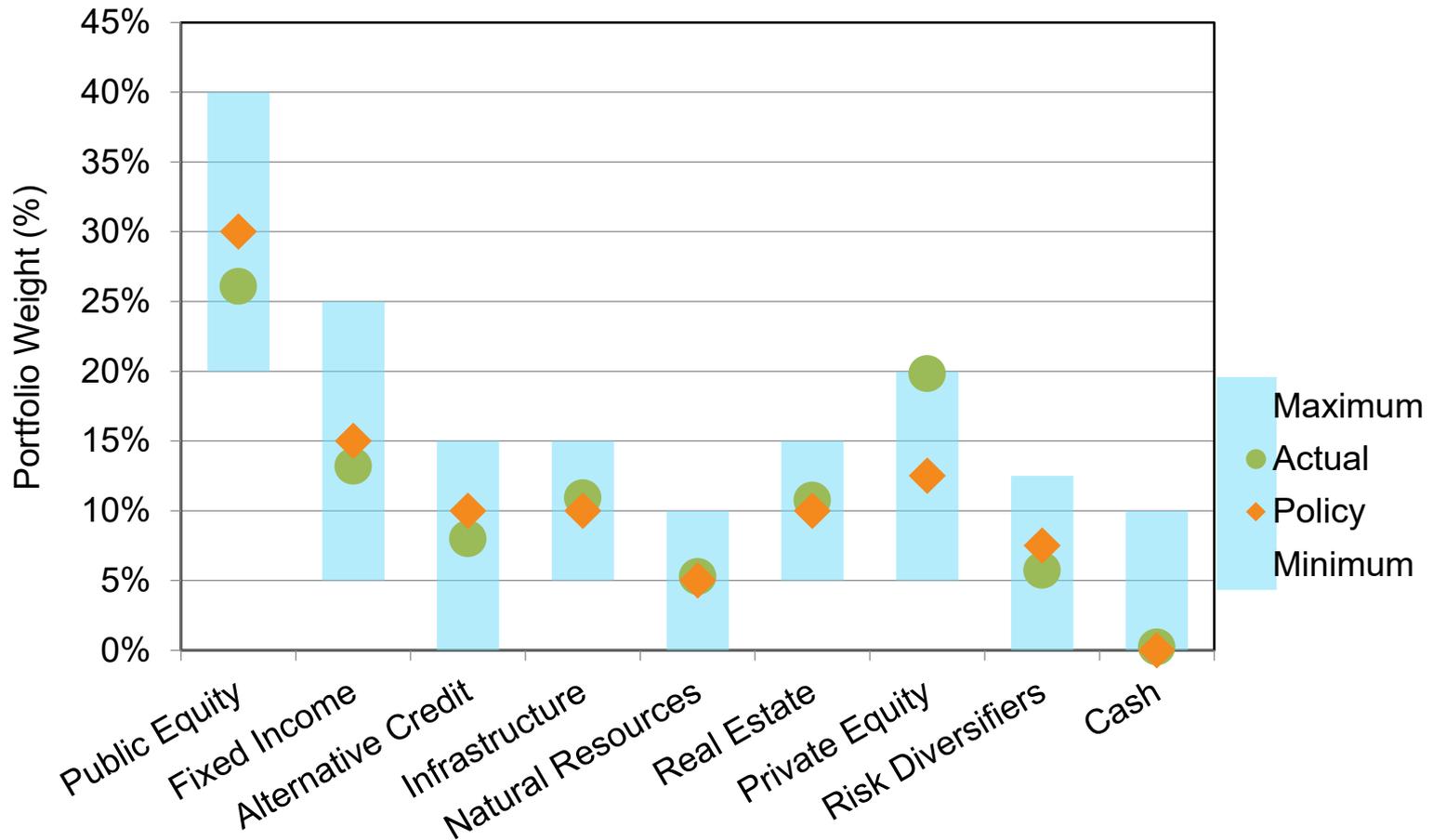
Assets (Millions)	Value	% of Fund	Policy %
MainePERS Portfolio	\$ 17,949	100.0%	100.0%
Domestic Equity	\$ 2,956	16.5%	18.6%
International Equity	\$ 1,725	9.6%	11.4%
Fixed Income	\$ 2,367	13.2%	15.0%
Alternative Credit	\$ 1,433	8.0%	10.0%
Infrastructure	\$ 1,961	10.9%	10.0%
Natural Resources	\$ 950	5.3%	5.0%
Private Equity	\$ 3,558	19.8%	12.5%
Real Estate	\$ 1,931	10.8%	10.0%
Risk Diversifiers	\$ 1,029	5.7%	7.5%
Cash	\$ 39	0.2%	0.0%

Portfolio weights for most asset classes remain near MainePERS Investment Policy asset allocation weights.

Private equity remains overweight at ~20% of Fund value, and private markets assets in aggregate comprise 54.8% of the overall portfolio, above the 47.5% policy weight.

* Total Public Equity policy weight is 30%, divided across U.S. and non-U.S. equities based on ACWI weights.

October 2022 Asset Allocation (Preliminary)

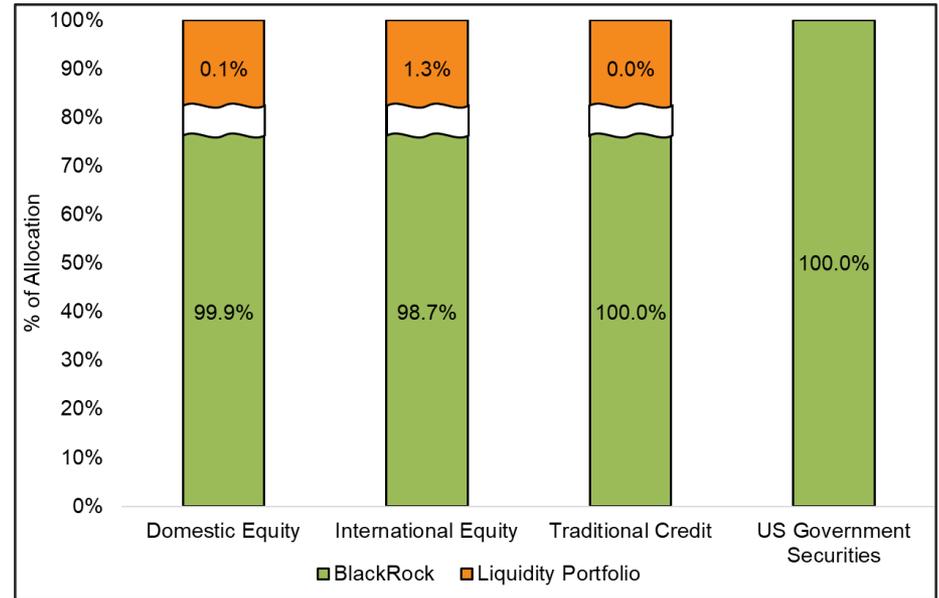


All asset classes are within their investment policy range. Private equity is just below its maximum policy range of 20%.

Public Securities: Liquidity Portfolio

At the end of October, 0.1% of Fund assets were invested via ETFs and futures contracts in an account managed by Parametric Associates.

The Liquidity Portfolio accounts for 0.4% of MainePERS' total exposure to public securities.



MainePERS Liquidity Portfolio	Market Value (Millions)	Exposure Type
Parametric Domestic Equity	\$4.3	Futures
Parametric International Equity	\$22.1	Futures
Parametric Traditional Credit	\$0.3	ETFs
Parametric US Government Securities	\$0.0	Futures
Total Liquidity Portfolio	\$26.8	

MainePERS has **exposure to derivatives** in the following areas:

- Public Equities, Public Fixed Income, and Risk Diversifiers

MainePERS has **financial leverage** (borrowing and investing) in the following areas:

- BlackRock – Financial leverage in securities lending
- JP Morgan – Financial leverage in securities lending
- Alternative Credit
- Infrastructure
- Natural Resources
- Private Equity
- Real Estate

Investment Related Fees: October 2022

Description	FYTD 23	FY 22	FY 21	FY 20	FY 19
Investment Mgmt. Fees	\$40,643,354	\$119,200,558	\$118,561,261	\$124,480,394	\$106,398,871
Securities Lending Fees ¹	316,429	1,744,317	1,653,172	2,239,396	2,226,826
Consulting Fees	373,333	1,120,000	1,120,000	1,120,000	1,120,000
Broker Commissions ²	48,376	30,833	52,364	37,461	28,970
Placement Agent Fees	0	0	0	0	0
Total	\$41,381,492	\$122,095,708	\$121,386,797	\$127,877,251	\$109,774,667
Percentage of Fund ³	0.69%	0.66%	0.67%	0.87%	0.74%

1. Securities Lending Fees are through 9/30/2022
2. Actual paid commissions reported by JP Morgan
3. Annualized estimated total fees divided by the current fund value for FYTD 23. The prior years' calculations are actual fees divided by the June 30 market value of that year.

Securities Lending: September 2022

	Average Lendable Assets	Average Assets On Loan	Total Sec Lending Revenue	Revenue Split	MainePERS Net Income	MainePERS Net Income, FYTD
BlackRock						
Fixed Income	\$2,022,485,733	\$1,617,318,684	\$175,736	60%/40%	\$105,442	\$265,993
Total Equity	\$1,652,421,615	\$211,722,367	\$116,546	60%/40%	\$77,932	\$230,403
Total Blackrock	\$3,674,907,348	\$1,829,041,051	\$292,282		\$183,374	\$496,396
JP Morgan						
Domestic Equities	\$2,762,943,566	\$136,616,966	\$65,615	85%/15%	\$55,780	\$146,478
Total	\$6,437,850,914	\$1,965,658,017	\$357,897		\$239,154	\$642,874
Total Annualized Securities Lending Income, FY 2023:				\$2,571,494 (0.01%, or 1.4 bps)		
Total Actual Securities Lending Income, FY 2022:				\$3,118,726 (0.02%, or 1.7 bps)		

Liquidity Schedule: October 2022

Term	Market Value	Percent of Portfolio
Liquid ¹	\$7,088m	39.5%
Semi-Liquid ²	\$2,376m	13.2%
Illiquid ³	\$8,485m	47.3%
Total	\$17,949m	100.0%

Sources and Uses of Liquidity

	Last 12 Months Actual	Next 12 Months Projection
Private Markets Activity		
Capital Contributions	-\$1,732m	-\$890m
Distributions	\$1,852m	\$1,750m
Net Private Markets Activity	\$121m	\$860m
Benefit Payments	-\$320m	-\$420m
Net Cash Flows	-\$199m	\$440m

¹Liquid assets includes public equities and public fixed income

²Semi-liquid assets includes risk diversifiers, open-end real estate investments, and listed alternative credit funds

³Illiquid assets includes closed-end alternative credit, infrastructure, natural resources, private equity, and real estate funds

MainePERS Alternative Investments Summary

<i>as of 10/31/2022</i>	# of Funds	# of GP Relationships
Alternative Credit	22	13
Infrastructure	34	11
Natural Resources	15	10
Private Equity	120	33
Real Estate	34	19
Risk Diversifiers	9	7
Total*	234	84

*GP Total may not add due to overlapping relationships

Currently, MainePERS is invested in 234 funds,
and has 84 distinct manager relationships.

MainePERS Alternative Investments Summary

<i>(in \$millions)</i> as of 10/31/2022	<u>Current Market Value</u>			<u>Unfunded Commitment</u>	
	Dollars	% of Fund	Policy %*	Dollars	% of Fund
Alternative Credit	\$ 1,433	8.0%	10.0%	\$ 624	3.5%
Infrastructure	\$ 1,961	10.9%	10.0%	\$ 819	4.6%
Natural Resources	\$ 950	5.3%	5.0%	\$ 221	1.2%
Private Equity	\$ 3,558	19.8%	12.5%	\$ 1,217	6.8%
Real Estate	\$ 1,931	10.8%	10.0%	\$ 557	3.1%
Risk Diversifiers	\$ 1,029	5.7%	7.5%	\$ -	0.0%
Total Alternatives	\$ 10,862	60.5%	55.0%	\$ 3,438	19.2%

For more details please see Private Markets Investment Summary at <http://www.maineper.org/Investments/>

*Investment Policy weights approved by the Board of Trustees effective May 2022

Note: Market values shown above are preliminary estimates. Private market asset values are based on 6/30/2022 values, adjusted for subsequent cash flows.

<i>(in \$millions)</i> as of 10/31/2022	<u>Private Market Commitments by Vintage Year</u>				<u>3-Year</u>
	2019	2020	2021	2022	Average ¹
Alternative Credit	\$ 200	\$ 275	\$ 410	\$ 425	\$ 295
Infrastructure	\$ 350	\$ 235	\$ 180	\$ 200	\$ 255
Natural Resources	\$ 175	\$ -	\$ -	\$ 30	\$ 58
Private Equity	\$ 240	\$ 276	\$ 438	\$ 218	\$ 318
Real Estate	\$ 230	\$ 80	\$ 285	\$ 180	\$ 198
Total Commitments	\$ 1,195	\$ 866	\$ 1,313	\$ 1,053	\$ 1,125

¹13-Year Average: 2019-2021



Q3 2022



Comprehensive Quarterly Reports

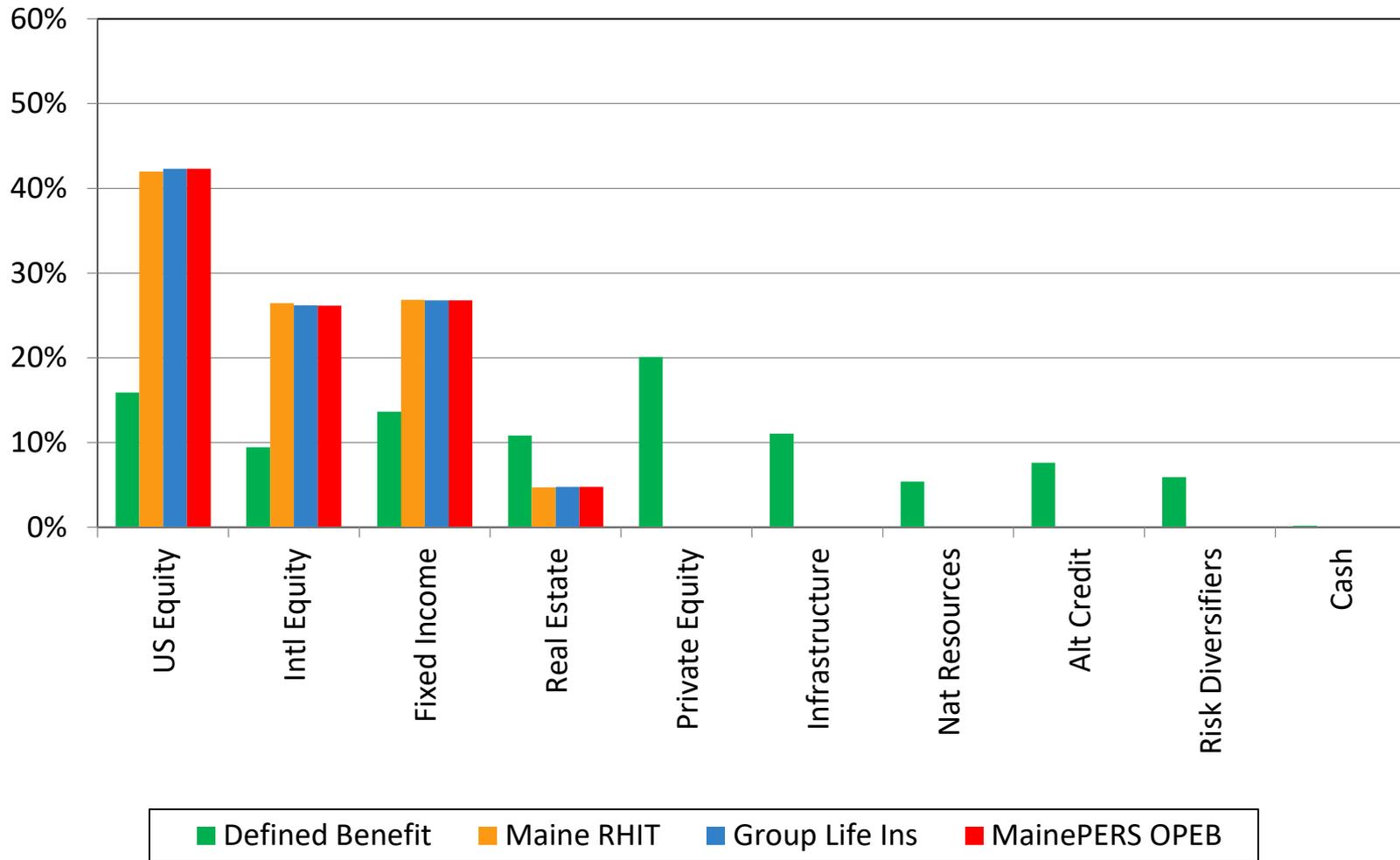


MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

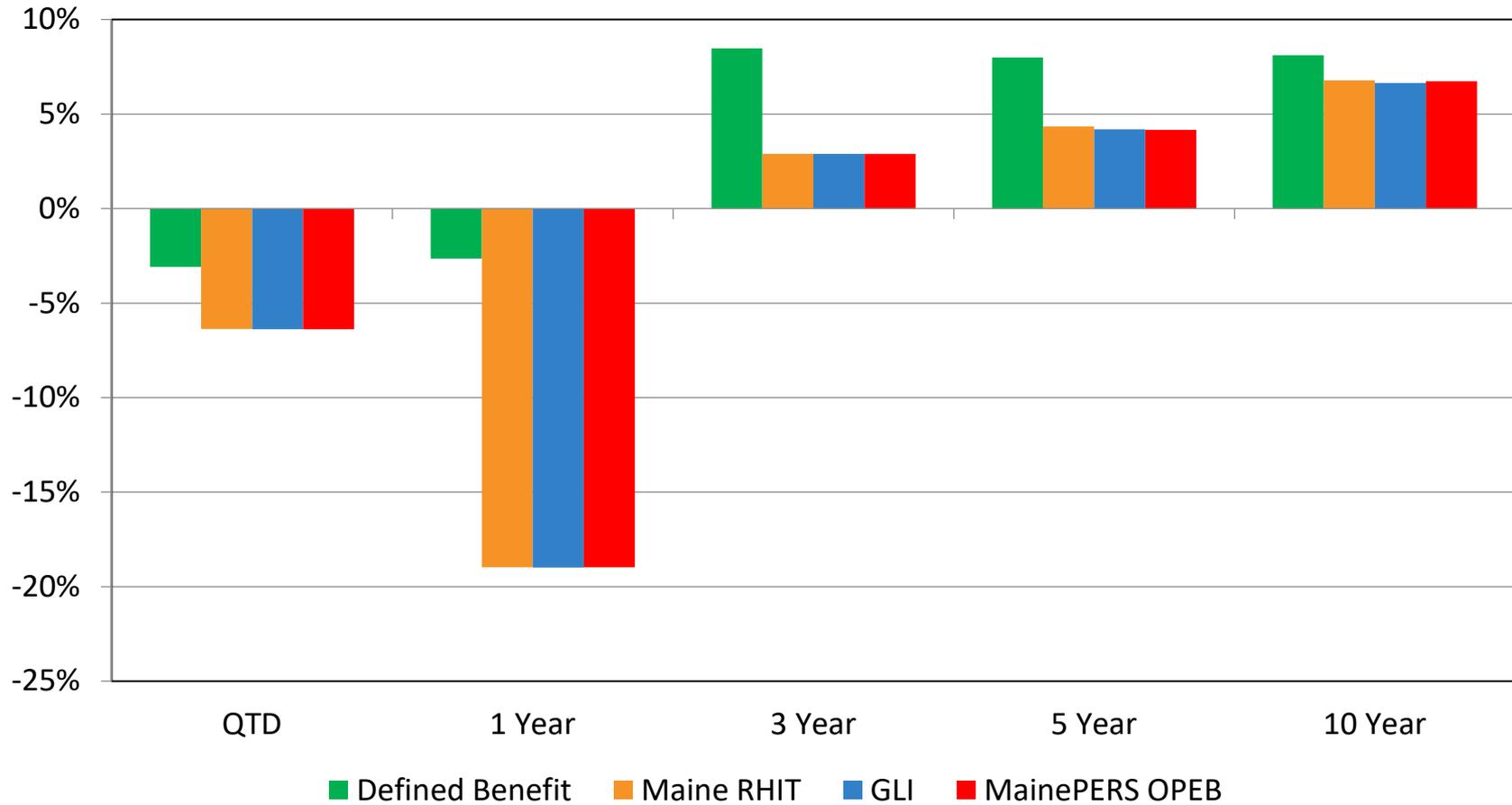
Investment Returns for All Funds at 9/30/2022

Fund	Market Value (millions)	Quarter End	1 Year	3 Year	5 Year	10 Year
Defined Benefit	\$17,719.5	-3.1%	-2.6%	8.5%	8.0%	8.1%
Benchmark		-5.2%	-6.5%	6.6%	6.7%	7.1%
Maine RHIT	\$310.2	-6.4%	-19.0%	2.9%	4.3%	6.8%
Benchmark		-6.2%	-18.8%	2.3%	3.9%	6.5%
Group Life Insurance	\$149.3	-6.4%	-19.0%	2.9%	4.2%	6.7%
Benchmark		-6.2%	-18.8%	2.3%	3.9%	6.5%
MainePERS OPEB	\$15.2	-6.4%	-19.0%	2.9%	4.2%	6.7%
Benchmark		-6.2%	-18.8%	2.3%	3.9%	6.5%

Asset Allocation for All Funds at 9/30/2022



Performance for All Funds at 9/30/2022



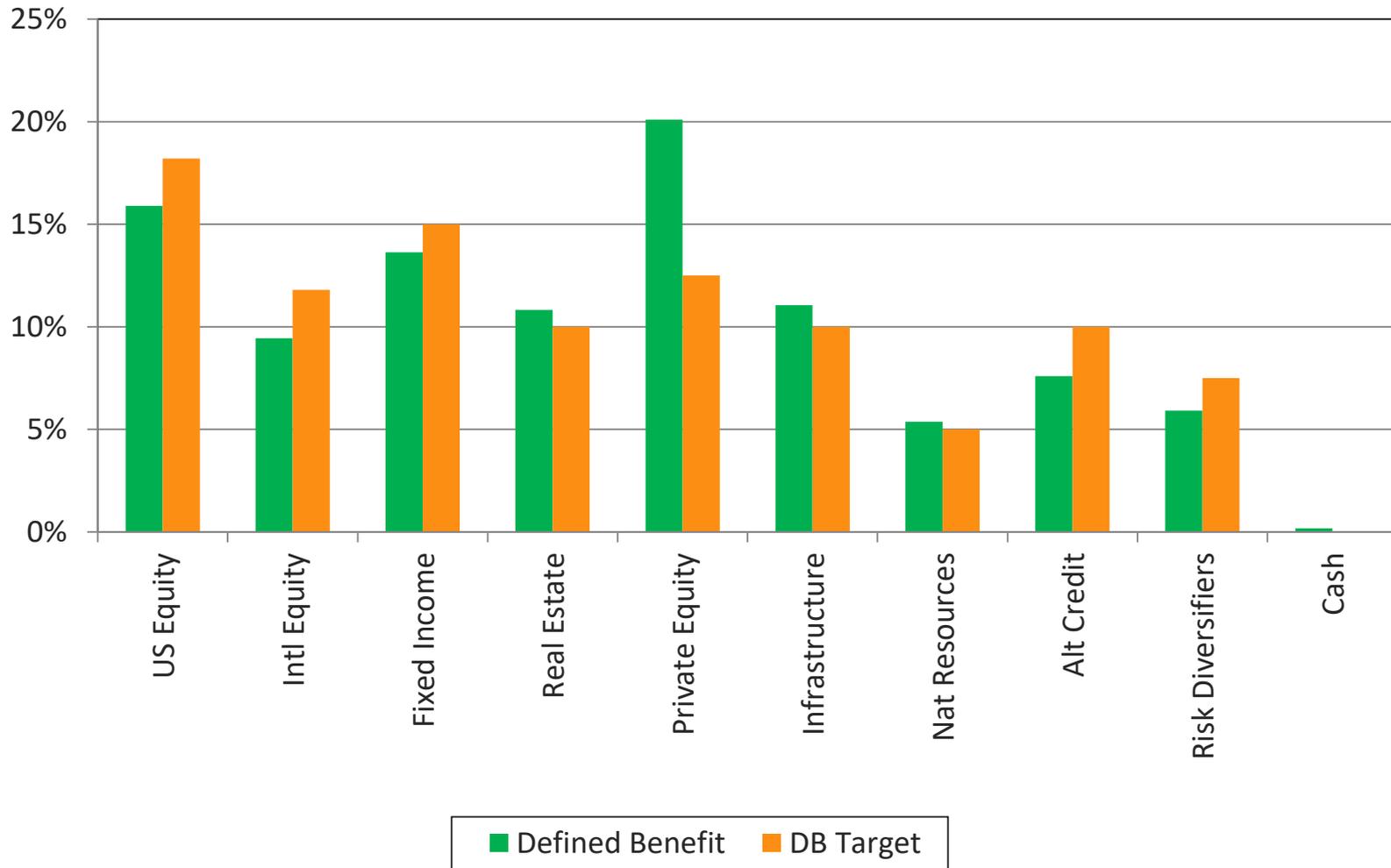


Appendix

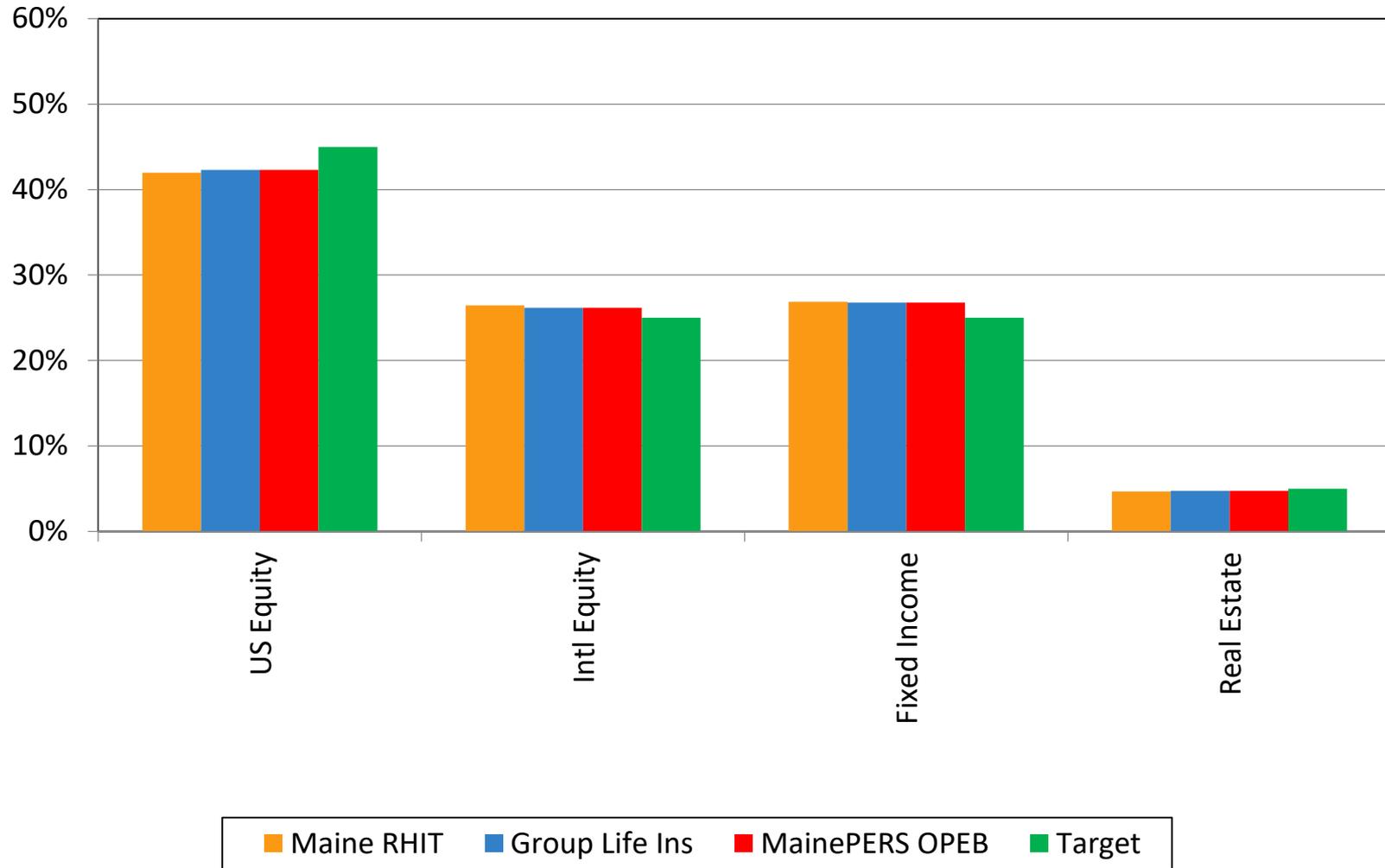


MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

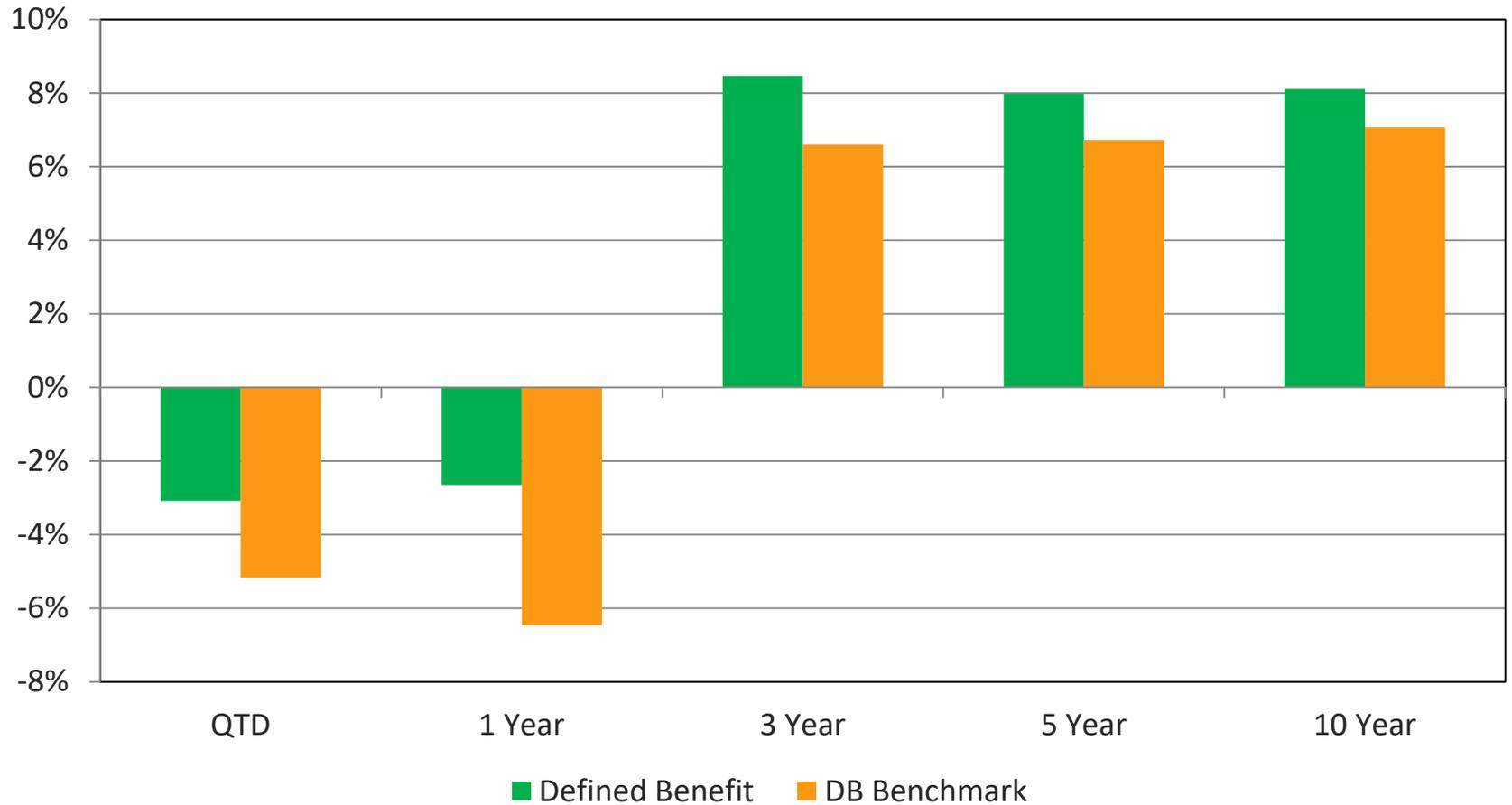
Asset Allocation for Defined Benefit at 9/30/2022



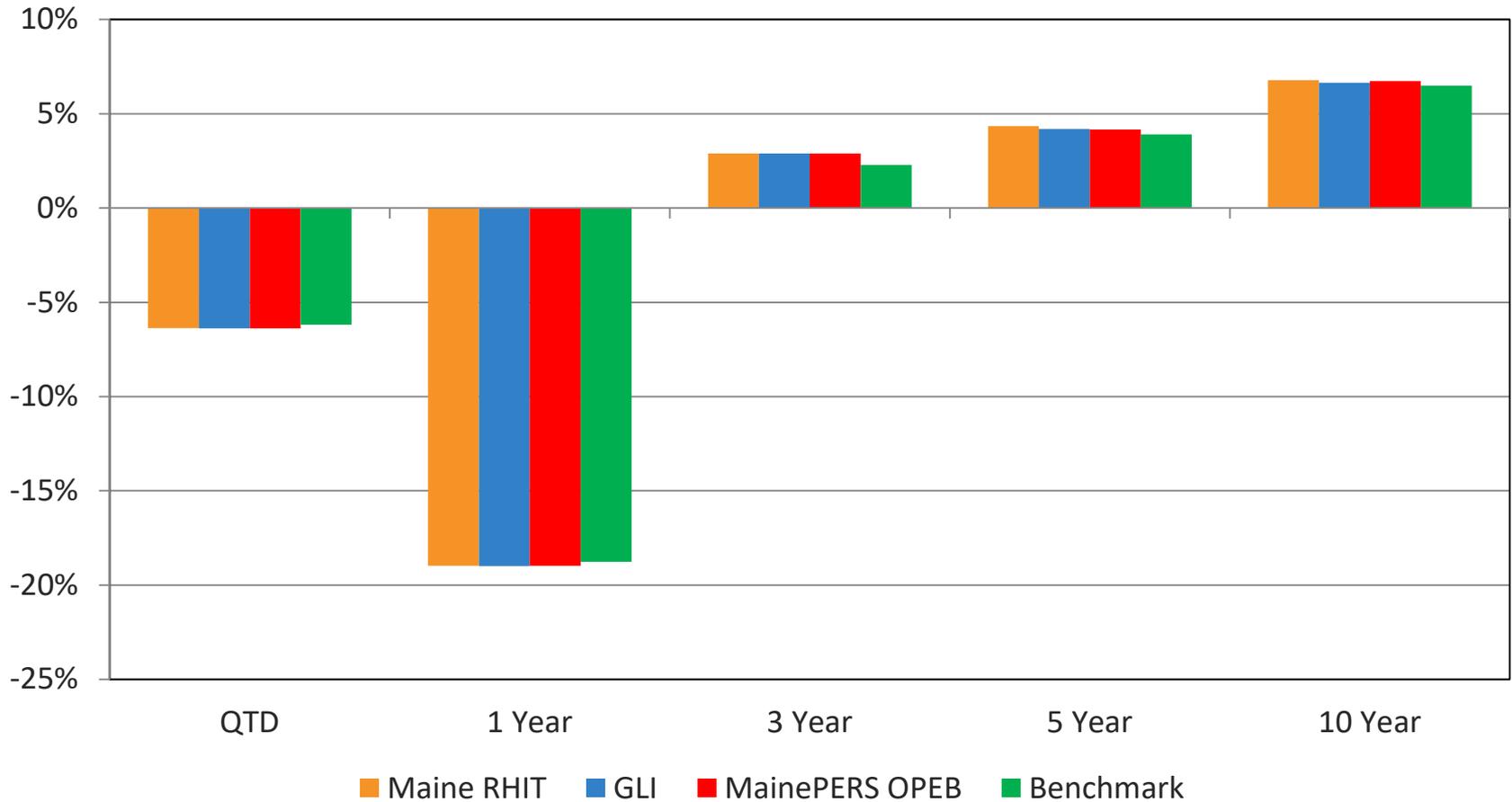
Asset Allocation for RHIPEB, GLI, and OPEB at 9/30/2022



Performance for Defined Benefit at 9/30/2022



Performance for RHIPEB, GLI, and OPEB at 9/30/2022



MainePERS Private Market Investments Summary: 06/30/2022

Asset Class Summary	Commitment (A)	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit	\$ 1,967,790	\$ 1,428,081	\$ 486,077	\$ 1,148,035	\$ 1,634,112	6.7%
Infrastructure	\$ 3,259,920	\$ 3,091,295	\$ 2,456,026	\$ 2,022,936	\$ 4,478,963	11.6%
Natural Resources	\$ 1,015,500	\$ 1,047,549	\$ 409,042	\$ 956,032	\$ 1,365,074	7.3%
Private Equity	\$ 4,820,149	\$ 4,383,544	\$ 3,609,177	\$ 3,628,086	\$ 7,237,262	17.4%
Real Estate	\$ 2,742,564	\$ 2,433,613	\$ 1,766,485	\$ 1,906,030	\$ 3,672,515	7.9%
Total	\$ 13,805,923	\$ 12,384,082	\$ 8,726,808	\$ 9,661,119	\$ 18,387,927	11.3%

Note: This Asset Class Summary table includes all private market investments: both fund investments and co-investments.

Co-Investment Summary	Commitment (A)	# of Co- Investments	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit Co-Investments	\$ 178,700	29	\$ 185,738	\$ 60,427	\$ 143,078	\$ 203,505	8.2%
Infrastructure Co-Investments	\$ 207,250	10	\$ 204,513	\$ 187,740	\$ 148,159	\$ 335,899	13.5%
Natural Resources Co-Investments	\$ 32,500	2	\$ 31,142	-	\$ 42,133	\$ 42,133	10.9%
Private Equity Co-Investments	\$ 370,496	30	\$ 352,577	\$ 308,610	\$ 264,532	\$ 573,142	16.2%
Real Estate Co-Investments	\$ 66,500	5	\$ 57,317	\$ 4,791	\$ 56,798	\$ 61,588	3.8%
Total	\$ 855,446	76	\$ 831,288	\$ 561,567	\$ 654,699	\$ 1,216,266	15.1%

Note: This table contains values for the co-investment portion of the private market portfolio.

MainePERS Private Market Investments Summary: 06/30/2022

Alternative Credit

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Angelo Gordon Direct Lending Fund II	\$ 25,000	3/31/2020	\$ 23,749	\$ 17,612	\$ 14,189	\$ 31,801	20.0%
Angelo Gordon Direct Lending Fund III	\$ 100,000	7/20/2018	\$ 100,633	\$ 57,553	\$ 74,045	\$ 131,598	10.9%
Participation Agreement #1	\$ 7,500	10/11/2019	\$ 7,463	\$ 1,314	\$ 7,279	\$ 8,593	7.7%
Participation Agreement #2	\$ 5,000	10/11/2019	\$ 4,994	\$ 5,422	\$ -	\$ 5,422	8.8%
Participation Agreement #3	\$ 5,000	10/11/2019	\$ 5,000	\$ 5,700	\$ -	\$ 5,700	7.3%
Participation Agreement #4	\$ 7,500	10/18/2019	\$ 7,488	\$ 1,437	\$ 7,208	\$ 8,645	8.0%
Participation Agreement #5	\$ 5,000	12/6/2019	\$ 5,000	\$ 1,696	\$ 4,323	\$ 6,019	8.8%
Participation Agreement #6	\$ 10,000	12/6/2019	\$ 9,991	\$ 1,234	\$ 9,810	\$ 11,044	8.4%
Participation Agreement #7	\$ 5,000	12/11/2019	\$ 5,000	\$ 1,167	\$ 4,666	\$ 5,833	6.9%
Participation Agreement #8	\$ 5,000	8/13/2020	\$ 4,914	\$ 716	\$ 4,818	\$ 5,534	NM
Participation Agreement #9	\$ 7,500	4/9/2021	\$ 7,425	\$ 623	\$ 7,396	\$ 8,019	NM
Participation Agreement #10	\$ 5,000	4/20/2021	\$ 5,007	\$ 655	\$ 4,772	\$ 5,427	NM
Participation Agreement #11	\$ 5,000	5/5/2021	\$ 5,000	\$ 489	\$ 4,886	\$ 5,375	NM
Angelo Gordon Direct Lending Fund IV	\$ 100,000	1/24/2020	\$ 75,000	\$ 5,073	\$ 81,927	\$ 87,000	12.4%
Participation Agreement #1	\$ 5,000	10/23/2020	\$ 4,913	\$ 1,089	\$ 4,406	\$ 5,495	NM
Participation Agreement #2	\$ 12,500	8/17/2021	\$ 12,295	\$ 483	\$ 12,335	\$ 12,818	NM
Participation Agreement #3	\$ 7,500	10/5/2021	\$ 7,500	\$ 7,913	\$ -	\$ 7,913	NM
Participation Agreement #4	\$ 5,000	12/21/2021	\$ 4,925	\$ 216	\$ 4,915	\$ 5,131	NM
Participation Agreement #5	\$ 5,000	12/21/2021	\$ 4,925	\$ 176	\$ 4,916	\$ 5,092	NM
Participation Agreement #6	\$ 5,000	1/12/2022	\$ 4,925	\$ 170	\$ 4,904	\$ 5,074	NM
Participation Agreement #7	\$ 7,500	1/12/2022	\$ 7,388	\$ 284	\$ 7,338	\$ 7,622	NM
Participation Agreement #8	\$ 12,500	6/16/2022	\$ 12,406	\$ 63	\$ 12,313	\$ 12,376	NM
Angelo Gordon Direct Lending Fund IV Annex	\$ 50,000	11/18/2021	\$ 20,000	\$ -	\$ 20,587	\$ 20,587	NM
Ares Capital Europe IV	\$ 122,000	4/30/2018	\$ 97,001	\$ 19,457	\$ 85,434	\$ 104,891	3.2%
Ares Capital Europe V	\$ 122,000	9/4/2020	\$ 56,812	\$ 1,054	\$ 54,451	\$ 55,505	NM
Ares Senior Direct Lending Fund II	\$ 100,000	12/10/2021	\$ 25,327	\$ 795	\$ 26,224	\$ 27,019	NM
Audax Senior Debt (MP), LLC	\$ 100,000	6/30/2017	\$ 100,000	\$ -	\$ 122,648	\$ 122,648	4.6%
Comvest Credit Partners VI	\$ 125,000	5/20/2022	\$ 6,250	\$ -	\$ 6,286	\$ 6,286	NM
Deerpath Capital VI	\$ 75,000	9/30/2021	\$ 54,590	\$ 1,384	\$ 55,526	\$ 56,910	NM
Global Infrastructure Partners Spectrum	\$ 100,000	2/20/2019	\$ 49,936	\$ 17,491	\$ 35,331	\$ 52,822	NM
Mesa West Core Lending Fund	\$ 100,000	6/18/2013	\$ 118,530	\$ 52,973	\$ 119,555	\$ 172,528	6.5%
Owl Rock Capital Corporation	\$ 100,000	3/10/2017	\$ 100,000	\$ 22,638	\$ 94,958	\$ 117,596	4.5%
Participation Agreement #1	\$ 5,000	5/7/2018	\$ 4,851	\$ 5,499	\$ -	\$ 5,499	12.7%

MainePERS Private Market Investments Summary: 06/30/2022

Alternative Credit

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Participation Agreement #2	\$ 6,185	7/31/2018	\$ 6,196	\$ 7,745	\$ -	\$ 7,745	9.9%
Participation Agreement #3	\$ 5,000	8/7/2018	\$ 4,938	\$ 5,634	\$ -	\$ 5,634	7.9%
Participation Agreement #4	\$ 5,000	8/20/2018	\$ 4,566	\$ 5,835	\$ -	\$ 5,835	8.1%
Participation Agreement #5	\$ 5,000	12/21/2018	\$ 4,827	\$ 1,382	\$ 4,511	\$ 5,894	6.8%
Participation Agreement #6	\$ 7,500	8/7/2020	\$ 8,905	\$ 2,783	\$ 7,373	\$ 10,156	NM
Participation Agreement #7	\$ 7,500	7/26/2021	\$ 6,565	\$ 512	\$ 6,567	\$ 7,079	NM
Participation Agreement #8	\$ 12,500	6/17/2022	\$ 3,536	\$ -	\$ 3,571	\$ 3,571	NM
Owl Rock Capital Corporation III	\$ 100,000	6/19/2020	\$ 107,089	\$ 7,089	\$ 105,724	\$ 112,813	5.4%
Pathlight Capital Fund II	\$ 75,000	4/22/2021	\$ 98,876	\$ 40,771	\$ 62,212	\$ 102,983	NM
Participation Agreement #1	\$ 7,500	4/1/2022	\$ 7,368	\$ 146	\$ 7,336	\$ 7,482	NM
Participation Agreement #2	\$ 7,500	4/1/2022	\$ 7,429	\$ 43	\$ 7,433	\$ 7,477	NM
Pathlight Capital Fund III	\$ 75,000	6/24/2022	\$ -	\$ -	\$ -	\$ -	NM
Solar Capital Private Corporate Lending Fund	\$ 50,000	6/26/2019	\$ 35,139	\$ 3,643	\$ 37,165	\$ 40,808	15.0%
Solar Capital Debt Fund	\$ 50,000	6/26/2019	\$ 14,706	\$ 612	\$ 16,225	\$ 16,837	NM
Silver Point Specialty Credit II	\$ 50,000	1/31/2020	\$ 57,821	\$ 21,181	\$ 39,694	\$ 60,875	7.5%
Tennenbaum Direct Lending VIII	\$ 100,000	11/30/2017	\$ 100,883	\$ 73,413	\$ 47,733	\$ 121,146	6.4%

MainePERS Private Market Investments Summary: 06/30/2022

Infrastructure

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alinda Infrastructure Fund II	\$ 50,000	9/17/2009	\$ 67,889	\$ 64,449	\$ 10,026	\$ 74,475	2.1%
ArcLight Energy V	\$ 75,000	10/28/2011	\$ 76,031	\$ 95,561	\$ 7,982	\$ 103,543	8.0%
Shore Co-Investment Holdings II	\$ 20,000	1/30/2014	\$ 17,709	\$ 19,737	\$ -	\$ 19,737	8.4%
ArcLight Energy VI	\$ 150,000	11/25/2014	\$ 159,687	\$ 86,490	\$ 90,890	\$ 177,380	2.8%
Great River Hydro Partners	\$ 12,000	6/17/2017	\$ 10,718	\$ 8,639	\$ 18,548	\$ 27,187	30.0%
Brookfield Infrastructure Fund II	\$ 100,000	6/28/2013	\$ 115,841	\$ 99,990	\$ 87,913	\$ 187,903	9.9%
Brookfield Infrastructure Fund III	\$ 100,000	4/15/2016	\$ 96,327	\$ 44,079	\$ 93,297	\$ 137,376	11.8%
Co-Investment #1	\$ 20,000	3/31/2017	\$ 15,945	\$ 17,596	\$ 14,492	\$ 32,088	26.2%
Carlyle Global Infrastructure Opportunity Fund	\$ 100,000	5/1/2019	\$ 76,949	\$ 4,662	\$ 79,871	\$ 84,533	9.4%
Carlyle Infrastructure Partners	\$ 50,000	11/2/2007	\$ 57,366	\$ 64,289	\$ 387	\$ 64,676	2.5%
Carlyle Power Partners II	\$ 50,000	11/19/2015	\$ 61,769	\$ 29,038	\$ 50,366	\$ 79,403	8.9%
Cube Infrastructure	\$ 45,000	4/16/2010	\$ 60,063	\$ 96,104	\$ 1,068	\$ 97,172	8.0%
Cube Infrastructure II	\$ 90,000	9/11/2018	\$ 73,467	\$ 3,927	\$ 75,646	\$ 79,573	3.3%
Cube Infrastructure III	\$ 90,000	8/16/2021	\$ 17,597	\$ -	\$ 15,493	\$ 15,493	NM
EQT Infrastructure III	\$ 68,000	12/3/2016	\$ 93,718	\$ 127,290	\$ 37,705	\$ 164,995	21.4%
EQT Infrastructure IV	\$ 100,000	12/17/2018	\$ 88,063	\$ 16,802	\$ 94,460	\$ 111,262	13.6%
EQT Infrastructure V	\$ 75,000	12/8/2020	\$ 37,251	\$ 3,311	\$ 30,971	\$ 34,281	NM
First Reserve Energy Infrastructure Fund	\$ 50,000	6/30/2010	\$ 59,716	\$ 51,704	\$ 5,545	\$ 57,249	-1.2%
First Reserve Energy Infrastructure Fund II	\$ 100,000	10/21/2013	\$ 125,740	\$ 121,842	\$ 38,964	\$ 160,806	15.7%
Global Infrastructure Partners Sonic	\$ 30,000	7/31/2020	\$ 31,578	\$ -	\$ 24,437	\$ 24,437	NM
Global Infrastructure Partners	\$ 75,000	3/31/2008	\$ 101,173	\$ 205,062	\$ 709	\$ 205,771	17.2%
Global Infrastructure Partners II	\$ 75,000	12/3/2011	\$ 104,709	\$ 143,427	\$ 36,071	\$ 179,498	16.1%
Global Infrastructure Partners III	\$ 150,000	4/15/2016	\$ 166,753	\$ 63,713	\$ 170,801	\$ 234,513	11.2%
Co-Investment #1	\$ 29,000	2/28/2017	\$ 27,420	\$ 15,870	\$ 33,439	\$ 49,309	15.2%
Co-Investment #2	\$ 25,000	8/16/2018	\$ 26,645	\$ 2,489	\$ 12,703	\$ 15,192	-15.5%
Global Infrastructure Partners IV	\$ 150,000	12/21/2018	\$ 88,243	\$ 8,385	\$ 81,142	\$ 89,527	2.0%
IFM Global Infrastructure (US), L.P.	\$ 100,000	12/20/2012	\$ 144,550	\$ 208,040	\$ -	\$ 208,040	9.8%
KKR Diversified Core Infrastructure Fund	\$ 100,000	4/29/2022	\$ -	\$ -	\$ -	\$ -	NM

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2022

Infrastructure

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
KKR Global Infrastructure Investors	\$ 75,000	9/29/2010	\$ 87,917	\$ 154,068	\$ 22	\$ 154,089	13.1%
KKR Global Infrastructure Investors II	\$ 150,000	10/24/2014	\$ 182,659	\$ 218,162	\$ 85,418	\$ 303,580	16.9%
KKR Atlanta Co-Invest	\$ 24,000	9/26/2014	\$ 21,428	\$ 28,551	\$ -	\$ 28,551	5.7%
KKR Taurus Co-Invest II	\$ 25,000	8/15/2017	\$ 25,000	\$ 34,190	\$ 22,514	\$ 56,704	21.9%
KKR Byzantium Infrastructure Aggregator	\$ 15,000	10/17/2017	\$ 15,000	\$ 7,013	\$ 9,737	\$ 16,750	3.3%
KKR Global Infrastructure Investors III	\$ 100,000	3/29/2018	\$ 82,876	\$ 17,277	\$ 76,730	\$ 94,007	8.0%
Meridiam Infrastructure (SCA)	\$ 11,000	9/23/2015	\$ 21,938	\$ 9,271	\$ 25,895	\$ 35,166	8.5%
Meridiam Infrastructure Europe II (SCA)	\$ 22,500	9/23/2015	\$ 27,380	\$ 13,797	\$ 33,855	\$ 47,652	11.6%
Meridiam Infrastructure Europe III SLP	\$ 95,000	4/27/2016	\$ 69,465	\$ 13,144	\$ 47,839	\$ 60,983	-6.3%
Meridiam Sustainable Infrastructure Europe IV	\$ 90,000	4/16/2021	\$ 9,952	\$ 4	\$ 7,667	\$ 7,670	NM
Meridiam Infrastructure N.A. II	\$ 75,000	9/28/2012	\$ 88,232	\$ 31,084	\$ 172,025	\$ 203,109	18.7%
MINA II CIP	\$ 175	6/30/2015	\$ 169	\$ 29	\$ 19,399	\$ 19,428	138.3%
Meridiam Infrastructure N.A. II	\$ 20,000	6/30/2015	\$ 18,870	\$ 4,342	\$ 44,076	\$ 48,418	27.0%
Meridiam Infrastructure N.A. III	\$ 50,000	7/12/2017	\$ 13,887	\$ 1	\$ 21,779	\$ 21,780	NM
Stonepeak Infrastructure Partners II	\$ 140,000	11/12/2015	\$ 188,331	\$ 223,546	\$ 46,284	\$ 269,830	13.8%
Stonepeak Claremont Co-Invest	\$ 25,000	5/30/2017	\$ 25,000	\$ 51,938	\$ 15	\$ 51,953	17.8%
Stonepeak Spear (Co-Invest) Holdings	\$ 25,000	1/8/2018	\$ 19,648	\$ 1,717	\$ 36,710	\$ 38,427	17.0%
Stonepeak Infrastructure Partners III	\$ 150,000	10/13/2017	\$ 143,150	\$ 39,705	\$ 183,810	\$ 223,515	21.6%
Stonepeak Infrastructure Partners IV	\$ 125,000	5/8/2020	\$ 46,994	\$ 5,582	\$ 44,065	\$ 49,647	NM

MainePERS Private Market Investments Summary: 06/30/2022

Natural Resources

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
ACM Permanent Crops	\$ 35,000	10/24/2014	\$ 39,100	\$ 10,375	\$ 60,516	\$ 70,890	10.8%
ACM Permanent Crops II	\$ 35,000	5/12/2016	\$ 41,072	\$ 8,885	\$ 23,769	\$ 32,654	-7.9%
AMERRA Agri Fund III	\$ 50,000	2/11/2016	\$ 96,188	\$ 67,504	\$ 32,564	\$ 100,068	1.7%
Denham Mining Fund	\$ 35,000	6/29/2018	\$ 26,701	\$ -	\$ 38,728	\$ 38,728	17.0%
Homestead Capital Farmland II	\$ 50,000	8/8/2016	\$ 54,272	\$ 9,540	\$ 53,369	\$ 62,909	4.9%
Homestead Capital Farmland III	\$ 30,000	10/26/2018	\$ 19,862	\$ 2,014	\$ 19,344	\$ 21,358	6.9%
Orion Mine Finance Fund II	\$ 50,000	5/25/2016	\$ 100,749	\$ 74,178	\$ 45,489	\$ 119,667	8.9%
Orion Mine Finance Co-Fund II	\$ 20,000	8/13/2018	\$ 20,085	\$ -	\$ 32,934	\$ 32,934	14.3%
Silver Creek Aggregate Reserves Fund	\$ 100,000	11/6/2018	\$ 15,166	\$ 1,774	\$ 16,721	\$ 18,496	NM
Taurus Mining Fund	\$ 50,000	3/27/2015	\$ 41,459	\$ 45,135	\$ 4,406	\$ 49,540	7.3%
Taurus Mining Fund Annex	\$ 23,000	12/1/2016	\$ 18,298	\$ 22,993	\$ 1,135	\$ 24,128	17.9%
Taurus Mining Fund No. 2	\$ 75,000	4/18/2019	\$ 55,593	\$ 42,630	\$ 24,695	\$ 67,325	25.0%
Teays River Integrated Agriculture	\$ 200,000	7/1/2015	\$ 198,989	\$ 28,770	\$ 344,882	\$ 373,652	10.0%
Twin Creeks Timber	\$ 125,000	1/7/2016	\$ 198,940	\$ 83,680	\$ 125,271	\$ 208,951	1.5%
U.S. Farming Realty Trust III	\$ 100,000	7/7/2015	\$ 110,017	\$ 11,565	\$ 123,011	\$ 134,576	4.9%
Canally Coinvest Holdings	\$ 12,500	12/9/2019	\$ 11,057	\$ -	\$ 9,199	\$ 9,199	-13.8%

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
ABRY Advanced Securities Fund II	\$ 20,000	5/4/2011	\$ 20,530	\$ 29,628	\$ 521	\$ 30,149	13.2%
ABRY Advanced Securities Fund III	\$ 30,000	4/30/2014	\$ 44,186	\$ 19,942	\$ 22,371	\$ 42,313	-1.5%
ABRY Heritage Partners	\$ 10,000	5/31/2016	\$ 10,696	\$ 10,879	\$ 6,700	\$ 17,579	27.0%
ABRY Partners VII	\$ 10,000	4/29/2011	\$ 12,930	\$ 17,259	\$ 2,461	\$ 19,719	12.6%
ABRY Partners VIII	\$ 20,000	8/8/2014	\$ 23,751	\$ 29,422	\$ 3,854	\$ 33,276	10.3%
ABRY Senior Equity IV	\$ 10,000	12/7/2012	\$ 10,819	\$ 16,620	\$ 1,686	\$ 18,305	15.2%
ABRY Senior Equity V	\$ 12,050	1/19/2017	\$ 12,560	\$ 3,933	\$ 14,102	\$ 18,035	18.6%
Advent International GPE VII	\$ 30,000	6/29/2012	\$ 34,511	\$ 52,335	\$ 6,187	\$ 58,522	13.8%
Advent International GPE VIII	\$ 50,000	2/5/2016	\$ 55,594	\$ 42,125	\$ 59,814	\$ 101,938	19.6%
Advent International GPE IX	\$ 50,000	5/9/2019	\$ 34,629	\$ 3,998	\$ 60,802	\$ 64,800	49.0%
GPE IX TKE Co-Investment	\$ 24,000	3/30/2020	\$ 21,243	\$ -	\$ 21,110	\$ 21,110	-0.3%
Advent International GPE X	\$ 45,000	4/28/2022	\$ -	\$ -	\$ -	\$ -	NM
Advent Latin America PE Fund VI	\$ 20,000	10/17/2014	\$ 19,516	\$ 10,750	\$ 21,210	\$ 31,960	16.4%
Affinity Asia Pacific Fund IV	\$ 60,000	2/28/2013	\$ 64,277	\$ 68,021	\$ 30,607	\$ 98,628	14.5%
Affinity Asia Pacific Fund V	\$ 40,000	12/11/2017	\$ 16,134	\$ 3,777	\$ 17,092	\$ 20,869	NM
Bain Capital Ventures 2021	\$ 25,000	10/28/2020	\$ 14,125	\$ 1	\$ 16,981	\$ 16,982	NM
Bain Capital Ventures 2022	\$ 25,000	6/10/2022	\$ -	\$ -	\$ -	\$ -	NM
Bain Capital Venture Coinvestment Fund III	\$ 15,000	4/1/2021	\$ 11,775	\$ -	\$ 14,143	\$ 14,143	NM
Bain Capital Venture Coinvestment Fund IV	\$ 15,000	6/10/2022	\$ -	\$ -	\$ -	\$ -	NM
Berkshire Fund VIII	\$ 15,000	7/20/2011	\$ 16,795	\$ 24,989	\$ 11,603	\$ 36,593	17.4%
Berkshire Fund IX	\$ 50,000	3/18/2016	\$ 53,980	\$ 24,021	\$ 63,318	\$ 87,339	19.6%
Blackstone Capital Partners VI	\$ 30,000	6/30/2010	\$ 37,416	\$ 48,703	\$ 12,463	\$ 61,166	12.2%
Blackstone Capital Partners VII	\$ 54,000	3/27/2015	\$ 59,239	\$ 29,960	\$ 59,610	\$ 89,570	15.6%
Carlyle Asia Partners III	\$ 15,000	12/31/2009	\$ 20,408	\$ 29,734	\$ 1,038	\$ 30,772	12.5%
Carlyle Asia Partners IV	\$ 60,000	6/3/2014	\$ 77,167	\$ 84,420	\$ 35,232	\$ 119,652	12.5%
Carlyle Asia Partners V	\$ 45,000	10/30/2017	\$ 29,741	\$ 9,074	\$ 26,375	\$ 35,449	15.1%
Centerbridge Capital Partners III	\$ 30,000	10/24/2014	\$ 46,787	\$ 41,510	\$ 31,113	\$ 72,624	19.8%
CB Blizzard Co-Invest	\$ 10,000	9/11/2019	\$ 15,684	\$ 10,053	\$ 1,592	\$ 11,645	-39.4%
Charterhouse Capital Partners VIII	\$ 13,500	1/6/2011	\$ 11,188	\$ 14,160	\$ -	\$ 14,160	7.9%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Charterhouse Capital Partners IX	\$ 4,500	1/6/2011	\$ 5,373	\$ 7,091	\$ 127	\$ 7,218	11.9%
Charterhouse Capital Partners X	\$ 67,000	5/13/2015	\$ 53,928	\$ 40,175	\$ 50,828	\$ 91,003	20.2%
Charterhouse Acrostone	\$ 12,000	8/24/2018	\$ 13,254	\$ 21,268	\$ 9	\$ 21,277	16.9%
Charterhouse Capital Partners XI	\$ 45,000	4/23/2021	\$ 0	\$ -	\$ (538)	\$ (538)	NM
CVC Capital Partners VI	\$ 67,000	7/12/2013	\$ 94,227	\$ 84,573	\$ 84,251	\$ 168,824	18.1%
CVC Capital Partners VII	\$ 48,000	5/9/2017	\$ 68,811	\$ 32,011	\$ 63,272	\$ 95,283	25.9%
CVC Capital Partners VIII	\$ 44,000	6/11/2020	\$ 22,946	\$ 14,073	\$ 9,626	\$ 23,699	16.2%
EnCap Energy Capital VIII	\$ 30,000	1/31/2011	\$ 34,181	\$ 21,445	\$ 13,446	\$ 34,891	0.5%
EnCap Energy Capital Fund VIII Co-Investors, L.P.	\$ 16,238	12/8/2011	\$ 16,495	\$ 5,144	\$ 7,199	\$ 12,342	-4.4%
EnCap Energy Capital Fund IX	\$ 30,000	12/19/2012	\$ 34,502	\$ 33,735	\$ 14,429	\$ 48,164	10.0%
EnCap Energy Capital Fund X	\$ 40,000	3/5/2015	\$ 41,240	\$ 30,173	\$ 45,204	\$ 75,377	16.7%
EnCap Energy Capital Fund XI	\$ 40,000	5/31/2017	\$ 32,160	\$ 7,441	\$ 36,489	\$ 43,930	18.8%
EnCap Flatrock Midstream Fund III	\$ 20,000	4/9/2014	\$ 25,034	\$ 16,752	\$ 14,234	\$ 30,986	8.4%
EnCap Flatrock Midstream Fund IV	\$ 22,000	11/17/2017	\$ 13,650	\$ 7,094	\$ 8,965	\$ 16,059	8.0%
General Catalyst X - Early Venture	\$ 19,565	3/26/2020	\$ 18,391	\$ -	\$ 38,346	\$ 38,346	69.9%
General Catalyst X - Endurance	\$ 22,826	3/26/2020	\$ 22,859	\$ -	\$ 25,986	\$ 25,986	9.8%
General Catalyst X - Growth Venture	\$ 32,609	3/26/2020	\$ 30,815	\$ -	\$ 50,224	\$ 50,224	39.8%
General Catalyst XI - Creation	\$ 8,823	10/29/2021	\$ 2,143	\$ -	\$ 2,093	\$ 2,093	NM
General Catalyst XI - Endurance	\$ 29,412	10/29/2021	\$ 15,969	\$ -	\$ 15,384	\$ 15,384	NM
General Catalyst XI - Ignition	\$ 11,765	10/29/2021	\$ 4,818	\$ -	\$ 4,796	\$ 4,796	NM
GTCR Fund X	\$ 30,000	1/28/2011	\$ 31,766	\$ 64,445	\$ 164	\$ 64,609	21.4%
GTCR Fund XI	\$ 35,000	11/15/2013	\$ 34,196	\$ 67,178	\$ 62,241	\$ 129,419	38.1%
GTCR Fund XII	\$ 50,000	9/29/2017	\$ 51,223	\$ 31,746	\$ 53,948	\$ 85,694	32.0%
Co-Investment #1	\$ 5,238	4/26/2019	\$ 4,556	\$ -	\$ 8,378	\$ 8,378	21.4%
Co-Investment #2	\$ 5,997	11/1/2019	\$ 5,806	\$ 10,935	\$ 2,745	\$ 13,680	50.3%
GTCR XIII	\$ 50,000	10/27/2020	\$ 12,430	\$ 1,809	\$ 16,220	\$ 18,029	NM
H.I.G. Bayside Loan Fund II	\$ 25,000	5/28/2010	\$ 24,192	\$ 29,602	\$ 2,084	\$ 31,686	6.6%
H.I.G. Bayside Loan Ops Fund III (Europe)	\$ 30,000	7/27/2012	\$ 26,707	\$ 31,070	\$ 4,292	\$ 35,363	7.9%
H.I.G. Brazil & Latin America Partners	\$ 60,000	7/1/2015	\$ 63,534	\$ 14,505	\$ 85,577	\$ 100,082	19.1%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
H.I.G. Capital Partners V	\$ 15,000	2/28/2013	\$ 18,834	\$ 22,149	\$ 13,816	\$ 35,964	23.5%
H.I.G. Europe Capital Partners II	\$ 22,500	7/1/2013	\$ 25,240	\$ 20,667	\$ 13,518	\$ 34,185	11.6%
H.I.G. Growth Buyouts & Equity Fund II	\$ 17,500	6/30/2011	\$ 22,235	\$ 24,210	\$ 17,576	\$ 41,786	16.3%
H.I.G. Growth Buyouts & Equity Fund III	\$ 35,000	9/13/2018	\$ 11,852	\$ -	\$ 11,783	\$ 11,783	NM
H.I.G Middle Market LBO Fund II	\$ 40,000	2/7/2014	\$ 47,563	\$ 63,274	\$ 29,688	\$ 92,961	30.7%
Co-Investment #1	\$ 9,000	10/12/2017	\$ 9,000	\$ -	\$ 5,069	\$ 5,069	-11.5%
Co-Investment #2	\$ 686	6/19/2020	\$ 686	\$ -	\$ 830	\$ 830	9.8%
Co-Investment #3	\$ 1,000	6/1/2021	\$ 1,079	\$ -	\$ 1,355	\$ 1,355	NM
H.I.G. Middle Market LBO Fund III	\$ 40,000	7/23/2019	\$ 25,920	\$ 431	\$ 29,729	\$ 30,160	36.6%
Hellman & Friedman Capital Partners VII	\$ 30,000	6/19/2009	\$ 44,342	\$ 105,630	\$ 5,700	\$ 111,329	24.7%
Hellman & Friedman Capital Partners VIII	\$ 45,000	9/24/2014	\$ 48,407	\$ 26,428	\$ 62,906	\$ 89,334	18.8%
Hellman & Friedman Capital Partners IX	\$ 45,000	9/28/2018	\$ 43,952	\$ 1,069	\$ 52,786	\$ 53,856	14.7%
Hellman & Friedman Capital Partners X	\$ 45,000	5/10/2021	\$ 24,529	\$ -	\$ 22,744	\$ 22,744	NM
Inflexion Buyout Fund IV	\$ 27,000	9/30/2014	\$ 33,518	\$ 34,364	\$ 20,074	\$ 54,439	14.4%
Inflexion Partnership Capital Fund I	\$ 17,000	9/30/2014	\$ 22,242	\$ 25,566	\$ 14,626	\$ 40,192	21.6%
Inflexion Supplemental Fund IV	\$ 10,000	5/31/2016	\$ 14,245	\$ 17,933	\$ 8,920	\$ 26,853	24.1%
Kelso Investment Associates VIII	\$ 3,000	1/6/2011	\$ 3,022	\$ 4,263	\$ 150	\$ 4,412	8.2%
Kelso Investment Associates IX	\$ 60,000	11/5/2014	\$ 69,666	\$ 75,442	\$ 40,745	\$ 116,186	20.2%
KIA IX (Hammer) Investor	\$ 25,000	8/12/2016	\$ 25,426	\$ 69,298	\$ 217	\$ 69,515	21.4%
Kelso Investment Associates X	\$ 45,000	3/16/2018	\$ 39,687	\$ 12,888	\$ 57,695	\$ 70,583	44.2%
Kelso Investment Associates XI	\$ 45,000	12/22/2021	\$ 1,547	\$ -	\$ 1,384	\$ 1,384	NM
KKR North American Fund XI	\$ 60,000	2/7/2012	\$ 95,328	\$ 147,951	\$ 37,549	\$ 185,500	20.1%
KKR North America Fund XI (Platinum)	\$ 8,003	2/26/2016	\$ 8,040	\$ 2,313	\$ 5,913	\$ 8,226	0.5%
KKR Element Co-Invest	\$ 10,000	8/29/2016	\$ 10,050	\$ 24,030	\$ -	\$ 24,030	23.5%
KKR Americas XII	\$ 60,000	3/3/2016	\$ 59,957	\$ 22,564	\$ 80,449	\$ 103,013	25.4%
KKR Sigma Aggregator	\$ 15,000	6/22/2018	\$ 15,000	\$ -	\$ 19,453	\$ 19,453	6.7%
KKR Enterprise Co-Invest	\$ 15,000	10/11/2018	\$ 15,000	\$ -	\$ -	\$ -	-100.0%
KKR Enterprise Co-Invest AIV A	\$ 8,936	11/8/2019	\$ 8,936	\$ 7,243	\$ 4,320	\$ 11,563	27.1%
KKR North America XIII	\$ 40,000	6/25/2021	\$ 6,689	\$ -	\$ 6,340	\$ 6,340	NM

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
KKR Special Situations Fund	\$ 60,000	12/19/2012	\$ 118,957	\$ 97,434	\$ 11,784	\$ 109,218	-3.2%
KKR Special Situations Fund II	\$ 60,000	12/19/2014	\$ 97,892	\$ 73,542	\$ 33,439	\$ 106,981	3.9%
Oaktree Opportunities VIII	\$ 30,000	12/9/2009	\$ 30,000	\$ 43,849	\$ 231	\$ 44,080	9.1%
ONCAP IV	\$ 15,000	11/8/2016	\$ 12,053	\$ 2,725	\$ 16,468	\$ 19,193	16.8%
Onex Partners III	\$ 10,000	1/6/2011	\$ 11,181	\$ 16,832	\$ 1,806	\$ 18,637	13.2%
Onex Partners IV	\$ 60,000	11/22/2013	\$ 62,871	\$ 43,444	\$ 43,926	\$ 87,370	8.2%
Co-Investment #1	\$ 10,000	2/27/2017	\$ 10,471	\$ 1,181	\$ 15,659	\$ 16,841	10.3%
Onex Partners V	\$ 45,000	7/11/2017	\$ 38,694	\$ 2,378	\$ 43,005	\$ 45,383	16.4%
Paine & Partners Capital Fund IV	\$ 60,000	12/18/2014	\$ 53,247	\$ 29,070	\$ 47,541	\$ 76,611	9.6%
Wawona Co-Investment Fund I	\$ 15,000	3/31/2017	\$ 15,012	\$ -	\$ 8,623	\$ 8,623	-10.0%
Lyons Magnus Co-Investment Fund I	\$ 15,000	11/8/2017	\$ 15,000	\$ -	\$ 36,054	\$ 36,054	20.8%
PSP Maverick Co-Invest	\$ 7,238	9/12/2019	\$ 7,254	\$ -	\$ 12,681	\$ 12,681	22.1%
PSP AH&N Co-Investment Fund	\$ 19,724	11/27/2019	\$ 17,539	\$ -	\$ 30,997	\$ 30,997	26.9%
Paine Schwartz Food Chain Fund V	\$ 45,000	8/3/2018	\$ 39,651	\$ 10,723	\$ 40,653	\$ 51,376	33.5%
SNFL Co-Investment Fund	\$ 10,000	10/11/2019	\$ 5,024	\$ 265	\$ 7,426	\$ 7,691	17.0%
Rhone Partners V	\$ 56,000	3/12/2015	\$ 70,335	\$ 32,124	\$ 77,703	\$ 109,827	17.0%
Riverside Capital Appreciation Fund VI	\$ 60,000	7/3/2013	\$ 61,710	\$ 70,903	\$ 24,886	\$ 95,789	12.0%
RCAF VI CIV XXXII	\$ 12,399	10/21/2015	\$ 12,687	\$ 35,260	\$ -	\$ 35,260	19.9%
Riverside Micro-Cap Fund III	\$ 35,000	6/30/2014	\$ 49,448	\$ 183,115	\$ 63,467	\$ 246,582	38.1%
Riverside Micro-Cap Fund IV	\$ 60,000	10/23/2015	\$ 55,659	\$ -	\$ 100,335	\$ 100,335	13.8%
Riverside Micro-Cap Fund IV-B	\$ 20,000	8/9/2019	\$ 24,292	\$ 5,583	\$ 33,991	\$ 39,574	33.5%
Riverside Micro-Cap Fund V	\$ 40,000	8/21/2018	\$ 30,673	\$ -	\$ 42,243	\$ 42,243	21.2%
Riverside Micro-Cap Fund VI	\$ 45,000	8/26/2021	\$ 0	\$ -	\$ (1,002)	\$ (1,002)	NM
Shoreview Capital Partners III	\$ 24,000	7/24/2013	\$ 25,134	\$ 28,438	\$ 24,368	\$ 52,807	20.0%
Shoreview Capital Partners IV	\$ 30,000	6/3/2019	\$ 10,422	\$ 5,768	\$ 8,609	\$ 14,377	NM
Sovereign Capital IV	\$ 46,500	7/7/2014	\$ 40,344	\$ 21,967	\$ 36,141	\$ 58,109	11.3%
Summit Partners Credit II	\$ 60,000	10/25/2013	\$ 90,550	\$ 82,699	\$ 24,406	\$ 107,104	6.7%
Summit Europe Growth Equity III	\$ 22,000	3/18/2020	\$ 10,563	\$ -	\$ 10,066	\$ 10,066	NM
Summit Growth Equity VIII	\$ 25,000	5/27/2011	\$ 33,302	\$ 61,691	\$ 16,007	\$ 77,698	27.3%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Co-Investment #1	\$ 16,000	6/3/2015	\$ 16,000	\$ 38,735	\$ 16,654	\$ 55,390	32.3%
Summit Growth Equity IX	\$ 60,000	8/26/2015	\$ 83,052	\$ 88,968	\$ 91,219	\$ 180,187	37.4%
Co-Investment #1	\$ 15,000	11/29/2016	\$ 14,895	\$ 41,104	\$ -	\$ 41,104	159.6%
Summit Partners Co-Invest (Ironman)	\$ 15,000	4/20/2018	\$ 15,001	\$ -	\$ 17,903	\$ 17,903	4.5%
Summit Partners Co-Invest (Giants-B)	\$ 15,000	10/22/2019	\$ 15,000	\$ 41,780	\$ 5,244	\$ 47,024	84.3%
Summit Growth Equity X	\$ 60,000	2/26/2019	\$ 57,704	\$ 13,804	\$ 55,502	\$ 69,306	21.8%
Summit Partners Co-Invest (Lions)	\$ 7,000	10/14/2020	\$ 7,000	\$ -	\$ 7,096	\$ 7,096	NM
Summit Partners Co-Invest (Indigo)	\$ 10,000	12/11/2020	\$ 11,432	\$ -	\$ 11,424	\$ 11,424	NM
Summit Growth Equity XI	\$ 45,000	10/1/2021	\$ 0	\$ -	\$ (227)	\$ (227)	NM
Summit Venture Capital III	\$ 13,150	5/27/2011	\$ 18,044	\$ 32,899	\$ 2,432	\$ 35,332	17.5%
Summit Venture Capital IV	\$ 40,000	8/26/2015	\$ 49,739	\$ 48,377	\$ 57,247	\$ 105,624	43.7%
Summit Venture Capital V	\$ 45,000	6/16/2020	\$ 18,361	\$ 773	\$ 17,229	\$ 18,002	NM
Summit Partners Co-Invest (CS)	\$ 12,000	10/22/2021	\$ 12,007	\$ -	\$ 9,682	\$ 9,682	NM
Technology Crossover Ventures VIII	\$ 60,000	5/8/2013	\$ 52,307	\$ 39,509	\$ 57,533	\$ 97,042	10.7%
Technology Crossover Ventures IX	\$ 60,000	2/19/2016	\$ 48,428	\$ 46,154	\$ 49,123	\$ 95,277	21.8%
TCV Sports	\$ 8,000	9/25/2018	\$ 8,000	\$ -	\$ 6,954	\$ 6,954	-3.7%
Technology Crossover Ventures X	\$ 45,000	8/31/2018	\$ 33,774	\$ -	\$ 63,365	\$ 63,365	31.9%
Technology Crossover Ventures XI	\$ 45,000	10/2/2020	\$ 19,087	\$ -	\$ 19,366	\$ 19,366	NM
Technology Impact Fund	\$ 40,000	12/18/2017	\$ 35,377	\$ 22,270	\$ 81,658	\$ 103,928	60.2%
Technology Impact Fund II	\$ 40,000	4/13/2021	\$ 8,320	\$ -	\$ 8,689	\$ 8,689	NM
Technology Impact Growth Fund	\$ 40,000	11/26/2018	\$ 47,422	\$ 26,676	\$ 32,519	\$ 59,195	13.8%
Technology Impact Growth Fund II	\$ 40,000	8/6/2021	\$ 5,562	\$ -	\$ 4,667	\$ 4,667	NM
Thoma Bravo Fund XI	\$ 50,000	5/1/2014	\$ 69,098	\$ 119,295	\$ 68,974	\$ 188,270	27.4%
Thoma Bravo Fund XII	\$ 60,000	4/27/2016	\$ 72,729	\$ 45,352	\$ 87,087	\$ 132,438	16.9%
Thoma Bravo Fund XIII	\$ 45,000	12/7/2018	\$ 56,723	\$ 30,516	\$ 64,082	\$ 94,599	37.4%
Thoma Bravo Special Opportunities Fund II	\$ 15,000	3/27/2015	\$ 17,555	\$ 18,290	\$ 17,372	\$ 35,662	17.1%
Tillridge Global Agribusiness Partners II	\$ 50,000	10/21/2016	\$ 24,318	\$ 125	\$ 19,937	\$ 20,062	NM
Water Street Healthcare Partners III	\$ 25,000	7/25/2012	\$ 29,674	\$ 76,771	\$ 7,660	\$ 84,431	35.4%
Water Street Healthcare Partners IV	\$ 33,000	9/15/2017	\$ 31,714	\$ 10,624	\$ 26,546	\$ 37,170	8.6%

MainePERS Private Market Investments Summary: 06/30/2022

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Water Street Healthcare Partners V	\$ 43,000	4/15/2022	\$ -	\$ -	\$ -	\$ -	NM
Wayzata Opportunities Fund III	\$ 30,000	9/11/2012	\$ 14,718	\$ 10,063	\$ 3,926	\$ 13,989	NM
Wynnchurch Capital Partners IV	\$ 40,000	10/23/2014	\$ 38,047	\$ 35,402	\$ 56,314	\$ 91,716	29.1%
Wynnchurch Capital Partners V	\$ 40,000	1/15/2020	\$ 16,260	\$ -	\$ 22,107	\$ 22,107	NM

MainePERS Private Market Investments Summary: 06/30/2022

Real Estate

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Angelo Gordon Net Lease IV	\$ 50,000	2/17/2020	\$ 29,237	\$ 1,036	\$ 31,074	\$ 32,110	7.5%
Angelo Gordon Realty Fund XI	\$ 50,000	3/31/2022	\$ -	\$ -	\$ -	\$ -	NM
Bain Capital Real Estate II	\$ 50,000	3/5/2021	\$ 15,667	\$ 920	\$ 18,592	\$ 19,511	NM
Blackrock Granite Property Fund	\$ 63,791	9/30/2006	\$ 68,771	\$ 53,312	\$ -	\$ 53,312	-4.9%
Blackstone Property Partners	\$ 350,000	6/29/2017	\$ 350,000	\$ 31,542	\$ 472,291	\$ 503,833	10.5%
Blackstone Real Estate Partners VII	\$ 75,000	2/26/2012	\$ 104,132	\$ 152,899	\$ 19,288	\$ 172,187	15.5%
Blackstone Real Estate Partners VIII	\$ 50,000	3/27/2015	\$ 62,958	\$ 63,322	\$ 41,618	\$ 104,940	18.0%
Blackstone Real Estate Partners IX	\$ 40,000	12/21/2018	\$ 31,699	\$ 13,388	\$ 36,724	\$ 50,112	39.8%
Barings Asia Real Estate II	\$ 50,000	7/31/2018	\$ 21,041	\$ -	\$ 19,067	\$ 19,067	NM
EQT Real Estate II	\$ 55,000	4/26/2019	\$ 21,269	\$ 4,956	\$ 17,656	\$ 22,611	NM
EQT Real Estate Rock Co-Investment	\$ 11,000	8/10/2020	\$ 8,790	\$ -	\$ 10,934	\$ 10,934	NM
H/2 Credit Partners, L.P.	\$ 75,000	6/21/2011	\$ 75,000	\$ 112,177	\$ -	\$ 112,177	5.9%
Harrison Street Core Property Fund, L.P.	\$ 75,000	4/30/2012	\$ 94,737	\$ 47,941	\$ 134,763	\$ 182,704	9.1%
HSRE-Coyote Maine PERS Core Co-Investment	\$ 20,000	12/4/2020	\$ 14,000	\$ -	\$ 17,342	\$ 17,342	NM
High Street Real Estate Fund IV, L.P.	\$ 25,000	8/23/2013	\$ 24,717	\$ 34,157	\$ -	\$ 34,157	14.7%
High Street Real Estate Fund V	\$ 25,000	7/24/2015	\$ 24,925	\$ 36,045	\$ -	\$ 36,045	13.2%
High Street Real Estate Fund VI	\$ 25,000	3/22/2019	\$ 25,000	\$ 2,598	\$ 30,485	\$ 33,084	18.6%
HSREF VI Elgin Co-Invest	\$ 10,000	4/9/2021	\$ 10,000	\$ 631	\$ 12,521	\$ 13,152	NM
High Street Real Estate Fund VII	\$ 35,000	8/16/2021	\$ 13,260	\$ -	\$ 12,469	\$ 12,469	NM
Hines US Property Partners	\$ 200,000	9/9/2021	\$ 79,719	\$ 3,645	\$ 76,331	\$ 79,976	NM
Invesco Real Estate Asia IV	\$ 30,000	3/25/2020	\$ 17,906	\$ 10,069	\$ 6,210	\$ 16,279	-27.6%
Invesco US Income Fund	\$ 195,000	7/17/2014	\$ 167,184	\$ 53,462	\$ 292,696	\$ 346,157	13.3%
IPI Data Center Partners I	\$ 30,000	12/15/2017	\$ 31,645	\$ 16,578	\$ 40,668	\$ 57,246	25.6%
IPI Data Center Partners II	\$ 25,000	12/20/2019	\$ 12,311	\$ 1,619	\$ 10,469	\$ 12,088	NM
JPMCB Strategic Property Fund	\$ 130,000	11/15/2005	\$ 186,941	\$ 297,519	\$ -	\$ 297,519	5.8%
KKR Real Estate Partners Europe I	\$ 50,000	12/2/2015	\$ 51,092	\$ 44,022	\$ 22,197	\$ 66,219	10.3%
KKR Real Estate Partners Europe II	\$ 25,000	12/23/2019	\$ 17,085	\$ 3,288	\$ 16,371	\$ 19,659	26.7%
KKR Real Estate Partners Americas I	\$ 50,000	12/20/2013	\$ 49,812	\$ 59,226	\$ 2,502	\$ 61,729	11.2%
KKR Real Estate Partners Americas II	\$ 50,000	6/2/2016	\$ 57,945	\$ 66,550	\$ 18,045	\$ 84,596	25.0%
Northbridge-Strategic Fund II	\$ 30,000	2/8/2019	\$ 30,000	\$ 2,905	\$ 38,352	\$ 41,257	10.3%
Prima Mortgage Investment Trust, LLC	\$ 75,000	7/29/2011	\$ 97,488	\$ 92,443	\$ 39,465	\$ 131,908	3.8%

MainePERS Private Market Investments Summary: 06/30/2022

Real Estate

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Principal Life Insurance Company U.S. Property	\$ 60,000	5/20/2005	\$ 60,000	\$ 125,410	\$ -	\$ 125,410	6.2%
PRISA	\$ 90,000	6/30/2005	\$ 139,622	\$ 222,450	\$ -	\$ 222,450	5.3%
Rubenstein Properties Fund III	\$ 30,000	10/23/2015	\$ 30,606	\$ 627	\$ 28,925	\$ 29,552	-1.0%
LCC Co-Investor B	\$ 15,000	10/18/2019	\$ 14,917	\$ -	\$ 11,408	\$ 11,408	-11.1%
Rubenstein Properties Fund IV	\$ 25,000	4/16/2019	\$ 5,700	\$ 56	\$ 4,352	\$ 4,408	NM
Prudential Senior Housing Fund V	\$ 50,000	3/17/2015	\$ 41,333	\$ 5,453	\$ 51,038	\$ 56,491	7.0%
Smart Markets Fund, L.P.	\$ 195,000	6/17/2013	\$ 168,182	\$ 60,323	\$ 286,118	\$ 346,441	11.4%
Stonelake Opportunity Partners VII	\$ 40,000	6/30/2022	\$ 0	\$ -	\$ (284)	\$ (284)	NM
Walton Street Real Estate Fund VII	\$ 50,000	5/9/2012	\$ 43,990	\$ 49,099	\$ 13,039	\$ 62,138	10.0%
Walton Street Real Estate Fund VIII	\$ 50,000	10/23/2015	\$ 42,685	\$ 27,936	\$ 32,505	\$ 60,441	12.4%
Co-Investment #1	\$ 10,000	9/27/2017	\$ 9,610	\$ 4,160	\$ 4,592	\$ 8,752	-3.0%
Westbrook Real Estate Fund IX	\$ 15,000	6/30/2014	\$ 17,380	\$ 17,500	\$ 3,098	\$ 20,599	6.3%
Westbrook Real Estate Fund X	\$ 50,000	1/15/2015	\$ 48,455	\$ 42,649	\$ 18,281	\$ 60,931	11.1%
Westbrook Real Estate Fund XI	\$ 40,000	1/31/2019	\$ 16,802	\$ 4,571	\$ 14,826	\$ 19,397	NM

MainePERS Private Market Investments Summary: 06/30/2022

Notes: NM = Not Meaningful. MainePERS only reports IRRs for funds with more than 24 months of history and for which Amount Contributed is greater than 50% of Commitments. "Date of Commitment" is not the date of first capital draw. The "IRR" presented uses interim estimates and may not be indicative of ultimate performance of partnership investments due to a number of factors including lags in valuation, maturity of fund, and differences in investment pace and strategy of various funds. Performance figures should not be used to compare returns among multiple funds or different limited partners. Private market investments are long-term investments which are expected to generate returns over the course of their entire life cycle of 10 or more years. Common industry practice dictates that any performance analysis on these funds while they are still in the early years of their investment cycle would not generate meaningful results. The Interim Net IRR figures presented in this table are based on cash flow information provided by the general partner. The above information was not prepared, reviewed, or approved by any of the partnerships, general partners, or their affiliates and may differ from those generated by the general partner or other limited partners due to differences in timing of investments, disposal of in-kind distributions, and accounting and valuation policies.

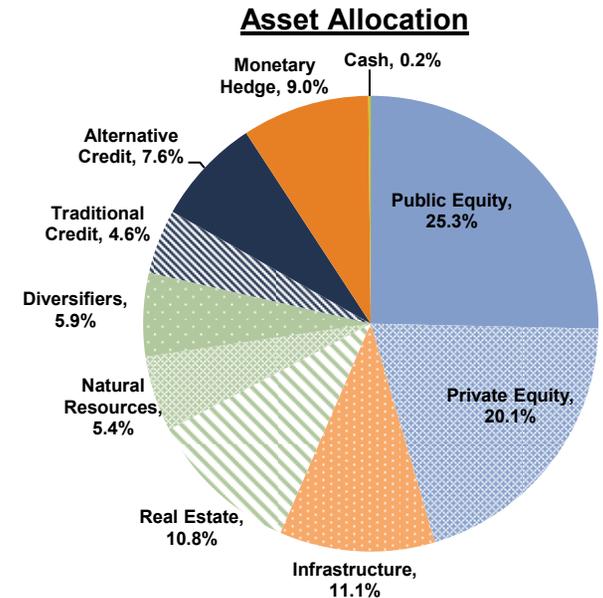
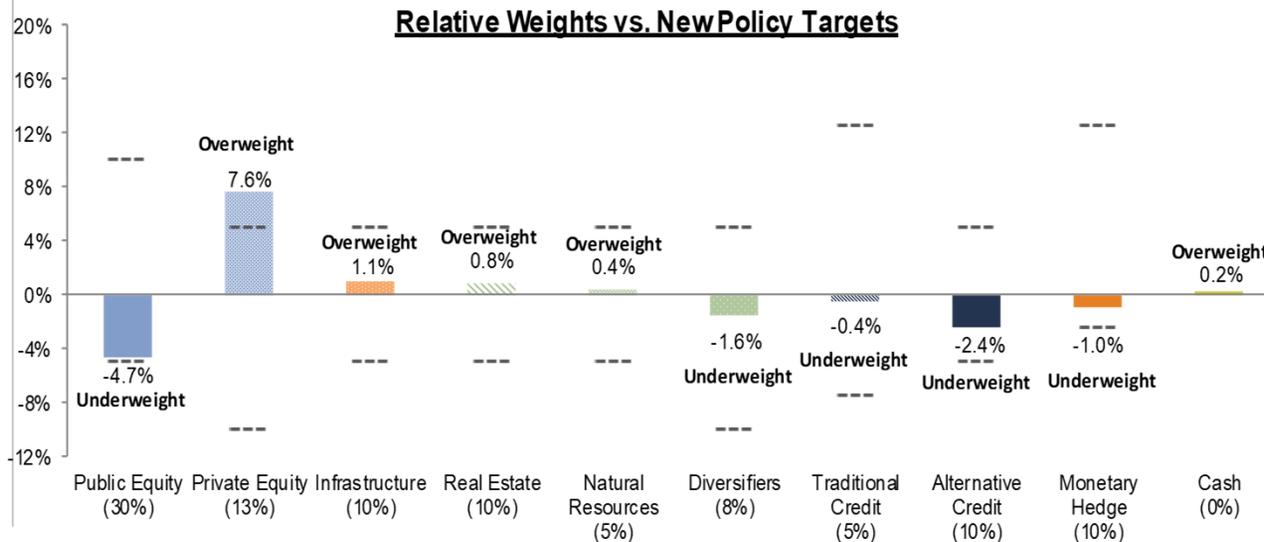
MainePERS Dashboard as of September 30, 2022

Summary Portfolio Observations

- The MainePERS total portfolio market value at the end of Q3 2022 was \$17,719.5 million. The portfolio returned -3.1% in the quarter ended September 30, 2022, with relative outperformance primarily driven by Private Equity and Alternative Credit. Over the past five years, the portfolio has generated annualized returns of +8.0%.

Total Fund Performance (9/30/2022)

	Q3 2022	Tr. 1 Year	Tr. 3 Year	Tr. 5 Year
Total Fund Composite	-3.1	-2.6	8.5	8.0
MainePERS Policy Index	-5.2	-6.5	6.6	6.7
Value Add	2.1	3.8	1.9	1.3





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MAINEPERS

THIRD QUARTER 2022 PERFORMANCE REVIEW

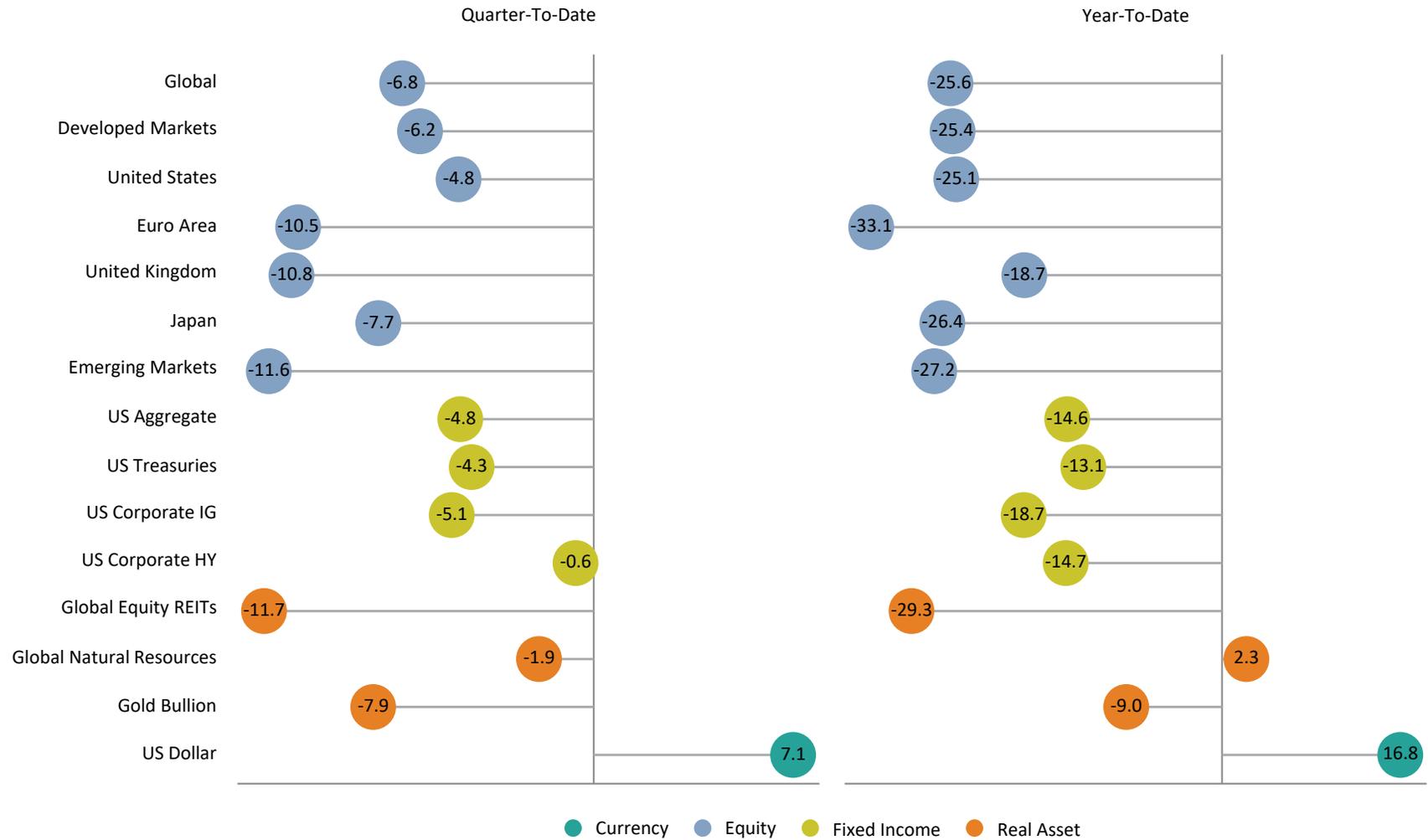


MARKET UPDATE



Rising rates and inflationary pressures batter markets in Q3

GLOBAL ASSET CLASS PERFORMANCE
As of September 30, 2022 • US Dollar • Percent (%)

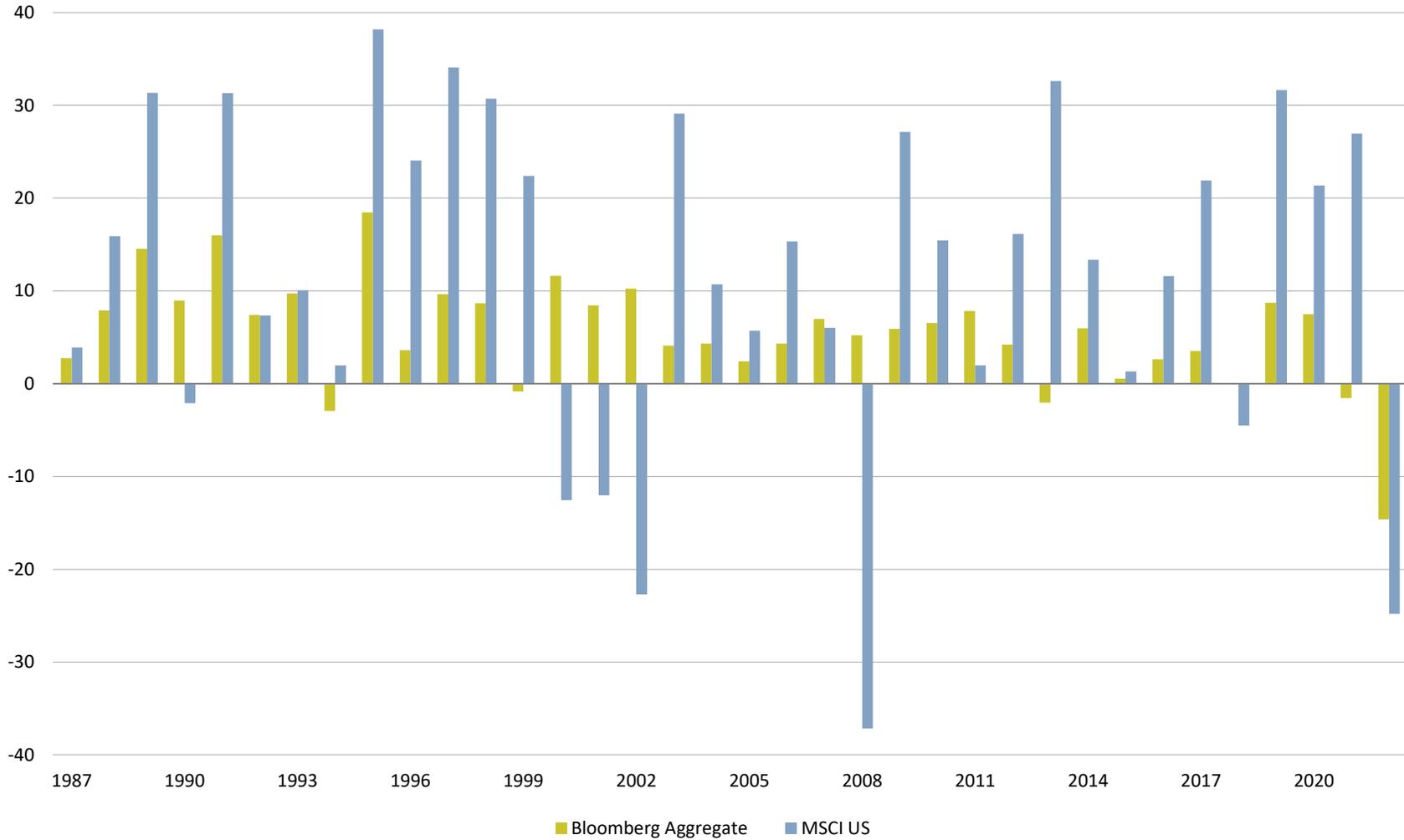


Sources: Bloomberg Index Services Limited, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties. Notes: All data are in US Dollar terms. The equity data are total returns net of dividend taxes of MSCI indexes. The fixed income data are total returns of Bloomberg Barclays indexes. The MSCI Global Equity REIT Index, the MSCI ACWI Commodity Producers Index, and front-month gold contracts as traded on the New York Mercantile Exchange are used to calculate real asset performances. The US Dollar Index (DXY) is used to calculate US Dollar performances.

70/30 on track for worst year since 2008

BLOOMBERG AGGREGATE AND MSCI US CALENDAR YEAR RETURNS

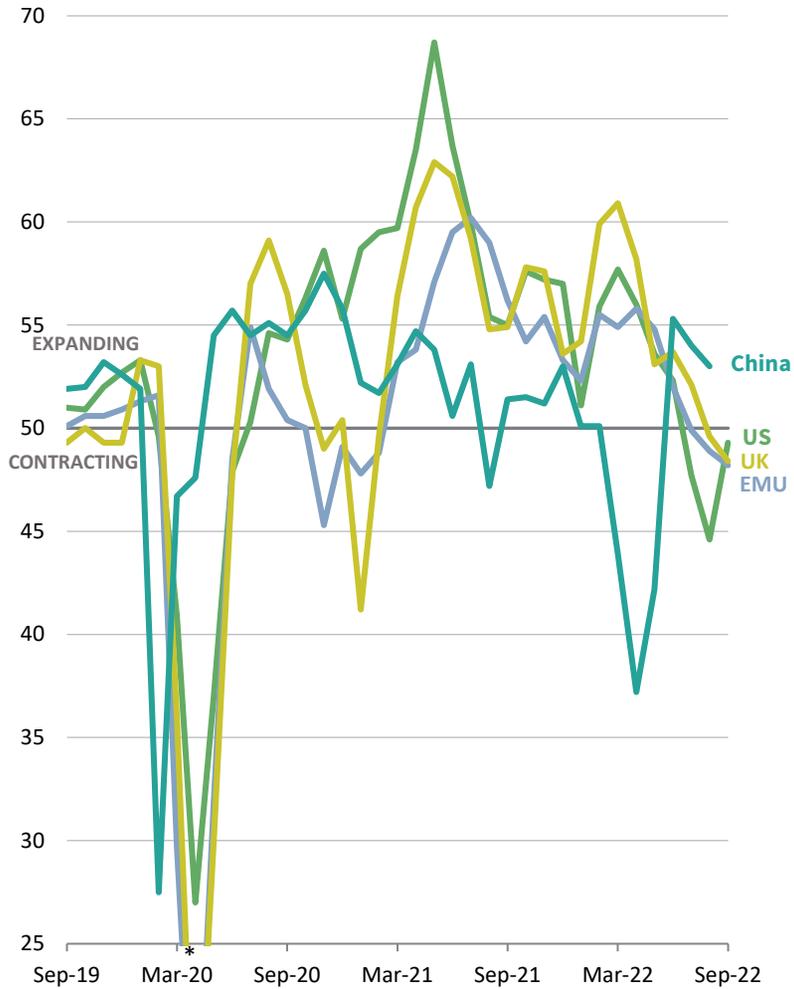
1987–2022 • Total Return in USD (%)



Growth is fading, but the magnitude of the slowdown remains uncertain

COMPOSITE PMIs

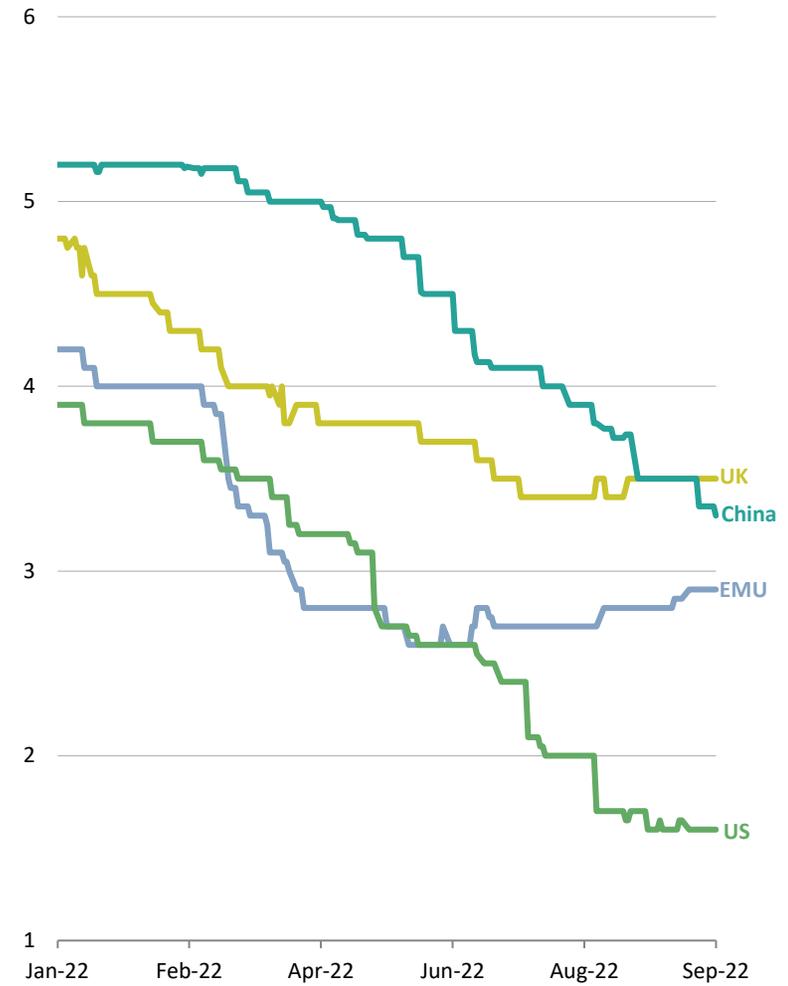
September 30, 2019 – September 30, 2022



* Chart is capped for scaling purposes.

2022 CONSENSUS GDP GROWTH ESTIMATES

December 31, 2021 – September 30, 2022 • Percent (%)

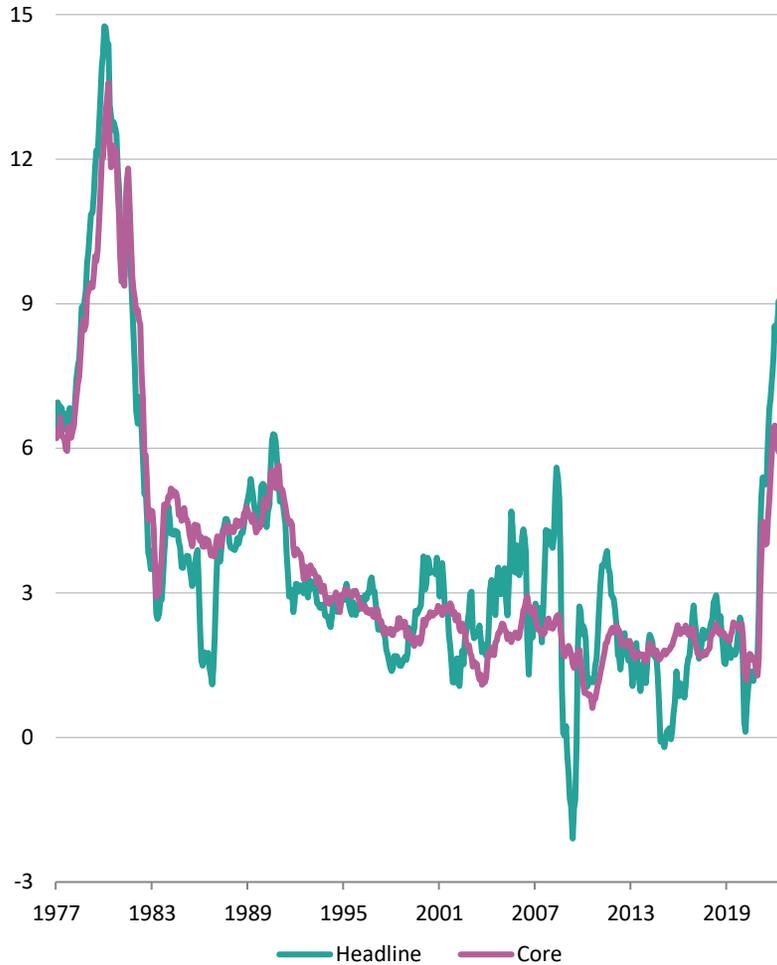


Sources: Bloomberg L.P., Markit Economics, and Thomson Reuters Datastream.
 Notes: Composite PMI data are flash estimates. Data for China are as of August 31. GDP growth forecasts for 2022 are based on median estimates.
 MMHC

Inflation remains stubbornly high, but is still expected to rollover

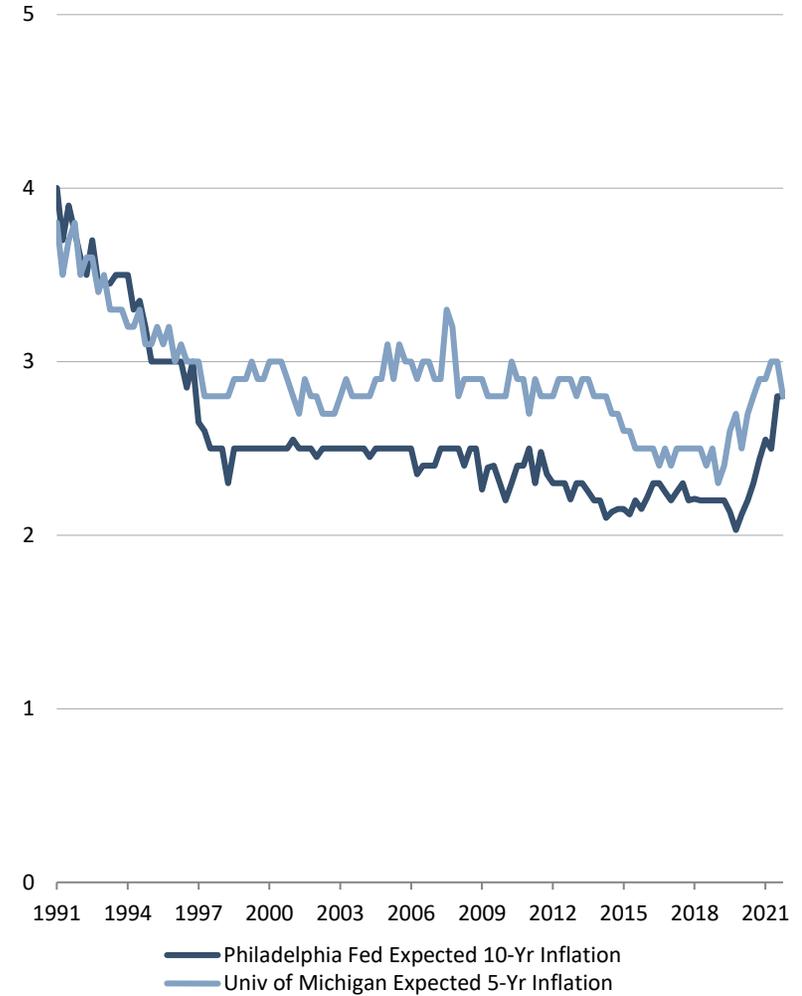
US HEADLINE AND CORE INFLATION

March 31, 1977 – August 31, 2022 • Year-Over-Year Percent Change (%)



INFLATION EXPECTATIONS

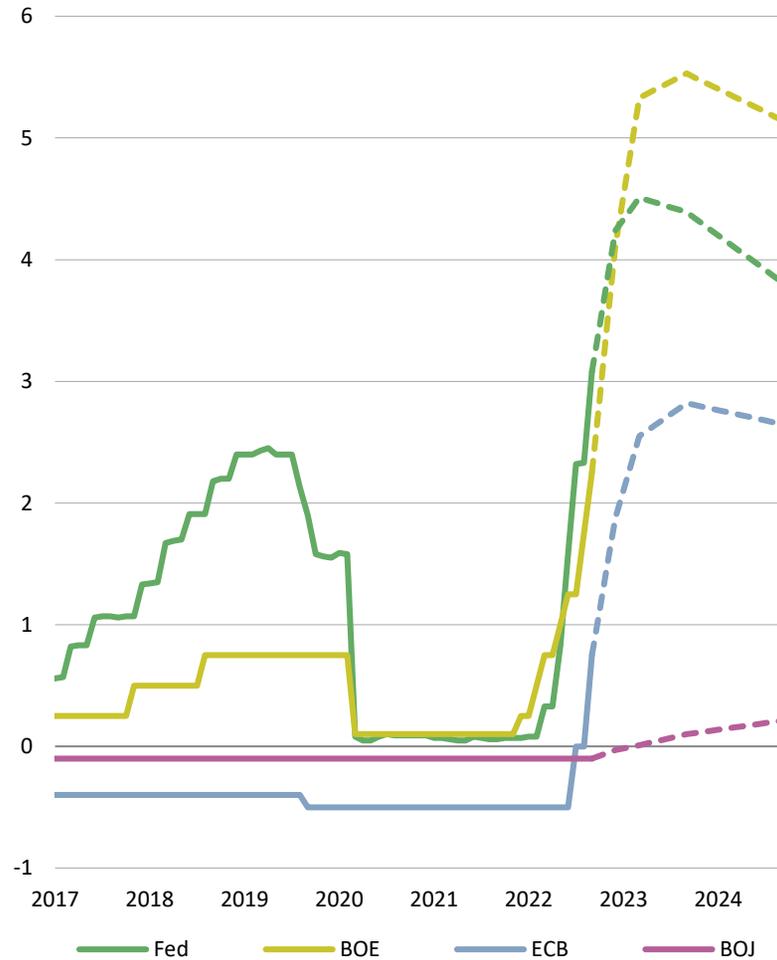
December 31, 1991 – September 30, 2022 • Percent (%)



Aggressive tightening by central banks has resulted in a shift to higher bond yields

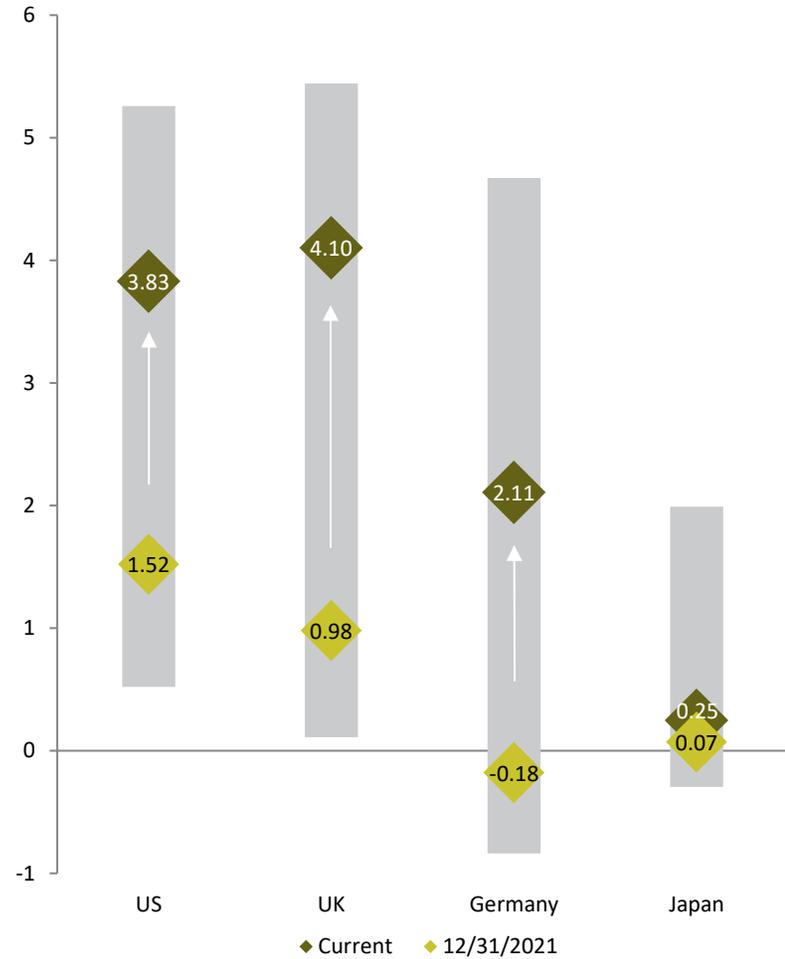
G4 GLOBAL POLICY RATES

January 1, 2017 – September 30, 2024 • Percent (%)



TRAILING 20-YR RANGE OF 10-YR G4 GOVERNMENT BOND YIELDS

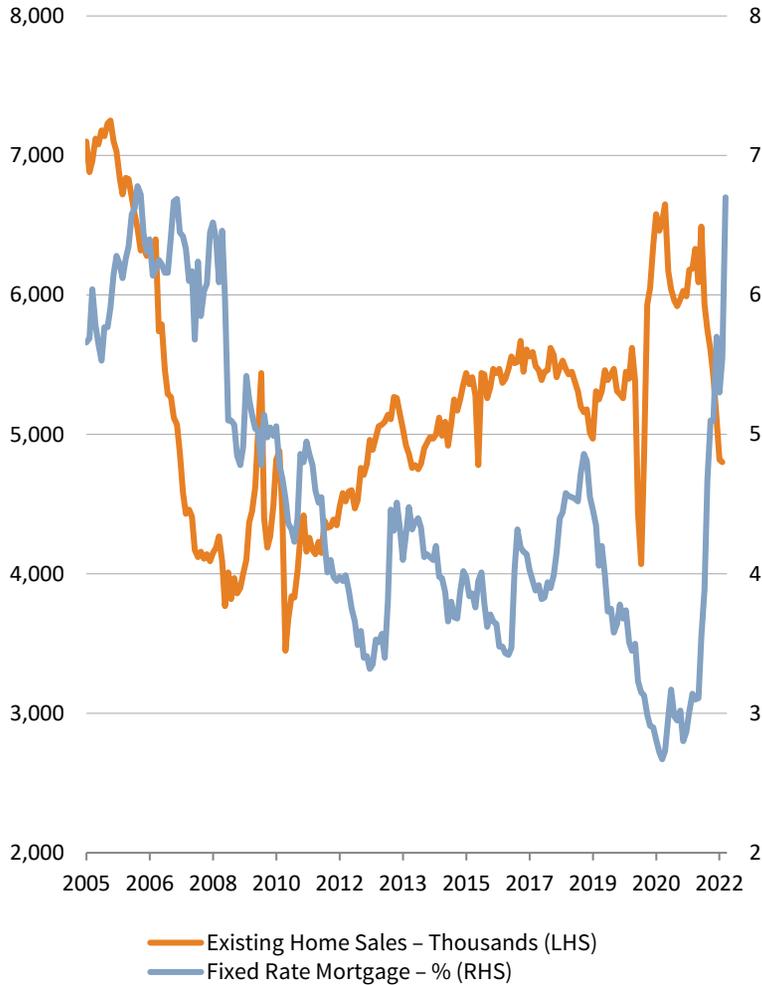
October 31, 2002 – September 30, 2022 • Yield (%)



Rapid pace of Fed tightening is impacting markets like housing

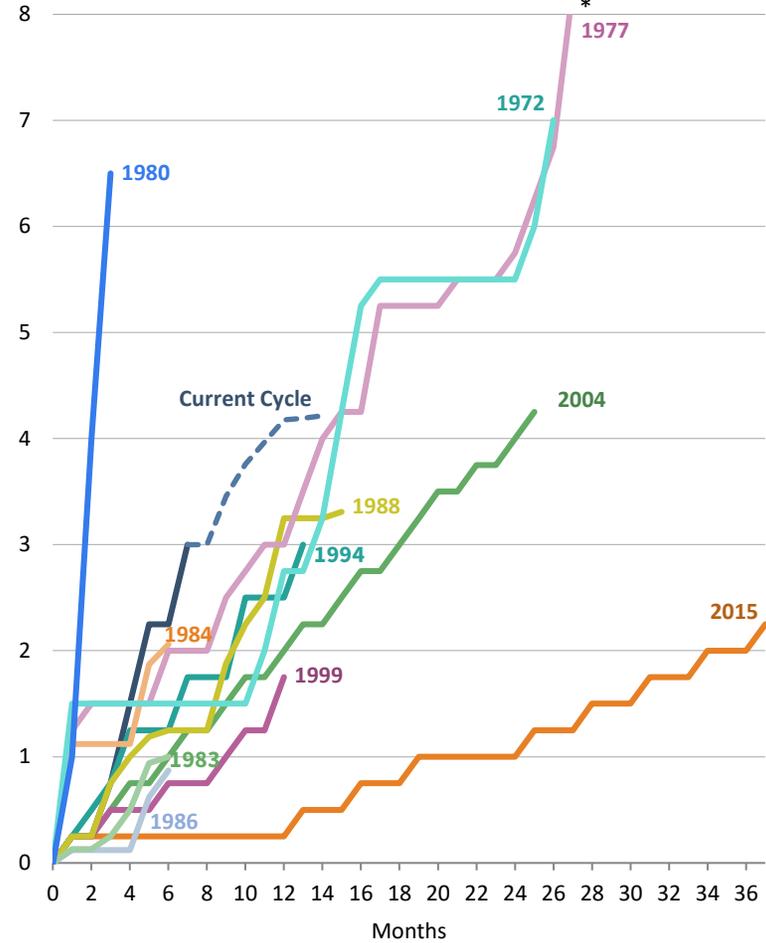
HOME SALES AND 30-YR MORTGAGE RATES OVER TIME

January 31, 2005 – September 30, 2022



PACE OF FED FUNDS RATE HIKES SINCE 1972

January 31, 1971 – September 30, 2022 • Cumulative Change in Fed Funds Rate (%)

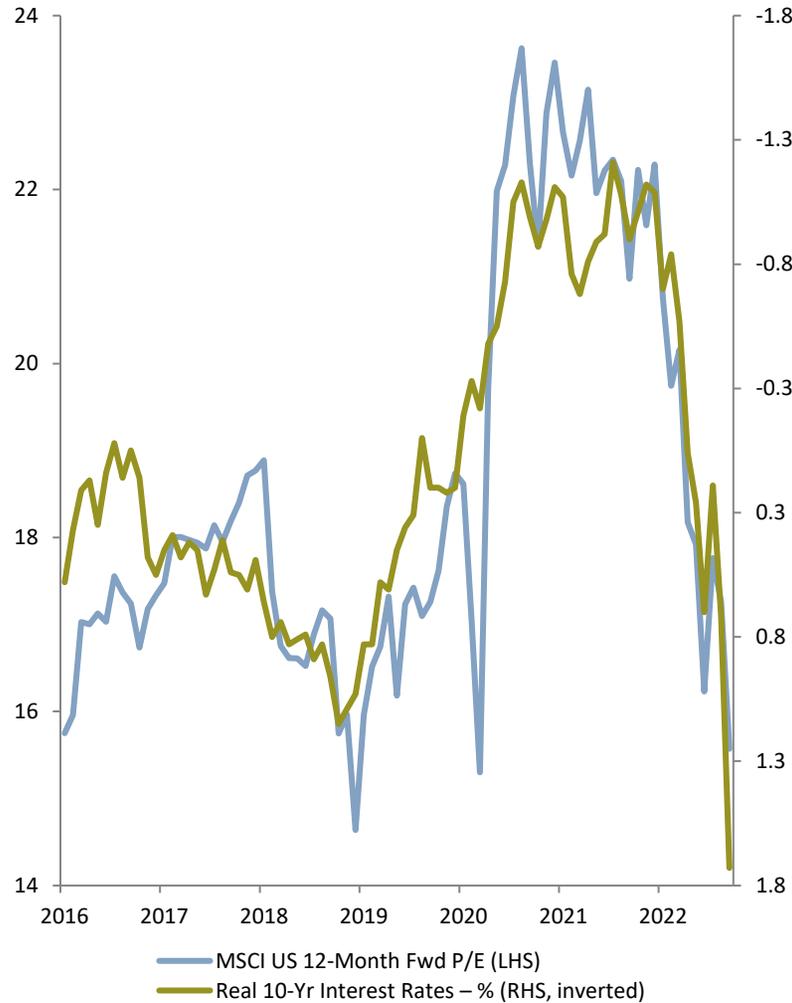


* Y-axis are capped for scaling purposes. The fed funds rate increased 11.75% during the 1977 rate hiking cycle.

Rising interest rates have weighed on valuations and aided value versus growth stocks

MSCI US FWD P/E VS REAL INTEREST RATES

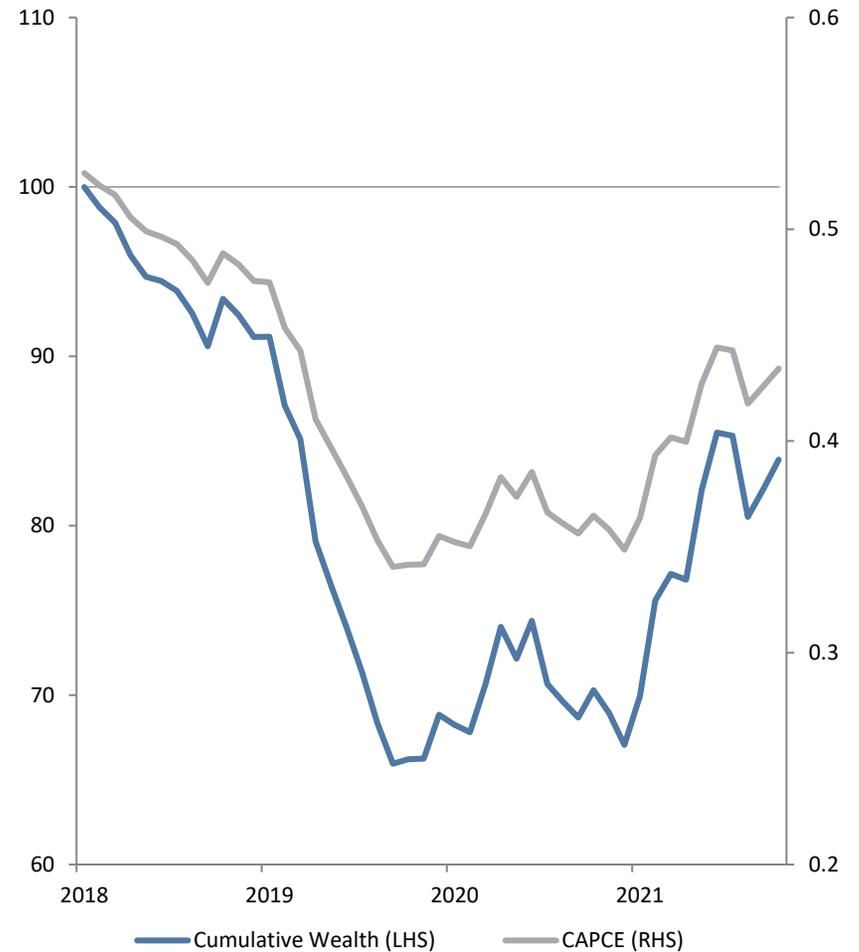
January 31, 2016 – September 30, 2022



RELATIVE CUMULATIVE WEALTH AND CAPCE

MSCI ACWI VALUE VS GROWTH

December 31, 2018 – September 30, 2022 • Local Currency • December 31, 2018 = 100

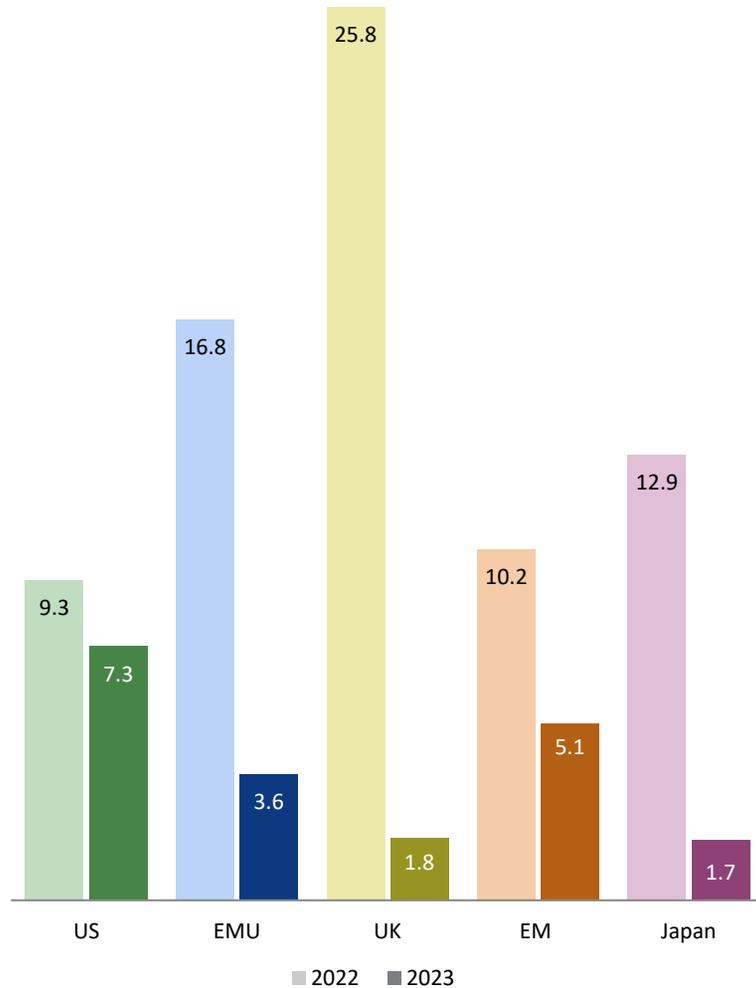


Sources: Federal Reserve, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided “as is” without any express or implied warranties. Notes: Real ten-year interest rates are represented by the ten-year TIPS yield. Data are monthly. Total return data are gross of dividend taxes. The cyclically adjusted price-to-cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing ten-year average inflation-adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies and therefore excludes these two industry groups from index-level cash earnings. MMHC

Negative revisions outside of commodity sector are dragging EPS forecasts lower

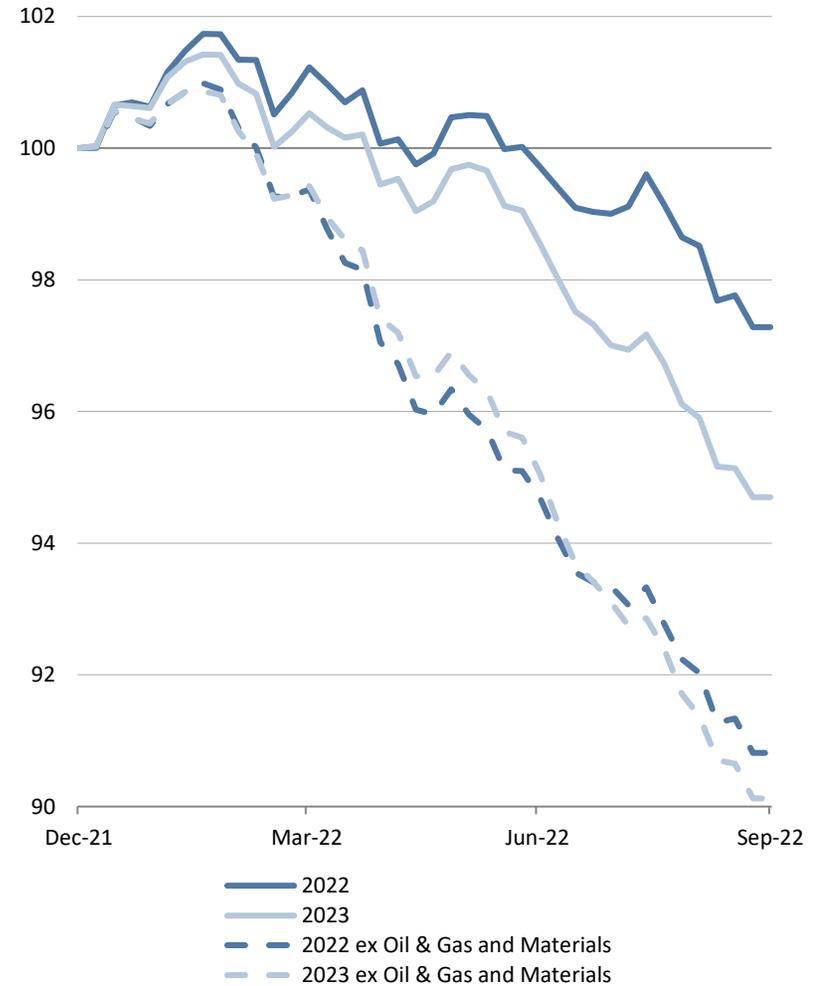
FY EPS GROWTH ESTIMATES BY REGION

As of September 30, 2022 • Percent (%)



MSCI ACWI EARNINGS GROWTH EXPECTATIONS

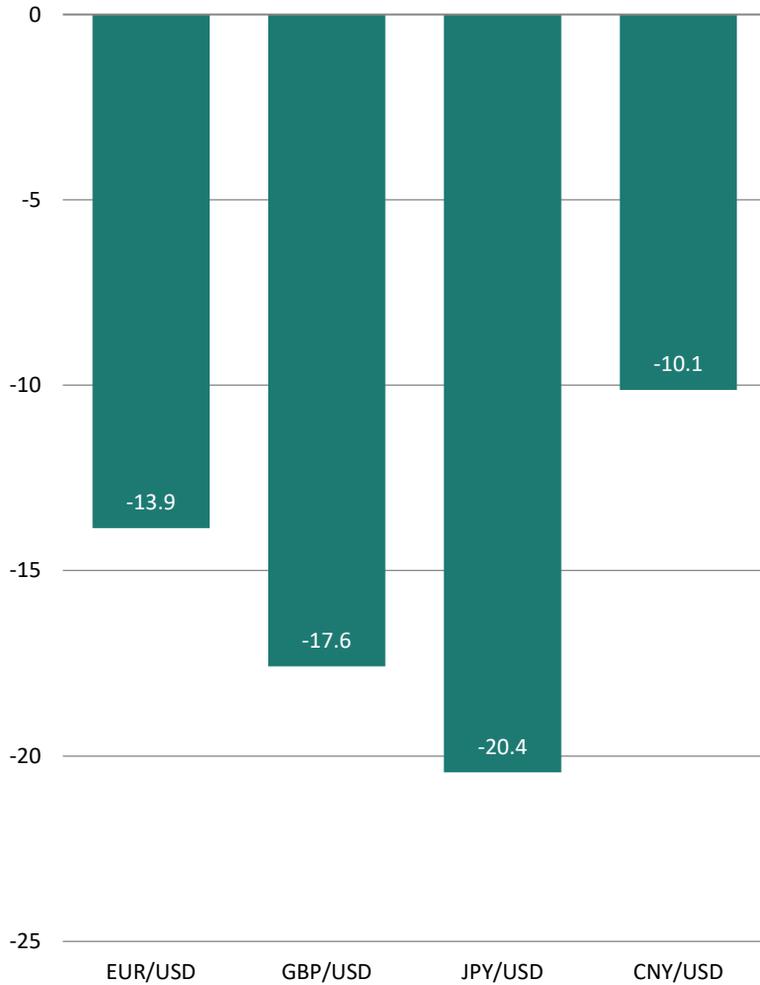
December 31, 2021 – September 30, 2022 • December 31, 2021 = 100



Dollar strength has dragged down the rest of the world's currencies

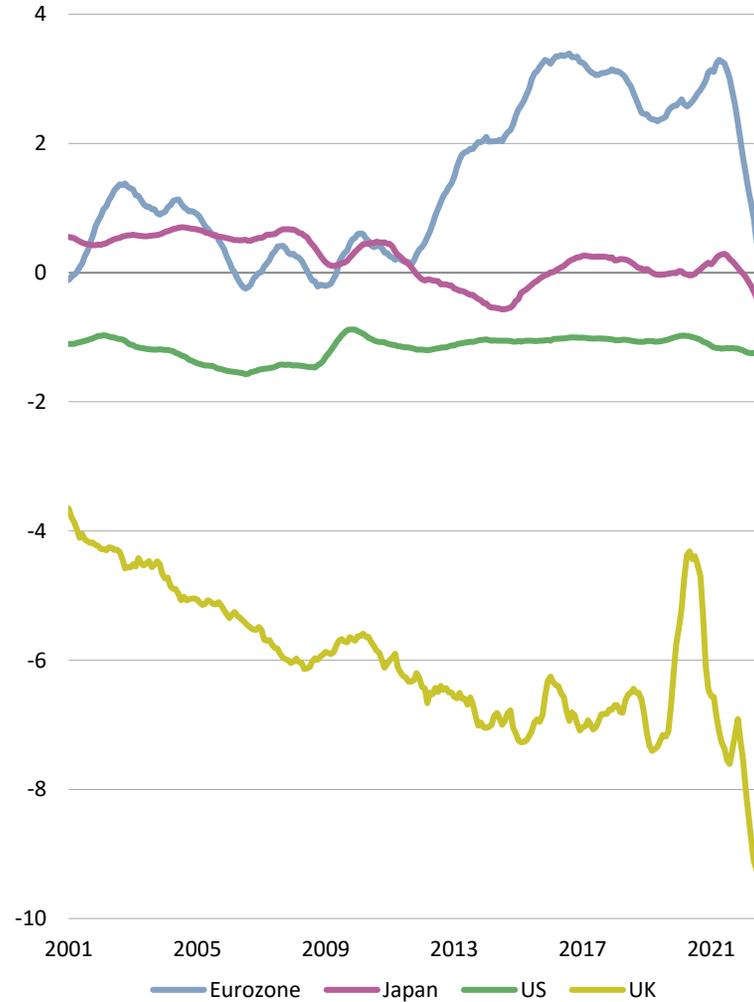
YTD SELECT GLOBAL CURRENCY RETURNS

As of September 30, 2022 • Percent (%)



GOODS TRADE BALANCE

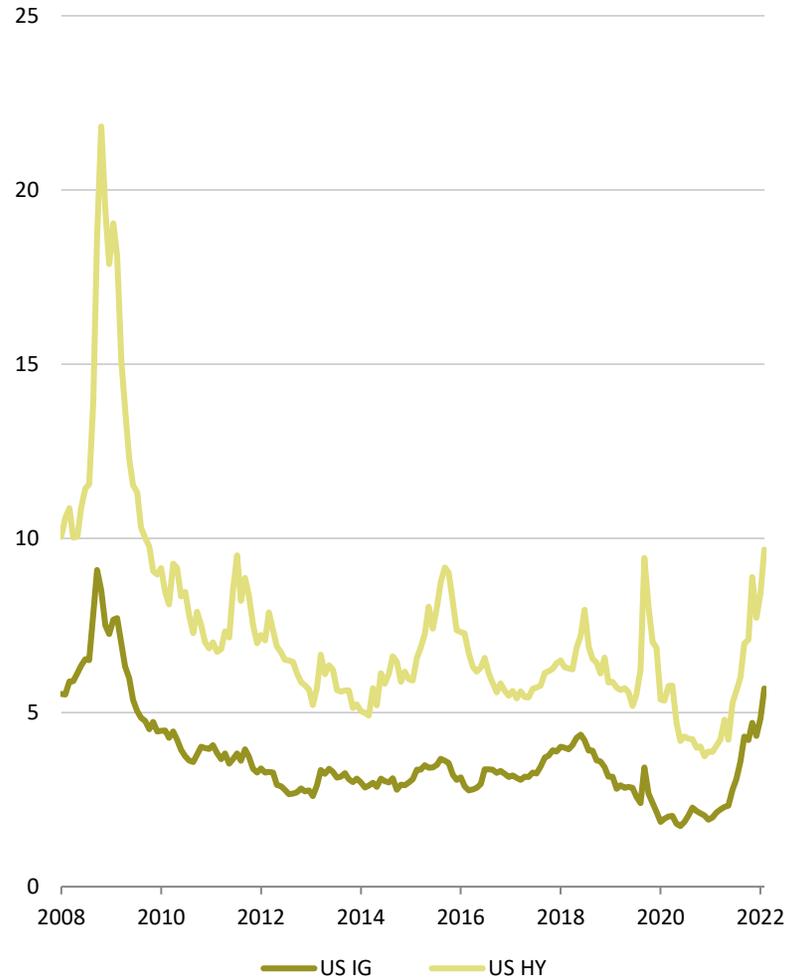
February 28, 2001 – July 31, 2022 • Percent of GDP (%)



Credit yields are at cyclical peaks with all eyes on potential defaults

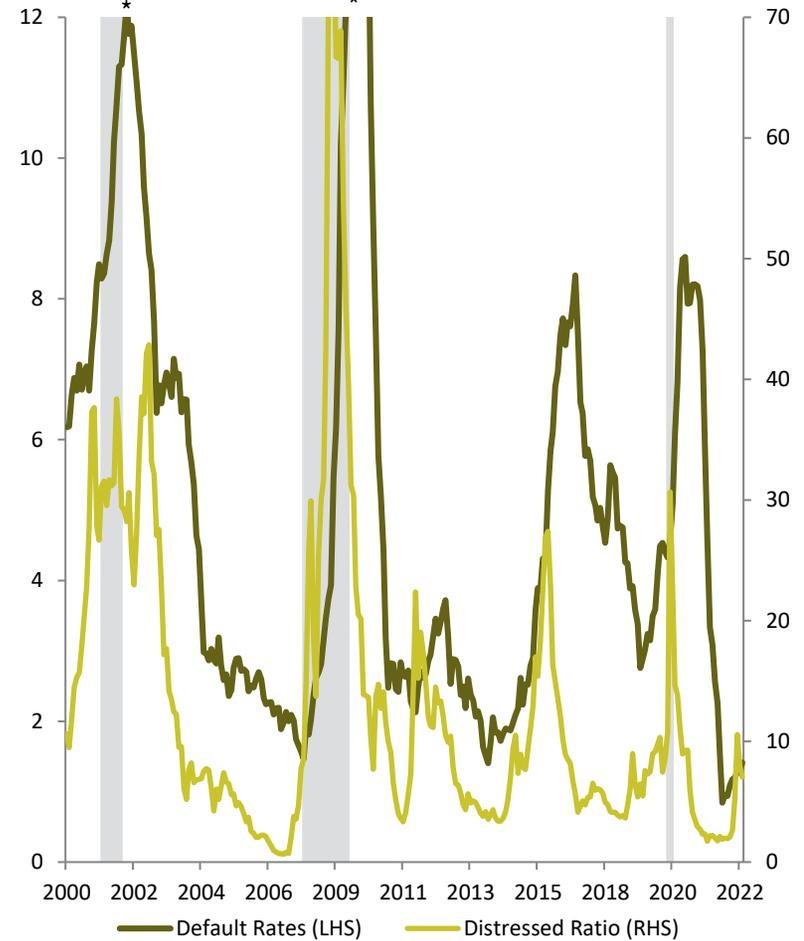
US IG AND US HY BOND YIELDS OVER TIME

January 31, 2008 – September 30, 2022 • Percent (%) • Yield-to-Worst



US HIGH-YIELD BOND DEFAULT RATES AND DISTRESSED RATIO

January 31, 2000 – August 31, 2022 • Percent (%)



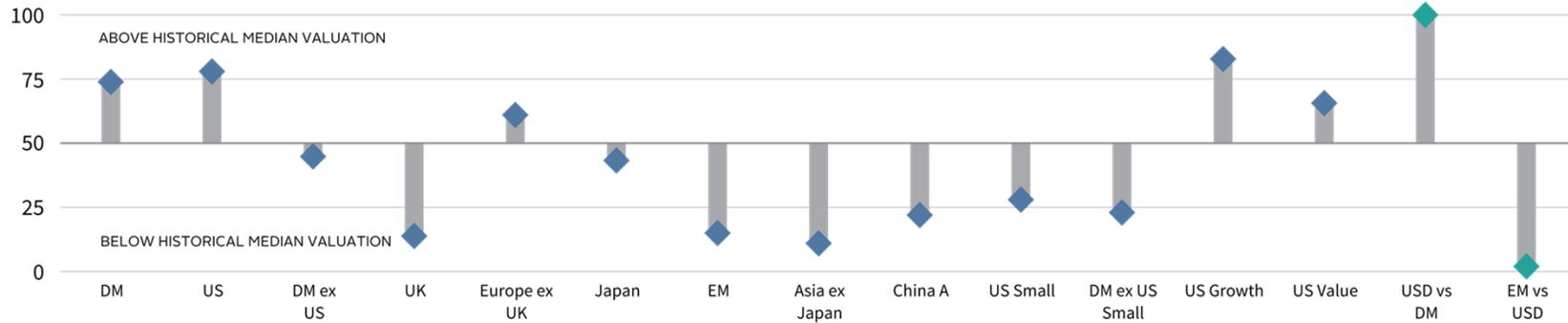
* Y-axis are capped for scaling purposes. The default rates reached 12.2% on January 31, 2002, and 15.6% on November 30, 2009. The distress ratio reached 85.7% on November 30, 2008.

Cambridge Associates Current Valuations Summary

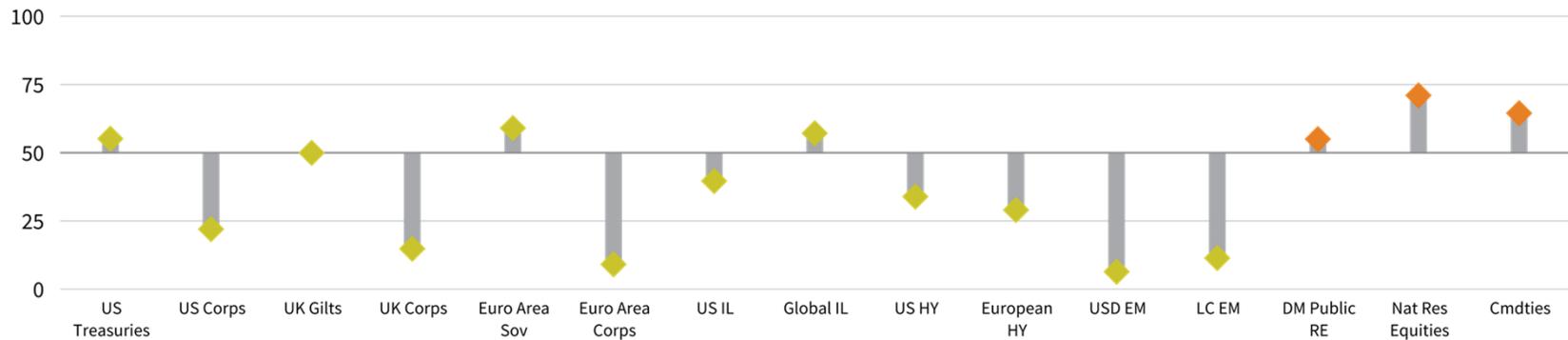
CURRENT VALUATION LEVELS OF VARIOUS ASSET CLASSES

As of September 30, 2022 • Percentile

Equities



Fixed Income



Source: Cambridge Associates LLC.

Notes: This exhibit compares current valuation levels to historical levels across a variety of asset classes. A percentile rank of 50 indicates that an asset class's current valuation level is consistent with its long-term median, while a percentile rank of 75 indicates that level is higher than 75% of historical data. The valuation level for each asset class is determined by a metric or composite of metrics relevant to that asset class.

PERFORMANCE REVIEW

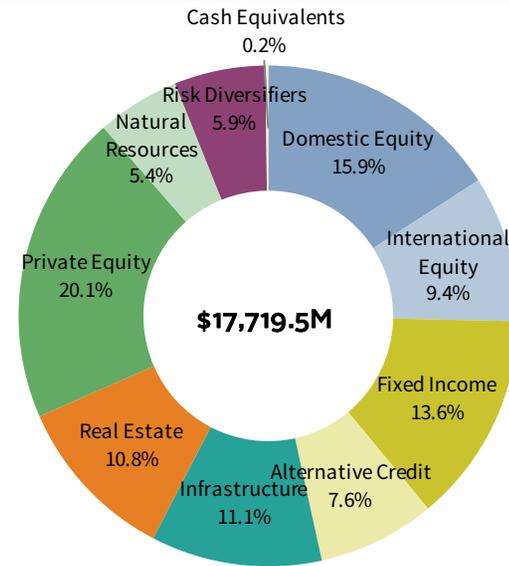


MainePERS Allocation Snapshot

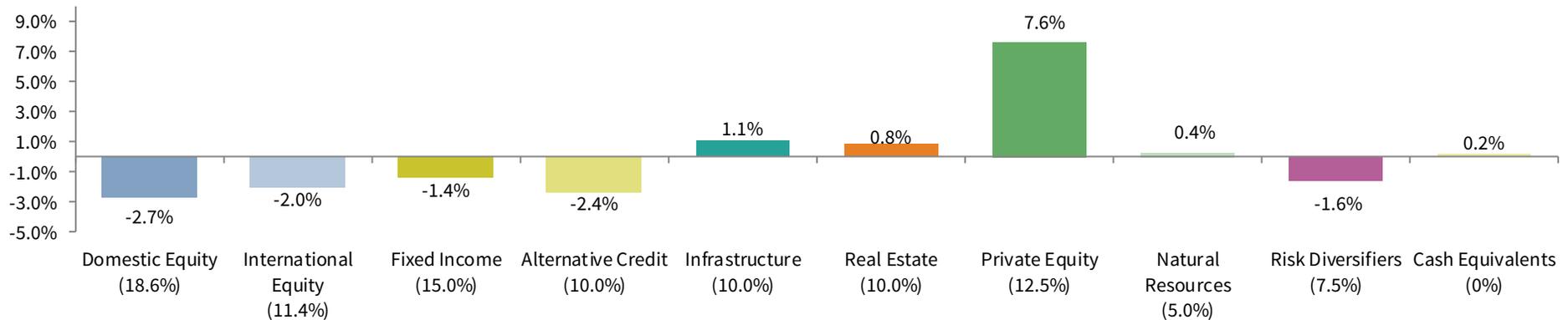
As of September 30, 2022

Asset Allocation (\$ Millions)

Asset Class	\$(M)	%
Domestic Equity	2,816.9	15.9
International Equity	1,672.7	9.4
Fixed Income	2,414.3	13.6
Alternative Credit	1,346.5	7.6
Infrastructure	1,959.3	11.1
Real Estate	1,917.0	10.8
Private Equity	3,562.7	20.1
Natural Resources	951.0	5.4
Risk Diversifiers	1,048.6	5.9
Cash Equivalents	30.7	0.2
Total	\$17,719.5	100.0%



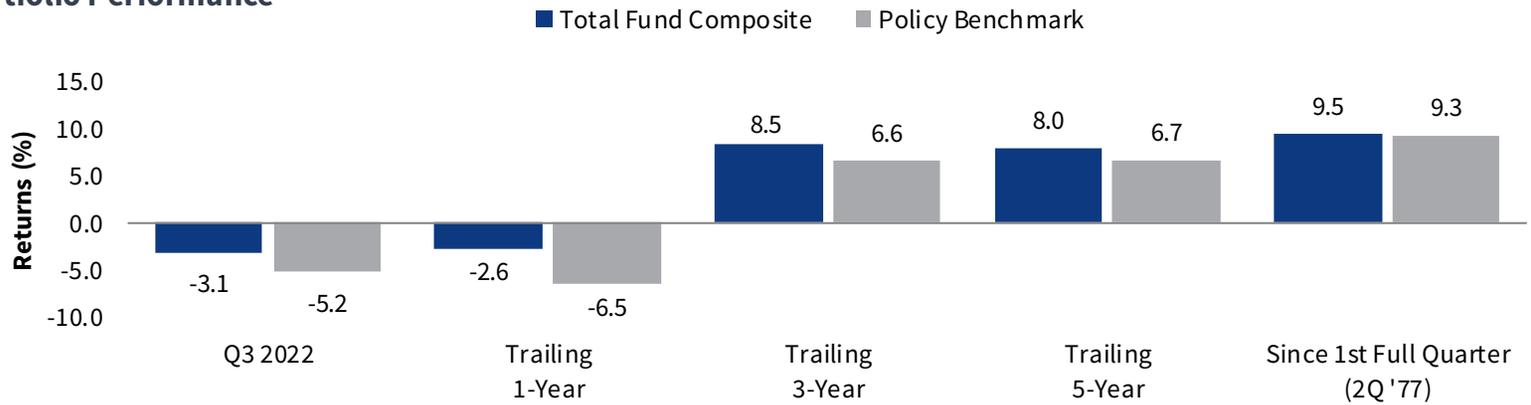
Relative Weights vs. Policy Targets



MainePERS Performance Summary

As of September 30, 2022

Total Portfolio Performance



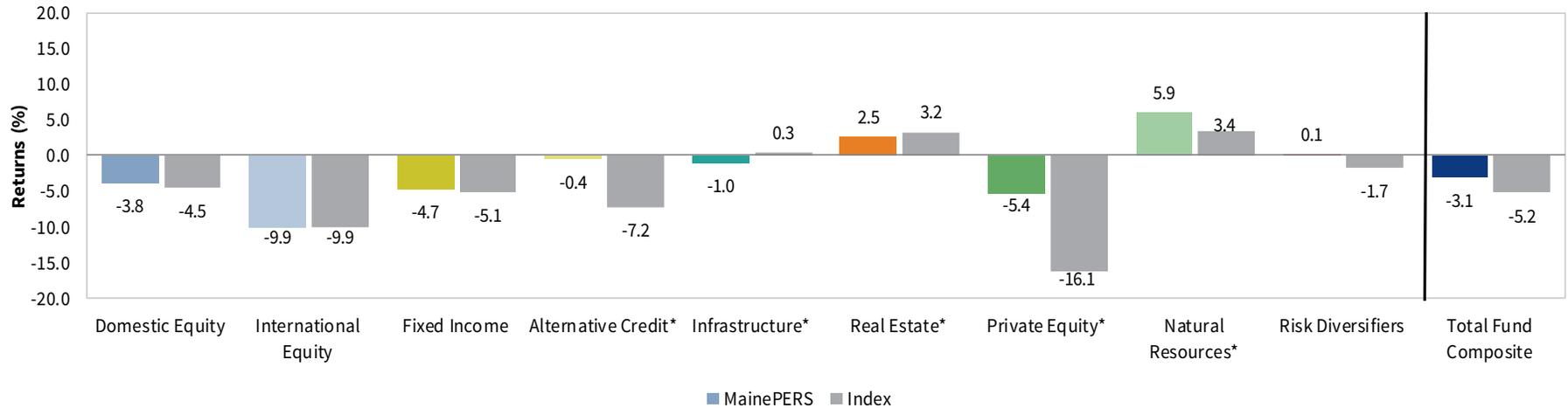
	Q3 2022	Trailing 1-Year	Trailing 3-Year	Trailing 5-Year	Since 1st Full Quarter (2Q '77)
Total Fund Composite	(3.1)	(2.6)	8.5	8.0	9.5
Policy Benchmark	(5.2)	(6.5)	6.6	6.7	9.3
<i>Value Added</i>	2.1	3.8	1.9	1.3	0.1

MainePERS Asset Class Performance

As of September 30, 2022

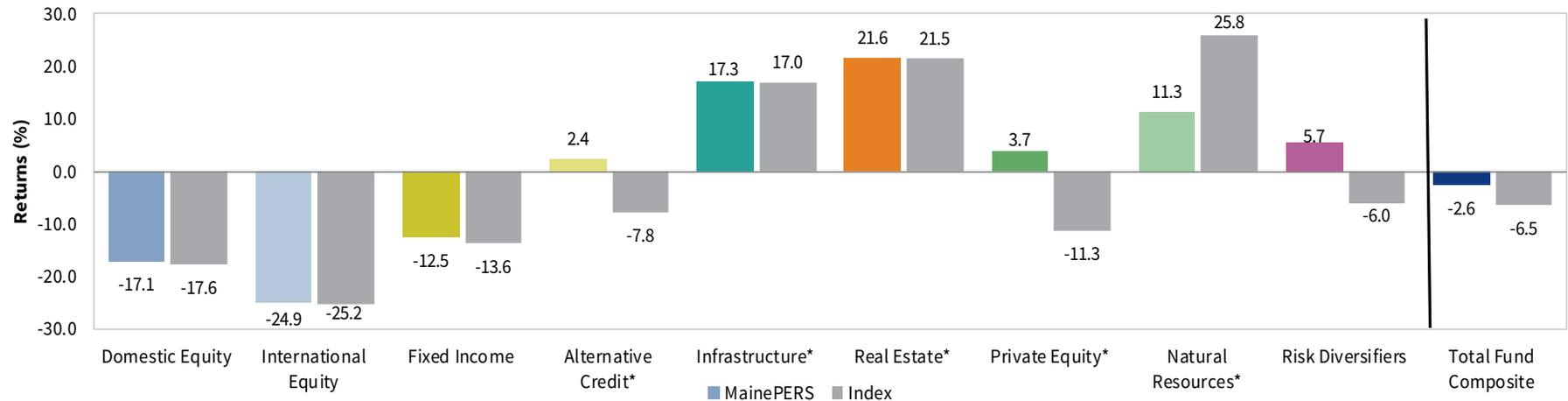
Quarter-to-Date

July 1, 2022 - September 30, 2022



Trailing 1-Year

October 1, 2021 - September 30, 2022



Notes: Asset class benchmarks (from left to right): Index returns for Infrastructure, Real Estate, and Natural Resources are reported on a quarterly basis. Returns reported by J.P. Morgan, except for Infrastructure and Real Estate indices, which are reported by Cambridge Associates on a quarter lag. Returns for CA Real Estate and Infrastructure indices are preliminary, and subject to adjustment.

*Performance is reported on a quarter lag, as June 30, 2022.

Asset Class Benchmarks

Asset Class	Benchmark	Long-Term Target
	Russell 3000 ¹	18.6%
	MSCI ACWI ex US ²	11.4%
Public Equity	Total Public Equity	30.0%
Private Equity	Russell 3000 + 3% per annum (1 qtr lag)	12.5%
Risk Diversifiers	0.3 Beta MSCI ACWI ³	7.5%
Real Estate	NCREIF Property (1 qtr lag)	10.0%
Infrastructure	Cambridge Associates Infrastructure Median (1 qtr lag)	10.0%
Natural Resources	Cambridge Associates Natural Resources Median (1 qtr lag)	5.0%
Traditional Credit	Barclays US Agg ex Treasury	5.0%
Alternative Credit	50% BAML US HY II + 50% S&P/LSTA US Leveraged Loan Index (1 qtr lag) ⁴	10.0%
US Govt Treasuries	Custom Fixed Income ⁵	10.0%
Total		100.0%

1. Russell 3000 weight is based upon the MSCI ACWI weighting for US

2. MSCI ACWI ex US weight is based upon the MSCI ACWI weighting for International

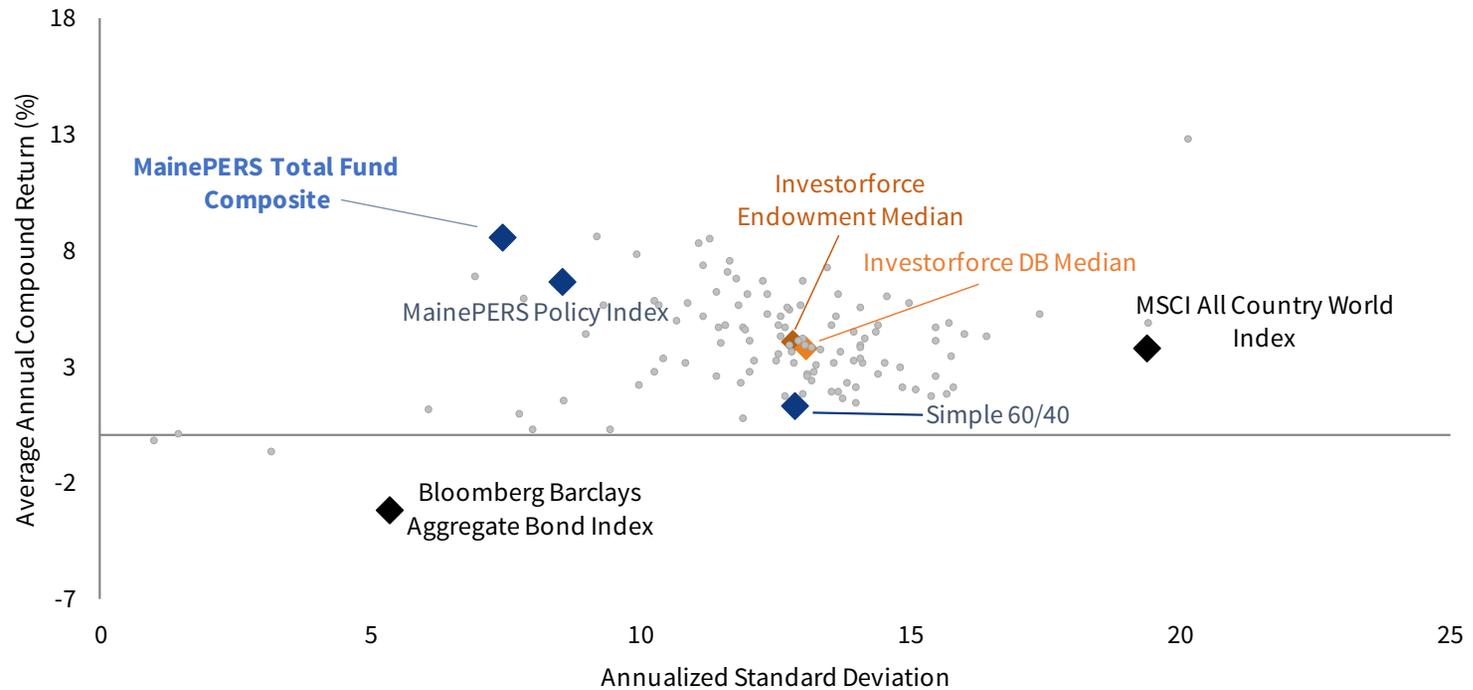
3. 91-day T-bill + 0.3(MSCI ACWI Return – 91-day T-bill)

4. 50% Bank of America US High Yield II + 50% S&P/Loan Syndications & Trading Association US Leveraged Loan Index

5. 65% 0-5 Year TIPS / 35% US TIPS Fund

MainePERS Risk/Return – 3 Years

As of September 30, 2022



	Average Annual Compound Return	Annualized Standard Deviation	Sharpe Ratio ¹	Beta vs. MSCI ACWI
MainePERS - Total Fund Composite	8.5	7.4	1.1	0.32
MainePERS - Policy Index	6.6	8.6	0.7	0.34
Simple 60/40	1.3	12.9	0.1	0.66
Investorforce Public DB Plan Median	3.8	13.1	0.2	---
Investorforce Endowment Median	4.0	12.8	0.3	---
Indices				
MSCI All Country World Index (Net)	3.7	19.4	0.2	--
Bloomberg Barclays Aggregate Bond Index	-3.3	5.4	-0.7	0.15



Note: Calculations are based on monthly data, net of fees.

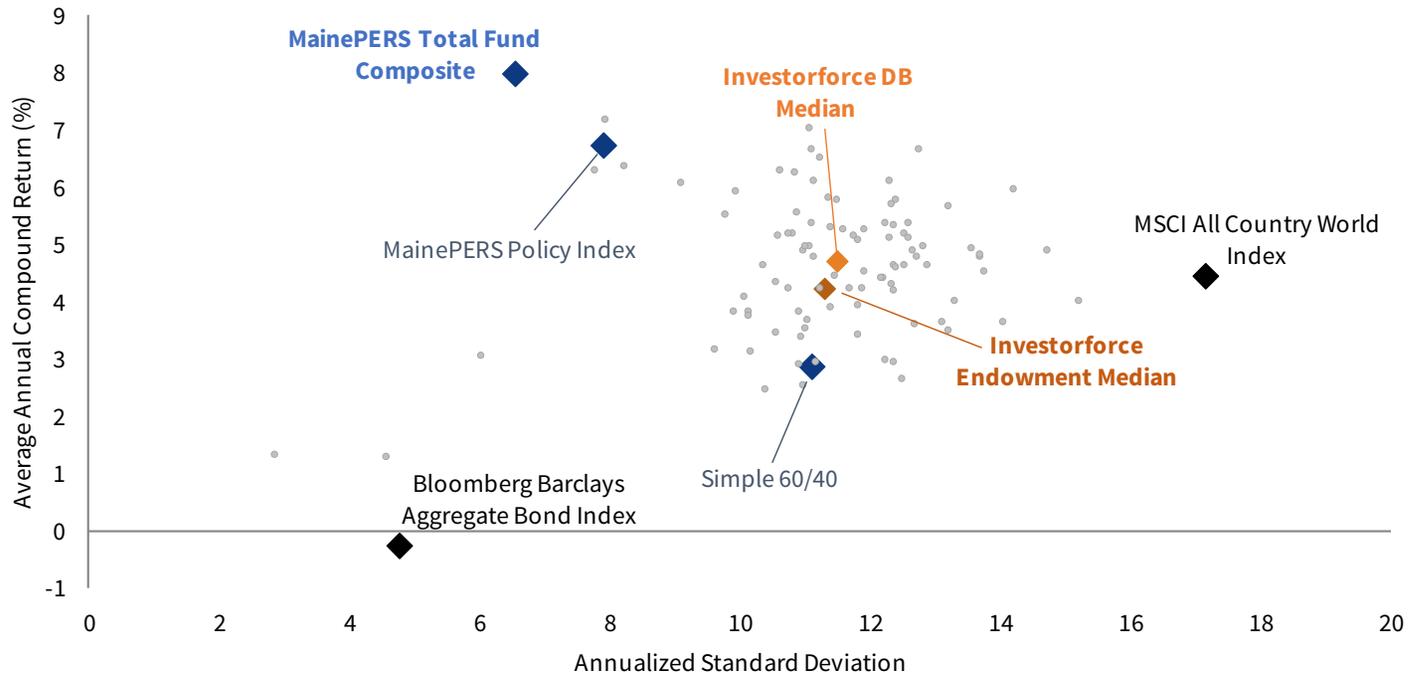
¹The Sharpe Ratio represents the excess return generated for each unit of risk. To calculate this number, subtract the average T-Bill return (risk-free return) from the manager's average return, then divide by the manager's standard deviation. The Investor Force data uses the median return and standard deviations are based on monthly data, net of fees.

² Simple 60/40 is 60% MSCI ACWI and 40% BC Aggregate US Bond Index.

³ Net Investor Force Median data reflects median of 3-year returns and the standard deviations as reported by institutions with over \$100m in assets to Investor Force.

MainePERS Risk/Return – 5 Years

As of September 30, 2022



	Average Annual Compound Return	Annualized Standard Deviation	Sharpe Ratio ¹	Beta vs. MSCI ACWI
MainePERS - Total Fund Composite	8.0	6.5	1.1	0.32
MainePERS - Policy Index	6.7	7.9	0.7	0.38
Simple 60/40	2.9	11.1	0.2	0.64
Investorforce Public DB Plan Median	4.7	11.5	0.3	---
Investorforce Endowment Median	4.2	11.3	0.3	---
Indices				
MSCI All Country World Index (Net)	4.4	17.2	0.2	--
Bloomberg Barclays Aggregate Bond Index	-0.3	4.8	-0.3	0.10



Note: Calculations are based on monthly data, net of fees.

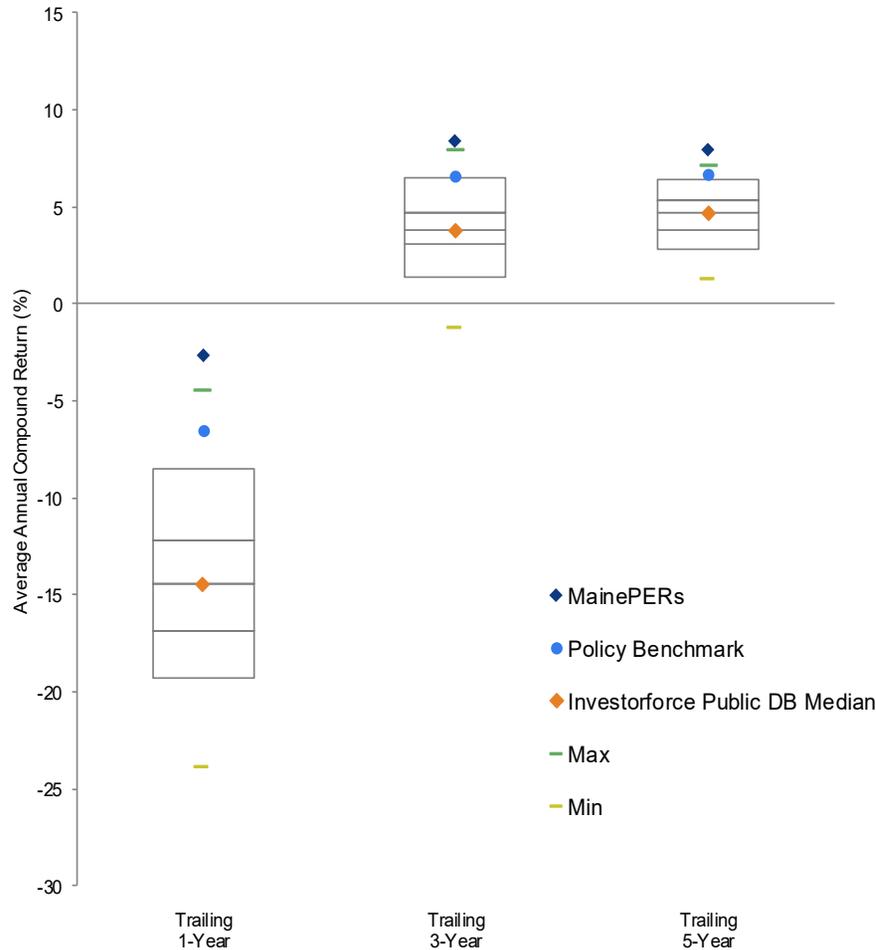
¹The Sharpe Ratio represents the excess return generated for each unit of risk. To calculate this number, subtract the average T-Bill return (risk-free return) from the manager's average return, then divide by the manager's standard deviation. The Investor Force data uses the median return and standard deviations are based on monthly data, net of fees.

² Simple 60/40 is 60% MSCI ACWI and 40% BC Aggregate US Bond Index.

³ Net Investor Force Median data reflects median of 5-year returns and the standard deviations as reported by institutions with over \$100m in assets to Investor Force.

MainePERS vs. Defined Benefit Peers

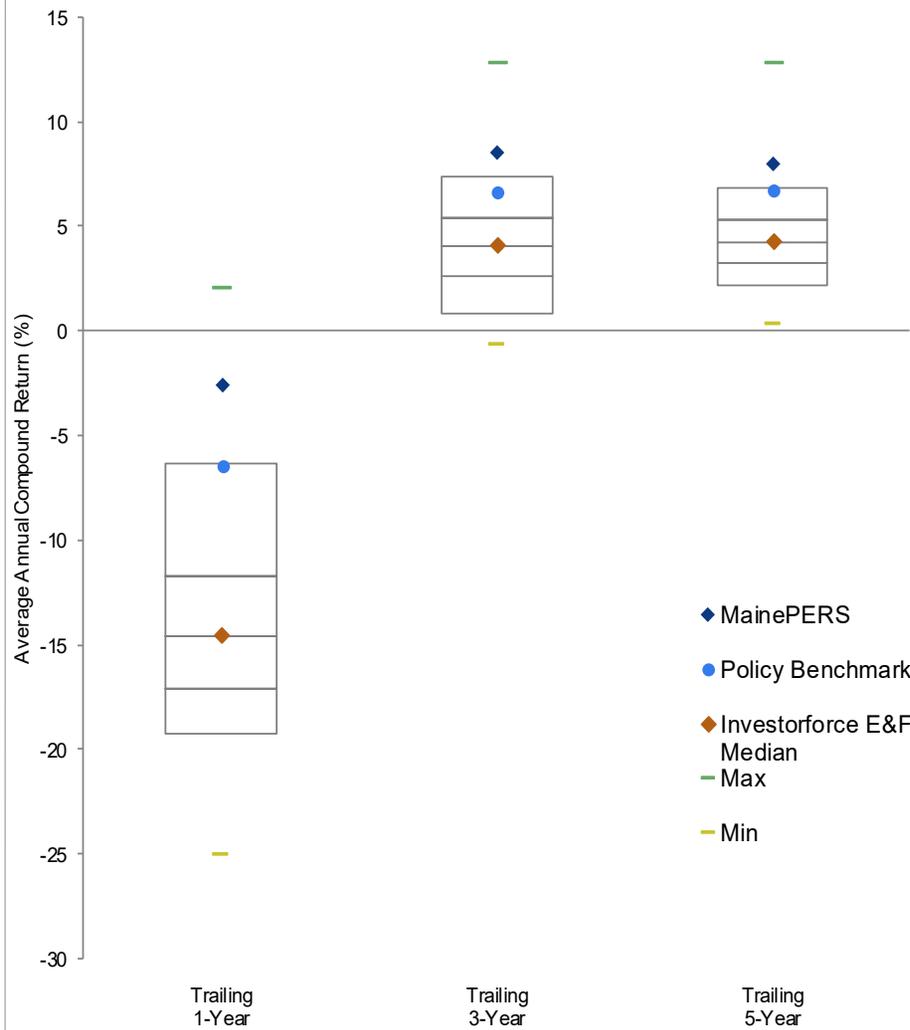
As of September 30, 2022



	<u>One Year</u>	<u>Three Year</u>	<u>Five Year</u>
MainePERS	-2.6	8.5	8.0
Policy Benchmark	-6.5	6.6	6.7
Max	-4.5	8.0	7.2
5th Percentile	-8.5	6.5	6.4
25th Percentile	-12.2	4.7	5.3
Investorforce Public DB Median	-14.4	3.8	4.7
75th Percentile	-16.8	3.1	3.8
95th Percentile	-19.2	1.4	2.8
Min	-23.9	-1.2	1.3
Sample Size			
<i>n</i>	100	99	94

MainePERS vs. E&F Peers

As of September 30, 2022



	One Year	Three Year	Five Year
MainePERS	-2.6	8.5	8.0
Policy Benchmark	-6.5	6.6	6.7
Max	2.0	12.7	12.7
5th Percentile	-6.3	7.4	6.8
25th Percentile	-11.7	5.4	5.3
Investorforce E&F Median	-14.6	4.0	4.2
75th Percentile	-17.1	2.6	3.3
95th Percentile	-19.2	0.8	2.2
Min	-25.1	-0.7	0.3
Sample Size <i>n</i>	119	113	108

	One Year	Three Year	Five Year
MainePERS	-2.6	8.5	8.0
Policy Benchmark	-6.5	6.6	6.7
Max	2.0	12.7	12.7
5th Percentile	-6.3	7.4	6.8
25th Percentile	-11.7	5.4	5.3
Investorforce E&F Median	-14.6	4.0	4.2
75th Percentile	-17.1	2.6	3.3
95th Percentile	-19.2	0.8	2.2
Min	-25.1	-0.7	0.3
Sample Size <i>n</i>	119	113	108

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Standard & Poor's

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MAINEPERS

BOARD OF TRUSTEES GOVERNANCE MEMORANDUM

TO: BOARD MEMBERS
FROM: MICHAEL COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL
SUBJECT: BOARD POLICY REVIEW
DATE: NOVEMBER 2, 2022

We have adopted a process of reviewing each Board Policy at least every three years and revising and updating as needed. This year we have reviewed ten policies and recommend substantive amendments to three of the policies, which are summarized below and reflected in the attached. Board Policy 4.3 – Monitoring Executive Director Performance also is up for review and will be brought before the Board next month.

In October of 2018, the Board authorized the Executive Director to make non-substantive changes to Board Policies without further Board approval. Non-substantive changes, primarily changing “Executive Director” to “Chief Executive Officer,” also are reflected in the attached.

POLICY REFERENCE

[Board Policy 1.1 – Governance Principles and Commitment](#)

[Board Policy 1.4 – Trustee Responsibilities and Position Description](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

POLICIES REVIEWED AND RECOMMENDED AMENDMENTS

- 1.2 Trustee Fiduciary Responsibility
 - No substantive changes
- 1.3 Standards of Conduct
 - Change the annual conflict of interest submission process to reflect outsourcing of the internal audit function

1.5 Board Officer Elections and Position Descriptions

- No changes

3.1 Reporting

- Update list of required reports

3.2 Legislation

- No substantive changes

4.1 Coordination of Control

- No substantive changes

4.2 Executive Director Accountability

- No substantive changes

4.4 Board / Consultants / Staff Relations

- Revise consultant interview process

4.5 Board / Staff Relations

- No substantive changes

4.6 Communication and Support to the Board

- No substantive changes

RECOMMENDATION

That the Board approve amended Board Policies 1.3, 3.1, and 4.4.

Attachments

Board Governance

1.2 – Trustee Fiduciary Responsibility

Date Adopted: June 9, 2012

Date Amended: December 13, 2012; June 13, 2013; October 13, 2016

Policy

The Trustees of the System, both collectively as the Board of Trustees and individually, have a fiduciary duty imposed by the Constitution of Maine, Maine State statutes, and common law. The members of the Board of Trustees are trustees of the funds of the System and have a fiduciary obligation to administer the System and the funds under the System's control solely in the interest of the members as beneficiaries of pension and related benefits.

It is the obligation of every Trustee to conduct herself or himself in a manner that promotes public confidence in the integrity, impartiality, professionalism and ethical behavior of the System in its relations with retirees, beneficiaries, members, employers, the public, staff and outside providers of goods and services.

Nothing in this policy shall excuse any Trustee from any other restrictions or requirements of State or federal law concerning conflicts of interest and fiduciary duties.

Statutory/Legal Provisions

- [Me. Const. art. IX, § 18.](#)
- [5 M.R.S. §§ 17102, 17103, 17435; 18-B M.R.S. § 801, et seq.](#) (Maine Uniform Trust Code); [18-B M.R.S. § 901, et seq.](#) (Maine Uniform Prudent Investor Act).
- [5 M.R.S. §§ 17153\(4\).](#)
- Restatement (Third) of Trusts § 78(1) (2007) (the “sole interest rule”).
- The Employee Retirement Income Security Act (“ERISA”), codified at [29 U.S.C. § 1002, et seq.](#), provides a description of the standard of care that applies to trustees of private sector retirement plans. Although the System as a public retirement plan is not specifically governed by the fiduciary duty standard set forth in ERISA, courts will often consider the standard set forth in ERISA when addressing public pension plan issues. Under ERISA, a fiduciary must act with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person (expert) acting in a like capacity would act. This statutory standard is derived from the common law of trusts, which is applicable in the State of Maine.

Statement of Fiduciary Standards

All MainePERS Trustees shall adhere to this list of fiduciary standards:

- A fiduciary relationship is one founded on trust or confidence under circumstances where one person relies upon the integrity and fidelity of another;
- A Trustee of the System has a fiduciary duty to act in the best interests of the members as beneficiaries of the pension plans and related benefits administered by the System;
- As a fiduciary, a Trustee must discharge duties with respect to the trust for the exclusive benefit of the member or participant and beneficiaries of the trust;

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- A Trustee has the duty of undivided loyalty to the members and beneficiaries;
- A Trustee must administer the trust solely for the benefit of the members, participants and beneficiaries. Trustee self-dealing is illegal under the laws of the State of Maine;
- A Trustee cannot take advantage of the trust position for personal gain;
- Scrupulous good faith, complete fairness, the highest standard of honesty and candor are always required of a Trustee; and
- A Trustee is not expected or required to be an expert in all matters under the Trustee's ultimate control. If a fiduciary lacks the expertise in a certain area, then the fiduciary must delegate responsibilities to an expert which has been prudently hired and responsibly monitored and evaluated. Trustees are entitled, and in some instances obligated, to rely upon such experts.

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Board Governance

1.3 – Standards of Conduct

Date Adopted: January 14, 1999

Date Amended: September 14, 2006; June 13, 2013; March 13, 2015; October 13, 2016; November 14, 2019; [November 10, 2022](#)

Policy

Trustees shall conduct themselves in a manner that promotes public confidence in the integrity, impartiality, professionalism and ethical behavior of the System in its relations with retirees, beneficiaries, members, employers, the public, staff and outside providers of goods and services. Conflict of interest guidelines and candid disclosure protect the System and Trustees when transactions or arrangements are contemplated that might benefit, or appear to benefit the private interest of anyone covered by this policy. These guidelines are intended to supplement but not replace any applicable state and federal laws governing conflict of interest or professional association codes of conduct (e.g., CFA Code of Ethics) applicable to System business. To the extent there are differences between these standards and state and federal law, the more restrictive guidelines shall apply.

Statutory/Legal Provisions

- [Me. Const. art. IX, § 18](#) (“All of the assets, and income therefrom, of the [Maine Public Employees Retirement System] ... shall be held, invested or disbursed as in trust for the exclusive purpose of providing for [retirement and related] benefits and shall not be encumbered for, or diverted to, any other purpose.”)
- [5 M.R.S. §§ 17102](#) and [17103](#); [18-B M.R.S. § 801](#), *et seq.* (Maine Uniform Trust Code); [18-B M.R.S. § 901](#), *et seq.* (Maine Uniform Prudent Investor Act).
- [5 M.R.S. § 17153\(4\)](#).
- [Restatement \(Third\) of Trusts § 78\(1\)](#) (2007) (the “sole interest rule”).

Standards of Conduct

Trustees shall conduct all System business in a fair and reasonable manner for the sole benefit of the members, participants and beneficiaries and consistent with all other governance policies. In addition, Trustees shall avoid any activity which may result in, be interpreted as, or give the appearance of, a conflict of interest, including but not limited to:

Engaging in Related Transactions

Trustees shall not:

- Participate in securities privately offered for sale by an issuer in whose securities the System has or is considering obtaining an interest until such securities are available to the general public;
- Engage in financial and business dealings for personal gain while serving as a Trustee with any vendor with whom the System does business or who is exploring engagement

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by the System. The System shall maintain procurement terms that restrict vendors from engaging in financial or business dealings with a Trustee (or a former Trustee within two years after leaving the Board) if the Trustee had participated in or influenced a decision to award a contract to the vendor;

- Engage in personal investments or business transactions, including investments in otherwise permissible investments, that result from specific knowledge acquired in conducting System business unless the same information could be gained through independent channels available to the general public;
- Become an endorser, surety or obligor for money loaned to or borrowed from the System except when duly authorized and acting on behalf of the System in said capacity.

Accepting Contributions, Gifts, and Honorariums

Trustees shall not:

- Solicit or accept political contributions from current or prospective individuals, groups or organizations that provide professional services or profit directly or indirectly from the System.
- Solicit or accept, directly or indirectly, anything of economic value as a gift, gratuity or favor from sources associated with the System such as consultants, advisors, service providers, vendors or prospective vendors of the System if that gift, gratuity or favor would 1) influence a vote, action or judgment; or 2) be considered as part of a reward for action or inaction. A gift is any gratuity, discount, entertainment, hospitality, loan, forgiven debt, or other tangible or intangible item having monetary value greater than \$50. A gift includes, but is not limited to 1) cash 2) food and beverages and 3) honoraria and travel expenses for engagements for the purpose of influence. A gift does not include food or beverages provided in connection with a business meeting, educational seminar, conference or convention, nor personal gifts from family or friends that are clearly not intended to influence Trustee decisions.
- Accept a speaking engagement, attend a partnership meeting, speak on behalf of the Board, or attend a conference without prior approval of the Board Chair.
- Accept honorariums, hosted meals, or reimbursement of or payment for travel expenses unless the source of the honorarium, hosted meals, or reimbursement of or payment for travel does not seek to provide, or continue to provide, goods or services to MainePERS.

Inappropriate Use of Position

Trustees shall not:

- Use confidential information for purposes other than Board or System purposes;
- Disclose confidential information except as required by law, including the Freedom of Access law, as determined by Board and System counsel;
- Divulge System, proprietary, or investment information in advance of the scheduled date for issuance of that information;
- Represent or imply that they are speaking or acting on behalf of the Board or System without specific Board approval;
- Use their position to attempt to obtain private gain or advantage for themselves or other persons;

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- Use their position to obtain gain or influence for a person or entity seeking to do business with the System.

Conflict of Interest Resolution

Trustees shall seek information and advice from the Board Chair or Chief Executive Officer~~Director~~ before entering into any activity or transaction that may create an actual or appearance of a conflict of interest. If any Trustee or staff member has reasonable cause to believe an actual or possible conflict of interest has not been disclosed, he or she shall contact the Board Chair or Chief Executive Officer~~Director~~.

The Chief Executive Officer~~Director~~, or, in the Chief Executive Officer~~Director~~'s absence, the Chief Operating Officer and General Counsel, shall review each reported conflict or potential conflict unless such conflicts involve one of them. In such cases the matter shall be referred to the Board Chair for review. The Chief Executive Officer~~Director~~ or Chief Operating Officer and General Counsel shall either provide guidance to the individual with the actual, potential, or appearance of a conflict of interest or refer the matter to the Board Chair for review and guidance. If the individual does not agree with the guidance, the matter will be referred to the Board of Trustees for resolution.

Reporting Requirements

Trustees shall report annually on activities or absence of activities that create an actual, potential or appearance of a conflict of interest, including:

- Submitting a signed statement to the Chief Operating Officer and General Counsel~~Internal Auditor~~ by December 31 of each year verifying that the Trustee has received a copy of this policy and has read and understands it. The Trustee's signature shall confirm that the Trustee agrees to comply with the policy, acknowledging that the System is a quasi-government entity in the State of Maine subject to both laws and public expectations of transparency. Trustees shall list any gifts and contributions requiring disclosure; and
- Submitting a statement to the Chief Operating Officer and General Counsel~~Internal Auditor~~ by December 31 of each year that lists all personal financial interests in which the System also holds an interest, excluding Permissible Investments. Permissible Investments are any mutual fund; exchange traded fund (ETF) or similar type fund; deposit account, certificate of deposit, or money market fund maintained with a bank, broker, or other financial institution; any publicly-traded security whose issuer has a market capitalization greater than \$2 billion; or any interest in real estate (including a real estate mortgage), hedge funds or private partnerships unless such interest involves a transaction with a party who has a contractual, investment, or other financial relationship with the System or a Trustees.

The Chief Operating Officer and General Counsel~~Internal Auditor~~ shall report conflicts to the Board Chair of the Finance and Audit Committee and to the Chief Executive Officer~~Director~~ upon receipt.

Board Governance

Policy 1.3 – Attachment 1 – Conflict of Interest Statements

Date Adopted: June 13, 2013

Date Amended: October 13, 2016

MainePERS Conflict of Interest Statement

I have received a copy of, have read, and understand Board Policy 1.3 – Standards of Conduct. I acknowledge that the System is a quasi-government entity in the State of Maine subject to both laws and public expectations of transparency. I agree to comply with all parts of the policy and the policy as a whole. I have not solicited or received gifts in excess of the stated limits nor solicited or accepted political contributions which would violate this policy. I have listed below all gifts and contributions received and personal financial interests that would constitute the appearance of or an actual conflict of interest excluding Permissible Investments as defined in the above-referenced Board policy.

Signature

Date

Print Name

Investment, Gift, or Contribution	Date	Explanation

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Board Governance

1.5 – MainePERS Board Officer Elections and Position Descriptions

Date Adopted: September 13, 2012

Date Amended: November 13, 2014; October 13, 2016

Policy

The Board of Trustees (Board) shall annually elect a Chair from the Trustees to serve as the primary representative of the Board in all Board matters. The Board shall also elect a Vice-Chair from the Trustees to fulfill the Chair's responsibilities in the absence of or through delegation by the Chair. The Chair and Vice Chair are the Board Officers and fulfill the duties contained in the Board Officer descriptions adopted by the Board of Trustees (See Attachment 1 and Attachment 2).

Statutory/Legal Provisions

- [5 M.R.S. §§ 17102](#) and [17103](#).

Election Process

The Board of Trustees will annually elect the Chair using the following process:

- Trustees nominate candidates for Chair at the November Board of Trustees meeting. Trustees may nominate themselves or other Trustees;
- The Board Secretary will place nominated candidate names for Chair on a paper ballot and provide one ballot to each Trustee who is physically present at the meeting;
- Those Trustees each vote for one candidate and return their ballot to the Board Secretary;
- A candidate must receive at least five votes to be elected Chair; and
- The Board Secretary counts the ballots and announces the name of the candidate receiving at least five votes. If no one has five votes, the Board Secretary announces the names of the two candidates with the highest number of votes (or more than two candidates if required by a tie), prepares a new ballot with the names of those candidates, and the process is repeated until one candidate receives at least five votes.
- The Board Chair may dispense with the above secret ballot process and conduct a voice vote if there is only one nomination.

After the Chair has been elected, the Board of Trustees will annually elect the Vice-Chair using the same process.

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Seating Board Officers

The Chair and Vice-Chair begin their one year terms in the month immediately following their election. If the Chair leaves the Board before the end of the Chair's term, the Vice-Chair assumes the position of Chair *pro tem* and mid-term elections for both the Chair and Vice-Chair are held using the election process above for the remainder of the term. If the Vice-Chair leaves the Board before the end of the Vice-Chair's term, the election process is used to fill the position until the next annual election.

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MainePERS Board of Trustees

Board Governance

Policy 1.5 – Attachment 1 - Board Chair Position Description

Date Adopted: September 13, 2012

Date Amended: November 13, 2014; October 13, 2016; November 10, 2022

The Maine PERS Board Chair holds a position of leadership and must be able to devote the necessary time to fulfill the commitment. The purpose of the Board Chair Position Description is:

- To detail the functions of the Board Chair;
- To express the Trustees' expectations and codify the authority they are voluntarily giving to the Board Chair; and
- To outline the expertise and time commitment required so that Trustees that are interested in being Board Chair will understand the expectations of the position.

The Board Chair serves for a term of one-year. In addition to the regular duties and responsibilities inherent in the position of a Trustee, the Board Chair is responsible for:

- Meeting with the Chief Executive Officer~~Director~~ to review the meeting agendas and written materials to ensure the proper flow of information to Trustees;
- Presiding over Board meetings to ensure that they are orderly and bringing discussion items to closure with clear direction to staff for follow-on actions;
- Appointing Trustees (or others) to committees;
- Maintaining sensitivity to and providing appropriate amounts of time for differing views without letting one view dominate to the detriment of others;
- Using appropriate process such as a simplified Robert's Rules of Order to ensure the fair participation of all Trustees in Board meeting discussions or when making decisions;
- Making sure the Board has the appropriate amount of time to effectively study and review the business under consideration;
- Presiding over appeals presented to the Board, in consultation with Board counsel;
- Maintaining knowledge of open meeting and open record laws, and encouraging Trustee and staff compliance with these laws;
- Addressing ethical issues that have been brought up by the Board, staff, Board counsel, or others in accordance with the MainePERS Standard of Conduct Policy;
- Communicating with the Vice-Chair to ensure consistency in the Board's governance;
- Assisting Trustees in fulfilling their responsibilities;
- Acting as the primary liaison between the Board and the Chief Executive Officer~~Director~~;
- Facilitating the Board's evaluation of the Chief Executive Officer~~Director~~ and, in concert with the Vice-Chair, presenting the evaluation results to the Chief Executive Officer~~Director~~; and
- Carrying out other duties reasonably related to MainePERS as requested by the Board or the Chief Executive Officer~~Director~~, depending on needs and circumstances.

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MainePERS Board of Trustees

Board Governance

Policy 1.5 – Attachment 1 - Board Vice-Chair Position Description

Date Adopted: September 13, 2012

Date Amended: November 13, 2014; October 13, 2016; November 10, 2022

The Maine PERS Board Vice-Chair, like the Chair, holds a position of leadership and must be able to devote the necessary time to fulfill the commitment. The purpose of the Board Vice-Chair Position Description is:

- To detail the functions of the Board Vice-Chair;
- To express the Trustees' expectations and codify the authority they are voluntarily giving to the Board Vice-Chair; and
- To outline the expertise and time commitment required so that Trustees that are interested in being Board Vice-Chair will understand the expectations of the position.

The Board Vice-Chair serves for a term of one-year. In addition to the regular duties and responsibilities inherent in the position of a Trustee, the Board Vice-Chair is responsible for:

- Educating herself or himself about the major activities of MainePERS so that she or he is able to take the place of the Chair if necessary;
- Serving as the Chair of the Board if the person elected to that position has resigned or cannot serve in that capacity;
- Performing all the duties listed in the Chair's position description if called upon to do so;
- Collaborating with the Chair and with the Chief Executive Officer~~Director~~ on a regular basis regarding the meeting agendas and MainePERS issues;
- Teaming with the Chair to convey performance evaluation results to the Chief Executive Officer~~Director~~ on an annual basis;
- Attending additional meetings to prepare for the responsibilities of being the Board Vice-Chair; and
- Performing any other duties reasonably related to the office of Vice-Chair of MainePERS if requested by the Board or Chair.

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MainePERS Board of Trustees

Board – Government Coordination

3.1 – Reporting

Date Adopted: June 13, 2013

Date Amended: October 13, 2016; November 14, 2019; [November 10, 2022](#)

Policy

The Board of Trustees directs the [Chief Executive Officer](#)~~Director~~ to prepare and submit all reports required to be submitted to the Maine State Legislature, the Standing Committee with oversight jurisdiction for MainePERS, or other government agencies as required by legislation.

Copies of reports shall be made available to Trustees electronically, and in hard copy upon request by individual Trustees or the Board as a whole. See Attachment 1 for a list of recurring reports.

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MainePERS Board of Trustees

Board – Government Coordination

3.1 – Attachment 1 – Recurring Reports

Date Adopted: October 13, 2016

Date Amended: November 14, 2019; [November 10, 2022](#)

Reports submitted on a recurring basis include, but are not limited to:

<u>Report</u>	<u>Statutory Reference</u>	<u>Date Due</u>
Quarterly Out-of-State Travel Report to the Legislature	5 M.R.S. § 44-A	Within 15 days after end of each quarter
Quarterly RHIPB Investment Trust Fund Reports to the Treasurer and Controller	5 M.R.S. § 17435	Within 30 days after end of each quarter
Annual Report on Review of the Environmental, Social and Governance Investment Policy	5 M.R.S. § 1957(5)	January 1
Annual Report to the Legislature (Fossil Fuel Divestment)	P.L. 2021, ch. 231, § 4	January 1 (through 2026)
Annual Report to the Legislature (Procurement)	5 M.R.S. § 12023	February 1
Annual Military Subsidy Report to the Legislature	5 M.R.S. § 17760(6)	February 15
Annual Report to the Legislature (Operations)	5 M.R.S. § 17103(11)	March 1
Annual RHIPB Investment Trust Fund Report to the State, Legislature, Treasurer, and Controller	5 M.R.S. § 17435	March 1
Annual Reports to the Secretary of State on the Board of Trustees and PLD Advisory Committee	5 M.R.S. § 12005-A	December 31
State Government Evaluation Act Report	3 M.R.S. § 956	November 1 every eight years (next 2024)

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MainePERS Board of Trustees

Board – Government Coordination

3.2 – Legislation

Date Adopted: June 13, 2013

Date Amended: November 14, 2019; ~~November 10, 2022~~

Policy

The Board of Trustees may ~~propose sponsor~~, oppose, support, or assist in drafting legislation that is in the best interest of the System.

System Legislation

The Board of Trustees delegates responsibility to the ~~Chief Executive Officer~~ ~~Director~~ to ~~propose sponsor~~ System legislation that:

- Is required to comply with state and federal laws;
- Creates consistency within state and federal law;
- Improves the administrative, actuarial, or investment efficiency of the System's state-sponsored retirement, disability, or group life insurance programs;
- Improves the administrative, actuarial, or investment efficiency of MaineStart ~~and~~ the Retiree Health Insurance Post-employment Benefits Investment Trust Fund; or
- Enables the Participating Local District (PLD) Advisory Board to recommend actions that maintain sound funding for the PLD Consolidated Plan.

The ~~Chief Executive Officer~~ ~~Director~~ shall keep the Board informed of any System-~~proposed sponsored~~ legislation.

System Assisted Legislation

The Board of Trustees delegates responsibility to the ~~Chief Executive Officer~~ ~~Director~~ to assist the Legislature, Governor's Office, or units of state government in drafting retirement system legislation and associated fiscal notes.

Assistance in developing technically correct legislative language may be provided to stakeholders. Assistance may also be provided to stakeholders in developing high-level fiscal impacts of proposed legislation, but this assistance must be provided in a manner that does not incur excessive costs to the System.

The ~~Chief Executive Officer~~ ~~Director~~ shall keep the Board informed of any legislation developed with the System's assistance.

Restrictions

The Board of Trustees shall not ~~propose sponsor~~, formally support, or formally oppose legislation that changes the plan design of state-sponsored retirement plans except as required by the Board's fiduciary duties or to ensure compliance with applicable federal law.

Governance Manual

MainePERS Board of Trustees

Board – Chief Executive Officer~~Director~~ Coordination

4.1 – Coordination of Control

Date Adopted: June 13, 2013; November 10, 2022

Date Amended: New

Policy

The Board of Trustees shall conduct System business through delegation to the Chief Executive Officer~~Director~~. The Chief Executive Officer~~Director~~ shall implement decisions of the Board. Decisions or instructions of individual Trustees shall be implemented only when the Board has specifically approved them.

Board – ~~Chief Executive Officer~~ Director Coordination

4.2 – ~~Chief Executive Officer~~ Director Accountability

Date Adopted: June 13, 2013

Date Amended: November 14, 2019; November 10, 2022

Policy

The ~~Chief Executive Officer~~ Director is the Board of Trustees' link to the organization's operations, achievement, and conduct. The Board shall:

- Hold the ~~Chief Executive Officer~~ Director accountable for organizational performance;
- Evaluate only the ~~Chief Executive Officer~~ Director; and
- Work through the ~~Chief Executive Officer~~ Director and not give instructions to persons who report directly or indirectly to the ~~Chief Executive Officer~~ Director.

Delegation

The Board of Trustees delegates authority to the ~~Chief Executive Officer~~ Director to implement Board policies, directives made during Board meetings, and System long-term strategic outcomes and goals. The ~~Chief Executive Officer~~ Director is authorized to establish administrative policies, make decisions, take actions, and establish practices to implement Board policies, directives, and strategic direction and will be evaluated on the results.

Accordingly, the ~~Chief Executive Officer~~ Director shall:

- Assist the Board in the development of governance policies;
- Assist the Board in their role in System strategic planning;
- Ensure Board policies are implemented by linking Board policies to agency rules, administrative policies and procedures;
- Apply reasonable interpretations of Board policy, law, rules and direction in day-to-day System administration;
- Develop Board meeting agendas to ensure Trustees can accomplish all required Board functions;
- Provide internal and key indicator reports that enable the Board to oversee and monitor organizational performance;
- Coordinate with and support external third-parties selected by the Board in providing independent reporting of organizational performance.

Board – ~~Chief Executive Officer~~ ~~Director~~ Coordination

4.4 – Board / Consultants / Staff Relations

Date Adopted: June 13, 2013

Date Amended: October 13, 2016; November 14, 2019; November 10, 2022

Policy

Trustees shall in part fulfill their fiduciary duty through reliance on trained and experienced professional consultants. The ~~Chief Executive Officer~~ ~~Director~~ shall ensure that only qualified Board consultants are presented to Trustees for their consideration.

Consultants to the Board

Board consultants shall be identified and selected through a combination of Trustee and staff actions and decisions. Staff shall thoroughly research the field of possible consultants for each need and set of criteria identified by the Board and provide the Board with a final list of candidates and the reasoning for selecting those candidates. ~~Board and staff shall interview the finalists.~~ Staff shall provide their reasoning and recommendation for which consultant to engage, and the Board shall interview the recommended consultant prior to a final Board decision.

At least every five years, staff will evaluate the performance of each consultant and make a recommendation to the Board as to whether or not a search process for a new consultant should be initiated.

Individual Trustees shall not directly contact consultants before or during their engagement without the prior knowledge of the Board Chair and ~~Chief Executive Officer~~ ~~Director~~. Individual Trustees shall not give consultants direction unless this authority has been specifically delegated.

Individual Trustees shall interact with consultants consistent with the Board Standards of Conduct and all governance policies.

Staff/Consultant Relations

Consultants to the Board shall be engaged with the understanding that they report to the Board, but will work with staff in supporting Board needs. Consultants shall further be engaged with the understanding that while the majority of their work will involve working with staff in meeting Board needs, they are expected to provide independent opinions that may deviate from those of staff.

Staff shall respect the unique relationship consultants have with the Board, understanding that if issues arise between consultants and staff, consultants will first attempt to cooperatively resolve operating issues directly with staff. If issues cannot be resolved, consultants will work first with the ~~Chief Executive Officer~~ ~~Director~~ to resolve them, and if issues are still unresolved, report the issues directly to the Board Chair. Consultants shall also be engaged with the understanding

Governance Manual

MainePERS Board of Trustees

that they are to report suspicion of or actual improper staff behavior to the Chief Executive Officer~~Director~~ and/or Board Chair as appropriate. The Chief Executive Officer~~Director~~ will report the contact to the Board Chair and communicate a plan of action to resolve the issue. Consultants shall be engaged with the understanding they are to report improper staff behavior as soon as possible directly to the Board Chair if the Chief Executive Officer~~Director~~ is not resolving the issue.

Governance Manual

MainePERS Board of Trustees

Board – ~~Chief Executive Officer~~ ~~Director~~ Coordination

4.5 – Board / Staff Relations

Date Adopted: June 13, 2013

Date Amended: November 14, 2019; ~~November 10, 2022~~

Policy

Trustees shall in part fulfill their fiduciary duty through reliance on trained and experienced qualified professional staff. The ~~Chief Executive Officer~~ ~~Director~~ shall ensure that only trained and experienced qualified staff support Trustees in fulfilling their duty.

Staff/Board Relations

Staff shall prepare an appropriate level of information and education for Trustees to fulfill their fiduciary role and monitor System operations.

Staff shall work to provide relevant information to Trustees, including metrics that enable Trustees to effectively monitor the operating outcomes of Board policy. Staff shall also thoroughly research and prepare background material for all decisions required or collectively requested by Trustees. Trustees shall be provided with a set of options along with supporting reasoning for each requested decision, and the option recommended by staff along with supporting reasoning.

Governance Manual

MainePERS Board of Trustees

Board – ~~Chief Executive Officer~~ ~~Director~~ Coordination

4.6 – Communication and Support to the Board

Date Adopted: August 8, 2013

Date Amended: ~~New~~ November 10, 2022

Policy

The ~~Chief Executive Officer~~ ~~Director~~ shall support the Board so that all Trustees are informed in their work.

The ~~Chief Executive Officer~~ ~~Director~~ shall:

- Prepare and present information in concise, understandable formats that support Trustee monitoring or decision-making, avoiding unnecessarily complex or lengthy information;
- Provide Trustees with background information, education, options, and a staff recommendation and reasoning for Board decisions;
- Timely inform the Board of substantial losses, anticipated adverse media coverage, material external and internal changes, and on-going environmental or regulatory issues that impact System operations;
- Advise the Board if, in the ~~Chief Executive Officer~~ ~~Director~~'s opinion, the Board is not in compliance with its own policies;
- Report material staff non-compliance with Board policies that may adversely impact the System in a timely manner.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS
FROM: MICHAEL J. COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL
CHIP GAVIN, CHIEF SERVICES OFFICER
SUBJECT: OPERATIONS AND MEMBER SERVICES REPORT
DATE: NOVEMBER 2, 2022

Content in the following paragraphs was selected to provide noteworthy information regarding the System's operations and member services.

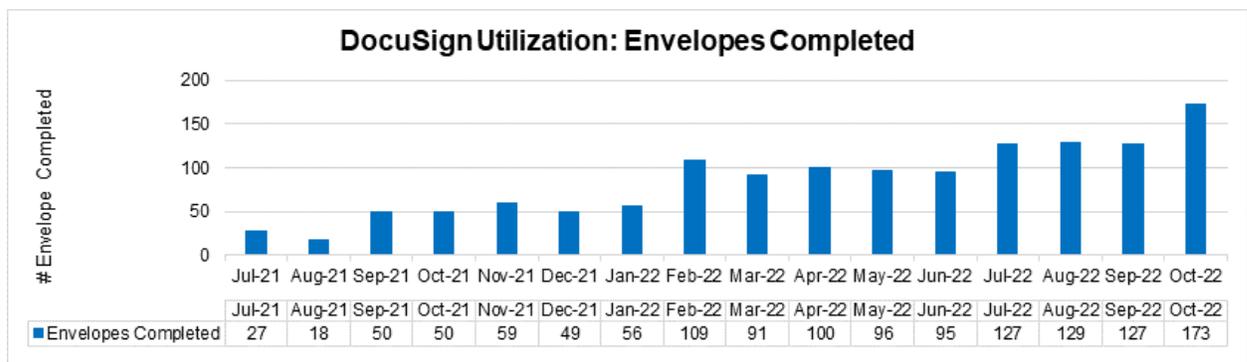
POLICY REFERENCE

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communications and Support to the Board](#)

MEMBER SERVICES

1. SECURE ONLINE DOCUMENT SIGNATURES AND TRANSMITTALS. MainePERS has continued to experience an increase in DocuSign signature transmittals, reaching more than 170 envelopes containing one or more such signed documents in October 2022.



2. MEMBER ACCOUNT STATEMENTS. Approximately 5,000-5,500 member account statements are sent monthly (since June of 2022) to active members in the month of their birth. The format and content of the statement has been updated to serve the needs of two similar documents with this single merged document. In addition to providing the information proactively as described, this also will help improve the efficiency of responding to member requests for such information. An annotated example of an updated statement is attached at the end of this report.

3. CUSTOMARY SERVICES DATA. The customary member services data points that have been provided to Trustees as part of the operations update in the past are attached to this report.

FINANCE

1. ACCOUNTING AND FINANCE. Work continues on the Annual Comprehensive Financial Report and on the supplemental audits related to GASB 67 and GASB 74.
2. EMPLOYER REPORTING. Employers submitted defined benefit payrolls on time at an 87.2% rate in October, which is slightly below the fiscal year to date monthly average of 89.6%. Employer Reporting staff have engaged with Tyler Technologies, a vendor assisting many employers to upgrade payroll applications, and employer staff to reduce reporting errors that affect timeliness of reporting.
3. EMPLOYER AUDITING. We initiated three payroll compliance audits in October and closed one. The completed audit resulted in one finding, which has been resolved. Approximately 92% of audit findings to date have been satisfactorily resolved.
4. INTERNAL AUDIT. We have received Wipfli's final Internal Control Risk Assessment Report, which is being presented to the Finance and Audit Committee on November 10, 2022. CliftonLarsonAllen's audit of the disability retirement program continues.
5. LINE OF BUSINESS. Staff have almost completed work required to implement the new form W-4P, which we will implement at the end of next month.
6. CONTRIBUTIONS AND DISBURSEMENTS. Attached is a report of contributions and member disbursements for the combined defined benefit plans fiscal year to date with a comparison to the same period in FY22.

ADMINISTRATION

1. HUMAN RESOURCES. We had one new employee start last month and have eight positions in recruitment.

We are working with Korn Ferry on a compensation study for our collective bargaining positions.

We held an influenza and COVID vaccination clinic for employees in October.

We held "active shooter" training for staff conducted by security consulting firm Blue-U.

We have initiated a performance appraisal program for confidential employees.

2. DOCUMENT CENTER. We are transitioning retiree payroll production from the Information Technology Department to the Document Center.

In October staff eliminated a backlog of 350 address changes.

3. INCIDENT RESPONSE PLAN. We completed and closed out two incident response action plans regarding the handling of non-public information.

INFORMATION TECHNOLOGY

1. SECURITY. Implementation of Airgap has been completed, increasing our ability to recover quickly and safely from certain types of cyber-attacks.
2. DATABASES. We have initiated an upgrade of all Access databases to SQL, which will improve access to the databases by staff working remotely.

LEGAL

1. EARLY DISTRIBUTION TAX. Over the next four months we will be revising our forms and educational materials and adjusting our processes to educate members and employers on possible tax implications for those who return to work with the same employer before age 59½ and ensure compliance with federal tax reporting requirements.

RECOMMENDATION

No Board action is recommended at this time.



ANNUAL STATEMENT OF ACCOUNT

October 2022

October 3, 2022

██████████
 ██████████
 YARMOUTH, ME 04096

This annual statement provides key details regarding your MainePERS retirement account. MainePERS provides this annual update to help you plan for your future retirement.

Your Plan

Plan Name	Normal Retirement Age	Years of Service Credit
Teacher Plan	62	16.42

New Feature: See explanatory note below.

Your Account

Contributions Paid by You	Interest Earned to Date	Total
\$60,821.60	\$16,390.33	\$77,211.93

New Feature: Interest on member's contribution displayed.

Your Beneficiaries

Pension Beneficiaries - Primary	Vesting
██████████	100%

New Feature: Beneficiaries included on statement.

You are vested in MainePERS, which means you have met the minimum service requirement needed to receive a pension once you become eligible to retire.

Additional Explanations:

New Feature: Expanded plan and service credit explanation.

Your Plan and Service Credit – This section lists the MainePERS pension plans in which you have participated and the amount of service credit earned in each. Your Years of Service Credit listed here includes time worked and any "regular" time which you previously purchased. This figure does not yet include time purchased based on its actuarial cost. Any amount you have paid for actuarial time is reflected in the "Contributions Paid by You" figure, but the conversion of that specific type of purchased time to service credit cannot be done until your final payroll information is available. It is calculated and credited to you at that time.

New Feature: Definition Added.

Normal Retirement Age – This is the age at which you can retire without your benefit being reduced for early retirement.

Your Contributions – This section includes your contributions as of the first of the month indicated on the statement. Most employees participating in MainePERS pension plans contribute a percentage of pay toward their pension. This section shows the contributions you have paid into your plan(s) and interest earned on that money. Interest is only directly paid to you if you take a refund of your contributions and forego your pension. Any actuarial costs you have paid to purchase service credit also is reflected in "Contributions Paid by You".

Your Beneficiaries – If you die before you retire, the MainePERS pension benefits you have earned are provided to the individuals you have designated as beneficiaries. You may also have designated beneficiaries for Group Life Insurance if you have that coverage. Keeping your named beneficiaries up-to-date is extremely important, and they can be changed by you at any time.

Vesting – You must have a minimum amount of service credit before you are eligible for lifetime pension payments. This section tells you whether you have earned this minimum amount of credit to be eligible for a pension. If you stop contributing to MainePERS before

your normal retirement age you can leave your contributions on account with us until you reach that age. If you are eligible and retire before your normal retirement age your monthly payment will be reduced according to your plan's requirements.

Required Distributions – Federal law requires individuals who no longer are participating in tax deferred retirement plans to begin receiving the benefits they have earned by April 1 of the year after they reach 72 years old (or 70½ if you turned that age prior to January 1, 2020). If you are approaching the time when these Required Minimum Distributions must begin, please contact us to discuss receiving your benefits.

New Feature: Information on Required Minimum Distribution included.

Your Estimated Benefit – Estimating a preliminary and final retirement benefit can be a complicated task and can be influenced by many factors and variables. Once you retire, a final benefit is calculated and verified by MainePERS. Before you retire, most members can self-calculate a very preliminary unofficial estimate using this general formula: Average of your three highest years of earnable compensation x Years of Service Credit x Accrual Rate (typically 2% or .02) = Annual Service Retirement Benefit under the Full Benefit option at Normal Retirement Age. Again, please know that many factors, including whether you select your full benefit or an alternative option and whether your benefit is subject to a cap because of the plan you participate in, can substantially influence your actual final benefit. See your applicable member handbook at (mainepers.org/forms-resources/publications/) for more information regarding your benefit.

New Feature: Detail on estimating the member's final benefit.

Questions? There are a variety of factors that will affect the benefits available to you at retirement. Please review your member handbook at www.mainepers.org/forms-resources/publications/ for more information. You may also contact MainePERS at P.O. Box 349 Augusta, Maine 04332, or by calling 207-512-3100.

NOVEMBER 2022 BoT SUPPLEMENTAL NUMBERS

BENEFITS PAYROLL. Monthly pension payments were made to 47,073 recipients in October, totaling \$98,774,481.14.

RETIREMENT SERVICES. One hundred twenty (121) individuals received their first benefit payment in October, with the typical benefit amount being \$2,519. First time recipients averaged 23 years of service. The count of new recipients, payment amount, and service are in line with what has been seen during the same month in recent prior years.

One hundred forty-five (145) former members received a refund of their contributions in October, typically amounting to \$9,801 as the result of three years of service. The aggregate amount refunded was \$1,421,169.

DISABILITY SERVICES. Seven (7) new disability retirement applications were received in October. Seventeen (17) intakes were completed with varying levels of detail and duration were conducted.

SURVIVOR SERVICES. Survivor Services: 45 GLI claims were approved in the month of October 2022. Of this, 39 were retirees and 6 were active with two supplementals of \$465,000 and one dependent claim of \$10,000. GLI claims approved totaled \$1,452,840.

DEFINED CONTRIBUTION PLAN SERVICES. MaineSTART had 1,621 participants at the end of October, with \$53,388,359 of investment assets in the program.

PLD PLAN ADMINISTRATION. One new employers joined the PLD Retirement Program effective in November, 2022. Two employers made plan changes (adding full coverage for dispatchers and police unit support staff; and adding Law Enforcement Officers. Both were effective November, 2022.

Maine Public Employees Retirement System
Contributions and Disbursements - Defined Benefit Plans
For the Three Months Ended September 30, 2022 and September 30, 2021

	<u>Current</u>	<u>Year to Date</u>	<u>Prior Year to Date</u>
Contributions			
Employer Contributions ⁽¹⁾	\$ 45,897,253	\$ 136,886,624	\$ 128,400,926
Member Contributions	18,123,967	50,694,756	47,231,009
Member Repurchases	336,688	1,297,853	407,389
Total Contributions	<u>\$ 64,357,908</u>	<u>\$ 188,879,233</u>	<u>\$ 176,039,324</u>
Member Disbursements			
Benefits Payroll	\$ 98,558,310	\$ 292,519,494	\$ 275,969,973
Member Refunds	2,444,608	5,369,427	5,013,110
Total Member Disbursements	<u>\$ 101,002,918</u>	<u>\$ 297,888,921</u>	<u>\$ 280,983,083</u>
Net	<u>\$ (36,645,010)</u>	<u>\$ (109,009,688)</u>	<u>\$ (104,943,759)</u>

⁽¹⁾Employer Contributions include both normal cost and UAL contributions.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS
FROM: JOY CHILDS, DIRECTOR OF INFORMATION TECHNOLOGY
SUBJECT: BOARD SOFTWARE DEMONSTRATION
DATE: NOVEMBER 2, 2022

MainePERS is considering new software to provide meeting materials and other information to the Board of Trustees. This would replace the Board web site and the system we have used over the past several years to deliver Board packets to the Trustees. I will provide a demonstration of the software at the November Board meeting and answer any questions.

POLICY REFERENCE

[Board Policy 4.5 – Board/Staff Relations](#)

[Board Policy 4.6 – Communication and Support to the Board](#)

RECOMMENDATION

No Board action is required.

MainePERS Board of Trustees Fiduciary Responsibility Legal Framework

Maine Constitution Article IX:

Section 18. **Limitation on use of funds of Maine State Retirement System.** All of the assets, and proceeds or income therefrom, of the Maine State Retirement System or any successor system and all contributions and payments made to the system to provide for retirement and related benefits shall be held, invested or disbursed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to, other purposes. Funds appropriated by the Legislature for the Maine State Retirement System are assets of the system and may not be diverted or deappropriated by any subsequent action.

Maine Statutes

MainePERS Board of Trustee statutes:¹

§17101. Establishment

1. Purpose. There is established a retirement system, the functions and operations of which are under the supervision of the board, for the purpose of providing retirement allowances and other benefits under this Part for employees.
2. Name. The retirement system is known as the "Maine Public Employees Retirement System" and by that name all of its business must be transacted, all of its funds invested and all of its cash and securities and other property held in trust for the purpose for which received.

§17102. Duties of the Board of Trustees

4. Oath. Each trustee shall, within 30 days after the trustee's appointment, take an oath of office to faithfully discharge the duties of a trustee, in the form prescribed by the Constitution of Maine.²

§17151. Legislative findings and intent

¹ 5 M.R.S. §17101 et seq. Board of Trustees requirements

² Article IX, Section 1. **Oaths and subscriptions.** Every person elected or appointed to either of the places or offices provided in this Constitution, and every person elected, appointed, or commissioned to any judicial, executive, military or other office under this State, shall, before entering on the discharge of the duties of that place or office, take and subscribe the following oath or affirmation: "I, _____, do swear [or affirm] that I will support the Constitution of the United States and of this State, so long as I shall continue a citizen thereof. So help me God."

1. Findings. The Legislature finds that the State owes a great debt to its retired employees for their years of faithful and productive service.
 - A. Part of that debt is repaid by the benefits provided to retirees through the State Employee and Teacher Retirement Program.
 - B. Retirees, who depend heavily on these benefits, and current employees, who will one day retire and receive benefits, are concerned about the financial viability of the retirement program.

§17153. Board of trustees

3. Investment of funds. The board may cause the funds created by this Part to be invested and reinvested in accordance with the standards defined in Title 18-B, [Maine Uniform Trust Code] sections 802 to 807 and chapter 9, [Maine Prudent Investor Act] subject to periodic approval of the investment program by the board.

MainePERS Divestment statutes³

§ 1957

2. Limitation on investment in fossil fuel company. The board, in accordance with sound investment criteria and consistent with fiduciary obligations, may not invest the assets of any state pension or annuity fund in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. Nothing in this section precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

3. Review and divestment of assets. The board shall review the extent to which the assets of any state pension or annuity fund are invested in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. The board shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings. Divestment pursuant to this subsection must be complete by January 1, 2026. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

§ 1958

2. Board may not invest. The board, in accordance with sound investment criteria and consistent with fiduciary obligations, may not invest the assets of the retirement system in any stocks or other securities of any corporation or company that owns or operates

³ 5 M.R.S. § 1957 and § 1958

prisons for profit. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any corporation or company that owns or operates prisons for profit.

3. Board to divest. The board shall review the extent to which the assets of the retirement system are invested in any stocks or other securities of any corporation or company that owns or operates prisons for profit. The board shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any corporation or company that owns or operates prisons for profit.

Maine Uniform Trust Code⁴

§802. Duty of loyalty

1. Interests of beneficiaries. A trustee shall administer the trust solely in the interests of the beneficiaries.

§804. Prudent administration

A trustee shall administer the trust as a prudent person would, by considering the purposes, terms, distributional requirements and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill and caution.

Maine Uniform Prudent Investor Act⁵

§901. Prudent investor rule

1. Duty to comply. Except as otherwise provided in [section 902](#), a trustee who invests and manages trust assets owes a duty to the beneficiaries of the trust to comply with the prudent investor rule set forth in this chapter.
2. Altered by provisions of trust. The prudent investor rule may be expanded, restricted, eliminated or otherwise altered by the provisions of a trust. A trustee is not liable to a beneficiary to the extent that the trustee acted in reasonable reliance on the provisions of the trust.

§902. Standard of care; portfolio strategy; risk and return objectives

1. Consideration of purposes, terms, distribution requirements and other circumstances. A trustee shall invest and manage trust assets, as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill and caution.

⁴ 18-B M.R.S. Uniform Trust Code, Chapter 8, Duties and Powers of Trustees

⁵ 18-B M.R.S. Uniform Trust Code, Chapter 9, Uniform Prudent Investor Act

Board Policies

The members of the Board of Trustees are trustees of the funds of the System and have a fiduciary obligation to administer the System and the funds under the System's control solely in the interest of the members as beneficiaries of pension and related benefits.⁶

Trustees shall conduct all System business in a fair and reasonable manner for the sole benefit of the members, participants and beneficiaries and consistent with all other governance policies.⁷

Common law of Trusts

Restatement (Third) of Trusts § 78 (2007)

§ 78 Duty of Loyalty

Except as otherwise provided in the terms of the trust, a trustee has a duty to administer the trust solely in the interest of the beneficiaries, or solely in furtherance of its charitable purpose.

Except in discrete circumstances, the trustee is strictly prohibited from engaging in transactions that involve self-dealing or that otherwise involve or create a conflict between the trustee's fiduciary duties and personal interests

Whether acting in a fiduciary or personal capacity, a trustee has a duty in dealing with a beneficiary to deal fairly and to communicate to the beneficiary all material facts the trustee knows or should know in connection with the matter.

IRS laws⁸

26 USC §401(a)(2) Qualified pension, profit-sharing, and stock bonus plans
REQUIREMENTS FOR QUALIFICATION A trust created or organized in the United States and forming part of a stock bonus, pension, or profit-sharing plan of an employer for the exclusive benefit of his employees or their beneficiaries shall constitute a qualified trust under this section—

...

(2) if under the trust instrument it is impossible, at any time prior to the satisfaction of all liabilities with respect to employees and their beneficiaries under the trust, for any part of the corpus or income to be (within the taxable year or thereafter) used for, or diverted to, purposes other than for the exclusive benefit of his employees or their beneficiaries (but this paragraph shall not be construed, in the case of a multiemployer plan, to prohibit the return of a contribution within 6 months after the plan administrator determines that the

⁶ Board Governance 1.2

⁷ Board Governance 1.3

⁸ 26 USC §401(a)(2)

contribution was made by a mistake of fact or law (other than a mistake relating to whether the plan is described in section 401(a) or the trust which is part of such plan is exempt from taxation under section 501(a), or the return of any withdrawal liability payment determined to be an overpayment within 6 months of such determination));

Federal regulation⁹

§ 1.401-2 Impossibility of diversion under the trust instrument¹⁰

(a) *In general.*

(1) Under section 401(a)(2) a trust is not qualified unless under the trust instrument it is impossible (in the taxable year and at any time thereafter before the satisfaction of all liabilities to employees or their beneficiaries covered by the trust) for any part of the trust corpus or income to be used for, or diverted to, purposes other than for the exclusive benefit of such employees or their beneficiaries. This section does not apply to funds of the trust which are allocated to provide medical benefits described in section 401(h) as defined in paragraph (a) of § 1.401-14. For the rules prohibiting diversion of such funds and the requirement of reversion to the employer after satisfaction of all liabilities under the medical benefits account, see paragraph (c) (4) and (5) of § 1.401-14. For rules permitting reversion to the employer of amounts held in a section 415 suspense account, see § 1.401(a)-2(b).

...

(3) As used in section 401(a)(2), the phrase “purposes other than for the exclusive benefit of his employees or their beneficiaries” includes all objects or aims not solely designed for the proper satisfaction of all liabilities to employees or their beneficiaries covered by the trust.

⁹ 26 CFR 1.401-2