



MainePERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Board of Trustees

Public Meeting Packet

December 14, 2023

**MainePERS Board of Trustees
December 14, 2023
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 November 9, 2023Decision, R.Z. AppealConsideration of Items Removed	ACTION	Brian Noyes
9:05 – 9:15 a.m.	2.	<u>RULEMAKING</u> <ul style="list-style-type: none">Public Hearing – Proposed Amendment to Rule Chapter 803 (PLD Consolidated Retirement Plan)		Michael Colleran
9:15 – 9:25 a.m.	3.	<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> <ul style="list-style-type: none">Wynnchurch Capital Partners VIBain Capital Real Estate III	ACTION ACTION	Brian Noyes James Bennett James Bennett
9:25 – 9:30 a.m.	4.	<u>PRIVATE MARKETS REVIEW</u> <ul style="list-style-type: none">Private Markets Activity		James Bennett
9:30 – 9:45 a.m.	5.	<u>INVESTMENT REVIEW</u> <ul style="list-style-type: none">Investment Monthly Review		James Bennett Brian McDonnell, Cambridge Assocs.
9:45 – 10:30 a.m.	6.	<u>QUARTERLY INVESTMENT EDUCATION</u> <ul style="list-style-type: none">Pacing Private Market Investments		James Bennett
10:30 – 10:45 a.m.		<u>BREAK</u>		
10:45 – 11:05 a.m.	7.	<u>DIVESTMENT REPORT</u>		Dr. Rebecca M. Wyke James Bennett Michael Colleran
11:05 – 11:15 a.m.	8.	<u>ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FACTORS</u> <ul style="list-style-type: none">Review of Board Policy 2.6 – ESGESG Report		Dr. Rebecca M. Wyke James Bennett

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.

11:15 – 11:25 a.m.	9.	<u>MAINESTART QUARTERLY REPORT</u>		Michael Colleran James Bennett Chip Gavin
11:25 – 11:35 a.m.	10.	<u>MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT</u>		Chip Gavin Sherry Vandrell Michael Colleran
11:35 a.m. – 12:00 p.m.	11.	<u>CEO REPORT</u>		Dr. Rebecca M. Wyke Chip Gavin Michael Colleran
		<ul style="list-style-type: none"> • <u>Compassionate Allowance List</u> • <u>Appeals Program</u> 		
12:00 – 12:30 p.m.	12.	<u>CHIEF EXECUTIVE OFFICER COMPENSATION</u>	ACTION	Brian Noyes
		<ul style="list-style-type: none"> • Executive Session pursuant to 1 M.R.S. §405(6)(A) 	ACTION	Brian Noyes
		<i>Board moves out of executive session.</i>		
12:30 p.m.		<u>ADJOURNMENT</u>		Brian Noyes

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

Minutes

Board of Trustees
Board Meeting
November 9, 2023

MainePERS
Portland
9:00 a.m.

The Board of Trustees met at MainePERS, One City Center, Portland, ME 04101 at 9:00 a.m. on November 9, 2023. Brian Noyes, Chair, presided. Other Trustees participating were: Dick Metivier, Vice Chair; Henry Beck, State Treasurer; John Beliveau; Shirrin Blaisdell; Mark Brunton; John Kimball and Ken Williams. Joining the Trustees were Dr. Rebecca Wyke, Chief Executive Officer; Michael Colleran, Chief Operating Officer and General Counsel; James Bennett, Chief Investment Officer; Sherry Vandrell, Chief Financial Officer; 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 Seth Keller, Asset Class Head Investments; Justin Hodgkins, Sr. Analyst Operations; Bill Proom, Managing Director Investments; Jim Ackor, Managing Director Investments; and Bartley Parker, Managing Director Investments; Stuart Cameron, Cambridge Associates; Tom Lynch and George Bumeder, Cliffwater; William Greenwood and Jennifer Yeung, Alboune; and Amy McDuffee, Mosaic Governance.

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

CONSIDERATION OF THE CONSENT CALENDAR

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

- Minutes of October 12, 2023
- Dismissal, Hubbell Appeal
- Action. Ken Williams made the motion, seconded by Shirrin Blaisdell, to approve the Consent Calendar. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

BOARD ELECTIONS

- Action. Dick Metivier made the motion, seconded by Shirrin Blaisdell, that the Board elect Brian Noyes as Chair for the next year. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).
- Action. Ken Williams made the motion, seconded by Shirrin Blaisdell, that the Board elect Dick Metivier as Vice Chair for the next year. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

PRIVATE MARKETS ACTION

General Catalyst XII

James Bennett introduced Seth Keller to the Trustees. Seth reviewed the recommended commitment to General Catalyst Group XII with the Trustees.

- **Action.** Shirrin Blaisdell made the motion, seconded by John Kimball, that MainePERS make a commitment of up to \$25 million to General Catalyst Group XII, 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. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

OPEB FUND INVESTMENT POLICY STATEMENT

Jim Bennett reviewed the newly-developed OPEB Investment Policy Statement with the Trustees.

- **Action.** Henry Beck made the motion, seconded by Dick Metivier, that the Board adopt Board Policy 2.1-D – OPEB Trust Investment Policy Statement. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

INVESTMENT REVIEW

Investment Monthly Review

Jim Bennett reported that as of October 31, 2023 the MainePERS fund had a preliminary market value of \$18.4 billion, the preliminary return for the month was -0.9%, and the preliminary calendar year-to-date return was 3.4%.

RHIT/GLI/OPEB Quarterly Review

Jim Bennett presented the RHIT/GLI/OPEB Quarterly Review as of September 30, 2023. Jim answered questions from the Trustees.

Investment Quarterly Review

Stuart Cameron reviewed the Investment Quarterly Report for the quarter ending September 30, 2023. Stuart answered questions from the Trustees.

John Beliveau joined the meeting at 9:50 a.m.

PRIVATE MARKET REVIEW

Private Markets Activity

Jim Bennett reviewed the table of private market funds and co-investments that had closed during the past 12 months. Jim shared the next manager meeting is scheduled for Tuesday, November 28, 2023, in Portland, with presentations by Wynnchurch Capital Partners VI at 10:00 a.m. and Bain Capital Real Estate for 11:00 a.m.

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Albourne Quarterly Review

Jennifer Yeung and William Greenwood shared an update on the Infrastructure, Natural Resources, and Real Estate portfolios as of June 30, 2023. Jennifer and Will answered questions from the Trustees.

Cliffwater Quarterly Review

Tom Lynch and George Bumeder provided an overview of the Private Equity and Alternative Credit Portfolios as of June 30, 2023. Tom and George answered questions from the Trustees.

RISK DIVERSIFIERS QUARTERLY REVIEW

Stuart Cameron reviewed the risk diversifiers quarterly report with the Trustees.

GOVERNANCE

Board Charter and Policy Review

Michael Colleran stated that ten Board policies were reviewed this year as part of the three-year review cycle and recommended substantive changes to three of the policies. He shared an annual review of the Board Charter was also conducted and there are no recommended changes at this time.

- **Action.** Dick Metivier made the motion, seconded by Henry Beck, that the Board approve amended Board Policies 1.6, 4.5, and 5.5. Voted unanimously by eight Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

BOARD 2024 CALENDAR AND WORK PLAN

Dr. Rebecca Wyke provided the Trustees with the 2024 Board Calendar of meetings and the proposed Board Work Plan of activities, updates, and reports required by law or Board policy.

- **Action.** Dick Metivier made the motion, seconded by Shirrin Blaisdell, that the Board approve the proposed MainePERS 2024 Board Calendar and Annual Board Work Plan. Voted unanimously by eight Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

FINANCE AND AUDIT COMMITTEE UPDATE

Shirrin Blaisdell stated the Committee had met prior to the Board meeting and reviewed internal audit activity and the financial operations reports for the three months ending September 30, 2023.

CEO REPORT

Dr. Rebecca Wyke thanked Chip Gavin and his team for their proactive work with those who were involved in the Lewiston tragedy. She stated their thoughtfulness handling those calls did not go unnoticed. Chip also shared his appreciation for the great work his staff had done

during this difficult time. On behalf of the Board of Trustees, Brian Noyes thanked Chip and the staff for their compassion and great work.

Dr. Rebecca Wyke shared the PLD Advisory Committee met and voted to recommend contribution rates for FY 2025; elimination of Special Plan 4N, which has no current participants; and an additional one time ad hoc COLA of ½ percent. Rulemaking will be required for the plan elimination and COLA.

PPCC Recognition Award

Dr. Rebecca Wyke shared that MainePERS was awarded the Public Pension Coordinating Council (PPCC) Recognition Award for the sixteenth consecutive year.

Member Portal Counts

Dr. Rebecca Wyke provided the latest member portal counts. Out of 6,200 invitations, approximately 865 have set up accounts.

Disability Retirement Experience Survey

Dr. Rebecca Wyke reviewed the results of a disability retirement experience survey sent to members who had completed the disability application process and had received their final outcome. Overall, the majority of the participants gave favorable feedback on the application and process, that they were treated respectfully, their questions were answered in a timely fashion, and the process was conducted fairly.

Investment Team Activities

Jim Bennett introduced Justin Hodgkins, Bill Proom, Jim Ackor, and Bartley Parker from his Team. Each member shared an outline of the duties they perform within the Investment Team. The members answered questions from the Trustees.

WEP/GPO

Michael Colleran provided the Trustees with a presentation on the report prepared for the Joint Standing Committee on Labor and Housing to study the creation of an interstate compact with other states affected by the WEP/GPO. Michael answered questions from the Trustees.

CEO ANNUAL REVIEW

- **Action.** Dick Metivier made the motion, seconded by Ken Williams to enter into executive session pursuant to 1 M.R.S. §405(6)(A) to discuss evaluation of an employee. Unanimously voted by eight Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

The Board moved out of executive session.

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ADJOURNMENT

- Action. Henry Beck made the motion, seconded by John Kimball to adjourn the November meeting of the Board of Trustees. Unanimously voted by eight Trustees (Beck, Beliveau, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

The meeting adjourned at approximately 2:00 p.m.

12/14/23
Date Approved by the Board

Dr. Rebecca M. Wyke, Chief Executive Officer

Date Signed

MAINEPERS

BOARD OF TRUSTEES RULEMAKING MEMORANDUM

TO: BOARD MEMBERS
FROM: MICHAEL J. COLLERAN, CHIEF OPERATING OFFICER AND
GENERAL COUNSEL
SUBJECT: PUBLIC HEARING -- PROPOSED AMENDMENT TO RULE CHAPTER
803 (PLD CONSOLIDATED RETIREMENT PLAN)
DATE: DECEMBER 6, 2023

A public hearing on a proposed amendment to Rule Chapter 803 will be held as part of the Board meeting. A public hearing provides an opportunity for members of the public to comment on the proposed rulemaking. It is not the time for the Board to make any decisions or for the Board or staff to provide responses to any comments or questions. Comments from the public may also be submitted in writing through December 26, 2023. We then will consider all comments, make any revisions we think appropriate in response to the comments, and bring a recommendation to the Board for action at a future meeting.

POLICY REFERENCE

[Board Policy 2.3 -- Rulemaking](#)

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

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

RULE CHAPTER 803

Rule 803 contains plan provisions for the PLD Consolidated Plan. The PLD Advisory Committee has recommended amending the rule to: (1) provide a one-time, non-cumulative cost-of-living payment in the amount of 0.5% of benefits to be paid to retirees who were eligible for a cost-of-living adjustment in September 2023; and (2) remove special plan 4N as a plan option effective February 1, 2024. There currently are no employers participating in special plan 4N. A copy of the proposed amended rule is attached.

RECOMMENDATION

No Board action is required at this time.

PROPOSED AMENDMENT DECEMBER 2023

94-411 MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

Chapter 803: PARTICIPATING LOCAL DISTRICT CONSOLIDATED RETIREMENT PLAN

SUMMARY: This chapter establishes a consolidated retirement plan, as required by 5 M.R.S. §18801 *et seq.* for local districts that are participating local districts under 5 M.R.S., Chapter 425 before the date the plan is put into operation and for local districts that enter into agreements for the participation of their employees in the Maine Public Employees Retirement System after The Plan is put into operation.

NOTE: 5 M.R.S., Chapter 421, *General Provisions*, is applicable to all activities relating to the Maine Public Employees Retirement System, including the subject matter of this chapter of the rules of the Board of Trustees (“Board”). 5 M.R.S., Chapter 427, *Participating Local Districts Consolidated Plan*, is the statute from which this chapter of the rules of the Board derives its authority and is applicable to all activity based upon this chapter.

SECTION 1. DEFINITIONS

1. **Local District.** "Local district" means:
 - A. Any county, municipality, quasi-municipal corporation or incorporated instrumentality of the State or of one or more of its political subdivisions;
 - B. Any incorporated association of employees of the State or employees of any of the entities set out in paragraph A;
 - C. Any incorporated association of any of the entities set out in paragraph A;
 - D. Any entity eligible to become a participating local district before January 1, 1976;
 - E. Any entity participating in the Retirement System before January 1, 1976; or
 - F. Any educational institution in the State teaching courses equivalent to or higher than secondary institutions.
 - G. Any public charter school, as authorized by Title 20-A, chapter 112.
2. **“Consumer Price Index”** means:
 - A. The Consumer Price Index for All Urban Consumers, CPI-U, as compiled by the Bureau of Labor Statistics, United States Department of Labor; or
 - B. If the index described in paragraph A is revised or superseded, the Board must employ the Consumer Price Index compiled by the Bureau of Labor Statistics, United States Department of Labor that the Board finds to be most reflective of changes in the purchasing power of the dollar for the broadest population of consumers, including retired consumers.

3. **"Current Employer"** means the employer who is the member's employer at the time the member becomes a member under The Plan.
4. **"Member"** means any employee included in the membership of The Plan.
5. **"Normal Retirement Age"** means the specified age, the years of service requirement or any combination of age and years of service requirements at which a member becomes eligible for an unreduced retirement benefit.
6. **"Participant"** means any employee included in the defined contribution plan under this chapter.
7. **"Participating Local District"** means a local district which has approved the participation of its employees in the Retirement System under 5 M.R.S. §18201 or §18804.
8. **"The Plan"** means the defined benefit plan under the consolidated retirement plan for local districts established by 5 M.R.S., Chapter 427 (§18801 *et seq.*) and this chapter.
9. **Other Terms.** All other terms used in this chapter, unless the context otherwise indicates, shall have the same definitions as in 5 M.R.S. §17001.

SECTION 2. LOCAL DISTRICT PARTICIPATION

1. **Participating Local District Election.** Before July 1, 1996, the executive body or legislative body of each local district that is a participating local district under 5 M.R.S., Chapter 425 (§18201 *et seq.*) must, by resolution or order, elect one of the following options. Failure to make an election will have the same effect as electing paragraph B.
 - A. **To Join The Plan.** A participating local district may elect to participate in The Plan in accordance with the requirements of 5 M.R.S. §18804. Upon receipt of the certified copy of the resolution or order and record of the vote, the Executive Director shall prepare an agreement, to be signed by the authorized representative of the district and the Executive Director, specifying the parts of The Plan applicable to the district and the duties and rights of the district and the Retirement System. The resolution or order shall include:
 - (1) Approval of the participation in The Plan;
 - (2) The regular service retirement benefit plan and, if applicable, the special service retirement benefit plan elected from those provided by this chapter for the district's employees; and
 - (3) The name or title of the person authorized to sign the agreement on behalf of the local district.
 - B. **To Be Transferred to The Plan.** A participating local district may elect to have its participation in the Retirement System transferred to The Plan without electing the retirement benefit plan or plans for the district's employees.

- (1) The Retirement System will transfer the district's employees to the plan or plans with the benefit level or levels closest to the district's current plan or plans.
 - (2) The resolution or order shall include the same information as that required under paragraph A, except that it shall state that the Retirement System is to determine the retirement benefit plan or plan that apply to the district's employees.
 - (3) The agreement as prepared by the Executive Director shall be as provided in paragraph A.
- C. **To Withdraw from the Maine Public Employees Retirement System.** Subject to 5 M.R.S. §18203, a participating local district may withdraw from participation in the Retirement System. The effect of withdrawal on the district's employees is governed by 5 M.R.S. §18254.
2. **Local District May Enter into Agreement for The Plan.** Any local district that is not a participating local district before July 1, 1993, may enter into an agreement for participation of its employees in the Retirement System only under The Plan and in the manner provided by 5 M.R.S. §18804, sub-§1 or 2. Upon receipt of the certified copy of the resolution or order and record of the vote, the Executive Director shall prepare an agreement specifying the parts of The Plan applicable to the district and the duties and rights of the district and the Retirement System. The resolution or order shall include:
- A. Approval of the participation in The Plan;
 - B. The regular service retirement benefit plan and, if applicable, the special service retirement benefit plan elected from those provided by this chapter for the district's employees;
 - C. A list of classes, and a list by name and social security number, of any employees who are excluded from membership based upon their being provided for by local pension provisions;
 - D. Any limitations on the granting of service credits to employees for service before the beginning date of the participation of its employees in The Plan; and
 - E. The name or title of the person authorized to sign the agreement on behalf of the local district.
3. **Effective Date; Date of Operation; Date of Participation**
- A. **Effective Date.** July 1, 1993, is the effective date of The Plan. Participating local districts and other local districts may enter into an agreement to participate in The Plan on and after that date.
 - B. **Date the Plan Goes into Operation.** The Plan will be put into operation as of July 1 immediately following the date when:

- (1) The number of local districts that have entered into agreements for participation in The Plan with an election of regular service retirement benefits for their employees exceeds 3% of the districts which as of that date are participating in the Retirement System in regular service retirement benefit plans;
 - (2) The number of local districts that have entered into agreements for participation in The Plan with an election of special service retirement benefits for their employees exceeds 3% of the districts which as of that date are participating in the Retirement System special service retirement benefit plans; and
 - (3) In each instance the total number of members employed by districts that have entered agreements exceeds 5% of the total of all participating local district members in each category as of that date.
- C. **Date of Participation.** The date of participation in The Plan for a participating local district is the first day of the month that most immediately follows the date on which the agreement for participation is signed by the Executive Director and the authorized representative of the participating local district or such later date stated in the agreement or amendment, unless The Plan is not then in operation, in which case, the date of participation is the date on which The Plan goes into operation.
4. **Full Withdrawal from The Plan.** A participating local district may fully withdraw from participation in The Plan by filing with the Board of Trustees a duly certified copy of the withdrawal vote of the body entitled to approve participation under 5 M.R.S. §18804, sub-§1 or 2. The withdrawal date is the later of the last day of the month following the month in which the certified notice is received by the Board or the last day of a later month specified in the notice. The effect of withdrawal on the district's employees is governed by 5 M.R.S. §18254, sub-§1 through 4.
1. A participating local district that withdraws from participation in The Plan must continue to make payments as required under Section 5, subsection 2.
 2. Additionally, the withdrawing participating local district must make a withdrawal liability payment determined as follows:
 - (1) The System's actuary will calculate the pooled unfunded actuarial liability of The Plan as of the most recent valuation date that precedes the withdrawal date. The actuary will allocate a portion of the pooled unfunded actuarial liability to the withdrawing participating local district on the basis of the proportion of the withdrawing participating local district's total covered payroll to the total covered payroll of The Plan as of the valuation date.
 - (2) Unless otherwise agreed under subparagraph 3, the actuary will subtract from the withdrawing participating local district's portion calculated under subparagraph 1 the present value, as of the withdrawal date, of pooled unfunded actuarial liability payments the participating local district has made since the valuation and pooled unfunded actuarial liability payments the participating local district is expected to pay through the payment of employer contributions after withdrawal on those employees who remain active members. The difference is the withdrawal liability payment amount.

- (3) As an alternative to subparagraph 2, the Executive Director and the withdrawing participating local district may agree that the withdrawal liability payment amount is the withdrawing participating local district's portion as calculated under subparagraph 1, reduced only by the present value, as of the withdrawal date, of any pooled unfunded actuarial liability payments the participating local district has made since the valuation. In that case, the withdrawing participating local district's obligations under paragraph A do not include payments under Section 5, subsection 2, paragraph C.
 - (4) The withdrawing participating local district may pay this withdrawal liability amount in a lump sum or amortize it over a period of up to 30 years at the actuarial assumed rate of return used in the most recent valuation that precedes the withdrawal date.
3. The withdrawing participating local district remains a participating local district subject to this rule until it has no remaining active members and all of its liabilities for inactive vested members, retired members and beneficiaries of retired members have been satisfied according to the requirements of federal and state law, and rules and policies governing satisfaction of liabilities.
- 4-1. **Partial Withdrawal from The Plan.** For purposes of this subsection, a partial withdrawal occurs when a participating local district elects a change under subsection 7 that excludes a category of employees from membership who would have been eligible for membership absent the change. In the case of a partial withdrawal, the participating local district must make a withdrawal liability payment calculated and paid in the same manner as set forth in subsection 4, paragraph B, except that the portion of The Plan's pooled unfunded actuarial liability that will be allocated to the partially-withdrawing participating local district will be based on the proportion of the district's covered payroll for that category of employees to the total covered payroll of The Plan as of the valuation date.
5. **Resumption of Participation after Withdrawal.** A participating local district that has withdrawn from The Plan under subsection 1, paragraph C or subsection 4 may resume participation in The Plan by taking the actions required by subsection 2.
 - A. A participating local district which has resumed participation and which thereafter again withdraws may not subsequently again resume participation before 3 years from the date of its immediately prior withdrawal.
 - B. A local district may resume participation only under the consolidated plan. The retirement benefit plan adopted by the local district on resumption is applicable to all current and future employees who are members if the plan results in a higher level of benefits for the district's employees. The plan adopted on resumption is applicable only to new employees if the plan results in a lower level of benefits for the district's employees or results in a change from a plan with cost of living adjustments to a plan without cost of living adjustments.
 - C. **Effect on employees.** Except as set forth below in this paragraph C, employees of a local district which resumes participation in the Retirement System are eligible for membership in the System on the same basis as employees of a local district upon initial participation.

- (1) Employees who did not withdraw from membership when the local district withdrew from participation in the System may continue membership on the same basis as before the resumption of participation and are entitled to any additional benefit provisions selected and any increase in the level of benefits provided under The Plan.
 - (2) Employees for whom membership was compulsory who withdrew from membership when the local district withdrew from participation in the System must resume membership in the System if membership with the local district remains compulsory upon the resumption of participation by the local district.
 - (a) These employees may receive service credits for previous membership service upon repayment of withdrawn accumulated contributions and applicable interest.
 - (b) These employees may not purchase service credits for periods of employment between withdrawal from membership and resumption of participation by the local district.
 - (3) Employees for whom membership was not compulsory and who elected not to become or remain a member may not be a member as an employee of that local district unless the employee is electing to rejoin The Plan and:
 - (a) The employee is covered by a plan provided by the employer under section 5 M.R.S. §18252-B with an employee contribution rate that is not lower than the employee contribution rate for the applicable plan under The Plan; and
 - (b) Employee contributions after rejoining The Plan qualify for treatment as pick-up contributions for federal tax purposes and the person's membership otherwise complies with the United States Internal Revenue Code as applicable to governmental qualified defined benefit plans.
 - (4) The participating local district may allow current employees who began service with the district after the district withdrew from participation to purchase service credits for service rendered from the time of hire to the resumption of participation. The purchase of such service credits is governed by 5 M.R.S. §18253, sub-§2, paragraphs A and B.
 - (5) If the district grants prior service credits, those service credits shall be based only upon the employee's employment with the district before the district's initial date of participation.
6. **Disbanded or Dissolved Districts.** The effect of the disbanding or dissolution of a district that participates in The Plan on the membership and benefits of its employees is governed by 5 M.R.S. §18255 and §18408.
 7. **Change of Service Retirement Benefit Plan or Plans.** After beginning participation in The Plan, a participating local district may elect to change the service retirement benefit plan or plans which apply to the district's employees by following the same process set forth in Section 2 for participation in The Plan. The change is applicable to all current and future

employees who are members, if the change results in a higher level of benefits for the district's employees. The change is applicable to new employees only, if the change results in a lower level of benefits for the district's employees or results in a change from a plan with cost of living adjustments to a plan without cost of living adjustments.

The Executive Director shall prepare either a new agreement or an amendment to the district's agreement which will be signed by the authorized representative of the district and the Executive Director. The effective date of the change is the first day of the month that most immediately follows the date the new agreement or amendment to the agreement is signed by the authorized representative of the district and the Executive Director or such later date stated in the agreement or amendment.

SECTION 3. MEMBERSHIP

1. **Compulsory Membership.** Membership is compulsory for all employees who are in the service of a participating local district on the date when participation of the employees of that district in The Plan begins and who are members of the System on that date and for all employees entering the service of that district after that date, except as provided under subsection 2 and 3. A local district that is not a participating local district before July 1, 1993, shall designate in its resolution or order approving participation any class of employees otherwise provided for by local pension provisions who are excluded from membership in The Plan as provided under 5 M.R.S. §18804, sub-§3.
2. **Optional Membership.** Optional membership under The Plan for employees of participating local districts is governed as follows:
 - A. **Member When Participation of Employees Begins.** Membership is optional for employees in the service of a local district on the date when the participation in the Retirement System of the employees of the local district first begins, whether under 5 M.R.S., Chapters 425 or 427.
 - B. **Elected or Appointed Officials.** Membership is optional for elected officials and officials appointed for a fixed term.
 - C. **Trustees of Water, Sanitary and Sewer Districts.** Membership of trustees of water, sanitary and sewer districts is subject to the following:
 - (1) **Water districts.** Membership of trustees of a water district is governed by 35-A M.R.S., §6410, subsection 8;
 - (2) **Sanitary districts.** Membership of trustees of a sanitary district is governed by 38 M.R.S. §1104.
 - (3) **Sewer districts.** Membership of trustees of a sewer district is governed by 38 M.R.S. §1036.
 - D. **Employees Covered by Social Security.** Membership is optional for an employee of a participating local district who is covered under the *United States Social Security Act*. Except as provided by paragraph H, optional membership for those employees is subject to 5 M.R.S. §18252.

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- E. **Employees Not Covered by Social Security.** Membership is optional for any employee of a participating local district that does not provide Social Security coverage provided that the district offers an alternative plan that meets the requirements of 5 M.R.S. §18252-B, and provided that the employee participates in the alternative plan. Optional membership for those employees is subject to 5 M.R.S. §18252-A as amended by PL 2021, c. 90.
 - F. **Chief Administrative Officer.** Membership is optional for a chief administrative officer of a participating local district, whether appointed for a fixed term or whether appointed with tenure.
 - G. **Employees Not Subject to Municipal Public Employees Labor Relations Law.** Membership is optional for those employees who are not subject to the municipal public employees labor relations laws contained in 26 M.R.S., Chapter 9-A.
 - H. Membership for employees of a participating local district that provides a plan under 5 M.R.S. §18252-B is governed by 5 M.R.S. §18252-A as amended by PL 2021, c. 90.
 - I. The provisions of 5 M.R.S. §18252-C apply only to employees of participating local districts who specifically adopt them in their participation agreement.
- 3. **Part-Time, Seasonal or Temporary Employees.** Membership of part-time, seasonal and temporary employees, as defined by Chapter 802 (94-411 CMR 802) of the rules of the Board is determined by the election made by each participating local district under Section 2.
 - 4. **Cessation of Membership.** A member ceases to be a member of the Retirement System if the member:
 - A. **Withdrawal.** Withdraws accumulated contributions;
 - B. **Beneficiary.** Becomes a beneficiary as a result of the member's own retirement; or
 - C. **Death.** Dies.
 - 5. **Service in the Armed Forces.** The membership of the following members under The Plan is considered to have continued during the period of the member's service in the Armed Forces of the United States:
 - A. Any member entering a class of service in the Armed Forces of the United States approved by resolution of the Board, if the member does not withdraw accumulated contributions;
 - B. Any member who enlists in or is inducted or drafted into the service of the Armed Forces of the United States; and
 - C. Any member who enlists in or is inducted or drafted into the service of the Armed Forces of the United States while the *United States Selective Service Act of 1948*, Public Law 759, or any of its amendments or extensions is in effect.

SECTION 4. PORTABILITY OF SERVICE CREDITS; ELIGIBILITY TO RETIRE, COMPUTATION OF BENEFIT

1. **Two or More Employers under The Plan.** A member's benefits are based upon all creditable service with all participating employers while a member under The Plan, and creditable service with the member's employer on the date the member began participation under The Plan. When a member under The Plan terminates employment and is subsequently reemployed by another employer whose employees participate in The Plan, the member is not considered to be reemployed by a new employer. If the member is reemployed by the subsequent employer as of the first work day following termination of employment with the previous employer, for the purpose of determining eligibility for benefits, the member is considered to have continuous membership and creditable service.
2. **Previous Employer Not under The Plan; Subsequent Employer under The Plan.** When a member either terminates employment with an employer that has withdrawn from the System, or terminates employment with another employer under the System whose employees are not covered by The Plan, and is employed by a subsequent employer whose employees are members under The Plan, the member's creditable service with the previous employer is used in determining eligibility to retire under the subsequent employer's regular service retirement benefit plan under Section 7. Benefits for service with the previous employer are based upon creditable service and earnable compensation with the previous employer and the provisions of 5 M.R.S., Part 20 in effect with respect to the previous employer at the date of termination of service by the member. A county or municipal law enforcement officer or a municipal firefighter who is eligible under 5 M.R.S. §18253, sub-§1, paragraph E, and who elects to make the contribution necessary under Section 5, subsection 1, paragraph K may include all or part of the creditable service earned with a previous employer with service earned with the new employer both for the purpose of qualification for a service retirement benefit and for the benefit computation.
3. **Previous Employer under The Plan; Subsequent Employer Not under The Plan.** Membership, creditable service and benefits of a member under The Plan who terminates employment and is reemployed as a state employee or teacher are governed by 5 M.R.S. §17656, sub-§1. Until July 1, 1996, membership, creditable service and benefits of a member under The Plan who terminates employment and is reemployed by a participating local district whose employees do not participate in The Plan are governed by 5 M.R.S. §18253, sub-§1. As required by Section 2, paragraph 1, as of July 1, 1996, each local district that is a participating local district must have either entered into an agreement to participate in The Plan or have withdrawn from participation in the Retirement System.
4. **Service under Two or More Special Service Retirement Benefit Plans; Eligibility to Retire.** If a member accrues service credits under more than one special service retirement benefit plan in The Plan, whether with the same employer or more than one employer, credit from service under other special plans toward meeting the retirement eligibility requirements of the special plan from which the member retires is transferred based upon the percentage of the eligibility requirements for the previous plan or plans which were met while under the previous plan or plans. For example, a member who accrues 10 years of creditable service under Special Service Retirement Benefit Plan 1 (1/2 of AFC after 20 years) would have completed 50% of the eligibility requirement under that plan and upon transferring to employment under Special Service Retirement Benefit Plan 2 (1/2 of AFC after 25 years) would be entitled to 50% of the eligibility requirements for that plan; i.e., 12.5 years. The member's benefit would be calculated at 2.5% of AFC for each year under Plan 1 and at 2% for each year under Plan 2.

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5. **Service under Two or More Service Retirement Benefit Plans – One Regular and One Special; Eligibility to Retire**
- A. **Regular Service before Special Service.** If a member under The Plan accrues service credits under a regular service retirement plan before accruing service credits under a special service retirement benefit plan, whether with the same employer or more than one employer,
- (1) the member may retire at any time after the member qualifies for a special service retirement benefit under Section 8. The regular plan service credits may be used toward qualifying to retire under a special service retirement benefit as provided in Section 8. The regular plan service credits used towards qualification for a special service retirement benefit are considered to be special plan service credits for the purpose of computation of the special service retirement benefit as provided in Section 8. If the application of the provisions of Section 4, subsection 6 would result in a greater service retirement benefit, then the benefit will be computed under that section.
 - (2) A member who does not qualify to retire under a special service retirement plan may retire under a regular service retirement plan at any time after the member qualifies under Section 7. The service retirement benefit for all service is computed as provided in Section 7.
- B. **Special Service before Regular Service.** If a member under The Plan accrues service credits under a special service retirement benefit plan before accruing service credits under a regular service retirement benefit plan, whether with the same employer or more than one employer,
- (1) before qualifying to retire under a special service retirement plan, the member may retire at any time after completing 25 years total service or reaching normal retirement age with at least one year of service. The service retirement benefit for all service is computed as provided in Section 7.
 - (2) after qualifying to retire under a special service retirement plan, the member may retire at any time. The portion of the benefit that is based upon service credits under a regular service retirement benefit plan is subject to early retirement reduction if retirement is before normal retirement age. The portion of any benefit paid to a member that is based upon service credits under Special Service Retirement Benefit Plan 4 is also subject to early retirement reduction, if retirement is before age 55.
6. **Service under Two or More Service Retirement Benefit Plans; Computation of Benefits.** When a member has creditable service under two or more service retirement benefit plans, the appropriate benefit formula is applied to each period of service as provided by Section 7, “Regular Service Retirement Benefits Plans” and Section 8, “Special Service Retirement Benefit Plans”. All benefits based upon creditable service under The Plan are based upon one calculation of average final compensation.

SECTION 5. CONTRIBUTIONS**1. Member contributions**

- A. **Active Member.** Each member under The Plan shall contribute to the Retirement System or have pick-up contributions made by the employer at a rate provided by Sections 7, 8, and 9. The contribution rate for a member is the rate assigned to the retirement benefit plan under which the member is accruing service credits.
- B. **Former Members; Service under The Plan.** Any former member who, after having terminated service while a member under The Plan and having withdrawn accumulated contributions, again becomes a member under The Plan may repay the withdrawn contributions to the Members' Contribution Fund under the following conditions:
- (1) **Time.** The repayment must be made before the date any retirement benefit becomes effective for the member.
 - (2) **Manner of Repayment.** The repayment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
 - (3) **Amount of Repayment.** The amount of repayment must be equal to the withdrawn accumulated contributions plus interest on the amount of those accumulated contributions, beginning on the date of withdrawal to the date the repayment or repayments are made, at a rate to be set by the Board not to exceed regular interest by 5 or more percentage points.
 - (4) **Credit under The Plan.** Except as provided in paragraph C, only withdrawn contributions relating to creditable service under The Plan may be repaid for service credit under The Plan.
- C. **Service Not under The Plan**
- (1) **Withdrawn Contributions**
 - (a) Any member who had service while not a member under The Plan and having withdrawn contributions relating to that service may repay the withdrawn contributions to the Members Contribution Fund under the conditions specified in paragraph B, subparagraphs 1 to 3. Creditable service related to these repaid contributions is used in determining eligibility to retire under the applicable regular service retirement benefit plan under Section 7. Benefits for that service are calculated based on that service and on earnable compensation related to that service in accordance with applicable provisions of 5 M.R.S., Part 20 in effect with respect to the previous employer's regular service retirement plan immediately before that employer's employees became members under The Plan. The additional liability relating to the service credits granted under this division becomes part of the previous employer's unpooled unfunded actuarial liability as provided in subsection 2, paragraph A, subparagraph 2.
 - (b) Any member who had service while not a member under The Plan and having withdrawn contributions relating to that service may

repay the withdrawn contributions to the Members Contribution Fund under the conditions specified in paragraph B, subparagraphs 1 to 3. Creditable service related to these repaid contributions is used in determining that a member is qualified to retire and in the computation of retirement benefit under the applicable service retirement benefit plan under Section 7 or Section 8. Unless the service was with the same employer that is the member's employer at the time the contributions are repaid, the contributions provided for under this subparagraph may be repaid only after the participating local district that is the member's employer at the time the contributions are repaid agrees to assume the additional liability incurred as part of the district's unpooled unfunded actuarial liability as provided in subsection 2, paragraph A, subparagraph 2.

(2) **Non-member Service**

- (a) Subject to the personnel rules or policies of the member's employer at the time of the service; provided the member has continued to be employed by that employer; and subject to 5 M.R.S. §18305-B, a member who had service as an employee of a participating local district for which contributions were not made may receive service credit for that service upon paying the appropriate contributions to the Members Contribution Fund under the conditions specified in paragraph B, subparagraphs 2 and 3. Creditable service related to these contributions is used in determining that a member is qualified to retire and in the computation of retirement benefit under the applicable service retirement benefit plan under Section 7 or Section 8. The additional liability relating to the service credits granted under this division becomes part of the district's unpooled unfunded actuarial liability as provided in subsection 2, paragraph A, subparagraph 2.
- (b) Subject to 5 M.R.S. §18305-B, a member who had service as an employee of any participating local district for which contributions were not made may receive service credit for that service upon paying the appropriate contributions to the Members Contribution Fund under the conditions specified in paragraph B, subparagraphs 2 and 3. Creditable service related to these contributions is used in determining that a member is qualified to retire and in the computation of retirement benefit under the applicable service retirement benefit plan under Section 7 or Section 8. The contributions provided for under this subparagraph may be made only after the participating local district that is the member's employer at the time the contributions are made and the service credits are granted agrees to assume the additional liability incurred as part of the district's unpooled unfunded actuarial liability as provided in subsection 2, paragraph A, subparagraph 2.

D. **Optional Members with non-member service.** The purchase of service credit for a member for whom membership is optional under Section 3, subsection 2 who had service as an employee of a participating local district for which contributions were not made is governed by 5 M.R.S. §18305-B, provided that the member has

continued to be employed by the same employer as that during which no contributions were paid.

- E. **Former Member; Withdrawal by Employees Not Covered by Social Security.** In addition to paragraphs B and C, the repayment of contributions that were withdrawn by a member who is an employee of a participating local district that is not covered under a Social Security Section 218 agreement but that has a plan that meets the requirements of 5 M.R.S. §18252-B is subject to the provisions of 5 M.R.S. §18252-A as amended by PL 2021, c. 90.
- F. **Service in the Armed Forces before Becoming a Member.** A member who qualifies under Section 6, subsection 4, paragraph B, sub-paragraphs 1 through 4, shall contribute to the Retirement System for the period of service in the Armed Forces under the following terms and conditions:
- (1) Contributions are calculated at the percentage rate required of active members during the period of time covered by the service in the Armed Forces applied to the member's earnable compensation during the first year as an employee subsequent to service in the Armed Forces under the following terms and conditions:
 - (a) The payment may not be made until the member has accumulated at least 15 years of creditable service and must be made before the date any retirement benefit becomes effective for the member;
 - (b) If 2 or more percentage rates were in effect during the period of service in the Armed Forces, the highest percentage rate is used;
 - (c) The minimum rate is 5%; and
 - (d) Interest at a rate set by the board not to exceed regular interest by 2 or more percentage points is paid on the unpaid balance beginning January 1, 1976, or the date of attaining 15 years of creditable service, if later, to the date payment is made.
 - (2) **Manner of Repayment.** The repayment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
- G. **Service in the Armed Forces after Becoming a Member.** For members who qualify to have their membership in the Retirement System continued under Section 3, subsection 5 because of service in the Armed Forces of the United States, the participating local district shall contribute to the Members' Contribution Fund the same amount that the member would have been required to contribute if the member had been serving the district during the period of service in the Armed Forces in the same capacity in which the member was serving at the time the member joined the Armed Forces. Any member whose contributions to the Members' Contribution Fund are paid by the district under this subsection, who withdraws or ceases to be a member of the Retirement System, may not withdraw any of the contributions made by the district under this subsection. Upon receiving written certification and substantiation from the member's employer that a member has met the requirements of Section 3, subsection 5 and Section 6, subsection 4, paragraph A, the System shall calculate the member contributions applicable to the period of service in the Armed

Forces. The participating local district by which the member is employed is responsible for those contributions and will be billed by the System.

H. **Out-of-state Service.** A member who qualifies under Section 6, subsection 5, must make contributions into the Members' Contribution Fund for the years of out-of-state service under the following terms and conditions:

- (1) Contributions are calculated on the same basis as the member would have made contributions had the service been in the State;
 - (a) The payment may not be made until the member has accumulated at least 20 years of creditable service in the Retirement System and must be made before the date any retirement benefit becomes effective for the member; and
 - (b) Interest at a rate, to be set by the Board, not to exceed regular interest by 5 or more percentage points is paid on the unpaid balance. Interest shall be computed from the end of the year when those contributions would have been made, if the service had been in the State, to the date of payment.
- (2) **Manner of Payment.** The payment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.

I. **Refund of Contributions.** Refunds of contributions to members under The Plan are subject to 5 M.R.S. §§ 18306-A and 18307-A.

J. **Teachers in Private, Parochial and Other Schools.** A member who qualifies under Section 6, subsection 8, must make contributions into the Members' Contribution Fund for the years of private, parochial or other school service under the following terms and conditions:

- (1) Contributions are calculated on the same basis as the member would have made contributions had the service been as a state employee or teacher in the State. The member's earnings for the years of private or parochial teaching must be assumed to have been the same as the average salary for teachers in the State as determined by the Department of Education for each of the years when the private or parochial school teaching took place.
 - (a) The payment may not be made until the member has accumulated at least 20 years of creditable service in the Retirement system as a member of the participating local district and must be made before the date any retirement benefit becomes effective for the member;
 - (b) Interest at a rate, to be set by the Board, not to exceed regular interest by 5 or more percentage points is paid on the unpaid balance. Interest shall be computed from the end of the year when those contributions would have been made, if the service had been as a state employee or teacher in the State, to the date of payment.
- (2) **Manner of Payment.** The payment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.

- K. **Portability of Service.** A member who elects under 5 M.R.S. §18253, sub-§1, paragraph E to include all or part of the creditable service and earnable compensation from a prior plan with service earned under The Plan may do so under the following terms and conditions:
- (1) Before any retirement benefit becomes effective for that member, the member must pay into the Members' Contribution Fund an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the inclusion of the prior plan creditable service and earnable compensation with service earned under The Plan.
 - (2) **Manner of Payment.** The payment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
- L. **Back contributions for certain days off without pay.** A member who elects under 5 M.R.S. §18305-C to include compensation that would have been paid for days off without pay in order to include those earnings in the calculation of the member's average final compensation as provided in 5 M.R.S. §17001, sub-§4, paragraph A, may do so under the following terms and conditions:
- (1) **Election.** If the retirement system determines at the time a member retires that the member's benefit would be increased as a result of the inclusion of compensation that would have been paid for days off without pay, the retirement system shall advise the member of that result and shall allow the member to elect to have that compensation included in the calculation of the member's benefit and to make payments as set forth in subsection 2.
 - (2) **Payment.** The amount that a member who makes the election permitted in subsection 1 must pay is the amount equal to the employee contribution that member would have made on compensation that would have been paid to that member on the days off without pay, plus interest at the same rate as that required for repayment of withdrawn contributions pursuant to section 18304. If the member elects to make the payment, the retirement system shall withhold the required amount from the member's first retirement benefit check.
 - (3) **Benefit calculation.** If a member fails to make the election within 31 days of the notification provided under subsection 1, the retirement system shall calculate the member's retirement benefit without inclusion of the compensation that would have been paid for the days off without pay.
- M. **Law enforcement service before becoming a member.** A member who qualifies under Section 6, subsection 10 must make contributions into the Members' Contribution Fund for the period of law enforcement service under the following terms and conditions:
- (1) Before any retirement benefit becomes effective for that member, the member must pay into the Members' Contribution Fund an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the inclusion of the prior law enforcement service credit with service earned under The Plan.

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- (2) **Manner of Payment.** The payment must be made to the Retirement System consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
2. **Employer Contributions.** Contributions by participating local districts whose employees are members under The Plan are subject to 5 M.R.S. §18303, except that contributions and pickup contributions are to be calculated according to Sections 7, 8, and 9, and the following:
- A. **Unpooled Unfunded Actuarial Liability Contribution.** Each participating local district with employees who are members under The Plan shall make a contribution known as the "Unpooled Unfunded Actuarial Liability Contribution" based upon:
- (1) its Initial Unpooled Unfunded Actuarial Liability, which is the excess of projected liabilities allocated to future benefit payments to current recipients of benefits and to current members as of the date its employees begin participation under The Plan over the sum of the participating local district's assets on hand as of that date and its future employer and member normal contributions. The rate for this portion of Unpooled Unfunded Actuarial Liability Contribution shall be determined by a valuation made by the System's actuary for each participating local district with employees who are members under The Plan; and
 - (2) any adjustments to the Initial Unpooled Unfunded Actuarial Liability attributable to that district separately. The rate for this portion of the Unpooled Unfunded Actuarial Liability Contribution shall be added to or subtracted from the rate determined under a.
 - (3) if the calculation required by (1) or (2) above results in a credit balance, the balance may, at the discretion of the participating local district, be applied as an offset against the monthly contribution required in an amount no greater than the total amount of the monthly contribution against which the offset is applied.
- B. **Normal Contribution.** Each participating local district with employees who are members under The Plan, along with those members pursuant to Sections 7, 8, and 9, shall make a contribution known as a "Normal Contribution" based upon the portion of projected liabilities attributable to service of all members under the several benefit plans under The Plan for the year following the valuation. The rate of this contribution shall be determined annually by a valuation made by the System's actuary based upon the membership data relating to all members under each benefit plan under The Plan and in accordance with Sections 7, 8, and 9.
- C. **Pooled Unfunded Actuarial Liability Contribution.** Each participating local district with employees who are members under The Plan, along with those members pursuant to Sections 7, 8, and 9, shall make a contribution known as the "Pooled Unfunded Actuarial Liability Contribution" based upon the Pooled Unfunded Actuarial Liability. This liability is equal to the present value of all projected benefits for current and future members, including employer contributions related to military service credit under The Plan, less the present value of future member and employer normal contributions, the assets of The Plan and the present value of all Unpooled Unfunded Actuarial Liability contributions. This rate of this contribution shall be determined annually in accordance with Sections 7, 8, and 9.

- D. **Disability Benefit Contribution.** Each participating local district with employees who are members under The Plan shall make a contribution known as a "disability benefit contribution" based upon the expected value of future disability benefits to be paid to those employees, and to employees who are participants in the defined contribution 401(a) plan under this chapter but who are not members under The Plan, as a result of disablements occurring during the year following the valuation date. The rate of this contribution shall be determined annually by a valuation made by the System's actuary based upon the membership data relating to all members under each benefit plan under The Plan and participants in the defined contribution 401(a) plan under this chapter who are not members under The Plan.
- E. **Death Benefit Contribution.** Each participating local district with employees who are members under The Plan shall make a contribution known as a "death benefit contribution" based upon the expected value of future death benefits to be paid to beneficiaries of those employees and to beneficiaries of employees who are participants in the defined contribution plan under this chapter as a result of deaths occurring during the year following the valuation date. The rate of this contribution shall be determined annually by a valuation made by the System's actuary based upon the membership data relating to all members under each benefit plan under The Plan and participants in the defined contribution plan under this chapter.

SECTION 6. CREDITABLE SERVICE

1. **Determination of Service Credits.** The determination of service credits for members under The Plan is subject to Chapter 401 (94-411 CMR 401) of the rules of the Board.
2. **Prior Service; Service Before Effective Date of District's Participation.** Service credit for service as an employee of a local district before the beginning date of the participation of the employees of a participating local district in the Retirement System shall be granted upon certification by the district, subject to limitations in the district's agreement as provided by Section 2, subsection 2, paragraph D and statutes and rules in effect at the time the service was rendered.
3. **Former Member**
 - A. **Member who Terminated Service.** Upon complete payment of the withdrawn contributions under Section 5, subsection 1, paragraph B, a member shall be granted service credit for the period of time for which the contributions have been repaid. Upon making partial payment of the withdrawn contributions under Section 5, the member shall be granted service credit on a pro rata basis in accordance with rules adopted by the Board.
 - B. **Service Not under The Plan.** Upon complete payment of the contributions under Section 5, subsection 1, paragraph C, a member shall be granted service credit for the period of time for which the contributions have been paid. Upon making partial payment of the contributions under Section 5, the member shall be granted service credit on a pro rata basis in accordance with rules adopted by the Board.
 - C. **Contributions Withdrawn by Employees Not Covered by Social Security.** The granting of creditable service upon repayment of contributions, under section 5, subsection 1, paragraph E, that were withdrawn by a member who is an employee of a participating local district that is not covered under a Social Security Section 218

agreement but that has a plan that meets the requirements of 5 M.R.S. §18252-B is subject to the provisions of 5 M.R.S. §18252-A as amended by PL 2021, c. 90.

4. **Service in the Armed Forces.** Service credit for service in the Armed Forces of the United States is governed as follows:
 - A. **Service after Becoming a Member.** A member is entitled to service credit for the period of time during which the member's membership is continued under Section 3, subsection 5 under the following terms and conditions. Except as provided in subparagraph 3, service credit under this subsection is limited to 5 years.
 - (1) A member's separation from service in the Armed Forces of the United States must be under conditions other than dishonorable.
 - (2) A member is not entitled to service credit for military leave if the member's return to membership service is delayed beyond 90 days after separation from the service in the Armed Forces, unless the delay is caused by an illness or disability incurred in the service in the Armed Forces.
 - (3) A member may not receive service credit for military leave beyond the end of the period of first enlistment or induction or beyond 5 years from the date of original call to active duty in the Armed Forces, whichever is less, unless:
 - (a) The member's return to active duty in the Armed Forces or the extension of the period of service beyond 5 years is required by some mandatory provision; and
 - (b) The member presents proof of the return to or extension of service satisfactory to the Board.
 - B. **Service before Becoming a Member.** A member who served as a full-time active duty member of the Armed Forces of the United States before becoming a member of the Retirement System is entitled to service credit for the period of time the member served in the Armed Forces, under the following terms and conditions. Service credit under this subsection is limited to 4 years.
 - (1) Except as provided in paragraph 6, on the date of retirement, the member must have at least 15 years of creditable service.
 - (2) The member must have separated from the Armed Forces under conditions other than dishonorable.
 - (3) Except as provided in subparagraph 4, the member must have begun membership before January 1, 1976.
 - (4) Except as provided in paragraph 6, a member who served in the Armed Forces during any federally recognized period of conflict, as defined in 5 M.R.S. §18360(2)(E), is entitled to service credit under this paragraph.
 - (5) Upon complete payment of the back contributions under Section 5, subsection 1, paragraph F, the member shall be granted service credit for the period of time for which the contributions have been made. Upon making partial payment of the back contributions under Section 5, the member shall

be granted service credit on a pro rata basis in accordance with rules adopted by the board.

- (6) **Alternative.** A member who fails to meet one or more of the terms and conditions required under paragraphs 1, 3 and 4 may purchase service credit as provided in this paragraph. The member must have at least 5 years of creditable service and, before any retirement benefit becomes effective for that member, must pay into the Members' Contribution Fund, an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the additional creditable service. Any member who purchases service credit under this paragraph who subsequently, without inclusion of the purchased service credit and prior to retirement, meets the terms and conditions of paragraphs 1, 2 and 4 is entitled to purchase the service credit under Section 5, subsection 1, paragraph F and to receive a refund of the amount paid under this paragraph that exceeds the cost to purchase the service under Section 5.
5. **Out-of-state Service.** For members who began membership before January 1, 1976, additional service credit shall be allowed for out-of-state service, subject to the following conditions.
- A. **20 Years of Creditable Service.** The member must have creditable service in the Retirement System of at least 20 years in the aggregate;
- B. **Last 10 Years in Maine; 10 Year Limit.** The member's last 10 years of creditable service before the date of retirement must be in the State and no more than 10 years of service credit may be allowed for out-of-state service; and
- C. **Payment of Contributions.** Upon complete payment of the back contributions under Section 5, subsection 1, paragraph H, subparagraph 2, the member shall be granted service credit for the period of time for which the contributions have been made. Upon making partial payment of the back contributions under Section 5, subsection 1, paragraph H, subparagraph 2, the member shall be granted service credit on a pro rata basis in accordance with rules adopted by the board.
- D. **Alternative.** If service credit for out-of-state service is not allowed under paragraph A and B, service credit for out-of-state service shall be allowed if the member, before any retirement benefit becomes effective for that member, pays into the Members' Contribution Fund, an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the additional creditable service. Payments must be made consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
- (1) Additional amounts paid under this subsection shall become a part of the member's accumulated contributions.
- (2) If any retirement benefit becomes effective before the completion of the payment under this subsection, the member is entitled to service credit for that portion of the additional creditable service that the total amount of payments actually made, plus regular interest on those payments to the date the retirement benefit becomes effective, bears to the actuarial

equivalent of the total portion of the retirement benefit based on the additional creditable service.

- E. **Service Credit not to be Used in Another State.** Any application for a retirement benefit for which out-of-state service credit is to be granted must be accompanied by a certified statement from the appropriate retirement system that the out-of-state service credit granted has not been or will not be used to obtain benefits in another state.
6. **Disability Retirement Service Credit.** A recipient of a disability retirement benefit shall receive service credit for the purpose of determining benefits under The Plan for the period of time following termination of service during which disability retirement benefits are being received under 5 M.R.S. Chapter 425, subchapter V, article 3-A.
7. **Unused Sick Leave or Vacation Leave**
- A. **Earnable Compensation.** A member's earnable compensation does not include payment for unused accumulated or accrued sick leave, unused vacation time, or a combination of both, or any other payment that is not compensation for actual services rendered or that is not paid at the time the actual services are rendered, except that for a member with at least 20 years of creditable service under The Plan at the effective date of the member's retirement, and for a recipient of a disability retirement benefit, earnable compensation includes payment for unused accumulated or accrued sick leave, unused vacation time, or a combination of both, up to a maximum of 30 days, if paid upon the member's last termination before the member applies for retirement benefits.
- B. **Service Credit.** A member may not receive service credit for unused accumulated or accrued sick leave, unused vacation leave, or a combination of both, for which a member is credited on termination of service, but for which the member does not receive payment, except under the following conditions.
- (1) Leave, up to a lifetime maximum of 90 days, qualifies for service credit for a member with at least 20 years of creditable service under The Plan, before the application of this sub-paragraph, at the effective date of the member's retirement.
 - (2) Leave, up to a lifetime maximum of 90 days, qualifies for service credit for a recipient of a disability retirement benefit, at the effective date of the member's disability retirement.
 - (3) Leave, including leave beyond 90 days, may qualify for service credit, up to the maximum number of days of leave, set by personnel rules or by contract, that a person is allowed to accumulate, if, the member, before any retirement benefit becomes effective for the member, pays into the Members' Contribution Fund, a single payment which is the actuarial equivalent, at the effective date of the member's retirement benefit, of the portion of the member's retirement benefit based on the additional creditable service beyond 90 days.
8. **Teachers in Private, Parochial and Other Schools.** A member who taught in a parochial school or in a public or private academy may purchase up to 10 years of service credit for that service under the following conditions.

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- A. The member must have taught in a school approved by the Department of Education or the education department of another state while holding an appropriate teaching certificate;
- B. **20 Years of Creditable Service.** The member must have 20 years of creditable service as a member of the participating local district;
- C. **Membership before January 1, 1976.** The member must have begun membership before January 1, 1976;
- D. **Last 10 Years in Participating Local District.** The member's last 10 years of creditable service before the date of retirement must be as a member of the participating local district; and
- E. **Payment of Contributions.** Upon complete payment of the back contributions under Section 5, subsection 1, paragraph K, subparagraph 2, the member shall be granted service credit for the period of time for which the contributions have been made. Upon making partial payment of the back contributions under Section 5, subsection 1, paragraph K, subparagraph 2, the member shall be granted service credit on a pro rata basis in accordance with rules adopted by the board.
- F. **Alternative.** If service credit for private, parochial or other school service is not allowed under paragraphs B and C, additional service credit is allowed for any member who meets the requirements of paragraphs A and D, if the member, before any retirement benefit becomes effective for that member, pays into the Members' Contribution Fund an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the additional creditable service. Payments must be made consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
- (1) Additional amounts paid under this subsection shall become a part of the member's accumulated contributions.
 - (2) If any retirement benefit becomes effective before the completion of the payment under this subsection, the member is entitled to service credit for that portion of the additional creditable service that the total amount of payments actually made, plus regular interest on those payments to the date the retirement benefit becomes effective, bears to the actuarial equivalent of the total portion of the retirement benefit based on the additional creditable service.
9. **Other Schools and Programs.** A member who terminates service in the State and teaches under the Volunteers in Service to America Program, the Fulbright Exchange Program or the Peace Corps, foreign or domestic, or teaches children of United States Foreign Corps personnel outside the continental limits of the United States is entitled to service credit for that service under the following conditions.
- A. **2 Year Limit.** The service credit may not exceed 2 years.
- B. **Return to Active Service.** The member must return to active service as a member of the retirement system within one year of the completion of the teaching outside of the State described in this section.

- C. **Payment of Contributions.** The member, before any retirement benefit becomes effective for that member, must pay into the Members' Contribution Fund an amount that, together with regular interest on that amount, is the actuarial equivalent, at the effective date of the retirement benefit, of the portion of the retirement benefit based on the additional creditable service. Payments must be made consistent with Chapter 406 (94-411 CMR 406) of the rules of the Board.
10. **Law enforcement service before becoming a member.** A member who served as a full-time law enforcement officer with a federal, state, county or local law enforcement agency before becoming a member, and who did not decline membership under section 3, subsection 2, during the period of prior law enforcement service, is entitled under this subsection to purchase service credit for the period of time that the member served as a law enforcement officer under the following conditions:
- A. **15 years of creditable service.** The member must have at least 15 years of creditable service at the time of retirement.
- B. **4 year limit.** Service credit purchased under this subsection is limited to 4 years.
- C. **Service credit not to be used for other benefits.** The member must provide a certified statement from the appropriate retirement system that the service credit to be granted has not been and will not be used to obtain other retirement benefits.
- D. **Payment of contributions.** The member must complete payment of contributions as required by Section 5, subsection 1, paragraph M.
- (1) Additional amounts paid under this subsection shall become a part of the member's accumulated contributions.
- (2) If any retirement benefit becomes effective before the completion of the payment under this subsection, the member is entitled to service credit for that portion of the additional creditable service that the total amount of payments actually made, plus regular interest on those payments to the date the retirement benefit becomes effective, bears to the actuarial equivalent of the total portion of the retirement benefit based on the additional creditable service.

SECTION 7. REGULAR SERVICE RETIREMENT BENEFIT PLANS

Payment of benefits to members under The Plan is subject to the provisions of 5 M.R.S. §§ 18403 – 18405-A, 18409 - 18413.

1. **Regular Benefit Plan AC.** Regular Benefit Plan AC may be elected by any participating local district or local district.
- A. **Contribution Rate.** Subject to Section 15, subsection 1, and the rate caps under Section 9, employer and employee contributions shall be set annually by the Board based on the recommendations of the System's actuary in accordance with the following:
- (1) The Plan's unfunded actuarial liability as of June 30, 2018, shall be paid in an actuarially sound manner and allocated between the employer and

employee in a ratio approved by the Board based on the recommendation of the Participating Local District Advisory Committee;

- (2) Any Plan unfunded actuarial liability created beginning July 1, 2018, shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee;
- (3) The normal cost shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee.; and
- (4) Rates shall reflect any differences in actuarial assumptions and experience and shall be based on whether the member is subject to paragraphs B or B-1.

B. Qualification for Benefit Prior to July 1, 2014. A member of The Plan prior to July 1, 2014 qualifies for a service retirement benefit under this paragraph when one of the following occurs:

- (1) The member is in service when reaching 60 years of age, or is in service after reaching 60 years of age, and has been in service for a minimum of one-year immediately before retirement or except as provided in sub-paragraph 4 has at least 10 years of creditable service, which may include creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8;
- (2) The member is not in service when reaching 60 years of age, and except as provided in sub-paragraph 4 has at least 10 years of creditable service, which may include creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8; or
- (3) The member has completed 25 or more years of creditable service, which may include, for the purpose of meeting eligibility requirements, creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8.
- (4) The member has at least 5 years of creditable service, which, for the purpose of determining completion of the 5-year requirement, may include creditable service as a member of the Legislative Retirement Program, and:
 - (a) Was in service on October 1, 1999;
 - (b) Had left prior to October 1, 1999 with or without withdrawing contributions and on or after October 1, 1999 returned to service; or
 - (c) Was first in service on or after October 1, 1999.

B-1. Qualification for Benefit after July 1, 2014. A member who was not covered by The Plan prior to July 1, 2014 qualifies for a service retirement benefit under this paragraph when one of the following occurs:

- (1) The member is in service when reaching 65 years of age, or is in service after reaching 65 years of age, and has been in service for a minimum of one year immediately before retirement or has at least 5 years of creditable

service, which may include creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8;

- (2) The member is not in service when reaching 65 years of age and has at least 5 years of creditable service, which may include creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8; or
- (3) The member has completed 25 or more years of creditable service, which may include, for the purpose of meeting eligibility requirements, creditable service as a member of the Legislative Retirement Program under 3 M.R.S. §701, sub-§8.

C. Computation of Benefit - Retirement at Normal Retirement Age or Later.

Subject to the requirements of Section 4, subsection 6, the total amount of the service retirement benefit for a member qualified under paragraph B, subparagraphs 1, 2 or 4 or under paragraph B-1, equals:

- (1) $1/50$ of the member's average final compensation multiplied by the number of years of creditable service under The Plan; and
- (2) If the member had creditable service, with the member's current employer before that employer's employees were under The Plan, the benefit for that creditable service is calculated on the basis of:
 - (a) $1/50$ of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the $1/50$ formula;
 - (b) $1/60$ of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the $1/60$ formula;
 - (c) $1/70$ of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the $1/70$ formula;
- (3) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.

- (4) If the member has prior service credit, the benefit for that service is calculated on the basis of the applicable formula of paragraph C (2) above, as adopted by the district for prior service credit.

D. **Computation of Benefit - Retirement before Normal Retirement Age - With Creditable Service of 25 Years or More.** Subject to the requirements of Section 4, subsections 5 and 6, the amount of the service retirement benefit for a member who retires prior to normal retirement age shall be computed as follows:

- (1) The amount of the service retirement benefit for a member qualified under paragraph B, subparagraph 3, who has 20 or more years of creditable service under The Plan as of July 1, 2019, shall be computed in accordance with paragraph C, except that:
- (a) The amount arrived at under paragraph C shall be reduced by applying to that amount the percentage that a life annuity due at age 60 bears to the life annuity due at the age of retirement.
- (b) For the purpose of making the computation under division a, the Board-approved tables of annuities in effect at the date of the member's retirement shall be used.
- (2) The amount of the service retirement benefit for a member qualified under paragraph B-1, subparagraph 3, who, pursuant to Title 5, Section 18253, has 20 or more years of creditable service under The Plan as of July 1, 2019, shall be computed in accordance with paragraph C, except that the benefit is reduced by 6% for each year that the member's age precedes 65 years of age.
- (3) The amount of the service retirement benefit for all other members shall be computed in accordance with paragraph C, except that the amount arrived at under paragraph C shall be reduced to reflect the full actuarial impact of the early retirement. At the election of the member, any cost of living adjustments pursuant to Section 9 shall not be applied until the member has reached age 60, for a member to whom paragraph B applies, or age 65, for a member to whom paragraph B-1 applies, and the actuarial impact shall reflect this election.

E. **Cost of Living Adjustments.** Subject to paragraph D, subparagraph 2, all benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

2. **Regular Benefit Plan AN.** Regular Benefit Plan AN may be elected by any participating local district or local district.

This benefit plan is the same as Regular Benefit Plan AC, except that there is no provision for cost of living adjustments.

3. **Regular Benefit Plan BC.** Regular Benefit Plan BC may be elected by any participating local district or local district which covers its employees under the Federal Social Security program under a Section 218 Agreement. Any current employee who was a member under a plan which provided benefits under the 1/50 or 1/60 formula with a cost of living adjustment may elect to

be under Regular Benefit Plan A and any current employee who was under a plan which provided benefits under the 1/50 or 1/60 or 1/70 formula without cost of living adjustments may elect to be under Regular Benefit Plan AN. Regular Benefit Plans AC and AN require that members make contributions at the rate as set forth in subsections 1 and 2. For the purposes of this subsection, "current employee" means a person whose employment with a participating local district began prior to the date on which participation in The Plan for that district's employees begins and who is a member as an employee of that district on that date.

- A. **Contribution Rate.** Employer and employee contribution rates are set in the same manner and subject to the same requirements as Regular Benefit Plan AC.
- B. **Qualification for Benefit.** The requirements for a member to qualify for a service retirement benefit under this paragraph are exactly the same as under Regular Benefit Plan AC - subsection 1, paragraphs B and B-1.
- C. **Computation of Benefit - Retirement at Normal Retirement Age or Later.** Subject to the requirements of Section 4, subsection 6, the total amount of the service retirement benefit for a member qualified as specified in subsection 1, paragraph B, subparagraph 1, 2 or 4 or under subsection 1, paragraph B-1 equals:
- (1) 1/100 of the member's average final compensation multiplied by the number of years of membership service under The Plan; and
 - (2) If the member had creditable service, with the member's current employer before that employer's employees were under The Plan, the benefit for that creditable service is calculated on the basis of:
 - (a) 1/50 of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the 1/50 formula;
 - (b) 1/60 of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the 1/60 formula;
 - (c) 1/70 of the member's average final compensation multiplied by the number of years of creditable service, if, before being under The Plan, the service retirement benefit for that employer's employees was based upon the 1/70 formula;
 - (3) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The

Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.

- (4) If the member has prior service credit, the benefit for that service is calculated on the basis of the applicable formula of paragraph C (2) above, as adopted by the district for prior service credit.

D. **Computation of Benefit - Retirement before Normal Retirement Age - With Creditable Service of 25 Years or More.** Subject to the requirements of Section 4, subsections 5 and 6, the amount of the service retirement benefit for a member who retires prior to normal retirement age shall be computed as follows:

- (1) The amount of the service retirement benefit for a member qualified as specified in subsection 1, paragraph B, subparagraph 3, who has 20 or more years of creditable service under The Plan as of July 1, 2019, shall be computed in accordance with paragraph C, except that:
 - (a) The amount arrived at under paragraph C shall be reduced by applying to that amount the percentage that a life annuity due at age 60 bears to the life annuity due at the age of retirement.
 - (b) For the purpose of making the computation under subparagraph 1, the board-approved tables of annuities in effect at the date of the member's retirement shall be used.
- (2) The amount of the service retirement benefit for a member qualified under subsection 1, paragraph B-1, subparagraph 3, who, pursuant to Title 5, Section 18253, has 20 or more years of creditable service under The Plan as of July 1, 2019, shall be computed in accordance with subsection 1, paragraph C, except that the benefit is reduced by 6% for each year that the member's age precedes 65 years of age.
- (3) The amount of the service retirement benefit for all other members shall be computed in accordance with paragraph C, except that the amount arrived at under Paragraph C shall be reduced to reflect the full actuarial impact of the early retirement. At the election of the member, any cost of living adjustments pursuant to Section 9 shall not be applied until the member has reached age 60, for a member to whom subsection 1, paragraph B applies, or age 65, for a member to whom subsection 1, paragraph B-1 applies, and the actuarial impact shall reflect this election.

E. **Cost of Living Adjustments.** Subject to paragraph D, subparagraph 2, all benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

4. **Minimum Benefit.** Any member under The Plan who has 10 or more years of creditable service at retirement is entitled to a minimum service retirement benefit of \$100 per month.

SECTION 8. SPECIAL SERVICE RETIREMENT BENEFIT PLANS

Payment of benefits to members under The Plan is subject to the provisions of 5 M.R.S. §§ 18403 – 18405-A, 18409-18413. If, upon electing to participate in The Plan, a participating local district elects a special benefit plan other than the special benefit plan that a member is then covered under, the member may elect to continue under the special benefit plan under which the member is then covered. The member's election must be made as of the date on which the district's participation in The Plan begins and may not be changed thereafter. Members having membership service under special plans prior to July 1, 1977, are entitled to the alternative benefit computation based on that service in accordance with the applicable provision of 5 M.R.S. §18453. A member who does not qualify to retire under a special service retirement plan may retire under a regular service retirement plan at any time after the member qualifies under Section 7. The service retirement benefit for all service is computed as provided in Section 7.

1. **Special Benefit Plan 1C.** Special Benefit Plan 1C may be elected by any participating local district or local district for police officers, firefighters, sheriffs, full-time deputy sheriffs, county corrections employees who are employed at a county jail and whose duties include contact with prisoners or juvenile detainees, and emergency medical services persons as defined in Title 32 M.R.S. §83, sub-§12, including but not limited to first responders, emergency medical technicians, advanced emergency medical technicians and paramedics.
 - A. **Contribution Rate.** Subject to Section 15, subsection 1, and to the rate caps under Section 9, employer and employee contributions shall be set annually by the Board based on the recommendations of the System's actuary in accordance with the following:
 - (1) The Plan's unfunded actuarial liability as of June 30, 2018, shall be paid in an actuarially sound manner and allocated between the employer and employee in a ratio approved by the Board based on the recommendation of the Participating Local District Advisory Committee;
 - (2) Any Plan unfunded actuarial liability created beginning July 1, 2018, shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee; and
 - (3) The normal cost shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee.
 - B. **Qualification for Benefit**
 - (1) A member qualifies for a service retirement benefit under this subsection when the member has completed 20 years of creditable service as an employee in one or more of the types of employment specified in this subsection and specified by the district as covered under this plan. If the member had creditable service under a special plan with the member's current employer before that employer's employees became members under The Plan, that creditable service is counted when determining the member's qualification for this benefit;
 - (2) A member who has accrued service credits under a regular service retirement plan before accruing service under this plan, and for whom the regular plan service credits are considered service under The Plan as provided by Section 4, subsection 1, may use those service credits toward

qualifying to retire under this plan at the rate of one year of special plan service credit for each two years of regular plan service credit; and

- (3) Except for employees who are entitled, under the current employer's plan in effect before the employer's employees become members under The Plan, to use military service credits to qualify for service retirement benefits, service credits for service in the Armed Forces before becoming a member, under Section 6, subsection 4, paragraph B, apply only to additional retirement benefits under this plan and the service credits do not apply to service requirements to qualify for retirement benefits.
- (4) Service credits for law enforcement service before becoming a member, under Section 6, subsection 10, apply only to additional retirement benefits under this plan and the service credits do not apply to service requirements to qualify for retirement benefits.

C. **Computation of Benefit.** Subject to the requirements of Section 4, subsections 5 and 6, the total amount of the service retirement benefit for a member qualified under paragraph B, equals 1/2 of the member's average final compensation and, subject to the limitations of subsection J, an additional 2% of the member's average final compensation for each year of creditable service not included in determining qualification under paragraph B.

- (1) If the member had creditable service under a special plan, with the member's current employer, before that employer's employees became members under The Plan, that creditable service is used when calculating the benefit under this paragraph.
- (2) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.

D. **Cost of Living Adjustments.** All benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

2. **Special Benefit Plan 1N.** Special Benefit Plan 1N may be elected by any participating local district or local district.

This benefit plan is identical to Special Benefit Plan 1C, except that there is no provision for cost of living adjustments.

3. **Special Benefit Plan 2C.** Special Benefit Plan 2C may be elected by any participating local district or local district for police officers, firefighters, sheriffs, full-time deputy sheriffs, county corrections employees who are employed at a county jail and whose duties include contact with prisoners or juvenile detainees, emergency medical services persons as defined in Title 32 M.R.S. §83, sub-§12, including but not limited to first responders, emergency medical technicians, advanced emergency medical technicians and paramedics, and dispatchers as defined in 5 M.R.S. §18313, sub-§1. A district may also elect this plan for all of its employees.
 - A. **Contribution Rate.** Subject to Section 15, subsection 1, and to the rate caps under Section 9, employer and employee contributions shall be set annually by the Board based on the recommendations of the System's actuary in accordance with the following:
 - (1) The Plan's unfunded actuarial liability as of June 30, 2018, shall be paid in an actuarially sound manner and allocated between the employer and employee in a ratio approved by the Board based on the recommendation of the Participating Local District Advisory Committee;
 - (2) Any Plan unfunded actuarial liability created beginning July 1, 2018, shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee; and
 - (3) The normal cost shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee.
 - B. **Qualification for Benefit**
 - (1) A member qualifies for a service retirement benefit under this subsection when the member has completed 25 years of creditable service as an employee in one or more of the types of employment specified in this subsection and specified by the district as covered under this plan. If the member had creditable service under a special plan with the member's current employer before that employer's employees became members under The Plan, that creditable service is counted when determining the member's qualification for this benefit; and
 - (2) A member who has accrued service credits under a regular service retirement plan before accruing service under this plan, and for whom the regular plan service credits are considered service under The Plan as provided by Section 4, subsection 1, may use those service credits toward qualifying to retire under this plan at the rate of two years of special plan service credit for each three years of regular plan service credit.
 - C. **Computation of Benefit.** Subject to the requirements of Section 4, subsections 5 and 6, the total amount of the service retirement benefit for a member qualified under paragraph 2, equals 1/2 of the member's average final compensation and, subject to the limitations of subsection J, an additional 2% of the member's average final compensation for each year of creditable service not included in determining qualification under paragraph B.
 - (1) If the member had creditable service (1) under a special plan, with the member's current employer, before that employer's employees became members under

The Plan, that creditable service is used when calculating the benefit under this paragraph.

- (2) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.

- D. **Cost of Living Adjustments.** All benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

4. **Special Benefit Plan 2N.** Special Benefit Plan 2N may be elected by any participating local district or local district.

This benefit plan is identical to Special Benefit Plan 2C, except that there is no provision for cost of living adjustments.

5. **Special Benefit Plan 3C.** Special Benefit Plan 3C may be elected by any participating local district or local district for police officers, firefighters, sheriffs, full-time deputy sheriffs, county corrections employees who are employed at a county jail and whose duties include contact with prisoners or juvenile detainees, emergency medical services persons as defined in Title 32 M.R.S. §83, sub-§12, including but not limited to first responders, emergency medical technicians, advanced emergency medical technicians and paramedics, and dispatchers as defined in 5 M.R.S. §18313, sub-§1.

- A. **Contribution Rate.** The contribution rate for members under Special Benefit Plan 3C is as set out below until the completion of 25 years of creditable service under this special benefit plan, after which the members contribute at the same rate of earnable compensation as paid by members who contribute under Regular Plan AC as set forth in Section 7, subsection 1, paragraph A. Subject to Section 15, subsection 1, and to the rate caps under Section 9, employer and employee contributions shall be set annually by the Board based on the recommendations of the System's actuary in accordance with the following:

- (1) The Plan's unfunded actuarial liability as of June 30, 2018, shall be paid in an actuarially sound manner and allocated between the employer and employee in a ratio approved by the Board based on the recommendation of the Participating Local District Advisory Committee;
- (2) Any Plan unfunded actuarial liability created beginning July 1, 2018, shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee; and

- (3) The normal cost shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee.

B. Qualification for Benefit

- (1) A member qualifies for a service retirement benefit under this subsection when the member has completed 25 years of creditable service as an employee in one or more of the types of employment specified in this subsection and specified by the district as covered under this plan. If the member had creditable service under a special plan with the member's current employer before that employer's employees became members under The Plan, that creditable service is counted when determining the member's qualification for this benefit; and
- (2) A member who has accrued service credits under a regular service retirement plan before accruing service under this plan, and for whom the regular plan service credits are considered service under The Plan as provided by Section 4, subsection 1, may use those service credits toward qualifying to retire under this plan at the rate of two years of special plan service credit for each three years of regular plan service credit.

C. Computation of Benefit. Subject to the requirements of Section 4, subsections 5 and 6, the total amount of the service retirement benefit for a member qualified under paragraph 2, equals $\frac{2}{3}$ of the member's average final compensation and, subject to the limitations of subsection J, an additional 2% of the member's average final compensation for each year of creditable service not included in determining qualification under paragraph B.

- (1) If the member had creditable service under a special plan, with the member's current employer, before that employer's employees became members under The Plan, that creditable service is used when calculating the benefit under this paragraph.
- (2) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.

D. Cost of Living Adjustments. All benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

6. **Special Benefit Plan 3N.** Special Benefit Plan 3N may be elected by any participating local district or local district.

This benefit plan is identical to Special Benefit Plan 3C, except that there is no provision for cost of living adjustments.

7. **Special Benefit Plan 4C.** Special Benefit Plan 4C may be elected by any participating local district or local district for police officers, firefighters, sheriffs, full-time deputy sheriffs, county corrections employees who are employed at a county jail and whose duties include contact with prisoners or juvenile detainees, emergency medical services persons as defined in Title 32 M.R.S. §83, sub-§12, including but not limited to first responders, emergency medical technicians, advanced emergency medical technicians and paramedics, and dispatchers as defined in 5 M.R.S. §18313, sub-§1.

- A. **Contribution Rate.** The contribution rate for members under Special Benefit Plan 4C is as set out below until the completion of 25 years of creditable service under this special benefit plan, after which the members contribute at the same rate of earnable compensation as paid by members who contribute under Regular Plan AC as set forth in Section 7, subsection 1, paragraph A. Subject to Section 15, subsection 1, and to the rate caps under Section 9, employer and employee contributions shall be set annually by the Board based on the recommendations of the System's actuary in accordance with the following:

- (1) The Plan's unfunded actuarial liability as of June 30, 2018, shall be paid in an actuarially sound manner and allocated between the employer and employee in a ratio approved by the Board based on the recommendation of the Participating Local District Advisory Committee;
- (2) Any Plan unfunded actuarial liability created beginning July 1, 2018, shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee; and
- (3) The normal cost shall be paid through employer and employee contributions allocated 58% to the employer and 42% to the employee.

- B. **Qualification for Benefit**

- (1) A member qualifies for a service retirement benefit under this subsection when the member has completed 25 years of creditable service as an employee in one or more of the types of employment specified in this subsection and specified by the district as covered under this plan. If the member had creditable service under a special plan with the member's current employer before that employer's employees became members under The Plan, that creditable service is counted when determining the member's qualification for this benefit; and
- (2) A member who has accrued service credits under a regular service retirement plan before accruing service under this plan, and for whom the regular plan service credits are considered service under The Plan as provided by Section 4, subsection 1, may use those service credits toward qualifying to retire under this plan at the rate of two years of special plan service credit for each three years of regular plan service credit.

- C. **Computation of Benefit.** Subject to the requirements of Section 4, subsections 5 and 6, the total amount of the service retirement benefit for a member qualified under paragraph B, equals:
- (1) If the member retires after reaching age 55, $1/50$ of the member's average final compensation multiplied by the number of years of creditable service;
 - (2) If the member retires before reaching age 55, $1/50$ of the member's average final compensation multiplied by the number of years of creditable service reduced as follows:
 - (a) For a member who was covered by The Plan prior to July 1, 2014, who has 20 or more years of creditable service under The Plan as of July 1, 2019, the benefit is reduced by applying to that amount the percentage that a life annuity due at age 55 bears to the life annuity due at the age of retirement.
 - (b) For a member who was not covered by The Plan prior to July 1, 2014, but who, pursuant to Title 5, Section 18253, has 20 or more years of creditable service under The Plan as of July 1, 2019, the benefit is reduced by 6% for each year that the member's age precedes 55 years of age.
 - (c) For all other members, the benefit is reduced to reflect the full actuarial impact of the early retirement. At the election of the member, any cost of living adjustments pursuant to Section 9 shall not be applied until the member has reached age 55, and the actuarial impact shall reflect this election.
 - (3) If the member had creditable service under a special plan, with the member's current employer, before that employer's employees became members under The Plan, that creditable service is used when calculating the benefit under this paragraph.
 - (4) If the member had creditable service with an employer other than the member's current employer before becoming a member under The Plan for which the member's current employer has not accepted liability, and for which the member has not made the election under 5 M.R.S. §18253, sub-§1, paragraph E, the benefit for that creditable service is calculated on the basis of creditable service and earnable compensation with the previous employer and in accordance with the previous employer's regular service retirement plan immediately before the previous employer's employees became members under The Plan or the previous employer withdrew from the System. If the previous employer has neither begun participation in The Plan nor withdrawn from the System, the benefit is calculated on the basis of the previous employer's plan at the time of the member's retirement.
- D. **Cost of Living Adjustments.** Subject to paragraph C, subparagraph 2, all benefits based upon creditable service under this service retirement benefit plan are subject to cost of living adjustments as provided by Section 9. Benefits based upon creditable service earned before a member was under The Plan will be subject to cost of living adjustments only if the employer's plan provided for cost of living adjustments.

8. **Special Benefit Plan 4N.** Special Benefit Plan 4N may be elected by any participating local district or local district prior to February 1, 2024.

This benefit plan is identical to Special Benefit Plan 4C, except that there is no provision for cost of living adjustments.

9. **Transfer from Special Plan Position to Non-Special Plan Position Due to Disability.**

A member who has not completed the service requirements for retirement under a special service retirement benefit plan, upon becoming disabled as defined in section 18521, and upon becoming reemployed in a position not under a special service retirement benefit plan shall upon retirement receive retirement benefits as follows:

- A. The part of the member's service retirement based upon membership service before becoming disabled shall be computed according to the formula for computing benefits under the member's previous special plan.
- B. The part of the member's service retirement based upon membership service after becoming reemployed in a position not under a special plan shall be computed according to the formula for computing benefits under the member's previous special plan.
- C. If the member is found to be no longer disabled, as defined in section 18521, the member may:
 - (1) Return to a position in the member's previous special plan; or
 - (2) Remain in the position which is not under a special plan and have the part of the member's service retirement benefit based upon post-disability service computed in accordance with the applicable regular service retirement benefit plan under Section 7.
- D. The executive director may require that a member subject to this subsection submit records and undergo medical examinations or tests to determine the member's disability for purposes of paragraph C.
 - (1) If the member refuses to submit records or undergo the examination or tests under this paragraph, the member's retirement benefit shall be based upon the applicable regular service retirement benefit plan under Section 7 until the member withdraws the refusal.
 - (2) If the member's refusal under subparagraph 1 continues for one year, all the member's rights to any further benefit under this subsection shall cease.

10. **Additional 2% Benefit.** The additional 2% of average final compensation benefit provided to members under the special service retirement plans in this section is applicable only to service credits earned with relation to service rendered after a member becomes a member under The Plan. A member is also entitled to this benefit for service rendered before becoming a member under The Plan to the extent that the member was entitled to the benefit under the member's current employer's retirement plan that was in effect immediately before the employer's employees became members under The Plan.

SECTION 9. COST OF LIVING ADJUSTMENTS; CONTRIBUTION CAPS

1. **Cost of Living Adjustments.** Subject to subsections 2, 3, ~~and 4~~ and 5, the cost-of-living adjustment shall be determined as follows.
 - A. Except as provided in subsections 2, 3 and 4, whenever there is a percentage increase in the Consumer Price Index from July 1 of the previous year to June 30 of the current year, the Board shall automatically make an equal percentage increase in retirement benefits, beginning in September, up to a maximum annual increase of 2.5%.
 - B. If there is a percentage decrease in the Consumer Price Index from July 1st to June 30th, the Board shall set the percentage change at 0% for that September. The adjustment for the following year must be set based on the actuarially compounded Consumer Price Index for both years in a cost-neutral manner. If the Consumer Price Index in the subsequent year or years is not sufficient to allow for the adjustment to be cost-neutral for the 2 years, then the adjustment needed for cost-neutrality must continue to be applied to following years until such time as the cost-neutrality requirement is met.
 - C. The Board shall determine the costs of the adjustments under this Section and shall include those costs in the annual valuation.
 - D. Cost-of-living adjustments under this Section shall be applied to the retirement benefits of retirees as follows:
 - (1) For retirees who retire prior to September 1, 2019, a cost-of-living adjustment is applied if the retiree has been retired for at least 12 months before the date that the adjustment becomes payable.
 - (2) For retirees who retire on or after September 1, 2019, a cost-of-living adjustment is applied if the retiree has been retired for at least 24 months before the date that the adjustment becomes payable. Beneficiaries of deceased retirees shall be eligible for the cost-of-living adjustment at the same time the deceased retiree would have become eligible.
2. **Contribution Caps.** The employer and employee contribution rates, as calculated in the aggregate across all benefit plans in The Plan, are capped at 12.5% and 9%, respectively. If the rates calculated by the System's actuary would exceed the caps for a particular year, the following shall occur:
 - A. The aggregated employer and employee rates will be reduced to the cap amounts, and the Board will set individual benefit plan rates based on the System's actuary's recommendation for allocating the reductions.
 - B. The cost of living adjustment calculated under subsection 1 shall be reduced to maintain cost-neutrality, but not below zero. If the reduction otherwise would have been below zero, then an adjustment will be applied to contribution rates, up to the caps set forth in this subsection, and the cost of living adjustment, but not below zero, in following years until such time as cost-neutrality is achieved.
3. Notwithstanding subsection 1, paragraph A, the cost-of-living adjustment for the period from September 1, 2021 through August 31, 2022 shall be 3.5%.

4. Notwithstanding subsection 1, paragraph A, the cost-of-living adjustment for the period from September 1, 2022 through August 31, 2023 shall be 3.5%.
- 4.5. In addition to the cost-of-living adjustment under subsection 1, paragraph A, a one-time noncumulative cost-of-living adjustment payment equal to 0.5% of retirement benefits will be paid to those eligible for a cost-of-living adjustment for the period from September 1, 2023 through August 31, 2024.

SECTION 10. DISABILITY BENEFITS

1. **Members of The Plan.** Disability retirement benefits for members under The Plan are subject to 5 M.R.S., Chapter 425, subchapter V, *Benefits*, Article 3-A, *Disability Retirement Benefits After September 30, 1989*, except section 18534.
2. **Election Regarding Age-limit or No-age-limit Disability.** The election made by each member under PL 1991, c. 887 whether to be covered under age-limit or no-age-limit disability remains in effect after a member's participation in The Plan begins. Depending upon a member's election, the member is covered under the age-limit or no-age-limit version of the disability plan specified in this Section.
3. **Current Recipients of Disability Benefits.** After having begun to participate in The Plan, a participating local district which before participating in The Plan did not have as part of its plan 5 M.R.S., Chapter 425, subchapter V, *Benefits*, Article 3-A, *Disability Retirement Benefits After September 30, 1989*, may elect to adopt 5 M.R.S. §18534, thereby allowing its former employees who are recipients of disability retirement benefits under prior law the option of being governed by disability retirement provisions applicable to members under The Plan. Any former employee of a district which adopts §18534 who is a recipient of a disability retirement benefit under 5 M.R.S., Article 3, as in effect immediately before October 1, 1989, or under section 1122 of the former retirement system law, as in effect immediately before July 1, 1977, may elect to be governed by 5 M.R.S., Chapter 425, subchapter V, *Benefits*, Article 3-A, by making written application to the executive director within 6 months after adoption of this provision by the participating local district. If the disability retirement benefit recipient makes the election, Article 3-A shall apply from the date of the recipient's original eligibility for disability retirement, but any increase in benefits may only be granted from the date of election by the recipient. The district's adoption and the recipient's election are irrevocable. The additional liability resulting from the adoption of this provision will be included in the district's Additional Unpooled Unfunded Actuarial Liability.

SECTION 11. ORDINARY DEATH BENEFITS

Ordinary death benefits for members under The Plan are subject to 5 M.R.S., Chapter 425, subchapter V, *Benefits*, Article 4, *Ordinary Death Benefits*.

SECTION 12. ACCIDENTAL DEATH BENEFITS

1. **Definitions.** As used in this section, unless the context otherwise indicates, the following terms have the following meanings.
 - A. **Professional firefighter.** "Professional firefighter" means an employee of a municipal fire department who is a member of the Participating Local District

Retirement Program or who is a participating member under chapter 425 and who aids in the extinguishment of fires, whether or not the employee has other administrative duties.

B. **Qualifying member.** “Qualifying member” means:

- (1) A member who dies as a result of an injury arising out of and in the course of employment as an employee;
- (2) After October 31, 2004, an active member who is a professional firefighter who dies as a result of an injury or disease as described in Title 39-A, section 328 if the injury or disease that causes the death is the result of a condition that develops within 30 days of the active member’s participating in firefighting or training or a drill that involves firefighting. If the professional firefighter dies after 30 days but within 6 months of participating in firefighting or training or a drill that involves firefighting, there is a rebuttable presumption that the death is the result of an injury arising out of and in the course of employment as a professional firefighter; or
- (3) A former member receiving a disability retirement benefit who dies as a result of an injury arising out of and in the course of employment as an employee.

2. **Qualification for Benefit.** The beneficiary of a qualifying member shall receive a benefit in accordance with section 18603.

3. **Computation of Benefit.** Benefits under this section are determined as follows:

- A. **Surviving spouse; no dependent children.** If the qualifying member is survived by a spouse and no dependent child, the surviving spouse shall be paid 2/3 of the average final compensation of the qualifying member.
- B. **Surviving spouse having care of dependent children.** If the qualifying member is survived by a spouse who has the care of the dependent child or dependent children of the qualifying member, the surviving spouse shall be paid an annual sum equal to the average final compensation of the qualifying member.
- C. **Surviving spouse not having care of dependent children.** If the qualifying member is survived by a spouse who does not have the care of the dependent child or dependent children of the qualifying member, the surviving spouse shall share with the dependent child or dependent children an annual sum equal to the average final compensation of the qualifying member, the benefit to be divided equally among the surviving spouse and the dependent child or dependent children.
- D. **No surviving spouse.** If no spouse survives the qualifying member, the dependent child or dependent children shall be paid an annual sum equal to the average final compensation of the qualifying member.

4. **Method of Payment.** All benefits paid under this section shall be paid in equal monthly installments beginning the first month after the death of the qualifying member.

5. **Adjustment of Benefits.** Benefits under this section are subject to the following adjustments:

- A. **Cessation of eligibility.** When a person sharing benefits under section 18603 ceases to be eligible to receive benefits, the subsequent benefits of the remaining beneficiaries shall be recalculated as if the remaining beneficiaries had been the only beneficiaries to survive the qualifying member.
 - B. **Workers' compensation or similar law.** The amount payable under this section must be reduced by any amount received by the surviving spouse and dependent child or dependent children under former Title 39, the *Workers' Compensation Act* or Title 39-A, Part 1, the *Maine Workers' Compensation Act of 1992*, or a similar law.
 - (1) Lump-sum settlements of benefits that would reduce the accidental death benefits under this subsection must be prorated on a monthly basis in an equitable manner prescribed by the board.
 - (2) The prorated lump-sum settlement amounts must reduce the accidental death benefits payable monthly under this section.
 - C. **Cost-of-living adjustments.** Benefits under this section are subject to adjustment as provided in section 9.
6. **Termination of Benefits.** The benefits under this section shall be paid to:
- A. **Surviving spouse.** The surviving spouse until the spouse dies; and
 - B. **Dependent children.** The dependent child or dependent children until they die or until they no longer meet the definition of "dependent child" under section 17001, subsection 12.

SECTION 13. DEFINED CONTRIBUTION/DEFERRED COMPENSATION PLANS

1. **Defined Contribution/Deferred Compensation Plans.** A participating local district may provide for the participation of its employees in a defined contribution and/or deferred compensation plan or plans for which the System is The Plan Sponsor. To provide for its employees' participation, the participating local district employer must comply with the procedure for adoption set out in paragraph 6.
2. **District is Employer.** For all purposes related to such a plan or plans, the participating local district is the employer of its employees who participate in the plan or plans.
3. **Federal Law Requirements.** The plan or plans for which the System is Plan Sponsor must meet all applicable federal law requirements.
4. **Terms and Requirements of Plan.** The rights, obligations, conditions and terms of each plan or plans for which the System is Plan Sponsor are those provided in the relevant Plan Document, as revised or amended from time to time.
5. **Plan under 5 MRSA Section 18252-B.** Adoption of a plan or plans under this section does not by itself satisfy the requirements of 5 M.R.S. §18252-B. A participating local district that intends a plan or plans that it adopts under this section to comply with 5 M.R.S. §18252-B must also meet that section's requirements.
6. **Procedure for Adoption**

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- A. **Adoption Agreement.** A participating local district that acts to adopt a plan or plans under this section must complete the relevant Adoption Agreement or Agreements in a form provided or authorized by the System. An Adoption Agreement constitutes documentation of the participating local district's decision to adopt the plan to which the Agreement applies and signifies its understanding and acceptance of the provisions of the plan as set out in The Plan Document.
- B. **401(a) Plan: Contribution Rates.** In the case of a plan established in accordance with the requirements of Section 401(a) of the United States Internal Revenue Code of 1986, as amended,
- (1) the Adoption Agreement must specify the required employee contribution as established by the participating local district employer and the employer contribution, if any; and
 - (2) the participating local district may change the amount of the required employee contribution annually, effective July 1 immediately following its decision to change the amount. The participating local district must document the change by amending its Adoption Agreement to state the new required employee contribution amount. An employee already participating in the district's 401(a) plan at the time the required employee contribution amount is changed has the right to continue his/her employee contribution in the amount previously required or to change to the new required contribution amount.
7. **Disability Retirement Benefits: Participants in a 401(a) Plan who are Not Members under The Plan**
- A. **Applicability.** Employees who are participants in a 401(a) plan under this section and who are not members under The Plan are covered in the event of disability as set out in paragraph B.
- B. **Disability Retirement Program.** The disability retirement program established under this paragraph is that established by section 18521 *et seq.* and implemented by the System's related rules and policies, including but not limited to the disability application, determination and review processes, and standards for benefit eligibility and standards for continuation of benefits.
- (1) Title 5 M.R.S. §18524, sub-§2, applies to an employee with fewer than 5 years of participation in the 401(a) plan.
 - (2) Except as provided in subparagraph 3, the amount of the disability retirement benefit is 60% of the participant's annual compensation being paid at the time the participant became disabled, subject to adjustment as provided by 5 M.R.S. §18407 and this chapter.
 - (3) A participant who is found eligible for a disability retirement benefit and who terminates employment may elect to withdraw the balance of the participant's 401(a) account. If such a withdrawal includes employer contributions made on behalf of the participant, the disability retirement benefit will be actuarially adjusted so that the participant receives a disability retirement benefit of not more than the amount specified in subparagraph 2.

- (4) Benefits cease if the participant is found no longer eligible under the applicable statute, or on the date that the participant is required to receive a Required Minimum Distribution under federal law, whichever is earlier.

SECTION 14. RETIRING AND RETURNING TO WORK

If a person who is a recipient of a service retirement benefit under The Plan returns to employment by a participating local district of The Plan in a position for which membership would be mandatory or optional for a new hire, the person continues to receive the service retirement benefit and does not re-enter The Plan as a member. During the period that a retiree is returned to employment, contributions must be remitted to the System by the participating local district in the amount of the greater of (i) 5% of the person's earnable compensation, or (ii) the equivalent of employer and employee unfunded actuarial liability contributions at the aggregate rate on the person's earnable compensation. For purposes of this section, earnable compensation does not include Workers' Compensation earnings paid to the person.

SECTION 15. TRANSITION

1. **Rates.** Employer and employee rates for July 1, 2018, through June 30, 2019, shall be the rates set under this Rule prior to the amendment effective July 1, 2018. The transition from those rates to the rates calculated pursuant to Sections 7 and 8 shall be accomplished by smoothing in the new rates over an actuarially sound period.
2. **Unused Sick Leave or Vacation Leave.** Section 6, subsection 7, applies to those with a retirement effectiveness date on or after August 1, 2019.
3. **Retiring and Returning to Work.** Section 14 does not apply to a retiree employed by a participating local district on October 1, 2018, until the earlier of termination of employment or June 30, 2021.
4. **Membership Election.** The one-time election to join The Plan by November 1, 2021 under PL 2021, c. 286, § 6 applies only to employees of participating local districts who specifically adopt that provision in their participation agreement prior to November 1, 2021, or at the next meeting of the participating local district's executive or legislative body, whichever is later. For participating local districts adopting the provision on or after November 1, 2021, the one-time election date shall be such later date stated in the amended participation agreement.

STATUTORY AUTHORITY:

5 M.R.S. §§ 17103(4), 18200 *et seq.*, 18801 *et seq.*

EFFECTIVE DATE:

May 11, 1993

AMENDED:

July 20, 1993

May 6, 1995

April 1, 2001

September 28, 2002

January 17, 2004

October 12, 2004
October 29, 2005 – filing 2005-449
October 9, 2006 – filing 2006-433
February 1, 2011 – filing 2011-45
December 9, 2013 – filing 2013-295 (header corrected March 7, 2016)
June 5, 2016 – filing 2016-099
August 30, 2017 – filing 2017-133
May 26, 2018 – filing 2018-082
September 19, 2018 – filing 2018-188
June 24, 2019 – filing 2019-101
November 4, 2019 – filing 2019-189
July 18, 2020 – Section 16 added, filing 2020-160
November 25, 2020 – filing 2020-236
October 4, 2021 – filing 2021-197
July 23, 2022 – filing 2022-137
January 24, 2023 – filing 2023-011

MAINEPERS**BOARD OF TRUSTEES INVESTMENTS MEMORANDUM**

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: MONTHLY INVESTMENT REVIEW
DATE: DECEMBER 6, 2023

Following this memo is the Monthly Investment Review for November.

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 \$18.8 billion.
- Monthly return of 2.6%.
- Calendar year-to-date return of 6.0%.
- Fiscal year-to-date return of 1.2%.



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Investment Review

December 14, 2023

Investment Objective

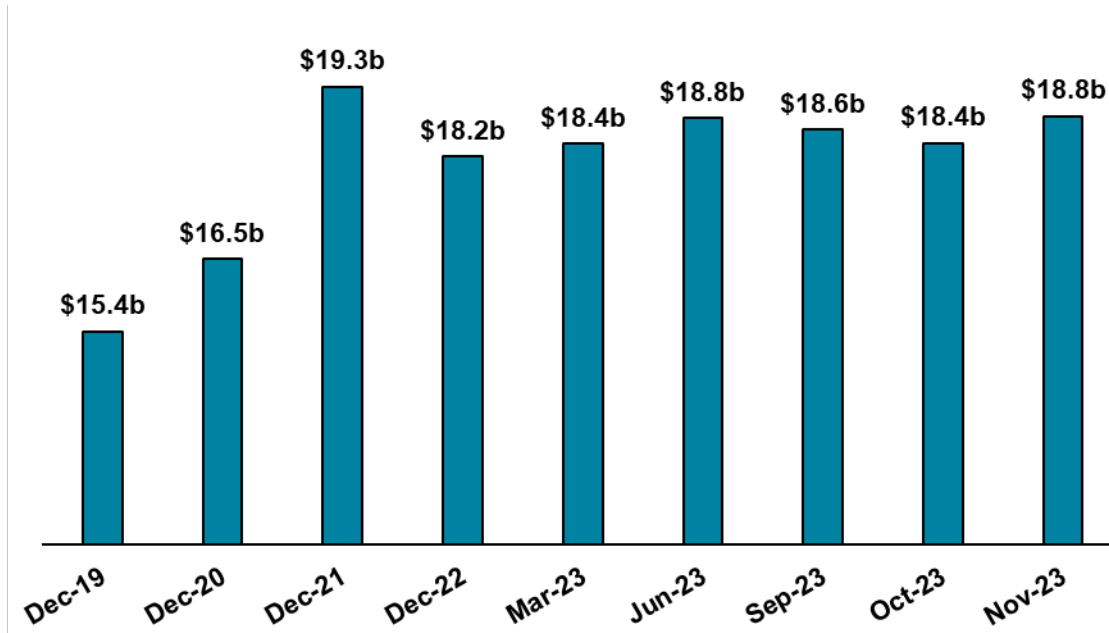
MainePERS' investment objectives balance the System's twin goals of generating investment returns (to ensure growth of the trust funds) and minimizing investment risks (loss of capital and cash flow shortfalls).

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.

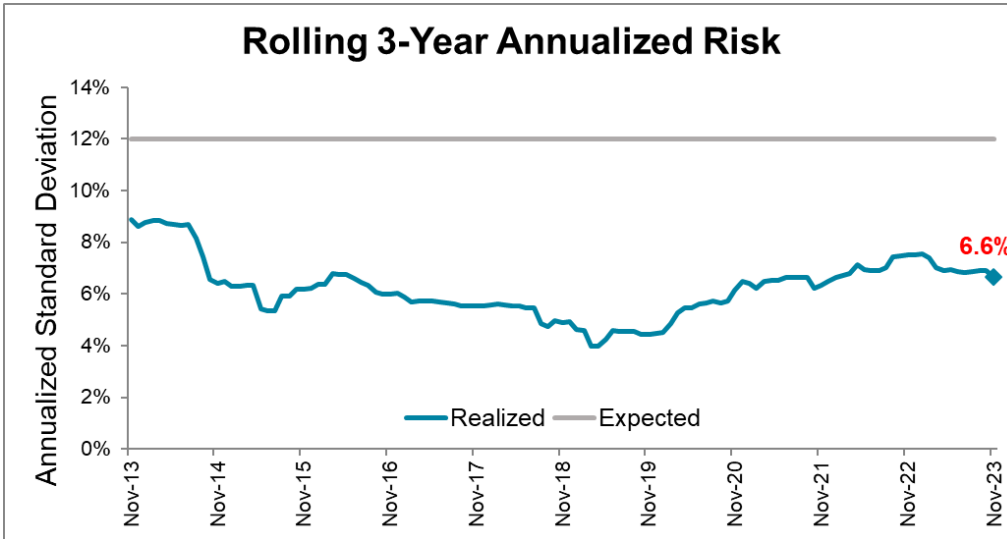
November 2023 Performance (Preliminary)

The **preliminary** fund value at the end of November is \$18.8 billion.

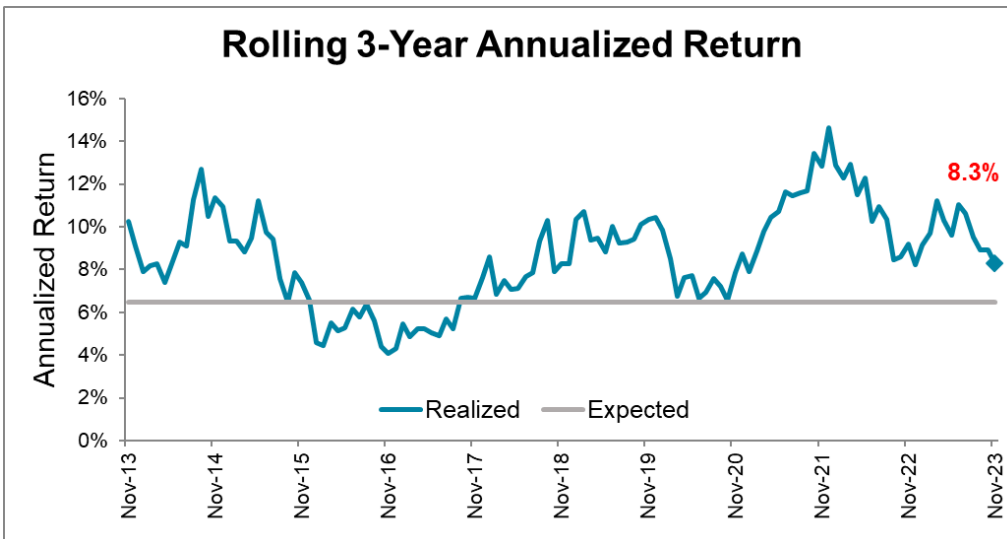


Fund and Benchmark Returns

	Nov-23	CYTD 2023	FYTD 2024
Total Fund	2.6%	6.0%	1.2%
Russell 3000	9.3%	19.6%	3.0%
MSCI ACWI ex-USA	9.0%	10.1%	0.6%
Bloomberg US Aggregate	4.5%	1.6%	-0.4%



Despite heightened volatility 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.

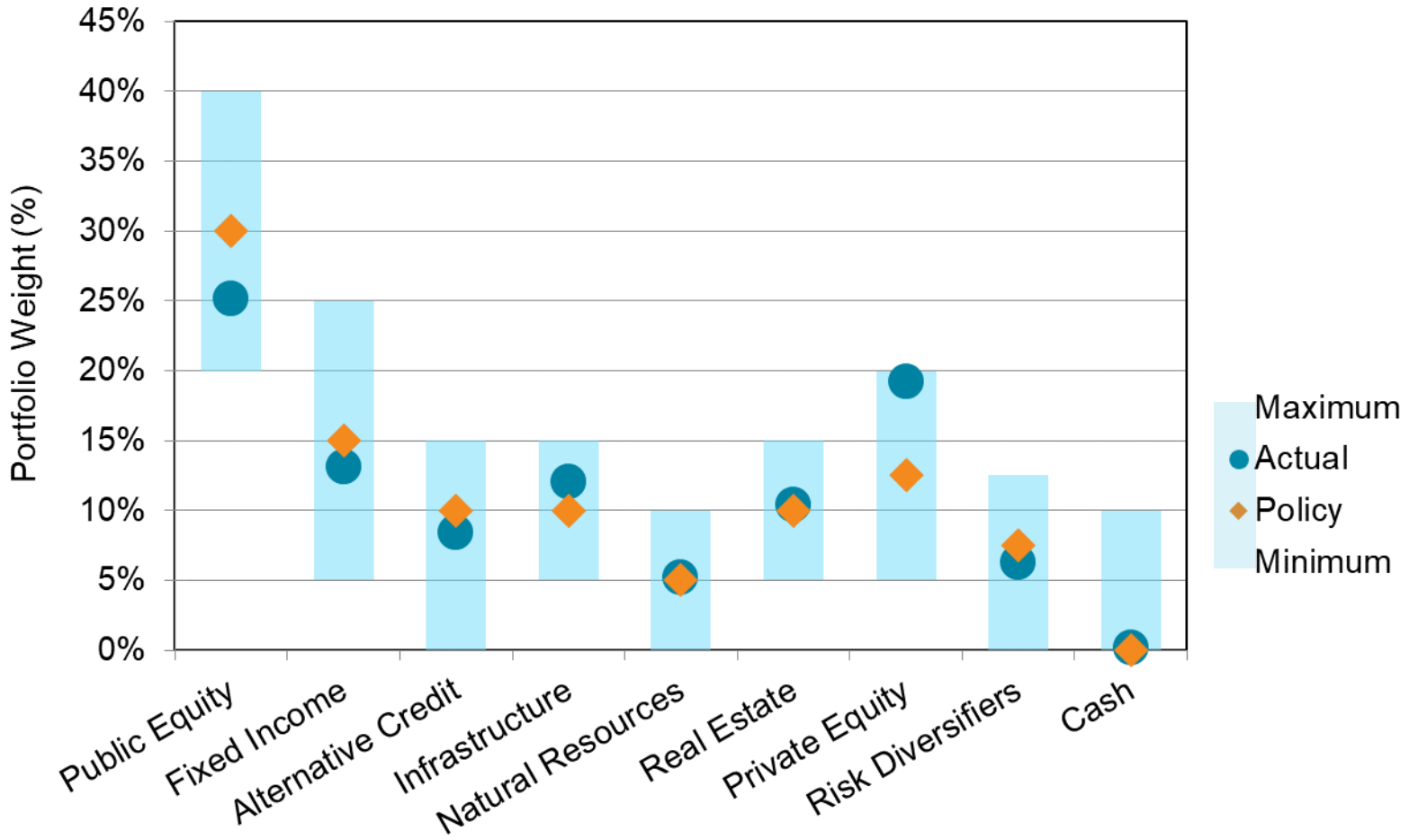
November 2023 Asset Allocation (Preliminary)

Assets (Millions)	Value	% of Fund	Policy %
MainePERS Portfolio	\$ 18,811	100.0%	100.0%
Domestic Equity	\$ 2,953	15.7%	18.8%
International Equity	\$ 1,781	9.5%	11.2%
Fixed Income	\$ 2,466	13.1%	15.0%
Alternative Credit	\$ 1,580	8.4%	10.0%
Infrastructure	\$ 2,271	12.1%	10.0%
Natural Resources	\$ 976	5.2%	5.0%
Private Equity	\$ 3,610	19.2%	12.5%
Real Estate	\$ 1,963	10.4%	10.0%
Risk Diversifiers	\$ 1,183	6.3%	7.5%
Cash	\$ 28	0.1%	0.0%

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

Private equity remains overweight at ~19% of Fund value, and private markets assets in aggregate comprise 55.3% of the overall portfolio, above the 47.5% policy weight.

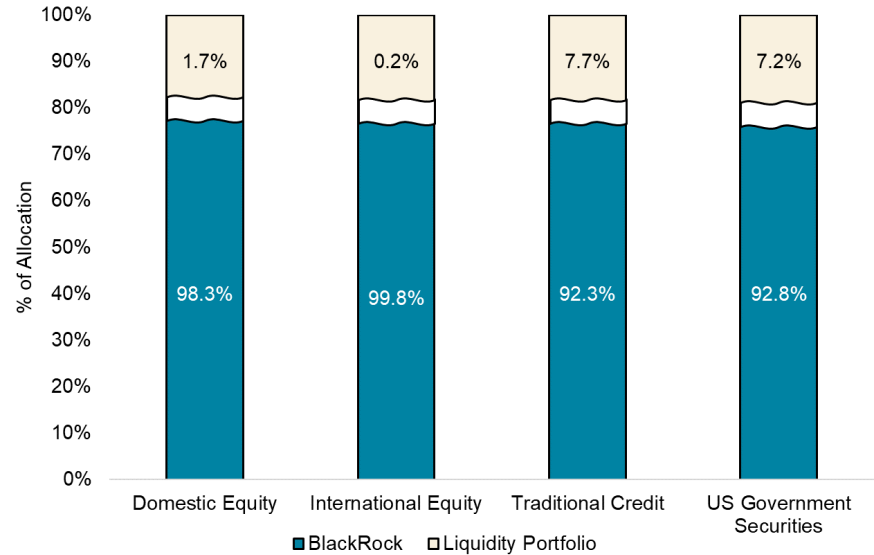
November 2023 Asset Allocation (Preliminary)



Public Securities: Liquidity Portfolio

At the end of November, 1.3% of Fund assets were invested via ETFs and futures contracts in an account managed by Parametric Associates.

The Liquidity Portfolio accounts for 3.3% of MainePERS' total exposure to public securities.



MainePERS Liquidity Portfolio	Market Value (Millions)	Exposure Type
Parametric Domestic Equity	\$51.4	Futures
Parametric International Equity	\$3.0	Futures
Parametric Traditional Credit	\$65.7	ETFs
Parametric US Government Securities	\$116.8	Futures
Total Liquidity Portfolio	\$236.8	

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: November 2023

Description	FYTD 24	FY 23	FY 22	FY 21	FY 20
Investment Mgmt. Fees	\$55,473,225	\$133,285,971	\$130,884,088	\$120,429,567	\$122,567,451
Securities Lending Fees ¹	494,469	1,303,543	1,744,317	1,653,172	2,239,396
Consulting Fees	506,250	1,193,543	1,120,000	1,120,000	1,120,000
Broker Commissions ²	28,568	136,039	77,558	52,364	37,461
Placement Agent Fees	0	0	0	0	0
Total	\$56,502,512	\$135,919,096	\$133,825,963	\$123,255,103	\$125,964,308
Percentage of Fund ³	0.72%	0.72%	0.73%	0.68%	0.86%

1. Securities Lending Fees are through 10/31/2023
2. Actual paid commissions reported by JP Morgan
3. For FY24: Total fees projected for the full fiscal year divided by current Fund value.
For prior FY: Total fees divided by FYE Fund value.

Securities Lending: October 2023

	Average Lendable Assets	Average Assets On Loan	Total Sec Lending Revenue	Revenue Split	MainePERS Net Income	MainePERS Net Income, FYTD
BlackRock						
Fixed Income	\$1,797,949,415	\$1,312,354,257	\$211,335	60%/40%	\$126,801	\$512,746
Total Equity	\$1,539,195,670	\$164,806,757	\$92,076	60%/40%	\$61,088	\$260,404
Total Blackrock	\$3,337,145,085	\$1,477,161,014	\$303,411		\$187,889	\$773,150
JP Morgan						
Domestic Equities	\$2,639,047,246	\$113,947,821	\$22,042	85%/15%	\$18,742	\$130,315
Total JP Morgan	\$2,639,047,246	\$113,947,821	\$22,042		\$18,742	\$130,315
Total	\$5,976,192,331	\$1,591,108,835	\$325,453		\$206,631	\$903,465
Total Annualized Securities Lending Income, FY 2024:				\$2,710,396 (0.01%, or 1.4 bps)		
Total Actual Securities Lending Income, FY 2023:				\$2,557,153 (0.01%, or 1.4 bps)		

Liquidity Schedule: November 2023

Term	Market Value	Percent of Portfolio
Liquid ¹	\$7,229m	38.4%
Semi-Liquid ²	\$2,459m	13.1%
Illiquid ³	\$9,123m	48.5%
Total	\$18,811m	100.0%

<u>Sources and Uses of Liquidity</u>		
	Last 12 Months Actual	Next 12 Months Projection
Private Markets Activity		
Capital Contributions	-\$1,280m	-\$750m
Distributions	\$1,208m	\$1,850m
Net Private Markets Activity	-\$72m	\$1,100m
Benefit Payments	-\$445m	-\$460m
Net Cash Flows	-\$517m	\$640m

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 11/30/2023</i>	# of Funds	# of GP Relationships
Alternative Credit	25	13
Infrastructure	35	11
Natural Resources	16	10
Private Equity	124	34
Real Estate	33	18
Risk Diversifiers	11	10
Total*	244	87

*GP Total may not add due to overlapping relationships

Currently, MainePERS is invested in 244 funds, and has 87 distinct manager relationships.

MainePERS Alternative Investments Summary

<i>(in \$millions)</i> as of 11/30/2023	<u>Current Market Value</u>			<u>Unfunded Commitment</u>	
	Dollars	% of Fund	Policy %*	Dollars	% of Fund
Alternative Credit	\$ 1,580	8.4%	10.0%	\$ 732	3.9%
Infrastructure	\$ 2,271	12.1%	10.0%	\$ 527	2.8%
Natural Resources	\$ 976	5.2%	5.0%	\$ 211	1.1%
Private Equity	\$ 3,610	19.2%	12.5%	\$ 1,031	5.5%
Real Estate	\$ 1,963	10.4%	10.0%	\$ 361	1.9%
Risk Diversifiers	\$ 1,183	6.3%	7.5%	\$ 105	0.6%
Total Alternatives	\$ 11,583	61.6%	55.0%	\$ 2,968	15.8%

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 6/30/2023 values, adjusted for subsequent cash flows.

<i>(in \$millions)</i> as of 11/30/2023	<u>Private Market Commitments by Vintage Year</u>				<u>3-Year</u>
	2020	2021	2022	2023	Average ¹
Alternative Credit	\$ 275	\$ 410	\$ 550	\$ 180	\$ 412
Infrastructure	\$ 235	\$ 180	\$ 200	\$ 50	\$ 205
Natural Resources	\$ -	\$ -	\$ 30	\$ 40	\$ 10
Private Equity	\$ 276	\$ 438	\$ 218	\$ 130	\$ 311
Real Estate	\$ 80	\$ 285	\$ 180	\$ 15	\$ 182
Total Commitments	\$ 866	\$ 1,313	\$ 1,178	\$ 415	\$ 1,119

¹13-Year Average: 2020-2022

MainePERS Private Market Investments Summary: 06/30/2023

Asset Class Summary	Commitment (A)	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit	\$ 2,378,725	\$ 1,900,417	\$ 691,352	\$ 1,538,663	\$ 2,230,014	7.4%
Infrastructure	\$ 3,442,946	\$ 3,528,753	\$ 2,777,854	\$ 2,305,186	\$ 5,083,040	11.3%
Natural Resources	\$ 1,060,500	\$ 1,096,444	\$ 443,446	\$ 982,880	\$ 1,426,327	6.4%
Private Equity	\$ 4,890,371	\$ 4,757,030	\$ 4,068,610	\$ 3,698,626	\$ 7,767,236	16.0%
Real Estate	\$ 2,742,800	\$ 2,673,612	\$ 1,901,803	\$ 1,895,727	\$ 3,797,530	6.9%
Total	\$ 14,515,342	\$ 13,956,255	\$ 9,883,065	\$ 10,421,082	\$ 20,304,147	10.5%

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	\$ 253,700	35	\$ 257,381	\$ 83,105	\$ 211,391	\$ 294,496	9.2%
Infrastructure Co-Investments	\$ 219,004	11	\$ 215,216	\$ 252,582	\$ 128,829	\$ 381,411	14.6%
Natural Resources Co-Investments	\$ 32,500	2	\$ 32,662	\$ 37	\$ 48,853	\$ 48,890	11.3%
Private Equity Co-Investments	\$ 372,922	32	\$ 372,944	\$ 310,156	\$ 264,013	\$ 574,170	13.5%
Real Estate Co-Investments	\$ 67,001	5	\$ 58,567	\$ 7,306	\$ 41,903	\$ 49,209	-6.3%
Total	\$ 945,127	85	\$ 936,770	\$ 653,187	\$ 694,988	\$ 1,348,175	12.6%

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

MainePERS Private Market Investments Summary: 06/30/2023

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	\$ 22,083	\$ 11,213	\$ 33,297	18.7%
Angelo Gordon Direct Lending Fund III	\$ 100,000	7/20/2018	\$ 102,285	\$ 75,242	\$ 64,264	\$ 139,506	10.6%
Participation Agreement #1	\$ 7,500	10/11/2019	\$ 7,497	\$ 2,294	\$ 7,041	\$ 9,335	8.4%
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	\$ 10,000	10/18/2019	\$ 9,915	\$ 2,376	\$ 9,578	\$ 11,954	8.6%
Participation Agreement #5	\$ 5,000	12/6/2019	\$ 5,000	\$ 2,413	\$ 4,085	\$ 6,497	9.5%
Participation Agreement #6	\$ 10,000	12/6/2019	\$ 9,991	\$ 2,447	\$ 9,535	\$ 11,983	9.0%
Participation Agreement #7	\$ 5,000	12/11/2019	\$ 5,000	\$ 1,927	\$ 4,543	\$ 6,470	8.7%
Participation Agreement #8	\$ 5,000	8/13/2020	\$ 4,914	\$ 1,302	\$ 4,828	\$ 6,130	8.8%
Participation Agreement #9	\$ 7,500	4/9/2021	\$ 7,425	\$ 1,477	\$ 7,331	\$ 8,808	10.0%
Participation Agreement #10	\$ 5,000	4/20/2021	\$ 5,007	\$ 1,365	\$ 4,549	\$ 5,914	9.0%
Participation Agreement #11	\$ 5,000	5/5/2021	\$ 5,000	\$ 995	\$ 4,676	\$ 5,671	6.6%
Angelo Gordon Direct Lending Fund IV	\$ 100,000	1/24/2020	\$ 90,000	\$ 12,658	\$ 99,776	\$ 112,434	12.1%
Participation Agreement #1	\$ 5,000	10/23/2020	\$ 4,913	\$ 1,551	\$ 4,373	\$ 5,925	8.5%
Participation Agreement #2	\$ 12,500	8/17/2021	\$ 12,295	\$ 1,839	\$ 12,233	\$ 14,072	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	\$ 747	\$ 4,877	\$ 5,624	NM
Participation Agreement #5	\$ 5,000	12/21/2021	\$ 4,925	\$ 902	\$ 4,694	\$ 5,596	NM
Participation Agreement #6	\$ 5,000	1/12/2022	\$ 4,925	\$ 743	\$ 4,868	\$ 5,611	NM
Participation Agreement #7	\$ 7,500	1/12/2022	\$ 7,388	\$ 1,109	\$ 7,286	\$ 8,394	NM
Participation Agreement #8	\$ 12,500	6/16/2022	\$ 12,406	\$ 1,424	\$ 12,253	\$ 13,677	NM
Angelo Gordon Direct Lending Fund IV Annex	\$ 50,000	11/18/2021	\$ 47,500	\$ 3,449	\$ 49,741	\$ 53,190	NM
Angelo Gordon Direct Lending Fund V	\$ 125,000	8/3/2022	\$ 53,125	\$ -	\$ 58,013	\$ 58,013	NM
Participation Agreement #1	\$ 7,500	9/1/2022	\$ 7,388	\$ 674	\$ 7,328	\$ 8,002	NM
Participation Agreement #2	\$ 12,500	10/7/2022	\$ 12,263	\$ 565	\$ 12,277	\$ 12,842	NM
Participation Agreement #3	\$ 10,000	10/19/2022	\$ 9,850	\$ 819	\$ 9,770	\$ 10,589	NM
Participation Agreement #4	\$ 10,000	10/27/2022	\$ 9,800	\$ 805	\$ 9,720	\$ 10,524	NM
Participation Agreement #5	\$ 10,000	2/27/2023	\$ 9,821	\$ 442	\$ 9,783	\$ 10,225	NM
Ares Capital Europe IV	\$ 122,000	4/30/2018	\$ 96,890	\$ 24,885	\$ 88,496	\$ 113,381	4.9%
Ares Capital Europe V	\$ 122,000	9/4/2020	\$ 88,965	\$ 4,738	\$ 92,330	\$ 97,069	7.3%
Ares Capital Europe VI	\$ 82,500	3/17/2023	\$ 0	\$ -	\$ 248	\$ 248	NM
Ares Senior Direct Lending Fund II	\$ 100,000	12/10/2021	\$ 53,930	\$ 5,758	\$ 54,717	\$ 60,476	NM
Audax Senior Debt (MP), LLC	\$ 100,000	6/30/2017	\$ 100,000	\$ 39,300	\$ 90,894	\$ 130,194	5.0%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

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
Brookfield Infrastructure Debt Fund III	\$ 100,000	7/15/2022	\$ 45,341	\$ 6,628	\$ 39,737	\$ 46,366	NM
Comvest Credit Partners VI	\$ 125,000	5/20/2022	\$ 68,750	\$ -	\$ 72,257	\$ 72,257	NM
Deerpath Capital VI	\$ 75,000	9/30/2021	\$ 54,590	\$ 5,743	\$ 55,563	\$ 61,306	NM
Global Infrastructure Partners Spectrum	\$ 100,000	2/20/2019	\$ 72,889	\$ 28,392	\$ 50,712	\$ 79,104	6.9%
Mesa West Core Lending Fund	\$ 100,000	6/18/2013	\$ 127,612	\$ 62,055	\$ 115,891	\$ 177,945	5.5%
Owl Rock Capital Corporation	\$ 100,000	3/10/2017	\$ 116,571	\$ 50,068	\$ 103,353	\$ 153,421	7.2%
Participation Agreement #1	\$ 5,000	5/7/2018	\$ 4,851	\$ 5,499	\$ -	\$ 5,499	12.7%
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	\$ 4,988	\$ 1,843	\$ 4,627	\$ 6,470	7.3%
Participation Agreement #6	\$ 11,653	8/7/2020	\$ 12,181	\$ 3,513	\$ 10,540	\$ 14,053	9.2%
Participation Agreement #7	\$ 7,500	7/26/2021	\$ 6,558	\$ 1,220	\$ 6,501	\$ 7,721	NM
Participation Agreement #8	\$ 12,500	6/17/2022	\$ 12,778	\$ 1,660	\$ 12,383	\$ 14,043	NM
Participation Agreement #9	\$ 7,500	9/26/2022	\$ 7,388	\$ 655	\$ 7,350	\$ 8,006	NM
Owl Rock Capital Corporation III	\$ 100,000	6/19/2020	\$ 118,400	\$ 18,400	\$ 121,972	\$ 140,372	10.1%
Pathlight Capital Fund II	\$ 75,000	4/22/2021	\$ 108,651	\$ 54,950	\$ 63,695	\$ 118,645	9.7%
Participation Agreement #1	\$ 7,500	4/1/2022	\$ 7,368	\$ 1,333	\$ 7,008	\$ 8,341	NM
Participation Agreement #2	\$ 7,500	4/1/2022	\$ 7,429	\$ 918	\$ 7,354	\$ 8,272	NM
Pathlight Capital Fund III	\$ 75,000	6/24/2022	\$ 66,468	\$ 18,843	\$ 50,271	\$ 69,115	NM
Solar Capital Private Corporate Lending Fund	\$ 50,000	6/26/2019	\$ 40,188	\$ 7,644	\$ 41,335	\$ 48,980	11.8%
Solar Capital Debt Fund	\$ 50,000	6/26/2019	\$ 25,000	\$ 2,473	\$ 26,277	\$ 28,750	12.9%
SLR Private Corporate Lending Fund II	\$ 125,000	12/23/2022	\$ -	\$ -	\$ -	\$ -	NM
Silver Point Specialty Credit II	\$ 50,000	1/31/2020	\$ 57,821	\$ 26,206	\$ 39,334	\$ 65,540	9.7%
Tennenbaum Direct Lending VIII	\$ 100,000	11/30/2017	\$ 100,883	\$ 83,247	\$ 40,535	\$ 123,782	6.4%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Infrastructure

Fund Name	Commitment		Amount	Total	Current	Total Value (C+D)	Interim Net IRR
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Market Value (D)		
Alinda Infrastructure Fund II	\$ 50,000	9/17/2009	\$ 68,297	\$ 74,099	\$ 214	\$ 74,314	1.9%
ArcLight Energy V	\$ 75,000	10/28/2011	\$ 76,031	\$ 103,624	\$ -	\$ 103,624	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	\$ 127,354	\$ 60,942	\$ 188,297	4.0%
Great River Hydro Partners	\$ 12,000	6/17/2017	\$ 10,718	\$ 45,094	\$ -	\$ 45,094	39.5%
Brookfield Infrastructure Fund II	\$ 100,000	6/28/2013	\$ 117,103	\$ 108,637	\$ 90,867	\$ 199,504	10.0%
Brookfield Infrastructure Fund III	\$ 100,000	4/15/2016	\$ 110,004	\$ 58,327	\$ 105,676	\$ 164,004	12.1%
Co-Investment #1	\$ 20,000	3/31/2017	\$ 15,951	\$ 20,057	\$ 18,529	\$ 38,586	28.1%
Carlyle Global Infrastructure Opportunity Fund	\$ 100,000	5/1/2019	\$ 85,007	\$ 16,111	\$ 89,348	\$ 105,459	13.0%
Carlyle Infrastructure Partners	\$ 50,000	11/2/2007	\$ 57,366	\$ 64,289	\$ 372	\$ 64,661	2.5%
Carlyle Power Partners II	\$ 50,000	11/19/2015	\$ 63,926	\$ 33,971	\$ 56,874	\$ 90,845	10.5%
Cube Infrastructure	\$ 45,000	4/16/2010	\$ 60,063	\$ 96,665	\$ 422	\$ 97,087	8.0%
Cube Infrastructure II	\$ 90,000	9/11/2018	\$ 77,017	\$ 5,744	\$ 70,669	\$ 76,413	-0.2%
Cube Infrastructure III	\$ 90,000	8/16/2021	\$ 40,821	\$ -	\$ 42,313	\$ 42,313	NM
EQT Infrastructure III	\$ 68,000	12/3/2016	\$ 102,922	\$ 154,917	\$ 24,311	\$ 179,228	20.9%
EQT Infrastructure IV	\$ 100,000	12/17/2018	\$ 94,746	\$ 17,140	\$ 105,333	\$ 122,473	10.7%
EQT Infrastructure V	\$ 75,000	12/8/2020	\$ 57,888	\$ 6,451	\$ 58,072	\$ 64,523	10.4%
First Reserve Energy Infrastructure Fund	\$ 50,000	6/30/2010	\$ 59,778	\$ 52,235	\$ 4,147	\$ 56,383	-1.6%
First Reserve Energy Infrastructure Fund II	\$ 100,000	10/21/2013	\$ 128,143	\$ 127,258	\$ 32,764	\$ 160,022	13.4%
Global Infrastructure Partners Sonic	\$ 35,000	7/31/2020	\$ 32,521	\$ -	\$ 19,842	\$ 19,842	-16.4%
Global Infrastructure Partners	\$ 75,000	3/31/2008	\$ 101,173	\$ 205,062	\$ 237	\$ 205,298	17.2%
Global Infrastructure Partners II	\$ 75,000	12/3/2011	\$ 105,524	\$ 145,737	\$ 37,281	\$ 183,018	15.8%
Global Infrastructure Partners III	\$ 150,000	4/15/2016	\$ 184,409	\$ 104,294	\$ 155,738	\$ 260,031	10.2%
Co-Investment #1	\$ 29,000	2/28/2017	\$ 27,782	\$ 16,891	\$ 35,630	\$ 52,520	14.3%
Co-Investment #2	\$ 25,000	8/16/2018	\$ 26,980	\$ 3,029	\$ 18,213	\$ 21,242	-5.5%
Global Infrastructure Partners IV	\$ 150,000	12/21/2018	\$ 130,542	\$ 15,348	\$ 122,304	\$ 137,652	4.2%
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	\$ 100,000	\$ -	\$ 101,266	\$ 101,266	NM
KKR Global Infrastructure Investors	\$ 75,000	9/29/2010	\$ 87,917	\$ 154,328	\$ 89	\$ 154,418	13.1%
KKR Global Infrastructure Investors II	\$ 150,000	10/24/2014	\$ 184,831	\$ 243,203	\$ 77,264	\$ 320,467	17.0%
KKR Atlanta Co-Invest	\$ 24,000	9/26/2014	\$ 21,428	\$ 28,551	\$ -	\$ 28,551	5.7%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Infrastructure

Fund Name	Commitment		Amount	Total	Current	Total Value (C+D)	Interim Net IRR
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Market Value (D)		
KKR Taurus Co-Invest II	\$ 25,000	8/15/2017	\$ 25,000	\$ 56,779	\$ 834	\$ 57,613	21.4%
KKR Byzantium Infrastructure Aggregator	\$ 15,000	10/17/2017	\$ 15,000	\$ 7,013	\$ 11,100	\$ 18,113	4.8%
KKR Global Infrastructure Investors III	\$ 100,000	3/29/2018	\$ 90,022	\$ 24,909	\$ 87,408	\$ 112,317	10.1%
Meridiam Infrastructure (SCA)	\$ 11,000	9/23/2015	\$ 21,938	\$ 10,863	\$ 26,227	\$ 37,089	8.4%
Meridiam Infrastructure (SCA) B Shares	\$ 1,000	9/23/2015	\$ 305	\$ 55	\$ 24,063	\$ 24,118	77.0%
Meridiam Infrastructure Europe II (SCA)	\$ 22,500	9/23/2015	\$ 27,639	\$ 16,507	\$ 36,981	\$ 53,488	12.2%
Meridiam Infrastructure Europe III SLP	\$ 95,000	4/27/2016	\$ 71,670	\$ 17,268	\$ 60,393	\$ 77,661	2.9%
Meridiam Sustainable Infrastructure Europe IV	\$ 90,000	4/16/2021	\$ 12,422	\$ 393	\$ 9,996	\$ 10,389	NM
Meridiam Infrastructure N.A. II	\$ 75,000	9/28/2012	\$ 88,232	\$ 31,965	\$ 171,429	\$ 203,394	16.4%
MINA II CIP	\$ 175	6/30/2015	\$ 169	\$ 29	\$ 19,431	\$ 19,460	113.0%
Meridiam Infrastructure N.A. II	\$ 20,000	6/30/2015	\$ 18,870	\$ 4,568	\$ 43,920	\$ 48,488	22.3%
Meridiam Infrastructure N.A. III	\$ 50,000	7/12/2017	\$ 32,309	\$ 1	\$ 38,829	\$ 38,830	13.4%
Stonepeak Infrastructure Partners II	\$ 140,000	11/12/2015	\$ 189,188	\$ 232,329	\$ 39,601	\$ 271,930	13.3%
Stonepeak Claremont Co-Invest	\$ 25,000	5/30/2017	\$ 25,000	\$ 51,959	\$ -	\$ 51,959	17.8%
Stonepeak Spear (Co-Invest) Holdings	\$ 25,000	1/8/2018	\$ 19,648	\$ 3,472	\$ 34,528	\$ 38,000	13.5%
Stonepeak Infrastructure Partners III	\$ 150,000	10/13/2017	\$ 163,376	\$ 53,280	\$ 188,424	\$ 241,704	15.4%
Stonepeak Guardian (Co-Invest) Holdings	\$ 10,000	4/27/2023	\$ 10,000	\$ -	\$ 9,995	\$ 9,995	NM
Stonepeak Infrastructure Partners IV	\$ 125,000	5/8/2020	\$ 66,956	\$ 10,212	\$ 62,412	\$ 72,624	7.9%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

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	\$ 12,107	\$ 57,989	\$ 70,096	9.2%
ACM Permanent Crops II	\$ 35,000	5/12/2016	\$ 41,556	\$ 8,885	\$ 19,807	\$ 28,692	-10.4%
AMERRA Agri Fund III	\$ 50,000	2/11/2016	\$ 98,675	\$ 77,368	\$ 26,208	\$ 103,576	1.9%
Denham Mining Fund	\$ 35,000	6/29/2018	\$ 31,349	\$ 659	\$ 38,790	\$ 39,449	8.3%
Homestead Capital Farmland II	\$ 50,000	8/8/2016	\$ 55,063	\$ 11,016	\$ 57,554	\$ 68,570	5.8%
Homestead Capital Farmland III	\$ 30,000	10/26/2018	\$ 27,356	\$ 2,610	\$ 28,180	\$ 30,790	7.7%
Orion Mine Finance Fund II	\$ 50,000	5/25/2016	\$ 101,839	\$ 77,793	\$ 48,191	\$ 125,984	9.3%
Orion Mine Finance Co-Fund II	\$ 20,000	8/13/2018	\$ 20,125	\$ -	\$ 34,263	\$ 34,263	12.0%
Silver Creek Aggregate Reserves Fund	\$ 100,000	11/6/2018	\$ 15,340	\$ 2,572	\$ 17,775	\$ 20,347	NM
Sprott Private Resource Lending Fund III	\$ 30,000	8/31/2022	\$ 2,436	\$ 537	\$ 1,658	\$ 2,195	NM
Sprott Private Resource Streaming and Royalty Annex	\$ 40,000	5/17/2023	\$ 18,215	\$ -	\$ 18,114	\$ 18,114	NM
Taurus Mining Fund	\$ 50,000	3/27/2015	\$ 41,459	\$ 46,116	\$ 4,112	\$ 50,228	7.6%
Taurus Mining Fund Annex	\$ 23,000	12/1/2016	\$ 18,366	\$ 23,384	\$ 950	\$ 24,335	17.8%
Taurus Mining Fund No. 2	\$ 75,000	4/18/2019	\$ 64,374	\$ 45,393	\$ 31,911	\$ 77,304	18.5%
Teays River Integrated Agriculture	\$ 200,000	7/1/2015	\$ 198,974	\$ 28,770	\$ 315,267	\$ 344,037	7.6%
Twin Creeks Timber	\$ 200,000	1/7/2016	\$ 199,664	\$ 94,635	\$ 124,867	\$ 219,502	2.5%
U.S. Farming Realty Trust III	\$ 100,000	7/7/2015	\$ 110,017	\$ 11,565	\$ 142,655	\$ 154,220	6.8%
Canally Coinvest Holdings	\$ 12,500	12/9/2019	\$ 12,537	\$ 37	\$ 14,590	\$ 14,627	7.6%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment		Amount	Total	Current Market		Interim Net
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Value (D)	Total Value (C+D)	
ABRY Advanced Securities Fund II	\$ 20,000	5/4/2011	\$ 20,539	\$ 29,678	\$ 281	\$ 29,958	13.1%
ABRY Advanced Securities Fund III	\$ 30,000	4/30/2014	\$ 44,799	\$ 25,795	\$ 18,783	\$ 44,578	-0.2%
ABRY Heritage Partners	\$ 10,000	5/31/2016	\$ 10,865	\$ 10,979	\$ 8,694	\$ 19,673	27.2%
ABRY Partners VII	\$ 10,000	4/29/2011	\$ 12,939	\$ 17,340	\$ 2,102	\$ 19,442	12.1%
ABRY Partners VIII	\$ 20,000	8/8/2014	\$ 23,864	\$ 29,732	\$ 3,631	\$ 33,362	10.0%
ABRY Senior Equity IV	\$ 10,000	12/7/2012	\$ 10,841	\$ 16,718	\$ 1,485	\$ 18,203	14.8%
ABRY Senior Equity V	\$ 12,050	1/19/2017	\$ 12,795	\$ 5,370	\$ 13,194	\$ 18,565	14.5%
Advent International GPE VII	\$ 30,000	6/29/2012	\$ 34,811	\$ 52,785	\$ 5,519	\$ 58,304	13.4%
Advent International GPE VIII	\$ 50,000	2/5/2016	\$ 56,378	\$ 45,750	\$ 64,357	\$ 110,107	18.6%
Advent International GPE IX	\$ 50,000	5/9/2019	\$ 46,753	\$ 4,998	\$ 64,838	\$ 69,836	22.2%
GPE IX TKE Co-Investment	\$ 24,000	3/30/2020	\$ 21,243	\$ -	\$ 29,956	\$ 29,956	12.4%
Advent International GPE X	\$ 45,000	4/28/2022	\$ 10,463	\$ -	\$ 9,927	\$ 9,927	NM
AI Co-Investment I-A	\$ 7,500	3/2/2023	\$ 7,443	\$ -	\$ -	\$ -	NM
Advent Latin America PE Fund VI	\$ 20,000	10/17/2014	\$ 19,516	\$ 12,350	\$ 21,039	\$ 33,389	14.9%
Affinity Asia Pacific Fund IV	\$ 60,000	2/28/2013	\$ 64,783	\$ 74,509	\$ 31,746	\$ 106,255	15.1%
Affinity Asia Pacific Fund V	\$ 40,000	12/11/2017	\$ 22,767	\$ 4,872	\$ 22,448	\$ 27,320	9.1%
Bain Capital Ventures 2021	\$ 25,000	10/28/2020	\$ 18,688	\$ 1	\$ 19,584	\$ 19,585	3.1%
Bain Capital Ventures 2022	\$ 25,000	6/10/2022	\$ 1,375	\$ 0	\$ 1,001	\$ 1,001	NM
Bain Capital Venture Coinvestment Fund III	\$ 15,000	4/1/2021	\$ 15,000	\$ 825	\$ 15,175	\$ 16,000	4.9%
Bain Capital Venture Coinvestment Fund IV	\$ 15,000	6/10/2022	\$ -	\$ -	\$ -	\$ -	NM
Berkshire Fund VIII	\$ 15,000	7/20/2011	\$ 16,846	\$ 27,586	\$ 9,895	\$ 37,481	17.1%
Berkshire Fund IX	\$ 50,000	3/18/2016	\$ 56,849	\$ 35,932	\$ 57,181	\$ 93,113	16.9%
Blackstone Capital Partners VI	\$ 30,000	6/30/2010	\$ 37,993	\$ 53,245	\$ 10,612	\$ 63,856	12.4%
Blackstone Capital Partners VII	\$ 54,000	3/27/2015	\$ 61,475	\$ 40,806	\$ 53,651	\$ 94,458	13.7%
Carlyle Asia Partners III	\$ 15,000	12/31/2009	\$ 20,752	\$ 31,105	\$ 178	\$ 31,283	12.6%
Carlyle Asia Partners IV	\$ 60,000	6/3/2014	\$ 81,289	\$ 99,315	\$ 30,119	\$ 129,434	12.9%
Carlyle Asia Partners V	\$ 45,000	10/30/2017	\$ 36,138	\$ 10,769	\$ 29,613	\$ 40,382	6.9%
Centerbridge Capital Partners III	\$ 30,000	10/24/2014	\$ 47,767	\$ 45,744	\$ 29,134	\$ 74,878	18.0%
CB Blizzard Co-Invest	\$ 15,684	9/11/2019	\$ 15,684	\$ 10,053	\$ 3,270	\$ 13,324	-12.9%
Charterhouse Capital Partners VIII	\$ 13,500	1/6/2011	\$ 11,188	\$ 14,160	\$ -	\$ 14,160	7.9%
Charterhouse Capital Partners IX	\$ 4,500	1/6/2011	\$ 5,400	\$ 7,226	\$ 80	\$ 7,307	12.0%
Charterhouse Capital Partners X	\$ 67,000	5/13/2015	\$ 58,597	\$ 65,409	\$ 40,609	\$ 106,017	20.5%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment		Amount	Total	Current Market	Total Value	Interim Net
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Value (D)	(C+D)	IRR
Charterhouse Acrostone	\$ 12,000	8/24/2018	\$ 13,254	\$ 21,268	\$ 0	\$ 21,269	16.9%
Charterhouse Capital Partners XI	\$ 45,000	4/23/2021	\$ 13,385	\$ -	\$ 14,762	\$ 14,762	NM
CVC Capital Partners VI	\$ 67,000	7/12/2013	\$ 101,033	\$ 121,740	\$ 57,244	\$ 178,985	16.9%
CVC Capital Partners VII	\$ 48,000	5/9/2017	\$ 72,939	\$ 43,129	\$ 66,501	\$ 109,630	23.0%
CVC Capital Partners VIII	\$ 44,000	6/11/2020	\$ 46,581	\$ 21,835	\$ 27,038	\$ 48,873	9.1%
CVC Capital Partners IX	\$ 44,000	6/29/2023	\$ -	\$ -	\$ -	\$ -	NM
EnCap Energy Capital VIII	\$ 30,000	1/31/2011	\$ 34,186	\$ 23,364	\$ 11,702	\$ 35,066	0.5%
EnCap Energy Capital Fund VIII Co-Investors	\$ 16,238	12/8/2011	\$ 16,506	\$ 5,997	\$ 6,373	\$ 12,370	-4.0%
EnCap Energy Capital Fund IX	\$ 30,000	12/19/2012	\$ 34,541	\$ 40,196	\$ 10,041	\$ 50,237	10.4%
EnCap Energy Capital Fund X	\$ 40,000	3/5/2015	\$ 42,225	\$ 49,332	\$ 28,948	\$ 78,280	15.5%
EnCap Energy Capital Fund XI	\$ 40,000	5/31/2017	\$ 40,343	\$ 17,226	\$ 42,157	\$ 59,382	18.8%
EnCap Flatrock Midstream Fund III	\$ 20,000	4/9/2014	\$ 25,178	\$ 20,835	\$ 13,620	\$ 34,455	10.4%
EnCap Flatrock Midstream Fund IV	\$ 22,000	11/17/2017	\$ 19,661	\$ 9,245	\$ 13,847	\$ 23,091	8.0%
General Catalyst X - Early Venture	\$ 19,565	3/26/2020	\$ 18,880	\$ -	\$ 33,270	\$ 33,270	27.8%
General Catalyst X - Endurance	\$ 22,826	3/26/2020	\$ 22,859	\$ -	\$ 22,819	\$ 22,819	-0.1%
General Catalyst X - Growth Venture	\$ 32,609	3/26/2020	\$ 31,467	\$ -	\$ 35,114	\$ 35,114	4.7%
General Catalyst XI - Creation	\$ 8,823	10/29/2021	\$ 3,082	\$ -	\$ 3,269	\$ 3,269	NM
General Catalyst XI - Endurance	\$ 29,412	10/29/2021	\$ 20,731	\$ -	\$ 19,821	\$ 19,821	NM
General Catalyst XI - Ignition	\$ 11,765	10/29/2021	\$ 7,723	\$ -	\$ 7,172	\$ 7,172	NM
GTCR Fund X	\$ 30,000	1/28/2011	\$ 31,766	\$ 64,646	\$ -	\$ 64,646	21.4%
GTCR Fund XI	\$ 35,000	11/15/2013	\$ 34,961	\$ 76,701	\$ 38,690	\$ 115,391	33.5%
GTCR Fund XII	\$ 50,000	9/29/2017	\$ 51,223	\$ 31,746	\$ 53,657	\$ 85,403	24.0%
Co-Investment #1	\$ 5,238	4/26/2019	\$ 4,556	\$ -	\$ 9,150	\$ 9,150	18.3%
Co-Investment #2	\$ 5,997	11/1/2019	\$ 5,806	\$ 10,935	\$ 2,722	\$ 13,657	46.4%
GTCR XIII	\$ 50,000	10/27/2020	\$ 25,573	\$ 5,447	\$ 24,926	\$ 30,373	19.1%
GTCR XIV	\$ 50,000	12/16/2022	\$ -	\$ -	\$ -	\$ -	NM
H.I.G. Bayside Loan Fund II	\$ 25,000	5/28/2010	\$ 24,020	\$ 32,189	\$ 272	\$ 32,461	7.1%
H.I.G. Bayside Loan Ops Fund III (Europe)	\$ 30,000	7/27/2012	\$ 26,707	\$ 31,070	\$ 3,812	\$ 34,882	7.5%
H.I.G. Brazil & Latin America Partners	\$ 60,000	7/1/2015	\$ 69,005	\$ 24,546	\$ 78,959	\$ 103,504	13.9%
H.I.G. Capital Partners V	\$ 15,000	2/28/2013	\$ 20,501	\$ 28,359	\$ 11,694	\$ 40,054	23.3%
H.I.G. Europe Capital Partners II	\$ 22,500	7/1/2013	\$ 25,240	\$ 20,667	\$ 15,673	\$ 36,340	12.1%
H.I.G. Growth Buyouts & Equity Fund II	\$ 17,500	6/30/2011	\$ 23,547	\$ 26,958	\$ 14,369	\$ 41,327	14.4%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment		Amount	Total	Current Market		Interim Net
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Value (D)	Total Value (C+D)	
H.I.G. Growth Buyouts & Equity Fund III	\$ 35,000	9/13/2018	\$ 16,048	\$ -	\$ 16,604	\$ 16,604	NM
H.I.G Middle Market LBO Fund II	\$ 40,000	2/7/2014	\$ 49,049	\$ 68,278	\$ 25,419	\$ 93,698	27.9%
Co-Investment #1	\$ 9,000	10/12/2017	\$ 9,000	\$ -	\$ (31)	\$ (31)	-100.0%
Co-Investment #2	\$ 686	6/19/2020	\$ 686	\$ -	\$ 925	\$ 925	10.3%
Co-Investment #3	\$ 1,000	6/1/2021	\$ 1,079	\$ -	\$ 12	\$ 12	-88.4%
H.I.G. Middle Market LBO Fund III	\$ 40,000	7/23/2019	\$ 34,486	\$ 1,694	\$ 41,233	\$ 42,927	19.5%
Hellman & Friedman Capital Partners VII	\$ 30,000	6/19/2009	\$ 44,355	\$ 105,844	\$ 6,537	\$ 112,382	24.7%
Hellman & Friedman Capital Partners VIII	\$ 45,000	9/24/2014	\$ 48,742	\$ 26,913	\$ 56,723	\$ 83,636	14.0%
Hellman & Friedman Capital Partners IX	\$ 45,000	9/28/2018	\$ 44,605	\$ 1,069	\$ 61,442	\$ 62,511	14.8%
Hellman & Friedman Capital Partners X	\$ 45,000	5/10/2021	\$ 32,383	\$ -	\$ 34,519	\$ 34,519	5.4%
Inflexion Buyout Fund IV	\$ 27,000	9/30/2014	\$ 34,338	\$ 38,539	\$ 23,110	\$ 61,649	15.9%
Inflexion Partnership Capital Fund I	\$ 17,000	9/30/2014	\$ 25,813	\$ 39,627	\$ 7,453	\$ 47,080	22.3%
Inflexion Supplemental Fund IV	\$ 10,000	5/31/2016	\$ 14,912	\$ 20,957	\$ 8,436	\$ 29,393	24.3%
Kelso Investment Associates VIII	\$ 3,000	1/6/2011	\$ 3,022	\$ 4,263	\$ 126	\$ 4,388	8.1%
Kelso Investment Associates IX	\$ 60,000	11/5/2014	\$ 70,159	\$ 86,523	\$ 34,174	\$ 120,698	19.8%
KIA IX (Hammer) Investor	\$ 25,000	8/12/2016	\$ 25,426	\$ 69,298	\$ 310	\$ 69,608	21.4%
Kelso Investment Associates X	\$ 45,000	3/16/2018	\$ 46,763	\$ 13,311	\$ 72,197	\$ 85,508	33.0%
Kelso Investment Associates XI	\$ 45,000	12/22/2021	\$ 8,192	\$ 652	\$ 10,474	\$ 11,127	NM
Kelso XI Heights Co-Investment	\$ 12,000	8/19/2022	\$ 10,013	\$ -	\$ 10,841	\$ 10,841	NM
KKR North American Fund XI	\$ 60,000	2/7/2012	\$ 100,494	\$ 166,162	\$ 21,231	\$ 187,393	19.3%
KKR North America Fund XI (Platinum)	\$ 8,003	2/26/2016	\$ 8,040	\$ 2,313	\$ 5,323	\$ 7,636	-1.0%
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	\$ 62,049	\$ 30,802	\$ 74,925	\$ 105,727	19.5%
KKR Sigma Aggregator	\$ 15,000	6/22/2018	\$ 15,000	\$ -	\$ 23,606	\$ 23,606	9.5%
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	\$ 911	\$ 8,154	-10.8%
KKR North America XIII	\$ 40,000	6/25/2021	\$ 14,209	\$ -	\$ 14,865	\$ 14,865	NM
KKR Special Situations Fund	\$ 60,000	12/19/2012	\$ 118,957	\$ 99,865	\$ 12,352	\$ 112,216	-2.0%
KKR Special Situations Fund II	\$ 60,000	12/19/2014	\$ 98,291	\$ 77,594	\$ 23,778	\$ 101,372	1.3%
Long Ridge Equity Partners IV	\$ 15,000	6/26/2023	\$ -	\$ -	\$ -	\$ -	NM
Metwest Enhanced TALF Strategy Fund L. P.	\$ 75,000	7/31/2009	\$ 53,350	\$ 67,405	\$ -	\$ 67,405	10.2%
Oaktree Opportunities VIII	\$ 30,000	12/9/2009	\$ 30,000	\$ 43,920	\$ 86	\$ 44,005	9.1%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment		Amount	Total	Current Market	Total Value	Interim Net
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Value (D)	(C+D)	IRR
ONCAP IV	\$ 15,000	11/8/2016	\$ 13,085	\$ 3,296	\$ 18,115	\$ 21,411	14.6%
Onex Partners III	\$ 10,000	1/6/2011	\$ 11,202	\$ 17,022	\$ 1,763	\$ 18,786	13.1%
Onex Partners IV	\$ 60,000	11/22/2013	\$ 62,871	\$ 50,953	\$ 38,805	\$ 89,758	8.0%
Co-Investment #1	\$ 10,000	2/27/2017	\$ 10,471	\$ 1,235	\$ 7,235	\$ 8,470	-3.8%
Onex Partners V	\$ 45,000	7/11/2017	\$ 39,000	\$ 5,911	\$ 43,783	\$ 49,694	13.4%
Paine & Partners Capital Fund IV	\$ 60,000	12/18/2014	\$ 56,550	\$ 29,070	\$ 48,785	\$ 77,855	7.7%
Wawona Co-Investment Fund I	\$ 15,000	3/31/2017	\$ 15,023	\$ -	\$ 3	\$ 3	-92.3%
Lyons Magnus Co-Investment Fund I	\$ 15,000	11/8/2017	\$ 15,016	\$ -	\$ 24,991	\$ 24,991	9.5%
PSP Maverick Co-Invest	\$ 7,238	9/12/2019	\$ 7,264	\$ -	\$ 517	\$ 517	-50.4%
PSP AH&N Co-Investment Fund	\$ 19,724	11/27/2019	\$ 17,539	\$ -	\$ 31,750	\$ 31,750	19.2%
Paine Schwartz Food Chain Fund V	\$ 45,000	8/3/2018	\$ 46,537	\$ 21,166	\$ 42,550	\$ 63,716	24.2%
SNFL Co-Investment Fund	\$ 5,000	10/11/2019	\$ 5,024	\$ 265	\$ 9,960	\$ 10,225	21.3%
Rhone Partners V	\$ 56,000	3/12/2015	\$ 71,743	\$ 35,889	\$ 86,905	\$ 122,795	16.6%
Riverside Capital Appreciation Fund VI	\$ 60,000	7/3/2013	\$ 63,008	\$ 79,860	\$ 19,409	\$ 99,269	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	\$ 51,304	\$ 234,419	36.3%
Riverside Micro-Cap Fund IV	\$ 60,000	10/23/2015	\$ 55,659	\$ 5,112	\$ 80,064	\$ 85,176	8.0%
Riverside Micro-Cap Fund IV-B	\$ 20,000	8/9/2019	\$ 24,292	\$ 5,583	\$ 35,233	\$ 40,817	23.2%
Riverside Micro-Cap Fund V	\$ 40,000	8/21/2018	\$ 33,000	\$ 2,513	\$ 46,456	\$ 48,968	17.0%
Riverside Micro-Cap Fund VI	\$ 45,000	8/26/2021	\$ 12,766	\$ 263	\$ 12,994	\$ 13,258	NM
Shoreview Capital Partners III	\$ 24,000	7/24/2013	\$ 25,657	\$ 28,779	\$ 24,511	\$ 53,290	18.2%
Shoreview Capital Partners IV	\$ 30,000	6/3/2019	\$ 13,902	\$ 5,989	\$ 13,924	\$ 19,912	NM
Sovereign Capital IV	\$ 46,500	7/7/2014	\$ 40,344	\$ 26,905	\$ 33,889	\$ 60,794	10.8%
Summit Partners Credit II	\$ 60,000	10/25/2013	\$ 90,831	\$ 87,991	\$ 18,173	\$ 106,165	5.9%
Summit Europe Growth Equity III	\$ 22,000	3/18/2020	\$ 15,638	\$ -	\$ 17,317	\$ 17,317	8.0%
Summit Europe Growth Equity IV	\$ 22,000	2/10/2023	\$ -	\$ -	\$ -	\$ -	NM
Summit Growth Equity VIII	\$ 25,000	5/27/2011	\$ 33,445	\$ 63,535	\$ 11,978	\$ 75,513	26.3%
Co-Investment #1	\$ 16,000	6/3/2015	\$ 16,000	\$ 38,735	\$ 19,728	\$ 58,463	31.8%
Summit Growth Equity IX	\$ 60,000	8/26/2015	\$ 83,784	\$ 88,968	\$ 93,001	\$ 181,969	31.9%
Co-Investment #1	\$ 15,000	11/29/2016	\$ 14,895	\$ 41,743	\$ -	\$ 41,743	159.6%
Summit Partners Co-Invest (Ironman)	\$ 15,530	4/20/2018	\$ 15,534	\$ -	\$ 15,509	\$ 15,509	0.0%
Summit Partners Co-Invest (Giants-B)	\$ 15,000	10/22/2019	\$ 15,000	\$ 41,780	\$ 5,439	\$ 47,219	81.4%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment		Amount	Total	Current Market	Total Value	Interim Net
	(A)	Date of Commitment	Contributed (B)	Distributions (C)	Value (D)	(C+D)	IRR
Summit Growth Equity X	\$ 60,000	2/26/2019	\$ 59,876	\$ 18,176	\$ 61,929	\$ 80,105	19.1%
Summit Partners Co-Invest (Lions)	\$ 7,534	10/14/2020	\$ 7,534	\$ -	\$ 14,476	\$ 14,476	28.6%
Summit Partners Co-Invest (Indigo)	\$ 10,000	12/11/2020	\$ 11,436	\$ -	\$ 11,425	\$ 11,425	0.0%
Summit Growth Equity XI	\$ 45,000	10/1/2021	\$ 10,983	\$ -	\$ 11,536	\$ 11,536	NM
Summit Venture Capital III	\$ 13,150	5/27/2011	\$ 18,044	\$ 32,899	\$ 2,902	\$ 35,802	17.6%
Summit Venture Capital IV	\$ 40,000	8/26/2015	\$ 50,767	\$ 48,377	\$ 60,888	\$ 109,265	38.1%
Summit Venture Capital V	\$ 45,000	6/16/2020	\$ 25,742	\$ 2,771	\$ 23,649	\$ 26,421	2.1%
Summit Partners Co-Invest (CS)	\$ 13,753	10/22/2021	\$ 13,798	\$ -	\$ 11,714	\$ 11,714	NM
Technology Crossover Ventures VIII	\$ 60,000	5/8/2013	\$ 52,307	\$ 39,509	\$ 74,765	\$ 114,275	12.2%
Technology Crossover Ventures IX	\$ 60,000	2/19/2016	\$ 48,428	\$ 48,612	\$ 53,319	\$ 101,931	20.8%
TCV Sports	\$ 8,000	9/25/2018	\$ 8,000	\$ -	\$ 11,167	\$ 11,167	7.3%
Technology Crossover Ventures X	\$ 45,000	8/31/2018	\$ 36,448	\$ 6,801	\$ 65,121	\$ 71,922	24.9%
Technology Crossover Ventures XI	\$ 45,000	10/2/2020	\$ 23,033	\$ -	\$ 20,587	\$ 20,587	-6.6%
Technology Impact Fund	\$ 40,000	12/18/2017	\$ 37,492	\$ 23,745	\$ 99,543	\$ 123,288	51.2%
Technology Impact Fund II	\$ 40,000	4/13/2021	\$ 11,992	\$ 325	\$ 12,061	\$ 12,386	NM
Technology Impact Growth Fund	\$ 40,000	11/26/2018	\$ 48,109	\$ 26,676	\$ 31,866	\$ 58,542	9.5%
Technology Impact Growth Fund II	\$ 40,000	8/6/2021	\$ 13,066	\$ -	\$ 11,640	\$ 11,640	NM
Thoma Bravo Fund XI	\$ 50,000	5/1/2014	\$ 74,040	\$ 145,149	\$ 59,279	\$ 204,428	27.0%
Thoma Bravo Fund XII	\$ 60,000	4/27/2016	\$ 78,447	\$ 80,943	\$ 64,890	\$ 145,834	16.3%
Thoma Bravo Fund XIII	\$ 45,000	12/7/2018	\$ 59,671	\$ 31,856	\$ 71,784	\$ 103,640	29.4%
Thoma Bravo Special Opportunities Fund II	\$ 15,000	3/27/2015	\$ 18,113	\$ 21,091	\$ 16,545	\$ 37,636	16.5%
Thoma Bravo Discover Fund IV	\$ 45,000	7/1/2022	\$ 14,963	\$ -	\$ 15,636	\$ 15,636	NM
Tillridge Global Agribusiness Partners II	\$ 50,000	10/21/2016	\$ 28,819	\$ 2,900	\$ 24,991	\$ 27,891	-1.1%
Water Street Healthcare Partners III	\$ 25,000	7/25/2012	\$ 30,122	\$ 78,657	\$ 8,782	\$ 87,439	35.4%
Water Street Healthcare Partners IV	\$ 33,000	9/15/2017	\$ 34,936	\$ 10,624	\$ 41,382	\$ 52,006	16.5%
Water Street Healthcare Partners V	\$ 43,000	4/15/2022	\$ 5,719	\$ -	\$ 4,815	\$ 4,815	NM
Wayzata Opportunities Fund III	\$ 30,000	9/11/2012	\$ 14,718	\$ 11,338	\$ 3,861	\$ 15,199	0.7%
Wynnchurch Capital Partners IV	\$ 40,000	10/23/2014	\$ 38,209	\$ 39,897	\$ 60,278	\$ 100,175	27.3%
Wynnchurch Capital Partners V	\$ 40,000	1/15/2020	\$ 28,231	\$ 538	\$ 33,666	\$ 34,204	15.1%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

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	\$ 45,944	\$ 2,943	\$ 47,708	\$ 50,650	6.3%
Angelo Gordon Realty Fund XI	\$ 50,000	3/31/2022	\$ 5,000	\$ -	\$ 4,290	\$ 4,290	NM
Bain Capital Real Estate II	\$ 50,000	3/5/2021	\$ 25,803	\$ 2,365	\$ 26,299	\$ 28,664	10.8%
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	\$ 41,647	\$ 409,102	\$ 450,749	5.7%
Blackstone Real Estate Partners VII	\$ 75,000	2/26/2012	\$ 104,422	\$ 155,916	\$ 13,153	\$ 169,068	14.9%
Blackstone Real Estate Partners VIII	\$ 50,000	3/27/2015	\$ 63,719	\$ 65,135	\$ 37,900	\$ 103,035	15.7%
Blackstone Real Estate Partners IX	\$ 40,000	12/21/2018	\$ 43,884	\$ 15,219	\$ 47,476	\$ 62,695	23.7%
Barings Asia Real Estate II	\$ 50,000	7/31/2018	\$ 21,041	\$ -	\$ 17,992	\$ 17,992	NM
EQT Real Estate II	\$ 55,000	4/26/2019	\$ 31,496	\$ 5,268	\$ 29,914	\$ 35,182	6.9%
EQT Real Estate Rock Co-Investment	\$ 11,000	8/10/2020	\$ 9,090	\$ -	\$ 10,607	\$ 10,607	7.2%
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	\$ 95,749	\$ 52,811	\$ 132,721	\$ 185,532	8.5%
HSRE-Coyote Maine PERS Core Co-Investment	\$ 20,000	12/4/2020	\$ 14,184	\$ 1,669	\$ 13,364	\$ 15,034	2.4%
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	\$ 36,176	\$ -	\$ 36,176	13.2%
High Street Real Estate Fund VI	\$ 25,000	3/22/2019	\$ 25,000	\$ 5,106	\$ 38,269	\$ 43,375	24.0%
HSREF VI Elgin Co-Invest	\$ 10,000	4/9/2021	\$ 10,000	\$ 1,477	\$ 13,677	\$ 15,153	22.2%
High Street Real Estate Fund VII	\$ 35,000	8/16/2021	\$ 33,151	\$ -	\$ 38,524	\$ 38,524	NM
High Street Real Estate VII Venture	\$ 15,000	3/17/2023	\$ 1,765	\$ -	\$ -	\$ -	NM
Hines US Property Partners	\$ 200,000	9/9/2021	\$ 99,107	\$ 11,550	\$ 88,217	\$ 99,767	NM
Invesco Real Estate Asia IV	\$ 30,000	3/25/2020	\$ 22,739	\$ 13,923	\$ 10,492	\$ 24,414	9.7%
Invesco US Income Fund	\$ 195,000	7/17/2014	\$ 223,678	\$ 64,955	\$ 320,060	\$ 385,016	10.6%
IPI Data Center Partners I	\$ 30,000	12/15/2017	\$ 34,676	\$ 19,043	\$ 36,242	\$ 55,285	17.4%
IPI Data Center Partners II	\$ 25,000	12/20/2019	\$ 18,540	\$ 1,619	\$ 17,813	\$ 19,432	4.2%
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	\$ 52,860	\$ 54,632	\$ 14,222	\$ 68,854	9.8%
KKR Real Estate Partners Europe II	\$ 25,000	12/23/2019	\$ 19,592	\$ 5,644	\$ 14,866	\$ 20,510	3.9%
KKR Real Estate Partners Americas I	\$ 50,000	12/20/2013	\$ 50,037	\$ 59,408	\$ 2,310	\$ 61,717	10.9%
KKR Real Estate Partners Americas II	\$ 50,000	6/2/2016	\$ 59,546	\$ 67,721	\$ 14,725	\$ 82,446	20.4%
Northbridge-Strategic Fund II	\$ 30,000	2/8/2019	\$ 30,000	\$ 4,169	\$ 44,596	\$ 48,765	12.3%
Prima Mortgage Investment Trust, LLC	\$ 75,000	7/29/2011	\$ 97,490	\$ 131,918	\$ -	\$ 131,918	3.8%
Principal Life Insurance Company U.S. Property	\$ 60,000	5/20/2005	\$ 60,000	\$ 125,410	\$ -	\$ 125,410	6.2%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

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
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	\$ 19,302	\$ 19,929	-9.2%
LCC Co-Investor B	\$ 15,000	10/18/2019	\$ 15,000	\$ -	\$ 4,255	\$ 4,255	-33.2%
Rubenstein Properties Fund IV	\$ 25,000	4/16/2019	\$ 8,232	\$ 2	\$ 5,055	\$ 5,056	NM
Prudential Senior Housing Fund V	\$ 50,000	3/17/2015	\$ 41,333	\$ 5,453	\$ 47,943	\$ 53,397	4.8%
Smart Markets Fund, L.P.	\$ 195,000	6/17/2013	\$ 222,335	\$ 69,476	\$ 303,527	\$ 373,003	9.0%
Stonelake Opportunity Partners VII	\$ 40,000	6/30/2022	\$ 0	\$ -	\$ (1,020)	\$ (1,020)	NM
Walton Street Real Estate Fund VII	\$ 50,000	5/9/2012	\$ 43,990	\$ 49,882	\$ 10,666	\$ 60,548	9.1%
Walton Street Real Estate Fund VIII	\$ 50,000	10/23/2015	\$ 42,685	\$ 35,493	\$ 23,133	\$ 58,626	10.0%
Co-Investment #1	\$ 10,000	9/27/2017	\$ 10,293	\$ 4,160	\$ -	\$ 4,160	-60.0%
Westbrook Real Estate Fund IX	\$ 15,000	6/30/2014	\$ 17,418	\$ 17,500	\$ 2,794	\$ 20,294	5.6%
Westbrook Real Estate Fund X	\$ 50,000	1/15/2015	\$ 48,688	\$ 42,649	\$ 16,513	\$ 59,162	8.6%
Westbrook Real Estate Fund XI	\$ 40,000	1/31/2019	\$ 24,541	\$ 11,223	\$ 17,388	\$ 28,610	18.5%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

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**BOARD OF TRUSTEES INVESTMENTS MEMORANDUM**

TO: BOARD MEMBERS
FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER
SUBJECT: TRUSTEE EDUCATION: PRIVATE MARKET COMMITMENT PACING
DATE: DECEMBER 6, 2023

Following this memo is a presentation that reviews the methodology used by the Investment Team and consultants for developing private market pacing plans and capital budgeting.

POLICY REFERENCE

[Board Policy 1.8 – Trustee Education](#)

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

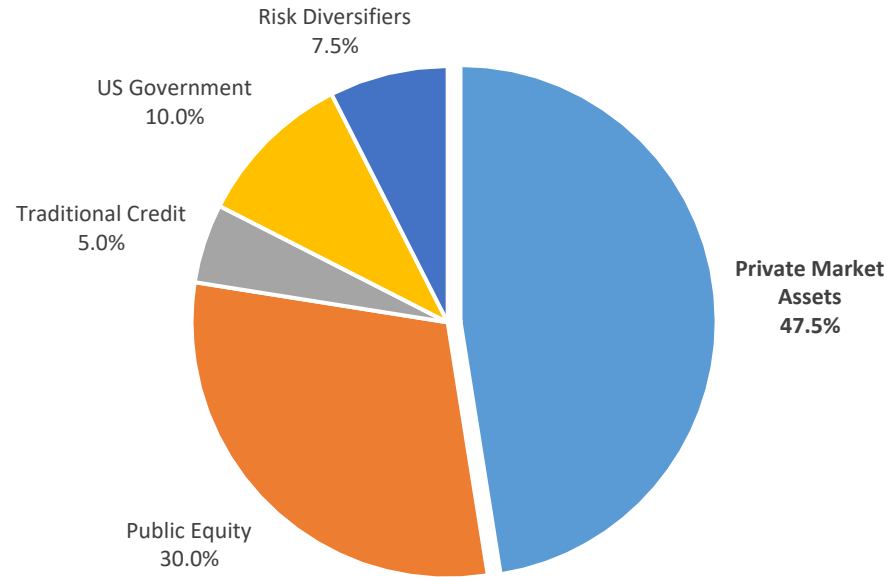
[Board Policy 4.5 – Board/Staff Relations](#)

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



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

**Quarterly Education
Private Market Pacing
December 14, 2023**



Public market investments (Public Equity, Traditional Credit, and US Gov.) and Risk Diversifiers are liquid and most holdings can be adjusted in short order.

Private market assets are illiquid – reaching and maintaining target weights requires careful pacing of commitments.

Each year, the Investment Team and consultants develop pacing plans to guide commitments over the next 2-3 years. Plans are updated as needed during each year.

First step is estimating future values for the total Fund

- Individual asset class targets depend on total Fund value

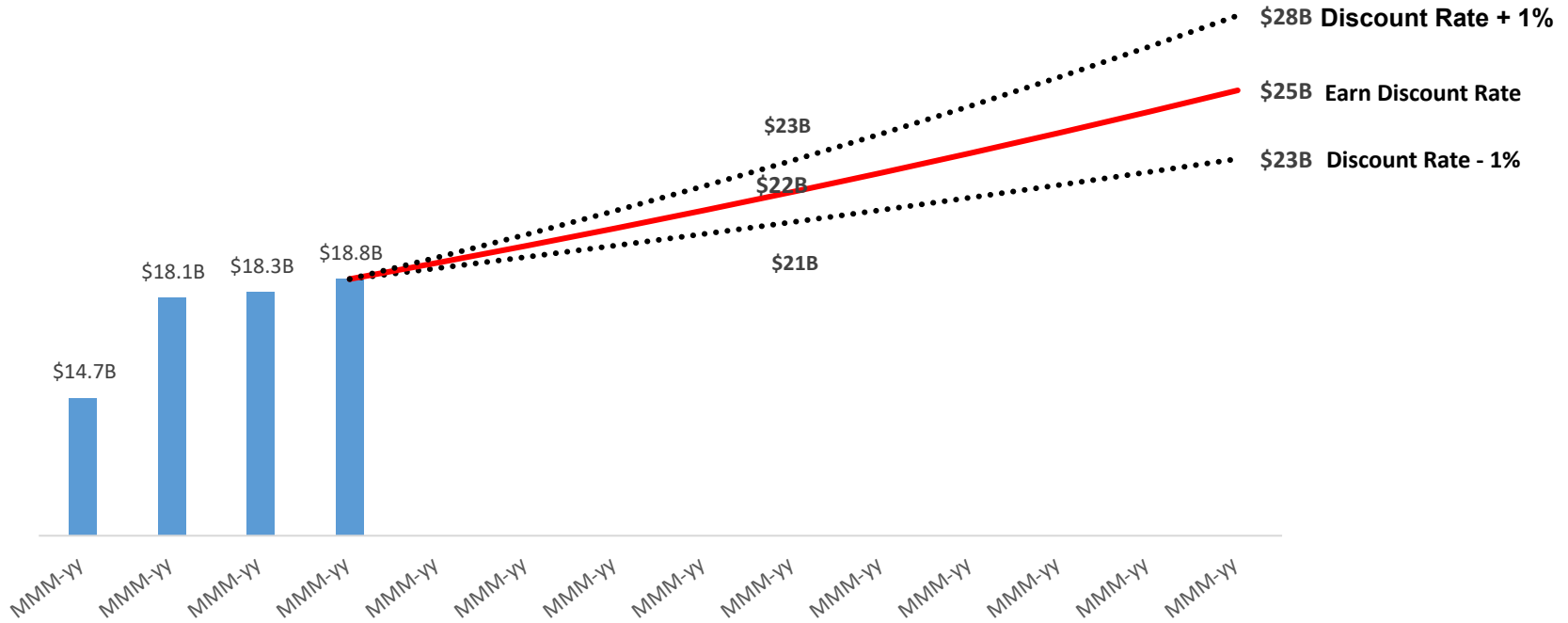
Next, develop models for individual asset classes

- Use asset class-specific models to project future values based on commitment levels
- Models need to account for
 - Specific asset class characteristics
 - Strategy types & fund structures
 - Use of co-investment
 - Current asset class Net Asset Values (NAV) & composition

Then, develop annual commitment plans consistent with asset class targets

Finally, implementation – source, diligence, and finalize commitments to existing and new managers

Projecting Total Fund Values



Fund growth is projected based on investment returns less cash outflows.

	2028 Target	Current Value
Alt. Credit	\$2.2B	\$1.6B
Infrastructure	\$2.2B	\$2.3B
Natural Resources	\$1.1B	\$1.0B
Private Equity	\$2.7B	\$3.6B
Real Estate	\$2.2B	\$2.0B
	\$10.3B	\$10.5B

Private market asset class projections

Asset class models are used to forecast future year-by-year values of:

- Capital calls
- Distributions
- NAV levels

for a commitment made today.

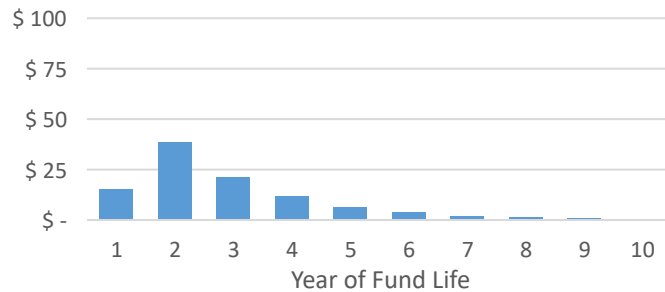
Models are similar across asset classes, but assumptions may vary fund by fund, due to differences in:

- Length of fund life and investment period
- Individual investment holding periods
- Expected returns
- Expected yields

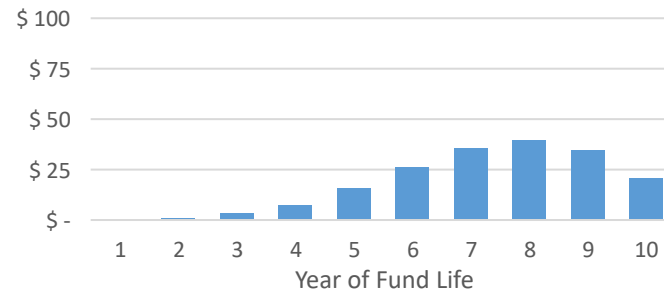
Drawdown Model – Single Fund

Based on a single \$100 commitment today:

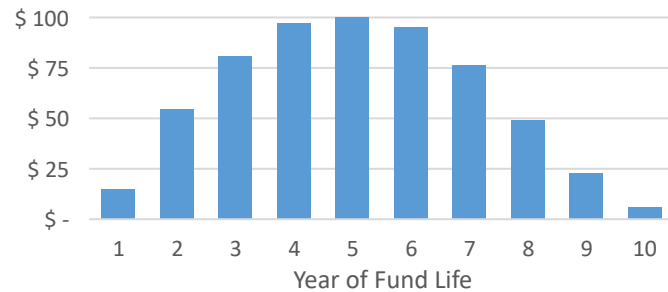
Capital Calls



Distributions

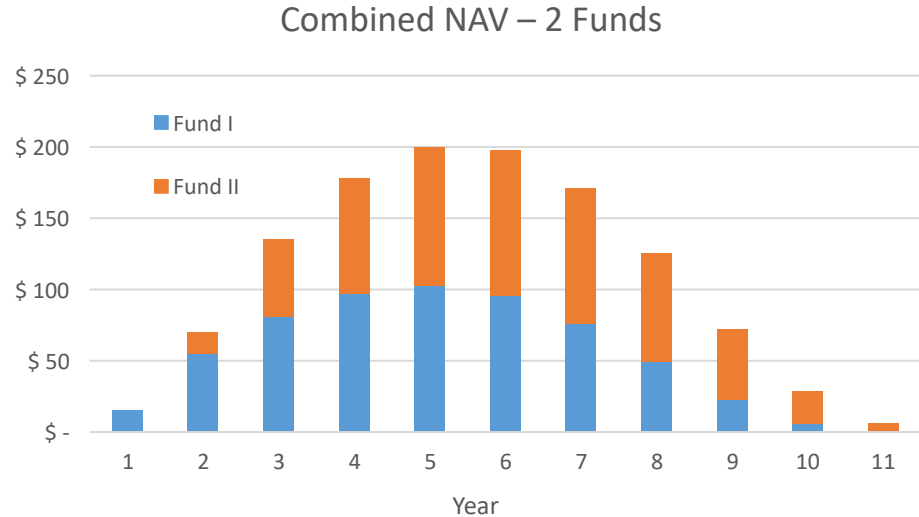


Fund NAV

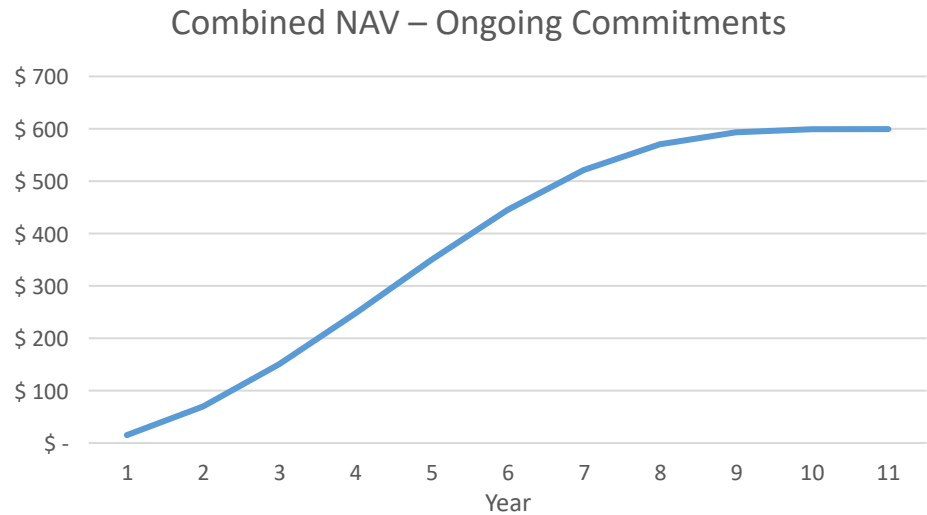


Drawdown Model – Multiple Commitments

Commit \$100 this year
and again next year:



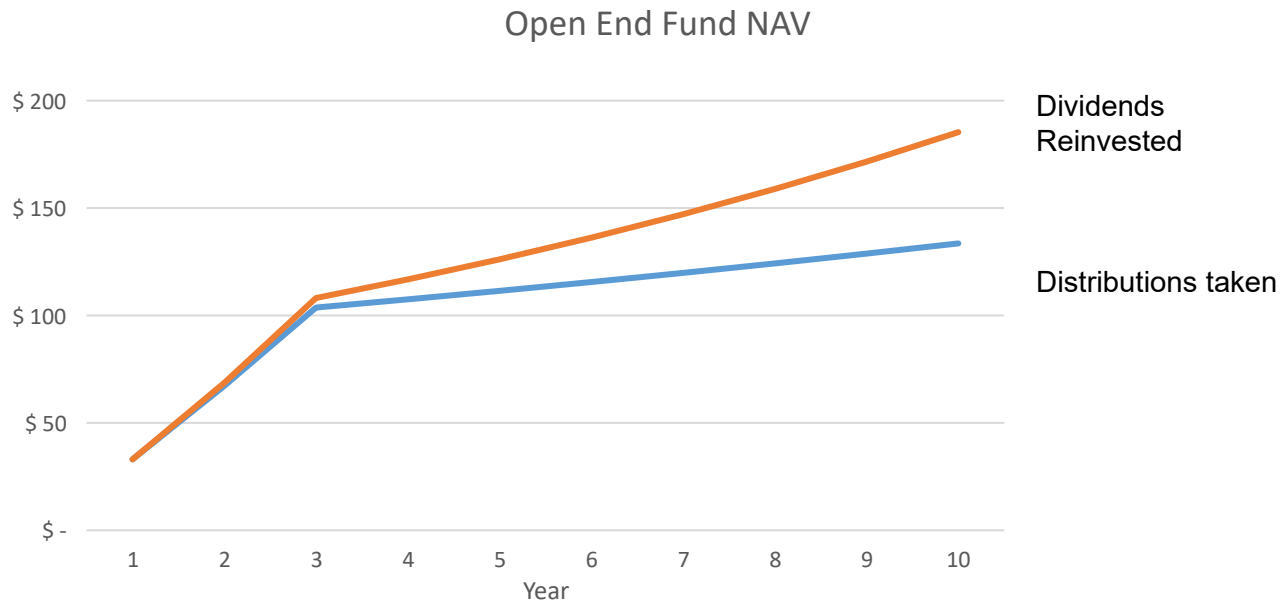
Commit \$100 each year:



Open-Ended Fund Model

Open-ended fund commitment of \$100:

- Assume capital called over 3 years
- Option to receive or reinvest distributions



Alternative Credit

Shorter fund lifetimes, contractual nature of underlying investments
Mix of drawdown, open-ended, and Business Develop. Co. (BDCs)

Infrastructure

Longer fund lifetimes, longer asset holding periods
Mix of drawdown and open-ended funds

Natural Resources

Mix of equity and debt strategies
Mix of “permanent” capital, drawdown, and long-lived funds

Private Equity

Mix of strategies: Buyout, Growth, and Venture

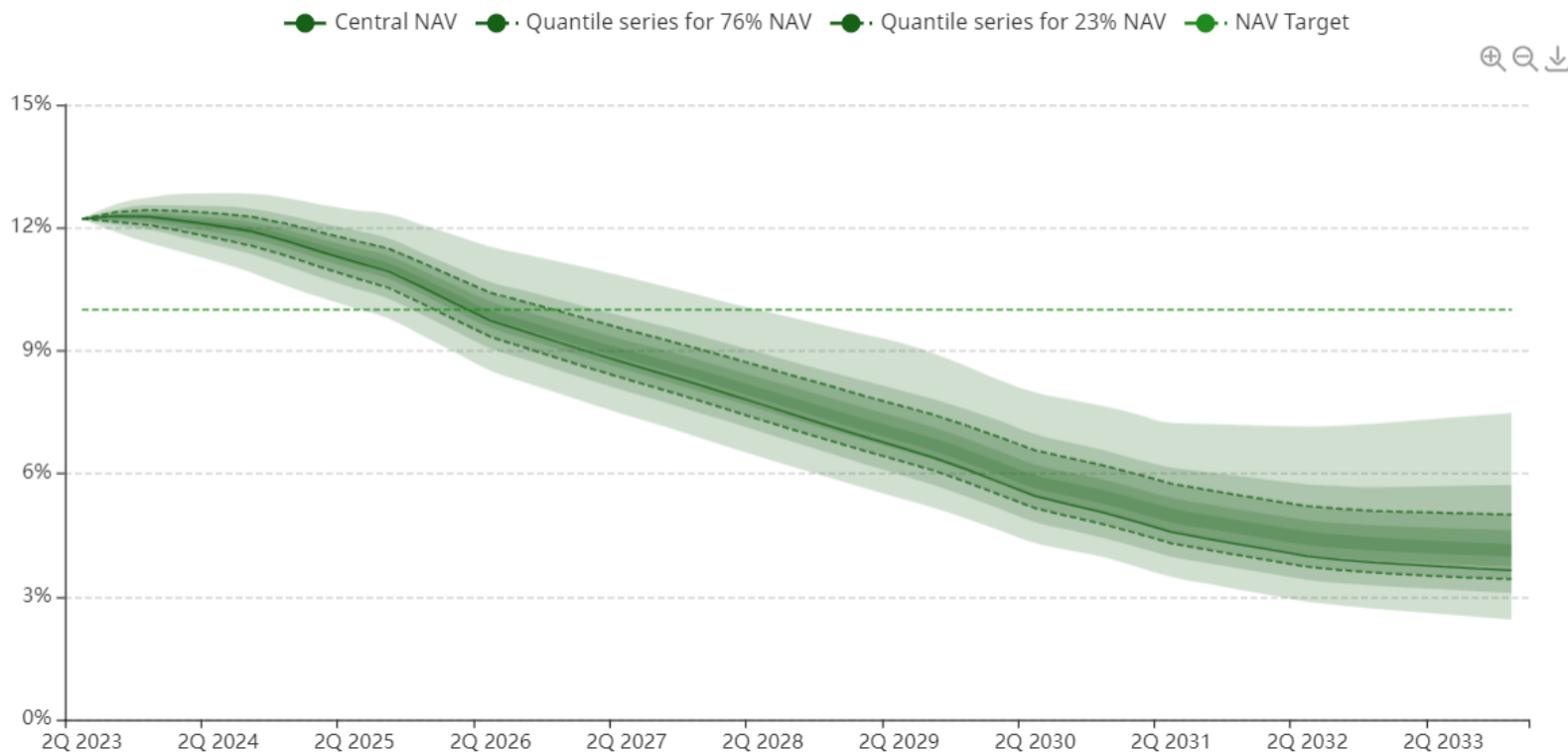
Real Estate

Mix of drawdown and open-ended funds

Final Consideration: Current portfolio NAV & co-investment

3) Develop Pacing Plans

Next step is to forecast future NAVs for existing investments, assuming that no additional commitments are made. Below chart shows projected Infrastructure values as a % of total Fund, based on current portfolio (46 funds & co-inv).

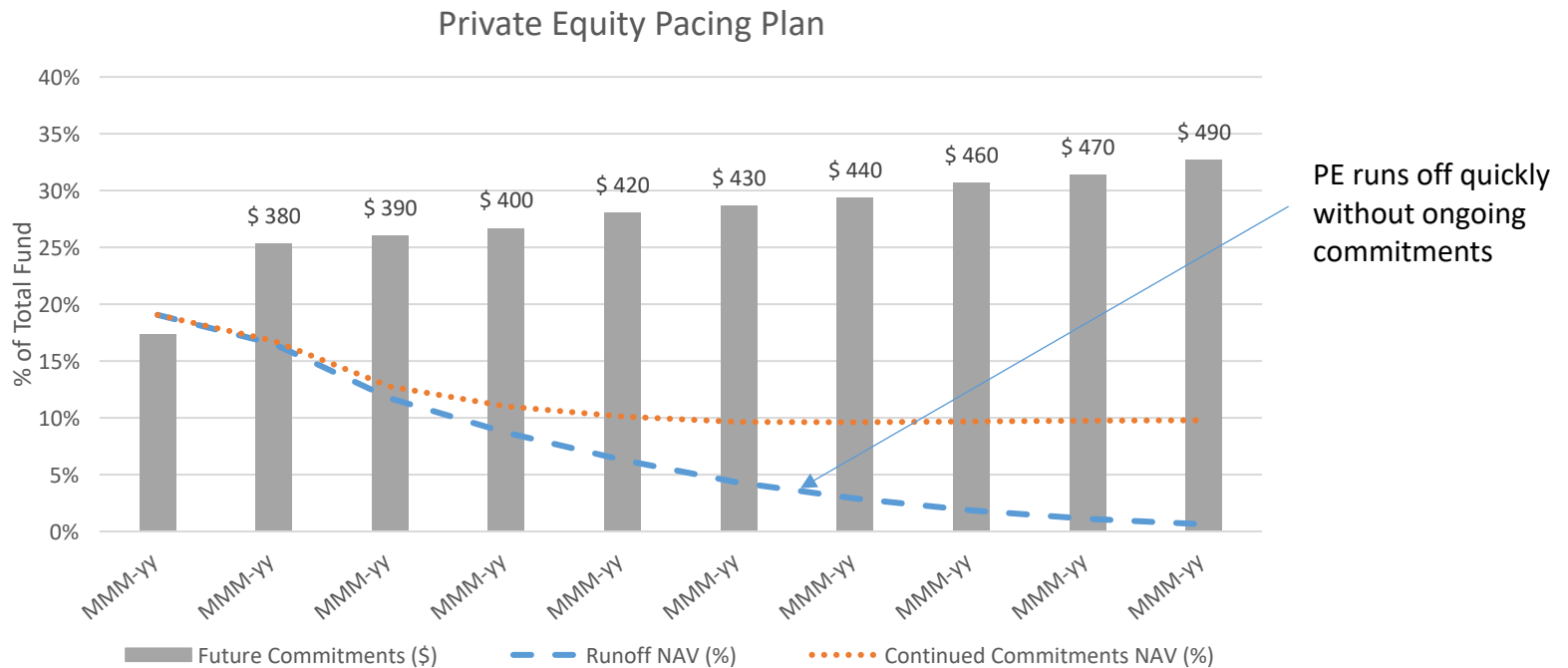


Similar “runoff” scenarios are developed for each asset class.

Pacing Plan: Private Equity

Goal: Choose future commitments to guide PE to 10% of total fund

- PE target allocation is 12.5%, targeting 10% leaves room for co-investment



Target ≈ \$1B+ in commitments over next three years, spread across

- Buyout, Growth, and Venture Strategies
- Re-ups with existing managers and new managers

Other Asset Classes

Take a similar approach with other asset classes

- Model “runoff” scenarios
- Develop commitment plans that guide future NAV to desired levels
 - Taking co-investment plans into account
- Develop annual pacing plans
 - Project timing of likely re-ups
 - Continue identifying and diligencing potential new managers

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: DECEMBER 6, 2023

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

Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry, and Public Law 2021, c. 233, An Act to Promote Socially Responsible Investing by the Maine Public Employees Retirement System by Prohibiting Investment in For-profit Prisons, became effective in October 2021. Both divestment laws are subject to the limitation that these actions be achieved “in accordance with sound investment criteria and consistent with fiduciary obligations.”

The fossil fuel divestment law states that a company is subject to divestment 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.”

Board Policy 2.1 requires an annual report summarizing the System’s fossil fuel and for-profit prison investments. A presentation reviewing the System’s exposures as of June 30, 2023, follows this memorandum. Additionally, the fossil fuel divestment law requires annual reporting regarding the progress of divestment with a final report due on January 1, 2026. A draft of the 2024 Divestment Report due to the Legislature on January 1, 2024, is also attached.

MAINEPERS FOR-PROFIT PRISON EXPOSURE

As shown on slide 2 of the presentation, MainePERS’ investments in companies with for-profit prison exposure totals \$720,000, or around 0.004% of System assets. These investments are contained in the iShares Russell 2000 ETF held by MainePERS and in the System’s ACWI-ex U.S. equity holdings.

MAINEPERS FOSSIL FUEL EXPOSURE

As shown on slide 3, MainePERS’ aggregate investments in fossil fuel companies decreased during 2023 both in absolute terms and as a percent of assets for both public and private market investments. Exposure fell by \$193 million in the past year and represents 6.5% of total system assets as of June 30, 2023.

For public market investments, fossil fuel exposure within public equity dropped by \$28.5 million, as shown on slide 4. This decrease was offset by an increase of \$11.3 million in the Traditional Credit portfolio, producing a net decrease of \$17.1 million over the past year.

Overall fossil fuel exposure for private market investments fell by \$175 million over the past year, as shown on slide 5. Infrastructure and Private Equity exposure decreased as fossil fuel investments were realized and capital returned. Whereas, infrastructure debt funds deployed capital into fossil fuel investments during 2023.

Slide 6 details private market exposure by vintage year and shows 75% of exposure resides in funds with vintage years 2017 and earlier. MainePERS’ exposure to fossil fuels within private markets is expected to decrease over time due to the runoff of historical commitments to fossil fuel-focused strategies and the growth of infrastructure investment opportunities related to the energy transition.



DIVESTMENT REPORT

Public Law 2021, c. 231

January 2024

Prepared by the Maine Public Employees Retirement System

Table of Contents

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IV.	Implementation Update.....	6
V.	Fossil Fuel Investment Status.....	7

Appendices

- I. 2023 Divestment Report and appendices
 - A. Maine Constitution, Article IX, Section 18
 - B. Divestment Legislation, Public Law 2021, c. 231
 - C. Letter from Attorney General Aaron Frey to the Joint Standing Committee on Labor and Housing, April 9, 2021
 - D. Letter from Assistant Attorney General Andrew Black to MainePERS, December 8, 2022
 - E. MainePERS Governance Manual, 2.1 Investment Policy Statement
 - F. Request for Proposal 2022-03, Divestment Consulting Services
 - G. NEPC Divestment Consulting Services Proposal, April 2022
 - H. NEPC Divestment Memo, November 2022

- II. MainePERS Governance Manual, 2.1 Investment Policy Statement – amended February 9, 2023

I. Introduction

The Maine Public Employees Retirement System (MainePERS or System) is an incorporated public instrumentality of the state governed by a Board of Trustees pursuant to Maine law. Since 1942, MainePERS has joined with public employers to help their employees prepare for retirement. The System's active contributing members include teachers; state, county, and municipal employees; legislators; judges; and others. Upon retirement, our members receive monthly benefits from their respective defined benefit plans. The basic defined benefit retirement plan funding equation provides that, over the long term, contributions plus investment earnings must be equal to benefit obligations. While investment market performance affects plan funding levels and funding requirements, it does not affect benefit obligations.

The Board of Trustees owes fiduciary duties to MainePERS' members, retirees and beneficiaries. First, the Board owes a duty of loyalty – to follow the exclusive benefit rule established in the Maine Constitution (2023 Divestment Report, Appendix A) by acting solely in the interests of the members, retirees, and beneficiaries as recipients of retirement or related benefits. This duty includes not using the Board's position of trust for personal gain or to advance other causes. Second, the Board owes a duty of prudence. This requires the exercise of reasonable care, skill, and caution. In making investment decisions, this requires considering the portfolio as a whole, the role each investment plays in the portfolio, and diversification. Additionally, the Board may incur only costs that are reasonable in relation to the trust property, the purposes of the trust and the skills of the Board. The 2023 Divestment Report (Appendix I) provides additional detail on the legal and policy framework to which the Board must adhere.

Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry (2023 Divestment Report, Appendix B), became effective on October 18, 2021. This divestment statute (5 M.R.S. §1957) directs the Board of Trustees of the Maine Public Employees Retirement System to refrain from future investment in fossil fuel companies and divest of any existing holdings by January 1, 2026, subject to the limitation that these actions be achieved "in accordance with sound investment criteria and consistent with fiduciary obligations." Additionally, the divestment statute requires MainePERS report annually regarding the progress of divestment with a final report due on January 1, 2026. This report includes an update on the implementation of the divestment statute and the status of MainePERS' fossil fuel investments as of June 30, 2023.

Following the enactment of Public Law 2021, c. 231, MainePERS expended considerable resources and the better part of a year working diligently to implement the law by exploring the financial implications of alternative strategies to avoid fossil fuel investments and consulting with the Attorney General's Office on the legal issues guiding the fiduciary duty of the Board of Trustees in implementing the new law. The 2023 Divestment Report (Appendix I), summarized in section II, details these efforts and is appended to this report.

II. Summary of the 2023 Divestment Report

Article IX, Section 18, of the Maine Constitution (2023 Divestment Report, Appendix A) establishes a fiduciary duty to hold, invest, and disburse MainePERS pension trust funds solely in the best financial interest of the members as pension recipients. In fulfilling its fiduciary obligations, the Board appropriately relies on staff members and consultants with investment expertise.

The Board, based on investment staff and consultant recommendations, has adopted a passive, index-based approach to investing in the public markets as being in the best interests of members as pension recipients. For private market investments, the Board has adopted an approach to hire managers following due diligence that includes the manager's approach to environmental, social, and governance issues, and then to rely upon the manager's selection of portfolio investments as being in the best interest of members as pension recipients.

In October 2021, in accordance with sound investment criteria and consistent with fiduciary obligations, the Board of Trustees voted to continue its current approach to investing in the public and private markets while directing staff to explore the financial implications of alternative strategies to avoid fossil fuel investments. This included continuing discussions with MainePERS' investment consultants and with asset managers who provide fossil fuel-free or climate-aware investment options, including the extent to which alternatives are available with comparable risk and return profiles and fees.

Additionally, in November 2021, the Board of Trustees approved a plan to engage a specialty consultant to assist the staff in a review of the portfolio's exposure to fossil fuel and an evaluation of investment implications resulting from the divestment statute. A working group was formed to develop a request for proposals (RFP) for this engagement. This group consisted of staff, MainePERS' general consultant -- Cambridge Associates, and several external investment professionals with public plan experience related to these issues. The working 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. Six individuals offered oral testimony, and 25 individuals submitted written comments.

MainePERS issued the RFP (2023 Divestment Report, Appendix F) directly to 13 potential bidders and via public media in March 2022. Five responses were received by the deadline in April 2022. Following a review of the RFP responses MainePERS engaged NEPC, formerly New England Pension Consultants, in June 2022 for the below scope of work (2022 Divestment Report, Appendix G):

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

NEPC delivered its report to the Board of Trustees in November 2022 (2023 Divestment Report, Appendix H). The report notes MainePERS' holdings of fossil fuel investments are both substantial and widespread, with a majority of asset classes containing fossil fuel exposure. Importantly, these exposures are not intentional, but rather arise as a result of investment decisions made in order to best balance the System's goals of generating returns while minimizing investment risks. Achieving and maintaining a fossil fuel-free portfolio by 2026 would require both disposing of significant existing investments as well as making fundamental changes to MainePERS' investment approach. The 2023 Divestment Report (Appendix I) discusses the impacts of divestment in more detail.

Subsequent to the receipt of the NEPC report, MainePERS sought advice from the Office of the Attorney General on how to interpret certain provisions of the fossil fuel and for-profit prison divestment statutes. The Office of the Attorney General issued a letter dated December 8, 2022, (2023 Divestment Report, Appendix D,). The letter states, in part:

The subject statutes do not affect the Board's exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on "accordance with sound investment criteria" and "consisten[cy] with fiduciary obligations." As such, they reiterate rather than modify the Board's fiduciary obligations as a trustee – both constitutional and statutory.

The letter also states:

The Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of [the divestment statutes].

The Board of Trustees planned to modify Board Policy 2.1 (2023 Divestment Report, Appendix E; and, as amended, Appendix II), the System's Investment Policy Statement, to recognize the divestment statute, require annual divestment reporting, and provide guidance on investments that include exposure to fossil fuels.

The 2023 Divestment Report (Appendix I) noted that a majority of MainePERS' fossil fuel exposure resides in its private market investments, concentrated within the infrastructure and private equity asset classes. The report further noted that the last private market commitments to investments with a fossil fuel-focus occurred in 2017, that the capital invested in these strategies should be returned in the next several years as these investments wind down, and that no further commitments to funds with a fossil fuel-focus are anticipated. As a result, MainePERS projected the portfolio's exposure to fossil fuels would decline by roughly one-third by 2026.

III. Investments at MainePERS

The Board's Investment Policy Statement (Appendix II) directs staff in the investment of trust assets, by spelling out both high-level goals and specific implementation guidelines. As noted at the start of the Policy, all investments are made consistent with the need to balance two competing objectives:

- Generating investment returns (to ensure growth of the trust funds); and
- Minimizing investment risks (loss of capital and cash flow shortfalls);

while maintaining the volatility of contribution rates and the plan's funded status at acceptable levels. As the Policy notes, these two goals are in opposition – generating adequate returns requires constructing a portfolio that exposes trust assets to investment risk. The 2023 Divestment Report (Appendix I) discusses MainePERS' investment approach in more detail.

Broadly speaking, MainePERS strategic asset allocation includes three general categories – public markets, risk diversifiers, and private markets. Investment implementation varies across these asset classes.

	<u>Policy Weight</u>
Public Market Assets	
Domestic Equity	19.0%
International Equity	11.0%
Total Public Equity*	30.0%
Traditional Credit	5.0%
US Gov. Securities	10.0%
Total Public Markets	45.0%
Risk Diversifiers	7.5%
Private Market Assets	
Infrastructure	10.0%
Private Equity	12.5%
Alternative Credit	10.0%
Natural Resources	5.0%
Real Estate	10.0%
Total Private Markets	47.5%

**Domestic Equity and International Equity policy proportions are based on floating MSCI ACWI weights.*

Public market investments include domestic and international equity, traditional credit, and US Government Securities. In broad terms, MainePERS employs a passive “buy the market” approach for its investments in public markets where the likelihood of generating outperformance is low. This allows the System to earn market returns at very low cost while maintaining a very high level of diversification.

In contrast, the System uses an active “beat the market” approach for other asset classes, where it is reasonable to believe that an active approach will add value. Investment in risk diversifiers are made via private funds employing active strategies to invest in assets such as public stocks, bonds, and commodities. These strategies are expected to have little correlation to public markets, intended to provide diversification away from growth assets, and are typically implemented using derivatives -- buying stock index futures rather than holding shares in individual companies.

Private market assets include infrastructure, private equity, alternative credit, natural resources, and real estate. MainePERS invests in private market assets by committing to capital as a limited partner to long-term private investment funds. The general partners (GP) of these funds agree to serve as fiduciaries to MainePERS, and have wide discretion in the sourcing, managing, creating value, and timing of the acquisition and disposition of investments. MainePERS typically partners with managers pursuing a generalist investment approach in their funds, which allows the GP to direct capital into industries and sectors based on what it perceives as the most attractive investments based on current market conditions and the long-term opportunity set. Outcomes are driven by GP skill, and there is wide dispersion in performance across the universe of private market managers.

As noted in section II of this report, exposure to fossil fuel assets are not intentional, but rather arise as a result of investment decisions made in order to best balance the System’s goals of generating returns while minimizing investment risks.

IV. Implementation Update

In February of 2023, the Board of Trustees amended the Investment Policy Statement (Appendix II) as discussed in the 2023 Divestment Report. The revised policy recognizes the divestment statute, requires annual divestment reporting, and provides guidance on investments that include exposure to fossil fuels. In particular, these changes direct the Investment Team to provide the Board of Trustees with disclosures regarding the potential for fossil fuel and other exposures when recommending new investments and to report on the System's exposures to these assets on an annual basis.

Board Policy 2.1 – Investment Policy Statement was amended to include the following provision:

Fossil Fuel and Private Prison Investments

The System may invest in strategies providing managers with broad discretion in the selection of investments. The potential for fossil fuel or for-profit prison investment must be disclosed to the Board prior to the Board's approval of a strategy. For those strategies likely to invest in stocks, securities or other obligations of fossil fuel or for-profit prison assets, disclosures will include a description of the expected role of such investments in the proposed strategy and discussion of the process leading to the selection of the strategy.

On an annual basis, the Board will be provided with a report summarizing the System's fossil fuel and for-profit prison investments. This report will include a discussion of the actual and expected changes in these exposures, and analysis of these exposures within the context of the divestment statutes, 5 M.R.S. §§ 1957 and 1958.

MainePERS is in compliance with revised Board Policy 2.1, including required disclosures along with a description of the expected role of the investments in proposed strategy and discussion of the process leading to the selection of the strategy.

Specifically, MainePERS made a total of six commitments to private market investments subsequent to adopting the above language in revised Board Policy 2.1. As discussed in section III of this report, these private market investments take the form of interests in private partnerships. One of the six commitments was made to an infrastructure fund. It is typical for such funds to include one or more fossil fuel sectors as potential investment areas, however these are expected to represent a minority of fund investments. Per revised Board Policy 2.1, this was disclosed along with a description of the expected role of the investments in proposed strategy and discussion of the process leading to the selection of the strategy.

V. Fossil Fuel Investment Status

Following is an update on the status of MainePERS' fossil fuel investments as of June 30, 2023, as compared to the status of fossil fuel investments as of June 30, 2022. While preparing this report it was discovered that a private market fossil fuel investment valued at \$32.3 million was omitted from the System's 2023 analysis due to a classification error. This error has been corrected and prior-year exposures contained in the below tables have been updated to include this omitted investment. This investment remains part of the System's private market portfolio, and its value is reflected in the 2023 figures in this report. The updated values are designated as "Corrected".

Table 1 – MainePERS Fossil Fuel Exposure

Asset	Estimated FF [\$M]	Weighted Exposure
Public Markets		
2022	\$445.5	2.5%
2023	\$428.4	2.3%
Risk Diversifiers		
2022	\$0.0	0.0%
2023	\$0.0	0.0%
Private Markets		
2022*	\$962.3	5.3%
2023	\$786.8	4.2%
Total		
2022*	\$1,407.8	7.8%
2023	\$1,215.2	6.5%

Note: Totals shown in tables may not sum due to rounding.

* Corrected.

As shown above, the System's holdings of fossil fuel investments decreased during the fiscal year by \$193M, from \$1,408M to \$1,215M, and represented 6.5% of total System assets as of June 30, 2023. Fossil fuel exposure remained constant at \$0 for Risk Diversifiers and declined for both public market and private market investments. The below tables provide additional detail on exposures within these categories.

Table 2 – MainePERS Fossil Fuel Exposures – Public Markets

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF [% of (B)]	Estimated FF [\$M]	Weighted Exposure
Total Public Equity					
2022	30%	24.5%	9.1%	\$404.5	2.2%
2023	30%	25.6%	7.8%	\$376.0	2.0%
Traditional Credit					
2022	5%	5.7%	4.0%	\$41.0	0.2%
2023	5%	4.2%	6.7%	\$52.3	0.3%
US Govt. Securities					
2022	10%	7.7%	0.0%	\$0.0	0.0%
2023	10%	8.5%	0.0%	\$0.0	0.0%
Total Public Markets					
2022	45%	37.9%	6.5%	\$445.5	2.5%
2023	45%	38.2%	5.9%	\$428.4	2.3%

Note: Totals shown in tables may not sum due to rounding.

Fossil fuel exposure within public equity dropped by \$28.5M. This decrease was offset by an increase of \$11.3M in the Traditional Credit portfolio, producing a net decrease of \$17.1M during the year.

Table 3 – MainePERS Fossil Fuel Exposures – Private Markets

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF [% of (B)]	Estimated FF [\$M]	Weighted Exposure
Infrastructure					
2022*	10.0%	11.2%	36.5%	\$735.5	4.1%
2023	10.0%	12.2%	24.5%	\$565.4	3.0%
Private Equity					
2022	12.5%	21.1%	5.2%	\$197.3	1.1%
2023	12.5%	19.6%	4.3%	\$159.9	0.8%
Alternative Credit					
2022	10.0%	6.8%	1.8%	\$22.3	0.1%
2023	10.0%	8.2%	3.7%	\$57.3	0.3%
Natural Resources					
2022	5.0%	5.0%	0.8%	\$7.2	0.0%
2023	5.0%	5.2%	0.4%	\$4.3	0.0%
Real Estate					
2022	10.0%	10.5%	0.0%	\$0.0	0.0%
2023	10.0%	10.1%	0.0%	\$0.0	0.0%
Total Private Markets					
2022*	47.5%	54.5%	9.8%	\$962.3	5.3%
2023	47.5%	55.3%	7.6%	\$786.8	4.2%

Note: Totals shown in tables may not sum due to rounding.

* Corrected.

As shown above, the bulk of the decrease in the MainePERS' fossil fuel exposure took place in the private market investments, where fossil fuel holdings fell from a (corrected) value of \$962.3M to \$786.8M, a reduction of \$175.5M. As discussed in the 2023 Divestment Report (Appendix I), MainePERS' exposure to fossil fuels within private markets is expected to decrease over time due to the runoff of historical commitments to fossil fuel-focused strategies and the growth of infrastructure investment opportunities related to the energy transition.

MainePERS made its last private market commitments to investments with a fossil fuel-focus in 2017, and the capital invested in these strategies will be returned in the next several years as those investments wind down. Additionally, as the universe of potential infrastructure investments broadens to include more opportunities related to the energy transition, MainePERS expects its generalist managers will increasingly find these types of investments more attractive relative to fossil fuel investments. As a result, MainePERS continues to project the portfolio's exposure to fossil fuels will decline by roughly one-third by 2026 relative to its level of exposure in 2022.



DIVESTMENT REPORT

Public Law 2021, c. 231

January 2023

Prepared by the Maine Public Employees Retirement System



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I. EXECUTIVE SUMMARY

Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry (Appendix B), became effective on October 18, 2021. This divestment statute (5 M.R.S. §1957) directs the Board of Trustees of the Maine Public Employees Retirement System (MainePERS) to refrain from future investment in fossil fuel companies and divest of any existing holdings by January 1, 2026, subject to the limitation that these actions be achieved “in accordance with sound investment criteria and consistent with fiduciary obligations.”

Article IX, Section 18, of the Maine Constitution (Appendix A) establishes a fiduciary duty to hold, invest, and disburse MainePERS pension trust funds solely in the best financial interest of the members as pension recipients. In fulfilling its fiduciary obligations, the Board appropriately relies on staff members and consultants with investment expertise.

The Board, based on investment staff and consultant recommendations, has adopted a passive, index-based approach to investing in the public markets as being in the best interests of members as pension recipients. For private market investments, the Board has adopted an approach to hire managers following due diligence that includes the manager’s approach to environmental, social, and governance issues, and then to rely upon the manager’s selection of portfolio investments as being in the best interest of members as pension recipients.

In October 2021, in accordance with sound investment criteria and consistent with fiduciary obligations, the Board of Trustees voted to continue its current approach to investing in the public and private markets while directing staff to explore the financial implications of alternative strategies to avoid fossil fuel investments. This included continuing discussions with MainePERS’ investment consultants and with asset managers who provide fossil fuel-free or climate-aware investment options, including the extent to which alternatives are available with comparable risk and return profiles and fees.

Additionally, in November 2021, the Board of Trustees approved a plan to engage a specialty consultant to assist the staff in a review of the portfolio’s exposure to fossil fuel and an evaluation of investment implications resulting from the divestment statute. A working group was formed to develop a request for proposals (RFP) for this engagement. This group consisted of staff, MainePERS’ general consultant -- Cambridge Associates, and several external investment professionals with public plan experience related to these issues. The working 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. Six individuals offered oral testimony, and 25 individuals submitted written comments.

MainePERS issued the RFP (Appendix F) directly to 13 potential bidders and via public media in March 2022. Five responses were received by the deadline in April 2022. Following a review of the RFP responses MainePERS engaged NEPC, formerly New England Pension Consultants, in June 2022 for the below scope of work (Appendix G):

- A. Broad review of divestment and the climate change-related landscape;
- B. Identify and quantify the System’s portfolio holdings subject to divestment;

- C. Identify and quantify direct divestment costs; and
- D. Identify and quantify divestment impact on the portfolio.

NEPC delivered its report to the Board of Trustees in November 2022 (Appendix H). The report notes MainePERS' holdings of fossil fuel investments are both substantial at 7.63% and widespread, with a majority of asset classes containing fossil fuel exposure. Importantly, these exposures are not intentional, but rather arise as a result of investment decisions made in order to best balance the System's goals of generating returns while minimizing investment risks. Achieving and maintaining a fossil fuel-free portfolio by 2026 would require both disposing of significant existing investments as well as making fundamental changes to MainePERS' investment approach.

Subsequent to the receipt of the NEPC report, MainePERS sought advice from the Office of the Attorney General on how to interpret certain provisions of the fossil fuel and for-profit prison divestment statutes. The Office of the Attorney General issued a letter dated December 8, 2022, (Appendix D). The letter states, in part:

The subject statutes do not affect the Board's exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on "accordance with sound investment criteria" and "consisten[cy] with fiduciary obligations." As such, they reiterate rather than modify the Board's fiduciary obligations as a trustee – both constitutional and statutory.

The letter also states:

The Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of [the divestment statutes].

The Board of Trustees are expected to modify Board Policy 2.1 (Appendix E), the System's Investment Policy Statement, to recognize the divestment statute, require annual divestment reporting, and provide guidance on investments that include exposure to fossil fuels.

The majority of MainePERS' fossil fuel exposure resides in its private market investments, concentrated within the infrastructure and private equity asset classes. It is worth noting that the last private market commitments to investments with a fossil fuel-focus occurred in 2017 and that the capital invested in these strategies should be returned in the next 3-4 years as these investments wind down. No further commitments to funds with a fossil fuel-focus are anticipated. As a result, MainePERS projects the portfolio's exposure to fossil fuels will decline by roughly one-third by 2026.

II. INTRODUCTION TO MAINEPERS

The Maine Public Employees Retirement System (MainePERS) is an incorporated public instrumentality of the state governed by a Board of Trustees pursuant to Maine law. Since 1942, MainePERS has joined with public employers to help their employees prepare for retirement. The System's active contributing members include teachers; state, county, and municipal employees; legislators; judges; and others. Upon retirement, our members receive monthly benefits from their respective defined benefit plans. The System also administers disability retirement, group life insurance, survivor services, and a tax-deferred retirement savings program known as MaineSTART. Management of these programs includes financial and investment administration, recordkeeping of members' work and compensation data, and administration of retirement and related services.

The defined benefit plans are the prevailing program administered by MainePERS. The basic defined benefit retirement plan funding equation provides that, over the long term, contributions plus investment earnings must be equal to benefit obligations. While investment market performance affects plan funding levels and funding requirements, it does not affect benefit obligations.

The Board of Trustees' management of MainePERS investments is guided by the System's investment policy. The policy states the Board's underlying investment objectives, sets out the investment strategies intended to realize the objectives, and establishes guidelines and criteria for implementation of the strategies.

The foundation of the investment policy is the mix of investment types in which assets are invested and the allocation of assets across asset classes. The Board is responsible for establishing the policy that serves as the framework for investment of the programs' assets. The Board employs in-house investment professionals as well as a general consultant to advise it on investment policy and asset class specialty consultants to advise it on specific investments.

The Board's choice of asset classes reflects its assessment of expected investment returns and the nature, level, and management of risk. The defined benefit programs' assets perform two functions: they collateralize the benefits owed to participants, and they provide investment earnings. All benefit payments must eventually be funded from a combination of contributions and investment earnings.

The return on invested contributions has historically supplied a significant amount of the benefit funding resources of defined benefit plans. In periods when the investment markets provide lower returns than expected, the resulting funding shortfall has historically been supplemented by a combination of increased contributions and investment market returns in other periods that exceed expectations. For this reason, the performance of the investment markets is a significant factor affecting the financial activities or position of the System, and the effects of market performance flow through to contribution requirements.

The recent two-decade low interest rate environment has affected the potential volatility of employer contributions. This is because low interest rates mean that the fund is no longer able to earn attractive returns from relatively safer fixed-income assets and as a result is more reliant on earnings from riskier assets, such as equities. As interest rates have fallen and to help maintain contribution stability, the trust fund has decreased its earnings assumption by 1.5% (from 8% to 6.5%) and shifted assets away from fixed-income. At the same time the trust fund has increased diversification by expanding its asset allocation to include a number of alternative asset classes.

III. DIVESTMENT LEGISLATION

The 130th Legislature enacted Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry, which became effective in October of 2021. The divestment statute requires MainePERS to refrain from certain types of investments and to divest of any existing holdings of these investments to the extent doing so would be “in accordance with sound investment criteria and consistent with fiduciary obligations.” The statute includes an exception for de minimis exposure and sets a January 1, 2026 target for completing divestment.

The investments covered by the divestment statute are “stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.” PL 2021, c. 231, § 3. “Fossil fuel company” is defined as any company that:

- 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 (e.g., wells, pipelines, refineries, power plants, storage tanks, export terminals);
- Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or
- Receives more than 50% of its gross revenues from companies meeting the above definitions.

IV. LEGAL AND POLICY FRAMEWORK

Constitutional, Statutory, and Regulatory Context

The Maine Constitution protects the retirement benefit of MainePERS members by establishing a fiduciary duty to hold, invest, and disburse pension trust funds solely in the best financial interest of members as pension recipients. Article IX, Section 18, of the Constitution (Appendix A) states:

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.

This “exclusive benefit rule” is also reflected in the Maine Uniform Trust Code, which applies to the MainePERS Board of Trustees and states, “A trustee shall administer the trust solely in the interests of the beneficiaries.” *18-B M.R.S. § 802(1)*; see also *5 M.R.S. § 17153(3)*. The exclusive benefit rule is further reflected in the federal statutes and regulations that qualify MainePERS retirement plans for federal tax deferral. Under federal law, qualified retirement fund assets must not be “used for, or diverted to purposes other than the exclusive benefit of [the] employees or their beneficiaries.” *26 U.S.C. § 401(a)(2)*. The “phrase ‘purposes other than for the exclusive benefit of [the] 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.” *26 C.F.R. § 1.401-2(a)(3)*.

Additionally, the MainePERS Board of Trustees must comply with the Maine Uniform Prudent Investor Act, which requires the Board to “invest and manage trust assets, as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust.” *18-B M.R.S. § 902(1)*. The general provisions of Title 5, Part 20, Maine Public Employees Retirement System, lays out these purposes, terms, distribution requirements and other circumstances of the trust administered by the Board, and the findings declare “The Legislature finds that the State owes a great debt to its retired employees for their years of faithful and productive service. Part of that debt is repaid by the benefits provided to retirees...” through the retirement programs administered by MainePERS. *5 M.R.S. § 17151*.

Fiduciary Duty of Trustees

As noted above, the MainePERS Board of Trustees owes fiduciary duties to MainePERS’ members, retirees, and beneficiaries.

First, the Board owes a duty of loyalty – to follow the exclusive benefit rule established in the Maine Constitution by acting solely in the interests of the members, retirees, and beneficiaries as recipients of retirement or related benefits. This duty includes not using the Board’s position of trust for personal gain or to advance other causes.

Second, the Board owes a duty of prudence. This requires the exercise of reasonable care, skill, and caution. In making investment decisions, this requires considering the portfolio as a whole, the role each investment plays in the portfolio, and diversification. See *18-B M.R.S. §§ 804, 902, 903*. Additionally, the Board “may incur only costs that are reasonable in relation to the trust property, the purposes of the trust and the skills of the” Board. *18-B M.R.S. § 805*.

The fossil fuel divestment statute does not alter these fiduciary duties. Analyzing this and the for-profit prison divestment statute, the Attorney General’s Office explains:

The subject statutes do not affect the Board’s exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings

unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on “accordance with sound investment criteria” and “consisten[cy] with fiduciary obligations.” As such, they reiterate rather than modify the Board’s fiduciary obligations as a trustee – both constitutional and statutory.

The Attorney General’s Office further explains:

The Board’s focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of [the divestment statutes].

(Appendix D). This analysis echoes that provided by the Attorney General to the Joint Standing Committee on Labor and Housing when the bills that became the divestment statutes were under consideration. (Appendix C).

V. INVESTMENTS AT MAINEPERS

Investment Policy Statement

The Board’s Investment Policy Statement (Policy) directs staff in the investment of trust assets, by spelling out both high-level goals and specific implementation guidelines (Appendix E).

As spelled out at the start of the Policy, all investments are made consistent with the need to balance two competing objectives:

- Generating investment returns (to ensure growth of the trust funds); and
- Minimizing investment risks (loss of capital and cash flow shortfalls);

while maintaining the volatility of contribution rates and the plan’s funded status at acceptable levels. As the Policy notes, these two goals are in opposition – generating adequate returns requires constructing a portfolio that exposes trust assets to investment risk.

The Policy defines a strategic asset allocation specifying and defining the asset classes to be invested in and provides target portfolio weights for each asset class. The Policy acknowledges that these choices are the primary determinants of the level of investment risk contained in the System’s portfolio.

The Policy also provides implementation guidance to investment staff in a number of key areas. Specifically, the Policy:

- Defines each asset class and requires that individual investments be consistent with these definitions.
- Identifies benchmarks for each asset class and specifies that asset class performance be measured against these benchmarks.
- Directs that a passive approach be taken in public market equity investments.
- Requires that investments be made consistent with the Board’s Environmental, Social and Governance Policy and Engagement Policy.
- Specifies high-level processes used to select and monitor individual managers.
- Discusses the use of derivatives, leverage, hedging, and securities lending.

Investment Policy Design

The System’s strategic asset allocation spans a number of asset classes:

	<u>Policy Weight</u>
Public Market Assets	
Domestic Equity	19.0%
International Equity	11.0%
Total Public Equity*	30.0%
Traditional Credit	5.0%
US Gov. Securities	10.0%
Total Public Markets	45.0%
Risk Diversifiers	7.5%
Private Market Assets	
Infrastructure	10.0%
Private Equity	12.5%
Alternative Credit	10.0%
Natural Resources	5.0%
Real Estate	10.0%
Total Private Markets	47.5%

**Domestic Equity and International Equity policy proportions are based on floating MSCI ACWI weights*

Investment implementation varies across asset classes. In broad terms, MainePERS employs a passive “buy the market” approach for its investments in public markets where the likelihood of

generating outperformance is low. In contrast, the System uses an active “beat the market” approach for other asset classes, where it is reasonable to believe that an active approach will add value. Brief descriptions of each asset class and rationale for the choice of investment approach are discussed below.

Public Market Investments

Public market investments span three distinct asset classes:

- Public Equity: 30% target allocation
- US Government Securities: 10% target allocation
- Traditional Credit: 5% target allocation

Each of these asset classes play a different role in the portfolio. Public Equities are “growth” assets that involve ownership of shares in a business. These are riskier investments and expected to produce commensurately higher returns, substantially through price appreciation. Their values are volatile and annual fluctuations in excess of 20% are to be expected.

Traditional Credit assets involve the lending of capital in return for contractual interest payments and return of capital. While these investments are exposed to the risk that borrowers will default, they are less risky than equity investments and are expected to earn lower returns. US Government Securities are the least risky of all asset classes and are viewed as having no default risk. This asset class generally benefits from a “flight to safety” when investors exit other asset classes due to a perceived increase in the risks of those asset classes. As such, this asset class is expected to serve MainePERS as a source of liquidity, if needed, in extreme market conditions.

Investment implementation within these asset classes is guided by three foundational principles:

- **Efficiency:** Public markets are generally efficient, with prices fairly reflecting investment risks.
- **Diversification:** Broad diversification allows exposure to the full spectrum of return sources and reduces exposure to uncompensated risks.
- **Costs:** Investment costs matter, and as a long term investor small cost savings will compound meaningfully over time. For example, the annual return difference between \$1B invested at 10% versus 9.9% is \$1M. However, over 10 years a portfolio invested at 10% will be worth \$23M more than one invested at 9.9%.

Based on these views, MainePERS invests in public securities on a passive basis, benchmarked to broad market indices. MainePERS does not pay managers to attempt to beat the market by choosing securities or sectors to over- or under-weight. Costs are therefore extremely low (management fees average around 0.011% annually), and these investments require minimal staff oversight. This small allocation of MainePERS resources is consistent with the small likelihood of adding investment value by taking an active investment approach in public market asset classes, as discussed below.

Data Supporting Public Markets Investment Methodology

A substantial body of evidence provides strong support for MainePERS' low cost passive index-based investment approach for public markets. For example, S&P Dow Jones Indices measures the performance of active managers relative to their benchmarks on an annual basis. The results of this analysis are contained in their publicly available SPIVA (S&P Indices Versus Active) report. The most recent SPIVA study as of June 30, 2022, shows that over 93% of actively managed domestic (US) funds underperformed the S&P 1500 Composite over the trailing 20 years. Results are similar outside the US, where they again find that over 93% of actively managed funds underperform a broad market index (the S&P 700) over a 20-year period.

Risk Diversifiers

The System's strategic asset allocation specifies a target weight of 7.5% for the Risk Diversifiers asset class. Investments in this asset class are made via private funds employing active strategies to invest in assets such as public stocks, bonds, and commodities. These strategies are expected to have little correlation to public markets (i.e., are just as likely to produce gains when public markets are down as they are to produce gains when public markets rise) and are intended to provide diversification away from growth assets. The principles guiding investment implementation within the Risk Diversifiers are:

- **Diversification:** Diversification across strategy types and managers
- **Complexity:** MainePERS devotes appropriate resources (staff & consultants) to develop the ability to understand this asset class and to identify and invest with top managers in order to meet the goals of the asset class

These strategies are highly dependent upon manager skill and require close monitoring on the part of MainePERS investment staff. Investment management fees in this actively managed asset class average 1.25% per year.

Private Market Investments

Private market investments span five asset classes:

- Alternative Credit: 10% target allocation
- Infrastructure: 10% target allocation
- Natural Resources: 5% target allocation
- Private Equity: 12.5% target allocation
- Real Estate: 10% target allocation

While these asset classes play different roles in the overall portfolio, the below set of common core principles guide the System's investments in private market assets:

- **Diversification:**
 - Across asset classes to provide exposure to a broad spectrum of return sources,
 - Across managers within asset classes to avoid undue concentration, and
 - Over time to avoid concentration of investments in any given year;
- **Efficiency:** Private markets are generally inefficient, and MainePERS is able to identify and invest with managers that are able to source and invest in opportunities that exploit inefficiencies;
- **Illiquidity Premium:** A return premium exists for illiquid assets, and as a patient long-term investor MainePERS is able to earn excess returns by investing in illiquid assets as compared to public markets; and
- **Complexity:** MainePERS devotes appropriate resources (staff & consultants) to develop the ability to understand this asset class and to identify and invest with top managers in order to meet the goals of the asset class.

Based on these principles, MainePERS commits capital as a limited partner to long-term private investment funds. The general partners (GPs) of these funds agree to serve as fiduciaries to MainePERS, and have wide discretion in the sourcing, managing, creating value, and timing of the acquisition and disposition of investments. MainePERS typically partners with managers pursuing a generalist investment approach in their funds, which allows the GP to direct capital into industries and sectors based on what it perceives as the most attractive investments based on current market conditions and the long-term opportunity set. Outcomes are driven by GP skill, and there is wide dispersion in performance across the universe of private market managers. MainePERS investment staff devote the majority of their time to the management of these asset classes. Annual management fees are high across the private market assets classes and average nearly 1.2%.

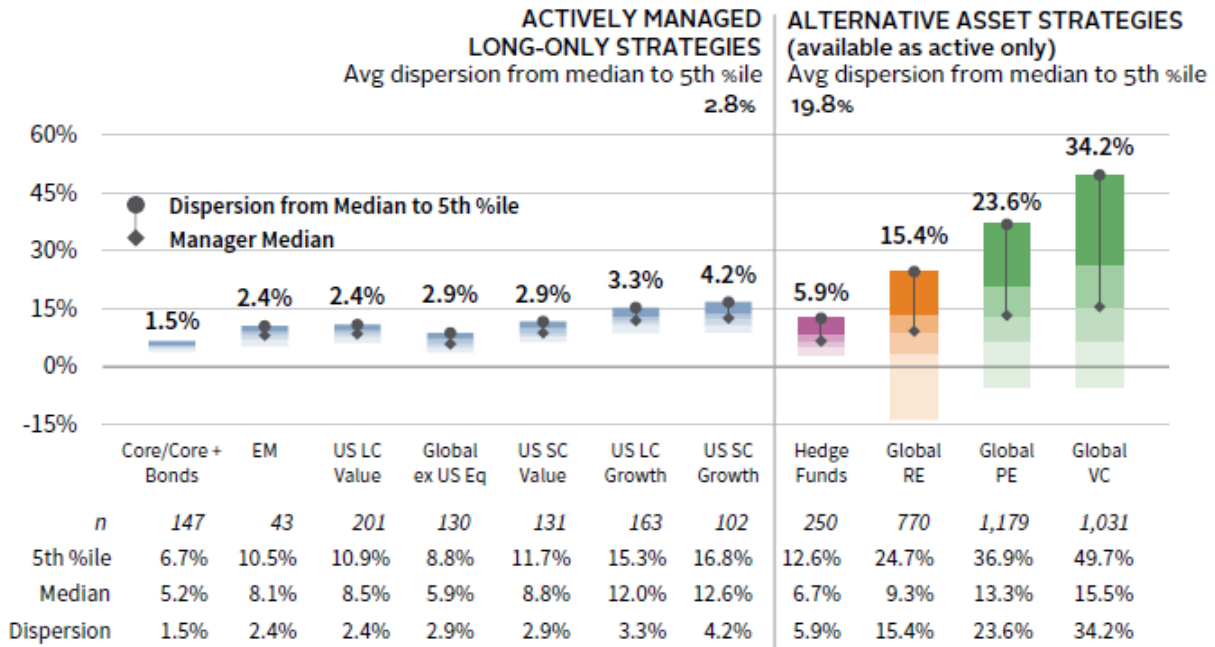
Data Supporting Private Market Investment Methodology

MainePERS “active” private market investment approach is also strongly supported by data. In contrast to public markets, where evidence supports a low cost, passive index-based approach, investing in private market assets is very different for several key reasons.

First, there is no such thing as a passive approach to private market investing. Unlike public markets, private market investors cannot “buy the market.” In addition, the dispersion of returns for alternative asset managers is much wider than for public markets managers. For example, a recent study by Cambridge Associates documents that differences in returns between a median manager and one in the 5th percentile is 1.5% for core bond managers, 2-4% for public equity managers, and averages nearly 20% for strategies involving alternative assets, as shown below.

Average Annual Manager Returns by Asset Class

January 1, 2006 – December 31, 2020



Source: Cambridge Associates LLC.

This means that the sourcing, underwriting, due diligence, and selection of alternative asset managers is the primary key to achieving attractive long-term rates of returns in those asset classes. This is a labor-intensive process that requires a skilled and dedicated team. MainePERS has deliberately focused its’ investment team’s efforts on these alternative asset classes, where there is the best risk-return potential from active manager selection.

VI. IMPACTS OF DIVESTMENT

As shown in NEPC’s report (Appendix H), MainePERS’ holdings of fossil fuel investments are both substantial at 7.63% and widespread, with a majority of asset classes containing fossil fuel exposure. Importantly, these exposures are not intentional, but rather arise as a result of investment decisions made in order to best balance the System’s goals of generating returns while minimizing investment risks. Achieving and maintaining a fossil fuel-free portfolio by 2026 would require both disposing of significant existing investments as well as making fundamental changes to MainePERS’ investment approach, as discussed below.

Initial One-time Costs Associated with Divestment

Public Market Assets

Fossil fuel exposures in the public market portion of the portfolio are shown below.

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	

The System holds its Russell 1000 investments directly, in a Separately Managed Account (SMA), and these holdings can be sold at will. Removing fossil fuel exposure from this portion of the portfolio would incur transactions costs associated with the sale and reinvestment of shareholdings valued at \$192.6M.

Investments in the other public market asset classes shown above are made via investments in commingled funds. In these cases, divestment would require exiting these commingled vehicles and redeploying capital into SMAs where the capital could be directly invested into the non-fossil fuel constituents of each benchmark index. In addition to the transactions costs associated with liquidating and then redeploying capital, SMA creation involves custodial and legal costs, in particular for those accounts holding non-US assets.

Private Market Assets

The System's private market investments generally consist of interests in fixed-life private partnerships. While these interests can be transferred, their illiquid nature requires a lengthy sales process and transactions typically occur at a discount to Net Asset Value (NAV). The below table summarizes the System's current holdings of private market investments containing fossil fuel exposure and projects that these existing exposures will drop by nearly two thirds over the next 3 years as funds dispose of investments and return capital.

	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

Complete removal of fossil fuel exposure would require MainePERS to sell its entire interest in any private market fund containing a fossil fuel asset. Based on indicative quotes obtained by NEPC, the System could expect to incur discounts on the sale of its partnership interests ranging from 10% to 60% depending on the asset class and fund characteristics. This suggests a minimum discount of over \$100M, calculated as a 10% discount applied to a projected year-end 2025 net asset value of \$1,166.2M, to remove existing fossil fuel exposure from the System's private market investments by 2026, and substantially more if divestment were to occur sooner. The System would also incur substantial legal and other costs associated with the transfer of partnership interests.

Implications for Investment Methodology and Ongoing Costs

Public Market Assets

As discussed above, MainePERS' approach to investing in public market assets is guided by three foundational principles: market efficiency, diversification, and costs. Excluding fossil fuel securities from public market investments raises issues related to each of these principles.

As a reminder, MainePERS takes a passive "buy the market" approach when investing in public market asset classes, which generally are viewed as efficient. This approach is guided by the evidence that over the long-term passive approaches will consistently outperform active strategies that select specific securities or sectors to over- or underweight. MainePERS would be precluded from employing its current evidence-based approach to public market investing if it were to exclude fossil fuel assets from its public market holdings. As shown above, MainePERS has \$445M in fossil fuel exposure across its public market asset classes.

Relatedly, holding less than the broad market portfolio necessarily results in a lower level of diversification. Diversification is one of the few true "free lunches" available in investments. Broadly speaking, diversification allows an investor to reduce risk without sacrificing return simply by constructing a portfolio with capital spread over a large number of assets. Divestment would necessarily reduce the level of diversification in the MainePERS portfolio, thereby exposing MainePERS to a higher level of investment risk than it would otherwise bear.

The final issue concerns costs – the MainePERS approach is consistent with its general fiduciary duty to manage expenses in a prudent manner. Investment management fees across the System's public market investments are very low. MainePERS achieves these low investment costs in large part due to structural choices made with respect to investment vehicles. As noted above, MainePERS holds public market assets in both SMAs and commingled funds. Investment via commingled funds allows MainePERS to benefit from economies of scale created via pooling capital with other institutional investors.

In FY22 MainePERS paid approximately \$900,000 in management fees on an average of \$8.1B of public market assets, or 0.011% (1.1 basis point). As NEPC notes, management fees for customized strategies avoiding fossil fuel investments are likely to be 1-3 basis points higher. In addition to this doubling (or more) of management fees, MainePERS would face higher costs for

portfolio servicing (e.g., proxy advisor) and transactions, costs associated with additional staffing needs, as well as ongoing costs for data and portfolio screening.

Private Market Assets

MainePERS' investment policy calls for investing 47.5% of assets across five private market asset classes, and investment staff devote a majority of their time to the oversight of these asset classes. The decision to invest in private markets is driven by key principles related to efficiency, illiquidity, and complexity. As noted above, MainePERS considers private markets to be inefficient, meaning that skilled managers must be retained to identify, invest, and manage assets that will provide returns that more than compensate for the risks being taken. Investments in these markets are illiquid, and as such carry an "illiquidity premium" providing long-term investors the ability to earn higher returns on private market investments than on public market investments of comparable risk. Finally, MainePERS recognizes that private market investments are complex and that resources must be devoted both internally and externally in order to successfully invest in these asset classes.

The majority of MainePERS' fossil fuel exposure resides in its private market investments. As shown below, this exposure is concentrated within the Infrastructure and Private Equity asset classes, while Private Credit and Natural Resources contain small exposures, and Real Estate currently has no exposure.

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

The heavy exposure within Infrastructure exists for two reasons. First, the System historically made commitments to specialized funds having a focus on investments involving fossil fuel distribution and power generation. It is worth noting that 2015 marked the last commitment to such specialized infrastructure funds, that remaining capital invested in these specialized funds should be returned over the next 3-4 years, and that no further commitments to funds with a fossil fuel-focus are anticipated. Second, MainePERS holds "generalist" infrastructure funds, where investments are sourced from a variety of sectors such as transportation, telecommunications, power generation and transmission, and social infrastructure such as

hospitals and electric vehicle charging stations. While these commitments are likely to lead to some fossil fuel exposure, fossil fuel investments are unlikely to represent a majority of any single fund's investments.

Fossil fuel exposure within Private Equity totals \$197M. Nearly \$150M of this amount arises from funds managed by a single GP having a specific focus on fossil fuel exploration, production, and distribution. Investment returns on these "pure play" funds may be heavily influenced by (globally-determined) fossil fuel prices, which can easily negate the value expected to be added by the manager's skill in sourcing and managing assets. MainePERS last committed to these fossil fuel-focused private equity funds in 2017. The \$150M invested in these funds is expected to be returned over the next 3-4 years as funds liquidate existing investments, and no further fossil fuel-focused private equity investments are anticipated.

As discussed earlier, MainePERS' private market investments take the form of interests in private partnerships. MainePERS participates in these investments as a limited partner, while the partnership is managed by the GP. The GP has wide discretion concerning the types and timing of investments subject to broad limits specified in partnership documents. This point is crucial in understanding the investment policy changes required in order to achieve and maintain a fossil fuel-free portfolio. While the above table shows that only 58 out of 302 individual private market investments currently contain fossil fuel exposure, it is important to note that essentially all of MainePERS' private investment funds have the latitude to make fossil fuel investments. This flexibility is by design – MainePERS' private market investments intentionally provide GPs with the ability to devote capital to what they see as the most attractive investment opportunities.

VII. Update to Investment Policy Statement

Trustees are expected in early 2023 to modify Board Policy 2.1, the System's Investment Policy Statement, to recognize the divestment statutes, require annual divestment reporting, and provide guidance on investments that include exposure to fossil fuels as follows:

The System may invest in strategies providing managers with broad discretion in the selection of investments. The potential for fossil fuel or for-profit prison investment must be disclosed to the Board prior to the Board's approval of a strategy. Disclosures will include a description of the expected role of such investments in the proposed strategy and discussion of the process leading to the selection of the strategy.

On an annual basis, the Board will be provided with a report summarizing the System's fossil fuel and for-profit prison investments. This report will include a discussion of the actual and expected changes in these exposures, and analysis of these exposures within the context of the divestment statutes, 5 M.R.S. §§ 1957 and 1958.

APPENDICES

- A. Maine Constitution, Article IX, Section 18
- B. Divestment Legislation, Public Law 2021, c. 231
- C. Letter from Attorney General Aaron Frey to the Joint Standing Committee on Labor and Housing, April 9, 2021
- D. Letter from Assistant Attorney General Andrew Black to MainePERS, December 8, 2022
- E. MainePERS Governance Manual, 2.1 Investment Policy Statement
- F. Request for Proposal 2022-03, Divestment Consulting Services
- G. NEPC Divestment Consulting Services Proposal, April 2022
- H. NEPC Divestment Memo, November 2022

Excerpt from the Constitution of the State of Maine

Article IX.

General Provisions.

Section 18. Limitation on use of funds of the 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.

APPROVED

JUNE 16, 2021

BY GOVERNOR

STATE OF MAINE

IN THE YEAR OF OUR LORD

TWO THOUSAND TWENTY-ONE

H.P. 65 - L.D. 99

An Act To Require the State To Divest Itself of Assets Invested in the Fossil Fuel Industry

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 5 MRSA §135, as amended by PL 2005, c. 386, Pt. CC, §2 and PL 2013, c. 16, §10, is further amended by adding at the end a new paragraph to read:

The Treasurer of State may not invest in any prime commercial paper or corporate bonds issued by a fossil fuel company, as defined in section 1957, subsection 1, paragraph C.

Sec. 2. 5 MRSA §138, as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State 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, as defined in section 1957, subsection 1, paragraph C. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Divestment pursuant to this paragraph must be complete by January 1, 2026. Nothing in this paragraph precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

Sec. 3. 5 MRSA §1957 is enacted to read:

§1957. Limitation on investment in fossil fuel companies; divestment

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Board" means the Board of Trustees of the Maine Public Employees Retirement System.

B. "Fossil fuel" means coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel.

C. "Fossil fuel company" means any company that:

- (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;
- (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 subparagraph (1), (2), (3) or (4).

D. "Fossil fuel infrastructure" means 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.

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 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.

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.

4. Post on website. On a quarterly basis, the board shall post on the publicly accessible website of the Maine Public Employees Retirement System information detailing all its holdings in the public market and private equity investments.

5. Annual report. Beginning January 1, 2022 and annually thereafter, the board shall issue a report reviewing its environmental, social and governance investment policy. The report must disclose commonly available environmental performance metrics on the environmental effects of the board's investments.

Sec. 4. Report to Legislature. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement System shall report annually to the joint standing committee of the Legislature having jurisdiction over retirement matters by January 1, 2023, 2024 and 2025 regarding the progress of divestment under and the implementation of the Maine Revised Statutes, Title 5, sections 138 and 1957. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement

System shall make a final report to the joint standing committee of the Legislature having jurisdiction over appropriations and financial affairs by January 1, 2026 regarding completion of the divestment pursuant to this section.

REGIONAL OFFICES
 84 HARLOW ST. 2ND FLOOR
 BANGOR, MAINE 04401
 TEL: (207) 941-3070
 FAX: (207) 941-3075

125 PRESUMPSCOT ST., SUITE 26
 PORTLAND, MAINE 04103
 TEL: (207) 822-0260
 FAX: (207) 822-0259

14 ACCESS HIGHWAY, STE. 1
 CARIBOU, MAINE 04736
 TEL: (207) 496-3792
 FAX: (207) 496-3291



AARON M. FREY
 ATTORNEY GENERAL

TEL: (207) 626-8800
 TTY USERS CALL MAINE RELAY 711

STATE OF MAINE
 OFFICE OF THE ATTORNEY GENERAL
 6 STATE HOUSE STATION
 AUGUSTA, MAINE 04333-0006

April 9, 2021

The Honorable Craig Hickman, Senate Chair
 The Honorable Michael Sylvester, House Chair
 Joint Standing Committee on Labor and Housing
 Cross Building, Room 202
 Augusta, ME 04333

Re: LD 99, *An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry*
 LD 319, *An Act to Promote Socially Responsible Investing by the Maine Public Employees Retirement System by Prohibiting Investment in the Fossil Fuel Industry or For-profit Prisons*

Dear Senator Hickman and Representative Sylvester:

Thank you for your letter of March 9, 2021 on behalf of the Joint Standing Committee on Labor and Housing regarding LD 99 and LD 319 of the 130th Legislature. Your letter poses two questions:

1. Whether LD 99 and LD 319 as drafted are contrary to the Maine Constitution; and
2. Whether the fiduciary responsibility in the Maine Constitution requiring MainePERS to get the most optimal return for members creates a constitutional issue that would prohibit the Maine Legislature from requesting MainePERS to get the most optimal return for members within specific parameters set by the Legislature.

The short answer to both questions is "yes." Enactment of a statute will not amend constitutional mandates. Article IX, Section 18 of the Maine Constitution reads as follows:

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.

The mandate that all MainePERS “assets be held, invested or disbursed as in trust for the exclusive purpose of providing for [retirement and related] benefits” effectively prevents the Legislature from dictating how these funds may be invested. By requiring the assets to be held “as in trust,” the Constitution creates the legal framework under which these funds are to be held and managed. Property held in trust is managed by a trustee who is subject to fiduciary duties. The Constitution also defines both the purpose of the fund management and to whom those fiduciary duties run, that is, for retirement and related benefits for MainePERS beneficiaries.

As a fiduciary of a pension trust, the MainePERS Board of Trustees (“the Trustees”) has a duty of loyalty to administer the trust solely in the interest of the beneficiaries and for the articulated purpose of the trust – providing retirement and related benefits. A trustee’s duty of loyalty is a fundamental principle of common law reflected in the Restatement (Third) of Trusts,¹ the Maine Uniform Trust Code,² and the Employee Retirement Income Security Act of 1974 (“ERISA”).³ The constitutional intent is clear. By requiring the funds be held as in trust for the exclusive purpose of providing retirement benefits, the Constitution is mandating that the Trustees manage these funds solely in the best interest of MainePERS members as pension recipients.

As drafted, both LD 99 and LD 319 would: (1) prohibit the Trustees from acquiring assets in certain industries;⁴ and (2) require the Trustees to divest of any currently held assets in those industries “in accordance with sound investment criteria and consistent with the board’s fiduciary obligations.” The first requirement conflicts with the constitutional mandate because it requires the Trustees to refrain from certain investment activity regardless of whether it would be in the best interests of the beneficiaries.⁵ The second requirement, although arguably not in conflict with the Trustees’ fiduciary duties, is essentially hollow. Unless a failure to divest an asset would be a

¹ “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.” Restatement (Third) of Trusts § 78 (2007).

² “A trustee shall administer the trust solely in the interests of the beneficiaries.” 18-B M.R.S. § 802(1).

³ “A fiduciary shall discharge his duties with respect to a plan solely in the interest of the participants and beneficiaries and (A) for the exclusive purpose of (i) providing benefits to participants and their beneficiaries and (ii) defraying reasonable expenses of administering the plan.” 29 U.S.C. § 1003(a)(1). “[A]t the heart of the fiduciary relationship is the duty of complete and undivided loyalty to the beneficiaries of the trust.” *Donovan v. Mazzola*, 716 F.2d 1226, 1238 (9th Cir. 1983) (quoting *Freund v. Marshall & Ilsley Bank*, 485 F. Supp. 629, 639 (W.D. Wis. 1979)).

⁴ LD 99 would prohibit investment “in any stocks or other securities of any corporation or company within in the fossil fuel industry.” LD 319 would prohibit investment “in any stocks or other securities of any corporation or company within the fossil fuel industry or any corporation or company that owns or operates prisons for profit.”

⁵ One New Hampshire case appears to conflict with this conclusion because the court concluded that a provision in the New Hampshire Constitution similar to that of Maine’s did not render New Hampshire’s Sudan Divestment Act unconstitutional. *Bd. of Trustees of N.H. Judicial Ret. Plan v. Sec’y of State*, 7 A.3d 1166, 1174 (N.H. 2010). In that case, the court reached its result by construing the language in the underlying ballot initiative, which did not contain the material provisions found in either the New Hampshire or Maine Constitutions. *Id.* at 1173. The case was remanded to the trial court “to determine whether the Act impermissibly interferes with the trustee’s statutory or common law fiduciary duties.” *Id.* at 1174. Before the trial court ruled on this issue, the New Hampshire Legislature repealed the Act, purportedly because of the high cost of compliance with the Act’s mandates. 2011 N.H. Laws ch. 53:1 (eff. May 9, 2011).

breach of the Trustees' existing fiduciary duties (i.e., not in best interest of the members), any attempt to enforce the statutory requirement to divest would be meritless.

On the other hand, a resolution encouraging the Trustees to consider certain non-pecuniary factors (e.g., environmental impact) when making investment decisions may be helpful to the Trustees. Such a resolution may help insulate the Trustees from lawsuits alleging breach of fiduciary duty if the Trustees used such a non-pecuniary factor as a "tiebreaker" when choosing between investment alternatives of comparable risk and return. Although ERISA is not applicable to MainePERS, regulations recently adopted by the U.S. Department of Labor pertaining to ERISA plans indicate that using such factors for tiebreakers would not be inconsistent with a trustee's duty of loyalty.⁶

Although this letter is not a formal Attorney General Opinion pursuant to 5 M.R.S. § 195, I hope it will be helpful to you in the Joint Committee's work sessions.

Sincerely,



Aaron M. Frey
Attorney General

cc. Sandy Matheson, MainePERS Executive Director
Henry E. M. Beck, Esq., State Treasurer and Member, MainePERS Board of Trustees
Members, Joint Standing Committee on Labor and Housing

⁶ 29 C.F.R. § 2550.404(a-1)(c)(2) reads as follows:

Notwithstanding the [pecuniary basis only] requirements of paragraph (c)(1) of this section, when choosing between or among investment alternatives that the plan fiduciary is unable to distinguish on the basis of pecuniary factors alone, the fiduciary may use non-pecuniary factors as the deciding factor in the investment decision provided that the fiduciary documents:

- (i) Why pecuniary factors were not sufficient to select the investment or investment course of action;
- (ii) How the selected investment compares to the alternative investments with regard to the factors listed in paragraphs (b)(2)(ii)(A) through (C) of this section; and
- (iii) How the chosen non-pecuniary factor or factors are consistent with the interests of participants and beneficiaries in their retirement income or financial benefits under the plan.

Although this regulation became effective on January 12, 2021, the Department of Labor issued an enforcement statement on March 10, 2021, stating that until further notice it would not enforce the new regulation.

AARON M. FREY
ATTORNEY GENERAL



STATE OF MAINE
OFFICE OF THE ATTORNEY GENERAL
6 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0006

TEL: (207) 626-8800
TTY USERS CALL MAINE RELAY 711

REGIONAL OFFICES
84 HARLOW ST. 2ND FLOOR
BANGOR, MAINE 04401
TEL: (207) 941-3070
FAX: (207) 941-3075

125 PRESUMPCOT ST., SUITE 26
PORTLAND, MAINE 04103
TEL: (207) 822-0260
FAX: (207) 822-0259

14 ACCESS HIGHWAY, STE. 1
CARIBOU, MAINE 04736
TEL: (207) 496-3792
FAX: (207) 496-3291

December 8, 2022*

Dr. Rebecca M. Wyke
MainePERS Chief Executive Officer
P.O. Box 349
Augusta, ME 04332-0349

Dear Dr. Wyke,

You asked this Office for advice on how to interpret certain provisions of 5 M.R.S. §§ 1957 and 1958. Together, these statutes direct the Board of Trustees (“the Board”) of the Maine Public Employees Retirement System (“the System”) to (1) cease future investment in fossil fuel companies and for-profit prisons and (2) divest any such current holdings by January 1, 2026. Notably, these directives are subject to a limitation that they be accomplished “in accordance with sound investment criteria and consistent with fiduciary obligations.”¹

As I understand your request, your concerns are whether and to what extent these statutes may affect the Board’s exercise of its fiduciary duties and whether and to what extent the Board must adhere to the directives if ceasing to invest or divesting would be inconsistent with sound investment criteria or fiduciary obligations, such as the duty of loyalty or the prudent investor rule.

The subject statutes do not affect the Board’s exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on “accordance with sound investment criteria” and “consisten[cy] with fiduciary obligations.” As such, they reiterate rather than modify the Board’s fiduciary obligations as a trustee—both constitutional² and statutory.³

* This version corrects a typographical error that appeared in the original letter.

¹ As an example, section 1957(2) reads in pertinent part: “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.” 5 M.R.S. § 1957(2) (emphasis added). Sections 1957(3) and 1958(2) and (3) contain the same emphasized language.

² All the assets of the System “shall be held, invested or disbursed as in trust for the exclusive purpose of providing [retirement and related] benefits.” Me. Const. art. IX, §18.

³ “The members of the board shall be the trustees of the several funds created by this Part [20 of Title 5].” 5 M.R.S. §17153(2). “The board may cause the funds created by this Part to be invested and reinvested in accordance with

Dr. Rebecca M. Wyke
December 8, 2022 (corrected version)
Page 2

Chiefly relevant in this context are the Board's duty of loyalty and its obligation to adhere to the prudent investor rule. Its duty of loyalty requires it to "administer the trust solely in the interests of the beneficiaries."⁴ The prudent investor rule requires it to "invest and manage trust assets, as a prudent investor would"⁵ and evaluate and make investment decisions "as part of an overall investment strategy having risk and return objectives reasonably suited to the trust."⁶ If adherence to sound investment criteria and fiduciary obligations prevents achievement of the investment and divestiture objectives of sections 1957 and 1958, failure to achieve those objectives is not a violation of the directives in those statutes. In short, the Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of sections 1957 and 1958.

Although this is not a formal Attorney General Opinion pursuant to 5 M.R.S. § 195, I hope it is of assistance to you.

Sincerely,



Andrew L. Black
Assistant Attorney General
Chief, PFR Division

cc: Aaron M. Frey, Attorney General

the standards defined in Title 18-B, sections 802 to 807 and chapter 9," 5 M.R.S. §17153(3), which provisions of the Maine Uniform Trust Code (sections 802 to 807) delineate the fiduciary duties of trustees and provisions of the Maine Uniform Prudent Investor Act (chapter 9) require adherence to the prudent investor rule.

⁴ 18-B M.R.S. § 802(1).

⁵ 18-B M.R.S. § 902(1).

⁶ 18-B M.R.S. § 902(2).

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy for Defined Benefit Plans

2.1 – Investment Policy Statement

Date Adopted: June 9, 2016

Date Amended: November 10, 2016; May 11, 2017; June 8, 2017; September 14, 2017; December 14, 2017; November 12, 2020; January 14, 2021; May 12, 2022

Policy

The Board of Trustees of the Maine Public Employees Retirement System is authorized and responsible for administering defined benefit retirement programs at the State and local levels. The Board carries out this responsibility by adopting investment objectives and establishing an investment program through which the policy is implemented. In the case of conflicts, this policy statement supersedes previous policies and actions by the Board.

This policy covers the investment management of the assets of the following defined benefit programs administered by the Board:

- Legislative Retirement Program;
- Judicial Retirement Program;
- State Employee and Teacher Retirement Program, which includes State employees and public school members; and
- Participating Local District Retirement Program, which includes retirement plans of withdrawn participating local districts and the Consolidated Plan for Participating Local Districts.

Collectively, the assets of these programs are referred to as the DB Plan Assets. Statutes allow for the pooling of the DB Plan Assets for the purpose of investment. Pooling provides significant efficiencies. Because the relevant characteristics of the DB plans are sufficiently similar, all the DB Plan Assets are pooled for investment.

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”).
- Restatement (Third) of Trusts formally permits, and in some cases requires, the delegation of investment decisions from trustees to internal staff or external agents with the necessary skills and knowledge.
- 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

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MainePERS Board of Trustees

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.

Resources

The Board of Trustees implements this investment policy in coordination with:

- in-house investment professionals (the “Investment Team”), with experience, authority and responsibility to implement the investment policy and administer investment operations;
- consultants, with appropriate expertise, to assist the Board and the Investment Team;
- investment managers, selected individually and collectively to reflect and implement the investment policy, having full discretion within policy and contractual limits to manage assets allocated to them;
- custodians qualified to carry out recordkeeping, reporting, measurement and custodial functions; and
- other advisors that the Board deems appropriate and necessary

The Investment Team shall oversee the processes by which Custodians, Consultants, and other Advisors are hired, evaluated, and terminated, and shall work with the General Counsel on the terms of contracts of engagement.

At least every five years, the Investment Team will evaluate the performance and contract terms of all such service providers and make a recommendation to the Board as to whether or not a search process for new providers and/or renegotiation of terms be initiated.

Investment Objectives

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.

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MainePERS Board of Trustees

Strategic Asset Allocation and Rebalancing

The Investment Team and Board consultants shall annually review long-term capital market expectations and existing asset class allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes to the existing strategic asset classes, target weights, and ranges for implementation by the Investment Team. (See Appendix 1)

The specified policy weight ranges define minimum and maximum acceptable weights for each asset class. (See Appendix 2) The Investment Team shall maintain asset class weights within target ranges, subject to considerations such as transactions costs and the unique characteristics of private market investments, by reallocating capital within existing strategies and investments. The Investment Team will provide Trustees with reports showing the fund's current asset allocation at least monthly, and report on rebalancing activity quarterly.

Portfolio Risk Management

The primary method of controlling risk shall be the selection of the strategic asset allocation and asset class target weights within the allocation. (See Appendix 1) Combined with long term capital market expectations, these policy weights define a portfolio with a specific level of risk.

The Chief Investment Officer shall develop a risk strategy for managing assets within the Board approved strategic asset allocation. The risk strategy will specify practices and procedures for the measurement and management of portfolio risk, including the provision of a portfolio risk report to the Board at least quarterly. (See Appendix 3)

Nothing in the risk strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance, but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 4) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

For performance evaluation purposes, all rates of return will be measured net of the deduction of investment management fees.

During a period of transition from one asset allocation to another, certain transitional allocations to appropriate benchmarks are permitted.

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MainePERS Board of Trustees

Investment Implementation

The Investment Team shall implement the investment policy, subject to Board guidelines:

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 4. Any exceptions must be approved by the Board.
- Investments within each Asset Class should be consistent with the Asset Class definitions provided in Appendix 1.

Environmental, Social, and Governance; Engagement

In performing due diligence and monitoring activities, the Board and the Investment Team shall comply with Board Policy 2.6, Environmental, Social and Governance Policy; and Board Policy 2.7, Engagement.

Investment Manager Selection and Allocation Process

MainePERS invests through external investment managers, who are charged to act as fiduciaries, and allocates fund assets among them in accordance with the strategic asset allocation. The Investment Team identifies, performs due diligence on, and recommends investment managers and allocations to the Board. The Investment Team also monitors performance and recommends retention and termination decisions to the Board. The Board retains final authority for manager selection, retention and termination decisions.

Managers are selected and retained on the basis of an evaluation that establishes sufficient confidence that the manager will improve the return and risk of the investment program. If and when the Investment Team and/or consultant(s) identify an investment manager that they believe will improve the investment program, the Investment Team will make a recommendation to the Board of Trustees that the manager be hired. This recommendation will be accompanied by an opinion by the investment consultant on this recommendation. The Board retains the final authority to accept or reject such recommendations.

The Investment Team will prepare and present to the Board of Trustees selection criteria they deem pertinent for each manager search and recommendation to hire. The Investment Team will provide the Board with all the necessary information and analysis to enable an informed decision. The Board may choose to interview the recommended manager or they may rely on the Investment Team to conduct interviews.

Derivatives

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. The System may also invest in strategies which use derivatives to obtain leverage. In all such cases, the use of derivatives must be disclosed to the

Governance Manual

MainePERS Board of Trustees

Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Leverage

The System may invest in strategies in which managers have discretion to use leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Hedging

The Board has reviewed the benefits and risks associated with foreign currency exposures. As a general rule the Board has chosen not to hedge currency at the portfolio level. Unless otherwise directed asset managers will have discretion to hedge investments under their management as they deem most beneficial to their mandate.

Transaction Costs and Brokerage

The Board of Trustees expects investment managers, in their capacity as fiduciaries, to manage transaction costs in the best interests of the System as an investor. To enable the managers to fulfill this fiduciary duty, it is the Board's policy not to be party to directed brokerage programs.

Securities Lending

The System may participate in a securities lending program either directly through its separately managed portfolios or indirectly through its investments in pooled vehicles. In each case, the securities lending program must focus on low risk, as opposed to maximization of returns. All DB Plan Assets are available for securities lending.

Monitoring

The Board relies on the Investment Team and the investment consultant(s) to continuously monitor the investment program and to report to the Board as outlined below.

- the Investment Team and investment consultant(s) provide comprehensive periodic reports on the entire investment program, including asset allocation, performance of each component relative to benchmarks, attribution analysis, and commentary.
- the Investment Team and investment consultant(s) monitor changes and developments at investment managers and at custodian(s) on an ongoing basis and report significant changes or events with recommended actions as needed.

Governance Manual

MainePERS Board of Trustees

Emergency Measures

Immediate action may be taken beyond the bounds of this policy under extraordinary circumstances and in order to preserve the best interests of the plans' participants by unanimous decision of the following:

- The Chair, or in the Chair's absence, Vice Chair of the Board
- The Chief Executive Officer, or in the Chief Executive Officer's absence, the Chief Operating Officer and General Counsel
- The Chief Investment Officer, or in the Chief Investment Officer's absence, Deputy Chief Investment Officer, or in the absence of both of them, the general investment consultant

Any such action must be reported to the Board of Trustees at the earliest opportunity.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; September 14, 2017; January 14, 2021; May 12, 2022

The System's assets are invested across nine Asset Classes that play four distinct Roles in the overall Fund. The Trustees define these Roles and Asset Classes and set target policy weights and ranges below.

	Weights		
	Minimum	Policy	Maximum
GROWTH	35%	42.5%	55%
Public Equity	20%	30%	40%
Private Equity	5%	12.5%	20%
RISK DIVERSIFIERS	0%	7.5%	12.5%
HARD ASSETS	15%	25%	35%
Real Estate	5%	10%	15%
Infrastructure	5%	10%	15%
Natural Resources	0%	5%	10%
CREDIT	5%	15%	20%
Traditional Credit	0%	5%	10%
Alternative Credit	0%	10%	15%
MONETARY HEDGE	5%	10%	15%
US Government Securities	5%	10%	15%
Cash	0%	0%	10%

Asset Class Definitions

The below Asset Class definitions are simplified and are intended to convey the general characteristics of investments held within each class. Some investment strategies involve assets and securities that span multiple asset classes.

Public Equity

Investments in publicly-traded shares of companies. May include different classes of common stock, shares of REITs, and MLPs.

Private Equity

Investments in non-publicly traded shares of companies. Investments are typically made via private limited partnerships, and may include both equity and debt securities.

Governance Manual

MainePERS Board of Trustees

Risk Diversifiers

Investments typically made through private funds that generally invest in listed assets such as stocks, bonds, and commodities, via strategies that are expected to have little correlation with declining or rising stock markets.

Real Estate

Investments providing direct exposure Real Estate, including investments through private funds.

Infrastructure

Investments typically made through private funds that generally invest in assets that meet most or all of the following criteria: provide essential public services, possess monopoly-like characteristics, provide long term contracted cash flows, and bear limited volumetric and price risk.

Natural Resources

Investments in private funds that generally invest in businesses focused on natural resources such as timberland, agriculture, and mining. Private energy investments will generally be included in Private Equity, rather than Natural Resources.

Traditional Credit

Investments in investment-grade debt instruments that are not issued by the U.S. Government. Such debt may or may not be registered for sale to the general public.

Alternative Credit

Investments in debt instruments issued by non-investment grade and unrated entities. This may include, but is not limited to high yield debt, bank loans, structured debt, and asset-backed debt. Alternative credit investments are expected to pay or accrue periodic interest and to return principal at maturity. Distressed debt and other debt or yield-oriented securities that include equity-like exposures are considered Private Equity, not Alternative Credit.

Monetary Hedges

Investments in debt instruments issued by the U.S. Government, including nominal Treasury securities and Treasury Inflation Protected Securities (TIPS), held in approximately equal proportions.

Governance Manual

MainePERS Board of Trustees

Roles in the Overall Fund

Each of the above asset classes fills a specific Role in the overall portfolio. These Roles are defined below.

Growth Assets

Growth Assets are intended to reduce the system's funding needs in the long term by appreciating in value. Growth Assets possess inherently higher expected returns than other asset classes. Growth Assets also have higher expected volatility than other asset classes, and are expected to increase funding volatility in the short run.

Risk Diversifiers

Risk Diversifiers are investments that primarily derive their return from alpha (or active manager skill) as opposed to market directionality. Risk Diversifiers are expected to provide significant risk diversification benefits away from Growth Assets.

Hard Assets

Investments in the Hard Assets category provide exposure to long-lived "real" assets, such as real estate, timber, agricultural, and infrastructure assets. Expected return levels of Hard Assets are lower than those of Growth Assets, and a substantial portion of such returns is expected to come from ongoing cash flows. Hard Assets are expected to provide inflation protection, to have low correlation with Growth Assets, and to provide diversification benefits.

Credit Assets

Credit investments provide capital to end-users via loans and the purchase of debt securities. Such investments provide for contractual returns (interest) and repayment of principal. Credit investments possess lower risk and expected returns than equity investments, but have higher risk and expected returns than monetary hedges. Credit investments are expected to provide diversification away from Growth Assets.

Monetary Hedges

The role of Monetary Hedges in the portfolio is to provide liquidity and a safe harbor in times of turbulence. These investments are cash and obligations of the U.S. Government, and are considered to be free of default risk.

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 2: Rebalancing

Date Adopted: June 9, 2016

Date Amended: May 12, 2022; July 14, 2022

The Board has set target weights for each Asset Class and Role in Portfolio category in Appendix 1, and delegates the management of asset class allocation to the Investment Team. The Investment Team is expected to maintain asset class weights near target, subject to considerations such as transactions costs and the unique funding and liquidity characteristics of private market investments.

To this end, the Team is permitted to reallocate capital within existing strategies and investments for rebalancing purposes. The Investment Team is expected to consider both Role in Portfolio and Asset Class policy weights when rebalancing. The Team will provide Trustees with reports showing the Fund's current asset allocation at least monthly, and report on rebalancing activity at least quarterly.

In the specific case of the System's Risk Diversifier allocation, the Investment Team is permitted to rebalance across existing managers and strategies, consistent with the goal of maintaining diversification within the allocation. Rebalancing activity will be reported to Trustees at least quarterly.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 3: Risk Strategy

Date Adopted: June 9, 2016

Date Amended: New

While this Risk Strategy is in development the Chief Investment Officer shall rely on the Strategic Asset Allocation and Rebalancing provisions of this policy to manage the Fund's risk.

The Investment Team and the Board believe that this approach will deliver an appropriate expected return with commensurate risk over a long term horizon. However they also recognize that the portfolio's realized risk will vary over time which may result in periods during which the fund bears substantially higher risk than the System initially targeted.

In an effort to achieve more stable (less volatile) returns, the Investment Team will seek to develop management tools and practices that they believe will be better able to keep the fund's risk in an acceptable range.

This Risk Strategy shall be updated from time to time by the Trustees to reflect recommendations developed by the Chief Investment Officer.

Nothing in the Risk Strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 4: Policy Benchmarks

Date Adopted: June 9, 2016

Date Amended: June 8, 2017, January 14, 2021, May 12, 2022

Asset	Benchmark	Weight
Total Public Equity	Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights	30%
Private Equity	Russell 3000 + 3%	12.5%
Diversifiers	0.3 Beta MSCI ACWI	7.5%
Real Estate	NCREIF Property (lagged one quarter)	10%
Infrastructure	CA Infrastructure Median	10%
Natural Resources	CA Natural Resources Median	5%
Traditional Credit	Barclays US Aggregate, ex Treasury	5%
Alternative Credit	50% BAML US HY II + 50% S&P/LSTA US Leveraged Loan Index	10%
U.S. Government Securities	50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index	10%

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 4: Co-Investment

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; January 14, 2021; May 12, 2022

Co-investments are permitted within private market asset classes, subject to the below guidelines.

Target Allocation	7.5% of total Fund. This target is a subset of the total 47.5% allocation to private market asset classes, and is not in addition to that allocation.
Asset Classes	Co-investment may be made in each of the private market asset classes.
Discretion	Investment Team has discretion to make co-investments, in conjunction with the asset class consultant.
Signatories	The Chief Executive Officer, Chief Investment Officer, and General Counsel are authorized as signatories to execute documents in connection with co-investments.
Permissible Partners	Unless otherwise authorized, co-investments will only be made alongside Funds in which the System is a current investor.
Size Limits	Unless otherwise authorized, maximum of \$25m invested into any single co-investment. Unless otherwise authorized, maximum of \$200m aggregate co-investment in a single asset class with any single General Partner. The Investment Team will provide additional co-investment portfolio reporting to Trustees for those General Partners with more than \$100m of aggregate co-investment in any single asset class.

**Maine Public Employees Retirement System
Request for Proposals 2022-03
Divestment Consulting Services**

1. **About:** The Maine Public Employees Retirement System (MainePERS) is a quasi-governmental agency operating in Augusta and Portland, Maine. For more information about MainePERS please visit our website at www.maineopers.org.
2. **Scope:** The objective of this Request for Proposals (“RFP”) is for MainePERS to procure consulting services from one or more qualified firms to assist MainePERS as it evaluates divestment of certain fossil fuel and private prison assets as specified in Maine statutes, Public Laws 2021, chapters 231 and 234, copies of which may be found at Attachment A.
3. **Definition of Parties:** Respondents to this Request for Proposal (RFP) will hereinafter be referred to as “Bidders” and each Bidder to whom a contract is awarded will hereinafter be referred to as the “Contractor.”
4. **Description of Requirements:** Attachment B describes the products and/or services to be provided by the Contractor to MainePERS pursuant to this RFP.
5. **Terms of Contract:** The Contractor will be required to enter into MainePERS’ standard contract, a copy of which may be found at Attachment C.
6. **Insurance:** For the duration of the contract, the Contractor will be required to procure, maintain, and provide proof of a liability policy encompassing the services described in this RFP with liability coverage of at least \$2,000,000 to protect the Contractor and MainePERS from suits, along with workers’ compensation insurance as required by law.
7. **Qualifications:** Each Bidder must demonstrate a minimum of five years of experience in the business of providing the services and products described in this RFP and have access to appropriate resources to perform as necessary to meet the obligations of this RFP.
8. **Substantive Questions:** All substantive questions must be voiced during the Bidders’ Conference (see below) or submitted in writing via e-mail to RFP@maineopers.org no later than 5:00 p.m. EDT on April 11, 2022. We anticipate issuing answers to substantive questions on or before April 15, 2022.
9. **Bidders’ Conference:** A mandatory Bidders’ conference call for this RFP will be held at 1:00 p.m. EDT on April 11, 2022. Participants are asked to register in advance for this call by calling (207) 512-3292 no later than April 8, 2022. A Bidder who fails to register by the time of the call may not participate in the call. During the conference call, questions may be asked regarding the RFP. MainePERS may provide answers to questions at that time or provide a written response. All participants in the Bidders’ conference will receive a copy of any written response to questions.
10. **Evaluation Committee:** An Evaluation Committee will review, evaluate and score all proposals. The Evaluation Committee may include or be advised by MainePERS’ general investment consultant, Cambridge Associates, LLC. Following a preliminary review of all proposals submitted by the deadline, the Evaluation Committee may or may not interview those Bidders whose proposals have received the highest scores. The interview would be an opportunity for a Bidder to respond to questions and to clarify its proposal. It will not be an opportunity for the Bidder to submit new information not included in the proposal. If

interviews of the top-scoring Bidders are conducted, the Evaluation Committee will conduct a post-interview review of the proposals and any further clarification as conveyed through the interview process. Bids will be evaluated using the following weighted criteria:

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

11. **Proposal Package:** Proposals must be submitted by email and include the following:
- a. Transmittal email which shall include:
 - i. Name and address of the Bidder;
 - ii. Name, title, telephone number, and email address of the contact person for the Bidder;
 - iii. A statement that the proposal is in response to this Request for Proposal; and
 - iv. The Bidder's federal tax I.D. number.
 - b. As an attachment to the transmittal email, a PDF file containing the substance of the proposal, including the following mandatory items:
 - i. An executive summary of the proposal;
 - ii. A description of the Bidder's business; a summary of the Bidder's experience (including any experience with MainePERS); answers to the questions contained in Attachment D; any other information that the Bidder believes is material to its qualifications; and at least three recent references for whom the Bidder has provided similar services; and
 - iii. A statement that all provisions of Attachment C are acceptable or specifically state any objections to any provisions.
 - c. All proposals are due no later than 2:00 p.m. EDT on April 29, 2022. Only proposals received as of 2:00 p.m. will be considered. Proposals must be submitted by email to RFP@mainepers.org. Mailed, faxed, or hand delivered proposals will not be considered. Bidders will receive an email acknowledging receipt of their proposal. A Bidder who has submitted a proposal and not received an acknowledgment should call (207) 512-3292.
12. **Freedom of Access:** Proposals and any other communications received from Bidders are subject to Maine's Freedom of Access law, 1 M.R.S. ch. 13. If a Bidder believes that a portion of its proposal is exempt from public disclosure under that law, the Bidder must specifically identify that portion and the exemption. Blanket designation of an entire proposal as confidential would be ineffective.
13. **Award:** MainePERS intends to award a contract to one or more Bidders who receive the highest scores following the final review.
14. **Award Notification:** All Bidders will be notified of the award decision in writing. MainePERS will initiate contract negotiations with the selected Bidder. Should MainePERS be unable to reach an acceptable contract agreement with a selected Bidder, MainePERS

reserves the right to withdraw the award to that Bidder and to make an award in favor of another Bidder based on the scoring.

15. **Rights of MainePERS**: The Request for Proposal does not commit MainePERS to award a contract. MainePERS reserves the right to accept or reject any or all proposals received. MainePERS reserves the right not to check any or all references. MainePERS has the right to interview any or all Bidders after the RFP deadline. MainePERS may also cancel or amend this Request for Proposal in part or in its entirety.
16. **Timeline for this RFP**: MainePERS has developed the following list of key events related to this RFP. All dates are subject to change at the discretion of MainePERS.

EVENT	DATE
RFP Issued	March 21, 2022
Register for Bidders' Conference	April 8, 2022
Bidders' Conference	April 11, 2022
Deadline for Questions	April 11, 2022
Questions Answered	April 15, 2022
Proposal Due Date	April 29, 2022
Evaluation of Proposals	May 2-13, 2022
Execution of Contract	May 31, 2022
Contract Start Date	June 1, 2022

STATE OF MAINE

—

IN THE YEAR OF OUR LORD

TWO THOUSAND TWENTY-ONE

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H.P. 65 - L.D. 99

An Act To Require the State To Divest Itself of Assets Invested in the Fossil Fuel Industry

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 5 MRSA §135, as amended by PL 2005, c. 386, Pt. CC, §2 and PL 2013, c. 16, §10, is further amended by adding at the end a new paragraph to read:

The Treasurer of State may not invest in any prime commercial paper or corporate bonds issued by a fossil fuel company, as defined in section 1957, subsection 1, paragraph C.

Sec. 2. 5 MRSA §138, as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State 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, as defined in section 1957, subsection 1, paragraph C. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Divestment pursuant to this paragraph must be complete by January 1, 2026. Nothing in this paragraph precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

Sec. 3. 5 MRSA §1957 is enacted to read:

§1957. Limitation on investment in fossil fuel companies; divestment

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Board" means the Board of Trustees of the Maine Public Employees Retirement System.

B. "Fossil fuel" means coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel.

C. "Fossil fuel company" means any company that:

- (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;
- (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 subparagraph (1), (2), (3) or (4).

D. "Fossil fuel infrastructure" means 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.

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 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.

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.

4. Post on website. On a quarterly basis, the board shall post on the publicly accessible website of the Maine Public Employees Retirement System information detailing all its holdings in the public market and private equity investments.

5. Annual report. Beginning January 1, 2022 and annually thereafter, the board shall issue a report reviewing its environmental, social and governance investment policy. The report must disclose commonly available environmental performance metrics on the environmental effects of the board's investments.

Sec. 4. Report to Legislature. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement System shall report annually to the joint standing committee of the Legislature having jurisdiction over retirement matters by January 1, 2023, 2024 and 2025 regarding the progress of divestment under and the implementation of the Maine Revised Statutes, Title 5, sections 138 and 1957. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement

System shall make a final report to the joint standing committee of the Legislature having jurisdiction over appropriations and financial affairs by January 1, 2026 regarding completion of the divestment pursuant to this section.

APPROVED
JUNE 16, 2021
BY GOVERNOR

APPENDIX

CHAPTER
234
PUBLIC LAW

STATE OF MAINE

IN THE YEAR OF OUR LORD
TWO THOUSAND TWENTY-ONE

H.P. 223 - L.D. 319

An Act To Promote Socially Responsible Investing by the Maine Public Employees Retirement System by Prohibiting Investment in For-profit Prisons

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 5 MRSA §138, as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State are invested in the stocks, securities or other obligations of any corporation or company or any subsidiary, affiliate or parent of any company that owns or operates prisons for profit. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Nothing in this section precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any corporation or company or any subsidiary, affiliate or parent of any company that owns or operates prisons for profit.

Sec. 2. 5 MRSA §1957 is enacted to read:

§1957. For-profit prisons

1. Definitions. For the purposes of this section, unless the context otherwise indicates, the following terms have the following meanings.

- A. "Board" has the same meaning as in section 17001, subsection 7.
- B. "Retirement system" means the Maine Public Employees Retirement System.

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 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.

Sec. 3. Policy review. The Board of Trustees of the Maine Public Employees Retirement System shall review its "Environmental, Social and Governance Policy" adopted January 8, 2015 and shall make any changes necessary to its policy to conform to the requirements of the Maine Revised Statutes, Title 5, section 1957. The board shall submit its report of the review of the policy and any amendments adopted by the board to the Joint Standing Committee on Labor and Housing by January 1, 2022.

Attachment B Specifications of Work to be Performed and Products to be Provided

Maine Public Employees Retirement System seeks a consultant to assist the System as it evaluates divestment of certain assets as specified in Maine statutes PL2021 c. 231 and PL2021 c. 234.

MainePERS views the evaluation of divestment as the necessary first step in the process of complying with legislation, and further RFPs are expected for any subsequent steps arising from the results of this RFP.

The evaluation of divestment is expected to include, but need not be limited to, the below items. All work must be documented for the System in a comprehensive and detailed manner. The consultant will prepare a written report for delivery no later than November 1, 2022.

A. Broad review of divestment and the climate change-related risk landscape

Aspects of this should include, but need not be limited to:

1. A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.
2. A summary of key climate change-related investment risks and their implications for institutional investors.
3. A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.

B. Identify and quantify the System's portfolio holdings subject to divestment

For public market holdings this should include:

1. Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.
2. Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:
 - a. Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)
 - b. Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy
 - c. Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)
 - d. Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)

MainePERS will identify and provide to the winning bidder information regarding private market portfolio holdings that are subject to divestment.

C. Identify and quantify direct divestment costs

In this section the consultant will, for all portfolio assets subject to divestment:

1. Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:
 - a. Transaction costs related to divestment of existing public holdings
 - b. Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds
 - c. Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services
 - d. Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)

D. Identify and quantify divestment impact on portfolio

This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:

1. Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.
2. Compute and discuss these measures.
 - a. This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.

**Attachment C
DIVESTMENT CONSULTING SERVICES AGREEMENT**

THIS DIVESTMENT CONSULTING SERVICES AGREEMENT (“Agreement”) is made this 1st day of June 2022, by and between the MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM (“MainePERS”) and _____ (the “Contractor”).

NOW, THEREFORE, MainePERS and the Contractor hereby agree as follows:

Section 1 SERVICES OF THE CONTRACTOR

- 1.1 Scope of Services. The Contractor shall furnish services as requested by MainePERS and as set forth in the Divestment Consulting Services Request for Proposals, Number 2022-003, issued March 21, 2022, (“RFP”) and the Contractor’s proposal in response to the RFP, which are incorporated herein by reference and portions of which are attached hereto as Exhibits 1 and 2, respectively. To the extent that there is a conflict among the body of this Agreement and the exhibits, the body of this Agreement shall take priority.
- 1.2 Compliance with Law. The Contractor warrants and represents that it will comply with all governmental ordinances, laws and regulations. This Agreement shall be governed in all respects by the laws, statutes and regulations of the United States of America and the State of Maine. Any judicial proceeding brought by one party against the other party shall be brought in the courts of the State of Maine.
- 1.3 Licenses, Permits, and Fees. The Contractor shall obtain, at its sole cost and expense, such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement.
- 1.4 Insurance. The Contractor shall keep in force insurance as specified in the RFP. Prior to the execution of this Agreement, and subsequently at the request of MainePERS, the Contractor shall furnish MainePERS with written or photocopied verification of the existence of such insurance.

Section 2 COMPENSATION

- 2.1 Contract Pricing. [To be filled in.]
- 2.2 Method of Payment. [Payment terms to be filled in.] Invoices and all other billing communications should be directed to:

Maine Public Employees Retirement System
Accounts Payable
P.O. Box 349
Augusta, ME 04332-0349
accounting@mainepers.org
(207) 512-3117

- 2.3 Independent Contractor. In the performance of this Agreement, the parties hereto agree that the Contractor, and any agents and employees of the Contractor, shall act in the

capacity of an independent contractor and not as officers or employees or agents of MainePERS.

Section 3 COORDINATION OF WORK

- 3.1 Agreement Administrator. James A. Bennett hereby is designated to be the MainePERS Agreement Administrator during the term of this Agreement (“Agreement Administrator”). MainePERS shall have the right to designate another Agreement Administrator upon written notice to the Contractor. All correspondence and related submission from the Contractor shall be submitted to:

James A, Bennett
 Chief Investment Officer
 Maine Public Employees Retirement System
 P.O. Box 349
 Augusta, ME 04332-0349

- 3.2 Amendments. This Agreement may be modified, amended, changed, added to or subtracted from by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement and attached to the original Agreement to maintain continuity.
- 3.3 Assignment. The Contractor shall not assign or subcontract the whole or any part of this Agreement without the prior written consent of MainePERS, and any attempt to so assign or subcontract shall be invalid. No assignment shall relieve the Contractor of its obligations hereunder. This Agreement will be binding upon the Contractor’s successors and permitted assignees.

Section 4 TERM

- 4.1 Term. Unless earlier terminated by MainePERS in accordance with subsection 4.2 below, the term for this Contract shall begin on June 1, 2022, and shall continue through December 31, 2022, except that subsections 5.5, 5.8, 5.9, and 5.10 below shall survive.
- 4.2 Termination. MainePERS may terminate this agreement for any reason by giving the Contractor at least 30-days written notice of termination.

Section 5 MISCELLANEOUS PROVISIONS

- 5.1 Conflicts of Interest. The Contractor shall not engage any Trustee or employee of MainePERS in a position that would constitute a violation of 17 M.R.S. § 3104.
- 5.2 Background Checks. The Contractor shall perform a criminal background check on all of its employees who perform work on MainePERS’ property. The Contractor’s employees performing work on MainePERS’ property must not have been convicted of a felony or any crime involving theft. A list of employees authorized to work on MainePERS’ property and the results of their background checks shall be provided to MainePERS by the Contractor upon request.
- 5.3 ID Badges. While on MainePERS’ property, all employees of the Contractor shall wear on their person an ID badge or wear a uniform containing the Contractor’s business name.

- 5.4 Unauthorized Persons. Unless specifically authorized by the Agreement Administrator, under no circumstance shall another person or persons accompany the Contractor or the Contractor's employees onto MainePERS' property while the Contractor is conducting work under this contract.
- 5.5 Confidential Information/Security. Confidentiality of MainePERS information is required. All materials and documents provided by MainePERS, employers or participants in the plans administered by MainePERS, or MainePERS' vendors, or located in MainePERS buildings, shall constitute confidential information. The Contractor shall maintain confidentiality in accordance with industry standards and State and federal law. Neither the Contractor nor its employees will disclose, release or communicate any confidential information to any third person, individual, organization or entity without specific authorization by MainePERS. Any violation or breach of this provision will constitute grounds for immediate termination of the Agreement and shall entitle MainePERS to all remedies available in law or equity.
- 5.6 Solicitors. The Contractor warrants that it has not employed or contracted with any company or person, other than for assistance with the normal study and preparation of a proposal, to solicit or secure this Agreement and that it has not paid, or agreed to pay, any company or person, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon, or resulting from the award for making this Agreement. For breach or violation of this warranty, MainePERS shall have the right to annul this Agreement without liability or, in its discretion to otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.
- 5.7 Non-Discrimination in Employment: MainePERS' contracts for services are subject to statutory conditions related to non-discrimination in employment, 5 M.R.S. § 784. The Contractor has read and agrees to these conditions.
- 5.8 Access to Records. The Contractor shall maintain all books, documents, payrolls, papers, accounting records and other evidence pertaining to this Agreement for a period of seven (7) years following termination of this Agreement. The Contractor shall allow inspection of pertinent documents by MainePERS or its authorized representatives at the Contractor's office upon reasonable notice and shall furnish copies of the documents if requested.
- 5.9 MainePERS Held Harmless. The Contractor will indemnify, defend, and save harmless MainePERS, its Trustees, employees, and agents from any and all claims, costs, expenses, injuries, liabilities, losses and damages of every kind and description resulting from or arising out of the performance of this Agreement by the Contractor, its employees, agents, or subcontractors. This indemnification does not extend to a claim that results solely and directly from (i) MainePERS' negligence or unlawful act, or (ii) action by the Contractor taken in reasonable reliance upon an instruction or direction given by an authorized person acting on behalf of MainePERS in accordance with this Agreement. Nothing in this Agreement shall be construed as a waiver of the privileges or immunities of MainePERS, its Board of Trustees, or its employees.
- 5.10 Notice of Claims. The Contractor shall give the Agreement Administrator immediate notice in writing of any legal action or suit filed related in any way to this Agreement or which may affect the performance of the Contractor under this Agreement.

- 5.11 Severability. The invalidity or unenforceability of any particular provision or part thereof of this Agreement shall not affect the remainder of said provisions, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

- 5.12 Force Majeure. The performance of an obligation by a party under this Agreement shall be excused in the event that performance of that obligation by that party is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party. In the event of the Contractor’s non-performance caused by any of the foregoing reasons, MainePERS may, at its discretion, extend the time period for performance of the obligation excused under this section by the period of the excused delay together with a reasonable period to reinstate compliance with the terms of this Agreement.

- 5.13 Vendor Security Requirements. The Contractor will comply with MainePERS’ Vendor Security Requirements, which are attached hereto as Exhibit 3 and incorporated herein by reference.

- 5.14 Entire Agreement. This document contains the entire Agreement of the parties, and neither party shall be bound by any statement or representation not contained herein. No waiver shall be deemed to have been made by any of the parties unless expressed in writing and signed by the waiving party. The parties expressly agree that they shall not assert in any action relating to the Agreement that any implied waiver occurred between the parties which is not expressed in writing. The failure of any party to insist in any one or more instances upon strict performance of any of the terms or provisions of the Agreement, or to exercise an option or election under the Agreement, shall not be construed as a waiver or relinquishment for the future of such terms, provisions, option or election, but the same shall continue in full force and effect, and no waiver by any party of any one or more of its rights or remedies under the Agreement shall be deemed to be a waiver of any prior or subsequent rights or remedy under the Agreement or at law.

IN WITNESS WHEREOF, MainePERS and the Contractor, by their representatives duly authorized, have entered into this Agreement as of the date first written above.

Maine Public Employees
Retirement System

Company Name

By: _____
Name:
Title:

By: _____
Name:
Title:

EXHIBIT 3**MainePERS Vendor Security Requirements**

The Contractor shall cooperate with MainePERS in protecting the integrity, security, and confidentiality of MainePERS' information and assets by:

- participating in an annual vendor due diligence process by providing information reasonably requested by MainePERS within 10 business days;

[Other requirements to be identified based on particular Bidder and proposal and subject to negotiation]

Attachment D
Questions for RFP Respondents

A: General Information

1. Name and business address of responding party.
2. Name, address, email address and phone number of primary point of contact for all communications.
3. Provide a brief overview of your firm's business.
4. If applicable, please describe your firm's membership of and/or partnerships with investment-related organizations.
5. Please describe the composition and qualifications of the team that would work on this assignment.

B: Experience with Investment Consulting and Divestment

1. Please describe your firm's experience consulting with institutional investors on general investment topics such as asset allocation, portfolio construction, and performance measurement.
2. Please describe your firm's experience, if any, consulting with U.S. public pension plans on divestment, particularly of fossil-fuel companies.
3. Please describe your firm's experience consulting on climate change-related investment risks.
4. Please describe the data sources and analytical methods your firm would use for this engagement.

C: Other Items

1. Please disclose any potential conflicts of interest your firm may have related to this engagement such as managing investment products that have ownership of or exclude investment from fossil fuel companies.
2. Please provide at least three references for prior investment consulting engagements, preferably focused on divestment analysis for U.S. public pension plans.



Kristine Pelletier
Partner

Dulari Pancholi, CFA, CAIA
Principal, Head of Credit and Multi-Asset Investments

Kevin Leonard
Partner

April 29, 2022

Maine Public Employees Retirement System
139 Capitol Street
Augusta, ME 04330

RE: Divestment Consulting Services for Maine Public Employees Retirement System

Dear MainePERS Board of Trustees:

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined in the attached Executive Summary. NEPC has been providing investment consulting services since 1986. NEPC was founded on three main principles: strive to maintain **independence**, provide **proactive counsel** in an attempt to help our clients exceed their goals and objectives, and service our clients with **seasoned professionals**. As you evaluate firms, we would ask you to consider the following points that differentiate NEPC from the competition.

1. We are one of the largest **independent** investment consulting firms in the industry. We advise 399 retainer clients with \$1.5 trillion in assets¹. Our growth is attributed to the high quality results our clients have achieved and our high service model.
2. We have a **dedicated public fund team** that advises 68 public funds representing \$802 billion in assets². These team members have all spent virtually their entire careers working with Public Fund clients.
3. NEPC is a **thought leader in Impact Investing**; we are proud to work with more than 70 organizations that pursue Impact Investing to further their missions.

Thank you in advance for your consideration and we hope to have the opportunity to present our divestment consulting capabilities to you in person. Should you have any questions, please call us at (617) 374-1300.

Best regards,

A handwritten signature in black ink, appearing to read 'K. Pelletier'.

A handwritten signature in black ink, appearing to read 'D. Pancholi'.

A handwritten signature in black ink, appearing to read 'K. Leonard'.

Enclosures

¹ As of 1/1/2022, includes 86 clients with discretionary assets of \$66.3 billion.

² As of 1/1/2022



APRIL 2022

DIVESTMENT CONSULTING SERVICES PROPOSAL

Maine Public Employees Retirement
System

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EXECUTIVE SUMMARY

NEPC was founded in 1986 on three main principles: maintain **independence**, provide **proactive solutions**, and serve our clients with **seasoned professionals**. This focus, combined with client performance, has allowed us to provide investment consulting services to our clients for **36 years**.



100%
Independently owned
by 45 partners

100% employee-owned NEPC is neither an affiliate nor a subsidiary of any organization. Our independence ensures our impartiality, aligning our interests with the success of our clients. We do not accept any form of compensation other than the consulting fees paid by our clients.



- 117 CLIENT SERVICES
- 64 RESEARCH
- 65 PERFORMANCE REPORTING
- 81 OPERATIONS & SUPPORT

At NEPC, we’ve created a thriving company culture that appeals to the industry’s finest talent — with **327 professionals** in seven offices nationwide.

NEPC’s consulting business is divided into distinct practice areas. We work with **68 public fund clients** representing \$802 billion in assets. Public funds account for 55% of NEPC’s clients’ total assets. These funds are served by our dedicated Public Fund team of 34 investment professionals, including 7 partners.

How We Help Our Clients

Our dedicated Public Fund Consulting Team has deep knowledge of asset allocation, asset liability hedging as well as a proactive strategic approach, which understands the nuances specific to the public fund marketplace. Everything we do is driven by our passion to gain a clear understanding of your situation and deliver investment advice specific to your needs.



We assess our clients’ progress against their own unique goals and objectives as well as the largest Public Fund performance measurement universe in the industry.

To help our public fund clients build **customized investment programs** that meet their unique investment goals and fulfill their fiduciary obligations, we incorporate data from the plan’s actuarial valuation statements when performing our comprehensive **asset liability studies**. As a result, we can forecast the impact of changes to fund provisions, workforce, and actuarial assumptions on funding and contributions. Additionally, our **risk budgeting and scenario analysis** tools allow plan sponsors to test alternative asset allocations under multiple economic environments to confidently build an investment program that meets their needs.



In response to our clients' growing concern about **liquidity**, we've developed an analysis that enables us to examine each client's current and projected liquidity needs, and to profile the potential sources of these needs. We're careful to define these liquidity needs not only as actuarial forecasts of contributions vs. benefit payments, but also as forecasts of the liquidity needs rising from their alternative asset programs. This gives our clients a complete picture of their liquidity profile, which then becomes a key factor in determining how much exposure their portfolio can handle within illiquid asset classes.

Investing Is Complex, But We Love Every Part



We love great investment ideas. Superior investing is grounded in superior research and knowledge. NEPC has built one of the largest dedicated research teams in the consulting industry. The Research Group comprises 20% of NEPC's total work force and plays an integral role in supporting client relationships. Be it searching for the next investment strategy for your portfolio, considering a mosaic of perspectives while constructing portfolios, or monitoring existing managers, our mission is to provide sound financial advice. When you work with us, you get:

- A **boutique consulting experience** backed by a 64-person research team
- A forward-looking, multi-faceted asset allocation process that involves a comprehensive understanding of risk
- Actionable investment advice based on original, on-the-ground research and a comprehensive and exhaustive due diligence process
- A **Discovery Platform** dedicated to uncovering the next great investment idea off the beaten path of traditional areas of focus
- An open mind, relentless curiosity, **diversity in thought and experience**, and a vibrant mix of ideas
- Investment opportunities across the entire liquidity spectrum, not just within a single asset class
- **Independent and unbiased insights** on traditional and alternative assets, market and economic events, and industry trends

We are proactive in bringing new ideas and investment opportunities to clients and are widely viewed as a thought leader in our field. As a firm, we do this formally through our **annual asset allocation letter**, **quarterly market thoughts**, and **monthly market updates**, as well as through **client webinars**, our **annual investment conference**, "**Market Chatter**" pieces that focus on topical issues and **white papers** on key investment topics including new investment opportunities.

Divestment Consulting Services

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined below based on the System's project scope of services:

A. Broad review of divestment and the climate change-related risk landscape

Aspects of this should include, but need not be limited to:

1. A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.
2. A summary of key climate change-related investment risks and their implications for institutional investors.
3. A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.

NEPC will have primary responsibility for providing a broad review of divestment and the climate change-related risk landscape with support from MSCI using MSCI's existing research (e.g., whitepapers, case studies, research blogs, etc.).

B. Identify and quantify the System's portfolio holdings subject to divestment

For public market holdings this should include:

1. **Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.**
2. **Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:**
 - a. **Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)**
 - b. **Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy**
 - c. **Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)**
 - d. **Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)**

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc.

C. Identify and quantify direct divestment costs

In this section the consultant will, for all portfolio assets subject to divestment:

1. **Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:**
 - a. **Transaction costs related to divestment of existing public holdings**
 - b. **Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds**
 - c. **Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services**
 - d. **Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)**

NEPC will have primary responsibility for identifying and quantifying direct divestment costs with support from MSCI as applicable (e.g., changes in data resources required to monitor holdings).

D. Identify and quantify divestment impact on portfolio

This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:

1. **Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.**
2. **Compute and discuss these measures.**

- a. **This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.**

NEPC will have primary responsibility identifying and quantifying divestment impact on the portfolio with support from MSCI (e.g., utilizing off the shelf or potentially custom ex-Fossil Fuel/ex Thermal Coal indexes to help analyze divestment impact on risk/return profile of total opportunity set(s), tracking error, country/sector weights, style factors, climate risk metrics, etc.). NEPC will leverage MSCI Index Metrics reports for the analysis.

Let us use our experience and customized solutions, in collaboration with MSCI, to help MainePERS meet its divestment goals.

Data as of 1/1/2022



RESPONSE TO QUESTIONNAIRE

A. General Information

1. Name and business address of responding party.

NEPC, LLC
255 State Street
Boston, MA 02109

2. Name, address, email address and phone number of primary point of contact for all communications.

For the purpose of this proposal, your proposed primary NEPC contacts are:

Kristine Pelletier
Partner
kpelletier@nepc.com
(617) 314-3141

Dulari Pancholi, CFA, CAIA
Principal, Head of Credit and Multi-Asset Investments
dpancholi@nepc.com
(617) 395-7323

Kevin Leonard
Partner
kleonard@nepc.com
(617) 314-3128

3. Provide a brief overview of your firm's business.

NEPC, LLC has been providing investment consulting services since 1986. NEPC was founded on three main principles: strive to maintain **independence**, provide **proactive solutions** in an attempt to help our clients exceed their goals and objectives, and service our clients with **seasoned professionals**. This focus has generated 36 consecutive years of thoughtfully-managed growth.

NEPC takes pride in our long record of success providing independent, objective investment counsel to our clients. Clients can be confident in NEPC's integrity, as our revenue model is completely aligned with our clients' interests and goals. NEPC receives **100% of our revenue** exclusively from providing advisory consulting and discretionary investment services to our clients. NEPC's client-focused approach, paired with our experience and deep research resources, helps to ensure that we will continue to meet our clients' needs, through all types of market conditions.

4. If applicable, please describe your firm's membership of and/or partnerships with investment-related organizations.

NEPC has a small number of client relationships (currently four) with companies that have a money manager subsidiary whereby we (a) provide advice regarding the employee retirement



plan, or (b) provide research and advice connected to the selection of third-party investment managers. Although these relationships contribute less than 1% to our annual revenue, all are fully disclosed when NEPC conducts manager searches. The fees NEPC receives from these relationships are not affected by a rating that may be assigned by our research team, or by investments that any client may make.

In addition, we use the services of investment management firms to manage our employee Profit Sharing and 401(k) Plans, as do nearly all firms offering retirement plan benefits to their employees.

NEPC is an active member of several professional organizations, including:

- American Academy of Actuaries
- Associated General Contractors of America (AGC)
- Association for Financial Professionals (AFP)
- Association of Benefit Administrators (ABA)
- California Association of Public Retirement Systems (CALAPRS)
- Defined Contribution Institutional Investment Association (DCIIA)
- Economic Club of Chicago
- Family Office Exchange Members
- Financial Industry Regulatory Authority (FINRA)
- Gartner Leadership Council
- Georgia Association of Public Pension Trustees (GAPPT)
- Intentional Endowment Network (IEN)
- International Foundation of Employee Benefits Plans (IFEBP)
- Investment Consultants Sustainability Working Group - United States (ICSWG-US)
- Louisiana Trustee Education Council (LATEC)
- MA Coalition of Taft-Hartley Trust Funds, Inc
- MCA of Las Vegas SMACNA
- Michigan Association of Public Employee Retirement Systems (MAPERS)
- National Association of Securities Professionals (NASP)
- National Association of State Retirement Administrators (NASRA)
- National Conference on Public Employee Retirement Systems (NCPERS)
- National Coordinating Committee Multiemployer Plans (NCCMP)
- National Council of Real Estate Investment Fiduciaries (NCREIF)
- New America Alliance (NAA)
- NMS Endowment & Foundation Service Provider Membership (NMS)
- Principles for Responsible Investment Association (PRI)
- Private Equity Women Investor Network (PEWIN)
- Society for Info. Management
- Society of Actuaries (SOA)
- State Association of County Retirement Systems (SACRS)
- Texas Association of Public Employee Retirement Systems (TEXPERS)



5. Please describe the composition and qualifications of the team that would work on this assignment.

If we are chosen as your investment consultant, your NEPC project service team will consist of Kristine Pelletier, Partner, Dulari Pancholi, CFA, CAIA, Principal, Head of Credit and Multi-Asset Investments and Kevin Leonard, Partner. They will be supported by a dedicated Consulting Analyst and dedicated Research Specialists where appropriate.

Kristine M. 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 consultants³.

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 a mentor for Girls Who Invest, is an active volunteer with her alma mater, Simmons University, and previously served on the board for the Student Leadership Training Program.

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. She is the Head of Credit and Multi-Asset Investment Group at NEPC. Dulari is also the Co-Head of NEPC's Impact Investing Committee. As a research team leader, Dulari is a member of multiple investment committees and serves as the Co-Head of the Credit Beta Group. 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. Prior to that, Dulari was employed as a Research Associate at the Center for International Securities and Derivatives Market (CISDM). As a Research

³ Please see Disclosures for important disclosures related to awards and recognitions.



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.

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. She has recently completed the Sustainable Finance program at Yale SOM Executive Education.

Kevin M. Leonard **Partner**

Kevin joined NEPC in 2007 and his career in the financial services industry began in 1991 and the investment consulting industry in 1994. His consulting responsibilities and background include servicing public pension plans, Taft-Hartley pension funds, hospital, endowments, and foundations. Kevin is the team leader for the NEPC Public Fund Consulting Practice and is also a member of NEPC's Due Diligence Committee and Large Cap Equity Research Advisory Committee.

Prior to joining NEPC, Kevin was a Vice President/Partner at Segal Advisors. Prior to working at Segal Advisors, he was a Consultant at The Hannah Consulting Group, and worked at State Street Bank and Trust Company.

Kevin received his B.A. in Business Management from Assumption College. He served on the Board of Directors for the Massachusetts Public Pension Forum and is a frequent speaker at educational conferences and association seminars. Kevin was recognized as the 2012 Public Plan Consultant of the Year by Money Management Intelligence. Kevin was also a nominee for the same award in 2011. Kevin was named in CIO magazine's "The Knowledge Brokers 2019" list as one of the world's most influential investment consultants⁴.

NEPC's Research Group

Research is a core competency at NEPC and a hallmark of our service to our clients. NEPC's Research Group is comprised of 64 dedicated research professionals (approximately 20% of NEPC's total work force) organized into seven teams: Asset Allocation, Portfolio Construction, Global Research, Marketable Securities Research, Private Markets Research, Operational Due Diligence, and OCIO Portfolio Strategy. Our CIO, Tim McCusker, FSA, CFA, CAIA, Partner, is responsible for leading the overall research effort. The research teams are supported by NEPC's research operations group.

NEPC's Research Group provides customized solutions across a range of asset classes and investment strategies to help our clients meet their long-term financial objectives within their individual risk constraints.

⁴ 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/>

When you work with us, you get:

- A boutique consulting experience backed by a 64-person Research team
- A forward-looking, multi-faceted asset allocation process that involves a comprehensive understanding of risk
- Actionable investment advice based on original, on-the-ground research and a comprehensive and exhaustive due diligence process
- A Discovery Platform dedicated to uncovering the next great investment idea off the beaten path of traditional areas of focus
- An open mind, relentless curiosity, diversity in thought and experience, and a vibrant mix of ideas
- Investment opportunities across the entire liquidity spectrum, not just within a single asset class
- Independent and unbiased insights on public markets and alternative assets, market and economic events, and industry trends

B. Experience with Investment Consulting and Divestment

1. Please describe your firm's experience consulting with institutional investors on general investment topics such as asset allocation, portfolio construction, and performance measurement.

NEPC has been consulting to public retirement plans since its inception over 36 years ago. Our dedicated Public Fund Consulting Team has deep knowledge of asset allocation, asset liability hedging as well as a proactive strategic approach, which understands the nuances specific to the public fund marketplace. Over the past (5+) years, NEPC has also worked with several of its clients who have considered divestment, with some choosing to move forward with divestment and others choosing to take a more holistic sustainability approach to the portfolio. We serve 399 retainer clients with \$1.5 trillion in assets across 1,053 separate portfolios⁵.

Client Type	Retainer Clients	Total Assets
Corporate	113	\$367 billion
Not-for-Profit/Charitable	80	\$95 billion
Healthcare Related	43	\$122 billion
Private Wealth	42	\$13 billion
Public Fund	68	\$802 billion
Taft-Hartley	53	\$66 billion
Total Clients	399	\$1,465 billion

NEPC's full-service retainer relationships are characterized by a trustworthy service commitment, featuring ready access to our staff and resources, state-of-the-art technology, and comprehensive solutions to our clients' investment needs. We offer an array of services to our clients, highlights of which are outlined below.

Investment Policy - Your Goals, Your Plan

Creating/reviewing your Investment Policy Statement (IPS) is our first priority. A well-conceived, actionable plan developed in close collaboration with the client, the IPS sets forth your goals and objectives within risk tolerances and investment constraints. Serving as the investment

⁵ As of 1/1/2022, includes 86 clients with discretionary assets of \$66.3 billion.



program's blueprint, the IPS defines asset classes and investment managers, an asset allocation target, investment guidelines and restrictions, including rebalancing guidelines and performance benchmarks, and the roles of the plan's fiduciaries and reporting requirements. We extend and reinforce the IPS by developing investment guidelines for each investment manager in a client's portfolio.

Asset Allocation - Multifaceted, Customized, Risk-controlled

Along with leveraging our dedicated research group and asset class experts, NEPC uses sophisticated and comprehensive proprietary asset modeling systems to customize each client's investment program. After a careful analysis of your objectives and constraints — cash flow projections, risk aversions, rate of return requirements, permissible asset classes, and any unique policy or regulatory considerations — we seek to develop investment portfolios. Employing a multifaceted approach that integrates several asset allocation models, including mean-variance optimization, risk budgeting, economic scenario analysis, factor analysis and liquidity analysis to minimize risk, we identify strategies that represent the most efficient risk-return-liquidity tradeoffs.

Manager Search – A Rigorous, Proprietary Process

We believe that identifying managers that can meet a fund's objectives is one of the most important parts of an investment consultant's role. Our proprietary process begins with documenting the reasons for the search, and taking note of the client's specific needs, objectives, and sensitivities. NEPC has developed minimum criteria for each asset class, and we monitor a variety of internal systems and databases, including eVestment to find and track managers for our focused placement list of managers.

Of most impact to finding the best managers first are two resources unique to us: the NEPC database, housing all of our Due Diligence data, and our proprietary Performance Analytics Statistical Software (PASS), which allows our analysts to validate and compare investment returns and other key performance indicators.

We review investment manager candidates objectively and methodically. When a list is vetted, we can assist with the interview process, either with you or on your behalf, to create the most appropriate portfolio of managers to reach the risk and return goals of the Fund.

Alternative Assets – Improving Diversification and Risk-adjusted Returns

NEPC has significant experience building alternative asset programs and identifying high quality private equity, private debt, hedge funds and real assets managers for our clients' alternative investments programs. NEPC has actively advised our clients regarding alternative investments for the past 28 years. Our clients have \$246.9 billion in alternative assets across 286 client relationships⁶. We have the commitment, experience, and research resources to meet all of your alternative assets consulting needs and to drive a positive outcome. Our alternative assets services include education, portfolio design, manager search, due diligence reviews, and monitoring/reporting. We currently have 24 full-time individuals dedicated to Alternative Investments led by Sarah Samuels, CFA, CAIA, Partner, Head of Investment Manager Research.

Performance Measurement - Broader, Deeper Analysis

Investment Performance Analysis (IPA) reports are highly graphic, customized documents, providing performance results, risk analyses and comparisons for the total fund, all asset classes, capitalization ranges, and style combinations and investment managers versus goals

⁶ As of 12/31/2020, NEPC provides some form of advice to all clients counted but does not advise all clients on all asset classes.



and objectives. We work with each client to develop an appropriate reporting tool for their program.

Client Education - Timely, Tailored Programs

As a research-driven organization whose consultants are among the industry's foremost thought leaders, we take every opportunity to share our resources and insights with our clients. As we see it, the better informed you are, the stronger our collaboration. That's why, in addition to your access to a team of NEPC consultants and analysts, we provide a range of tailored educational programs and services. Of course, we also offer informative resources such as white papers, in which we present our perspectives on industry issues, legislative changes, and investment strategies that can affect an investment program.

Impact Investing Committee

As part of our commitment to impact investing, we have an internal **Impact Investing Committee** responsible for overseeing trends, researching managers and working with clients to develop strategies that meet their needs and align with their respective organizations' mission. This group includes a mix of client consultants and research professionals across asset classes. Kristine Pelletier, Partner and Dulari Pancholi, CFA, CAIA, Principal, Head of Credit and Multi-Asset Investments serve as Co-Heads of this Committee. As we have seen increasing interest in ESG and impact investing from across our diverse client base, we felt that an integrated committee approach would offer the ability to better tailor our focus to each client's unique need – leveraging information and views from peers across the firm. In addition, NEPC's research professionals all play an important role in discussing and evaluating the role that ESG plays in the respective processes of all investment managers we evaluate.

NEPC meets regularly with impact-oriented investment managers across asset classes as we continue to source preferred strategies and options for our clients. Importantly, we have sourced several preferred strategies for clients that target attractive risk-adjusted returns and align with the respective missions and values of our client base. While our Impact Investing Committee may source and identify strategies, its vetting and approval process follows the standard NEPC research process.

Ongoing Efforts to Enhance Impact Investing Best Practices

The NEPC ESG rating system, Impact Investing Committee and related ESG evaluation approach reflects a commitment to being a best-in-class option for impact-oriented investors. However, we also recognize that effective impact investing demands ongoing evolution, evaluation, and education. To that end, NEPC engages in numerous efforts to track developments, evaluate new sources of information, and promote better practices in our industry. For example:

- NEPC is a founding member of the US Investment Consultants Sustainability Working Group (ICSWG). Dulari Pancholi serves as our primary representative to this group. The ICSWG is a collaboration among investment consulting firms to engage with its collective stakeholders, and empower asset owners and their ultimate beneficiaries, to advance sustainable investment practices across the investment industry.
- We participate in national conversations about the evolution of ESG investing, such as the Department of Labor and the White House Office of Social Innovation's stakeholder roundtable.
- We regularly host opportunities for our clients to explore ESG topics and share their own best practices, such as our annual Investment Conference, webinars and outside speaker events.

- We are a signatory to the United Nations Principles for Responsible Investing (PRI) Initiative, a leading global network for investors to publicly demonstrate their commitment to impact investment.

NEPC Research

NEPC is a research-driven consulting firm, as evidenced by the list of papers generated by our research and consulting teams over the past few years. Please see a sampling listing of research papers below. A complete list can be found at <https://www.nepc.com/insights>.

- **Taking Stock: China Transitions, an NEPC 2022 Key Market Theme** (February 2022)
- **Taking Stock: Globalization Backlash, an NEPC 2022 Key Market Theme** (February 2022)
- **Taking Stock: Economic Crossroads, an NEPC 2022 Key Market Theme** (February 2022)
- **NEPC's 2022 Asset Allocation Letter: The Case for Curing Investment Amnesia** (February 2022)
- **Taking Stock: Permanent Interventions, an NEPC 2022 Key Market Theme** (February 2022)
- **A Decade in Review: The 2021 Defined Benefit Trends Survey** (January 2022)
- **China Bears and Inflation Scars: Positioning Portfolios for Success in 2022 and Beyond – Q3 Quarterly Market Webinar** (October 2021)
- **Taking Stock: NEPC's August 2021 Pension Monitor** (September 2021)
- **NEPC Market Outlook: Taking Profits in a Period of Market Strength** (August 2021)
- **Meeting You Where You Are: Client Input About the Future of Meetings** (June 2021)
- **Should Investors be Bracing for a Tidal Wave of Inflation** (May 2021)
- **Taking Stock: Stimulus Package Provides Respite to Single-Employer Pension Plans** (March 2021)
- **Taking Stock: China Transitions** (March 2021)
- **Taking Stock: Globalization Backlash** (March 2021)
- **Taking Stock: Permanent Interventions, an NEPC 2021 Key Market Theme** (February 2021)
- **Taking Stock: Virus Trajectory, an NEPC 2021 Key Market Theme** (February 2021)
- **NEPC's 2021 Asset Allocation Letter: Time for Your Portfolio's Annual Wellness Check** (February 2021)
- **Taking Stock: LDI-Focused Corporate Pension Plans Win in 2020** (January 2021)
- **Taking a Leap of Faith into a New Decade: NEPC's 2020 Asset Allocation Letter** (January 2020)
- **Winter Is Coming, But When?: NEPC's 2019 Asset Allocation Letter** (January 2019)
- **Markets Take Flight: NEPC's 2018 Asset Allocation Letter** (February 2018)
- **The Curse of Greed** (January 2018)
- **Power Up Your Pension Plans** (October 2017)
- **Terminated-Vested Lump Sum Payouts** (October 2017)
- **The Essential Guide to Third-Party Valuations for Hedge Fund Investors** (May 2017)
- **Fossil Fuel Divestment: Considerations for Institutional Portfolios** (March 2017)
- **The Times Are A-Changin': NEPC's 2017 Annual Asset Allocation** (February 2017)
- **Behind the Curtain: Operational Capabilities Are a Must for OCIOs** (October 2016)
- **NEPC Corporate Pension Focus – Interest Rate Risk and Asset/Liability Management for Cash Balance Plans** (October 2016)
- **Class is in Session: Lawsuits Against Higher Education Retirement Plans** (October 2016)



- **The Disease of Doubt** (July 2016)
- **Thinking Ahead to Stay Ahead: Strategic Private Equity Investing in Healthcare** (April 2016)
- **Embrace Opportunities Amidst Uncertainty: NEPC's 2016 Asset Allocation Letter** (January 2016)

2. Please describe your firm's experience, if any, consulting with U.S. public pension plans on divestment, particularly of fossil-fuel companies.

We have a handful of clients that currently engage in some type of divestment approach. NEPC believes in utilizing a broad opportunity set and flexible strategies to construct a diversified investment portfolio. We are committed to working with our clients to design customized solutions that meet the specific goals and objectives of their organization. When it comes to divestment, we believe that there is no "one size fits all" solution – each organization and investment portfolio has unique issues that will impact the decision. We believe that decision makers should contemplate and discuss a number of factors that fall into three main categories:

- 1) What do you hope to accomplish through divestment?
- 2) How will you measure or define success?
- 3) What approach is best for your investment program?

Working in partnership with the MainePERS, we would help the Board discuss these factors to determine if divestment is the best path forward for your organization. NEPC has worked extensively with the Board, staff and stakeholders in providing education, recommendations, and investment analysis related to negative screening and pursuing best practices with respect to assessing ESG related risks, and in particular, climate change risk. We have generated intellectual content and topical white papers and are currently in the process of developing a framework for climate change risk scenario analysis tool to aid clients with strategic asset allocation process within an asset-liability framework.

We have worked with several clients who have considered divestment, with some choosing to move forward with divestment and others choosing to take a more holistic ESG approach to the portfolio. When it comes to implementation, each organization's path will look somewhat different. The chart below demonstrates some of the available options to the MainePERS should you choose to pursue a divestment strategy.

Potential Options	Description	Example	Comments
Full divestment	Divest from a specified list of fossil fuel companies across entire investment portfolio (i.e. Carbon Tracker 200 list)	<ul style="list-style-type: none"> ▪ Sterling College: Portfolio was solely invested in index products ▪ Endowment completely divested from fossil fuels and utilized a sole fossil fuel free investment manager for implementation 	Small and liquid investment program allows for easier implementation

Potential Options	Description	Example	Comments
Partial divestment from specific asset classes	Divest from fossil fuel companies (i.e. Carbon 200 list), but only within certain asset classes	<ul style="list-style-type: none"> ▪ Pitzer College: Committed to divesting the endowment/s investments in fossil fuel stocks by the end of 2014 	Potential to prioritize certain asset classes where greater breadth of options exist (public equities)
Partial divestment from specific industries	Commit to divesting from companies in select high carbon emitting industries (e.g. coal)	<ul style="list-style-type: none"> ▪ Stanford University: Committed to divesting a list of 100 coal companies 	Easier option to implement for larger investment programs with separate accounts.

In addition to the options listed above, there are also extensions to divestment. Some of those extensions include:

- Allocating to sustainable investments, including those with a focus the energy transition
 - This can be achieved through investment in green bonds, private equity funds and other specialized funds
- Considering investments in strategies with an ESG focus
 - Broader approach that promotes environmental, social and governance best practices
 - Will likely reduce exposure to fossil fuels and provide exposure to the best ideas from an ESG perspective
- Company engagement on key issues
 - Requires significant resources and a well-defined mission
 - Efforts may be combined with other organizations to increase bargaining power
 - Active proxy voting (requires investment in carbon emitting companies)
- Public Policy work
 - Time intensive, but can create awareness
- Allocating a percentage of investment proceeds to green projects within the organization
 - Examples include solar/wind power for buildings, LEED certification, providing grants for carbon emission reduction research, etc.

NEPC would work in partnership with MainePERS to discuss all of these options to determine which path forward is the best for your organization. In considering the potential effects on MainePERS we believe there are a few different frameworks from which to evaluate the divestment decision:

- 1) Asset Allocation could be impacted by a decision to divest as solutions may be limited within certain asset classes or strategies (e.g. alternative investments, real assets, or global asset allocation). Eliminating these asset classes from an investment portfolio could dramatically alter the risk and return profile
- 2) Risk Management should be considered when discussing divestment. Exposure to the energy sector has been a valuable source of return, diversification and inflation protection. Limiting exposure to diversifying strategies may impact overall return and risk expectations. Evaluating currency, country and regional concentration is important if divesting from international companies and re-allocating capital.

- 3) Manager Selection will likely be significantly limited. Larger organizations may have greater ability to access separate accounts or influence the terms of commingled funds. The current universe of managers/strategies that divest is limited and may have low asset levels, shorter track records and higher management fees. There is a substantial universe of managers/strategies that integrate ESG factors into their analysis, however this will not guarantee a fossil fuel free strategy.
- 4) Investment performance may be influenced by divestment and there are a number of ways to assess the potential impact. Some organizations have evaluated the performance impact of divestment by reviewing performance of the energy sector versus that of the overall market. Restricting investments in a certain sector or industry limits the investment manager opportunity set and may impact performance positively or negatively. Other organizations have concluded that divestment would require the forfeiture of future alpha. If fossil fuel companies are viewed as a risk likely to underperform going forward, the decision to divest could be interpreted as an active management decision. Divesting an actively invested program by reallocating funds to a fossil fuel free index fund may sacrifice alpha. The limited number of established actively managed fossil fuel free funds may leave investors with few choices in reallocating capital. Requesting that a manager implement negative screening shrinks the investment universe, so investors may experience underperformance and/or heightened volatility
- 5) Investment Related Fees are important to quantify when assessing divestment, specifically: transaction costs to divest and re-invest securities in separately managed accounts; transaction costs associated with changing investment products; potential changes to investment management fees.
- 6) Investment Policy Statements will have to be updated if the decision is made to divest. A description of the divestment approach (asset classes, timeline, etc.), monitoring process and roles and responsibilities for the Board, Investment Committee and any sub-Committees are critical.

3. Please describe your firm's experience consulting on climate change-related investment risks.

Because climate change is expected to have a material impact on virtually all markets in coming decades, the NEPC **Impact Investing Committee** has sought to formalize and expand its understanding of climate related impacts and make appropriate recommendations to clients regarding their investment portfolios to reflect climate risks and opportunities.

Climate Change Research Climate change is a critical theme that we embrace as part of our Impact Investing Research. While NEPC has cultivated an awareness of long-term potential climate impacts for many years, we began formally analyzing client portfolios in 2019 for specific climate risk factors. This is a long-term project and an evolving process to assess climate risk factors at the asset class, country, and eventually the sector/industry level.

Our research efforts have produced the following key learnings that inform our recommendations to clients:

- Climate change will impact numerous fundamental building blocks of capital markets such as inflation, real growth, profit margins, and credit defaults.
- Wealthier countries are most able to adapt to climate change, exacerbating global wealth inequality. Emerging markets are most vulnerable with higher sensitivity to climate change risk factors, specifically nations with a fragile socio-economic profile.
- Climate change transition costs are likely to pressure profit margins across industries in coming decades, and the physical costs of climate change could have a potentially

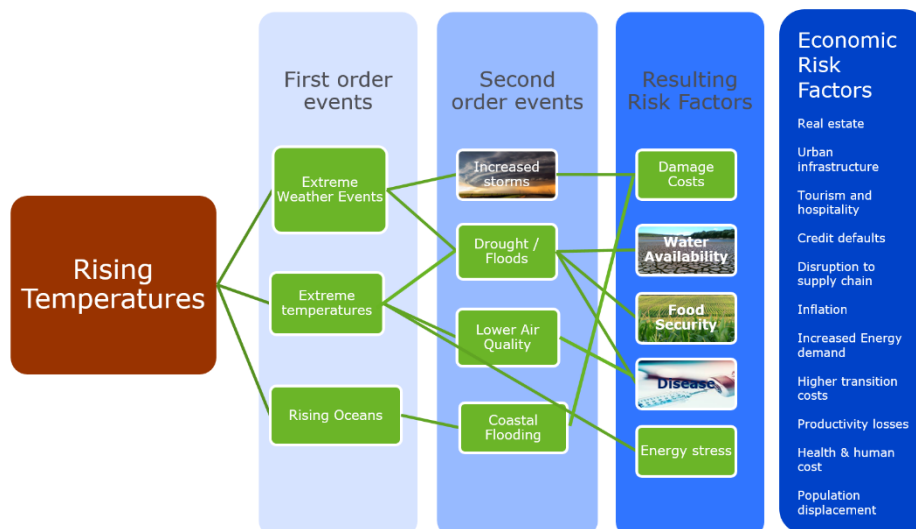
inflationary effect. Credit markets may be most exposed to this risk, with higher defaults associated with climate events and large disruptions to business models.

- The capital market risks of climate change can be seen today but it is an unknown when the market may fully discount the range of outcomes associated with climate change costs.
- COVID-19 has had a significant impact on the global climate as many people globally slowed travel and transportation.
- Potential portfolio actions over time may include identifying private equity opportunities in new technologies and analyzing geographical diversification for real estate.

We focus on climate change risk factors because they help us categorize systematic exposures to long-term impacts of climate change. Vulnerability to these risk factors (and each economy’s ability to adapt) will ultimately determine the winners and losers across geographies and industries. Our climate change “policy scenarios” are defined by the mitigation policies of global nations. The scenarios highlight the severity and economic implications of an economy’s risk factors and adaptability to climate change.

The policy scenarios impact the core building blocks of capital markets and are used to define potential investment effects. Below is an example of economic risk factors of climate change that could affect economic factors.

Working through first and second order effects, we identify the economic risk factors of climate change, which then inform our asset class assumptions for each policy path



How Climate Research Is Integrated into Client Portfolios Our research approaches climate-related portfolio solutions through a multi-step process which links to client’s goals and objectives. It begins with collaborating to set strategy around the climate solution in context of overall portfolio objectives and constraints. In this area, there are several approaches, but we seek to optimize the client’s goals and objectives using our “four pillars” framework. Below is a schematic of the four pillars as it relates to climate change.





Reduce Carbon Emissions	Benefit from decarbonization trend	Carbon Offset Reduce Emissions	Engage with corporate on lowering emission and Net Zero agenda
Fund's portfolio would exclude investments or screen out investments in all or key fossil fuel emitters	Opportunistic mandates benefiting from industry winner/losers	Replacing fossil/carbon exposure with renewable energy Control total emission at portfolio level	Collaboration at issuer level with similar minded allocators
<ul style="list-style-type: none"> Low carbon index Fossil Free Indices Screen out fossil fuel exposure or high emitters 	ESG Integrated products across asset classes and liquidity spectrum	Environment focused Thematic liquid and illiquid funds (e.g. renewables energy, water, etc.)	Case specific situations specifically targeted towards emissions

It is our view that climate change data and policies are likely to change considerably in coming years, and as such it is incumbent on us to continually update our research approach and investment recommendations around climate issues. For example, the Biden administration has rejoined the Paris Climate Accord and has stated its intent to support the development of renewable energy.

Given the significant data and policy changes ahead, NEPC will be reviewing and revising its climate analysis in the near term. NEPC is also in the beginning stages of fine tuning its investment manager ESG rating system to highlight manager climate engagement. In addition, NEPC has continued to expand our thematic manager Focused Placement Lists to distinguish best-in-class climate-focused managers for recommendation to clients. Several of the managers we work with have relationships with climate advisors, or solid internal expertise and experience – we would be happy to work with you and these experts to develop an educational session if that is of interest.

Example of Client Projects: West Coast Public Pension Client: NEPC has been engaged as the Board's strategic advisor providing advice on planning, policy setting, governance, investment research and implementation regarding investment sustainability/ ESG integration. We have encouraged the plan to integrate ESG holistically into their investment process. This includes ongoing focus and refinement on ESG integration versus purely negative screens, education and writing white papers for the Board recommending pursuing ESG integration, encouraging affiliation with industry groups that are focused on ESG related risks and encouraging the build out of ESG related employee resources at the Plan. This client hired a Director of ESG, who has since developed complex models projecting the impact of global warming on financial results of energy companies as a guide to engaging with company management; NEPC reviewed and opined positively on the results. We have aided the plan with governance and policy setting around the topic of sustainability and long-term strategic investment priorities such as the inclusion of extensive ESG related evaluation criteria in investment manager searches and ongoing monitoring of exposures related to climate change risk. We have aided the Plan in

providing investment management solutions related to climate change risk. Our work has also focused on active ownership and shareholder advocacy, and detailed review of proxy voting policies and manager voting process.

Example of an Investment Underwritten In Past Two Years NEPC has made a concerted effort to source and underwrite thematic impact ideas with theses that align with our clients' missions. In particular, NEPC has underwritten strategies across themes such as sustainability, education/workforce development, and investing in underserved communities. One recent example is Vision Ridge III, a sustainable infrastructure fund that invests across the energy, transportation and agriculture sectors, targeting opportunities in renewable energy, energy storage, charging infrastructure, maritime and commercial vehicle electrification, sustainable agriculture, and water infrastructure. The manager's team has over 30 years of collective experience investing across various real assets sectors and has developed comprehensive sector knowledge and a diverse and deep network to leverage.

4. Please describe the data sources and analytical methods your firm would use for this engagement.

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc. The information outlined on public markets data below was provided by MSCI.

Fossil Fuel Reserves Data

MSCI ESG Research provides reported fossil fuel reserves data under the following reserve categories for 9,300+ companies (including the MSCI ACWI IMI). MSCI ESG Research has a dedicated team of analysts responsible for identifying companies with fossil fuel reserves and revenue. Sources include company publications (e.g. annual reports, 10K, 20F) and other public records (such as sustainability reports). Fossil fuel reserves data is updated annually.

- Metallurgical coal
- Thermal coal
- Conventional oil
- Shale oil
- Oil shale & tar sands
- Natural gas
- Shale gas

Fossil Fuel Revenue Data

Oil and Gas Revenue related to Extraction and Production To help clients screen their portfolios for companies involved in various types of oil and gas production, MSCI ESG Research provides an oil and gas revenue exposure module for Integrated Oil and Gas and Exploration and Production companies available for 9,300+ companies including the MSCI ACWI IMI.

Oil & Gas Revenue related to Other Business Activities in the Value Chain MSCI ESG Research collects data on revenue derived from following oil & gas-related business activities (beyond Extraction and Production):



- Oil & Gas equipment and services;
- Oil & Gas refining;
- Oil & Gas pipelines and transportation;
- Oil & Gas distribution and retailing;
- Petrochemical products;
- Trading of Oil & Gas and related products; and
- Biofuel

Thermal Coal Mining Revenue Data

In addition to Oil & Gas revenue, MSCI ESG Research also identifies revenue associated with thermal coal mining. This screen identifies the percentage of revenue (either reported or estimated) that companies derive from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties, and contract mining services.

Power Generation

In order to help clients screen their portfolios/universes for companies involved in carbon-intensive power generation operations, MSCI ESG Research provides a power-generation module containing power-generation volumes, installed capacity data and power-generation revenue by fuel type for 9,300+ companies.

For the divestment of private prison assets, MSCI's Business Involvement Screening Research would be utilized, and specifically, our For-Profit Prisons screen which identifies companies that derive any detectable revenue from the operation of private prisons, jails, detention centers or correctional facilities or from the provision of integral services to these types of facilities. Integral services include complete facilities management (end-to-end), security services and detention services. For-Profit Prisons may be alternatively known as private prisons. Please reference the attached Business Involvement Screening Research document for the full methodology and definitions.

In addition to the datasets mentioned above, MSCI can create customized screens tailored to adhere to specific legislation or client mandates as well as creating customized indexes for policy/mandate benchmarks or as the basis of passive exposures to align with divestment legislation and/or investment policies.

Private Markets

NEPC will work with MainePERS to understand the private market portfolio holdings, and work with you as well as your investment managers as appropriate in the evaluation of those portfolios. NEPC has also, on occasion, worked with clients to determine if a sale of private assets is in their best interest. In this process, NEPC works with a combination of secondary funds, private equity secondary brokers, and other intermediaries that might be useful in determining the approximate desirability and representative pricing of those assets.

C. Other Items

1. **Please disclose any potential conflicts of interest your firm may have related to this engagement such as managing investment products that have ownership of or exclude investment from fossil fuel companies.**

We are unaware of any potential conflicts of interest that would be created in serving MainePERS. **You should never wonder if your interests are first and foremost when working with your consultant.** NEPC strives to avoid and mitigate conflicts of interest whenever possible, and we have structured our business model with this in mind. Examples of our focus on mitigating potential conflicts of interest include the following:

- We do not have a complicated business model which can inhibit the ability of plan sponsors to understand fee transparencies and conflicts
- We do not provide management consulting to investment management firms to help them with strategic decision-making and product positioning
- We are not affiliated with divisions or firms that offer investment products
- We do not provide brokerage services
- We do not offer actuarial services
- We do not accept or pay referral fees, finder's fees or other commissions for placing managers with clients or for any other activity
- We do not incent our consultants to switch clients to a higher-fee service model
- We do not charge investment managers for inclusion in our manager search databases
- All fees paid to NEPC are cash-based ("hard dollars") and we do not accept any "soft dollars"
- Our annual investment conference is not subsidized by investment managers

Our business model has been designed to mitigate potential conflicts of interests so that we maintain our independence and objectivity and align our interests with those of our clients.

2. **Please provide at least three references for prior investment consulting engagements, preferably focused on divestment analysis for U.S. public pension plans.**

Our clients are our only customers, and we have grown substantially through their referrals over the years. While we submit client references per your request, we respectfully request that you not contact them without notifying us first at which time we will provide full contact information.

NEPC References:

San Francisco Employees' Retirement System

Andrew Collins

Head of ESG and Responsible Investing

University of Maine System

Tracy Elliott, CPA, CIA

VP of Finance and Controller



MSCI References:

- **UC Investments** - <https://www.ucop.edu/investment-office/files/uc-investments-tcf2021.pdf>
- **United Nations Joint Staff Pension Fund** - https://www.unjspf.org/wp-content/uploads/2022/03/UNJSPF_Report_March8.pdf
- **Regents of the University of Michigan**



DIVESTMENT CONSULTING AGREEMENT

NEPC would like to request the following additions to the proposed agreement. We would be pleased to discuss these items at your convenience.

Section 5.5 - Confidential Information/Security

Please add:

Notwithstanding the foregoing, the Contractor shall be permitted to disclose or communicate to a proper party information received from MainePERS, MainePERS's custodian bank or MainePERS's investment managers if such disclosure or communication is necessary for the Contractor to perform the services required in this Agreement or is required by law.

NEPC also requests that the following new sections be added:

Responsibility of Contractor

Contractor shall have no responsibility or authority to (i) manage or in any way direct the investment of any assets of MainePERS or (ii) enter into any agreement with any investment manager on behalf of, or otherwise bind, MainePERS. Nothing contained herein shall require MainePERS to engage any investment manager recommended by Contractor or to follow any advice provided by Contractor.

Acknowledgments

MainePERS acknowledges and agrees that:

1. Contractor has not made and cannot make any promise, guarantee or other statement or representation regarding the future investment performance of MainePERS's investments;
2. the past performance of the accounts of other clients of Contractor is not necessarily indicative of the future performance of MainePERS's investments;
3. in the performance of its services under this Agreement, Contractor shall be entitled to rely on information furnished by investment managers, it being understood that Contractor shall have no liability for the accuracy or completeness of any information furnished or representation made by the investment managers, provided Contractor conducted due diligence and evaluation of such investment managers with reasonable care;
4. to the extent permitted by applicable law, Contractor will not be liable for any losses or expenses incurred as a result of any action or omission by an investment manager, custodian or unrelated third party;
5. with respect to funds-of-funds, if applicable, Contractor's analysis will be conducted at the fund-of-funds level and will not generally include a direct review of underlying funds; and
6. Contractor's services do not include tax or regulatory advice, or interpretation of legal documents.

Miscellaneous Terms

Contractor shall be permitted to give advice and take action with respect to MainePERS which differs from the advice made or recommended or actions taken with respect to such other accounts and clients even though the investment objectives may be the same or similar. Contractor shall not be obligated to give MainePERS treatment more favorable than or preferential to that provided to such other accounts and clients.

Nothing in this Agreement shall limit or restrict Contractor or any of its shareholders, officers or employees from buying, selling, or trading in any securities for their own account or accounts, subject to Contractor's obligations as an SEC-registered entity and the restrictions set forth in Contractor's Code of Ethics and Personal Trading Policy. MainePERS acknowledges that Contractor and its shareholders, officers, affiliates and employees, and its other clients, may at any time have,



acquire, increase, decrease, or dispose of positions in investments which are at the same time being acquired or disposed of for the account of MainePERS.

Electronic Signatures and Records

Both the Contractor and MainePERS consent to the use of electronic signatures. This Agreement, and any other documents requiring a signature hereunder, may be signed electronically. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the basis that it is an electronic record or electronic signature or that it is not in its original form or is not an original.



PROPOSED FEES

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined below based on the System's project scope of services:

NEPC is proposing a project fee of \$75,000 with travel, postage, and related expenses will be billed back at cost. The pricing for access to the MSCI data to perform work on identifying and quantifying holdings subject to divestment are included in this project fee.

A. Broad review of divestment and the climate change-related risk landscape

Aspects of this should include, but need not be limited to:

1. A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.
2. A summary of key climate change-related investment risks and their implications for institutional investors.
3. A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.

NEPC will have primary responsibility for providing a broad review of divestment and the climate change-related risk landscape with support from MSCI using MSCI's existing research (e.g., whitepapers, case studies, research blogs, etc.).

B. Identify and quantify the System's portfolio holdings subject to divestment

For public market holdings this should include:

1. Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.
2. Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:
 - a. Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)
 - b. Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy
 - c. Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)
 - d. Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc.

C. Identify and quantify direct divestment costs

In this section the consultant will, for all portfolio assets subject to divestment:

1. Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:
 - a. Transaction costs related to divestment of existing public holdings

- b. **Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds**
- c. **Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services**
- d. **Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)**

NEPC will have primary responsibility for identifying and quantifying direct divestment costs with support from MSCI as applicable (e.g., changes in data resources required to monitor holdings).

D. Identify and quantify divestment impact on portfolio

This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:

1. **Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.**
2. **Compute and discuss these measures.**
 - a. **This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.**

NEPC will have primary responsibility identifying and quantifying divestment impact on the portfolio with support from MSCI (e.g., utilizing off the shelf or potentially custom ex-Fossil Fuel/ex Thermal Coal indexes to help analyze divestment impact on risk/return profile of total opportunity set(s), tracking error, country/sector weights, style factors, climate risk metrics, etc.). NEPC will leverage MSCI Index Metrics reports for the analysis.

DISCLOSURES

Awards and Recognitions Disclosure

- Pension Bridge Institutional Asset Management Awards 2020. For more information, please visit <https://iamanagementawards.awardstage.com/#!/judging-methodology--criteria>.
- 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/>
- These rating or awards may not be representative of any one client's experience with NEPC. Any rating or award is representative of NEPC's past performance only and is not indicative of NEPC's future performance, nor does it indicate an endorsement of NEPC. NEPC did not pay any of these organizations to be considered for an award.
- An award presented to a client of NEPC is not a recognition of NEPC's performance and should not be considered an endorsement of NEPC.

Client Results Disclosure – All Clients

- Past performance is no guarantee of future results.
- NEPC acts in an advisory capacity-only for many clients and does not have discretion over those client assets. As a result, a client's investment performance may not be attributable solely to NEPC's advice.
- NEPC's Overall Composite is compiled from all Pension Plans, Endowments and Foundations for which NEPC is the sole full-retainer consultant. Plans are included in the Composite provided they have exposure to equity and bonds (including alternatives) of at least 25% each, and no more than 20% to other assets such as cash and GIC's.
- New clients are added to the Overall Composite with the first full quarter of a new manager selected from an NEPC search, or after one year as an NEPC client, whichever comes first, provided that the plan is globally diversified.
- Results are reported gross of NEPC advisory fees.
- NEPC's fees for advisory clients vary considerably depending on client size and complexity.

Information Disclosure

- Investment Metrics Plan Universe
- As of 12/31/2021, the Investment Metrics Universe contained actual, custodian-supplied and audited data on over 3,100 plan sponsors, representing roughly \$2.5 trillion in assets. This data is drawn from 52 independent investment consulting firms, including NEPC.
- ICC Universe
- Through 2011, universe rankings were based on the ICC Universe, which was populated by 12 independent investment consulting firms, including NEPC, and supplemented by many of the performance measurement clients of State Street Bank.
- Certain information, including that relating to market indices, was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This document may contain confidential or proprietary information and is intended only for the designated recipient(s). If you are not a designated recipient, you may not copy or distribute this document.

Alternative Investment Disclosure

It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds, real estate, real assets and private equity:

- Performance can be volatile and investors could lose all or a substantial portion of their investment.



- Leverage and other speculative practices may increase the risk of loss.
- Past performance may be revised due to the revaluation of investments.
- These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms.
- A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value.
- These funds are not subject to the same regulatory requirements as registered investment vehicles.
- Managers may not be required to provide periodic pricing or valuation information to investors.
- These funds may have complex tax structures and delays in distributing important tax information.
- These funds often charge high fees.
- Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy.





November 2022



DIVESTMENT MEMO

NEPC, LLC

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INTRODUCTION

The purpose of this report is to assist MainePERS in evaluating the divestment of certain assets as specified in Maine statutes PL2021 c.231 and PL2021 c.234. The report will cover the following items:

- A review of the divestment and climate change-related risk landscape
- Identify and quantify the System's portfolio holdings subject to divestment
- Identify and quantify direct divestment costs
- Identify and quantify divestment impact on portfolio

The information provided within is intended to give the System a more detailed understanding of the impact of the Maine legislation and the implied costs (investment and operational) of divesting as contemplated by the legislation. This report will not include alternatives to divesting, but rather focus on the impact of divesting.

SECTION A: BROAD REVIEW OF DIVESTMENT AND THE CLIMATE CHANGE-RELATED RISK LANDSCAPE

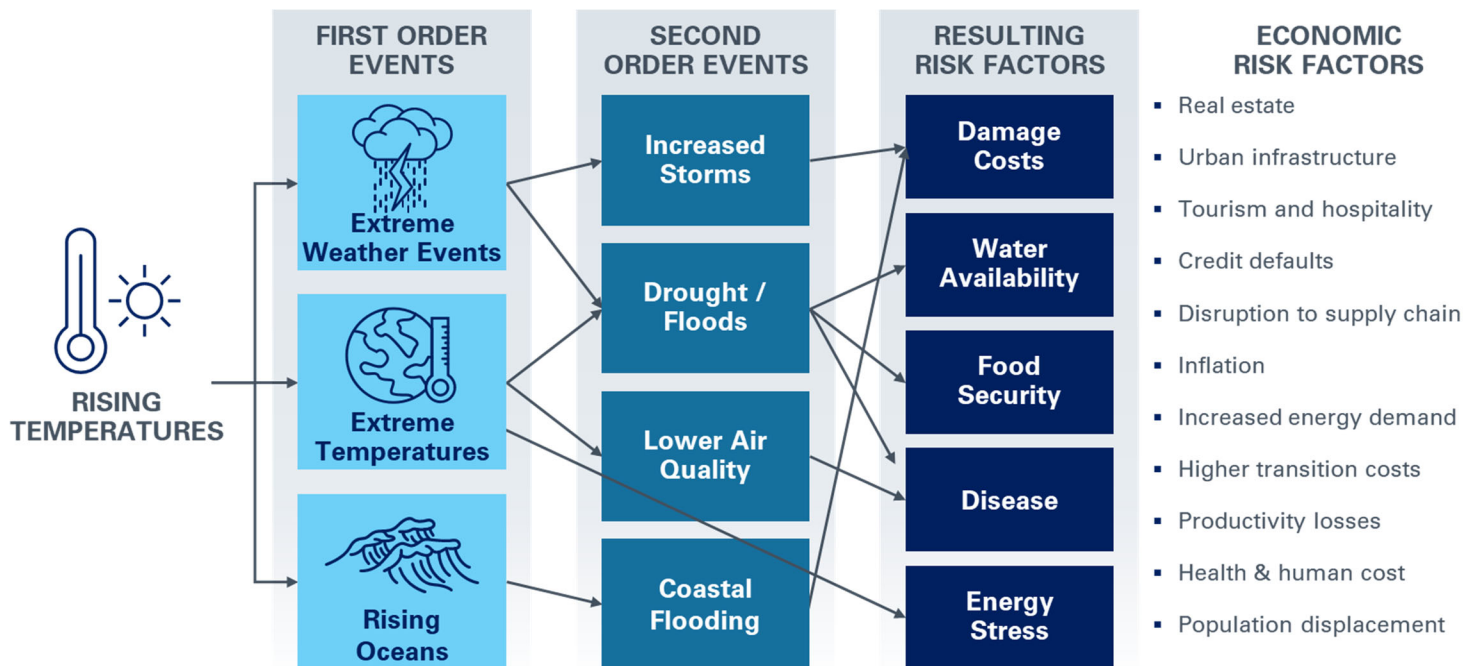
Over the last decade, investors have increased their understanding of climate related risks and have considered those risks in various ways for portfolio construction. This section will provide a brief overview of those risks, the potential investment implications, and how institutional investors are considering those implications through portfolio mandates. We will also highlight some of the state legislative trends.

Risks

As investors strive to understand the investment implications associated with climate change, it is important to begin with an understanding of *risk factors* and potential government *policy reactions* to those risks. These combine to influence the eventual investment implications.

Climate change risk factors categorize systematic exposures to long-term impacts of climate change. Vulnerability to these risk factors and each economy’s ability to adapt will ultimately determine the winners and losers across geographies and industries.

Working through first and second order effects, the economic risk factors of climate change can then inform asset class views for each government policy path.

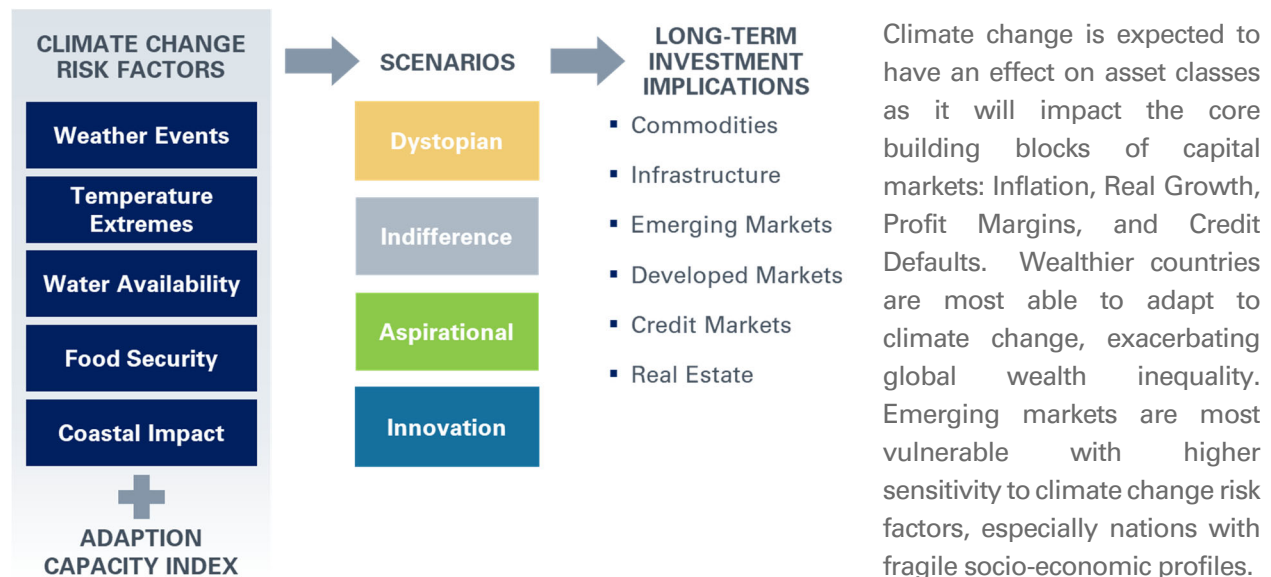


Countries may have the ability to mitigate or offset exposures to certain risk factors by taking some type of action in response to climate change. Ultimately, it depends on readiness in regard to economics (mobility of private capital), governance (stability of society and institutional arrangements), and social conditions (that help society make efficient and equitable use of capital).

We view potential policy scenarios under the following framework:

- **Dystopian:** Industrialized nations reverse current policies in place to mitigate greenhouse gas emissions. Potential global temperature change of 5°C or greater
- **Indifference:** Current mitigation policies in place continue with potential global temperature change of 3°C to 3.5°C
- **Aspirational:** Current pledges of industrialized nations are implemented along with current policies (e.g., Paris Accord) with potential global temperature change of 3°C or less
- **Innovation:** Revolutionary technological change reduces greenhouse gas emissions to 20th century levels. Potential global temperature change of 2°C or less

Investors can turn to investment implications by engaging this type of climate risk model – beginning with economic risk factors, overlaying scenario work on potential policies, leading to varied outcomes depending on the asset class.



Climate change transition costs are likely to pressure profit margins across industries with physical costs of climate change having a potentially inflationary effect. Credit markets may be most exposed with higher defaults associated with climate events and large disruptions to business models. The capital market risks of climate change can be seen today but it is still to be determined when the market may fully discount the range of outcomes associated with climate change costs.

Investor Response

As investors grapple with how to evaluate exposure to climate risks and consider portfolio implications, multiple approaches are typically discussed. The four most reviewed include negative screening, ESG integration, thematic investing, and engagement. A description of each of these approaches follows, with a note about the adoption of each by pension plans.

Approach 1: Cancel

Strategy: Negative Screening

Description: Avoid companies, products, or industries that you don't support. This strategy has been around for decades because it's a straightforward approach.

Example: Historically, lots of people have sought to avoid ‘sin stocks’ like guns, liquor, or tobacco. More recently, many investors with a particular concern about climate change have sought to divest from companies that produce or are dependent on fossil fuels, as opposed to renewable energy sources.

Suitable for: Negative-screening portfolios place blunt limits on portfolio managers and are not necessarily designed to find the best long-term investments. For that reason, negative-screening strategies are best used by organizations with strong missions or specific philanthropic goals, such as religious institutions. Screening can be challenging to implement as it is often accompanied by higher investment management fees and a more restricted universe of options. At times, sector exclusion may pose a challenge from a fiduciary standpoint.

Approach 2: Consider

Strategy: ESG Integration

Description: ESG integration looks at a firm’s environmental, social and governance data to glean intelligence on its long-term viability and value. In addition to portfolio managers assessing each company on the basis of its financial fundamentals, they also consider material information about its environmental impacts, stakeholder relationships, and governance record. Investments that are strong on these counts are viewed as quality investments that are less likely to be derailed by unforeseen risks.

Example: The implosion of Equifax in 2017, when a data breach exposed the personal information of 145.5 million Americans and wreaked havoc on its reputation and its stock price. Monitoring the firm’s ESG data could have helped in forming a clearer picture of the true risks of investing in Equifax.

Suitable for: This strategy has the broadest appeal for most investors because it builds on traditional analysis, rather than trying to replace or constrain it. A well-developed ESG rating system allows investors to benefit from a firm’s financial gains while being aware of risks that might not show up on a balance sheet. It also gives investors an opportunity to get an early look at firms that are exploring—and potentially utilizing—impact-related opportunities.

Approach 3: Sharpen your focus

Strategy: Thematic Investing

Description: A specialized approach that prioritizes specific impact issues, such as expanding the use of renewable energy, improving access to healthcare, or addressing racial equity. Unlike negative screening, these strategies tend to take a more constructive approach, actively investing in firms that have solutions to offer while also achieving financial goals.

Example: As environmental concerns have become more severe, investment managers are responding by presenting public and private investments that target companies offering sustainable solutions. We have seen a variety of themes here, ranging from agriculture technology, energy efficiency, water and waste management, to food security and access. Investors also are increasingly focused on DEI, that is, diversity, equity, and inclusion, and are taking steps to view and assess their portfolio through this lens.



Suitable for: The idea with thematic investing is to be proactive with your capital. The approach is a good fit for investors with a specific interest, especially those who prefer to focus on investing in companies offering solutions rather than avoiding firms deemed problematic.

Approach 4: Progress by proxy

Strategy: Engagement

Description: Invest in the firms you like but take an active approach to discussing ESG and impact issues with company management, and/or utilize proxy votes to focus the company’s attention on matters of concern. This strategy tends to work best when investors join forces in voting blocs or other organized campaigns to communicate with the company.

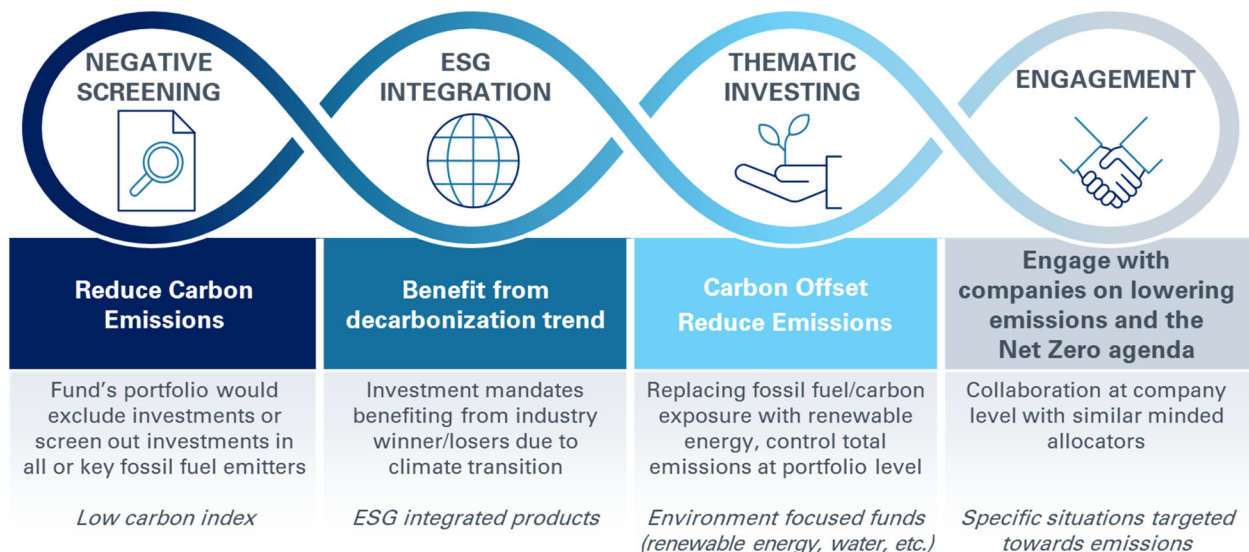
Example: Shareholder initiatives by large institutional investors, like New York City’s pension fund, which has pressured major companies to release workforce data on race and gender or face a shareholder vote.

Suitable for: Engagement demands time and organization, so the strategy is best employed by professionals with the time and resources to build alliances and see the strategy through.

These approaches are not mutually exclusive, and investors often explore multiple options depending on their goals and objectives. When pension plans are considered specifically, the following trends emerge:

- Negative screening: Some plans explore this option for low-carbon or fossil fuel free mandates. Sector exclusion may pose a challenge from a fiduciary standpoint.
- ESG Integration: An ongoing area of focus.
- Thematic investing: An increasing area of focus as some pensions explore emission targets and diversity mandates.
- Engagement: Pension plans dominate this segment. Most engagement efforts are geared towards emissions, equity, and governance issues.

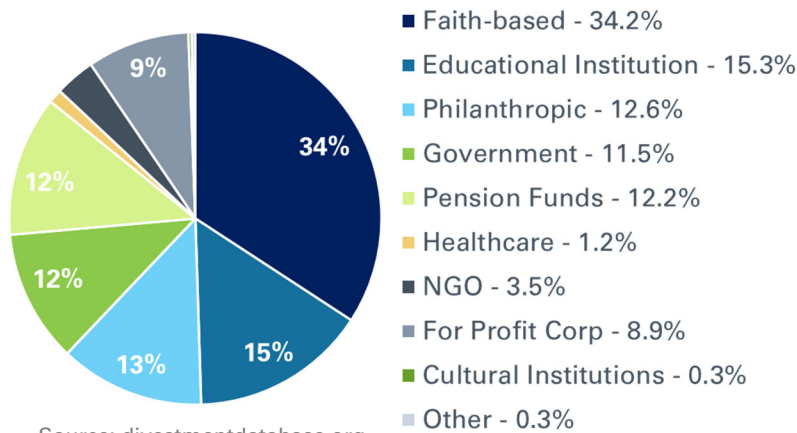
Taking these four approaches and applying them specifically to climate may result in the following types of portfolio mandates.



Prior to selecting an approach, investors may benefit from undergoing a process to determine portfolio exposures that may be most impacted by climate risks. Depending on the investor type, a process to reduce or eliminate (divest) exposure may follow. In NEPC’s 2017 paper “Fossil Fuel Divestment: Considerations for Institutional Portfolios” we described the many considerations that investors should evaluate when evaluating a divestment approach, including, but not limited to the impact on asset allocation, volatility, returns and costs.

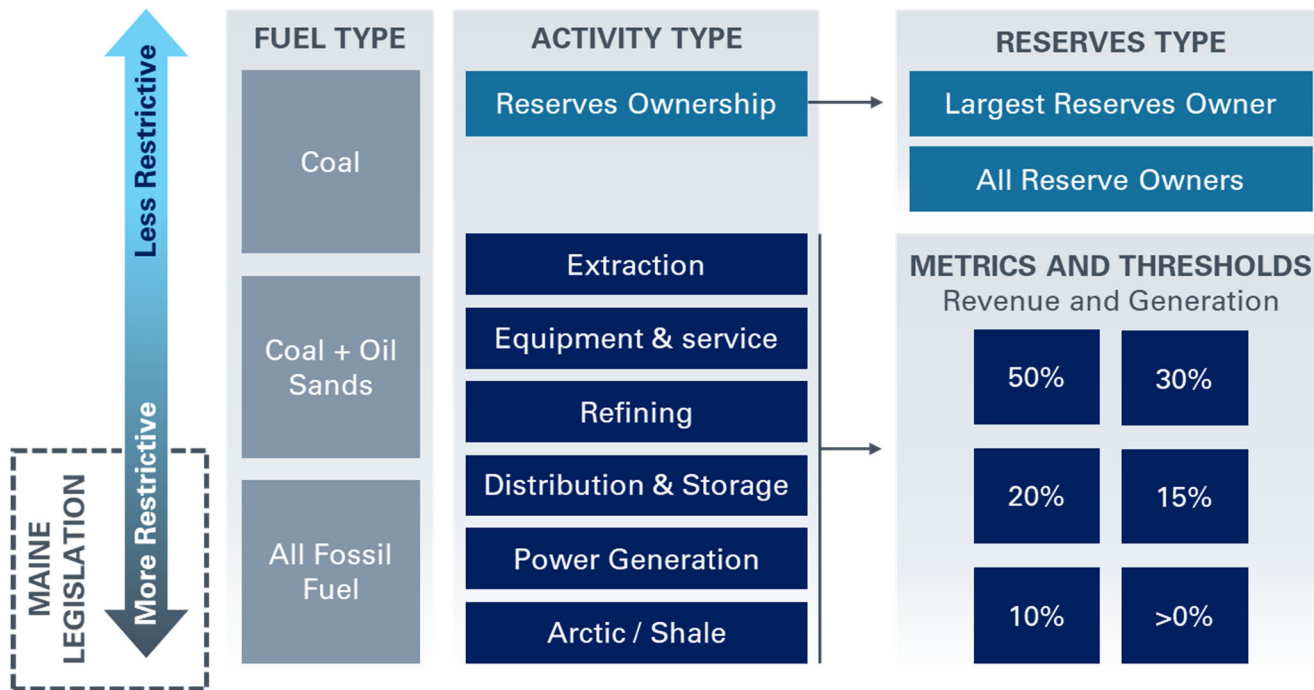
Divestment Trends

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. As seen to the right, the majority of these institutions are mission related (faith-based, education, philanthropic, etc.) and may not be subject to the same regulations as pension plans. Relating this back to the possible negative outcomes of a divestment approach on portfolio returns, in the case of public pension funds the government (and ultimately taxpayers) are generally the backstop if returns aren’t met, which is an important distinction between public pensions and the other institutions in the chart above.



Source: divestmentdatabase.org

If a determination is made to divest, in this case from fossil fuels, there are still several decisions to make. The below graphic highlights some of these points, including what types of fuels, what type of activity, reserves, and if thresholds will be utilized based on revenue and/or generation.



Source: MSCI



Even after the above points are evaluated, there is a spectrum of divestment commitments among investors which range from less to more restrictive. These implementation approaches may be based on industry membership or only following a security-by-security review on fundamental investment characteristics, often through the lens of a long-term business plan or potential to adapt to the energy transition.

As indicated, many commitments may be partial – such as focusing on the largest fossil fuel companies by reserve, or focusing on a specific asset class. As investors evaluate their portfolios for exposure, we may see commitments become more comprehensive. Importantly, an announcement by an investor does not indicate divestment action is complete. In practice, announcements are usually followed by significant evaluation and discussion about implementation plans.



Source: divestmentdatabase.org

Importantly, investors rely on flexibility in their divestment statements to accommodate implementation challenges. Areas that require specificity for implementation:

- 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 current market

- Determine if engagement will have a role (or not)

A thorough review of the above items would address operational complexity for the investor and anticipated costs. Maximum flexibility assumes no legislation is forcing a specific approach. While many divestment announcements have been made over the last several years, the legislation outcomes are mixed.

For a summary of legislation being explored or implemented by states, Ropes & Gray has periodically published a survey of “State Regulation of ESG Investment Decision-Making by Public Retirement Plans”. For this report, the August 2022 update was reviewed, specifically looking at “Actions Promoting Divestment from Fossil Fuel and/or Firearms/Ammunition Companies”. We found the following:

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

Notably, only two states have legislation currently in effect – Connecticut and Maine. Connecticut has a Responsible Gun Policy, which applies to Connecticut Retirement Plans and Trust Funds. Maine stands alone as the only state with enacted fossil fuel divestment legislation. This will be important to keep in mind whenever comparisons are made to peers.



SECTION B: IDENTIFY AND QUANTIFY THE SYSTEM'S PORTFOLIO HOLDINGS SUBJECT TO DIVESTMENT

This section of the report will outline the process conducted to identify and quantify the System's portfolio holdings subject to divestment, across both public and private markets.

Divestment Legislation

The Maine 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).

"Fossil fuel infrastructure" means 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.

As noted in the legislation, a final report to the joint standing committee regarding the completion of divestment is due on January 1, 2026.

Process to Identify Current Holdings – as of June 30, 2022

NEPC worked in partnership with MSCI to produce a comprehensive analysis of the MainePERS public market holdings. MSCI created a customized screen to map the Maine legislation into their proprietary ESG Manager portal. All public market holdings were uploaded to the MSCI ESG Manager portal to run through the custom screen. This is a repeatable process for the future, but does come at a cost for access to the MSCI ESG Manager portal. Note that this tool is only useful for the public market, not the private market, holdings.

MainePERS Staff provided information regarding private market portfolio holdings that are subject to divestment. The Staff assessment of holdings was based on fossil fuel Global Industry Classification Standard (GICS) codes.

The fossil fuel and private prison (FF/PP) exposure across the total fund is summarized below. As shown (refer appendix for additional details), the total exposure across the fund is 7.63% (or \$1,375.5 million) with the majority in the Private Markets allocation.



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%

It should be noted that Fossil fuel-related investments represent the vast majority of exposure in the total fund. Private prison exposure accounts for 0.0009% or \$0.2M of total Fund market value, so we will primarily focus on Fossil fuel related exposure throughout this report.

Public Markets Divestment Exposure

As shown in the table below, the divestment exposure of 2.47% in Public Markets is spread across US Equity, International Equity and Traditional Credit. The total market value is \$445.5 million. The majority of the public market divestment exposure is concentrated in the public equity allocation.

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%	

Diving deeper into the Public Markets, the table below details the dollar amount and the number of holdings within each Asset of Public Markets. While the number of holdings is highest in Traditional Credit, the dollar amount is small. The table also notes where the limited amount of Private Prison exposure is held, within the Russell 2000 allocation.



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	

Going one step further into specific holdings, the top 3 holdings across the Public Markets (along with their dollar exposure) are noted below. Exxon Mobil shows up in both the Russell 1000 and Traditional Credit as a top holding. We have included a full listing of exposures in the Appendix of this report, and noted which aspect of the Maine legislation caused each holding to be tagged.

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)

Private Markets Divestment Exposure

As shown in the table below, the divestment exposure of 5.16% in Private Markets is spread across Infrastructure, Private Equity, Private Credit and Natural Resources. The total market value is \$930.0 million. The majority of the private market divestment exposure is concentrated in the infrastructure allocation.

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%	

Diving deeper into the Private Markets, the table below details the dollar amount and the number of funds within each segment of Private Markets. Out of 302 Private Market funds that MainePERS owns, 58 funds have fossil fuel exposure, three of which are co-investments. For further reference, these 58 funds include 25 funds in infrastructure (including two co-investments), 22 funds in private equity (including one co-investment), 8 in private credit, and 3 in natural resources. The number of holdings and market value are the highest in infrastructure.

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

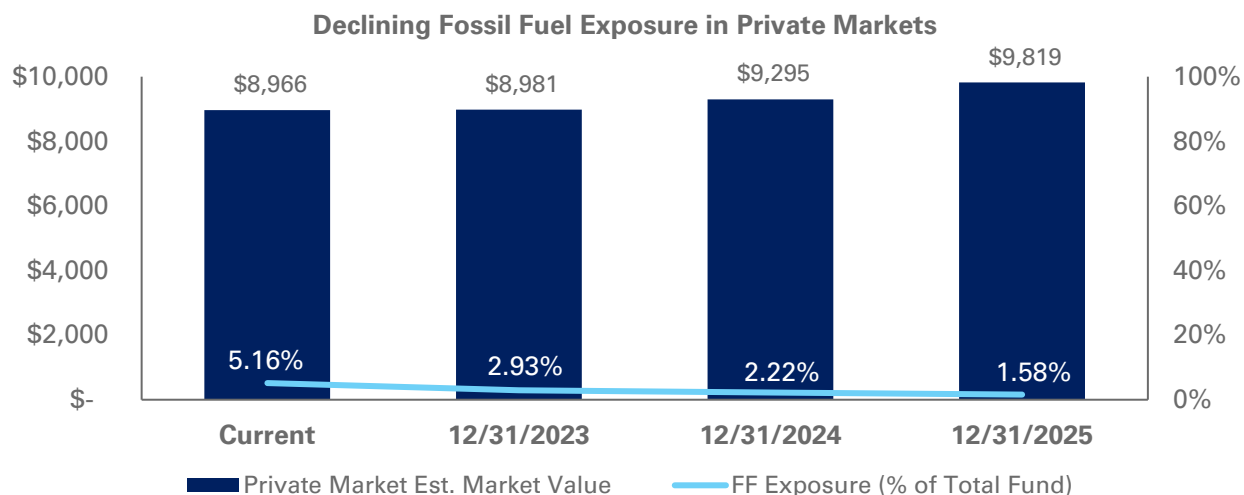


Since existing private market fossil fuel exposures are held in fixed-life funds, an additional evaluation was run to estimate how these holdings may change through the end of 2025 (keeping in mind that the legislation calls for the completion of divestment to occur by January 1, 2026). NEPC used our internal forecasts to estimate how each fund would wind down over the next three years. Several assumptions were included in this forecast:

- MainePERS continues to make commitments to private market investment opportunities at the 47.5% target
- No new commitments are made 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

The following table and chart summarize the estimated decline of divestment exposure within Private Markets over the next three years. As shown, our forecasts indicate that the number of funds will decrease from 58 to 48, and the market value exposure will drop significantly from \$930.0 million to \$327.2 million.

	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



The chart above demonstrates the impact that this decline in private market exposure will have on the total fossil fuel exposure, declining from 5.16% of the total fund to 1.58% of the total fund. While the above exercise can aid in understanding the anticipated shift in private markets, it is important to highlight that these are only estimates and results could differ significantly depending on market conditions and each manager’s results.



SECTION C: IDENTIFY AND QUANTIFY THE DIRECT INVESTMENT COSTS

In this section of the report, we will discuss the potential costs and considerations to divest completely from fossil fuels and private prisons across the public and private market allocations.

Public Market Exposure

Currently, 2.47% of the MainePERS total public market allocation is estimated to be from fossil fuels and private prisons. Most of this exposure is from fossil fuel investments within domestic equity, followed by international equity, and then the traditional credit allocation. The typical paths to implement divestment would include either exploring fossil-free products and/or customizing a Separately Managed Account (SMA). While off-the-shelf fossil fuel free products exist in the market today, they may not meet the divestment criteria defined within the State of Maine’s legislation nor would they exclude private prisons from the investment mandate. As such, for implementing divestment within its public market allocation, MainePERS will need to consider Separately Managed Accounts (SMAs). SMAs have additional costs and considerations that need to be evaluated such as:

- On average, SMA’s incur higher management fees, higher trading costs, legal paperwork, creating custodian accounts, proxy voting expenses, and an increase in time/resource commitment from the staff.
- The predicted tracking error for an SMA account tends to be higher relative to its comparable index fund. A fund manager can optimize the portfolio to reduce the tracking error however, the exclusion of sectors or investments from a portfolio limits the diversification benefit as well as the ability to replicate an index holding.
- Other considerations such as retaining other ad-hoc services and licensing expenses such as an updated list of securities/screens to provide to the SMA manager, on-going reporting on exposures and monitoring for compliance.

The table below summarizes the estimations for cost increases for using SMAs and the associated considerations for implementation.

Consideration for SMAs	
US Equity	<ul style="list-style-type: none"> ▪ Increase in management fees on average could range 1-2 bps higher ▪ Own custody account and expect increased transaction costs ▪ Relatively easy to set up and implement an SMA
International Equity (ACWI)	<ul style="list-style-type: none"> ▪ Increase in management fees on average of 2-3 bps higher than US Equity ▪ Challenging to set up and implement efficiently as MainePERS will need to set up individual custody accounts in each of the underlying countries. This may take an estimated 6-12 months to open all custody accounts. In addition, there will be licensing requirements to invest directly in some emerging market countries ▪ Potentially higher tracking error
Traditional Credit	<ul style="list-style-type: none"> ▪ Potentially higher trading costs for fixed income ▪ Relatively easy to set up and implement



Following is a summary of costs that will need to be considered when implementing an SMA vehicle:

- **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 a SMA, thereby incurring additional transaction costs in the 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 Market Exposure

Currently, 5.16% of MainePERS fossil fuel exposure is from the private market allocation. Since private market fossil fuel exposures are held in fixed-life funds, our analysis was focused on two options:

Option#1 was to estimate how these fossil fuel exposures are likely to change before the timeline laid out in the legislation (January 2026). This estimate is outlined in Section B.

Option#2 was to evaluate the potential discounts in valuation if the funds containing fossil exposures were sold in the secondary market. For clarification, secondary purchases involve one party (a secondaries manager) buying an existing limited partnership (LP) interest in one or more private markets funds from another party (such as MainePERS, for example). Many LPs have explored this avenue to access liquidity or to rebalance a portfolio or as a return seeking/risk management tool. Secondaries managers typically purchase these LP interests at a discount or premium based on their underwriting of fund holdings and market valuations. The secondaries market has grown rapidly over the past few years as more LPs and GPs explore ways to manage liquidity and access opportunities within private market investments.

For Option #2, NEPC contacted four established secondaries fund managers to obtain tentative valuation ranges for the private market portfolio. Initial feedback from these managers provided the following assessment:



	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.

Based on the valuation estimates provided by these managers, on average, infrastructure funds held value relatively well as the underlying assets remain attractive in this market environment. This is important to note because most of the fossil fuel exposure within private markets is from the plan's infrastructure investments. In contrast, Energy fund interest was low. For those few fund managers with dedicated Energy or Real Asset secondary funds, interest varied based on the quality of the assets with suggested valuation discounts ranging from 30% to 50+%. Finally, Private Equity (PE) funds in general are expected to be discounted in the range of 20%-30% of fund valuation. This is higher than usual due to the lag in PE valuations fully reflecting the current public market and economic outlook. If MainePERS decides to explore a secondary sale, it should be noted that the best practice would dictate retaining services of a third-party broker service for best execution (additional cost). In addition to these one-time costs, there will be other costs to consider such as the on-going monitoring for compliance with the legislation as well as the opportunity cost of significantly reducing the infrastructure allocation for the future.



SECTION D: IDENTIFY AND QUANTIFY THE DIRECT INVESTMENT IMPACT ON MAINEPERS PORTFOLIO

In this section of the report, we will discuss the impact on MainePERS portfolio return, risk, and asset exposures, from implementing divestment measures.

The overall impact on the portfolio from implementing screening involves three aspects: Reduced diversification benefit which will impact portfolio volatility, increased cost, reduced or lost investment opportunity in the future.

Public Market Portfolio

To understand the impact on the public market portfolio, NEPC conducted a (back-tested) hypothetical scenario analysis. In this analysis, two portfolios were compared - one (Benchmark Portfolio) consisting of the existing public equity allocation and the other (Divested Portfolio) consisting of the Benchmark Portfolio that was divested from fossil fuel and private prison investments as defined in the state's legislation. This hypothetical performance was prepared for NEPC by the investment firm Parametric at NEPC's request. This performance represents back-tested historical returns based on the exclusion of fossil fuels and private prisons (following Maine's legislative directive), with trailing periods calculated as of June 30, 2022.

The results indicate that the variability of returns (volatility), will be different than the index due to loss of diversification benefit from sector exclusion. Over the long 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.

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%

*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.



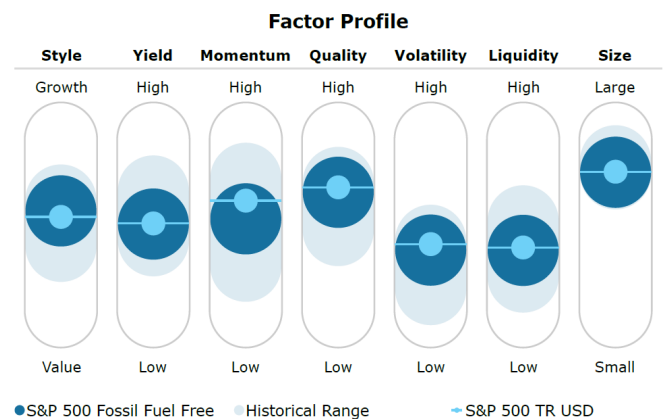
The primary reason for this increase in variability of returns is that the composition of the portfolio changes as sectors are excluded from the investment mandate. Contribution to return varies by sector from year to year as seen in the exhibit below. An increase in portfolio concentration in certain sectors will change the return-risk profile for the portfolio going forward.

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022**
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 1.85	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 26.71	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 13.27	Consumer Staples -8.00	NYSE Equal Sector Weight 23.21	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 -8.59	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

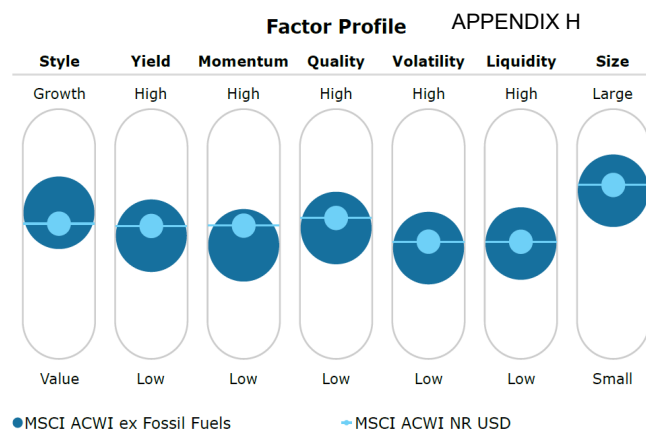
Source: Bloomberg. Data shown in percentages. 2022 data as of September 30, 2022.

In addition, the Divested portfolio may also exhibit variability with respect to a variety of measures, such as Value/Growth tilt, dividend yield, and other such valuation metrics. For example, when we compare an ex-fossil fuel index with a broad index we find the following difference in characteristics, indicating a growth tilt to ex-fossil fuel index.

	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
# of Holdings	489	503



	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
# of Holdings	2,750	2,899



Source: Morningstar, eVestment and/or Strategy materials. Past performance is no guarantee of future results. As of 9/30/2022.

Private Market Portfolio

To understand the impact of divestment on the private market portfolio, NEPC used the discount estimates provided by the four secondaries investment managers to arrive at the estimated average dollar loss from discount. The table below provides the break-down of the estimated dollar value of discount across private market holdings. It should be noted that, in private funds, to implement divestment completely, the entire interest in the fund containing fossil exposure would need to be sold or wound down. As such, for Maine to divest the full \$930 million fossil fuel exposure through secondaries transactions, it would require selling off the entire \$2,486.5 million of NAV (full fund value). The approximate loss from the discount from such transactions would be around \$565 million, which is subject to change at the time of actual execution.

	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

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

NEPC also conducted an asset allocation analysis to understand the impact on the expected portfolio risk and return if MainePERS excluded infrastructure assets from its portfolio. We limited this analysis to just infrastructure because it is the largest contributor to fossil fuel exposure within the portfolio. In the table below, we show three portfolio mixes – one with the Policy mix, second with the portfolio ex-infrastructure and the third being a risk-adjusted ex-infrastructure portfolio. For clarification, MainePERS ex-infrastructure represents a proportional re-allocation of the infrastructure allocation across the remaining private market asset classes. And 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.

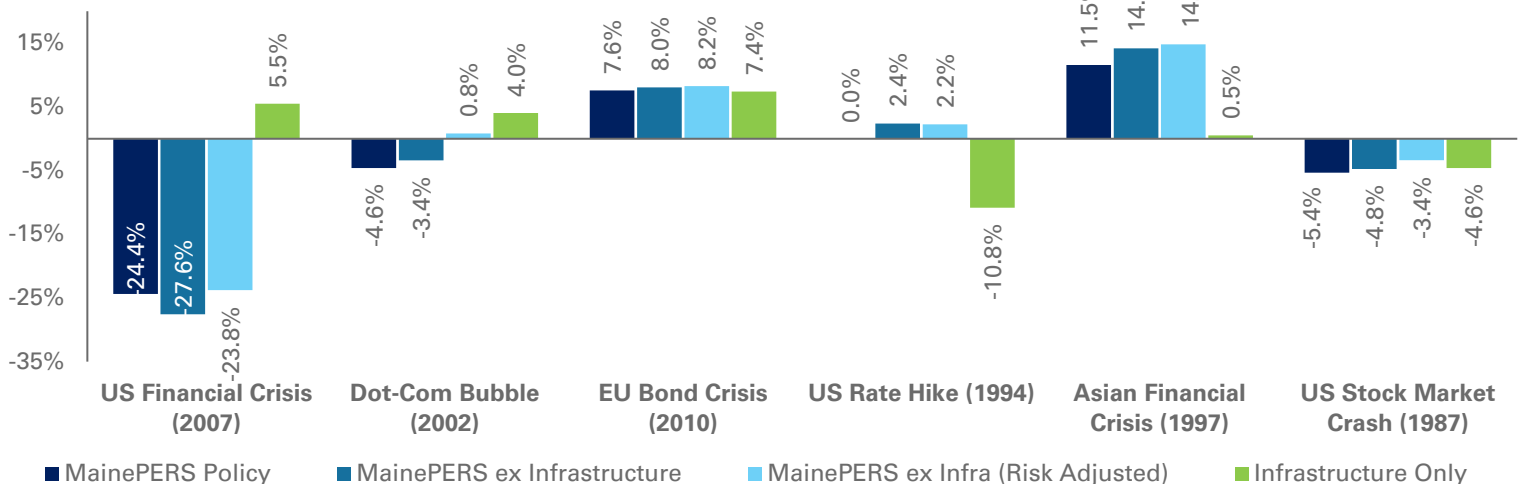


The table below highlights the three portfolio mixes and the difference in allocations across various asset classes and the ultimate impact on the return, risk, and Sharpe ratio (excess return per unit of risk). We also show the results of a stress test that demonstrates the hypothetical impact on these three portfolios during periods of historical market crisis. The results indicate an increase in return variability, which when controlled in the risk-adjusted portfolio may have an impact on future returns due to a reduction in the equity allocation.

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

Stress Test - Hypothetical Cumulative Return

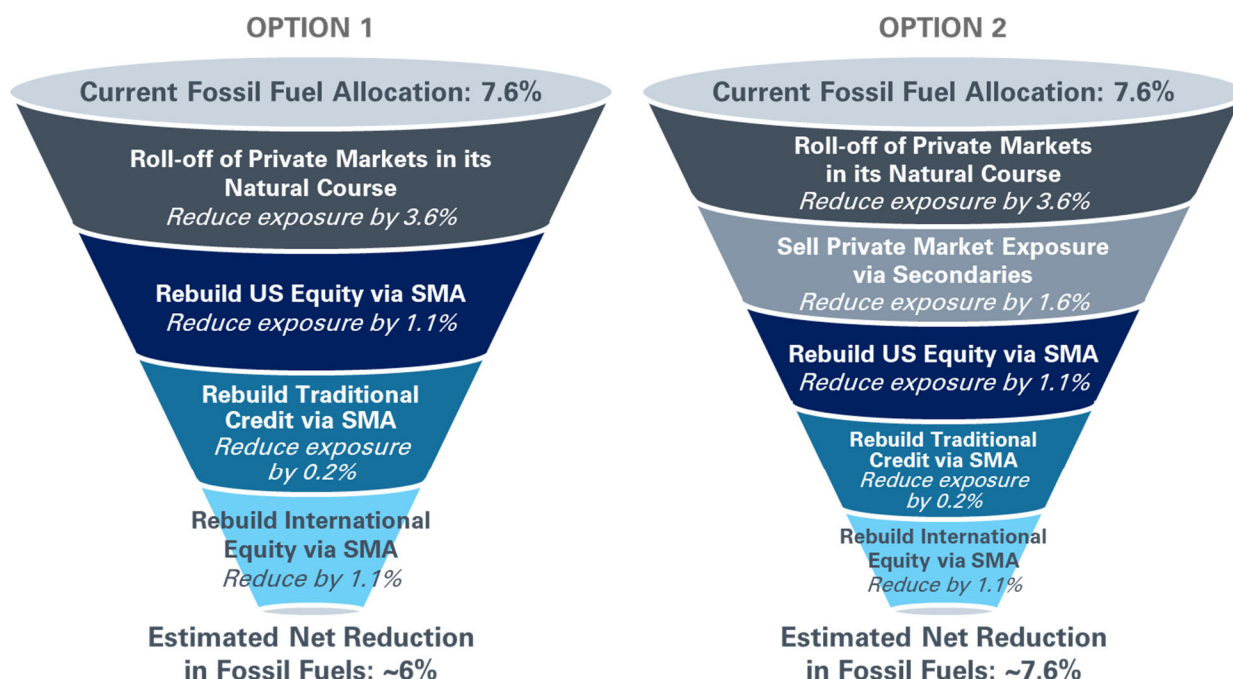


SUMMARY

In summary, MainePERS currently has 7.6% in holdings that fall within the scope of the new legislation (refer to Appendix for more details). Two options that can decrease this exposure, in order of ease of implementation, are the following:

- Option 1: Do nothing with the public market allocations, allow the existing private markets to roll-off and make no new commitments to private markets that fall under the legislation. This should, over the next three years, reduce the exposure by 3.6%.
- Option 2: Do nothing with the public market allocations, allow the existing private markets to roll-off and make no new commitments to private markets that fall under the legislation (that is, follow Option 1 to reduce by 3.6%). Then, following the roll-off in three years, explore a secondaries sale of remaining Private Markets holdings to reduce the exposure by the outstanding 1.6%. While this approach provides a faster way to reduce the additional exposure from private markets, its implementation may result in a loss (valuation discount).
- Additional actions that can be taken, alongside each option above:
 - Restructure US Equity with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 1.1%. This will involve some operational complexity and cost considerations.
 - Restructure Traditional Credit with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 0.2%. This will involve some operational complexity and cost considerations.
 - Restructure International Equity with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 1.1%. This will be a costly and operationally challenging option.

The chart below depicts these two options (with add-ons) to reduce fossil fuel exposure:



As indicated, Option 1 will not bring the FF exposure to 0% by 2026. Option 2 can bring the FF exposure to 0% by 2026, but would involve a secondary sale. Further analysis would need to be done to evaluate alternatives that could help minimize some of the costs borne by the Plan. The purpose of this report was to clarify the total exposure across the portfolio and to provide a summary of the anticipated costs to divest pursuant to the legislation.



APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE-RUSSELL 1000

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
Russell 1000	ALCOA CORPORATION	0.02%			x										
Russell 1000	ALLIANT ENERGY CORPORATION	0.04%			x										
Russell 1000	AMEREN CORPORATION	0.06%			x										
Russell 1000	AMERICAN ELECTRIC POWER COMPANY, INC.	0.13%			x									x	
Russell 1000	ANTERO MIDSTREAM CORPORATION	0.01%				x						x			
Russell 1000	ANTERO RESOURCES CORPORATION	0.02%	x				x	x							
Russell 1000	APA CORPORATION	0.03%	x				x	x							
Russell 1000	ATMOS ENERGY CORPORATION	0.04%								x					
Russell 1000	BAKER HUGHES COMPANY	0.07%				x					x				
Russell 1000	BERKSHIRE HATHAWAY INC.	1.31%		x	x										
Russell 1000	CASEY'S GENERAL STORES, INC.	0.02%								x					
Russell 1000	CENTERPOINT ENERGY, INC.	0.05%			x										
Russell 1000	CHENIERE ENERGY, INC.	0.09%				x				x					
Russell 1000	CHESAPEAKE ENERGY CORPORATION	0.03%	x				x	x							
Russell 1000	CHEVRON CORPORATION	0.76%	x				x	x							
Russell 1000	CMS ENERGY CORPORATION	0.05%			x										
Russell 1000	CONOCOPHILLIPS	0.31%	x				x	x							
Russell 1000	CONTINENTAL RESOURCES, INC.	0.01%	x				x	x							
Russell 1000	Coterra Energy Inc.	0.05%	x				x	x							
Russell 1000	DEVON ENERGY CORPORATION	0.10%	x				x	x							
Russell 1000	DIAMONDBACK ENERGY, INC.	0.06%	x				x	x							
Russell 1000	Dominion Energy, Inc.	0.17%			x										
Russell 1000	DT MIDSTREAM, INC.	0.01%				x						x			
Russell 1000	DTE ENERGY COMPANY	0.06%			x										
Russell 1000	DUKE ENERGY CORPORATION	0.22%			x										
Russell 1000	ENTERGY CORPORATION	0.06%			x										
Russell 1000	EDG RESOURCES, INC.	0.17%	x				x	x							
Russell 1000	EQT CORPORATION	0.03%	x				x	x							
Russell 1000	Evergy, Inc.	0.04%			x										
Russell 1000	EXXON MOBIL CORPORATION	0.96%	x				x		x						
Russell 1000	FIRSTENERGY CORP.	0.06%			x										
Russell 1000	FREEPORT-MCMORAN INC.	0.11%	x												
Russell 1000	HALLIBURTON COMPANY	0.08%				x					x				
Russell 1000	HESS CORPORATION	0.08%	x				x	x							
Russell 1000	HF SINCLAIR CORPORATION	0.02%					x		x						
Russell 1000	IDACORP, INC.	0.01%			x										
Russell 1000	KINDER MORGAN, INC.	0.09%				x						x			
Russell 1000	MARATHON OIL CORPORATION	0.04%	x				x	x							
Russell 1000	MARATHON PETROLEUM CORPORATION	0.12%					x		x						
Russell 1000	MDU RESOURCES GROUP, INC.	0.01%			x										
Russell 1000	NATIONAL FUEL GAS COMPANY	0.02%	x												
Russell 1000	NEW FORTRESS ENERGY INC.	0.01%				x				x					
Russell 1000	NEXTERA ENERGY, INC.	0.40%			x										
Russell 1000	NISOURCE INC.	0.03%			x					x					
Russell 1000	NOV INC.	0.02%				x					x				
Russell 1000	NRG ENERGY, INC.	0.02%			x										
Russell 1000	OCCIDENTAL PETROLEUM CORPORATION	0.13%	x				x	x							
Russell 1000	OGE ENERGY CORP.	0.02%			x										
Russell 1000	ONEOK, INC.	0.07%				x						x			
Russell 1000	OVINTIV INC.	0.03%	x				x	x							
Russell 1000	PDC ENERGY, INC.	0.02%	x				x	x							
Russell 1000	PHILLIPS 66	0.10%					x			x					
Russell 1000	PINNACLE WEST CAPITAL CORPORATION	0.02%			x										
Russell 1000	PIONEER NATURAL RESOURCES COMPANY	0.14%	x				x	x							
Russell 1000	PPL CORPORATION	0.05%			x								x		
Russell 1000	RANGE RESOURCES CORPORATION	0.02%	x				x	x							
Russell 1000	Schlumberger N.V.	0.13%				x					x				
Russell 1000	SEMPRA ENERGY	0.13%										x			
Russell 1000	SOUTHWESTERN ENERGY COMPANY	0.02%	x				x	x							
Russell 1000	TARGA RESOURCES CORP.	0.04%				x						x			
Russell 1000	Texas Pacific Land Corp	0.02%					x								
Russell 1000	THE AES CORPORATION	0.04%			x									x	
Russell 1000	THE SOUTHERN COMPANY	0.20%			x									x	
Russell 1000	THE WILLIAMS COMPANIES, INC.	0.10%				x						x			
Russell 1000	UGI CORPORATION	0.02%								x					
Russell 1000	VALERO ENERGY CORPORATION	0.11%					x		x						
Russell 1000	VISTRA CORP.	0.03%			x										
Russell 1000	WEC ENERGY GROUP, INC.	0.08%			x										
Russell 1000	Xcel Energy Inc.	0.10%			x										



APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE-RUSSELL 2000

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage/Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
Russell 2000	ALLETE, INC.	0.15%		x	x										x
Russell 2000	ALPHA METALLURGICAL RESOURCES, INC.	0.10%		x											x
Russell 2000	ALTO INGREDIENTS, INC.	0.01%					x								
Russell 2000	ARCH RESOURCES, INC.	0.10%		x											x
Russell 2000	Archaea Energy Inc	0.04%					x								
Russell 2000	ARCHROCK INC.	0.05%				x									
Russell 2000	ARCO CORP.	0.03%								x					
Russell 2000	AVISTA CORPORATION	0.13%			x										
Russell 2000	BERRY CORPORATION (BRY)	0.03%	x				x	x							
Russell 2000	BLACK HILLS CORPORATION	0.21%		x	x							x			x
Russell 2000	Borr Drilling Limited	0.03%				x									
Russell 2000	BRIGHAM MINERALS, INC.	0.06%	x				x								
Russell 2000	BRISTOW GROUP INC.	0.02%				x									
Russell 2000	BROOKFIELD INFRASTRUCTURE CORPORATION	0.18%										x			
Russell 2000	CACTUS, INC.	0.10%				x					x				
Russell 2000	CALIFORNIA RESOURCES CORPORATION	0.13%	x				x	x							
Russell 2000	CALLON PETROLEUM COMPANY	0.08%	x				x	x							
Russell 2000	CENTENNIAL RESOURCE DEVELOPMENT, INC.	0.05%	x				x	x							
Russell 2000	CHAMPIONX CORPORATION	0.18%				x					x				
Russell 2000	CHESAPEAKE UTILITIES CORPORATION	0.09%								x					
Russell 2000	CIVITAS RESOURCES, INC.	0.17%	x				x	x							
Russell 2000	CLEAN ENERGY FUELS CORP.	0.03%					x			x					
Russell 2000	CNX RESOURCES CORPORATION	0.14%	x				x	x							
Russell 2000	COMSTOCK RESOURCES, INC.	0.05%	x				x	x							
Russell 2000	CONSOL ENERGY INC.	0.07%		x										x	
Russell 2000	CORECIVIC, INC.	0.06%													x
Russell 2000	CRESCENT ENERGY COMPANY	0.02%	x				x	x							
Russell 2000	CVR ENERGY, INC.	0.04%					x		x						
Russell 2000	DELEK US HOLDINGS, INC.	0.08%					x		x						
Russell 2000	DENBURY INC.	0.13%	x				x	x							
Russell 2000	DMC GLOBAL INC.	0.01%				x					x				
Russell 2000	Dorian LPG Ltd.	0.02%				x						x			
Russell 2000	DRIL-QUIP, INC.	0.04%									x				
Russell 2000	EARTHSTONE ENERGY, INC.	0.03%	x				x	x							
Russell 2000	Equitrans Midstream Corporation	0.11%				x						x			
Russell 2000	EXPRO GROUP HOLDINGS N.V.	0.04%				x					x				
Russell 2000	FLEX LNG LTD.	0.03%				x						x			
Russell 2000	FRONTLINE LTD.	0.05%				x						x			
Russell 2000	GEVO, INC.	0.02%					x								
Russell 2000	GREEN PLAINS INC.	0.04%					x								
Russell 2000	GULFPORT ENERGY CORPORATION	0.04%	x				x	x							
Russell 2000	HELIX ENERGY SOLUTIONS GROUP, INC.	0.02%				x					x				
Russell 2000	HELMERICH & PAYNE, INC.	0.19%				x		x							
Russell 2000	INTERNATIONAL SEAWAYS, INC.	0.05%				x							x		
Russell 2000	KINETIK HOLDINGS INC.	0.02%				x									
Russell 2000	KOSMOS ENERGY LTD.	0.12%	x				x	x					x		
Russell 2000	LAREDO PETROLEUM, INC	0.05%	x				x	x							
Russell 2000	LIBERTY ENERGY INC.	0.08%				x					x				
Russell 2000	MAGNOLIA OIL & GAS CORPORATION	0.15%	x				x	x							
Russell 2000	MATADOR RESOURCES COMPANY	0.23%	x				x	x							
Russell 2000	MGE ENERGY, INC.	0.12%			x										
Russell 2000	Montauk Renewables Inc	0.03%								x					
Russell 2000	MURPHY OIL CORPORATION	0.20%	x				x	x							
Russell 2000	MURPHY USA INC.	0.23%								x					
Russell 2000	NABORS INDUSTRIES LTD.	0.05%				x		x							
Russell 2000	NEW JERSEY RESOURCES CORPORATION	0.19%								x					
Russell 2000	NextDecade Corp	0.01%				x							x		
Russell 2000	NEXTER OILFIELD SOLUTIONS INC.	0.07%				x					x				
Russell 2000	NOBLE CORPORATION	0.04%				x		x							
Russell 2000	NORTHERN OIL AND GAS, INC.	0.07%	x				x								
Russell 2000	NORTHWEST NATURAL HOLDING COMPANY	0.08%								x					
Russell 2000	NORTHWESTERN CORPORATION	0.14%	x		x										
Russell 2000	NOW INC.	0.05%									x				
Russell 2000	OCEANEERING INTERNATIONAL, INC.	0.05%				x					x				
Russell 2000	ONE GAS, INC.	0.19%								x					
Russell 2000	Otter Tail Corporation	0.12%			x										
Russell 2000	PAR PACIFIC HOLDINGS, INC.	0.03%	x				x		x						
Russell 2000	PATTERSON-UTI ENERGY, INC.	0.15%				x		x							
Russell 2000	PBF ENERGY INC.	0.12%					x		x						
Russell 2000	PEABODY ENERGY CORPORATION	0.11%		x											x
Russell 2000	PNM RESOURCES, INC.	0.18%			x										
Russell 2000	PORTLAND GENERAL ELECTRIC COMPANY	0.19%			x										
Russell 2000	PROPETRO HOLDING CORP.	0.04%				x					x				
Russell 2000	RAMACO RESOURCES, INC.	0.01%													x
Russell 2000	Ranger Oil Corporation	0.03%	x				x	x							
Russell 2000	REX AMERICAN RESOURCES CORPORATION	0.02%					x								
Russell 2000	RFC, INC.	0.02%				x					x				
Russell 2000	SANDRIDGE ENERGY, INC.	0.01%	x				x	x							
Russell 2000	SELECT ENERGY SERVICES, INC.	0.02%				x						x			
Russell 2000	SILVERBOW RESOURCES, INC.	0.01%	x				x	x							
Russell 2000	SM ENERGY COMPANY	0.18%	x				x	x							
Russell 2000	SOUTH JERSEY INDUSTRIES, INC.	0.18%								x					
Russell 2000	Spire Inc.	0.17%								x					
Russell 2000	TALOS ENERGY INC.	0.05%	x				x	x							
Russell 2000	TEEKAY CORPORATION	0.01%				x							x		
Russell 2000	TELLURIAN INC.	0.07%	x				x	x							
Russell 2000	THE GEO GROUP, INC.	0.03%													x
Russell 2000	TIDEWATER INC.	0.04%				x					x				
Russell 2000	TRAVELCENTERS OF AMERICA INC.	0.02%								x					
Russell 2000	U.S. SILICA HOLDINGS, INC.	0.04%				x					x				
Russell 2000	UNITED STATES LIME & MINERALS, INC.	0.01%	x												
Russell 2000	Valaris Limited	0.11%				x		x							
Russell 2000	W&T OFFSHORE, INC.	0.02%	x				x	x							
Russell 2000	WARRIOR MET COAL, INC.	0.07%		x											
Russell 2000	WEATHERFORD INTERNATIONAL PUBLIC LIMITED COMPANY	0.06%				x					x				
Russell 2000	WHITING PETROLEUM CORPORATION	0.12%	x				x	x							
Russell 2000	WORLD FUEL SERVICES CORPORATION	0.06%					x			x					



APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
ACWI ex US	ABOITIZ EQUITY VENTURES INC.	0.01%			x										
ACWI ex US	ABU DHABI NATIONAL OIL COMPANY FOR DISTRIBUTION PJSC	0.02%								x					
ACWI ex US	AC Energy Corporation	0.01%											x		
ACWI ex US	ACWA POWER Company	0.01%			x								x		
ACWI ex US	ADANI ENTERPRISES LIMITED	0.04%												x	
ACWI ex US	ADANI POWER LIMITED	0.01%											x		
ACWI ex US	ADANI TOTAL GAS LIMITED	0.04%								x					
ACWI ex US	ADANI TRANSMISSION LIMITED	0.04%			x										
ACWI ex US	AFRICAN RAINBOW MINERALS LIMITED	0.01%		x										x	
ACWI ex US	AK ALROSA PAO	0.00%	x												
ACWI ex US	AKER BP ASA	0.04%	x				x	x							
ACWI ex US	ALFA, S.A.B. de C.V.	0.01%	x												
ACWI ex US	ALIMENTATION COUCHE-TARD INC.	0.15%								x					
ACWI ex US	AltaGas Ltd.	0.03%						x							
ACWI ex US	Aluminum Corporation of China Limited	0.01%												x	
ACWI ex US	Aluminum Corporation of China Limited	0.00%												x	
ACWI ex US	AMPOL LIMITED	0.03%					x		x						
ACWI ex US	APA Group	0.04%										x			
ACWI ex US	ARC RESOURCES LTD.	0.04%	x				x	x							
ACWI ex US	AYALA CORPORATION	0.01%			x										
ACWI ex US	B.Grimm Power Public Company Limited	0.00%											x		
ACWI ex US	BASF SE	0.17%	x												
ACWI ex US	BEIJING ENTERPRISES HOLDINGS LIMITED	0.01%										x			
ACWI ex US	BHARAT PETROLEUM CORPORATION LIMITED	0.02%					x		x						
ACWI ex US	BHP GROUP LIMITED	0.65%	x	x										x	
ACWI ex US	BP P.L.C.	0.42%	x				x		x						
ACWI ex US	CANADIAN NATURAL RESOURCES LIMITED	0.29%	x				x	x							
ACWI ex US	Canovus Energy Inc.	0.12%	x				x								
ACWI ex US	Centrais Eletricas Brasileiras S.A.	0.04%			x										
ACWI ex US	Centrais Eletricas Brasileiras S.A.	0.01%			x										
ACWI ex US	CEZ, a.s.	0.04%		x	x									x	
ACWI ex US	China Coal Energy Company Limited	0.01%		x	x									x	
ACWI ex US	CHINA GAS HOLDINGS LIMITED	0.02%										x			
ACWI ex US	CHINA LONGYUAN POWER GROUP CORPORATION LIMITED	0.03%			x										
ACWI ex US	China Oilfield Services Limited	0.01%				x					x				
ACWI ex US	China Petroleum & Chemical Corporation	0.05%	x				x								
ACWI ex US	China Petroleum & Chemical Corporation	0.01%	x				x								
ACWI ex US	China Power International Development Limited	0.02%			x								x		
ACWI ex US	CHINA RESOURCES GAS GROUP LIMITED	0.02%								x					
ACWI ex US	China Resources Power Holdings Company Limited	0.02%			x								x		
ACWI ex US	China Shenhua Energy Company Limited	0.04%		x	x									x	
ACWI ex US	China Shenhua Energy Company Limited	0.01%		x	x									x	
ACWI ex US	China Suntien Green Energy Corporation Limited	0.00%				x						x			
ACWI ex US	Chubu Electric Power Company, Incorporated	0.03%			x										
ACWI ex US	CITIC Limited	0.03%	x		x										x
ACWI ex US	CK HUTCHISON HOLDINGS LIMITED	0.08%	x												
ACWI ex US	CK INFRASTRUCTURE HOLDINGS LIMITED	0.02%			x										
ACWI ex US	CLP HOLDINGS LIMITED	0.06%			x										
ACWI ex US	COAL INDIA LTD	0.02%		x										x	
ACWI ex US	COMPAGNIE PETROLIERE IMPERIALE LTEE	0.05%	x				x		x						
ACWI ex US	COSAN S.A.	0.02%					x			x					
ACWI ex US	COSCO Shipping Energy Transportation Co., Ltd.	0.00%				x						x			
ACWI ex US	DCC PUBLIC LIMITED COMPANY	0.03%								x					
ACWI ex US	DIALOG GROUP BERHAD	0.01%				x					x				
ACWI ex US	E.ON SE	0.08%			x										
ACWI ex US	ECOPETROL S.A.	0.02%	x				x		x						
ACWI ex US	EDP - Energias de Portugal, S.A.	0.06%			x										
ACWI ex US	ELECTRICITE DE FRANCE SA	0.02%			x										
ACWI ex US	ELECTRICITY GENERATING PUBLIC COMPANY LIMITED	0.01%		x	x								x	x	
ACWI ex US	EMERA INCORPORATED	0.06%			x								x		
ACWI ex US	Empresas Copec S.A.	0.01%					x			x					
ACWI ex US	Enagas, S.A.	0.02%										x			
ACWI ex US	Enbridge Inc.	0.39%					x					x			
ACWI ex US	Endesa, Sociedad Anonima	0.03%			x										
ACWI ex US	ENEL - SPA	0.20%			x										
ACWI ex US	Enel Americas S.A.	0.01%			x										
ACWI ex US	Enel Chile S.A.	0.00%			x										
ACWI ex US	ENEOS Holdings, Inc.	0.05%	x				x		x					x	
ACWI ex US	ENGIE BRASIL ENERGIA S.A.	0.01%			x										
ACWI ex US	ENGIE SA	0.09%	x		x							x			
ACWI ex US	ENI S.P.A.	0.14%	x				x								
ACWI ex US	ENN ENERGY HOLDINGS LIMITED	0.06%								x					
ACWI ex US	ENN Natural Gas Co., Ltd.	0.00%								x					
ACWI ex US	EQUINOR ASA	0.15%	x				x		x						
ACWI ex US	EXXARO RESOURCES LIMITED	0.01%		x										x	
ACWI ex US	FORMOSA PETROCHEMICAL CORPORATION	0.02%					x		x						
ACWI ex US	Fortis Inc.	0.10%			x										
ACWI ex US	Fortum Oyj	0.03%			x										
ACWI ex US	FOSUN INTERNATIONAL LIMITED	0.01%	x												
ACWI ex US	Franco-Nevada Corporation	0.11%	x												
ACWI ex US	GAIL (INDIA) LIMITED	0.01%	x							x					
ACWI ex US	Galp Energia, SGPS, S.A.	0.03%	x				x								
ACWI ex US	GAZPROM PAO	0.00%	x				x								
ACWI ex US	GD POWER DEVELOPMENT CO., LTD.	0.00%			x								x		
ACWI ex US	GLENCORE PLC	0.24%	x	x										x	
ACWI ex US	Global Power Synergy Public Company Limited	0.01%			x								x		



APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
ACWI ex US	GMK NORIL'SKIY NIKEL PAO	0.00%	x												
ACWI ex US	GUANGDONG INVESTMENT LIMITED	0.02%			x										
ACWI ex US	Guanghui Energy Co., Ltd.	0.00%	x	x			x	x						x	
ACWI ex US	Gulf Energy Development Public Company Limited	0.02%											x		
ACWI ex US	HD HYUNDAI CO.,LTD.	0.01%					x		x						
ACWI ex US	HENAN SHENHUO COAL & POWER CO.,LTD	0.00%		x	x										
ACWI ex US	HINDUSTAN PETROLEUM CORPORATION LIMITED	0.01%	x				x		x						
ACWI ex US	HK ELECTRIC INVESTMENTS LIMITED	0.01%			x								x		
ACWI ex US	Huadian Power International Corporation Limited	0.00%		x	x								x	x	
ACWI ex US	Huaibei Mining Holdings Co.,Ltd.	0.00%												x	
ACWI ex US	HUANENG POWER INTERNATIONAL, INC.	0.01%			x								x		
ACWI ex US	HUANENG POWER INTERNATIONAL, INC.	0.00%			x								x		
ACWI ex US	HYUNDAI GLOVIS Co., LTD.	0.01%												x	
ACWI ex US	Iberdrola, S.A.	0.27%			x										
ACWI ex US	Idemitsu Kosan Co.,Ltd.	0.02%	x				x		x					x	
ACWI ex US	INDIAN OIL CORPORATION LIMITED	0.01%	x				x		x						
ACWI ex US	Indraprastha Gas Ltd	0.01%								x					
ACWI ex US	INNER MONGOLIA DIAN TOU ENERGY CORPORATION LIMITED	0.00%												x	
ACWI ex US	Inner Mongolia ERDOS Resources Co.,Ltd.	0.00%		x										x	
ACWI ex US	INNER MONGOLIA YITAI COAL CO., LTD	0.01%		x										x	
ACWI ex US	INPEX CORPORATION	0.05%	x				x	x							
ACWI ex US	INTER RAO YEES PAO	0.00%			x										
ACWI ex US	ITOCHU Corporation	0.14%		x										x	
ACWI ex US	JARDINE MATHESON HOLDINGS LIMITED	0.05%												x	
ACWI ex US	JINDAL STEEL AND POWER LIMITED	0.01%		x	x										
ACWI ex US	Jizhong Energy Resources Co., Ltd.	0.00%		x										x	
ACWI ex US	JSW STEEL LIMITED	0.02%			x										
ACWI ex US	KEPPEL CORPORATION LIMITED	0.03%	x												
ACWI ex US	KEYERA CORP.	0.02%					x			x					
ACWI ex US	KOC HOLDING ANONIM SIRKETI	0.01%												x	
ACWI ex US	KOREA ELECTRIC POWER CORPORATION	0.02%			x										
ACWI ex US	KUNLUN ENERGY COMPANY LIMITED	0.01%	x							x					
ACWI ex US	MISC BERHAD	0.01%										x			
ACWI ex US	Mitsubishi Corporation	0.17%	x	x										x	
ACWI ex US	MITSUMI & CO., LTD.	0.14%	x	x										x	
ACWI ex US	MOL Magyar Olaj- es Gazipari Nyilvanosan Mukodo Reszvenyt	0.02%	x				x		x						
ACWI ex US	Naturgy Energy Group, S.A.	0.02%			x					x					
ACWI ex US	Neste Oyj	0.08%					x								
ACWI ex US	NK LUKOIL PAO	0.00%	x				x		x						
ACWI ex US	NK ROSNEFT PAO	0.00%	x				x		x						
ACWI ex US	NOVATEK PAO	0.00%	x				x	x							
ACWI ex US	NTPC LIMITED	0.03%		x	x								x		
ACWI ex US	OFFSHORE OIL ENGINEERING CO.,LTD.	0.00%				x					x				
ACWI ex US	OIL AND NATURAL GAS CORPORATION LIMITED	0.02%	x				x		x						
ACWI ex US	OK RUSAL MKPAO	0.00%		x											
ACWI ex US	OMV Aktiengesellschaft	0.03%	x				x		x						
ACWI ex US	ORIGIN ENERGY LIMITED	0.03%	x		x										
ACWI ex US	Orsted AS	0.09%			x										
ACWI ex US	OSAKA GAS CO., LTD.	0.03%										x			
ACWI ex US	PARKLAND CORPORATION	0.02%					x			x					
ACWI ex US	PEMBINA PIPELINE CORPORATION	0.09%				x						x			
ACWI ex US	PETRO RIO S.A.	0.01%	x				x	x							
ACWI ex US	PetroChina Company Limited	0.04%	x				x								
ACWI ex US	PetroChina Company Limited	0.00%	x				x								
ACWI ex US	Petroleo Brasileiro S.A. (Petrobras)	0.11%	x				x		x						
ACWI ex US	Petroleo Brasileiro S.A. (Petrobras)	0.10%	x				x		x						
ACWI ex US	PETRONAS DAGANGAN BERHAD	0.01%					x			x					
ACWI ex US	PETRONET LNG LIMITED	0.01%				x				x					
ACWI ex US	PGE POLSKA GRUPA ENERGETYCZNA SPOLKA AKCYJNA	0.01%			x										
ACWI ex US	PINGDINGSHAN TIANAN COAL. MINING CO., LTD.	0.00%												x	
ACWI ex US	POLSKI KONCERN NAFTOWY ORLEN SPOLKA AKCYJNA	0.02%	x		x		x								
ACWI ex US	POLSKIE GORNICTWO NAFTOWE I GAZOWNICTWO SPOLKA A	0.01%	x		x		x					x			
ACWI ex US	POSCO Holdings Inc.	0.06%			x										
ACWI ex US	Power Assets Holdings Limited	0.04%			x										
ACWI ex US	PT Adaro Energy Indonesia Tbk	0.01%		x										x	
ACWI ex US	PT Aneka Tambang Tbk	0.00%		x										x	
ACWI ex US	PT Astra International Tbk	0.04%		x										x	
ACWI ex US	PT United Tractors Tbk	0.01%		x										x	
ACWI ex US	PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIM	0.03%	x				x	x							
ACWI ex US	PTT Oil and Retail Business PCL	0.01%								x					
ACWI ex US	PTT Public Company Limited	0.04%	x	x	x		x							x	
ACWI ex US	PUBLIC POWER CORPORATION S.A.	0.00%			x										
ACWI ex US	Qatar Fuel Company QPSC	0.01%					x			x					
ACWI ex US	Qatar Gas Transport Company Limited (Nakilat)QPSC	0.01%				x						x			
ACWI ex US	Rabigh Refining and Petrochemical Company SJSC	0.01%					x		x						
ACWI ex US	RATCH GROUP PUBLIC COMPANY LIMITED	0.01%			x								x		
ACWI ex US	RELIANCE INDUSTRIES LIMITED	0.47%	x				x								
ACWI ex US	Repsol S.A.	0.10%	x				x								
ACWI ex US	Ressources Teck Limitee	0.07%	x												
ACWI ex US	RWE Aktiengesellschaft	0.10%			x										
ACWI ex US	Samsung Engineering Co., Ltd.	0.01%									x				
ACWI ex US	SANTOS LIMITED	0.07%	x				x	x							
ACWI ex US	SASOL LIMITED	0.06%	x	x										x	
ACWI ex US	Saudi Arabian Oil Company	0.11%	x				x	x							

APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
ACWI ex US	Saudi Electricity Company SJSJ	0.02%											x		
ACWI ex US	SDIC Power Holdings Co., Ltd.	0.00%			x										
ACWI ex US	SEVERSTAL' PAO	0.00%												x	
ACWI ex US	Shaanxi Coal Industry Company Limited	0.01%		x										x	
ACWI ex US	SHAN XI HUA YANG GROUP NEW ENERGY CO., LTD.	0.00%		x	x									x	
ACWI ex US	Shanxi Coking Coal Energy Group Co., Ltd.	0.00%			x									x	
ACWI ex US	Shanxi Lu'an Environmental Energy Dev. Co., Ltd	0.00%		x										x	
ACWI ex US	SHELL PLC	0.89%	x				x		x						
ACWI ex US	Shenzhen Energy Group Co., Ltd.	0.00%			x								x		
ACWI ex US	SICHUAN CHUANYOU ENERGY CO., LTD.	0.00%			x										
ACWI ex US	Sinopec Shanghai Petrochemical Company Limited	0.00%							x						
ACWI ex US	SK Inc.	0.03%												x	
ACWI ex US	SK Innovation Co., Ltd.	0.04%					x		x						
ACWI ex US	SNAM S.P.A.	0.05%										x			
ACWI ex US	S-Oil Corporation	0.02%					x		x						
ACWI ex US	SOUTH32 LIMITED	0.06%		x										x	
ACWI ex US	SSE PLC	0.09%	x												
ACWI ex US	SUMITOMO CORPORATION	0.07%												x	
ACWI ex US	Suncor Energy Inc.	0.23%	x				x		x						
ACWI ex US	SURGUTNEFTEGAZ PAO	0.00%	x				x	x							
ACWI ex US	SURGUTNEFTEGAZ PAO	0.00%	x				x	x							
ACWI ex US	TATNEFT' PAO	0.00%	x				x								
ACWI ex US	TBEA CO., LTD.	0.00%												x	
ACWI ex US	TC Energy Corporation	0.23%				x						x			
ACWI ex US	TENAGA NASIONAL BERHAD	0.02%											x		
ACWI ex US	TENARIS S.A.	0.03%				x					x				
ACWI ex US	Thai Oil Public Company Limited	0.01%					x		x						
ACWI ex US	THE HONG KONG AND CHINA GAS COMPANY LIMITED	0.05%	x							x				x	
ACWI ex US	The Kansai Electric Power Company, Incorporated	0.03%			x										
ACWI ex US	THE TATA POWER COMPANY LIMITED	0.02%		x	x								x	x	
ACWI ex US	Tokyo Electric Power Company Holdings, Incorporated	0.03%			x										
ACWI ex US	TOKYO GAS CO.,LTD.	0.04%								x					
ACWI ex US	TotalEnergies SE	0.59%	x				x								
ACWI ex US	TOURMALINE OIL CORP.	0.07%	x				x	x							
ACWI ex US	TURKIYE PETROL RAFINERILERI ANONIM SIRKETI	0.01%					x		x						
ACWI ex US	ULTRAPAR PARTICIPACOES S.A.	0.01%				x				x					
ACWI ex US	Uniper SE	0.01%			x										
ACWI ex US	VALE S.A.	0.26%		x										x	
ACWI ex US	VEDANTA LIMITED	0.01%	x	x	x										
ACWI ex US	VEOLIA ENVIRONNEMENT SA	0.07%			x										
ACWI ex US	VERBUND AG	0.03%			x										
ACWI ex US	VIBRA ENERGIA S/A	0.02%								x					
ACWI ex US	WASHINGTON H. SOUL PATTINSON AND COMPANY LIMITED	0.02%	x	x										x	
ACWI ex US	WOODSIDE ENERGY GROUP LTD	0.19%	x				x	x							
ACWI ex US	Yankuang Energy Group Company Limited	0.02%		x	x									x	
ACWI ex US	Yankuang Energy Group Company Limited	0.00%		x	x									x	
ACWI ex US	Yantai Jereh Oilfield Services Group Co., Ltd.	0.00%				x					x				
ACWI ex US	Zijin Mining Group Company Limited	0.01%		x											

APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE – TRADITIONAL CREDIT

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
Maine Agg	Alabama Power Company	0.04%			x								x		
Maine Agg	AMEREN CORPORATION	0.01%			x										
Maine Agg	AMERICAN ELECTRIC POWER COMPANY, INC.	0.02%			x									x	
Maine Agg	APACHE CORPORATION	0.00%	x					x							
Maine Agg	Appalachian Power Company	0.02%			x								x		
Maine Agg	ARIZONA PUBLIC SERVICE COMPANY	0.03%			x								x		
Maine Agg	ATMOS ENERGY CORPORATION	0.03%								x					
Maine Agg	AVISTA CORPORATION	0.00%			x										
Maine Agg	BERKSHIRE HATHAWAY ENERGY COMPANY	0.09%		x	x										
Maine Agg	BERKSHIRE HATHAWAY INC.	0.02%		x	x										
Maine Agg	BLACK HILLS CORPORATION	0.02%		x	x							x		x	
Maine Agg	CANADIAN NATURAL RESOURCES LIMITED	0.05%	x				x	x							
Maine Agg	Genovus Energy Inc.	0.05%	x				x								
Maine Agg	CENTERPOINT ENERGY, INC.	0.01%			x										
Maine Agg	CHEVRON CORPORATION	0.07%	x				x	x							
Maine Agg	CMS ENERGY CORPORATION	0.01%			x										
Maine Agg	CONOCOPHILLIPS	0.02%	x				x	x							
Maine Agg	CONTINENTAL RESOURCES, INC.	0.01%	x				x	x							
Maine Agg	Coterra Energy Inc.	0.02%	x				x	x							
Maine Agg	DEVON ENERGY CORPORATION	0.04%	x				x	x							
Maine Agg	DIAMONDBACK ENERGY, INC.	0.03%	x				x	x							
Maine Agg	DOMINION ENERGY SOUTH CAROLINA, INC.	0.01%			x								x		
Maine Agg	Dominion Energy, Inc.	0.06%			x										
Maine Agg	DTE ELECTRIC COMPANY	0.04%			x										
Maine Agg	DTE ENERGY COMPANY	0.02%			x										
Maine Agg	Duke Energy Carolinas, LLC	0.08%			x										
Maine Agg	DUKE ENERGY CORPORATION	0.07%			x										
Maine Agg	DUKE ENERGY FLORIDA, LLC	0.04%			x								x		
Maine Agg	DUKE ENERGY INDIANA, LLC	0.02%			x								x		
Maine Agg	Duke Energy Progress, LLC	0.05%			x										
Maine Agg	ENABLE MIDSTREAM PARTNERS, LP	0.02%										x			
Maine Agg	ENBRIDGE ENERGY PARTNERS, L.P.	0.02%										x			
Maine Agg	Enbridge Inc.	0.06%					x					x			
Maine Agg	Enel Americas S.A.	0.00%			x										
Maine Agg	Enel Chile S.A.	0.01%			x										
Maine Agg	Enel Generacion Chile S.A.	0.00%			x										
Maine Agg	ENERGY TRANSFER LP	0.20%		x			x					x			
Maine Agg	ENTERGY ARKANSAS, LLC	0.02%			x										
Maine Agg	ENTERGY CORPORATION	0.02%			x										
Maine Agg	ENTERGY LOUISIANA, LLC	0.05%			x								x		
Maine Agg	ENTERGY MISSISSIPPI, LLC	0.01%			x								x		
Maine Agg	ENTERGY TEXAS, INC.	0.01%			x								x		
Maine Agg	ENTERPRISE PRODUCTS OPERATING LLC	0.17%					x					x			
Maine Agg	EOG RESOURCES, INC.	0.02%	x				x	x							
Maine Agg	EQT CORPORATION	0.02%	x				x	x							
Maine Agg	EQUINOR ASA	0.09%	x				x		x						
Maine Agg	EVERGY KANSAS CENTRAL, INC.	0.01%											x		
Maine Agg	Evergy Metro, Inc.	0.01%			x										
Maine Agg	Evergy, Inc.	0.01%			x										
Maine Agg	EXXON MOBIL CORPORATION	0.19%	x				x		x						
Maine Agg	FLORIDA POWER & LIGHT COMPANY	0.09%			x								x		
Maine Agg	Fortis Inc.	0.01%			x										

APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE – TRADITIONAL CREDIT

Strategy	Issuer Name	Portfolio Weight	O&G Reserves	Coal Reserves	Coal Generate Output	Energy Supplier	Energy Producer	O&G Extraction Producer	O&G Refining	O&G Distribution	O&G Equip Services	O&G Storage Transport	Max Rev Fossil Fuels	Max Rev Coal	Private Prisons
Maine Agg	FREEMPORT-MCMORAN INC.	0.04%	x												
Maine Agg	GEORGIA POWER COMPANY	0.04%			x										
Maine Agg	GULF POWER COMPANY	0.00%			x								x		
Maine Agg	HALLIBURTON COMPANY	0.06%				x					x				
Maine Agg	HELMERICH & PAYNE, INC.	0.01%				x		x							
Maine Agg	HESS CORPORATION	0.04%	x				x	x							
Maine Agg	HF SINCLAIR CORPORATION	0.01%					x		x						
Maine Agg	INDIANA MICHIGAN POWER COMPANY	0.02%			x										
Maine Agg	IPALCO ENTERPRISES INC	0.01%												x	
Maine Agg	KENTUCKY UTILITIES COMPANY	0.01%			x									x	
Maine Agg	KINDER MORGAN, INC.	0.08%				x						x			
Maine Agg	LOUISVILLE GAS AND ELECTRIC COMPANY	0.00%			x									x	
Maine Agg	MAGELLAN MIDSTREAM PARTNERS, L.P.	0.03%				x						x			
Maine Agg	MARATHON OIL CORPORATION	0.02%	x				x	x							
Maine Agg	MARATHON PETROLEUM CORPORATION	0.05%					x		x						
Maine Agg	MIDAMERICAN ENERGY COMPANY	0.04%			x										
Maine Agg	MPLX LP	0.12%				x						x			
Maine Agg	NATIONAL FUEL GAS COMPANY	0.01%	x												
Maine Agg	NEVADA POWER COMPANY	0.01%												x	
Maine Agg	NISOURCE INC.	0.07%			x					x					
Maine Agg	Northern States Power Company (Minnesota)	0.04%			x										
Maine Agg	NORTHWESTERN CORPORATION	0.00%	x		x										
Maine Agg	NOV INC.	0.01%				x					x				
Maine Agg	OGLETHORPE POWER CORP	0.02%			x									x	
Maine Agg	OKLAHOMA GAS AND ELECTRIC COMPANY	0.01%			x									x	
Maine Agg	ONE GAS, INC.	0.01%								x					
Maine Agg	ONEOK, INC.	0.06%				x						x			
Maine Agg	OVINTIV INC.	0.01%	x				x	x							
Maine Agg	PHILLIPS 66	0.06%					x			x					
Maine Agg	Piedmont Natural Gas Company, Inc.	0.01%								x					
Maine Agg	PINNACLE WEST CAPITAL CORPORATION	0.00%			x										
Maine Agg	PIONEER NATURAL RESOURCES COMPANY	0.02%	x				x	x							
Maine Agg	PLAINS ALL AMERICAN PIPELINE, L.P.	0.05%				x						x			
Maine Agg	Progress Energy, Inc.	0.01%			x									x	
Maine Agg	PUBLIC SERVICE COMPANY OF COLORADO	0.03%			x										
Maine Agg	PUGET ENERGY, INC.	0.01%			x										
Maine Agg	PUGET SOUND ENERGY, INC.	0.02%			x										
Maine Agg	Ressources Teck Limitee	0.02%	x												
Maine Agg	SABINE PASS LIQUEFACTION, LLC	0.07%								x					
Maine Agg	SEMPRA ENERGY	0.05%										x			
Maine Agg	SIERRA PACIFIC POWER COMPANY	0.00%			x										
Maine Agg	SOUTHWESTERN ELECTRIC POWER COMPANY	0.02%			x									x	
Maine Agg	SOUTHWESTERN PUBLIC SERVICE COMPANY	0.01%			x										
Maine Agg	Suncor Energy Inc.	0.04%	x				x		x						
Maine Agg	TAMPA ELECTRIC COMPANY	0.01%			x									x	
Maine Agg	TARGA RESOURCES CORP.	0.02%				x						x			
Maine Agg	TC PIPELINES, LP	0.01%										x			
Maine Agg	TENNESSEE GAS PIPELINE COMPANY, L.L.C.	0.01%										x			
Maine Agg	TEXAS EASTERN TRANSMISSION, LP	0.00%										x			
Maine Agg	THE AES CORPORATION	0.01%			x									x	
Maine Agg	THE SOUTHERN COMPANY	0.06%			x									x	
Maine Agg	THE WILLIAMS COMPANIES, INC.	0.10%				x						x			
Maine Agg	TRANSCANADA PIPELINES LIMITED	0.10%										x			
Maine Agg	TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC	0.02%										x			
Maine Agg	TUCSON ELECTRIC POWER COMPANY	0.01%			x									x	
Maine Agg	UNION ELECTRIC COMPANY	0.04%			x									x	
Maine Agg	VALE S.A.	0.01%		x											x
Maine Agg	VALERO ENERGY CORPORATION	0.05%					x		x						
Maine Agg	VEOLIA ENVIRONNEMENT SA	0.00%			x										
Maine Agg	Virginia Electric and Power Company	0.11%			x									x	
Maine Agg	WEC ENERGY GROUP, INC.	0.01%			x										
Maine Agg	WISCONSIN POWER AND LIGHT COMPANY	0.01%			x									x	
Maine Agg	WISCONSIN PUBLIC SERVICE CORPORATION	0.01%			x									x	
Maine Agg	Xcel Energy Inc.	0.04%			x										



DISCLOSURES

Past performance is no guarantee of future results.

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

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.

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

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.





Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy for Defined Benefit Plans

2.1 – Investment Policy Statement

Date Adopted: June 9, 2016

Date Amended: November 10, 2016; May 11, 2017; June 8, 2017; September 14, 2017; December 14, 2017; November 12, 2020; January 14, 2021; May 12, 2022, February 9, 2023

Policy

The Board of Trustees of the Maine Public Employees Retirement System is authorized and responsible for administering defined benefit retirement programs at the State and local levels. The Board carries out this responsibility by adopting investment objectives and establishing an investment program through which the policy is implemented. In the case of conflicts, this policy statement supersedes previous policies and actions by the Board.

This policy covers the investment management of the assets of the following defined benefit programs administered by the Board:

- Legislative Retirement Program;
- Judicial Retirement Program;
- State Employee and Teacher Retirement Program, which includes State employees and public school members; and
- Participating Local District Retirement Program, which includes retirement plans of withdrawn participating local districts and the Consolidated Plan for Participating Local Districts.

Collectively, the assets of these programs are referred to as the DB Plan Assets. Statutes allow for the pooling of the DB Plan Assets for the purpose of investment. Pooling provides significant efficiencies. Because the relevant characteristics of the DB plans are sufficiently similar, all the DB Plan Assets are pooled for investment.

Statutory/Legal Provisions

- [Me. Const. art. IX, § 18.](#)
- [5 M.R.S. §§ 1957-1958](#) (divestment statutes)
- [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”).
- Restatement (Third) of Trusts formally permits, and in some cases requires, the delegation of investment decisions from trustees to internal staff or external agents with the necessary skills and knowledge.

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MainePERS Board of Trustees

- 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.

Resources

The Board of Trustees implements this investment policy in coordination with:

- in-house investment professionals (the “Investment Team”), with experience, authority and responsibility to implement the investment policy and administer investment operations;
- consultants, with appropriate expertise, to assist the Board and the Investment Team;
- investment managers, selected individually and collectively to reflect and implement the investment policy, having full discretion within policy and contractual limits to manage assets allocated to them;
- custodians qualified to carry out recordkeeping, reporting, measurement and custodial functions; and
- other advisors that the Board deems appropriate and necessary

The Investment Team shall oversee the processes by which Custodians, Consultants, and other Advisors are hired, evaluated, and terminated, and shall work with the General Counsel on the terms of contracts of engagement.

At least every five years, the Investment Team will evaluate the performance and contract terms of all such service providers and make a recommendation to the Board as to whether or not a search process for new providers and/or renegotiation of terms be initiated.

Investment Objectives

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.

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Strategic Asset Allocation and Rebalancing

The Investment Team and Board consultants shall annually review long-term capital market expectations and existing asset class allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes to the existing strategic asset classes, target weights, and ranges for implementation by the Investment Team. (See Appendix 1)

The specified policy weight ranges define minimum and maximum acceptable weights for each asset class. (See Appendix 2) The Investment Team shall maintain asset class weights within target ranges, subject to considerations such as transactions costs and the unique characteristics of private market investments, by reallocating capital within existing strategies and investments. The Investment Team will provide Trustees with reports showing the fund's current asset allocation at least monthly, and report on rebalancing activity quarterly.

Portfolio Risk Management

The primary method of controlling risk shall be the selection of the strategic asset allocation and asset class target weights within the allocation. (See Appendix 1) Combined with long term capital market expectations, these policy weights define a portfolio with a specific level of risk.

The Chief Investment Officer shall develop a risk strategy for managing assets within the Board approved strategic asset allocation. The risk strategy will specify practices and procedures for the measurement and management of portfolio risk, including the provision of a portfolio risk report to the Board at least quarterly. (See Appendix 3)

Nothing in the risk strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance, but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 4) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

For performance evaluation purposes, all rates of return will be measured net of the deduction of investment management fees.

During a period of transition from one asset allocation to another, certain transitional allocations to appropriate benchmarks are permitted.

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MainePERS Board of Trustees

Investment Implementation

The Investment Team shall implement the investment policy, subject to Board guidelines:

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 4. Any exceptions must be approved by the Board.
- Investments within each Asset Class should be consistent with the Asset Class definitions provided in Appendix 1.

Environmental, Social, and Governance; Engagement

In performing due diligence and monitoring activities, the Board and the Investment Team shall comply with Board Policy 2.6, Environmental, Social and Governance Policy; and Board Policy 2.7, Engagement.

Investment Manager Selection and Allocation Process

MainePERS invests through external investment managers, who are charged to act as fiduciaries, and allocates fund assets among them in accordance with the strategic asset allocation. The Investment Team identifies, performs due diligence on, and recommends investment managers and allocations to the Board. The Investment Team also monitors performance and recommends retention and termination decisions to the Board. The Board retains final authority for manager selection, retention and termination decisions.

Managers are selected and retained on the basis of an evaluation that establishes sufficient confidence that the manager will improve the return and risk of the investment program. If and when the Investment Team and/or consultant(s) identify an investment manager that they believe will improve the investment program, the Investment Team will make a recommendation to the Board of Trustees that the manager be hired. This recommendation will be accompanied by an opinion by the investment consultant on this recommendation. The Board retains the final authority to accept or reject such recommendations.

The Investment Team will prepare and present to the Board of Trustees selection criteria they deem pertinent for each manager search and recommendation to hire. The Investment Team will provide the Board with all the necessary information and analysis to enable an informed decision. The Board may choose to interview the recommended manager or they may rely on the Investment Team to conduct interviews.

Derivatives

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. The System may also invest in strategies which use derivatives to obtain leverage. In all such cases, the use of derivatives must be disclosed to the

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MainePERS Board of Trustees

Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Leverage

The System may invest in strategies in which managers have discretion to use leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Fossil Fuel and Private Prison Investments

The System may invest in strategies providing managers with broad discretion in the selection of investments. The potential for fossil fuel or for-profit prison investment must be disclosed to the Board prior to the Board's approval of a strategy. For those strategies likely to invest in stocks, securities or other obligations of fossil fuel or for-profit prison assets, disclosures will include a description of the expected role of such investments in the proposed strategy and discussion of the process leading to the selection of the strategy.

On an annual basis, the Board will be provided with a report summarizing the System's fossil fuel and for-profit prison investments. This report will include a discussion of the actual and expected changes in these exposures, and analysis of these exposures within the context of the divestment statutes, 5 M.R.S. §§ 1957 and 1958.

Hedging

The Board has reviewed the benefits and risks associated with foreign currency exposures. As a general rule the Board has chosen not to hedge currency at the portfolio level. Unless otherwise directed asset managers will have discretion to hedge investments under their management as they deem most beneficial to their mandate.

Transaction Costs and Brokerage

The Board of Trustees expects investment managers, in their capacity as fiduciaries, to manage transaction costs in the best interests of the System as an investor. To enable the managers to fulfill this fiduciary duty, it is the Board's policy not to be party to directed brokerage programs.

Securities Lending

The System may participate in a securities lending program either directly through its separately managed portfolios or indirectly through its investments in pooled vehicles. In each case, the securities lending program must focus on low risk, as opposed to maximization of returns. All DB Plan Assets are available for securities lending.

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MainePERS Board of Trustees

Monitoring

The Board relies on the Investment Team and the investment consultant(s) to continuously monitor the investment program and to report to the Board as outlined below.

- the Investment Team and investment consultant(s) provide comprehensive periodic reports on the entire investment program, including asset allocation, performance of each component relative to benchmarks, attribution analysis, and commentary.
- the Investment Team and investment consultant(s) monitor changes and developments at investment managers and at custodian(s) on an ongoing basis and report significant changes or events with recommended actions as needed.

Emergency Measures

Immediate action may be taken beyond the bounds of this policy under extraordinary circumstances and in order to preserve the best interests of the plans' participants by unanimous decision of the following:

- The Chair, or in the Chair's absence, Vice Chair of the Board
- The Chief Executive Officer, or in the Chief Executive Officer's absence, the Chief Operating Officer and General Counsel
- The Chief Investment Officer, or in the Chief Investment Officer's absence, Deputy Chief Investment Officer, or in the absence of both of them, the general investment consultant

Any such action must be reported to the Board of Trustees at the earliest opportunity.

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; September 14, 2017; January 14, 2021; May 12, 2022

The System's assets are invested across nine Asset Classes that play four distinct Roles in the overall Fund. The Trustees define these Roles and Asset Classes and set target policy weights and ranges below.

	Weights		
	Minimum	Policy	Maximum
GROWTH	35%	42.5%	55%
Public Equity	20%	30%	40%
Private Equity	5%	12.5%	20%
RISK DIVERSIFIERS	0%	7.5%	12.5%
HARD ASSETS	15%	25%	35%
Real Estate	5%	10%	15%
Infrastructure	5%	10%	15%
Natural Resources	0%	5%	10%
CREDIT	5%	15%	20%
Traditional Credit	0%	5%	10%
Alternative Credit	0%	10%	15%
MONETARY HEDGE	5%	10%	15%
US Government Securities	5%	10%	15%
Cash	0%	0%	10%

Asset Class Definitions

The below Asset Class definitions are simplified and are intended to convey the general characteristics of investments held within each class. Some investment strategies involve assets and securities that span multiple asset classes.

Public Equity

Investments in publicly-traded shares of companies. May include different classes of common stock, shares of REITs, and MLPs.

Private Equity

Investments in non-publicly traded shares of companies. Investments are typically made via private limited partnerships, and may include both equity and debt securities.

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MainePERS Board of Trustees

Risk Diversifiers

Investments typically made through private funds that generally invest in listed assets such as stocks, bonds, and commodities, via strategies that are expected to have little correlation with declining or rising stock markets.

Real Estate

Investments providing direct exposure Real Estate, including investments through private funds.

Infrastructure

Investments typically made through private funds that generally invest in assets that meet most or all of the following criteria: provide essential public services, possess monopoly-like characteristics, provide long term contracted cash flows, and bear limited volumetric and price risk.

Natural Resources

Investments in private funds that generally invest in businesses focused on natural resources such as timberland, agriculture, and mining. Private energy investments will generally be included in Private Equity, rather than Natural Resources.

Traditional Credit

Investments in investment-grade debt instruments that are not issued by the U.S. Government. Such debt may or may not be registered for sale to the general public.

Alternative Credit

Investments in debt instruments issued by non-investment grade and unrated entities. This may include, but is not limited to high yield debt, bank loans, structured debt, and asset-backed debt. Alternative credit investments are expected to pay or accrue periodic interest and to return principal at maturity. Distressed debt and other debt or yield-oriented securities that include equity-like exposures are considered Private Equity, not Alternative Credit.

Monetary Hedges

Investments in debt instruments issued by the U.S. Government, including nominal Treasury securities and Treasury Inflation Protected Securities (TIPS), held in approximately equal proportions.

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MainePERS Board of Trustees

Roles in the Overall Fund

Each of the above asset classes fills a specific Role in the overall portfolio. These Roles are defined below.

Growth Assets

Growth Assets are intended to reduce the system's funding needs in the long term by appreciating in value. Growth Assets possess inherently higher expected returns than other asset classes. Growth Assets also have higher expected volatility than other asset classes, and are expected to increase funding volatility in the short run.

Risk Diversifiers

Risk Diversifiers are investments that primarily derive their return from alpha (or active manager skill) as opposed to market directionality. Risk Diversifiers are expected to provide significant risk diversification benefits away from Growth Assets.

Hard Assets

Investments in the Hard Assets category provide exposure to long-lived "real" assets, such as real estate, timber, agricultural, and infrastructure assets. Expected return levels of Hard Assets are lower than those of Growth Assets, and a substantial portion of such returns is expected to come from ongoing cash flows. Hard Assets are expected to provide inflation protection, to have low correlation with Growth Assets, and to provide diversification benefits.

Credit Assets

Credit investments provide capital to end-users via loans and the purchase of debt securities. Such investments provide for contractual returns (interest) and repayment of principal. Credit investments possess lower risk and expected returns than equity investments, but have higher risk and expected returns than monetary hedges. Credit investments are expected to provide diversification away from Growth Assets.

Monetary Hedges

The role of Monetary Hedges in the portfolio is to provide liquidity and a safe harbor in times of turbulence. These investments are cash and obligations of the U.S. Government, and are considered to be free of default risk.

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 2: Rebalancing

Date Adopted: June 9, 2016

Date Amended: May 12, 2022; July 14, 2022

The Board has set target weights for each Asset Class and Role in Portfolio category in Appendix 1, and delegates the management of asset class allocation to the Investment Team. The Investment Team is expected to maintain asset class weights near target, subject to considerations such as transactions costs and the unique funding and liquidity characteristics of private market investments.

To this end, the Team is permitted to reallocate capital within existing strategies and investments for rebalancing purposes. The Investment Team is expected to consider both Role in Portfolio and Asset Class policy weights when rebalancing. The Team will provide Trustees with reports showing the Fund's current asset allocation at least monthly, and report on rebalancing activity at least quarterly.

In the specific case of the System's Risk Diversifier allocation, the Investment Team is permitted to rebalance across existing managers and strategies, consistent with the goal of maintaining diversification within the allocation. Rebalancing activity will be reported to Trustees at least quarterly.

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 3: Risk Strategy

Date Adopted: June 9, 2016

Date Amended: New

While this Risk Strategy is in development the Chief Investment Officer shall rely on the Strategic Asset Allocation and Rebalancing provisions of this policy to manage the Fund's risk.

The Investment Team and the Board believe that this approach will deliver an appropriate expected return with commensurate risk over a long term horizon. However they also recognize that the portfolio's realized risk will vary over time which may result in periods during which the fund bears substantially higher risk than the System initially targeted.

In an effort to achieve more stable (less volatile) returns, the Investment Team will seek to develop management tools and practices that they believe will be better able to keep the fund's risk in an acceptable range.

This Risk Strategy shall be updated from time to time by the Trustees to reflect recommendations developed by the Chief Investment Officer.

Nothing in the Risk Strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

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Board Responsibilities – Investment Policy

Appendix 4: Policy Benchmarks

Date Adopted: June 9, 2016

Date Amended: June 8, 2017, January 14, 2021, May 12, 2022

Asset	Benchmark	Weight
Total Public Equity	Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights	30%
Private Equity	Russell 3000 + 3%	12.5%
Diversifiers	0.3 Beta MSCI ACWI	7.5%
Real Estate	NCREIF Property (lagged one quarter)	10%
Infrastructure	CA Infrastructure Median	10%
Natural Resources	CA Natural Resources Median	5%
Traditional Credit	Barclays US Aggregate, ex Treasury	5%
Alternative Credit	50% BAML US HY II + 50% S&P/LSTA US Leveraged Loan Index	10%
U.S. Government Securities	50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index	10%

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MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 4: Co-Investment

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; January 14, 2021; May 12, 2022

Co-investments are permitted within private market asset classes, subject to the below guidelines.

Target Allocation	7.5% of total Fund. This target is a subset of the total 47.5% allocation to private market asset classes, and is not in addition to that allocation.
Asset Classes	Co-investment may be made in each of the private market asset classes.
Discretion	Investment Team has discretion to make co-investments, in conjunction with the asset class consultant.
Signatories	The Chief Executive Officer, Chief Investment Officer, and General Counsel are authorized as signatories to execute documents in connection with co-investments.
Permissible Partners	Unless otherwise authorized, co-investments will only be made alongside Funds in which the System is a current investor.
Size Limits	Unless otherwise authorized, maximum of \$25m invested into any single co-investment. Unless otherwise authorized, maximum of \$200m aggregate co-investment in a single asset class with any single General Partner. The Investment Team will provide additional co-investment portfolio reporting to Trustees for those General Partners with more than \$100m of aggregate co-investment in any single asset class.



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Divestment Review

December 14, 2023

For-Profit Prison Exposures

Asset	Portfolio Allocation (\$M)	Total Number of Holdings	Number of Holdings with For-Profit Prison Exposure	For-Profit Prison Exposure (%)	For-Profit Prison Exposure (\$M)
Russell 1000	\$2,810.6	1,022	0	0.0%	\$0.0
Russell 2000	\$162.7	2,069	2	0.0%	\$0.0
ACWI ex US	\$1,848.8	2,425	1	0.0%	\$0.7
Traditional Credit	\$782.2	14,643	0	0.0%	\$0.0

The System's equity portfolios contain three companies with exposure to for-profit prison investments, totaling \$720,000 in value.

Table 1: Fossil Fuel Exposures

Asset	Estimated FF [\$M]	Weighted Exposure
Public Markets		
2022	\$445.5	2.5%
2023	\$428.4	2.3%
Risk Diversifiers		
2022	\$0.0	0.0%
2023	\$0.0	0.0%
Private Markets		
2022*	\$962.3	5.3%
2023	\$786.8	4.2%
Total		
2022*	\$1,407.8	7.8%
2023	\$1,215.2	6.5%

Note: Totals shown in tables may not sum due to rounding.

* Corrected.

The System's exposure to fossil fuel investments decreased during 2023 both in absolute terms and as a percent of assets for both public and private market investments. Exposure fell by \$193 million in the past year and represents 6.5% of total System assets as of June 30, 2023.

Table 2: Public Market Exposures

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF [% of (B)]	Estimated FF [\$M]	Weighted Exposure
Total Public Equity					
2022	30%	24.5%	9.1%	\$404.5	2.2%
2023	30%	25.6%	7.8%	\$376.0	2.0%
Traditional Credit					
2022	5%	5.7%	4.0%	\$41.0	0.2%
2023	5%	4.2%	6.7%	\$52.3	0.3%
US Govt. Securities					
2022	10%	7.7%	0.0%	\$0.0	0.0%
2023	10%	8.5%	0.0%	\$0.0	0.0%
Total Public Markets					
2022	45%	37.9%	6.5%	\$445.5	2.5%
2023	45%	38.2%	5.9%	\$428.4	2.3%

Note: Totals shown in tables may not sum due to rounding.

Fossil fuel exposure within public equity dropped by \$28.5 million. This decrease was offset by an increase of \$11.3 million in the Traditional Credit portfolio, producing a net decrease of \$17.1 million over the past year.

Table 3: Private Market Exposures

Asset	Policy Target (A)	Portfolio Weight (B)	Estimated FF [% of (B)]	Estimated FF [\$M]	Weighted Exposure
Infrastructure					
2022*	10.0%	11.2%	36.5%	\$735.5	4.1%
2023	10.0%	12.2%	24.5%	\$565.4	3.0%
Private Equity					
2022	12.5%	21.1%	5.2%	\$197.3	1.1%
2023	12.5%	19.6%	4.3%	\$159.9	0.8%
Alternative Credit					
2022	10.0%	6.8%	1.8%	\$22.3	0.1%
2023	10.0%	8.2%	3.7%	\$57.3	0.3%
Natural Resources					
2022	5.0%	5.0%	0.8%	\$7.2	0.0%
2023	5.0%	5.2%	0.4%	\$4.3	0.0%
Real Estate					
2022	10.0%	10.5%	0.0%	\$0.0	0.0%
2023	10.0%	10.1%	0.0%	\$0.0	0.0%
Total Private Markets					
2022*	47.5%	54.5%	9.8%	\$962.3	5.3%
2023	47.5%	55.3%	7.6%	\$786.8	4.2%

Infrastructure and PE exposure decreased as fossil fuel investments were realized and capital returned.

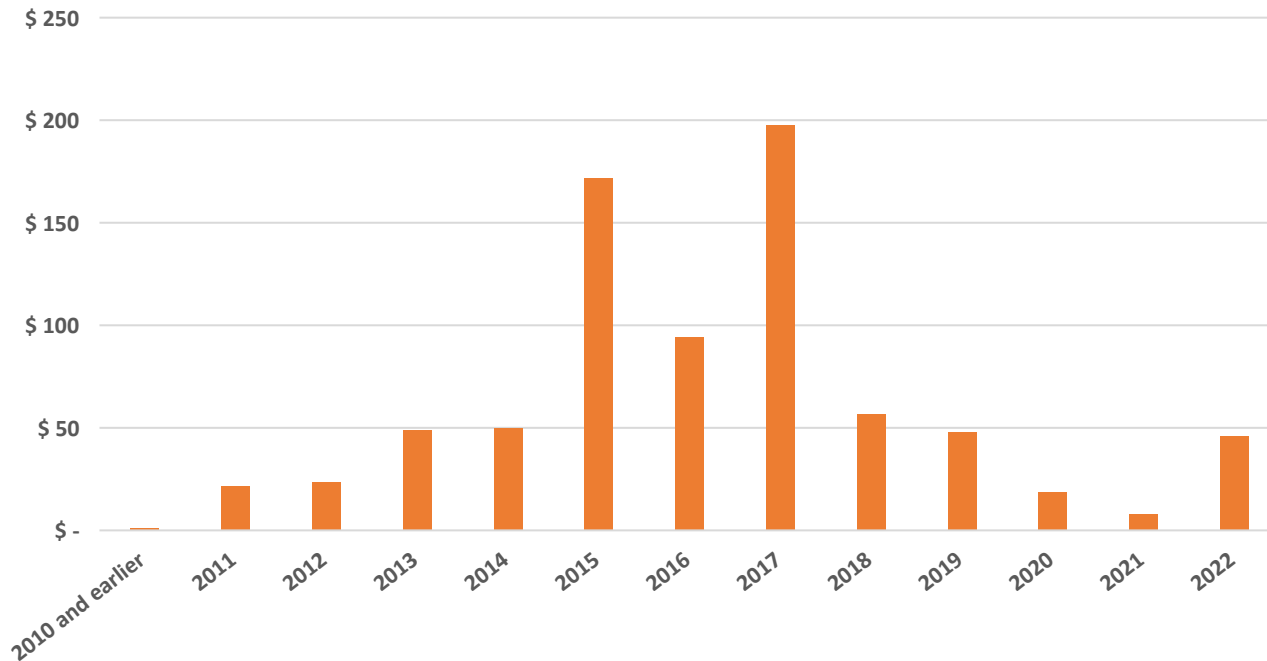
Infrastructure debt funds deployed capital into fossil fuel investments during 2023.

Overall fossil fuel exposure for private market investments fell \$175.5 million over the past year.

Note: Totals shown in tables may not sum due to rounding.

* Corrected.

Private Market Exposure by Vintage Year



Around 75% of fossil fuel exposure is held in vintage year 2017 and earlier funds. MainePERS' exposure to fossil fuels within private markets is expected to decrease over time due to the runoff of historical commitments to fossil fuel-focused strategies and the growth of infrastructure investment opportunities related to the energy transition.

MAINEPERS**BOARD OF TRUSTEES INVESTMENTS MEMORANDUM**

TO: BOARD MEMBERS

FROM: REBECCA WYKE, CHIEF EXECUTIVE OFFICER
JAMES BENNETT, CHIEF INVESTMENT OFFICER

SUBJECT: ANNUAL ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

DATE: DECEMBER 6, 2023

POLICY REFERENCE

[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](#)

Public Law 2021, c. 231, the fossil fuel divestment law, requires an annual review of the Board's environmental, social and governance (ESG) policy and disclosure of commonly available environmental performance metrics on the environmental effects of the Board's investments. Board Policy 2.6 incorporates the requirements of Public Law 2021, c. 231, and also requires a description of the implementation of the Board's policy, including recommendations for updates or revisions to this policy. Following this memo is the annual report for 2023, which meets all of these requirements.

This report discusses MainePERS' approach to integrating ESG considerations into investment decision-making, the Investment Team's efforts related to maintaining awareness of ESG considerations, and the System's commitment to transparency and appropriate stakeholder engagement. Additionally, the report discloses MainePERS' performance on commonly available environmental performance metrics.

A copy of Board Policy 2.6 – Environmental, Social and Governance Policy is included in this report. We have reviewed this policy and have no changes to recommend at this time.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Public Law 2021, c. 231

January 2024

Maine Public Employees Retirement System

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Appendix

- A. MainePERS Governance Manual, 2.6 Environmental, Social and Governance Policy
- B. MainePERS Governance Manual, 2.7 Engagement Policy
- C. MainePERS Governance Manual, 2.1 Investment Policy Statement

I. Introduction

The MainePERS Board of Trustees adopted Policy 2.6 – Environmental, Social and Governance Policy in January 2015 and subsequently amended this policy in May 2017 and November 2021. This policy directs MainePERS staff to incorporate environmental, social and governance (ESG) considerations into its investment decision-making and ongoing monitoring of investments. Policy 2.6 is contained in Appendix A and has three broad areas of focus:

ESG: Maintaining Awareness

Directs staff to maintain awareness and knowledge of ESG considerations and to understand the role these considerations play in investment valuation.

ESG: Investment Implementation

Directs staff to integrate ESG considerations when making investments and in the monitoring of existing investments. It also directs staff to encourage governance structures providing appropriate oversight in audit, risk management, and potential conflicts of interest, and to encourage managers to employ sound ESG practices.

ESG: Transparency and Stakeholder Engagement

Directs staff to provide timely and transparent disclosures regarding ESG matters and be accessible to, and engage with, relevant stakeholders.

II. Investments at MainePERS

MainePERS approach to ESG implementation in investments varies by investment area due to the nature of the assets and the specific approach taken when investing in different asset classes. Broadly speaking, MainePERS' strategic asset allocation includes three general categories – public markets, risk diversifiers, and private markets. Policy weights by category are shown below:

Public Market Assets	45.0%
Risk Diversifiers	7.5%
Private Market Assets	47.5%

Public market investments include domestic and international equity, traditional credit, and U.S. Government Securities. In broad terms, MainePERS employs a passive “buy the market” approach for its investments in public markets where the likelihood of generating outperformance is low. This allows the System to earn market returns at very low cost while maintaining a very high level of diversification. Since MainePERS does not make investment decisions based on the merits of individual securities within this asset class, ESG implementation primarily occurs via proxy voting, where MainePERS encourages appropriate governance and ESG practices.

In contrast, the System uses an active “beat the market” approach for other asset classes, where it is reasonable to believe that an active approach will add value. Investment in risk diversifiers are made via private funds employing active strategies to invest in assets such as public stocks, bonds, and commodities. These strategies are expected to have little correlation to public markets, intended to provide diversification away from growth assets, and are typically implemented using derivatives – buying stock index futures rather than holding shares in individual companies. ESG considerations within Risk Diversifiers typically focus on an analysis of the manager’s ESG characteristics and practices.

Private market assets include infrastructure, private equity, alternative credit, natural resources, and real estate. MainePERS invests in private market assets by committing capital as a limited partner to long-term private investment funds. The general partners (GP) of these funds agree to serve as fiduciaries to MainePERS and have wide discretion in the sourcing, managing, creating value, and timing of the acquisition and disposition of investments. MainePERS typically partners with managers pursuing a generalist investment approach in their funds, which allows the GP to direct capital into industries and sectors based on what it perceives as the most attractive investments based on current market conditions and the long-term opportunity set. Outcomes are driven by GP skill, and there is wide dispersion in performance across the universe of private market managers. MainePERS’ investments in this area are made subsequent to conducting due diligence on all aspects of the investments, including ESG considerations.

III. ESG: Maintaining Awareness

As discussed below, MainePERS’ Investment Team is able to draw on a variety of resources to maintain awareness of ESG-related investment considerations, including consultants, peer and professional networks, and participation in broad-based as well as ESG-focused organizations.

ESG Awareness: Weekly Team Meetings

The full Investment Team meets in-person on a weekly basis and is joined via Zoom by the System’s asset class consultants (Albourne and Cliffwater). These meetings are focused on presentations and discussions related to all aspects of the current pipeline of potential investments as well as discussion of existing investments and industry events and trends. While meeting topics are generally not ESG-specific, ESG-related investment issues are regularly considered as the merits of potential investments are presented and discussed. Specific examples include:

- EU Sustainable Finance Disclosure Regulation (SFDR) – discussion of the requirements for compliance and potential impact on private market funds’ strategies

- Investment Team Briefings – each potential investment is presented to the Team during early stages of due diligence, and key investment aspects (including ESG-related aspects) are presented and discussed
- Team debriefs – individual team members will brief the full group on topics and issues of general interest, including items arising in recent meetings with managers and peers. ESG-specific examples include:
 - Blackstone - Energy transition landscape and investment opportunities
 - ESG Book – ESG data and analytics provider
 - Ecosystem Investment Partners – Wetland-mitigation based strategy
 - Quantum Capital – VC approach to energy, sustainability, and decarbonization
 - Bluefield Partners – Renewables-focused infrastructure manager
 - S&P – Net zero indices
 - CIO-led discussions of stakeholder concerns regarding specific managers or investments
- Consultant discussion of ESG integration into investment due diligence

ESG Awareness: Professional Networks and Organizations

The investment team has access to ESG-related resources from both broad-based professional organizations such as the CFA Institute and CAIA (Chartered Alternative Investment Analyst) Association and via System membership in ESG-focused organizations such as the Coalition for Environmentally Responsible Economies (Ceres) and the Thirty Percent Coalition. Many of these organizations produce research and guidance specifically related to ESG considerations in investments, including private market investments. Examples of activities and materials related to professional networks and organizations include:

- The CFA Institute’s Certificate in ESG Investing. Two investment team members earned this certificate in 2022 and during 2023 presented an overview of the program to the full investment team.
- MainePERS is a member of the CAIA Association, which seeks to be a thought leader with respect to ESG trends and developments, and offers a variety of materials and events to assist members. The CAIA Association offers a well-respected certification in alternative investment analysis, and seven investment team members have earned this certification.
- MainePERS is a member of the Institutional Limited Partners Association (ILPA), an organization dedicated to advancing the interests of Limited Partners through education, research, and advocacy. Team members attend events both in-person and virtually, and the organization provides substantial ESG-related resources.
- MainePERS is a member of Ceres, a nonprofit group that works with institutional investors to promote investment sustainability. The group produces sustainability-related reports and tools, and hosts monthly calls to discuss risks related to fossil fuel investments.

IV. ESG Considerations in Investments

As noted above, MainePERS' approach to integrating ESG considerations into investment decisions varies by asset class, based on both the nature of the asset class and the investment approach taken by MainePERS.

ESG Considerations in Investments: Public Market Investments

As noted above, MainePERS takes a passive "buy the market" approach to investing in public markets. Such "indexing" allows the System to earn market returns at low cost while maintaining a high level of diversification. This approach does not involve evaluating the investment merits (ESG or otherwise) of individual securities and results in MainePERS owning small minority stakes in thousands of individual companies with limited ability to influence any particular organization. That said, the MainePERS Investment Team selectively engages companies where we believe engagement can have meaningful impact related to encouraging good governance.

The MainePERS Investment Team believes that being active owners and making our voice heard by voting of proxies of publicly traded companies has economic value and can serve to reduce portfolio risk. Proxies are the vehicle by which boards of directors are elected, bylaws are changed, and other actions in which owners are involved are accomplished. In conjunction with our proxy agent, Glass Lewis, MainePERS typically votes on over 10,000 individual management and shareholder proxy items each year. During the most recent fiscal year, MainePERS voted in favor of 50% of shareholder proposals and voted against management's recommendations concerning shareholder proposals in 67% of cases.

In addition, MainePERS engaged with 14 companies prior to casting our proxy vote on specific governance items. In these cases, we communicated to the companies our thinking regarding governance best practices and informed the company of our intention to vote our proxy contrary to management's recommendation. In one case (General Dynamics), we engaged in follow-up conversations with the company to better understand the reasoning behind their recommendation and ultimately changed our vote to support management on the particular issue.

ESG Considerations in Investments: Risk Diversifiers

Investments in MainePERS' Risk Diversifier allocation are intended to provide diversification away from growth assets such as equities. In general, these strategies are highly systematic – managers use quantitative data-driven models to construct portfolios and generally obtain exposures via derivatives, rather than taking positions in individual securities. Within this allocation, ESG considerations typically arise in the course of conducting manager-level due diligence, rather than strategy-specific due diligence. ESG considerations reviewed as part of manager-level due diligence include a review of the manager's history, SEC filings, involvement in legal actions, and potential for MainePERS to suffer reputational harm as a result of engaging with the manager. The ownership structure of the manager is considered, as well as the potential for conflicts of interest and the manager's own ESG practices and policies.

Implementing ESG Considerations: Private Market Investments

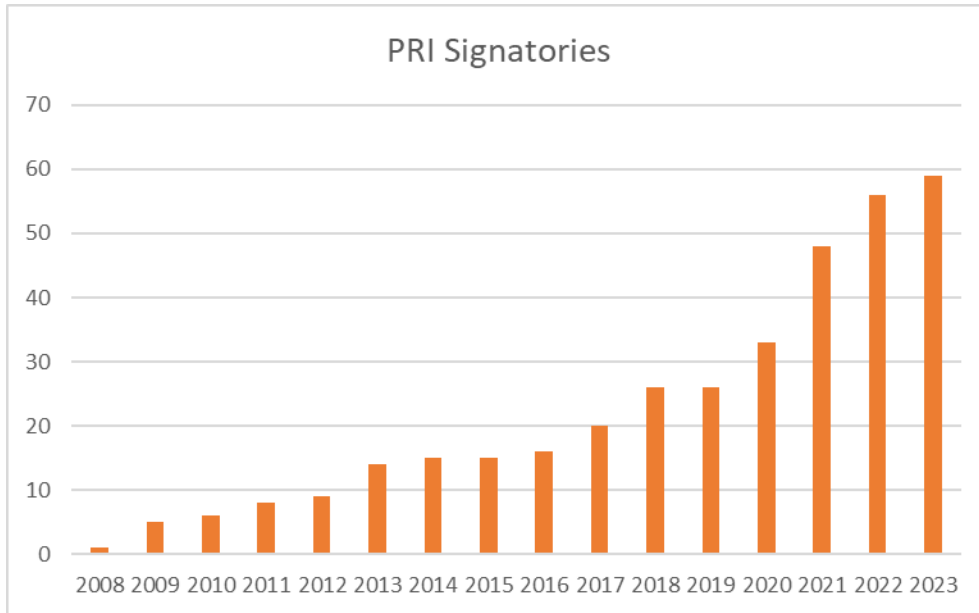
MainePERS invests in a number of private “alternative” asset classes, including infrastructure, private equity, alternative credit, natural resources, and real estate. Prior to investing with any particular private asset manager, the MainePERS Investment Team completes a thorough due diligence process. This process is designed to assist the Team in the identification and monitoring of risk factors, including ESG-specific risks, and includes a review of a prospective manager’s internal ESG policy.

Governance and labor practices are crucial concerns in our due diligence process. Appropriate governance and alignment of interests is a prerequisite for any MainePERS investment. We also study labor practices of both the fund and the companies they manage. The due diligence process provides our Investment Team with a road map of strengths and weaknesses that allows us to make an informed investment recommendation to the Board of Trustees.

Our holistic approach means we rarely make an investment decision based on a single issue (ESG-related or otherwise). Bringing all these factors into consideration, MainePERS looks to partner with asset managers that operate in an environmentally responsible manner, foster a fair and meritocratic work environment, and provide responsible corporate citizenship. Our Investment Team also believes that conducting due diligence into the ESG practices of potential managers is itself an important act and in many cases serves to alert managers to a need to improve their ESG practices and disclosures. The improvements to ESG practices are beginning to take root, and we have noticed an increasing number of managers incorporating ESG-related issues such as climate risk into investment decisions each year.

ESG Considerations in Investments: Encouraging Managers

As discussed above, part of MainePERS’ due diligence process includes a review of a prospective manager’s integration of ESG considerations into investment due diligence. Not surprisingly, the number of managers explicitly considering ESG factors when making investments has risen over time as institutional investors such as MainePERS include ESG considerations as part of investment due diligence. One quantifiable measure of this is the number of managers that have signed onto the Principles for Responsible Investing, a UN-supported effort that works with investors and asset managers around the world. PRI signatories commit to incorporating ESG issues into investment analysis and asset ownership and to appropriate levels of ESG-related disclosures. As shown below, the number of managers in the MainePERS portfolio that have signed on to these Principles for Responsible Investing has grown steadily over time. As of fiscal year end, 59 (out of 89 total) of MainePERS’ managers, with investment responsibility for 84% of assets, were PRI signatories.



V. ESG: Transparency and Stakeholder Engagement

As an organization, MainePERS strives to be transparent and willing to engage with stakeholders as appropriate. With respect to the System's investments in general, and ESG-related topics specifically, this commitment to transparency is evidenced by the materials available on the System's website. Interested stakeholders are easily able to find and review:

- System policies, including
 - Policy 2.1 – Investment Policy Statement
 - Policy 2.6 – Environmental, Social and Governance Policy
 - Policy 2.7 – Engagement
- System reports, including
 - Annual Comprehensive Financial Reports
 - Annual ESG and Divestment Reports
 - Monthly Investment Reviews prepared for each month's Trustee meeting
- Detailed lists of investment holdings
- Summary and detailed proxy voting reports

Stakeholders, both individuals and organizations, frequently contact MainePERS regarding ESG-related investment issues. These inquiries range from simple requests for information to requests to meet in order to discuss particular issues. In all cases, requests are appropriately responded to. In many cases these inquiries lead to the Investment Team holding discussions with individual managers to fully understand the issues raised by stakeholders and, as warranted,

result in Trustee notification and discussion. During 2023, MainePERS' CEO and CIO also participated in the following virtual meetings in response to stakeholder inquiries:

- January 2023: MainePERS' proxy voting discussion with representatives from SEIU.
- April 2023: MainePERS' proxy voting discussion with representatives from the Sierra Club and Stop the Money Pipeline.
- June 2023: Met with representatives from the Private Equity Stakeholder Project to discuss issues raised by the group concerning one of MainePERS' managers.

VI. ESG: Metrics

The development and reporting of ESG-related metrics remains nascent, and such metrics are primarily available only for publicly listed companies. In this section we provide environmental metrics for the public equity portion of MainePERS' portfolio. We hope to expand this reporting in future years as these metrics become available for additional asset classes.

As discussed earlier, MainePERS employs an indexing approach to its public equity investments. This approach allows MainePERS to obtain broad exposure to global stock markets at very low cost. By "buying the market," MainePERS is invested in the shares of over 5,000 companies spread across 50 developed and emerging markets. As a result, the characteristics of MainePERS' equity holdings mirror those of the benchmarks that the portfolio tracks. For example, the U.S. Equity portion of the portfolio is indexed to the Russell 3000 Index. This means that the features and characteristics of MainePERS' U.S. equity holdings match those of the index. For example, if aggregate price-to-earnings (P/E) ratio of the index equals 23, then the U.S. portion of MainePERS' equity holdings will also have a P/E ratio of 23. This correspondence also holds for other features, including ESG-related metrics.

The below table contains commonly available environmental metrics for those global equity benchmarks to which MainePERS' equity portfolio is indexed.

	Russell 3000 Index	MSCI All Country World Index ex U.S.
Total CO2 Emissions / \$1m invested (1)	97	210
Emissions Intensity (2)	177	263

(1) Annual tons of Scope 1 and Scope 2 CO2 equivalent emissions per \$1m invested value.

(2) Annual tons of Scope 1 and Scope 2 CO2 equivalent emissions per \$1m revenue.

As of June 30, 2023, MainePERS held \$3.0 billion of U.S. equities and \$1.8 billion of non-U.S. equities, which represents approximately 0.007% of the total value of these indexes. Applying these dollar amounts to the benchmark metrics contained above allows us to estimate the total CO2 equivalent emissions (Scope 1 and 2) related to MainePERS public equity investments as

669,200 metric tons. MainePERS' portfolio metrics, both environmental and otherwise, should be viewed as being in line with global benchmarks as we are invested in benchmarks that effectively comprise all companies listed in global markets other than "frontier" markets.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investments and Administration

2.6 – Environmental, Social and Governance Policy

Date Adopted: January 8, 2015

Date Amended: May 11, 2017; November 18, 2021

Policy

The MainePERS Board of Trustees considers material environmental, social, and governance (ESG) risks and value creation opportunities critical for inclusion in its due diligence and ongoing monitoring of investments subject to its fiduciary duties, constitutional requirements and in accordance with laws and regulations. The MainePERS Board of Trustees directs the Chief Executive Officer and MainePERS Investment Team to incorporate ESG considerations into all investments considered or made by MainePERS following the adoption date of this policy, and to examine opportunities for ESG integration in existing investments.

MainePERS acknowledges that it will not always be feasible to ensure a particular investment's integration of ESG considerations, especially in cases where MainePERS is a minority owner and has limited ability to influence the organization. In these cases, the MainePERS Investment Team shall engage organizations with which it currently invests to strongly consider relevant ESG-related issues. In addition, MainePERS will consider its ability to influence ESG considerations when weighing prospective investments.

The MainePERS Board of Trustees shall annually review implementation of this policy and update or revise this policy as appropriate.

This policy shall also apply to investment consultants hired by MainePERS to provide guidance on investment due diligence matters.

Statutory/Legal Provisions

- [Me. Const. art. IX § 18](#)
- [5 M.R.S. §§ 1957, 17102 and 17103](#)

Roles and Responsibilities

The Chief Executive Officer shall ensure that the MainePERS Investment Team integrates this policy into the investment due diligence process. The MainePERS Chief Investment Officer and Deputy Chief Investment Officer shall ensure that material ESG issues are continually reviewed, revised and integrated by the investment team in the due diligence process. A report describing the implementation of this policy, including recommendations for updates or revisions to this policy, will be provided to the Trustees at the December Board meeting each year. The report must also include commonly available environmental performance metrics on the environmental effects of MainePERS' investments.

Governance Manual

MainePERS Board of Trustees

ESG Due Diligence

MainePERS believes that organizations that understand the benefit of and openly practice sound environmental, social and governance business practices create strong business models and investment opportunities. Consistent with its fiduciary duties, constitutional requirements and in accordance with laws and regulations, MainePERS shall:

1. Maintain awareness of new and existing key ESG considerations and their impact on investment valuation, and update the due diligence process used to identify material ESG issues accordingly.
2. Examine and understand each potential or existing investment's material ESG risk exposure and use this knowledge when evaluating potential investments and during the duration of investment ownership.
3. Be accessible to, and engage with, relevant stakeholders.
4. Encourage and support the adoption and implementation of sound environmental, social, and governance practices by companies and managers in which MainePERS invests.
5. Encourage governance structures that provide appropriate levels of oversight in the areas of audit, risk management, and potential conflicts of interest.
6. Encourage MainePERS investments, and MainePERS business partners to commit to aligning their operations and strategies with the United Nations Global Compact's principles regarding human rights, labor, environment, and anti-corruption.
7. Provide timely and transparent information accessible by stakeholders on the matters addressed in this policy.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investments and Administration

2.7 – Engagement

Date Adopted: February 11, 2016

Date Amended: October 11, 2018; November 18, 2021

Policy

MainePERS is the fiduciary for funds it is assigned to manage. MainePERS shall be a good steward for the funds entrusted to it, managing and investing these funds as a “prudent investor” in accordance with the “exclusive benefit rule” and the laws and Constitution of the State of Maine. MainePERS shall also promote the long-term success of companies with which the System invests through engagement activities.

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.

Engagement

Engagement is encouraging long-term success and growth of publicly traded companies with whom MainePERS invests through activities such as:

- Direct engagement
- Participating in or sponsoring shareholder litigation
- Proxy voting

Governance Manual

MainePERS Board of Trustees

Direct Engagement

MainePERS will maintain a direct engagement effort consistent with the need for and resources available to encourage the publicly traded companies in its portfolio to achieve long term growth and success, balancing the long term focus of good stewardship with the short term challenges the company faces. Direct engagement opportunities may be based on continuous monitoring of its investments including investment analysis, trade publications, trade organizations, or coordination with other institutional investors.

Direct engagement includes written and oral communication to companies, including attending shareholder meetings and sponsoring shareholder resolutions in unusual circumstances.

Shareholder Litigation

MainePERS will participate in shareholder litigation only to the extent that participation is likely to benefit MainePERS members as pension beneficiaries. MainePERS generally will not assume the role of lead plaintiff in a securities class action unless no other investor with interests similar to MainePERS and sufficient resources to support the litigation is willing to serve as lead plaintiff and the System otherwise will lose the benefit of the litigation to members.

Proxy Voting

MainePERS will vote its proxies in the best interests of its members as pension beneficiaries. This will generally mean focusing on good stewardship by the companies with which MainePERS invests, including:

- Voting to optimize each company's value to shareholders, balancing the long-term focus of good stewardship with the short-term challenges the company faces. Good stewardship includes establishment of effective governance and management practices, responsibility to employee and customer welfare, and responsibility to the environment;
- When there is a conflict between long- and short-term interests, voting shall be in favor of proposals that maximize shareholder control consistent with effective business operations of the company;
- Refraining from voting to further the interests of any group other than the best interests of MainePERS members as pension beneficiaries.

The Chief Executive Officer and Chief Investment Officer shall implement this direction by engaging a proxy voting agent to vote shares of stock owned by MainePERS. The MainePERS investment team shall create, maintain, and update general guidance in the following areas that the proxy voting agent can use to map to proxy votes available to MainePERS:

- Management resolutions
 - Elections of officers
 - Ratification of auditors
 - Governance structure and shareholder rights
 - Compensation

Governance Manual

MainePERS Board of Trustees

- Shareholder proposals
 - Environment
 - Social matters
 - Governance
 - Compensation
- Mergers and proxy contests

The MainePERS Investment team shall work with the proxy voting agent to determine MainePERS' position on proxies not directly covered by the implementation guidance. The Investment team shall monitor the proxy voting agent's implementation of the MainePERS guidance and report semi-annually to the Board of Trustees. The Board may meet with the proxy voting agent from time to time to discuss MainePERS' votes.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy for Defined Benefit Plans

2.1 – Investment Policy Statement

Date Adopted: June 9, 2016

Date Amended: November 10, 2016; May 11, 2017; June 8, 2017; September 14, 2017; December 14, 2017; November 12, 2020; January 14, 2021; May 12, 2022, February 9, 2023

Policy

The Board of Trustees of the Maine Public Employees Retirement System is authorized and responsible for administering defined benefit retirement programs at the State and local levels. The Board carries out this responsibility by adopting investment objectives and establishing an investment program through which the policy is implemented. In the case of conflicts, this policy statement supersedes previous policies and actions by the Board.

This policy covers the investment management of the assets of the following defined benefit programs administered by the Board:

- Legislative Retirement Program;
- Judicial Retirement Program;
- State Employee and Teacher Retirement Program, which includes State employees and public school members; and
- Participating Local District Retirement Program, which includes retirement plans of withdrawn participating local districts and the Consolidated Plan for Participating Local Districts.

Collectively, the assets of these programs are referred to as the DB Plan Assets. Statutes allow for the pooling of the DB Plan Assets for the purpose of investment. Pooling provides significant efficiencies. Because the relevant characteristics of the DB plans are sufficiently similar, all the DB Plan Assets are pooled for investment.

Statutory/Legal Provisions

- [Me. Const. art. IX, § 18.](#)
- [5 M.R.S. §§ 1957-1958](#) (divestment statutes)
- [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”).
- Restatement (Third) of Trusts formally permits, and in some cases requires, the delegation of investment decisions from trustees to internal staff or external agents with the necessary skills and knowledge.

Governance Manual

MainePERS Board of Trustees

- 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.

Resources

The Board of Trustees implements this investment policy in coordination with:

- in-house investment professionals (the “Investment Team”), with experience, authority and responsibility to implement the investment policy and administer investment operations;
- consultants, with appropriate expertise, to assist the Board and the Investment Team;
- investment managers, selected individually and collectively to reflect and implement the investment policy, having full discretion within policy and contractual limits to manage assets allocated to them;
- custodians qualified to carry out recordkeeping, reporting, measurement and custodial functions; and
- other advisors that the Board deems appropriate and necessary

The Investment Team shall oversee the processes by which Custodians, Consultants, and other Advisors are hired, evaluated, and terminated, and shall work with the General Counsel on the terms of contracts of engagement.

At least every five years, the Investment Team will evaluate the performance and contract terms of all such service providers and make a recommendation to the Board as to whether or not a search process for new providers and/or renegotiation of terms be initiated.

Investment Objectives

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.

Governance Manual

MainePERS Board of Trustees

Strategic Asset Allocation and Rebalancing

The Investment Team and Board consultants shall annually review long-term capital market expectations and existing asset class allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes to the existing strategic asset classes, target weights, and ranges for implementation by the Investment Team. (See Appendix 1)

The specified policy weight ranges define minimum and maximum acceptable weights for each asset class. (See Appendix 2) The Investment Team shall maintain asset class weights within target ranges, subject to considerations such as transactions costs and the unique characteristics of private market investments, by reallocating capital within existing strategies and investments. The Investment Team will provide Trustees with reports showing the fund's current asset allocation at least monthly, and report on rebalancing activity quarterly.

Portfolio Risk Management

The primary method of controlling risk shall be the selection of the strategic asset allocation and asset class target weights within the allocation. (See Appendix 1) Combined with long term capital market expectations, these policy weights define a portfolio with a specific level of risk.

The Chief Investment Officer shall develop a risk strategy for managing assets within the Board approved strategic asset allocation. The risk strategy will specify practices and procedures for the measurement and management of portfolio risk, including the provision of a portfolio risk report to the Board at least quarterly. (See Appendix 3)

Nothing in the risk strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance, but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 4) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

For performance evaluation purposes, all rates of return will be measured net of the deduction of investment management fees.

During a period of transition from one asset allocation to another, certain transitional allocations to appropriate benchmarks are permitted.

Governance Manual

MainePERS Board of Trustees

Investment Implementation

The Investment Team shall implement the investment policy, subject to Board guidelines:

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 4. Any exceptions must be approved by the Board.
- Investments within each Asset Class should be consistent with the Asset Class definitions provided in Appendix 1.

Environmental, Social, and Governance; Engagement

In performing due diligence and monitoring activities, the Board and the Investment Team shall comply with Board Policy 2.6, Environmental, Social and Governance Policy; and Board Policy 2.7, Engagement.

Investment Manager Selection and Allocation Process

MainePERS invests through external investment managers, who are charged to act as fiduciaries, and allocates fund assets among them in accordance with the strategic asset allocation. The Investment Team identifies, performs due diligence on, and recommends investment managers and allocations to the Board. The Investment Team also monitors performance and recommends retention and termination decisions to the Board. The Board retains final authority for manager selection, retention and termination decisions.

Managers are selected and retained on the basis of an evaluation that establishes sufficient confidence that the manager will improve the return and risk of the investment program. If and when the Investment Team and/or consultant(s) identify an investment manager that they believe will improve the investment program, the Investment Team will make a recommendation to the Board of Trustees that the manager be hired. This recommendation will be accompanied by an opinion by the investment consultant on this recommendation. The Board retains the final authority to accept or reject such recommendations.

The Investment Team will prepare and present to the Board of Trustees selection criteria they deem pertinent for each manager search and recommendation to hire. The Investment Team will provide the Board with all the necessary information and analysis to enable an informed decision. The Board may choose to interview the recommended manager or they may rely on the Investment Team to conduct interviews.

Derivatives

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. The System may also invest in strategies which use derivatives to obtain leverage. In all such cases, the use of derivatives must be disclosed to the

Governance Manual

MainePERS Board of Trustees

Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Leverage

The System may invest in strategies in which managers have discretion to use leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

Fossil Fuel and Private Prison Investments

The System may invest in strategies providing managers with broad discretion in the selection of investments. The potential for fossil fuel or for-profit prison investment must be disclosed to the Board prior to the Board's approval of a strategy. For those strategies likely to invest in stocks, securities or other obligations of fossil fuel or for-profit prison assets, disclosures will include a description of the expected role of such investments in the proposed strategy and discussion of the process leading to the selection of the strategy.

On an annual basis, the Board will be provided with a report summarizing the System's fossil fuel and for-profit prison investments. This report will include a discussion of the actual and expected changes in these exposures, and analysis of these exposures within the context of the divestment statutes, 5 M.R.S. §§ 1957 and 1958.

Hedging

The Board has reviewed the benefits and risks associated with foreign currency exposures. As a general rule the Board has chosen not to hedge currency at the portfolio level. Unless otherwise directed asset managers will have discretion to hedge investments under their management as they deem most beneficial to their mandate.

Transaction Costs and Brokerage

The Board of Trustees expects investment managers, in their capacity as fiduciaries, to manage transaction costs in the best interests of the System as an investor. To enable the managers to fulfill this fiduciary duty, it is the Board's policy not to be party to directed brokerage programs.

Securities Lending

The System may participate in a securities lending program either directly through its separately managed portfolios or indirectly through its investments in pooled vehicles. In each case, the securities lending program must focus on low risk, as opposed to maximization of returns. All DB Plan Assets are available for securities lending.

Governance Manual

MainePERS Board of Trustees

Monitoring

The Board relies on the Investment Team and the investment consultant(s) to continuously monitor the investment program and to report to the Board as outlined below.

- the Investment Team and investment consultant(s) provide comprehensive periodic reports on the entire investment program, including asset allocation, performance of each component relative to benchmarks, attribution analysis, and commentary.
- the Investment Team and investment consultant(s) monitor changes and developments at investment managers and at custodian(s) on an ongoing basis and report significant changes or events with recommended actions as needed.

Emergency Measures

Immediate action may be taken beyond the bounds of this policy under extraordinary circumstances and in order to preserve the best interests of the plans' participants by unanimous decision of the following:

- The Chair, or in the Chair's absence, Vice Chair of the Board
- The Chief Executive Officer, or in the Chief Executive Officer's absence, the Chief Operating Officer and General Counsel
- The Chief Investment Officer, or in the Chief Investment Officer's absence, Deputy Chief Investment Officer, or in the absence of both of them, the general investment consultant

Any such action must be reported to the Board of Trustees at the earliest opportunity.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; September 14, 2017; January 14, 2021; May 12, 2022

The System's assets are invested across nine Asset Classes that play four distinct Roles in the overall Fund. The Trustees define these Roles and Asset Classes and set target policy weights and ranges below.

	Weights		
	Minimum	Policy	Maximum
GROWTH	35%	42.5%	55%
Public Equity	20%	30%	40%
Private Equity	5%	12.5%	20%
RISK DIVERSIFIERS	0%	7.5%	12.5%
HARD ASSETS	15%	25%	35%
Real Estate	5%	10%	15%
Infrastructure	5%	10%	15%
Natural Resources	0%	5%	10%
CREDIT	5%	15%	20%
Traditional Credit	0%	5%	10%
Alternative Credit	0%	10%	15%
MONETARY HEDGE	5%	10%	15%
US Government Securities	5%	10%	15%
Cash	0%	0%	10%

Asset Class Definitions

The below Asset Class definitions are simplified and are intended to convey the general characteristics of investments held within each class. Some investment strategies involve assets and securities that span multiple asset classes.

Public Equity

Investments in publicly-traded shares of companies. May include different classes of common stock, shares of REITs, and MLPs.

Private Equity

Investments in non-publicly traded shares of companies. Investments are typically made via private limited partnerships, and may include both equity and debt securities.

Governance Manual

MainePERS Board of Trustees

Risk Diversifiers

Investments typically made through private funds that generally invest in listed assets such as stocks, bonds, and commodities, via strategies that are expected to have little correlation with declining or rising stock markets.

Real Estate

Investments providing direct exposure Real Estate, including investments through private funds.

Infrastructure

Investments typically made through private funds that generally invest in assets that meet most or all of the following criteria: provide essential public services, possess monopoly-like characteristics, provide long term contracted cash flows, and bear limited volumetric and price risk.

Natural Resources

Investments in private funds that generally invest in businesses focused on natural resources such as timberland, agriculture, and mining. Private energy investments will generally be included in Private Equity, rather than Natural Resources.

Traditional Credit

Investments in investment-grade debt instruments that are not issued by the U.S. Government. Such debt may or may not be registered for sale to the general public.

Alternative Credit

Investments in debt instruments issued by non-investment grade and unrated entities. This may include, but is not limited to high yield debt, bank loans, structured debt, and asset-backed debt. Alternative credit investments are expected to pay or accrue periodic interest and to return principal at maturity. Distressed debt and other debt or yield-oriented securities that include equity-like exposures are considered Private Equity, not Alternative Credit.

Monetary Hedges

Investments in debt instruments issued by the U.S. Government, including nominal Treasury securities and Treasury Inflation Protected Securities (TIPS), held in approximately equal proportions.

Governance Manual

MainePERS Board of Trustees

Roles in the Overall Fund

Each of the above asset classes fills a specific Role in the overall portfolio. These Roles are defined below.

Growth Assets

Growth Assets are intended to reduce the system's funding needs in the long term by appreciating in value. Growth Assets possess inherently higher expected returns than other asset classes. Growth Assets also have higher expected volatility than other asset classes, and are expected to increase funding volatility in the short run.

Risk Diversifiers

Risk Diversifiers are investments that primarily derive their return from alpha (or active manager skill) as opposed to market directionality. Risk Diversifiers are expected to provide significant risk diversification benefits away from Growth Assets.

Hard Assets

Investments in the Hard Assets category provide exposure to long-lived "real" assets, such as real estate, timber, agricultural, and infrastructure assets. Expected return levels of Hard Assets are lower than those of Growth Assets, and a substantial portion of such returns is expected to come from ongoing cash flows. Hard Assets are expected to provide inflation protection, to have low correlation with Growth Assets, and to provide diversification benefits.

Credit Assets

Credit investments provide capital to end-users via loans and the purchase of debt securities. Such investments provide for contractual returns (interest) and repayment of principal. Credit investments possess lower risk and expected returns than equity investments, but have higher risk and expected returns than monetary hedges. Credit investments are expected to provide diversification away from Growth Assets.

Monetary Hedges

The role of Monetary Hedges in the portfolio is to provide liquidity and a safe harbor in times of turbulence. These investments are cash and obligations of the U.S. Government, and are considered to be free of default risk.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 2: Rebalancing

Date Adopted: June 9, 2016

Date Amended: May 12, 2022; July 14, 2022

The Board has set target weights for each Asset Class and Role in Portfolio category in Appendix 1, and delegates the management of asset class allocation to the Investment Team. The Investment Team is expected to maintain asset class weights near target, subject to considerations such as transactions costs and the unique funding and liquidity characteristics of private market investments.

To this end, the Team is permitted to reallocate capital within existing strategies and investments for rebalancing purposes. The Investment Team is expected to consider both Role in Portfolio and Asset Class policy weights when rebalancing. The Team will provide Trustees with reports showing the Fund's current asset allocation at least monthly, and report on rebalancing activity at least quarterly.

In the specific case of the System's Risk Diversifier allocation, the Investment Team is permitted to rebalance across existing managers and strategies, consistent with the goal of maintaining diversification within the allocation. Rebalancing activity will be reported to Trustees at least quarterly.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 3: Risk Strategy

Date Adopted: June 9, 2016

Date Amended: New

While this Risk Strategy is in development the Chief Investment Officer shall rely on the Strategic Asset Allocation and Rebalancing provisions of this policy to manage the Fund's risk.

The Investment Team and the Board believe that this approach will deliver an appropriate expected return with commensurate risk over a long term horizon. However they also recognize that the portfolio's realized risk will vary over time which may result in periods during which the fund bears substantially higher risk than the System initially targeted.

In an effort to achieve more stable (less volatile) returns, the Investment Team will seek to develop management tools and practices that they believe will be better able to keep the fund's risk in an acceptable range.

This Risk Strategy shall be updated from time to time by the Trustees to reflect recommendations developed by the Chief Investment Officer.

Nothing in the Risk Strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 4: Policy Benchmarks

Date Adopted: June 9, 2016

Date Amended: June 8, 2017, January 14, 2021, May 12, 2022

Asset	Benchmark	Weight
Total Public Equity	Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights	30%
Private Equity	Russell 3000 + 3%	12.5%
Diversifiers	0.3 Beta MSCI ACWI	7.5%
Real Estate	NCREIF Property (lagged one quarter)	10%
Infrastructure	CA Infrastructure Median	10%
Natural Resources	CA Natural Resources Median	5%
Traditional Credit	Barclays US Aggregate, ex Treasury	5%
Alternative Credit	50% BAML US HY II + 50% S&P/LSTA US Leveraged Loan Index	10%
U.S. Government Securities	50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index	10%

Governance Manual

MainePERS Board of Trustees

Board Responsibilities – Investment Policy

Appendix 4: Co-Investment

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; January 14, 2021; May 12, 2022

Co-investments are permitted within private market asset classes, subject to the below guidelines.

Target Allocation	7.5% of total Fund. This target is a subset of the total 47.5% allocation to private market asset classes, and is not in addition to that allocation.
Asset Classes	Co-investment may be made in each of the private market asset classes.
Discretion	Investment Team has discretion to make co-investments, in conjunction with the asset class consultant.
Signatories	The Chief Executive Officer, Chief Investment Officer, and General Counsel are authorized as signatories to execute documents in connection with co-investments.
Permissible Partners	Unless otherwise authorized, co-investments will only be made alongside Funds in which the System is a current investor.
Size Limits	Unless otherwise authorized, maximum of \$25m invested into any single co-investment. Unless otherwise authorized, maximum of \$200m aggregate co-investment in a single asset class with any single General Partner. The Investment Team will provide additional co-investment portfolio reporting to Trustees for those General Partners with more than \$100m of aggregate co-investment in any single asset class.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: MICHAEL COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL
JAMES BENNETT, CHIEF INVESTMENT OFFICER
CHIP GAVIN, CHIEF SERVICES OFFICER

SUBJECT: MAINESTART QUARTERLY REVIEW

DATE: DECEMBER 6, 2023

Following this memo is the MaineSTART Quarterly Review for the quarter ending 6/30/2023.

POLICY REFERENCE

[Board Policy 2.1-C – DC Plans 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 required.



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

MaineSTART Quarterly Review

For the Quarter Ending 9/30/2023

MAINE
START

MaineSTART Review 3Q 2023

Overview of MaineSTART

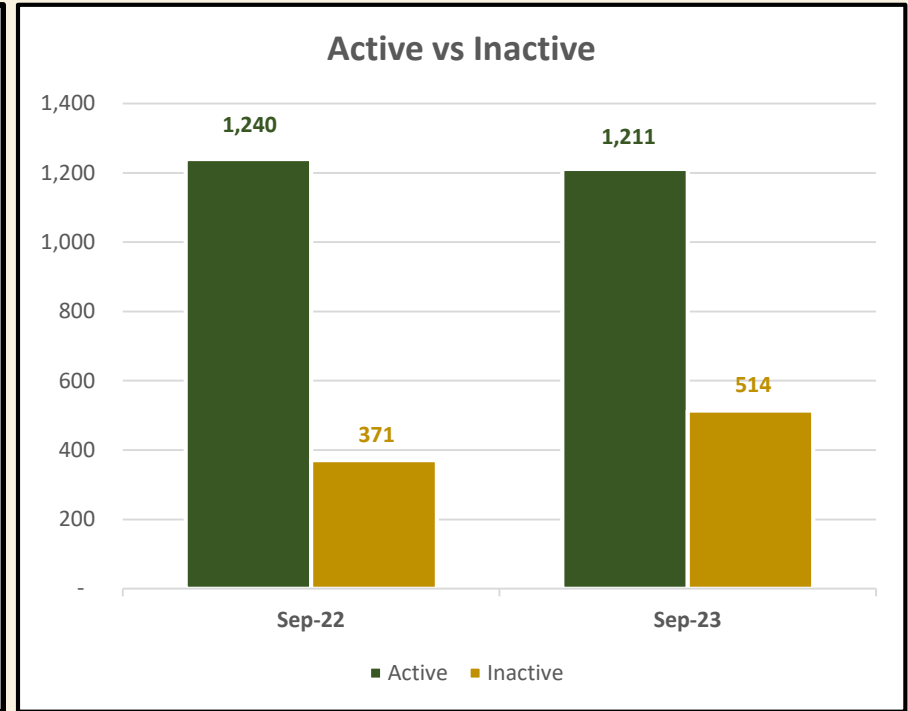
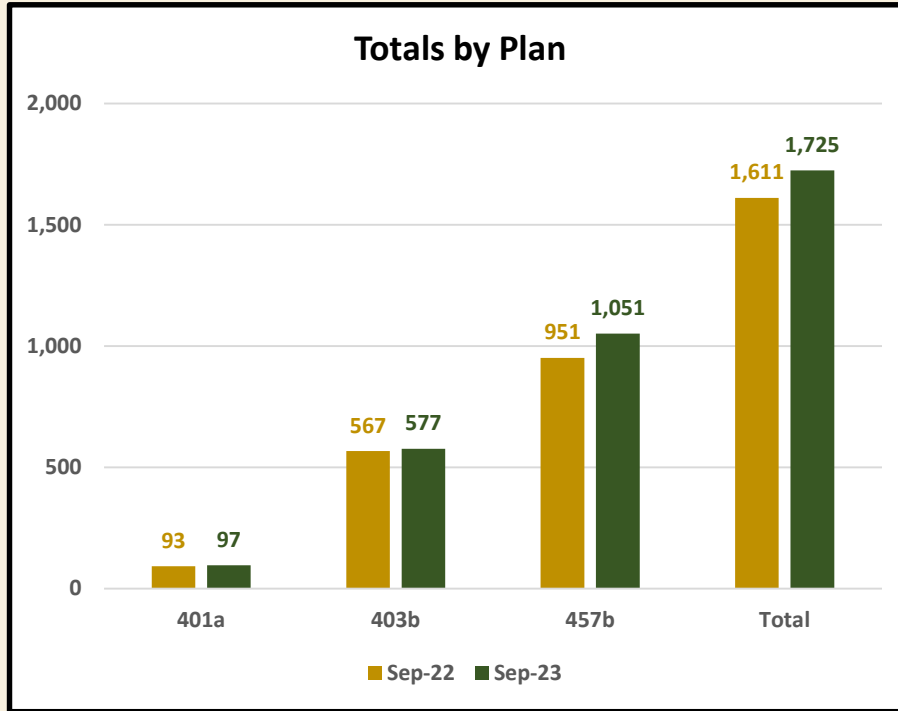
- ▶ **401(a) Defined Contribution Plan**
 - ▶ **Qualified Plan**
 - ▶ **Higher Contribution Limits**
 - ▶ **Inflexible**

- ▶ **403(b) Tax-Sheltered Annuity Plan**
 - ▶ **Only for Educational and Certain Non-Profit Organizations**
 - ▶ **Flexible**

- ▶ **457(b) Deferred Compensation Plan**
 - ▶ **Flexible**

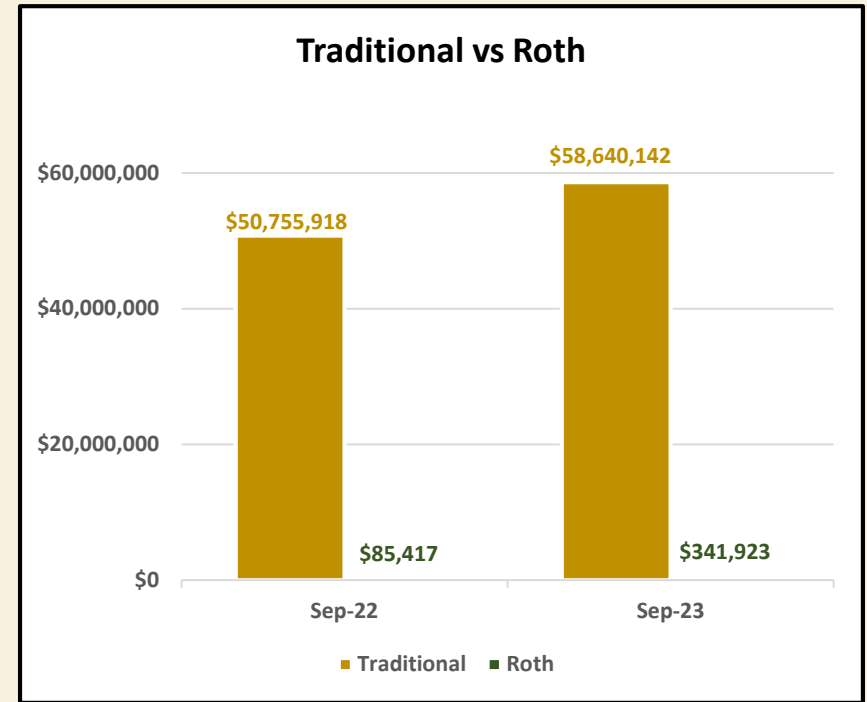
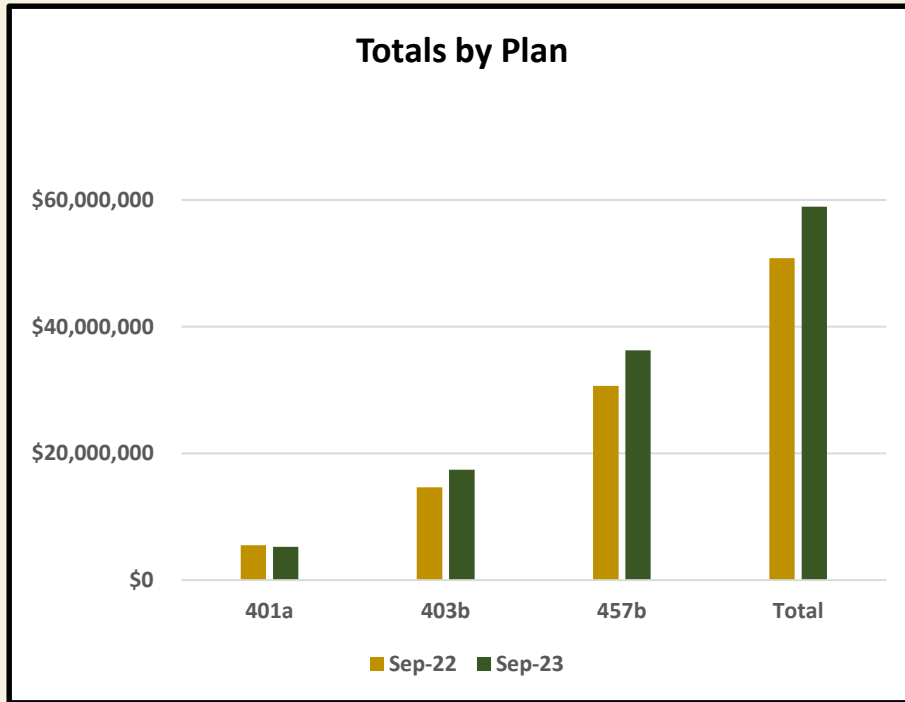
MaineSTART Review 3Q 2023

Participants



MaineSTART Review 3Q 2023

Market Value



MaineSTART Review 3Q 2023

Participation and Value as of 9/30/2023

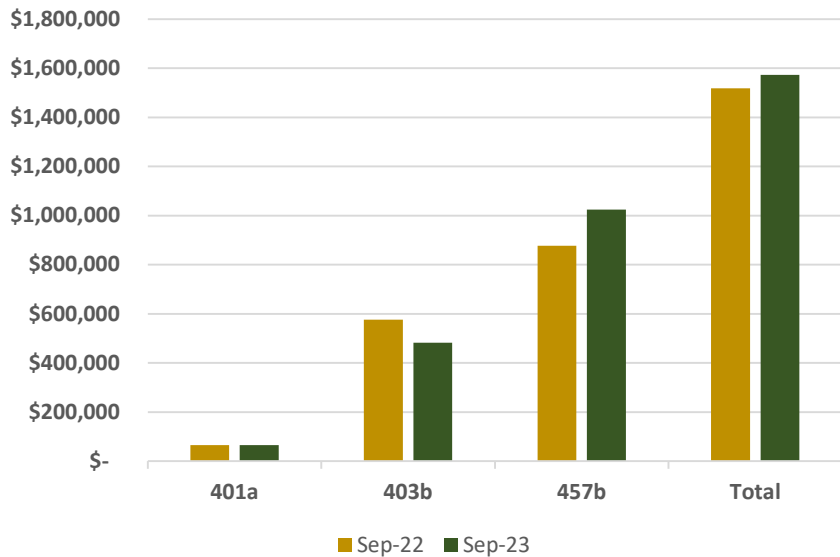
	401(a)	403(b)	457(b)	Total	Change from 9/30/2022
Participating Employers	7	1	77	85*	5
Participating Employees	97	577	1,051	1,725	114
Total Market Value	\$5,277,045	\$17,453,346	\$36,251,674	\$58,982,065	\$8,140,730

*24% of PLDs

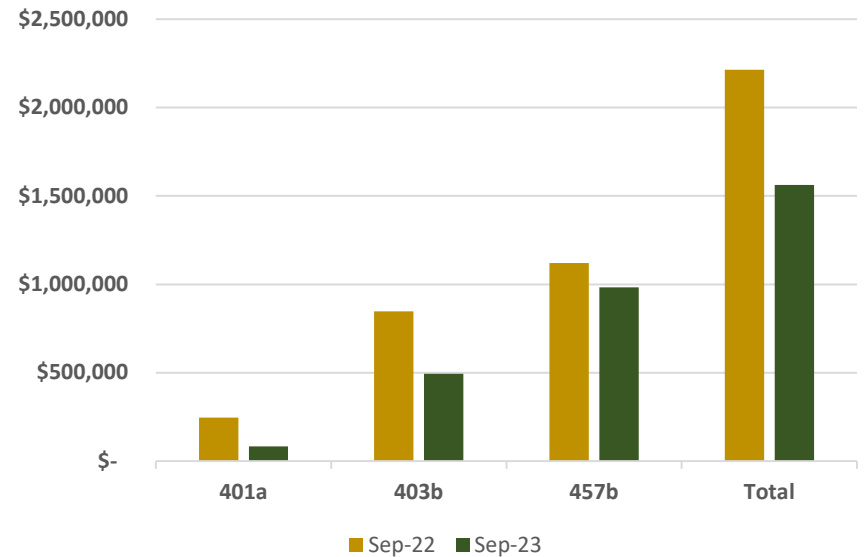
MaineSTART Review 3Q 2023

Cash Flows

Contributions by Plan



Distributions by Plan



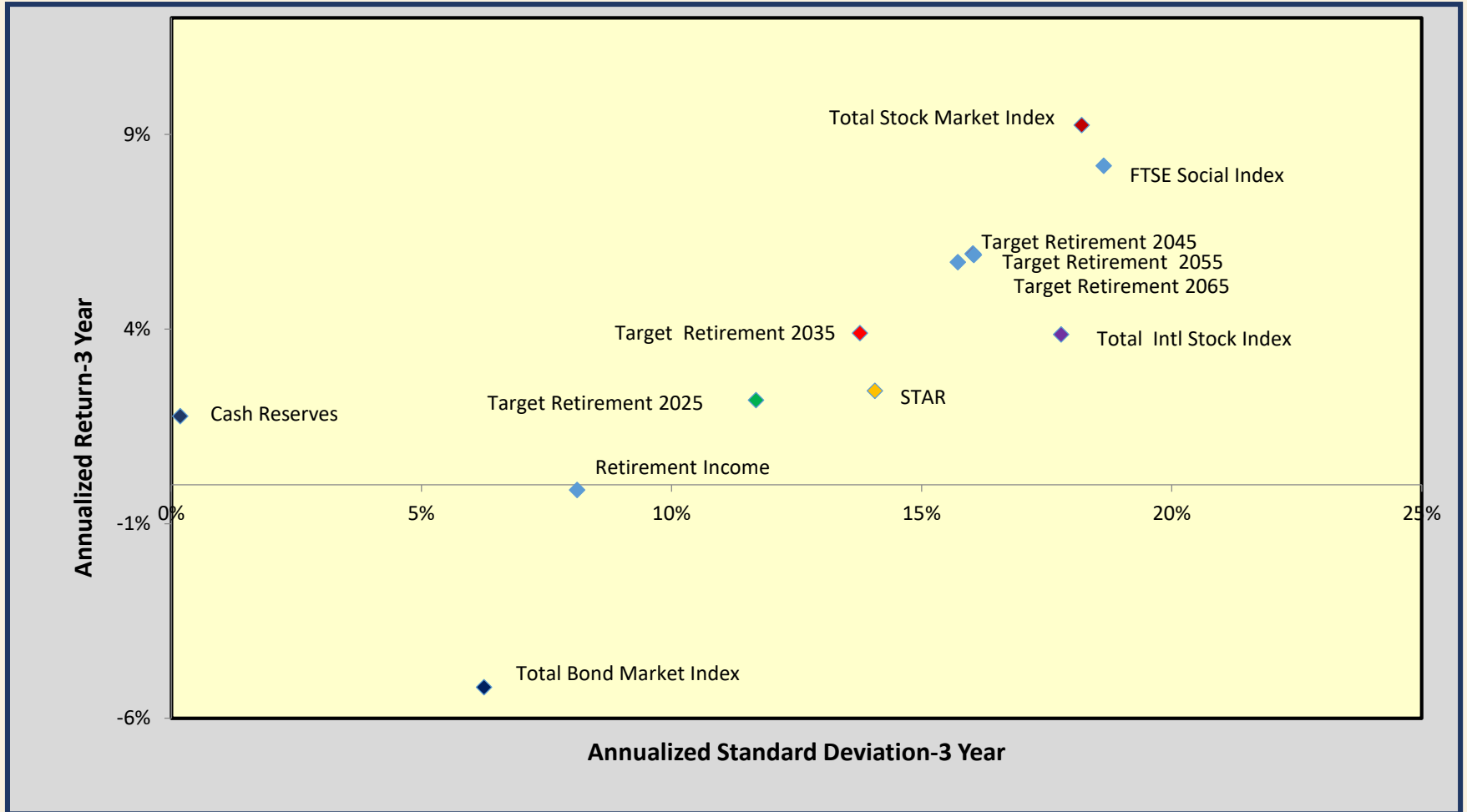
MaineSTART Review 3Q 2023

MaineSTART Investment Options

Fund	Expense Ratio
Target Retirement	
Vanguard Target Retirement 2025	0.08%
Vanguard Target Retirement 2035	0.08%
Vanguard Target Retirement 2045	0.08%
Vanguard Target Retirement 2055	0.08%
Vanguard Target Retirement 2065	0.08%
Vanguard Target Retirement Income	0.08%
US Equity	
Vanguard Total Stock Market Index	0.03%
Vanguard FTSE Social Index	0.14%
Non-US Equity	
Vanguard Total International Stock Index	0.11%
Balanced	
Vanguard STAR	0.31%
Fixed Income	
Vanguard Total Bond Market Index	0.05%
Cash	
Vanguard Cash Reserves Federal Money Market	0.10%

MaineSTART Review 3Q 2023

Risk vs Reward



MaineSTART Review 3Q 2023

Performance of Target Date Funds

Total Fund	\$ 58,982,065	% Total	Quarter	1 Yr	3 Yrs	5 Yrs	10 Yrs
Target Retirement Funds							
Target Retirement 2025	\$ 14,266,201	24.2%	-3.0%	11.6%	2.2%	4.1%	5.8%
Target Retirement 2025 Benchmark			-2.8%	11.9%	2.6%	4.5%	6.1%
Target Retirement 2035	\$ 10,185,329	17.3%	-3.3%	14.6%	3.9%	4.9%	6.8%
Target Retirement 2035 Benchmark			-3.0%	15.0%	4.3%	5.4%	7.1%
Target Retirement 2045	\$ 6,505,855	11.0%	-3.5%	17.7%	5.7%	5.9%	7.6%
Target Retirement 2045 Benchmark			-3.2%	18.0%	6.1%	6.3%	8.0%
Target Retirement 2055	\$ 1,569,133	2.7%	-3.5%	18.5%	5.9%	6.0%	7.7%
Target Retirement 2055 Benchmark			-3.2%	18.7%	6.3%	6.4%	8.0%
Target Retirement 2065	\$ 178,382	0.3%	-3.5%	18.5%	5.9%	6.0%	
Target Retirement 2065 Benchmark			-3.2%	18.7%	6.3%	6.4%	
Target Retirement Income	\$ 4,708,587	8.0%	-2.4%	7.0%	-0.1%	2.7%	3.6%
Target Retirement Income Benchmark			-2.3%	7.3%	0.1%	3.0%	3.8%

Tracking Error for all funds remains within expected ranges given market volatility during Q3.

MaineSTART Review 3Q 2023

Performance of Index and Balanced Funds

Total Fund	\$ 58,982,065	% of Total	Quarter	1 Yr	3 Yrs	5 Yrs	10 Yrs
US Equity							
Total Stock Market Index	\$ 11,075,636	18.8%	-3.3%	20.4%	9.2%	9.1%	11.2%
Dow Jones Total Stock Market Index			-3.3%	20.4%	9.3%	9.1%	11.2%
FTSE Social Index	\$ 926,447	1.6%	-3.5%	22.4%	8.2%	10.0%	12.3%
FTSE4Good US Select Index			-3.5%	22.6%	8.3%	10.1%	12.4%
Non-US Equity							
Total International Stock Index	\$ 2,222,855	3.8%	-4.0%	20.5%	3.9%	2.7%	3.6%
Total International Stock Index			-3.3%	20.4%	4.1%	2.9%	3.7%
Balanced							
STAR	\$ 2,149,809	3.6%	-4.0%	13.5%	2.4%	5.2%	6.7%
STAR Composite Index			-2.9%	13.6%	3.7%	5.4%	6.5%
Fixed Income							
Total Bond Market Index	\$ 1,758,583	3.0%	-3.1%	0.7%	-5.2%	0.1%	1.1%
Barclays Capital Aggregate Bond Index			-3.1%	0.8%	-5.2%	0.2%	1.2%
Total Cash							
Cash Reserves Federal Money Market	\$ 3,435,249	5.8%	1.3%	4.6%	1.8%	1.7%	1.2%
Citigroup 90 Day T-Bill Index			1.2%	4.1%	1.5%	1.5%	0.9%

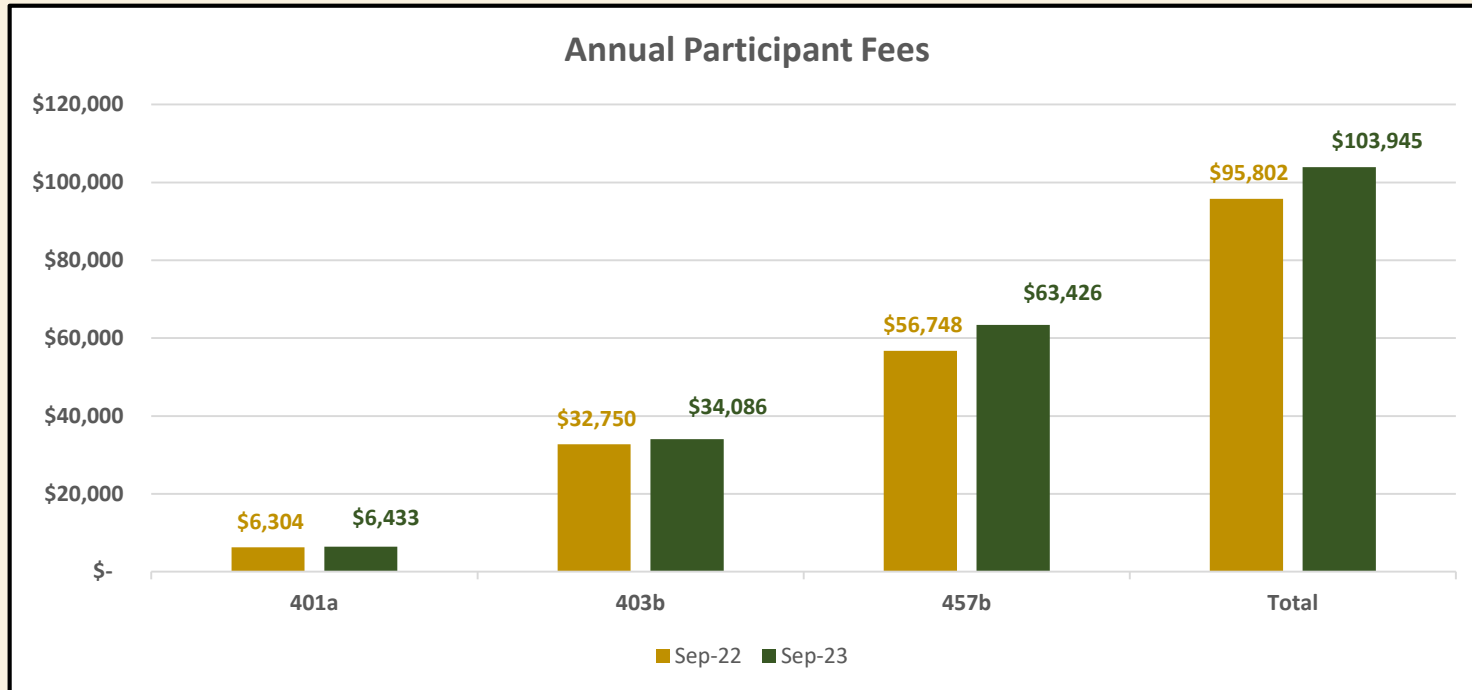
MaineSTART Review 3Q 2023

Investment Option Fees

Fund Name	Ticker	Market Value	MaineSTART	Next	Next
			Expense Ratio	Threshold Amount	Expense Ratio
Vanguard Total Stock Market Index	VITSX	\$11,075,636	0.03%	\$100,000,000	0.02%
Vanguard Total International Stock Index	VTIAX	\$2,222,855	0.11%	\$5,000,000	0.10%
Vanguard STAR	VGSTX	\$2,149,809	0.31%	N/A	0.31%
Vanguard FTSE Social Index	VFTAX	\$926,447	0.14%	\$5,000,000	0.12%
Vanguard Target Retirement 2025	VTTVX	\$14,266,201	0.08%	N/A	0.08%
Vanguard Target Retirement 2035	VTTHX	\$10,185,329	0.08%	N/A	0.08%
Vanguard Target Retirement 2045	VTIVX	\$6,505,855	0.08%	N/A	0.08%
Vanguard Target Retirement 2055	VFFVX	\$1,569,133	0.08%	N/A	0.08%
Vanguard Target Retirement 2065	VLXVX	\$178,382	0.08%	N/A	0.08%
Vanguard Retirement Income	VTINX	\$4,708,587	0.08%	N/A	0.08%
Vanguard Total Bond Market Index	VBTLX	\$1,758,583	0.05%	N/A	0.05%
Vanguard Cash Reserves Federal MM	VMRXX	\$3,435,249	0.10%	N/A	0.10%
Newport Group charges \$50 annually and 3 bps on assets.					
		\$58,982,065			

MaineSTART Review 3Q 2023

Fees



Notes:

- Participants pay an annual fee of \$50 and 3 bps on assets to the Newport Group
- Investment management fees vary depending on the fund selection
- Annual Administrative Fees of \$244,600 are assessed through PLD payrolls at 0.04%

MaineSTART Review 3Q 2023

Compliance and Operations

- ▶ **Teacher and PLD outreach continues**
- ▶ **Sebago Public School Teachers enrolled**

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: MICHAEL J. COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL
CHIP GAVIN, CHIEF SERVICES OFFICER
SHERRY VANDRELL, CHIEF FINANCIAL OFFICER

SUBJECT: MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT

DATE: DECEMBER 6, 2023

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

POLICY REFERENCE

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

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

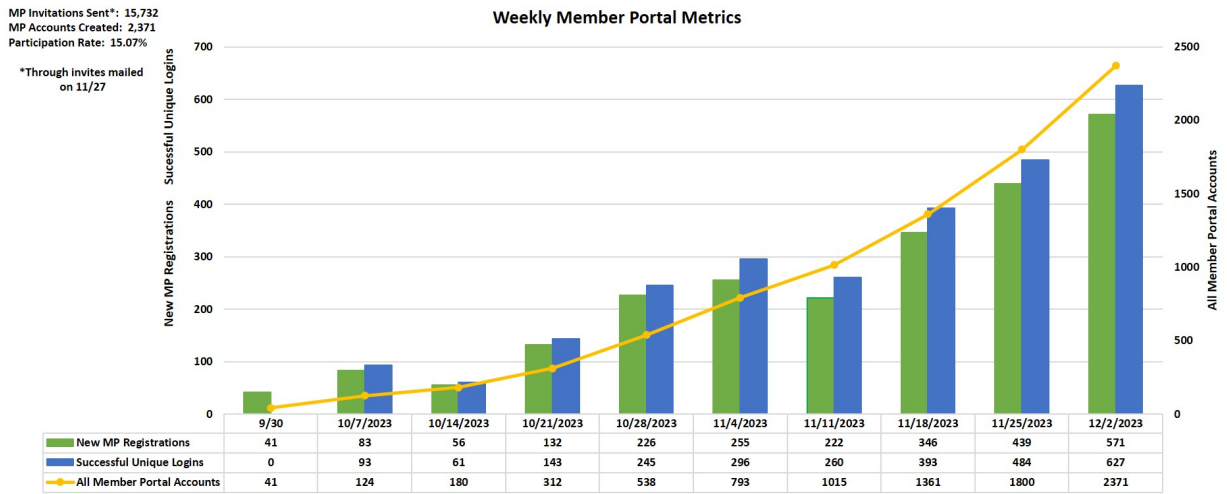
MEMBER SERVICES

1. COLA: A special one-time COLA payment for state-sponsored plans for the period ending August 31, 2022, which became effective October 25, 2023, was implemented by MainePERS with the November 2023 payroll. Efforts were made to communicate this one-time COLA information to affected retirees via mailed postcard notices and emails prior to the November payroll. The COLA information also is posted to the new MainePERS Member Portal and website www.maineopers.org.
2. MEMBER PORTAL: The Member Portal has continued to grow and more than 2,500 portal accounts had been registered by December 6, 2023. The portal is part of Goal IV, Strategic Objectives (E) and (B) and other related components of the Strategic Plan. MainePERS is on track to have sent all expected invitations for portal participation by approximately the end of January 2024.

Feedback has been positive from those using the portal, based on their responses to surveys. Overall, 84% of members and retirees who registered for the Member Portal in October and November and who responded to the survey reported they found the Member Portal very easy/easy to use. Additionally, respondents reported the ability to confirm and change their demographic information, confirm their beneficiaries, and view documents in their file were the most helpful functions offered by the Member Portal.

In a related initiative, more than 15,000 people had responded through December 6 to MainePERS recent mailings inviting them to update their contact and other demographic information on file with MainePERS to facilitate portal access and other MainePERS communication. All of those intended mailings, approximately 50,000, have now been sent.

The graph below reflects the ongoing rollout and growth of the Member Portal through the week ending December 2, the last completed full week of data at the time of the preparation of meeting materials.



- PENSION ADMINISTRATION SYSTEM (PAS) PROJECT:** Linea reports the overall PAS project is green, indicating overall stability. MainePERS agrees. The PAS project supports Goals III and IV among other elements of the Strategic Plan.

MainePERS staff as of December 4 has completed the fact-finding and information gathering discussion sessions that have been ongoing this fall with the pension administration software advisor, information which now will be used to assist in crafting an Request for Proposals that is scheduled to be released in CY2024.

Below is an excerpt of Linea’s most recently bi-weekly status report:

Overall		Scope	
Schedule		Resources	
Project Lead	Denise Fernandes	Project Sponsor	CEO Rebecca Wyke
Project Start	July 17, 2023	Project End	Aug 19, 2024
Reporting Period	Nov 14, 2023 – Nov 27, 2023	Reporting Date	Nov 29, 2023
Audience	Chip Gavin, Michael Colleran, Joy Childs, Valerie Scott, Lauren Fowler, Domna Giatas, Timothy Poulin, Sherry Vandrell	Next Meeting Date	Dec 13, 2023

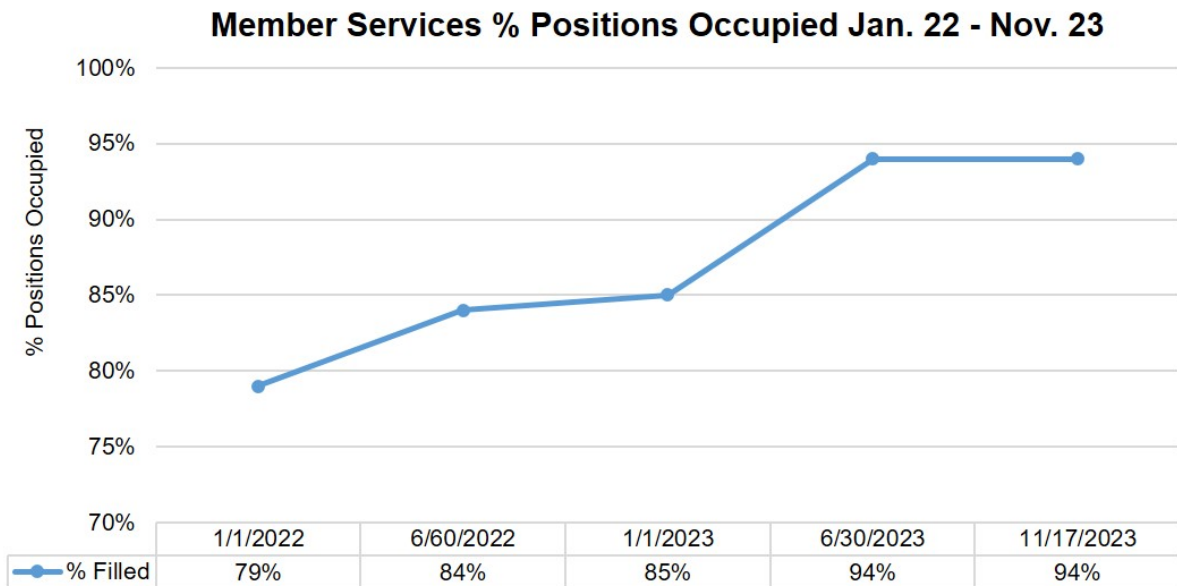
Since the last Trustee meeting, no risks monitored by Linea have changed in their severity ratings. One new risk was added since the last Trustee meeting and a second new risk is currently being considered.

The category of Linea’s status report (above) regarding schedule has changed to yellow from green since the last Trustee meeting in connection with concerns from Linea regarding the currently anticipated total duration of the schedule of Linea’s engagement. Linea and MainePERS are proactively working to mitigate and address that topic. The overall project per Linea’s status report remains green.

4. PROPORTION OF VESTED MEMBERS: Trustees had recently asked to be updated regarding the proportion of MainePERS members who are vested. In response, MainePERS reports the following.

	% vested	% non-vested
Active	62%	38%
Inactive	20%	80%

5. MEMBER SERVICES STAFFING: MainePERS offers the following information, in response to recent Trustee interest, regarding improved recruitment and retention in Member Services.



FINANCE

1. EMPLOYER REPORTING. Employers submitted defined benefit payrolls on time at a 96% rate in November. This compares to a rate of 87% for the same period last year. The number of accounts now fully reconciled through September data is now 494, or 76%. This is a slight increase in the percentage reported last month.

Last month we reported that one of two larger employers who had fallen behind in reporting due to staffing challenges and payroll application upgrades is now current. The second of

the two employers continues to work with members of the employer reporting team and is making some progress but remains behind. We recently identified a third employer who is facing similar challenges and are proactively engaging with them now.

2. EMPLOYER AUDITING. Three audits were opened in November and five were completed with one contribution related finding. Ninety-five percent of all findings to date have been resolved satisfactorily, which is the slightly higher than reported last month.
3. ACCOUNTING AND FINANCE. CliftonLarsonAllen has completed an internal audit of cash receipts and disbursements and that report will be presented to members of the finance and audit committee in February. The planned review of facilities management and controls began in November and that work is ongoing. Scoping for the next review is currently underway.

OPERATIONS

1. ADMINISTRATION: Effective December 1, 2023, Lynn Clark was promoted to Director of Human Resources and Administration in anticipation of Rebecca Grant's retirement later this month. Rebecca has been with MainePERS for over 33 years and has held positions ranging from Clerk Typist I through Director of Administration.
2. HUMAN RESOURCES: We hired one new employee in November and had no terminations. We are recruiting for six openings. Only three positions (Deputy Chief Investment Officer and two Pension Associate positions) have been in recruitment for more than 30 days. Four employees completed Diversity and Inclusion in HR Management certification. We conducted intermediate Excel training for 32 staff members.
3. INFORMATION TECHNOLOGY: IT staff continue to be heavily involved in the PAS replacement project, creating the Data Cleansing Project Team and holding its kick-off meeting, planning for the next supplemental COLA, updating V3 to enhance compliance and efficiency, and performing regular security and network operations functions.
4. FACILITIES: We are working with an engineering firm to explore adding a generator to power some or all of our Augusta facility in the event of a power loss. We completed upgrades to our security camera, panic alarm, and motion sensor systems.
5. DOCUMENT CENTER: We now have updated contact information for more than 11,000 members and retirees since the beginning of our member portal mailing campaign in August. Document Center staff imaged over 17,000 documents in November.

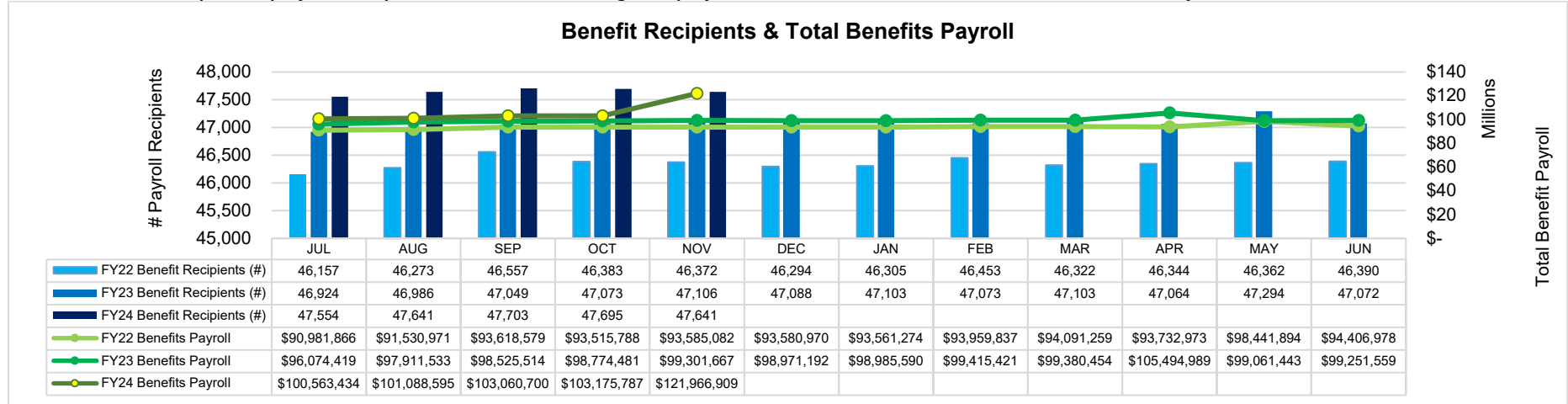
RECOMMENDATION

No Board action is recommended at this time.

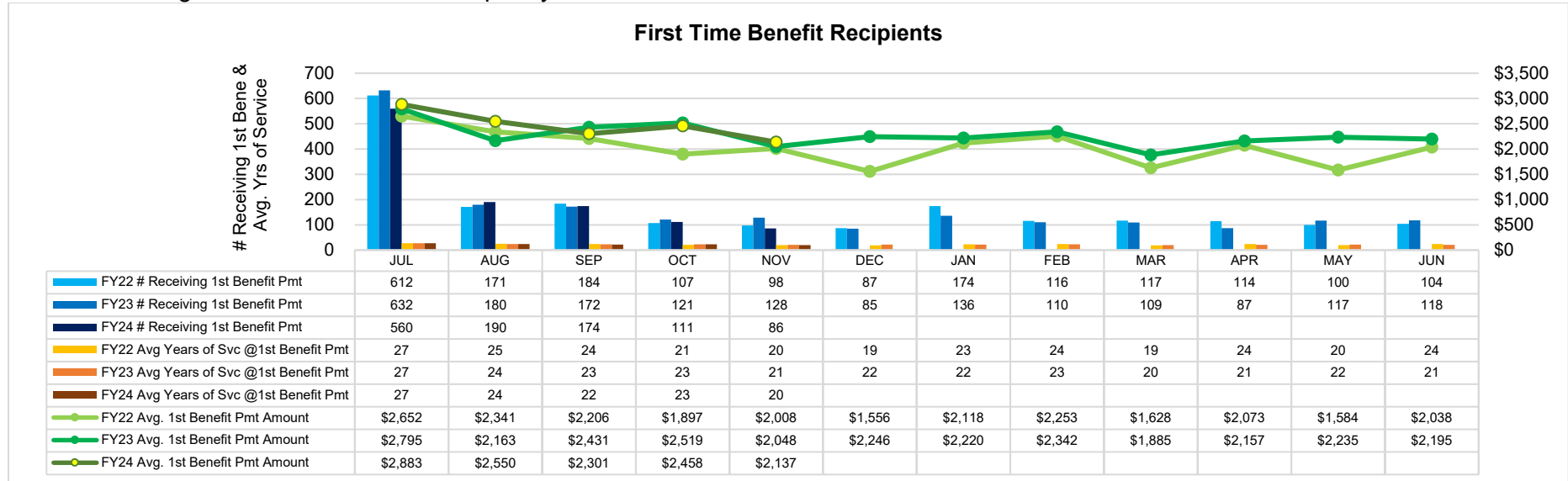
DECEMBER 2023 BOARD OF TRUSTEES OPERATIONS – MEMBER SERVICES SUPPLEMENTAL NUMBERS

RETIREMENT SERVICES

BENEFITS PAYROLL: Regular monthly pension benefit payments were made to 47,641 recipients in November, totaling \$121,966,909. November included the one-time, non-cumulative 3% cost-of-living adjustments for eligible retirees in State-sponsored plans pursuant to PL 2023 c. 208, Part HHHHH. *Note: Special payments paid outside of the regular payroll run are not reflected in the “Benefits Payroll” total.*

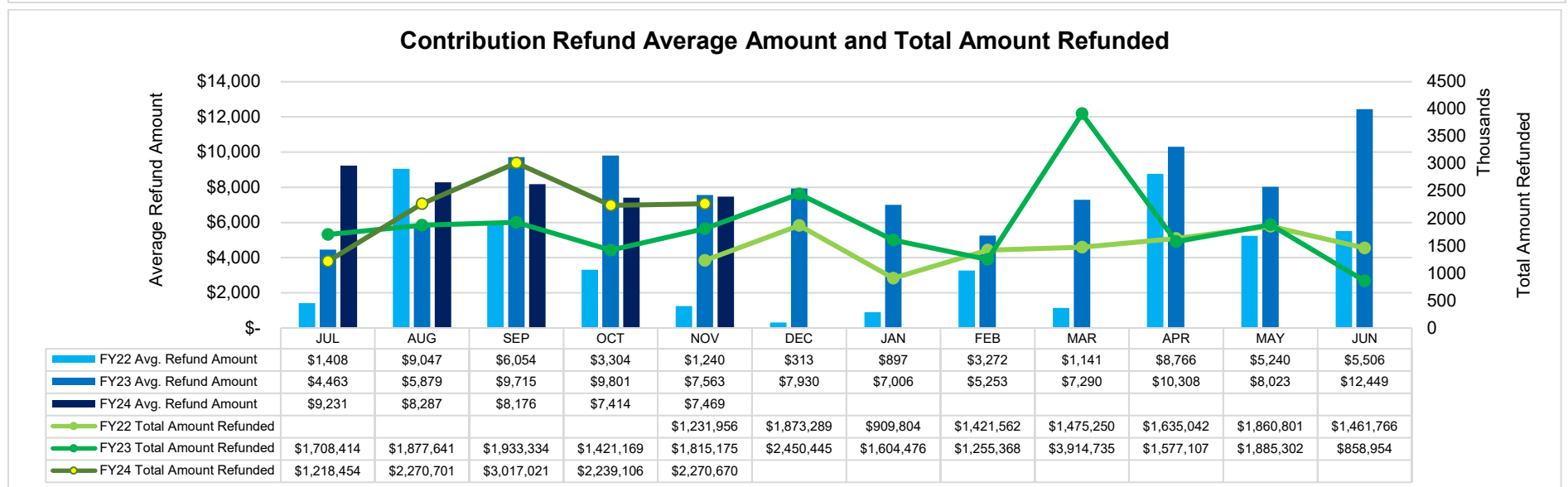
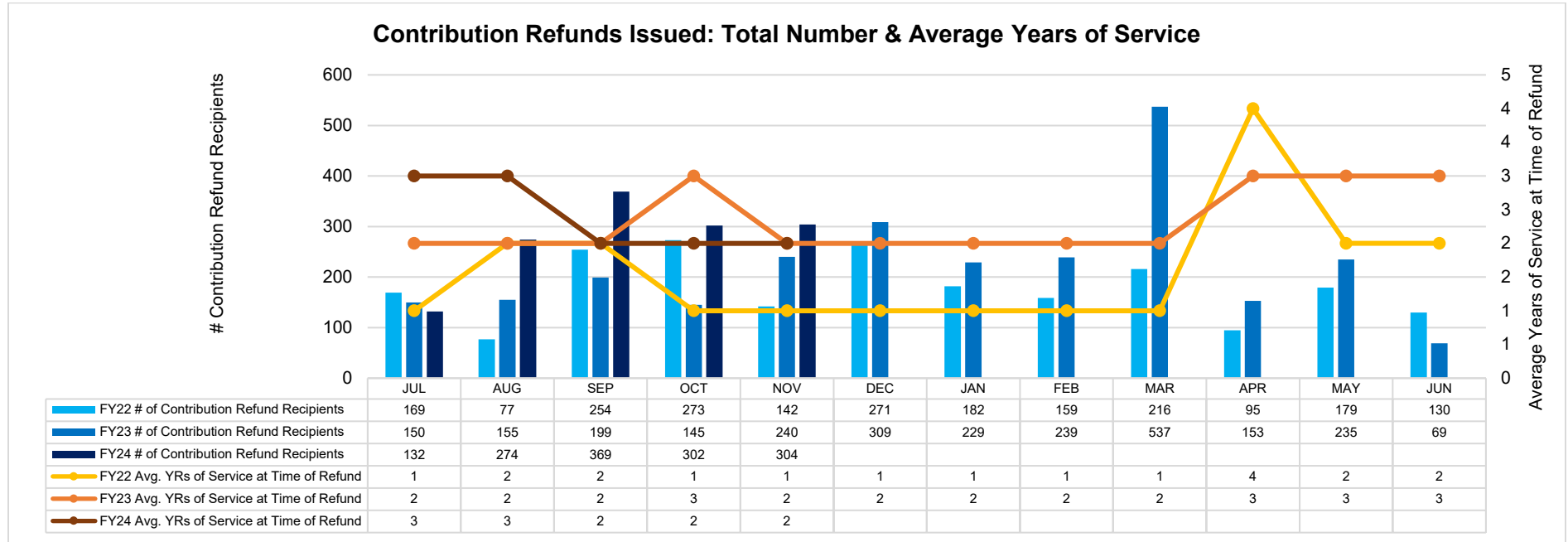


FIRST TIME BENEFIT RECIPIENTS: Eighty-six (86) individuals received their first benefit payment in November. The average benefit amount was \$2,137. First time recipients averaged twenty (20) years of service. The count of new recipients, payment amount, and service are comparable to data seen during the same month in recent prior years.



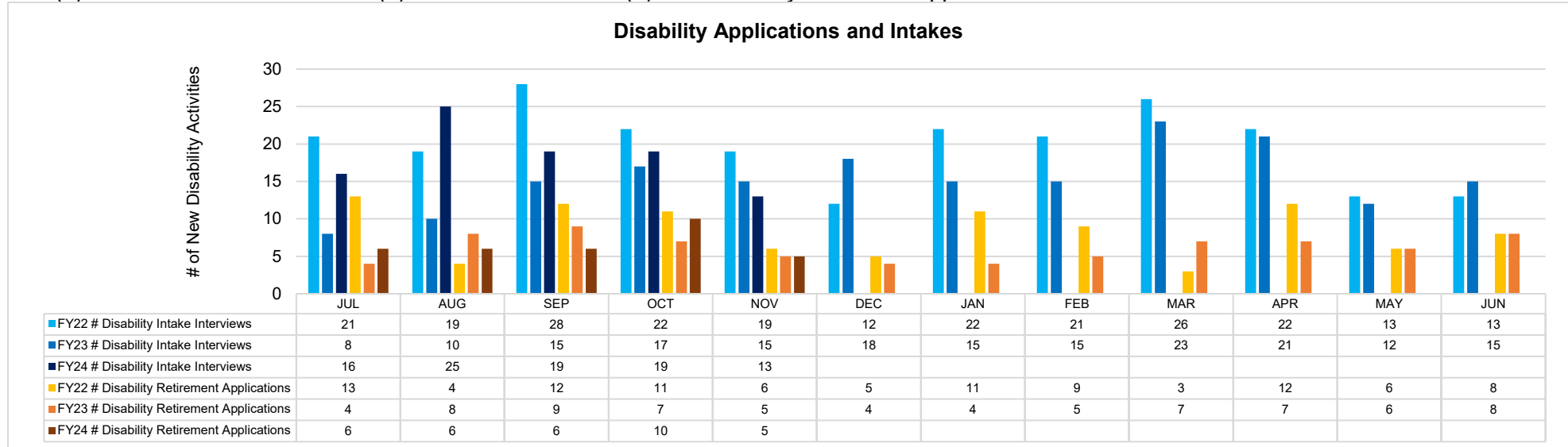
RETIREMENT SERVICES: continued

CONTRIBUTION REFUNDS: Three hundred four (304) former members received a refund of their contributions in November. The average refund was \$7,469 as the result of an average two (2) years of service. The aggregate amount refunded was \$2,270,670.



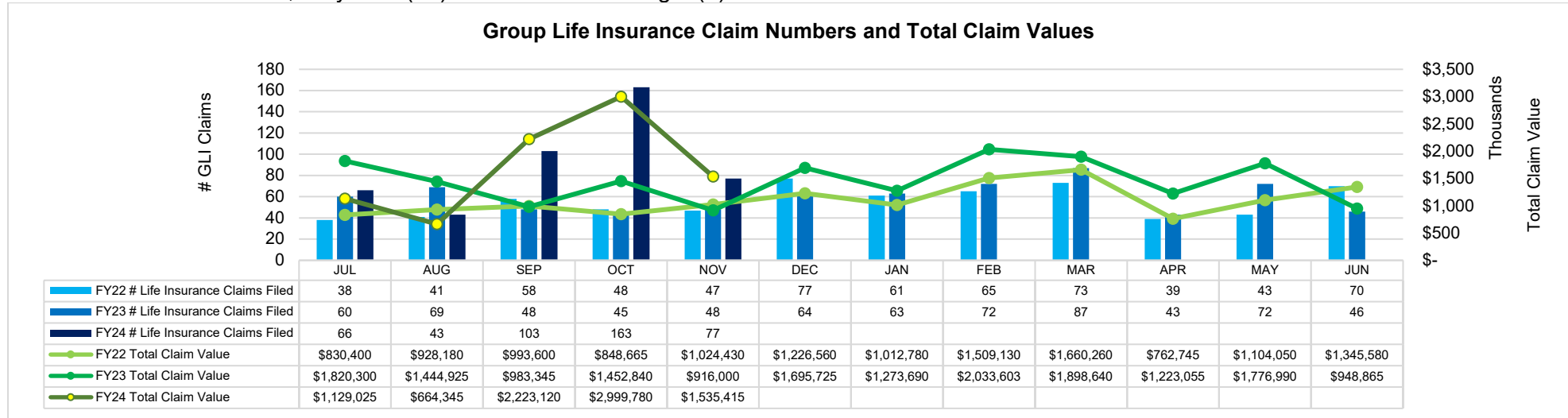
DISABILITY SERVICES

Thirteen (13) intake interviews were completed in November with varying levels of detail and duration. Intakes included three (3) State members, four (4) Teacher members and four (4) PLD members. Five (5) new disability retirement applications were received in November.



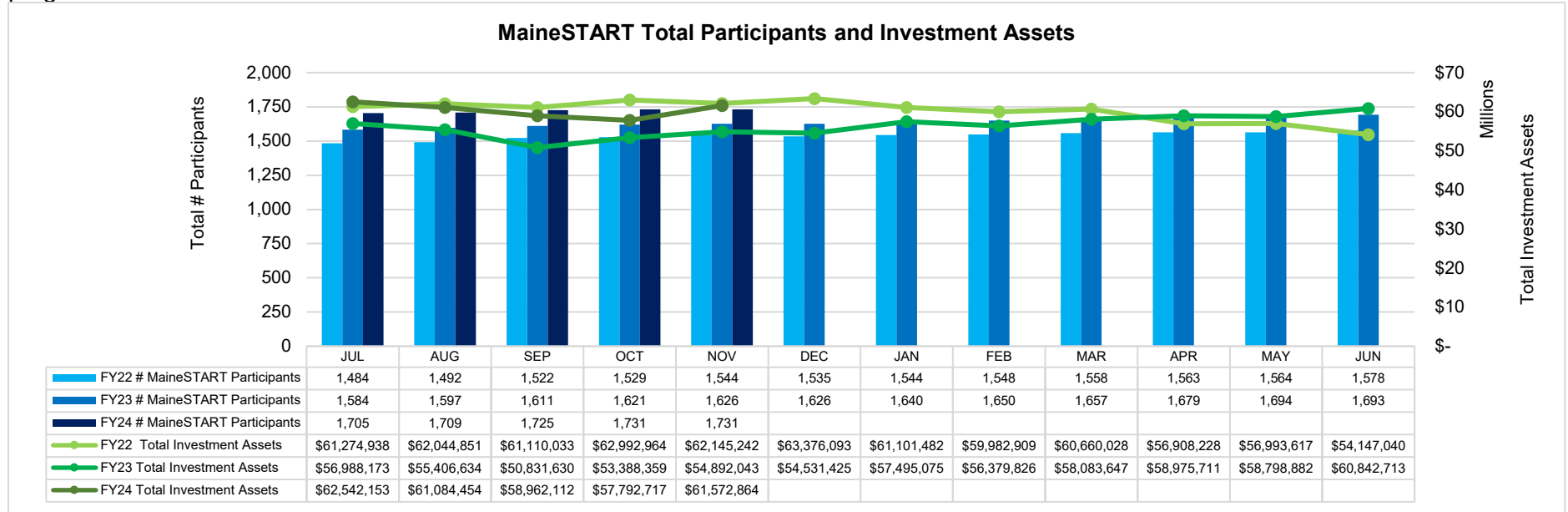
SURVIVOR SERVICES

Seventy-seven (77) life insurance claims were sent to our carrier (The Hartford) in November with a total value of \$1,535,415 in payments due to beneficiaries. Of the claims, sixty-nine (69) were retirees and eight (8) were active members claims.



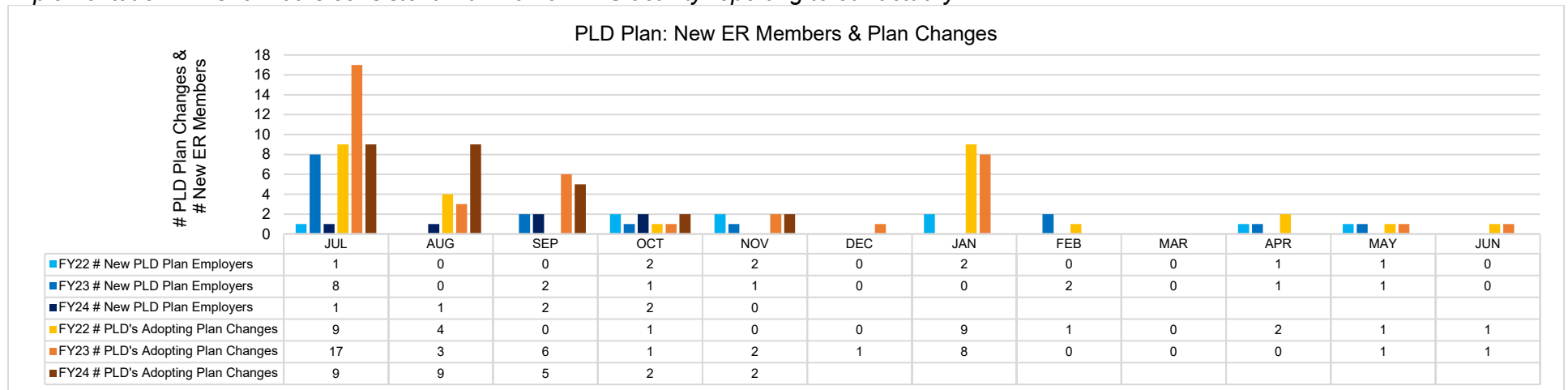
DEFINED CONTRIBUTION PLAN SERVICES

MaineSTART had one thousand seven hundred thirty-one (1,731) participants at the end of November with \$61,572,864 of investment assets in the program.



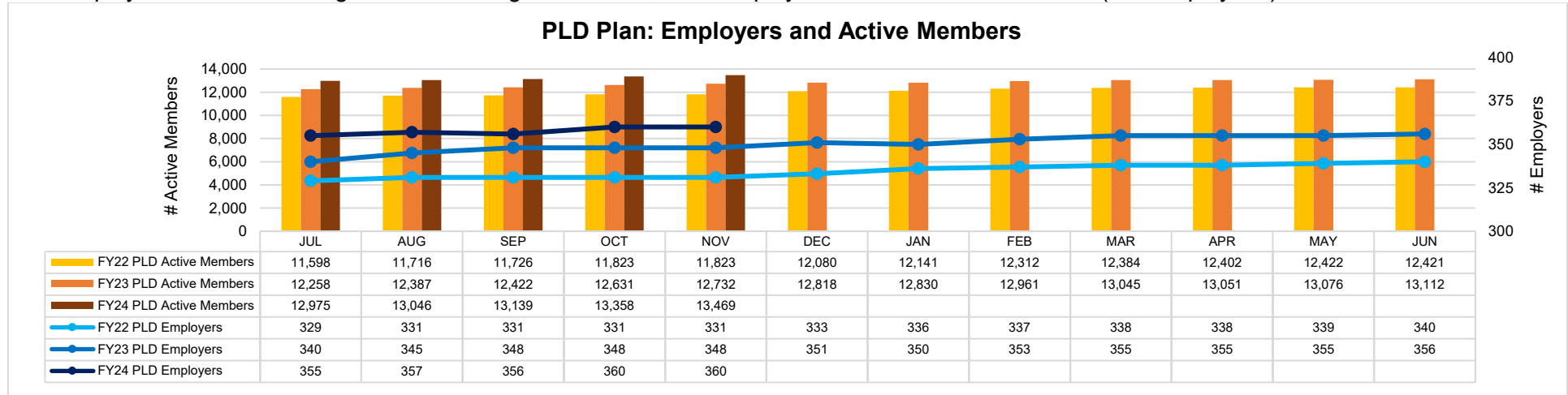
PLD PLAN ADMINISTRATION

There were not new employers who joined the PLD Retirement Program effective November 1, 2023. There were two (2) employer plan changes effective in November 01, 2023. *Note: This metric reflects PLD employer changes (joining, returning, adopting plan changes) in the month of their implementation. This format is consistent with MainePERS activity reporting to our actuary.*



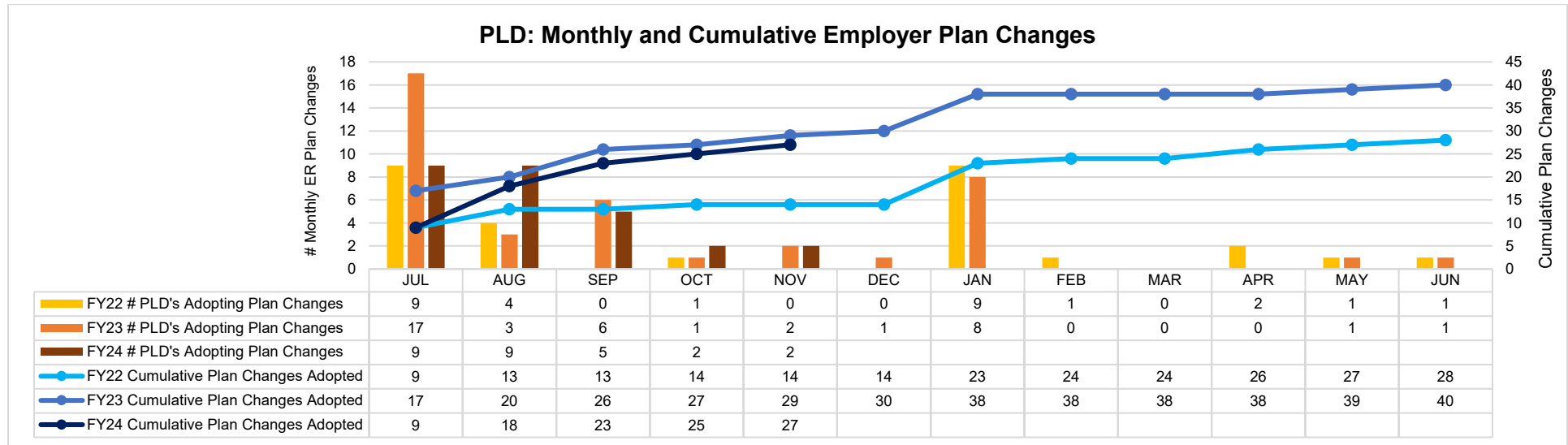
PLD PLAN ADMINISTRATION – Continued
PLD Plan - Cumulative Employer and Member Numbers

PLD employers remain unchanged at 360 through November; PLD Employee numbers increased 0.8% (111 employees) month-over-month.



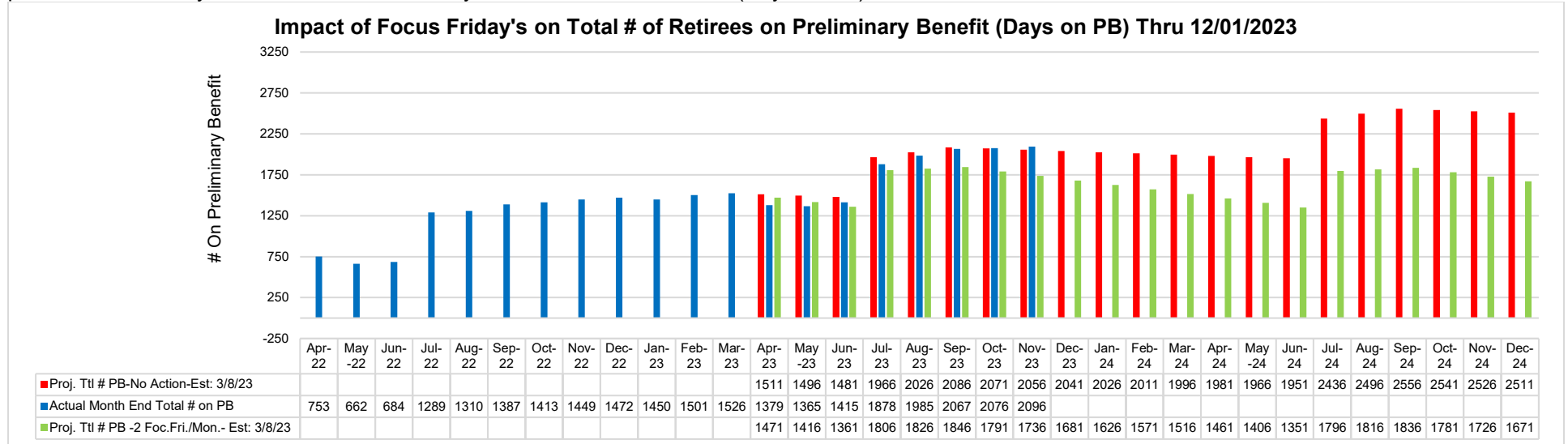
PLD PLAN - MONTHLY AND CUMULATIVE EMPLOYER PLAN CHANGES

No new employers have joined the PLD Retirement Program effective November 01, 2023. There were two (2) employer plan changes effective on November 01, 2023 bringing total plan change this FY to 27. *Note: This metric reflects PLD employer changes (joining, returning, adopting plan changes) in the month of their implementation. This format is consistent with MainePERS activity reporting to our actuary.*

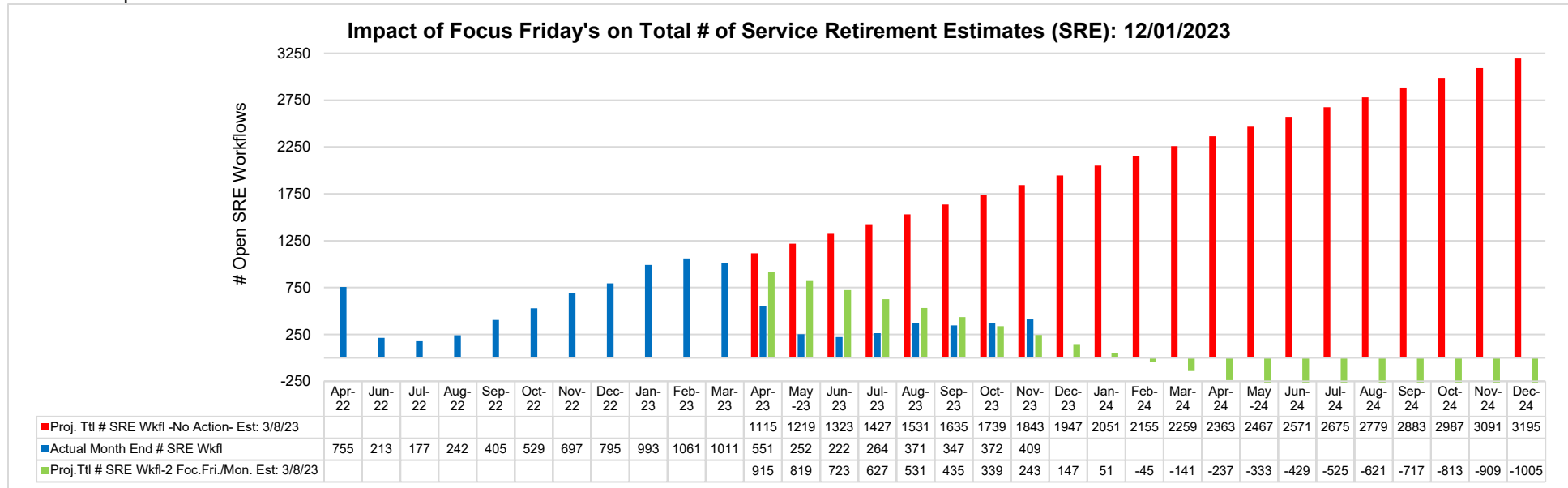


FOCUS FRIDAY IMPACT ON BACKLOG REDUCTION

PRELIMINARY TO FINAL BENEFIT (PB TO FINAL) BACKLOG THROUGH DECEMBER 1, 2023: The backlog projections and reporting below are based on a data point that counts days since an initial Preliminary Benefit disbursement date (Days on PB) occurred.



SERVICE RETIREMENT ESTIMATE BACKLOG THROUGH DECEMBER 1, 2023: The backlog projections and reporting below are based on data that count the total number of open Service Retirement Estimate workflows.



MAINEPERS**BOARD OF TRUSTEES MEMORANDUM**

TO: BOARD MEMBERS
FROM: DR. REBECCA M. WYKE, CEO
SUBJECT: CEO REPORT
DATE: DECEMBER 6, 2023

Pending Retirement

Rebecca Grant will be retiring this month after 33 years of service to MainePERS. Rebecca came to MainePERS in November of 1990 as a project employee and quickly moved up through the organization. Rebecca has spent the past 15 years as the Director of Administration and during her tenure has overseen human resources, information technology, communications, facilities, and the document center. Please join me in thanking Rebecca for her many years of service and extending best wishes for a well-deserved retirement.

Lynn Clark, who previously served as the Human Resources Manager, will be assuming Rebecca's duties. Lynn's new title is Director of Human Resources and Administration.

Participating Local District (PLD) Advisory Committee

The PLD Advisory Committee voted unanimously to set rates for FY 2025, based on the total calculated rate of 18.6% from the FY 2023 valuation of the plan. This represents the first time the Committee has voted to assess all sub plans at the 58% employer and 42% employee risk allocation under the plan. The Committee also voted unanimously to eliminate sub plan 4N, as currently there are no employers utilizing the plan and no employees enrolled in the plan. Sub plan 4N is a no COLA plan that provides for retirement after 25 years of services with a normal retirement age of 55. In addition, the Committee voted unanimously to award an additional one-time cost of living adjustment (COLA) of 0.5% for members eligible to receive a COLA in September 2023. This additional one-time COLA requires an amendment to Rule Chapter 803 for which a public hearing will be held at the December Board Meeting.

Disability Retirement Services Compassionate Allowance List

Effective January 1, 2023, MainePERS will utilize the Social Security Administration's (SSA) compassionate allowance list to identify conditions appropriate for expedited processing when feasible. Although the standards for a disability benefit differ between SSA and MainePERS, the compassionate allowance list identifies diseases and other medical conditions that could

meet MainePERS' standard under the law. Certain statutory requirements such as pre-existence of medical conditions or timing of onset of the incapacity, however, may impact MainePERS ability to expedite an application. At the December Board Meeting, Chief Services Officer Chip Gavin, Assistant Director of Member Services Mara McGowen, and Disability Retirement Business Leader Stephanie Whitney will provide a brief overview of this new process.

Appeals Program

Chief Operating Officer and General Counsel Mike Colleran will provide an overview of the Appeals Program, including the process that occurs before recommended decisions are brought to the Board for consideration.



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

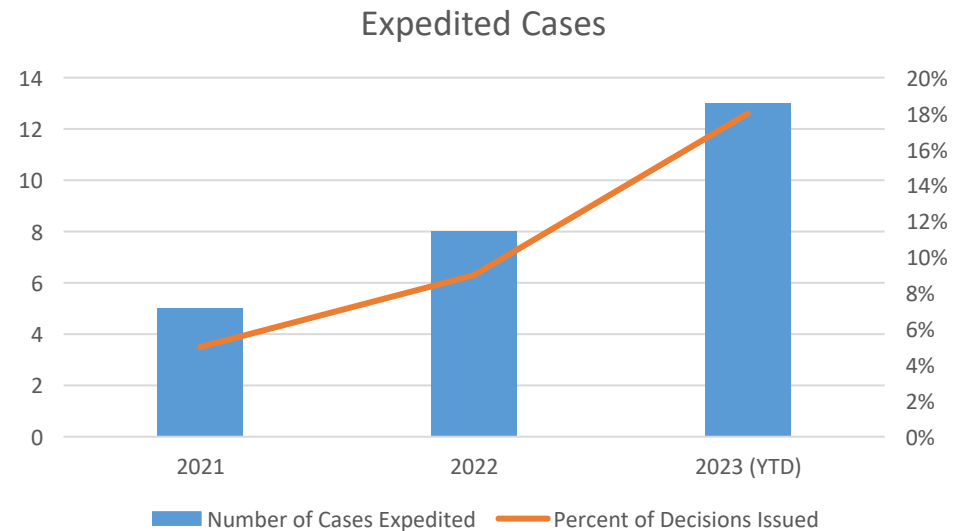
Expediting Disability Applications

Disability Retirement Program

- Monthly disability retirement benefit available to MainePERS members who meet eligibility criteria
- In order to qualify, applicants must:
 - Be unable to meet the expectations of their MainePERS covered position due to limitations caused by a physical or mental condition(s)
 - The limitations caused by the condition(s) are more likely than not to be permanent
 - The condition(s) must have existed as of the member's last date of service in their MainePERS covered position
 - If they have been employed in a MainePERS covered position for less than 5 continuous years, the condition(s) must not have existed prior to beginning MainePERS covered employment
- Approximately 900 recipients, representing approximately 2% of MainePERS' monthly benefits payroll
- MainePERS receives approximately 100 applications per year

History of Expediting Cases at MainePERS

- MainePERS recognizes the importance of providing timely, accurate decisions to applicants
- MainePERS currently expedites cases at the discretion of Disability Services staff

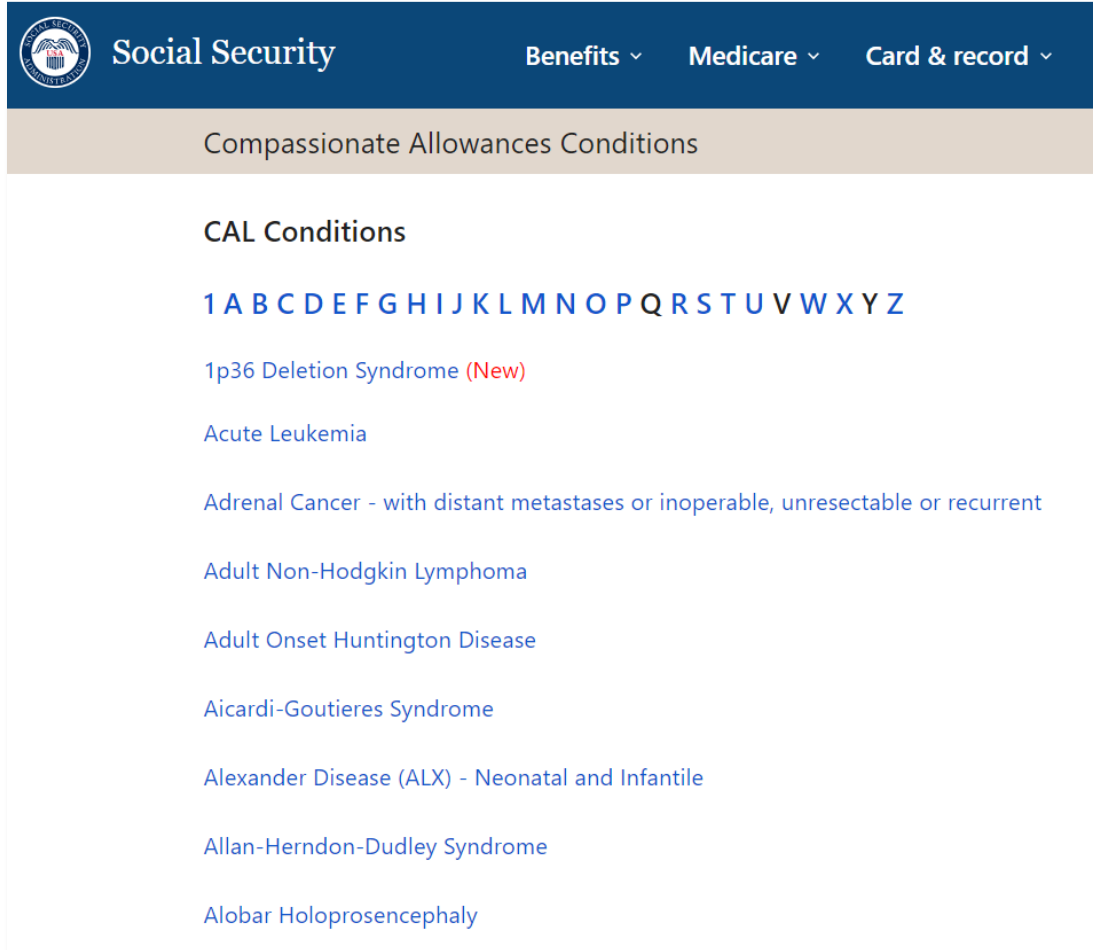


Commitment to Process Improvement

- Feedback from applicants, employers and stakeholders has indicated the amount of time required to process an application can be consequential for the applicant
- In last year's report to the legislature, MainePERS committed to review whether the Compassionate Allowance List (CAL), published and maintained by the Social Security Administration, should be utilized by MainePERS
 - MainePERS has completed its review and determined, with the support of the MainePERS CEO, use of the CAL is feasible and could be beneficial for Disability Program applicants

What is the Compassionate Allowance List (CAL)?

- The Compassionate Allowance List is a compilation of severe medical conditions such as progressive forms of cancer, adult brain disorders and other serious conditions which often meet the eligibility criteria established for Social Security benefits
- The CAL is published on [Social Security's website](#)



The screenshot shows the Social Security Administration website. At the top, there is a dark blue header with the Social Security Administration logo on the left, the text "Social Security" in the center, and three navigation links: "Benefits", "Medicare", and "Card & record", each with a downward arrow. Below the header is a light beige banner with the text "Compassionate Allowances Conditions". Underneath this banner, the page content is white. It starts with the heading "CAL Conditions" in bold. Below that is a row of blue letters "1 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z". Following the letters is a list of medical conditions, each on a new line and in blue text. The first condition is "1p36 Deletion Syndrome (New)", where "(New)" is in red. The other conditions are: "Acute Leukemia", "Adrenal Cancer - with distant metastases or inoperable, unresectable or recurrent", "Adult Non-Hodgkin Lymphoma", "Adult Onset Huntington Disease", "Aicardi-Goutieres Syndrome", "Alexander Disease (ALX) - Neonatal and Infantile", "Allan-Herndon-Dudley Syndrome", and "Alobar Holoprosencephaly".

Social Security Administration

Benefits ▾ Medicare ▾ Card & record ▾

Compassionate Allowances Conditions

CAL Conditions

1 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1p36 Deletion Syndrome (New)

Acute Leukemia

Adrenal Cancer - with distant metastases or inoperable, unresectable or recurrent

Adult Non-Hodgkin Lymphoma

Adult Onset Huntington Disease

Aicardi-Goutieres Syndrome

Alexander Disease (ALX) - Neonatal and Infantile

Allan-Herndon-Dudley Syndrome

Alobar Holoprosencephaly

MainePERS' Use of the CAL

- New practice effective January 1, 2024
- Staff will compare the conditions on the disability application to the conditions on the CAL
- If one or more conditions appear on the CAL, the application will be flagged for expedited processing and assigned to a Specialist
- The Specialist will prioritize scheduling a new application interview with the member and will immediately begin collecting the evidence necessary to process the case

MainePERS' Use of the CAL Cont.

- When possible, staff will utilize MainePERS Rule 506, Section 2 (2) (A) which permits a favorable decision be issued when “qualification is clear to a layperson” without review by our Medical Review Service Provider
 - CAL applicants must meet the same eligibility criteria as an applicant who does not have a condition listed therefore; inclusion on the CAL does not guarantee an applicant will be approved for benefits. Inclusion on the CAL does communicate a clear indication that a severe medical condition may be involved and it does mean the application is highlighted for expedited processing.
 - MainePERS staff will continue to expedite cases when reasonable even when a condition does not currently appear on the CAL

Thank you

Thank you.
Questions?



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Appeals Program

December 14, 2023

Michael J. Colleran

Appeals Program

- Decisions of CEO or designee are subject to appeal to Board
- Process is governed by statute and rule
- Significant legislative changes in 2009 restricted Board's role and discretion
- Independent Hearing Officers preside over appeals and make recommended decisions to the Board
- The Board must adopt the recommended decision unless it:
 - Is not supported by the record as a whole
 - Is based on an error of law
 - Exceeds the hearing officer's jurisdiction
- The Board's decision is subject to appeal to the courts

Appeals Program

Participants

- Hearing Officers
 - Five independent contractor attorneys, each with 20-40+ years of experience
- MainePERS staff
- Appellants and their counsel or representative
- Board counsel

Board Action

- Appeals on the consent calendar
 - Decisions
 - Dismissals
- Appeals on the agenda for oral argument

Appeals Program

The Number of Appeals Has Declined Significantly

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Pending Appeals at Start of Year	95	71	48	42	33	21	10	9
Appeals Filed	59	34	24	15	10	6	6	3
Board Decisions	35	23	19	12	6	8	3	4
Dismissals	48	34	11	12	16	9	4	2
Pending Appeals at End of Year	71	48	42	33	21	10	9	6