

# **Board of Trustees**

# **Public Meeting Packet**

October 10, 2024

# MainePERS Board of Trustees October 10, 2024 139 Capitol Street, Augusta

# AGENDA

9:00 a.m. <sup>1</sup>		CALL TO ORDER		Brian Noyes
9:00 – 9:05 a.m.	1.	CONSIDERATION OF CONSENT CALENDAR Minutes of September 12, 2024 Decision, D.M. Appeal Consideration of Items Removed	ACTION	Brian Noyes
9:05 – 10:15 a.m.	2.	ACTUARIAL VALUATIONS AND UAL UPDATE	ACTION	Gene Kalwarski Bonnie Rightnour Ryan Benitez Kathy Morin
10:15 – 10:30 a.m.		BREAK		
10:30 – 11:25 a.m.	3.	AUDITED FINANCIAL STATEMENTS	ACTION	Sherry Vandrell; Mark LaPrade Leah Clair, BerryDunn
11:25 – 11:35 a.m.	4.	<ul> <li>PRIVATE MARKETS ACTION</li> <li>Executive Session pursuant to 1 M.R.S. §405(6)(F); 5 M.R.S. §17057(4)</li> </ul>	ACTION	Brian Noyes
		Board moves out of executive session.		
		Farallon Special Situations Fund III	ACTION	James Bennett Scott Lupkas
11:35 – 11:45 a.m.	5.	<ul> <li>INVESTMENT REVIEW</li> <li>Investment Monthly Review</li> </ul>		James Bennett
11:45 a.m. – 12:00 p.m.	6.	<ul> <li>PRIVATE MARKETS REVIEW</li> <li>Private Markets Activity</li> <li>Co-Investment Reporting</li> </ul>		James Bennett Scott Lupkas
12:00 – 12:30 p.m.		LUNCH		

<sup>&</sup>lt;sup>1</sup> 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.

12:30 – 1:30 p.m.	7.	<ul> <li><u>CEO REPORT</u></li> <li>Strategic Plan Update</li> <li>Key Performance and Risk Measures</li> </ul>	Dr. Rebecca M. Wyke
1:30 – 1:40 p.m.	8.	MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT	Chip Gavin Sherry Vandrell Michael Colleran
1:40 – 1:45 p.m.	9.	LITIGATION UPDATE	Betsy Stivers
1:45 – 2:00 p.m.	10.	CHIEF EXECUTIVE OFFICER EVALUATION	Brian Noyes
2:00 p.m.		ADJOURNMENT	Brian Noyes

#### MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

#### Minutes

Board of Trustees Board Meeting September 12, 2024 MainePERS Augusta 9:00 a.m.

The Board of Trustees met at MainePERS, 139 Capitol Street, Augusta, ME 04330 at 9:00 a.m. on September 12, 2024. Brian Noyes, Chair, presided. Other Trustees participating were: Dick Metivier, Vice Chair; Henry Beck, State Treasurer; John Beliveau; Shirrin Blaisdell; Nate Burnett; Kirk Duplessis; and John Kimball. 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; Scott Lupkas, Deputy Chief Investment 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 William Proom, Managing Director; Stuart Cameron, Cambridge Associates; Mark White, Sean Crawford, and Will Greenwood, Albourne; and Tom Lynch and George Bumeder, Cliffwater.

Brian Noyes called the meeting to order at 9:00 a.m. Henry Beck participated through video remote access pursuant to 1 M.R.S. § 403-B, having been excused from in-person attendance. All other Trustees were in-person.

#### **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 August 8, 2024
- Action. Dick Metivier made the motion, seconded by Nate Burnett, to approve the Consent Calendar. Unanimously voted in favor by seven Trustees (Beliveau, Blaisdell, Burnett, Duplessis, Kimball, Metivier, and Noyes).

Henry Beck joined the meeting at 9:05.

#### **PRIVATE MARKETS ACTION**

#### ShoreView Capital Partners V

Scott Lupkas presented the Investment Team's recommendation and reported that the Investment Team believes that a commitment to ShoreView Capital Partners V is unlikely to involve any investment in stocks, securities, or other obligations of fossil fuel or for-profit prison companies.

Action. Shirrin Blaisdell made the motion, seconded by Dick Metivier, that MainePERS make a commitment of up to \$25 million to ShoreView Capital Partners V, subject to final due diligence, legal review and negotiations, and authorize the Board authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute the documents in connection with this commitment. Unanimously voted in favor by eight Trustees (Beck, Beliveau, Blaisdell, Burnett, Duplessis, Kimball, Metivier, and Noyes).

### Summit Partners Growth Equity Fund XII

Scott Lupkas presented the Investment Team's recommendation and reported that the Investment Team believes that a commitment to Summit Partners Growth Equity Fund XII is unlikely to involve any investment in stocks, securities, or other obligations of fossil fuel or for-profit prison companies.

Action. Nate Burnett made the motion, seconded by John Beliveau, that MainePERS make a commitment of up to \$25 million to Summit Partners Growth Equity Fund XII, subject to final due diligence, legal review and negotiations, and authorize the Board authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute the documents in connection with this commitment. Unanimously voted in favor by eight Trustees (Beck, Beliveau, Blaisdell, Burnett, Duplessis, Kimball, Metivier, and Noyes).

#### **INVESTMENT REVIEW**

#### **Investment Monthly Review**

Jim Bennett reported that as of August 31, 2024, the MainePERS fund had a preliminary market value of \$20.0 billion, the preliminary return for the month was 0.9%, and the preliminary calendar year-to-date return was 6.0%.

#### PRIVATE MARKETS REVIEW

#### Private Markets Activity

Scott Lupkas reviewed the table of private market funds and co-investments that had closed during the past 12 months. Scott shared the next manager meeting is scheduled for Tuesday, September 24, 2024, in Portland, with presentations by Farallon Capital Management at 10:00 a.m. and Bridgewater Associates at 11:15 a.m.

#### **QUARTERLY INVESTMENT EDUCATION**

Mark White made a presentation on the energy transition, including the history of energy transitions, the evolving demand for energy, and potential market opportunities related to the current energy transition. Mark answered questions from the Trustees.

#### **MaineSTART**

#### Cambridge Review

Stuart Cameron presented Cambridge's update and review of the defined contribution program's investment options with the Trustees. Stuart answered questions from the Trustees.

#### **Quarterly Report**

Michael Colleran presented the MaineSTART Quarterly Review for the quarter ending 6/30/24.

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#### RULEMAKING

#### Repeal and Replace of Rule Chapter 201

Michael Colleran summarized the proposed repeal and replacement of Rule Chapter 201, the rulemaking process, and the staff's recommendation.

Action. Nate Burnett made the motion, seconded by Kirk Duplessis that the Board repeal and replace Rule Chapter 201 and adopt the replacement rule's basis statement. Unanimously in favor by eight Trustees (Beck, Beliveau, Blaisdell, Burnett, Duplessis, Kimball, Metivier, and Noyes).

#### CEO REPORT

#### **Board Education**

Dr. Rebecca Wyke shared with the Trustees the Board Education Plan for 2024-2025. She stated one of the outcomes from the Board's self-evaluation was to have their Value Statement at the forefront. Dr. Wyke stated the statement will be the first item in the agenda going forward.

#### Low Carbon Target Index Investments

Jim Bennett shared a presentation reviewing the MSCI Low Carbon Target (LCT) Index. Jim described the methodology used to construct the index and presented statistics comparing the index's performance relative to the overall market and to MainePERS' Public Equity asset class. Jim discussed how MainePERS' current investment strategy of holding the overall market remained the optimal approach for the System's public equity investments as it provides diversification, cost, and other benefits relative to the LCT. Jim and Stuart Cameron from Cambridge answered Trustee questions.

#### Risk Management

Michael Colleran shared the annual report of the Enterprise Risk Management Program with the Trustees. Michael highlighted the top risks, the mitigation steps in place, and additional mitigation steps that are planned. Michael answered questions from the Trustees.

#### MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT

Chip Gavin shared the PAS project is on track with a decision planned for this fall. Chip stated a mission moment presentation will be provided to the Trustees at a future meeting that will show approaches we have implemented to reduce the preliminary to final benefit processing time.

Sherry Vandrell reported an increase of eight employer accounts being fully reconciled. She also stated the transition of the Group Life Insurance invoice reconciliation from Survivor Services to Employer Reporting has been completed. Sherry shared audited financial statements will be presented to the Board next month.

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Michael Colleran shared that IT completed the email migration to O365, installed modernized Exagrid back-up hardware, and filled the new Project Manager position. He stated Facilities has completed the first of two phases of work space reconfigurations. Michael reported 18 proposals were received in response to the RFP for securities litigation and monitoring services. He stated negotiations on collective bargaining agreements with the three units has begun.

### LITIGATION UPDATE

Betsy Stivers shared the dismissal was received from the Superior Court on the disability matter. The litigant has time to appeal to the Law Court. She stated the Stoddard overpayment is still in discovery until the end of October.

#### ADJOURNMENT

Action. John Kimball made the motion, seconded by Shirrin Blaisdell that the September meeting adjourn. Unanimously voted by eight Trustees (Beck, Beliveau, Blaisdell, Burnett, Duplessis, Kimball, Metivier, and Noyes).

The meeting adjourned at approximately 12:15 p.m.

<u>10/10/24</u> Date Approved by the Board

Dr. Rebecca M. Wyke, Chief Executive Officer

Date Signed

# MAINEPERS

# **BOARD OF TRUSTEES MEMORANDUM**

TO: BOARD MEMBERS

FROM: KATHY MORIN, DIRECTOR, ACTUARIAL & LEGISLATIVE AFFAIRS

SUBJECT: FY 2024 ACTUARIAL VALUATION REPORTS

DATE: OCTOBER 2, 2024

#### POLICY REFERENCE

Board Policy 2.2 – Actuarial Soundness and Funding

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 - Communication and Support to the Board

Cheiron is completing its annual valuation of the System's defined benefit plans and the Group Life Insurance Program. A final draft of each of the reports, including the State Employee and Teacher Program, the Legislative Program, the Judicial Program, the PLD Consolidated Program, and the Group Life Insurance Program (separate for State-sponsored groups and PLDs), is included with this memo. There have been no substantive changes made to the reports from the versions that were previously provided to Trustees.

Gene Kalwarski, Bonnie Rightnour and Ryan Benitez will present the draft valuation reports at the October 10, 2024 meeting and will answer any questions you may have at that time. A copy of their presentation is included with this memo. If the Board accepts the reports, they will be immediately finalized.

#### RECOMMENDATION

Accept the FY 2024 Actuarial Reports for the State Employee and Teacher Program, the Legislative Program, the Judicial Program, the PLD Consolidated Plan, and the Group Life Insurance Program (State-sponsored and PLD) as presented.



Maine Public Employees Retirement System

**State Employee and Teacher Retirement Program** 

Actuarial Valuation Report as of June 30, 2024

Produced by Cheiron October 2024

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Appendix C	Actuarial Assumptions and Methods
Appendix D	Glossary of GASB Terms







October 10, 2024

Board of Trustees Maine Public Employees Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

We are pleased to submit the June 30, 2024 Actuarial Valuation Report for the State Employee and Teacher Retirement Program (Program) of the Maine Public Employees Retirement System (MainePERS or System).

The purpose of this report is to present the annual actuarial valuation of the State Employee and Teacher Retirement Program (Program) of the Maine Public Employees Retirement System. This report contains information on assets, liabilities, and contributions of the Program, as well as required accounting statement disclosures under the Governmental Accounting Standards Board (GASB) Statement No. 67.

In preparing our report, we relied on information, some oral and some written, supplied by the System's staff. This information includes, but is not limited to, the Plan provisions, employee data, and financial information as of the valuation date. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

Future results may differ significantly from the current results presented in this report due to such factors as the following: Program experience differing from that anticipated by the assumptions, changes in assumptions, and changes in plan provisions or applicable law.

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

This actuarial report was prepared exclusively for MainePERS for the purposes described herein and for the use by the Program auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users. Board of Trustees Maine Public Employees Retirement System October 10, 2024 Page ii

Finally, the results of this valuation are purely informational. Because MainePERS sets contribution rates for the System on a biennial basis, these results will not be used in determining State contributions to the System.

Sincerely, Cheiron

Gene Kalwarski, FSA, EA Principal Consulting Actuary Bonnie Rightnour, FSA, EA Principal Consulting Actuary

cc: Fiona E. Liston, Cheiron Greg Reardon, Cheiron Kathleen Weaver, Cheiron



#### FOREWORD

Cheiron has completed the Actuarial Valuation Report for the Maine Public Employees Retirement System (MainePERS or System) State Employee and Teacher Program (Program) as of June 30, 2024. The purpose of this report is to:

- 1) Measure and disclose, as of the valuation date, the financial condition of the Program,
- 2) Examine trends, both historical and prospective, in the condition of the Program,
- 3) Assess and disclose actuarial risks of the Program,
- 4) Report on the contribution rates developed in this valuation for informational purposes (Note: the actual contributions paid by the employers for fiscal year (FY) 2024 were developed in the budgeting process in July 2022, based on a roll-forward of the June 30, 2021 valuation), and
- 5) Provide specific information required for MainePERS's financial disclosures.

An actuarial valuation establishes and analyzes assets and liabilities on a consistent basis and tracks the progress of both from one year to the next. It includes measurement of investment performance as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our key findings, disclosing important Program trends in recent years, and providing analysis relating to the future status of the Program.

Section II assesses and discloses various actuarial risk measures of the Program.

Section III contains details on various asset measures, together with pertinent performance measurements.

Section IV shows similar information on liability measures for various purposes, including analysis of key changes in the measures.

Section V develops informational employer contribution rates to be compared to those established during the ratemaking process.

Section VI includes financial disclosure information.

Finally, we present appendices containing the following summaries:

- Program membership information at the valuation date (Appendix A),
- Major benefit provisions of the Program (Appendix B),
- Actuarial assumptions and methods used in the current valuation (Appendix C), and
- Terminology used in the Governmental Accounting Standards Board (GASB) disclosures (Appendix D).



#### **SECTION I – BOARD SUMMARY**

# **General Comments**

The annual employer contributions to this Program are determined on a biennial basis in even years. The contributions for fiscal year (FY) 2024 and FY 2025 were developed through this ratemaking process in 2022. The assets used in developing these rates were the preliminary June 30, 2022 assets. These were then combined with estimated liability measures as of June 30, 2022, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2021 actuarial valuation. This adjustment reflected anticipated growth in benefits, reductions due to benefit payouts, and any changes in assumptions or benefits between the June 30, 2021 valuation date and the June 30, 2022 measurement date. Similarly, the contributions for FY 2026 and FY 2027 were developed in July of 2024 based on estimated assets as of June 30, 2024 and estimated June 30, 2024 liabilities based on a roll-forward of the June 30, 2023 actuarial valuation liabilities.

The results of this June 30, 2024 valuation will be used primarily for accounting disclosures. Next year's June 30, 2025 valuation, adjusted to a June 30, 2026 measurement date and combined with preliminary assets as of June 30, 2026, will be used as the basis for the applicable FY 2028 and FY 2029 employer contributions.

# Experience from July 1, 2023 through June 30, 2024 (FY 2024)

With respect to investment experience measured on a market value of assets (MVA) basis, MainePERS experienced an investment return of positive 7.43% for the fiscal year ending June 30, 2024. This is more than the assumed rate of return assumption of 6.50%. However, given the three-year asset smoothing method in place, only one-third of that gain is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore for this Program, asset smoothing also resulted in recognizing one-third of prior deferred assets gains of \$0.184 billion during FY 2024. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.26%. This is also greater than the 6.50% assumed rate of return in effect for FY 2024, resulting in a gain on investments for this Program for the year of \$111 million.

With respect to liability experience, the Program experienced a liability loss of \$156 million above the expected growth of \$348 million (a 0.9% growth in total liabilities beyond expected growth). Of this increase, approximately \$96 million was attributable to demographic experience, primarily higher salary increases than expected. There was also a liability loss of \$60 million attributable to the payment of cost-of-living adjustments (COLA) exceeding the assumed COLA. In addition to the regular COLA adjustment, a three percent one-time COLA payment was paid to eligible retirees during FYE 2024. An amount of \$20 million was funded immediately to fully cover this payment. Lastly, there was a plan change that increase the benefits for certain retirees resulting in a \$6 million increase in liabilities that was also funded immediately. Additional details of the plan changes can be found in Appendix B.

For FY 2024, the resulting new UAL amortization base is a net loss of \$55 million. The investment and liability experience produced a net experience loss of \$45 million. In addition, there was a \$10 million loss due to contribution timing. Given Maine's biennial budget process,



#### **SECTION I – BOARD SUMMARY**

there will always be a contribution timing gain or loss. This is because the biennial UAL amortizations that are projected for the next two years will be different than what the actual valuation produces for the UAL amortizations in those years. Finally, this translates to an informational total employer contribution of 20.43% of payroll as of June 30, 2024. This is a decrease of 0.10% compared to the June 30, 2023 valuation contribution rate (prior to being rolled-forward for ratemaking) of 20.53% of payroll. The decrease is largely attributable to a higher than expected payroll.

As of the June 30, 2024 valuation, the Program has an unfunded actuarial liability (UAL) of \$2.464 billion based on the AVA. This represents a decrease of \$168 million from the \$2.632 billion AVA UAL measured as of June 30, 2023. This compares to an expected decrease in the UAL of \$223 million. The specific factors contributing to this change are presented in Table I-1 that follows. This table has separate columns showing the components of the changes in liabilities and investments during FY 2024 as well as their combined effect on the UAL.

	Table I-1 (Amounts in Billion	s)	
	Liabilities	Assets*	UAL
Value as of June 30, 2023	\$ 17.521	\$ 14.889	\$ 2.632
Expected Change	0.348	0.571	(0.223)
Impact of Program Changes	0.026	0.026	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Impact of Contribution Timing	0.000	(0.010)	0.010
Recognized Investment Gain	0.000	0.111	(0.111)
Recognized Liability Loss	0.156	0.000	0.156
Value as of June 30, 2024	\$ 18.051	\$ 15.587	\$ 2.464

\* This table uses actuarial value of assets. Results would be different if the market value were used.

The remainder of this Board Summary summarizes the Program's historical trends, provides baseline projections of the Program's future status, and summarizes the principal results of the valuation. These principal results compare key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates.



# **SECTION I – BOARD SUMMARY**

# Legislated Changes effective after June 30, 2024 (FY 2024)

There were two plan changes that were signed into law prior to the completion of this valuation with effective dates after the valuation date. It is our understanding that the census information received for this valuation did not incorporate these changes. In addition, the funds appropriated to cover the increased liability for these changes were not received in FY 2024. Because the funds appropriated are in the amount of the expected increase in the actuarial liability that results from these plan changes, there will be no ultimate impact on the unfunded actuarial liability or the Net Pension Liability of the Program. Also, because the results of this valuation are not used in the determination of the biennial contribution rates, omission of the normal cost component of these changes has no impact on the funding of the Program. As such, these items have been explicitly excluded from this valuation in all respects.

The two plan changes will be recognized in the June 30, 2025 valuation in both the assets and the liabilities. These changes include:

- Chapter 436 (L.D. 483) This plan change provides retroactive 1998 Special Plan coverage to certain Department of Corrections employees. This results in an increase in the actuarial liability of \$170,054 and will be funded in FY 2025.
- Chapter 412, Part IIII (L.D. 258) This plan change moves specified crime lab and computer crimes unit employees from either the State Employees Regular Plan or the 1998 Special Plan to the 25 and Out Plan. This results in an increase in the actuarial liability of \$1,799,311 and will be funded in FY 2025.



#### **SECTION I – BOARD SUMMARY**

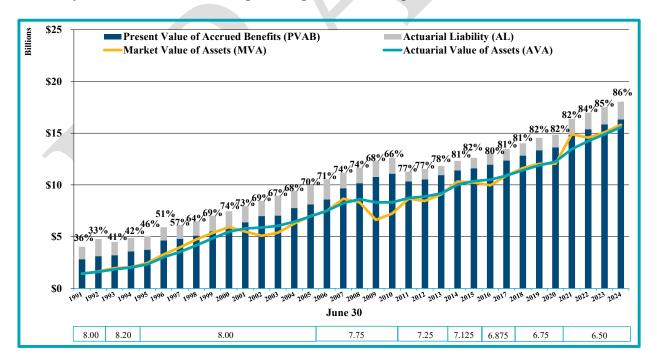
# Trends

It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition. In addition to considering the past, examining future possible trajectories of the Program is also vital to understanding the current results. Baseline projections are provided in this Board Summary, and the potential variability of these results is explored further in the risk section of this report.

# Assets and Liabilities

The following graph illustrates the progress of assets and liabilities for the Program since June 30, 1991 as well as the Program's funded ratio on an actuarial value of assets (AVA) basis.

Liability measures are shown as bars as of June 30 of the indicated years. The actuarial liability (AL), the liability measure used for the Program's funding purposes, is represented by the top of the grey bars. The blue bars represent the present value of accrued benefits (PVAB). These liability measures are discussed further in Section IV. Measures of the assets are shown as lines. The AVA is shown with a teal line, while the market value of assets (MVA) is shown as a yellow line. The AVA divided by the AL is the AVA funded ratio that is often used in evaluating the Program's funded status. The value of this metric at each valuation date is shown as the percentages in the graph labels. The values shown below the dates are the discount rates in effect for each year and should be read as percentages, i.e., 8.00 represents an 8.00% discount rate.



Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2024, the Program's AVA based

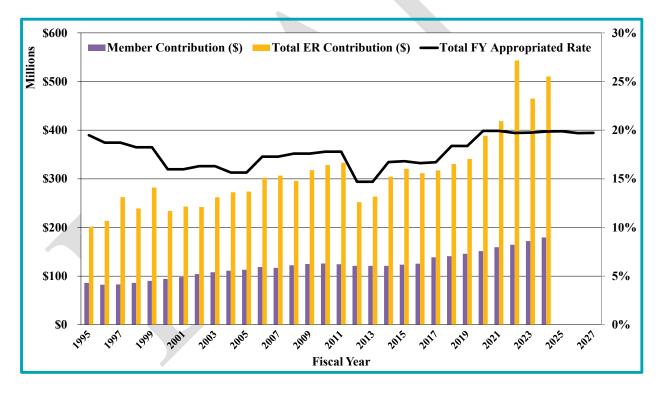


#### **SECTION I – BOARD SUMMARY**

funded ratio is 86.3%, which represents a slight increase from the 85.0% ratio reported in the prior valuation. Measured on an MVA basis, the funded ratio is 87.6% as of June 30, 2024, also a slight increase over last year's 86.0% MVA funded ratio.

#### Contributions

The next graph shows the history of contributions to the Program, both as dollar amounts and as percentages of payroll. The bars in this graph show the contributions made by both the employers and the members in dollar terms for each fiscal year (FY) as indicated by the horizontal axis since 1995. These bars are read using the left-hand axis. The black line shows the total appropriated employer contribution rate for the FY indicated as a percentage of payroll and references the right-hand axis. These rates are those determined by the ratemaking process rather than the informational rates determined in the annual valuations. The FY 2025 through FY 2027 contribution rates have already been determined based on the ratemaking process, so three additional years of the contribution rate are shown versus dollars received. The total employer contribution for FY 2024 includes the approximately \$19.7 million extra payment to fund the one-time additional COLA payment as well as the \$5.9 million payment to increase certain retiree benefits effective October 1, 2023.



The member contribution rates are set by statute, based on the Plan within the Program in which each member participates. The total employer contribution rate is set by the ratemaking process on a biennial basis. The contribution rate for FY 2024 was based on a roll-forward of the June 30, 2021 valuation to June 30, 2022, as previously described in this Board Summary.

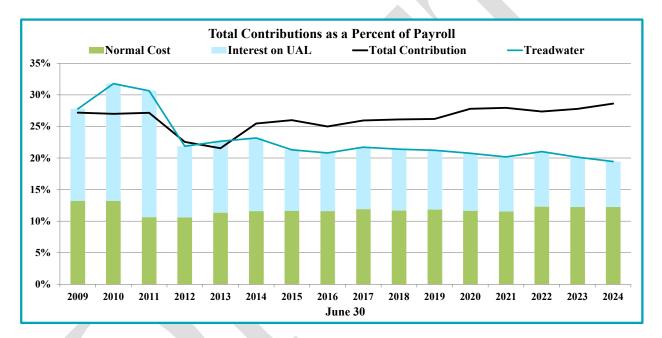


# **SECTION I – BOARD SUMMARY**

The most important information to be gleaned from this chart is that the Program, as evidenced in the prior chart, has successfully and significantly improved its funded status over the past 30 years, while maintaining a remarkably stable State contribution rate between approximately 15% and 20%.

The next chart compares the total contribution rate to a rate we refer to as the "tread water rate." The tread water rate is the rate of payroll which, if contributed, would result in the UAL remaining the same in the following year if all experience exactly matched the assumptions. The tread water rate is the full normal cost plus interest on the UAL.

As can be seen in the following chart, the total contribution rate has exceeded the tread water rate since 2014.

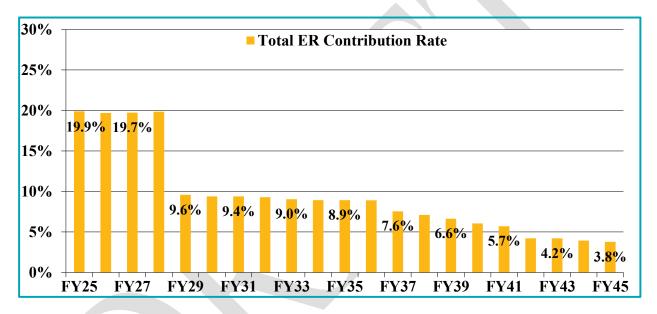




#### **SECTION I – BOARD SUMMARY**

# **Baseline Projections**

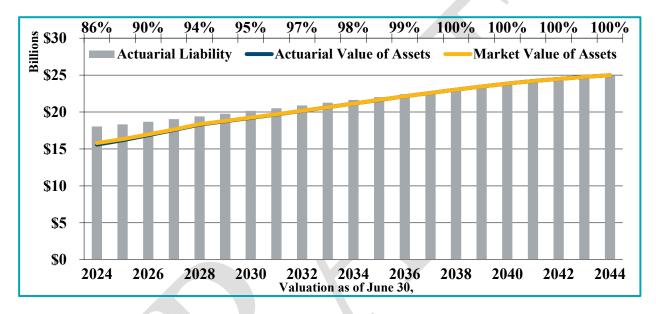
Our analysis of the projected financial trends for the Program is an important part of this valuation. In this section, we project future valuation results, focusing on the previously referenced AVA funded ratio (AVA over AL) and the expected employer contributions that will be developed through the ratemaking process in future biennia. Here we present a baseline projection of these metrics based on all actuarial assumptions being exactly met during the projection period, including the assumed 6.50% investment return being achieved each year. In the risk section of the report, we demonstrate the sensitivity of future valuation results to deviations in actual returns from the assumed investment returns by presenting similar projections based on investment returns averaging similarly to the assumed returns but deviating from the assumed rate in the individual years of the 20-year projection period.





#### **SECTION I – BOARD SUMMARY**

This baseline projection shows that the overall composite employer contribution rate for the Program is projected to remain within 0.5% of the current rate of 19.89% applicable for FY 2025 through FY 2028, then dramatically drop in FY 2029 once the 1996 UAL balance is fully paid off. At that point, the employer contribution rates under this baseline scenario drop, initially to 9.6%, with small decreases thereafter as additional bases are recognized, dropping to 3.8% by the end of the projection period. Note that this baseline projection is based on all assumptions being met each and every year where the reality is that there will be gains and losses each and every year, resulting in new amortization layers, negative or positive, occurring every year. This concept is explored further in the risk section of this report.



The graph above shows the projected AVA funded ratio (AVA divided by AL) over the next 20 years in the baseline scenario where all underlying assumptions are exactly met. It shows that the Program's AVA funded ratio is projected to improve from the current 86% as of FY 2024 to 100% starting in FY 2038. If the ratios used market value of assets (MVA), the funded ratios would be slightly different.

# **Principal Results Summary**

The last section of this Board Summary presents a summary of the principal results of the valuation, comparing key results between this and last year's valuations for member counts, assets and liabilities, and contribution rates. These summary results are shown for the total State Employee and Teacher Program, and then for each of these subgroups as well as the division of the State Employee Program into the Regular and Special Plans.



	Table I-2			
	ummary of Principa Ite Employee and T			
i otai sta	Valuation as of June 30, 2023	Va	luation as of une 30, 2024	% Change
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds Total Membership	40,586 30,686 6,270 574 1,508 9,202 <u>39,038</u> 127,864		$\begin{array}{r} 40,932\\ 31,203\\ 6,275\\ 558\\ 1,499\\ 9,410\\ \underline{38,789}\\ 128,666\end{array}$	0.9% 1.7% 0.1% (2.8)% (0.6)% 2.3% (0.6)% 0.6%
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 2,384,910,774 \$ 973,327,522	\$ \$	2,497,375,613 1,012,801,406	4.7% 4.1%
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded AL (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$17,520,535,684 <u>14,889,086,583</u> \$2,631,449,101 85.0% 86.0%		18,050,569,851 <u>15,586,656,799</u> 2,463,913,052 86.3% 87.6%	3.0% 4.7% (6.4)%
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$15,859,583,162 <u>15,073,148,465</u> \$786,434,697 95.0%		16,327,475,935 <u>15,809,706,213</u> 517,769,722 96.8%	3.0% 4.9% N/A
Contributions as a Percentage of Pay Employer Normal Cost Rate UAL Amortization Rate Total Employer Calculated Rate	<u>vroll</u> 4.56% <u>15.97%</u> 20.53%		4.60% <u>15.83%</u> 20.43%	
Total Employer Budgeted Rates Total Employer Budgeted Rates	<u>2022 Ratem</u> FY 2024 FY 2025	<u>aking</u> 19.87% 19.89%	<u>2024</u> FY 2026 FY 2027	<u>Ratemaking</u> 19.70% 19.73%



Table I-3 Summary of Principal Results Teacher Program								
Mamban Counts	Valuation as of June 30, 2023		luation as of une 30, 2024	% Change				
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds Total Membership	27,897 19,227 3,008 284 660 5,920 <u>29,843</u> 86,839	7 3 4 ) 3 	28,028 19,576 3,026 276 658 6,106 <u>29,201</u> 86,871	$\begin{array}{c} 0.5\% \\ 1.8\% \\ 0.6\% \\ (2.8)\% \\ (0.3)\% \\ 3.1\% \\ (2.2)\% \\ 0.0\% \end{array}$				
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 1,538,137,420 \$ 620,531,499		1,587,791,945 646,128,045	3.2% 4.1%				
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded Actuarial Liability (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$11,507,894,703 <u>9,868,754,960</u> \$1,639,139,743 85.8% 86.8%	$\frac{1}{3}$ $\frac{1}{5}$	1,847,210,197 0,327,239,734 1,519,970,463 87.2% 88.4%	2.9% 4.6% (7.3)%				
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$10,326,394,915 <u>9,990,754,493</u> \$335,640,422 96.7%	$\frac{3}{2}$ $\frac{1}{\$}$	0,626,393,209 <u>0,475,025,420</u> 151,367,789 98.6%	2.9% 4.8% N/A				
<u>Contributions as a Percentage of Payroll</u> Employer Normal Cost Rate UAL Rate Total Employer Rate	4.36% <u>15.08%</u> 19.44% 2022 Ratema	, , , , ,	4.40% <u>15.07%</u> 19.47% 2024 Pa	temaking				
Total Employer Budgeted Rates Total Employer Budgeted Rates	FY 2024	18.98% 18.98%	FY 2026 FY 2027	18.80% 18.80%				



Table I-4 Summary of Principal Results State Program (Regular and Special Plans)								
Ĭ	Valuation as June 30, 202	of Valuation as	8					
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds Total Membership	12,68 11,45 3,26 29 84 3,28 9,19 41,02	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 846,773,35 \$ 352,796,02							
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded Actuarial Liability (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 6,012,640,98 <u>5,020,331,62</u> \$ 992,309,35 83.50 84.50	3         5,259,417,00           8         \$ 943,942,50           %         84.8	65 4.8% 89 (4.9)% %					
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 5,533,188,24 <u>5,082,393,97</u> \$ 450,794,27 91.99	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	93 33 5.0% (18.7)%					
Contributions as a Percentage of Payroll Employer Normal Cost Rate UAL Rate Total Employer Rate	4.92 <u>17.59</u> 22.51	$\frac{\frac{1}{6}}{\frac{1}{6}}$ $\frac{17.16}{22.10}$	<u>%</u> %					
Total Employer Budgeted Rates Total Employer Budgeted Rates	<u>2022 Rater</u> FY 2024 FY 2025	<u>naking 20</u> 21.51% FY 20 21.58% FY 20						



Table I-5 Summary of Principal Results State Program – Regular Plans Only							
	Valuation as June 30, 20	s of V	Valuation as of June 30, 2024	% Change			
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds	10, 3, 2, 1,	043 599 032 273 764 876 <u>795</u>	11,251 10,727 2,996 265 755 2,879 1,869	$\begin{array}{c} 1.9\% \\ 1.2\% \\ (1.2)\% \\ (2.9)\% \\ (1.2)\% \\ 0.1\% \\ 4.1\% \\ 1.2\% \end{array}$			
Total Membership Annual Payroll of Active Members Annual Payments to Benefit Recipients	30, \$ 711,537, \$ 318,716,			1.2% 7.8% 3.4%			
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded Actuarial Liability (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)		<u>614</u>	5 5,289,284,569 4,509,868,498 779,416,071 85.3% 86.5%	2.8% 4.2% (4.5)%			
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 4,753,994, <u>4,381,713,</u> \$ 372,280, 92.	786	5 4,877,692,310 <u>4,574,405,977</u> 5 303,286,333 93.8%	2.6% 4.4% (18.5)%			
Contributions as a Percentage of Payroll Employer Normal Cost Rate UAL Rate Total Employer Rate	4.8 <u>17.2</u> 22.0		4.83% <u>16.79%</u> 21.62%				
Total Employer Budgeted Rates Total Employer Budgeted Rates	<u>2022 Rate</u> FY 2024 FY 2025	emaking 21.07% 21.14%	<u>2024 Ra</u> FY 2026 FY 2027	<u>atemaking</u> 20.86% 20.95%			



	Table I-6			
	ry of Principal gram – Special P			
State Prog	Valuation as	· · · · · · · · · · · · · · · · · · ·	luation as of	
	June 30, 20		lune 30, 2024	% Change
Member Counts	,		,	0
Active Members	1,	646	1,653	0.4%
Retired Members		860	900	4.7%
Beneficiaries of Retired Members		230	253	10.0%
Survivors of Deceased Members		17	17	0.0%
Disabled Members		84	86	2.4%
Terminated Vested Members		406	425	4.7%
Inactives Due Refunds		400	7,719	4.3%
Total Membership		543	11,053	3.9%
Annual Payroll of Active Members	\$ 135,235,	398 \$	142,485,370	5.4%
Annual Payments to Benefit Recipients	\$ 34,079,		37,044,638	8.7%
Assets and Liabilities				
Actuarial Liability (AL)	\$ 868,123,	094 \$	914,075,085	5.3%
Actuarial Value of Assets (AVA)	692,124,		749,548,567	8.3%
Unfunded Actuarial Liability (UAL)	\$ 175,999,			(6.5)%
AVA Funded Ratio (AVA/AL)		7%	82.0%	
MVA Funded Ratio (MVA/AL)		7%	83.2%	
Accrued Benefit Liability (PVAB)	\$ 779,193,	973 \$	823,390,416	5.7%
Market Value of Assets (MVA)	700,680,		760,274,816	8.5%
Unfunded PVAB	\$ 78,513,		63,115,600	(19.6)%
Accrued Benefit Funded Ratio		9%	92.3%	
Contributions as a Percentage of Payroll				
Employer Normal Cost Rate	5.4	9%	5.54%	
UAL Rate	19.5	-	19.08%	
Total Employer Rate	25.0		24.62%	
	2022 Rate	emaking	2024 Ra	temaking
Total Employer Budgeted Rates	FY 2024	23.83%	FY 2026	23.32%
Total Employer Budgeted Rates	FY 2025	23.92%	FY 2027	23.43%



#### SECTION II - RISK ASSESSMENT AND DISCLOSURE

# Introduction

The Program's actuarial valuation results are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, these assumptions represent a reasonable estimate for future experience. However, actual future experience will never conform exactly to these assumptions and may differ significantly from the assumptions. This deviation is a risk that pension plan sponsors bear in relying on a pension plan's actuarial valuation results.

This section of this report is intended to identify the primary drivers of these risks, provide background information and assessments about these identified risks, and communicate the significance of these risks to this Program.

# **Identification of Risks**

For this Program, the three primary valuation results that can significantly differ from those expected are the assets, the liabilities, and the employer contributions. While there are several factors that could lead to these results being different, we believe the primary risks for this Program are:

- Investment risk,
- Longevity and other demographic risks,
- Plan change risk, and
- Assumption change risk

Other risks that we have not identified may also turn out to be significant.



#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

*Investment Risk* is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation, the unfunded liability will increase from what was expected and will require higher contributions than otherwise anticipated. But when actual returns exceed those assumed, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. As seen in the historical section that follows, this has been a significant driver of deviations in the actual measurements for this Program from those expected by the prior valuations.

Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expectations. In addition, the extensive number of assumptions related to longevity and other demographic experience often result in offsetting deviations contributing to the Program's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to the investment returns. The historical section that follows shows that this has been true for this Program in most individual years, with the magnitude of the gains and losses from investment experience often significantly larger than the gains and losses from liability experience. During the past 10 years, the offsetting effects of the investment gains and losses has resulted in a lower total net value despite the annual volatility whereas the longevity and other demographic risk gains and losses have had more losses in recent years resulting in a larger cumulative value. The continued losses seen since the last experience study can be attributed largely to pay increases being higher than expected.

*Plan Change Risk* is the potential for the provisions of the Program to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Program being changed, future valuation measurements can also be impacted, with Program changes leading to deviations between actual future measurements and those expected by prior valuations. For this Program, this risk is partially mitigated by the constitutional requirement that any Program changes creating new actuarial liabilities must be fully funded. Because of this, plan changes in the recent 10-year period have not attributed to changes in the unfunded actuarial liability, as they have all been fully funded. It is worth noting that when plan changes reduce the liability, there will be a gain associated with such a change. The last time this occurred was in 2011.

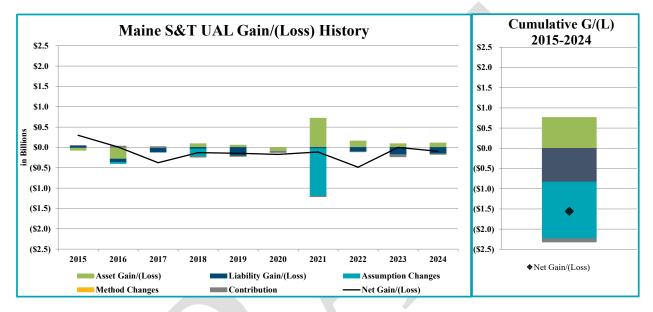
Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment resulting in the current assumption no longer being reasonable. The historical review section will show that assumption change risk has been the most significant risk for this Program over the period.



#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

# **Historical Experience Deviations**

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The following chart shows the gains/(losses) at each valuation date between the actual and expected experience broken down by cause for the last 10 years.



As described previously and evident in this chart, assumption changes as well as liability and asset gains and losses have been the most significant risks for the Program over this 10-year period on a cumulative basis. Contribution timing was much less significant over this period. Over this period, there were no method changes.

# **Plan Maturity Measures**

As pension plans become more mature, the primary risks of adverse investments, demographic deviations, plan changes, and assumption/method changes become of more significant concern as the resulting impacts on the Program's condition are more pronounced. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. With shrinking workforces, aging Baby Boomers, and retirees living longer, plans pay out more in benefits than they receive in contributions – leading to negative cash flows, excluding investment income, making it harder for a plan to recover from losses since contributions are generally made based on active payroll.

One of the main reasons risks are more amplified with a mature plan is that when plans with negative cash flows suffer investment losses, they need to liquidate enough assets to pay for benefits in excess of contributions. That means these plans will need to earn higher returns to



#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

rebuild their assets to the previous levels. Plans with negative cash flows exceeding five percent of assets are especially vulnerable to asset losses.

The balance of this section discloses and examines two maturity measures: the asset leverage ratio and the net cash flow ratio.

#### Asset Leverage Ratio

One important plan maturity measure is the asset leverage ratio, the market value of assets divided by the plan's payroll, which represents the percentage of payroll that would need to be contributed to make up a given change in the plan's assets. As a plan matures, its assets increase, and a greater proportion of the assets are paid out in benefit payments to members. The greater the plan's assets are relative to payroll, the more vulnerable the plan is to investment volatility in terms of the resulting contribution requirement changes.

As an example, here are two plans that both experience a 10% investment loss equaling \$500 million on their existing assets of five billion dollars. Plan A's asset leverage ratio is 10 and Plan B's ratio is five. This means that Plan A has to spread, or amortize, that loss over a payroll that is half as large as Plan B's. As seen in the chart below, this results in the percentage of payroll that Plan A would need to contribute to make up the loss being double what would be required for Plan B.

		(\$ in mi	llio	ns)				
	P	Plan A	P	'lan B				
Plan Assets	\$	5,000	\$	5,000				
Payroll	\$	500	\$	1,000				
Asset Leverage Ratio		10.0		5.0				
10% Loss	\$	500	\$	500				
10% Loss as % of Payroll		100%		50%				

The Government Finance Officers Association (GFOA), MissionSquare Research Institute, the National Association of State Retirement Administrators (NASRA), and the Center for Retirement Research at Boston College maintain the Public Plans Data database that contains almost all state plans as well as many large municipal plans, covering over 95% of the membership in public plans as well as over 95% of the assets held by public pension plans.

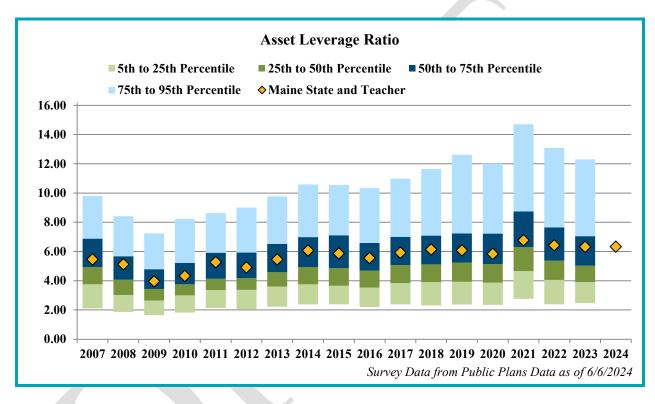
The chart that follows shows the asset leverage ratios for the Program and the plans in this database since 2007. The colored bars represent the central 90% of the asset leverage ratios of the plans in the database for each year. The Maine State Employee and Teacher Program is represented by the gold diamonds. This chart shows that the Program's asset leverage ratio has generally increased over this period, both in absolute terms and relative to the universe of other systems, although it had remained steady, within approximately 50% of 600% of salary, for the



#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

eight years prior to 2021, when it increased to 677%, or 6.77 times salary. Due to the market loss in FY 2022 and the slight gains in 2023 and 2024, the rate is now back within the previous range at 633%, or 6.33 times salary.

Note that the charts showing the Program versus the universe of public plans in this section show one more year for the Program than the universe as the 2024 numbers are not yet available for the database. When these numbers are available, we anticipate that the universe of public plans will also show a similar trend experience in this ratio when compared to MainePERS.



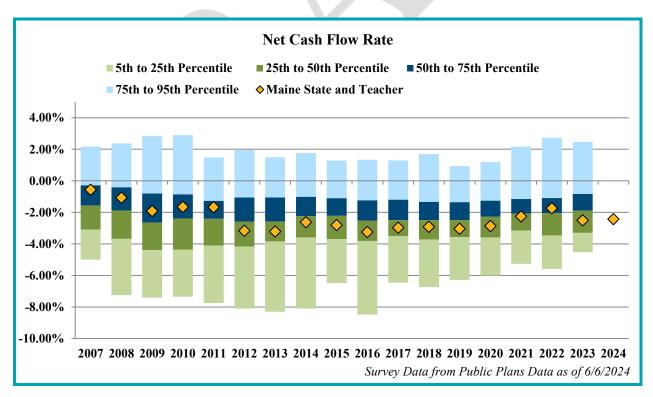


#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

#### Net Cash Flow Ratio

Another measure of plan maturity is the ratio of the net cash flow (excluding investment returns) for a plan – contributions less benefits and expenses – divided by the market value of plan assets. When this ratio is significantly negative, a plan is very vulnerable to market declines. This vulnerability increases as this ratio becomes more negative.

This chart shows that the Program's net cash flow ratio in 2007 was about negative 0.6% and generally trended towards more negative values through 2012. Starting in 2013, it remained relatively stable within 0.35% of negative 2.95% in all years through 2020. In FY 2021, the Program's negative cash flow improved to negative 2.3%, largely due to the significant asset gains in FY 2021. In FY 2022, the Program's negative cash flow increased to negative 1.7%, due largely to the extra contributions made to the Trust to fund the COLA benefit change enacted in FY 2022. In FY 2024, the cash flow rate is negative 2.4%. Relative to the public plans universe, the Program had smaller negative cash flows than the median plan in the database at the beginning of this period. But since 2012, the negative net cash flows have been larger than the median plan in the universe other than FY 2022. Since the results for other systems as of 2024 are not yet available, we do not yet know how the change in the net cash flow ratio for this System in 2024 will compare relative to that of other systems. Note also that the Program's contribution rate is expected to decrease once the 1996 UAL is paid off – which will be in FY 2028. After that point, we anticipate seeing a significant increase in the negative net cash flow rate to about negative 4.0%.





#### SECTION II – RISK ASSESSMENT AND DISCLOSURE

# **Assessing Future Risk**

Assessing the future risk that the expected measurements produced by the actuarial valuations will deviate from the actual values over time is complex and can never be exactly known. However, to try to assist the Board in its review of this report, we have attempted to develop some basic assessments of this risk in the remainder of this section, focusing on risks related to investment returns.

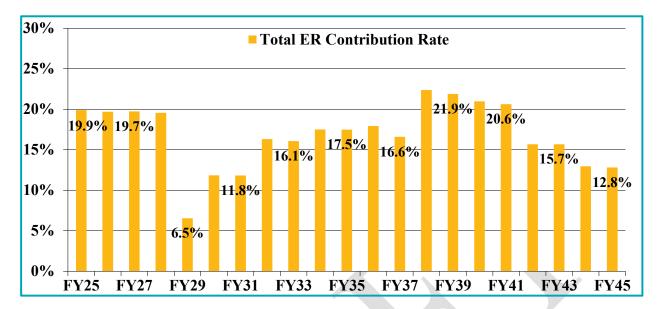
Pages 7-8 have additional detail on the baseline projection produced from this valuation. It is important to note that baseline projections, while informative, **are not going to occur** as experience never conforms exactly to assumptions every year. As discussed in the plan maturity section, as plans become more mature, it typically becomes more difficult for them to recover from market declines even when the average investment return over an extended period is equal to the expected return. As a demonstration of this, on the following pages we show a scenario that is based on assuming varying returns in the future. We based this varying return scenario on assuming the returns for the next 20 years would equal what a portfolio invested 75% in the SP-500 index and 25% in the Bloomberg Aggregate bond index would have earned for the 20-year period July 1, 1999 through June 30, 2019 as a rough proxy for the Program's asset allocation. The rates assumed for this scenario are shown below.

FY	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Return	17.9%	6.6%	-8.3%	-11.3%	2.8%	14.4%	6.4%	6.3%	17.0%	-8.1%
FY	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Return	-18.1%	13.2%	24.0%	6.0%	15.3%	19.6%	6.0%	4.5%	13.3%	10.7%

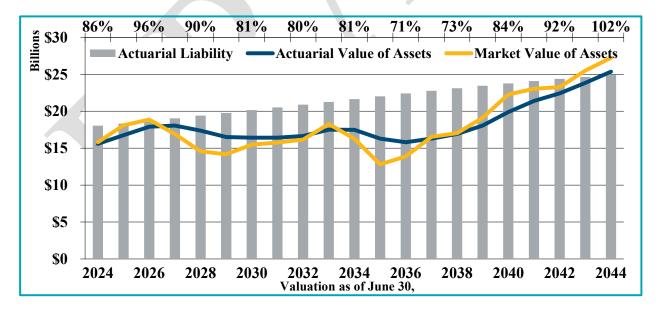
With varying annual earnings, one can see the volatility in the employer contributions in the first chart. Where the near-term contributions in the baseline scenario were relatively stable until the 1996 UAL is paid off, under this alternative scenario with varying returns, the contributions during that period decrease slightly through FY 2028. Also, in the period after the 1996 UAL is paid off, the contribution rates are much more volatile in this scenario, including ranging to rates of over 21% and with all years remaining higher than those anticipated in the baseline scenario. Note that this chart reflects an illustrative scenario and is not intended to reflect future expectations as the volatility of the contributions will vary with the volatility of the returns. It is provided simply to demonstrate the magnitude of this potential volatility.



# SECTION II – RISK ASSESSMENT AND DISCLOSURE



The AVA funded ratio of the Program is also more volatile with varied returns as seen in the following graph based on this illustrative varying returns scenario. These two scenarios both result in the Program being fully funded by the end of the projection period. However, where the baseline projection has the funded ratio steadily increasing from the current 86% to 100% over the forecasted period, in this illustrative varying returns scenario, the funded ratio is much more volatile. The AVA funded ratio even dips to a low of 71% in 2036 before recovering over this period.





#### **SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of plans and in the decisions that Trustees make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely affect benefit levels, employer contribution rates, and the ultimate security of members' benefits.

The assets for all Defined Benefit (DB) Programs administered by MainePERS are invested together. These Programs are the State Employee and Teacher Retirement Program that is valued in this report, the Judicial Retirement Program, the Legislative Retirement Program, and the Participating Local District (PLD) Retirement Program, including both the Consolidated Plan and the several Nonconsolidated PLDs. The assets of these Programs are entirely commingled for investment purposes, so the actuarial value of assets (AVA) for each of these Programs is developed by first developing it for the entire asset pool and then subsequently allocating that total AVA to each of the specific Programs.

In this section, we present detailed information on the Program's assets including:

- Disclosure of total MainePERS DB assets at June 30, 2024,
- Statement of changes in total MainePERS DB market values during the year,
- Development of the total MainePERS DB actuarial value of assets,
- Allocation of the total actuarial value to MainePERS DB Programs,
- Assessment of the total MainePERS DB investment performance, and
- Projection of expected cash flows for the Program for the next 10 years.

# Disclosure

The market value of assets (MVA) represents a "snap-shot" or "cash-out" value, which provides the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with corresponding swings in the marketplace, resulting in volatility in the resulting contributions if the unadjusted market value is used in the valuation process that develops the contributions. Therefore, a smoothed actuarial value of assets is developed for use in the valuation process and for evaluating the Program's ongoing ability to meet its obligations. The actuarial value of the Program's assets is developed by allocating the actuarial value of the total MainePERS DB assets to each Program. This section discloses the market and actuarial values of the MainePERS DB assets both in total and for each Program.



# **SECTION III – ASSETS**

Table III-1 that follows develops the change in the market value of assets for the total MainePERS DB assets during FY 2024.

Table III-1           Changes in Market Value of Total MainePERS Defined Benefit (DB) Assets		
Market Value of Total MainePERS DB A		\$ 19,032,500,469
Additions		
Contributions:		
Employer Contributions	\$ 609,725,832	
Member Contributions	253,072,755	
Transfers	(276,351)	
Total Contributions	\$ 862,522,236	
Investment Income:		
Net Appreciation (Depreciation) in		
Fair Value of Investments	\$ 1,550,729,080	
Interest on Bank Balances	3,318,765	
Total Investment Income	\$ 1,554,047,845	
Investment Activity Expenses:		
Management Fees	\$ (131,872,981)	
Investment Related Expense	(5,758,258)	
Banking Fees	(36,109)	
Total Investment Activity Expenses	\$ (137,667,348)	
Net Income from Investing Activities	\$ 1,416,380,497	
Total Additions		\$ 2,278,902,733
Deductions		
Retirement Benefits	\$ (1,200,976,761)	
Disability Benefits	(25,883,395)	
Survivor Benefits	(28,529,982)	
Refunds	(37,506,149)	
Administrative Expenses	(17,274,490)	
Total Deductions	<u>, , , , , , , , , , , , , , , , , ,</u>	\$ (1,310,170,777)
Total		
Net Increase (Decrease)		\$ 968,731,956
Market Value of Total MainePERS DB Assets – June 30, 2024		\$ 20,001,232,425



## **SECTION III – ASSETS**

# Actuarial Value of Total MainePERS DB Assets

Table III-2 that follows develops the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024 using the adopted actuarial valuation methodology.

	Table III-2Development of Actuarial Value of Total MainePERS Defined Bas of June 30, 2024	enef	it (DB) Assets
1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023	\$	18,800,089,976
2.	Amount in (1) with Interest to June 30, 2024		20,022,095,824
3.	Employer and Member Contributions for FY 2024		862,522,236
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2024		27,590,682
5.	Total Disbursements without Administrative Expenses, for FY 2024		(1,292,896,287)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2024		<u>(41,357,647)</u>
7.	Expected Value of Total MainePERS DB Assets at June 30, 2024 = $(2) + (3) + (4) + (5) + (6)$	\$	19,577,954,808
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2024		20,001,232,425
9.	Excess of (8) Over (7)		423,277,617
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2024 = $(7) + [33\frac{1}{3}\% \text{ of } (9)]$	\$	19,719,047,347

As discussed in the disclosure portion of this section, the actuarial value of assets for the Program represents a "smoothed" value developed by the actuary to reduce, or eliminate, volatility in valuation results, particularly contribution rates, that could develop from short-term fluctuations in the market value of assets. Current actuarial methods employed in this Program use an allocated portion of the total actuarial value of assets for the total MainePERS DB assets based on the Program's market value of assets to develop the actuarial value of assets for the Program. The methodology for the total MainePERS DB assets sets the actuarial value of assets equal to the expected value of the actuarial value of assets and the expected actuarial value of assets. The expected value of the actuarial value of assets takes the prior year's actuarial value of assets and adjusts it for contributions, disbursements, and expected interest earnings at the investment return assumption that was in effect for the previous year, 6.50% for this valuation. The previous table, Table III-2, illustrates the calculation of the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024.



## **SECTION III – ASSETS**

# Allocation of Actuarial Value of Assets to the Program

The assets for the defined benefit (DB) Programs administered by MainePERS are commingled for investment purposes with the actuarial value of assets for the total assets allocated to the individual Programs on the basis of the market value of the assets for each Program. An asset ratio (total MainePERS DB actuarial value of assets divided by total MainePERS DB market value of assets) is applied to the market value of assets attributable to each of the Programs to determine its actuarial value of assets as of the valuation date. The asset ratio derived in this June 30, 2024 valuation is 0.985892 ( $$19,719,047,347 \div $20,001,232,425$ ). The allocation of actuarial value of the total MainePERS DB assets to each of the MainePERS DB Programs based on this asset ratio is shown in the following table.

Allocation of Actuarial Value	le III-3 of Total MainePERS ne 30, 2024	DB Assets
Program	Market Value	Actuarial Value
Teacher	\$ 10,475,025,420	\$10,327,239,734
State (Regular & Special)	5,334,680,793	5,259,417,065
Judicial	89,203,285	87,944,771
Legislative	17,431,101	17,185,176
Participating Local Districts (Consolidated & Non-Consolidated)	4,084,891,826	4,027,260,601
Total	\$ 20,001,232,425	\$19,719,047,347

# **Investment Performance**

The market value of assets for the total MainePERS DB assets returned a positive 7.43% during FY 2024. This is greater than the assumed return of 6.50% for FY 2024. The equivalent market value returns for the total MainePERS DB assets for FY 2023 and FY 2022 were positive 6.05% and negative 0.62%, respectively.

On an actuarial value of assets basis, the return for FY 2024 was a positive 7.26% for the total MainePERS DB assets. This return is less than the return on a market value basis but greater than the 6.50% assumption in effect for FY 2024. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.



## **SECTION III – ASSETS**

## **Cash Flow Projections**

		Table III- f State Employee a fit Payments and	and Teacher Program	m
FY		Expected	Expected	
Ending	Expected Benefit	Employer	Member	<b>Total Expected</b>
June 30,	Payments	Contributions	Contributions	Contributions
2025	\$1,182,777,000	\$ 503,512,000	\$ 195,177,000	\$ 698,689,000
2026	1,122,698,000	512,416,000	200,545,000	712,961,000
2027	1,154,053,000	527,309,000	206,060,000	733,369,000
2028	1,183,785,000	545,236,000	211,726,000	756,962,000
2029	1,213,211,000	270,438,000	217,549,000	487,987,000
2030	1,244,062,000	272,548,000	223,531,000	496,079,000
2031	1,274,757,000	279,792,000	229,678,000	509,470,000
2032	1,304,820,000	284,392,000	235,995,000	520,387,000
2033	1,333,952,000	284,466,000	242,484,000	526,950,000
2034	1,362,136,000	288,537,000	249,153,000	537,690,000

In Table III-4 above, we provide a projection of expected cash flows in and out of the Program for the next 10 years for informational purposes. The Board may share these projections with its investment advisor for consideration of the gap shown between the cash expected to come into the Program through employer and member contributions and the cash expected to be paid out of the Program to provide benefit payments.

The expected benefit payments in Table III-4 were developed using the data currently included in this valuation and on the assumption that the actuarial assumptions disclosed in Appendix C will be exactly met. Actual benefit payments will vary if members retire sooner or later than assumed, if salary increases and actual future post-retirement COLAs differ from those assumed, or if other assumptions differ from the actual experience seen. These benefit projections exclude any assumption about new Program participants, whose experience will eventually lead to increased benefit payments. However, we do not feel this exclusion will materially impact the projections for the period shown.

Expected employer contributions in this table use the budgeted contributions for FY 2025 through FY 2027. Future contributions beyond that point are developed based on the assumption that all actuarial assumptions will be exactly met in the projection period, including that the market value of assets will earn 6.50% per year, that payroll grows at 2.75% per year, and that these rates are based on following the biennial budgeting process. These future employer contribution rates are shown graphically in the baseline projection on page seven.

The expected member contributions are similarly based on a 2.75% per year assumed increase in covered payroll multiplied by the current average aggregate member contribution rate of 7.71% for FY 2025.



## **SECTION IV – LIABILITIES**

In this section, we present detailed information on Program liabilities including:

- Disclosure of the Program's liabilities as of June 30, 2023 and June 30, 2024,
- Statement of changes in these liabilities during the year, and
- An allocation of liabilities to the Teacher, State Regular, and State Special Plans.

# Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- Present Value of Future Benefits (PVB): Used for analyzing the overall financial obligations of the Program, this represents the amount of money needed today to fully fund all future benefits of the Program, assuming no new members, that active members continue to earn salary increases and accrue benefits under their current Program provisions, and that all actuarial assumptions are exactly met, including the 6.50% per year investment return.
- Actuarial Liability (AL): Used for funding calculations and GASB disclosures, this liability is calculated taking the PVB above and subtracting the value of accruals that are assigned to future years on a person-by-person basis. This offset is equal to the present value of future member contributions and future employer normal cost contributions under an acceptable actuarial cost method. For this Program and the other MainePERS DB Programs, the method used is referred to as the entry age normal (EAN) cost method, which is the only permitted actuarial cost method for GASB disclosures.
- Present Value of Accrued Benefits (PVAB): Used for communicating the liabilities for benefits accrued as of the valuation date.

Table IV-1 that follows discloses each of these liabilities for the current and prior years' valuations. With respect to the actuarial liability and the present value of accrued benefits, a subtraction of the appropriate value of the Program's assets yields, for each respective type, a net surplus or an unfunded liability. For the PVB measure, it is compared to the market value of assets plus the expected future value of contributions to the Program. The future employer contributions are calculated as the expected rates for each year times the expected future payroll as of each date. The future member contributions are calculated assuming the current average rate of 7.71% will be continued for all future years and applied to the expected future payroll as of each date. The difference between the PVB and these anticipated resources indicates either an expected shortfall or an expected surplus representing either additional funding required or excess funding and indicates the size of the Program's stored gains or losses that remain outside of the valuation process currently. We note that none of the liabilities presented in this report are an appropriate measure of a settlement liability.



## **SECTION IV – LIABILITIES**

The liability measures are compared to appropriate measures of assets, along with the expected future value of member and employer contributions where appropriate. The difference between the liability measure and the anticipated resources indicates either an expected shortfall or an expected surplus related to that liability measure. The surplus or shortfall on the present value of benefits (PVB) measure indicates the size of the Program's stored gains or losses that remain outside of the valuation process.

Table IV-1		
Disclosure of Liab	oilities	
	June 30, 2023	June 30, 2024
Present Value of Benefits (PVB)		,
Active Member Benefits	\$ 8,597,464,148	\$ 8,918,907,944
Retired, Disabled, Survivor, and Beneficiary Benefits	10,421,363,188	10,723,995,963
Terminated Vested Benefits	837,556,738	870,743,702
Terminated Nonvested Benefits	88,700,930	91,720,611
Total PVB	\$ 19,945,085,004	\$ 20,605,368,220
	. , , , ,	· , , , ,
Market Value of Assets (MVA)	\$ 15,073,148,465	\$ 15,809,706,213
Future Member Contributions	1,606,361,272	1,686,569,266
Future Employer Contributions	3,582,879,952	3,471,563,019
Projected (Surplus)/Shortfall	(317,304,685)	(362,470,278)
Total Resources	\$ 19,945,085,004	\$ 20,605,368,220
Actuarial Liability (AL)		
Present Value of Benefits (PVB)	\$ 19,945,085,004	\$ 20,605,368,220
Present Value of Future Normal Costs (PVFNC)		
Employer Portion	818,188,048	868,229,103
Member Portion	1,606,361,272	<u>1,686,569,266</u>
Actuarial Liability (AL = PVB – PVFNC)	\$ 17,520,535,684	\$ 18,050,569,851
Actuarial Value of Assets (AVA)	14,889,086,583	15,586,656,799
Net (Surplus)/Unfunded (AL – AVA)	\$ 2,631,449,101	\$ 2,463,913,052
Present Value of Accrued Benefits (PVAB)	<b>•</b> • • • • • • • • • • • • • • •	
Present Value of Future Benefits (PVB)	\$ 19,945,085,004	\$ 20,605,368,220
Present Value of Future Benefit Accruals (PVFBA)	4,085,501,842	4,277,892,285
Accrued Liability (PVAB = PVB – PVFBA)	\$ 15,859,583,162	\$ 16,327,475,935
Market Value of Assets (MVA)	15,073,148,465	15,809,706,213
Net (Surplus)/Unfunded (PVAB – MVA)	\$ 786,434,697	\$ 517,769,722



## **SECTION IV – LIABILITIES**

# Low-Default-Risk Obligation Measure (LDROM)

The System invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the System. Such a portfolio, however, would have a lower expected rate of return than the diversified portfolio. The LDROM represents what the funding liability would be if the System invested its assets in such a portfolio. As of June 30, 2024, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 4.44% compared to the System's discount rate of 6.50%, and the LDROM would be \$23.2 billion compared to the Actuarial Liability of \$18.1 billion. The \$5.1 billion difference represents the expected taxpayer savings from bearing the risk of investing in the diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

If the System were to invest in the LDROM portfolio, the reported funded status would decrease, and contribution requirements would increase. Benefit security for members of the Program relies on a combination of the assets in the System, the investment returns generated on those assets, and the promise of future contributions. If the System were to invest in the LDROM portfolio, it would not change the amount of assets currently in the System, but it would reduce expected future investment returns and increase expected future contributions. However, the range of future investment returns and future contributions needed would narrow significantly.

# **Changes in Liabilities**

Each of the liabilities disclosed in Table IV-1 is expected to change at each subsequent valuation. The components of these changes, depending upon which liability is analyzed, can include:

- New Program members since the last valuation
- Benefits accrued since the last valuation
- Program amendments changing benefits since the last valuation
- Passage of time, which adds interest to the prior liability
- Benefits paid to members since the last valuation
- Members retiring, terminating, or dying at rates different than expected since the last valuation
- Salaries changing at rates different than expected since the last valuation
- A change in actuarial assumptions since the last valuation
- A change in the actuarial cost method since the last valuation



## **SECTION IV – LIABILITIES**

Unfunded liability measurements will change because of all of the above, as well as due to changes in the Program's asset measurements resulting from:

- Contributions being different than expected
- Investment earnings being different than expected
- A change in the method used to measure the Program's assets in developing the unfunded liability measure since the last valuation

In each valuation, we report on those elements of change in the Program's liability measures that are of particular significance, potentially affecting the long-term financial outlook of the Program. In Table IV-2 that follows, we present key changes in the Program's liability measures since the last valuation.

	Table IV-2 Present Value of Future Benefits	Actuarial Liability	Present Value of Accrued Benefits
Liability Measurement – June 30, 2023	\$ 19,945,085,00	)4 \$ 17,520,535,684	\$ 15,859,583,162
Liability Measurement – June 30, 2024	20,605,368,22	20 18,050,569,851	16,327,475,935
Liability Measurement Increase/	\$ 660,283,21	6 \$ 530,034,167	\$ 467,892,773
(Decrease) Due to:			
Program Amendment	\$ 5,946,00	00 \$ 5,946,000	\$ 5,946,000
Assumption Change		0 0	0
Actuarial (Gain)/Loss	N/	C 155,752,965	N/C
Benefits Accumulated			
and Other Sources	\$ 654,337,21	6 \$ 368,335,202	\$ 461,946,773
N/C = Not calculated			



## **SECTION IV – LIABILITIES**

Table IV-3 below presents the actuarial liability information for the Program in total as well as divided into the Teacher Program, the State Regular Plans, and the State Special Plans.

	All	Tal location of Actuarial	ole IV-3 Liability as of June	30, 2024	
		Total Program	Teacher Program	State Regular Plans	State Special Plans
1.	Actuarial Liabilities for: a. Active Members b. Retired, Disabled,	\$ 6,364,109,575	\$ 4,316,171,607	\$ 1,661,603,972	\$ 386,333,996
	Survivor, and Beneficiary Members c. Terminated (Vested & Nonvested)	10,723,995,963	6,853,863,300	3,392,735,885	477,396,778
	Members	962,464,313	677,175,290	234,944,712	50,344,311
2.	Total Actuarial Liability $[1(a) + 1(b) + 1(c)]$	\$ 18,050,569,851	\$ 11,847,210,197	\$ 5,289,284,569	\$ 914,075,085
3.	Actuarial Value of Assets	15,586,656,799	10,327,239,734	4,509,868,498	749,548,567
4.	Unfunded Actuarial Liability (2 – 3)	\$ 2,463,913,052	\$ 1,519,970,463	\$ 779,416,071	\$ 164,526,518



## **SECTION V – CONTRIBUTIONS**

In this section, we present detailed information on informational employer contribution rates as developed in this June 30, 2024 valuation for the Program, including:

- Development of the composite total employer contribution rate, including the composite employer normal cost rate (NC rate) and the composite unfunded actuarial liability (UAL) amortization rate (UAL amortization rate),
- Summary of the employer normal cost rate, the UAL rate, and the total employer rate by Plan,
- Derivation and division of the composite UAL rate into the two component Programs, Teacher and State, and
- Allocation of the UAL rate for the total State Program into each State Regular and Special Plan.

Note that these contribution rates are only informational, and the actual contribution rates are set by the budgeting process described in the Board Summary at the beginning of this report.

# **Description of Rate Components**

For the Plans in this Program, the funding methodology employed to determine the employer contribution rates is the entry age normal (EAN) cost method. Under this method, there are two components to the total employer contribution rate: the NC rate and the UAL amortization rate. Both of these rates are developed separately for each Plan within the Program, consisting of the Teacher Plan, the State Regular Plan, and several State Special Plans.

An individual EAN cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate for each member is determined by taking the value of their projected future benefits, as of entry age into the Program. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. Finally, the resulting total normal cost rate is reduced by the member contribution rate to produce the employer's normal cost rate for the member. These rates are then multiplied by each member's salary as of the valuation date and added together to get the total employer normal cost dollars as of the Valuation date for the Program, which is then divided by the total payroll at the valuation date for the Program to get the employer normal cost rate for the Program. This process results in specific total and employer normal cost rates for each of the Plans in the Program.

The unfunded actuarial liability under the EAN cost method equals the present value at the time of valuation of the future benefit payments less the present value of future employer normal cost contributions, future member contributions, and current assets. The UAL amortization rate is the percentage that when applied to member payroll, which is assumed to increase 2.75% per year, is expected to amortize the UAL according to the Program's amortization policy. Specifically, the remaining original UAL from 1996 has four years of its amortization period remaining, the UAL amount for the period from 1997 through 2011 has four years of its amortization period



### **SECTION V – CONTRIBUTIONS**

remaining, and all other gains, losses, and changes since then are amortized over individual 20-year periods beginning on the date as of which they were first measured with the exception of the gain base related to FY 2014, for which the amortization was accelerated by six years beginning with the 2022 ratemaking. As such, we have similarly accelerated the amortization of this base in developing the informational rates contained in this report with a remaining period of four years as of June 30, 2024. This June 30, 2024 valuation is the third valuation reflecting the accelerated amortization of the FY 2014 base.

# **Contribution Calculations**

Table V-1 below presents and compares the composite total employer contribution rate, as well as its two components, for all Plans in the Program in aggregate as developed in this valuation and the prior one.

Table V-1       Composite Total Employer Rate							
Valuation Date	June 30, 2023	June 30, 2024					
Composite Employer NC Rate	4.56%	4.60%					
Composite UAL Amortization Rate	<u>15.97%</u>	<u>15.83%</u>					
Composite Total Employer Rate	20.53%	20.43%					

The rates developed in this section are for informational purposes only. Actual budgeted rates are set based on the ratemaking process described in the Board Summary section.

Table V-2 that follows shows the employer NC rate, the UAL amortization rate, and the total employer rate for each Plan in the Program as well as the Program in total and divided into the Teacher and State Programs.

The liability and resulting necessary contributions associated with groups that no longer have any active participants as of the current valuation date are included with the State Regular Program. With this valuation, the State Police Closed Plan no longer has any active participants and as such is no longer included within Table V-2.



## **SECTION V – CONTRIBUTIONS**

Table V-2Total Employer Contribution Rates by Plan							
Valuation Date June 30, 2024	Total NC Rate	Employee Contribution Rate	Employer NC Rate	UAL Contribution Rate	Total Employer Contribution Rate		
Total Program	12.31%	7.71%	4.60%	15.83%	20.43%		
Teacher Program	12.05%	7.65%	4.40%	15.07%	19.47%		
State Program	12.75%	7.81%	4.94%	17.16%	22.10%		
State Regular 25 & Out Plan 1998 Special Plan Fire Marshals Inland F&W*	12.48% 14.14% 14.12% 19.89% 23.06%	7.65% 8.65% 8.65% 8.65% 8.65%	4.83% 5.49% 5.47% 11.24% 14.41%	16.79% 19.02% 18.99% 26.76% 31.03%	21.62% 24.51% 24.46% 38.00% 45.44%		

\* Closed plan

Table V-3 that follows provides the development of the 15.83% UAL amortization rate for the Program as a whole and divided between the Teacher and State Programs.



## SECTION V – CONTRIBUTIONS

	]	Table V-3			
Derivation of U	J <b>nfun</b>	ded Actuarial I	liabi	lity Rates	
			S	State Program	
Valuation Date				(Regular and	Total
June 30, 2024	Теа	icher Program		Special Plans)	Program
1. Actuarial Liability (AL)	\$	11,847,210,197	\$	6,203,359,654	\$ 18,050,569,851
2. Actuarial Value of Assets (AVA)		10,327,239,734		5,259,417,065	 15,586,656,799
3. Unfunded Actuarial Liability (UAL)	\$	1,519,970,463	\$	943,942,589	\$ 2,463,913,052
4. Remaining Balances of Prior Amortization B	ases				
a. 1996 UAL Amount	\$	1,175,440,022	\$	676,850,013	\$ 1,852,290,035
b. 1997-2011 UAL Base		(448,200,082)		(258,085,674)	(706,285,756)
c. 2012 (Gain)/Loss Base		21,947,638		19,553,229	41,500,867
d. 2013 (Gain)/Loss Base		(100,067,193)		112,475,060	12,407,867
e. 2014 (Gain)/Loss Base		(131,634,056)		(59,529,691)	(191,163,747)
f. 2015 (Gain)/Loss Base		3,194,530		(5,115,771)	(1,921,241)
g. 2016 (Gain)/Loss Base		153,694,136		172,209,218	325,903,354
h. 2017 (Gain)/Loss Base		95,060,147		17,284,891	112,345,038
i. 2018 (Gain)/Loss Base		103,660,127		27,139,290	130,799,417
j. 2019 (Gain)/Loss Base		138,036,905		23,044,599	161,081,504
k. 2020 (Gain)/Loss Base		25,788,834		81,688,529	107,477,363
1. 2021 (Gain)/Loss Base		394,554,394		75,542,637	470,097,031
m. 2022 (Gain)/Loss Base		15,375,458		(15,788,099)	(412,641)
n. 2023 (Gain)/Loss Base		59,431,286		35,712,174	95,143,460
o. 2024 (Gain)/Loss Base		13,688,317		40,962,184	 54,650,501
p. Sum of the Bases	\$	1,519,970,463	\$	943,942,589	\$ 2,463,913,052
5. UAL Amortizations					
a. 1996 UAL Amount 4 Years	\$	319,755,658	\$	184,123,917	\$ 503,879,575
b. 1997-2011 UAL Base 4 Years		(121,924,139)		(70,207,201)	(192,131,340)
c. 2012 (Gain)/Loss Base 8 Years		3,198,865		2,849,881	6,048,746
d. 2013 (Gain)/Loss Base 9 Years		(13,186,714)		14,821,806	1,635,092
e. 2014 (Gain)/Loss Base 4 Years*		(35,808,492)		(16,193,898)	(52,002,390)
f. 2015 (Gain)/Loss Base 11 Years		356,239		(570,487)	(214,248)
g. 2016 (Gain)/Loss Base 12 Years		15,975,474		17,899,993	33,875,467
h. 2017 (Gain)/Loss Base 13 Years		9,273,365		1,686,186	10,959,551
i. 2018 (Gain)/Loss Base 14 Years		9,546,067		2,499,259	12,045,326
j. 2019 (Gain)/Loss Base 15 Years		12,060,278		2,013,406	14,073,684
k. 2020 (Gain)/Loss Base 16 Years		2,146,999		6,800,819	8,947,818
1. 2021 (Gain)/Loss Base 17 Years		31,419,489		6,015,675	37,435,164
m. 2022 (Gain)/Loss Base 18 Years		1,175,093		(1,206,629)	(31,536)
n. 2023 (Gain)/Loss Base 19 Years		4,372,279		2,627,296	6,999,575
o. 2024 (Gain)/Loss Base 20 Years		<u>971,965</u>		2,908,599	 3,880,564
p. Sum of Amortization Payments	\$	239,332,426	\$	156,068,622	\$ 395,401,048

\* The amortization of the FY 2014 base was accelerated by six years beginning with the 2022 ratemaking.



## **SECTION V – CONTRIBUTIONS**

			V-3 (continued) nded Actuarial I		ity Rates	
	Valuation Date June 30, 2024	Те	eacher Program	(	tate Program Regular and pecial Plans)	Total Program
6. 7	Covered Payroll	\$	1,587,791,945	\$	909,583,668	\$ 2,497,375,613
7.	<ul><li>UAL Amortization Rates</li><li>a. 1996 UAL Amount 4 Years</li><li>b. 1997-2011 UAL Base 4 Years</li></ul>		20.14%		20.24%	20.16%
			(7.68)%		(7.72)%	(7.69)%
	<ul><li>c. 2012 (Gain)/Loss Base 8 Years</li><li>d. 2013 (Gain)/Loss Base 9 Years</li></ul>		0.20%		0.31%	0.24%
	e. 2014 (Gain)/Loss Base 4 Years		(0.83)% (2.26)%		1.63% (1.78)%	0.07% (2.08)%
	f. 2015 (Gain)/Loss Base 11 Years		0.02%		(0.06)%	(0.01)%
	g. 2016 (Gain)/Loss Base 12 Years		1.01%		1.97%	1.36%
	h. 2017 (Gain)/Loss Base 13 Years		0.58%		0.19%	0.44%
	i. 2018 (Gain)/Loss Base 14 Years		0.58%		0.1976	0.44%
	j. 2019 (Gain)/Loss Base 17 Years					
	k. 2020 (Gain)/Loss Base 15 Years		0.76%		0.22%	0.56%
			0.14%		0.75%	0.36%
			1.98%		0.66%	1.50%
	m. 2022 (Gain)/Loss Base 18 Years		0.07%		(0.13)%	0.00%
	n. 2023 (Gain)/Loss Base 19 Years		0.28%		0.29%	0.28%
	o. 2024 (Gain)/Loss Base 20 Years		<u>0.06%</u>		0.32%	<u>0.16%</u>
	p. Sum of UAL Amortization Rates		15.07%	•	17.16%	15.83%



## **SECTION V – CONTRIBUTIONS**

Table V-4 below shows the development of the UAL amortization rate for each specific Plan within the State Program.

Table V-4 Allocation of Unfunded Actuarial Liability Amortization Rate within State Program (Regular & Special Plans)						
Valuation Date June 30, 2024 1. Employer NC Rate	<b>Total State</b> <b>Program</b> 4.94%	State Regular Plan 4.83%	<b>25 &amp; Out</b> <b>Plan</b> 5.49%	<b>1998</b> <b>Special</b> <b>Plan</b> 5.47%	<b>Fire</b> <b>Marshals</b> 11.24%	<b>Inland F&amp;W (Closed)</b> 14.41%
2. Member Contribution Rate	7.81%	7.65%	8.65%	<u>8.65%</u>	<u>8.65%</u>	<u>8.65%</u>
3. Total NC Rate	12.75%	12.48%	14.14%	14.12%	19.89%	23.06%
<ul> <li>4. UAL Amortization Rates* <ul> <li>a. 1996 UAL Amount</li> <li>b. 1997-2011 UAL Base</li> <li>c. 2012 Loss Base</li> <li>d. 2013 Loss Base</li> <li>e. 2014 Gain Base</li> <li>f. 2015 Gain Base</li> <li>g. 2016 Loss Base</li> <li>h. 2017 Loss Base</li> <li>i. 2018 Loss Base</li> <li>j. 2019 Loss Base</li> <li>k. 2020 Loss Base</li> <li>l. 2021 Gain Base</li> <li>m. 2022 Gain Base</li> <li>n. 2023 Gain Base</li> <li>o. 2024 Gain Base</li> </ul> </li> </ul>	$\begin{array}{c} 20.24\% \\ (7.72)\% \\ 0.31\% \\ 1.63\% \\ (1.78)\% \\ (0.06)\% \\ 1.97\% \\ 0.19\% \\ 0.27\% \\ 0.22\% \\ 0.75\% \\ 0.66\% \\ (0.13)\% \\ 0.29\% \\ 0.32\% \end{array}$	19.81% (7.56)% 0.30% 1.60% (1.74)% (0.06)% 1.93% 0.19% 0.26% 0.22% 0.73% 0.65% (0.13)% 0.28% 0.31%	$\begin{array}{c} 22.45\% \\ (8.56)\% \\ 0.34\% \\ 1.81\% \\ (1.97)\% \\ (0.07)\% \\ 2.18\% \\ 0.21\% \\ 0.30\% \\ 0.24\% \\ 0.83\% \\ 0.73\% \\ (0.14)\% \\ 0.32\% \\ 0.35\% \end{array}$	$\begin{array}{c} 22.41\% \\ (8.55)\% \\ 0.34\% \\ 1.81\% \\ (1.97)\% \\ (0.07)\% \\ 2.18\% \\ 0.21\% \\ 0.30\% \\ 0.24\% \\ 0.83\% \\ 0.73\% \\ (0.14)\% \\ 0.32\% \\ 0.35\% \end{array}$	31.57% (12.04)% 0.48% 2.54% (2.78)% (0.09)% 3.07% 0.30% 0.42% 0.34% 1.17% 1.03% (0.20)% 0.45% 0.50%	36.61% (13.96)% 0.56% 2.95% (3.22)% (0.11)% 3.56% 0.34% 0.49% 0.40% 1.36% 1.19% (0.24)% 0.52% 0.58%

\* The UAL amortization rate for the State Program in total is allocated to each of the Plans within the Program based on the ratio of that Plan's total NC rate to the 12.75% total NC rate for the State Program in total.



## SECTION V – CONTRIBUTIONS

The rates developed in this section are for informational purposes only. Actual budgeted rates are set based on the ratemaking process described in the Board Summary section.

Table V-5 shows the anticipated future amortization through FY 2028 of the UAL attributable to periods before FY 2012. This chart assumes that the current discount rate of 6.50% and the aggregate, or across-the-board, payroll increase of 2.75% applies to each year in the future.

UAL Amorti	Table V-5 zation for periods b Total Program	efore FY 2012
June 30,	<b>UAL Balance</b>	<b>UAL Payment</b>
2024	\$1,146,004,279	\$311,748,235
2025	898,774,004	320,321,311
2026	626,626,446	329,130,148
2027	327,698,679	338,181,226
2028	0	0



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

This section contains financial disclosure information regarding the Program developed under a number of accounting standards and guidance.

First, for informational purposes, we show the Program's funded status under the Financial Accounting Standards Board (FASB) ASC Topic 960, which discloses how the market value of assets would compare to accrued liabilities if contributions were to stop and accrued benefit claims had to be satisfied as of the valuation date. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if all provisions of the Program were to terminate. We have prepared the following exhibit in this section based on FASB ASC Topic 960:

• Table VI-1: Accrued Benefits Information

The Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 establish standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in financial statements, notes to financial statements, and supplementary information. We have prepared the following exhibits reflecting provisions of GASB Statement Nos. 67 and 68:

- Table VI-2: Schedule of Changes in Net Pension Liability and Related Ratios
- Table VI-3: Sensitivity of Net Pension Liability to Changes in Discount Rate
- Table VI-4: Schedule of Employer Contributions
- Table VI-5: Average Expected Remaining Service Lives

A summary of the terminology used in GASB Statement Nos. 67 and 68 is provided in Appendix D of this report. Note that while much of the information provided in this report under GASB No. 67 is also utilized in GASB No. 68, Table VI-5 included in this section is only applicable to GASB No. 68.

Finally, we have also developed disclosure information in this section based on additional guidance relating to the Annual Comprehensive Financial Reports (ACFR) of PERS provided by the Government Finance Officers Association (GFOA) in their publication, *Governmental Accounting, Auditing, and Financial Reporting* (GAAFR). We have prepared the following exhibits reflecting guidance in the GAAFR:

- Table VI-6: Analysis of Financial Experience
- Table VI-7: Schedule of Funded Liabilities by Type

The present value of accrued benefits, the total pension liability (GASB 67/68), and the actuarial liability (GAAFR) disclosures in this section are all determined assuming that the Program is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities as of June 30, 2024 are discounted at the assumed valuation interest rate of 6.50% per annum in all of these disclosures.



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-1 below includes the relevant amounts as of June 30, 2023 and June 30, 2024 as well as a reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1								
Accrued Benefits Information								
June 30, 2023 June 30, 2024								
FASB ASC Topic 960 Basis								
<ol> <li>Present Value of Benefits Accrued to Date (PVAB)         <ol> <li>Members Currently Receiving Payments</li> <li>Terminated Vested Members</li> <li>Terminated Nonvested Members</li> <li>Active Members</li> <li>Total PVAB</li> </ol> </li> </ol>	\$ 10,421,363,188 837,556,738 88,700,930 <u>4,511,962,306</u> \$ 15,859,583,162							
2. Market Value of Assets (MVA)	15,073,148,465	15,809,706,213						
<ol> <li>Unfunded Present Value of Accrued Benefits, but not less than Zero</li> </ol>	\$ 786,434,697	\$ 517,769,722						
4. Ratio of MVA to PVAB (2)/(1)(e)	95.0%	96.8%						
Change in Present Value of Benefits Accrued to Date du	ring FY 2024							
Increase/(Decrease) during Year Attributable to: Passage of Time Benefits Paid Assumption Changes Program Changes Benefits Accrued, Other Gains/Losses Net Increase (Decrease)		$\begin{array}{c} \$ & 996,989,159 \\ (1,059,251,998) \\ 0 \\ 25,675,350 \\ \underline{504,480,262} \\ \$ & 467,892,773 \end{array}$						

Table VI-2 that follows shows the changes in the total pension liability (TPL), the Program's fiduciary net position (FNP) (i.e., fair value of the Program's net assets), and the net pension liability (NPL) during the measurement year ending June 30, 2024 as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2024 valuation, the fiduciary net position for this Program was projected to be available to make all projected future benefit payments for current Program members. As such, the long-term expected rate of return on the Program's investments was applied to all periods of projected benefit payments in determining the total pension liability under GASB Nos. 67 and 68. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rates, and the employer contributions will be made according to the actuarial calculations developed in the biennial ratemaking process.



## SECTION VI - FINANCIAL DISCLOSURE INFORMATION

Table VI-2           Schedule of Changes in Net Pension Liability and Related Ratios						
	FY 2024 Teacher Program	State Program	Total State and Teacher Program			
<u>Total Pension Liability (TPL)</u>	¢ 104.550.001	<b>•</b> 105 501 500	<b>• • • • • • • • • •</b>			
Service Cost (SC)	\$ 184,750,031	\$ 107,781,538	\$ 292,531,569 1 115 226 282			
Interest (includes Interest on SC) Changes of Benefit Terms	732,773,376 13,794,508	382,552,906 11,880,842	1,115,326,282 25,675,350			
Differences Between Actual and Expected	15,794,508	11,000,042	25,075,550			
Experience	84,600,277	71,152,688	155,752,965			
Changes of Assumptions	0	0	0			
Benefit Payments, including Refunds of			, i i i i i i i i i i i i i i i i i i i			
Member Contributions	(676,602,698)	(382,649,301)	(1,059,251,999)			
Net Change in TPL	339,315,494	190,718,673	530,034,167			
Beginning of Year (BOY) TPL End of Year (EOY) TPL	<u>11,507,894,703</u> <u>\$11,847,210,197</u>	<u>6,012,640,981</u> <u>\$ 6,203,359,654</u>	<u>17,520,535,684</u> <u>\$ 18,050,569,851</u>			
Program Fiduciary Net Position (FNP)						
Employer Contributions	\$ 310,531,278	\$ 199,929,170	\$ 510,460,448			
Member Contributions	117,627,152	61,878,864	179,506,016			
Transfers	0	(305,355)	(305,355)			
Net Investment Income	741,783,781	378,047,390	1,119,831,171			
Benefit Payments, including Refunds of						
Member Contributions	(676,602,698)	(382,649,301)	(1,059,251,999)			
Administrative Expense	(9,068,586)	(4,613,947)	(13,682,533)			
Net Change in FNP	484,270,927	252,286,821	736,557,748			
BOY FNP EOY FNP	<u>9,990,754,493</u> <u>\$10,475,025,420</u>	<u>5,082,393,972</u> <u>\$ 5,334,680,793</u>	<u>15,073,148,465</u> <u>\$ 15,809,706,213</u>			
EOY Net Pension Liability (NPL)	<u>\$ 1,372,184,777</u>	<u>\$ 868,678,861</u>	<u>\$ 2,240,863,638</u>			
FNP as a Percentage of TPL	88.4%	86.0%	87.6%			
Covered Payroll*	1,562,947,155	874,127,849	2,437,075,004			
NPL as a Percentage of Covered Payroll * For FY 2024	87.8%	99.4%	91.9%			

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

None



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

A 10-year schedule of changes in NPL and related ratios is to be included within the ACFR for PERS. However, based on GASB guidance, this 10-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net Pension Liability and Related Ratios* above and believe that you can accumulate the individual years in the MainePERS ACFRs to show the full 10-year schedule. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included suggested information for such a note in the *Notes to Schedule of Changes in Net Pension Liability and Related Ratios* above. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any information they may need for this purpose.

Table VI-3 below illustrates the sensitivity of the net pension liability (NPL) to the discount rate. Changes in the discount rate affect the measurement of the total pension liability (TPL) for the Program. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the Net Pension Liability (NPL) can be very significant for relatively small changes in the discount rate.

Table VI-3Sensitivity of Net Pension Liability to Changes in Discount RateFY 2024							
	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%				
	Teacher Program	0.50 /0	7.30 /0				
Total Pension Liability (TPL)	\$ 13,354,240,227	\$ 11,847,210,197	\$ 10,592,862,228				
Program Fiduciary Net Position (FNP)	10,475,025,420	10,475,025,420	10,475,025,420				
Net Pension Liability (NPL)	\$ 2,879,214,807	\$ 1,372,184,777	\$ 117,836,808				
FNP as a Percentage of TPL	78.4%	88.4%	98.9%				
	State Program						
Total Pension Liability (TPL)	\$ 6,930,410,741	\$ 6,203,359,654	\$ 5,593,304,550				
Program Fiduciary Net Position (FNP)	5,334,680,793	5,334,680,793	5,334,680,793				
Net Pension Liability (NPL)	<u>\$ 1,595,729,948</u>	<u>\$ 868,678,861</u>	<u>\$ 258,623,757</u>				
FNP as a Percentage of TPL	77.0%	86.0%	95.4%				
Total St	ate Employee and Teac	her Program					
Total Pension Liability (TPL)	\$ 20,284,650,968	\$ 18,050,569,851	\$16,186,166,778				
Program Fiduciary Net Position (FNP)	15,809,706,213	15,809,706,213	15,809,706,213				
Net Pension Liability (NPL)	<u>\$ 4,474,944,755</u>	<u>\$ 2,240,863,638</u>	<u>\$ 376,460,565</u>				
FNP as a Percentage of TPL	77.9%	87.6%	97.7%				

A one percent decrease in the discount rate increases the TPL for the total Program by approximately 12% and increases the NPL by approximately 100%. A one percent increase in the discount rate decreases the TPL by approximately 10% and decreases the NPL by approximately 83%.



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-4 that follows provides information relating to the employer contributions for the Program. Under GASB Statement No. 67, if an actuarially determined contribution (ADC) or a contractually or statutorily required contribution (CRC) is developed for a single employer or cost-sharing plan, the following schedule is required. For purposes of this schedule, an ADC is a contribution amount determined in accordance with Actuarial Standards of Practice, and a CRC is based on statutory or contractual requirements. Both should exclude any amounts to finance specific liabilities of individual employers of the Program. If an ADC is available, the schedule of employer contributions should be developed on that basis. If there is no ADC, but there is a CRC, the schedule should be developed on that basis. Only if neither an ADC nor a CRC is developed can this schedule be omitted from the PERS's ACFR.

The Program's rates, set in the ratemaking process, meet the definition of a reasonable ADC, so for this Program, this schedule should be developed on that basis. Based on GASB guidance, a full 10 years of information should be shown in this schedule. We have shown only the current year of this *Schedule of Employer Contributions* below and believe that you can accumulate these in the MainePERS ACFR to show the full 10-year schedule.

Only the current year of the *Notes to Schedule of Employer Contributions* below needs to be included in the notes to this schedule. However, any factors that significantly affect trends in the *Schedule of Employer Contributions* at any point in the 10-year period should also be included in the notes to this schedule. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Employer Contributions* below. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any additional information that they may need for this purpose.

Table VI-4         Schedule of Employer Contributions         FY 2024								
Total State Teacher State and Teacher Program Program Program								
Actuarially Determined Contribution (ADC)	\$ 296,647,370	\$ 188,024,900	\$ 484,672,270					
Contributions in Relation to the ADC	296,647,370	188,024,900	484,672,270					
Contribution Deficiency/(Excess)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>					
Covered Payroll (Payroll)*	\$ 1,562,947,155	\$ 874,127,849	\$ 2,437,075,004					
Contributions as a Percentage of Payroll	18.98%	21.51%	19.89%					

\* For FY 2024



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Notes to Schedule of Employer Contributions

Valuation Date: June 30, 2021

Timing: June 30, 2024 ADC rates are calculated based on 2022 liabilities developed as a roll-forward of the 2021 valuation liability, adjusted for expected experience and any assumption or methodology changes during FY 2022 using preliminary actual assets as of June 30, 2022.

Key Methods and Assumptions Used to Determine Contribution Rates

Actuarial Cost Method: Entry age normal

Asset Valuation Method: Three-year smoothed market

Amortization Method: Level percentage of payroll, closed periods. Cumulative UAL from prior to 2012 amortized over a remaining seven years from July 1, 2021. Subsequent layers of UAL amortized over individual 20-year periods.

Discount Rate: 6.50%

Amortization Growth Rate: 2.75%

Price Inflation: 2.75%

Salary Increases:

2.75% plus merit component based on employee's years of service

Mortality: State Employee Program: Healthy Retirees: 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. Active Lives: 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. Disabled Annuitants: 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Tables, respectively, for males and females. All tables projected generationally from the 2010 base rates using the RPEC\_2020 model with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027.

Teacher Program: Healthy Retirees: 98.1% and 87.5%, respectively for male ages before 85 and females before age 80 (106.4% and 122.3% respectively for males on and after age 85 and females on and after age 80) of the 2010 Public Plan Teachers Benefits-Weighted Healthy Retiree Mortality Table. Active Lives: 93.1% and 91.9% of



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

the 2010 Public Plan Teacher Benefits-Weighted Employee Mortality Table, respectively, for males and females. Disabled Annuitants: 94.2% and 123.8% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Tables, respectively, for males and females. All tables projected generationally from the 2010 base rates using the RPEC\_2020 model with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024 can be found in the June 30, 2022 actuarial valuation report.

Other Information

None



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-5 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Program. GASB No. 68 requires some items be recognized by employers into pension expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed as of June 30, 2023. Note that the decision was made to apply GASB No. 68 separately to the Teacher Program and the State Program based upon paragraph 19 of that statement, so this value has been provided separately for these Programs. Also note that the decision was made to use these averages based on rounding to the nearest whole year, so the values are thus shown as such.

Table VI-5 Average Expected Remaining Service Lives For Measurement Year Ending June 30, 2024							
<u>Teacher Program</u> Status	Total Expected Future Service	Count	Average Remaining Service Lives				
Active Members	321,868	27,897	12				
In-Pay Members	0	23,179	0				
Terminated Vested Members	0	5,920	0				
Inactives Due Refunds	0	<u>29,843</u>	0				
Total Membership	321,868	86,839	4				
<u>State Program</u>	Total Expected		Average Remaining				
Status	<b>Future Service</b>	Count	Service Life				
Actives	120,703	12,689	10				
In-Pay Members	0	15,859	0				
Terminated Vested Members	0	3,282	0				
Inactives Due Refunds	0	9,195	0				
Total Membership	120,703	41,025	3				



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-6 below is a gain/loss analysis of the changes in the actuarial liability over the past six years, reflecting variances between actual experience and assumed experience for different kinds of risk as specified in the GFOA GAAFR.

Table VI-6 Analysis of Financial Experience Gain and Loss in Actuarial Liability During Fiscal Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience								
	Gain (or Loss) For Fiscal Year Ended June 30, 2019	Gain (or Loss) For Fiscal Year Ended June 30, 2020	Gain (or Loss) For Fiscal Year Ended June 30, 2021	Gain (or Loss) For Fiscal Year Ended June 30, 2022	Gain (or Loss) For Fiscal Year Ended June 30, 2023	Gain (or Loss) For Fiscal Year Ended June 30, 2024		
Type of Activity								
Investment Income	\$ 57,985,155	\$ (102,951,302)	\$ 720,053,045	\$ 160,575,868	\$ 92,030,355	\$ 110,996,800		
Combined Liability Experience	(208,719,412)	(162,293)	(25,575,263)	<u>(107,921,791)</u>	(174,376,812)	<u>(155,752,965</u> )		
			Y Y					
Gain (or Loss) during Year from Financial Experience	\$ (150,734,257)	\$ (103,113,595)	\$ 694,477,782	\$ 52,654,077	\$ (82,346,457	\$ (44,756,165)		
Non-Recurring Items	0	(1,223,156)	(1,175,893,728)	(104,916,162)	0	(5,946,000)		
Composite Gain (or Loss) During Year	\$ (150,734,257)	\$ (104,336,751)	\$ (481,415,946)	\$ (52,262,085)	\$ (82,346,457)	\$ (50,702,165)		



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-7 below compares the Program's assets as of each valuation date shown to the Program's actuarial liability divided into three separate groups: liabilities for contributions on deposit for current active members, liabilities for future benefits for inactive members, and employer-financed liabilities for current active members. This Schedule of Funded Liabilities by Type is used to assess funding progress based on what percentage of the liabilities for each of these groups the Program's assets are sufficient to cover. Per GFOA guidance, this schedule is to include this assessment for the 10 most recent years, and notes to this schedule should be provided to explain any factors that affect the comparability of the data. We do not believe such a note is needed for the measurement year ending June 30, 2024, but it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule.

Table VI-7         Schedule of Funded Liabilities by Type									
Aggregate Actuarial Liabilities for:									
	(1)	(2)	(3)		Portion	of Actu	ıarial		
Valuation	Active	Retirees,	Active Members		Liabili	ties Cov	vered		
Date	Member	Vested Terms,	(Employer	Reported	by Rep	orted A	ssets		
June 30,	Contributions	Beneficiaries	Financed Portion)	Assets*	(1)	(2)	(3)		
2024	\$2,838,026,952	\$ 11,686,460,276	\$ 3,526,082,623	\$ 15,586,656,799	100%	100%	30%		
2023	2,752,053,117	11,347,620,856	3,420,861,711	14,889,086,583	100	100	23		
2022	2,659,590,270	10,910,951,750	3,411,250,062	14,248,105,921	100	100	20		
2021	2,588,064,433	10,387,107,459	3,417,179,436	13,460,870,272	100	100	14		
2020	2,600,834,192	9,668,292,329	2,596,333,609	12,249,961,306	100	100	0		
2019	2,499,498,544	9,460,680,994	2,587,043,375	11,894,672,150	100	99	0		
2018	2,453,797,249	9,030,789,541	2,546,601,055	11,419,986,652	100	99	0		
2017	2,402,112,525	8,727,549,999	2,355,223,988	10,904,082,221	100	97	0		
2016	2,359,818,665	8,399,121,582	2,311,014,701	10,512,524,178	100	97	0		
2015	2,339,138,044	7,831,348,903	2,445,800,107	10,375,552,497	100	100	8		

\* Reported assets are measured at actuarial value. Results would be different if the market value of assets were used. Despite the name of this exhibit, the liabilities presented in this schedule are not an appropriate measurement of the settlement liability of the Program.



## **APPENDIX A – MEMBERSHIP INFORMATION**

Active Member Data as of June 30, 2024	
Teacher Plan	
Count	28,028
Average Current Age	45.6
Average Benefit Service	11.7
Average Vesting Service	11.9
Average Valuation Pay	\$ 56,650
State Employee Regular Plan	
Count	11,251
Average Current Age	47.6
Average Benefit Service	10.5
Average Vesting Service	11.1
Average Valuation Pay	\$ 68,180
Inland Fisheries & Wildlife Officers Special Plan (Closed Plan)	
Count	1
Average Current Age	68.9
Average Benefit Service	46.2
Average Vesting Service	46.2
Average Valuation Pay	\$ 93,637
<u>State Employee Special 25 &amp; Out Plan</u>	
Count	453
Average Current Age	40.1
Average Benefit Service	13.1
Average Vesting Service	13.7
Average Valuation Pay	\$106,514



## **APPENDIX A – MEMBERSHIP INFORMATION**

Active Member Data as of June 30, 2024				
State Employee 1998 Special Plan				
Count	1,189			
Average Current Age	42.8			
Average Benefit Service	10.4			
Average Vesting Service	10.9			
Average Valuation Pay	\$ 78,060			
	<i>t</i>			
Fire Marshal Special Plan				
Count	10			
Average Current Age	42.3			
Average Benefit Service	10.4			
Average Vesting Service	14.9			
Average Valuation Pay	\$132,792			
	+ ,			
State Employee Totals (Excludes Teachers)				
Count	12,904			
Average Current Age	46.9			
Average Benefit Service	10.6			
Average Vesting Service	11.2			
Average Valuation Pay	\$ 70,489			

Non-Active Member Data as of June 30, 2024 Teachers						
	Count	Average Age	Total Annual Benefit	Average Annual Benefit		
Retired	19,576	74.7	\$ 580,410,115	\$ 29,649		
Retired – Concurrent Beneficiary	1,239	75.4	8,076,439	6,519		
Disability – Section 1122	0		0	0		
Disability – Sections 3 and 3A	658	70.2	20,931,803	31,811		
Beneficiary of Above	1,787	74.5	34,775,890	19,460		
Pre-Retirement Death Beneficiary	276	62.3	1,933,798	7,007		
Terminated Vested	6,106	52.5	62,826,334	10,289		
Inactive Due Refund	29,201	NA	NA	NA		



### **APPENDIX A – MEMBERSHIP INFORMATION**

Non-Active Member Data as of June 30, 2024 State Regular							
	Count	Average Age	Total Annual Benefit	Average Annual Benefit			
Retired	10,727	74.2	\$ 266,574,327	\$ 24,851			
Retired – Concurrent Beneficiary	875	73.9	5,096,508	5,825			
Disability – Section 1122	0		0	N/A			
Disability – Sections 3 and 3A	755	69.1	20,773,119	27,514			
Beneficiary of Above	2,121	64.2	35,250,758	16,620			
Pre-Retirement Death Beneficiary	265	68.2	1,934,011	7,298			
Terminated Vested	2,879	52.5	26,656,998	9,259			
Inactive Due Refund	1,869	NA	NA	NA			

Non-Active Member Data as of June 30, 2024 State Special							
	Count	Average Age	Total Annual Benefit	Average Annual Benefit			
Retired	900	68.9	\$ 30,606,906	\$ 34,008			
Retired – Concurrent Beneficiary	107	67.3	823,161	7,693			
Disability – Section 1122	0		0	NA			
Disability – Sections 3 and 3A	86	61.9	2,900,537	33,727			
Beneficiary of Above	146	73.5	2,598,400	17,797			
Pre-Retirement Death Beneficiary	17	51.4	115,634	6,802			
Terminated Vested	425	45.9	3,585,804	8,437			
Inactive Due Refund	7,719	NA	NA	NA			

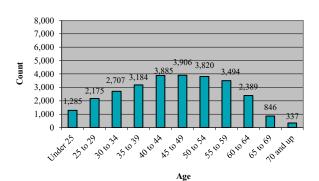
In preparing this report, we relied on data provided by MainePERS as modified following the procedures outlined in the State of Maine Data Processing Notebook. Adjustments to the data are made based on this processing notebook. Accuracy of the results is dependent on the completeness of the underlying information. The plan sponsor is responsible for the validity and completeness of the information provided. We believe the data provided as modified as documented in the Processing Notebook is sufficient for the actuarial analysis performed.



# **APPENDIX A – MEMBERSHIP INFORMATION**

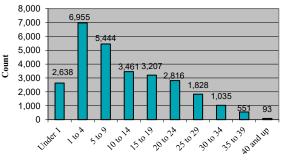
Distribution of Active Members As of June 30, 2024

Teachers												
		Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Totals	
Under 25	694	591	0	0	0	0	0	0	0	0	1,285	
25 to 29	364	1,359	452	0	0	0	0	0	0	0	2,175	
30 to 34	291	968	1,108	340	0	0	0	0	0	0	2,707	
35 to 39	263	951	851	834	285	0	0	0	0	0	3,184	
40 to 44	286	920	851	567	933	328	0	0	0	0	3,885	
45 to 49	245	743	702	523	576	859	258	0	0	0	3,906	
50 to 54	173	525	595	488	513	582	729	213	2	0	3,820	
55 to 59	142	412	426	345	495	494	440	557	183	0	3,494	
60 to 64	92	290	280	250	277	392	278	195	302	33	2,389	
65 to 69	52	126	131	83	103	137	87	49	42	36	846	
70 and up	36	70	48	31	25	24	36	21	22	24	337	
Total	2,638	6,955	5,444	3,461	3,207	2,816	1,828	1,035	551	93	28,028	





#### Service Distribution



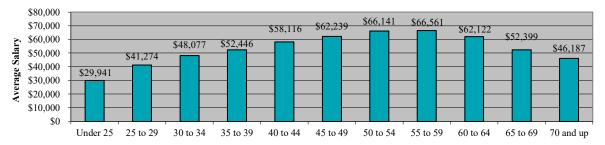
Service



## **APPENDIX A – MEMBERSHIP INFORMATION**

#### Distribution of Active Members As of June 30, 2024

Teachers											
					Average	Salary					
	Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Average
Under 25	23,708	37,260	0	0	0	0	0	0	0	0	29,941
25 to 29	28,746	41,676	50,153	0	0	0	0	0	0	0	41,274
30 to 34	30,065	44,528	52,174	60,250	0	0	0	0	0	0	48,077
35 to 39	29,459	43,616	53,753	62,501	69,799	0	0	0	0	0	52,446
40 to 44	30,488	45,318	53,358	65,069	72,857	76,502	0	0	0	0	58,116
45 to 49	29,833	45,762	53,351	63,009	72,769	79,008	83,745	0	0	0	62,239
50 to 54	36,639	45,981	52,752	61,176	70,240	78,145	83,696	85,649	83,398	0	66,141
55 to 59	36,053	46,341	48,633	59,486	65,269	71,038	82,628	86,856	81,830	0	66,561
60 to 64	31,863	42,011	47,122	55,272	57,714	67,180	72,729	81,834	83,436	78,406	62,122
65 to 69	28,139	38,257	38,297	51,384	55,197	56,776	64,060	72,042	80,332	78,428	52,399
70 and up	23,112	31,945	42,142	36,077	46,696	57,569	56,652	67,815	63,765	80,841	46,187
Average	28,858	43,337	51,694	61,265	68,900	74,229	80,311	84,574	81,880	79,043	56,650



#### **Average Salary Distribution**

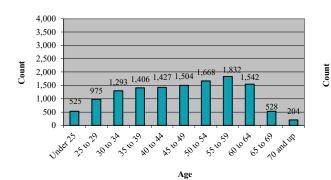




## **APPENDIX A – MEMBERSHIP INFORMATION**

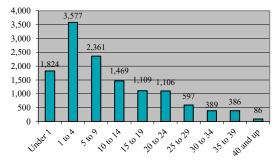
Distribution of Active Members As of June 30, 2024

State												
		Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Totals	
Under 25	311	207	7	0	0	0	0	0	0	0	525	
25 to 29	291	534	147	3	0	0	0	0	0	0	975	
30 to 34	240	543	412	97	1	0	0	0	0	0	1,293	
35 to 39	206	494	374	269	60	3	0	0	0	0	1,406	
40 to 44	184	416	300	236	200	89	2	0	0	0	1,427	
45 to 49	160	362	259	183	219	249	72	0	0	0	1,504	
50 to 54	158	330	275	195	186	241	187	80	16	0	1,668	
55 to 59	132	346	252	206	187	230	161	153	163	2	1,832	
60 to 64	92	240	227	191	162	210	124	105	159	32	1,542	
65 to 69	29	73	80	71	65	62	42	39	36	31	528	
70 and up	21	32	28	18	29	22	9	12	12	21	204	
Total	1,824	3,577	2,361	1,469	1,109	1,106	597	389	386	86	12,904	



Age Distribution







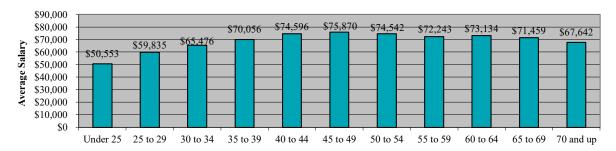




## **APPENDIX A – MEMBERSHIP INFORMATION**

#### Distribution of Active Members As of June 30, 2024

State												
	Average Salary											
		Years of Service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Average	
Under 25	44,860	58,702	62,551	0	0	0	0	0	0	0	50,553	
25 to 29	52,693	60,550	71,340	61,568	0	0	0	0	0	0	59,835	
30 to 34	52,735	61,546	74,876	78,967	76,184	0	0	0	0	0	65,476	
35 to 39	53,897	65,646	74,549	81,452	80,908	107,018	0	0	0	0	70,056	
40 to 44	56,162	67,787	78,426	80,121	86,309	90,889	63,957	0	0	0	74,596	
45 to 49	57,180	66,375	75,975	82,233	81,649	87,129	92,079	0	0	0	75,870	
50 to 54	58,796	64,568	69,805	74,828	79,294	83,178	89,215	89,077	84,125	0	74,542	
55 to 59	54,760	63,355	68,073	71,293	76,419	77,106	82,177	84,297	80,124	73,467	72,243	
60 to 64	50,344	61,644	70,141	74,389	69,732	79,898	85,494	86,098	81,538	79,202	73,134	
65 to 69	52,447	62,401	68,513	67,858	72,634	76,151	78,159	83,043	86,421	73,555	71,459	
70 and up	49,093	56,839	60,866	74,885	69,926	61,332	66,030	82,150	96,432	84,889	67,642	
Average	52,757	63,449	72,986	77,171	78,592	82,039	85,678	85,574	81,967	78,422	70,489	



#### **Average Salary Distribution**

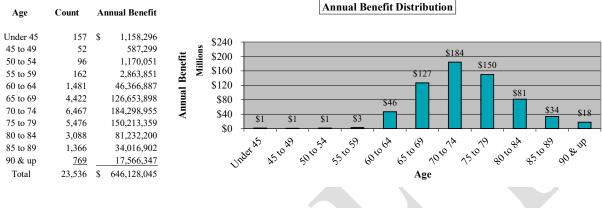
Age



### **APPENDIX A – MEMBERSHIP INFORMATION**

Distribution of Retirees, Disabled Members, Beneficiaries, and Survivors As of June 30, 2024

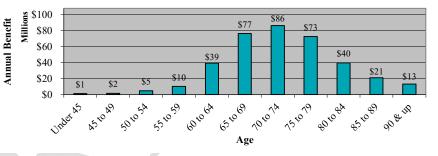
#### Teachers



#### State

Count	Annual Benefit	
129	\$ 1,188,463	
92	1,508,618	
225	4,828,575	ŧ
432	10,143,891	
1,480	39,321,933	
3,330	76,555,966	
3,780	86,352,028	
3,142	72,597,657	
1,748	39,829,536	
977	21,056,916	
664	13,289,778	
15,999	\$ 366,673,361	
	129 92 225 432 1,480 3,330 3,780 3,142 1,748 977 <u>664</u>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Annual Benefit Distribution





Status Reconciliation - Teachers									
	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members <sup>1</sup>	Terminated Vested Members <sup>2</sup>			
As of June 30, 2023	27,897	19,227	3,008	284	660	5,920			
New hires	2,113								
Rehires	698				-	(278)			
Movement between plans	(4)					4			
New retirees	(338)	826				(487)			
New beneficiaries due to retirements			45						
New disabled retirees	(19)				29	(10)			
New deferred vested members	(1,029)					1,102			
Non-vested terminations	(1,003)								
Refunds	(279)					(126)			
Deaths, no future benefits	(2)	(366)	(128)	(13)	(19)	(8)			
Deaths with a survivor or beneficiary	(6)	(111)	101	18	(15)	(13)			
Benefits expired			-	(13)					
Data correction	-	-	-	-	3	2			
As of June 30, 2024	28,028	19,576	3,026	276	658	6,106			

### **APPENDIX A – MEMBERSHIP INFORMATION**

1. Former disabled retirees who have changed to service retirement as mandated by the Plan are still included as disabled members.

2. Terminated vested members includes those indicated to us in the data who have terminated and are eligible for a future annuity.

Status Reconciliation - State Regular and Special Groups										
5141	Active Members	Retired Members	Beneficiaries of Retired Members		Disabled Members <sup>1</sup>	Terminated Vested Members <sup>2</sup>				
As of June 30, 2023	12,689	11,459	3,262	290	848	3,282				
New hires	1,642									
Rehires	143					(44)				
Movement between plans	(2)					(4)				
New retirees	(345)	538				(193)				
New beneficiaries due to retirements			43							
New disabled retirees	(17)				26	(8)				
New deferred vested members	(313)					370				
Non-vested terminations	(682)									
Refunds	(195)					(79)				
Deaths, no future benefits	(10)	(264)	(162)	(17)	(18)	(14)				
Deaths with a survivor or beneficiary	(6)	(106)	( )	13	(14)	(11)				
Benefits expired				(4)						
Data correction	-	-	-	-	(1)	5				
As of June 30, 2024	12,904	11,627	3,249	282	841	3,304				

1. Former disabled retirees who have changed to service retirement as mandated by the Plan are still included as disabled members.

2. Terminated vested members includes those indicated to us in the data who have terminated and are eligible for a future annuity.



### **APPENDIX A – MEMBERSHIP INFORMATION**

### **Missing Participants**

Due to reporting issues, MainePERS was not able to provide complete payroll information for the year ending June 30, 2024 for Teachers in the City of Portland School Department. The payroll information provided for this group excludes the period from April 2023 to March 2024 and after April 2024. For purposes of the valuation, we estimated the missing payroll using the valuation assumptions for active participants reported. In addition, any members hired after April 2024 were not reported in the census files. Overall, there is a small percentage of teachers hired during May and June each year. In addition, because this valuation is not used for purposes of setting rates due to the biennium rate setting process, excluding such members is not expected to have a material impact on the results or outcomes of this valuation.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

### 1. Membership

Membership is a condition of employment for state employees and teachers, and optional for elected and appointed officials.

Membership ceases on the earlier of withdrawal of contributions, retirement, or death.

### 2. Member Contributions

Except as otherwise described below, members are required to contribute 7.65% of earnable compensation. Member contributions earn annual interest at the rate adopted by the Board of Trustees each February.

### Contribution Requirements for Special State Employee Groups

Inland fisheries and wildlife officers employed before September 1, 1984: required to contribute 8.65% of earnable compensation for 20 years of service and 7.65% thereafter.

1998 Special Plan employees, which includes state prison employees, airplane pilots, forest rangers, defense, veterans and emergency management firefighters employed at Bangor International Airport, corrections employees, Baxter State Park Authority rangers, State Fire Marshal, assistant state fire marshal - inspections and state fire marshal inspectors, oil and hazardous materials emergency response workers, capitol security officers, attorney general detectives, emergency communications employees; motor vehicle detectives, crime laboratory and computer crimes unit employees: required to contribute 8.65% of earnable compensation for 25 years and 7.65% thereafter.

State police employed on or after September 16, 1984 and special agent investigators hired before June 21, 1982: required to contribute 8.65% of earnable compensation for 25 years and 7.65% thereafter.

Inland fisheries and wildlife officers and marine resources officers employed on or after September 1, 1984: required to contribute 8.65% of earnable compensation for 25 years and 7.65% thereafter.

Fire marshal investigators, fire marshal sergeants and assistant state fire marshal - investigations: required to contribute 8.65% of earnable compensation until eligible for retirement and 7.65% thereafter.



## **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

### 3. Average Final Compensation

For purposes of determining benefits payable, average final compensation is the average annual rate of earnable compensation for the three years of creditable service (not necessarily consecutive) that produce the highest such average.

With some exceptions as provided in law, for compensation paid on or after July 1, 1993, increases in earnable compensation of greater than 5% per year or greater than 10% over the highest three years are not included in calculating average final compensation unless the employer pays the cost of including such compensation. Earnable compensation does not include sick and vacation pay for those members who had less than 10 years of service on July 1, 1993. For members for whom sick and vacation pay is includable in earnable compensation, these payments are included in applying the caps described above.

### 4. Creditable Service

Creditable service includes service while a member, certain service prior to the establishment of the Program, purchased service credit of which there are several types, and service while receiving disability benefits under the Program.

### 5. Service Retirement Benefits

## A. Regular Plan (State Employees and Teachers)

i. Provisions for Members with at Least 10 Years of Creditable Service on July 1, 1993

Normal Retirement Age: 60

Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.

Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement and not in Active Service on or after October 1, 1999: At least 10 years of creditable service and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement, but in Active Service on or after October 1, 1999: At least five years of creditable service and at least normal retirement age.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Benefit: 1/50 of average final compensation multiplied by years of creditable service and up to 25 years of prior service, reduced by the following approximate percentages for each year retirement age is less than age 60.

Age	Reduction	Age	Reduction
45	29.3%	53	16.6%
46	28.0	54	14.6
47	26.6	55	12.5
48	25.2	56	10.3
49	23.6	57	7.9
50	22.0	58	5.4
51	20.3	59	2.8
52	18.5	60	0.0

Form of Payment: Life annuity.

ii. Provisions for Members with Less Than 10 Years of Creditable Service on July 1, 1993

Normal Retirement Age: 62

Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.

Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement age and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement and not in Active Service on or after October 1, 1999: At least 10 years of creditable service and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement, but in Active Service on or after October 1, 1999: At least five years of creditable service and at least normal retirement age.

Benefit: 1/50 of average final compensation multiplied by years of membership service and up to 25 years of prior service, reduced by 6% for each year retirement age is less than age 62.

Form of Payment: Life annuity.

iii. Provisions for Members with Less Than Five Years of Creditable Service on July 1, 2011



## **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Normal Retirement Age: 65

Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.

Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement age and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement and not in Active Service on or after October 1, 1999: At least 10 years of creditable service and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement, but in Active Service on or after October 1, 1999: At least five years of creditable service and at least normal retirement age.

Benefit: 1/50 of average final compensation multiplied by years of membership service and up to 25 years of prior service, reduced by 6% for each year retirement age is less than age 65.

Form of Payment: Life annuity.

## **B.** Special Plans (State Employees)

i. Inland Fisheries and Wildlife Officers Employed Before September 1, 1984

Eligibility: 20 years of creditable service in named positions.

Benefit: One-half of average final compensation plus 2% for each year of service in excess of 20. If greater, the pro-rated portion of the benefit for service before July 1, 1976, is based on annual pay instead of average final pay.

Form of Payment: 50% joint and survivor annuity or life annuity.

ii. 1998 Special Plan

1998 Entrants: State prison employees, airline pilots, forest rangers, and liquor inspectors, employed after August 31, 1984; defense, veterans, and emergency management firefighters employed on and after July 1, 1998.

2000 Entrants: Baxter State Park Authority rangers, correctional employees, and State Fire Marshal and state fire marshal inspectors employed on or after January 1, 2000.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

2002 Entrants: Capitol Police and oil and hazardous materials emergency response workers.

2020 Entrants: Emergency communications employees, motor vehicle detectives and attorney general detectives.

2021 Entrants: Crime laboratory and computer crimes unit employees.

Eligibility: 10 years of creditable service under the 1998 Special Plan in one or a combination of the covered capacities and the attainment of age 55 - OR - 25 years of creditable service in one or a combination of the covered capacities.

Benefit: For service prior to coverage in the 1998 Special Plan, 1/50 of average final compensation multiplied by years of service reduced for retirement before age 60, 62, or 65 (as determined by the applicable Regular Plan provisions described in 5.A.), except oil and hazardous materials emergency response workers, certain prison employees, Capitol Police, and certain Department of Corrections employees benefits are reduced for retirement before age 55.

## -PLUS-

For service under the 1998 Special Plan, 1/50 of average final compensation multiplied by years of service reduced for retirement before age 55.

Form of Payment: Life annuity.

iii. 25 & Out Plan

1998 Entrants: State police employed on or after September 16, 1984 and special agent investigators hired before June 21, 1982.

2002 Entrants: Inland fisheries and wildlife officers and marine resources officers employed on and after August 31, 1984.

Eligibility: 25 years of creditable service in named positions. Benefit: 1/50 of average final compensation multiplied by years of service.

Form of Payment: Life annuity.

Members in Special Plans who fail to qualify for Special Plan benefits can receive Regular Plan benefits when and as eligible and qualified.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

iv. Fire Marshals

Eligibility: 20 years of creditable service in named positions.

Benefit: One-half of average final compensation plus 2% for each year of service in excess of 20.

Form of Payment: Life annuity.

Members in Special Plans who fail to qualify for Special Plan benefits can receive Regular Plan benefits when and as eligible and qualified.

v. Minimum Service Retirement Benefit

\$100 per month.

## 6. Disability Retirement Benefits Other Than No-Age Benefits (See Item 7)

Eligibility: Disabled as defined in the MainePERS statutes prior to applicable normal retirement age, employed prior to October 16, 1992, and did not elect No-Age Disability Benefits, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 66<sup>2</sup>/<sub>3</sub>% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the earlier of 10 years following normal retirement age or the date that the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of 66<sup>2</sup>/<sub>3</sub>% of average final compensation or 10 years after the normal retirement date if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

### 7. No-Age Disability Retirement Benefits

Eligibility: Disabled as defined in the MainePERS statutes, employed on or after October 16, 1992 or employed prior to October 16, 1992 and elected the provisions of No-Age Disability, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 59% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the date the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of 59% of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that time.

## 8. Pre-Retirement Ordinary Death Benefits

Eligibility: Death while active, inactive eligible to retire, or disabled not resulting from an injury received in the line-of-duty.

Benefit: Designated beneficiary, spouse, children, or parents entitled to benefit calculated as if the deceased member had retired under Option 2 (see item 13); however, the beneficiary may elect survivor benefits payable to a surviving spouse, dependent children, parent, or other designated beneficiaries in monthly amounts varying by the status of beneficiary and number of eligible survivors. Otherwise, accumulated contributions with interest are payable to the designated beneficiary, spouse, children, older parents, or estate.

## 9. Pre-Retirement Accidental Death Benefits

Eligibility: Death while active or disabled resulting from an injury received in the line-ofduty.



## **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Benefit:

- If the member leaves no dependent children, two-thirds of the member's average final compensation to the surviving spouse until death.
- If the member is survived by a spouse who has the care of dependent children of the member, the surviving spouse shall receive an annual sum equal to the member's average final compensation while having the care of dependent children. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member is survived by a spouse who does not have the care of the member's dependent children, the surviving spouse and dependent children shall share equally an annual sum equal to the member's average final compensation. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member leaves no spouse, the dependent children shall share an annual amount equal to the member's average final compensation. Benefits will cease when the last dependent child no longer meets the definition of "dependent child."

## **10. Termination Benefit**

Eligibility: Termination of service other than by retirement or death with at least five years of creditable service.

Benefit: The member's choice of a refund of the accumulated contributions with interest or a retirement benefit using creditable service and average final compensation as of the date of termination, deferred to normal retirement age.

## **11. Refund of Contributions**

Eligibility: Termination of service other than by retirement or death with less than five years of creditable service.

Benefit: Refund of member's accumulated contributions with interest.

## 12. Cost-of-Living Adjustments (COLA)

All service and disability retirement and survivor benefits are adjusted each year that there is a percentage change in the Consumer Price Index (CPI), based on the Index. If the percentage change is negative, then no adjustment is made in that year. In subsequent years, the adjustment that would have been made will be adjusted downward to the extent necessary



## **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

to recoup the full actuarial value of not having made the previous year's negative adjustment. This process of adjustment may occur over a multi-year period if needed to recoup the full value of negative changes in the Index.

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA Base whose value grows annually with the same adjustment as the COLA (see values below) for all benefits that have been in payment for at least 12 months as of that date. The maximum annual increase, or COLA Cap, is three percent. Average final compensation used in determining disability benefits for disabled members is similarly adjusted for purposes of determining the recipient's service retirement benefit if and when the recipient moves to service retirement.

COLA Base History: (value as of September 1 of listed year when COLA effective):

2014 - \$20,000.00 2015 - \$20,420.00 2016 - \$20,940.71 2017 - \$21,474.70 2018 - \$21,818.30 2019 - \$22,451.03 2020 - \$22,810.25 2021 - \$22,947.11 2022 - \$24,186.25\* 2023 - \$24,911.84 2024 - \$25,659.20

\* Special legislation was passed to pay an additional one percent COLA above the maximum COLA Cap of three percent. In addition, the COLA Base was increased by the full CPI change of 5.4%.

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.

Members who did not have 10 years of service on July 1, 1993, will begin receiving cost-of-living adjustments at the later of 12 months after their normal retirement age and the first September 1 following a minimum of 12 months of being in receipt of their benefit.

## 13. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:

Full Benefit: Unadjusted benefit paid for the life of the member only.



### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Option 1: Cash refund equal to the remaining member contribution balance, if any, at the date of death (where the member contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by member contributions). Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.

Option 5: Designated percentage of the benefit (not less than 51%) payable to the member, with the remaining percentage (the two to equal 100%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lower-percentage benefit ceases to be paid.

Option 6: 100% joint and survivor annuity (Option 2) with pop-up\*.

Option 7: 50% joint and survivor annuity (Option 3) with pop-up\*.

Option 8: Option 4 with pop-up\*.

\* The "pop-up" feature attached to a given Option means that in the case of a beneficiary predeceasing the member, the member's benefit will be revised prospectively to the amount that the benefit would have been had the member selected Full Benefit payment upon retirement.

## 14. Program Changes Since Prior Valuation

For certain state employees who retired between July 1, 2011 and January 1, 2012, and for certain teachers who retired between July 1, 2011 and July 1, 2012, the factor of 6% per year for reduction of their benefit prior to their normal retirement age of 62 or 65 (as applicable) was changed to 2.25% beginning with their October 1, 2023 monthly benefit.

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.

This Appendix B is intended to be a brief summary of provisions. In the event of a dispute, applicable statutes and administrative policy supersede this report description.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# **A. Actuarial Assumptions**

## 1. Annual Rate of Investment Return

State Employees	6.50%
Teachers	6.50%

Rate is net of both administrative and investment expense.

## 2. LDROM Discount Rate

4.44%
4.44%

# 3. Cost-of-Living Adjustment (COLA) Assumed Rate

State Employees	2.20%
Teachers	2.20%

## 4. Annual Rate of Individual Salary Increase (% at Selected Years of Service)

	State	
Service	Employees	Teachers
0	9.43%	13.03%
5	6.24	5.83
10	5.32	4.81
15	3.98	4.29
20	3.78	3.26
25 and over	3.26	2.80

The above rates include a 2.75% across-the-board increase at each year of service.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

Service	State Employees	Teachers
0	32.5%	26.0%
5	10.0	9.0
10	6.0	5.5
15	4.0	3.5
20	3.0	3.0
25	2.5	3.0

### 5. Sample Rates of Termination (% at Selected Years of Service)

Non-vested members are assumed to take a refund of contributions with interest. Once vested, the member is assumed to elect the greater of the deferred vested benefit or a refund of member contributions with interest based on present value at the time of termination.

6. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

(Showing values in 2024)           State Employees         Teachers           Age         Male         Female           50         31         24         10         6           55         46         34         21         17           60         70         47         36         26           65         102         69         58         37					
50         31         24         10         6           55         46         34         21         17           60         70         47         36         26		State I			
55         46         34         21         17           60         70         47         36         26	Age	Male	Female	Male	Female
60     70     47     36     26	50	31	24	10	6
	55	46	34	21	17
65 102 69 58 37	60	70	47	36	26
	65	102	69	58	37
70 157 110 96 59	70	157	110	96	59
75 264 196 176 112	75	264	196	176	112
80 478 364 337 315	80	478	364	337	315
85 884 695 707 622	85	884	695	707	622
90 1,547 1,308 1,327 1,185	90	1,547	1,308	1,327	1,185
95 2,421 2,143 2,241 2,116	95	2,421	2,143	2,241	2,116

Rates for State Employees are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

Rates for Teachers are based on the 2010 Public Plan Teacher Benefits-Weighted Healthy Retiree Mortality Table adjusted as follows:

- 98.1% and 87.5%, respectively, of the rates for males before age 85 and females before age 80
- 106.4% and 122.3%, respectively, of the rates for males on and after age 85 and females on and after age 80

The rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.

7. Sample Rates of Mortality for Active Lives at Selected Ages (number of deaths per 10,000 members)\*

	(Showing values in 2024)				
	State En	nployees	Teac	chers	
Age	Male	Female	Male	Female	
20	3	1	3	1	
25	3	1	2	1	
30	4	2	3	2	
35	6	3	4	3	
40	7	4	5	3	
45	9	5	7	4	
50	12	7	10	6	
55	17	11	15	10	
60	27	17	25	15	
65	39	25	40	23	
	20 25 30 35 40 45 50 55 60	AgeMale203253304356407459501255176027	AgeState Employees Male20312531304235634074459550127551711602717	AgeState EmployeesTeacAgeMaleFemaleMale20313253123042335634407454595750127105517111560271725	

\* For State Regular and Teachers, 5% of deaths are assumed to arise out of and in the course of employment; for State Special, 20% of deaths are assumed to arise out of and in the course of employment.

Rates for State Employees are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. Rates for Teachers are based on 93.1% and 91.9% of the 2010 Public Plan Teacher Benefits-Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC 2020 model as described in the healthy annuitant mortality.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

	(Showing values in 2024) State					
	-	Employees		ichers		
Age	Male	Female	Male	Female		
25	36	21	31	25		
30	54	37	47	45		
35	74	58	65	69		
40	91	76	80	92		
45	113	98	99	118		
50	159	141	140	169		
55	216	181	189	217		
60	274	210	241	252		
65	325	220	286	263		
70	383	258	336	309		

8. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Rates for State Employees are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. Rates for Teachers are based on 94.2% and 123.8% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.

## 9. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members)

		State R	legular Em	ployees		Teachers	
9	Age	NRA 60	NRA 62	NRA 65	NRA 60	NRA 62	NRA 65
	57	40	35	N/A	40	35	N/A
	59	260	40	N/A	200	45	N/A
	60	210	50	20	275	80	20
	61	210	350	20	210	240	20
	62	210	270	50	230	220	50
	63	250	180	80	220	180	80
	64	190	200	300	280	220	200
	65	210	220	250	340	300	300
	70	200	200	200	300	200	300
	75	350	350	250	400	200	300
	80	1,000	1,000	1,000	1,000	1,000	1,000

Teachers and State Regular Plans



### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

In the case of State Regular and Teacher employees, NRA 60 refers to those who had accrued at least 10 years of service by July 1, 1993. NRA 62 refers to those who had not accrued at least 10 years of service by July 1, 1993 or were hired after that date but had five years of service by July 1, 2011. NRA 65 refers to those who did not have five years of service by July 1, 2011. Rates are only applied for early retirement when the member is at least age 57. Earlier rates are applicable for normal retirement.

### State Special Plans

Members of the 1998 Special Plan are assumed to retire at rates that vary by age and whether service is less than 25 years or not. Sample rates are as follows.

	1998 Special Pl	an Retirement	
Age	Service < 25	Service >= 25	
55	20.0%	25.0%	
57	10.0	25.0	
60	20.0	30.0	
62	30.0	30.0	
65	23.4	30.0	
67	36.8	50.0	
70	100.0	100.0	

Members of the 25 & Out Plan are assumed to retire at rates that vary by service. Sample rates are as follows.

25 .	25 & Out Plan	
Service	Assumption	
<24	0.0%	
25-29	25.0	
30-31	25.0	
32-34	40.0	
35-37	40.0	
38+	100.0	

Members of State Special Plans other than the 25 & Out Plan and the 1998 Special Plan are all currently assumed to retire at a rate of 50% per year, beginning when they reach eligibility for unreduced benefits, with a 100% assumed rate at age 70. Rates are only applied when the member is at least age 50.



### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

10. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000	)
members)*	

State Employees				
Age	Regular	Special	Teachers	
25	2.5	5.4	1.1	
30	3.1	6.5	1.2	
35	9.3	9.9	1.2	
40	14.0	15.8	1.6	
45	16.0	24.4	3.1	
50	18.0	36.4	6.6	
55	25.0	42.6	22.1	
60	43.4	46.4	22.2	

\* 10% assumed to receive Workers Compensation benefits offsetting disability benefit; also, current rates for State Special groups are higher by 7 per 10,000 at all ages.

### **11. Family Composition Assumptions**

80% of active members are assumed to be married and have two children born when the member is 24 and 28; children are assumed dependent until age 18; a female spouse is assumed to be three years younger than a male spouse; member is assumed to have no dependent parents; unmarried members are assumed to have beneficiaries entitled to benefits worth 80% as much as those of married members' beneficiaries.

### **12. Vacation/Sick Leave Credits**

Members can use up to 90 days of unused, unpaid vacation and sick leave at retirement to increase creditable service.

For members who had 10 years of service on July 1, 1993, payment for up to 30 days of unused vacation and sick leave may be used to increase final average compensation, subject to an earnings cap. To reflect this, projected retirement benefits are increased by 0.48% for state (regular) employees and 0.75% for teachers for impacted members.

### 13. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year.

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: Reflect actual historical member contribution interest rates from 1970 through the valuation; future contribution interest assumed to equal the inflation assumption of 2.75%.



### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

COLA Timing: September 1.

Special Plan Member Contribution Rates: For members of Special Plans where the contribution rate drops from 8.65% to 7.65% after a given number of years, 8.65% is used for all years for valuation purposes as a simplifying assumption reflecting data limitations.

### **14. Rationale for Assumptions**

The demographic assumptions were adopted by the Board of Trustees at their March 11, 2021 meeting. The discount rate was adopted by the Board of Trustees at their August 12, 2021 meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015 through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. In our professional judgment, the combined effect of the assumptions is expected to have no significant bias.

The LDROM discount rate is the single equivalent rate determined by matching Plan cashflows to US Treasury Securities yields as of the measurement date as published by the Federal Reserve.

### **15. Changes Since Last Valuation**

The LDROM discount rate was updated to 4.44% based on Treasury yields as of June 30, 2024.

### 16. Rationale for Change in Actuarial Assumptions

N/A

## 17. Disclosure for Actuarially Determined Contribution Method

The actuarial methods used to determine the actuarially determined contribution have been selected to balance benefit security, intergenerational equity, and stability of actuarially determined contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

### **18. Disclosure of Models Used**

**ProVal:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.



### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

**Projection Model:** This report includes projections of future contributions, assets, liabilities, and funded status for the purpose of assisting the Board of Trustees with the management of the Fund. We have used Cheiron's P-Scan and R-Scan models to develop these projections. The model is also used to stress test the impact of volatile asset returns over the projection period.

The P-Scan projection uses projected benefit payments for current members but does not include projected benefit payments for new members. This limitation is not material for the next 20 years, but longer projection periods should be viewed with caution. The P-Scan projection uses standard roll-forward techniques that implicitly assume a stable active population. Changes in the demographic characteristics of the active population will lead to different results.

The stochastic projections of investment returns assume that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods of time. The standard deviation used in the stochastic projection of investment returns was provided by the investment consultant.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020 used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# **B.** Actuarial Methods

## 1. Funding and LDROM Cost Method

For the Plans in this Program, the funding methodology employed is the entry age normal cost method. Under this method, there are two components to the total contribution: the normal cost rate (NC rate), and the unfunded actuarial liability rate (UAL rate). Both of these rates are developed for each Plan within the Program, consisting of the Teacher Program, the State Regular Plan, and several State Special Plans.

For each Plan in the Program, an individual entry age normal cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate is determined by taking the value, as of entry age into a Plan, of each active member's projected future benefit. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. Finally, the rate is reduced by the member contribution rate to produce the employer normal contribution rate. These rates are then multiplied by each member's salary as of the valuation date to get the total normal cost dollars as of the valuation date for that Plan and then divided by the total payroll at the valuation for the Plan to get the normal cost rate for that Plan. This process results in specific normal cost rates for each of the Plans in the Program.

The unfunded actuarial liability under the entry age normal cost method equals the present value, at the time of valuation, of the future benefit payments less the present value of future employer normal cost contributions, future member contributions, future UAL payments, and current assets. The UAL rate determined is the percentage that when applied to member payroll is expected to amortize the UAL according to the Program's amortization policy. Specifically, the remaining original UAL has four years of its prescribed amortization period remaining and all other gains and losses, including assumption changes, are amortized over 20-year periods beginning on the date as of which they occur. The UAL amortization uses a level percentage of pay method with payroll assumed to increase at 2.75% annually. Amortization payments are assumed to occur at each pay period. Benefit changes are funded immediately and are therefore not included in the amortization of the UAL. With the 2022 ratemaking, the 2014 gain base was accelerated by six years from the standard 20-year schedule.

## 2. Asset Valuation Method

For purposes of determining the employer contributions to the Program and the Program's funded ratio, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.



### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

In determining the actuarial value of assets, we calculate an expected actuarial value based on the cash flows for the year and imputed returns at the actuarial assumption. This expected value is compared to the actual fair value at the valuation date and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

### 3. FASB ASC Topic 960 Cost Method:

The cost method for valuation of liabilities for FASB ASC Topic 960 purposes is the Unit Credit Cost method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of accrued benefits methods is that the funding pattern follows the pattern of benefit accrual. The accrued liability, which is determined for each Participant as of each valuation date, represents the actuarial present value of each Participant's benefit earned prior to the valuation date.

### 4. Changes Since Last Valuation

None

## 5. Rationale for Change

N/A



## **APPENDIX D – GLOSSARY OF GASB TERMS**

## 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

## 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

## 3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

## 4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability or investment losses that are recognized in future reporting periods.

## 5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB Nos. 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

## 6. Measurement Date

The date as of which the Total Pension Liability and Program Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the Program.



## **APPENDIX D – GLOSSARY OF GASB TERMS**

## 7. Net Pension Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Program Fiduciary Net Position.

## 8. Program Fiduciary Net Position

The fair or market value of assets.

## 9. Reporting Date

The last day of the Program or employer's fiscal year.

## **10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

## **11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.





Maine Public Employees Retirement System

Legislative Retirement Program

Actuarial Valuation Report as of June 30, 2024

Produced by Cheiron October 2024

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October 10, 2024

Board of Trustees Maine Public Employees Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

We are pleased to submit the June 30, 2024 Actuarial Valuation Report for the Maine Legislative Retirement Program (Program) of the Maine Public Employees Retirement System (MainePERS or System).

The purpose of this report is to present the annual actuarial valuation of the Legislative Retirement Program of the Maine Public Employees Retirement System. This report contains information on assets, liabilities, and contributions of the Program, as well as required accounting statement disclosures under the Governmental Accounting Standards Board (GASB) Statement No. 67.

In preparing our report, we relied on information, some oral and some written, supplied by the System's staff. This information includes, but is not limited to, the Plan provisions, employee data, and financial information as of the valuation date. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

Future results may differ significantly from the current results presented in this report due to such factors as the following: Program experience differing from that anticipated by the assumptions, changes in assumptions, and changes in Plan provisions or applicable law.

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

This actuarial report was prepared exclusively for MainePERS for the purposes described herein and for the use by the Program auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users. Board of Trustees Maine Public Employees Retirement System October 10, 2024 Page ii

Finally, the results of this valuation are purely informational. Because MainePERS sets contribution rates for the System on a biennial basis, these results will not be used in determining State contributions to the System.

Sincerely, Cheiron

Greg Reardon, FSA, EA Principal Consulting Actuary Bonnie Rightnour, FSA, EA Principal Consulting Actuary Gene Kalwarski, FSA, EA Principal Consulting Actuary

Cc: Fiona Liston, Cheiron Kathleen Weaver, Cheiron



## FOREWORD

Cheiron has completed the Actuarial Valuation Report for the Maine Public Employees Retirement System (MainePERS or System) Legislative Retirement Program (Program) as of June 30, 2024. The purpose of this report is to:

- 1) Measure and disclose, as of the valuation date, the financial condition of the Program,
- 2) Examine historical Program trends,
- 3) Assess and disclose actuarial risks of the Program,
- 4) Report on the contribution rates developed in this valuation for informational purposes (Note: the actual contributions paid by the State for fiscal year (FY) 2024 were developed in the budgeting process in July 2022, based on a roll-forward of the June 30, 2021 valuation), and
- 5) Provide specific information required for MainePERS's financial disclosures.

An actuarial valuation establishes and analyzes assets and liabilities on a consistent basis and tracks the progress of both from one year to the next. It includes measurement of investment performance as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our key findings, disclosing important Program trends in recent years, and providing analysis relating to the future status of the Program.

Section II assesses and discloses various actuarial risk measures of the Program.

Section III contains details on various asset measures, together with pertinent performance measurements.

Section IV shows similar information on liability measures for various purposes, including analysis of key changes in the measures.

Section V develops informational employer contribution rates to be compared to those established during the ratemaking process.

Section VI includes financial disclosure information.

Finally, we present appendices containing the following summaries:

- Program membership information at the valuation date (Appendix A),
- Major benefit provisions of the Program (Appendix B),
- Actuarial assumptions and methods used in the current valuation (Appendix C), and
- Terminology used in the Governmental Accounting Standards Board (GASB) disclosures (Appendix D).



### **SECTION I – BOARD SUMMARY**

## **General Comments**

The annual employer contributions to this Program are determined on a biennial basis in even years. The contributions for fiscal year (FY) 2024 and FY 2025 were developed through this ratemaking process in 2022. The assets used in developing these rates were the preliminary June 30, 2022 assets. These were then combined with estimated liability measures as of June 30, 2022, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2021 actuarial valuation. This adjustment reflected anticipated growth in benefits, reductions due to benefit payouts, and any changes in assumptions or benefits between the June 30, 2021 valuation date and the June 30, 2022 measurement date. Similarly, the contributions for FY 2026 and FY 2027 were developed in July of 2024 and were based on estimated assets as of June 30, 2023 actuarial valuation liabilities.

The results of this June 30, 2024 valuation will be used primarily for accounting disclosures. Next year's June 30, 2025 valuation, adjusted to a June 30, 2026 measurement date and combined with preliminary assets as of June 30, 2026, will be used as the basis for the applicable FY 2028 and FY 2029 employer contributions.

# Experience from July 1, 2023 through June 30, 2024 (FY 2024)

With respect to investment experience, measured on a market value of assets (MVA) basis, MainePERS experienced an investment return of positive 7.43% for the fiscal year ending June 30, 2024. This is more than the assumed rate of return assumption of 6.50%. However, given the three-year asset smoothing method in place, only one-third of that gain is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore for this Program, asset smoothing also resulted in recognizing one-third of prior deferred net asset gains of \$0.204 million during FY 2024. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.26%. This is also greater than the 6.50% assumed rate of return in effect for FY 2024, resulting in a gain on investments for this Program for the year of \$0.123 million.

With respect to liability experience, the Program experienced a liability gain of \$0.305 million less than the expected growth of \$0.455 million (a 2.7% decrease in total liabilities compared to expected growth). This decrease is net of an approximately \$0.039 million increase attributable to the payment of cost-of-living adjustments (COLA) exceeding the assumed COLA. The balance of the liability experience was a net gain of \$0.344 million primarily attributable to lower Final Average Earnings than expected due to the shorter legislative session. In addition to the regular COLA adjustment, a three percent one-time COLA payment was paid to eligible retirees during FYE 2024. An amount of \$0.015 million was funded immediately to fully cover this payment.

Combining the investment and liability experience produced a net experience gain of \$0.428 million. This translates to an informational total employer contribution of 0.00% of payroll as of June 30, 2024. This is the same as the June 30, 2023 valuation contribution rate (prior to being rolled-forward for ratemaking) of 0.00% of payroll.



## **SECTION I – BOARD SUMMARY**

As of the June 30, 2024 valuation, the Program has an unfunded actuarial liability (UAL) of (\$5.614) million (i.e., a surplus) based on the AVA. This represents an increase in the surplus position of \$0.542 million from the (\$5.072) million AVA UAL measured as of June 30, 2023. This compares to an expected increase in the surplus position of \$0.114 million. The specific factors contributing to this change are presented in Table I-1 that follows. This table has separate columns showing the components of the changes in liabilities and investments during FY 2024 as well as their combined effect on the UAL.

Table I-1       (Amounts in Millions)			
	Liabilities	Assets*	UAL
Value as of June 30, 2023	\$ 11.406	\$ 16.478	\$ (5.072)
Expected Change	0.455	0.569	(0.114)
Impact of Plan Changes	0.015	0.015	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Recognized Investment Gain	0.000	0.123	(0.123)
Recognized Liability Gain	(0.305)	0.000	(0.305)
Value as of June 30, 2024	\$ 11.571	\$ 17.185	\$ (5.614)

\* This table uses the actuarial value of assets. Results would be different if the market value were used.

The remainder of this Board Summary section summarizes the Program's historical trends and summarizes the principal results of the valuation. These principal results compare key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates.

# Legislated Changes effective after June 30, 2024 (FY 2024)

Chapter 446 (L.D. 1155) increased the first and second session salaries for legislators beginning in December 2024. The first session pay will increase to \$25,000 and the second session pay will increase to \$20,000. These salaries will first be seen in the census data collected beginning with the June 30, 2025 valuation. These salary increases will be significantly higher than the projected increases based on the current assumptions and will result in an increase in the actuarial liability that is higher than projected. Given the funded status of this Program, we do not expect this pay increase to result in a change in the employer contribution and have therefore not incorporated this legislation into an adjustment to our assumptions.

# Trends

It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition.

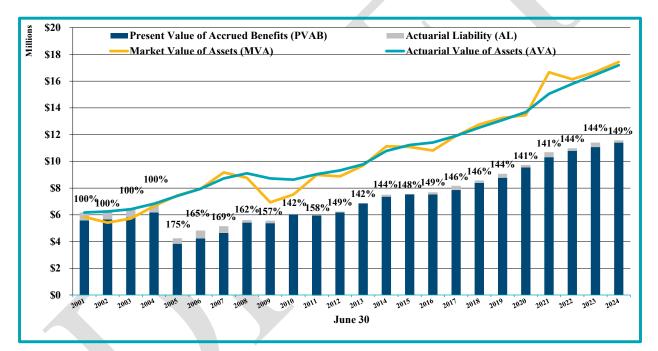


## **SECTION I – BOARD SUMMARY**

## Assets and Liabilities

The following graph illustrates the progress of assets and liabilities for the Program since June 30, 2001 as well as the Program's funded ratio on an actuarial value of assets (AVA) basis.

Liability measures are shown as bars as of June 30 of the indicated years. The actuarial liability (AL), the liability measure used for the Program's funding purposes, is represented by the top of the grey bars. The blue bars represent the present value of accrued benefits (PVAB). These liability measures are discussed further in Section IV. Measures of the assets are shown as lines. The AVA is shown with a teal line, while the market value of assets (MVA) is shown as a yellow line. The AVA divided by the AL is the AVA funded ratio that is often used in evaluating the Program's funded status. The value of this metric at each valuation date is shown as the percentages in the graph labels.



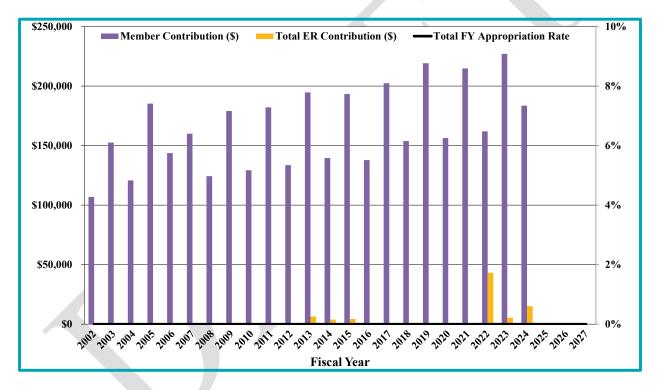
Between the 2004 and 2005 valuations, there was a change in cost method used for this Program that resulted in the large drop in stated liabilities between those dates. Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2024, the Program's AVA based funded ratio is 148.5%, which represents an increase from the 144.5% reported in the prior valuation. The 24-year history in the graph shows that the Program has been fully funded at a 100% or greater funded ratio on an AVA basis over this entire period. Measured on a MVA basis, the funded ratio is 150.6% as of June 30, 2024.



### **SECTION I – BOARD SUMMARY**

## Contributions

The next graph shows the history of contributions to the Program, both as dollar amounts and as percentages of payroll. The bars in this graph show the contributions made by both the employers and the members in dollar terms for each fiscal year (FY) as indicated by the horizontal axis since 2002. These bars are read using the left-hand axis. The black line shows the total appropriated employer contribution rate for the FY indicated as a percentage of payroll and references the right-hand axis. These rates are those determined by the ratemaking process rather than the informational rates determined in the annual valuations. The FY 2025 through FY 2027 contribution rates have already been determined based on the ratemaking process, so three additional years of the contribution rates are shown versus dollars received. The total employer contribution for FY 2024 includes the approximately \$15.2 thousand extra payment to fund the one-time additional COLA payment.



The member contribution rates are set by statute. The up and down nature of these member contribution amounts is due to the legislative calendar, which includes alternating long and short terms. The total employer contribution rate is set by the ratemaking process on a biennial basis. The contribution rate for FY 2024 was based on a roll-forward of the June 30, 2021 valuation to June 30, 2022, as previously described in this Board Summary.

For this Program, this employer contribution rate has been 0% of pay since before 2002, so the black line of the total appropriated employer contribution rate is shown as a constant at zero



### **SECTION I – BOARD SUMMARY**

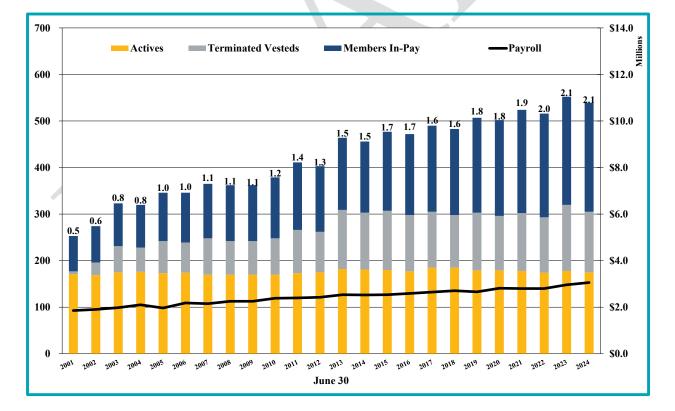
percent. The yellow bars showing employer contributions in dollars represent transfers or cost-of-living adjustment (COLA) payments made during the fiscal year indicated.

### Participant Trends

The stacked bars in the graph that follows show the number of active members, terminated vested members, and members in pay status covered by the Program as of June 30 of each year indicated and is read using the left-hand axis of the graph. As with many funds in this country, there has been a steady growth in the number of retired members as the Program has matured.

The labels above each bar show the "support ratio," which is the ratio of inactive members (members in pay status plus terminated vested members) to active members. This ratio has been generally increasing since 2001 for the Program. As this ratio grows, the cash flows (contributions less benefits and expenses) of a pension plan tend to become more negative. The more negative a plan's cash flows, the more sensitive the plan is to volatile investment markets, resulting in the higher likelihood of contribution volatility.

The black line in the graph indicates the total active member covered payroll in the Program and is read using the right-hand axis of the graph. Generally, it has been gradually increasing or steady since 2001.





## SECTION I – BOARD SUMMARY

# **Principal Results Summary**

The last section of this Board Summary section of this Actuarial Valuation Report presents a summary of the principal results of the valuation, comparing key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates.

Table I-2         Summary of Principal Results         Legislative Retirement Program			
Ŭ	Valuation as of June 30, 2023	Valuation as of June 30, 2024	% Change
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds Total Membership	$     \begin{array}{r}       178 \\       191 \\       30 \\       9 \\       2 \\       142 \\       \underline{96} \\       648 \\     \end{array} $	$     \begin{array}{r}       175 \\       191 \\       30 \\       11 \\       2 \\       130 \\       \underline{95} \\       634 \\     \end{array} $	(1.7)% 0.0% 0.0% 22.2% 0.0% (8.5)% (1.0)% (2.2)%
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 2,962,483 \$ 564,301	\$ 3,056,745 \$ 585,518	3.2% 3.8%
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded AL (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 11,406,177 <u>16,478,192</u> \$ (5,072,015) 144.5% 146.3%	\$11,571,061 <u>17,185,176</u> \$(5,614,115) 148.5% 150.6%	1.4% 4.3% 10.7%
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 11,061,412 <u>16,681,900</u> \$ (5,620,488) 150.8%	\$11,398,394 <u>17,431,101</u> \$(6,032,707) 152.9%	3.0% 4.5% 7.3%
<u>Contributions as a Percentage of Payroll</u> Employer Normal Cost Rate UAL Amortization Rate Total Employer Rate, Not Less Than Zero	5.59% (20.65)% 0.00%	3.24% (22.15)% 0.00%	
Total Employer Budgeted Rates Total Employer Budgeted Rates		ng <u>2024 I</u> 0% FY 2026 0% FY 2027	Ratemaking 0.00% 0.00%



## SECTION II - RISK ASSESSMENT AND DISCLOSURE

# Introduction

The Program's actuarial valuation results are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, these assumptions represent a reasonable estimate for future experience. However, the actual future experience will never conform exactly to these assumptions and may differ significantly from the assumptions. This deviation is a risk that pension plan sponsors bear in relying on a pension plan's actuarial valuation results.

This section of this report is intended to identify the primary drivers of these risks, provide background information and assessments about these identified risks, and communicate the significance of these risks to this Program. This section for this Program, as well as the Judicial Program, is limited in comparison to the risk sections for the two larger Programs, the State Employee and Teacher Retirement Program and the Participating Local District Retirement Program. This limitation reflects the relatively smaller nature of these two Programs as well as their robust funded statuses. It is thus our belief that the additional information that is included in the reports for the larger Programs would not be significantly beneficial in improving the Board's understanding of the identified risks for these two smaller Programs.

# **Identification of Risks**

For this Program, the three primary valuation results that can significantly differ from those expected are the assets, the liabilities, and the employer contributions. While there are several factors that could lead to these results being different, we believe the primary risks for this Program are:

- Investment risk,
- Longevity and other demographic risks,
- Plan change risk, and
- Assumption change risk

Other risks that we have not identified may also turn out to be significant.



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

*Investment Risk* is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation, the unfunded liability will increase from what was expected and will require higher contributions than otherwise anticipated. But, when actual returns exceed those assumed, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. As seen in the historical section that follows, this has been a significant driver of deviations in the actual measurements for this Program from those expected by the prior valuations. However, the cumulative magnitude of these deviations over the period shown has been muted as a result of offsetting deviations.

Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expectations. In addition, the extensive number of assumptions related to longevity and other demographic experience often result in offsetting deviations contributing to the Program's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to the investment returns. However, for small plans like this, there are relatively few members, and so the behavior of individual members can have a significant impact on the liabilities. The following historical section shows that this is true for this Program in individual years, but these deviations have been offsetting such that the cumulative magnitude for the period shown is relatively minor.

*Plan Change Risk* is the potential for the provisions of the Program to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Program being changed, future valuation measurements can also be impacted, with Program changes leading to deviations between actual future measurements and those expected by prior valuations. Over the period shown in the following historical section, this Program has experienced only relatively insignificant plan changes.

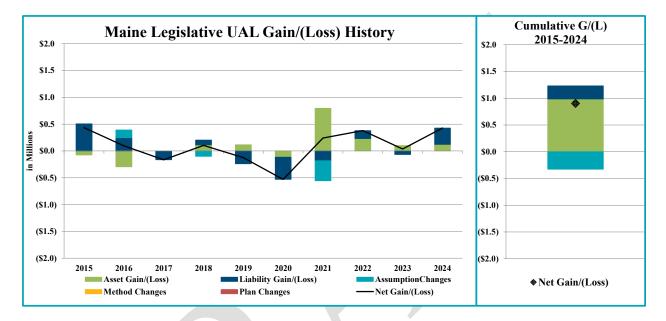
Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment resulting in the current assumption no longer being reasonable. The historical review section will show that assumption change risk has been a significant risk for this Program.



## SECTION II – RISK ASSESSMENT AND DISCLOSURE

# **Historical Experience Deviations**

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The following graph shows the gains/(losses) at each valuation date between the actual and expected experience broken down by cause for the last 10 years.



As described previously, and as evident in this graph, assumption changes and asset gains and losses have been the most significant risks for the Program. Liability gains and losses have also been sources of significant risks in individual years.

# **Plan Maturity Measures**

As pension plans become more mature, the primary risks of adverse investments, demographic deviations, plan changes, and assumption/method changes become of more significant concern as the resulting impacts on the Program's condition are more pronounced. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. With shrinking workforces, aging Baby Boomers, and retirees living longer, plans pay out more in benefits than they receive in contributions – leading to negative cash flows, excluding investment income. This dynamic makes it harder for a plan to recover from losses since contributions are generally made based on active payroll.

One of the main reasons risks are more amplified with a mature plan is that when plans with negative net cash flows suffer investment losses, they need to liquidate enough assets to pay for benefits in excess of contributions. That means these plans will need to earn higher returns to rebuild their assets to the previous levels. Plans with negative net cash flows exceeding five percent of assets are especially vulnerable to asset losses.



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

The balance of this section discloses and examines three maturity measures: the asset leverage ratio, the liability leverage ratio, and the support ratio.

### Asset Leverage Ratio

One important plan maturity measure is the asset leverage ratio, the market value of assets divided by the plan's payroll, which represents the percentage of payroll that would need to be contributed to make up a given change in the plan's assets. As a plan matures, its assets increase, and a greater proportion of the assets are paid out in benefit payments to members. The greater the plan's assets are relative to payroll, the more vulnerable the plan is to investment volatility in terms of the resulting contribution requirement changes.

As an example, here are two plans that both experience a 10% investment loss equaling \$500 million on their existing assets of five billion dollars. Plan A's asset leverage ratio is 10, and Plan B's ratio is five. This means that Plan A has to spread, or amortize, that loss over a payroll that is half as large as Plan B's. As seen in the chart below, this results in the percentage of payroll that Plan A would need to contribute to make up the loss being double what would be required for Plan B.

	(\$ in millions)			
	ŀ	Plan A	P	'lan B
Plan Assets	\$	5,000	\$	5,000
Payroll	\$	500	\$	1,000
Asset Leverage Ratio		10.0		5.0
10% Loss	\$	500	\$	500
10% Loss as % of Payroll		100%		50%

This Program's asset leverage ratio has been generally increasing over the last decade and is currently a little higher than 5.7. As a result of the increasing trend of this ratio, investment losses represent an increasing greater proportion of payroll.

## Liability Leverage Ratio

Another leverage ratio that can be examined is the liability leverage ratio, the ratio of actuarial liabilities to payroll. The greater the plan's liabilities are relative to payroll, the more vulnerable the plan is to experience volatility. As previously discussed, the small nature of this Program means that the magnitude of liability gains and losses are often greater relative to the liabilities compared to what larger plans experience, so it is valuable to be aware of this ratio. For this Program, this metric has also been generally increasing over the last decade and is currently less than 3.8.



# SECTION II – RISK ASSESSMENT AND DISCLOSURE

#### Support Ratios

Another commonly used measure of plan maturity is the support ratio, the ratio of in-pay and inactive members, or those receiving benefits or entitled to a deferred benefit, to the number of active members, or those currently accruing benefits in the plan. The greater this ratio, the more mature a plan is considered, with the proportion of the plan's liability represented by actives generally declining.

A graph of this ratio was shown in the prior section, which showed that this ratio has been generally increasing for this Program in recent years and is currently approximately 2.1 participants either in-pay or with a deferred benefit for each active member.



# **SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of plans and in the decisions that Trustees make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely affect benefit levels, employer contribution rates, and the ultimate security of members' benefits.

The assets for all Defined Benefit (DB) Programs administered by MainePERS are invested together. These Programs are the State Employee and Teacher Retirement Program, the Judicial Retirement Program, the Legislative Retirement Program that is valued in this report, and the Participating Local District (PLD) Retirement Program, including both the Consolidated Plan and the several Nonconsolidated PLDs. The assets of these Programs are entirely commingled for investment purposes, so the actuarial value of assets (AVA) for each of these Programs is developed by first developing it for the entire asset pool and then subsequently allocating that total AVA to each of the specific Programs.

In this section, we present detailed information on the Program's assets including:

- Disclosure of total MainePERS DB assets at June 30, 2024,
- Statement of changes in total MainePERS DB market values during the year,
- Development of the total MainePERS DB actuarial value of assets,
- Allocation of the total actuarial value to MainePERS DB Programs,
- Assessment of the total MainePERS DB investment performance, and
- Projection of expected cash flows for the Program for the next 10 years.

# Disclosure

The market value of assets (MVA) represents a "snap-shot" or "cash-out" value, which provides the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with corresponding swings in the marketplace, resulting in volatility in the resulting contributions if the unadjusted market value is used in the valuation process that develops the contributions. Therefore, a smoothed actuarial value of assets is developed for use in the valuation process and for evaluating the Program's ongoing ability to meet its obligations. The actuarial value of the Program's assets is developed by allocating the actuarial value of the total MainePERS DB assets to each Program. This section discloses the market and actuarial values of the MainePERS DB assets both in total and for each Program.



# **SECTION III – ASSETS**

Table III-1 that follows develops the change in the market value of assets for the total MainePERS DB assets during FY 2024.

Table		
Changes in Market Value of Total Ma		
Market Value of Total MainePERS DB Asse	ts – June 30, 2023	\$ 19,032,500,469
<u>Additions</u>		
Contributions:		
Employer Contributions	\$ 609,725,832	
Member Contributions	253,072,755	
Transfers	(276,351)	
Total Contributions	\$ 862,522,236	
Investment Income:		
Net Appreciation (Depreciation) in		
Fair Value of Investments	\$ 1,550,729,080	
Interest on Bank Balances	3,318,765	
Total Investment Income	\$ 1,554,047,845	
Investment Activity Expenses:		
Management Fees	\$ (131,872,981)	
Investment Related Expense	(5,758,258)	
Banking Fees	(36,109)	
Total Investment Activity Expenses	\$ (137,667,348)	
Net Income from Investing Activities	\$ 1,416,380,497	
Total Additions		\$ 2,278,902,733
Deductions		
Retirement Benefits	\$ (1,200,976,761)	
Disability Benefits	(25,883,395)	
Survivor Benefits	(28,529,982)	
Refunds	(37,506,149)	
Administrative Expenses	(17,274,490)	
Total Deductions		\$ (1,310,170,777)
Total		
Net Increase (Decrease)		\$ 968,731,956
Market Value of Total MainePERS DB Asse	ts – June 30, 2024	\$ 20,001,232,425



# **SECTION III – ASSETS**

# **Actuarial Value of Total MainePERS DB Assets**

Table III-2 that follows develops the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024 using the adopted actuarial valuation methodology.

	Table III-2 Development of Actuarial Value of Total MainePERS Defined B as of June 30, 2024	enefi	t (DB) Assets
1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023	\$	18,800,089,976
2.	Amount in (1) with Interest to June 30, 2024		20,022,095,824
3.	Employer and Member Contributions for FY 2024		862,522,236
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2024		27,590,682
5.	Total Disbursements without Administrative Expenses for FY 2024		(1,292,896,287)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2024		(41,357,647)
7.	Expected Value of Total MainePERS DB Assets at June 30, 2024 = $(2) + (3) + (4) + (5) + (6)$	\$	19,577,954,808
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2024		20,001,232,425
9.	Excess of (8) Over (7)		423,277,617
10	. Actuarial Value of Total MainePERS DB Assets at June 30, 2024 = $(7) + [33\frac{1}{3}\% \text{ of } (9)]$	\$	19,719,047,347

As discussed in the disclosure portion of this section, the actuarial value of assets for the Program represents a "smoothed" value developed by the actuary to reduce, or eliminate, volatility in valuation results, particularly contribution rates that could develop from short-term fluctuations in the market value of assets. Current actuarial methods employed in this Program use an allocated portion of the total actuarial value of assets for the total MainePERS DB assets based on the Program's market value of assets to develop the actuarial value of assets for the Program. The methodology for the total MainePERS DB assets sets the actuarial value of assets equal to the expected value of assets and the expected actuarial value of assets. The expected value of the actuarial value of assets takes the prior year's actuarial value of assets and adjusts it for contributions, disbursements, and expected interest earnings at the investment return assumption that was in effect for the previous year, 6.50% for this valuation. The previous table, Table III-2, illustrates the calculation of the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024.



# **SECTION III – ASSETS**

# Allocation of Actuarial Value of Assets to the Program

The assets for the defined benefit (DB) Programs administered by MainePERS are commingled for investment purposes with the total actuarial value of assets allocated to the individual Programs on the basis of the market value of the assets for each Program. An asset ratio (total MainePERS DB actuarial value of assets divided by total MainePERS DB market value of assets) is applied to the market value of assets attributable to each of the Programs to determine its actuarial value of assets as of the valuation date. The asset ratio derived in this June 30, 2024 valuation is 0.985892 (19,719,047,347  $\div$  20,001,232,425). The allocation of actuarial value of the total MainePERS DB assets to each of the MainePERS DB Programs based on this asset ratio is shown in the following table.

Allocation of Actuarial Value	le III-3 of Total MainePERS 1e 30, 2024	5 DB Assets
Program	Market Value	Actuarial Value
Teachers	\$10,475,025,420	\$ 10,327,239,734
State (Regular & Special)	5,334,680,793	5,259,417,065
Judicial	89,203,285	87,944,771
Legislative	17,431,101	17,185,176
Participating Local Districts		
(Consolidated & Non-Consolidated)	4,084,891,826	4,027,260,601
Total	\$20,001,232,425	\$ 19,719,047,347

# **Investment Performance**

The market value of assets for the total MainePERS DB assets returned a positive 7.43% during FY 2024. This is greater than the assumed return of 6.50% for FY 2024. The equivalent market value returns for the total MainePERS DB assets for FY 2023 and FY 2022 were positive 6.05% and negative 0.62%, respectively.

On an actuarial value of assets basis, the return for FY 2024 was a positive 7.26% for the total MainePERS DB assets. This return is less than the return on a market value basis but greater than the 6.50% assumption in effect for FY 2024. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.



# **SECTION III – ASSETS**

# **Cash Flow Projections**

Table III-4 Projection of Legislative Program Benefit Payments and Contributions				
FY		Expected	Expected	
Ending	<b>Expected Benefit</b>	Employer	Member	<b>Total Expected</b>
June 30,	Payments	Contributions	Contributions	Contributions
2025	\$ 873,200	\$ 0	\$ 233,800	\$ 233,800
2026	787,600	0	168,200	168,200
2027	922,400	0	246,900	246,900
2028	840,100	0	177,600	177,600
2029	981,900	0	260,600	260,600
2030	912,300	0	187,500	187,500
2031	1,012,100	0	275,200	275,200
2032	945,900	0	197,900	197,900
2033	989,900	0	290,500	290,500
2034	947,300	0	209,000	209,000

In Table III-4 above, we provide a projection of expected cash flows in and out of the Program for the next 10 years for informational purposes. The Board may share these projections with its investment advisor for consideration of the gap shown between the cash expected to come into the Program through employer and member contributions and the cash expected to be paid out of the Program to provide benefit payments.

The expected benefit payments in Table III-4 were developed using the data currently included in this valuation and on the assumption that the actuarial assumptions disclosed in Appendix C will be exactly met. Actual benefit payments will vary if members retire sooner or later than assumed, if salary increases and actual future post-retirement COLAs differ from those assumed, or if other assumptions differ from the actual experience seen. These benefit projections exclude any assumption about new Program participants, whose experience will eventually lead to increased benefit payments. However, we do not feel this exclusion will materially impact the projections for the period shown.

Expected employer contributions in this table use the budgeted contributions for FY 2025 through FY 2027. Future contributions beyond that point are assumed to continue at the FY 2027 rate and include an assumption that payroll grows at 2.75% per year. However, since the FY 2027 rate is zero percent, the payroll assumption is moot for the employer contributions.

The expected member contributions are similarly based on a 2.75% per year assumed increase in covered payroll multiplied by the current average aggregate member contribution rate of 7.65% for FY 2025.



# **SECTION IV – LIABILITIES**

In this section, we present detailed information on Program liabilities including:

- Disclosure of the Program's liabilities as of June 30, 2023 and June 30, 2024, and
- Statement of changes in these liabilities during the year.

# Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- Present Value of Future Benefits (PVB): Used for analyzing the overall financial obligations of the Program, this represents the amount of money needed today to fully fund all future benefits of the Program, assuming no new members, that active members continue to earn salary increases and accrue benefits under their current Program provisions, and that all actuarial assumptions are exactly met, including the 6.50% per year investment return.
- Actuarial Liability (AL): Used for funding calculations and GASB disclosures, this liability is calculated taking the PVB above and subtracting the value of accruals that are assigned to future years on a person-by-person basis. This offset is equal to the present value of future member contributions and future employer normal cost contributions under an acceptable actuarial cost method. For this Program and the other MainePERS DB Programs, the method used is referred to as the entry age normal (EAN) cost method, which is the only permitted actuarial cost method for GASB disclosures.
- Present Value of Accrued Benefits (PVAB): Used for communicating the liabilities for benefits accrued as of the valuation date.

Table IV-1 that follows discloses each of these liabilities for the current and prior years' valuations. With respect to the actuarial liability and the present value of accrued benefits, a subtraction of the appropriate value of the Program's assets yields, for each respective type, a net surplus or an unfunded liability. For the PVB measure, it is compared to the market value of assets plus the expected future value of contributions to the Program. The future contributions are calculated assuming the current employer and member rates will be continued for all future years along with the expected future payroll as of each date. The difference between the PVB and these anticipated resources indicates either an expected shortfall or an expected surplus representing either additional funding required or excess funding and indicates the size of the Program's stored gains or losses that remain outside of the valuation process currently.

We note that none of the liabilities presented in this report are an appropriate measure of a settlement liability.



# **SECTION IV – LIABILITIES**

The liability measures are compared to appropriate measures of assets, along with the expected future value of member and employer contributions where appropriate. The difference between the liability measure and the anticipated resources indicates either an expected shortfall or an expected surplus related to that liability measure. The surplus or shortfall on the present value of benefits (PVB) measure indicates the size of the Program's stored gains or losses that remain outside of the valuation process.

Table IV-1 Disclosure of Liabilities			
		June 30, 2023	June 30, 2024
Present Value of Benefits (PVB)			
Active Member Benefits	\$	4,178,125	\$ 4,004,323
Retired, Disabled, Survivor, and Beneficiary Benefits		5,399,748	5,547,548
Terminated Vested Benefits		2,743,117	2,484,226
Terminated Nonvested Benefits	$\mathbf{N}$	422,642	431,181
Total PVB	\$	12,743,632	\$ 12,467,278
Market Value of Assets (MVA)	\$	16,681,900	\$ 17,431,101
Future Member Contributions		787,092	648,206
Future Employer Contributions		0	0
Projected (Surplus)/Shortfall		(4,725,360)	(5,612,029)
Total Resources	\$	12,743,632	\$ 12,467,278
Actuarial Liability (AL)			
Present Value of Benefits (PVB)	\$	12,743,632	\$ 12,467,278
Present Value of Future Normal Costs (PVFNC)			
Employer Portion		550,363	248,011
Member Portion		787,092	648,206
Actuarial Liability (AL = PVB – PVFNC)	\$	11,406,177	\$ 11,571,061
Actuarial Value of Assets (AVA)		16,478,192	17,185,176
Net (Surplus)/Unfunded (AL – AVA)	\$	(5,072,015)	\$ (5,614,115)
Present Value of Accrued Benefits (PVAB)			
Present Value of Future Benefits (PVB)	\$	12,743,632	\$ 12,467,278
Present Value of Future Benefit Accruals (PVFBA)	_	1,682,220	1,068,884
Accrued Liability (PVAB = PVB – PVFBA)	\$	11,061,412	\$ 11,398,394
Market Value of Assets (MVA)		16,681,900	17,431,101
Net (Surplus)/Unfunded (PVAB – MVA)	\$	(5,620,488)	\$ (6,032,707)



# **SECTION IV – LIABILITIES**

# Low-Default-Risk Obligation Measure (LDROM)

The System invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the System. Such a portfolio, however, would have a lower expected rate of return than the diversified portfolio. The LDROM represents what the funding liability would be if the System invested its assets in such a portfolio. As of June 30, 2024, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 4.44% compared to the System's discount rate of 6.50%, and the LDROM would be \$14.2 million compared to the Actuarial Liability of \$11.6 million. The \$2.6 million difference represents the expected taxpayer savings from bearing the risk of investing in the diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

If the System were to invest in the LDROM portfolio, the reported funded status would decrease, and contribution requirements would increase. Benefit security for members of the Program relies on a combination of the assets in the System, the investment returns generated on those assets, and the promise of future contributions. If the System were to invest in the LDROM portfolio, it would not change the amount of assets currently in the System, but it would reduce expected future investment returns and increase expected future contributions. However, the range of future investment returns and future contributions needed would narrow significantly.



# **SECTION IV – LIABILITIES**

# **Changes in Liabilities**

Each of the liabilities disclosed in Table IV-1 is expected to change at each subsequent valuation. The components of these changes, depending upon which liability is analyzed, can include:

- New Program members since the last valuation
- Benefits accrued since the last valuation
- Program amendments changing benefits since the last valuation
- Passage of time, which adds interest to the prior liability
- Benefits paid to members since the last valuation
- Members retiring, terminating, or dying at rates different than expected since the last valuation
- Salaries changing at rates different than expected since the last valuation
- A change in actuarial assumptions since the last valuation
- A change in the actuarial cost method since the last valuation

Unfunded liability measurements will change because of all of the above, as well as due to changes in the Program's asset measurements resulting from:

- Contributions being different than expected
- Investment earnings being different than expected
- A change in the method used to measure the Program's assets in developing the unfunded liability measure since the last valuation

In each valuation, we report on those elements of change in the Program's liability measures that are of particular significance, potentially affecting the long-term financial outlook of the Program. In Table IV-2 that follows, we present key changes in the Program's liability measures since the last valuation.

	Ta	ble IV-2			Pres	sent Value
		sent Value of ture Benefits		Actuarial Liability	of	Accrued Benefits
Liability Measurement – June 30, 2023	\$	12,743,632	<b>\$</b> 1	11,406,177	\$ 1	1,061,412
Liability Measurement – June 30, 2024		12,467,278	]	11,571,061	1	1,398,394
Liability Measurement Increase/	\$	(276,354)	\$	164,884	\$	336,982
(Decrease) Due to:						
Program Amendment	\$	15,225	\$	15,225	\$	15,225
Assumption Change		0		0		0
Actuarial (Gain)/Loss		N/C		(305,190)		N/C
Benefits Accumulated				. ,		
and Other Sources	\$	(291,579)	\$	454,849	\$	321,757

N/C = Not calculated



# **SECTION V – CONTRIBUTIONS**

In this section, we present detailed information on informational employer contribution rates as developed in this June 30, 2024 valuation for the Program, including the development of the employer contribution rate, comprised of the employer normal cost rate and the unfunded actuarial liability (UAL) amortization rate (UAL amortization rate).

Note that these contribution rates are only informational, and the actual contribution rates are set by the budgeting process described in the Board Summary at the beginning of this report.

# **Description of Rate Components**

For this Program, the funding methodology employed to determine the employer contribution rates is the entry age normal (EAN) cost method. Under this method, there are two components to the total employer contribution rate: the employer's normal cost rate (NC rate) and the UAL amortization rate (UAL amortization rate).

An individual EAN cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate for each member is determined by taking the value of their projected future benefits, as of entry age into the Program. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. Finally, the resulting total normal cost rate is reduced by the member contribution rate to produce the employer's normal cost rate for the member. These rates are then multiplied by each member's salary as of the valuation date and added together to get the total employer normal cost dollars as of the valuation date for the Program, which is then divided by the total payroll at the valuation date for the Program to get the employer normal cost rate for the Program.

The unfunded actuarial liability under the EAN cost method equals the present value, at the time of valuation, of the future benefit payments less the present value of future employer normal cost contributions, future member contributions, and current assets. The UAL amortization rate is the percentage that when applied to member payroll, which is assumed to increase 2.75% per year, is expected to amortize the UAL according to the Program's amortization policy, which is an open 10-year period for the Program.

# **Contribution Calculations**

Table V-1 below presents and compares the total employer contribution rate, as well as its two components, for the Program as developed in this valuation and the prior one.

	Fable V-1 Fotal Employer Rate	e
Valuation Date	June 30, 2023	June 30, 2024
Employer NC Rate	5.59%	3.24%
UAL Amortization Rate	(20.65)%	(22.15)%
Total Employer Rate*	(15.06)%	(18.91)%

\* Limited to 0% for actual contributions

The rates developed in this section are for informational purposes only. Actual budgeted rates are set based on the ratemaking process described in the Board Summary section.



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

This section contains financial disclosure information regarding the Program developed under a number of accounting standards and guidance.

First, for informational purposes, we show the Program's funded status under the Financial Accounting Standards Board (FASB) ASC Topic 960, which discloses how the market value of assets would compare to accrued liabilities if contributions were to stop and accrued benefit claims had to be satisfied as of the valuation date. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if all provisions of the Program were to terminate. We have prepared the following exhibit in this section based on FASB ASC Topic 960:

• Table VI-1: Accrued Benefits Information

The Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 establish standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in financial statements, notes to financial statements, and supplementary information. We have prepared the following exhibits reflecting provisions of GASB Statement Nos. 67 and 68:

- Table VI-2: Schedule of Changes in Net Pension Liability and Related Ratios
- Table VI-3: Sensitivity of Net Pension Liability to Changes in Discount Rate
- Table VI-4: Schedule of Employer Contributions
- Table VI-5: Average Expected Remaining Service Lives

A summary of the terminology used in GASB Statement Nos. 67 and 68 is provided in Appendix D of this report. Note that while much of the information provided in this report under GASB No. 67 is also utilized in GASB No. 68, Table VI-5 included in this section is only applicable to GASB No. 68.

Finally, we have also developed disclosure information in this section based on additional guidance relating to the Annual Comprehensive Financial Reports (ACFR) of PERS provided by the Government Finance Officers Association (GFOA) in their publication, *Governmental Accounting, Auditing, and Financial Reporting* (GAAFR). We have prepared the following exhibits reflecting guidance in the GAAFR:

- Table VI-6: Analysis of Financial Experience
- Table VI-7: Schedule of Funded Liabilities by Type

The present value of accrued benefits, the total pension liability (GASB 67/68), and the actuarial liability (GAAFR) disclosures in this section are all determined assuming that the Program is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities as of June 30, 2024 are discounted at the assumed valuation interest rate of 6.50% per annum in all of these disclosures.



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-1 below includes the relevant amounts as of June 30, 2023 and June 30, 2024 as well as reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1 Accrued Benefits Info	ormation		
FASB ASC Topic 960 Basis	June 30, 2023	Ju	ne 30, 2024
<ol> <li>Present Value of Benefits Accrued to Date (PVAB)         <ol> <li>Members Currently Receiving Payments</li> <li>Terminated Vested Members</li> <li>Terminated Nonvested Members</li> <li>Active Members</li> <li>Total PVAB</li> </ol> </li> </ol>	5,399,748 2,743,117 422,642 <u>2,495,905</u> 11,061,412	\$ 	5,547,548 2,484,226 431,181 <u>2,935,439</u> 11,398,394
2. Market Value of Assets (MVA)	<u>    16,681,900    </u>		<u>17,431,101</u>
<ol> <li>Unfunded Present Value of Accrued Benefits, but not less than Zero</li> </ol>	\$ 0	\$	0
4. Ratio of MVA to PVAB (2)/(1)(e)	150.8%		152.9%
Change in Present Value of Benefits Accrued to Date d	uring FY 2024		
Increase/(Decrease) during Year Attributable to:\$697,548Passage of Time\$697,548Benefits Paid(670,376)Assumption Changes0Program Changes15,225Benefits Accrued, Other Gains/Losses294,585			
Net Increase (Decrease)		\$	336,982

Table VI-2 that follows shows the changes in the total pension liability (TPL), the Program's fiduciary net position (FNP) (i.e., fair value of the Program's net assets), and the net pension liability (NPL) during the measurement year ending June 30, 2024, as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2024 valuation, the fiduciary net position for this Program was projected to be available to make all projected future benefit payments for current Program members. As such, the long-term expected rate of return on the Program's investments was applied to all periods of projected benefit payments in determining the total pension liability under GASB Nos. 67 and 68. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate, and the employer contributions will be made according to the actuarial calculations developed in the biennial ratemaking process.



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Schedule of Changes in Net Pension Liability and Related Ratios FY 2024Total Pension Liability (TPL) Service Cost (SC)\$ 392,233Interest (includes Interest on SC)732,992Changes of Benefit Terms15,225Differences Between Actual and Expected Experience(305,190)Changes of Assumptions0Benefit Payments, including Refunds of Member Contributions(670,376)Net Change in TPL11,406,177End of Year (BOY) TPL11,406,177End of Year (EOY) TPL\$ 15,225Member Contributions\$ 12,35,988Benefit Payments, including Refunds of Member(670,376)Contributions\$ 749,201BOY FNP\$ 749,201BOY FNP\$ 16,681,900EOY FNP\$ 17,431,101EOY Net Pension Liability (NPL)\$ (5,860,040)FNP as a Percentage of TPL150.6%Covered Payroll*\$ 3,056,745NPL as a Percentage of Covered Payroll(191,7)%	Table VI-2		
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BOY FNP       16,681,900         EOY FNP       \$ 17,431,101         EOY Net Pension Liability (NPL)       \$ (5,860,040)         FNP as a Percentage of TPL       150.6%         Covered Payroll*       \$ 3,056,745         NPL as a Percentage of Covered Payroll       (191.7)%	Administrative Expense		(15,142)
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NPL as a Percentage of Covered Payroll (191.7)%		\$	3,056,745
	NPL as a Percentage of Covered Pavroll		(191.7)%
			(

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

None



#### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

A 10-year schedule of changes in NPL and related ratios is to be included within the ACFRs for PERS. However, based on GASB guidance, this 10-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net Pension Liability and Related Ratios* above and believe that you can accumulate the individual years in the MainePERS ACFRs to show the full 10-year schedule. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included suggested information for such a note in the *Notes to Schedule of Changes in Net Pension Liability and Related Ratios* above. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any information they may need for this purpose.

Table VI-3 below illustrates the sensitivity of the net pension liability (NPL) to the discount rate. Changes in the discount rate affect the measurement of the total pension liability (TPL) for the Program. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the Net Pension Liability (NPL) can be very significant for relatively small changes in the discount rate.

-			
Sensitivity of Net Pension	Table VI-3 1 Liability to Cha FY 2024	nges in Discount R	ate
	<b>1% Decrease</b> 5.50%	<b>Discount Rate</b> 6.50%	<b>1% Increase</b> 7.50%
Total Pension Liability (TPL) Program Fiduciary Net Position (FNP) Net Pension Liability (NPL)	\$ 12,719,135 <u>17,431,101</u> \$ (4,711,966)	$ \begin{array}{r}     \$ 11,571,061 \\     \underline{17,431,101} \\     \$ (5.860,040) \end{array} $	\$10,600,941 <u>17,431,101</u> \$(6,830,160)
FNP as a Percentage of TPL	137.0%	<u> </u>	<u>4 (0,850,100)</u> 164.4%

A one percent decrease in the discount rate increases the TPL by approximately 10% and increases the NPL by approximately 20%. A one percent increase in the discount rate decreases the TPL by approximately 8% and decreases the NPL by approximately 17%.

Table VI-4 that follows provides information relating to the employer contributions for the Program. Under GASB Statement No. 67, if an actuarially determined contribution (ADC) or a contractually or statutorily required contribution (CRC) is developed for a single employer or cost-sharing plan, the following schedule is required. For purposes of this schedule, an ADC is a contribution amount determined in accordance with Actuarial Standards of Practice, and a CRC is based on statutory or contractual requirements. Both should exclude any amounts to finance specific liabilities of individual employers of the Program. If an ADC is available, the schedule of employer contributions should be developed on that basis. If there is no ADC, but there is a CRC, the schedule should be developed on that basis. Only if neither an ADC nor a CRC is developed can this schedule be omitted from the PERS's ACFR.



#### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

The Program's rates set in the ratemaking process meet the definition of an ADC, so for this Program, this schedule should be developed on that basis. Based on GASB guidance, a full 10 years of information should be shown in this. We have shown only the current year of this *Schedule of Employer Contributions* below and believe that you can accumulate these in the MainePERS ACFR to show the full 10-year schedule.

Only the current year of the *Notes to Schedule of Employer Contributions* below needs to be included in the notes to this schedule. However, any factors that significantly affect trends in the *Schedule of Employer Contributions* at any point in the 10-year period should also be included in the notes to this schedule. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Employer Contributions* below. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any additional information that they may need for this purpose.

	Table VI-4Schedule of Employer Contributions		
	FY 2024		
Actuarially Deterr	nined Contribution (ADC)	\$ 0	
	elation to the ADC	0	
Contribution Defi	ciency/(Excess)	\$ 0	
Covered Payroll (1		\$3,056,745	
• • •	Percentage of Payroll	0.00%	
* For FY 2024	i oromingi or i njion		
101112021			
Notes to Schedule of Emp	ployer Contributions		
Valuation Date:	June 30, 2021		
Timing:	June 30, 2024, ADC rates are calculated base developed as a roll-forward of the 2021 valuation expected experience, and any assumption or n during FY 2022 using preliminary actual assets a	n liability, adjusted methodology chang	for iges
Key Methods and Assum	ptions Used to Determine Contribution Rates		
Actuarial Cost Method:	Entry age normal		
Asset Valuation Method:	Three-year smoothed market		
Amortization Method:	Level percentage of payroll, open 10-year amorti	zation	
Discount Rate:	6.50%		



#### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Amortization Growth Rate:	2.75%
Price Inflation:	2.75%
Salary Increases:	2.75%
Mortality:	Healthy Retirees: 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. Active Lives: 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. Disabled Annuitants: 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Tables, respectively, for males and females. All tables projected generationally from the 2010 base rates using the RPEC_2020 model with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024 can be found in the June 30, 2022 Actuarial Valuation Report.

#### Other Information

None

Table VI-5 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Program. GASB Statement No. 68 requires some items be recognized by employers into pension expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed as of June 30, 2023. Note that the decision was made to use these averages based on rounding to the nearest whole year, so the values are thus shown as such.

	Table VI-5 Expected Remaining Surement Year Endin		
Status	Total Expected Future Service	Count	Average Remaining Service Lives
Actives	697	178	4
In-Pay Members	0	232	0
Terminated Vested Members	0	142	0
Inactives Due Refunds	0	<u>96</u>	<u>0</u>
Total Membership	697	648	1



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-6 below is a gain/loss analysis of the changes in the actuarial liability over the past six years, reflecting variances between actual experience and assumed experience for different kinds of risk as specified in the GFOA GAAFR.

Table VI-6 Analysis of Financial Experience Gain and Loss in Actuarial Liability During Fiscal Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience												
	F Ye	in (or Loss) 'or Fiscal ear Ended ne 30, 2019	] Y	in (or Loss) For Fiscal ear Ended ne 30, 2020	Gain (or For Fi Year E June 30,	scal nded	For I Year I	or Loss) Fiscal Ended 0, 2022	Fo Ye	n (or Loss) or Fiscal ar Ended e 30, 2023	Fe Ye	n (or Loss) or Fiscal ar Ended e 30, 2024
Type of Activity												
Investment Income	\$	115,981	\$	(116,186)	\$ 790	5,071	\$ 1	87,103	\$	100,695	\$	122,634
Combined Liability Experience		(238,611)		(413,313)	(180	) <u>,989)</u>	1	99,354		(64,885)		305,190
Gain (or Loss) during Year from Financial Experience		(122,630)		(529,499)	61:	5,082	3	86,457		35,810		427,824
Non-Recurring Items		0		0	(374	<u>,000)</u>	(	<u>(43,111)</u>		0		0
Composite Gain (or Loss) During Year	\$	(122,630)	\$	(529,499)	\$ 24	,082	\$ 3	343,346	\$	35,810	\$	427,824



#### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-7 below compares the Program's assets as of each valuation date shown to the Program's actuarial liability divided into three separate groups: liabilities for contributions on deposit for current active members, liabilities for future benefits for inactive members, and employer-financed liabilities for current active members. This Schedule of Funded Liabilities by Type is used to assess funding progress based on what percentage of the liabilities for each of these groups the Program's assets are sufficient to cover. Per GFOA guidance, this schedule is to include this assessment for the 10 most recent years, and notes to this schedule should be provided to explain any factors that affect the comparability of the data. We do not believe such a note is needed for the measurement year ending June 30, 2024, but it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule.

			Table VI-7				
Schedule of Funded Liabilities by Type							
Aggregate Actuarial Liabilities for:							
	(1)	(2)	(3)		Portio	n of Actu	ıarial
Valuation	Active	Retirees,	<b>Active Members</b>		Liabil	lities Cov	'ered
Date	Member	Vested Terms,	(Employer	Reported	by Re	ported A	ssets
June 30,	Contributions	Beneficiaries	Financed Portion)	Assets*	(1)	(2)	(3)
2024	\$3,201,108	\$ 8,462,955	\$ (93,002)	\$ 17,185,176	100%	100%	100%
2023	3,270,110	8,565,507	(429,440)	16,478,192	100	100	100
2022	3,140,712	7,923,374	(86,804)	15,787,715	100	100	100
2021	3,039,312	7,836,190	(197,031)	15,049,435	100	100	100
2020	3,039,660	6,844,699	(155,670)	13,679,070	100	100	100
2019	2,667,308	6,903,616	(504,160)	13,092,938	100	100	100
2018	2,591,378	6,277,075	(308,503)	12,523,131	100	100	100
2017	2,516,620	6,172,223	(525,533)	11,908,009	100	100	100
2016	2,505,647	5,795,917	(622,106)	11,405,769	100	100	100
2015	2,444,638	5,581,571	(467,916)	11,219,880	100	100	100

\* Reported assets are measured at actuarial value. Results would be different if the market value of assets were used. Despite the name of this exhibit, the liabilities presented in this schedule are not an appropriate measurement of the settlement liability of the Program.



# **APPENDIX A – MEMBERSHIP INFORMATION**

Active Member Data as of June 30, 2024				
Count	175			
Average Current Age	58.0			
Average Benefit Service	5.5			
Average Vesting Service	6.2			
Average Valuation Pay	\$17,467			

Non-Active Member Data as of June 30, 2024					
	Count	Average	Total Annual Banafit	Average Annual Banafit	
Retired	<u>Count</u> 191	<u>Age</u> 77.6	<u>Benefit</u> \$ 448,831	<u>Benefit</u> \$ 2,350	
Retired – Concurrent Beneficiary	7	71.9	2,811	402	
Disability	2	69.4	17,021	8,511	
Beneficiary of Above	23	82.0	40,148	1,746	
Pre-Retirement Death Beneficiary	11	76.7	76,706	6,973	
Terminated Vested	130	56.6	275,835	2,122	
Inactive Due Refund	95	NA	NA	NA	

	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members <sup>1</sup>	Deferred Vested Members <sup>2</sup>
As of June 30, 2023	178	191	30	9	2	142
New hires	2					
Rehires	0	0				0
Movement between plans	0					
New retirees	0	8				(8)
New beneficiaries due to retirements			2			
New deferred vested members	(2)					3
Non-vested terminations	(2)					
Refunds	0					(4)
Deaths, no future benefits	0	(4)	(5)	0		(3)
Deaths with a survivor or beneficiary	(1)	(4)		2		
Benefits expired						
Data correction		0		0		0
As of June 30, 2024	175	191	30	11	2	130

1. Former disabled retirees who have changed to service retirement as mandated by the Plan are still included as disabled members.

2. Deferred vested members includes those indicated to us in the data who have terminated and are eligible for a future annuity.

In preparing this report, we relied on data provided by MainePERS as modified following the procedures outlined in the State of Maine Data Processing Notebook. Adjustments to the data are made based on this processing notebook. Accuracy of the results is dependent on the completeness of the underlying information. The plan sponsor is responsible for the validity and completeness of the information provided. We believe the data provided as modified as documented in the Processing Notebook is sufficient for the actuarial analysis performed.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

# 1. Membership

Except as provided by statute, membership is mandatory for every legislator in service in the Legislature on or after December 3, 1986, and optional for those who were members of the Retirement System on December 2, 1986.

Membership ceases on the earlier of withdrawal of contributions, retirement, or death.

# 2. Member Contributions

Members are required to contribute 7.65% of earnable compensation. Member contributions earn annual interest at the rate adopted by the Board of Trustees each February.

# 3. Average Final Compensation

For purposes of determining benefits payable, average final compensation is the average annual rate of earnable compensation for the three years of creditable service (not necessarily consecutive) that produce the highest such average.

# 4. Creditable Service

Creditable service includes the following:

- A. All legislative service as a member after December 2, 1986,
- B. All legislative service before December 3, 1986, for which contributions have been made to the Retirement System at the applicable rate, including appropriate interest,
- C. Service credited while receiving disability benefits under the Program, and
- D. All service creditable under the Retirement System as a State Employee provided the member elects to have the member's and the employer's contributions on behalf of such service transferred to the Legislative Program.

# 5. Service Retirement Benefits

Eligibility:

- A. Eligibility for Members with at Least 10 Years of Creditable Service on July 1, 1993
  - i. Eligibility for members in active service and inactive members:

25 years of creditable service.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

ii. Eligibility alternative for members in active service:

Attainment of age 60.

iii. Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999:

Attainment of age 60 and 10 years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:

Attainment of age 60 and five years of creditable service.

- B. Eligibility for Members with Less Than 10 Years of Creditable Service on July 1, 1993
  - i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 62.

iii. Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999:

Attainment of age 62 with 10 years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:

Attainment of age 62 and five years of creditable service.

# C. Eligibility for Members with Less Than Five Years of Creditable Service on July 1, 2011

i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 65.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

iii. Eligibility for members not in active service at retirement, and not in active service on or after October 1, 1999:

Attainment of age 65 with 10 years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:

Attainment of age 65 and five years of creditable service.

Benefit: 1/50 of average final compensation multiplied by years of creditable service.

The benefit is reduced for retirement before age 60 at the approximate rates listed in the table below, for members with at least 10 years of creditable service on July 1, 1993.

				100.
	Age	Reduction	Age	Reduction
	45	29.3%	53	16.6%
L	46	28.0	54	14.6
L	47	26.6	55	12.5
L	48	25.2	56	10.3
L	49	23.6	57	7.9
L	50	22.0	58	5.4
L	51	20.3	59	2.8
L	52	18.5	60	0.0

The benefit is reduced for retirement before age 62 by 6% for each year the member's age is less than age 62, if less than 10 years creditable service on July 1, 1993, but at least five years creditable service on July 1, 2011.

The benefit is reduced for retirement before age 65 by 6% for each year the member's age is less than age 65, if less than five years of creditable service on July 1, 2011.

Minimum benefit \$100 per month if at least 10 years of creditable service.

Form of Payment: Life annuity.

# 6. Disability Retirement Benefits Other Than No-Age Benefits (See Item 7)

Eligibility: Disabled as defined in the Legislative Retirement Program statutes prior to normal retirement age, employed prior to October 16, 1992 and did not elect the No-Age Disability Benefits, and either disabled in the line-of-duty or disabled with at least five years of creditable service.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Benefit: 66<sup>2</sup>/<sub>3</sub>% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the earlier of 10 years following normal retirement age or the date that the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited, and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of  $66^{2}/_{3}$ % of average final compensation or 10 years after the normal retirement date if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.

#### 7. No-Age Disability Retirement Benefits

Eligibility: Disabled as defined in the Legislative Retirement Program statutes, employed on or after October 16, 1992 or employed prior to October 16, 1992 and elected the provisions of No-Age Disability, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 59% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the date the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited, and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of 59% of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that time.

#### 8. Pre-Retirement Ordinary Death Benefits

Eligibility: Death while active, inactive eligible to retire, or disabled not resulting from an injury received in the line-of-duty.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

Benefit: Designated beneficiary, spouse, children, or parents entitled to benefit calculated as if the deceased member had retired under Option 2 (see item 13); however, the beneficiary may elect survivor benefits payable to a surviving spouse, dependent children, parent, or other designated beneficiaries in monthly amounts varying by the status of beneficiary and number of eligible survivors. Otherwise, accumulated contributions with interest are payable to the designated beneficiary, spouse, children, older parents, or estate.

# 9. Pre-Retirement Accidental Death Benefits

Eligibility: Death while active or disabled resulting from an injury received in the line-of-duty.

Benefit:

- If the member leaves no dependent children, two-thirds of the member's average final compensation to the surviving spouse until death.
- If the member is survived by a spouse who has the care of dependent children of the member, the surviving spouse shall receive an annual sum equal to the member's average final compensation while having the care of dependent children. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member is survived by a spouse who does not have the care of the member's dependent children, the surviving spouse and dependent children shall share equally an annual sum equal to the member's average final compensation. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member leaves no spouse, the dependent children shall share an annual amount equal to the member's average final compensation. Benefits will cease when the last dependent child no longer meets the definition of "dependent child."

# **10. Termination Benefit**

Eligibility: Termination of service other than by retirement or death with at least five years of creditable service.

Benefit: The member's choice of a refund of the accumulated contributions with interest or a retirement benefit using creditable service and average final compensation as of the date of termination, deferred to normal retirement age.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

#### **11. Refund of Contributions**

Eligibility: Termination of service other than by retirement or death with less than five years of creditable service.

Benefit: Refund of member's accumulated contributions with interest.

# 12. Cost-of-Living Adjustments (COLA)

All service and disability retirement and survivor benefits are adjusted each year that there is a percentage change in the Consumer Price Index (CPI), based on the Index. If the percentage change is negative, then no adjustment is made in that year. In subsequent years, the adjustment that would have been made will be adjusted downward to the extent necessary to recoup the full actuarial value of not having made the previous year's negative adjustment. This process of adjustment may occur over a multi-year period if needed to recoup the full value of negative changes in the Index.

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA Base whose value grows annually with the same adjustment as the COLA (see values below) for all benefits that have been in payment for at least 12 months as of that date. The maximum annual increase, or COLA Cap, is three percent. Average final compensation used in determining disability benefits for disabled members is similarly adjusted for purposes of determining the recipient's service retirement benefit if and when the recipient moves to service retirement.

COLA Base History: (value as of September 1 of listed year when COLA effective):

- 2014 \$20,000.00 2015 - \$20,420.00 2016 - \$20,940.71 2017 - \$21,474.70 2018 - \$21,818.30 2019 - \$22,451.03 2020 - \$22,810.25 2021 - \$22,947.11 2022 - \$24,186.25\* 2023 - \$24,911.84 2024 - \$25,659.20
- \* Special legislation was passed to pay an additional one percent COLA above the maximum COLA Cap of three percent. In addition, the COLA Base was increased by the full CPI change of 5.4%.

Members who did not have 10 years of service on July 1, 1993 will begin receiving the cost-of-living adjustments at the later of 12 months after their normal retirement age and the first September 1 following a minimum of 12 months of being in receipt of their benefit.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.

# 13. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:

Full Benefit: Unadjusted benefit paid for the life of the member only.

Option 1: Cash refund equal to the remaining member contribution balance, if any, at the date of death (where the member contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by member contributions).

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.

Option 5: Designated percentage of the benefit (not less than 51%) payable to the member, with the remaining percentage (the two to equal 100%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lower-percentage benefit ceases to be paid.

Option 6: 100% joint and survivor annuity (Option 2) with pop-up\*.

Option 7: 50% joint and survivor annuity (Option 3) with pop-up\*.

Option 8: Option 4 with pop-up\*.

\* The "pop-up" feature attached to a given Option means that in the case of a beneficiary predeceasing the member, the member's benefit will be revised prospectively to the amount that the benefit would have been had the member selected Full Benefit payment upon retirement.

# 14. Program Changes Since Last Valuation

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.

This Appendix B is intended to be a brief summary of provisions. In the event of a dispute, applicable statutes and administrative policy supersede this report description.



# **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# **A. Actuarial Assumptions**

# 1. Annual Rate of Investment Return

Legislative 6.50%

Rate is net of both administrative and investment expense.

# 2. LDROM Discount Rate

Legislative 4.44%

3. Cost-of-Living Adjustment (COLA) Assumed Rate

Legislative 2.20%

4. Annual Rate of Individual Salary Increase

Legislative	2.75%

5. Sample Rates of Termination (% at Selected Years of Service)

Service	Assumption
0	0%
1	-5
2	10
23	15
4 5 6	20
5	25
6	30
7	40
8 9	50
9	50
10	50
11	50
12	50
13	50
14	50
15	50
16+	50

The rates shown are only applicable in the fiscal years ending in odd years, while zero terminations are assumed in the fiscal years ending in even years.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

Non-vested members are assumed to take a refund of contributions with interest. Once vested, the member is assumed to elect the greater of the deferred vested benefit or a refund of member contributions with interest based on present value at the time of termination.

6. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

	Showing values in 2024					
Age	Male	Female				
50	31	24				
55	46	34				
60	70	47				
65	102	69				
70	157	110				
75	264	196				
80	478	364				
85	884	695				
90	1,547	1,308				
95	2,421	2,143				

Rates are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. The rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

7. Sample Rates of Mortality for Active Lives at Selected Ages (number of deaths per 10,000 members)\*

Showing values in 2024					
Age	Male	Female			
20	3	1			
25	3	1			
30	4	2			
35	6	3			
40	7	4			
45	9	5			
50	12	7			
55	17	11			
60	27	17			
65	39	25			

\* 5% of deaths assumed to arise out of and in the course of employment.

Rates are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model as described in the healthy annuitant mortality.

8. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

	1000 AU				
	Showing values in 2024				
Age	Male	Female			
25	36	21			
30	54	37			
35	74	58			
40	91	76			
45	113	98			
50	159	141			
55	216	181			
60	274	210			
65	325	220			
70	383	258			

Rates are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.



# **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# Fiscal YearsFiscal YearsAgeEnding EvenEnding Odd57-69025070+01,000

#### 9. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members):

Note that all retirement rates are only applied once the member is eligible to retire, so those in with 62 or 65 normal retirement ages are not assumed to retire until eligible. No retirements are assumed prior to age 57, regardless of service amount.

# 10. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000 members)

No disability assumed.

# **11. Family Composition Assumptions**

80% of active members are assumed to be married and have two children born when the member is 24 and 28; children are assumed dependent until age 18; a female spouse is assumed to be three years younger than a male spouse; member is assumed to have no dependent parents; unmarried members are assumed to have beneficiaries entitled to benefits worth 80% as much as those of married members' beneficiaries.

# 12. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: Reflect actual historical member contribution interest rates from 1970 through the valuation; future contribution interest assumed to equal the inflation assumption of 2.75%.

COLA Timing: September 1.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

#### **13.** Rationale for Assumptions

The demographic assumptions were adopted by the Board of Trustees at their March 11, 2021 meeting. The discount rate was adopted by the Board of Trustees at their August 12, 2021 meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015 through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. In our professional judgment, the combined effect of the assumptions has no significant bias.

The LDROM discount rate is the single equivalent rate determined by matching System cashflows to US Treasury Securities yields as of the measurement date as published by the Federal Reserve.

#### 14. Changes Since Prior Valuation

The LDROM discount rate was updated to 4.44% based on Treasury yields as of June 30, 2024.

#### 15. Rationale for Change in Actuarial Assumptions

N/A

#### 16. Disclosure for Reasonable Actuarially Determined Contribution Method

The rates determined in the ratemaking process and shown in Table I-2 meet the requirements of a reasonable ADC as defined by the Actuarial Standards of Practice. The actuarial methods used to determine the reasonable ADC have been selected to balance benefit security, intergenerational equity, and stability of contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

#### 17. Disclosure of Models Used

**ProVal:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020



# **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

#### **B.** Actuarial Methods

#### 1. Funding and LDROM Cost Method

The entry age normal actuarial cost method is used to determine costs. Under this cost method, the total employer contribution rate consists of two elements: the employer normal cost rate and the unfunded actuarial liability (UAL) rate.

Under this method, the actuarial present value of the projected benefits of each active included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to the year beginning on the valuation date is called the normal cost. For each active, the normal cost is determined by taking the value, as of entry age into the Program, of the member's projected benefits, reduced by the value of future member contributions, and then dividing it by the value, also as of the member's entry age, of the member's expected future salary. This rate is then multiplied by the member's salary at the valuation date to produce the normal cost for each member, which are then aggregated across all members to get the total normal cost for the Program. This total normal cost rate for the Program.

The portion of the actuarial present value not provided for at the valuation date by the actuarial present value of the future normal costs is called the actuarial liability. The unfunded actuarial liability is defined as the total actuarial liability at the valuation date less the actuarial value of the Program's assets at the valuation date. Contributions are made to fund this unfunded actuarial liability (UAL). The UAL amortization rate for this Program is developed by amortizing the unfunded liability over an open 10-year period, assuming these amortization payments increase over the previous year at a rate of 2.75% per year. The resulting amortization for the year beginning on the valuation date is then divided by the total payroll for the Program to develop the UAL amortization rate. Amortization payments are assumed to be made in each pay period. All assumption changes and gain/losses are included in the UAL amortization except for Program changes that are fully funded at the time of implementation.

The total rate for the Program is produced by adding the normal cost rate and the UAL amortization rate, subject to the requirement that the total rate cannot be less than 0%.

By using an open amortization period, this cost method results in the expectation that any unfunded liability in the Program as of a valuation date will never be fully reduced to zero if all of the valuation assumptions are exactly met.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

#### 2. Asset Valuation Method

For purposes of determining the State contributions to the Program and the Program's funded ratio, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on the cash flows for the year and imputed returns at the actuarial assumption. This expected value is compared to the actual fair value at the valuation date and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

#### 3. FASB ASC Topic 960 Cost Method:

The cost method for valuation of liabilities for FASB ASC Topic 960 purposes is the Unit Credit Cost method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of accrued benefits methods is that the funding pattern follows the pattern of benefit accrual. The accrued liability, which is determined for each Participant as of each valuation date, represents the actuarial present value of each Participant's benefit earned prior to the valuation date.

#### 4. Changes Since Last Valuation

None

#### 5. Rationale for Change

N/A



# **APPENDIX D – GLOSSARY OF GASB TERMS**

#### 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

# 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

# 3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

# 4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

# 5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB Nos. 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

#### 6. Measurement Date

The date as of which the Total Pension Liability and Program Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the Program.



## **APPENDIX D – GLOSSARY OF GASB TERMS**

## 7. Net Pension Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Program Fiduciary Net Position.

## 8. Program Fiduciary Net Position

The fair or market value of assets.

## 9. Reporting Date

The last day of the Program or employer's fiscal year.

### **10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

## **11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.





Maine Public Employees Retirement System

Judicial Retirement Program

Actuarial Valuation Report as of June 30, 2024

**Produced by Cheiron** 

October 2024

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October 10, 2024

Board of Trustees Maine Public Employees Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

We are pleased to submit the June 30, 2024 Actuarial Valuation Report for the Judicial Retirement Program (Program) of the Maine Public Employees Retirement System (MainePERS or System).

The purpose of this report is to present the annual actuarial valuation of the Judicial Retirement Program of the Maine Public Employees Retirement System. This report contains information on assets, liabilities, and contributions of the Program, as well as required accounting statement disclosures under the Governmental Accounting Standards Board (GASB) Statement No. 67.

In preparing our report, we relied on information, some oral and some written, supplied by the System's staff. This information includes, but is not limited to, the Plan provisions, employee data, and financial information as of the valuation date. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

Future results may differ significantly from the current results presented in this report due to such factors as the following: Program experience differing from that anticipated by the assumptions, changes in assumptions, and changes in Plan provisions or applicable law.

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

This actuarial report was prepared exclusively for MainePERS for the purposes described herein and for the use by the Program auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users. Board of Trustees Maine Public Employees Retirement System October 10, 2024 Page ii

Finally, the results of this valuation are purely informational. Because MainePERS sets contribution rates for the System on a biennial basis, these results will not be used in determining State contributions to the System.

Sincerely, Cheiron

Greg Reardon, FSA, EA Principal Consulting Actuary Bonnie Rightnour, FSA, EA Principal Consulting Actuary Gene Kalwarski, FSA, EA Principal Consulting Actuary

Cc: Fiona Liston, Cheiron Kathleen Weaver, Cheiron

### FOREWORD

Cheiron has completed the Actuarial Valuation Report for the Maine Public Employees Retirement System (MainePERS or System) Judicial Retirement Program (Program) as of June 30, 2024. The purpose of this report is to:

- 1) Measure and disclose, as of the valuation date, the financial condition of the Program,
- 2) Examine historical Program trends,
- 3) Assess and disclose actuarial risks of the Program,
- 4) Report on the contribution rates developed in this valuation for informational purposes (Note: the actual contributions paid by the State for fiscal year (FY) 2024 were developed in the budgeting process in July 2022, based on a roll-forward of the June 30, 2021 valuation), and
- 5) Provide specific information required for MainePERS's financial disclosures.

An actuarial valuation establishes and analyzes assets and liabilities on a consistent basis and tracks the progress of both from one year to the next. It includes measurement of investment performance as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our key findings, disclosing important Program trends in recent years, and providing analysis relating to the future status of the Program.

Section II assesses and discloses various actuarial risk measures of the Program.

Section III contains details on various asset measures, together with pertinent performance measurements.

Section IV shows similar information on liability measures for various purposes, including analysis of key changes in the measures.

Section V develops informational employer contribution rates to be compared to those established during the ratemaking process.

Section VI includes financial disclosure information.

Finally, we present appendices containing the following summaries:

- Program membership information at the valuation date (Appendix A),
- Major benefit provisions of the Program (Appendix B),
- Actuarial assumptions and methods used in the current valuation (Appendix C), and
- Terminology used in the Governmental Accounting Standards Board (GASB) disclosures (Appendix D).



### **SECTION I – BOARD SUMMARY**

## **General Comments**

The annual employer contributions to this Program are determined on a biennial basis in even years. The contributions for fiscal year (FY) 2024 and FY 2025 were developed through this ratemaking process in 2022. The assets used in developing these rates were the preliminary June 30, 2022 assets. These were then combined with estimated liability measures as of June 30, 2022, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2021 actuarial valuation. This adjustment included updating to reflect anticipated growth in benefits, reductions due to benefit payouts, and any changes in assumptions or benefits between the June 30, 2021 valuation date and the June 30, 2022 measurement date. Similarly, the contributions for FY 2026 and FY 2027 were developed in July of 2024 and were based on estimated assets as of June 30, 2024 and estimated June 30, 2024 liabilities based on a roll-forward of the June 30, 2023 actuarial valuation liabilities.

The results of this June 30, 2024 valuation will be used primarily for accounting disclosures. Next year's June 30, 2025 valuation, adjusted to a June 30, 2026 measurement date and combined with preliminary assets as of June 30, 2026, will be used as the basis for the applicable FY 2028 and FY 2029 employer contributions.

## Experience from July 1, 2023 through June 30, 2024 (FY 2024)

With respect to investment experience, measured on a market value of asset (MVA) basis, MainePERS experienced an investment return of positive 7.43% for the fiscal year ending June 30, 2024. This is more than the assumed rate of return assumption of 6.50%. However, given the three-year asset smoothing method in place, only one-third of that gain is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore, for this Program, asset smoothing also resulted in recognizing one-third of prior deferred asset gains of \$1.068 million during FY 2024. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.26%. This is also greater than the 6.50% assumed rate of return in effect for FY 2024, resulting in a gain on investments for this Program for the year of \$0.557 million.

With respect to liability experience, the Program experienced a liability loss of \$1.098 million above the expected growth of \$1.107 million (a 1.4% growth in total liabilities beyond expected growth). Of this net increase, approximately \$1.300 million was attributable to salaries and COLA exceeding assumed increases, offset by demographic experience, primarily fewer retirements than expected. In addition to the regular COLA adjustment, a three percent one-time COLA payment was paid to eligible retirees during FYE 2024. An amount of \$0.055 million was funded immediately to fully cover this payment.

Combining the investment and liability experience produced a net experience loss of \$0.541 million. This translates to an informational total employer contribution of 4.25% of payroll as of June 30, 2024. This is an increase of 2.55% compared to the June 30, 2023 valuation contribution rate (prior to being rolled-forward for ratemaking) of 1.70% of payroll.



### **SECTION I – BOARD SUMMARY**

As of the June 30, 2024 valuation, the Program has an unfunded actuarial liability (UAL) of (\$7.099) million (i.e., a surplus) based on the actuarial value of assets (AVA). This represents a decrease in the surplus position of \$0.671 million from the (\$7.770) million AVA UAL measured as of June 30, 2023. This compares to an expected decrease in the surplus position of \$0.130 million. The specific factors contributing to this change are presented in Table I-1 that follows. This table has separate columns showing the components of the changes in liabilities and the assets during FY 2024 as well as their combined effect on the UAL.

	Table I-1		
	(Amounts in Millions)		
	Liabilities	Assets*	UAL
Value as of June 30, 2023	\$ 78.586	\$ 86.356	\$ (7.770)
Expected Change	1.107	0.977	0.130
Impact of Plan Changes	0.055	0.055	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Recognized Investment Gain	0.000	0.557	(0.557)
Recognized Liability Loss	1.098	0.000	1.098
Value as of June 30, 2024	\$ 80.846	\$ 87.945	\$ (7.099)

\* This table uses the actuarial value of assets. Results would be different if the market value were used.

The remainder of this Board Summary section summarizes the Program's historical trends and summarizes the principal results of the valuation. These principal results compare key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates.

## Trends

It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition.

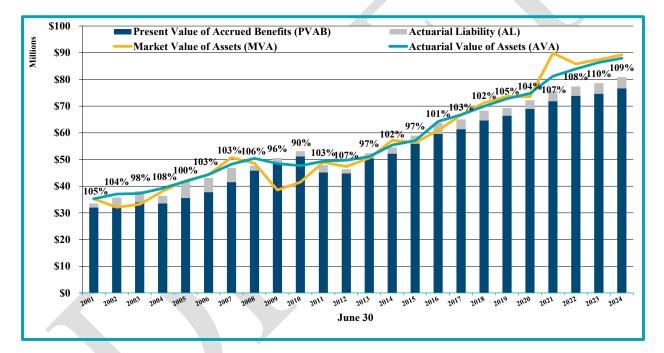


### **SECTION I – BOARD SUMMARY**

### Assets and Liabilities

The following graph illustrates the progress of assets and liabilities for the Program since June 30, 2001, as well as the Program's funded ratio on an actuarial value of assets (AVA) basis.

Liability measures are shown as bars as of June 30 of the indicated years. The actuarial liability (AL), the liability measure used for the Program's funding purposes, is represented by the top of the grey bars. The blue bars represent the present value of accrued benefits (PVAB). These liability measures are discussed further in Section IV. Measures of the assets are shown as lines. The AVA is shown with a teal line, while the market value of assets (MVA) is shown as a yellow line. The AVA divided by the AL is the AVA funded ratio that is often used in evaluating the Program's funded status. The value of this metric at each valuation date is shown as the percentages in the graph labels.



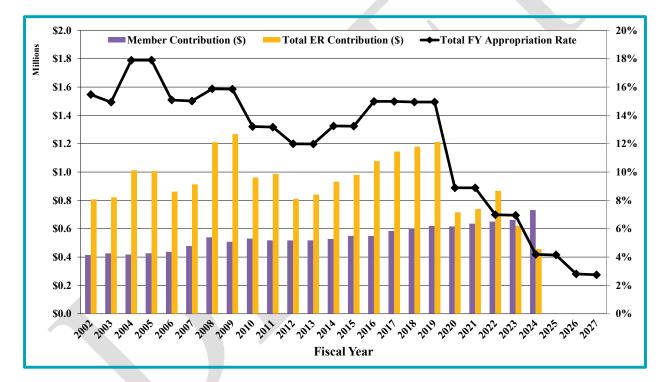
Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2024, the Program's AVA based funded ratio is 108.8%, which represents a slight decrease from the 109.9% ratio reported in the prior valuation. The 24-year history in the graph shows that over this period the Program has averaged over a 102% funded ratio on an AVA basis. Measured on an MVA basis, the funded ratio is 110.3% as of June 30, 2024.



### **SECTION I – BOARD SUMMARY**

### Contributions

The next graph shows the history of contributions to the Program, both as dollar amounts and as percentages of payroll. The bars in this graph show the contributions made by both the employers and the members in dollar terms for each fiscal year (FY) as indicated by the horizontal axis since 2002. These bars are read using the left-hand axis. The black line shows the total appropriated employer contribution rate for the FY indicated as a percentage of payroll and references the right-hand axis. These rates are those determined by the ratemaking process rather than the informational rates determined in the annual valuations. The FY 2025 through FY 2027 contribution rates have already been determined based on the ratemaking process, so three additional years of the contribution rates are shown versus dollars received. The total employer contribution for FY 2024 includes the approximately \$55 thousand extra payment to fund the one-time additional COLA payment.



The member contribution rates are set by statute. The total employer contribution rate is set by the ratemaking process on a biennial basis. The contribution rate for FY 2024 was based on a roll-forward of the June 30, 2021 valuation to June 30, 2022, as previously described in this Board Summary.

The data has reflected purchased service amounts for a number of years, but it was not until the 2017 valuation that assets were transferred to cover those purchases. The impact of this transfer can be seen in the large decline in employer contribution rates between FY 2019 and FY 2020.



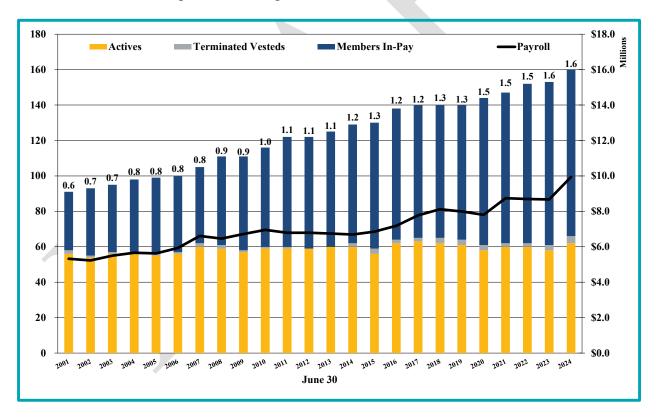
### **SECTION I – BOARD SUMMARY**

## Participant Trends

The stacked bars in the graph that follows show the number of active members, terminated vested members, and members in pay status covered by the Program as of June 30 of each year indicated and is read using the left-hand axis of the graph. As with many funds in this country, there has been a steady growth in the number of retired members as the Program has matured.

The labels above each bar show the "support ratio," which is the ratio of inactive members (members in pay status plus terminated vested members) to active members. This ratio has been generally increasing since 2001 for the Program. As this ratio grows, the cash flows (contributions less benefits and expenses) of a pension plan tend to become more negative. The more negative a plan's cash flows, the more sensitive the plan is to volatile investment markets, resulting in a higher likelihood of contribution volatility.

The black line in the graph indicates the total active member covered payroll in the Program and is read using the right-hand axis of the graph. Generally, it has been gradually increasing or steady since 2001, with the exception of the larger increases in FYE 2021 and 2024.





### **SECTION I – BOARD SUMMARY**

## **Principal Results Summary**

The last section of this Board Summary section of this Actuarial Valuation Report presents a summary of the principal results of the valuation, comparing key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates.

Table I-2         Summary of Principal Results         Judicial Retirement Program						
Momber Counts	Valuation as of June 30, 2023	Valuation as of June 30, 2024	% Change			
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members Inactives Due Refunds	$58 \\ 73 \\ 18 \\ 0 \\ 1 \\ 3 \\ 1 \\ 154$	$ \begin{array}{r} 62\\ 74\\ 19\\ 0\\ 1\\ 4\\ -1\\ 161 \end{array} $	$\begin{array}{c} 6.9\% \\ 1.4\% \\ 5.6\% \\ 0.0\% \\ 0.0\% \\ 33.3\% \\ 0.0\% \\ 4.5\% \end{array}$			
Total Membership Annual Payroll of Active Members Annual Payments to Benefit Recipients	154 \$ 8,670,579 \$ 5,511,079	161 \$ 9,938,460 \$ 5,622,832	4.5% 14.6% 2.0%			
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded AL (UAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 78,586,151 <u>86,355,694</u> \$ (7,769,543) 109.9% 111.2%	\$ 80,846,424 <u>87,944,771</u> \$ (7,098,347) 108.8% 110.3%	2.9% 1.8% (8.6%)			
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 74,679,305 <u>87,423,240</u> \$ (12,743,935) 117.1%	\$ 76,671,748 <u>89,203,285</u> \$ (12,531,537) 116.3%	2.7% 2.0% (1.7%)			
<u>Contributions as a Percentage of Pay</u> Employer Normal Cost Rate UAL Amortization Rate Total Employer Rate	<u>roll</u> 12.51% <u>(10.81)%</u> 1.70%	12.87% (8.62)% 4.25%				
Total Employer Budgeted Rates Total Employer Budgeted Rates		ing <u>2024 F</u> 19% FY 2026 15% FY 2027	<u>Ratemaking</u> 2.81% 2.75%			



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

## Introduction

The Program's actuarial valuation results are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, these assumptions represent a reasonable estimate for future experience. However, the actual future experience will never conform exactly to these assumptions and may differ significantly from the assumptions. This deviation is a risk that pension plan sponsors bear in relying on a pension plan's actuarial valuation results.

This section of this report is intended to identify the primary drivers of these risks, provide background information and assessments about these identified risks, and communicate the significance of these risks to this Program. This section for this Program, as well as the Legislative Program, is limited in comparison to the risk sections for the two larger Programs, the State Employee and Teacher Retirement Program and the Participating Local District Retirement Program. This limitation reflects the relatively smaller nature of these two Programs as well as their robust funded statuses. It is thus our belief that the additional information that is included in the reports for the larger Programs would not be significantly beneficial in improving the Board's understanding of the identified risks for these two smaller Programs.

## **Identification of Risks**

For this Program, the three primary valuation results that can significantly differ from those expected are the assets, the liabilities, and the employer contributions. While there are several factors that could lead to these results being different, we believe the primary risks for this Program are:

- Investment risk,
- Longevity and other demographic risks,
- Plan change risk, and
- Assumption change risk.

Other risks that we have not identified may also turn out to be significant.



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

*Investment Risk* is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation, the unfunded liability will increase from what was expected and will require higher contributions than otherwise anticipated. But, when actual returns exceed those assumed, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. As seen in the historical section that follows, this has been a significant driver of deviations in the actual measurements for this Program from those expected by the prior valuations.

Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expectations. In addition, the extensive number of assumptions related to longevity and other demographic experience often result in offsetting deviations contributing to the Program's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to the investment returns. However, for small plans like this, there are relatively few members and so the behavior of individual members can have a significant impact on the liabilities. The following historical section shows that this is true for this Program in individual years, but these deviations have been offsetting such that the cumulative magnitude for the period shown is relatively minor.

*Plan Change Risk* is the potential for the provisions of the Program to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Program being changed, future valuation measurements can also be impacted, with Program changes leading to deviations between actual future measurements and those expected by prior valuations. For this Program, this risk is partially mitigated by the constitutional requirement that any Program changes creating new actuarial liabilities must be fully funded. Note that the Plan change that is shown in the 10-year history chart in this section is the result of a timing difference of when liabilities and assets were transferred to this Plan from other Programs – the result showing a liability loss in one year followed by a Plan change gain in the next.

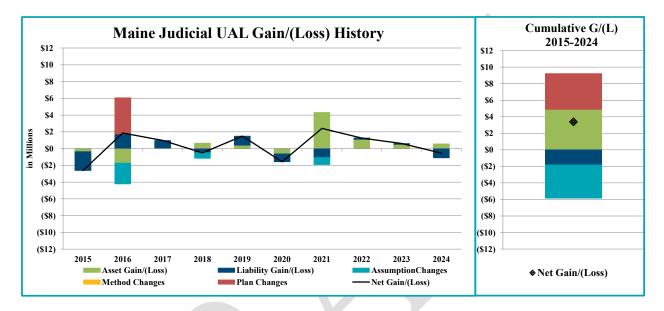
Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment resulting in the current assumption no longer being reasonable. The historical review section will show that assumption change risk has been a significant risk for this Program.



## SECTION II – RISK ASSESSMENT AND DISCLOSURE

## **Historical Experience Deviations**

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The following graph shows the gains/(losses) at each valuation date between the actual and expected experience broken down by cause for the last 10 years.



As described previously and as evident in this graph, assumption changes, plan changes, and asset gains and losses have been the greatest sources of deviations for the Program cumulatively. While liability gains and losses have not been a significant source cumulatively for this period, they have been sources of significant risk in individual years.

## **Plan Maturity Measures**

As pension plans become more mature, the primary risks of adverse investments, demographic deviations, plan changes, and assumption/method changes become of more significant concern as the resulting impacts on the Program's condition are more pronounced. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. With shrinking workforces, aging Baby Boomers, and retirees living longer, plans pay out more in benefits than they receive in contributions – leading to negative net cash flows, excluding investment income. This dynamic makes it harder for a plan to recover from losses since contributions are generally made based on active payroll.



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

One of the main reasons risks are more amplified with a mature plan is that when plans with negative net cash flows suffer investment losses, they need to liquidate enough assets to pay for benefits in excess of contributions. That means these plans will need to earn higher returns to rebuild their assets to the previous levels. Plans with negative net cash flows exceeding five percent of assets are especially vulnerable to asset losses.

The balance of this section discloses and examines three maturity measures: the asset leverage ratio, the liability leverage ratio, and the support ratio.

### Asset Leverage Ratio

One important plan maturity measure is the asset leverage ratio, the market value of assets divided by the plan's payroll, which represents the percentage of payroll that would need to be contributed to make up a given change in the plan's assets. As a plan matures, its assets increase, and a greater proportion of the assets are paid out in benefit payments to members. The greater the plan's assets are relative to payroll, the more vulnerable the plan is to investment volatility in terms of the resulting contribution requirement changes.

As an example, here are two plans that both experience a 10% investment loss equaling \$500 million on their existing assets of five billion dollars. Plan A's asset leverage ratio is 10, and Plan B's ratio is five. This means that Plan A has to spread, or amortize, that loss over a payroll that is half as large as Plan B's. As seen in the chart below, this results in the percentage of payroll that Plan A would need to contribute to make up the loss being double what would be required for Plan B.

	(\$ in millions)		ns)	
	P	lan A	P	lan B
Plan Assets	\$	5,000	\$	5,000
Payroll	\$	500	\$	1,000
Asset Leverage Ratio		10.0		5.0
10% Loss	\$	500	\$	500
10% Loss as % of Payro	11	100%		50%

This Program's asset leverage ratio has been generally increasing over the last decade and is currently just under 9.0. As a result of the increasing trend of this ratio, investment losses are equivalent to a greater proportion of payroll.

### Liability Leverage Ratio

Another leverage ratio that can be examined is the liability leverage ratio, the ratio of actuarial liabilities to payroll. The greater the plan's liabilities are relative to payroll, the more vulnerable the plan is to experience volatility. As previously discussed, the small nature of this Program means



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

that the magnitude of liability gains and losses are often greater relative to the liabilities compared to what larger plans experience, so it is valuable to be aware of this ratio. For this Program, this metric has also been generally increasing over the last decade and is currently at approximately 8.1.

### Support Ratios

Another commonly used measure of plan maturity is the support ratio, the ratio of in-pay and inactive members, or those receiving benefits or entitled to a deferred benefit, to the number of active members, or those currently accruing benefits in the plan. The greater this ratio, the more mature a plan is considered, with the proportion of the plan's liability represented by actives generally declining.

A graph of this ratio was shown in the prior section, which showed that this ratio has been generally increasing for this Program in recent years and is currently approximately 1.6 participants either in-pay or with a deferred benefit for each active member.



## **SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of plans and in the decisions that Trustees make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely affect benefit levels, employer contribution rates, and the ultimate security of members' benefits.

The assets for all Defined Benefit (DB) Programs administered by MainePERS are invested together. These Programs are the State Employee and Teacher Retirement Program, the Judicial Retirement Program that is valued in this report, the Legislative Retirement Program, and the Participating Local District (PLD) Retirement Program, including both the Consolidated Plan and the several Nonconsolidated PLDs. The assets of these Programs are entirely commingled for investment purposes, so the actuarial value of assets (AVA) for each of these Programs is developed by first developing it for the entire asset pool and then subsequently allocating that total AVA to each of the specific Programs.

In this section, we present detailed information on the Program's assets including:

- Disclosure of total MainePERS DB assets at June 30, 2024,
- Statement of changes in total MainePERS DB market values during the year,
- Development of the total MainePERS DB actuarial value of assets,
- Allocation of the total actuarial value to MainePERS DB Programs,
- Assessment of the total MainePERS DB investment performance, and
- Projection of expected cash flows for the Program for the next 10 years.

## Disclosure

The market value of assets (MVA) represents a "snap-shot" or "cash-out" value, which provides the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with corresponding swings in the marketplace, resulting in volatility in the resulting contributions if the unadjusted market value is used in the valuation process that develops the contributions. Therefore, a smoothed actuarial value of assets is developed for use in the valuation process and for evaluating the Program's ongoing ability to meet its obligations. The actuarial value of the Program's assets is developed by allocating the actuarial value of the total MainePERS DB assets to each Program. This section discloses the market and actuarial values of the MainePERS DB assets both in total and for each Program.



## **SECTION III – ASSETS**

Table III-1 that follows develops the change in the market value of assets for the total MainePERS DB assets during FY 2024.

Tab Changes in Market Value of Total M	le III-1 JainePERS Defined Ben	efit (DR) Assets
Market Value of Total MainePERS DB As	\$ 19,032,500,469	
Additions Contributions:	¢ (00 705 000	
Employer Contributions Member Contributions Transfers	\$ 609,725,832 253,072,755 (276,351)	
Total Contributions	\$ 862,522,236	
Investment Income: Net Appreciation (Depreciation) in Fair Value of Investments Interest on Bank Balances Total Investment Income	\$1,550,729,080 <u>3,318,765</u> \$1,554,047,845	
Investment Activity Expenses: Management Fees Investment Related Expense Banking Fees Total Investment Activity Expenses	$\begin{array}{r} \$ & (131,872,981) \\ & (5,758,258) \\ \hline & (36,109) \\ \$ & (137,667,348) \end{array}$	>
Net Income from Investing Activities	\$1,416,380,497	
Total Additions		\$ 2,278,902,733
Deductions Retirement Benefits Disability Benefits Survivor Benefits Refunds Administrative Expenses Total Deductions	(1,200,976,761) (25,883,395) (28,529,982) (37,506,149) (17,274,490)	\$ (1,310,170,777)
Total		φ (1,310,170,777)
Net Increase (Decrease)		\$ 968,731,956
Market Value of Total MainePERS DB As	ssets – June 30, 2024	\$ 20,001,232,425



## **SECTION III – ASSETS**

## **Actuarial Value of Total MainePERS DB Assets**

Table III-2 that follows develops the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024 using the adopted actuarial valuation methodology.

	Table III-2 Development of Actuarial Value of Total MainePERS Defined Benefit (DB) Assets as of June 30, 2024				
1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023	\$ 18,800,089,976			
2.	Amount in (1) with Interest to June 30, 2024	20,022,095,824			
3.	Employer and Member Contributions for FY 2024	862,522,236			
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2024	27,590,682			
5.	Total Disbursements without Administrative Expenses for FY 2024	(1,292,896,287)			
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2024	<u>(41,357,647)</u>			
7.	Expected Value of Total MainePERS DB Assets at June 30, 2024 = $(2) + (3) + (4) + (5) + (6)$	\$ 19,577,954,808			
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2024	20,001,232,425			
9.	Excess of (8) Over (7)	423,277,617			
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2024 = $(7) + [33\frac{1}{3}\% \text{ of } (9)]$	\$ 19,719,047,347			

As discussed in the disclosure portion of this section, the actuarial value of assets for the Program represents a "smoothed" value developed by the actuary to reduce, or eliminate, volatility in valuation results, particularly contribution rates that could develop from short-term fluctuations in the market value of assets. Current actuarial methods employed in this Program use an allocated portion of the total actuarial value of assets for the total MainePERS DB assets based on the Program's market value of assets to develop the actuarial value of assets for the Program. The methodology for the total MainePERS DB assets sets the actuarial value of assets equal to the expected value of the actuarial value of assets plus one-third of the difference between the actual market value of assets takes the prior year's actuarial value of assets and adjusts it for contributions, disbursements, and expected interest earnings at the investment return assumption that was in effect for the previous year, 6.50% for this valuation. The previous table, Table III-2, illustrates the calculation of the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024.



## **SECTION III – ASSETS**

## Allocation of Actuarial Value of Assets to the Program

The assets for the defined benefit (DB) Programs administered by MainePERS are commingled for investment purposes with the total actuarial value of assets allocated to the individual Programs on the basis of the market value of the assets for each Program. An asset ratio (total MainePERS DB actuarial value of assets divided by total MainePERS DB market value of assets) is applied to the market value of assets attributable to each of the Programs to determine its actuarial value of assets as of the valuation date. The asset ratio derived in this June 30, 2024 valuation is 0.985892 ( $$19,719,047,347 \div $20,001,232,425$ ). The allocation of actuarial value of the total MainePERS DB assets to each of the MainePERS DB Programs based on this asset ratio is shown in the following table.

Table III-3           Allocation of Actuarial Value of Total MainePERS DB Assets					
as of June 3	30, 2024				
Program	<b>Market Value</b>	Actuarial Value			
Teachers	\$ 10,475,025,420	\$10,327,239,734			
State (Regular & Special)	5,334,680,793	5,259,417,065			
Judicial	89,203,285	87,944,771			
Legislative	17,431,101	17,185,176			
Participating Local Districts					
(Consolidated & Non-Consolidated)	4,084,891,826	4,027,260,601			
Total	\$ 20,001,232,425	\$19,719,047,347			

## **Investment Performance**

The market value of assets for the total MainePERS DB assets returned a positive 7.43% during FY 2024. This is greater than the assumed return of 6.50% for FY 2024. The equivalent market value returns for the total MainePERS DB assets for FY 2023 and FY 2022 were positive 6.05% and negative 0.62%, respectively.

On an actuarial value of assets basis, the return for FY 2024 was a positive 7.26% for the total MainePERS DB assets. This return is less than the return on a market value basis but greater than the 6.50% assumption in effect for FY 2024. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.



## **SECTION III – ASSETS**

## **Cash Flow Projections**

Table III-4 Projection of Judicial Program Benefit Payments and Contributions						
FY		Expected	Expected			
Ending	Expected Benefit	Employer	Member	<b>Total Expected</b>		
June 30,	Payments	Contributions	Contributions	Contributions		
2025	\$ 6,076,100	\$ 412,400	\$ 760,300	\$ 1,172,700		
2026	6,461,200	287,000	781,200	1,068,200		
2027	6,724,400	288,500	802,700	1,091,200		
2028	6,892,000	296,500	824,800	1,121,300		
2029	7,006,900	304,600	847,400	1,152,000		
2030	7,115,900	313,000	870,700	1,183,700		
2031	7,211,700	321,600	894,700	1,216,300		
2032	7,279,600	330,500	919,300	1,249,800		
2033	7,303,600	339,600	944,600	1,284,200		
2034	7,291,100	348,900	970,500	1,319,400		

In Table III-4 above, we provide a projection of expected cash flows in and out of the Program for the next 10 years for informational purposes. The Board may share these projections with its investment advisor for consideration of the gap shown between the cash expected to come into the Program through employer and member contributions and the cash expected to be paid out of the Program to provide benefit payments.

The expected benefit payments in Table III-4 were developed using the data currently included in this valuation and on the assumption that the actuarial assumptions disclosed in Appendix C will be exactly met. Actual benefit payments will vary if members retire sooner or later than assumed, if salary increases and actual future post-retirement COLAs differ from those assumed, or if other assumptions differ from the actual experience seen. These benefit projections exclude any assumption about new Program participants, whose experience will eventually lead to increased benefit payments. However, we do not feel this exclusion will materially impact the projections for the period shown.

Expected employer contributions in this table use the budgeted contributions for FY 2025 through FY 2027. Future contributions beyond that point are assumed to continue at the FY 2027 rate and include an assumption that payroll grows at 2.75% per year.

The expected member contributions are similarly based on a 2.75% per year assumed increase in covered payroll multiplied by the current average aggregate member contribution rate of 7.65% for FY 2025.



## **SECTION IV – LIABILITIES**

In this section, we present detailed information on Program liabilities including:

- Disclosure of the Program's liabilities as of June 30, 2023 and June 30, 2024, and
- Statement of changes in these liabilities during the year.

## Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- Present Value of Future Benefits (PVB): Used for analyzing the overall financial obligations of the Program, this represents the amount of money needed today to fully fund all future benefits of the Program, assuming no new members, that active members continue to earn salary increases and accrue benefits under their current Program provisions, and that all actuarial assumptions are exactly met, including the 6.50% per year investment return.
- Actuarial Liability (AL): Used for funding calculations and GASB disclosures, this liability is calculated taking the PVB above and subtracting the value of accruals that are assigned to future years on a person-by-person basis. This offset is equal to the present value of future member contributions and future employer normal cost contributions under an acceptable actuarial cost method. For this Program and the other MainePERS DB Programs, the method used is referred to as the entry age normal (EAN) cost method, which is the only permitted actuarial cost method for GASB disclosures.
- Present Value of Accrued Benefits (PVAB): Used for communicating the liabilities for benefits accrued as of the valuation date.

Table IV-1 that follows discloses each of these liabilities for the current and prior years' valuations. With respect to the actuarial liability and the present value of accrued benefits, a subtraction of the appropriate value of the Program's assets yields, for each respective type, a net surplus or an unfunded liability. For the PVB measure, it is compared to the market value of assets plus the expected future value of contributions to the Program. The future contributions are calculated assuming the current employer and member rates will be continued for all future years along with the expected future payroll as of each date. The difference between the PVB and these anticipated resources indicates either an expected shortfall or an expected surplus representing either additional funding required or excess funding and indicates the size of the Program's stored gains or losses that remain outside of the valuation process currently.

We note that none of the liabilities presented in this report is an appropriate measure of a settlement liability.



## **SECTION IV – LIABILITIES**

The liability measures are compared to appropriate measures of assets, along with the expected future value of member and employer contributions where appropriate. The difference between the liability measure and the anticipated resources indicates either an expected shortfall or an expected surplus related to that liability measure. The surplus or shortfall on the present value of benefits (PVB) measure indicates the size of the Program's stored gains or losses that remain outside of the valuation process.

Table IV-1       Disclosure of Liabilities					
	Jı	une 30, 2023	Jun	e 30, 2024	
Present Value of Benefits (PVB)					
Active Member Benefits	\$	36,388,414	\$	39,892,918	
Retired, Disabled, Survivor, and Beneficiary Benefits		50,383,705		51,028,645	
Terminated Vested Benefits		1,161,849		1,998,314	
Terminated Nonvested Benefits		4,149		4,314	
Total PVB	\$	87,938,117	\$	92,924,191	
Market Value of Assets (MVA)	\$	87,423,240	\$	89,203,285	
Future Member Contributions		3,883,886		4,807,338	
Future Employer Contributions		1,209,432		989,293	
Projected (Surplus)/Shortfall		(4, 578, 441)		(2,075,725)	
Total Resources	\$	87,938,117	\$	92,924,191	
Actuarial Liability (AL)					
Present Value of Benefits (PVB)	\$	87,938,117	\$	92,924,191	
Present Value of Future Normal Costs (PVFNC)					
Employer Portion		5,468,080		7,270,429	
Member Portion		3,883,886		4,807,338	
Actuarial Liability (AL = PVB – PVFNC)	\$	78,586,151	\$	80,846,424	
Actuarial Value of Assets (AVA)		86,355,694		<u>87,944,771</u>	
Net (Surplus)/Unfunded (AL – AVA)	\$	(7,769,543)	\$	(7,098,347)	
Present Value of Accrued Benefits (PVAB)					
Present Value of Future Benefits (PVB)	\$	87,938,117	\$	92,924,191	
Present Value of Future Benefit Accruals (PVFBA)		13,258,812		16,252,443	
Accrued Liability (PVAB = PVB – PVFBA)	\$	74,679,305	\$	76,671,748	
Market Value of Assets (MVA)		87,423,240		89,203,285	
Net (Surplus)/Unfunded (PVAB – MVA)	\$	(12,743,935)	\$	(12,531,537)	



## **SECTION IV – LIABILITIES**

## Low-Default-Risk Obligation Measure (LDROM)

The System invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the System. Such a portfolio, however, would have a lower expected rate of return than the diversified portfolio. The LDROM represents what the funding liability would be if the System invested its assets in such a portfolio. As of June 30, 2024, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 4.44% compared to the System's discount rate of 6.50%, and the LDROM would be \$96.7 million compared to the Actuarial Liability of \$80.8 million. The \$15.9 million difference represents the expected taxpayer savings from bearing the risk of investing in the diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

If the System were to invest in the LDROM portfolio, the reported funded status would decrease, and contribution requirements would increase. Benefit security for members of the Program relies on a combination of the assets in the System, the investment returns generated on those assets, and the promise of future contributions. If the System were to invest in the LDROM portfolio, it would not change the amount of assets currently in the System, but it would reduce expected future investment returns and increase expected future contributions. However, the range of future investment returns and future contributions needed would narrow significantly.



## **SECTION IV – LIABILITIES**

## **Changes in Liabilities**

Each of the liabilities disclosed in Table IV-1 is expected to change at each subsequent valuation. The components of these changes, depending upon which liability is analyzed, can include:

- New Program members since the last valuation
- Benefits accrued since the last valuation
- Program amendments changing benefits since the last valuation
- Passage of time, which adds interest to the prior liability
- Benefits paid to members since the last valuation
- Members retiring, terminating, or dying at rates different than expected since the last valuation
- Salaries changing at rates different than expected since the last valuation
- A change in actuarial assumptions since the last valuation
- A change in the actuarial cost method since the last valuation

Unfunded liability measurements will change because of all of the above, as well as due to changes in the Program's asset measurements resulting from:

- Contributions being different than expected
- Investment earnings being different than expected
- A change in the method used to measure the Program's assets in developing the unfunded liability measure since the last valuation

In each valuation, we report on those elements of change in the Program's liability measures that are of particular significance, potentially affecting the long-term financial outlook of the Program. In Table IV-2 that follows, we present key changes in the Program's liability measures since the last valuation.

	Tabl	e IV-2		D	4 \$ 7 1
		sent Value of ure Benefits	Actuarial Liability		esent Value of Accrued Benefits
Liability Measurement – June 30, 2023	\$	87,938,117	\$ 78,586,151	\$	74,679,305
Liability Measurement – June 30, 2024		92,924,191	 80,846,424		76,671,748
Liability Measurement Increase/	\$	4,986,074	\$ 2,260,273	\$	1,992,443
(Decrease) Due to:					
Program Amendment	\$	55,424	\$ 55,424	\$	55,424
Assumption Change		0	0		0
Actuarial (Gain)/Loss		N/C	1,098,347		N/C
Benefits Accumulated			-		
and Other Sources	\$	4,930,650	\$ 1,106,502	\$	1,937,019

N/C = Not calculated



## **SECTION V – CONTRIBUTIONS**

In this section, we present detailed information on informational employer contribution rates as developed in this June 30, 2024 valuation for the Program, including the development of the employer contribution rate, comprised of the employer normal cost rate and the unfunded actuarial liability (UAL) amortization rate (UAL amortization rate).

Note that these contribution rates are only informational, and the actual contribution rates are set by the budgeting process described in the Board Summary at the beginning of this report.

## **Description of Rate Components**

For this Program, the funding methodology employed to determine the employer contribution rates is the entry age normal (EAN) cost method. Under this method, there are two components to the total employer contribution rate: the employer's normal cost rate (NC rate) and the UAL amortization rate (UAL amortization rate).

An individual EAN cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate for each member is determined by taking the value of their projected future benefits, as of entry age into the Program. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. Finally, the resulting total normal cost rate is reduced by the member contribution rate to produce the employer's normal cost rate for the member. These rates are then multiplied by each member's salary as of the valuation date and added together to get the total employer normal cost dollars as of the valuation date for the Program, which is then divided by the total payroll at the valuation date for the Program to get the employer normal cost rate for the Program.

The unfunded actuarial liability under the EAN cost method equals the present value, at the time of valuation, of the future benefit payments less the present value of future employer normal cost contributions, future member contributions, and current assets. The UAL amortization rate is the percentage that when applied to member payroll, which is assumed to increase 2.75% per year, is expected to amortize the UAL according to the Program's amortization policy, which is an open 10-year period for this Program.

## **Contribution Calculations**

Table V-1 below presents and compares the total employer contribution rate, as well as its two components, for the Program as developed in this valuation and the prior one.

Table V-1Judicial Total Employer Rate					
Valuation Date	June 30, 2023	June 30, 2024			
Employer NC Rate	12.51%	12.87%			
UAL Amortization Rate	<u>(10.81)%</u>	<u>(8.62)%</u>			
Total Employer Rate	1.70%	4.25%			

The rates developed in this section are for informational purposes only. Actual budgeted rates are set based on the ratemaking process described in the Board Summary section.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

This section contains financial disclosure information regarding the Program developed under a number of accounting standards and guidance.

First, for informational purposes, we show the Program's funded status under the Financial Accounting Standards Board (FASB) ASC Topic 960, which discloses how the market value of assets would compare to accrued liabilities if contributions were to stop and accrued benefit claims had to be satisfied as of the valuation date. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if all provisions of the Program were to terminate. We have prepared the following exhibit in this section based on FASB ASC Topic 960:

• Table VI-1: Accrued Benefits Information

The Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 establish standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in financial statements, notes to financial statements, and supplementary information. We have prepared the following exhibits reflecting provisions of GASB Statement Nos. 67 and 68:

- Table VI-2: Schedule of Changes in Net Pension Liability and Related Ratios
- Table VI-3: Sensitivity of Net Pension Liability to Changes in Discount Rate
- Table VI-4: Schedule of Employer Contributions
- Table VI-5: Average Expected Remaining Service Lives

A summary of the terminology used in GASB Statement Nos. 67 and 68 is provided in Appendix D of this report. Note that while much of the information provided in this report under GASB No. 67 is also utilized in GASB No. 68, Table VI-5 included in this section is only applicable to GASB No. 68.

Finally, we have also developed disclosure information in this section based on additional guidance relating to the Annual Comprehensive Financial Reports (ACFR) of PERS provided by the Government Finance Officers Association (GFOA) in their publication, *Governmental Accounting, Auditing, and Financial Reporting* (GAAFR). We have prepared the following exhibits reflecting guidance in the GAAFR:

- Table VI-6: Analysis of Financial Experience
- Table VI-7: Schedule of Funded Liabilities by Type

The present value of accrued benefits, the total pension liability (GASB 67/68), and the actuarial liability (GAAFR) disclosures in this section are all determined assuming that the Program is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities as of June 30, 2024 are discounted at the assumed valuation interest rate of 6.50% per annum in all of these disclosures.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-1 below includes the relevant amounts as of June 30, 2023 and June 30, 2024 as well as a reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1         Accrued Benefits Information						
FASB ASC Topic 960 Basis	June 30, 2023	June 30, 2024				
<ol> <li>Present Value of Benefits Accrued to Date (PVAB)         <ol> <li>Members Currently Receiving Payments</li> <li>Terminated Vested Members</li> <li>Terminated Nonvested Members</li> <li>Active Members</li> <li>Total PVAB</li> </ol> </li> </ol>	$ \begin{array}{r}                                     $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
2. Market Value of Assets (MVA)	87,423,240	89,203,285				
<ol> <li>Unfunded Present Value of Accrued Benefits, but not less than Zero</li> </ol>	\$ 0	\$ 0				
4. Ratio of MVA to PVAB (2)/(1)	117.1%	116.3%				
Change in Present Value of Benefits Accrued to Date	during FY 2024					
Increase/(Decrease) during Year Attributable to: Passage of Time Benefits Paid Assumption Changes Program Changes Benefits Accrued, Other Gains/Losses		\$ 4,674,148 (5,627,267) 0 55,424 2,890,138				
Net Increase (Decrease)		\$ 1,992,443				

Table VI-2 that follows shows the changes in the total pension liability (TPL), the Program's fiduciary net position (FNP) (i.e., fair value of the Program's net assets), and the net pension liability (NPL) during the measurement year ending June 30, 2024, as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2024 valuation, the fiduciary net position for this Program was projected to be available to make all projected future benefit payments for current Program members. As such, the long-term expected rate of return on the Program's investments was applied to all periods of projected benefit payments in determining the total pension liability under GASB Nos. 67 and 68. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate, and the employer contributions will be made according to the actuarial calculations developed in the biennial ratemaking process.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-2		
Schedule of Changes in Net Pension Liability and	Relat	ed Ratios
FY 2024		
<b>Total Pension Liability (TPL)</b>		
Service Cost (SC)	\$	1,747,988
Interest (includes Interest on SC)		4,985,781
Changes of Benefit Terms		55,424
Differences Between Actual and Expected		1 000 247
Experience		1,098,347
Changes of Assumptions		0
Benefit Payments, including Refunds of Member Contributions		(5 (07 )(7)
Net Change in TPL	\$	<u>(5,627,267)</u> <b>2,260,273</b>
	Ф	
Beginning of Year (BOY) TPL		<u>78,586,151</u>
End of Year (EOY) TPL	<u>\$</u>	80,846,424
Program Fiduciary Net Position (FNP)		
Employer Contributions	\$	456,322
Member Contributions		731,941
Transfers		0
Net Investment Income		6,297,740
Benefit Payments, including Refunds of Member		<i>(</i>
Contributions		(5,627,267)
Administrative Expense	<u></u>	(78,691)
Net Change in FNP	\$	1,780,045
BOY FNP		87,423,240
EOY FNP	\$	<u>89,203,285</u>
EOY Net Pension Liability (NPL)	\$	<u>(8,356,861)</u>
FNP as a Percentage of TPL		110.3%
Covered Payroll*	\$	9,567,971
NPL as a Percentage of Covered Payroll		(87.3)%
*For FY 2024		

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

None



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

A 10-year schedule of changes in NPL and related ratios is to be included within the ACFR for PERS. However, based on GASB guidance, this 10-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net Pension Liability and Related Ratios* above and believe that you can accumulate the individual years in the MainePERS ACFRs to show the full 10-year schedule. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included suggested information for such a note in the *Notes to Schedule of Changes in Net Pension Liability and Related Ratios* above. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any information they may need for this purpose.

Table VI-3 below illustrates the sensitivity of the net pension liability (NPL) to the discount rate. Changes in the discount rate affect the measurement of the total pension liability (TPL) for the Program. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the Net Pension Liability (NPL) can be very significant for relatively small changes in the discount rate.

Table VI-3Sensitivity of Net Pension Liability to Changes in Discount RateFY 2024							
	1% Decrease	Discount Rate	1% Increase				
	5.50%	6.50%	7.50%				
Total Pension Liability (TPL)	\$87,961,227	\$ 80,846,424	\$ 74,629,532				
Program Fiduciary Net Position (FNP)	89,203,285	89,203,285	<u>89,203,285</u>				
Net Pension Liability (NPL)	\$ (1,242,058)	<u>\$ (8,356,861)</u>	<u>\$(14,573,753)</u>				
FNP as a Percentage of TPL	101.4%	110.3%	119.5%				

A one percent decrease in the discount rate increases the TPL by approximately 9% and increases the NPL by approximately 85%. A one percent increase in the discount rate decreases the TPL by approximately 8% and decreases the NPL by approximately 74%.

Table VI-4 that follows provides information relating to the employer contributions for the Program. Under GASB Statement No. 67, if an actuarially determined contribution (ADC) or a contractually or statutorily required contribution (CRC) is developed for a single employer or cost-sharing plan, the following schedule is required. For purposes of this schedule, an ADC is a contribution amount determined in accordance with Actuarial Standards of Practice, and a CRC is based on statutory or contractual requirements. Both should exclude any amounts to finance specific liabilities of individual employers of the Program. If an ADC is available, the schedule of employer contributions should be developed on that basis. If there is no ADC, but there is a CRC, the schedule should be developed on that basis. Only if neither an ADC nor a CRC is developed can this schedule be omitted from the PERS's ACFR.



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

The Program's rates, set in the ratemaking process, meet the definition of an ADC, so for this Program, this schedule should be developed on that basis. Based on GASB guidance, a full 10 years of information should be shown in this schedule. We have shown only the current year of this *Schedule of Employer Contributions* below and believe that you can accumulate these in the MainePERS ACFR to show the full 10-year schedule.

Only the current year of the *Notes to Schedule of Employer Contributions* below needs to be included in the notes to this schedule. However, any factors that significantly affect trends in the *Schedule of Employer Contributions* at any point in the 10-year period should also be included in the notes to this schedule. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Employer Contributions* below. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any additional information that they may need for this purpose.

	Table VI-4 Schedule of Employer Contributions FY 2024		
Actuarially Detern	nined Contribution (ADC)	\$ 400,898	
	elation to the ADC	400,898	
Contribution Defi	ciency/(Excess)	<u>\$ 0</u>	
Covered Payroll (		\$ 9,567,971	
	Percentage of Payroll	4.19%	
*For FY 2024			
Notes to Schedule of Em	ployer Contributions		
Valuation Date:	June 30, 2021		
Timing: June 30, 2024, ADC rates are calculated based on 2022 liabilitit developed as a roll-forward of the 2021 valuation liability, adjusted for expected experience, and any assumption or methodology changed during FY 2022 using preliminary actual assets as of June 30, 2022.			
Key Methods and Assum	ptions Used to Determine Contribution Rates	<u>}</u>	
Actuarial Cost Method:	Entry age normal		
Asset Valuation Method:	Three-year smoothed market		
Amortization Method:	Level percentage of payroll, open 10-year a	mortization	
Discount Rate:	6.50%		



### SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Amortization Growth Rate:	2.75%
Price Inflation:	2.75%
Salary Increases:	2.75%
Mortality:	Healthy Retirees: 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. Active Lives: 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. Disabled Annuitants: 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Tables, respectively, for males and females. All tables projected generationally from the 2010 base rates using the RPEC_2020 model with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024 can be found in the June 30, 2022 Actuarial Valuation Report.

Other Information

None

Table VI-5 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Program. GASB Statement No. 68 requires some items be recognized by employers into pension expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed as of June 30, 2023. Note that the decision was made to use these averages based on rounding to the nearest whole year, so the values are thus shown as such.

Table VI-5 Average Expected Remaining Service Lives For Measurement Year Ending June 30, 2024							
Total ExpectedAverage RemainingStatusFuture ServiceCountServiceServiceService							
Active Members	430	58	7				
In-Pay Members	0	92	0				
Terminated Vested Members	0	3	0				
Inactives Due Refunds <u>0</u> <u>1</u> <u>0</u>							
Total Membership	430	154	3				



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-6 below is a gain/loss analysis of the changes in the actuarial liability over the past six years, reflecting variances between actual experience and assumed experience for different kinds of risk as specified in the GFOA GAAFR.

Table VI-6 Analysis of Financial Experience Gain and Loss in Actuarial Liability During Fiscal Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience								
	Gain (or Loss) For Fiscal Year Ended June 30, 2019	Gain (or Loss) For Fiscal Year Ended June 30, 2020	Gain (or Loss) For Fiscal Year Ended June 30, 2021	Gain (or Loss) For Fiscal Year Ended June 30, 2022	Gain (or Loss) For Fiscal Year Ended June 30, 2023	Gain (or Loss) For Fiscal Year Ended June 30, 2024		
Type of Activity								
Investment Income	\$ 408,141	\$ (630,358)	\$ 4,321,879	\$ 1,106,736	\$ 498,070	\$ 556,957		
Combined Liability Experience	1,087,164	(942,561)	(1,066,613)	150,154	110,488	(1,098,347)		
Gain (or Loss) during Year from Financial Experience	1,495,305	(1,572,919)	3,255,266	1,256,890	608,558	(541,390)		
Non-Recurring Items	0	0	(836,266)	(273,590)	0	0		
Composite Gain (or Loss) During Year	\$ 1,495,305	\$(1,572,919)	\$ 2,419,000	\$ 983,300	\$ 608,558	\$ (541,390)		



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-7 below compares the Program's assets as of each valuation date shown to the Program's actuarial liability divided into three separate groups: liabilities for contributions on deposit for current active members, liabilities for future benefits for inactive members, and employer-financed liabilities for current active members. This Schedule of Funded Liabilities by Type is used to assess funding progress based on what percentage of the liabilities for each of these groups the Program's assets are sufficient to cover. Per GFOA guidance, this schedule is to include this assessment for the 10 most recent years, and notes to this schedule should be provided to explain any factors that affect the comparability of the data. We do not believe such a note is needed for the measurement year ending June 30, 2024, but it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule.

			Table VI-7				
		Schedule o	f Funded Liabilities	by <mark>Type</mark>			
Aggregate Actuarial Liabilities for:							
	(1)	(2)	(3)			on of Act	
Valuation	Active	Retirees,	<b>Active Members</b>			ilities Co	
Date	Member	Vested Terms,	(Employer	Reported	by R	eported A	Assets
June 30,	Contributions	Beneficiaries	Financed Portion)	Assets*	(1)	(2)	(3)
2024	\$ 12,031,356	\$ 53,031,273	\$ 15,783,795	\$ 87,944,771	100%	100%	100%
2023	11,409,956	51,549,703	15,626,492	86,355,694	100	100	100
2022	12,044,397	50,810,744	14,570,544	83,932,655	100	100	100
2021	11,813,509	44,894,321	19,079,734	81,207,552	100	100	100
2020	12,368,756	43,098,408	16,729,946	74,766,188	100	100	100
2019	11,255,316	37,884,418	20,176,806	72,775,425	100	100	100
2018	11,180,063	36,854,246	20,257,615	69,934,400	100	100	100
2017	10,933,820	33,422,798	20,643,526	66,776,230	100	100	100
2016	10,592,002	33,418,288	19,710,981	64,265,782	100	100	100
2015	9,717,368	30,422,680	18,771,569	57,074,951	100	100	90

\* Reported assets are measured at actuarial value. Results would be different if the market value of assets were used. Despite the name of this exhibit, the liabilities presented in this schedule are not an appropriate measurement of the settlement liability of the Program.



## **APPENDIX A – MEMBERSHIP INFORMATION**

Active Member Data as of June 30, 2024	
Count	62
Average Current Age	59.1
Average Benefit Service	13.2
Average Vesting Service	14.2
Average Valuation Pay	\$ 160,298

Non-Active Member Data as of June 30, 2024					
		Average	Total Annual	Average Annual	
	<u>Count</u>	Age	Benefit	<b>Benefit</b>	
Retired	74	76.5	\$ 4,904,891	\$ 66,282	
Retired – Concurrent Beneficiary	6	72.6	86,744	14,457	
Disability	1	78.6	41,681	41,681	
Beneficiary of Above	13	84.1	589,516	45,347	
Pre-Retirement Death Beneficiary	0	0.0	0	0	
Terminated Vested	4	64.4	188,115	47,029	
Inactive Due Refund	1	NA	NA	NA	

	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members <sup>1</sup>	Deferred Vested Members <sup>2</sup>
As of June 30, 2023	58	73	18	0	1	3
New hires	8					
Rehires Movement between plans	0					
New retirees New beneficiaries due to retirements	(3)	3	2			0
New deferred vested members Non-vested terminations Refunds	(1) 0 0					1
Deaths, no future benefits Deaths with a survivor or beneficiary Benefits expired Data correction	0	(2) 0	(1) 0			
As of June 30, 2024	62	74	19	0	1	4

1. Former disabled retirees who have changed to service retirement as mandated by the Plan are still included as disabled members.

2. Deferred vested members includes those indicated to us in the data who have terminated and are eligible for a future annuity.

In preparing this report, we relied on data provided by MainePERS as modified following the procedures outlined in the State of Maine Data Processing Notebook. Adjustments to the data are made based on this processing notebook. Accuracy of the results is dependent on the completeness of the underlying information. The plan sponsor is responsible for the validity and completeness of the information provided. We believe the data provided as modified as documented in the Processing Notebook is sufficient for the actuarial analysis performed.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

# 1. Membership

Membership is a condition of employment for all judges serving on or after December 1, 1984.

Membership ceases on the earlier of withdrawal of contributions, retirement, or death.

Judges who retired prior to December 1, 1984 are covered under a different program.

#### 2. Member Contributions

Members are required to contribute 7.65% of earnable compensation. Member contributions earn annual interest at the rate adopted by the Board of Trustees each February.

# 3. Average Final Compensation

For purposes of determining benefits payable, average final compensation is the average annual rate of earnable compensation for the three years of creditable service (not necessarily consecutive) that produce the highest such average.

For active judges as of July 1, 2003, July 1, 2004, and July 1, 2010, average final compensation shall be increased to reflect missed salary increases.

#### 4. Creditable Service

Creditable service includes the following:

- A. All judicial service as a member after November 30, 1984,
- B. All judicial service before December 1, 1984,
- C. Service credited while receiving disability benefits under the Program, and
- D. All service creditable under the State Employee and Teacher Program provided the member elects to have the member's and the employer's contributions on behalf of such service transferred to the Judicial Program.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

## 5. Service Retirement Benefits

Eligibility:

# A. Eligibility for Members with at Least 10 Years of Creditable Service on July 1, 1993

i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 70 with at least one year of service immediately before retirement.

iii. Eligibility for members not in active service at retirement and not in active service on or after October 1, 1999:

Attainment of age 60 and 10 years of creditable service.

iv. Eligibility for members not in active service at retirement, but in active service on or after October 1, 1999:

Attainment of age 60 and five years of creditable service.

# B. Eligibility for Members with Less Than 10 Years of Creditable Service on July 1, 1993

i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 70 with at least one year of service immediately before retirement.

iii. Eligibility for members not in active service at retirement and not in active service on or after October 1, 1999:

Attainment of age 62 with 10 years of creditable service.

iv. Eligibility for members in active service on or after October 1, 1999:

Attainment of age 62 and five years of creditable service.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

# C. Eligibility for Members with Less Than Five Years of Creditable Service on July 1, 2011

i. Eligibility for members in active service and inactive members:

25 years of creditable service.

ii. Eligibility alternative for members in active service:

Attainment of age 70 with at least one year of service immediately before retirement.

iii. Eligibility for members not in active service at retirement and not in active service on or after October 1, 1999:

Attainment of age 65 with 10 years of creditable service.

iv. Eligibility for members in active service on or after October 1, 1999:

Attainment of age 65 and five years of creditable service.

Benefit Sum of:

- (1) for service after November 30, 1984 and before July 1, 1998 and creditable service allowed under Section 1302(3), 2% of average final compensation multiplied by years of service,
- (2) for service on or after July 1, 1998, 3% of average final compensation multiplied by years of service, and
- (3) for judicial service prior to December 1, 1984, 75% of November 30, 1984 salary for the position held at retirement, pro-rated for prior service less than 10 years.

The benefit is reduced for retirement before age 60 at the approximate rates listed in the table below, for members with at least 10 years of creditable service on July 1, 1993.

Age	Reduction	Age	Reduction
45	29.3%	53	16.6%
46	28.0	54	14.6
47	26.6	55	12.5
48	25.2	56	10.3
49	23.6	57	7.9
50	22.0	58	5.4
51	20.3	59	2.8
52	18.5	60	0.0



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

The benefit is reduced for retirement before age 62 by 6% for each year the member's age is less than age 62, if less than 10 years creditable service on July 1, 1993, but at least five years creditable service on July 1, 2011.

The benefit is reduced for retirement before age 65 by 6% for each year the member's age is less than age 65, if less than five years of creditable service on July 1, 2011.

Maximum Benefit: Total benefit cannot exceed 70% of average final compensation except as provided under the minimum benefit provision.

Minimum Benefit: For a judge in service and age 50 or older on December 1, 1984, 75% of salary on June 30, 1984 for the position held at retirement, increased by 6% per year from June 30, 1984 to June 30, 1989 or retirement date if earlier, and increased beyond June 30, 1989 by the cost-of-living increase granted the previous September.

Form of Payment: Life annuity, except for a judge in service and age 50 before December 1, 1984, 50% joint and survivor annuity to surviving spouse.

#### 6. Disability Retirement Benefits Other Than No-Age Benefits (See Item 7)

Eligibility: Disabled as defined in the Judicial Retirement Program statutes prior to normal retirement age, employed prior to October 16, 1992 and did not elect the No-Age Disability Benefits, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 66<sup>2</sup>/<sub>3</sub>% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the earlier of age 70 or the date that the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited, and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of  $66^{2}/_{3}$ % of average final compensation or at age 70, if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

#### 7. No-Age Disability Retirement Benefits

Eligibility: Disabled as defined in the Judicial Retirement Program statutes, employed on or after October 16, 1992 or employed prior to October 16, 1992, and elected the provisions of No-Age Disability, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 59% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation. A member in service on November 30, 1984 may elect benefits applicable for retirement before December 1, 1984.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after two years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the date the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited, and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (not subject to the COLA Cap) (see item 12). On the date when service benefits reach a level of 59% of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that time.

#### 8. Pre-Retirement Ordinary Death Benefits

Eligibility: Death while active, inactive eligible to retire, or disabled not resulting from an injury received in the line-of-duty.

Benefit: Designated beneficiary, spouse, children, or parents entitled to benefit calculated as if the deceased member had retired under Option 2 (see item 13); however, the beneficiary may elect survivor benefits payable to a surviving spouse, dependent children, parent, or other designated beneficiaries in monthly amounts varying by the status of beneficiary and number of eligible survivors. Otherwise, accumulated contributions with interest are payable to the designated beneficiary, spouse, children, older parents, or estate.

Minimum Benefit: For a judge in service prior to December 1, 1984, one-half of the judge's retirement benefit determined on date of death, payable to the spouse and/or dependent children.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

# 9. Pre-Retirement Accidental Death Benefits

Eligibility: Death while active or disabled resulting from an injury received in the line-of-duty. Benefit:

- If the member leaves no dependent children, two-thirds of the member's average final compensation to the surviving spouse until death.
- If the member is survived by a spouse who has the care of dependent children of the member, the surviving spouse shall receive an annual sum equal to the member's average final compensation while having the care of dependent children. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member is survived by a spouse who does not have the care of the member's dependent children, the surviving spouse and dependent children shall share equally an annual sum equal to the member's average final compensation. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member leaves no spouse, the dependent children shall share an annual amount equal to the member's average final compensation. Benefits will cease when the last dependent child no longer meets the definition of "dependent child."

# 10. Termination Benefit

Eligibility: Termination of service other than by retirement or death with at least five years of creditable service.

Benefit: The member's choice of a refund of the accumulated contributions with interest or a retirement benefit using creditable service and average final compensation as of the date of termination, deferred to normal retirement age.

#### 11. Refund of Contributions

Eligibility: Termination of service other than by retirement or death with less than five years of creditable service.

Benefit: Refund of member's accumulated contributions with interest.



#### **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

## 12. Cost-of-Living Adjustments (COLA)

All service and disability retirement and survivor benefits are adjusted each year that there is a percentage change in the Consumer Price Index (CPI), based on the Index. If the percentage change is negative, then no adjustment is made in that year. In subsequent years, the adjustment that would have been made will be adjusted downward to the extent necessary to recoup the full actuarial value of not having made the previous year's negative adjustment. This process of adjustment may occur over a multi-year period if needed to recoup the full value of negative changes in the Index.

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA Base whose value grows annually with the same adjustment as the COLA (see values below) for all benefits that have been in payment for at least 12 months as of that date. The maximum annual increase, or COLA Cap, is three percent. Average final compensation used in determining disability benefits for disabled members is similarly adjusted for purposes of determining the recipient's service retirement benefit if and when the recipient moves to service retirement.

COLA Base History: (value as of September 1 of listed year when COLA effective):

 $\begin{array}{l} 2014 - \$20,000.00\\ 2015 - \$20,420.00\\ 2016 - \$20,940.71\\ 2017 - \$21,474.70\\ 2018 - \$21,818.30\\ 2019 - \$22,451.03\\ 2020 - \$22,810.25\\ 2021 - \$22,947.11\\ 2022 - \$24,186.25*\\ 2023 - \$24,911.84\\ 2024 - \$25,659.20\\ \end{array}$ 

\* Special legislation was passed to pay an additional one percent COLA above the maximum COLA Cap of three percent. In addition, the COLA Base was increased by the full CPI change of 5.4%.

Members who did not have 10 years of service on July 1, 1993 will begin receiving the cost-of-living adjustments at the later of 12 months after their normal retirement age and the first September 1 following a minimum of 12 months of being in receipt of their benefit.

Minimum benefits are increased 6% per year from July 1985 through June 1989 and as described above thereafter.

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.



# **APPENDIX B – SUMMARY OF PROGRAM PROVISIONS**

## 13. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:

Full Benefit: Unadjusted benefit paid for the life of the member only.

Option 1: Cash refund equal to the remaining member contribution balance, if any, at the date of death (where the member contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by member contributions).

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.

Option 5: Designated percentage of the benefit (not less than 51%) payable to the member, with the remaining percentage (the two to equal 100%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lower-percentage benefit ceases to be paid.

Option 6: 100% joint and survivor annuity (Option 2) with pop-up\*.

Option 7: 50% joint and survivor annuity (Option 3) with pop-up\*.

Option 8: Option 4 with pop-up\*.

\* The "pop-up" feature attached to a given Option means that in the case of a beneficiary predeceasing the member, the member's benefit will be revised prospectively to the amount that the benefit would have been had the member selected Full Benefit payment upon retirement.

# 14. Program Changes Since Prior Valuation

An ad-hoc 3% non-cumulative COLA was paid in November 2023 to eligible in-pay participants. This payment had no effect on future benefits payable.

This Appendix B is intended to be a brief summary of provisions. In the event of a dispute, applicable statutes and administrative policy supersede this report description.



# **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# **A. Actuarial Assumptions**

1. Annual Rate of Investment Return

Judicial 6.50%

Rate is net of both administrative and investment expense.

2. LDROM Discount Rate

Judicial 4.44%

3. Cost-of-Living Adjustment (COLA) Assumed Rate

Judicial 2.20%

4. Annual Rate of Individual Salary Increase:

Judicial	2.75%

5. Sample Rates of Termination (% at Selected Ages)

	100
Age	Termination Rate
25	7%
30	6
35	5
40	4
45	3
50	2
55	1
	40 45 50

Non-vested members are assumed to take a refund of contributions with interest. Once vested, the member is assumed to elect the greater of the deferred vested benefit or a refund of member contributions with interest based on present value at the time of termination.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

	Showing values in 2024		
Age	Male	Female	
50	31	24	
55	46	34	
60	70	47	
65	102	69	
70	157	110	
75	264	196	
80	478	364	
85	884	695	
90	1,547	1,308	
95	2,421	2,143	

6. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Rates are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. The rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.

7. Sample Rates of Mortality for Active Lives at Selected Ages (number of deaths per 10,000 members)\*

Showing values in 2024		
Age	Male	Female
20 25	3	1
25	3	1
30	4	2
35	6	3
40	7	4
45	9	5
50	12	7
55	17	11
60	27	17
65	39	25

\* 5% of deaths assumed to arise out of and in the course of employment.



# **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

Rates are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model as described in the healthy annuitant mortality.

8. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Showing values in 2024				
Age	Male	Female		
25	36	21		
30	54	37		
35	74	58		
40	91	76		
45	113	98		
50	159	141		
55	216	181		
60	274	210		
65	325	220		
70	383	258		

Rates are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.



## **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

Age	NRA	NRA	NRA	
	60	62	65	
60-61	1,000	NA	NA	
62	1,000	200	NA	
63	1,000	275	NA	
64	1,000	350	NA	1
65	1,000	425	400	
66	1,000	500	500	9
67	1,000	450	450	
68	1,000	400	400	
69	1,000	350	350	
70	1,000	300	300	
71-75	1,000	250	250	
76-79	1,000	500	500	
80+	1,000	1,000	1,000	

#### 9. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members)

In the case of Judicial employees, NRA 60 refers to those who had accrued at least 10 years of service by July 1, 1993. NRA 62 refers to those who had not accrued at least 10 years of service by July 1, 1993 or were hired after that date but had five years of service by July 1, 2011. NRA 65 refers to those who did not have five years of service by July 1, 2011.

# 10. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000 members)

No disability incidents are assumed.

#### **11. Family Composition Assumptions**

80% of active members are assumed to be married and have two children born when the member is 24 and 28; children are assumed dependent until age 18; a female spouse is assumed to be three years younger than a male spouse; member is assumed to have no dependent parents; unmarried members are assumed to have beneficiaries entitled to benefits worth 80% as much as those of married members' beneficiaries.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

#### 12. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year.

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: Reflect actual historical member contribution interest rates from 1970 through the valuation; future contribution interest assumed to equal the inflation assumption of 2.75%.

COLA Timing: September 1.

#### **13. Rationale for Assumptions**

The demographic assumptions were adopted by the Board of Trustees at their March 11, 2021, meeting. The discount rate was adopted by the Board of Trustees at their August 12, 2021, meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015, through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. In our professional judgment, the combined effect of the assumptions has no significant bias.

The LDROM discount rate is the single equivalent rate determined by matching System cash flows to US Treasury Securities yields as of the measurement date as published by the Federal Reserve.

#### 14. Changes Since Last Valuation

The LDROM discount rate was updated to 4.44% based on Treasury yields as of June 30, 2024.

#### 15. Rationale for Change in Actuarial Assumptions

N/A

#### 16. Disclosure for Reasonable Actuarially Determined Contribution Method

The rates determined in the ratemaking process and shown in Table I-2 meet the requirements of a reasonable ADC as defined by the Actuarial Standards of Practice. The actuarial methods used to determine the reasonable ADC have been selected to balance benefit security, intergenerational equity, and stability of contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

#### 17. Disclosure of Models Used

**ProVal:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020 used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

# **B.** Actuarial Methods

#### 1. Funding and LDROM Cost Method

The entry age normal actuarial cost method is used to determine costs. Under this cost method, the total employer contribution rate consists of two elements: the employer normal cost rate and the unfunded actuarial liability (UAL) rate.

Under this method, the actuarial present value of the projected benefits of each active included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to the year beginning on the valuation date is called the normal cost. For each active, the normal cost is determined by taking the value, as of entry age into the Program, of the member's projected benefits, reduced by the value of future member contributions, and then dividing it by the value, also as of the member's entry age, of the member's expected future salary. This rate is then multiplied by the member's salary at the valuation date to produce the normal cost for each member, which is then aggregated across all members to get the total normal cost for the Program. This total normal cost rate for the Program.

The portion of the actuarial present value not provided for at the valuation date by the actuarial present value of the future normal costs is called the actuarial liability. The unfunded actuarial liability is defined as the total actuarial liability at the valuation date less the actuarial value of the Program's assets at the valuation date. Contributions are made to fund this unfunded actuarial liability (UAL). The UAL amortization rate for this Program is developed by amortizing the unfunded liability over an open 10-year period, assuming these amortization payments increase over the previous year at a rate of 2.75% per year. The resulting amortization for the year beginning on the valuation date is then divided by the total payroll for the Program to develop the UAL amortization rate. Amortization payments are assumed to be made in each pay period. All assumption changes and gain/losses are included in the UAL amortization except for Program changes that are fully funded at the time of implementation.

The total rate for the Program is produced by adding the normal cost rate and the UAL amortization rate, subject to the requirement that the total rate cannot be less than 0%.

By using an open amortization period, this cost method results in the expectation that any unfunded liability in the Program as of a valuation date will never be fully reduced to zero if all of the valuation assumptions are exactly met.



#### **APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS**

#### 2. Asset Valuation Method

For purposes of determining the State contributions to the Program and the Program's funded ratio, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on the cash flows for the year and imputed returns at the actuarial assumption. This expected value is compared to the actual fair value at the valuation date and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

#### 3. FASB ASC Topic 960 Cost Method:

The cost method for valuation of liabilities for FASB ASC Topic 960 purposes is the Unit Credit Cost method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of accrued benefits methods is that the funding pattern follows the pattern of benefit accrual. The accrued liability, which is determined for each Participant as of each valuation date, represents the actuarial present value of each Participant's benefit earned prior to the valuation date.

## 4. Changes Since Last Valuation

None

#### 5. Rationale for Change

N/A



## **APPENDIX D – GLOSSARY OF GASB TERMS**

## 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

# 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

# 3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

# 4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

# 5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB Nos. 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

#### 6. Measurement Date

The date as of which the Total Pension Liability and Program Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the Program.



## **APPENDIX D – GLOSSARY OF GASB TERMS**

## 7. Net Pension Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Program Fiduciary Net Position.

## 8. Program Fiduciary Net Position

The fair or market value of assets.

# 9. Reporting Date

The last day of the Program or employer's fiscal year.

#### **10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

## **11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.





Maine Public Employees Retirement System

**Consolidated Plan for Participating Local Districts** 

Actuarial Valuation Report as of June 30, 2024

Produced by Cheiron October 2024

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October 10, 2024

Board of Trustees Maine Public Employees Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

We are pleased to submit the June 30, 2024 Actuarial Valuation Report for the Consolidated Plan for Participating Local Districts (Plan) of the Maine Public Employees Retirement System (MainePERS or System).

The purpose of this report is to present the annual actuarial valuation of the Participating Local Districts (Plan) of the Maine Public Employees Retirement System. This report contains information on assets, liabilities, and contributions of the Plan, as well as required accounting statement disclosures under the Governmental Accounting Standards Board (GASB) Statement No. 67.

In preparing our report, we relied on information, some oral and some written, supplied by the System's staff. This information includes, but is not limited to, the Plan provisions, employee data, and financial information as of the valuation date. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

Future results may differ significantly from the current results presented in this report due to such factors as the following: Plan experience differing from that anticipated by the assumptions, changes in assumptions, and changes in Plan provisions or applicable law.

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

Board of Trustees Maine Public Employees Retirement System October 10, 2024 Page ii

This actuarial report was prepared exclusively for MainePERS for the purposes described herein and for use by the Plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely, Cheiron

Bonnie Rightnour, FSA, EA Principal Consulting Actuary Fiona E. Liston, FSA, EA Principal Consulting Actuary Gene Kalwarski, FSA, EA Principal Consulting Actuary

CC: Greg Reardon, Cheiron Kathleen Weaver, Cheiron

## FOREWORD

Cheiron has completed the Actuarial Valuation Report for the Consolidated Plan for Participating Local Districts (Plan) of the Maine Public Employees Retirement System (MainePERS or System) as of June 30, 2024. The purpose of this report is to:

- 1) Measure and disclose, as of the valuation date, the financial condition of the Plan,
- 2) Examine trends, both historical and prospective, in the condition of the Plan,
- 3) Assess and disclose actuarial risks of the Plan,
- 4) Report on the contribution rates developed in this valuation for informational purposes for the Participating Local Districts (PLDs) and members for fiscal year (FY) 2026 in aggregate (Note: the actual contributions to be paid by PLDs and members specific to each Regular and Special Plan within the Plan for FY 2026 will be developed consistent with the ratemaking policy of the MainePERS Board of Trustees and provided under separate cover), and
- 5) Provide specific information required for MainePERS's financial disclosures.

An actuarial valuation establishes and analyzes assets and liabilities on a consistent basis and tracks the progress of both from one year to the next. It includes measurement of investment performance as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our key findings, disclosing important Plan trends in recent years, and providing analysis relating to the future status of the Plan.

Section II assesses and discloses various actuarial risk measures of the Plan.

Section III contains details on various asset measures, together with pertinent performance measurements.

Section IV shows similar information on liability measures for various purposes, including analysis of key changes in the measures.

**Section V** develops informational PLD and member contribution rates for the Plan in aggregate for FY 2026. (The actual rates paid for each specific Regular and Special Plan within the Plan are developed consistent with the risk-sharing framework of the MainePERS Board of Trustees and provided under separate cover.)

Section VI includes financial disclosure information.

Finally, we present appendices containing the following summaries:

- Plan elections that have been made by the participating local districts (PLDs) at the valuation date (Appendix A),
- Plan membership information at the valuation date (Appendix B),
- Major benefit provisions of the Plan and the various Regular and Special Plans included in the Plan (Appendix C),
- Actuarial assumptions and methods used in the current valuation (Appendix D), and
- Terminology used in the Governmental Accounting Standards Board (GASB) disclosures (Appendix E).



#### **SECTION I – BOARD SUMMARY**

# **General Comments**

Most of the participating local districts in the State of Maine participate in this Consolidated Plan for the Participating Local Districts (Plan). The Plan offers a number of Plan options from which each Participating Local District (PLD) can choose, with each option having its own specific contribution rates to be paid by both the member and their associated PLD. Both the member contributions and the PLD contributions are paid as distinct rates that are set by the risk-sharing framework adopted by the MainePERS Board of Trustees and are applicable to payroll. Prior to the 2018 valuation, the member rates were static and set by the Board, while the PLD rates were established using the previous corridor method.

The results of this June 30, 2024 valuation will be used to develop the specific rates for both PLDs and members of each Regular and Special Plan within the Plan for FY 2026. This report develops the Actuarially Determined Plan Total Rate and the Plan-Specific Normal Cost Rates that are the basis of this process to develop the specific rates. The results of this June 30, 2024 valuation will also be used for accounting disclosures.

# Experience from July 1, 2023 through June 30, 2024 (FY 2024)

With respect to investment experience, measured on a market value of assets (MVA) basis, MainePERS experienced an investment return of positive 7.43% for the fiscal year ending June 30, 2024. This is more than the assumed rate of return of 6.50%. However, given the three-year asset smoothing method in place, only one-third of that gain is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore, the asset smoothing also resulted in recognizing one-third of prior deferred asset gains of \$47 million during FY 2024 for this Plan. As a result, the investment return measured on a smoothed, actuarial valuation of assets basis was 7.26%. This is also greater than the 6.50% assumed rate of return in effect for FY 2024, resulting in a gain on investments for the year of \$29.2 million.

With respect to liability experience, the Plan experienced a liability loss of \$150.6 million above the expected growth of \$160.9 million (a 3.5% growth in total liabilities beyond expected growth). Of this increase, approximately \$11.6 million was attributable to the payment of 2.5% capped cost-of-living adjustments (COLA) exceeding the 1.91% assumption. In addition to the regular COLA adjustment, a 0.5% one-time COLA payment was paid to eligible retirees during FYE 2024. About \$58 million of this loss was due to an understatement of the liability loss in 2023, and the \$81 million balance was primarily attributable to salaries being greater than expected.

For FY 2024, the resulting new UAL amortization base is a net loss of \$105 million. Combining the investment and liability experience, the Actuarially Determined Plan Total Rate produced a net experience loss of \$121 million. In addition, there was a \$16 million gain due to contribution timing. There will always be a contribution timing gain or loss because the UAL amortization from a given valuation is not incorporated into the contribution until the fiscal year that begins one year later. Finally, this translates to a Plan total contribution rate, reflecting all Plans within the



#### **SECTION I – BOARD SUMMARY**

Consolidated Plan for Participating Local Districts, of 19.2%. This is an increase of 0.6% compared to the June 30, 2023 Plan total contribution rate of 18.6% of payroll. The Plan-Specific rates for each PLD and members of each Regular and Special Plan for each fiscal year are developed annually in letters provided under separate cover. The rates for FY 2024 were developed in a letter dated November 9, 2022, and the rates for FY 2025 were developed in a letter dated November 20, 2023. The Plan-Specific Rates for both the PLD and members for each Regular and Special Plan for FY 2026 based on this June 30, 2024 valuation will be provided under similar separate cover.

Note that this Total Rate differs from that tracked for the other MainePERS Programs as it reflects contributions from both members and the employers, the PLDs in the case of this Plan. In the other Programs, the employer-only portion of the contribution is reported in the equivalent experience sections. The reason for this difference is that in this Plan, the contributions from members change with experience similar to the contributions from employers, so it makes sense to track the progress of the Total Rate.

As of the June 30, 2024 valuation, the Plan has an unfunded actuarial liability (UAL) of \$457.8 million based on the actuarial value of assets (AVA). This represents an increase of \$91.7 million from the \$366.1 million AVA UAL measured as of June 30, 2023. This compares to an expected decrease in the UAL of \$13.5 million. The specific factors contributing to this change are presented in Table I-1 that follows. This table has separate columns showing the components of the changes in liabilities and investments during FY 2024 as well as their combined effect on the UAL.

	Table I-1		
(Amo	unts in Millions) Liabilities	Assets*	UAL
Value as of June 30, 2023	\$ 4,165.8	\$ 3,799.7	\$ 366.1
Expected Change	160.9	175.3	(14.4)
Impact of Plan Changes	0.9	0.0	0.9
Impact of Assumption Changes	0.0	0.0	0.0
Impact of Contribution Timing	0.0	16.2	(16.2)
<b>Recognized Investment Gain</b>	0.0	29.2	(29.2)
Recognized Liability Loss	150.6	0.0	150.6
Value as of June 30, 2024	\$ 4,478.2	\$ 4,020.4	\$ 457.8

\* This table uses actuarial value of assets. Results would be different if the market value were used.

The remainder of this Board Summary section summarizes the Plan's historical trends, provides baseline projections of the Plan's future status, and summarizes the principal results of the valuation. These principal results compare key results between this and last years' valuations for member counts, assets and liabilities, and total contribution rates.



## **SECTION I – BOARD SUMMARY**

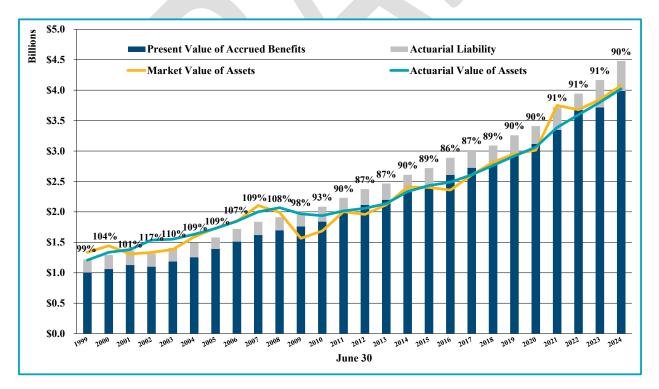
# Trends

It is important to take a step back from the latest results and view them in the context of the Plan's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Plan's condition. In addition to considering the past, examining future possible trajectories of the Plan is also vital to understanding the current results. Baseline projections are provided in this Board Summary, and the potential variability of these results is explored further in the risk section of this report.

# Assets and Liabilities

The following graph illustrates the progress of assets and liabilities for the Plan as well as the Plan's funded ratio on an actuarial value of assets (AVA) basis since June 30, 1999.

Liability measures are shown as bars as of June 30 of the indicated years. The actuarial liability (AL), the liability measure used for the Plan's funding purposes, is represented by the top of the grey bars. The blue bars represent the present value of accrued benefits (PVAB). These liability measures are discussed further in Section IV. Measures of the assets are shown as lines. The AVA is shown with a teal line, while the market value of assets (MVA) is shown as a yellow line. The AVA divided by the AL is the AVA funded ratio that is often used in evaluating the Plan's funded status. The value of this metric at each valuation date is shown as the percentages in the graph labels.



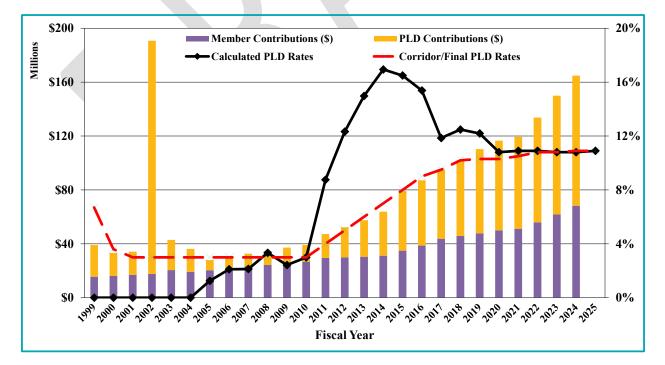


#### **SECTION I – BOARD SUMMARY**

This graph shows that the Plan had its highest AVA funded ratio (117%) over the period shown as of June 30, 2002, which was just after several PLDs paid off their Initial Unpooled Unfunded Actuarial Liabilities (IUUALs). After that, the funded ratio was relatively stable around 107-110% until the financial market events of 2008-2009 resulted in the ratio dropping below 100%. Following that drop, the ratio stabilized again beginning June 30, 2011 and has stayed in the range of 86-91% since that time. Measured on an MVA basis, the funded ratio is 91.1%, a slight decrease over last year's 92.3% MVA funded ratio.

#### Contributions

The next graph shows the history of contributions to the Plan, both as dollar amounts and as percentages of payroll. The bars in this graph show the contributions made by both the PLDs and the members in dollar terms for each fiscal year (FY) as indicated by the horizontal axis since 1999. These bars are read using the left-hand axis. Through FY 2019, the black line shows the actuarially calculated total pooled PLD contribution rate as a percentage of payroll for the fiscal year indicated. Beginning with FY 2020, the amount shown by the black line is the Actuarially Determined Plan PLD Rate under the risk-sharing framework. Similarly, the red dotted line in this graph shows the aggregate corridor contribution rate actually in effect for each year through FY 2019 and then shows the Aggregate Final PLD Rate, which reflects all adjustments from the risk-sharing framework, beginning with FY 2020. For both of these rates, which are read using the rates through FY 2025, the latest year for which the Aggregate Final PLD rate, which corresponds with the rates that will actually be paid, has been developed. Note that both the red and black lines represent the rates that apply to the PLDs and do not include the member rate.





#### **SECTION I – BOARD SUMMARY**

The significant increase in the total calculated rate from FY 2010 to FY 2014 was due primarily to investment losses sustained in the 2008-09 market events. The increases in the aggregate corridor rate during this period combined with benefit changes made progress to close the gap between these two rates through FY 2019, the last year that the method used to determine the actual contributions paid by the PLDs was the corridor method. Beginning with FY 2020, the calculated rate has been determined with the risk-sharing framework. Initially, this calculated rate (the Actuarially Determined Plan PLD Rate shown by the black line) was slightly above the actual final rates being paid (the Aggregate Final PLD Rate shown as the red line) as the risk-sharing framework was phased in, but beginning with the Final Rates developed based on the June 30, 2021, valuation, these two rates have converged. Note, however, that while the total rates have converged, the allocation of the rate between PLDs and members is still being phased in, but we anticipate these will also converge as the risk-sharing framework is fully phased in.

The majority of the actual PLD contribution dollars shown are based on the rates determined by the funding methodology in effect for the period, but some PLDs also pay an additional IUUAL contribution to amortize the liability specific to their members as well as contributions related to purchases of service by members. Note that the large dollar amount contributed in FY 2002 by the PLDs in the previous graph was due to several PLDs paying off their IUUAL amounts as IUUAL contributions are included in the PLD contributions shown in the yellow bars.

Through FY 2019, the member contribution rates were fixed values, ranging from 4.5% to 9.5%, as set by statute and the Board, specific to the Regular or Special Plan in which each member participates. Beginning with FY 2020, the member contribution rates are determined under the risk-sharing framework adopted by the Board as described in the General Comments section of this Board Summary. The Aggregate Final PLD Member Rate in effect for FY 2025 is 7.8%.

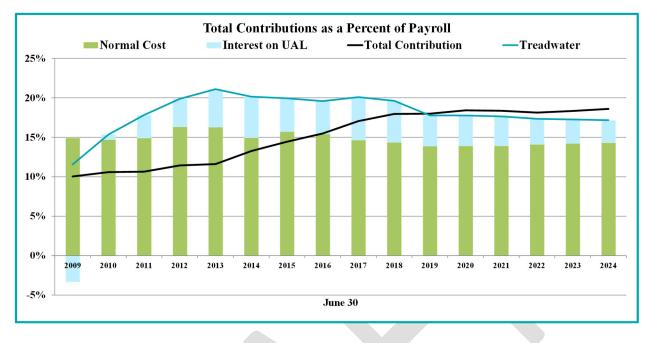
Note that in addition to the member contribution rates varying by the specific Plan each member is in, for those participating in Regular Plans, members with an Age 65 normal retirement age (NRA) contribute at a lower rate than those in the NRA 60 plans. See the description of these items in Section V for additional information. The specific rates by Plan for FY 2025, the most recent year currently developed, range from a low of 3.35% for the Age 65 Plan Member Rate under Plan BC to a high of 10.1% for members in Plans 1C.

The next chart compares the total contribution rate to a rate we refer to as the "tread water" rate. The tread water rate is that rate of payroll which, if contributed, would result in the UAL remaining the same in the following year if all experience exactly matched the assumptions. The tread water rate is the full normal cost plus interest on the UAL.

As can be seen in the following chart, the total contribution rate has exceeded the tread water rate since 2019.



# **SECTION I – BOARD SUMMARY**



# **Baseline Projections**

Our analysis of the projected financial trends for the Plan is an important part of this valuation. In this section, we project future valuation results, focusing on the previously referenced AVA funded ratio (AVA over AL), the expected Actuarially Determined Plan PLD Rate, and the expected Actuarially Determined Plan Member Rate. Here we present a baseline projection of these metrics based on all actuarial assumptions being exactly met during the projection period, including the assumed 6.50% investment return being achieved each year. In the risk section of the report, we demonstrate the sensitivity of future valuation results to deviations in actual returns from the assumed investment returns by presenting similar projections based on investments earning an average return similar to the assumed return but deviating from the assumed rate in the individual years over the 20-year projection period.

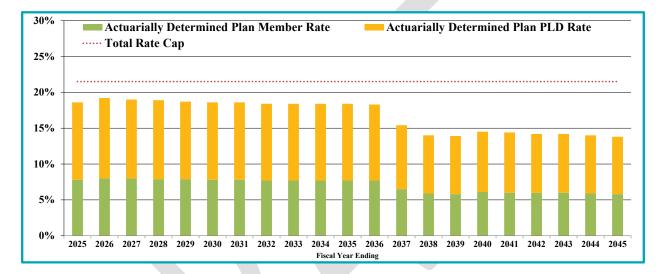
Note that in these projections, we have assumed that the PLD and member contributions received by the Plan are the actuarially determined amounts developed as of the valuation date one year prior to the beginning of each fiscal year rather than the Plan-Specific contributions developed under the risk-sharing framework. If the actual contributions received are different from this assumption, the results will vary. However, as the risk-sharing framework has been largely phased in at this point, with the actuarially determined and final aggregate rates having fully converged and the only differences between the actual and calculated contributions being in the allocations between the PLDs and the members, no significant variation is anticipated as a result of this assumption.

In addition, in these baseline projections, as well as the varying return projection scenarios in the next section, we have assumed that the Aggregate Final Total Rate is subject to a minimum equal to 100% of the total normal cost at that time, allocated 58% to the PLDs and 42% to the members.



#### **SECTION I – BOARD SUMMARY**

For example, based on the 14.3% total normal cost produced in this June 30, 2024 valuation, this currently results in a minimum contribution of 8.3% for the PLDs and 6.0% for the members. In developing these projections, we have also reflected the anticipated decline in the total normal cost over time as members under the newer tier, which provides lower benefits and hence a lower normal cost, replace current members in the older tier. Actual minimums under the risk-sharing framework have not yet been adopted by the Board, but it is our understanding that the Board's intent is to have a minimum similar to this. If the actual rules differ such that the otherwise determined contributions would go below this assumed minimum contribution level, the resulting projections would vary.



The graph above shows the expected progress of the Actuarially Determined Plan Member Rate and Actuarially Determined Plan PLD Rate over the next 20 years assuming that the Plan's assets earn 6.50% on their *market value* as well as all other current assumptions being exactly met in each year of the 20-year projection period. In addition, these projected contribution rates also reflect any prior years' actual investment gains or losses that have not been fully recognized in this valuation. The green bars represent the Actuarially Determined Plan Member Rate, while the yellow bars represent the Actuarially Determined Plan PLD Rate. The combined bars thus represent the Actuarially Determined Plan Total Rate. Note that these rates represent the rates expected to be calculated for the Plan as a whole, as opposed to the Plan-Specific rates developed under the risk-sharing framework. However, as previously noted, these rates have now converged when considered in total with only the allocation between the members and PLDs continuing to be phased in.

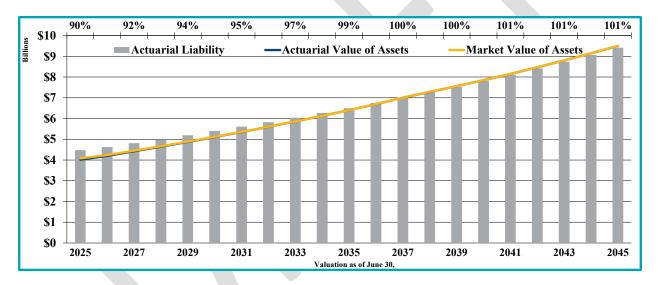
Assuming all assumptions are exactly met, it is projected that the contributions will decline through FY 2036 when the existing UAL will be paid off and then hover around the Plan's total normal cost rate. However, in reality, there will be gains and losses each and every year resulting in new amortization layers (negative or positive) as well as additional layers reflecting changes such as assumption or benefit changes. This concept is explored further in the risk section of this report.



#### **SECTION I – BOARD SUMMARY**

This graph also includes a dashed red line showing the 21.5% Total Rate Cap for the Program, which is composed of 12% PLD Contribution Rate Cap and a 9.5% Member Contribution Rate Cap. In this baseline projection, this Total Rate Cap is not hit in any of the years of the projection. In years that the contributions are limited by these caps, temporary reductions in the COLA are implemented under the provisions of this Plan to make up the difference in the actuarially determined contributions and the actual contributions limited by these caps. Since the Total Rate Cap is not hit in any of the years of this baseline projection, no temporary COLA reductions are required and thus the percentage of the COLA to be paid each year of the projection is 100%.

The graph below shows the projected AVA funded ratio (AVA divided by AL) over the next 20 years in this baseline scenario. It shows that the Plan's AVA funded ratio is projected to improve from the starting level of 90% as of FY 2025 to 101% in FY 2045. The amounts shown are as of June 30 of the year identified in the horizontal axis. The Plan's funded ratio exceeds 100% due to the lag in the development of contributions and when they are paid as well as the assumed minimum contributions to the Plan. Note that if these ratios used market value of assets (MVA), the funded ratios would be different.



# **Principal Results Summary**

The last section of this Board Summary presents a summary of the principal results of the valuation, comparing key results between this and last years' valuations for member counts, assets and liabilities, and contribution rates. These summary results are shown for the total Consolidated Plan as well as the division into the Regular Plans subgroup and the Special Plans subgroup.



# **SECTION I – BOARD SUMMARY**

Table I-2 Summary of Principal Results PLD Consolidated Retirement Plan Total				
	Valuation as of June 30, 2023	Valuation as of June 30, 2024	% Change	
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members Terminated Vested Members	13,122 7,905 2,128 179 403 2,865	13,561 8,121 2,144 180 408 2,953 10,252	3.3% 2.7% 0.8% 0.6% 1.2% 3.1%	
Inactives Due Refunds Total Membership Annual Payroll of Active Members	<u>10,467</u> 37,069 \$ 831,914,971	<u>10,253</u> 37,620 \$ 909,408,424	(2.0%) 1.5% 9.3%	
Annual Payments to Benefit Recipients <u>Assets and Liabilities</u> Actuarial Liability (AL) Actuarial Value of Assets (AVA)	\$ 203,377,930 \$ 4,165,812,801 3,799,744,503	\$ 215,905,262 \$ 4,478,226,902 4,020,441,970	6.2% 7.5% 5.8%	
Unfunded Actuarial Liability (UAL) Individual Portion (IUUAL) Pooled Portion (PUAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 366,068,298 <u>NA</u> \$ 366,068,298 91.2% 92.3%	\$ 457,784,932 <u>NA</u> \$ 457,784,932 89.8% 91.1%	25.1% 25.1%	
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 3,717,080,285 <u>3,846,717,708</u> \$ (129,637,423) 103.5%	\$ 3,990,062,383 <u>4,077,975,617</u> \$ (87,913,234) 102.2%	7.3% 6.0% 32.2%	
Plan Total Contribution Rates* Actuarially Determined Plan Normal Cost Rate Actuarially Determined Plan	<u>FY 2025</u> 14.3%	<u>FY 2026</u> 14.3%		
UAL Amortization Rate Actuarially Determined Plan Total Rate	<u>4.3%</u> 18.6%	<u> </u>		

\* These are actuarially determined amounts from which the Plan-Specific member and PLD rates are determined based on the risksharing framework. As such, these values are informational rates developed based on the entire Plan rather than applied to any specific Plan.



# SECTION I – BOARD SUMMARY

Table I-3 Summary of Principal Results PLD Consolidated Retirement Plan Regular Plans: AC, AN & BC					
Valuation as of Valuation as of					
<u>Member Counts</u> Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members	June 30, 2023 9,197 6,229 1,460 162 285	June 30, 2024 9,397 6,403 1,480 164 284 2.464	% Change 2.2% 2.8% 1.4% 1.2% (0.4%) 2.6%		
Terminated Vested Members Inactives Due Refunds Total Membership	2,402 <u>9,631</u> 29,366	2,464 <u>9,261</u> 29,453	2.6% (3.8%) 0.3%		
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 532,065,996 \$ 125,559,611	\$ 569,720,771 \$ 132,993,133	7.1% 5.9%		
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded Actuarial Liability (UAL) Individual Portion (IUUAL) Pooled Portion (PUAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 2,352,772,112 2,140,389,483 \$ 212,382,629 <u>NA</u> \$ 212,382,629 91.0% 92.1%	\$ 2,509,103,387 2,250,617,331 \$ 258,486,057 <u>NA</u> \$ 258,486,057 89.7% 91.0%	6.6% 5.1% 21.7% 21.7%		
Accrued Benefit Liability (PVAB) Market Value of Assets (MVA) Unfunded PVAB MVA Accrued Benefit Funded Ratio	\$ 2,140,672,264 <u>2,166,849,408</u> \$ (26,177,144) 101.2%	\$ 2,288,627,335 2,282,824,294 \$ 5,803,041 99.7%	6.9% 5.4% (122.2%)		
<b><u>Regular Plan Total Contribution</u></b>	<u>FY 2025</u>	<u>FY 2026</u>			
Rates* Actuarially Determined Regular Plans Normal Cost Rate Actuarially Determined Regular Plans UAL Amortization Rate	12.9% 3.9%	12.9% 4.4%			
Actuarially Determined Regular Plans Total Rate	16.8%	17.3%			

\* These are actuarially determined amounts that are solely for informational purposes. They are developed based on all the Regular Plans in the Plan rather than applied to any specific Plan.



# **SECTION I – BOARD SUMMARY**

PLD Co	Table I-4 nary of Principal Results nsolidated Retirement Pla al Plans: 1C-4C & 1N-4N	ın	
	Valuation as of	Valuation as of	% Change
Member Counts Active Members Retired Members Beneficiaries of Retired Members Survivors of Deceased Members Disabled Members	June 30, 2023 3,925 1,676 668 17 118	June 30, 2024 4,164 1,718 664 16 124	6.1% 2.5% (0.6%) (5.9%) 5.1%
Terminated Vested Members Inactives Due Refunds Total Membership	463 <u>836</u> 7,703	489 992 8,167	5.6% 18.7% 6.0%
Annual Payroll of Active Members Annual Payments to Benefit Recipients	\$ 299,848,975 \$ 77,818,319	\$ 339,687,653 \$ 82,912,129	13.3% 6.5%
Assets and Liabilities Actuarial Liability (AL) Actuarial Value of Assets (AVA) Unfunded Actuarial Liability (UAL) Individual Portion (IUUAL) Pooled Portion (PUAL) AVA Funded Ratio (AVA/AL) MVA Funded Ratio (MVA/AL)	\$ 1,813,040,689 <u>1,659,355,020</u> \$ 153,685,669 <u>NA</u> \$ 153,685,669 91.5% 92.7%	\$ 1,969,123,515 <u>1,769,824,639</u> \$ 199,298,876 <u>NA</u> \$ 199,298,876 89.9% 91.2%	8.6% 6.7% 29.7% 29.7%
Accrued Benefit Liability (PVAB) MVA Market Value of Assets (MVA) Unfunded PVAB	\$ 1,576,408,021 <u>1,679,868,300</u> \$ (103,460,279)	\$ 1,701,435,048 <u>1,795,151,323</u> \$ (93,716,275)	7.9% 6.9% N/A
Accrued Benefit Funded Ratio <u>Special Plan Total Contribution Rates*</u> Actuarially Determined Special Plans	106.6% <u>FY 2025</u>	105.5% <u>FY 2026</u>	
Normal Cost Rate Actuarially Determined Special Plans UAL Amortization Rate Actuarially Determined Special Plans	16.6% 5.0%	16.6% 5.7%	
Total Rate	21.6%	22.3%	

\* These are actuarially determined amounts that are solely for informational purposes. They are developed based on all the Special Plans in the Plan rather than applied to any specific Plan.



# SECTION II - RISK ASSESSMENT AND DISCLOSURE

# Introduction

The Plan's actuarial valuation results are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, these assumptions represent a reasonable estimate for future experience. However, actual future experience will never conform exactly to these assumptions and may differ significantly from the assumptions. This deviation is a risk that pension plan sponsors bear in relying on a pension plan's actuarial valuation results.

This section of this report is intended to identify the primary drivers of these risks, provide background information and assessments about these identified risks, and communicate the significance of these risks to this Plan.

# **Identification of Risks**

For this Plan, the three primary valuation results that can significantly differ from those expected are the assets, the liabilities, and the annually determined PLD and member contributions. While there are several factors that could lead to these results being different, we believe the primary risks for this Plan are:

- Investment risk,
- Longevity and other demographic risks,
- Plan change risk, and
- Assumption change risk

Other risks that we have not identified may also turn out to be significant.



#### SECTION II - RISK ASSESSMENT AND DISCLOSURE

*Investment Risk* is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation, the unfunded liability will increase from what was expected and will require higher contributions than otherwise anticipated. But when actual returns exceed those assumed, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. As seen in the historical section that follows, this has been a significant driver of deviations in the actual measurements for this Plan from those expected by the prior valuations.

Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expectations. In addition, the extensive number of assumptions related to longevity and other demographic experience often result in offsetting deviations contributing to the Plan's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to the investment returns. The historical section that follows shows that this has been true for this Plan in many individual years, with the magnitude of the gains and losses from investment experience often significantly larger than the gains and losses from liability experience. In addition, during the past 10 years, the offsetting effects of the longevity and other demographic risk gains and losses have been such that the cumulative net effect of this longevity and other demographic risk as seen in the liability gains and losses has only been about 25% of the cumulative net investment gains and losses and a similar percentage of net assumption change deviations over this same period.

*Plan Change Risk* is the potential for the provisions of the Plan to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Plan being changed, future valuation measurements can also be impacted, with Plan changes leading to deviations between actual future measurements and those expected by prior valuations. The historical review section will show that plan change risk has been a driver of deviations in the actual measurements for this Plan from those expected by the valuations over the 10-year period shown with varying significance in individual years.

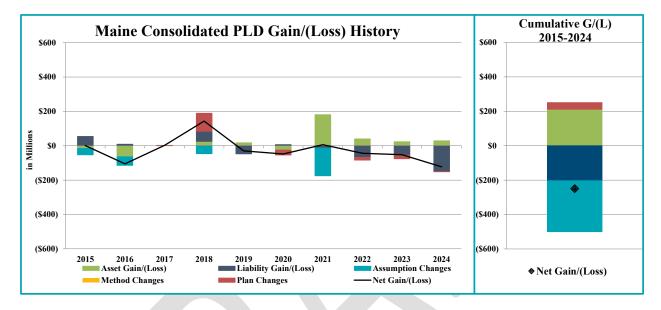
Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, changes in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment resulting in the current assumption no longer being reasonable. The historical review section will show that assumption change risk has been a very significant risk for this Plan. In addition to changes in individual assumptions, changes to the methods used in valuing the Plan can have a significant impact on the valuation results as can be seen based on the method change items in the Plan's historical experience. Over the period shown, method changes have also been a contributor to deviations in the Plan's actual status from that expected by prior valuations.



## SECTION II – RISK ASSESSMENT AND DISCLOSURE

# **Historical Experience Deviations**

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The following graph shows the gains/(losses) at each valuation date between the actual and expected experience broken down by cause for the last 10 years.



As described previously and as evident in this graph, assumption changes and asset gains/(losses) have been the most significant risks for the Plan over this 10-year period. In order of significance to experience deviations over this period, the remaining causes are: liability gains/(losses), plan changes, and method changes. Finally, we note again that while the cumulative effect of the liability gains and losses have been largely offsetting for the last 10 years, they have been significant in individual years, which we expect to remain true for future years.

# Plan Maturity Measures

As pension plans become more mature, the primary risks of adverse investments, demographic deviations, plan changes, and assumption/method changes become of more significant concern as the resulting impacts on the Plan's condition are more pronounced. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. With shrinking workforces, aging Baby Boomers, and retirees living longer, plans pay out more in benefits than they receive in contributions – leading to negative cash flows, excluding investment income, making it harder for a plan to recover from losses since contributions are generally made based on active payroll.



### SECTION II – RISK ASSESSMENT AND DISCLOSURE

One of the main reasons risks are more amplified with a mature plan is that when plans with negative cash flows suffer investment losses, they need to liquidate enough assets to pay for benefits in excess of contributions. That means these plans will need to earn higher returns to rebuild their assets to the previous levels. Plans with negative cash flows exceeding five percent of assets are especially vulnerable to asset losses.

The balance of this section discloses and examines three maturity measures: the asset leverage ratio, the support ratio, and the net cash flow ratio.

### Asset Leverage Ratio

One important plan maturity measure is the asset leverage ratio, the market value of assets divided by the plan's payroll, which represents the percentage of payroll that would need to be contributed to make up a given change in the plan's assets. As a plan matures, its assets increase, and a greater proportion of the assets are paid out in benefit payments to members. The greater the plan's assets are relative to payroll, the more vulnerable the plan is to investment volatility in terms of the resulting contribution requirement changes.

As an example, here are two plans that both experience a 10% investment loss equaling \$500 million on their existing assets of five billion dollars. Plan A's asset leverage ratio is 10 and Plan B's ratio is five. This means that Plan A has to spread, or amortize, that loss over a payroll that is half as large as Plan B's. As seen in the chart below, this results in the percentage of payroll that Plan A would need to contribute to make up the loss being double what would be required for Plan B.

		\$         500         \$         1,000           10.0         5.0           \$         500         \$         500		
	P	'lan A	P	'lan B
Plan Assets	\$	5,000	\$	5,000
Payroll	\$	500	\$	1,000
Asset Leverage Ratio		10.0		5.0
10% Loss	\$	500	\$	500
10% Loss as % of Payroll		100%		50%

The Government Finance Officers Association (GFOA), MissionSquare Research Institute, the National Association of State Retirement Administrators (NASRA), and the Center for Retirement Research at Boston College maintain the Public Plans Data database that contains almost all state plans as well as many large municipal plans, covering over 95% of the membership in public plans as well as over 95% of the assets held by public pension plans.

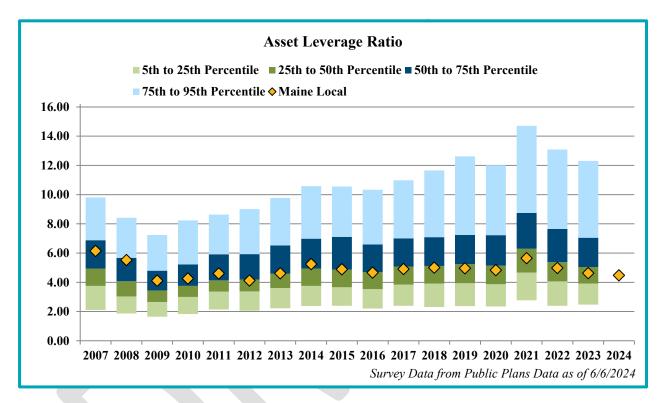
The chart that follows shows the asset leverage ratios for the Plan and the plans in this database since 2007. The colored bars represent the central 90% of the asset leverage ratios of the plans in the database for each year. The Maine Consolidated Plan for Participating Local Districts is represented by the gold diamonds. This chart shows that the Plan's asset leverage ratio has varied over this period but had remained steady at or just under five times salary from 2013 to 2020 before



## SECTION II – RISK ASSESSMENT AND DISCLOSURE

increasing to 565%, or 5.65 times salary, in FY 2021 with the significant increase in market values that year. The rate is now back within the previous range at 448%, or 4.48 times salary.

Note that the charts showing the Plan versus this universe of public plans in this section show one more year for the Plan than the universe as the 2024 numbers are not yet available for the database. When these numbers are available, we anticipate that the universe of public plans will also show a similar trend experience in this ratio when compared to MainePERS.



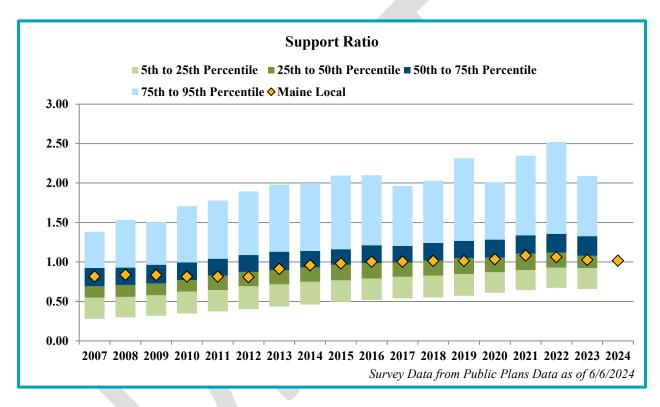


## SECTION II – RISK ASSESSMENT AND DISCLOSURE

## Support Ratio

Another commonly used measure of plan maturity is the support ratio, the ratio of in-pay and inactive members, or those receiving benefits or entitled to a deferred benefit, to the number of active members, or those currently accruing benefits in the plan. The greater this ratio, the more mature a plan is considered, with the proportion of the plan's liability represented by actives generally declining.

The chart that follows shows the support ratio over time for the Plan compared to the Public Plans Data database.



The gold diamonds in this chart show that the Plan's support ratio was relatively stable from 2007 through 2012 at just over 0.80 and has since been generally increasing, with the current ratio as of FY 2024 being approximately 1.02. However, relative to the universe of public plans, the Plan's support ratio has dropped from around the 66th percentile in 2007 to approximately the 45<sup>th</sup> percentile in 2023. Given that this Plan has moved down relative to the universe of plans indicates that the Plan's rate of maturity has been a little slower than the universe of public plans as a whole.

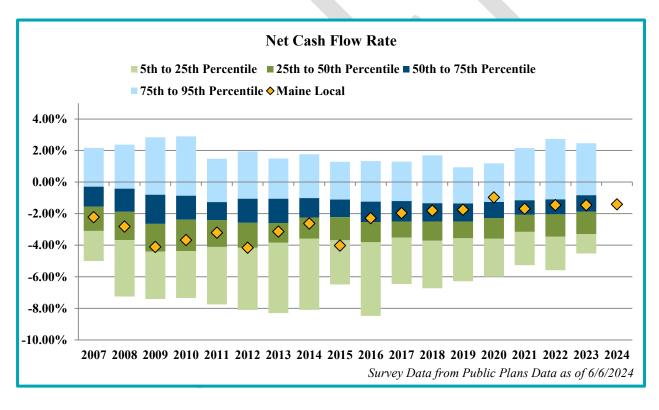


## SECTION II - RISK ASSESSMENT AND DISCLOSURE

## Net Cash Flow Ratio

Another measure of plan maturity is the ratio of the net cash flow (excluding investment returns) for a plan – contributions less benefits and expenses – divided by the market value of plan assets. When this ratio is significantly negative, a plan is very vulnerable to market declines. This vulnerability increases as this ratio becomes more negative.

The chart that follows shows that the Plan's net cash flow ratio has varied over this period but has generally trended gradually towards less negative rates in recent years, with the exception of a oneyear jump in 2020. However, note that 2020 was an unusual year for contributions to the Plan with a number of PLDs entering the Consolidated Plan paying additional contributions resulting in the unusually low value for that year on this metric. In the latter half of this period, the Plan's net cash flow has transitioned from being more negative than the median plan in the universe of public plans to less negative than the median plan. This measure thus provides some indication that this Plan may be maturing at a pace slower than the typical public plan.





## SECTION II – RISK ASSESSMENT AND DISCLOSURE

## **Assessing Future Risk**

Assessing the future risk that the expected measurements produced by the actuarial valuations will deviate from the actual values over time is complex and can never be exactly known. However, to try to assist the Board in its utilization of this report, we have attempted to develop some basic assessments of this risk in the remainder of this section focusing on risks related to investment returns.

Pages 6-8 have additional detail on the baseline projection produced from this valuation. It is important to note that baseline projections, while valid, **are not going to occur** as experience never conforms exactly to assumptions every year. As discussed in the plan maturity section, as plans become more mature, it typically becomes more difficult for them to recover from market declines even when the average investment return over an extended period is equal to the expected return. As a demonstration of this, on the following pages we show two scenarios that are based on assuming varying returns in the future. For both of these scenarios, we based these varying return scenarios on assuming the returns for the next 20 years would equal what a portfolio invested 75% in the SP-500 index and 25% in the Bloomberg Aggregate bond index would have earned for these historical 20-year periods as a rough proxy for the Plan's asset allocation.

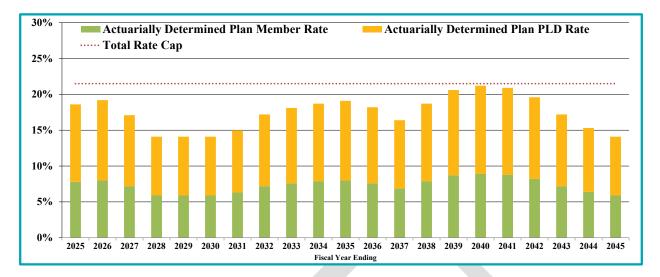
Note that these scenarios reflect illustrative examples and are not intended to reflect future expectations regarding the volatility of the returns. They are instead provided to demonstrate the magnitude and range of possible volatility in returns and funded ratios as a result of volatility in investment returns.

The first of these two scenarios is based on the 20-year period July 1, 1998 through June 30, 2018. The rates assumed for each year of this scenario are shown below.

FY	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Return	25.3%	17.9%	6.6%	-8.3%	-11.3%	2.8%	14.4%	6.4%	6.3%	17.0%
FY	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Return	-8.1%	-18.1%	13.2%	24.0%	6.0%	15.3%	19.6%	6.0%	4.5%	13.3%

With varying annual earnings, it can be seen in the following chart that the volatility in the contributions is greater than in the baseline scenario.





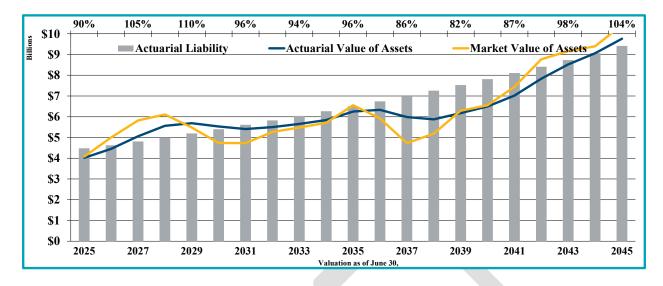
## SECTION II – RISK ASSESSMENT AND DISCLOSURE

Under this scenario the total contributions are never projected to equal the Total Rate Cap and so at no time are temporary COLA reductions required. As such, in this scenario it is projected that 100% of the full COLA will be paid each year, the same as in the baseline scenario. Note that in this scenario, the assumed minimum contributions based on 100% of the normal cost result in higher contributions for FY 2028 through FY 2030 whereas in the baseline projection these minimums only came into effect for FY 2039 and FY 2045.

The funded ratio of the Plan is also more volatile in this scenario than in the baseline, as seen in the following graph based on this first illustrative varying returns scenario. Also note that while the average returns and the average contributions in this scenario are slightly greater than in the baseline, on average the Plan has a slightly lower funded ratio over the projection period under this scenario than in the baseline. This is due to the negative cash flows of the Plan previously discussed in this section. Note also that timing of contribution development and payment, as well as the combination of the amortization layers and the assumed minimum contributions, result in the Plan being funded over 100% at times, similar to what is seen in the baseline projection. These funded ratios are based on the actuarial values of assets and would vary were they based on the market values of assets.



## SECTION II – RISK ASSESSMENT AND DISCLOSURE

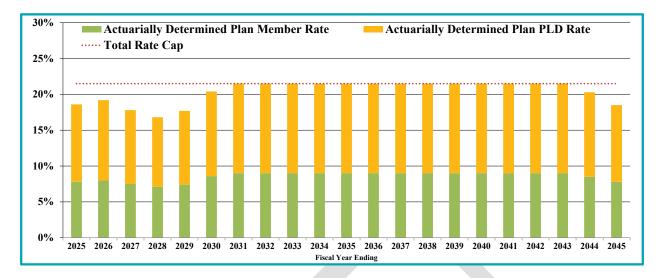


The second of these two scenarios is based on the 20-year period July 1, 1999 through June 30, 2019. The rates assumed for each year of this scenario are shown below.

FY	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Return	17.9%	6.6%	-8.3%	-11.3%	2.8%	14.4%	6.4%	6.3%	17.0%	-8.1%
FY	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Return	-18.1%	13.2%	24.0%	6.0%	15.3%	19.6%	6.0%	4.5%	13.3%	10.7%

This second varying returns scenario produces a significantly higher average total contribution for the projection period than the other two scenarios, with an average total rate of 20.4% compared to an average 17.5% rate in the last scenario and 16.8% in the baseline scenario. In addition, this scenario results in 13 years in this forecast in which the projected final total contribution equals the Total Rate Cap. This is in contrast to no years in both the baseline and the prior scenarios. Also, in this scenario the assumed minimum contributions based on the total normal cost are below the otherwise calculated contributions in all years of the projection.





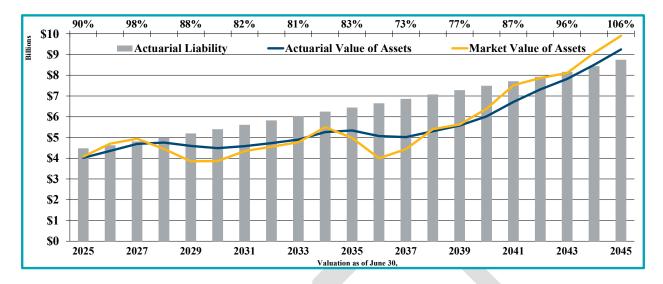
## SECTION II – RISK ASSESSMENT AND DISCLOSURE

This scenario also differs from the prior two as it projects that under the provisions of this Plan, temporary reductions in the COLA will be required to ensure the adequate funding of the Plan. Under this scenario, there are 11 years in the projection period where the COLA would be reduced or eliminated under the provisions of this Plan. The average percentage of the full COLA projected to be paid in this scenario is 70% in contrast to 100% in both of the prior projections. However, under this scenario it is projected that COLAs would resume again at the end of the projection period, demonstrating the success of the risk-sharing provisions of this Plan in ensuring its financial soundness.

The funded ratio of the Plan is also more volatile in this second scenario than in the baseline, as seen in the following graph based on this second illustrative varying returns scenario. Similar to what is seen in the previous two projections, this scenario results in the Plan being funded up to 100% by the end of the projection period due to the timing of contribution development and payment as well as the combination of the amortization layers and the COLA cuts that are projected to occur. These funded ratios are based on the actuarial values of assets and would vary were they based on the market values of assets.



## SECTION II – RISK ASSESSMENT AND DISCLOSURE



In addition to demonstrating the volatility of these key valuation results of actuarially determined contributions and funded ratios, these varying return scenarios also illustrate that the magnitude of these results can also vary depending on the pattern of returns.



## **SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of plans and in the decisions that Trustees make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely affect benefit levels, PLD and member contribution rates, and the ultimate security of members' benefits.

The assets for all Defined Benefit (DB) Programs administered by MainePERS are invested together. These Programs are the State Employee and Teacher Retirement Program, the Judicial Retirement Program, the Legislative Retirement Program, and the Participating Local District (PLD) Retirement Program, including both the Consolidated Plan that is the subject of this valuation and the several Nonconsolidated PLDs. The assets of these Programs are entirely commingled for investment purposes, so the actuarial value of assets (AVA) for each of these Programs is developed by first developing it for the entire asset pool and then subsequently allocating that total AVA to each of the specific Programs.

In this section, we present detailed information on the Plan's assets including:

- Disclosure of total MainePERS DB assets at June 30, 2024,
- Statement of changes in total MainePERS DB market values during the year,
- Development of the total MainePERS DB actuarial value of assets,
- Allocation of the total actuarial value to MainePERS DB Programs,
- Assessment of the total MainePERS DB investment performance, and
- Projection of expected cash flows for the Plan for the next 10 years.

# Disclosure

The market value of assets (MVA) represents a "snap-shot" or "cash-out" value, which provides the principal basis for measuring financial performance from one year to the next. However, market values can fluctuate widely with corresponding swings in the marketplace, resulting in volatility in the resulting contributions if the unadjusted market value is used in the valuation process that develops the contributions. Therefore, a smoothed actuarial value of assets is developed for use in the valuation process and for evaluating the Plan's ongoing ability to meet its obligations. The actuarial value of the Plan's assets is developed by allocating the actuarial value of the total MainePERS DB assets to each Program. This section discloses the market and actuarial values of the MainePERS DB assets both in total and for each Program.



## **SECTION III – ASSETS**

Table III-1 that follows develops the change in the market value of assets for the total MainePERS DB assets during FY 2024.

Changes in Market Value of T		e III-1 sinoDEDS Dofined B	or offit (	DD) Assots
Market Value of Total MainePERS DB A			enent ( \$	19,032,500,469
	35005	, une 00, 2020	Ψ	19,002,000,109
Additions Contributions:				
	\$	(00.725.022		
Employer Contributions Member Contributions	Э	609,725,832 253,072,755		
Transfers		(276,351)		
Total Contributions	\$	862,522,236		
Investment Income:				
Net Appreciation (Depreciation) in				
Fair Value of Investments	\$	1,550,729,080		
Interest on Bank Balances		3,318,765		
Total Investment Income	\$	1,554,047,845		
Investment Activity Expenses:				
Management Fees	\$	(131,872,981)		
Investment Related Expense		(5,758,258)		
Banking Fees	-	(36,109)		
Total Investment Activity Expenses	\$	(137,667,348)		
Net Income from Investing Activities	\$	1,416,380,497		
Total Additions			\$	2,278,902,733
<b>Deductions</b>				
Retirement Benefits	¢	1,200,976,761)		
Disability Benefits	Э (	(25,883,395)		
Survivor Benefits		(28,529,982)		
Refunds		(37,506,149)		
Administrative Expenses		(17,274,490)		
Total Deductions		(17,274,490)	\$	(1,310,170,777)
			φ	(1,310,170,777)
<u>Total</u>				
Net Increase (Decrease)			\$	968,731,956
Market Value of Total MainePERS DI	B Asset	ts – June 30, 2024	\$	20,001,232,425



## **SECTION III – ASSETS**

# **Actuarial Value of Total MainePERS DB Assets**

Table III-2 that follows develops the actuarial value of assets for the total MainePERS DB assets as of June 30, 2024 using the adopted actuarial valuation methodology.

	Table III-2 Development of Actuarial Value of Total MainePERS Defined Be as of June 30, 2024	nefit (DB) Assets
1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023	\$ 18,800,089,976
2.	Amount in (1) with Interest to June 30, 2024	20,022,095,824
3.	Employer and Member Contributions for FY 2024	862,522,236
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2024	27,590,682
5.	Total Disbursements without Administrative Expenses for FY 2024	(1,292,896,287)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2024	(41,357,647)
7.	Expected Value of Total MainePERS DB Assets at June 30, 2024 = $(2) + (3) + (4) + (5) + (6)$	\$ 19,577,954,808
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2024	20,001,232,425
9.	Excess of (8) Over (7)	423,277,617
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2024 = $(7) + [33\frac{1}{3}\% \text{ of } (9)]$	\$ 19,719,047,347

As discussed in the disclosure portion of this section, the actuarial value of assets for the Plan represents a "smoothed" value developed by the actuary to reduce, or eliminate, volatility in valuation results, particularly contribution rates, that could develop from short-term fluctuations in the market value of assets. Current actuarial methods employed in this Plan use an allocated portion of the total actuarial value of assets for the total MainePERS DB assets based on the Plan's market value of assets to develop the actuarial value of assets for the Plan. The methodology for the total MainePERS DB assets sets the actuarial value of assets equal to the expected value of the actuarial value of assets plus one-third of the difference between the actuarial value of assets takes the prior year's actuarial value of assets and adjusts it for contributions, disbursements, and expected interest earnings at the investment return assumption that was in effect for the previous year, 6.50% for this valuation. The previous table, Table III-2, illustrates the calculation of the actuarial value of assets for the total MainePERS DB assets for the total MainePERS DB assets for the total MainePERS DB assets for the total MainePERS and adjusts as of June 30, 2024.



## **SECTION III – ASSETS**

# Allocation of Actuarial Value of Assets to the Plan

The assets for the defined benefit (DB) Programs administered by MainePERS are commingled for investment purposes with the actuarial value of assets for the total assets allocated to the individual Programs on the basis of the market value of assets for each Program. An asset ratio (total MainePERS DB actuarial value of assets divided by total MainePERS DB market value of assets) is applied to the market value of assets attributable to each of the Programs to determine its actuarial value of assets as of the valuation date. The asset ratio derived in this June 30, 2024 valuation is 0.985892 ( $19,719,047,347 \div 20,001,232,425$ ). The allocation of actuarial value of the total MainePERS DB assets to each of the MainePERS DB Programs based on this asset ratio is shown in the following table.

Table III-3 Allocation of Actuarial Value of Total MainePERS DB Assets as of June 30, 2024						
Program	Market Value	Actuarial Value				
Teachers	\$10,475,025,420	\$ 10,327,239,734				
State (Regular & Special)	5,334,680,793	5,259,417,065				
Judicial	89,203,285	87,944,771				
Legislative	17,431,101	17,185,176				
Participating Local Districts (Consolidated & Non-Consolidated)	4,084,891,826	4,027,260,601				
Total	\$20,001,232,425	\$ 19,719,047,347				

# **Investment Performance**

The market value of assets for the total MainePERS DB assets returned a positive 7.43% during FY 2024. This is greater than the assumed return of 6.50% for FY 2024. The equivalent market value returns for the total MainePERS DB assets for FY 2023 and FY 2022 were positive 6.05% and negative 0.62%, respectively.

On an actuarial value of assets basis, the return for FY 2024 was a positive 7.26% for the total MainePERS DB assets. This return is less than the return on a market value basis but still greater than the 6.50% assumption in effect for FY 2024. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.



## **SECTION III – ASSETS**

## **Cash Flow Projections**

Table III-4 Projection of Consolidated Plan Benefit Payments and Contributions					
FY Ending June 30,	Expected Benefit Payments	Total Expected Contributions			
2025	\$ 270,123,000	\$ 171,460,000			
2026	248,258,000	181,858,000			
2027	257,105,000	184,913,000			
2028	265,985,000	188,998,000			
2029	275,919,000	192,141,000			
2030	286,501,000	196,368,000			
2031	298,408,000	201,769,000			
2032	310,278,000	205,088,000			
2033	321,778,000	210,728,000			
2034	333,329,000	216,523,000			

In Table III-4 above, we provide a projection of expected cash flows in and out of the Plan for the next 10 years for informational purposes. The Board may share these projections with its investment advisor for consideration of the gap shown between the cash expected to come into the Plan through PLD and member contributions and the cash expected to be paid out of the Plan to provide benefit payments.

The expected benefit payments in Table III-4 were developed using the data currently included in this valuation and on the assumption that the actuarial assumptions disclosed in Appendix D will be exactly met. Actual benefit payments will vary if members retire sooner or later than assumed, if salary increases and actual future post-retirement COLAs differ from those assumed, or if other assumptions differ from the actual experience seen. These benefit projections exclude any assumption about new Plan participants, whose experience will eventually lead to increased benefit payments. However, we do not feel this exclusion will materially impact the projections for the period shown.

For the purposes of this table of cash flows, as well as for all other liability calculations within this report, we have assumed that the member contribution rates for each Regular and Special Plan within the Plan will be developed and paid at the actuarially determined rates. In addition, these cash flows, with the exception of the FY 2025 rates, where we have assumed the rates adopted through the risk-sharing framework will be paid, again along with all other liability calculations within this report, are based on the assumption that the contributions made to the Plan will be the actuarially determined rates. In addition to these additional assumptions regarding the contributions that the Plan will receive, these cash flows are also developed based on the assumption that all valuation assumptions are exactly met, including an assumed 2.75% per year increase in covered payroll.



## **SECTION III – ASSETS**

Note that we expect the contribution rates that will actually be paid for FY 2026 and beyond will be those developed under the risk-sharing contribution methodology, which are modified versions of the actuarially determined rates rather than the actuarially determined rates themselves. We will continue to reflect the known adopted rates as they are developed, but at this time the unmodified actuarially determined contribution rates that are the basis of the risk-sharing contribution rates are the most reasonable to assume will be paid.



## **SECTION IV – LIABILITIES**

In this section, we present detailed information on Plan liabilities including:

- Disclosure of the Plan's liabilities as of June 30, 2023 and June 30, 2024, and
- Statement of changes in these liabilities during the year.

# Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which the figures are ultimately used.

- Present Value of Future Benefits (PVB): Used for analyzing the overall financial obligations of the Plan, this represents the amount of money needed today to fully fund all future benefits of the Plan, assuming no new members, that active members continue to earn salary increases and accrue benefits under their current Plan provisions, and that all actuarial assumptions are exactly met, including the 6.50% per year investment return.
- Actuarial Liability (AL): Used for funding calculations and GASB disclosures, this liability is calculated by taking the PVB above and subtracting the value of accruals that are assigned to future years on a person-by-person basis. This offset is equal to the present value of future member contributions and future PLD normal cost contributions under an acceptable actuarial cost method. For this Plan and the other MainePERS DB Programs, the method used is referred to as the entry age normal (EAN) cost method, which is the only permitted actuarial cost method for GASB disclosures.
- Present Value of Accrued Benefits (PVAB): Used for communicating the liabilities for benefits accrued as of the valuation date.

Table IV-1 that follows discloses each of these liabilities for the current and prior years' valuations. With respect to the actuarial liability and the present value of accrued benefits, a subtraction of the appropriate value of the Plan's assets yields, for each respective type, a net surplus or an unfunded liability. For the PVB measure, it is compared to the market value of assets plus the expected future value of contributions to the Plan.

We note that none of the liabilities presented in this report is an appropriate measure of a settlement liability.



## **SECTION IV – LIABILITIES**

The liability measures are compared to appropriate measures of assets, along with the expected future value of member and PLD contributions where appropriate. The difference between the liability measure and the anticipated resources indicates either an expected shortfall or an expected surplus related to that liability measure. The surplus or shortfall on the present value of benefits (PVB) measure is zero due to the Plan's risk-sharing framework where all costs are paid 58% by the PLD and 42% by the Member.

Table IV-1				
Disclosure of Liab	oiliti	es		
		June 30, 2023	•	June 30, 2024
Present Value of Benefits (PVB)				
Active Member Benefits	\$	2,540,507,510	\$	2,738,509,442
Retired, Disabled, Survivor, and Beneficiary Benefits		2,292,892,614		2,497,927,141
Terminated Vested Benefits		176,594,216		181,430,816
Terminated Nonvested Benefits		30,282,025		31,272,980
Total PVB	\$	5,040,276,365	\$	5,449,140,379
Market Value of Assets (MVA)	\$	3,846,717,708	\$	4,077,975,617
Future Member and PLD Contributions*	Ψ	1,193,558,657	Ψ	1,371,164,762
Projected (Surplus)/Shortfall		1,175,556,057		1,571,104,702
Total Resources	\$	5,040,276,365	\$	5,449,140,379
Actuarial Liability (AL)				
Present Value of Benefits (PVB)	\$	5,040,276,365	\$	5,449,140,379
Present Value of Future Normal Costs (PVFNC)	Ψ	874,463,564	Ψ	970,913,477
Actuarial Liability ( $AL = PVB - PVFNC$ )	\$	4,165,812,801	\$	4,478,226,902
Actuarial Value of Assets (AVA)	Ψ	3,799,744,503	Ψ	4,020,441,970
Net (Surplus)/Unfunded (AL – AVA)	\$	366,068,298	\$	457,784,932
Present Value of Accrued Benefits (PVAB)				
Present Value of Benefits (PVB)	\$	5,040,276,365	\$	5,449,140,379
Present Value of Future Benefit Accruals (PVFBA)	Φ	1,323,196,080	Ŷ	1,459,077,996
Accrued Liability (PVAB = PVB – PVFBA)	\$	3,717,080,285	\$	3,990,062,383
Market Value of Assets (MVA)	Ψ	3,846,717,708	Φ	4,077,975,617
Net (Surplus)/Unfunded (PVAB – MVA)	\$	(129,637,423)	\$	(87,913,234)
* Determined to be the amount to fully fund the PVB	Ψ		Ψ	(07,910,204)

\* Determined to be the amount to fully fund the PVB.



## **SECTION IV – LIABILITIES**

# Low-Default-Risk Obligation Measure (LDROM)

The System invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the System. Such a portfolio, however, would have a lower expected rate of return than the diversified portfolio. The LDROM represents what the funding liability would be if the System invested its assets in such a portfolio. As of June 30, 2024, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 4.44% compared to the System's discount rate of 6.50%, and the LDROM would be \$6.0 billion compared to the Actuarial Liability of \$4.5 billion. The \$1.5 billion difference represents the expected taxpayer savings from bearing the risk of investing in the diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

If the System were to invest in the LDROM portfolio, the reported funded status would decrease and contribution requirements would increase. Benefit security for members of the Plan relies on a combination of the assets in the System, the investment returns generated on those assets, and the promise of future contributions. If the System were to invest in the LDROM portfolio, it would not change the amount of assets currently in the System, but it would reduce expected future investment returns and increase expected future contributions. However, the range of future investment returns and future contributions needed would narrow significantly.

# **Changes in Liabilities**

Each of the liabilities disclosed in Table IV-1 is expected to change at each subsequent valuation. The components of these changes, depending upon which liability is analyzed, can include:

- New Plan members since the last valuation
- Benefits accrued since the last valuation
- Plan amendments changing benefits since the last valuation
- Passage of time, which adds interest to the prior liability
- Benefits paid to members since the last valuation
- Members retiring, terminating, or dying at rates different than expected since the last valuation
- Salaries changing at rates different than expected since the last valuation
- A change in actuarial assumptions since the last valuation
- A change in the actuarial cost method since the last valuation



## **SECTION IV – LIABILITIES**

Unfunded liability measurements will change because of all of the above, as well as due to changes in the Plan's asset measurements resulting from:

- PLD or member contributions being different than expected (including actual contributions developed under the risk-sharing framework deviating in aggregate from the actuarially determined contributions)
- Investment earnings being different than expected
- A change in the method used to measure the Plan's assets in developing the unfunded liability measure since the last valuation

In each valuation, we report on those elements of change in the Plan's liability measures that are of particular significance, potentially affecting the long-term financial outlook of the Plan. In Table IV-2 that follows, we present key changes in the Plan's liability measures since the last valuation.

-					
	Pre	able IV-2 esent Value of ture Benefits		Actuarial Liability	esent Value of crued Benefits
Liability Measurement – June 30, 2023	\$ 5	5,040,276,365	\$ 4	4,165,812,801	\$ 3,717,080,285
Liability Measurement – June 30, 2024	5	5,449,140,379	4	1,478,226,902	 3,990,062,383
Liability Measurement Increase/	\$	408,864,014	\$	312,414,101	\$ 272,982,098
(Decrease) Due to:					
Plan Amendment	\$	863,779	\$	863,779	\$ 863,779
Assumption Change		0		0	0
Actuarial (Gain)/Loss		N/C	\$	150,622,559	N/C
Benefits Accumulated					
and Other Sources	\$	408,000,235	\$	160,927,763	\$ 272,118,319

N/C = Not calculated



## **SECTION V – CONTRIBUTIONS**

In this section, we present detailed information on PLD and member contribution rates as developed in this June 30, 2024 valuation for the Plan, including:

- Development of Actuarially Determined Plan Total Rate for the Plan as a whole, including the Actuarially Determined Plan Normal Cost Rate and the Actuarially Determined Plan UAL Amortization Rate,
- Summary of the Plan-Specific Normal Cost Rates by each Regular and Special Plan, and
- Description of risk-sharing framework and how resulting contribution rates are developed.

Note that the actual rates that will be paid in FY 2026 based on this June 30, 2024 valuation are specific to each Regular and Special Plan and include a PLD rate for each Plan as well as a single member rate for each Special Plan and two member rates for each Regular Plan, where the Regular Plan member rates vary based on the applicable normal retirement age. These actual rates are developed in the risk-sharing framework process and are not contained within this report, but a general outline of this process is included as the last element of this section of this report for informational purposes.

In addition, any PLDs that have Initial Unpooled Unfunded Actuarial Liability (IUUAL) balances also make additional contributions to repay these balances in addition to their PLD contribution rates.

# **Description of Rate Components**

The rate components described here are the Actuarially Determined Plan Rates, based on the aggregation of all of the Regular and Special Plans in the Plan, and the Plan-Specific Normal Cost Rates that are anticipated to be the basis from which the risk-sharing contribution rates that will actually be paid by the PLDs and members in FY 2026 will be determined.

## Actuarially Determined Plan Total Rate

The Actuarially Determined Plan Total Rate is developed based on the entirety of the Consolidated Plan and consists of two elements: the Actuarially Determined Plan Normal Cost Rate and the Actuarially Determined Plan UAL Amortization Rate.

For each of the Regular and Special Plans in the Consolidated Plan, an individual entry age normal cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate is determined by taking the value, as of entry age into a Plan, of each active member's projected future benefits. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. These rates are then multiplied by each member's salary as of the valuation date to get the total normal cost dollars as of the valuation date for that Plan. These individual amounts for each Regular and Special Plan are then added to get the total normal cost dollars for the Plan and then divided by the total payroll for the Plan to get the Actuarially Determined Plan Normal Cost Rate.



## **SECTION V – CONTRIBUTIONS**

The pooled UAL under the entry age normal cost method equals the present value, at the time of valuation, of the future benefit payments less the present value of future contributions plus current assets. Under the Consolidated Plan, the Actuarially Determined Plan UAL Amortization Rate is calculated for the Consolidated Plan in total based on the pooled UAL being amortized over a 20-year period commencing with the June 30, 2015 valuation date and any layers of pooled UAL arising after that date being amortized over individual 20-year periods. These amortizations use a level percentage of pay method with payroll assumed to increase at 2.75% per year. The amortization payment thus derived for the valuation year is then divided by the total payroll to develop the Actuarially Determined Plan UAL Amortization Rate.

As a reminder, these rates are not paid by any PLD or member and instead determine the level of the contributions in aggregate that needs to be paid into the Plan. The risk-sharing framework allocates this cost level, with some adjustments, based on the relative rates of the Plan-Specific Normal Cost Rates and determines the rates that will be paid by every PLD and member in the Consolidated Plan based on each member's specific Plan.

### Plan-Specific Normal Cost Rates

Following the procedure outlined above to develop the total normal cost dollars for each specific Regular and Special Plan, these Plan-Specific values are then divided by the total payroll for each specific Plan to get the Plan-Specific Normal Cost Rate for that Plan. This procedure is followed for each Regular and Special Plan in the Consolidated Plan.

### IUUAL Payments

PLDs that either enter the Consolidated Plan with liabilities in excess of their assets or make Plan changes resulting in individual liability amounts are required to make additional contributions. They make payments on their Individual Unpooled Unfunded Actuarial Liability (IUUAL) until their IUUAL is fully paid off. IUUAL payments are made as specific dollar amounts on a schedule rather than as a rate applied to payroll. The System now treats future IUUAL payments as receivable contributions that are already included in the asset values provided and so are not separately identified in the Section I summary tables.

# **Contribution Calculations**

Table V-1 below presents and compares the Actuarially Determined Plan Total Rate for the Plan in aggregate, as well as its two components, as developed in this and last years' valuations.

Table V-1           Actuarially Determined Plan Total Rates					
Valuation Date	June 30, 2023	June 30, 2024			
Actuarially Determined Plan Normal Cost Rate	14.3%	14.3%			
Actuarially Determined Plan UAL Amortization Rate	4.3%	4.9%			
Actuarially Determined Plan Total Rate	18.6%	19.2%			



## **SECTION V – CONTRIBUTIONS**

The remainder of this section details the calculation of the above rates, including developing the Actuarially Determined Plan UAL Amortization Rate from its components and developing the Plan-Specific Normal Cost Rates for each Regular and Special Plan in the Consolidated Plan as well as the Actuarially Determined Plan Normal Cost Rate for the Plan in aggregate.

Table V-2 shows the development of the Plan-Specific Normal Cost Rates for each Regular and Special Plan as well as the Actuarially Determined Plan Normal Cost Rate. As of June 30, 2023, there are no remaining actives in the Special 4N Plan.

	Table V-2 Development of Plan-Specific Normal Cost Rates and Actuarially Determined Plan Normal Cost Rate						
			Plan-Specific	:			
	Initial Normal	Valuation	Normal		Total Normal		
Specific Plan	Cost Dollars	Salary	Cost Rate	Total Salary	Cost Dollars		
Regular AC	\$ 62,246,568	\$479,709,705	13.0%	\$ 522,417,778	\$ 67,914,311		
Regular AN	4,711,427	40,724,082	11.6%	44,129,734	5,119,049		
<b>Regular BC</b>	188,686	2,930,088	6.4%	3,173,259	203,089		
Special 1C	5,652,114	31,200,853	18.1%	33,112,818	5,993,420		
Special 2C	11,678,015	74,821,855	15.6%	80,206,110	12,512,153		
Special 3C	32,663,602	193,489,817	16.9%	204,602,947	34,577,898		
Special 4C	1,443,389	8,707,238	16.6%	9,235,387	1,533,074		
Special 1N	166,381	1,005,381	16.5%	1,167,143	192,579		
Special 2N	29,706	210,138	14.1%	224,096	31,598		
Special 3N	1,538,712	10,507,363	14.6%	11,139,152	1,626,316		
Total for Plan in Actuarially Det	Aggregate ermined Plan Norr		\$ 909,408,424	\$ 129,703,487 <b>14.3%</b>			



## **SECTION V – CONTRIBUTIONS**

Table V-3 below provides the development of the 4.9% UAL Amortization Rate as of June 30, 2024 that was shown in Table V-1 for the Consolidated Plan in aggregate.

Table V-3 Derivation of Actuarially Determined Pl	lan UAL Amortization Rate
1. Actuarial Liability (AL)	\$ 4,478,226,902
2. Actuarial Value of Assets (AVA)	4,020,441,970
3. Unfunded Actuarial Liability (UAL)	\$ 457,784,932
4. Remaining Balances of Prior Amortization Ba	ases
a. Original UAL Amount	\$ 233,470,342
b. 2016 (Gain)/Loss Base	99,624,504
c. 2017 (Gain)/Loss Base	8,822,287
d. 2018 (Gain)/Loss Base	(69,945,770)
e. 2019 (Gain)/Loss Base	19,453,731
f. 2020 (Gain)/Loss Base	11,992,362
g. 2021 (Gain)/Loss Base	(7,288,991)
h. 2022 (Gain)/Loss Base	25,797,368
i. 2023 (Gain)/Loss Base	30,622,397
j. 2024 (Gain)/Loss Base	105,236,702
k. Sum of the Bases	\$ 457,784,932
5. UAL Amortizations	
a. Original UAL Amount 11 Years	\$ 26,035,513
b. 2016 (Gain)/Loss Base 12 Years	10,355,299
c. 2017 (Gain)/Loss Base 13 Years	860,637
d. 2018 (Gain)/Loss Base 14 Years	(6,441,310)
e. 2019 (Gain)/Loss Base 15 Years	1,699,672
f. 2020 (Gain)/Loss Base 16 Years	998,401
g. 2021 (Gain)/Loss Base 17 Years	(580,443)
h. 2022 (Gain)/Loss Base 18 Years	1,971,603
i. 2023 (Gain)/Loss Base 19 Years	2,252,848
j. 2024 (Gain)/Loss Base 20 Years	7,472,535
k. Sum of the Amortization Payments	\$ 44,624,755



## SECTION V – CONTRIBUTIONS

Table V-3 (continued)         Derivation of Actuarially Determined Plan UAL	Amorti	zation Rate
6. Covered Payroll	\$	909,408,424
7. UAL Amortization Rate		
a. Original UAL Amount 11 Years		3.0%
b. 2016 (Gain)/Loss Base 12 Years		1.1%
c. 2017 (Gain)/Loss Base 13 Years		0.1%
d. 2018 (Gain)/Loss Base 14 Years		(0.7%)
e. 2019 (Gain)/Loss Base 15 Years		0.2%
f. 2020 (Gain)/Loss Base 16 Years		0.1%
g. 2021 (Gain)/Loss Base 17 Years		(0.1%)
h. 2022 (Gain)/Loss Base 18 Years		0.2%
i. 2023 (Gain)/Loss Base 19 Years		0.2%
j. 2024 (Gain)/Loss Base 20 Years		0.8%
k. Sum of the UAL Amortization Rates		4.9%

The Actuarially Determined Plan Normal Cost Rate developed in Table V-2 is combined with the Actuarially Determined Plan UAL Amortization Rate developed in Table V-3 to determine the Actuarially Determined Plan Total Rate. This Actuarially Determined Plan Total Rate, along with the Plan-Specific Normal Cost Rates, will be used in the risk-sharing framework to develop the risk-sharing contribution rates that will actually be paid by the PLDs and members in FY 2026. Since they are developed in that process outside of the actuarial valuations, these actual rates are not included in this report, but for informational purposes, this section is concluded with a general outline of this methodology.

# **Risk-Sharing Contribution Methodology**

As mentioned previously, the actual FY 2026 rates will be developed based on the results of this June 30, 2024 valuation, reflecting application of the risk-sharing contribution methodology. Details of the application of this methodology are determined by the Board, but we have provided a general description of this methodology to communicate how it operates. This basic information is thus useful for informational purposes as it can be provided in advance of the full rates that will be developed and provided under separate cover after the specifics of the methodology for this year are finalized and adopted by the Board.

Note that while this section provides a summary of the principles of the risk-sharing contribution methodology adopted by the Board, the specific details of the methodology to be used in developing the FY 2026 rates from the results of this June 30, 2024 actuarial valuation have not yet been finalized, and thus, any or all details of the methodology as outlined here may change prior to finalization and adoption.



### **SECTION V – CONTRIBUTIONS**

Most of the participating local districts in the State of Maine participate in this Consolidated Plan for PLDs. The Plan offers a number of specific Plan options from which each PLD can choose, with each option having its own specific contributions associated with it to be paid by both the member and the PLD. Under the risk-sharing contribution methodology, both the member contributions and the PLD contributions will be paid as rates that are set annually based on the actuarial valuation process. The June 30, 2018 valuation setting the Fiscal Year 2020 contribution rates was the first valuation used to develop member and PLD contribution rates based on this risksharing methodology. Prior to the 2018 valuation, the member rates were static and set by the Board, while the PLD rates were established using the corridor funding methodology. This June 30, 2024 valuation will be used as the basis to determine the Fiscal Year 2026 contribution rates for members and PLDs that will be paid.

Under the Plan's risk-sharing contribution methodology, PLD and member rates are developed for each Regular and Special Plan within the Plan. First, Plan-Specific Normal Cost Rates are developed for each Plan and then combined to develop the Actuarially Determined Plan Normal Cost Rate, which is the aggregate normal cost rate for the Plan as a whole. These rates represent the cost of providing the next year's benefits. The Actuarially Determined Plan UAL Amortization Rate is also developed based on the amortization of the aggregated UAL. The Actuarially Determined Plan Total Rate is then determined as the sum of the Actuarially Determined Plan Normal Cost Rate and the Actuarially Determined Plan UAL Amortization Rate. This Actuarially Determined Plan Total Rate is then allocated to each Regular and Special Plan relative to their Plan-Specific Normal Cost Rates. The resulting rate for each individual Regular and Special Plan is then allocated between the rate to be paid by the PLD and the rate to be paid by the members. In the case of the three Regular Plans, the process further develops distinct Plan-Specific member rates based on whether a member is covered by the provisions with an age 60 normal retirement age or an age 65 normal retirement age.

The implementation of the risk-sharing framework to develop the contribution rates to be paid based on each valuation includes further refinements based on details adopted by the Board for implementation in that specific year, which include maximum rates and phasing-in of changes in rates from prior years. The Board considers factors specific to the Plan in aggregate as well as the resulting Plan-Specific rates in determining the refinements of the implementation for each year.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

This section contains financial disclosure information regarding the Plan developed under a number of accounting standards and guidance.

First, for informational purposes, we show the Plan's funded status under the Financial Accounting Standards Board (FASB) ASC Topic 960, which discloses how the market value of assets would compare to accrued liabilities if contributions were to stop and accrued benefit claims had to be satisfied as of the valuation date. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if all provisions of the Consolidated Plan were to terminate. We have prepared the following exhibit in this section based on FASB ASC Topic 960:

• Table VI-1: Accrued Benefits information

The Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 establish standards for disclosure of pension information by public employee retirement systems (PERS) and governmental employers in financial statements, notes to financial statements, and supplementary information. We have prepared the following exhibits reflecting provisions of GASB Statement Nos. 67 and 68:

- Table VI-2: Schedule of Changes in Net Pension Liability and Related Ratios
- Table VI-3: Sensitivity of Net Pension Liability to Changes in Discount Rate
- Table VI-4: Schedule of Employer Contributions
- Table VI-5: Average Expected Remaining Service Lives

A summary of the terminology used in GASB Statement Nos. 67 and 68 is provided in Appendix E of this report. Note that while much of the information provided in this report under GASB No. 67 is also utilized in GASB No. 68, Table VI-5 included in this section is only applicable to GASB No. 68.

Finally, we have also developed disclosure information in this section based on additional guidance relating to the Annual Comprehensive Financial Reports (ACFR) of PERS provided by the Government Finance Officers Association (GFOA) in their publication, *Governmental Accounting, Auditing, and Financial Reporting* (GAAFR). We have prepared the following exhibits reflecting guidance in the GAAFR:

- Table VI-6: Analysis of Financial Experience
- Table VI-7: Schedule of Funded Liabilities by Type

The present value of accrued benefits, the total pension liability (GASB 67/68), and the actuarial liability (GAAFR) disclosures in this section are all determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities as of June 30, 2024 are discounted at the assumed valuation interest rate of 6.50% per annum in all of these disclosures.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-1 below includes the relevant amounts as of June 30, 2023 and June 30, 2024 as well as a reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1 Accrued Benefits Infor	rmation	
FASB ASC Topic 960 Basis	June 30, 2023	June 30, 2024
<ol> <li>Present Value of Benefits Accrued to Date (PVAB)         <ol> <li>Members Currently Receiving Payments</li> <li>Terminated Vested Members</li> <li>Terminated Nonvested Members</li> <li>Active Members</li> <li>Total PVAB</li> </ol> </li> </ol>	\$ 2,292,892,614 176,594,216 30,282,025 <u>1,217,311,430</u> \$ 3,717,080,285	\$2,497,927,141 181,430,816 31,272,980 <u>1,279,431,446</u> \$3,990,062,383
2. Assets at Market Value (MVA)	3,846,717,708	4,077,975,617
<ol> <li>Unfunded Present Value of Accrued Benefits, But Not Less Than Zero</li> </ol>	\$ 0	\$ 0
4. Ratio of MVA to PVAB (2)/(1)(d)	103.5%	102.2%
Change in Present Value of Benefits Accrued to Date	during FY 2024	
Increase/(Decrease) during Year Attributable to: Passage of Time Benefits Paid Assumption Changes Plan Changes Benefits Accrued, Other Gains/Losses Net Increase/(Decrease)		$\begin{array}{cccc} \$ & 234,406,429 \\ (225,200,272) \\ & 0 \\ 863,779 \\ \underline{262,912,162} \\ \$ & 272,982,098 \end{array}$

Table VI-2 that follows shows the changes in the total pension liability (TPL), the Plan's fiduciary net position (FNP) (i.e., fair value of the Plan's net assets), and the net pension liability (NPL) during the measurement year ending June 30, 2024, as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Plan.

As of the June 30, 2024 valuation, the fiduciary net position for this Plan was projected to be available to make all projected future benefit payments for current Plan members. As such, the long-term expected rate of return on the Plan's investments was applied to all periods of projected benefit payments in determining the total pension liability under GASB Nos. 67 and 68. The projection of cash flows used to determine the discount rate assumed that the member and PLD contribution rates will be at the actuarially determined rates in aggregate.



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-2	
Schedule of Changes in Net Pension Liability and Re	lated Ratios
FY 2024	
Total Pension Liability (TPL)	
Service Cost (SC)	\$ 118,728,433
Interest (includes Interest on SC)	267,399,602
Changes of Benefit Terms	863,779
Differences Between Actual and Expected Experience	150,622,559
Changes of Assumptions	0
Benefit Payments, including Refunds of Member	
Contributions	(225,200,272)
Net Change in TPL	312,414,101
Beginning of Year (BOY) TPL	4,165,812,801
End of Year (EOY) TPL	<u>\$ 4,478,226,902</u>
Plan Fiduciary Net Position (FNP)	
PLD (Employer) Contributions	\$ 98,715,699
Member Contributions	72,650,710
Transfers	57,992
Net Investment Income	288,525,441
Benefit Payments, including Refunds of Member	) )
Contributions	(225,200,272)
Administrative Expenses	(3,491,661)
Net Change in FNP	\$ 231,257,909
BOY FNP	3,846,717,708
EOY FNP	<u>\$ 4,077,975,617</u>
EOY Net Pension Liability (NPL)	<u>\$ 400,251,285</u>
FNP as a Percentage of TPL	91.1%
Covered Payroll (Payroll)*	\$ 914,034,250
NPL as a Percentage of Payroll	43.8%
* For FY 2024	

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

None



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

A 10-year schedule of changes in NPL and related ratios is to be included within the ACFR for PERS. However, based on GASB guidance, this 10-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net Pension Liability and Related Ratios* above and believe that you can accumulate the individual years in the MainePERS ACFRs to show the full 10-year schedule. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included suggested information for such a note in the *Notes to Schedule of Changes in Net Pension Liability and Related Ratios* above. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any information they may need for this purpose.

Table VI-3 below illustrates the sensitivity of the net pension liability (NPL) to the discount rate. Changes in the discount rate affect the measurement of the total pension liability (TPL) for the Plan. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the Net Pension Liability (NPL) can be very significant for relatively small changes in the discount rate.

Sensitivity of Net P	Table VI-3 ension Liability to ( FY 2024	Changes in Discount	Rate
	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Total Pension Liability (TPL)	\$5,078,060,046	\$ 4,478,226,902	\$ 3,984,033,239
Plan Fiduciary Net Position (FNP)	4,077,975,617	4,077,975,617	4,077,975,617
Net Pension Liability (NPL)	<u>\$1,000,084,429</u>	<u>\$ 400,251,285</u>	<u>\$ (93,942,378</u> )
FNP as a Percentage of TPL	80.3%	91.1%	102.4%

A one percent decrease in the discount rate increases the TPL by approximately 13% and increases the NPL by approximately 150%. A one percent increase in the discount rate decreases the TPL by approximately 11% and decreases the NPL by approximately 123%.

Table VI-4 that follows provides information relating to the employer contributions for the Plan. Under GASB Statement No. 67, if an actuarially determined contribution (ADC) or a contractually or statutorily required contribution (CRC) is developed for a single employer or cost-sharing plan, the following schedule is required. For purposes of this schedule, an ADC is a contribution amount determined in accordance with Actuarial Standards of Practice, and a CRC is based on statutory or contractual requirements. Both should exclude any amounts to finance specific liabilities of individual employers of the Plan. If an ADC is available, the schedule of employer contributions should be developed on that basis. If there is no ADC, but there is a CRC, the schedule should be developed on that basis. Only if neither an ADC nor a CRC is developed can this schedule be omitted from the PERS's ACFR.



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

The Consolidated Plan's risk-sharing contribution rates, which are the basis on which the FY 2024 contribution rates were determined, meet the definition of an ADC, so for this Plan, an additional year should be added to the schedule reflecting FY 2024 on that risk-sharing rate basis. Based on GASB guidance, a full 10 years of information should be shown in this schedule. We have shown only the current year of this *Schedule of Employer Contributions* below and believe that you can accumulate these in the MainePERS ACFR to show the full 10-year schedule.

Only the current year of the *Notes to Schedule of Employer Contributions* below needs to be included in the notes to this schedule. However, any factors that significantly affect trends in the *Schedule of Employer Contributions* at any point in the 10-year period should also be included in the notes to this schedule. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Employer Contributions* below. However, it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule, and we are available to provide any additional information that they may need for this purpose.

	Table VI-4 Schedule of Employer Contributions FY 2024			
Actuarially Determ	ined Contribution (ADC)	\$	98,715,699	
Contributions in Re			98,715,699	
Contribution Defici	ency/(Excess)	<u>\$</u> \$	0	
Covered Payroll (Pa		\$	914,034,250	
	Percentage of Payroll		10.8%	
* For FY 2024				
Notes to Schedule of	of Employer Contributions			
Valuation Date:	June 30, 2022			
Timing:June 30, 2024 rates based on the risk-sharing methodology calculated based on the 2022 actuarial valuation.				
Key Methods and Assumptions Used to Determine Contribution Rates				
Actuarial Cost Method:	Entry age normal			
Asset Valuation Method:	Three-year smoothed market			
Amortization Method:	Level percentage of payroll, closed periods. Cun to 2016 amortized over a 20-year period June 30, 2015 valuation date. Subsequent layers of over individual 20-year periods.	com	mencing with the	



# SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Discount Rate:	6.50%
Amortization Growth Rate:	2.75%
Price Inflation:	2.75%
Salary Increases:	2.75% plus merit component based on employee's years of service
Mortality:	112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Annuitant Mortality Table, respectively, for males and females, using the 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females, for ages prior to the start of the Healthy Annuitant Mortality Table, both projected from the 2010 base rates using MP_2020 model with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024 can be found in the June 30, 2022 Actuarial Valuation Report.

Other Information

None



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-5 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Plan. GASB No. 68 requires some items be recognized by employers into pension expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed as of June 30, 2023. Note that the decision was made to use these averages based on rounding to the nearest whole year, so the values are thus shown as such.

	Table VI-5 ected Remaining Se nent Year Ending Ju		
Status	Total Expected Future Service	Count	Average Remaining Service Lives
Active Members	127,779	13,122	10
In-Pay Members	0	10,615	0
Terminated Vested Members	0	2,865	0
Inactives Due Refunds	0	10,467	0
Total Membership	127,779	37,069	3



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-6 below is a gain/loss analysis of the changes in the actuarial liability over the past six years, reflecting variances between actual experience and assumed experience for different kinds of risk as specified in the GFOA GAAFR.

Table VI-6 Analysis of Financial Experience Gain and Loss in Actuarial Liability During Fiscal Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience						
	Gain (or Loss) For Fiscal Year Ended June 30, 2019	Gain (or Loss) For Fiscal Year Ended June 30, 2020	Gain (or Loss) For Fiscal Year Ended June 30, 2021	Gain (or Loss) For Fiscal Year Ended June 30, 2022	Gain (or Loss) For Fiscal Year Ended June 30, 2023	Gain (or Loss) For Fiscal Year Ended June 30, 2024
Type of Activity						
Investment Income	\$ 17,765,627	\$ (24,747,551)	\$ 181,079,340	\$ 39,956,349	\$ 23,513,351	\$ 29,210,147
Combined Liability Experience	(47,684,163)	6,552,650	(13,300,796)	(67,455,268)	(55,133,042)	(150,622,559)
Gain (or Loss) during Year from Financial						
Experience	\$ <u>(29,918,536)</u>	\$ (18,194,901)	\$ 167,778,544	\$ (27,498,919)	\$ (31,619,691)	\$(121,412,412)
Non-Recurring Items	0	(2,936,139)	(161,866,111)	(16,214,107)	(20,744,234)	(863,779)
Composite Gain (or Loss) During Year	\$ (29,918,536)	\$ (21,131,040)	\$ 5,912,433	\$ (43,713,026)	\$ (52,363,925)	\$(122,276,191)



## SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Table VI-7 below compares the Plan's assets as of each valuation date shown to the Plan's actuarial liability divided into three separate groups: liabilities for contributions on deposit for current active members, liabilities for future benefits for inactive members, and employer-financed liabilities for current active members. This Schedule of Funded Liabilities by Type is used to assess funding progress based on what percentage of the liabilities for each of these groups the Plan's assets are sufficient to cover. Per GFOA guidance, this schedule is to include this assessment for the 10 most recent years, and notes to this schedule should be provided to explain any factors that affect the comparability of the data. We do not believe such a note is needed for the measurement year ending June 30, 2024, but it is our expectation that the System's staff will make the final determination regarding any notes needed for this schedule.

			Table VI-7				
		Schedule	of Funded Liabilities by	у Туре			
	Agg	regate Actuarial Liab	ilities for:				
	(1)	(2)	(3)		Portio	n of Actua	rial
Valuation	Active	Retirees	Active Members		Liabi	lities Cove	red
Date	Member	Vested Terms,	(Employer	Reported	by Re	ported Ass	sets
June 30,	Contributions	Beneficiaries	<b>Financed Portion</b> )	Assets*	(1)	(2)	(3)
2024	\$ 679,073,755	\$ 2,710,630,937	\$1,088,522,210	\$ 4,020,441,970	100%	100%	58%
2023	639,673,576	2,499,768,855	1,026,370,370	3,799,744,503	100	100	64
2022	599,258,078	2,404,206,415	940,108,397	3,596,808,593	100	100	63
2021	561,690,222	2,230,697,428	926,628,764	3,388,697,748	100	100	64
2020	556,727,111	2,036,858,811	816,155,445	3,063,710,040	100	100	58
2019	521,610,261	1,927,683,260	809,526,084	2,918,585,814	100	100	58
2018	494,411,535	1,818,566,082	776,879,603	2,764,807,391	100	100	58
2017	472,362,260	1,721,058,286	823,240,175	2,609,806,231	100	100	51
2016	452,446,198	1,654,981,662	782,312,774	2,489,157,281	100	100	49
2015	438,925,747	1,543,532,803	738,477,459	2,433,186,149	100	100	61

\* Reported assets are measured at actuarial value. Results would be different if the market value of assets were used. Despite the name of this exhibit, the liabilities presented in this schedule are not an appropriate measurement of the settlement liability of the Plan.



# **APPENDIX A – PARTICIPATING LOCAL DISTRICT PLAN ELECTIONS**

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## Notes to Appendix A:

PLD Name:	Name of the Participating Local District
<u>PLD #</u> :	MainePERS Participating Local District Number
<u>Regular Plan</u> :	Identifies the Regular Plan currently adopted by the PLD.PlanAccrual RateA:2%B:1%
<u>Special Plans:</u>	Identifies the Special Plans, if any, currently adopted by the PLDPlanEligibility1:20 year, no age plan.225 year, no age plan.3:25 year, no age plan.4:Age 55 with 25 years of service.
<u>COLA</u> :	Current COLA adopted by the PLD: No = No COLA adopted for any current members Yes = COLA adopted for all service of all current members FO = COLA adopted for Future Service only for all current members, that is, the COLA is applicable only to the benefits attributable to service rendered after the Future Service COLA Date FO-Limited = COLA adopted for Future Service only for only a subset of the PLD's current members
Entry Date:	Date the PLD entered the Consolidated Plan for Participating Local Districts
<u>FO COLA Date</u>	The Future Service COLA Date, the date as of which COLA is applicable for members of the PLD covered by the FO COLA Varied = There are multiple Future Service COLA Dates applicable to different groups of the PLD's current members



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	<b>Date</b>	<b>Date</b>
Acton, Town of	0361	A	2	No	7/1/2016	
Alfred, Town of	0369	А		Yes	1/1/2019	
Androscoggin County	0067	А	1,2	Yes	7/1/1994	
Androscoggin Valley Council of Governments	0231	А		Yes	7/1/1996	
Anson-Madison Sanitary District	0365	А		Yes	7/1/2017	
Anson-Madison-Starks Ambulance Emergency Service	0389	А	3	Yes	11/1/2022	
Aroostook County	0106	А	3,4	Yes	7/1/1994	
Aroostook Waste Solutions	0267	А		Yes	7/1/1996	
Ashland, Town of	0418	А		No	7/1/2022	
Auburn Housing Authority	0145	А		Yes	7/1/1994	
Auburn Lewiston Airport	0256	А		Yes	7/1/1996	
Auburn Public Library	0043	A		FO	7/1/1996	7/1/2001
Auburn Water and Sewer District	0052	А		Yes	7/1/1994	
Auburn, City of	0027	А	2,3	Yes	7/1/1994	
Augusta Housing Authority	0351	А		Yes	4/1/2014	
Augusta, City of	0023	А	2,3	Yes	7/1/1994	
Baileyville, Town of	0069	А	3	Yes	7/1/1996	
Bangor Housing Authority	0288	А		Yes	7/1/1994	
Bangor Public Library	0022	А		Yes	7/1/1996	
Bangor Water District	0059	В		Yes	7/1/1996	
Bangor, City of	0020	А	2,3	Yes	7/1/1996	
Bar Harbor, Town of	0015	А	3,4	Yes	7/1/1995	
Bath Water District	0019	А		Yes	7/1/1994	
Bath, City of	0073	А	2,3	Yes	7/1/1996	
Baxter Academy of Technology And Sciences	0348	А		Yes	7/1/2013	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	<u>Date</u>	<u>Date</u>
Belfast Water District	0132	A	•	Yes	7/1/1995	
Belfast, City of	0035	A	3	Yes	7/1/1996	
Belgrade, Town of	0383	А	3	Yes	7/1/2022	
Berwick Sewer District	0207	А		Yes	7/1/1994	
Berwick, Town of	0108	А	1	FO	7/1/1996	7/1/2008
Bethel, Town of	0246	А		Yes	7/1/1996	
Biddeford Housing Authority	0310	А		Yes	7/1/2007	
Biddeford, City of	0158	А	3	FO	7/1/2010	7/1/2010
Boothbay Harbor Sewer District	0363	А		Yes	1/1/2017	
Boothbay Harbor, Town of	0146	А	2	Yes	7/1/1996	
Boothbay Region Water District	0298	А	2	Yes	1/1/2002	
Bowdoinham Water District	0319	A		Yes	1/1/2009	
Brewer Housing Authority	0248	A		Yes	7/1/1994	
Brewer, City of	0063	A	2,3	Yes	7/1/1996	
Bridgton, Town of	0176	А	3	Yes	1/1/2020	
Brownville, Town of	0177	А		No	7/1/2010	
Brunswick Fire & Police	0292	А	1,3	FO	7/1/1997	7/1/1997
Brunswick Public Library Association	0273	А		FO	7/1/1995	7/1/1995
Brunswick Sewer District	0072	А		Yes	7/1/1996	
Brunswick, Town of	0042	А	2	FO	7/1/1995	7/1/2000
Buckfield, Town of	0344	А		No	1/1/2013	
Bucksport, Town of	0130	А	1,3,4	FO-Limited	7/1/1995	8/1/2022
Buxton, Town of	0370	А	2	Yes	9/1/2020	
Calais, City of	0036	A		FO	7/1/1996	7/1/1996
, , , , ,						



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	<u>Date</u>
Camden, Town of	0008	A	2	Yes	7/1/1994	
Cape Elizabeth Police	0317	А	3	Yes	7/1/2008	
Caribou Fire & Police	0208	А	3	FO-Limited	7/1/1996	4/1/2022
Carmel, Town of	0390	A		Yes	4/1/2023	
Carrabassett Valley, Town of	0277	А		FO	7/1/1994	7/1/1994
China, Town of	0235	А		FO	7/1/1996	7/1/2008
Clinton, Town of	0385	А	3	Yes	7/1/2022	
Coastal Counties Workforce	0301	А		Yes	7/1/2003	
Community Regional Charter School	0345	А		Yes	7/1/2013	
Community School Dist. #912	0252	А		Yes	7/1/1996	
Corinth, Town of	0377	А		Yes	1/1/2022	
Cornish, Town of	0393	A		No	5/1/2023	
Cumberland County	0005	Α	2,3	Yes	7/1/1996	
Cumberland, Town of	0216	A	2,3	Yes	7/1/1995	
Damariscotta, Town of	0191	А		Yes	7/1/2011	
Danforth, Town of	0367	А		Yes	7/1/2017	
Dayton, Town of	0355	А	2	Yes	7/1/2014	
Dedham, Town of	0378	А	3	Yes	4/1/2022	
Dexter, Town of	0097	А		Yes	7/1/1996	
Dover-Foxcroft Water District	0137	А		Yes	7/1/1994	
Dover-Foxcroft, Town of	0167	А		No	7/1/1995	
Durham, Town of	0234	А		No	7/1/1996	
Eagle Lake Water & Sewer District	0274	А		Yes	7/1/1996	
East Millinocket, Town of	0054	А	2	Yes	7/1/1996	
Easton, Town of	0240	А		Yes	7/1/1994	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	Date
Eastport, City of	0007	A		Yes	7/1/2020	
Ecology Learning Center	0025	A		Yes	7/1/2020	
Eddington, Town of	0372	A	3	Yes	10/1/2020	
Eliot, Town of	0180	А	1	Yes	7/1/1994	
Ellsworth, City of	0013	А	2,4	Yes	7/1/1995	
Enfield, Town of	0001	А		Yes	1/1/2020	
Erskine Academy	0249	А		No	7/1/1994	
Fairfield, Town of	0260	А	3	Yes	7/1/1995	
Falmouth Memorial Library	0058	А		Yes	7/1/1996	
Falmouth, Town of	0087	А	3	Yes	7/1/1996	
Farmington Village Corporation	0118	А		No	7/1/1994	
Farmington, Town of	0100	A	1	Yes	7/1/1995	
Fort Fairfield Housing Authority	0275	A		FO	7/1/2002	7/1/1994
Fort Fairfield Utilities District	0131	A		Yes	7/1/1996	
Fort Fairfield, Town of	0017	А	3	Yes	7/1/2001	
Fort Kent, Town of	0091	А	1,2	FO	7/1/2019	7/1/2021
Franklin County	0102	А	2,3	Yes	7/1/2006	
Freeport, Town of	0142	А	2,3	FO	7/1/2003	7/1/2003
Frenchville, Town of	0098	А		No	7/1/1996	
Fryeburg, Town of	0149	А	1	No	1/1/2011	
Gardiner Water District	0221	А		No	7/1/1994	
Gardiner, City of	0024	А	3	FO	7/1/1996	7/1/2009
Glenburn, Town of	0174	А		Yes	7/1/1994	
Good Will Home Association	0347	А		Yes	7/1/2013	
Gorham Fire and Police	0334	А	3	Yes	7/1/2009	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	<u>Date</u>	Date
Gorham, Town of	0133	A		Yes	7/1/1996	
Gould Academy	0205	A		No	7/1/1996	
Grand Isle, Town of	0312	В		Yes	7/1/2008	
Greater Augusta Utility District	0311	A		Yes	1/1/2008	
Greenville, Town of	0112	А	2	Yes	7/1/1996	
Hallowell, City of	0160	А	2	Yes	7/1/1996	
Hampden Water District	0183	А		Yes	7/1/1996	
Hampden, Town of	0151	А	1,3	FO	7/1/1996	7/1/2009
Hancock County	0056	Α	2	Yes	7/1/1994	
Hancock, Town of	0353	А		Yes	7/1/2014	
Harpswell Coastal Academy	0350	А		Yes	1/1/2022	
Harpswell, Town of	0270	A		Yes	7/1/1994	
Harrison, Town of	0280	В		Yes	7/1/1994	
Hartland, Town of	0360	A		Yes	1/1/2016	
Hermon, Town of	0150	А	3	FO-Limited	7/1/1996	5/1/2023
Hodgdon, Town of	0215	А		FO	7/1/1996	7/1/2007
Holden, Town of	0338	А	3,4	Yes	7/1/2011	
Hollis, Town of	0386	А	3	Yes	9/1/2022	
Houlton Water Company	0026	А		Yes	7/1/1995	
Houlton, Town of	0010	А	3	Yes	7/1/1996	
Jackman Utility District	0294	А		Yes	7/1/1996	
Jay, Town of	0045	А	2	Yes	7/1/1994	
Kennebec County	0047	А	2	Yes	7/1/1995	
Kennebec Sanitary Treatment District	0220	А		FO	7/1/1995	7/1/1995
Kennebec Valley Council of Governments	0391	А		Yes	2/1/2023	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	Date
Kennebec Water District	0031	A		Yes	7/1/1996	
Kennebunk Light & Power District	0062	A		Yes	7/1/1994	
Kennebunk Sewer District	0201	А		FO	7/1/1994	7/1/2000
Kennebunk, Kennebunkport & Wells Water District	0255	A		FO	7/1/1996	7/1/1999
Kennebunk, Town of	0084	А	1	Yes	7/1/1996	
Kennebunkport, Town of	0188	А	1	FO	7/1/1996	7/1/2006
Kittery Water District	0012	А		Yes	7/1/1994	
Kittery, Town of	0014	А	1	Yes	7/1/1995	
Knox County Sheriffs and Corrections	0359	А	3	No	1/1/2016	
Lebanon, Town of	0181	А		Yes	7/1/1996	
Levant, Town of	0339	А		Yes	7/1/2011	
Lewiston Housing Authority	0154	A		Yes	7/1/1994	
Lewiston, City of	0048	A	3	Yes	7/1/1996	
Lewiston/Auburn 9-1-1	0291	A		Yes	7/1/1994	
Lewiston-Auburn Water Pollution Control Authority	0163	А		FO	7/1/1996	7/1/1996
Limerick, Town of	0375	А	3	No	10/1/2021	
Limestone Water & Sewer District	0029	А		Yes	7/1/2022	
Limestone, Town of	0245	А		Yes	7/1/2006	
Limington, Town of	0388	А	3	Yes	9/1/2022	
Lincoln & Sagadahoc Multi-County Jail Authority	0304	А	2	Yes	7/1/2004	
Lincoln Academy	0134	А		Yes	7/1/1994	
Lincoln County	0095	А	2	Yes	7/1/2004	
Lincoln County Sheriff's Office	0302	А	3	Yes	7/1/2003	
Lincoln Sanitary District	0219	А		Yes	7/1/1994	
Lincoln Water District	0092	А		Yes	7/1/1995	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	<u>Date</u>
Lincoln, Town of	0076	A	3	No	7/1/1996	
Linneus, Town of	0214	A		No	7/1/1996	
Lisbon Water Department	0243	А		FO	7/1/1996	7/1/2007
Lisbon, Town of	0103	A	3	Yes	7/1/1996	
Livermore Falls Water District	0032	А		Yes	7/1/1994	
Livermore Falls, Town of	0109	А	2	FO-Limited	7/1/1996	7/1/2021
Livermore, Town of	0392	А		No	2/1/2023	
Lovell, Town of	0276	А		Yes	7/1/1996	
Lubec Water District	0088	А		Yes	7/1/1996	
Lubec, Town of	0228	А		No	7/1/1996	
Lyman, Town of	0373	А		Yes	12/1/2020	
M.A.D.S.E.C.	0297	A		Yes	7/1/1999	
Madawaska Water District	0236	A		Yes	7/1/1994	
Madawaska, Town of	0082	A	3	Yes	7/1/1996	
Maine Academy of Natural Sciences	0346	А		Yes	7/1/2013	
Maine County Commissioners Association	0225	А		No	7/1/1996	
Maine Maritime Academy	0038	А		Yes	7/1/1996	
Maine Municipal Association	0055	А		Yes	7/1/2009	
Maine Municipal Bond Bank	0093	А		Yes	7/1/1995	
Maine Principals' Association	0105	А		Yes	7/1/1994	
Maine Public Employees Retirement System	0290	А		Yes	7/1/1994	
Maine School Management Association	0239	А		Yes	7/1/1994	
Maine School of Science and Mathematics	0352	А		Yes	7/1/2014	
Maine State Housing Authority	0169	А		Yes	7/1/2005	
Maine Turnpike Authority	0049	А		Yes	7/1/1994	
1 5						



	<b>DI D</b> #	Regular	Special		Entry	FO COLA
<u>PLD Name</u> Maine Veterans' Home	<u>PLD #</u> 0271	<u>Plan</u> A	<u>Plans</u>	<u>COLA</u> Yes	<u>Date</u> 7/1/1994	<u>Date</u>
Maine Virtual Academy	0357	A		Yes	7/1/2015	
Mapleton, Castle Hill, & Chapman, Town of	0265	A		Yes	7/1/1996	
Mars Hill Utility District	0203	A		Yes	7/1/1994	
Mars Hill, Town of	0283	A		Yes	7/1/1996	
Mechanic Falls Sanitary District	0282	A		FO	7/1/1994	7/1/2002
Mechanic Falls, Town of	0114	A	2	Yes	7/1/1994	//1/2002
Medway, Town of	0114	A	2	Yes	7/1/1996	
Mexico, Town of	0174	A	2	Yes	7/1/1996	
Midcoast Council of Governments	0343	A	2	Yes	7/1/2012	
Milford, Town of	0186	A		No	7/1/1996	
Millinocket, Town of	0003	A	3,4	Yes	7/1/1996	
Milo Water District	0238	A	5,1	No	7/1/1996	
Monmouth, Town of	0316	A	3	Yes	7/1/2008	
Monson, Town of	0184	A	5	No	7/1/1996	
Mount Desert Island Regional School District	0120	A		Yes	7/1/1996	
Mount Desert Water District	0300	A		Yes	7/1/2003	
Mount Desert, Town of	0016	A	2	Yes	7/1/1996	
Municipal Review Committee	0404	A	-	Yes	1/1/2024	
New Gloucester, Town of	0210	A	3	FO	7/1/1995	7/1/2007
Newport Water District	0313	A	C	Yes	7/1/2008	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Newport, Town of	0314	A	3	Yes	7/1/2008	
Newry, Town of	0387	A	-	Yes	7/1/2022	
North Berwick Water District	0308	A		Yes	7/1/2006	
North Berwick, Town of	0254	A	3	No	7/1/1996	
			-			



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	<u>Date</u>
North Yarmouth, Town of	0395	A	3	Yes	8/1/2023	
Northern Aroostook Regional Airport Authority	0374	A	2	Yes	7/1/2021	
Northern Oxford Regional Ambulance Service DBA Med- Care Ambulance	0403	A	3	Yes	1/1/2024	
Northern Oxford Regional Solid Waste Board	0354	А		Yes	7/1/2014	
Norway Water District	0136	А		FO	7/1/1995	7/1/2000
Norway, Town of	0125	А	2	FO	7/1/1996	7/1/2000
Oakland, Town of	0376	А	3	Yes	10/1/2021	
Ogunquit, Town of	0303	А	1	Yes	7/1/2004	
Old Orchard Beach, Town of	0140	Α	3	Yes	7/1/2003	
Old Town Housing Authority	0262	А		FO	7/1/1994	7/1/1994
Old Town Water District	0079	A		FO	7/1/1994	1/1/2022
Old Town, City of	0111	А	2,3	No	7/1/1995	
Orland, Town of	0166	A		No	7/1/1996	
Orono, Town of	0061	А	3	FO	7/1/1996	7/1/2002
Orrington, Town of	0209	А	3	No	7/1/1995	
Otis, Town of	0364	А		Yes	7/1/2017	
Otisfield, Town of	0193	А		FO	7/1/1996	7/1/1996
Oxford County	0057	А	2,4	Yes	7/1/1994	
Oxford, Town of	0200	А	1	No	7/1/1996	
Paris Utility District	0159	А		Yes	7/1/1995	
Paris, Town of	0127	А	2	Yes	7/1/1996	
Penobscot County	0011	А	2	Yes	7/1/1994	
Penquis	0237	А		No	7/1/1995	
Phippsburg, Town of	0202	А	3	Yes	7/1/1996	



		Regular	Special	COL	Entry	FO COLA
PLD Name Discosto surja Country	<u>PLD #</u>	<u>Plan</u>	Plans	<u>COLA</u>	<u>Date</u>	<b>Date</b>
Piscataquis County	0121	A	4	Yes	7/1/1994	
Pittsfield, Town of	0110	A		No	7/1/1996	
Pleasant Point Passamaquoddy Reservation Housing Authority	0165	А		Yes	7/1/1996	
Poland, Town of	0336	А	1	FO	7/1/2010	Varied
Portland Housing Authority	0185	А		Yes	7/1/1994	
Portland Public Library	0041	А		Yes	7/1/1995	
Portland, City of	0002	А	2,3	Yes	7/1/1995	
Presque Isle, City of	0004	А	3	Yes	1/1/2020	
Princeton, Town of	0258	А		No	7/1/1996	
Rangeley, Town of	0382	А	2	Yes	7/1/2022	
Regional School Unit #01	0315	A	2	Yes	7/1/2008	
Regional School Unit #02	0323	А		FO	7/1/2009	7/1/2009
Regional School Unit #04	0324	A		Yes	7/1/2009	
Regional School Unit #05	0325	А		Yes	7/1/2009	
Regional School Unit #09	0119	А		Yes	7/1/1995	
Regional School Unit #10	0326	А		Yes	7/1/2009	
Regional School Unit #20	0328	А		Yes	7/1/2009	
Regional School Unit #21	0322	А		FO	7/1/2009	7/1/2009
Regional School Unit #23	0329	А		Yes	7/1/2009	
Regional School Unit #25	0321	А		No	7/1/2009	
Regional School Unit #26	0330	А		Yes	7/1/2009	
Regional School Unit #29	0168	А		Yes	7/1/1996	
Regional School Unit #34	0331	А		No	7/1/2009	
Regional School Unit #49	0189	А		No	7/1/1995	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	<u>Date</u>
Regional School Unit #51	0198	A		No	7/1/1996	
Regional School Unit #52	0461	A		Yes	11/1/2021	
Regional School Unit #54	0115	А		Yes	7/1/1996	
Regional School Unit #56	0366	А		Yes	7/1/2017	
Regional School Unit #60	0187	А		No	7/1/1994	
Regional School Unit #67	0126	А		Yes	7/1/2016	
Regional School Unit #73	0340	А		Yes	7/1/2011	
Regional School Unit #75	0380	А		Yes	5/1/2022	
Richmond Utilities District	0242	Α		FO-Limited	7/1/1994	1/1/2023
Richmond, Town of	0213	А	3	Yes	7/1/2007	
Rockland, City of	0018	А	3	Yes	7/1/1995	
Rockport, Town of	0161	A	2	FO-Limited	7/1/1996	1/1/2021
RSU #35 - MSAD #35	0396	Α		Yes	7/1/2023	
RSU #87 - MSAD #23 - School Support	0398	A		Yes	10/1/2023	
Rumford Fire & Police	0060	А	2,4	Yes	7/1/1995	
Rumford Mexico Sewerage District	0247	А		Yes	7/1/1996	
Rumford Water District	0065	А		Yes	7/1/1995	
Rumford, Town of	0090	А		Yes	7/1/1995	
Sabattus, Town of	0175	А	1,3	FO	7/1/1996	7/1/2006
Saco, City of	0192	А	2,3	FO-Limited	7/1/1995	Varied
Sagadahoc County	0096	А	2,3	Yes	7/1/2002	
Sanford Housing Authority	0152	А		Yes	7/1/1996	
Sanford Sewerage District	0089	А		No	7/1/1994	
Sanford Water District	0170	А		FO	7/1/1996	1/1/2009
Sanford, City of	0083	А	1,3	FO	7/1/1995	7/1/2002
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		Regular	Special		Entry	FO COLA
PLD Name Seechemensche Terrer of	<u>PLD #</u> 0147	<u>Plan</u>	<u>Plans</u>	<u>COLA</u> Yes	$\frac{\text{Date}}{7/1/1006}$	<u>Date</u>
Scarborough, Town of		A	1,3		7/1/1996	
School Administrative District No. 13 Bingham	0223	A		Yes	7/1/1996	7/1/1004
School Administrative District No. 31 Howland	0050	A		FO	7/1/1994	7/1/1994
School Administrative District No. 41 Milo	0143	A		Yes	7/1/1996	
School Administrative District No. 53 Pittsfield	0129	A		No	7/1/1996	
Searsport Water District	0124	А		No	7/1/1996	
Searsport, Town of	0117	A	3	No	7/1/1996	
Shapleigh, Town of	0381	А		No	7/1/2022	
Skowhegan, Town of	0080	А	3	Yes	7/1/1996	
Somerset County	0101	А	2,3	Yes	7/1/2005	
South Berwick Sewer District	0299	А		Yes	7/1/2003	
South Berwick Water District	0171	A	2	Yes	7/1/1996	
South Berwick, Town of	0141	A	1	FO	7/1/1996	7/1/1996
South Portland Housing Authority	0206	A		Yes	7/1/1996	
South Portland, City of	0009	А	3	Yes	7/1/1995	
Southern Aroostook Emergency Medical Services	0384	А	3	Yes	10/1/2022	
Southwest Harbor, Town of	0368	А	2	Yes	7/1/2018	
St. Agatha, Town of	0030	А		Yes	7/1/1996	
Standish, Town of	0371	А	2	FO	1/1/2021	9/1/2023
Thomaston, Town of	0164	А	3	Yes	1/1/2010	
Thompson Free Library	0318	А		Yes	1/1/2009	
Topsham Sewer District	0307	А		Yes	7/1/2005	
Topsham, Town of	0081	А	2,3	Yes	7/1/1996	
Town of Gray	0399	А	3	Yes	10/1/2023	
Town of Machias	0397	А	2	Yes	9/1/2023	



		Regular	Special		Entry	FO COLA
PLD Name	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	<u>COLA</u>	Date	Date
Town of Norridgewock	0402	A	3	Yes	12/1/2023	
Town of Raymond	0394	A	3	Yes	9/1/2023	
Trenton, Town of	0341	А		Yes	7/1/2011	
Union, Town of	0342	A		No	7/1/2012	
United Technologies Center, Region 4, S Penobscot	0269	А		FO	7/1/1996	7/1/2009
University of Maine System	0379	А	2	Yes	7/1/2022	
Van Buren Housing Authority	0229	А		Yes	7/1/1995	
Van Buren, Town of	0182	А	3	Yes	7/1/1995	
Vassalboro, Town of	0153	А		Yes	7/1/1996	
Veazie Fire & Police	0305	А	3	Yes	7/1/2004	
Waldo County	0046	А	2,3	Yes	7/1/1994	
Waldo County Technical Center	0224	A		No	7/1/1996	
Waldoboro, Town of	0195	A	3	Yes	7/1/1995	
Washburn Water and Sewer District	0335	A		No	7/1/2009	
Washburn, Town of	0230	А		No	7/1/1994	
Washington County	0040	А	3,4	Yes	7/1/1996	
Waterboro, Town of	0356	А	3	No	1/1/2015	
Waterville Sewerage District	0222	А		Yes	7/1/1994	
Waterville, City of	0066	А	3	FO-Limited	7/1/1996	Varied
Wells Fire and Police	0349	А	1	Yes	7/1/2013	
Wells Ogunquit Community School District #918	0266	А		FO	7/1/1995	7/1/1995
Wells, Town of	0107	А	3	FO-Limited	1/1/2018	7/1/2020
West Bath, Town of	0333	А	3	Yes	7/1/2009	
Westbrook Fire & Police	0070	А	1,3	Yes	7/1/2006	
Westbrook, City of	0122	А	3	Yes	7/1/2006	
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		Regular	Special		Entry	FO COLA
<u>PLD Name</u>	<u>PLD #</u>	<u>Plan</u>	<u>Plans</u>	COLA	Date	Date
Wilton, Town of	0086	A	2,3	FO	1/1/2009	1/1/2009
Windham, Town of	0309	Α	3	Yes	7/1/2006	
Winslow, Town of	0362	А	3	Yes	1/1/2017	
Winter Harbor Utility District	0250	А		Yes	7/1/1995	
Winthrop Utilities District	0337	А		Yes	1/1/2011	
Winthrop, Town of	0179	А	2	FO	7/1/1994	7/1/2003
Wiscasset, Town of	0417	А	2	FO-Limited	1/1/2012	7/1/2020
Yarmouth Water District	0278	А		Yes	7/1/1994	
Yarmouth, Town of	0116	А	1	Yes	7/1/1996	
York County	0037	А	1,2,3	Yes	7/1/1996	
York Sewer District	0139	А		FO	7/1/1994	7/1/2006
York Water District	0039	A		Yes	7/1/1996	
York, Town of	0028	A	2,3	Yes	7/1/1994	



# **APPENDIX B – MEMBERSHIP INFORMATION**

Active Member Data as of June	30, 20	24	
Regular Plan Members			
Count		9,397	
Average Current Age		47.0	
Average Benefit Service		7.2	
Average Vesting Service		7.7	
Average Valuation Pay	\$	60,628	
Special Plan Members			
Count		4,164	
Average Current Age		39.0	
Average Benefit Service		8.8	
Average Vesting Service		9.5	
Average Valuation Pay	\$	81,577	
All Plan Members			
Count		13,561	
Average Current Age		44.6	
Average Benefit Service		7.7	
Average Vesting Service		8.2	
Average Valuation Pay	\$	67,061	

Participating Local District Inactive	Member D		Employees Retiren ine 30, 2024	nent System
		Average	Total	Average
	Count	Age	Annual Benefit	Annual Benefit
Retired	6,403	73.5	\$ 110,397,333	\$ 17,242
Retired - Concurrent Beneficiary	375	72.7	1,583,827	4,224
Disability - Section 1122	17	80.3	233,343	13,726
Disability – Sections 3 and 3A	267	68.2	6,461,920	24,202
Beneficiary of Above	1,105	73.6	13,168,552	11,917
Pre-Retirement Death Beneficiary	164	69.7	1,148,158	7,001
Terminated Vested	2,464	52.3	15,418,141	6,257
Inactive Due Refund	9,261	NA	NA	NA

There are no actives in Special 4N Plan, so all remaining inactive participants were transferred to the Regular Plan.



Participating Local District Inactive	Member I		Employees Retiren 1ne 30, 2024	nent System
		Average	Total	Average
	Count	Age	Annual Benefit	Annual Benefit
Retired	1,718	67.9	\$ 68,747,238	\$ 40,016
Retired - Concurrent Beneficiary	350	68.6	2,671,562	7,633
Disability - Section 1122	15	77.3	373,406	24,894
Disability – Sections 3 and 3A	109	62.9	3,888,361	35,673
Beneficiary of Above	314	73.7	7,099,409	22,610
Pre-Retirement Death Beneficiary	16	62.1	132,153	8,260
Terminated Vested	489	46.4	5,578,080	11,407
Inactive Due Refund	992	NA	NA	NA

## **APPENDIX B – MEMBERSHIP INFORMATION**

There are no actives in Special 4N Plan, so all remaining inactive participants were transferred to the Regular Plan.

In preparing this report, we relied on data provided by MainePERS as modified following the procedures outlined in the State of Maine Data Processing Notebook. Adjustments to the data are made based on this processing notebook. Accuracy of the results is dependent on the completeness of the underlying information. The plan sponsor is responsible for the validity and completeness of the information provided. We believe the data provided as modified as documented in the Processing Notebook is sufficient for the actuarial analysis performed.

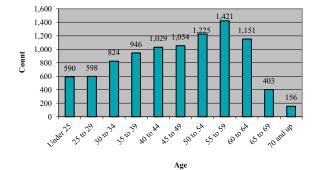


## **APPENDIX B – MEMBERSHIP INFORMATION**

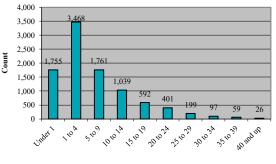
Distribution of Active Members As of June 30, 2024

				F	Regular Plan	Participant	ts				
					Years of	f Service					
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Totals
Under 25	381	206	3	0	0	0	0	0	0	0	590
25 to 29	191	330	77	0	0	0	0	0	0	0	598
30 to 34	205	405	175	36	3	0	0	0	0	0	824
35 to 39	227	433	190	75	21	0	0	0	0	0	946
40 to 44	185	395	246	129	54	19	1	0	0	0	1,029
45 to 49	162	405	223	140	69	42	13	0	0	0	1,054
50 to 54	146	416	256	166	100	94	33	10	4	0	1,225
55 to 59	130	411	279	204	162	104	75	35	20	1	1,421
60 to 64	69	332	233	194	123	90	43	27	27	13	1,151
65 to 69	38	94	59	68	48	40	24	18	8	6	403
70 and up	21	41	20	27	12	12	10	7	0	6	156
Total	1,755	3,468	1,761	1,039	592	401	199	97	59	26	9,397





#### Service Distribution



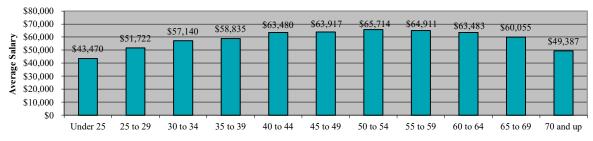




# **APPENDIX B – MEMBERSHIP INFORMATION**

Distribution of Active Members As of June 30, 2024

						]	Reg	gular Pla	n Pa	rticipant	ts									
								Average	Sal	lary										
								Years of	Ser	vice										
	τ	Jnder 1	1 to 4	5 to 9	1	0 to 14	1	5 to 19	2	0 to 24	2	5 to 29	3	0 to 34	3	5 to 39	40	and up	A	verage
Under 25	\$	39,682	\$ 50,073	\$ 71,202	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	43,470
25 to 29		45,101	52,903	63,087		0		0		0		0		0		0		0		51,722
30 to 34		49,043	56,417	65,029		71,575		74,631		0		0		0		0		0		57,140
35 to 39		49,485	57,304	64,155		77,681		76,019		0		0		0		0		0		58,835
40 to 44		49,003	60,247	68,118		77,208		78,731		74,357		76,571		0		0		0		63,480
45 to 49		51,684	57,303	67,657		75,383		85,083		75,992		83,401		0		0		0		63,917
50 to 54		54,159	60,153	65,314		73,522		76,536		78,994		75,561		74,605		81,330		0		65,714
55 to 59		51,495	59,817	62,119		68,212		72,869		70,170		80,313		80,783		85,157		56,063		64,911
60 to 64		49,030	57,473	58,932		71,684		66,633		71,278		80,969		71,147		76,666		67,963		63,483
65 to 69		42,705	51,538	53,590		68,632		66,693		69,363		62,157		71,756		83,929		79,211		60,055
70 and up		39,390	38,568	46,476		57,356		56,495		64,637		59,047		53,489		0		66,540		49,387
Average	\$	47,233	\$ 56,965	\$ 63,804	\$	72,337	\$	73,439	\$	73,049	\$	76,591	\$	73,819	\$	80,845	\$	69,773	\$	60,628
														-						



#### **Average Salary Distribution**

Age

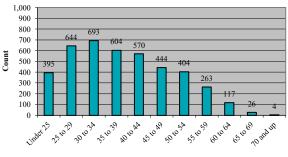


# **APPENDIX B – MEMBERSHIP INFORMATION**

				5	pecial Plan	Participants					
					Years of	Service					
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Totals
Under 25	137	252	6	0	0	0	0	0	0	0	395
25 to 29	102	358	184	0	0	0	0	0	0	0	644
30 to 34	59	263	278	93	0	0	0	0	0	0	693
35 to 39	45	164	167	163	65	0	0	0	0	0	604
40 to 44	37	100	109	132	149	43	0	0	0	0	570
45 to 49	28	72	49	86	95	105	9	0	0	0	444
50 to 54	13	74	29	70	80	97	36	5	0	0	404
55 to 59	9	25	28	46	47	72	21	10	5	0	263
60 to 64	4	17	10	20	28	20	9	4	4	1	117
65 to 69	0	3	6	6	1	8	1	1	0	0	26
70 and up	0	1	2	0	0	0	0	0	1	0	4
Total	434	1,329	868	616	465	345	76	20	10	1	4,164

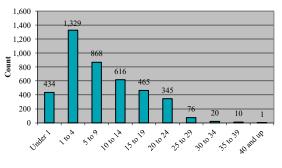
#### Distribution of Active Members As of June 30, 2024

Age Distribution









Service

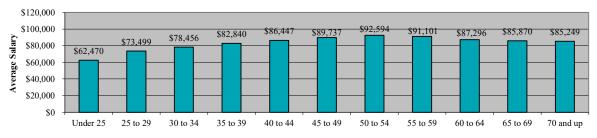




# **APPENDIX B – MEMBERSHIP INFORMATION**

						Special	Pla	n Participant	s				
						Av	erag	e Salary					
						Yea	rs o	f Service					
	Under 1	1 to 4	5 to 9	)	10 to 14	15 to 19		20 to 24	25 to 29	30 to 34	35 to 39	40 and up	Average
Under 25	\$ 51,998	\$ 68,052	\$ 67,	130	\$ 0	\$	0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 62,470
25 to 29	54,503	73,616	83,	303	0		0	0	0	0	0	0	73,499
30 to 34	54,212	72,980	84,	522	91,192		0	0	0	0	0	0	78,456
35 to 39	55,046	72,015	81,	358	95,810	100,67	6	0	0	0	0	0	82,840
40 to 44	53,901	73,843	82,	310	89,844	97,28	33	106,275	0	0	0	0	86,447
45 to 49	60,596	74,842	80,	029	95,288	92,33	31	103,362	113,028	0	0	0	89,737
50 to 54	64,924	75,114	88,	947	91,487	97,54	6	99,263	108,956	133,531	0	0	92,594
55 to 59	80,821	74,902	72,2	270	86,358	92,24	6	98,997	108,009	117,635	91,128	0	91,101
60 to 64	57,334	82,423	80,2	264	76,641	95,20	)7	98,664	77,394	105,111	109,580	53,223	87,296
65 to 69	0	88,298	73,	907	79,506	137,14	15	97,270	59,619	72,334	0	0	85,870
70 and up	0	106,407	74,4	440	0		0	0	0	0	85,711	0	85,249
Average	\$ 54,955	\$ 72,599	\$ 82,	716	\$ 91,783	\$ 96,24	2	\$ 101,248	\$ 104,789	\$ 116,839	\$ 97,967	\$ 53,223	\$ 81,577

#### Distribution of Active Members As of June 30, 2024



#### **Average Salary Distribution**

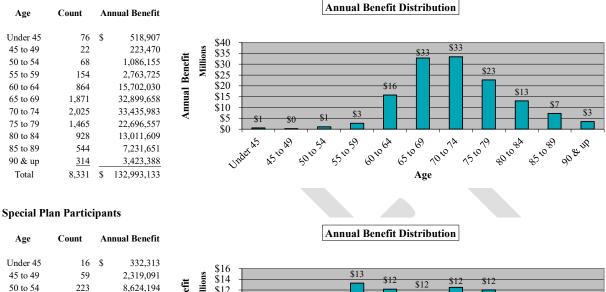
Age

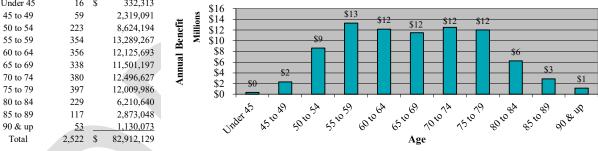


## **APPENDIX B – MEMBERSHIP INFORMATION**

Distribution of Retirees, Disabled Members, Beneficiaries, and Survivors As of June 30, 2024

#### **Regular Plan Participants**





There are no actives in Special 4N Plan, so all remaining inactive participants were transferred to the Regular Plan.



	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members <sup>1</sup>	Terminated Vested Members <sup>2</sup>
As of June 30, 2023	13,122	7,905	2,128	179	403	2,865
New hires	2,002					
Rehires	238					(69)
New PLDs or expanded coverage	51					
Movement between plans	(1)	-	-			(5)
New retirees	(313)	501				(186)
New disabled retirees	(13)				15	(2)
New beneficiaries due to retirements			41			
New deferred vested members	(391)					475
Non-vested terminations	(880)					
Refunds	(249)					(83)
Deaths, no future benefits	(2)	(205)	(102)	(5)	(10)	(16)
Deaths with a survivor or beneficiary	(7)	(79)	78	9	(4)	(10)
Benefits expired				(5)		
Benefits restarted				2		
Records combined / split						
Data correction	4	(1)	(1)	-	4	(16)
As of June 30, 2024	13,561	8,121	2,144	180	408	2,953

# **APPENDIX B – MEMBERSHIP INFORMATION**

1. Former disabled retirees who have changed to service retirement as mandated by the Plan are still included as disabled members.

2. Deferred vested members includes those indicated to us in the data who have terminated and are eligible for a future annuity.

# **Missing Participants**

Due to reporting issues, MainePERS was not able to provide complete payroll information for the year ending June 30, 2024 for City of Portland School Support employees. The information provided for this group for purposes of this valuation does not include members who were hired after March 2023. Employees of this group participate in Regular Plan AC. MainePERS was able to provide a partial file of information on the missing participants. We believe that, due to the small number of participants missing relative to the Regular Plan AC active membership, as well as the overall demographics of that group, excluding this group would not have a material impact to the results of this valuation. It is also our understanding that the contributions on behalf of these missing participants are not included in the assets reported by MainePERS and as such, excluding them also does not create a mismatch in the assets and liabilities for the Consolidated PLD valuation as a whole.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

## **1. Member Contributions**

Beginning with FY 2020, the contribution rates for members are determined annually based on the risk-sharing framework adopted by the Board of Trustees. The rates for members of Regular Plans (AC, AN, and BC) also vary based on whether the member joined the Plan prior to July 1, 2014 and thus has a normal retirement age of 60 or joined on or after this date and has a normal retirement age of 65. See the Annual PLD Contribution Rate letter for further details.

Member contributions earn annual interest at the rate adopted by the Board of Trustees each February.

## 2. Average Final Compensation

For purposes of determining benefits payable, average final compensation is the average annual rate of earnable compensation for the three years of creditable service (not necessarily consecutive) that produce the highest such average.

## 3. Creditable Service

Creditable service includes service while a member, certain service prior to the establishment of the Plan, purchased service credit of which there are several types, and service while receiving disability benefits under the Plan.

Effective August 1, 2019, the ability to use accrued, unused vacation and sick leave towards retirement benefits is available only to those who have 20 or more years of creditable service under the Plan at retirement.

# 4. Service Retirement Benefits

## **Regular Plan AC**

Normal Retirement Age:

Plan members prior to July 1, 2014: 60 New members to the Plan on or after July 1, 2014: 65

Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.

Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement and at least normal retirement age.



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Eligibility for Members not in Active Service at Retirement and not in Active Service on or after October 1, 1999: At least 10 years of creditable service and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement but in Active Service on or after October 1, 1999: At least five years of creditable service and at least normal retirement age.

Benefit: 1/50 of average final compensation multiplied by years of membership service under Consolidated Plan AC reduced by:

Plan members prior to July 1, 2014:

approximately  $2\frac{1}{4}\%$  for each year that a member is younger than age 60 at retirement.

New members to the Plan on or after July 1, 2014:

6% for each year that a member is younger than age 65 at retirement.

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1, 2019. The above 2<sup>1</sup>/<sub>4</sub>% and 6% rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.

# Regular Plan AN

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

# Regular Plan BC

Normal Retirement Age:

Plan members prior to July 1, 2014: 60 New members to the Plan on or after July 1, 2014: 65

Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement and not in Active Service on or after October 1, 1999: At least 10 years of creditable service and at least normal retirement age.

Eligibility for Members not in Active Service at Retirement but in Active Service on or after October 1, 1999: At least five years of creditable service and at least normal retirement age.

Benefit: 1/100 of average final compensation multiplied by years of membership service under Consolidated Plan BC reduced by:

Plan members prior to July 1, 2014:

approximately  $2\frac{1}{4}\%$  for each year that a member is younger than age 60 at retirement.

New members to the Plan on or after July 1, 2014:

6% for each year that a member is younger than age 65 at retirement.

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1, 2019. The above  $2\frac{1}{4}\%$  and 6% rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.

# **Regular Plan Notes**

- 1. Under certain circumstances, Regular Plan service can count on a pro-rata basis specific to the applicable Special Plan toward meeting Special Plan benefit eligibility requirements.
- 2. The actual benefit for service earned prior to coverage under the Consolidated Plan may be based on a variable percentage of average final compensation multiplied by years of service under any previous plan(s) (the percentage depends on the previous plan(s)).

# Special Plan 1C

Eligibility: 20 years of creditable service in named positions.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Benefit: One-half of average final compensation plus 2% for each year of service in excess of 20 years of service.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.

# Special Plan 1N

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

# Special Plan 2C

Eligibility: 25 years of creditable service in named positions.

Benefit: One-half average final compensation plus 2% for each year of service in excess of 25 years of service.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.

## Special Plan 2N

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

## Special Plan 3C

Eligibility: 25 years of creditable service in named positions.

Benefit: Two-thirds of average final compensation plus 2% for each year of service in excess of 25 years of service.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

# Special Plan 3N

This benefit is identical to Regular Benefit Plan 3C, except that there is no provision for costof-living adjustments.

# Special Plan 4C

Eligibility: Age 55 with 25 years of creditable service in named positions.

Benefit: 1/50 of average final compensation multiplied by years of membership service under Consolidated Plan 4C reduced by:

Plan members prior to July 1, 2014:

approximately  $2\frac{1}{4}\%$  for each year that a member is younger than age 55 at retirement.

New members to the Plan on or after July 1, 2014:

6% for each year that a member is younger than age 55 at retirement.

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1, 2019. The above  $2\frac{1}{4}\%$  and 6% rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit") unless an optional method of payment is selected.

Cost-of-Living Adjustment: See item 11.

# Special Plan 4N

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

# Special Plan Notes

- A. If a Special Plan member fails to meet the Special Plan eligibility criteria, their service retirement benefit is that provided by the applicable underlying Regular Plan; Special Plan service credits are used toward Regular Plan eligibility requirements.
- B. Service in all Special Plans counts, on a percentage basis, toward meeting the benefit eligibility requirements of any Special Plan.



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

C. The actual benefit for service earned prior to coverage under the Consolidated Plan may be based on a variable percentage of average final compensation multiplied by years of service under any previous Plan(s) (the percentage depends on the previous Plan(s)).

## 5. Disability Retirement Benefits Other Than No-Age Benefits (See Item 6)

Eligibility: Disabled as defined in the MainePERS statutes prior to applicable normal retirement age, employed prior to October 16, 1992, and did not elect the No-Age Disability Benefits, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 66<sup>2</sup>/<sub>3</sub>% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after five years unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the earlier of 10 years following normal retirement age or the date that the service retirement benefit equals or exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (see item 11). On the date when service benefits reach a level of  $66^{2}/_{3}$ % of average final compensation or 10 years after the normal retirement date if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.

# 6. No-Age Disability Retirement Benefits

Eligibility: Disabled as defined in the MainePERS statutes, employed on or after October 16, 1992 or employed prior to October 16, 1992 and elected the provisions of No-Age Disability, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: 59% of average final compensation, reduced by employment earnings over the specified statutory limit, and to the extent that the benefit, in combination with Workers' Compensation and Social Security, exceeds 80% of average final compensation.

Form of Payment: Payment begins upon the termination of service and ceases on cessation of disability or after five years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the date the service retirement benefit equals or exceeds the disability benefit.



## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (see item 11). On the date when service benefits reach a level of 59% of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that time.

# 7. Pre-Retirement Ordinary Death Benefits

Eligibility: Death while active, inactive eligible to retire, or disabled not resulting from an injury received in the line-of-duty.

Benefit: Designated beneficiary, spouse, children, or parents entitled to benefit calculated as if the deceased member had retired under Option 2 (see item 12); however, the beneficiary may elect survivor benefits payable to a surviving spouse, dependent children, parent, or other designated beneficiaries in monthly amounts varying by the status of beneficiary and number of eligible survivors. Otherwise, accumulated contributions with interest are payable to the designated beneficiary, spouse, children, older parents, or estate.

# 8. Pre-Retirement Accidental Death Benefits

Eligibility: Death while active or disabled resulting from an injury received in the line of duty.

Benefit:

- If the member leaves no dependent children, two-thirds of the member's average final compensation to the surviving spouse until death.
- If the member is survived by a spouse who has the care of dependent children of the member, the surviving spouse shall receive an annual sum equal to the member's average final compensation while having the care of dependent children. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member is survived by a spouse who does not have the care of the member's dependent children, the surviving spouse and dependent children shall share equally an annual sum equal to the member's average final compensation. When there are no longer any dependent children, the surviving spouse shall receive two-thirds of the member's average final compensation until death.
- If the member leaves no spouse, the dependent children shall share an annual amount equal to the member's average final compensation. Benefits will cease when the last dependent child no longer meets the definition of "dependent child."



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

## 9. Termination Benefit

Eligibility: Termination of service other than by retirement or death with at least five years of creditable service.

Benefit: The member's choice of a refund of the accumulated contributions with interest or a retirement benefit using creditable service and average final compensation as of the date of termination, deferred to normal retirement age.

## **10. Refund of Contributions**

Eligibility: Termination of service other than by retirement or death with less than five years of creditable service.

Benefit: Refund of member's accumulated contributions with interest.

## 11. Cost-of-Living Adjustments (COLA)

All service and disability retirement and survivor benefits payable to (or in relation to) benefit recipients who were employed by a PLD that elected a Plan that provides for a COLA are adjusted each year that there is a percentage change in the Consumer Price Index, based on the Index. If the percentage change is negative, then no adjustment is made in that year. In subsequent years, the adjustment that would have been made will be adjusted downward to the extent necessary to recoup the full actuarial value of not having made the previous year's negative adjustment. This process of adjustment may occur over a multi-year period if needed to recoup the full value of negative changes in the Index.

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to all benefits in a Plan that provides for a COLA that have been in payment for six months for retirees who retire prior to September 1, 2015, 12 months for retirees who retired on or after September 1, 2015, and 24 months for those who retire on or after September 1, 2019.

The maximum annual increase is 2.5%, applicable to COLAs issued in September 2018 and later (prior to this, 3% for the 2014 through 2017 COLAs and 4% prior to the 2014 COLA).

Possible downward adjustments to future COLAs may occur if severe market losses result in contribution rates under the risk-sharing contribution methodology that exceed the contribution caps for PLD and member rates under this methodology. In this eventuality, a reduced COLA may be paid to retirees.

An extra 1.0% COLA was granted to eligible retirees at September 1, 2022.



# **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

## 12. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:

Full Benefit: Unadjusted benefit paid for the life of the member-only.

Option 1: Cash refund equal to the remaining member contribution balance, if any, at the date of death (where the member contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by member contributions).

Option 2: 100% joint and survivor annuity.

Option 3: 50% joint and survivor annuity.

Option 4: Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.

Option 5: Designated percentage of the benefit (not less than 51%) payable to the member, with the remaining percentage (the two to equal 100%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lower-percentage benefit ceases to be paid.

Option 6: 100% joint and survivor annuity (Option 2) with pop-up\*.

Option 7: 50% joint and survivor annuity (Option 3) with pop-up\*.

Option 8: Option 4 with pop-up\*.

\* The "pop-up" feature attached to a given Option means that in the case of a beneficiary predeceasing the member, the member's benefit will be revised prospectively to the amount that the benefit would have been had the member selected Full Benefit payment upon retirement.

## 13. Plan Changes Since Prior Valuation

An ad-hoc 0.5% non-cumulative COLA was paid in February 2024 to eligible in-pay participants. This payment had no effect on future benefits payable.

This Appendix C is intended to be a brief summary of provisions. In the event of a dispute, applicable statutes and administrative policy supersede this report description.



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

# **A. Actuarial Assumptions**

1. Annual Rate of Investment Return

PLDs 6.50%

Rate is net of both administrative and investment expense.

2. LDROM Discount Rate

PLDs	4.44%

3. Cost-of-Living Adjustment (COLA) Assumed Rate

_	
PLDs	1.91%

4. Sample Rates of Individual Salary Increases (% at Selected Years of Service)

Years of Service	PLD
0	11.48%
1	8.66
2	4.81
3	4.29
4	4.03
5	3.78
10	3.26
15	3.26
20	3.01
25	2.75
30	2.75

The above rates include a 2.75% across-the-board increase at each year of service.



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

Service	Regular	Special
0	28.0%	17.9%
1	21.0	14.4
2	15.0	10.5
3	12.0	9.5
4	10.0	7.8
5	9.0	7.9
10	5.0	4.5
15	3.5	2.9
20	3.5	2.7
25	3.0	0.0

## 5. Sample Rates of Termination (% at Selected Years of Service)

Non-vested members are assumed to take a refund of contributions with interest. Once vested, the member is assumed to elect the greater of the deferred vested benefit or a refund of member contributions with interest based on present value at the time of termination.

6. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

	(Showing val	ues in 2024)
Age	Male	Female
50	31	24
55	46	34
60	70	47
65	102	69
70	157	110
75	264	196
80	478	364
85	884	695
90	1,547	1,308
95	2,421	2,143

Rates are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. The rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.



## **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

7. Sample Rates of Mortality for Active Lives at Selected Ages (number of deaths per 10,000 members)\*

	(Showing values in 2024)	
Age	Male	Female
20	3	1
25	3	1
30	4	2
35	6	$\frac{2}{3}$
40	7	
45	9	4 5
50	12	7
55	17	11
60	27	17
65	39	25

\* For Regular Plans, 5% of deaths assumed to arise out of and in the course of employment, while for Special Plans, 20% of deaths are assumed to arise out of and in the course of employment.

Rates are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model as described in the healthy annuitant mortality.

8. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Age	(Showing va Male	lues in 2024) Female
25	36	21
30	54	37
35	74	58
40	91	76
45	113	98
50	159	141
55	216	181
60	274	210
65	325	220
70	383	258

Rates for are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

9. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members)

Regular Plans

	<b>Regular Plans</b>		
Age	NRA 60	NRA 65	
45	N/A	N/A	
50	N/A	N/A	
55	N/A	N/A	
60	120	60	
65	250	200	
70	1,000	250	
75	1,000	1,000	

In the case of PLD employees, NRA 60 refers to those who were members prior to July 1, 2014, and NRA 65 refers to those who became members on or after July 1, 2014.

# Special Plans

	Special Plans	
Service	Assumption	
20	350	
21	300	
22	280	
23	250	
24	200	
25	350	
26	250	
27	230	
28	250	
29	400	
30	250	
31-33	250	
34	330	
35+	1,000	



## **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

Note that all retirement rates are only applied once the member is eligible to retire, so those in 25-year Plans are not assumed to retire at 20 years of service. For Special Plan retirements with less than 20 years of service, we assume 250 retirements per 1,000 members.

10. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000 members)\*

-		
Age	Regular	Special
25	0.9	2.3
30	1.2	3.0
35	1.8	4.5
40	4.2	10.5
45	8.7	21.8
50	16.5	41.3
55	28.5	70.0
60	30.0	70.0

\* 10% assumed to receive Workers Compensation benefits offsetting disability benefit.

# **11. Family Composition Assumptions**

80% of active members are assumed to be married and have two children born when the member is 24 and 28; children are assumed dependent until age 18; a female spouse is assumed to be three years younger than a male spouse; member is assumed to have no dependent parents; unmarried members are assumed to have beneficiaries entitled to benefits worth 80% as much as those of married members' beneficiaries.

# 12. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year.

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: Reflects actual historical member contribution interest rates from 1970 through the valuation; future contribution interest assumed to equal the inflation assumption of 2.75%.

COLA Timing: September 1.



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

Member Contribution Rates: For purposes of developing liability amounts, the member contribution rates developed based on the prior year's valuation are assumed to continue for all periods in the future.

### **13.** Rationale for Assumptions

The demographic assumptions were adopted by the Board of Trustees at their May 13, 2021 meeting. The discount rate was adopted by the Board of Trustees at their August 12, 2021 meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015 through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. In our professional judgment, the combined effect of the assumptions has no significant bias.

The LDROM discount rate is the single equivalent rate determined by matching Plan cashflows to US Treasury Securities yields as of the measurement date as published by the Federal Reserve.

### 14. Changes Since Last Valuation

The LDROM discount rate was updated to 4.44% based on Treasury yields as of June 30, 2024.

# 15. Rationale for Change in Actuarial Assumptions

N/A

# 16. Disclosure for Reasonable Actuarially Determined Contribution Method

The rates developed in the ratemaking process in Table I-2 meet the requirements on a Total Plan basis of a reasonable ADC as defined by the actuarial standards of practice. The actuarial methods used to determine the reasonable actuarially determined contribution have been selected to balance benefit security, intergenerational equity, and stability of contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

# 17. Disclosure of Models Used

**ProVal:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

**Projection Model:** This report includes projections of future contributions, assets, liabilities, and funded status for the purpose of assisting the Board of Trustees with the management of the Fund. We have used Cheiron's P-Scan and R-Scan models to develop these projections. The model is also used to stress test the impact of volatile asset returns over the projection period.

The P-Scan projection uses projected benefit payments for current members but does not include projected benefit payments for new members. This limitation is not material for the next 20 years, but longer projection periods should be viewed with caution. The P-Scan projection uses standard roll-forward techniques that implicitly assume a stable active population. Changes in the demographic characteristics of the active population will lead to different results.

The stochastic projections of investment returns assume that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods of time. The standard deviation used in the stochastic projection of investment returns was provided by the investment consultant.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020 used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.

# **B.** Actuarial Methods

# 1. Funding and LDROM Cost Method

The entry age normal actuarial cost method is used to determine costs and the actuarially determined contributions needed to fund the Plan. The actuarially determined contributions are then used to develop the specific rates for both members and PLDs for each specific Regular and Special Plan within the Plan. Under this cost method, the Actuarially



### **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

Determined Plan Total Rate consists of two elements: the Actuarially Determined Plan Normal Cost Rate and the Actuarially Determined Plan UAL Amortization Rate.

For each of the Regular and Special Plans in the Consolidated Plan, an individual entry age normal cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate is determined by taking the value, as of entry age into a Plan, of each active member's projected future benefits. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. These rates are then multiplied by each member's salary as of the valuation date to get the total normal cost dollars as of the valuation date for that Plan. These individual amounts for each Regular and Special Plan are then added to get the total normal cost dollars for the Plan and then divided by the total payroll for the Plan to get the Actuarially Determined Plan Normal Cost Rate.

The unfunded actuarial liability under the entry age normal cost method equals the present value, at the time of valuation, of the future benefit payments less the present value of future normal costs, future member contributions, future IUUAL payments, and current assets. Under the Consolidated Plan, the Actuarially Determined Plan UAL Amortization Rate is calculated for the Consolidated Plan in total based on the pooled UAL being amortized over a 20-year period commencing with the June 30, 2015 valuation date and any layers of pooled UAL arising after that date amortized over individual 20-year periods. This amortization uses a level percentage of pay method with payroll assumed to increase at 2.75% per year. The amortization payment thus derived for the valuation year is then divided by the total payroll to develop the Actuarially Determined Plan UAL Amortization Rate. Amortization payments are assumed to be made each pay period.

The risk-sharing framework adopted by the Board of Trustees is then used to develop individual PLD and member rates for each Regular and Special Plan within the Plan based on the Actuarially Determined Plan Total Rate. The allocation to each specific Plan from the Total Rate is based on the normal cost rate for each specific Plan relative to the Plan in total. For the three Regular Plans, member rates are developed separately for members under the provisions with an age 60 normal retirement age and members under the provisions with an age 65 normal retirement age.

In addition to the development of rates for each Plan, the actual contribution for a given PLD will include an Individual Unpooled Unfunded Actuarial Liability (IUUAL) payment as well, unless the PLD came into the Plan without an IUUAL or has paid off its IUUAL. The Initial Unpooled Unfunded Actuarial Liability (IUUAL) was calculated at entry into the Consolidated Plan for each PLD that entered with liabilities in excess of their assets and is paid off through payment of a specific dollar amount until paid off.



# **APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS**

# 2. Asset Valuation Method

For purposes of determining member and PLD contributions to the Plan and the Plan's funded status, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

In determining the actuarial value of assets, we calculate an expected actuarial value based on the cash flows for the year and imputed returns at the actuarial assumption. This expected value is compared to the actual market value at the valuation date and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

# 3. FASB ASC Topic 960 Cost Method:

The cost method for valuation of liabilities for FASB ASC Topic 960 purposes is the Unit Credit Cost method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of accrued benefits methods is that the funding pattern follows the pattern of benefit accrual. The accrued liability, which is determined for each Participant as of each valuation date, represents the actuarial present value of each Participant's benefit earned prior to the valuation date.

# 4. Changes Since Last Valuation

None

# 5. Rationale for Change

N/A



# **APPENDIX E – GLOSSARY OF GASB TERMS**

# 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

# 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

# 3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

# 4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

# 5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB Nos. 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

# 6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the Plan.



# **APPENDIX E – GLOSSARY OF GASB TERMS**

# 7. Net Pension Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

# 8. Plan Fiduciary Net Position

The fair or market value of assets.

# 9. Reporting Date

The last day of the Plan or employer's fiscal year.

# **10. Service Cost**

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

# **11. Total Pension Liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Nos. 67 and 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method.





Maine Public Employees Retirement System

**Retiree Group Life Insurance Program** 

State Sponsored Groups Actuarial Valuation and GASB Statement No. 74 Report as of June 30, 2024

Presented by Cheiron October 2024

# DRAFT

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October 10, 2024

Board of Trustees Maine Public Employees Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under Governmental Accounting Standards Board (GASB) Statement No. 74 and present the estimated Postretirement Group Life Insurance obligations as of June 30, 2024 for the Maine Public Employees Retirement System (MainePERS or System) based on a full valuation of the obligations as of June 30, 2024.

This report covers the participants of the State Employee and Teacher Retirement Program, the Judicial Retirement Program, and the Legislative Retirement Program, which we collectively call the State Sponsored Groups. For Tables I-1, IV-1 to IV-4, V-2, and V-3, we separated out the Teachers group for informational purposes, with all others included in the State group.

This report includes:

- Determination of the discount rate,
- Calculation of the Total OPEB Liability (TOL) as of the valuation date,
- Calculation of the Net OPEB Liability (NOL) at the discount rate as well as discount rates one percentage higher and lower than the discount rate, and
- Changes in the Net OPEB Liability

We have determined the costs and liabilities for the substantive plan using actuarial assumptions and methods that we consider reasonable. The information shown in this report is primarily for financial disclosure purposes since the biennial full valuations are used to adjust the Teacher funding contributions. The State contributions for the remaining members of the State Sponsored Plans are based on premiums set by the premium studies.

The current premium rates reflect rate changes adopted by the Board of Trustees based on a premium study conducted in 2024. Teachers pay \$0.05 bi-weekly per \$1,000 of coverage for active coverage and the State contributes an amount equal to the calculated ADC for retired teacher coverage. However, as these are set two years in advance, the actual contribution may be higher or lower than that given year's ADC. The premiums for Teachers active coverage will increase to \$0.06 bi-weekly per \$1,000 of coverage in 2026. The premiums for State group employees are \$0.45 bi-weekly per \$1,000 of coverage for Fiscal Year (FY) 2024. This includes \$0.09 for active coverage and \$0.36 for retiree coverage for FY 2024. Premiums for active coverage will increase to \$0.12 in FY 2026. Any further increases will be determined by the next premium study in 2026.

Board of Trustees Maine Public Employees Retirement System October 10, 2024 Page ii

In preparing our report, we relied on information (some oral and some written) supplied by the System. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23 es, but is not limited to, the plan provisions, employee data, and financial information. We performed an information of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23 es, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

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

This report was prepared for the Maine Public Employees Retirement System for the purposes described herein and for the use by the Plan Auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely, Cheiron

John Colberg, FSA, EA, MAAA Principal Consulting Actuary Ryan Benitez, ASA, MAAA Consulting Actuary



# SECTION I – SUMMARY OF KEY RESULTS

The reporting date for the Maine Public Employees Retirement System Retiree Group Life Insurance Program presented in this report is June 30, 2024. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2024, and the Total OPEB Liability (TOL) as of the valuation date, June 30, 2024. There was an update of census data since the prior valuation.

Beginning of year measurements presented in this report are based on the actuarial valuation as of June 30, 2023. Since this is a full valuation, liability gains or losses due to experience are reported due to the updated census information.

Table I-1 below provides a summary of the key results during this reporting period ending on June 30, 2024. TOL results are shown for the State Sponsored Groups excluding the Teachers, for the Teachers group separately, and then the TOL under all of the State Sponsored Groups combined.

Table I-1       Summary of Results							
·	Measurement Date 06/30/2023	Measurement Date 06/30/2024					
State Total OPEB Liability	\$ 124,426,546	\$ 124,861,647					
State Plan Fiduciary Net Position	53,277,904	64,490,414					
State Net OPEB Liability	\$ 71,148,642	\$ 60,371,233					
Teacher Total OPEB Liability	\$ 121,023,616	\$ 123,868,113					
Teacher Plan Fiduciary Net Position	<u>86,558,606</u>	99,984,675					
Teacher Net OPEB Liability	\$ 34,465,010	\$ 23,883,438					
Combined Total OPEB Liability	\$ 245,450,162	\$ 248,729,760					
Combined Plan Fiduciary Net Position	<u>139,836,510</u>	<u>164,475,089</u>					
Combined Net OPEB Liability	\$ 105,613,652	\$ 84,254,671					



### SECTION II – DETERMINATION OF DISCOUNT RATE

MainePERS's funding policy for retiree group life insurance is to contribute at least the Actuarially Determined Contribution (ADC) annually for Teachers retirees and contribute based on premium rates for all other participants. The State premium rates on behalf of retirees are assumed to be \$0.36 in FY 2024 and is adjusted to approximate the ADC. The ADC is equal to the sum of the employer normal cost and the amortization of the unfunded liability. The amortization of the unfunded liability is calculated as a level-percent closed period with 14 years remaining as of FY 2024 for the State-Sponsored Groups. However, because the State sets contributions at least 2 years in advance, the contribution for the fiscal year ending June 30, 2024, was based on the valuation as of June 30, 2020, rolled forward to June 30, 2022.

The discount rate at June 30, 2024 is 6.50%, which is the assumed long-term expected rate of return on plan investments. The fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. As such, the long-term expected rate of return on the Program's investments was applied to all periods of projected benefit payments in determining the Total OPEB Liability. The projection of cash flows used to determine the discount rate assumed that the employer contributions will be made according to the funding policy described in the above paragraph.



# SECTION III – PROJECTION OF TOTAL OPEB LIABILITY

The TOL is measured as of the valuation date June 30, 2024. This is a full valuation, which is completed at least every two years, and roll forward valuations are performed in the off years. The only significant event in calculating the TOL as of the valuation date was an update in census data. The table below shows the calculated TOL at discount rates equal to the rate used for disclosure purposes and plus and minus one percent from the rate used for disclosure purposes. The TOL has been determined using the entry age actuarial cost method as described in paragraph 54 of GASB Statement 74.

Table III-1 shows the Total OPEB Liability as of the valuation date for the assumed discount rate as well as for plus and minus one percent of this discount rate.

Table III-1           Projection of Total OPEB Liability									
Discount Rate 5.50% 6.50% 7.50%									
Total OPEB Liability, 06/30/2024									
Actives	\$	87,478,386	\$	70,185,074	\$	56,956,699			
Deferred Vested		0		0		0			
Retirees		198,428,809		178,544,686		161,642,380			
Total	\$	285,907,195	\$	248,729,760	\$	218,599,079			



# **SECTION IV – NOTE DISCLOSURES**

The tables that follow show the changes in TOL, the plan fiduciary net position (i.e., fair value of Plan assets), and the Net OPEB Liability during the measurement year.

The differences between expected and actual experience reflect the following changes:

- Changes in census that have occurred since the last full biennial valuation in 2022,
- Life insurance payments made from the active trusts for deceased members in active or disabled status generally produces an experience gain for the retiree trust,
- A significant portion of the gain is due to individuals who were active and satisfied the eligibility criteria for retiree life insurance benefits in 2022, but who are no longer active and not receiving retirement life insurance benefits in 2024.

The change in assumptions reflects the update to the assumed expenses as a percentage of liabilities which were updated as part of the 2024 Premium Study.

We provide separate tables for State (IV-1), Teachers (IV-2), and the combined results of the State Sponsored Groups (IV-3) results.

Tabl Change in Net OF	le IV-1 PEB Liability - Sta	ıte						
	Increase (Decrease)							
	Total OPEB Liability (a)		an Fiduciary Net Position (b)		Net OPEB Liability (a) - (b)			
Balances at 06/30/2023	\$ 124,426,546	\$	53,277,904	\$	71,148,642			
Changes for the year:								
Service cost	1,425,767				1,425,767			
Interest	8,095,416				8,095,416			
Changes of benefits	0				0			
Changes of assumptions	106,834				106,834			
Differences between expected and actual experience	(5,434,981)				(5,434,981)			
Contributions - employer			7,303,774		(7,303,774)			
Contributions - member			0		0			
Net investment income			8,037,316		(8,037,316)			
Benefit payments	(3,757,935)		(3,757,935)		0			
Administrative expense	0		(370,645)		370,645			
Net changes	435,101		11,212,510		(10,777,409)			
Balances at 06/30/2024	\$ 124,861,647	\$	64,490,414	\$	60,371,233			



# **SECTION IV – NOTE DISCLOSURES**

	Increase (Decrease)							
		Total OPEB Liability (a)		n Fiduciary et Position (b)		Net OPEB Liability (a) - (b)		
Balances at 06/30/2023	\$	121,023,616	\$	86,558,606	\$	34,465,010		
Changes for the year:								
Service cost		1,508,726				1,508,726		
Interest		8,145,350				8,145,350		
Changes of benefits		0				C		
Changes of assumptions		1,647,002				1,647,002		
Differences between expected and actual experience		(4,980,343)				(4,980,343		
Contributions - employer				4,859,256		(4,859,256		
Contributions - member				0		0		
Net investment income				12,645,225		(12,645,225		
Benefit payments		(3,476,238)		(3,476,238)		C		
Administrative expense		0		(602,174)		602,174		
Net changes		2,844,497		13,426,069		(10,581,572		
Balances at 06/30/2024	\$	123,868,113	\$	99,984,675	\$	23,883,438		

Table IV-3 Change in Net OPEB Liability - Combined								
	Increase (Decrease)							
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)					
Balances at 06/30/2023	\$ 245,450,162	\$ 139,836,510	\$ 105,613,652					
Changes for the year:								
Service cost	2,934,493		2,934,493					
Interest	16,240,766		16,240,766					
Changes of benefits	0		0					
Changes of assumptions	1,753,836		1,753,836					
Differences between expected and actual experience	(10,415,324)		(10,415,324)					
Contributions - employer		12,163,030	(12,163,030)					
Contributions - member		0	0					
Net investment income		20,682,541	(20,682,541)					
Benefit payments	(7,234,173)	(7,234,173)	0					
Administrative expense	0	(972,819)	972,819					
Net changes	3,279,598	24,638,579	(21,358,981)					
Balances at 06/30/2024	\$ 248,729,760	\$ 164,475,089	\$ 84,254,671					



# **SECTION IV – NOTE DISCLOSURES**

Changes in the discount rate would affect the measurement of the TOL. Lower discount rates produce a higher TOL and higher discount rates produce a lower TOL. Because the discount rate does not affect the measurement of assets, the percentage change in the NOL can be very significant for a relatively small change in the discount rate. Table IV-4 shows the sensitivity of the TOL and NOL to the discount rate.

Sensitivity of Total Net OI		able IV-4 Liability to Ch	nang	ges in Discount	Ra	te
		1% Decrease 5.50%		Discount Rate 6.50%		1% Increase 7.50%
Teacher						
Total OPEB Liability	\$	143,572,698	\$	123,868,113	\$	108,018,396
Plan Fiduciary Net Position		99,984,675		99,984,675		99,984,675
Collective Net OPEB Liability	\$	43,588,023	\$	23,883,438	\$	8,033,721
Plan Fiduciary Net Position as a						
Percentage of the Total OPEB Liability		69.6%		80.7%		92.6%
State						
Total OPEB Liability	\$	142,334,497	\$	124,861,647	\$	110,580,683
Plan Fiduciary Net Position		64,490,414		64,490,414		64,490,414
Collective Net OPEB Liability	\$	77,844,083	\$	60,371,233	\$	46,090,269
Plan Fiduciary Net Position as a						
Percentage of the Total OPEB Liability		45.3%		51.6%		58.3%
Combined						
Total OPEB Liability	\$	285,907,195	\$	248,729,760	\$	218,599,079
Plan Fiduciary Net Position	_	164,475,089		164,475,089		164,475,089
Collective Net OPEB Liability	\$	121,432,106	\$	84,254,671	\$	54,123,990
Plan Fiduciary Net Position as a						
Percentage of the Total OPEB Liability		57.5%		66.1%		75.2%

For the combined State-Sponsored Groups a one percent decrease in the discount rate increases the TOL by approximately 14.9% and increases the NOL by approximately 44.1%. A one percent increase in the discount rate decreases the TOL by approximately 12.1% and decreases the NOL by approximately 35.8%.



# SECTION V - REQUIRED SUPPLEMENTARY INFORMATION

Table V-1 Schedule of Changes in Net OPEB Liability and Related	d Rati	05
		FY 2024
<u>Total OPEB Liability</u>		
Service cost (BOY)	\$	2,934,493
Interest (includes interest on service cost)		16,240,766
Changes of benefit terms		0
Differences between expected and actual experience		(10,415,324)
Changes of assumptions		1,753,836
Benefit payments		(7,234,173)
Net change in total OPEB liability		3,279,598
Total OPEB liability - beginning		245,450,162
Total OPEB liability - ending	<u>\$</u>	248,729,760
Plan fiduciary net position		
Contributions - employer	\$	12,163,030
Contributions - member		0
Net investment income		20,682,541
Benefit payments		(7,234,173)
Administrative expense		(972,819)
Net change in plan fiduciary net position	\$	24,638,579
Plan fiduciary net position - beginning		139,836,510
Plan fiduciary net position - ending	\$	164,475,089
Net OPEB liability - ending	<u>\$</u>	84,254,671
Plan fiduciary net position as a percentage of the total OPEB liability		66.13%
Covered employee payroll	\$	1,734,788,000
Net OPEB liability as a percentage of covered employee payroll		4.86%

Notes to Schedule of Changes in Net OPEB Liability and Related Ratios None

A ten-year schedule of changes in NOL and related ratios is to be included within the Annual Comprehensive Financial Report (ACFR) for MainePERS. However, based on GASB guidance, this ten-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net OPEB Liability and Related Ratios* above and believe that you can accumulate these individual years in the MainePERS ACFR to build this schedule to show the full ten-year schedule over time. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Changes in Net OPEB Liability and Related Ratios* above. However, it is our expectation that the System staff will make the final determination regarding any notes needed for this schedule and we are available to provide any information they may need for this purpose.



# SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

If an Actuarially Determined Contribution is calculated, the following schedule is required. An Actuarially Determined Contribution is a contribution amount determined in accordance with Actuarial Standards of Practice.

Results are shown in Table V-2 for the State Sponsored Groups excluding the Teachers, then for the Teachers group separately, and then combined for the State Sponsored Groups.

Table V-2 Schedule of Employer Cor During Fiscal Year			
	State	Teacher	Combined
Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contribution	\$ 8,197,423 7,303,774	\$ 4,859,254 4,859,256	\$ 13,056,677 12,163,030
Contribution Deficiency/(Excess)	\$ 893,649	\$ (2)	\$ 893,647
Covered Payroll Contributions as a Percentage of Covered Payroll	\$ 808,278,000 0.90%	926,510,000 0.52%	\$ 1,734,788,000 0.70%

# Notes to Schedule

Valuation Date: June 30, 2020

Timing: The ADC is calculated in advance of the completion of the prior biennial valuation and thus rolled-forward from prior results. In this case, ADCs for 2024 and 2025 are based on the June 30, 2020 valuation rolled forward and adjusted for changes in assumptions.

# Key Methods and Assumptions Used to Determine Contribution Rates for FY 2024

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market Value
Amortization Method:	Level percent closed with 14 years remaining for FY 2024
Discount Rate:	6.75%
Salary Inflation:	2.75%
Administrative Expense Loads:	State Employees, Judges, and Legislators: 9.84%
	Teachers: 16.51%

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024, can be found in the June 30, 2020 Actuarial Valuation report.



# SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-3 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Program. GASB 75 requires some items be recognized by employers into OPEB expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed based on the prior full biennial valuation data as of June 30, 2022. The development of this value is shown below, including reflection of the decision by MainePERS to round the resulting value to the nearest whole year.

Table V-3 Average Expected Remaining Service Life For Measurement Year Ending June 30, 2024								
State Program Status Actives Inactives	<b>Total Expected</b> <b>Future Service</b> 146,240 0	<b>Count</b> 11,399 8,977	Average Remaining Service Life 13 <u>0</u>					
Total Membership	146,240	20,376	7					
<u>Teacher Program</u> Status Actives Inactives Total Membership	<b>Total Expected</b> <b>Future Service</b> 241,064 <u>0</u> 241,064	<b>Count</b> 15,374 <u>8,039</u> 23,413	Average Remaining Service Life 16 <u>0</u> 10					
<u>Combined Programs</u>	Total Expected		Average Remaining					
Status	<b>Future Service</b>	Count	Service Life					
Actives	387,304	26,773	14					
Inactives Total Membership	<u>0</u> 387,304	<u>17,016</u> 43,789	<u>0</u> 9					



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Table A-1 Active Member Data					
Group	Count	Average Age	Average Service	Averag	ge Salary
State	11,734	47.4	11.2	\$	68,074
Teachers	15,214	46.5	13.2		60,899
Judges	62	59.1	14.0		153,161
Legislators	43	67.0	5.6		13,884
TOTAL	27,053	46.9	12.3		64,148

# Participant Data as of June 30, 2024

Note that Legislators are subject to 8-year term limits for each house. Therefore, it is assumed that no active Legislators will reach the 10 years of service required to be eligible for retiree life benefits. However, they are included in the counts for the above exhibit because they are included in the expected remaining service life.

No	Table A-2Non-Active Member Data							
Group Count Average Average Age Benefit <sup>1</sup>								
State	8,794	74.0	\$ 19,853					
Teachers	7,978	75.4	22,033					
Judges	58	76.8	49,012					
Legislators	12	79.9	5,824					
TOTAL	16,842	74.7	20,976					

Ultimate benefit (40% of initial base benefit)

Note that all assumptions are based on the MainePERS Pension assumptions, which were updated after the experience study performed in 2020. All assumptions specific to this valuation are detailed in the following section.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

# **A. Actuarial Assumptions**

# 1. Annual Rate of Investment Return

State Employees	6.50%
Teachers	6.50%
Judges	6.50%
Legislative	6.50%

# 2. Cost-of-Living Adjustment in Life Benefits

N/A. Life Insurance Benefits do not increase with the Cost of Living.

# 3. Annual Rate of Individual Salary Increase (% at Selected Years of Service)

Service	State Employees	Teachers	Judges	Legislators
0	9.43%	13.03%	2.75%	2.75%
5	6.24	5.83	2.75	2.75
10	5.32	4.81	2.75	2.75
15	3.98	4.29	2.75	2.75
20	3.78	3.26	2.75	2.75
25 and over	3.26	2.80	2.75	2.75

The above rates include a 2.75% across-the-board increase at each year of service.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Service	State Employees	Teachers
0	32.5%	26.0%
5	10.0	9.0
10	6.0	5.5
15	4.0	3.5
20	3.0	3.0
25	2.5	3.0

# 4. Sample Rates of Termination (% at Selected Years of Service)

Age	Judges	
25	7%	Í
30	6	Ľ
35	5	١.
40	4	L
45	3	
50 55	2	T
55	1	L

Service	Legislators
0	0%
1	5
2 3	10
3	15
4	20
5	25
6	30
7	40
8	50
9	50
10	50
11	50
12	50
13	50
14	50
15	50
16+	50

The rates shown for legislators are only applicable in the fiscal years ending in odd years while zero terminations are assumed in the fiscal years ending in even years.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

		(Showing val mployees		e) chers
Age	Male	Female	Male	Female
50	31	24	10	6
55	46	34	21	17
60	70	47	36	26
65	102	69	58	37
70	157	110	96	59
75	264	196	176	112
80	478	364	337	315
85	884	695	707	622
90	1,547	1,308	1,327	1,185
95	2,421	2,143	2,241	2,116

5. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Rates for the State Group are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. females.

Rates for Teachers are based on the 2010 Public Plan Teacher Benefits-Weighted Healthy Retiree Mortality Table adjusted as follows:

- 98.1% and 87.5% respectively of the rates for males before age 85 and females before age 80
- 106.4% and 122.3% respectively of the rates for males on and after age 85 and females on and after age 80

Rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, along with convergence to the ultimate rates in the year 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

		howing va nployees		
Age	Male	Female	Male	Female
20	3	1	3	1
25	3	1	2	1
30	4	2	3	2
35	6	3	4	3
40	7	4	5	3
45	9	5	7	4
50	12	7	10	6
55	17	11	15	10
60	27	17	25	15
65	39	25	40	23

6. Sample Rates of Mortality for Active Healthy Lives at Selected Ages (number of deaths per 10,000 members)

Rates for the State Group are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits-Weighted Employee Mortality Table, respectively, for males and females. Rates for Teachers are based on 93.1% and 91.9% of the 2010 Public Plan Teacher Benefits-Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model as described in the healthy annuitant mortality.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

	(Showing values in 2024) State				
	Emp	loyees	Tea	ichers	
Age	Male	Female	Male	Female	
25	36	21	31	25	
30	54	37	47	45	
35	74	58	65	69	
40	91	76	80	92	
45	113	98	99	118	
50	159	141	140	169	
55	216	181	189	217	
60	274	210	241	252	
65	325	220	286	263	
70	383	258	336	309	

7. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Rates for the State Group are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. Rates for Teachers are based on 94.2% and 123.8% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

# 8. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members)

	State Regular Employees				Teachers	
Age	NRA 60	NRA 62	NRA 65	NRA 60	NRA 62	NRA 65
57	40	35	N/A	40	35	N/A
59	260	40	N/A	200	45	N/A
60	210	50	20	275	80	20
61	210	350	20	210	240	20
62	210	270	50	230	220	50
63	250	180	80	220	180	80
64	190	200	300	280	220	200
65	210	220	250	340	300	300
70	200	200	200	300	200	300
75	350	350	250	400	200	300
80	1,000	1,000	1,000	1,000	1,000	1,000

Teachers and State Regular Plans

In the case of State Regular and Teacher employees, NRA 60 refers to those who had accrued at least 10 years of service by July 1, 1993. NRA 62 refers to those who had not accrued at least 10 years of service by July 1, 1993 or were hired after that date but had five years of service by July 1, 2011. NRA 65 refers to those who did not have five years of service by July 1, 2011. Rates are only applied for early retirement when the member is at least age 57. Earlier rates are applicable for normal retirement.

# State Special Plans

Members of the 1998 Special Plan are assumed to retire at rates that vary by age and whether service is less than 25 years or not. Sample rates are as follows:

	1998 Special P	1998 Special Plan Retirement				
Age	Service < 25	Service >= 25				
55	20.0%	25.0%				
57	10.0	25.0				
60	20.0	30.0				
62	30.0	30.0				
65	23.4	30.0				
67	36.8	50.0				
70	100.0	100.0				



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Members of the 25 & Out Plan are assumed to retire at rates that vary by service. Sample rates are as follows:

Service	Rate
<24	0.0%
25-29	25.0
30-31	25.0
32-34	40.0
35-37	40.0
38+	100.0

Members of State Special Plans other than the 25 & Out Plan and the 1998 Special Plan are all currently assumed to retire at a rate of 50% per year, beginning when they reach eligibility for unreduced benefits, with a 100% assumed rate at age 70. Rates are only applied when the member is at least age 50.

Judges

	NRA	NRA	NRA
Age	60	62	65
60-61	1,000	NA	NA
62	1,000	200	NA
63	1,000	275	NA
64	1,000	350	NA
65	1,000	425	400
66	1,000	500	500
67	1,000	450	450
68	1,000	400	400
69	1,000	350	350
70	1,000	300	300
71-75	1,000	250	250
76-79	1,000	500	500
80+	1,000	1,000	1,000

In the case of judicial employees, NRA 60 refers to those who had accrued at least 10 years of service by July 1, 1993. NRA 62 refers to those who had not accrued at least 10 years of service by July 1, 1993 or were hired after that date but had five years of service by July 1, 2011. NRA 65 refers to those who did not have five years of service by July 1, 2011.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

### Legislators

	Legislators	
	<b>Fiscal Years</b>	<b>Fiscal Years</b>
Age	Ending Even	Ending Odd
57-69	0	250
70+	0	1,000

Note that all retirement rates are only applied once the member is eligible to retire, so those in with 62 or 65 normal retirement ages are not assumed to retire until eligible. No retirements are assumed prior to age 57, regardless of service amount.

9. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000 members)

	Regular	Special	Teachers
25	2.5	5.4	1.1
30	3.1	6.5	1.2
35	9.3	9.9	1.2
40	14.0	15.8	1.6
45	16.0	24.4	3.1
50	18.0	36.4	6.6
55	25.0	42.6	22.1
60	43.4	46.4	22.2

Judges and Legislators: No disability assumed.

# **10. Premium Expense Assumption**

To reflect administrative expenses associated with the distribution of benefits, the following loads, determined in the 2024 Premium Study, have been added to the liabilities, normal cost, and benefit payments.

State Employees, Judges, and Legislators: 9.97% Teachers: 18.08%



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

# 11. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year.

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Conversion Charges: Applies to the cost of active group life insurance, not retiree group life insurance.

Form of Benefit Payment: Lump Sum.

Participation Percent for Future Retirees: 100% of those currently enrolled.

Retirement for Participants who are not members of MainePERS: Age 62.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

# **12.** Rationale for Assumptions

The revised demographic assumptions were adopted by the Board of Trustees at their March 11, 2021 meeting. The revised discount rate was adopted by the Board of Trustees at their August 12, 2021 meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015 through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants.

# 13. Changes since Last Valuation

The expense assumption for State Employees, Judges, and Legislators was changed from 9.84% to 9.97% and for Teachers from 16.51% to 18.08%.

# 14. Rationale for Change in Actuarial Assumptions

The expense assumption was reviewed as part of the premium study completed in 2024.

# 15. Additional Disclosures regarding Models Used:

**ProVal:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020 used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.



# **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

# **B.** Actuarial Methods

# 1. Funding Method

The individual entry age normal method is used to determine liabilities. Under this funding method, a normal cost rate is calculated for each member. This rate is determined by taking the value, as of age at entry into the Plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age of his expected future salary. The normal cost for each member is the product of their annual salary at the valuation date and their normal cost rate. The normal cost amount for the group is then the sum of the normal costs for all members.

The Actuarial Liability is defined as the present value of future benefits, as of the valuation date, for all current members less the present value of future normal costs for all current members. For funding purposes, the Unfunded Actuarial Liability is then equal to the Actuarial Liability, less the actuarial value of the System's assets.

The discount rate used reflects the long-term funding policy to fully fund the benefits on an actuarial basis by FY 2038 for State and Teachers.

# 2. Asset Valuation Method

Figures were reported by MainePERS without audit or change.

# 3. Changes since Last Valuation

None

# 4. Rationale for Change

N/A



# **APPENDIX B – SUMMARY OF KEY PLAN PROVISIONS**

# Membership

Service Retirement:	A retiree must have participated in the group life insurance program for at least 10 years and possess coverage just prior to retirement. Thus, participants who do not retire directly from active employment are not eligible.
Disability Retirement:	An employee must have participated in the group life insurance program immediately prior to disablement.

# **Basic Insurance**

Average final compensation calculated for retirement purposes.

# Amount of Insurance for a Retiree

- Service Retirement: The Basic Insurance will be reduced by 15% per year until the amount equal to the greater of (a) 40% of the initial Basic Insurance, or (b) \$2,500.
- Disability Retirement: The amount of basic life insurance in force prior to retirement will be continued until normal retirement age. At normal retirement age, the amount of insurance will be reduced as for service retirement.

# **Retiree Contribution**

State Employees:	None
Teachers:	None
Judges:	None
Legislators:	None

# **Normal Retirement Age**

The specified age, the years of service requirement, or any age and years of service combination at which a participant may become eligible for unreduced service retirement benefits.

# **Discontinued Coverages at Retirement**

- Supplemental Life
- Accidental Death and Dismemberment
- Dependent Life

(Discontinued coverage may be ported to another group term product or converted to an individual policy.)



# **APPENDIX C – GLOSSARY OF TERMS**

# 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

# 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

# 3. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 74 and 75 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total OPEB Liability.

# 4. Measurement Date

The date as of which the Total OPEB Liability and Plan Fiduciary Net Position are measured. The Total OPEB Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

# 5. Net OPEB Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit OPEB plan. It is calculated as the Total OPEB Liability less the Plan Fiduciary Net Position.

# 6. Plan Fiduciary Net Position

The fair or market value of assets.

# 7. Reporting Date

The last day of the Plan or employer's fiscal year.



# **APPENDIX C – GLOSSARY OF TERMS**

# 8. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 74 and 75. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

# 9. Total OPEB Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 74 and 75. The Total OPEB Liability is the Actuarial Liability calculated under the entry age actuarial cost method.





Classic Values, Innovative Advice



Maine Public Employees' Retirement System Retiree Group Life

**Insurance Program** 

Participating Local Districts (PLDs) Actuarial Valuation and GASB Statement No. 74 Report as of June 30, 2024

Presented by Cheiron October 2024

# DRAFT

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October 10, 2024

Board of Trustees Maine Public Employees' Retirement System PO Box 349 Augusta, Maine 04332-0349

Dear Members of the Board:

The purpose of this report is to provide accounting and financial reporting information under Governmental Accounting Standards Board (GASB) Statement No. 74 and present the estimated Postretirement Group Life Insurance obligations as of June 30, 2024, for the Maine Public Employees' Retirement System (MainePERS or System) based on a full valuation of the obligations as of June 30, 2024.

This report covers the participants of Participating Local Districts Plans (PLDs). This report includes:

- Determination of the discount rate,
- Calculation of the Total OPEB Liability (TOL) as of the valuation date,
- Calculation of the Net OPEB Liability (NOL) at the discount rate as well as discount rates one percentage higher and lower than the discount rate, and
- Changes in the Net OPEB Liability.

We have determined the costs and liabilities for the substantive plan using actuarial assumptions and methods that we consider reasonable. The information shown in this report is primarily for financial disclosure purposes since the biennial full valuations are used to adjust funding strategies, and the contributions for the participants of the PLDs are based on premiums set by the premium studies.

The current premium rates reflect rate changes adopted by the Board of Trustees based on a premium study conducted in 2024. The basic premiums are \$0.23 bi-weekly per \$1,000 of coverage for fiscal year (FY) 2024 for both active and retired PLD participants. Basic premiums will increase to \$0.24 for FY 2026 and \$0.25 for FY 2028. For active participants, \$0.12 is allocated to fund active benefits beginning in FY 2026, while the difference is allocated to fund future retiree benefits. The increases for 2028 will be evaluated during the next premium study that is scheduled for 2026.

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

Board of Trustees Maine Public Employees' Retirement System October 10, 2024 Page ii

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

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

This report was prepared for the Maine Public Employees' Retirement System for the purposes described herein and for the use by the Plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any such other users.

Sincerely, Cheiron

John Colberg, FSA, EA, MAAA Principal Consulting Actuary Ryan Benitez, ASA, MAAA Consulting Actuary



## SECTION I – SUMMARY OF KEY RESULTS

The reporting date for the Maine Public Employees Retirement System Retiree Group Life Insurance Program presented in this report is June 30, 2024, Measurements as of the reporting date are based on the fair value of assets as of June 30, 2024, and the Total OPEB Liability (TOL) as of the valuation date June 30, 2024. There was an update of census data since the prior valuation.

Beginning of year measurements presented in this report are based on the actuarial valuation as of June 30, 2023. Since this is a full valuation, liability and gains or losses due to experience are reported due to the updated census information

Table I-1 below provides a summary of the key results during this reporting period ending on June 30, 2024.

Table I-1       Summary of Results								
Measurement DateMeasurement06/30/202306/30/202				surement Date 06/30/2024				
Total OPEB Liability	\$	33,868,278	\$	34,440,889				
Plan Fiduciary Net Position		20,223,634		23,378,708				
Net OPEB Liability	\$	13,644,644	\$	11,062,181				



## SECTION II – DETERMINATION OF DISCOUNT RATE

MainePERS's funding policy is for PLD employees or districts to pay \$0.23 biweekly per \$1,000 in coverage for all participants. Of the \$0.23 for actives, \$0.12 is allocated to the Retiree Fund for retiree benefits.

As recommended in the 2024 Premium Study, the following increases are assumed and are determined as the amounts needed to fund the Actuarially Determined Contribution:

- FYE 2026: \$0.24 for retirees with \$0.12 of active premiums allocated to the Retiree Fund
- FYE 2028: \$0.25 for retirees with \$0.13 of active premiums allocated to the Retiree Fund

The discount rate at June 30, 2024 is 6.50%, which is the assumed long-term expected rate of return on plan investments. The fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. As such, the long-term expected rate of return on the Program's investments was applied to all periods of projected benefit payments in determining the Total OPEB Liability. The projection of cash flows used to determine the discount rate assumed that the employer contributions will be made according to the funding policy described in the above paragraph.





## SECTION III – PROJECTION OF TOTAL OPEB LIABILITY

The TOL is measured as of the valuation date June 30, 2024. This is a full valuation, which is completed at least every two years, and roll forward valuations are performed in the off years. The only significant event in calculating the TOL as of the valuation date was an update in census data. The table below shows the calculated TOL at discount rates equal to the rate used for disclosure purposes and plus and minus one percent from the rate used for disclosure purposes. The TOL has been determined using the entry age actuarial cost method as described in paragraph 54 of GASB Statement 74.

Table III-1 shows the TOL as of the valuation date rate for the assumed discount rate as well as for plus and minus one percent of this discount rate.

Table III-1Projection of Total OPEB Liability									
Discount Rate 5.50% 6.50% 7.50%									
Total OPEB Liability, 6/30/2	2024								
Actives	\$	12,157,174	\$	9,696,156	\$	7,825,623			
Deferred Vested		0		0		0			
Retirees		27,600,413		24,744,733		22,339,645			
Total	\$	39,757,587	\$	34,440,889	\$	30,165,268			



## **SECTION IV – NOTE DISCLOSURES**

Table IV-1 below shows the changes in TOL, the plan fiduciary net position (i.e., fair value of plan assets), and the Net OPEB Liability during the measurement year.

The differences between expected and actual experience reflect the following changes:

- Changes in census that have occurred since the last full biennial valuation in 2022,
- Life insurance payments made from the active trusts for deceased members in active or disabled status generally produces an experience gain for the retiree trust,
- A significant portion of the gain is due to individuals who were active and satisfied the eligibility criteria for retiree life insurance benefits in 2022, but who are no longer active and not receiving retirement life insurance benefits in 2024.

The change in benefits reflects the updated premiums that were endorsed by the PLD Advisory Committee at the July 30, 2024 meeting and adopted by the Board of Trustees at the August 8, 2024 meeting.

The change in assumptions reflects the update to the assumed expense as a percentage of liabilities which was updated as part of the 2024 Premium Study.

Table IV-1 Change in Net OPEB Liability - PLD							
	Increase (Decrease)						
	]	Fotal OPEB Liability (a)		an Fiduciary let Position (b)		Net OPEB Liability (a) - (b)	
Balances at 06/30/2023	\$	33,868,278	\$	20,223,634	\$	13,644,644	
Changes for the year:							
Service cost		351,657				351,657	
Interest		2,231,071				2,231,071	
Changes of benefits		(259,297)				(259,297)	
Changes of assumptions		98,188				98,188	
Differences between expected and actual experience		(697,751)				(697,751)	
Contributions - employer				1,497,755		(1,497,755)	
Contributions - member				0		0	
Net investment income				2,949,268		(2,949,268)	
Benefit payments		(1,151,257)		(1,151,257)		0	
Administrative expense		0		(140,692)		140,692	
Net changes		572,611		3,155,074		(2,582,463)	
Balances at 6/30/2024	\$	34,440,889	\$	23,378,708	\$	11,062,181	



## **SECTION IV – NOTE DISCLOSURES**

Changes in the discount rate would affect the measurement of the TOL. Lower discount rates produce a higher TOL and higher discount rates produce a lower TOL. Because the discount rate does not affect the measurement of assets, the percentage change in the NOL can be very significant for a relatively small change in the discount rate. Table IV-2 shows the sensitivity of the TOL and NOL to the discount rate.

Table IV-2           Sensitivity of Net OPEB Liability to Changes in Discount Rate							
		1% Decrease 5.50%		Discount Rate 6.50%		1% Increase 7.50%	
Total OPEB Liability Plan Fiduciary Net Position	\$	39,757,587 23,378,708	\$	34,440,889 23,378,708	\$	30,165,268 23,378,708	
Collective Net OPEB Liability Plan Fiduciary Net Position as a	\$	16,378,879	\$	11,062,181	\$	6,786,560	
Percentage of the Total OPEB Liability		58.8%		67.9%		7	

A one percent decrease in the discount rate increases the TOL by approximately 15.4% and increases the NOL by approximately 48.1%. A one percent increase in the discount rate decreases the TOL by approximately 12.4% and decreases the NOL by approximately 38.7%.



### SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-1           Schedule of Changes in Net OPEB Liability and Related Ratios					
	FY 2024				
<u>Total OPEB Liability</u>					
Service cost (BOY)	\$ 351,657				
Interest (includes interest on service cost)	2,231,071				
Changes of benefit terms	(259,297)				
Differences between expected and actual experience	(697,751)				
Changes of assumptions	98,188				
Benefit payments	(1,151,257)				
Net change in total OPEB liability	572,611				
Total OPEB liability - beginning	33,868,278				
Total OPEB liability - ending	<u>\$ 34,440,889</u>				
Plan fiduciary net position					
Contributions - employer	\$ 1,497,755				
Contributions - member	0				
Net investment income	2,949,268				
Benefit payments	(1,151,257)				
Administrative expense	(140,692)				
Net change in plan fiduciary net position	\$ 3,155,074				
Plan fiduciary net position - beginning	20,223,634				
Plan fiduciary net position - ending	<u>\$ 23,378,708</u>				
Net OPEB liability - ending	<u>\$ 11,062,181</u>				
Plan fiduciary net position as a percentage of the total OPEB liability	67.88%				
Covered employee payroll	\$ 339,968,000				
Net OPEB liability as a percentage of covered employee payroll	3.25%				

Notes to Schedule of Changes in Net OPEB Liability and Related Ratios None

A ten-year schedule of changes in NOL and related ratios is to be included within the Annual Comprehensive Financial Report (ACFR) for MainePERS. However, based on GASB guidance, this ten-year history can be built one year at a time following implementation. We have shown only the current year of this *Schedule of Changes in Net OPEB Liability and Related Ratios* above and believe that you can accumulate these individual years in the MainePERS ACFR to build this schedule to show the full ten-year schedule over time. Notes to this schedule should be included for any factors significantly impacting the trends reported within the period shown in this schedule at that time. As of June 30, 2024, we have not included such a note in the *Notes to Schedule of Changes in Net OPEB Liability and Related Ratios* above. However, it is our expectation that the System staff will make the final determination regarding any notes needed for this schedule and we are available to provide any information they may need for this purpose.



## SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

If an Actuarially Determined Contribution is calculated, the following schedule is required. An Actuarially Determined Contribution is a contribution amount determined in accordance with Actuarial Standards of Practice.

Table V-2 Schedule of Employer Contributions During Fiscal Year 2024	
	PLD
Actuarially Determined Contribution Contributions in Relation to the Actuarially Determined Contribution	\$ 1,931,612 1,497,755
Contribution Deficiency/(Excess)	\$ 433,857
Covered Payroll	\$ 339,968,000
Contributions as a Percentage of Covered Payroll	0.44%

## Notes to Schedule

Valuation Date: June 30, 2020

Timing: The ADC is calculated in advance of the completion of the prior biennial valuation and thus rolled-forward from prior results. In this case, ADCs for 2024 and 2025 are based on the June 30, 2020, valuation rolled forward and adjusted for changes in assumptions.

## Key Methods and Assumptions Used to Determine Contribution Rates for FY 2024

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market Value
Amortization Method:	Level percent closed with 12 years remaining for FY 2024
Discount Rate:	6.75%
Salary Inflation:	2.75%
Administrative Expense Load:	9.67%

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2024, can be found in the June 30, 2020, Actuarial Valuation report.



## SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-3 that follows is provided in this report at the request of MainePERS staff, showing the development of the average remaining service life for the Program. GASB 75 requires some items be recognized by employers into OPEB expense over a period "equal to the average of the expected remaining service lives of all employees that are provided with OPEB through the OPEB plan (active employees and inactive employees) determined as of the beginning of the measurement period." For the current measurement year ending on June 30, 2024, these values are thus developed based on the prior full biennial valuation data as of June 30, 2022. The development of this value is shown below, including reflection of the decision by MainePERS to round the resulting value to the nearest whole year.

Table V-3 Average Expected Remaining Service Life For Measurement Year Ending June 30, 2024								
Status	Average Remaining							
Status	<b>Future Service</b>	Count	Service Life					
Actives	53,162	5,248	10					
Inactives	<u>0</u>	<u>3,015</u>	<u>0</u>					
Total Membership	53,162	8,263	6					



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Table A-1Active Member Data								
Group	Count	Average Age	Average Service	Average	Salary			
PLDs	5,362	48.4	9.7	\$	63,403			

## Participant Data as of June 30, 2024

Table A-2Non-Active Member Data							
Group	Count	Average Age	Average Benefit <sup>1</sup>				
PLDs	2,957	73.5	\$ 20,193				

<sup>1</sup> Ultimate benefit (40% of initial base benefit)

Note that all assumptions are based on the MainePERS Pension assumptions, which were updated after the experience study performed in 2020. All assumptions specific to this valuation are detailed in the following section.



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

## **A. Actuarial Assumptions**

## 1. Annual Rate of Investment Return



Rate is net of investment expense.

## 2. Cost-of-Living Adjustment in Life Benefits

N/A. Unlike pension benefits, Life Benefits do not increase with the Cost of Living.

## 3. Annual Rate of Individual Salary Increase (% at Selected Years of Service)

f se
6

The above rates include a 2.75% across-the-board increase at each year of service.



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Service	Regular	Special
0	28.0%	17.9%
1	21.0	14.4
2	15.0	10.5
3	12.0	9.5
4	10.0	7.8
5	9.0	7.9
10	5.0	4.5
15	3.5	2.9
20	3.5	2.7
25	3.0	0.0

#### 4. Sample Rates of Termination (% at Selected Years of Service)

5. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

	(Showing va	lues in 2024)
Age	Male	Female
50	31	24
55	46	34
60	70	47
65	102	69
70	157	110
75	264	196
80	478	364
85	884	695
90	1,547	1,308
95	2,421	2,143

Rates are based on 112.1% and 118.5% of the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, respectively, for males and females. Proposed rates are projected generationally using the RPEC\_2020 model, with an ultimate rate of 1.00% for ages 80 and under, grading down to 0.05% at age 95, and further grading down to 0.00% at age 115, with convergence to the ultimate rates in 2027. All other parameters used in the RPEC\_2020 model are those included in the published MP-2020 scale.



#### **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

	(Showing va	lues in 2024)
Age	Male	Female
20	3	1
25	3	1
30	4	2
35	6	3
40	7	4
40 45	9	5
50	12	7
55	17	11
60	27	17
65	39	25

6. Sample Rates of Mortality for Active Lives at Selected Ages (number of deaths per 10,000 members)

Rates are based on 83.5% and 88.6% of the 2010 Public Plan General Benefits- Weighted Employee Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model as described in the healthy annuitant mortality.

7. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

Age	(Showing va Male	lues in 2024) Female
25	36	21
30	54	37
35	74	58
40	91	76
45	113	98
50	159	141
55	216	181
60	274	210
65	325	220
70	383	258

Rates are based on 107.3% and 103.2% of the 2010 Public Plan Non-Safety Benefits-Weighted Disabled Retiree Mortality Table, respectively, for males and females. These rates are generationally projected using the same version of the RPEC\_2020 model described in the healthy annuitant mortality.



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

#### 8. Sample Rates of Retirement at Selected Ages (number retiring per 1,000 members)

Regular Plans

	Regular Pla	ans
Age	NRA 60	NRA 65
45	N/A	N/A
50	N/A	N/A
55	N/A	N/A
60	120	60
65	250	200
70	1,000	250
75	1,000	1,000

In the case of PLD employees, NRA 60 refers to those who were hired prior to July 1, 2014, and NRA 65 refers to those who were hired on or after July 1, 2014.



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

### Special Plans

Years of Service	Special Plans
20	350
21	300
22	280
23	250
24	200
25	350
26	250
27	230
28	250
29	400
30	250
31-33	250
34	330
35+	1,000

Note that all retirement rates are only applied once the member is eligible to retire, so those in 25-year plans are not assumed to retire at 20 years of service. For Special Plan retirements with less than 20 years of service, we assume 250 retirements per 1,000 members.



#### **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

Regular	Special
0.9	2.3
1.2	3.0
1.8	4.5
4.2	10.5
8.7	21.8
16.5	41.3
28.5	70.0
30.0	70.0
	1.2 1.8 4.2 8.7 16.5 28.5

9. Sample Rates of Disability at Selected Ages (number becoming disabled per 10,000 members)\*

#### **10. Premium Expense Assumption**

To reflect administrative expenses associated with the distribution of benefits, the following loads, determined in the 2024 Premium Study, have been added to the liabilities, normal cost, and benefit payments.

PLDs: 9.67%

#### 11. Technical and Miscellaneous Assumptions

Decrement Timing: Middle of the valuation year.

Pay Increase Timing: Salary provided is treated as the rate of pay as of the valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Conversion Charges: Applies to the cost of active group life insurance, not retiree group life insurance.

Form of Benefit Payment: Lump Sum.

Participation Percent for Future Retirees: 100% of those currently enrolled.

Retirement for Participants who are not members of MainePERS: Age 62.

## **12.** Rationale for Assumptions

The revised demographic assumptions were adopted by the Board of Trustees at their March 11, 2021, meeting. The revised discount rate was adopted by the Board of Trustees at their August 12, 2021, meeting. The demographic assumptions adopted are based on an experience study covering the period from July 1, 2015 through June 30, 2020, and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants.



### **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

#### 13. Changes since Last Valuation

The expense assumption was changed from 9.36% to 9.67%.

#### 14. Rationale for Change in Actuarial Assumptions

The expense assumption was evaluated as part of the 2024 Premium Study.

#### 15. Disclosure of Models used

**Proval:** Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

*Mortality Improvement Model*: Cheiron utilized the RPEC\_2014\_v2020 Model Implementation Tool for the purposes of developing the customized version of MP-2020 used in this report. This tool is updated and published annually by the Society of Actuaries and their Retirement Plans Experience Committee and allows actuaries to develop customized versions of mortality improvement scales based on the parameters and data underlying the published MP-2020 scale but allowing practitioners to vary parameters from those used in the published MP-2020 scale.

We have reviewed this model and believe it is appropriate to our intended use in developing a customized mortality improvement scale for the Programs. Further, we are aware of no material inconsistencies that would limit our ability to use this model for its intended purpose.



## **APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS**

## **B.** Actuarial Methods

## 1. Funding Method

The individual entry age normal method is used to determine liabilities. Under this funding method, a normal cost rate is calculated for each member. This rate is determined by taking the value, as of age at entry into the Plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age of his expected future salary. The normal cost for each member is the product of their annual salary at the valuation date and their normal cost rate. The normal cost amount for the group is then the sum of the normal costs for all members.

The Actuarial Liability is defined as the present value of future benefits, as of the valuation date, for all current members less the present value of future normal costs for all current members. For funding purposes, the Unfunded Actuarial Liability is then equal to the Actuarial Liability, less the actuarial value of the System's assets.

The discount rate used reflects the long-term funding policy to fully fund the benefits on an actuarial basis by FY 2036 for PLDs.

#### 2. Asset Valuation Method

Figures were reported by MainePERS without audit or change.

## 3. Changes since Last Valuation

None

## 4. Rationale for Change

N/A



## **APPENDIX B – SUMMARY OF KEY PLAN PROVISIONS**

## Membership

Service Retirement:	A retiree must have participated in the group life insurance program for at least 10 years and possess coverage just prior to retirement.
Disability Retirement:	An employee must have participated in the group life insurance program immediately prior to disablement.

## **Basic Insurance**

Average final compensation is calculated for retirement purposes.

## Amount of Insurance for a Retiree

Service Retirement:	The Basic Insurance will be reduced by $15\%$ per year until the amount equal to the greater of (a) 40% of the initial Basic Insurance, or (b) \$2,500.
Disability Retirement:	The amount of basic life insurance in force prior to retirement will be continued until normal retirement age. At normal retirement age, the amount of insurance will be reduced as for service retirement.

## **Retiree Contribution**

PLD Employees: PLD must pay \$0.23 biweekly per \$1,000 of base benefit, based on the coverage amounts declining from 100% to 40%. Biweekly rates increase to \$0.24 in FYE 2026 and \$0.25 in FYE 2028.

## **Normal Retirement Age**

The specified age, the years of service requirement, or any age and years of service combination at which a participant may become eligible for unreduced service retirement benefits.

## **Discontinued Coverages at Retirement**

- Supplemental Life
- Accidental Death and Dismemberment
- Dependent Life

(Discontinued coverage may be ported to another group term product or converted to an individual policy.)



## **APPENDIX C – GLOSSARY OF TERMS**

## 1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

## 2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

## 3. Entry Age Actuarial Cost Method

The actuarial cost method is required for GASB 74 and 75 calculations. Under this method, the actuarial present value of the projected benefits of each individual, included in an actuarial valuation, is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total OPEB Liability.

## 4. Measurement Date

The date as of which the Total OPEB Liability and Plan Fiduciary Net Position are measured. The Total OPEB Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

## 5. Net OPEB Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit OPEB plan. It is calculated as the Total OPEB Liability less the Plan Fiduciary Net Position.

## 6. Plan Fiduciary Net Position

The fair or market value of assets.

## 7. Reporting Date

The last day of the Plan or employer's fiscal year.



## **APPENDIX C – GLOSSARY OF TERMS**

## 8. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 74 and 75. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

## 9. Total OPEB Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 74 and 75. The Total OPEB Liability is the actuarial liability calculated under the entry age actuarial cost method.





Classic Values, Innovative Advice



Classic Values, Innovative Advice

## June 30, 2024 Actuarial Valuations

October 10, 2024

Gene Kalwarski, FSA Bonnie Rightnour, FSA Greg Reardon, FSA Ryan Benitez, ASA





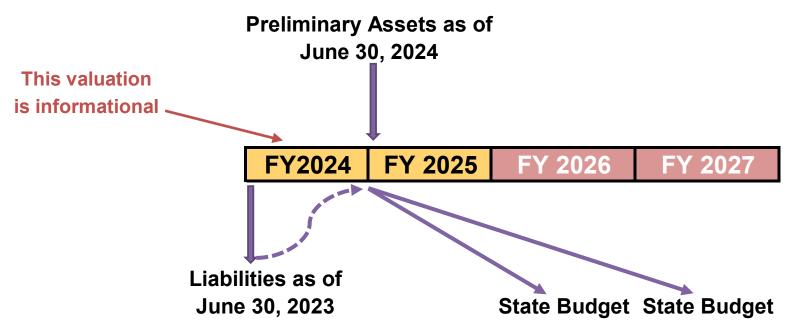
# **Topics for Discussion**



- 2024 Actuarial Valuation
  - Historical Review
  - Valuation Results
- UAL Analysis
- Peer Comparisons
- A Look Ahead

For the State Employee/Teacher Programs, Judicial, and Legislative Programs

Maine Valuation Cycle

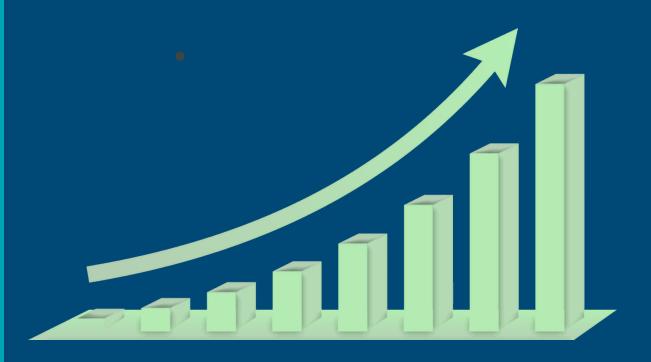


For the Participating Local Districts (PLD's) the 2024 valuation will be used for FY26 contributions

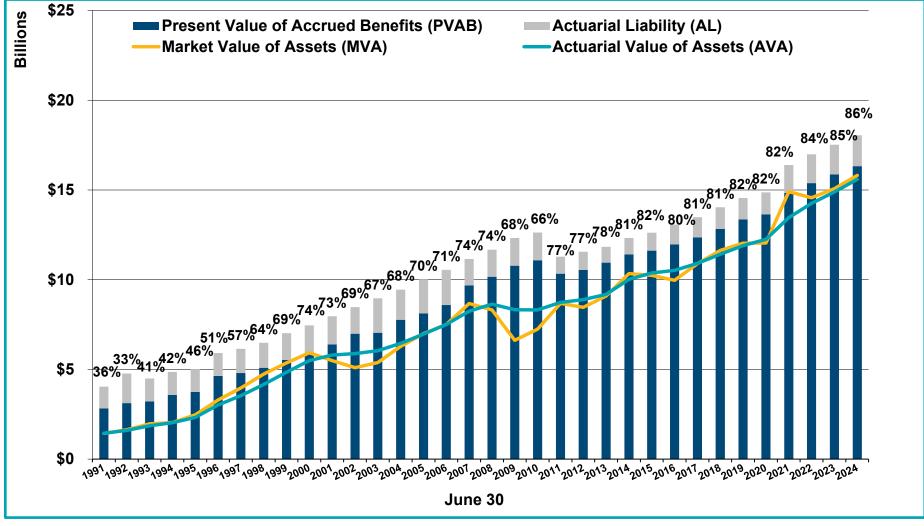


Historical Review & Valuation Results

# State Employees and Teacher Programs



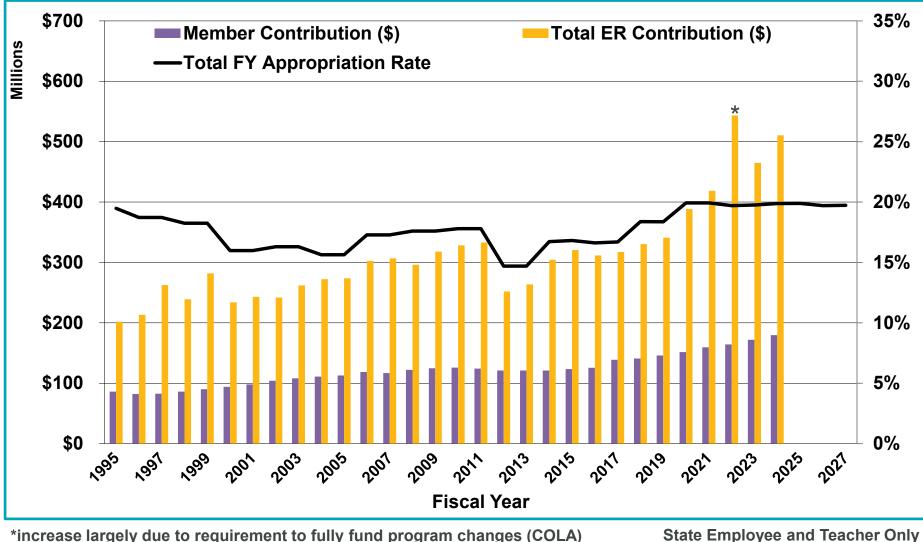
# CHEIRON 🥇 Strong Funded Status



Percentages shown are AVA funded ratios

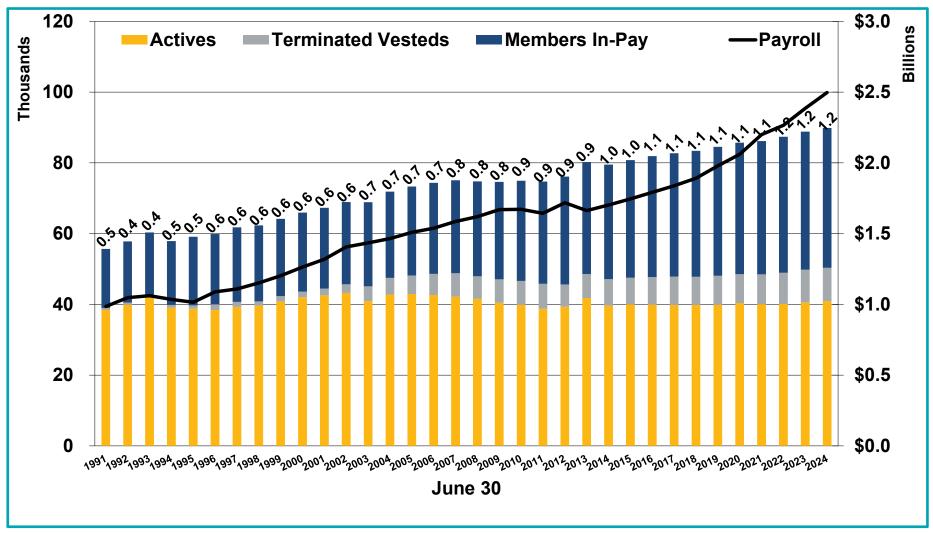
**State Employee and Teacher Only** 

## - HEIRON 🍰 Stable Contributions as a % of Pay



State Employee and Teacher Only

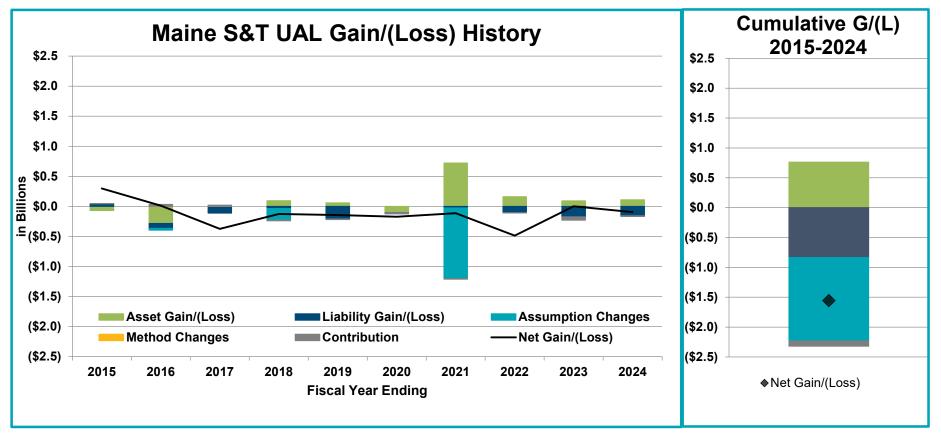
# CHEIRON 🧞 Increasing Maturity



Numbers represent the ratio of inactives to actives (the support ratio)

**State Employee and Teacher Only** 

## Assumption Changes Offset Investment Gains



**State Employee and Teacher Only** 

## State & Teacher – Key Valuation Results

		June 30,		
	2023	2024	2024	2023 to 2024
<u>Membership</u>	<b>Valuation</b>	<u>Ratemaking</u>	<b>Valuation</b>	<u>% change</u>
Actives	40,586		40,932	0.9%
Payroll (\$millions)	\$ 2,385	\$ 2,450	\$ 2,497	4.7%
Average Salary	\$ 58,762		\$ 61,013	3.8%
In Pay Status	39,038		39,535	1.3%
Total Annual Benefits (\$millions)	\$ 973	\$ 1,056	\$ 1,013	4.1%
Average Benefit	\$ 24,933		\$ 25,618	2.7%
Assets and Liabilities (\$millions)				
Actuarial Liability (6.50%)	\$ 17,521	\$ 17,957	\$ 18,051	3.0%
Actuarial Value of Assets (AVA)	\$ 14,889	\$ 15,569	\$ 15,587	4.7%
Unfunded Actuarial Liability (UAL)	\$ 2,632	\$ 2,388	\$ 2,464	-6.4%
UAL Amortization	\$ 381	\$ 390	\$ 395	3.8%
AVA Funded Ratio	85.0%	86.7%	86.3%	
Market Value of Assets (MVA)	\$ 15,073	\$ 15,712	\$ 15,810	4.9%
MVA Funded Ratio	86.0%	87.5%	87.6%	
Accrued Liability (6.50%)	\$ 15,860	NC	\$ 16,327	2.9%
Unfunded Accrued (using MVA)	\$ 787	NC	\$ 517	-34.3%
Accrued MVA Funded Ratio	95.0%	NC	96.8%	
LDROM Liability (4.44%)	\$ 24,105	NC	\$ 23,156	]
Total Contribution Rate				
Normal Cost Rate	4.56%	4.56%	4.60%	
UAL Rate (UAL Amort / Payroll)	15.97%	15.91%	15.83%	
Total Calculated Rate	20.53%	20.47%	20.43%	
NC = Not Calculated	,	· · · · · ·		

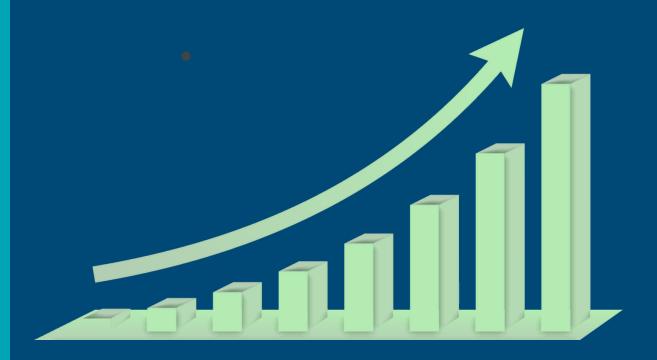
NC = Not Calculated

# **CHEIRON** FY 2024 Experience - State and Teacher

- Investments grew \$111 million more than expected
  - Market Return +7.43%
  - Actuarial Smoothed Return +7.26%
- Liabilities grew \$182 million more than expected
  - \$26 million One-time ad hoc noncumulative COLA paid to eligible retirees plus early retirement adjustment for certain retirees (both fully offset by additional contributions)
  - \$60 million 3% COLA vs. assumed 2.2%
  - \$96 million due to liability experience (mostly salaries)
- UAL
  - UAL declined by \$168 million
  - Calculated Employer valuation contribution rate dropped from 20.53% to 20.43% of payroll



# Judicial, Legislative, and PLD Programs



# Valuation Results

# Judicial – Key Valuation Results

		June 30,		
	2023	<u>2024</u>	2024	2023 to 2024
<u>Membership</u>	<b>Valuation</b>	<u>Ratemaking</u>	<b>Valuation</b>	<u>% change</u>
Actives	58		62	6.9%
Payroll (\$thousands)	\$ 8,671	\$ 8,909	\$ 9,938	14.6%
Average Salary	\$ 149,493		\$ 160,298	7.2%
In Pay Status	92		94	2.2%
Total Annual Benefits (\$thousands)	\$ 5,511	\$ 5,627	\$ 5,623	2.0%
Average Benefit	\$ 59,903		\$ 59,817	-0.1%
Assets and Liabilities (\$thousands)				
Actuarial Liability (6.50%)	\$ 78,586	\$ 79,902	\$ 80,846	2.9%
Actuarial Value of Assets (AVA)	\$ 86,356	\$ 87,789	\$ 87,945	1.8%
Unfunded Actuarial Liability (UAL)	\$ (7,770)	\$ (7,887)	\$ (7,099)	-8.6%
UAL Amortization	\$ (937)	\$ (951)	\$ (856)	-8.7%
AVA Funded Ratio	109.9%	109.9%	108.8%	
Market Value of Assets (MVA)	\$ 87,423	\$ 88,594	\$ 89,203	2.0%
MVA Funded Ratio	111.2%	110.9%	110.3%	
Accrued Liability (6.50%)	\$ 74,679	NC	\$ 76,672	2.7%
Unfunded Accrued (using MVA)	\$ (12,744)	NC	\$ (12,531)	-1.7%
Accrued MVA Funded Ratio	117.1%	NC	116.3%	
LDROM Liability (4.44%)	N/A	NC	\$ 96,667	
Total Contribution Rate				
Normal Cost Rate	12.51%	12.51%	12.87%	
UAL Rate (UAL Amort / Payroll)	-10.81%	-10.68%	-8.62%	
Total Calculated Rate	1.70%	1.83%	4.25%	

NC = Not Calculated

# CHEIRON 🤌 Legislative – Key Valuation Results

		June 30,		
	2023	2024	2024	2023 to 2024
<u>Membership</u>	<b>Valuation</b>	<u>Ratemaking</u>	<b>Valuation</b>	<u>% change</u>
Actives	178		175	-1.7%
Payroll (\$thousands)	\$ 2,962	\$ 3,044 *	\$ 3,057 *	3.2%
Average Salary	\$ 16,643		\$ 17,467	5.0%
In Pay Status	232		234	0.9%
Total Annual Benefits (\$thousands)	\$ 564	\$ 630	\$ 586	3.8%
Average Benefit	\$ 2,432		\$ 2,502	2.9%
Assets and Liabilities (\$thousands)				
Actuarial Liability (6.50%)	\$ 11,406	\$ 11,957	\$ 11,571	1.4%
Actuarial Value of Assets (AVA)	\$ 16,478	\$ 17,184	\$ 17,185	4.3%
Unfunded Actuarial Liability (UAL)	\$ (5,072)	\$ (5,227)	\$ (5,614)	10.7%
UAL Amortization	\$ (612)	\$ (630)	\$ (677)	10.7%
AVA Funded Ratio	144.5%	143.7%	148.5%	
Market Value of Assets (MVA)	\$ 16,682	\$ 17,341	\$ 17,431	4.5%
MVA Funded Ratio	146.3%	145.0%	150.6%	
Accrued Liability (6.50%)	\$ 11,061	NC	\$ 11,398	3.0%
Unfunded Accrued (using MVA)	\$ (5,620)	NC	\$ (6,033)	7.3%
Accrued MVA Funded Ratio	150.8%	NC	152.9%	
LDROM Liability (4.44%)	N/A	NC	\$ 14,182	
Total Contribution Rate				
Normal Cost Rate	5.59%	5.59%	3.24%	
UAL Rate (UAL Amort / Payroll)	-5.59%	-5.59%	-3.24%	Not less than negative NC Rate%
Total Calculated Rate	0.00%	0.00%	0.00%	IC = Not Coloulated

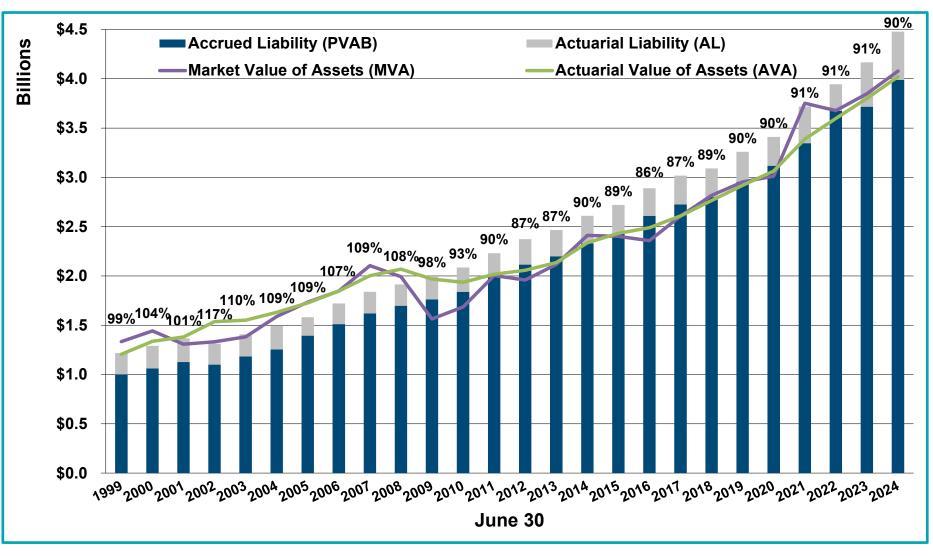
\* Annualized to approximate long-session rate of pay.

NC = Not Calculated

12

**CHEIRON FY 2024 Experience – Judicial & Legislative** 

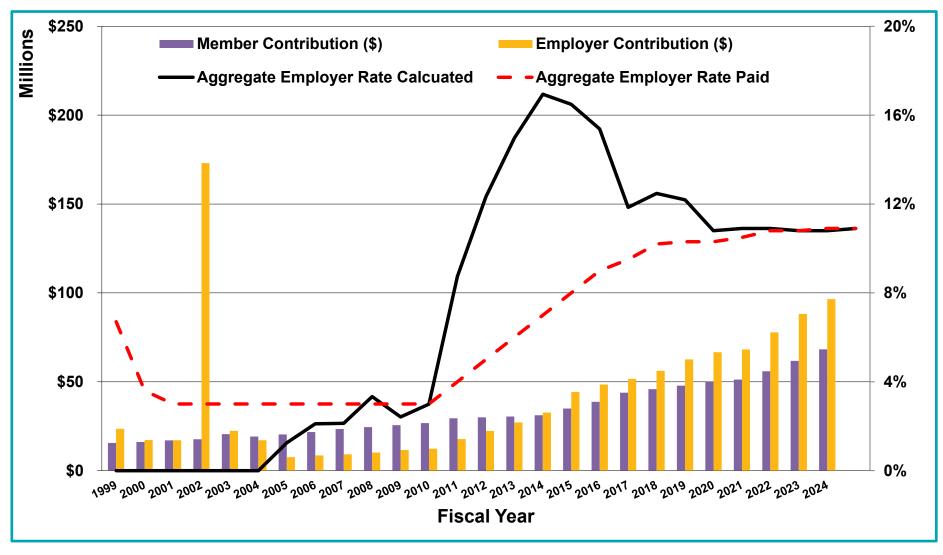
- Judicial investment gain of \$0.557 million
- Judicial liabilities grew \$1.098 million more than expected
- Legislative investment gain of \$0.123 million
- Legislative liabilities \$0.305 million lower than expected
- Net Impact
  - Both Programs remain overfunded
  - Judicial contribution rate increased from 1.70% to 4.25%



Percentages shown are AVA funded ratios

**Consolidated PLD Plans Only** 

## Consol. PLDs - Contributions



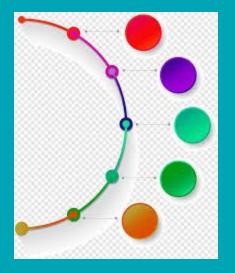
**Consolidated PLD Plans Only** 

# Consol. PLD – Key Valuation Results

	June 30,										
	2023	2024	2023 to 2024								
<u>Membership</u>	<b>Valuation</b>	<b>Valuation</b>	<u>% change</u>								
Actives	13,122	13,561	3.3%								
Payroll (\$millions)	\$ 832	\$ 909	9.3%								
Average Salary	\$ 63,398	\$ 67,061	5.8%								
In Pay Status	10,615	10,853	2.2%								
Total Annual Benefits (\$millions)	\$ 203	\$ 216	6.2%								
Average Benefit	\$ 19,159	\$ 19,894	3.8%								
Assets and Liabilities (\$millions)	_		_								
Actuarial Liability (6.50%)	\$ 4,166	\$ 4,478	7.5%								
Actuarial Value of Assets (AVA)	\$ 3,800	\$ 4,020	5.8%								
Unfunded Actuarial Liability (UAL)	\$ 366	\$ 458	25.1%								
AVA Funded Ratio	91.2%	89.8%									
Market Value of Assets (MVA)	\$ 3,847	\$ 4,078	6.0%								
MVA Funded Ratio	92.3%	91.1%									
Accrued Liability (6.50%)	\$ 3,717	\$ 3,990	7.3%								
Unfunded Accrued (using MVA)	\$ (130)	\$ (88)	-32.2%								
Accrued MVA Funded Ratio	103.5%	102.2%									
LDROM Liability (4.44%)	\$ 5,877	\$ 5,862									
Composite Contribution Rate	for FY 2023	for FY 2024									
Total Normal Cost Rate	14.3%	14.3%									
UAL Rate	4.3%	4.9%									
Total Calculated Rate	18.6%	19.2%									
Final Aggregate Employer Paid	10.8%	TBD									
Final Aggregate Member Paid	7.8%	TBD									

- Consolidated PLD investment gain of \$29.2 million
- Consolidated PLD liabilities grew by \$150.6 million more than expected
  - \$58.1 million increase due to programming correction
  - -\$11.6 million increase due to COLA of 2.5% vs. assumed 1.91%
  - \$80.9 million increase due to other liability experience (new hires, salary higher than expected)
- Net Impact
  - UAL increased by \$91.7 million to \$457.8 million
  - Calculated Employer Contribution Rate is higher by 0.6% of payroll





## **UAL** Analysis



# CHEIRON 🥇 1996 UAL Payoff

- Constitutional Amendment requires that the 1996 UAL be paid off by 2028
- The UAL is amortized on a level percentage of pay methodology
- In 2011 all UAL bases (1996 through 2011) were merged into a single base to be amortized by 2028

### Historical and Projected UAL's

	1996	1996 UAL	Total			UAL Bala	2000	- Dro	incted	1996 UA		
30-Jun	UAL Balance	Payment	UAL						-			
1996	2,888,985,772 <i>*</i>	123,965,519	2,888,985,772		Total	UAL	-	- Pro	jected	Total UA	AL.	
1997	2,991,275,887 <i>*</i>	130,268,348	2,612,058,351	ه \$5.0								
1998	3,095,199,119 <i>1</i>	168,011,907	2,316,528,732	üo								
1999	3,168,211,953 <i>*</i>	171,975,150	2,175,409,960	suoillia \$4.5								
2000	3,242,947,092	217,206,330	1,966,194,367	<b>6</b> \$4.5								
2001	3,276,655,419	221,419,138	2,157,386,869				٨	$\sim$				
2002	3,308,682,335	218,375,512	2,592,677,039	\$4.0			K					
2003	3,346,434,432	143,010,284	2,921,320,342	φ <del>4</del> .0								
2004	3,465,528,540	150,875,849	2,989,819,156									
2005	3,585,976,041	159,174,021	3,034,652,581	\$3.5								
2006	3,707,435,629 <i>1</i>	178,320,289	3,045,982,237	<i>+</i>								
2007	3,809,660,620 <i>′</i>	186,790,503	2,912,250,119									
2008	3,911,015,737 <i>′</i>		3,036,474,882	\$3.0								
2009	4,011,015,931		3,995,268,096									
2010	4,109,118,723	214,693,269	4,315,457,560		$\land$					$\sim$		
2011	4,204,718,019		2,544,780,065	\$2.5				- \-	T			
2012	4,225,136,373		2,672,576,161						1			
2013	4,166,523,477		2,652,900,255	<b>AA A</b>								
2014	4,090,888,412		2,302,646,777	\$2.0	V							
2015	3,994,584,554		2,240,734,557									<b>\</b>
2016	3,877,846,758		2,557,430,770	\$1.5							N	N.
2017	3,719,533,222		2,580,804,291	φ1.5								1
2018	3,538,650,454		2,611,201,193								•	Ň
2019	3,331,613,879		2,652,550,763	\$1.0							\ \	
2020	3,098,340,210		2,615,498,824	<b>vv</b>								1
2021	2,836,721,233		2,931,481,056									1
2022	2,541,754,432		2,733,686,161	\$0.5								
2023	2,214,432,563		2,631,449,101									1
2024	1,852,290,035		2,463,913,052									١
2025	1,452,691,025		2,145,439,783	\$0.0								•
2026	1,012,818,139		1,822,943,428	19	996 2000	2004		2012	2016	2020	2024	2028
2027	529,660,324		1,483,466,857				Ju	ine 30				
2028	0	0	1,118,167,275									

## Valuation\* vs. Ratemaking UAL Comparison

	Do	llars in Millions	;	\$400	
<u>FYE</u>	Valuation	Rate Setting	Paid		
2012	206.7	197.8	193.4	\$350	
2013	217.9	201.5	193.3	\$300	
2014	233.4	233.1	232.2	,	
2015	239.8	242.6	241.0	\$250	
2016	212.9	222.5	228.1		
2017	226.0	230.3	237.1	\$200	
2018	278.0	272.2	262.2	\$150	
2019	277.9	279.6	269.5		UAL \$ From Rate Setting
2020	306.0	306.7	312.5	\$100	
2021	314.4	315.1	326.7	<b>*</b> 50	
2022	341.4	338.5	349.1	\$50	
2023	328.8	347.8	359.4	\$0	
2024	374.2	369.6	375.8		2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024
Total	3,557.4	3,557.3	3,580.3		

\*Valuation results are adjusted to remove gains and losses that occur after budgets are established

(G)/L Base	Init	tial Base	<u>20</u> 2	24 Balance	<u>Methods</u>	Assumptions	<u>Assets</u>	Liabilities	Other*	
2012	\$	59.5	\$	41.5	(103.0	) -	220.1	(57.6)	0.0	EAN Method Change, CRSP applied
2013	\$	16.5	\$	12.4	(50.7	) -	52.0	(21.2)	36.3	New Data System
2014	\$	(298.8)	\$	(191.2)	(192.1	) 167.7	(255.4)	(17.7)	(1.3)	Asset/Discount Rate Change
2015	\$	(11.0)	\$	(1.9)	-	-	67.5	(44.6)	(33.9)	
2016	\$	375.3	\$	325.9	-	30.4	284.2	81.5	(20.9)	Exp. Study & Discount Rate
2017	\$	127.3	\$	112.3	-	-	18.1	95.2	14.0	
2018	\$	143.8	\$	130.8	-	192.0	(94.3)	34.2	11.9	Discount Rate
2019	\$	172.7	\$	161.1	-	-	(58.0)	208.7	22.0	
2020	\$	113.0	\$	107.5	-	-	103.0	0.1	9.9	
2021	\$	486.0	\$	470.1	-	1,175.9	(720.1)	25.6	4.6	Exp. Study, Discount Rate, Audit**
2022	\$	(0.4)	\$	(0.4)	-	-	(160.6)	104.6	55.6	
2023	\$	95.9	\$	95.1	-	-	(92.0)	174.4	13.6	
2024	\$	54.7	\$	54.7	-	-	(111.0)	155.8	9.9	
	\$	1,334.3	\$	1,317.9	\$ (345.7	) \$ 1,566.0	\$(746.5)	\$ 738.9	\$121.6	

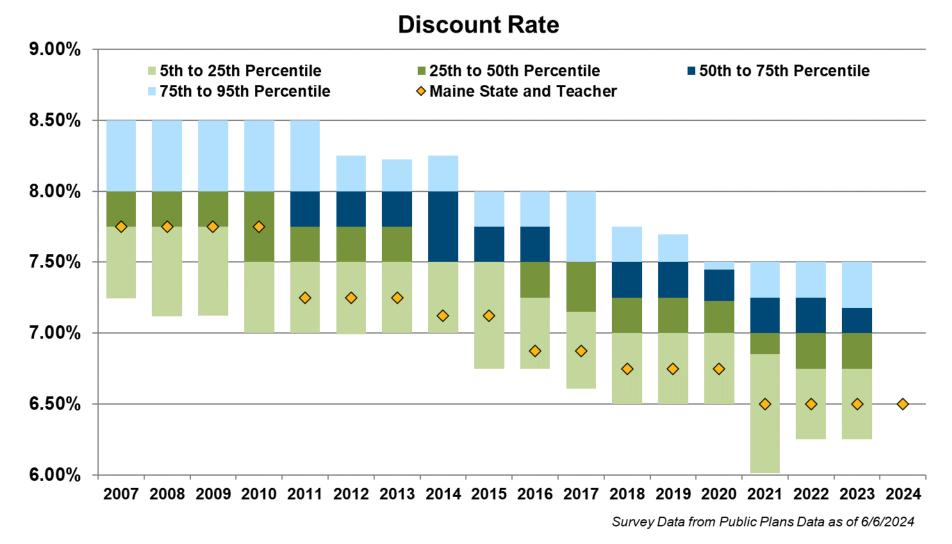
\* Other includes timing of contributions, benefit increases, and faster recognition of deferred asset gains

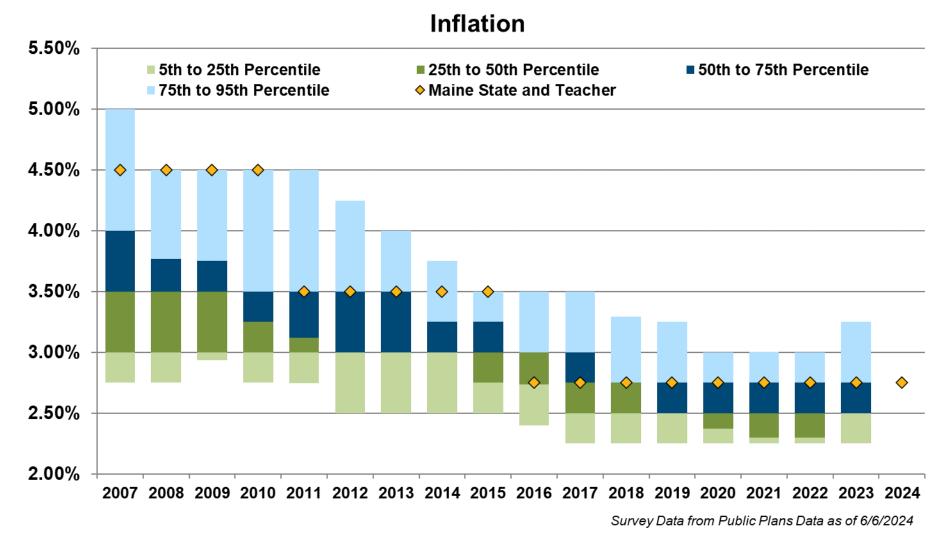
\*\*Mostly due to Discount Rate and Mortality (\$881m), and to a lesser degree (\$295m) to changes reflecting Audit findings (COLA timing)





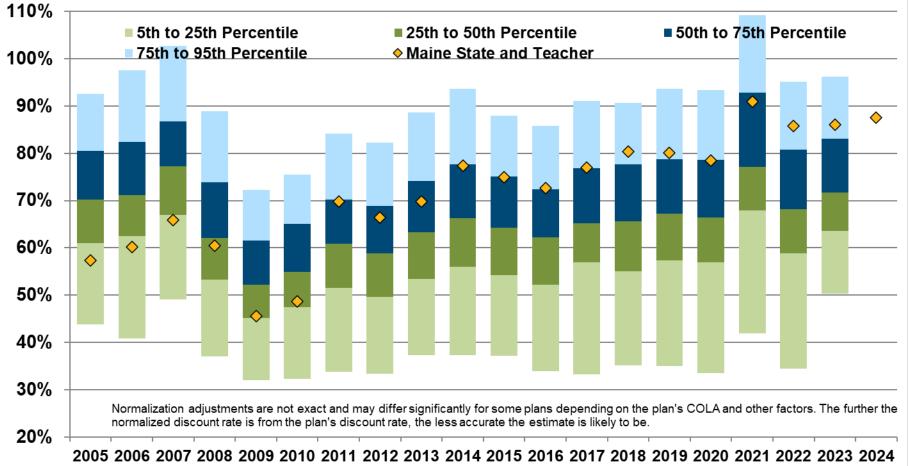
C E N T E R forRETIREMENT RESEARCH *at* boston college





## Funded Ratio at Market – All Plans at 6.5%

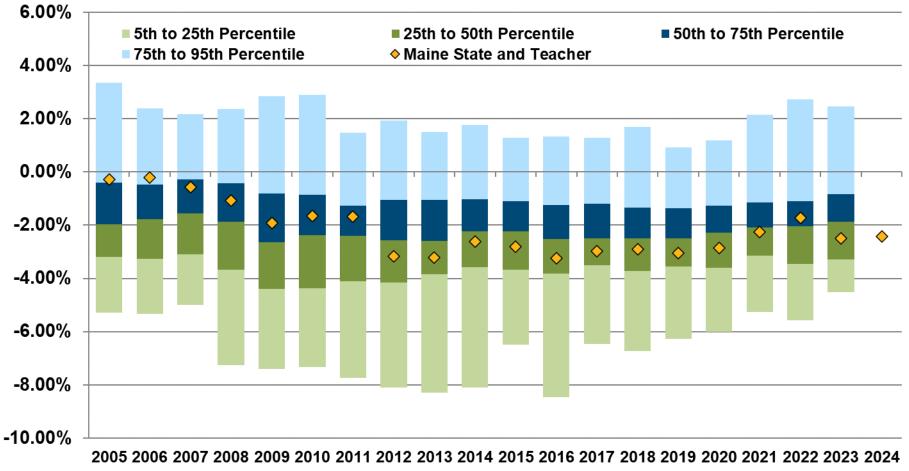
## **MVA Funded Ratio - Normalized**



Survey Data from Public Plans Data as of 6/6/2024

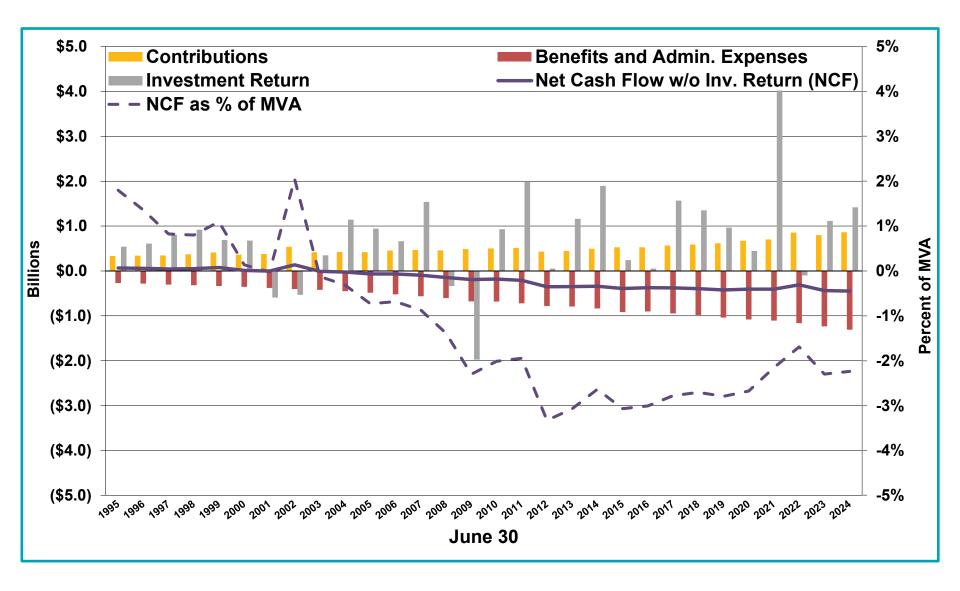
# CHEIRON 🧩 Net Cash Flow as a Percent of MVA

### **Net Cash Flow Rate**

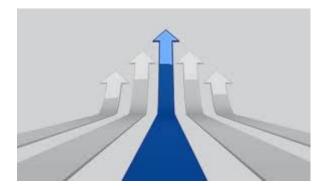


Survey Data from Public Plans Data as of 6/6/2024

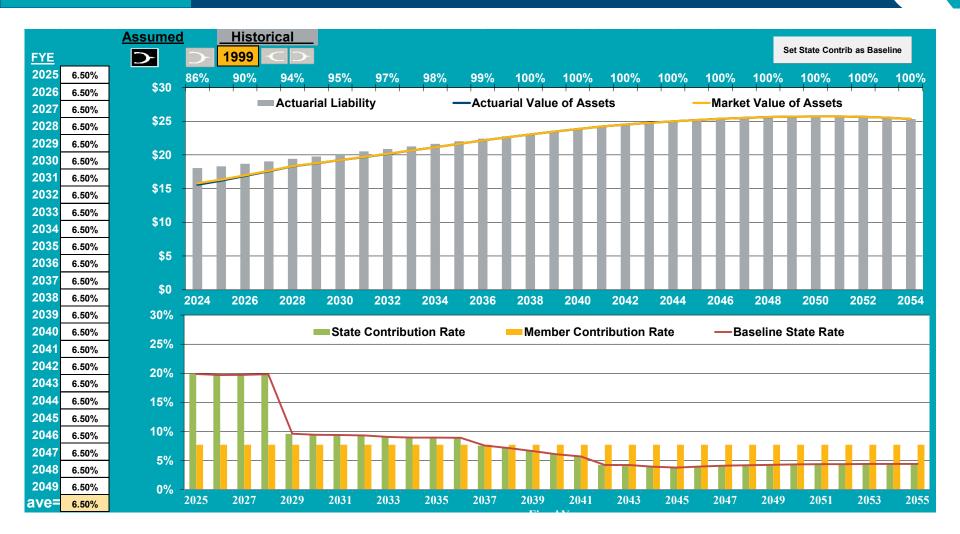
# CHEIRON 🔏 Net Cash Flows – All Programs



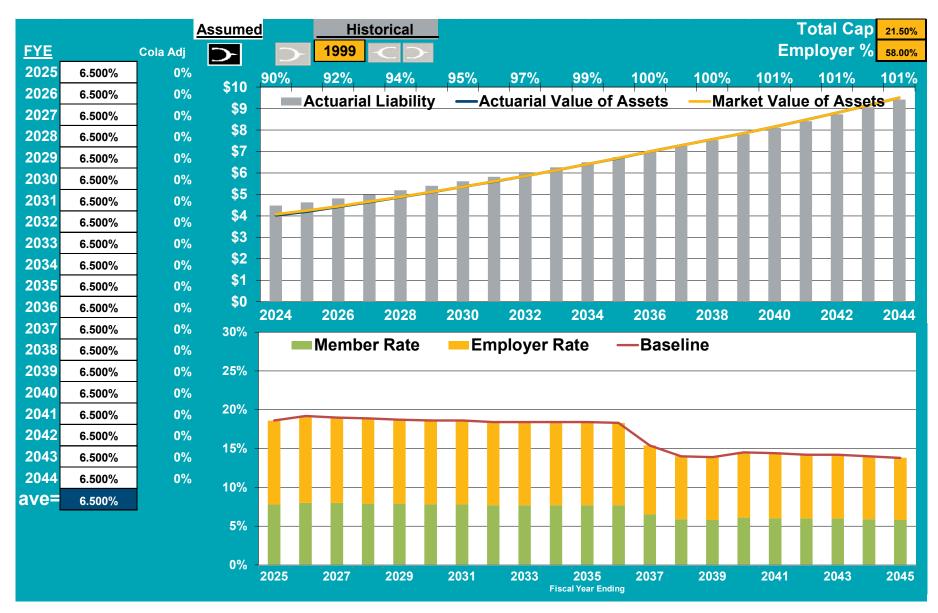




## State and Teacher Baseline Projection



# CHEIRON 🐉 PLD Baseline Projections



**Consolidated Plans Only** 





## Retiree Group Life Insurance (GLI)



## **Group Life Insurance Benefits**

- Active Life Insurance Benefits
  - Basic Life Insurance 100% of Salary
  - Accidental Death & Dismemberment Additional 100% of Salary for specific causes
  - Dependent Life Insurance
    - Plan A \$5,000 (Spouse & Child), \$1,000 (Child Under 6 months)
    - Plan B \$10,000 (Spouse), \$5,000 (Child), \$2,500 (Child Under 6 Months)

## Retirement Basic Life Benefits

- Retirement Year 1 100% of Salary
- Retirement Year 2 85% of Salary
- Retirement Year 3 70% of Salary
- Retirement Year 4 55% of Salary
- Retirement Year 5+ 40% of Salary



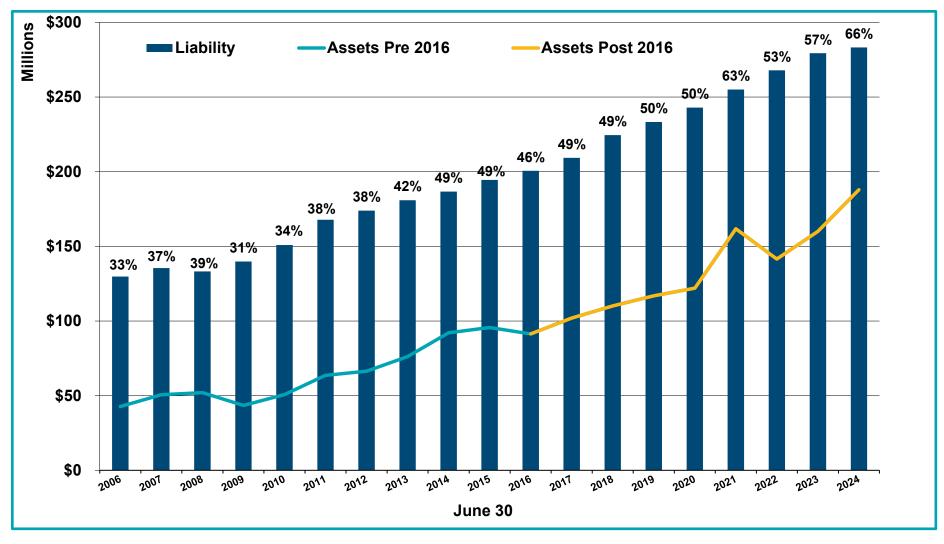
## 2024 GLI Premium Study – Summary

- State & Teacher:
  - Active Basic Life Increases in 2026:
    - State \$0.09 to \$0.12 (Adds \$0.65 million in premiums)
    - Teacher \$0.05 to \$0.06 (Adds \$0.25 million in premiums)
  - No change to Retiree, Supplemental, or Dependent Premium
- PLD:
  - Basic Life for Actives & Retirees:
    - Increase in 2026 from \$0.23 to \$0.24 based on results of 2020 Premium Study (Adds \$0.11 million in premiums)
      - For Actives: Active Fund allocation increases from \$0.11 to \$0.12, with Retiree Fund remaining at \$0.12 for future benefits
    - Increase in 2028 from \$0.24 to \$0.25 (Adds \$0.12 million in premiums)
      - For Actives: Active Fund allocation remaining at \$0.12, with Retiree Fund increasing from \$0.12 to \$0.13 for future benefits
  - No change to Supplemental, or Dependent Premium
- Next Premium Study will be in 2026

\*Premiums are bi-weekly per \$1,000 of life insurance coverage

## Historical Review Assets and Liabilities

- HEIRON 🧩



Assets as of 6/30/2016 and later are the amounts allocated to cover only retiree GLI benefits. Assets shown prior to 2016 cover both active and retiree GLI benefits.

# **CHEIRON GLI** Key Valuation Results

<u>Membership<sup>2</sup></u>	30, 2023 <u>Fotal</u>	<u>S1</u>	tate <sup>1</sup>	June 3( achers	Ĩ.	024 PLD		<u>rotal</u>	2023 to 2024 % Change
Actives	32,021	1	1,839	15,214		5,362	4	32,415	1.2%
Active Average Age	47.4		47.5	46.5		48.4		47.2	-0.5%
Average Salary	\$ 59,407	\$6	8,323	\$ 60,899	\$6	3,403	\$	64,024	7.8%
Retirees	20,031		8,864	7,978		2,957	•	19,799	-1.2%
Retiree Average Age	73.6		74.0	75.4		73.5		74.5	1.3%
Average Life Insurance Benefit	\$ 20,138	\$2	0,025	\$ 22,033	\$2	0,193	\$ 2	20,859	3.6%
Assets and Liabilities									
Discount Rate	6.50%		6.50%	6.50%		6.50%			
Actuarial Liability	\$ 279.2	\$	124.9	\$ 123.9	\$	34.4	\$	283.2	1.4%
Market Value of Assets (MVA)	\$ 160.0	\$	64.5	\$ 100.0	\$	23.3	\$	187.8	17.4%
Unfunded Actuarial Liability (UAL)	\$ 119.2	\$	60.4	\$ 23.9	\$	11.1	\$	95.4	-20.0%
MVA Funded Ratio	57%		52%	81%		68%		66%	

\*(\$ amounts in millions)

<sup>1</sup> State group includes Judicial and Legislative members as well as those in the State Employees Program

<sup>2</sup> Valuation as of June 30, 2023 is a roll-forward so census data is the same as June 30, 2022



## **Required Disclosures**

Classic Values, Innovative Advice

In preparing this presentation, we relied on information supplied by the Maine Public Employees Retirement System.

The actuarial assumptions, data, and methods are those used in the preparation of the latest actuarial valuation report prepared for these plans as of June 30, 2024.

The results of this presentation rely on future plan experience conforming to the underlying assumptions and methods outlined in the reports. Future results may differ significantly from the current results presented in this presentation due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

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

Cheiron's presentation was prepared solely for the Maine Public Employees Retirement System for the purposes described therein, except that the plan auditor may rely on the report solely for the purpose of completing an audit related to the matters herein. Other users of this presentation are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

### MAINEPERS

### **BOARD OF TRUSTEES MEMORANDUM**

TO: BOARD MEMBERS

FROM: SHERRY VANDRELL, CHIEF FINANCIAL OFFICER

SUBJECT: FY24 AUDITED FINANCIAL STATEMENTS

DATE: SEPTEMBER 30, 2024

### POLICY REFERENCE

Board Policy 1.6 – Finance and Audit Committee of the Board

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 – Communication and Support to the Board

BerryDunn is completing its audit of the System's FY24 Financial Statements and Required Supplemental information, pending Board acceptance of the annual valuation reports. A draft of the financial statements follows this memo. The auditor's report will be provided as soon as it is available.

Mark LaPrade, Principal, and Leah Claire, Audit Manager, will present the draft financial statements at the October 10, 2024 meeting and will answer any questions you may have at that time. If the Board accepts the audited financial statements, they will be finalized following the meeting.

### RECOMMENDATION

Accept the FY24 Audited Financial Statements as presented.

## **Maine Public Employees Retirement System**

(A Component Unit of the State of Maine)

Financial Statements, Required Supplementary Information and Additional Supplementary Information

> Year Ended June 30, 2024 With Independent Auditor's Report

### FINANCIAL STATEMENTS, REQUIRED SUPPLEMENTARY INFORMATION AND ADDITIONAL SUPPLEMENTARY INFORMATION

Year Ended June 30, 2024 With Summarized Information for June 30, 2023

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(A Component Unit of the State of Maine)

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

June 30, 2024

### Introduction

This Management's Discussion and Analysis (MD&A) is prepared by the management staff of the Maine Public Employees Retirement System (MainePERS or the System) for the purpose of providing an overview of the System's financial statements.

### **Financial Reporting Structure**

The System's financial statements are prepared on an accrual basis of accounting in accordance with Governmental Accounting Standards Board (GASB) pronouncements. The accrual basis of accounting requires the recognition and recording of financial transactions and other related events when they occur and not just in conjunction with the inflows and outflows of cash and other resources.

The funds managed by the System are held in trust and consistent with state and federal law can only be used for the payment of pension and related benefits to its members or, in the case of the Retiree Health Insurance Trust Fund, for the payment of retiree health insurance premiums for eligible retirees of the State of Maine. The System's Board of Trustees (the Board), as fiduciary, establishes the System's investment policies and oversees their overall implementation.

The System reports five defined benefit retirement plans consisting of the State Employee and Teacher Plan, a multiple-employer cost sharing plan with a special funding situation; the Judicial Plan, a single employer plan; the Legislative Plan, a single employer plan; the PLD Consolidated Plan, a multiple-employer cost sharing plan; and the PLD Agent Plan, an agent multiple-employer plan. The System also reports a Group Life Insurance Plan covering active state employees (including judges and legislators), teachers, and participating employees of the PLD Plan as well as two multiple-employer cost sharing other post-employment benefit (OPEB) plans providing life insurance coverage in retirement for retired state employees, including judges and legislators teachers and eligible retirees of the PLD Plans. In addition, the System reports certain defined contribution plans, the MainePERS OPEB Trust, and the Retiree Health Insurance Trust Fund.

#### **Basic Financial Statements**

The Statement of Fiduciary Net Position reports the balance of Fiduciary Net Position restricted for future benefits as of the fiscal year end, with summarized values reported as of the previous fiscal year end. The Statement of Changes in Fiduciary Net Position reports the net change in Fiduciary Net Position for the fiscal year, with summarized values reported for the previous fiscal year. The System reports each as separate funds and in separate columns in the financial statements. Condensed versions of both statements are included in the following section.

The Schedules of Changes in the Plan's Net Pension Liability and Related Ratios (Required Supplementary Information) present the total pension liability and information indicating the source of changes in the liability for each defined benefit retirement plan administered by the System. In addition, they show summary information regarding each Plan's net position for the years presented. They also present each Plan's net pension liability as a percentage of the covered payroll.

(A Component Unit of the State of Maine)

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

June 30, 2024

The Schedules of Employer Contributions (Required Supplementary Information) present the actuarially determined contributions for each defined benefit plan and compare them to actual employer contributions for the period presented. They also provide the actual contributions as a percentage of covered payroll for each year.

The Schedule of Investment Returns (Required Supplementary Information) presents the annual moneyweighted rate of return, net of investment expenses, for all of the defined benefit plans for each year presented.

The Schedules of Changes in the Plan's Net OPEB Liability and Related Ratios for the Group Life Insurance Plans (Required Supplementary Information) present the total OPEB liability and information indicating the source of changes in the liability for each OPEB plan administered by the System. In addition, they show summary information regarding each Plan's net position for the years presented. They also present each Plan's net OPEB liability as a percentage of the covered payroll.

The Schedules of Employer Contributions for the Group Life Insurance Plans (Required Supplementary Information) present the actuarially determined contributions for each OPEB plan and compare them to actual employer contributions for the periods presented. They also provide the actual contributions as a percentage of covered payroll for each year.

The Schedule of Investment Returns (Required Supplementary Information) presents the annual moneyweighted rate of return, net of investment expenses, for all of the OPEB plans for each year presented.

#### Financial Highlights and Analysis

The following are the Condensed Comparative Statements of Fiduciary Net Position and Condensed Comparative Statements of Changes in Fiduciary Net Position for the System for the fiscal years ended June 30, 2024, 2023, and 2022:

Condensed Comparative Statements of Fiduciary Ne	t Position	1					
(Dollar Values Expressed in Millions)							
	Jur	ne 30, 2024	Ju	ne 30, 2023	June 30, 202		
Cash and Receivables	\$	101.3	\$	248.2	\$	153.2	
Investments at Fair Value		20,852.2		19,586.8		18,814.7	
Collateral on Loaned Securities		3.4		6.9		10.3	
Other Assets		12.7		12.3		13.2	
Total Assets	\$	20,969.6	\$	19,854.2	\$	18,991.4	
Investment Management Fees Payable	\$	0.4	\$	1.9	\$	19.5	
Obligations Under Securities Lending Activities		63.4		25.4		10.3	
Other Liabilities		6.5		10.2		50.0	
Total Liabilities	\$	70.3	\$	37.5	\$	79.8	
Fiduciary Net Position - Restricted for Benefits	\$	20,899.3	\$	19,816.7	\$	18,911.6	

(A Component Unit of the State of Maine)

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

#### June 30, 2024

### Condensed Comparative Statements of Changes in Fiduciary Net Position

(Dollar Values Expressed in Millions)

	Jur	ne 30, 2024	Jur	ne 30, 2023	Jur	ne 30, 2022
ADDITIONS:						
Member Contributions	\$	263.7	\$	248.9	\$	239.9
Employer Contributions		402.6		536.6		440.5
Non-Employer Contributing Entities Contributions		225.7		204.7		199.3
Total Investment Income (Loss)		1,525.8		1,175.0		(190.2)
Transfers from Other Plans		0.3		1.1		0.3
Total Additions	\$	2,418.1	\$	2,166.3	\$	689.8
DEDUCTIONS:						
Benefits Paid	\$	1,271.3	\$	1,209.1	\$	1,141.3
Other		64.2		52.1		46.4
Total Deductions	\$	1,335.5	\$	1,261.2	\$	1,187.7
Net Increase (Decrease)	\$	1,082.6	\$	905.1	\$	(497.9)
Fiduciary Net Position - Restricted for Benefits, Beginning of Year	\$	19,816.7	\$	18,911.6	\$	19,409.5
Fiduciary Net Position - Restricted for Benefits, End of Year	\$	20,899.3	\$	19,816.7	\$	18,911.6

### Fiduciary Net Position

The Fiduciary Net Position of the System increased in fiscal year 2024 by \$1,082.6 million (5.5%) from the prior year Fiduciary Net Position. This was due, in part, to investment income of \$1,525.8 million combined with benefit payments that exceeded contributions in the amount of \$379.3 million. Investment income in fiscal year 2023 was \$1,175 million as compared to investment income of \$1,525.8 million in fiscal year 2024.

Comparatively, Fiduciary Net Position of the System increased in fiscal year 2023 by \$905.1 million (4.8%) from the prior year Fiduciary Net Position. This was due, in part, to investment income of \$1,175 million combined with benefit payments that exceeded contributions in the amount of \$218.9 million. Investment losses in fiscal year 2022 were \$190.2 million as compared to investment income of \$1,175 million in fiscal year 2023.

#### Assets

Investments at Fair Value increased by \$1,265.4 million (6.5%) in fiscal year 2024. This increase in Investments at Fair Value combined with a decrease in cash and receivables of \$146.9 million contributed to an increase in total assets of \$1,115.4 million during the fiscal year.

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### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

June 30, 2024

Comparatively, Investments at Fair Value increased by \$772.1 million (4.1%) in fiscal year 2023. This increase in Investments at Fair Value combined with an increase in cash and receivables of \$95 million contributed to an increase in total assets of \$862.8 million during the fiscal year 2023. The System records the collateral on loaned securities due to its securities lending activity as an asset and corresponding liability. The decrease of \$70 million in collateral on loaned securities arose due to changes in the amount and type of securities on loan. Non-cash collateral is not recorded in total assets on the System's financial statements.

There were \$26.5 thousand in pending sales at June 30, 2024. There were \$233.7 thousand in pending sales at June 30, 2023 and there were \$33.4 thousand in pending sales at June 30, 2022.

### <u>Liabilities</u>

On June 30, 2024, total loans outstanding in the securities lending program were \$3.4 million. On June 30, 2023 and 2022, the total loans outstanding in the securities lending program were \$6.9 million and \$10.3 million, respectively.

### Additions to Fiduciary Net Position

Additions to Fiduciary Net Position during fiscal year 2024 totaled \$2,418.1 million compared to additions of \$2,166.3 million to Fiduciary Net Position in fiscal year 2023. Contributions from all sources decreased by \$98.2 million. Investment income, net of fees and other deductions, increased by \$350.8 million. The increase in investment income in fiscal year 2024 is due to higher returns across the majority of the Fund's asset classes relative to 2023.

Additions to Fiduciary Net Position during fiscal year 2023 totaled \$2,166.3 million compared to additions of \$689.8 million to Fiduciary Net Position in fiscal year 2022. Contributions from all sources increased by \$110.5 million. Investment income, net of fees and other deductions, increased by \$1,365.2 million. The increase in investment income in fiscal year 2023 is due to higher returns across public market asset classes.

The State's contributions on behalf of State employees totaled \$200.1 million, \$190.3 million, and \$243.1 million for fiscal years 2024, 2023, and 2022, respectively. The State's contributions on behalf of teachers totaled \$297 million, \$261.4 million, and \$232.1 million, for fiscal years 2024, 2023, and 2022, respectively. The State's contribution on behalf of judges totaled \$456 thousand, \$620 thousand, and \$868 thousand for fiscal years 2024, 2023, and 2022, respectively. The State's contributions on behalf of legislative employees totaled \$15 thousand, \$5.5 thousand and \$43 thousand for fiscal years 2024, 2023 and 2022.

The balance of employer contributions reported is from local school district employers and Participating Local District (PLD) employers. Local school district employers pay the normal cost contribution on behalf of public school teachers. The normal cost rate for the Teacher Plan as a percentage of earnable compensation for fiscal year 2024 was 4.47%. For fiscal years 2023 and 2022 the normal cost rate was 3.84%. The range of employer contributions in the PLD Consolidated Plan as a percent of earnable compensation in fiscal year 2024 was 5.3% to 14.8%; for fiscal year 2023 the range was 5.6% to 14.7%; and for fiscal year 2022 the range was 5.5% to 15.2%.

(A Component Unit of the State of Maine)

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

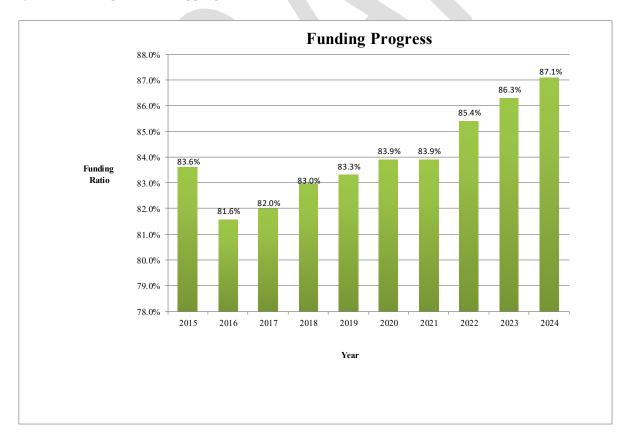
June 30, 2024

Member and employer data, contribution and benefit data for the 5 non-consolidated PLDs are specific to each PLD and are obtainable from the System.

## Deductions from Fiduciary Net Position

Total deductions from Fiduciary Net Position restricted for benefits during fiscal year 2024 increased by \$74.3 million (6.2%). There was an increase in the number of recipients receiving benefits, as well as the increased cost of benefits paid in 2024 combined with an increase in refunds and withdrawals of contributions and other deductions. Benefit payments in fiscal year 2024 exceeded contributions by \$379.3 million. Contributions totaled \$892 million, and benefit payments totaled \$1,271.3 million.

Comparatively, deductions from Fiduciary Net Position restricted for benefits during fiscal year 2023 increased by \$73.5 million (6.4%). There was an increase in the number of recipients receiving benefits, as well as the increased cost of benefits paid in 2023 combined with an increase in refunds and withdrawals of contributions and other deductions. Benefit payments in fiscal year 2023 exceeded contributions by \$218.9 million. Contributions totaled \$990.2 million, and benefit payments totaled \$1,209.1 million



# System Funding Status – Aggregate

(A Component Unit of the State of Maine)

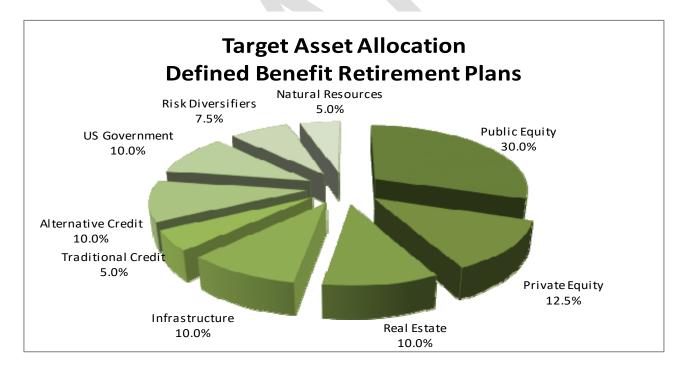
# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

June 30, 2024

At June 30, 2024, the State Employee and Teacher, Judicial, Legislative and PLD defined benefit plans were actuarially funded at 87.1%, up from 86.3% at June 30, 2023. As illustrated in the chart, the actuarial funded ratio of the System was 83.6% at June 30, 2015. The decrease in funding level in 2016 is attributable, in large part, to low investment returns due to the low return environment, combined with an increase in the overall liabilities of the plans resulting from changes in assumptions adopted following the completion of an experience study in 2016. The modest increases from 2017 through 2021 are attributable, in large part, to investment returns during those years. While investment returns were slightly negative in 2022, the actuarial funding ratio increased due to asset smoothing, which recognizes a portion of the current year losses as well as a portion of prior year gains into the actuarial value of assets. Positive investment returns in 2023 and 2024 contributed to an increase in the funding level in those years.

### Investments

The assets of all the defined benefit retirement plans that the System administers are commingled for investment purposes.



The System's investment portfolio for the defined benefit retirement plans is invested across nine asset classes: public equity, private equity, traditional credit, alternative credit, real estate, infrastructure, natural resources, US Government, and risk diversifiers. Publicly traded derivative securities are used in some portfolios to obtain exposures to one or more of the asset classes in a cost effective manner. The investment policy established by the Board in 2012 and as amended in May 2022 assigned strategic target allocations for these asset classes, as shown in the above chart.

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# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

June 30, 2024

Assets of the Group Life Insurance Plans and the Retiree Health Insurance Trusts are invested separately from the assets of the defined benefit retirement plans. The target allocations for these assets are public equity (70%), real estate (5%), traditional credit (16%), and US Government (9%).

All of the assets invested by the System are in portfolios managed by professional investment management firms. These managers act as fiduciaries and invest the assets assigned to them in accordance with the Board's investment policy and their separate contractual arrangements. At June 30, 2024, total fair value of assets in these portfolios (together with the amounts otherwise managed) was \$20.9 billion. The total fair value of assets as of June 30, 2023 and June 30, 2022, respectively, was \$19.6 billion and \$18.8 billion.

The investment return for the defined benefit plan assets, net of all fees, for the year ended June 30, 2024 was 8.0% The investment return for the years ended June 30, 2023 and June 30, 2022, respectively, was 4.7% and 3.3%. Investment returns in fiscal year 2024 were higher than in fiscal year 2023, due to generally higher returns across public market asset classes. Over the five, ten and thirty year periods ended June 30, 2024, the average annual investment return for the total fund was 8.5%, 7.5%, and 7.9%, respectively.

#### System Membership – Aggregate

The following membership counts for all of the defined benefit plans are derived from actuarial valuation data:

	2024	2023	% Change
Current active participants:			
Vested and nonvested	54,730	53,944	1.5%
Terminated participants			
Vested	12,497	12,212	2.3%
Inactives Due Refunds	49,139	49,603	-0.9%
Retirees and beneficiaries receiving benefits	50,757	50,021	1.5%
Total Membership	167,123	165,780	0.8%

The number of active State employees at June 30, 2024 in the State Employee and Teacher plan was 12,904, an increase of 215 from June 30, 2023. The number of active Teachers at June 30, 2024 was 28,028, an increase of 131 from June 30, 2023. Membership for judges increased by 4 to 62. Membership for Legislators was 175 at June 30, 2024, a decrease of 3 from the previous year. Total active membership in the PLD Consolidated Plan at June 30, 2024 was 13,561, an increase of 460 from June 30, 2023. There are no active members in the 5 remaining non-consolidated plans.

(A Component Unit of the State of Maine)

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONTINUED)

June 30, 2024

#### **Group Life Insurance Plan**

The Group Life Insurance Plans provide life insurance coverage for eligible members of the defined benefit plans administered by the System. Eligible members include State employees, including judges and legislators, teachers and those PLD employees whose employers have elected to participate in the program, and whose positions are eligible for coverage. Eligible employees who elect coverage receive life insurance coverage while actively employed and may carry coverage into retirement. The following summarized data, stated in millions, is derived from actuarial valuation data for the Group Life Insurance Plan with respect to benefits in retirement:

	2024	2023	% Change
Total OPEB Liability	\$283.2	\$279.2	1.4%
Plan Net Position	187.8	160.0	17.4%
Net OPEB Liability	\$95.4	\$119.2	-20.0%

# **Defined Contribution Plans**

The Section 401(a), Section 457 and Section 403(b) Plans administered by the Board are defined contribution plans. These plans are provided as supplemental plans to the basic retirement benefits of employees of PLDs that elect to participate in the Defined Contribution Plans. Contributions may be made to the Plans subject to plan and Internal Revenue Code limitations. Investments in the Defined Contribution Plans are individually directed and controlled by plan participants.

# Retiree Health Insurance Trust Fund (State)

The Maine State Legislature established the Retiree Health Insurance Post Employment Investment Trust (Investment Trust Fund) as an irrevocable trust for the sole purpose of holding and investing funds appropriated or otherwise provided to the Investment Trust Fund for the purpose of accumulating assets to provide funding to the State's unfunded liability obligations for retiree health benefits for retired employees of the State. The Trustees of the System were named Trustees of the Investment Trust Fund. At June 30, 2024, the Fiduciary Net Position Held in Trust for the Investment Trust Fund was \$496.0 million.

#### **Retiree Health Insurance Trust Fund (Teacher)**

The Maine State Legislature established the Retiree Health Insurance Post Employment Investment Trust (Investment Trust Fund) as an irrevocable trust for the sole purpose of holding and investing funds appropriated or otherwise provided to the Investment Trust Fund for the purpose of accumulating assets to provide funding to the State's unfunded liability obligations for retiree health benefits for retired teachers. The Trustees of the System were named Trustees of the Investment Trust Fund. At June 30, 2024, the Fiduciary Net Position Held in Trust for the Investment Trust Fund was \$115.3 million.

(A Component Unit of the State of Maine)

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONCLUDED)

June 30, 2024

## **Requests for Information**

Questions concerning this Management's Discussion and Analysis, other parts of the System's financial statements or the System's financial activities should be directed to Maine Public Employees Retirement System, Sherry Tripp Vandrell, Chief Financial Officer, at PO Box 349, Augusta, Maine 04332 or at (207) 512-3100 or toll-free at (800) 451-9800.

(A Component Unit of the State of Maine)

# STATEMENT OF FIDUCIARY NET POSITION

# June 30, 2024 With Summarized Information as of June 30, 2023

	State Employee/Teacher Plan	Judicial Plan	Legislative Plan	PLD Consolidated Plan	PLD Agent Plan	Group Life Insurance	Group Life Insurance Retired SETP	Group Life Insurance Retired PLD	Defined Contribution	MainePERS OPEB Trust	Retiree Health Insurance Trust State	Retiree Health Insurance Trust Teachers	2024 Total	2023
Assets														
Cash and cash		* ••••							ф (2.2.C)	¢.	¢.			
equivalents (note 3)	\$ 11,774,476	\$ 291,990	\$ 57,087	\$ 265,659	\$ 22,622	\$ 3,924,844	\$ 29,194	\$ 1,717	\$ 43,362	\$ -	\$ -	\$ - \$	16,410,951 \$	200,778,092
Investments at fair														
value (note 3):														
Common equity securities	2,565,442,673	14,475,028	2,828,542	661,733,377	1,122,297	-	-	-	-	-	-	-	3,245,601,917	2,741,456,638
Common/collective trusts	4,878,356,478	27,525,208	5,378,657	1,258,329,152	2,134,120	11,443,426	166,936,134	23,728,524	69,366,533	18,616,468	494,063,488	115,317,251	7,071,195,439	6,346,981,760
Partnerships	8,327,544,280	46,986,602	9,181,577	2,148,016,813	3,643,026	-	-		-		-		10,535,372,298	10,498,308,175
Total investments	15,771,343,431	88,986,838	17,388,776	4,068,079,342	6,899,443	11,443,426	166,936,134	23,728,524	69,366,533	18,616,468	494,063,488	115,317,251	20,852,169,654	19,586,746,573
Receivables:														
Contributions and														
premiums (notes 6 and 7)	39,980,601	-	-	13,084,090	-	229,678	-	76,755	-	-	2,000,000	-	55,371,124	42,112,262
Accrued interest and dividends	2,392,961	13,502	2,638	617,243	1,047	-	-	-	-	-	-	-	3,027,391	5,090,805
Due from brokers for														
securities sold	20,951,709	118,216	23,100	5,404,309	9,166	-			-				26,506,500	233,673
Total receivables	63,325,271	131,718	25,738	19,105,642	10,213	229,678	-	76,755	-	-	2,000,000	-	84,905,015	47,436,740
Collateral on loaned														
securities (note 5)	2,669,473	15,062	2,943	688,567	1,168	-	-	-	-	-	-	-	3,377,213	6,860,294
Capital assets, net of accumulated														
depreciation	10,031,246	56,599	11,060	2,587,472	4,388	-			-				12,690,765	12,349,779
Total assets	15,859,143,897	89,482,207	17,485,604	4,090,726,682	6,937,834	15,597,948	166,965,328	23,806,996	69,409,895	18,616,468	496,063,488	115,317,251	20,969,553,598	19,854,171,478
Liabilities														
Accounts payable	2,475,085	13,965	2,729	638,426	1,083	538	7,844	1,115	-	-	-	-	3,140,785	3,235,903
Due to brokers for securities														
purchased	30,635,284	172,854	33,777	7,902,102	13,402	-	-	-	-	-	-	-	38,757,419	16,589
Other liabilities	13,452,447	75,903	14,832	3,469,941	5,885	4,320,993	2,457,688	423,661	25,537	297,448	5,050	1,850	24,551,235	25,386,212
Accrued investment														
management fees	201,708	1,138	222	52,029	88	1,694	24,707	3,512	-	2,754	106,572	23,555	417,979	1,943,086
Obligations under securities														
lending activities (note 5)	2,669,473	15,062	2,943	688,567	1,168	-				-			3,377,213	6,860,294
Total liabilities	49,433,997	278,922	54,503	12,751,065	21,626	4,323,225	2,490,239	428,288	25,537	300,202	111,622	25,405	70,244,631	37,442,084
Fiduciary net position -														
restricted for benefits	\$ 15,809,709,900	\$ 89,203,285	\$ 17,431,101 \$	4,077,975,617	\$ 6,916,208	11,274,723	\$ 164,475,089	\$ 23,378,708	\$ 69,384,358	\$ 18,316,266	\$ 495,951,866	\$ 115,291,846 \$	20,899,308,967 \$	19,816,729,394

The accompanying notes are an integral part of these financial statements.

(A Component Unit of the State of Maine)

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

# Year Ended June 30, 2024 With Summarized Information for the Year Ended June 30, 2023

	State Employee/Teacher			PLD Consolidated		Group Life	Group Life Insurance	Group Life Insurance	Defined	MainePERS	Retiree Health Insurance Trust	Retiree Health Insurance Trust	2024	2023
Additions (subtractions):	Plan	Judicial Plan	Legislative Plan	Plan	PLD Agent Plan	Insurance	<b>Retired SETP</b>	Retired PLD	Contribution	OPEB Trust	State	Teachers	Total	Summarized
Investment income (loss):														
From investing activities:														
Net appreciation (depreciation)														
in the fair value														
of plan investments	\$ 1,175,652,529	\$ 6,615,638	\$ 1,297,807 \$	\$ 302,790,567	\$ 517,184	\$ 1,466,248	\$ 20,738,396	\$ 2,957,249	\$ 8,545,752	\$ 2,287,064	\$ 61,335,793	\$ 12,129,520 \$	1,596,333,747	\$ 1,126,327,945
Interest	12,949,958	73,034	14,264	3,334,720	5,714	1,865	25,369	3,623	-	-	-	-	16,408,547	9,796,845
Dividends	39,945,125	225,383	44,042	10,303,494	17,475	-,	,	-	-	-	45,441	187,731	50,768,691	184,179,565
Less: Investment expenses	(108,894,134)	(617,317)	(120,321)	(27,949,174)	(50,294)	(5,992)	(81,223)	(11,604)	(51,555)	(9,217)	(106,574)	(23,555)	(137,920,960)	(145,759,294)
Net income (loss) from	(100,00,000)	(***,***)	(*,)	(=,,,,,,,,,,,,,,)	(**,=>*)	(*,*,*_)	(**,==*)	(,,	(******)	(,,==,)	(100,071)		(	
investing activities	1,119,653,478	6,296,738	1,235,792	288,479,607	490,079	1,462,121	20,682,542	2,949,268	8,494,197	2,277,847	61,274,660	12,293,696	1,525,590,025	1,174,545,061
From securities lending activities:		, ,	, ,	, ,	,	, ,		, ,	, ,	, ,	, ,	, ,	, , ,	, , , ,
Securities lending income	290,458	1,639	320	74,921	127	-	-	-	-	-	-	-	367,465	599,535
Borrower rebates refunded	(69,232)	(391)	(76)	(17,858)	(30)	-	-	-	-	-	-	-	(87,587)	3,363
Management fees	(43,531)	(246)	(48)	(11,229)	(19)	-	-	-	-	-	-	-	(55,073)	(89,858)
Net income from securities		· · · · ·	· · · ·	<u> </u>	· · · · · ·		·						<u> </u>	
lending activities	177,695	1,002	196	45,834	78	-	-	-	-	-	-	-	224,805	513,040
Total investment income (loss)	1,119,831,173	6,297,740	1,235,988	288,525,441	490,157	1,462,121	20,682,542	2,949,268	8,494,197	2,277,847	61,274,660	12,293,696	1,525,814,830	1,175,058,101
Contributions and premiums														
(notes 6 and 7):														
Members	179,506,015	731,941	183,506	72,650,710	584	5,201,814	-	-	5,465,173	-	-	-	263,739,743	248,851,168
Employers	289,844,348	456,322	15,225	98,715,699	78,137	1,825,490	7,303,774	1,497,755	827,681	11,556	2,000,000	-	402,575,987	536,582,554
Non-employer contributing														
entities (note 1)	220,827,975	-	-	-	-	-	4,859,256	-	-	-	-	-	225,687,231	204,734,120
Transfers from other plans	5,355			57,992		-			271,000				334,347	1,122,375
Total contributions and premiums	690,183,693	1,188,263	198,731	171,424,401	78,721	7,027,304	12,163,030	1,497,755	6,563,854	11,556	2,000,000	<u> </u>	892,337,308	991,290,217
Total additions	1,810,014,866	7,486,003	1,434,719	459,949,842	568,878	8,489,425	32,845,572	4,447,023	15,058,051	2,289,403	63,274,660	12,293,696	2,418,152,138	2,166,348,318
Deductions:														
Benefits paid	1,033,967,786	5,627,267	599,448	214,645,464	771,036	8,376,939	6,034,905	975,260	-	299,889	-	-	1,271,297,994	1,209,098,999
Refunds and withdrawals	25,505,074	-	70,928	10,554,808	1,375,339	-	-	-	6,081,741	-	-	-	43,587,890	32,915,969
Transfers to other plans	305,355	-	-	-	28,988	-	-	-	-	-	-	-	334,343	1,122,375
Claims processing expenses (note 7)	-	-	-	-	-	117,798	1,199,269	175,997	117,550	-	-	-	1,610,614	1,546,426
Administrative expenses	13,682,532	78,691	15,142	3,491,661	6,463	79,023	972,820	140,692	271,000	-	1,850	1,850	18,741,724	16,515,359
Total deductions	1,073,460,747	5,705,958	685,518	228,691,933	2,181,826	8,573,760	8,206,994	1,291,949	6,470,291	299,889	1,850	1,850	1,335,572,565	1,261,199,128
Net increase (decrease) in														
fiduciary net position	736,554,119	1,780,045	749,201	231,257,909	(1,612,948)	(84,335)	24,638,578	3,155,074	8,587,760	1,989,514	63,272,810	12,291,846	1,082,579,573	905,149,190
Fiduciary net position - restricted for														
benefits, beginning of year	15,073,155,781	87,423,240	16,681,900	3,846,717,708	8,529,156	11,359,058	139,836,511	20,223,634	60,796,598	16,326,752	432,679,056	103,000,000	19,816,729,394	18,911,580,204
Fiduciary net position - restricted for														
benefits, end of year	\$ 15,809,709,900	\$ 89,203,285	\$ 17,431,101	\$ 4,077,975,617	\$ 6,916,208	\$ 11,274,723	\$ 164,475,089	\$ 23,378,708	\$ 69,384,358	\$ 18,316,266	\$ 495,951,866	\$ 115,291,846 \$	20,899,308,967	\$ 19,816,729,394
The accompanying notes are an in	tegral part of these fina	incial statements.												

The accompanying notes are an integral part of these financial statements.

(A Component Unit of the State of Maine)

#### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 1. Overview of the Maine Public Employees Retirement System Benefit Plans

#### **Background**

The Maine Public Employees Retirement System (the System or MainePERS), which is a component unit of the State of Maine, is the administrator of a public employee retirement system established and administered under the Laws of the State of Maine. The System was formerly named the Maine State Retirement System. The System provides pension, disability, and death benefits to its members, which include employees of the State, public school teachers (as defined by Maine law) and employees of 332 local municipalities and other public entities (participating local districts, or PLDs) in Maine, each of which contracts for participation in the System under provisions of the relevant statutes.

Individual PLDs are permitted by law to withdraw from participation in the System. Withdrawal precludes the PLD's nonmember employees, if any, and its employees hired subsequent to withdrawal from membership in the System. Depending on the circumstances and requirements of the PLD's participation under the System, a withdrawn PLD may have continuing funding obligations after withdrawal with respect to its employees who are active members at the time of withdrawal and who continue to be members thereafter, to its terminated vested employee members, and to its former employee members who are retired at the time of withdrawal.

# **Board of Trustees**

The Board is comprised of eight members. State law specifies the composition of the Board, whose members are confirmed by the Legislature. Three trustees are System members, one of whom is proposed and elected by the Maine Education Association, one of whom is proposed and elected by the Maine State Employees Association, and one of whom is an active or retired PLD member appointed by the governing body of the Maine Municipal Association. Four other trustees are appointed by the Governor. Of these, one must be selected by the Governor from a list of nominees submitted by the Maine Retired Teachers Association and one must be a MainePERS retiree selected from a list of nominees submitted by State and/or PLD retirees. The remaining two appointees are direct gubernatorial appointments, both of whom must be qualified through training or experience in investments, accounting, banking or insurance or as actuaries. All appointed trustees are required to have "a working knowledge of retirement policy and legal issues and a general knowledge and understanding of banking, finance, and investment practices." The eighth trustee is the State Treasurer. The Board annually elects its chair and vice chair from among its members.

#### Defined Benefit Plans

Pension funds managed by the System are constitutionally restricted and held in trust for the payment of pension and related benefits. The Board, in its fiduciary capacity, establishes the System's investment policies and oversees their overall implementation. The System administers five defined benefit pension plans consisting of the State Employee and Teacher Plan which includes the Governors' Plan, the Judicial Plan, the Legislative Plan, the PLD Consolidated Plan, and the PLD Agent Plan. The System maintains

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

### 1. <u>Overview of the Maine Public Employees Retirement System Benefit Plans (Continued)</u>

separate reserves and accounts and performs separate annual actuarial valuations for each pension plan. Additional information regarding each plan can be found in Note 6 of this report.

### Group Life Insurance Plans

The Group Life Insurance Plans (the Plans) were established by the State Legislature to provide group life insurance benefits, during active service as well as in retirement, to State employees, Teachers, members of the Judiciary and the Legislature, as well as Elected and Appointed Officers of the State, that are eligible for membership in the System. Group Life Insurance benefits are also provided to the employees of PLDs that elect to participate in the Plans. Generally, benefit plan provisions can only be amended through statutory change. Employees are eligible for coverage under the Plans, subject to their membership in one or more of the aforementioned eligible employment classes and any other conditions of eligibility that the Board may prescribe by rule or decision.

Group Life Insurance funds managed by the System are held in trust for the payment of benefits to participants and/or their beneficiaries. The Board, in its fiduciary capacity, establishes the System's investment policies and oversees their overall implementation. The System maintains separate reserves and accounts for both active and retiree coverage and biennial actuarial valuations are performed for each plan within the program. In those years where a full actuarial valuation is not completed, a roll-forward of plan liabilities from the previous valuation to the current fiscal year end with expected benefit payments and accruals is conducted. The liabilities for fiscal year ended June 30, 2023 were calculated as part of a roll-forward actuarial valuation.

# **Defined** Contribution Plans

The Section 401(a), Section 457 and Section 403(b) Plans (Defined Contribution Plans), administered by the System's Board of Trustees with funds held in trust, are defined contribution plans. These plans are available as supplemental plans to the basic retirement benefits of employees of PLDs that elect to participate in the Defined Contribution Plans. Contributions may be made to the Defined Contribution Plans by plan participants subject to plan and Internal Revenue Code limitations. At June 30, 2024, participation in the defined contribution plans was as follows:

	<u>401(a) Plan</u>	<u>457 Plan</u>	<u>403(b) Plan</u>
Employers	8	87	1
Participants	99	1,090	578

Investments in the Defined Contribution Plans are individually directed and controlled by plan participants. Benefits for deferred compensation, employer contributions, and earnings on the accounts are not recognized by Plan participants for income tax purposes until actually paid to the participant or beneficiary.

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#### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information or June 30, 2023

# 1. Overview of the Maine Public Employees Retirement System Benefit Plans (Concluded)

# MainePERS OPEB Trust

The MainePERS Other Post-Employment Benefits (OPEB) Trust is an irrevocable trust established for the purpose of accumulating assets to provide funding for retiree health benefits and life insurance in retirement for qualified individuals who retire from MainePERS. The Trustees of the System were named Trustees of the MainePERS OPEB Trust. Contributions are made to the Trust on an annual basis in the amount equal to the actuarially determined contribution amount.

### Retiree Health Insurance Trust Fund

The Maine State Legislature established the Retiree Health Insurance Post Employment Investment Trusts (Investment Trust Funds) as irrevocable trusts formed solely to hold and invest funds appropriated or otherwise provided to the Investment Trust Fund for the purpose of accumulating assets to provide funding to the State's unfunded liability obligations for retiree health benefits. The Trustees of the System were named Trustees of the Investment Trust Funds.

## 2. <u>Summary of Significant Accounting Policies</u>

#### Basis of Accounting

The System's financial statements are prepared using the accrual basis of accounting.

# Comparative Summarized Information

The financial statements include certain prior-year summarized comparative information in total but not by fund. Such information does not include sufficient detail to constitute a presentation in conformity with U.S. generally accepted accounting principles (U.S. GAAP). Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2023, from which the summarized information was derived.

#### Use of Estimates

The preparation of financial statements in conformity U.S. GAAP requires management to make significant estimates and assumptions. These estimates affect the reported amounts of fiduciary net position at the date of the financial statements, the actuarial information included in the required supplementary information as of the actuarial information date, the changes in fiduciary net position during the reporting period and, when applicable, the disclosure of contingent assets and liabilities at the date of the financial statements, as reported in the notes to the financial statements. Actual results could differ from those estimates.

(A Component Unit of the State of Maine)

# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 2. <u>Summary of Significant Accounting Policies (Continued)</u>

## **Revenue Recognition**

Pension contributions and group life insurance premiums, as well as contributions to the Retiree Health Insurance Trust, are recognized as additions in the period when they become due pursuant to formal commitments or statutory or contractual requirements. Contributions to Defined Contribution Plans are recognized in the period they are contributed.

Investment income includes net appreciation or depreciation in the fair value of investments, interest and dividend income, foreign currency transaction gains and losses, and securities lending income, less investment expenses, which include investment management and custodial fees and all other significant investment related costs. Dividends include income returns from partnerships. Investment income is recognized when earned and investment expenses are recorded when incurred.

# Benefits Paid and Refunds and Withdrawals

Pension and group life insurance benefits and contributions and premium refunds and withdrawals to the System's members and beneficiaries are recognized as deductions when due and payable in accordance with the terms of the statutes. In addition, an estimate is made for group life insurance death benefits incurred before year end but not reported to the System until after year end. These are reflected as other liabilities. Distributions from Defined Contribution Plans and the Retiree Health Insurance Trust are recognized in the period the disbursement is made.

# **Investments**

Investments are reported at fair value. Debt and equity securities that are traded on recognized exchanges are valued at the last sales price and the current exchange rates on the reporting date. Other regularly traded securities, including derivatives, are valued by the System's custodians through a variety of external sources. Investments that do not have an established market are reported at estimated fair value. The fair value of shares in common/collective trusts is based on unit values reported by the funds. The fair value of other investments, including private market partnerships, is based on third-party appraisals and valuations provided by the sponsor of the partnerships. Management reviews and approves all such appraisals and valuations prepared by other parties. Investment purchases and sales are recorded as of their trade date. Proceeds related to securities sold not yet purchased are carried as a liability and are adjusted to the fair value of the securities.

Assets of the defined benefit pension plans are pooled for investment purposes and are allocated to each plan based on each plan's fiduciary net position, as are investment expenses and administrative expenses. Assets of the Group Life Insurance Plans are pooled for investment purposes and are allocated to each plan based on each plan's fiduciary net position, as are investment expenses and administrative expenses. Other assets managed by the System are invested separately from the assets of the defined benefit pension plans and the Group Life Insurance Plans.

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 2. <u>Summary of Significant Accounting Policies (Continued)</u>

#### Due to/from Brokers

Amounts due to/from brokers for securities purchased or sold consist of trades not yet settled.

# Cash and Cash Equivalents

The System considers all highly liquid debt instruments that have a maturity of 90 days or less when purchased to be cash equivalents.

### Capital Assets

All capital assets with a unit cost of \$5,000 or greater are capitalized and reported in the accompanying financial statements. Purchased capital assets are valued at cost.

Capital asset costs include the purchase price or construction cost, plus those costs necessary to place the asset in its intended location and condition for use.

Depreciation is calculated using the straight-line method with estimated useful lives of 3 to 40 years.

#### Administrative Expenses

The cost of administering each of the plans managed by the System is financed primarily by investment income.

# Risks and Uncertainties

The System makes investments in accordance with the Board's investment policy in a combination of equities, fixed income securities, infrastructure, private equity, real estate, derivative financial instruments, other investment securities and mutual funds and common/collective trusts holding such investments. The investment policy specifically prohibits investment managers from using derivative financial instruments to introduce leverage without specific prior approval by the Board. Investment securities and securities underlying certain investments are exposed to various risks, such as interest rate risk, market risk, custodial credit risk and credit risk. Investments in the Defined Contribution Plans are individually directed and controlled by plan participants. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, changes in the values of investment securities are likely to occur in the near term and it is at least possible that such changes could materially affect the amounts reported in the statements of fiduciary net position and changes in fiduciary net position.

(A Component Unit of the State of Maine)

## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 2. <u>Summary of Significant Accounting Policies (Concluded)</u>

#### Defined Benefit Contributions

Contributions to the Defined Benefit Plans from employers and non-employer contributing entities are established by an actuarial valuation on the basis of actuarial assumptions related to economic indicators (e.g., interest rates, inflation rates), and member and retiree compensation and demographics. By law, the assumptions are adopted by the Board based on recommendation of the System's actuary. The System is also required by Maine law to perform an actuarial experience study whenever the Board, on recommendation of its actuary, determines such a study to be necessary for actuarial soundness or prudent administration.

#### New Accounting Pronouncements

The System adopted Governmental Accounting Standards Board (GASB) Statement No. 100, Accounting Changes and Error Corrections, for the year ended June 30. 2024. This statement defines accounting changes and provides guidance on related accounting and financial reporting requirements. Adopting this statement had no material effect on the System's financial reporting.

#### 3. Cash and Cash Equivalents and Investments

The Board is responsible for identifying the System's investment objective and establishing an investment policy to meet that objective. The Board relies on staff and consultants with appropriate expertise to establish investment policy, monitor compliance with that policy, and determine whether the investment objective has been met. The Board established the strategic asset allocation as part of its overall investment policy. The policy identifies the following investment classes and targets for all defined benefit pension plan assets: public equity (30%), private equity (12.5%), traditional credit (5%), alternative credit (10%), real estate (10%), infrastructure (10%), natural resources (5%), US Government (10%), and risk diversifiers (7.5%). For the group life insurance plan assets, the policy identifies four investment classes and targets: public equity (70%), real estate (5%), traditional credit (16%), and US Government (9%).

Custodial credit risk is the risk that in the event of a financial institution failure, the System's deposits may not be returned to it. The System has no formal policy for custodial credit risk. Cash and cash-like securities are held at two institutions: Bangor Savings Bank and JP Morgan. Cash balances at Bangor Savings Bank are insured by the Federal Deposit Insurance Corporation up to \$250,000. Bangor Savings Bank mitigates custodial credit risk through use of securities repurchase arrangements.

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## NOTES TO FINANCIAL STATEMENTS

#### June 30, 2024 With Summarized Information for June 30, 2023

### 3. Cash and Cash Equivalents and Investments (Continued)

Cash equivalents at JP Morgan are invested in the JP Morgan Prime Money Market Fund. The JP Morgan Prime Money Market fund is composed of short term debt securities held in a collective fund for the benefit of the System and other investors. All securities purchased in the JP Morgan Prime Money Market must either be payable on demand or have a maturity not exceeding eighteen months from the time of purchase.

The System's cash equivalents and investments are not exposed to custodial credit risk (a) because the underlying investments are registered in the name of the System and held by the System's custodian, or (b) because their existence is not evidenced by securities that exist in physical or book entry form.

These amounts are disclosed in the financial statements at June 30 as follows:

				<u>2024</u>		<u>2023</u>
Cash and Cash Equ Investments	uvalents		\$ 20	16,410,951 ,852,169,654		200,778,092
						<u> </u>
Total Fair Value			\$_20	,852,169,654	\$ <u> </u>	9,787,524,665

Credit risk is the risk an issuer or other counterparty to an investment will not fulfill its obligations to the System. The System has no formal policy on credit risk. The following table summarizes the System's aggregate fixed income portfolio credit ratings at June 30:

Quality Rating <sup>(1)</sup>	<u>2024</u>	<u>2023</u>	
ААА	\$ 185,602,	,405 \$ 1,226,461,555	
AA	1,414,485,	,696 101,773,568	
А	584,438,	,249 446,272,591	
BBB	607,045,	,459 477,119,889	
Not Rated			
Total Credit Risk Debt	\$ 2,791,571,	,809 (2) \$ 2,251,627,603 (	(2)

<sup>(1)</sup> Quality ratings are reported using S&P's rating categories and are based on bond ratings assigned by S&P, Moody's, and Fitch. The median rating is used when 3 ratings are available, and the lower or only rating is used in cases where only 2 or a single rating is available.

<sup>(2)</sup> Includes direct investments in debt securities held by the System as well as debt securities underlying investments in common/collective trusts. In 2024 and 2023, all amounts are from common/collective trusts.

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## NOTES TO FINANCIAL STATEMENTS

#### June 30, 2024 With Summarized Information for June 30, 2023

### 3. Cash and Cash Equivalents and Investments (Continued)

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of investment in a single issue. The System's investment policy places no limit on the amount the System may invest in any one issuer.

There were no individual investments that constitute 5% or more of fiduciary net position for the defined benefit pension plans administered by the System as of June 30, 2024.

There were no individual investments that constitute 5% or more of fiduciary net position for the other post-employment benefit plans administered by the System as of June 30, 2024.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The System has no formal investment policy related to managing interest rate risk. All of the System's fixed income portfolios are managed in accordance with contractual guidelines. Contractual guidelines generally specify a range of effective duration for the portfolio. Duration is widely used in the management of fixed income portfolios as a measure of a debt investment's exposure to fair value changes arising from changing interest rates. The System's interest rate risk is closely aligned with the Barclays Capital Aggregate Index. The following table details the System's interest rate risk for its debt investments at June 30, 2024 and 2023, using the segmented time distribution method. Maturities are based on the weighted average maturities of underlying investments in the common/collective trusts.

	Maturities as of June 30, 2024								
	Fair		Less than		1 to 6		6 to 10		10+
Investment Type	Value		<u>l Year</u>		Years		Years		Years
Common/									
Collective Trusts	\$ 2,791,013,607	\$	25,269,439	\$	943,843,216	\$	1,340,002,002	\$	481,898,950
Total	\$ 2,791,013,607	\$	25,269,439	\$	943,843,216	\$	1,340,002,002	\$	481,898,950
			M	aturities	s as of June 30, 2	023			
	Fair		Less than		1 to 6		6 to 10		10+
Investment Type	Value		<u>l Year</u>		Years		Years		Years
Common/									
Collective Trusts	\$ 2,251,627,603	\$	35,336,792	\$	677,138,936	\$	889,962,945	\$	649,188,930
Total	2,251,627,603		35,336,792		677,138,936		889,962,945		649,188,930

Foreign currency risk is the risk that changes in exchange rates will adversely impact the recorded fair value of an investment. The System does not have a formal investment policy limiting the amount of foreign currency exposure of its investments. The System's currency exposures reside primarily in the System's international equity investments. The System may hedge a portfolio's foreign currency exposure with currency forward contracts depending on their views of the currency relative to the dollar.

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 3. Cash and Cash Equivalents and Investments (Continued)

Norwegian Krone

All of the System's portfolios are managed in accordance with contractual guidelines. The System has nearly eliminated all direct exposure to foreign currency by using index funds which means the System owns units of U.S. dollar denominated commingled funds rather than conducting transactions directly in foreign currency. The System is still indirectly exposed to all the foreign currencies within the index.

The System's direct and indirect exposure to foreign currency risk in U.S. dollars as of June 30, 2024 is highlighted in the following table:

Currency	Total	Currency	Total
Australian Dollar	\$ 87,268,651	Peruvian Sol	993,906
Bermudian Dollar	260,424	Philippine Peso	2,847,532
Brazilian Real	22,953,694	Polish Zloty	4,846,747
British Pound Sterling	231,471,473	Qatari Rial	4,279,654
Canadian Dollar	138,718,239	Russian Ruble	834
Chilean Peso	2,401,363	Saudi Arabian Riyal	21,245,467
Chinese Yuan Renminbi	121,580,317	Singapore Dollar	18,415,893
Colombian Peso	621,889	South African Rand	14,832,349
Czech Koruna	759,683	Swedish Krona	38,155,755
Danish Krone	47,201,694	Swiss Franc	112,534,759
Egyptian Pound	333,811	Taiwan Dollar	105,375,020
Euro	2,341,822,254	Thai Baht	7,278,718
Hong Kong Dollar	27,272,938	Turkish Lira	4,291,443
Hungarian Forint	1,331,094	United Arab Emirates Dirham	6,102,160
Indian Rupee	110,502,881	Total	\$ 3,863,296,945
Indonesian Rupiah	8,650,554		
Japanese Yen	269,798,432		
Korean Won	66,513,404		
Kuwaiti Dinar	3,884,141		
Macanese Pataca	365,193		
Malaysian Ringgit	7,498,704		
Mexican Peso	11,647,639		
New Israeli Sheqel	8,947,459		
New Zealand Dollar	3,190,329		

7,100,442

(A Component Unit of the State of Maine)

## NOTES TO FINANCIAL STATEMENTS

#### June 30, 2024 With Summarized Information for June 30, 2023

#### 3. Cash and Cash Equivalents and Investments (Continued)

The System has entered into contracts to invest in partnerships with a focus on private equity, infrastructure, real estate and other investment strategies. As of June 30, 2024, the value of these investments is approximately \$10.5 billion and the remaining funding commitment is approximately \$3.0 billion.

For the year ended June 30, 2024, the annual money-weighted rate of return on all defined benefit plan investments, net of investment expenses, was 8.0%. For the year ended June 30, 2024 the annual money-weighted rate of return on all OPEB plan investments, net of investment expense, was 14.2%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested, based on monthly calculations.

The System categorizes its fair value measurements within the fair value hierarchy established by US GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets. Level 2 inputs are other significant observable inputs. Valuation inputs used to value the System's Level 2 holdings include, but are not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market–corroborated inputs. Level 3 inputs are unobservable inputs. The System has the following recurring fair value measurements at June 30:

			Fair Value Measurements Using						
	:	June 30, 2024		Level 1		Level 2		Level 3	
Investments by fair value level Common Equity	\$	3,245,601,917	\$	3,245,601,917	\$	-	\$	-	
Common/Collective Trusts		7,071,195,439		-		7,071,195,439		-	
Collateral from loaned securities		3,377,213		-		3,377,213		-	
Total investments by fair value level		10,320,174,569	\$	3,245,601,917	\$	7,074,572,652	\$	-	
Investments measured at net asset value (NAV	)								
Alternative Credit		1,480,772,751							
Infrastructure		2,424,230,604							
Natural Resources		1,013,974,596							
Private Equity		3,665,907,365							
Real Estate		1,950,486,982							
Total investments measured at NAV		10,535,372,298							
Total investments measured at fair value	\$	20,855,546,867							

(A Component Unit of the State of Maine)

# NOTES TO FINANCIAL STATEMENTS

# June 30, 2024 With Summarized Information for June 30, 2023

# 3. Cash and Cash Equivalents and Investments (Continued)

			 Fair	Value	e Measurements U	Jsing	
	-	June 30, 2023	Level 1		Level 2		Level 3
Investments by fair value level							
Common Equity	\$	2,741,456,638	\$ 2,741,456,638	\$	-	\$	-
Common/Collective Trusts		6,346,981,760	-		6,346,981,760		-
Collateral from loaned securities		6,860,294	-		6,860,294		-
Total investments by fair value level		9,095,298,692	\$ 2,741,456,638	\$	6,353,842,054	\$	-
Investments measured at net asset value (NAV	)						
Alternative Credit		1,642,543,480					
Infrastructure		2,297,418,917					
Natural Resources		982,880,475					
Private Equity		3,679,607,538					
Real Estate		1,895,857,765					
Total investments measured at NAV		10,498,308,175					
Total investments measured at fair value	\$	19,593,606,867					

# Common Equity

Common equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets.

# Common/Collective Trusts

Units of collective investment funds, including short-term investment funds, are valued based on quoted prices for similar assets, exchange rates, interest rates, credit risks and default rates. A unit value is determined for each fund on the valuation date. Valuation of each fund is determined each day the Fund is open for contributions and redemptions and, for financial reporting purposes, on the report date should the reporting period end on a date the Fund is not open. Unit values are determined by dividing each Fund's investments at fair value by the number of units outstanding on the valuation date.

#### Investments Measured at NAV

Alternative investments are generally reported at the NAV obtained from statements provided by the investment managers and assessed by the System as reasonable.

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## NOTES TO FINANCIAL STATEMENTS

#### June 30, 2024 With Summarized Information for June 30, 2023

#### 3. Cash and Cash Equivalents and Investments (Continued)

NAVs determined by investment managers generally consider variables including operating results, projected cash flows, recent sales prices and other pertinent information, and may reflect discounts for the illiquid nature of certain investments held. Due to the inherent uncertainties in valuation, the estimated fair values in NAV calculations may differ significantly from values that would have been used had a ready market existed.

The fair value and unfunded commitments for investments measured at NAV per share (or its equivalent) are presented in the following tables:

Investments Measured at NAV	Fair Value	(	Unfunded Commitments
Alternative Credit <sup>(1)</sup>	\$ 1,480,772,751	\$	769,950,702
Infrastructure <sup>(2)</sup>	2,424,230,604		475,771,872
Natural Resources <sup>(3)</sup>	1,013,974,596		218,622,043
Private Equity <sup>(4)</sup>	3,665,907,365		1,196,945,903
Real Estate <sup>(5)</sup>	1,950,486,982		299,183,496
Total investments measured at NAV	\$ 10,535,372,298	\$	2,960,474,016

#### June 30, 2023

June 30, 2024

Investments Measured at NAV			Unfunded
	Fair Value	<u>(</u>	Commitments
Alternative Credit <sup>(1)</sup>	\$ 1,642,543,480	\$	660,676,171
Infrastructure <sup>(2)</sup>	2,297,418,917		587,308,315
Natural Resources <sup>(3)</sup>	982,880,475		216,635,744
Private Equity <sup>(4)</sup>	3,679,607,538		1,134,338,166
Real Estate <sup>(5)</sup>	1,895,857,765		447,044,551
Total investments measured at NAV	\$ 10,498,308,175	\$	3,046,002,947

(1) Alternative Credit funds are funds that invest primarily in debt instruments issued by non-investment grade and unrated entities. Alternative credit investments are expected to pay or accrue periodic interest and to return principal at maturity. The fair values in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. Alternative

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 3. Cash and Cash Equivalents and Investments (Concluded)

Credit funds are typically structured as partnerships with fixed lifetimes. These funds are generally not available for redemption, and distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 7 or more years.

- (2) Infrastructure funds are funds that invest primarily in infrastructure assets such as roads, ports, pipelines, and airports, primarily in the US and Europe. The fair values in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These funds are generally not available for redemption, and distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 10 or more years.
- (3) Natural Resources funds are funds that invest primarily in assets and businesses related to natural resources such as farming, timber, and mining. The fair values in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These funds are generally not available for redemption, and distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 10 or more years.
- (4) Private Equity funds are funds that invest primarily in debt and equity securities of private businesses. The fair values in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These funds are generally not available for redemption, and distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 10 or more years.
- (5) Real Estate funds are funds that invest primarily in commercial real estate and real estate debt. The fair values in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. The majority of these investments (85% of dollar value) are available for redemption, subject to the timing of asset disposition. The remaining funds are generally not available for redemption, and distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 10 or more years.

# 4. **Derivative Securities**

Derivative financial instruments are financial contracts whose value depends on the value of one or more underlying assets, reference rates or financial indices. They include futures, forwards, options, and swap contracts. In addition, some traditional securities can have derivative-like characteristics, e.g., assetbacked securities, including collateralized mortgage obligations, which are sensitive to changes in interest rates and to prepayments.

The System may be a party, both directly and indirectly, to various derivative financial investments that are used in the normal course of investing to enhance expected returns on investments, to manage the risk of exposure to changes in value of investments due to fluctuations in market conditions, and to gain

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#### NOTES TO FINANCIAL STATEMENTS

## June 30, 2024 With Summarized Information for June 30, 2023

#### 4. <u>Derivative Securities (Concluded)</u>

passive exposure to markets. In addition to normal market risks these investments may involve, to varying degrees, elements of interest rate risk, credit risk, leverage risk, counterparty risk, and custodial credit risk.

Leverage risk may be created with derivatives. Financial leverage generally involves borrowing and then reinvesting the proceeds with the hope of earning a higher rate of return than the borrowing costs. With derivative instruments economic leverage may be effectively created without any explicit borrowing. Leveraged investments may be more volatile than if an investment had not been leveraged. Leveraging tends to exaggerate the effect of any increase or decrease in the value of an underlying investment. In a leveraged transaction an amount more than the initial investment may be lost. The System's investment policy requires specific approval from the Board of any investment strategy that involves the use of direct financial leverage.

Counterparty risk is the risk that the counterparty to a derivative transaction is unwilling or unable to deliver on their obligations to the System.

The System manages leverage risk and counterparty risk on a manager by manager basis by establishing guidelines with each manager. The manager is customarily allowed to invest within these predetermined guidelines.

The System's managers may also invest in swaps. Interest rate swaps are used to adjust interest rate and yield curve exposures and substitute for physical securities. Long swap positions increase exposure to long term rates; short positions decrease exposure. Credit default swaps are used to manage credit exposure. Purchased credit default swaps decrease credit exposure, while written credit default swaps increase exposure. Total return swaps are a means to gain exposure to an index.

The System may also hold investments in futures and options, which are used to manage various risks within the portfolio. A financial futures contract is an agreement between two parties to buy or sell units of a particular index or a certain amount of a security at a set price on a future date. The System may purchase and sell financial futures contracts to hedge against the effect of changes in the values of securities it owns or expects to purchase.

In addition to the derivative financial instruments directly held, the System may have indirect exposure to risk through its ownership interests in commingled investment funds, which use, hold or write derivative financial instruments. There also may be indirect exposure in the securities lending programs in which the System participates, in which some collateral pools may include derivatives (note 5). Where derivatives are held in those funds/pools, risks and risk management are as described above.

The System did not have any direct derivative investments as of June 30, 2024 or 2023 or during the years then ended.

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## NOTES TO FINANCIAL STATEMENTS

### June 30, 2024 With Summarized Information for June 30, 2023

### 5. <u>Securities Lending</u>

The System has entered into agreements with its master custodian to lend to broker-dealers and other entities any type of security held in the System's portfolio and held with the master custodian. Securities are loaned against collateral that may include cash, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned against collateral generally valued at 102% of the fair value of the securities plus any accrued interest. Non-U.S. securities are loaned against collateral valued at 105% of the fair value of the securities plus any accrued interest.

Non-cash collateral cannot be pledged or sold unless the borrower defaults. As a result, those securities are excluded from both assets and liabilities.

All securities loans can be terminated on demand by either the lender or the borrower. The average term of the System's loans was approximately 1 day as of June 30, 2024 and 2023.

Cash collateral is invested in a short-term investment account which had an interest sensitivity of 1 and 1 days as of June 30, 2024 and 2023, respectively. Cash collateral may also be invested separately in "term loans," in which case the investments match the loan term. These loans can be terminated on demand by either lender or borrower.

During fiscal years 2024 and 2023, there were no violations of legal or contractual provisions, and no borrower or lending agent default losses identified to the System by the securities lending agent. Securities lending earnings are credited to the System on approximately the fifteenth day of the following month.

Custodial credit risk is the risk that in the event of the insolvency of a borrower, and the master custodian has failed to live up to its contractual responsibilities relating to the lending of those securities, the System's securities are not returned to it. The master custodian's responsibilities include performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations concerning securities lending. At June 30, 2024 and 2023, all of the collateral for securities lending is subject to custodial credit risk.

Because of the program's collateralization of loans, generally at 102% (or more), the System believes that there is no material credit risk.

Some of the System's assets are held in common/collective trusts and are subject to similar agreements arranged by those trusts. The income from those arrangements and the associated collateral are not included in the securities lending amounts reported.

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 5. Securities Lending (Concluded)

Aggregate securities on loan by asset class are as follows:

	<u>2024</u>	<u>2023</u>
Domestic equity securities on loan	\$ <u>136,364,593</u>	\$ <u>115,182,125</u>
Aggregate securities lending collateral: Short-term investment collateral pool Non-cash collateral	\$ 3,377,213 <u>136,153,753</u>	\$ 6,860,294 <u>110,973,315</u>
Total collateral	\$ <u>139,530,966</u>	\$ <u>117,883,609</u>
Collateral ratio	<u>102.3</u> %	<u>102.3</u> %

### 6. Defined Benefit Plans

# State Employee and Teacher Plan

The State Employee and Teacher Plan administered by MainePERS is a multiple-employer cost sharing plan with a special funding situation. As of June 30, 2024, there were 241 employers, including the State of Maine, participating in the plan. The State of Maine is also a non-employer contributing entity in that the State pays the unfunded actuarial liability on behalf of teachers, while school districts contribute the normal cost, calculated actuarially, for their teacher members.

Plan membership counts for the State Employee and Teacher Plan at June 30 are as follows:

<u>2024</u>	<u>2023</u>
40,932	40,586
9,410	9,202
39,535	39,038
38,789	39,038
<u>128,666</u>	<u>127,864</u>
	40,932 9,410 39,535 <u>38,789</u>

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 6. Defined Benefit Plans (Continued)

# Judicial Plan

The Judicial Plan administered by MainePERS is a single-employer plan offered by the State of Maine.

Plan membership counts for the Judicial Plan at June 30 are as follows:

	<u>2024</u>	<u>2023</u>
Current participants:		
Vested and non-vested	62	58
Terminated participants:		
Vested	4	3
Inactive due refunds	1	1
Retirees and beneficiaries receiving benefits	<u>94</u>	92
	<u>161</u>	<u>154</u>

# Legislative Plan

The Legislative Plan administered by MainePERS is a single-employer plan offered by the State of Maine.

Plan membership counts for the Legislative Plan at June 30 are as follows:

	<u>2024</u>	<u>2023</u>
Current participants: Vested and non-vested	175	178
Terminated participants:	175	170
Vested	130	142
Inactive due refunds	95	96
Retirees and beneficiaries receiving benefits	<u>234</u>	<u>232</u>
	634	648

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 6. Defined Benefit Plans (Continued)

#### PLD Consolidated Plan

The PLD Consolidated Plan administered by MainePERS is a multiple-employer cost sharing plan. Eligible employers (districts) are defined in Maine statute. As of June 30, 2024, there were 336 employers participating in the plan.

Plan membership counts for the PLD Consolidated Plan at June 30 are as follows:

	<u>2024</u>	<u>2023</u>
Current participants:		
Vested and non-vested	13,561	13,122
Terminated participants:		
Vested	2,953	2,865
Inactive due refunds	10,253	10,467
Retirees and beneficiaries receiving benefits	<u>10,853</u>	<u>10,615</u>
	<u>37,620</u>	<u>37,069</u>

# PLD Agent Plan

The PLD Agent Plan administered by MainePERS is an agent multiple-employer plan for financial reporting purposes. This plan is an aggregation of single employer plans that were open when the PLD Consolidated Plan began. Under the legislation that created the consolidated plan, single employers could either join the consolidated plan whereby the single employer plan would end, or they could opt to not join the plan and continue to maintain their single employer plan as a closed plan until there were no further liabilities for pension, at which time the single employer plan would be dissolved. As of June 30, 2024, there were 4 employers in the plan.

Plan membership counts for the PLD Agent Plan at June 30 are as follows:

	<u>2024</u>	<u>2023</u>
Current participants:		
Vested and non-vested	_	_
Terminated participants:		
Vested	_	_
Inactive due refunds	1	1
Retirees and beneficiaries receiving benefits	41	44
	42	45

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 6. Defined Benefit Plans (Continued)

## <u>Benefits</u>

Benefit terms are established in Maine statute; in the case of the PLD Consolidated Plan, an advisory group, also established by Maine statute, reviews the terms of the plan and periodically makes recommendations to the Legislature to amend the terms. The System's retirement programs provide defined retirement benefits based on members' average final compensation and service credit earned as of retirement. Vesting (i.e., eligibility for benefits upon reaching qualification) occurs upon the earning of five years of service credit (effective October 1, 1999, the prior ten year requirement was reduced by legislative action to five years for State employees and teachers; separate legislation enacted the same reduced requirement for judges, legislators, and employees of PLDs). In some cases, vesting occurs on the earning of one year of service credit immediately preceding retirement at or after normal retirement age. Normal retirement age for State employees and teachers, judges and legislative members is age 60, 62 or 65, and is determined based on date of membership. The normal retirement age is determined by whether a member had met certain creditable service requirements on specific dates, as established by statute. For PLD members, normal retirement age is 60 or 65. The monthly benefit of members who retire before normal retirement age by virtue of having at least 25 years of service credit is reduced by a statutorily prescribed factor for each year of age that a member is below her/his normal retirement age at retirement. The System also provides disability and death benefits which are established by statute for all participating employers under applicable statutory provisions.

Upon termination of membership, members' accumulated employee contributions are refundable with interest, credited in accordance with statute. Withdrawal of accumulated contributions results in forfeiture of all benefits and membership rights. The annual rate of interest credited to members' accounts is set by the Board and is currently 3.88%.

# Funding Policy

The Maine Constitution, Maine statutes and the System's funding policy provide for periodic employer contributions in addition to the normal cost contributions for the State Employee and Teacher Plan. These are actuarially determined amounts that, based on certain actuarial assumptions, are sufficient to fully fund, on an actuarial basis, the initial unfunded actuarial accrued liability (IUAAL) that existed in the State Employee and Teacher Retirement Plan in 1996 by the year 2028. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial funding method. The System also uses the level percentage of payroll method to amortize the unfunded liability of the State Employee and Teacher Retirement Plan.

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 6. Defined Benefit Plans (Continued)

# Net Pension Liability – State Employee and Teacher Plan

The components of the net pension liability of the State of Maine and participating teacher employers, stated in millions of dollars as of June 30, 2024, were as follows:

Total pension liability Plan fiduciary net position			\$18,050.6 <u>15,809.7</u>
Net pension liability			\$ <u>2,240.9</u>
Plan fiduciary net position as a percentage o	f the total pension	liability	87.6%

### Net Pension Liability – Judicial Plan

The components of the net pension asset of the State of Maine for the Judicial Plan, stated in millions of dollars as of June 30, 2024, were as follows:

Total pension liability Plan fiduciary net position	\$ 80.8 89.2
Net pension asset	\$ <u>(8.4</u> )
Plan fiduciary net position as a percentage of the total pension liability	110.3%

# <u>Net Pension Liability – Legislative Plan</u>

The components of the net pension asset of the State of Maine for the Legislative Plan, stated in millions of dollars as of June 30, 2024, were as follows:

Total pension liability Plan fiduciary net position	\$ 11.6 17.2
Net pension asset	\$ (5.6)
Plan fiduciary net position as a percentage of the total pension liability	148.5%

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### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

### 6. Defined Benefit Plans (Continued)

#### Net Pension Liability – PLD Consolidated Plan

The components of the net pension asset of the PLD Consolidated Plan participating employers, stated in millions of dollars as of June 30, 2024, were as follows:

Total pension liability Plan fiduciary net position			\$ 4,478.2 <u>4,078.0</u>
Net pension liability			\$ <u>400.2</u>
Plan fiduciary net position as a percentage of	the total pension	liability	91.1%

#### Actuarial Methods and Assumptions

Actuarial valuations of ongoing plans involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Assumptions in an actuarial valuation typically include projections concerning future employment, mortality, and inflation. Actuarially determined contributions are subject to continual periodic revision as actual results are compared to past expectations and new estimates are made concerning the future. The Schedules of Changes in Net Pension Liabilities and Related Ratios, presented as Required Supplementary Information immediately following the Notes to Financial Statements, present multi-year trend information about whether the fiduciary net position of the plan is increasing or decreasing over time relative to the total pension liability of the plan.

Projections of benefits for financial reporting purposes are based on the provisions of the plans in effect at the time of each valuation and the historical pattern of sharing of costs between the employer and plan members. Actuarial methods and assumptions include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the funding methodologies.

The expected value of assets takes the prior year's actuarial value of assets and adjusts it for contributions, benefit payments, and expected interest earnings at the assumed rate for each plan. One-third of the difference between this expected value of assets and the actual fair value of assets is added to or subtracted from the expected value to provide the actuarial value of assets.

Costs are developed using the entry age normal cost method (based on a level percentage of covered payroll).

The initial unfunded actuarial pension liability of the State Employee and Teacher Program is amortized on a level percentage of payroll on a closed basis. The remaining amortization period as of June 30, 2024 was 5 years. All other gains, losses, and changes are amortized over twenty-year closed periods beginning on the date as of which they occur. The net pension liability of the Judicial and Legislative Plans is amortized on an open basis over a period of ten years. The net pension liability of the PLD Consolidated Plan is amortized on a level percentage of payroll using a method where a separate twenty-year closed

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# NOTES TO FINANCIAL STATEMENTS

# June 30, 2024 With Summarized Information for June 30, 2023

# 6. <u>Defined Benefit Plans (Continued)</u>

period is established annually for the gain or loss for that year. The amortization period can have a significant impact on contribution rates developed through the annual valuation process.

The total pension liability was determined by an actuarial valuation as of June 30, 2024, using the following actuarial assumptions, applied to all periods included in the measurement period. These same assumptions were used in the actuarial valuation as of June 30, 2023, except as indicated.

	State Employee and Teacher Plan	Judicial Plan	Legislative Plan	PLD Consolidated Plan
Investment Rate of Return	Per annum, compounded annually: 6.50% for June 30, 2024 and J			and June 30, 2023
Inflation Rate	2.75%			
Annual Salary	For June 30, 2024 and June 30, 2023			
Increases, including Inflation	State employees, 3.26% - 9.43%; Teachers, 2.80% - 13.03%	2.75%	2.75%	2.75% - 11.48%
Cost of Living Benefit Increases	t 2.20%		1.91%	
	For June 30, 2024 and June 30, 2023			
Mortality Rates General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model. Teachers: based on the 2010 Public Plan Teacher Benefits-Weighted Healthy Retiree for males and generationally using the Mortality Table, for males and females, projected generationally using the and generationally using the descent for males and generational generational descent for males and generation for males and generation descent for males and generation de		Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.		

The actuarial assumptions used in the June 30, 2024 and June 30, 2023 actuarial valuations were based on the results of an actuarial experience study for the period of June 30, 2016 to June 30, 2020.

The long-term expected rate of return on Defined Benefit Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major class of assets. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 6. Defined Benefit Plans (Continued)

geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2024 are summarized in the following table:

Long-Term Asset Class	Expected Real Rate of Return
Public equities	5.6%
US Government	2.2
Private equity	7.2
Real assets	
Real estate	5.8
Infrastructure	5.3
Natural resources	5.1
Traditional Credit	2.7
Alternative Credit	6.4
Diversifiers	4.8

# Discount Rate

The discount rate used to measure the total pension liability for each of the Defined Benefit Plans was 6.5%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and non-employer entity contributions will be made at contractually required rates, actuarially determined. Based on these assumptions, the fiduciary net position for each of the Defined Benefit Plans was projected to be available to make all projected future benefit payments to current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine the total pension liability.

# Sensitivity of the net pension liability to changes in the discount rate

The following table presents the net pension liability for the State Employee and Teacher Plan, Judicial Plan, Legislative Plan, and PLD Consolidated Plan calculated using the discount rate of 6.5%, as well as what the net pension liability would be if it were calculated using a discount rate of one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate:

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# NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 6. Defined Benefit Plans (Continued)

	1%	Current	1%
	Decrease	Rate	Increase
	<u>(5.5%)</u>	<u>(6.5%</u> )	<u>(7.5%</u> )
Net Pension Liability/(Asset):		. ,	
State Employee and Teacher Plan	\$ 4,474,944,755	\$ 2,240,863,638	\$ 376,460,565
Judicial Plan	(1,242,285)	(8,356,861)	(14,573,753)
Legislative Plan	(4,711,966)	(5,860,040)	(6,830,160)
PLD Consolidated Plan	1,000,084,429	400,251,285	(93,942,378)
PLD Consolidated Plan	1,000,084,429	400,251,285	(93,942,378)

Information regarding sensitivity of the net pension liability to changes in the discount rate for individual single employer plans making up the PLD Agent Plan can be found in each Plan's annual actuarial report, available by contacting the System.

#### **Contributions**

Retirement benefits are funded by contributions from members and employers and by earnings from investments. Disability and death benefits are funded by employer normal cost contributions and by investment earnings. Member and employer normal cost contributions are each a percentage of applicable member compensation. Member contribution rates are defined by law or MainePERS' Board rule and depend on the terms of the plan under which a member is covered. Employers' contributions are determined by actuarial valuations.

Included in the Employers and Non-employer Contributing Entities Contributions reported in the statement of changes in fiduciary net position are contributions received from the State of Maine on behalf of state employees and teachers in the total amount of \$497.6 million and \$451.7 million, and for judges in the total amount of \$456 thousand and \$620 thousand, for the years ended June 30, 2024 and 2023, respectively. There were no contributions due from the State of Maine on behalf of legislators in 2024 or 2023.

Employer normal cost retirement contribution rates as applied to State employee members' and teacher members' compensation are the actuarially determined rates. The UAAL rate as applied to State employee members' compensation is first established through the annual valuation process as an amount that will meet the required UAAL payment amount; it is then adjusted in the State's budget process to take into account differences in salary growth projections of the State Budget Office. This adjusted rate, expressed as a percentage of payroll, is the actual rate paid by the State as payment of the required UAAL payment amount for State employees. For teachers, the actuarially determined UAAL amount is paid in twelve equal monthly installments. PLD employer contribution rates are the actuarially determined rates. The rates in effect in 2024 and 2023 are as follows:

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 6. Defined Benefit Plans (Concluded)

Contribution Rates<sup>(1)</sup> (effective July 1 through June 30 of each fiscal year)

	<u>2024</u>	<u>2023</u>
State:		
Employees <sup>(2)</sup>	7.65 - 8.65%	7.65 - 8.65%
Employer <sup>(2)</sup>	18.26 - 44.02%	22.09 - 47.23%
Teachers:		
Employees	7.65%	7.65%
Employer	4.47%	3.84%
Non-employer entity	14.51%	14.29%
Judges:		
Employees	7.65%	7.65%
Employer	4.19%	6.95%
Legislative:		
Employees	7.65%	7.65%
Employer	0.00%	0.00%
zinproj di		0.0070
Participating local districts:		
Employees <sup>(2)</sup>	3.45 - 10.7%	3.35 - 9.7%
Employers <sup>(2)</sup>	5.3 - 14.8%	5.6 - 14.7%
Employers	5.5 14.070	5.6 14.770

<sup>(1)</sup> Employer Contribution Rates include normal cost and UAAL required payment, expressed as a percentage of payroll.

(2) Employee and Employer retirement contribution rates vary depending on specific terms of plan benefits for certain classes of employees or, in the case of PLDs, on benefit plan options selected by a particular PLD. The contributions of withdrawn entities that do not have active employees but continue to have other liabilities are set in dollar amounts, not as rates.

# 7. Group Life Insurance Program

#### Plan Description

The Group Life Insurance Program administered by MainePERS is comprised of two multiple-employer cost-sharing defined benefit OPEB plans in addition to a multiple-employer cost-sharing plan providing life insurance benefits to active employees. Group Life Insurance Program coverage for active employees is available to eligible participants and includes basic insurance consisting of life insurance and accidental death and dismemberment insurance in the amount equal to the participant's annual base compensation rounded up to the next \$1,000. Additional supplemental insurance coverage is available to those participants who elect basic coverage. Participants may also elect to insure the life of a dependent not otherwise insured under the basic and supplemental insurance provisions of the program.

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

### 7. Group Life Insurance Program (Continued)

#### Group Life Insurance Plan for Retired State Employees and Teachers

The Group Life Insurance Plan for Retired State Employees and Teachers is a multiple-employer cost sharing plan with a special funding situation. As of June 30, 2024 there were 237 employers, including the State of Maine, participating in the plan. The State of Maine is also a non-employer contributing entity in that the State pays contributions for retired public school teachers in the plan.

Plan membership counts for the Group Life Insurance Plan for Retired State Employees and Teachers as of the valuation date are as follows:

	<u>2024</u>	<u>2023</u>
Retired State Employees Retired Teachers	8,977 8,039	8,977 8,039
Active State Employees	11,399	11,399
Active Teachers	<u>15,374</u>	15,374
	<u>43,789</u>	43,789

# Group Life Insurance Plan for Retired PLD Employees

The Group Life Insurance Plan for Retired PLD employees is a multiple-employer cost sharing plan. As of June 30, 2024 there were 156 employers participating in the plan.

Plan membership counts for the Group Life Insurance Plan for Retired PLD Employees as of the valuation date are as follows:

	<u>2024</u>	<u>2023</u>
Retired PLD Employees Active PLD Employees	3,015 <u>5,248</u>	3,015 5,248
	<u>8,263</u>	8,263

## <u>Benefits</u>

The Group Life Insurance Plans provide basic group life insurance benefits, during retirement, to retirees who participated in the group life insurance plan prior to retirement for a minimum of 10 years (the 10-year participation requirement does not apply to recipients of disability retirement benefits).

The level of coverage in retirement is initially set to an amount equal to the retiree's average final compensation. The initial amount of basic life is then subsequently reduced at the rate of 15% per year to the greater of 40% of the initial amount or \$2,500.

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## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

## 7. Group Life Insurance Plan (Continued)

#### Funding Policy

Premium rates are those determined by the System's Board of Trustees to be actuarially sufficient to pay anticipated claims. For state employee, judicial and legislative employment classes, the premiums for retiree life insurance coverage are factored into the premiums paid for basic coverage while participants are active members. Premiums for basic life insurance coverage for retired teachers are paid by the State of Maine as the total dollar amount of each year's annual required contribution. PLD employees with retired PLD employees are required to remit a premium of \$0.50 per \$1,000 of coverage per month during the post-employment retired period.

### Net OPEB Liability – Retired State Employee and Teacher Plan

The components of the net OPEB liability of the State of Maine and participating teacher employers, stated in millions of dollars as of June 30, 2024, were as follows:

Total OPEB liability Plan fiduciary net position		\$ 248.7 164.5
Net OPEB liability		\$ 84.2
Plan fiduciary net position as a percen	tage of the total OPEB liability	66.1%

# <u>Net OPEB Liability – PLD Plan</u>

The components of the net OPEB liability of the PLD Plan participating employers, stated in millions of dollars as of June 30, 2024, were as follows:

Total OPEB liability Plan fiduciary net position	\$ 34.4 23.4
Net OPEB liability	\$ 11.0
Plan fiduciary net position as a percentage of the total OPEB liability	68.0%

Actuarial valuations of ongoing plans involve estimates of the values of reported amounts and assumptions about the probability of occurrence of events far into the future. Assumptions in an actuarial valuation typically include projections concerning future employment, mortality, and inflation. Actuarially determined contribution requirements are subject to continual periodic revision as actual results are compared to past expectations and new estimates are made concerning the future. The Schedule of Historical OPEB Information, presented as Required Supplementary Information immediately following the Notes to Financial Statements, will present multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

(A Component Unit of the State of Maine)

## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

# 7. Group Life Insurance Plan (Continued)

## Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the provisions of the plan in effect at the time of each valuation and the historical pattern of sharing of premium costs between the employer and plan members. Actuarial methods and assumptions include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the funding methodologies.

Costs are developed using the individual entry age normal cost method based on a level percentage of payroll.

Significant actuarial assumptions employed by the actuary for funding purposes as of June 30, 2024 are displayed in the table below. The valuation date is June 30, 2024. These same assumptions were used as of June 30, 2023 unless otherwise noted.

	State employees, including judges and legislators	Teachers	PLD employees
Investment Rate of Return	Per annum, compounded annually: 6.50% for June 30, 2024 and June 30, 2023		
Inflation Rate	2.75%		
	For June 30, 2024 and June 30, 2023		
Annual Salary Increases, including Inflation	State employees: 3.26% - 9.43%; Judges and Legislators: 2.75%	2.80 - 13.03%	2.75% - 11.48%
	For June 30, 2024 and June 30, 2023		
Mortality Rates	Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.	Based on the 2010 Public Plan Teacher Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.	General Benefits-Weighted Healthy Retiree Mortality Table, for males and females,
Participation Rate for Future Retirees	100% of those currently enrolled		
Conversion Charges	Apply to the cost of active group life insurance, not retiree group life insurance		
Form of Benefit Payment	Lump sum		

(A Component Unit of the State of Maine)

## NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

### 7. Group Life Insurance Plan (Continued)

The unfunded actuarial accrued liability is being amortized as a level percentage of payroll over a 30-year period on a closed basis. As of June 30, 2024, there were 13 years remaining in the amortization schedule for state employees and teachers, and 6 years remaining for PLD employees.

The actuarial assumptions used in the June 30, 2024 and June 30, 2023 actuarial valuations were based on the results of an actuarial experience study conducted for the period of June 30, 2016 to June 30, 2020.

The long-term expected rate of return on OPEB Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major class of assets. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2024 are summarized in the following table:

Asset Class	Long-Term Expected <u>Real Rate of Return</u>
Public equity	5.6%
Traditional credit US Government securities	2.7 2.2

#### Discount Rate

The discount rate used to measure the total OPEB liability for the State Employee and Teacher Plan and the PLD Plan was 6.5% in 2024 and 2023. The projection of cash flows used to determine the discount rate assumed that employer and non-employer entity contributions will be made at contractually required rates, actuarially determined. Based on these assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments to current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

(A Component Unit of the State of Maine)

#### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 7. Group Life Insurance Plan (Continued)

#### Sensitivity of the net OPEB liability to changes in the discount rate

The following table presents the net OPEB liability for the Retired State Employee and Teacher Plan calculated using the discount rate of 6.5%, as well as what the net OPEB liability would be if it were calculated using a discount rate of one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate:

	1%	Current	1%
	Decrease	Rate	Increase
	<u>(5.5%)</u>	<u>(6.5%)</u>	<u>(7.5%)</u>
Net OPEB Liability	\$121,432,106	\$84,254,671	\$ 54,123,990

The following table presents the net OPEB liability for the PLD Plan calculated using the discount rate of 6.5%, as well as what the net OPEB liability would be if it were calculated using a discount rate of one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate:

	1%	Current	1%
	Decrease	Rate	Increase
	<u>(5.5%</u> )	<u>(6.5%</u> )	<u>(7.5%</u> )
Net OPEB Liability	\$ 16,378,879	\$ 11,062,181	\$ 6,786,560

#### <u>Premiums</u>

The basic life benefits for participants are funded by the State, school districts, PLDs and individuals. Participants pay additional premiums for supplemental and dependent insurance based upon the coverage selected.

Maine statute requires the System's Board of Trustees to establish on a regular basis the premium rates for participants in the Group Life Insurance Plan. The premium rates are determined to be actuarially sufficient to pay anticipated claims and cover administrative costs. The State of Maine remits premiums at a single rate that supports basic coverage for active and retired state employees (including Legislative and Judicial employees). This rate is \$.98 per month for every \$1,000 of coverage. The State remits premiums for retired teachers at a rate of \$.36 per month for every \$1,000 of coverage. As per individual collective bargaining agreements between employers and employees, individual school districts or teachers themselves pay premiums at the rate of \$.11 per month for every \$1,000 of coverage while active, and employees of participating local districts or the district itself pay premiums of \$.50 per month for every \$1,000 in coverage for employees while active and retired. In those cases where employees themselves pay premiums, those premiums are usually deducted from employees' compensation and remitted to the System.

Included in the Employers and Non-employer Contributing Entities Contributions and Premiums in the Statement of Changes in Fiduciary Net Position are group life insurance premiums received from the State of Maine on behalf of active and retired state employees, retired teachers, legislators, and judges in the total amount of \$14 and \$12.8 million, respectively, for the years ended June 30, 2024 and 2023.

(A Component Unit of the State of Maine)

#### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 7. Group Life Insurance Plan (Concluded)

#### <u>Benefits</u>

Upon service retirement, only basic life insurance in an amount equal to the retiree's average final compensation will continue at no cost to the participant as long as the retiree participated in the group life insurance plan prior to retirement for a minimum of 10 years.

If a participant becomes eligible for disability retirement, the amount of basic insurance in force at the time of such retirement will be continued until normal retirement age, after which the amount will be reduced at the same rate as for a service retiree. The 10-year participation requirement does not apply to recipients of disability retirement benefits.

Under the Accidental Death and Dismemberment provisions of the plan, no legal action can be brought to recover any benefit after 3 years from the deadline for filing claims. The deadline for filing claims under the Accidental Death and Dismemberment provisions of the plan is 90 days after the date of the loss giving rise to the claim.

#### Claims Processing Expenses

All benefits are processed and paid by a third-party administrator (TPA). The fees incurred for services performed by the TPA totaled \$1.5 million and \$1.4 million for the years ended June 30, 2024 and 2023, respectively, and are listed as claims processing expenses in the basic financial statements.

#### 8. Statutory and Constitutional Requirements

An amendment to the Maine constitution approved in November 1995 requires the State of Maine to fund the unfunded actuarial liability of the State Employee and Teacher Retirement Plan existing on June 30, 1996, over a period not to exceed 31 years beginning July 1, 1997, and not later than June 30, 2028. The amendment prohibits the creation of new unfunded liabilities in that Plan except those arising from experience losses, which under the 1995 amendment must be funded over a period of not more than ten years. An amendment approved in November 2017 extends the period from ten years to twenty years.

#### 9. The System's Employee Benefits

#### Defined Benefit Plan

The System, as the employer of its staff, is a PLD in the PLD Consolidated Plan. As such, the System's employees are required by statute to contribute 6.95% or 7.7% of their annual covered salaries, depending on which plan they participate in. The System is required to contribute at the contribution rate established by the Board under the actuarial valuation of the PLD Consolidated Plan. The contribution rate was 10.2% and 10.2% of annual covered payroll for 2024 and 2023, respectively.

(A Component Unit of the State of Maine)

#### NOTES TO FINANCIAL STATEMENTS

June 30, 2024 With Summarized Information for June 30, 2023

#### 9. The System's Employee Benefits (Concluded)

The employer contributions on behalf of its employees, equal to the required contribution, were \$1,055,452 and \$901,534 for 2024 and 2023, respectively. The actuarial assumptions used in the PLD Consolidated Plan valuation are described in the actuarial assumptions and methods footnote to the required supplementary information.

The System's contributions to the PLD Consolidated Plan are treated as administrative costs of the Plan and are funded as a component of normal cost and included in the contribution rates paid by all employers in each of the plans administered by the System. Accordingly, the System does not reflect a portion of the collective net pension liability or related deferred inflows and outflows of resources related to pension obligations in the System's basic financial statements.

#### Group Life Insurance Plan

The System, as the employer of its staff, is a PLD in the Group Life Insurance Plan. The System pays the premiums for Basic only coverage for all active employees. Employees who elect additional coverage under the Supplemental and/or Dependent provisions have the additional required premiums withheld from their pay in order to fund such coverage.

The System was required to pay premiums for Basic coverage at the rate of \$0.50 per \$1,000 of coverage for the 2024 and 2023 fiscal years. The total premiums the System paid on behalf of its active employees, equal to the required contributions, were \$54,492 and \$46,471 for 2024 and 2023, respectively.

#### Other Post-Employment Benefits

The System provides OPEB to its retirees in the form of health insurance coverage and group life insurance coverage. The System's annual OPEB costs are actuarially determined based on the parameters of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.

The total contributions for retiree health insurance coverage, equal to the actuarially determined contributions, were \$0 for 2024 and 2023. The OPEB liability for this plan is immaterial and the Plan's assets exceed its actuarial liability at June 30, 2024 and 2023. The actuarial liability is calculated using assumptions similar to those used for the System's defined benefit plan.

The total contributions for retiree group life insurance coverage, equal to the actuarially determined contributions, were \$9,276 and \$8,868 for 2024 and 2023, respectively. The OPEB liability for this plan is immaterial.

#### 10. Risk Management

The System carries insurance to cover its exposure to various risks of loss. There were no uninsured losses during the last three years.

#### SCHEDULE OF HISTORICAL PENSION INFORMATION STATE EMPLOYEE AND TEACHER PLAN

#### June 30, 2023 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS LAST TEN FISCAL YEARS

		2024	2022		2021	2020	2010	2010	2015	2017	2015	2011
		2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	¢	202 521 570 0	<b>27</b> 9 <b>227 200 •</b>		229 775 102 <b>Φ</b>	221 22( 102	224 775 112 <sup>ф</sup>	015 00C 000 M	212 047 075 0	202 207 052	101 529 (40 \$	10( 27( 754
Service cost	\$	292,531,569 \$	278,327,390 \$	271,706,726 \$	238,775,193 \$	231,226,103 \$	224,775,112 \$	215,826,380 \$	213,047,075 \$	203,297,053 \$	191,528,649 \$	186,376,754
Interest Changes of benefit terms		1,115,326,282 25,675,350	1,080,895,886 6,574,283	1,052,840,572 104,916,162	989,560,149	968,243,358 1,223,156	934,009,648	914,535,911	886,834,221	882,785,134	861,682,508 9,778,106	842,229,062
Differences between expected and actual experience		155,752,965	174,376,812	107,921,791	25,575,263	1,223,136	- 208,719,412	- 34,151,279	- 95,207,531	- 81,506,700	(44,287,643)	- (17,694,276)
Changes of assumptions		-	-	107,921,791	1,175,893,728	102,295	200,719,412	191,998,939	95,207,551	30,436,605	(44,287,043)	167,650,573
Benefit payments, including refunds of member contributions		- (1,059,251,999)	- (1,001,430,769)	- (947,944,497)	(902,913,135)	(882,617,693)	- (851,469,104)	(810,211,176)	(780,157,263)	(744,357,598)	- (722,573,349)	(689,053,212)
Net change in total pension liability		530,034,167	538,743,602	589,440,754	1,526,891,198	318,237,217	516,035,068	546,301,333	414,931,564	453,667,894	296,128,271	489,508,901
Total pension liability, beginning		17.520.535.684	16,981,792,082	16,392,351,328	14,865,460,130	14,547,222,913	14,031,187,845	13.484.886.512	13,069,954,948	12.616.287.054	12,320,158,783	11,830,649,882
Total pension liability, ending (a)	\$	18,050,569,851 \$	17,520,535,684 \$	16,981,792,082 \$	16,392,351,328 \$	14,865,460,130 \$	14,547,222,913 \$	14,031,187,845 \$	13,484,886,512 \$	13,069,954,948 \$	12,616,287,054 \$	12,320,158,783
rour peneten nuonny, enung (u)	Ψ	10,000,000,001 \$	17,520,555,001 ψ	10,701,772,002 ψ	10,072,001,020 0	1,505,100,150 φ	1,517,222,915 Φ	1,001,107,010 ψ	10,101,000,012 \$	10,009,901,910 Φ	12,010,207,001	12,520,150,705
Plan fiduciary net position												
Contributions - member	\$	179,506,016 \$	171,937,520 \$	164,348,772 \$	159,510,002 \$	151,438,848 \$	146,019,051 \$	140,844,880 \$	139,464,284 \$	125,523,986 \$	123,528,807 \$	121,033,152
Contributions - employer		295,754,590	265,119,318	348,890,554	239,444,343	225,468,762	218,530,934	211,251,144	211,037,365	199,212,719	173,935,492	162,920,147
Contributions - non-employer		214,917,732	200,007,456	194,654,436	179,329,944	174,530,364	132,980,832	129,421,735	116,080,164	112,477,836	147,283,716	142,303,104
Net investment income / (loss)		1,119,831,175	881,906,560	(79,389,989)	3,192,036,232	354,272,726	768,987,130	1,077,827,554	1,256,043,735	40,540,758	191,829,057	1,517,432,345
Benefit payments, including refunds of member contributions		(1,059,472,862)	(1,001,644,268)	(948,151,998)	(903,115,909)	(882,819,483)	(851,653,558)	(810,381,770)	(780,325,980)	(744,523,743)	(722,724,258)	(689,191,030)
Administrative expenses		(13,682,533)	(11,964,126)	(11,962,324)	(11,088,956)	(11,343,928)	(11,180,852)	(10,076,242)	(9,216,027)	(8,649,030)	(9,386,695)	(8,246,740)
Other		(300,000)	(904,562)	(341,271)	(384,565)	(2,193,752)	(311,233)	-	(124,178)	(6,342,010)	-	-
Net change in fiduciary net position		736,554,118	504,457,898	(331,951,820)	2,855,731,091	9,353,537	403,372,304	738,887,301	932,959,363	(281,759,484)	(95,533,881)	1,246,250,978
Plan fiduciary net position, beginning		15,073,155,781	14,568,697,883	14,900,649,703	12,044,918,612	12,035,565,075	11,632,192,771	10,893,305,470	9,960,346,107	10,242,105,591	10,337,639,472	9,091,388,494
Plan fiduciary net position, ending (b)	\$	15,809,709,899 \$	15,073,155,781 \$	14,568,697,883 \$	14,900,649,703 \$	12,044,918,612 \$	12,035,565,075 \$	11,632,192,771 \$	10,893,305,470 \$	9,960,346,107 \$	10,242,105,591 \$	10,337,639,472
	Φ.	2 240 050 052	2 447 270 002	2 412 004 100	1 401 701 (05 *	2 020 541 510		<b>2</b> 200 005 074 *	2 501 501 042	2 100 (00 041 *	0.074.101.472	1 000 510 211
Plan's net pension liability, ending (a)-(b)	\$	2,240,859,952 \$	2,447,379,903 \$	2,413,094,199 \$	1,491,701,625 \$	2,820,541,518 \$	2,511,657,838 \$	2,398,995,074 \$	2,591,581,042 \$	3,109,608,841 \$	2,374,181,463 \$	1,982,519,311
Plan fiduciary net position as a percentage												
of the total pension liability		87.59%	86.03%	85.79%	90.90%	81.03%	82.73%	82.90%	80.78%	76.21%	81.18%	83.91%
	¢	2 427 075 004 ¢	۵ 212 <i>4</i> 12 527 ش	2 221 410 102 \$	2,096,365,332 \$	2 002 075 912 ¢	1 024 006 618 \$	1 202 274 010 \$	1 960 204 425	1 916 425 094 \$	1 600 160 990 \$	1 676 857 204
Covered payroll	Э	2,437,075,004 \$	2,312,413,537 \$	2,221,410,193 \$	2,090,303,332 \$	2,003,075,813 \$	1,924,006,618 \$	1,808,274,919 \$	1,860,294,435 \$	1,816,435,084 \$	1,699,160,889 \$	1,676,857,294
Plan net pension liability as a percentage of covered payroll		91.95%	105.84%	108.63%	71.16%	140.81%	130.54%	132.67%	139.31%	171.19%	139.73%	118.23%

See notes to historical pension and OPEB information.

#### REQUIRED SUPPLEMENTAL SCHEDULE

#### SCHEDULE OF HISTORICAL PENSION INFORMATION JUDICIAL PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS LAST TEN FISCAL YEARS

		2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability Service cost	s	1,747,988 \$	1,770,062 \$	1,733,281 \$	1,546,701 \$	1,608,376 \$	1,596,832 \$	1,487,383 \$	1,465,977 \$	1,396,704 \$	1,605,751
Interest Changes of benefit terms		4,985,781 55,424	4,916,069 18,706	4,875,889 273,590	4,822,289	4,644,191	4,582,454	4,442,404	4,358,175	4,154,433 2,016,584	3,863,455 27,931
Differences between expected and actual experience Changes of assumptions		1,098,347 - (5,627,267)	(110,488)	(150,154)	1,066,613 836,266	942,561	(1,087,164)	468,895 697,807	(893,352)	(1,745,956) 2,489,800 (2,501,011)	2,237,833
Benefit payments, including refunds of member contributions Net change in total pension liability		2,260,273	(5,433,883) 1,160,466	(5,094,485) 1,638,121	(4,681,415) 3,590,454	(4,314,558) 2,880,570	(4,067,506) 1,024,616	(3,804,709) 3,291,780	(3,651,927) 1,278,873	(3,501,911) 4,809,654	(3,383,995) 4,350,975
Total pension liability, beginning Total pension liability, ending (a)	· ·	78,586,151 80,846,424 \$	77,425,685 78,586,151 \$	75,787,564 77,425,685 \$	72,197,110 75,787,564 \$	69,316,540 72,197,110 \$	68,291,924 69,316,540 \$	65,000,144 68,291,924 \$	<u>63,721,271</u> 65,000,144 \$	58,911,617 63,721,271 \$	54,560,642 58,911,617
		00,040,424 \$	/8,580,151 \$	11,425,065 \$	75,787,504 \$	/2,197,110 \$	05,510,540 \$	00,271,724 3	05,000,144 \$	05,721,271 \$	58,911,017
Plan fiduciary net position Contributions - member Contributions - employer Contributions - non-employer	s	731,941 \$ 456,322	620,462 \$ 662,365	650,172 \$ 867,895	635,871 \$ 738,939	616,095 \$ 715,963	620,075 \$ 1,212,666	603,875 \$ 1,179,328	584,451 \$ 1,144,445	549,845 \$ 1,077,545	549,691 979,281
Net investment income (loss) Benefit payments, including refunds of member contributions Administrative expenses Other		6,297,740 (5,627,267) (78,691)	5,093,775 (5,433,883) (70,478) 729,841	(453,509) (5,094,485) (72,167) 29,746	19,279,640 (4,681,415) (67,680) 473,431	2,164,283 (4,314,558) (69,406) 764,902	4,709,445 (4,067,506) (68,475) (2,604)	6,606,905 (3,804,709) (61,708)	7,799,507 (3,651,927) (56,436)	129,372 (3,501,911) (47,577) 6,342,010	1,055,346 (3,383,995) (49,399) -
Net change in fiduciary net position		1,780,045	1,602,082	(4,072,348)	16,378,786	(122,721)	2,403,601	4,523,691	5,820,040	4,549,284	(849,076)
Plan fiduciary net position, beginning Plan fiduciary net position, ending (b)	\$	87,423,240 89,203,285 \$	85,821,158 87,423,240 \$	89,893,506 85,821,158 \$	73,514,720 89,893,506 \$	73,637,441 73,514,720 \$	71,233,840 73,637,441 \$	66,710,149 71,233,840 \$	60,890,109 66,710,149 \$	56,340,825 60,890,109 \$	57,189,901 56,340,825
Plan's net pension (asset) liability, ending (a)-(b)	S	(8,356,861) \$	(8,837,089) \$	(8,395,473) \$	(14,105,942) \$	(1,317,610) \$	(4,320,901) \$	(2,941,916) \$	(1,710,005) \$	2,831,162 \$	2,570,792
Plan fiduciary net position as a percentage of the total pension liability		110.34%	111.25%	110.84%	118.61%	101.83%	106.23%	104.31%	102.63%	95.56%	95.64%
Covered payroll	s	9,567,971 \$	8,658,366 \$	8,502,222 \$	8,312,022 \$	8,053,577 \$	8,116,908 \$	7,893,732 \$	7,639,818 \$	7,188,426 \$	7,185,501
Plan net pension (asset) liability as a percentage of covered payro	11	(87.34)%	(102.06)%	(98.74)%	(169.71)%	(16.36)%	(53.23)%	(37.27)%	(22.38)%	39.39%	35.78%

See notes to historical pension and OPEB information.

#### REQUIRED SUPPLEMENTAL SCHEDULE

#### SCHEDULE OF HISTORICAL PENSION INFORMATION LEGISLATIVE PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS LAST TEN FISCAL YEARS

		2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability											
Service cost	s	392,233 \$	311,209 \$	375,207 \$	286,472 \$	334,862 \$	297,324 \$	282,199 \$	264,807 \$	411,624 \$	451,393
Interest		732,992	702,689	698,694	657,782	611,447	577,720	565,088	530,313	547,268	544,526
Changes of benefit terms		15,225	5,513	43,111	-	-	-	-	-	-	4,418
Differences between expected and actual experience		(305,190)	64,885	(199,354)	180,989	413,313	238,611	(90,816)	157,775	(245,867)	(508,125)
Changes of assumptions Benefit payments, including refunds of member contributions		(670,376)	(655,401)	(618,847)	374,000 (549,461)	(697,697)	(606,841)	99,915 (459,746)	(469,043)	(146,529) (445,331)	(439,112)
Net change in total pension liability		164,884	428,895	298,811	949,782	661,925	506,814	396,640	483,852	121,165	53,100
Total pension liability, beginning		11,406,177	10,977,282	10,678,471	9,728,689	9,066,764	8,559,950	8,163,310	7,679,458	7,558,293	7,505,193
Total pension liability, ending (a)	\$	11,571,061 \$	11,406,177 \$	10,977,282 \$	10,678,471 \$	9,728,689 \$	9,066,764 \$	8,559,950 \$	8,163,310 \$	7,679,458 \$	7,558,293
Dien Chusismunst nasition											
Plan fiduciary net position Contributions - member	s	183,506 \$	226,997 \$	161,937 \$	214,905 \$	156,306 \$	220,611 \$	153,881 \$	202,388 \$	137,893 \$	193,356
Contributions - employer		15,225	5,513	43,111	214,905 \$	150,500 \$			202,000 \$	157,655 \$	4,418
Contributions - non-employer		-	-	-		-				-	-
Net investment income (loss)		1,235,988	975,107	(89,007)	3,559,227	390,165	845,408	1,176,463	1,366,222	47,890	206,454
Benefit payments, including refunds of member contributions		(670,376)	(655,401)	(618,847)	(549,461)	(697,697)	(606,841)	(459,746)	(469,043)	(445,331)	(439,112)
Administrative expenses		(15,142)	(13,257)	(13,374)	(12,383)	(12,458)	(12,262)	(11,002)	(10,003)	(9,353)	(9,584)
Other		-	-	-	(3,271)	365,766	45,285	-	-	-	-
Net change in fiduciary net position		749,201	538,959	(516,180)	3,209,017	202,082	492,201	859,596	1,089,564	(268,901)	(44,468)
Plan fiduciary net position, beginning		16,681,900	16,142,941	16,659,121	13,450,104	13,248,022	12,755,821	11,896,225	10,806,661	11,075,562	11,120,030
Plan fiduciary net position, ending (b)	S	17,431,101 \$	16,681,900 \$	16,142,941 \$	16,659,121 \$	13,450,104 \$	13,248,022 \$	12,755,821 \$	11,896,225 \$	10,806,661 \$	11,075,562
<b></b>	•	(5.949.949) A	(2.072.700)		(2.000.000.0		(1101.050) *	(1.105.071)		(2.107.000)	(2,2,2,2,2)
Plan's net pension asset ending (a)-(b)	2	(5,860,040) \$	(5,275,723) \$	(5,165,659) \$	(5,980,650) \$	(3,721,415) \$	(4,181,258) \$	(4,195,871) \$	(3,732,915) \$	(3,127,203) \$	(3,517,269)
Plan fiduciary net position as a percentage											
of the total pension liability		150.64%	146.25%	147.06%	156.01%	138.25%	146.12%	149.02%	145.73%	140.72%	146.54%
Covered payrol1	\$	3,056,745 \$	2,962,483 \$	2,801,166 \$	2,802,145 \$	2,814,060 \$	2,659,749 \$	2,710,694 \$	2,651,195 \$	2,590,011 \$	2,527,525
Plan net pension liability as a percentage of covered payroll		(191.71)%	(178.08)%	(184.41)%	(213.43)%	(132.24)%	(157.20)%	(154.79)%	(140.80)%	(120.74)%	(139.16)%

See notes to historical pension and OPEB information.

#### REQUIRED SUPPLEMENTAL SCHEDULE

#### SCHEDULE OF HISTORICAL PENSION INFORMATION PLD CONSOLIDATED PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS LAST TEN FISCAL YEARS

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability										
Service cost	\$ 118,728,433			\$ 86,845,610		\$ 78,317,217				\$ 75,805,492
Interest	267,399,602	256,376,007	241,612,217	229,954,447	219,752,007	208,360,684	207,492,397	198,972,490	192,774,429	187,928,506
Changes of benefit terms	863,779	20,744,234	16,214,107	-	29,759,516	-	(106,123,366)		-	-
Differences between expected and actual experience	150,622,559	51,680,563	67,455,268	13,300,796	(6,552,650)	47,684,163	1,285,303	(2,160,603)	(9,142,757)	(54,634,906)
Changes of assumptions	-	-	-	161,866,111	-	-	46,439,540	-	50,884,219	37,593,598
Benefit payments, including refunds of member contributions	(225,200,272)	(211,144,592)	(194,576,381)	(182,691,917)	(174,752,167)	(165,399,679)	(152,087,885)	(146,163,566)	(139,919,680)	(135,414,526)
Net change in total pension liability	312,414,101	222,239,911	224,556,476	309,275,047	150,921,762	168,962,385	73,196,499	126,920,087	168,804,625	111,278,164
Total pension liability, beginning	4,165,812,801	3,943,572,890	3,719,016,414	3,409,741,367	3,258,819,605	3,089,857,220	3,016,660,721	2,889,740,634	2,720,936,009	2,609,657,845
Total pension liability, ending (a)	\$ 4,478,226,902	\$ 4,165,812,801	\$ 3,943,572,890	\$ 3,719,016,414	\$ 3,409,741,367	\$ 3,258,819,605	\$ 3,089,857,220	\$ 3,016,660,721	\$ 2,889,740,634	\$ 2,720,936,009
Plan fiduciary net position Contributions - member	\$ 72,650,710	\$ 65,716,199	\$ 65,104,304	\$ 53,621,126	\$ 54,090,045	\$ 54,927,202	\$ 48,050,202	\$ 46,080,851	\$ 40,861,405	\$ 37,202,921
Contributions - employer	98,715,699	92,595,758	78,887,165	68,506,485	66,717,733	61,487,037	56,092,662	51,387,011	47,624,182	43,366,730
Refund of IUUAL account balances	-	-	-	-	-	-	-	-	-	(43,000,526)
Net investment income (loss)	288,525,441	224,685,095	(19,908,035)	802,368,797	88,330,927	188,620,106	259,699,519	299,780,948	10,200,342	46,075,304
Benefit payments, including refunds of member contributions	(225,200,272)	(211,144,591)	(194,576,381)	(182,691,917)		(165,399,679)	(152,087,885)		(139,919,680)	(135,414,526)
Administrative expenses	(3,491,661)	(3,020,237)	(3,011,451)	(2,773,340)		(2,706,977)	(2,411,666)		(2,028,294)	(2,117,266)
Other	57,992	147,934	89,325	(306,895)		48,552	(386,621)		(217,338)	-
Net change in fiduciary net position	231,257,909	168,980,158	(73,415,073)	738,724,256	59,272,271	136,976,241	208,956,211	248,813,719	(43,479,383)	(53,887,363)
Plan fiduciary net position, beginning	3,846,717,708	3,677,737,550	3,751,152,623	3,012,428,367	2,953,156,096	2,816,179,855	2,607,223,644	2,358,409,925	2,401,889,308	2,455,776,671
Plan fiduciary net position, ending (b)	\$ 4,077,975,617	\$ 3,846,717,708	\$ 3,677,737,550	\$ 3,751,152,623	\$ 3,012,428,367	\$ 2,953,156,096	\$ 2,816,179,855	\$ 2,607,223,644	\$ 2,358,409,925	\$ 2,401,889,308
Plan's net pension (asset) liability, ending (a)-(b)	\$ 400,251,285	\$ 319,095,093	\$ 265,835,340	\$ (32,136,209)	\$ 397,313,000	\$ 305,663,509	\$ 273,677,365	\$ 409,437,077	\$ 531,330,709	\$ 319,046,701
Plan fiduciary net position as a percentage of the total pension liability	91.06%	92.34%	93.26%	100.86%	88.35%	90.62%	91.14%	86.43%	81.61%	88.27%
Covered payrol1	\$ 914,034,250	\$ 857,368,130	\$ 744,218,538	\$ 646,287,594	\$ 641,523,784	\$ 593,884,355	\$ 561,126,768	\$ 542,572,528	\$ 521,870,235	\$ 497,616,846
Plan net pension (asset) liability as a percentage of covered payro	43.79%	37.22%	35.72%	(4.97)%	61.93%	51.47%	48.77%	75.46%	101.81%	64.11%

See notes to historical pension and OPEB information.

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

#### SCHEDULE OF HISTORICAL PENSION INFORMATION STATE EMPLOYEE AND TEACHER PLAN

#### June 30, 2024 (UNAUDITED)

### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

Actuarially determined	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	2017	<u>2016</u>	2015
contribution	\$ 484,672,270	\$ 458,177,786	\$ 438,298,297	\$ 418,558,583	\$ 399,775,788	\$ 350,583,375	\$ 340,376,744	\$ 312,736,906	\$ 301,891,511	\$ 302,028,725
Contributions in relation to the actuarially determined contribution	484,672,270	458,177,786	438,298,297	418,558,583	<u>399,775,788</u>	350,583,375	340,376,744	312,736,906	301,891,511	302,028,725
Contribution deficiency (excess)	<b>\$</b> –	<b>\$</b> –	<b>\$</b> –	_	<b>\$</b> –	\$	<b>\$</b> –	<b>\$</b> –	<b>\$</b> –	s –
	* <u></u>	*	*			* <u></u>	* <u></u>	*	* <u></u>	* <u></u>
Covered payroll	\$2,437,075,004	\$2,312,413,537	\$2,221,410,193	\$2,096,365,332	\$2,003,075,813	\$1,924,006,618	\$1,865,849,388	\$1,860,230,663	\$1,816,435,084	\$1,699,160,889
Contributions as a percentage of covered payroll	19.89%	19.81%	19.73%	19.97%	19.96%	18.22%	18.24%	16.81%	16.62%	17.78%

See notes to historical pension and OPEB information.

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

#### SCHEDULE OF HISTORICAL PENSION INFORMATION JUDICIAL PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS Last Ten Fiscal Years

A - 4	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	2017	2016	<u>2015</u>
Actuarially determined contribution	\$ 400,898	\$ 601,756	\$ 594,305	\$ 738,939	\$ 715,963	\$ 1,212,666	\$ 1,179,328	\$ 1,144,445	\$ 1,077,545	\$ 951,351
Contributions in relation to the actuarially determined contribution	400,898	<u> </u>	<u> </u>	738,939	<u> </u>	<u>_1,212,666</u>	1,179,328	1,144,445	1,077,545	951,351
Contribution deficiency (excess)	\$ <u> </u>	\$ <u></u>	\$ <u> </u>	\$ <u></u>	\$ <u> </u>	\$ <u></u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>
Covered payroll	\$89,567,971	\$ 8,658,366	\$ 8,502,222	\$ 8,312,022	\$ 8,053,577	\$ 8,116,908	\$ 7,893,762	\$ 7,639,818	\$ 7,188,426	\$ 7,185,501
Contributions as a percentage of covered payroll	4.19%	6.95%	6.99%	8.89%	8.89%	14.94%	14.94%	14.98%	14.99%	13.24%
See notes to historical pensio	n and OPEB ir	nformation.								

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

## SCHEDULE OF HISTORICAL PENSION INFORMATION LEGISLATIVE PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS Last Ten Fiscal Years

A stranially determined	2024	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	2018	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ –	\$ -	\$ -	\$ -	\$ -
Contributions in relation to the actuarially determined contribution										
Contribution deficiency (excess)	\$ <u></u>	\$ <u></u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>	\$ <u></u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>
Covered payroll	\$ 3,056,745	\$ 2,962,483	\$ 2,801,166	\$ 2,802,145	\$ 2,814,060	\$ 2,659,749	\$ 2,710,694	\$ 2,651,195	\$ 2,590,011	\$ 2,527,525
Contributions as a percentage of covered payroll	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
See notes to historical pensi	on and OPEB inf	ormation.								

(A Component Unit of the State of Maine)

#### **REQUIRED SUPPLEMENTARY INFORMATION**

## SCHEDULE OF HISTORICAL PENSION INFORMATION PLD CONSOLIDATED PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

Actuarially determined	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	2015
contribution	\$ 98,715,699	\$ 92,595,758	\$ 78,887,165	\$ 68,506,485	\$ 66,717,733	\$ 61,170,089	\$ 55,551,550	\$ 51,387,011	\$ 46,968,321	\$ 40,302,580
Contributions in relation to the actuarially determined contribution	98,715,699	92,595,758	78,887,165	<u> </u>	<u>    66,717,733</u>	61,170,089	55,551,550	51,387,011	46,968,321	40,302,580
Contribution deficiency (excess)	\$ <u> </u>	\$ <u></u>	\$ <u> </u>		\$	\$	\$ <u></u>	\$ <u> </u>	\$ <u> </u>	\$ <u> </u>
Covered payroll	\$ 914,034,250	\$ 857,368,130	\$ 744,218,538	\$ 646,287,594	\$ 641,523,784	\$ 593,884,355	\$ 561,126,768	\$ 542,572,528	\$ 521,870,235	\$ 497,616,846
Contributions as a percentage of covered payroll	10.80%	5 10.80%	10.60%	10.60%	. 10.40%	10.30%	9.90%	9.47%	<b>9.00%</b>	8.10%

See notes to historical pension and OPEB information.

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

#### SCHEDULE OF HISTORICAL PENSION INFORMATION ALL DEFINED BENEFIT PLANS

June 30, 2024 (UNAUDITED)

SCHEDULE OF INVESTMENT RETURNS Last Ten Fiscal Years \*

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u> <u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u> <u>2016</u>	<u>2015</u>
Annual money-weighted rate of return,								
net of investment expenses	8.0%	4.7%	3.4%	26.5% 1.8%	7.08%	10.30%	12.49% 0.48%	1.98%

See notes to historical pension and OPEB information.

\* Retroactive information is not required to be presented. This information will be presented each year until 10 years of such information is available.

#### REQUIRED SUPPLEMENTAL SCHEDULES

#### SCHEDULE OF HISTORICAL OPEB INFORMATION STATE EMPLOYEE AND TEACHER PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET OPEB LIABILITY AND RELATED RATIOS Last Ten Fiscal Years\*

		2024		2023		2022		2021		2020		2019		2018		2017
Total OPEB liability																
Service cost	\$	2,934,493	S		\$		\$	2,683,027	\$	2,190,471	\$	2,131,845	\$	2,122,079	\$	2,065,283
Interest		16,240,766		15,218,725		15,240,012		13,846,827		14,274,714		13,155,332		12,531,082		12,014,739
Changes of benefit terms		-		-		-		-		-		-		-		-
Differences between expected and actual experience Changes of assumptions		(10,415,324) 1,753,836		-		365,044		291,076		589,478		-		1,957,220 3,199,639		-
Benefit payments, including refunds of member contributions		(7,234,173)		(7,684,604)		(6,817,681)		(6,613,935)		(8,177,754)		(7,118,082)		(7,269,810)		(6,003,967)
Net change in total OPEB liability		3,279,598		10,390,075		11,544,185		10,206,995		8,876,909		8,169,095		12,540,210		8,076,055
Total OPEB liability, beginning		245,450,162		235,060,087		223,515,902	•	213,308,907		204,431,998		196,262,903		183,722,693		175,646,638
Total OPEB liability, ending (a)	2	248,729,760	\$	245,450,162	\$	235,060,087	2	223,515,902	2	213,308,907	\$	204,431,998	\$	196,262,903	2	183,722,693
Plan fiduciary net position for retirees																
Contributions - member	s	-	s	-	s	-	s	-	s	-	s	-	s	-	s	-
Contributions - employer		12,163,030	-	11,053,496	Ť	10,584,751		9,866,578	•	9,310,849	•	7,756,442	•	7,638,453	•	6,921,228
Net investment income		20,682,541		14,263,865		(20,387,369)		32,552,180		4,885,544		6,418,113		7,804,839		9,885,897
Benefit payments, including refunds of member contributions		(7,234,173)		(7,684,604)		(6,817,681)		(6,613,935)		(8,177,754)		(7,118,082)		(7,269,810)		(6,003,967)
Administrative expenses		(972,819)		(951,015)		(824,527)		(821,718)		(1,018,932)		(726,320)		(769,717)		(1,335,745)
Other		-		-		-		-		-		-		-		-
Net change in fiduciary net position for retirees		24,638,579		16,681,742		(17,444,826)		34,983,105		4,999,707		6,330,153		7,403,765		9,467,413
Plan fiduciary net position for retirees, beginning		139,836,510		123,154,768		140,599,594		105,616,489		100,616,782		94,286,629		86,882,864		77,415,451
Plan fiduciary net position for retirees, ending (b)	\$	164,475,089	\$	139,836,510	\$	123,154,768	\$	140,599,594	\$	105,616,489	\$	100,616,782	\$	94,286,629	\$	86,882,864
Net OPEB liability, ending (a)-(b)	\$	84,254,671	\$	105,613,652	\$	111,905,319	\$	82,916,308	\$	107,692,418	\$	103,815,216	\$	101,976,274	\$	96,839,829
Plan fiduciary net position for retirees as a percentage																
of the total OPEB liability		66.13%		56.97%		52.39%		62.90%		49.51%		49.22%		48.04%		47.29%
Covered payroll	\$	1,734,788,000	\$	1,644,477,452	\$	1,600,464,673	\$	1,525,192,949	\$	1,484,372,700	\$ °	1,380,619,384	\$	1,343,668,500	<b>S</b> 1	1,277,009,000
Net OPEB liability as a percentage of covered payroll		4.86%		6.42%		6.99%		5.44%		7.26%		7.52%		7.59%		7.58%

See notes to historical pension and OPEB information.

\* This information will be presented each year until 10 years of such information is available.

#### REQUIRED SUPPLEMENTAL SCHEDULES

#### SCHEDULE OF HISTORICAL OPEB INFORMATION PLD CONSOLIDATED PLAN

#### June 30, 2024 (UNAUDITED)

#### SCHEDULE OF CHANGES IN THE PLAN'S NET OPEB LIABILITY AND RELATED RATIOS Last Ten Fiscal Years\*

		2024		2023		2022		2021		2020		2019		2018		2017
Total OPEB liability																
Service cost Interest Changes of benefit terms	S	351,657 2,231,071 (259,297)		308,456 2,109,659	S	308,456 2,121,985	S	309,875 1,962,386	S	522,353 1,941,994 (636,731)	S	488,545 1,832,881	S	442,863 1,706,200	S	619,735 1,616,253
Differences between expected and actual experience Changes of assumptions		(697,751) 98,188		-		(149,516)		- 906,229		727,053 (9,045,090)		- - 893,851		- 2,045,678 1,554,074		- - (5,591,242)
Benefit payments, including refunds of member contributions		(1,151,257)		(1,373,721)		(988,402)		(1,223,890)		(1,589,460)		(1,581,540)		(1,530,346)		(1,394,586)
Net change in total OPEB liability		572,611		1,044,394		1,292,523		1,954,600		(8,079,881)		1,633,737		4,218,469		(4,749,840)
Total OPEB liability, beginning		33,868,278		32,823,884		31,531,361		29,576,761		37,656,642		36,022,905		31,804,436		36,554,276
Total OPEB liability, ending (a)	\$	34,440,889	\$	33,868,278	\$	32,823,884	\$	31,531,361	\$	29,576,761	\$	37,656,642	\$	36,022,905	\$	31,804,436
Plan fiduciary net position for retirees Contributions - member	s	-	s	-	s	-	s	-	s	-	s	-	s	-	s	-
Contributions - employer Net investment income		1,497,755 2,949,268	-	1,332,464 2,065,791	Ĩ	1,277,664 (3,031,547)	-	1,186,563 4,987,761	-	1,127,014 752,517		1,100,509 1,037,784	Ĩ	1,069,640 1,333,324	•	1,037,124 1,738,914
Benefit payments, including refunds of member contributions Administrative expenses Other		(1,151,257) (140,692) -		(1,373,721) (141,629) -		(988,402) (124,368) -		(1,223,890) (127,631) -		(1,589,460) (164,654) -		(1,581,540) (119,519) -		(1,530,346) (133,624) -		(1,394,586) (238,856) -
Net change in fiduciary net position for retirees		3,155,074		1,882,905		(2,866,653)		4,822,803		125,417		437,234		738,994		1,142,596
Plan fiduciary net position for retirees, beginning		20,223,634		18,340,729		21,207,382		16,384,579		16,259,162		15,821,928		15,082,934		13,940,338
Plan fiduciary net position for retirees, ending (b)	\$	23,378,708	\$	20,223,634	\$	18,340,729	\$	21,207,382	\$	16,384,579	\$	16,259,162	\$	15,821,928	\$	15,082,934
Net OPEB liability, ending (a)-(b)	\$	11,062,181	\$	13,644,644	\$	14,483,155	\$	10,323,979	s	13,192,182	s	21,397,480	s	20,200,977	\$	16,721,502
Plan fiduciary net position for retirees as a percentage of the total OPEB liability		67.88%		59.71%		55.88%		67.26%		55.40%		43.18%		43.92%		47.42%
Covered payroll	s	339,968,000	s	309,318,600	\$	301,040,000	\$	299,768,500	S	291,745,500	S	283,884,893	s	276,287,000	s	260,552,680
Net OPEB liability as a percentage of covered payroll		3.25%		4.41%		4.81%		3.44%		4.52%		7.54%		7.31%		6.42%

See notes to historical pension and OPEB information.

\* This information will be presented each year until 10 years of such information is available.

(A Component Unit of the State of Maine)

#### **REQUIRED SUPPLEMENTARY INFORMATION**

#### SCHEDULE OF HISTORICAL OPEB INFORMATION STATE EMPLOYEE AND TEACHER PLAN

June 30, 2024 (UNAUDITED)

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years\*

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>
Actuarially determined contribution	\$ 13,056,677	\$ 11,593,184	\$ 11,242,005	\$ 10,964,907
Contributions in relation				
to the actuarially determined contribution	<u>    12,163,030</u>	11,053,496	10,584,751	9,866,578
Contribution deficiency	\$ <u>893,647</u>	\$539,688	\$657,254	\$1,098,329
Covered payroll	\$ 1,734,788,000	\$ 1,644,477,452	\$ 1,600,464,673	\$ 1,525,192,949
Contributions as a percentage of covered payroll	0.70%	0.67%	0.66%	0.65%

See notes to historical pension and OPEB information.

\*This information will be presented each year until 10 years of such information is available.

	<u>2020</u>		<u>2019</u>		<u>2018</u>		<u>2017</u>
\$	10,671,443	\$	9,040,284	\$	8,805,704	\$	8,239,903
	9,310,849	_	7,756,442	_	7,638,453		6,921,228
\$_	1,360,594	\$	1,283,842	\$_	1,167,251	\$	1,318,675
\$	1,484,372,700	\$	1,380,619,384	\$	1,343,668,500	<b>\$</b> 1,	277,009,000
	0.63%		0.56%		0.57%		0.54%

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

#### SCHEDULE OF HISTORICAL OPEB INFORMATION PLD CONSOLIDATED PLAN

June 30, 2024 (UNAUDITED)

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Last Ten Fiscal Years

			<u>2024</u>		<u>2023</u>	<u>2022</u>	<u>2021</u>
Actuarially determined contribution	m	\$	1,931,612	\$	1,996,217	\$ 1,942,791	\$ 1,586,809
Contributions in relation to the actuarially determined contribution		_	1,497,755	_	1,332,464	 1,277,664	 1,186,563
Contribution deficiency		\$ _	433,857	\$	663,753	\$ 665,127	\$ 400,246
Covered payroll		\$	339,968,000	\$	309,318,600	\$ 301,040,000	\$ 299,768,500
Contributions as a percentage of covered payroll			0.44%		0.43%	0.42%	0.40%

See notes to historical pension and OPEB information.

\*This information will be presented each year until 10 years of such information is available.

	<u>2020</u>	<u>2019</u>		<u>2018</u>		<u>2017</u>
\$	1,544,340	\$ 1,287,098	\$	1,252,650	\$	1,146,324
	1,127,014	 1,100,509	_	1,069,640		1,037,124
\$	417,326	\$ 186,589	\$_	183,010	\$_	109,200
\$	291,745,500	\$ 283,884,893	\$	276,287,000	\$	260,552,680
	0.39%	0.39%		0.39%		0.40%

(A Component Unit of the State of Maine)

#### REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL OPEB INFORMATION ALL OPEB PLANS

> June 30, 2024 (UNAUDITED)

SCHEDULE OF INVESTMENT RETURNS

Last Ten Fiscal Years \*

		<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Annual money-weighted rate of return, net of investment expenses		14.2%	11.0%	14.1%	30.6%	6.0%	6.6%	9.00%	12.88%

See notes to historical pension and OPEB information.

\* Retroactive information is not required to be presented. This information will be presented each year until 10 years of such information is available.

(A Component Unit of the State of Maine)

#### NOTES TO HISTORICAL PENSION AND OPEB INFORMATION

June 30, 2024 (UNAUDITED)

#### 1. <u>Basis of Presentation</u>

The schedule of investment returns for pension plans applies to the State Employee and Teacher Plan, the Judicial Plan, the Legislative Plan, the PLD Consolidated Plan, and the PLD Agent Plans, as investments of these plans are commingled. Assets in the Group Life Insurance Plans, including assets to provide life insurance benefits to active employees, are commingled for investment purposes but separately from the pension plan assets.

#### 2. Actuarial Methods and Assumptions – Defined Benefit Plans

The information in the historical pension information was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation date, June 30, 2024, is as follows:

#### Actuarial Cost Method

The Entry Age Normal actuarial funding method is used to determine costs. Under this funding method, the total employer contribution rate consists of two elements, the normal cost rate and the unfunded actuarial liability rate.

The individual entry age normal method is used to determine liabilities. Under the individual entry age normal method, a normal cost rate is calculated for each employee. This rate is determined by taking the value, as of age at entry into the plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age, of the member's expected future salary. The normal cost for each employee is the product of the member's pay and normal cost rate. The normal cost for the group is the sum of the normal costs for all members.

Experience gains and losses, i.e., decreases or increases in liabilities and/or in assets when actual experience differs from the actuarial assumptions, affect the unfunded actuarial accrued liability.

#### Asset Valuation Method

An actuarial value of assets is used for determining employer contributions. The use of an actuarial value of assets for this purpose helps mitigate volatility in contribution rates that might otherwise occur due to fluctuations in market conditions. The specific technique adopted in this valuation recognizes in a given year one-third of the investment return that is different from the actuarial assumption for investment return.

#### Amortization

The net pension liability of the State Employee and Teacher Retirement Program is amortized on a level percentage of payroll over the amortization period then in effect under statutory and constitutional requirements (Note 6 to the Financial Statements). The net pension liabilities of the Legislative Plan and the Judicial Plan are amortized on a level percentage of payroll over open ten year periods.

(A Component Unit of the State of Maine)

#### NOTES TO HISTORICAL PENSION AND OPEB INFORMATION

#### June 30, 2024 (UNAUDITED)

#### 2. Actuarial Methods and Assumptions – Defined Benefit Plans (Concluded)

The net pension liability of the PLD Consolidated Plan is amortized on a level percentage of payroll using a method where a separate twenty-year closed period is established annually for the gain or loss for that year.

Significant actuarial assumptions employed by the actuary for funding purposes as of June 30 for each year indicated are as follows:

	State Employee and Teacher Plan	Judicial Plan	Legislative Plan	PLD Consolidated Plan
Investment Rate of Return	Per annum, compounded annually: 6.50% June 30, 2022 and June 30, 2021; 6.75% f June 30, 2018; 6.875% for June 30, 2017 30, 201	for June 30, 2020, and June 30, 2016	June 30, 2019 and	Per annum, compounded annually: 6.50% for June 30, 2024, June 30, 2023, June 30, 2022 and June 30, 2021; 6.75% for June 30, 2020, June 30, 2019 and June 30, 2018; 6.875% for June 30, 2017 and June 30, 2016; 7.125% for June 30, 2015
Inflation Rate			ne 30, 2021, June 3 016; 3.50% for June	0, 2020, June 30, 2019, June 30, 2018, June 30, 2015
	1	June 30, 2024, Jun	e 30, 2023, June 30	), 2022 and June 30, 2021
	State employees, 3.26% - 9.43%; Teachers, 2.80% - 13.03%	2.75%	2.75%	2.75% - 11.48%
Annual Salary	For the periods ended June 30,	2020; June 30, 20	19; June 30, 2018;	June 30, 2017; and June 30, 2016:
Increases, including Inflation	State employees, 2.75% - 8.75%; Teachers, 2.75% - 14.50%	2.75%	2.75%	2.75% - 9.00%
		For the period e	nded June 30, 2015	
	State employees, 3.50% - 10.50%; Teachers, 3.50% - 13.50%	3.50%	3.50%	3.50% - 9.50%
Cost of Living Benefit Increases	2.20% for June 30, 2024, June 30, 2023, Ju 2020, June 30, 2019, June 30, 2018, June for June 30,	30, 2017 and June		1.91% for June 30, 2024, June 30, 2023, June 30, 2022, June 30, 2021, June 30, 2020, June 30, 2019 and June 30, 2018; 2.20% for June 30, 2017 and June 30, 2016; 2.55% for June 30, 2015
	For the periods ended .	June 30, 2024, Jun	e 30, 2023, June 30	), 2022 and June 30, 2021
	State Employee, Judicial, and Legislati General Benefits-Weighted Healthy Ret females, projected generationally using based on the 2010 Public Plan Teacher I Mortality Table, for males and females, RPEC_2020	iree Mortality Tab the RPEC_2020 m Benefits-Weighted projected generati model.	le, for males and odel. Teachers: Healthy Retiree onally using the	Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.
				June 30, 2017; and June 30, 2016:
Mortality Rates	RP2014 Total Dataset Healthy Annuitar	nt Mortality Table, aset Disabled Annu	for males and fema aitant Mortality Tal	hers, legislative, judicial, and PLD plans, the ales, is used. For all recipients of disability ple, for males and females, is used.
		1	nded June 30, 2015	
	RP2000 Tables projected forward to 202 teacher plan. Mortality assumptions were the other Plans, based on actual demograp	15 using Scale AA also reviewed and bhic data of the Pla	are used; the ages updated in 2011 fo	ters, legislative, judicial, and PLD plans, the are set back two years for employees of the r the PLD Consolidated Plan, and in 2012 for tts of disability benefits, the Revenue Ruling males is used.

(A Component Unit of the State of Maine)

#### NOTES TO HISTORICAL PENSION AND OPEB INFORMATION

June 30, 2024 (UNAUDITED)

#### 3. Actuarial Methods and Assumptions – Group Life Insurance Plans

The information in the historical Group Life Insurance Plan information was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation date, June 30, 2024, is as follows:

#### Actuarial Cost Method

The individual entry age normal method is used to determine liabilities. Under the individual entry age normal method, a normal cost rate is calculated for each employee. This rate is determined by taking the value, as of age at entry into the plan, of the member's projected future benefits, and dividing it by the value, also as of the member's entry age, of the member's expected future salary. The normal cost for each employee is the product of the member's pay and normal cost rate. The normal cost for the group is the sum of the normal costs for all members.

The actuarial accrued liability is defined as the present value of future benefits less the present value of future normal cost contributions. The unfunded actuarial accrued liability is the total of the actuarial liability for all members less the actuarial value of the System's assets.

Experience gains and losses, i.e., decreases or increases in liabilities and/or in assets when actual experience differs from the actuarial assumptions, affect the unfunded actuarial accrued liability.

#### Asset Valuation Method

Asset amounts are taken as reported to the actuaries by the System without audit or change, except that State of Maine assets are allocated to State, Legislators, and Judges based on total actuarial liability.

#### Amortization

The unfunded actuarial accrued liability is being amortized as a level percentage of payroll over a 30-year period on a closed basis. As of June 30, 2024, there were 14 years remaining in the amortization schedule for state employees and teachers, and 7 years remaining for PLD employees.

(A Component Unit of the State of Maine)

#### NOTES TO HISTORICAL PENSION AND OPEB INFORMATION

#### June 30, 2024 (UNAUDITED)

#### 3. Actuarial Methods and Assumptions – Group Life Insurance Plan (Concluded)

Significant actuarial assumptions employed by the actuary for funding purposes as of June 30 for each year indicated are as follows:

	State employees, including judges and legislators	Teachers	PLD employees
		Per annum, compounded annual	y:
Investment Rate of Return	6.50% for June 30, 2024, June 30, 2021; 6.75% for June 30, 2020, 3 6.875% for J	June 30, 2019 and June 30, 2018;	<ul> <li>6.50% for June 30, 2024, June 30,</li> <li>2023, June 30, 2022 and June 30, 2021;</li> <li>6.75% for June 30, 2020; 4.98% for</li> <li>June 30, 2019; 5.13% for June 30,</li> <li>2018; 5.41% for June 30, 2017</li> </ul>
Inflation Rate	2.75% for June 30, 2024, June 30,	2023, June 30, 2022, June 30, 2021, 2018 and June 30, 2017	June 30, 2020, June 30, 2019, June 30,
	For June 30,	2024, June 30, 2023, June 30, 2022	and June 30, 2021
Annual Salary Increases,	State employees: 3.26% - 9.43%; Judges and Legislators: 2.75%	2.80 - 13.03%	2.75% - 11.48%
including Inflation	For June 30,	2020, June 30, 2019, June 30, 2018	and June 30, 2017
	2.75% - 8.75%	2.75% - 14.50%	2.75% - 9.00%
	For June 30,	2024, June 30, 2023, June 30, 2022	and June 30, 2021
Mortality Rates	Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.	Based on the 2010 Public Plan Teacher Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.	Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.
	For June 30,	2020, June 30, 2019, June 30, 2018	and June 30, 2017
	RP2014 Total Dataset Healthy An	nuitant Mortality Table, for males an	, legislative, judicial, and PLD plans, the nd females, is used. For all recipients of rtality Table, for males and females, is
Participation Rate for Future Retirees		100% of those currently enrolle	d
Conversion Charges	Apply to the cost o	f active group life insurance, not ret	iree group life insurance
Form of Benefit Payment		Lump sum	

(A Component Unit of the State of Maine)

#### ADDITIONAL SUPPLEMENTARY INFORMATION

#### SCHEDULE OF INVESTMENT EXPENSES

#### For the Year Ended June 30, 2024

	State Employee and Teacher Plan	Judicial Plan	Legislative <u>Plan</u>	PLD Consolidated Plan	PLD Agent Plan
Asset Class					
Alternative Credit	\$13,938,356	\$ 79,015	\$15,402	\$3,577,472	\$ 6,435
Infrastructure	19,156,641	108,599	21,166	4,916,813	8,847
Natural Resources	5,739,330	32,539	6,340	1,473,077	2,651
Public Equity	487,972	2,715	529	122,935	223
Fixed Income	277,578	1,574	307	71,245	128
Private Equity	35,834,062	203,143	39,594	9,197,298	16,555
Real Estate	16,395,686	92,945	18,118	4,208,177	7,570
Risk Diversifier	12,517,416	70,960	13,831	3,212,766	5,781
Other Investment Expenses	-	-	-	_	_
In-house investment management	4,555,946	25,827	5,034	<u>1,169,346</u>	2,104
Total investment expenses	\$ <u>108,893,987</u>	\$ <u>617,317</u>	\$ <u>120,321</u>	\$ <u>27,949,129</u>	\$ <u>50,294</u>

Group Life Insurance Plan Actives	Group L Insuran Plan <u>Retired S</u>	ce	]	Group Life Insurance Plan Retired PLD	Cont	fined ribution lans	M	ainePERS OPEB Trust	5 H Ins	etiree lealth urance st Fund	Total
\$ _	\$	_	\$	_	\$	_	\$	-	\$	_	\$17,616,680
—		_		_		-		-		_	24,212,066
_		_		_		-		-		_	7,253,937
1,425	19,3	25		2,761				2,193		68,433	699,511
1,041	14,1	13		2,016		_		1,069		51,910	421,521
_		_		_		_		_		_	45,290,652
198	2,6	75		382		-		304		9,785	20,735,840
_		_		_		-		_		-	15,820,754
_		_		-		51,554		_		_	51,554
 3,328	45,1	<u>10</u>	_	6,445	_			<u> </u>			<u>5,818,251</u>
\$ 5,992	\$ <u>81,2</u>	23	\$	11,604	\$	51,554	\$_	9,217	\$ <u>1</u>	130,128	\$ <u>137,920,765</u>

(A Component Unit of the State of Maine)

#### ADDITIONAL SUPPLEMENTARY INFORMATION

#### SCHEDULE OF ADMINISTRATIVE EXPENSES

#### For the Year Ended June 30, 2024

	State Employee and Teacher <u>Plan</u>	Judicial Plan	Legislative Plan	PLD Consolidated <u>Plan</u>	PLD Agent Plan
Personal services	\$ 8,737,136	\$ 50,249	\$ 9,669	\$2,229,640	\$ 4,127
Professional fees	1,608,091	9,249	1,779	410,370	759
Computer services	1,215,208	6,989	1,345	310,110	574
Telephone, data, and internet services	115,473	664	128	29,468	55
Printing and postage	534,774	3,076	592	136,469	253
Office rent and building operations	358,780	2,063	397	91,557	169
Depreciation	360,326	2,072	399	91,952	170
Other operating expenses	752,744	4,329	<u>833</u>	192,095	356
Total administrative expenses	\$ <u>13,682,532</u>	\$ <u>78,691</u>	\$ <u>15,142</u>	\$ <u>3,491,661</u>	\$ <u>6,463</u>

Group Life Insurance Plan Active	Group Life Insurance Plan Retired SET	Group Life Insurance Plan Retired PLD	Defined Contribution Plans	Retiree Health Insurance Trust Fund	Total
Active	Kenied SET	Retifed I ED	1 14115	Trust Fund	10tai
\$ 50,461 9,288	\$ 621,205 114,335	\$ 89,840 16,535	\$ 173,050 31,850	\$ 3,700	\$11,969,077 2,202,256
7,018	86,401	12,495	24,069	_	1,664,209
667	8.210	1.187	2,287	_	158,139
3,089	38,022	5,499	10,592	-	732,366
2,072	25,509	3,689	7,106	-	491,342
2,081	25,619	3,705	7,137	-	493,461
4,347	<u>53,519</u>	7,742	<u>14,909</u>	-	1,030,874
\$ <u>79,023</u>	\$ <u>972,820</u>	\$ <u>140,692</u>	\$ <u>271,000</u>	\$ <u>3,700</u>	\$ <u>18,741,724</u>

(A Component Unit of the State of Maine)

#### ADDITIONAL SUPPLEMENTARY INFORMATION

#### SCHEDULE OF PROFESSIONAL FEES

For the Year Ended June 30, 2024

Professional fee		
Audit*	\$	124,396
Actuarial services		330,148
IT service		947,863
Legal services		130,729
Medical consulting services and expenses		176,527
Other services		492,593
Total professional fees	\$ <u>2</u>	2,202,256

\*Including outsourced internal audit services

#### MAINEPERS

#### **BOARD OF TRUSTEES INVESTMENTS MEMORANDUM**

TO: BOARD MEMBERS

FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER

SUBJECT: MONTHLY INVESTMENT REVIEW

DATE: OCTOBER 2, 2024

Following this memo is the Monthly Investment Review for September and the Co-Investment Semi-Annual Reporting.

#### 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 \$20.1 billion.
- Monthly return of 0.7%.
- Calendar year-to-date return of 6.7%.
- Fiscal year-to-date return of 2.2%.



# Investment Review October 10, 2024

### **Investment Objective**

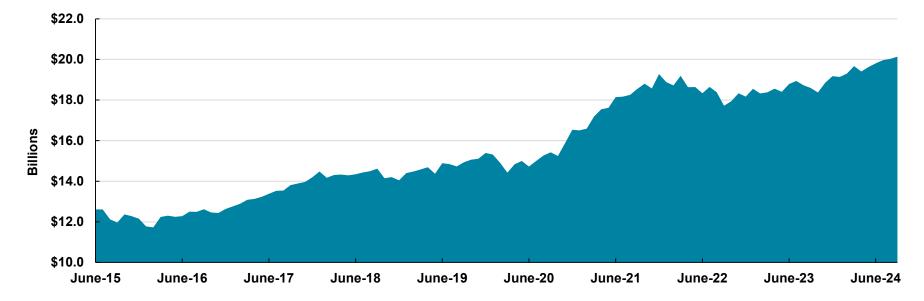
MainePERS' investment objectives balance the System's twin goals of generating investment returns (to ensure growth of the trust funds) and minimizing investment risks (loss of capital and cash flow shortfalls).

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.

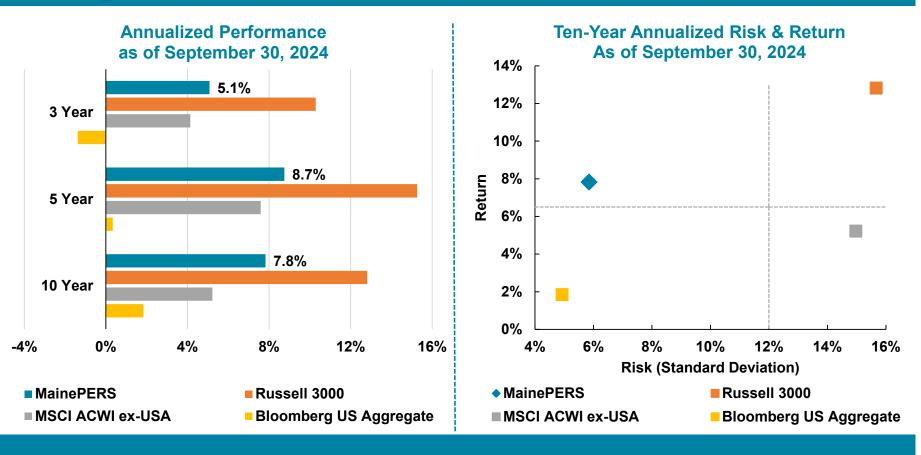
## September 2024 Performance (Preliminary)

### The preliminary fund value at the end of September is \$20.1 billion.



Fund and Benchmark Returns					
	Septembe	r CYTD	FYTD		
	2024	2024	2025	1 Year	
MainePERS	0.7%	6.7%	2.2%	10.8%	
Russell 3000	2.1%	20.6%	6.2%	35.2%	
MSCI ACWI ex-USA	2.7%	14.2%	8.1%	25.4%	
Bloomberg US Aggregate	1.3%	4.4%	5.2%	11.6%	

# **Long-Term Performance & Risk**



- Fund returns have exceeded the System's discount rate over the long term
- U.S. allocations buoyed MainePERS performance over all periods
- Diversification has resulted in strong risk/return profile over trailing 10 years
  - Substantially lower risk than global equity markets

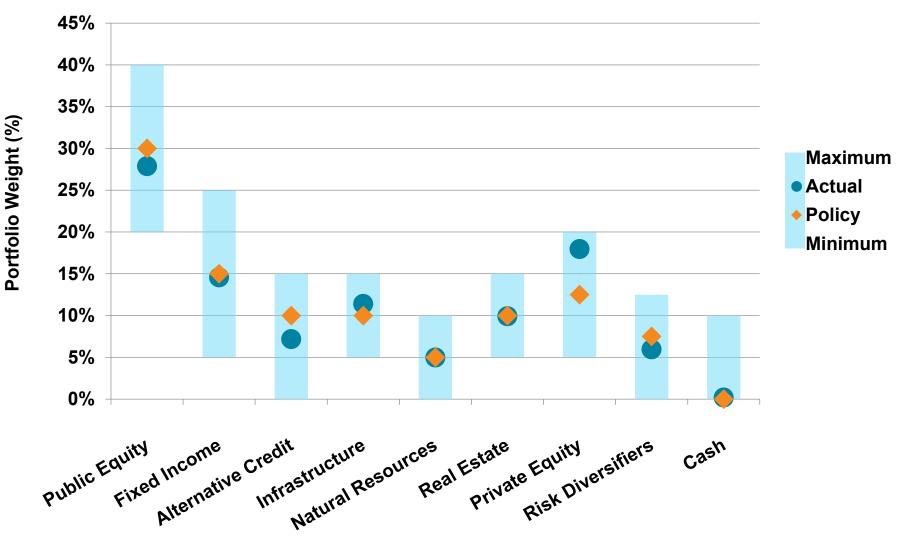
## September 2024 Asset Allocation (Preliminary)

Assets (Millions)	Value	% of Fund	Policy %
MainePERS Portfolio	\$ 20,136	100.0%	100.0%
Domestic Equity	\$ 3,620	18.0%	19.3%
International Equity	\$ 1,994	9.9%	10.7%
Fixed Income	\$ 2,934	14.6%	15.0%
Alternative Credit	\$ 1,444	7.2%	10.0%
Infrastructure	\$ 2,295	11.4%	10.0%
Natural Resources	\$ 1,002	5.0%	5.0%
Private Equity	\$ 3,616	18.0%	12.5%
Real Estate	\$ 1,995	9.9%	10.0%
Risk Diversifiers	\$ 1,199	6.0%	7.5%
Cash	\$ 37	0.2%	0.0%

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

Private equity remains overweight at ~18.0% of Fund value, and private markets assets in aggregate comprise 51.4% of the overall portfolio, above the 47.5% policy weight.

## September 2024 Asset Allocation (Preliminary)

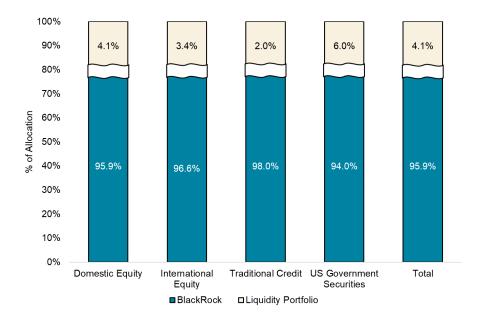


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# **Public Securities: Liquidity Portfolio**

At the end of September, 1.8% of Fund assets were invested via ETFs and futures contracts in an account managed by Parametric Associates.

The Liquidity Portfolio accounts for 4.1% of MainePERS' total exposure to public securities.



MainePERS Liquidity Portfolio	Market Value (Millions)	Exposure Type
Parametric Domestic Equity	\$148.7	Futures
Parametric International Equity	\$68.5	Futures
Parametric Traditional Credit	\$19.7	ETFs
Parametric US Government Securities	\$116.9	Futures
Total Liquidity Portfolio	\$353.8	

# **Derivatives and Leverage**

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: September 2024**

Description	FY 25	FY 24	FY 23	FY 22	FY 21
Investment Mgmt. Fees	\$33,116,784	\$131,940,081	\$135,770,817	\$130,884,088	\$120,429,567
Securities Lending Fees <sup>1</sup>	142,387	1,356,735	1,303,543	1,744,317	1,653,172
Consulting Fees	303,750	1,215,000	1,193,543	1,120,000	1,120,000
Broker Commissions <sup>2</sup>	27,261	77,495	136,039	77,558	52,364
Placement Agent Fees	0	0	0	0	0
Total	\$33,590,182	\$134,589,311	\$138,403,942	\$133,825,963	\$123,255,103
Percentage of Fund <sup>3</sup>	0.67%	0.68%	0.74%	0.73%	0.68%

- 1. Securities Lending Fees are through 8/31/2024
- 2. Actual paid commissions reported by JP Morgan
- 3. For FY25: Total fees projected for the full fiscal year (\$134,360,729) divided by current Fund value. For prior FY: Total fees divided by FYE Fund value.

# **Securities Lending: August 2024**

	Average Lendable Assets	Average Assets On Loan	Total Sec Lending Revenue	Revenue Split	MainePERS Net Income	MainePERS Net Income, FYTD
<u>BlackRock</u>						
Fixed Income	\$2,352,437,617	\$1,485,611,561	\$100,762	60%/40%	\$60,457	\$128,914
Total Equity	\$1,610,912,206	\$155,259,911	\$64,499	60%/40%	\$43,215	\$94,535
Total Blackrock	\$3,963,349,823	\$1,640,871,472	\$165,261		\$103,672	\$223,449
JP Morgan						
Domestic Equities	\$3,121,723,614	\$99,415,032	\$36,849	85%/15%	\$31,324	\$58,893
Total JP Morgan	\$3,121,723,614	\$99,415,032	\$36,849		\$31,324	\$58,893
Total	\$7,085,073,437	\$1,740,286,504	\$202,110		\$134,996	\$282,342
Total Annualized Secu	irities Lending Incom	e, FY 2025:	\$	61,694,051 (	0.01%, or 0.8 b	ops)
Total Actual Securities	Lending Income, FY	<u>′</u> 2024:	\$	52,441,429 (	0.01%, or 1.2 b	ops)

# **Liquidity Schedule: September 2024**

Term	Market Value	Percent of Portfolio
Liquid <sup>1</sup>	\$8,585m	42.6%
Semi-Liquid <sup>2</sup>	\$2,281m	11.3%
Illiquid <sup>3</sup>	\$9,270m	46.0%
Total	\$20,136m	100.0%

Sources and Uses of Liquidity		
Private Markets Activity	Last 12 Months Actual	Next 12 Months Projection
Capital Contributions	-\$990m	-\$730m
Distributions	\$1,250m	\$1,830m
Net Private Markets Activity	\$261m	\$1,100m
Benefit Payments	-\$440m	-\$460m
Net Cash Flows	-\$179m	\$640m

<sup>1</sup>Liquid assets includes public equities and public fixed income

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

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

# **MainePERS Alternative Investments Summary**

		# of GP
as of 09/30/2024	# of Funds	Relationships
Alternative Credit	25	13
Infrastructure	36	11
Natural Resources	16	10
Private Equity	132	35
Real Estate	35	18
<b>Risk Diversifiers</b>	12	11
Total*	256	89

\*GP Total may not add due to overlapping relationships

Currently, MainePERS is invested in 256 funds, and has 89 distinct manager relationships.

# MainePERS Alternative Investments Summary

(in \$millions)		Current	Market Value		Unfunded Cor	<u>nmitment</u>
as of 09/30/2024	D	ollars	% of Fund	Policy %*	Dollars	% of Fund
Alternative Credit	\$	1,444	7.2%	10.0%	\$ 739	3.7%
Infrastructure	\$	2,295	11.4%	10.0%	\$ 455	2.3%
Natural Resources	\$	1,002	5.0%	5.0%	\$ 212	1.1%
Private Equity	\$	3,616	18.0%	12.5%	\$ 1,098	5.5%
Real Estate	\$	1,995	9.9%	10.0%	\$ 250	1.2%
<b>Risk Diversifiers</b>	\$	1,199	6.0%	7.5%	\$ 80	0.4%
Total Alternatives	\$	11,551	57.4%	55.0%	\$ 2,834	14.1%

For more details please see Private Markets Investment Summary at http://www.mainepers.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 3/31/2024 values, adjusted for subsequent cash flows.

(in \$millions)		Private	ar	3-Year						
as of 09/30/2024	2	2021		2022	2023		2	024	Ave	rage <sup>1</sup>
Alternative Credit	\$	410	\$	550	\$	80	\$	175	\$	347
Infrastructure	\$	180	\$	200	\$	50	\$	25	\$	143
Natural Resources	\$	-	\$	30	\$	40	\$	-	\$	23
Private Equity	\$	438	\$	218	\$	71	\$	249	\$	242
Real Estate	\$	285	\$	180	\$	50	\$	35	\$	172
Total Commitments	\$	1,313	\$	1,178	\$	291	\$	484	\$	927

<sup>1</sup>3-Year Average: 2021-2023

Asset Class Summary	Co	mmitment (A)	с	Amount ontributed (B)	Total Distributions (C)			rrent Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit	\$	2,495,925	\$	2,056,258	\$	1,017,133	\$	1,468,892	\$ 2,486,026	7.7%
Infrastructure	\$	3,437,715	\$	3,657,011	\$	2,933,600	\$	2,413,946	\$ 5,347,546	11.1%
Natural Resources	\$	1,060,500	\$	1,123,086	\$	462,908	\$	1,010,735	\$ 1,473,644	6.1%
Private Equity	\$	5,015,300	\$	4,976,214	\$	4,450,956	\$	3,675,593	\$ 8,126,549	15.3%
Real Estate	\$	2,777,129	\$	2,859,718	\$	1,977,520	\$	1,895,327	\$ 3,872,847	6.1%
Total	\$	14,786,569	\$	14,672,288	\$	10,842,118	\$	10,464,494	\$ 21,306,611	10.0%

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

Co-Investment Summary	Co	Commitment # of Co- (A) Investments		Amount ontributed (B)	D	Total istributions (C)	Current Market Value (D)			Total Value (C+D)	Interim Net IRR
Alternative Credit Co-Investments	\$	265,353	36	\$ 262,515	\$	125,081	\$	193,709	\$	318,790	10.1%
Infrastructure Co-Investments	\$	218,580	11	\$ 215,477	\$	261,781	\$	127,062	\$	388,843	14.3%
Natural Resources Co-Investments	\$	32,500	2	\$ 32,662	\$	37	\$	51,466	\$	51,503	10.6%
Private Equity Co-Investments	\$	379,323	33	\$ 382,289	\$	317,567	\$	267,636	\$	585,204	12.6%
Real Estate Co-Investments	\$	66,880	5	\$ 60,583	\$	8,166	\$	37,409	\$	45,575	-8.6%
Total	\$	962,636	87	\$ 953,525	\$	712,632	\$	677,283	\$	1,389,915	11.9%

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

#### Alternative Credit

				4	Amount		Total	Cu	rrent Market		
	Cor	nmitment		Со	ntributed	Dis	stributions		Value	Total Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)	(C+D)	IRR
Angelo Gordon Direct Lending Fund II	\$	25,000	3/31/2020	\$	23,749	\$	22,560	\$	11,397	\$ 33,958	17.7%
Angelo Gordon Direct Lending Fund III	\$	100,000	7/20/2018	\$	103,070	\$	85,450	\$	58,818	\$ 144,268	10.5%
Participation Agreement #1	\$	7,500	10/11/2019	\$	7,479	\$	2,760	\$	6,951	\$ 9,711	8.3%
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	\$	3,357	\$	9,515	\$ 12,872	9.6%
Participation Agreement #5	\$	5,000	12/6/2019	\$	5,000	\$	6,824	\$	-	\$ 6,824	9.9%
Participation Agreement #6	\$	10,000	12/6/2019	\$	9,991	\$	3,347	\$	9,566	\$ 12,913	10.0%
Participation Agreement #7	\$	5,000	12/11/2019	\$	5,000	\$	2,307	\$	4,583	\$ 6,889	9.3%
Participation Agreement #8	\$	5,000	8/13/2020	\$	4,866	\$	2,011	\$	4,551	\$ 6,562	9.8%
Participation Agreement #9	\$	7,500	4/9/2021	\$	7,425	\$	2,414	\$	7,046	\$ 9,460	10.6%
Participation Agreement #10	\$	5,000	4/20/2021	\$	4,996	\$	1,831	\$	4,518	\$ 6,349	10.1%
Participation Agreement #11	\$	5,000	5/5/2021	\$	5,000	\$	1,428	\$	4,581	\$ 6,009	7.4%
Angelo Gordon Direct Lending Fund IV	\$	100,000	1/24/2020	\$	95,000	\$	23,051	\$	101,815	\$ 124,867	11.7%
Participation Agreement #1	\$	5,000	10/23/2020	\$	4,913	\$	6,266	\$	-	\$ 6,266	9.2%
Participation Agreement #2	\$	12,500	8/17/2021	\$	12,295	\$	2,997	\$	12,001	\$ 14,998	10.0%
Participation Agreement #3	\$	7,500	10/5/2021	\$	7,500	\$	7,913	\$	-	\$ 7,913	7.9%
Participation Agreement #4	\$	5,000	12/21/2021	\$	4,925	\$	1,209	\$	4,846	\$ 6,055	10.5%
Participation Agreement #5	\$	5,000	12/21/2021	\$	4,925	\$	1,846	\$	4,136	\$ 5,983	10.2%
Participation Agreement #6	\$	5,000	1/12/2022	\$	4,913	\$	1,216	\$	4,833	\$ 6,050	10.8%
Participation Agreement #7	\$	7,500	1/12/2022	\$	7,378	\$	1,812	\$	7,232	\$ 9,044	10.6%
Participation Agreement #8	\$	12,500	6/16/2022	\$	12,391	\$	2,607	\$	12,181	\$ 14,788	NM
Angelo Gordon Direct Lending Fund IV Annex	\$	50,000	11/18/2021	\$	47,500	\$	8,589	\$	48,801	\$ 57,390	11.2%
Angelo Gordon Direct Lending Fund V	\$	125,000	8/3/2022	\$	53,125	\$	1,948	\$	58,830	\$ 60,778	NM
Participation Agreement #1	\$	7,500	9/1/2022	\$	7,388	\$	1,342	\$	7,286	\$ 8,628	NM
Participation Agreement #2	\$	12,500	10/7/2022	\$	12,263	\$	2,192	\$	12,201	\$ 14,393	NM
Participation Agreement #3	\$	10,000	10/19/2022	\$	9,850	\$	1,733	\$	9,718	\$ 11,450	NM
Participation Agreement #4	\$	10,000	10/27/2022	\$	9,800	\$	2,136	\$	9,264	\$ 11,401	NM
Participation Agreement #5	\$	10,000	2/27/2023	\$	9,811	\$	1,415	\$	9,731	\$ 11,146	NM
Participation Agreement #6	\$	5,000	10/20/2023	\$	4,875	\$	264	\$	4,878	\$ 5,142	NM
Ares Capital Europe IV	\$	122,000	4/30/2018	\$	96,890	\$	38,355	\$	76,994	\$ 115,349	4.6%
Ares Capital Europe V	\$	122,000	9/4/2020	\$	88,832	\$	13,386	\$	88,428	\$ 101,814	7.3%
Ares Capital Europe VI	\$	82,500	3/17/2023	\$	15,529	\$	903	\$	15,619	\$ 16,522	NM
Ares Senior Direct Lending Fund II	\$	100,000	12/10/2021	\$	64,428	\$	12,352	\$	65 <i>,</i> 895	\$ 78,247	15.4%

#### Alternative Credit

				ļ	Amount		Total	Cu	rrent Market		
	Со	nmitment		Со	ntributed	Dis	stributions		Value	Total Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)	(C+D)	IRR
Ares Senior Direct Lending Fund III	\$	100,000	7/28/2023	\$	0	\$	-	\$	305	\$ 305	NM
Audax Senior Debt (MP), LLC	\$	100,000	6/30/2017	\$	100,000	\$	103,200	\$	30,869	\$ 134,069	5.2%
Brookfield Infrastructure Debt Fund III	\$	100,000	7/15/2022	\$	69,835	\$	25,319	\$	47,836	\$ 73,156	NM
Comvest Credit Partners VI	\$	125,000	5/20/2022	\$	78,370	\$	20,866	\$	66,685	\$ 87,551	NM
Deerpath Capital VI	\$	75,000	9/30/2021	\$	54,590	\$	9,668	\$	55,378	\$ 65,046	8.5%
Global Infrastructure Partners Spectrum	\$	100,000	2/20/2019	\$	110,990	\$	51,899	\$	69,576	\$ 121,475	7.4%
Mesa West Core Lending Fund	\$	100,000	6/18/2013	\$	127,612	\$	66,647	\$	101,621	\$ 168,268	4.3%
Blue Owl Capital Corporation	\$	100,000	3/10/2017	\$	116,571	\$	152,640	\$	23,417	\$ 176,057	9.7%
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	\$	4,987	\$	6,733	\$	-	\$ 6,733	7.7%
Participation Agreement #6	\$	11,653	8/7/2020	\$	12,642	\$	4,603	\$	11,083	\$ 15,686	10.7%
Participation Agreement #7	\$	7,500	7/26/2021	\$	6,557	\$	7,970	\$	-	\$ 7,970	9.8%
Participation Agreement #8	\$	12,500	6/17/2022	\$	12,778	\$	2,819	\$	12,290	\$ 15,109	NM
Participation Agreement #9	\$	7,500	9/26/2022	\$	7,388	\$	1,385	\$	7,184	\$ 8,569	NM
Blue Owl Capital Corporation III	\$	100,000	6/19/2020	\$	118,400	\$	35,520	\$	116,446	\$ 151,966	11.0%
Pathlight Capital Fund II	\$	75,000	4/22/2021	\$	120,219	\$	74,455	\$	61,878	\$ 136,333	10.8%
Participation Agreement #1	\$	7,500	4/1/2022	\$	7,292	\$	2,747	\$	6,309	\$ 9,056	13.1%
Participation Agreement #2	\$	7,500	4/1/2022	\$	7,429	\$	1,764	\$	7,225	\$ 8,988	11.0%
Pathlight Capital Fund III	\$	75,000	6/24/2022	\$	90,556	\$	50,442	\$	49,029	\$ 99,471	NM
Solar Capital Private Corporate Lending Fund	\$	50,000	6/26/2019	\$	40,188	\$	10,856	\$	41,875	\$ 52,731	12.0%
Solar Capital Debt Fund	\$	50,000	6/26/2019	\$	25,000	\$	4,473	\$	26,629	\$ 31,102	12.8%
SLR Private Corporate Lending Fund II	\$	125,000	12/23/2022	\$	6,202	\$	37	\$	7,707	\$ 7,743	NM
Silver Point Specialty Credit II	\$	50,000	1/31/2020	\$	62,775	\$	31,238	\$	42,597	\$ 73,835	10.1%
Tennenbaum Direct Lending VIII	\$	100,000	11/30/2017	\$	100,883	\$	95,288	\$	30,154	\$ 125,443	6.4%

#### Infrastructure

	-			Amount		Total		Current	Total Value		
Fund Name	COI	mmitment (A)	Date of Commitment	ntributed (B)	Dis	(C)	ivia	rket Value (D)	IC	(C+D)	Interim Net IRR
Alinda Infrastructure Fund II	\$	50,000	9/17/2009	68,297	Ś	74,099	Ś	304	\$	74,403	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	\$	-	\$	46,422	\$	184,012	3.3%
Great River Hydro Partners	\$	12,000	6/17/2017	10,718	\$		\$	-	\$	45,094	39.5%
Brookfield Infrastructure Fund II	\$	100,000	6/28/2013	\$ 118,049	\$	116,279	\$	90,093	\$	206,371	10.0%
Brookfield Infrastructure Fund III	\$	100,000	4/15/2016	\$ 111,825	\$	68,123	\$	108,470	\$	176,593	12.3%
Co-Investment #1	\$	20,000	3/31/2017	\$ 15,953	\$	28,056	\$	10,175	\$	38,231	26.2%
Carlyle Global Infrastructure Opportunity Fund	\$	100,000	5/1/2019	\$ 96,534	\$	23,764	\$	99,715	\$	123,479	12.0%
Carlyle Infrastructure Partners	\$	50,000	11/2/2007	\$ 57,366	\$	64,289	\$	356	\$	64,645	2.5%
Carlyle Power Partners II	\$	50,000	11/19/2015	\$ 64,785	\$	45,161	\$	47,645	\$	92,806	9.8%
Cube Infrastructure	\$	45,000	4/16/2010	\$ 60,063	\$	96,665	\$	422	\$	97,087	8.0%
Cube Infrastructure II	\$	90,000	9/11/2018	\$ 78,539	\$	5,744	\$	77,566	\$	83,310	1.5%
Cube Infrastructure III	\$	90,000	8/16/2021	\$ 57,514	\$	228	\$	59,636	\$	59 <i>,</i> 865	2.9%
EQT Infrastructure III	\$	68,000	12/3/2016	\$ 105,793	\$	158,963	\$	24,019	\$	182,982	20.5%
EQT Infrastructure IV	\$	100,000	12/17/2018	\$ 100,014	\$	17,265	\$	120,549	\$	137,815	11.0%
EQT Infrastructure V	\$	75,000	12/8/2020	\$ 66,568	\$	8,532	\$	71,371	\$	79,902	12.1%
Global Energy & Power Infrastructure Fund	\$	50,000	6/30/2010	\$ 59,778	\$	53,144	\$	2,246	\$	55 <i>,</i> 390	-2.1%
Global Energy & Power Infrastructure Fund II	\$	100,000	10/21/2013	\$ 128,643	\$	129,302	\$	24,678	\$	153,980	10.8%
Global Infrastructure Partners Sonic	\$	35,000	7/31/2020	\$ 34,110	\$	-	\$	21,073	\$	21,073	-13.5%
Global Infrastructure Partners	\$	75,000	3/31/2008	\$ 101,173	\$	205,062	\$	229	\$	205,290	17.2%
Global Infrastructure Partners II	\$	75,000	12/3/2011	\$ 106,369	\$	150,432	\$	37,986	\$	188,418	15.8%
Global Infrastructure Partners III	\$	150,000	4/15/2016	\$ 185,998	\$	111,281	\$	155,581	\$	266,861	9.6%
Co-Investment #1	\$	29,000	2/28/2017	\$ 27,950	\$	17,727	\$	32,984	\$	50,711	12.3%
Co-Investment #2	\$	25,000	8/16/2018	\$ 27,071	\$	3,392	\$	24,973	\$	28,365	0.9%
Global Infrastructure Partners IV	\$	150,000	12/21/2018	\$ 143,831	\$	18,198	\$	141,780	\$	159,978	6.0%
IFM Global Infrastructure (US), L.P.	\$	100,000	12/20/2012	\$ 144,550	\$	208,040	\$	-	\$	208,040	9.8%
KKR Diversified Core Infrastructure Fund	\$	100,000	4/29/2022	\$ 103,124	\$	3,124	\$	105,980	\$	109,104	NM
KKR Global Infrastructure Investors	\$	75,000	9/29/2010	\$ 87,917	\$	154,328	\$	93	\$	154,421	13.1%
KKR Global Infrastructure Investors II	\$	150,000	10/24/2014	\$ 186,972	\$	274,876	\$	53,669	\$	328,545	16.9%

#### Infrastructure

					Amount		Total		Current			
	Cor	nmitment		Со	ntributed	Dis	tributions	Ma	rket Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
KKR Atlanta Co-Invest	\$	24,000	9/26/2014	\$	21,428	\$	28,551	\$	-	\$	28,551	5.7%
KKR Taurus Co-Invest II	\$	25,000	8/15/2017	\$	25,000	\$	56,779	\$	840	\$	57,619	21.3%
KKR Byzantium Infrastructure Aggregator	\$	15,000	10/17/2017	\$	15,000	\$	7,013	\$	12,612	\$	19,625	6.0%
KKR Global Infrastructure Investors III	\$	100,000	3/29/2018	\$	92,014	\$	28,072	\$	102,286	\$	130,358	12.8%
Meridiam Infrastructure (SCA)	\$	11,000	9/23/2015	\$	21,938	\$	13,041	\$	27,651	\$	40,692	9.1%
Meridiam Infrastructure (SCA) B Shares	\$	1,000	9/23/2015	\$	305	\$	55	\$	25,370	\$	25,425	77.0%
Meridiam Infrastructure Europe II (SCA)	\$	22,500	9/23/2015	\$	36,936	\$	18,374	\$	38,586	\$	56,960	8.7%
Meridiam Infrastructure Europe III SLP	\$	95,000	4/27/2016	\$	73,719	\$	18,080	\$	71,585	\$	89,664	5.9%
Meridiam Sustainable Infrastructure Europe IV	\$	90,000	4/16/2021	\$	21,748	\$	1,473	\$	20,050	\$	21,524	NM
Meridiam Infrastructure N.A. II	\$	75,000	9/28/2012	\$	88,232	\$	39,091	\$	177,471	\$	216,562	15.9%
MINA II CIP	\$	175	6/30/2015	\$	169	\$	938	\$	20,014	\$	20,952	101.0%
Meridiam Infrastructure N.A. II	\$	20,000	6/30/2015	\$	18,870	\$	6,394	\$	45,466	\$	51,860	21.0%
Meridiam Infrastructure N.A. III	\$	50,000	7/12/2017	\$	32,309	\$	1	\$	42,839	\$	42,840	13.6%
Stonepeak Infrastructure Partners II	\$	140,000	11/12/2015	\$	189,926	\$	238,390	\$	36,758	\$	275,147	13.1%
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	\$	33,812	\$	37,284	11.5%
Stonepeak Infrastructure Partners III	\$	150,000	10/13/2017	\$	165,797	\$	57,763	\$	188,461	\$	246,224	13.0%
Stonepeak Guardian (Co-Invest) Holdings	\$	10,000	4/27/2023	\$	10,000	\$	0	\$	11,666	\$	11,667	NM
Stonepeak Infrastructure Partners IV	\$	125,000	5/8/2020	\$	84,694	\$	10,745	\$	84,383	\$	95,128	8.6%
Stonepeak Core Infrastructure Fund	\$	100,000	8/5/2022	\$	100,422	\$	422	\$	107,855	\$	108,277	NM
Stonepeak Opportunities Fund	\$	50,000	6/12/2023	\$	10,748	\$	1,513	\$	8,222	\$	9,735	NM

#### **Natural Resources**

								Current			
					Amount		Total	Market			
	Coi	nmitment		С	ontributed	Dis	stributions	Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)	(D)		(C+D)	IRR
ACM Permanent Crops	\$	35,000	10/24/2014	\$	39,821	\$	12,107	\$ 57,751	\$	69,858	8.3%
ACM Permanent Crops II	\$	35,000	5/12/2016	\$	42,906	\$	8,885	\$ 19,048	\$	27,933	-10.9%
AMERRA Agri Fund III	\$	50,000	2/11/2016	\$	101,331	\$	89,180	\$ 17,700	\$	106,880	2.1%
Denham Mining Fund	\$	35,000	6/29/2018	\$	33,511	\$	659	\$ 39,014	\$	39,673	5.1%
Homestead Capital Farmland II	\$	50,000	8/8/2016	\$	56,136	\$	11,440	\$ 57,388	\$	68,828	4.7%
Homestead Capital Farmland III	\$	30,000	10/26/2018	\$	32,067	\$	3,534	\$ 32,425	\$	35,958	5.8%
Orion Mine Finance Fund II	\$	50,000	5/25/2016	\$	102,219	\$	78,365	\$ 47,173	\$	125,539	8.2%
Orion Mine Finance Co-Fund II	\$	20,000	8/13/2018	\$	20,125	\$	-	\$ 34,483	\$	34,483	10.4%
Silver Creek Aggregate Reserves Fund	\$	100,000	11/6/2018	\$	15,474	\$	3,214	\$ 18,179	\$	21,393	NM
Sprott Private Resource Lending Fund III	\$	30,000	8/31/2022	\$	8,461	\$	539	\$ 7,777	\$	8,316	NM
Sprott Private Resource Streaming and Royalty Annex	\$	40,000	5/17/2023	\$	22,365	\$	477	\$ 23,950	\$	24,427	NM
Taurus Mining Fund	\$	50,000	3/27/2015	\$	41,459	\$	46,658	\$ 3,750	\$	50,408	7.6%
Taurus Mining Fund Annex	\$	23,000	12/1/2016	\$	18,384	\$	23,486	\$ 816	\$	24,302	17.5%
Taurus Mining Fund No. 2	\$	75,000	4/18/2019	\$	64,374	\$	47,089	\$ 31,496	\$	78,585	16.0%
Teays River Integrated Agriculture	\$	200,000	7/1/2015	\$	198,974	\$	28,770	\$ 343,319	\$	372,089	8.0%
Twin Creeks Timber	\$	200,000	1/7/2016	\$	202,925	\$	96,903	\$ 135,982	\$	232,885	3.3%
U.S. Farming Realty Trust III	\$	100,000	7/7/2015	\$	110,017	\$	11,565	\$ 123,503	\$	135,069	3.6%
Canally Coinvest Holdings	\$	12,500	12/9/2019	\$	12,537	\$	37	\$ 16,983	\$	17,021	11.2%

				ŀ	Amount		Total	Cur	rent Market			
	Con	nmitment		Со	ntributed	Dis	tributions		Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
ABRY Advanced Securities Fund II	\$	20,000	5/4/2011	\$	20,541	\$	29,705	\$	230	\$	29,934	13.0%
ABRY Advanced Securities Fund III	\$	30,000	4/30/2014	\$	45,253	\$	30,354	\$	16,345	\$	46,699	0.9%
ABRY Heritage Partners	\$	10,000	5/31/2016	\$	11,034	\$	12,303	\$	7,965	\$	20,268	25.7%
ABRY Partners VII	\$	10,000	4/29/2011	\$	12,969	\$	17,340	\$	2,250	\$	19,590	12.1%
ABRY Partners VIII	\$	20,000	8/8/2014	\$	23,934	\$	29,732	\$	3,679	\$	33,410	9.8%
ABRY Senior Equity IV	\$	10,000	12/7/2012	\$	10,853	\$	17,114	\$	888	\$	18,001	14.5%
ABRY Senior Equity V	\$	12,050	1/19/2017	\$	13,098	\$	6,728	\$	12,767	\$	19,495	13.3%
Advent International GPE VII	\$	30,000	6/29/2012	\$	34,811	\$	54,885	\$	3,263	\$	58,148	13.3%
Advent International GPE VIII	\$	50,000	2/5/2016	\$	57,556	\$	63,250	\$	48,403	\$	111,653	17.2%
Advent International GPE IX	\$	50,000	5/9/2019	\$	46,753	\$	4,998	\$	64,799	\$	69,797	16.3%
GPE IX TKE Co-Investment	\$	24,000	3/30/2020	\$	21,243	\$	-	\$	32,591	\$	32,591	12.3%
Advent International GPE X	\$	45,000	4/28/2022	\$	18,680	\$	-	\$	20,064	\$	20,064	NM
AI Co-Investment I-A	\$	7,500	3/2/2023	\$	7,443	\$	-	\$	8,459	\$	8,459	NM
Advent Latin America PE Fund VI	\$	20,000	10/17/2014	\$	20,272	\$	18,950	\$	15,818	\$	34,768	13.9%
Affinity Asia Pacific Fund IV	\$	60,000	2/28/2013	\$	65,344	\$	74,934	\$	40,040	\$	114,975	15.9%
Affinity Asia Pacific Fund V	\$	40,000	12/11/2017	\$	23,574	\$	6,647	\$	23,569	\$	30,216	9.8%
Bain Capital Ventures 2021	\$	25,000	10/28/2020	\$	19,938	\$	1	\$	22,795	\$	22,796	6.3%
Bain Capital Ventures 2022	\$	25,000	6/10/2022	\$	4,750	\$	0	\$	4,996	\$	4,996	NM
Bain Capital Venture Coinvestment Fund III	\$	15,000	4/1/2021	\$	15,750	\$	825	\$	15,130	\$	15,955	0.7%
Bain Capital Venture Coinvestment Fund IV	\$	15,000	6/10/2022	\$	1,500	\$	-	\$	1,780	\$	1,780	NM
Berkshire Fund VIII	\$	15,000	7/20/2011	\$	16,993	\$	27,959	\$	9,944	\$	37,904	16.8%
Berkshire Fund IX	\$	50,000	3/18/2016	\$	57,832	\$	36,889	\$	58,305	\$	95,194	15.2%
Blackstone Capital Partners VI	\$	30,000	6/30/2010	\$	38,362	\$	56,434	\$	8,287	\$	64,721	12.3%
Blackstone Capital Partners VII	\$	54,000	3/27/2015	\$	62,642	\$	48,652	\$	49,520	\$	98,172	13.0%
Carlyle Asia Partners III	\$	15,000	12/31/2009	\$	20,694	\$	31,227	\$	-	\$	31,227	12.6%
Carlyle Asia Partners IV	\$	60,000	6/3/2014	\$	87,727	\$	123,366	\$	13,652	\$	137,019	12.6%
Carlyle Asia Partners V	\$	45,000	10/30/2017	\$	45,830	\$	12,576	\$	40,283	\$	52,859	8.0%
Centerbridge Capital Partners III	\$	30,000	10/24/2014	\$	48,316	\$	48,352	\$	27,784	\$	76,136	16.9%
CB Blizzard Co-Invest	\$	15,684	9/11/2019	\$	15,684	\$	10,053	\$	1,947	\$	12,001	-20.6%
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	\$	5,410	\$	7,275	\$	34	\$	7,308	12.0%

					Amount		Total	Cur	rent Market			
	Con	nmitment		Со		Dis	tributions		Value	То	otal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
Charterhouse Capital Partners X	\$	67,000	5/13/2015	\$	59,406	\$	76,351	\$	32,825	\$	109,175	19.9%
Charterhouse Acrostone	\$	12,000	8/24/2018	\$	13,254	\$	21,268	\$	-	\$	21,268	16.9%
Charterhouse Capital Partners XI	\$	45,000	4/23/2021	\$	22,567	\$	1,329	\$	24,095	\$	25,424	17.0%
CVC Capital Partners VI	\$	67,000	7/12/2013	\$	104,784	\$	127,318	\$	57,923	\$	185,241	16.4%
CVC Capital Partners VII	\$	48,000	5/9/2017	\$	77,462	\$	53,773	\$	64,532	\$	118,306	20.6%
CVC Capital Partners VIII	\$	44,000	6/11/2020	\$	58,841	\$	27,352	\$	34,580	\$	61,931	6.5%
CVC Capital Partners IX	\$	44,000	6/29/2023	\$	-	\$	-	\$	-	\$	-	NM
EnCap Energy Capital VIII	\$	30,000	1/31/2011	\$	34,190	\$	23,766	\$	11,271	\$	35,037	0.5%
EnCap Energy Capital Fund VIII Co-Investors	\$	16,238	12/8/2011	\$	16,513	\$	6,278	\$	6,168	\$	12,446	-3.7%
EnCap Energy Capital Fund IX	\$	30,000	12/19/2012	\$	35,144	\$	46,005	\$	6,958	\$	52,964	11.0%
EnCap Energy Capital Fund X	\$	40,000	3/5/2015	\$	44,657	\$	59,933	\$	24,529	\$	84,462	15.7%
EnCap Energy Capital Fund XI	\$	40,000	5/31/2017	\$	41,754	\$	25,800	\$	43,351	\$	69,151	20.6%
EnCap Flatrock Midstream Fund III	\$	20,000	4/9/2014	\$	25,255	\$	24,137	\$	10,724	\$	34,861	10.0%
EnCap Flatrock Midstream Fund IV	\$	22,000	11/17/2017	\$	20,144	\$	11,193	\$	12,700	\$	23,893	7.3%
General Catalyst X - Early Venture	\$	19,565	3/26/2020	\$	19,174	\$	-	\$	30,244	\$	30,244	16.3%
General Catalyst X - Endurance	\$	22,826	3/26/2020	\$	22,859	\$	1,113	\$	23,308	\$	24,421	2.2%
General Catalyst X - Growth Venture	\$	32,609	3/26/2020	\$	32,120	\$	-	\$	35,182	\$	35,182	3.0%
General Catalyst XI - Creation	\$	8,823	10/29/2021	\$	6,582	\$	-	\$	6,808	\$	6,808	3.7%
General Catalyst XI - Endurance	\$	29,412	10/29/2021	\$	24,919	\$	-	\$	25,017	\$	25,017	0.2%
General Catalyst XI - Ignition	\$	11,765	10/29/2021	\$	8,579	\$	-	\$	8,215	\$	8,215	-2.6%
General Catalyst XII - Creation	\$	6,250	1/26/2024	\$	798	\$	-	\$	747	\$	747	NM
General Catalyst XII - Endurance	\$	9 <i>,</i> 375	1/26/2024	\$	-	\$	-	\$	-	\$	-	NM
General Catalyst XII - Health Assurance	\$	3,125	1/26/2024	\$	-	\$	-	\$	-	\$	-	NM
General Catalyst XII - Ignition	\$	6,250	1/26/2024	\$	767	\$	-	\$	701	\$	701	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	\$	35,142	\$	83,709	\$	27,108	\$	110,817	31.9%
GTCR Fund XII	\$	50,000	9/29/2017	\$	51,915	\$	33,192	\$	57,701	\$	90,894	22.2%
Co-Investment #1	\$	5,238	4/26/2019	\$	4,556	\$	-	\$	9,853	\$	9,853	17.1%
Co-Investment #2	\$	5 <i>,</i> 997	11/1/2019	\$	5,911	\$	10,962	\$	2,310	\$	13,271	43.2%
GTCR XIII	\$	50,000	10/27/2020	\$	26,578	\$	5,556	\$	29,207	\$	34,763	18.7%
GTCR XIV	\$	50,000	12/16/2022	\$	-	\$	-	\$	-	\$	-	NM

				ļ	Amount		Total	Cui	rent Market			
	Con	nmitment		Со		Dis	tributions		Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
H.I.G. Bayside Loan Fund II	\$	25,000	5/28/2010	\$	23,985	\$	32,321	\$	162	\$	32,482	7.1%
H.I.G. Bayside Loan Ops Fund III (Europe)	\$	30,000	7/27/2012	\$	26,707	\$	31,070	\$	3,433	\$	34,503	7.1%
H.I.G. Brazil & Latin America Partners	\$	60,000	7/1/2015	\$	69,040	\$	26,649	\$	75,387	\$	102,037	11.5%
H.I.G. Capital Partners V	\$	15,000	2/28/2013	\$	21,630	\$	34,067	\$	7,683	\$	41,749	22.9%
H.I.G. Europe Capital Partners II	\$	22,500	7/1/2013	\$	25,240	\$	20,667	\$	15,254	\$	35,921	10.8%
H.I.G. Growth Buyouts & Equity Fund II	\$	17,500	6/30/2011	\$	23,713	\$	28,136	\$	14,767	\$	42,903	14.4%
H.I.G. Growth Buyouts & Equity Fund III	\$	35,000	9/13/2018	\$	16,492	\$	2,134	\$	16,958	\$	19,092	NM
H.I.G Middle Market LBO Fund II	\$	40,000	2/7/2014	\$	49,202	\$	69,764	\$	19,731	\$	89,494	25.4%
Co-Investment #1	\$	9,000	10/12/2017	\$	9,000	\$	-	\$	0	\$	0	-84.4%
Co-Investment #2	\$	686	6/19/2020	\$	686	\$	-	\$	1,012	\$	1,012	10.8%
Co-Investment #3	\$	1,000	6/1/2021	\$	1,079	\$	-	\$	0	\$	0	-96.2%
H.I.G. Middle Market LBO Fund III	\$	40,000	7/23/2019	\$	34,970	\$	2,021	\$	40,900	\$	42,921	11.3%
Hellman & Friedman Capital Partners VII	\$	30,000	6/19/2009	\$	45,189	\$	111,116	\$	2,593	\$	113,709	24.7%
Hellman & Friedman Capital Partners VIII	\$	45,000	9/24/2014	\$	49,347	\$	30,557	\$	54,300	\$	84,857	12.7%
Hellman & Friedman Capital Partners IX	\$	45,000	9/28/2018	\$	46,794	\$	5,444	\$	63,939	\$	69,383	13.8%
Hellman & Friedman Capital Partners X	\$	45,000	5/10/2021	\$	32,635	\$	3,260	\$	35,213	\$	38,473	8.7%
Inflexion Buyout Fund IV	\$	27,000	9/30/2014	\$	37,885	\$	49,849	\$	16,309	\$	66,158	15.5%
Inflexion Partnership Capital Fund I	\$	17,000	9/30/2014	\$	26,034	\$	40,815	\$	6,938	\$	47,753	22.0%
Inflexion Supplemental Fund IV	\$	10,000	5/31/2016	\$	15,510	\$	23,320	\$	7,073	\$	30,393	23.6%
Kelso Investment Associates VIII	\$	3,000	1/6/2011	\$	3,044	\$	4,358	\$	11	\$	4,369	7.9%
Kelso Investment Associates IX	\$	60,000	11/5/2014	\$	70,063	\$	87,745	\$	33,458	\$	121,203	19.0%
KIA IX (Hammer) Investor	\$	25,000	8/12/2016	\$	25,492	\$	69,544	\$	-	\$	69,544	21.4%
Kelso Investment Associates X	\$	45,000	3/16/2018	\$	48,722	\$	19,943	\$	68,336	\$	88,279	25.9%
Kelso Investment Associates XI	\$	45,000	12/22/2021	\$	14,343	\$	1,829	\$	15,843	\$	17,672	NM
Kelso XI Heights Co-Investment	\$	12,000	8/19/2022	\$	10,025	\$	-	\$	10,111	\$	10,111	NM
KKR North American Fund XI	\$	60,000	2/7/2012	\$	100,673	\$	166,314	\$	21,916	\$	188,230	19.1%
KKR North America Fund XI (Platinum)	\$	8,003	2/26/2016	\$	8,040	\$	2,313	\$	3,251	\$	5,564	-7.0%
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	\$	64,838	\$	44,424	\$	75,177	\$	119,601	19.7%
KKR Sigma Aggregator	\$	15,000	6/22/2018	\$	15,000	\$	-	\$	23,844	\$	23,844	8.4%
KKR Enterprise Co-Invest	\$	15,000	10/11/2018	\$	15,000	\$	-	\$	-	\$	-	-100.0%

					Amount		Total	Cu	rrent Market			
	Con	nmitment		Со	ntributed	Dis			Value	То		Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
KKR Enterprise Co-Invest AIV A	\$	8,936	11/8/2019	\$	8,936	\$	7,908	\$	194	\$	8,101	-10.8%
KKR North America XIII	\$	40,000	6/25/2021	\$	23,458	\$	-	\$	25,286	\$	25,286	7.0%
KKR Special Situations Fund	\$	60,000	12/19/2012	\$	118,957	\$	100,522	\$	9,507	\$	110,029	-2.7%
KKR Special Situations Fund II	\$	60,000	12/19/2014	\$	98,284	\$	79,706	\$	21,414	\$	101,120	1.1%
Long Ridge Equity Partners IV	\$	15,000	6/26/2023	\$	-	\$	-	\$	-	\$	-	NM
Metwest Enhanced TALF Strategy Fund L. P.	\$	75,000	7/31/2009	\$	53 <i>,</i> 350	\$	67,405	\$	-	\$	67,405	10.2%
Oaktree Opportunities VIII	\$	30,000	12/9/2009	\$	30,000	\$	43,920	\$	73	\$	43,993	9.1%
ONCAP IV	\$	15,000	11/8/2016	\$	16,588	\$	5,922	\$	18,621	\$	24,544	12.0%
Onex Partners III	\$	10,000	1/6/2011	\$	11,217	\$	17,065	\$	2,066	\$	19,130	13.2%
Onex Partners IV	\$	60,000	11/22/2013	\$	64,494	\$	55,093	\$	37,121	\$	92,214	7.7%
Co-Investment #1	\$	10,000	2/27/2017	\$	10,471	\$	1,235	\$	3,849	\$	5 <i>,</i> 085	-11.7%
Onex Partners V	\$	45,000	7/11/2017	\$	42,659	\$	6,606	\$	51,607	\$	58,213	13.7%
Paine & Partners Capital Fund IV	\$	60,000	12/18/2014	\$	56,946	\$	29,070	\$	49,991	\$	79 <i>,</i> 062	7.2%
Wawona Co-Investment Fund I	\$	15,000	3/31/2017	\$	15,023	\$	-	\$	1	\$	1	-88.7%
Lyons Magnus Co-Investment Fund I	\$	15,000	11/8/2017	\$	15,016	\$	-	\$	27,759	\$	27,759	10.1%
PSP Maverick Co-Invest	\$	7,238	9/12/2019	\$	7,264	\$	-	\$	385	\$	385	-47.8%
PSP AH&N Co-Investment Fund	\$	23,895	11/27/2019	\$	21,361	\$	-	\$	38,205	\$	38,205	17.7%
Paine Schwartz Food Chain Fund V	\$	45,000	8/3/2018	\$	46,992	\$	23,888	\$	40,726	\$	64,614	18.6%
SNFL Co-Investment Fund	\$	5,000	10/11/2019	\$	5,024	\$	5,524	\$	4,467	\$	9,990	18.4%
Rhone Partners V	\$	56,000	3/12/2015	\$	75,954	\$	65,200	\$	69,729	\$	134,929	16.6%
Riverside Capital Appreciation Fund VI	\$	60,000	7/3/2013	\$	64,286	\$	79,867	\$	20,569	\$	100,435	11.7%
RCAF VI CIV XXXII	\$	12,399	10/21/2015	\$	12,687	\$	35,268	\$	-	\$	35,268	19.9%
Riverside Micro-Cap Fund III	\$	35,000	6/30/2014	\$	51,608	\$	194,767	\$	37,256	\$	232,023	35.7%
Riverside Micro-Cap Fund IV	\$	60,000	10/23/2015	\$	55,659	\$	5,112	\$	84,669	\$	89,781	8.0%
Riverside Micro-Cap Fund IV-B	\$	20,000	8/9/2019	\$	24,474	\$	5,583	\$	35,423	\$	41,007	18.3%
Riverside Micro-Cap Fund V	\$	40,000	8/21/2018	\$	37,363	\$	2,513	\$	54,150	\$	56,663	15.3%
Riverside Micro-Cap Fund VI	\$	45,000	8/26/2021	\$	13,878	\$	263	\$	12,575	\$	12,838	NM
Shoreview Capital Partners III	\$	24,000	7/24/2013	\$	25,922	\$	32,738	\$	23,831	\$	56,569	18.2%
Shoreview Capital Partners IV	\$	30,000	6/3/2019	\$	18,567	\$	6,023	\$	24,038	\$	30,062	40.6%
Sovereign Capital IV	\$	46,500	7/7/2014	\$	40,344	\$	26,905	\$	33,820	\$	60,725	9.9%
Summit Partners Credit II	\$	60,000	10/25/2013	\$	90,831	\$	87,991	\$	12,389	\$	100,381	3.9%

				Amount		Total	Cur	rent Market			
	Con	nmitment		 	Dis	tributions		Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment	(B)		(C)		(D)		(C+D)	IRR
Summit Europe Growth Equity III	\$	22,000	3/18/2020	\$ 19,091	\$	1,657	\$	22,105	\$	23,762	12.8%
Summit Europe Growth Equity IV	\$	22,000	2/10/2023	\$ -	\$	-	\$	-	\$	-	NM
Summit Growth Equity VIII	\$	25,000	5/27/2011	\$ 34,275	\$	68,730	\$	7,407	\$	76,137	25.9%
Co-Investment #1	\$	16,000	6/3/2015	\$ 16,000	\$	38,735	\$	19,639	\$	58,375	31.3%
Summit Growth Equity IX	\$	60,000	8/26/2015	\$ 84,846	\$	92,283	\$	77,508	\$	169,791	26.7%
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	\$	-	\$	15,508	\$	15,508	0.0%
Summit Partners Co-Invest (Giants-B)	\$	15,292	10/22/2019	\$ 15,292	\$	42,588	\$	4,875	\$	47,463	79.9%
Summit Growth Equity X	\$	60,000	2/26/2019	\$ 61,832	\$	18,176	\$	68,043	\$	86,219	16.4%
Summit Partners Co-Invest (Lions)	\$	7,534	10/14/2020	\$ 7,534	\$	119	\$	14,416	\$	14,535	21.7%
Summit Partners Co-Invest (Indigo)	\$	10,000	12/11/2020	\$ 11,436	\$	-	\$	11,423	\$	11,423	0.0%
Summit Growth Equity XI	\$	45,000	10/1/2021	\$ 11,609	\$	-	\$	13,304	\$	13,304	NM
Summit Venture Capital III	\$	13,150	5/27/2011	\$ 18,044	\$	32,899	\$	2,763	\$	35,662	17.4%
Summit Venture Capital IV	\$	40,000	8/26/2015	\$ 51,195	\$	48,377	\$	69,986	\$	118,363	36.4%
Summit Venture Capital V	\$	45,000	6/16/2020	\$ 29,988	\$	2,771	\$	28,570	\$	31,341	2.7%
Summit Partners Co-Invest (CS)	\$	13,753	10/22/2021	\$ 13,798	\$	-	\$		\$	12,977	-2.7%
Technology Crossover Ventures VIII	\$	60,000	5/8/2013	\$ 55,596	\$	62,656	\$	62,360	\$	125,015	12.4%
Technology Crossover Ventures IX	\$	60,000	2/19/2016	\$ 49,721	\$	52,386	\$	48,848	\$	101,234	18.7%
TCV Sports	\$	8,000	9/25/2018	\$ 8,000	\$	-	\$	10,098	\$	10,098	4.3%
Technology Crossover Ventures X	\$	45,000	8/31/2018	\$ 36,448	\$	14,377	\$	64,042	\$	78,419	23.1%
Technology Crossover Ventures XI	\$	45,000	10/2/2020	\$ 32,150	\$	-	\$	30,428	\$	30,428	-2.9%
Technology Impact Fund	\$	40,000	12/18/2017	\$ 38,077	\$	24,707	\$	89,116	\$	113,823	40.3%
Technology Impact Fund II	\$	40,000	4/13/2021	\$ 13,534	\$	341	\$	13,285	\$	13,626	NM
Technology Impact Growth Fund	\$	40,000	11/26/2018	\$ 50,425	\$	26,676	\$	32,684	\$	59,361	7.0%
Technology Impact Growth Fund II	\$	40,000	8/6/2021	\$ 17,577	\$	0	\$	15,355	\$	15,355	NM
TIGF II Direct Strategies LLC - Series 3	\$	5,000	7/14/2023	\$ 5,041	\$	-	\$	4,999	\$	4,999	NM
Thoma Bravo Fund XI	\$	50,000	5/1/2014	\$ 78,512	\$	168,810	\$	43,137	\$	211,947	26.6%
Thoma Bravo Fund XII	\$	60,000	4/27/2016	\$ 78,447	\$	80,943	\$	75,247	\$	156,190	16.7%
Thoma Bravo Fund XIII	\$	45,000	12/7/2018	\$ 60,680	\$	43,681	\$	65,528	\$	109,209	26.0%
Thoma Bravo Special Opportunities Fund II	\$	15,000	3/27/2015	\$ 18,113	\$	21,091	\$	18,525	\$	39,616	16.5%
Thoma Bravo Discover Fund IV	\$	45,000	7/1/2022	\$ 25,731	\$	-	\$	29,767	\$	29,767	NM

				ŀ	Amount		Total	Cur	rent Market			
	Cor	nmitment		Со	ntributed	Dis	stributions		Value	То	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
Tillridge Global Agribusiness Partners II	\$	50,000	10/21/2016	\$	33,063	\$	4,771	\$	24,519	\$	29,290	-3.8%
Water Street Healthcare Partners III	\$	25,000	7/25/2012	\$	30,474	\$	78,671	\$	11,033	\$	89,704	35.4%
Water Street Healthcare Partners IV	\$	33,000	9/15/2017	\$	36,745	\$	10,624	\$	55,081	\$	65,705	20.1%
Water Street Healthcare Partners V	\$	43,000	4/15/2022	\$	10,054	\$	-	\$	8,132	\$	8,132	NM
Wayzata Opportunities Fund III	\$	30,000	9/11/2012	\$	14,718	\$	11,860	\$	3,844	\$	15,704	1.2%
Wynnchurch Capital Partners IV	\$	40,000	10/23/2014	\$	38,584	\$	53,707	\$	50,516	\$	104,223	25.9%
Wynnchurch Capital Partners V	\$	40,000	1/15/2020	\$	29,503	\$	1,406	\$	36,261	\$	37,668	12.8%

#### **Real Estate**

					Amount		Total	Cu	rrent Market			
	Со	mmitment		C	Contributed	D	istributions		Value	Тс	tal Value	Interim Net
Fund Name		(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
Angelo Gordon Net Lease IV	\$	50,000	2/17/2020	\$	45,936	\$	6,382	\$	45,880	\$	52,263	5.8%
Angelo Gordon Realty Fund XI	\$	50,000	3/31/2022	\$	11,250	\$	-	\$	10,699	\$	10,699	NM
Bain Capital Real Estate II	\$	50,000	3/5/2021	\$	32,107	\$	2,685	\$	31,391	\$	34,076	4.3%
Bain Capital Real Estate III	\$	35,000	12/18/2023	\$	6,789	\$	552	\$	5,495	\$	6,046	NM
Blackrock Granite Property Fund	\$	63,791	9/30/2006	\$	68,771	\$	53,312	\$	-	\$	53,312	-4.9%
Blackstone Property Partners	\$	350,000	6/29/2017	\$	350,000	\$	45,672	\$	383,546	\$	429,219	4.0%
Blackstone Real Estate Partners VII	\$	75,000	2/26/2012	\$	105,732	\$	156,976	\$	10,649	\$	167,625	14.5%
Blackstone Real Estate Partners VIII	\$	50,000	3/27/2015	\$	64,545	\$	65,797	\$	35,444	\$	101,242	14.1%
Blackstone Real Estate Partners IX	\$	40,000	12/21/2018	\$	45,493	\$	16,395	\$	44,618	\$	61,012	15.0%
Barings Asia Real Estate II	\$	50,000	7/31/2018	\$	38,239	\$	2,506	\$	31,340	\$	33,845	-6.1%
EQT Real Estate II	\$	55,000	4/26/2019	\$	34,863	\$	5,720	\$	33,547	\$	39,267	5.8%
EQT Real Estate Rock Co-Investment	\$	11,000	8/10/2020	\$	9,334	\$	-	\$	10,975	\$	10,975	5.7%
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	\$	96,472	\$	56,567	\$	120,309	\$	176,876	7.4%
HSRE-Coyote Maine PERS Core Co-Investment	\$	20,000	12/4/2020	\$	15,956	\$	1,994	\$	11,432	\$	13,426	-6.0%
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	\$	7,306	\$	37,330	\$	44,636	19.9%
HSREF VI Elgin Co-Invest	\$	10,000	4/9/2021	\$	10,000	\$	2,012	\$	15,003	\$	17,015	21.4%
High Street Real Estate Fund VII	\$	35,000	8/16/2021	\$	35,000	\$	552	\$	40,341	\$	40,893	10.1%
High Street Real Estate VII Venture	\$	15,000	3/17/2023	\$	15,000	\$	-	\$	18,149	\$	18,149	NM
Hines US Property Partners	\$	200,000	9/9/2021	\$	166,408	\$	14,578	\$	143,526	\$	158,104	-4.3%
Invesco Real Estate Asia IV	\$	30,000	3/25/2020	\$	25,776	\$	18,531	\$	9,412	\$	27,943	9.3%
Invesco US Income Fund	\$	195,000	7/17/2014	\$	237,572	\$	78,849	\$	292,775	\$	371,624	8.4%
IPI Data Center Partners I	\$	30,000	12/15/2017	\$	36,325	\$	23,552	\$	31,023	\$	54,574	13.8%
IPI Data Center Partners II	\$	25,000	12/20/2019	\$	24,535	\$	1,619	\$	29,457	\$	31,077	16.3%
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	\$	53,925	\$	55,896	\$	14,324	\$	70,220	9.4%
KKR Real Estate Partners Europe II	\$	25,000	12/23/2019	\$	22,735	\$	6,411	\$	16,851	\$	23,263	1.5%
KKR Real Estate Partners Americas I	\$	50,000	12/20/2013	\$	50,066	\$	59,735	\$	1,461	\$	61,196	10.6%
KKR Real Estate Partners Americas II	\$	50,000	6/2/2016	\$	61,624	\$	72,970	\$	10,862	\$	83,833	19.1%
Northbridge-Strategic Fund II	\$	30,000	2/8/2019	\$	30,000	\$	5,686	\$	48,695	\$	54,381	13.0%
Prima Mortgage Investment Trust, LLC	\$	75,000	7/29/2011	\$	97,490	\$	131,918	\$	-	\$	131,918	3.8%

#### **Real Estate**

				Amount		Total	Cu	rrent Market			
Cor	nmitment		C	Contributed	D	istributions		Value	То	tal Value	Interim Net
	(A)	Date of Commitment		(B)		(C)		(D)		(C+D)	IRR
\$	60,000	5/20/2005	\$	60,000	\$	125,410	\$	-	\$	125,410	6.2%
\$	90,000	6/30/2005	\$	139,622	\$	222,450	\$	-	\$	222,450	5.3%
\$	30,000	10/23/2015	\$	30,606	\$	627	\$	8,808	\$	9,435	-21.1%
\$	15,000	10/18/2019	\$	15,000	\$	-	\$	-	\$	-	-100.0%
\$	25,000	4/16/2019	\$	8,286	\$	56	\$	1,372	\$	1,428	NM
\$	50,000	3/17/2015	\$	41,333	\$	5,453	\$	40,861	\$	46,314	1.9%
\$	195,000	6/17/2013	\$	230,630	\$	77,771	\$	290,393	\$	368,164	7.7%
\$	40,000	6/30/2022	\$	4,000	\$	-	\$	2,479	\$	2,479	NM
\$	50,000	5/9/2012	\$	44,094	\$	52,724	\$	7,403	\$	60,127	8.7%
\$	50,000	10/23/2015	\$	43,524	\$	38,882	\$	20,553	\$	59,434	9.2%
\$	10,000	9/27/2017	\$	10,293	\$	4,160	\$	-	\$	4,160	-60.0%
\$	15,000	6/30/2014	\$	17,446	\$	17,500	\$	1,884	\$	19,385	4.0%
\$	50,000	1/15/2015	\$	48,856	\$	42,649	\$	10,741	\$	53,390	4.0%
\$	40,000	1/31/2019	\$	37,502	\$	15,636	\$	26,429	\$	42,065	11.8%
	\$ \$ \$ \$ \$ \$ \$	(A)         \$       60,000         \$       90,000         \$       30,000         \$       15,000         \$       25,000         \$       50,000         \$       195,000         \$       50,000         \$       50,000         \$       50,000         \$       50,000         \$       50,000         \$       10,000         \$       15,000         \$       50,000	\$       60,000       5/20/2005         \$       90,000       6/30/2005         \$       30,000       10/23/2015         \$       15,000       10/18/2019         \$       25,000       4/16/2019         \$       50,000       3/17/2015         \$       195,000       6/17/2013         \$       40,000       6/30/2022         \$       50,000       5/9/2012         \$       50,000       10/23/2015         \$       10,000       9/27/2017         \$       15,000       6/30/2014         \$       50,000       1/15/2015	(A)         Date of Commitment           \$         60,000         5/20/2005         \$           \$         90,000         6/30/2005         \$           \$         90,000         10/23/2015         \$           \$         30,000         10/23/2015         \$           \$         15,000         10/18/2019         \$           \$         25,000         4/16/2019         \$           \$         50,000         3/17/2015         \$           \$         195,000         6/17/2013         \$           \$         195,000         6/30/2022         \$           \$         50,000         5/9/2012         \$           \$         50,000         10/23/2015         \$           \$         10,000         9/27/2017         \$           \$         15,000         6/30/2014         \$           \$         50,000         1/15/2015         \$	Commitment (A)         Date of Commitment Date of Commitment         Contributed (B)           \$         60,000         5/20/2005         \$         60,000           \$         90,000         6/30/2005         \$         139,622           \$         90,000         6/30/2015         \$         30,606           \$         15,000         10/23/2015         \$         30,606           \$         15,000         10/18/2019         \$         8,286           \$         25,000         4/16/2019         \$         8,286           \$         50,000         3/17/2015         \$         41,333           \$         195,000         6/17/2013         \$         230,630           \$         40,000         6/30/2022         \$         4,000           \$         50,000         10/23/2015         \$         43,524           \$         50,000         10/23/2015         \$         43,524           \$         10,000         9/27/2017         \$         10,293           \$         15,000         6/30/2014         \$         17,446           \$         50,000         1/15/2015         \$         48,856	Commitment (A)         Date of Commitment         Contributed (B)         D           \$         60,000         5/20/2005         \$         60,000         \$           \$         90,000         6/30/2005         \$         139,622         \$           \$         90,000         6/30/2015         \$         139,622         \$           \$         90,000         10/23/2015         \$         30,606         \$           \$         30,000         10/18/2019         \$         30,606         \$           \$         15,000         10/18/2019         \$         8,286         \$           \$         25,000         3/17/2015         \$         41,333         \$           \$         195,000         6/17/2013         \$         230,630         \$           \$         195,000         6/30/2022         \$         4,000         \$           \$         50,000         10/23/2015         \$         43,524         \$           \$         50,000         10/23/2015         \$         43,524         \$           \$         10,000         9/27/2017         \$         10,293         \$           \$         10,000         6/30/2014	Commitment (A)         Date of Commitment         Contributed (B)         Distributions (C)           \$         60,000         5/20/2005         \$         60,000         \$         125,410           \$         90,000         6/30/2005         \$         139,622         \$         222,450           \$         90,000         10/23/2015         \$         30,606         \$         627           \$         15,000         10/18/2019         \$         15,000         \$         -           \$         25,000         4/16/2019         \$         8,286         \$         566           \$         50,000         3/17/2015         \$         41,333         \$         5,453           \$         195,000         6/17/2013         \$         230,630         \$         -           \$         40,000         6/30/2022         \$         4,000         \$         -           \$         50,000         5/9/2012         \$         44,094         \$         52,724           \$         50,000         10/23/2015         \$         43,524         \$         38,882           \$         10,000         9/27/2017         10,293         \$         4,1600	Commitment (A)         Date of Commitment         Contributed (B)         Distributions (C)           \$         60,000         5/20/2005         \$         60,000         \$         125,410         \$           \$         90,000         6/30/2005         \$         139,622         \$         222,450         \$           \$         90,000         6/30/2015         \$         30,606         \$         6277         \$           \$         30,000         10/18/2019         \$         15,000         \$         -         \$           \$         15,000         4/16/2019         \$         8,286         \$         56         \$           \$         50,000         3/17/2015         \$         41,333         \$         5,453         \$           \$         195,000         6/17/2013         \$         230,630         \$         77,771         \$           \$         40,000         6/30/2022         \$         4,000         \$         -         \$           \$         50,000         10/23/2015         \$         43,524         \$         38,882         \$           \$         50,000         10/23/2015         \$         43,524         \$         3	Commitment (A)         Date of Commitment         Contributed (B)         Distributions (C)         Value (D)           \$         60,000         5/20/2005         \$         60,000         \$         125,410         \$         -           \$         90,000         6/30/2005         \$         139,622         \$         222,450         \$         -           \$         90,000         10/23/2015         \$         30,606         \$         6277         \$         8,808           \$         15,000         10/18/2019         \$         15,000         \$         -         \$         -           \$         25,000         4/16/2019         \$         8,286         \$         566         \$         1,372           \$         50,000         3/17/2015         \$         41,333         \$         5,453         \$         40,861           \$         195,000         6/17/2013         \$         230,630         \$         77,771         \$         290,393           \$         40,000         6/30/2022         \$         4,000         \$         -         \$         2,479           \$         50,000         10/23/2015         \$         43,524         \$	Commitment (A)         Date of Commitment         Contributed (B)         Distributions (C)         Value (D)         To (D)           \$         60,000         5/20/2005         \$         60,000         \$         125,410         \$         -         \$           \$         90,000         6/30/2005         \$         139,622         \$         222,450         \$         -         \$           \$         90,000         10/23/2015         \$         30,606         \$         627         \$         8,808         \$           \$         15,000         10/18/2019         \$         15,000         \$         -         \$         \$           \$         25,000         4/16/2019         \$         8,286         \$         56         \$         1,372         \$           \$         50,000         3/17/2015         41,333         \$         5,453         \$         40,861         \$           \$         195,000         6/17/2013         230,630         \$         77,771         \$         290,393         \$           \$         195,000         6/30/2022         4,000         \$         -         \$         2,479         \$           \$         50,000<	Commitment (A)         Date of Commitment         Contributed (B)         Distributions (C)         Value (D)         Total Value (C+D)           \$         60,000         5/20/2005         \$         60,000         \$         125,410         \$         -         \$         125,410           \$         90,000         6/30/2005         \$         139,622         \$         222,450         \$         -         \$         222,450           \$         30,000         10/23/2015         \$         30,606         \$         6277         \$         8,808         \$         9,435           \$         15,000         10/18/2019         \$         15,000         \$         -         \$         -         \$         -         \$         1,428           \$         50,000         3/17/2015         \$         41,333         \$         5,453         \$         40,861         \$         46,314           \$         195,000         6/17/2013         \$         230,630         \$         77,771         \$         290,393         \$         368,164           \$         40,000         6/30/2022         \$         4,000         \$         -         \$         2,479         \$         2,479<

**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 MEMORANDUM**

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CEO

**SUBJECT:** CEO REPORT

DATE: OCTOBER 3, 2024

#### Pension Administration System (PAS)

We are in the final stages of reviewing the vendor proposals with our consultant, Linea. We expect to select a vendor this month.

#### FY2024 Year End

At the October meeting, the Board will vote on the acceptance of the FY2024 valuation reports for the System's defined benefit plans. MainePERS experienced an investment return of 7.43% for the fiscal year. On a smoothed actuarial valuation of assets basis the return was 7.26%. Both measures are above the assumed rate of return, 6.5%. The market value of assets as of June 30, 2024, is \$19.7 billion.

The actuarial value of assets (AVA) funded ratio for the State Employee/Teacher Plan increased from 85% in FY2023 to 86.3% in FY2024, while the calculated employer contribution rate decreased from 20.53% to 20.43%. The AVA funded ratio for the PLD Consolidated Plan decreased from 91.2% to 89.8%, while the calculated aggregate contribution rate increased from 18.6% to 19.2%. The Legislative and Judicial Plans' AVA funded status remain overfunded at 148.5% and 108.8%, respectively. The Legislative Plan continues to have a calculated employer contribution rate of 0%, while the Judicial Plan's rate is 4.25%.

Today you will also hear from BerryDunn about the audited financial statements for the year ending June 30, 2024. The System's fiduciary net position as of June 30, 2024 is \$20.89 billion, an increase of \$1.08 billion, or 5.5%, largely driven by strong investment returns.

#### Strategic Plan Update & Key Performance and Risk Measures

The 5-Year Strategic Plan was adopted by the Board of Trustees in August 2022. Attached is a memorandum entitled 5-Year Strategic Plan Update – Year II, along with updated key performance and risk measures.

#### MAINEPERS

#### **BOARD OF TRUSTEES MEMORANDUM**

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CEO

SUBJECT: 5-YEAR STRATEGIC PLAN UPDATE – YEAR II

DATE: OCTOBER 3, 2024

#### POLICY REFERENCE

Board Policy 4.5 – Board/Staff Relations Board Policy 4.6 – Communications and Support to the Board

In August of 2022, the Board of Trustees adopted a 5-Year Strategic Plan. Much work has been done over the past two years to implement and operationalize the Plan. The focus of this report is to update the Board on the progress made in the second year of the Plan.

This work advanced each of the six goals under the plan:

- I. Preservation of the Trust Fund
- II. Stability of the Contribution Rates
- III. Security and Integrity of our Information Systems
- IV. Cultivation of a Member-centric Organization
- V. Development of Stakeholder Relations
- VI. Foster an Engaged Workforce that Advances the Organization's Mission

The four legislatively directed objectives in the Strategic Plan were substantially completed in the first year of the plan, including: a study on potential public plan options that include social security (Resolves 2021, c. 66 & 72), responding to the divestment legislation (PL 2021, c. 231 & 234), expanding the availability of defined contribution plans to teachers (PL 2021, c. 548), and exploring mandatory long-term disability insurance coverage (PL 2021, c. 277).

In relation to *Goal I. Preservation of the Trust Fund*, a Board Work Plan for 2024 was adopted by the Board in November 2023. The Plan maps the Board's responsibilities as outlined in Maine Law and Board Policy to the monthly meeting agenda and includes a frequency schedule to guide the annual update of the Plan. The Trustee Charter, which was adopted by the Board in March 2023, was reviewed in November 2023. The Charter sets forth the Board's principles, duties, and oversight responsibilities for the Governance of MainePERS and its programs. Additionally the Board reviewed and updated (as needed) more than a third of its policies in the Board Governance Manual over the past year, consistent with its three-year review cycle. Transparency efforts regarding Board operations continued and all public meeting materials were posted on the MainePERS website in advance of meetings, in addition to agendas and minutes. These materials are archived on the website so members of the public may easily review prior meeting materials. MainePERS also posts materials for the Finance and Audit Committee and the PLD Advisory Committee online. Additionally, all Board and Committee meetings are available live via an online webinar platform.

The Board conducted its annual self-evaluation in August 2023. As part of this process the Board received its annual education on best practices in Board governance. Following receipt of the Board's input on educational needs, an Education Plan was developed and presented to the Board in September 2023. The Plan includes educational presentations during Board Meetings, trustee seminars conducted by national associations, and materials for self-study. As part of this plan fiduciary education was offered by the Board's governance consultant in April 2024, outlining the legal framework of the Trustee's fiduciary duties and focusing on three case studies. Quarterly investment and annual actuarial practices education continued. The Board also received "mission moments" -- introducing the Board to various programs under MainePERS – on a variety of topics, including: the pension administration system project; the disability retirement compassionate allowance list; the appeals program; the legislative process; investment team activities; state-sponsored plans and sub-plans; and group life insurance.

Two new Trustees were welcomed to the Board in February 2024. Onboarding for the Trustee from MEA was completed last fall and onboarding for the Trustee from MSEA occurred in the first part of this year. These orientations were delivered by senior management over several meetings, and the topics covered included the governance framework, fiduciary duties, actuarial valuation, rate-setting, cost-of-living increases, finances, investments, member services and employer services.

Through its Finance and Audit Committee the Board reviewed the 2023 Annual Comprehensive Financial Report prior to its acceptance by the Board, with MainePERS receiving a "clean" audit for the year from its external auditor, BerryDunn. For the twentieth year in a row MainePERS was awarded a certificate of achievement for excellence in reporting from the Government Finance Officers Association. The FY 2025 Annual Administrative Operations and Investment Operations Budgets were reviewed by the Finance and Audit Committee prior to their adoption by the Board. The budgets were developed to support ongoing operational needs as well as the 5-Year Strategic Plan, in particular the development of the new pension administration system. FY 2024 ended within the overall budgets as approved by the Board.

The Finance and Audit Committee also oversaw the outsourced internal audit program. Audits were completed for cash receipts and disbursements, facilities policies and physical plant security, and member statement and estimate processes. The Committee reviewed the 2024-25 internal audit plan and the updated enterprise risk management plan. Additionally, the Committee reviewed the progress on employer account reconciliations, now at 85%, as well as status updates on employer reporting issues.

With assistance from the Board's general investment consultant, Cambridge Associates, the investment team reviewed the long-term capital market assumptions and the strategic asset allocation with the Board in January 2024. And, an internal working group was formed to explore strategies for pre and post-2028 system liabilities planning.

Staff reviewed compliance with the divestment legislation and related investment policy statement provisions, updated the status of fossil fuel investments, and presented the second

annual Divestment Report to the Board in December 2023. Staff also met with the Joint Standing Committee on Labor and Housing to discuss the divestment report for FY 2023, and separately engaged with the divestment advocates on several occasions. In response to a request by the advocates, staff researched an investment decision implemented by CaISTRS to invest a portion of their public equity allocation into a low carbon emission index and reported their findings to the Board in July and September of 2024.

From an investment perspective, inflation remained muted during FY 2024, increasing the likelihood that the Federal Reserve would begin to reduce interest rates. This prospect combined with excitement over artificial intelligence to drive stock markets to record highs. Investment returns reported by the System's custodian for the 1, 5, and 10-year periods ending 6/30/24 were 8.0%, 8.5%, and 7.5%. The preliminary trust fund balance at FY 2024 year end was \$19.7 billion, and for the first time the System's investments surpassed \$20 billion in July of 2024. For the sixteenth consecutive year, MainePERS received the Public Pension Coordinating Council's Recognition Awarded for Funding, in recognition of adherence to best practices in maintaining plan funding.

Under **Goal II – Stability of the Contribution Rates**, the Board reviewed and approved the FY 2023 actuarial valuations in October 2023. On an actuarial basis for FY 2023, the State Employee and Teacher Plan had an investment return of 7.15% (market value of assets, 6.05%) and is 85% funded. The calculated employer contribution rate was stable at 20.53%. The Board also adopted the FY 2026 and FY 2027 composite employer contribution rates at 19.70% and 19.73%, respectively. The Legislative and Judicial Plans remain fully funded at 144.5% and 109.9%, respectively. In anticipation of the FY 2024 valuation, the Board also reviewed the economic assumptions in June 2024.

MainePERS administered the award of two cost-of-living adjustments for the State-sponsored Plans. The Consumer Price Index-Urban (CPI-U) for the twelve months ended June 30, 2023 was 3.0%. Pursuant to Maine law, the Board of Trustees awarded an annual cumulative COLA of 3% in September 2023. Additionally, the Legislature approved a one-time COLA of 3% that was awarded in November, 2023.

The Participating Local District (PLD) Advisory Committee reviewed the actuarial valuation approved by the Board for the PLD Consolidated Plan. On an actuarial basis for FY 2023, the Plan remained 91.2% funded. The calculated contribution rate was stable at 18.6%. Additionally, the employer/employee rates for the Participating Local District Consolidated Plan were recommended by the PLD Advisory Committee and established pursuant to the authority granted by the Board to the Chief Executive Officer. The aggregate rate for the PLD Consolidated Plan remains stable at 18.6% and for the first time the Committee voted to recommend that all sub-plans be assessed at the 58% employer and 42% employee risk allocation goal for the Plan. Additionally the Committee voted to further consolidate plan offerings by eliminating sub-plan 4N, as there were no employees enrolled in the plan.

MainePERS also administered the award of two COLA adjustments for the PLD Consolidated Plan. Pursuant to Maine law and rule, the Board of Trustees awarded an annual cumulative COLA of 2.5% in September 2023. The PLD Advisory Committee recommended and the Board of Trustees authorized the awarding of an additional 0.5% one-time COLA, which was processed in February 2024.

Employers and other stakeholders were informed of funding trends through scheduled meetings with representatives of State government and the PLD Advisory Committee, as well as other communications. The Legislative committees of jurisdiction were also informed through the Annual Report to the Legislature in March 2024.

For **Goal III – Security and Integrity of our Information Systems**, staff have been focused on procuring a new pension administration system (PAS). MainePERS' current system is at end of life and in need of replacement. Planning for this transition began in fall 2022. Supported by our PAS procurement consultant, Linea, a Request for Proposals (RFP) was developed and issued in May 2024 for a new cloud-based PAS system and finalists are being reviewed with a contract award anticipated in early October 2024. An organizational change management firm was hired to support project leadership in engaging the staff throughout the transition and a PAS project manager has also been hired. The additional support staff approved by the Board in the FY 2025 budget are in the process of being hired.

Staff also worked with the current PAS vendor, Vitech, to make forty-four updates and enhancements to the system, which will be needed until the new system is designed and implemented. In preparation for the conversion of our data to the new system, staff is undertaking a data cleansing project and is part-way through seventy-two items identified for correction.

We successfully completed the final phase of an audit of our compliance with the National Institute of Standards and Technology (NIST) cybersecurity framework and nearly a dozen cybersecurity tests, including internal and external penetration testing. Staff also received monthly cybersecurity training to educate and guard against various threats. Additionally, we were able to renew our cyber-insurance policy for the same coverage at a reduced premium.

Our outdated tape back-up environment was modernized with implementation of the Exagrid immutable replication solution to bolster data security and seamless business continuity. The email infrastructure was migrated to cloud-based Microsoft Office 365 and we replaced our legacy intranet with SharePoint, allowing for more efficient search and retrieval of information.

Development of a comprehensive member education, communications, and service model that supports planning for retirement security is a key strategic objective under *Goal IV* – *Cultivation of a Member-centric Organization*. This past year MainePERS conducted 40 webinars that were attended by more than 800 members. This included the launch of a new PLD member webinar, which completes the webinar series for new and mid-career members, as well as a new PLD special plan member webinar. The benefit estimator, introduced over a year ago, was updated to improve modeling across various plans. To date, members have used the benefit estimator to generate more than 21,000 scenarios to support their retirement planning. Additionally, a series of upgrades were made to the phone system menu this past summer that have greatly enhanced answer rates and reduced hold times. For the month of August, 96% of calls to the main line were answered with an average answer time of 41 seconds.

Staff continue to monitor key workflow metrics on a weekly basis and have eliminated many of the backlogs in existence when the Strategic Plan was developed. In the Year I update for the Plan we reported the queue of service retirement estimates, necessary for placing a member on the payroll with a preliminary benefit upon retirement, were reduced from 1,011 at the end of March 2023 to 264 at the end of July 2023. We have been able to maintain that progress and that queue currently stands at 152 as of mid-September 2024. Last year we also reported that

we were able to eliminate the backlogs in member requests for benefit verifications, beneficiary elections, and member account statements and processing times for these requests continue to be current.

The most significant remaining backlog is in moving retired members from a preliminary to a final benefit. The roots of this backlog are complex and the solution lies in streamlined processes, additional staffing, and enhanced technology. The staff conducted a process review over the past year and in August began implementing several process changes to better manage this work. The Board also approved additional staff positions to keep pace with our expanding membership rolls, while plans to procure a new pension administration system are well underway.

Other process improvements include a new, no cost increase contract with our group life insurance vendor that improves efficiency by assigning the vendor some of the functions previously performed by staff. Additionally, we've reorganized this work internally to move employer account reconciliations to the employer reporting team, providing a single point of contact for employers and freeing up member services staff to focus on other work.

In Year I we reported that MainePERS conducted an extensive review of the disability retirement program following the implementation of Public Law 2021, c. 277. Both the law and the review focused on the application process for disability retirement. In January 2023 MainePERS began using the Social Security Administration's 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 can expedite application processing for certain individuals. Our most recent survey of members who have completed the disability application process since the prior survey was conducted in July 2024. Ninety-one percent (91%) of those responding were satisfied or very satisfied that the process was fair and 94% agreed or strongly agreed that they were treated with respect and had their questions responded to in a timely manner.

Over the past year staff focused on the processes required for those already receiving a disability retirement benefit and developed proposed changes that were adopted by the Board. These changes provide guidance on the definition of "earnings" and streamlined the annual process for applying compensation limitations and offsets to disability retirement benefits. Taken together, the changes serve to reduce the burden of compliance for members receiving a disability retirement benefit, while also reducing the amount of personal information collected. Additionally, staff worked to restructure and revise program information for members to provide greater clarity as well as discrete guidance for those applying for a disability retirement benefit and for those receiving a disability retirement benefit.

Perhaps one of the most significant achievements highlighted in the Year I update on the Strategic Plan was the development and launch of the member portal for which a phased rollout began in fall 2023. To date over 22,500 members have registered for the portal. Members use the portal to access forms, and review member statements and tax information. Members have also used the portal to update their own demographic information with nearly 2,500 transactions to date. As part of the member portal rollout, MainePERS conducted a campaign to update member demographic information to support the use of multi-factor authentication in registering for the portal. Over 47,000 active and retired members without a telephone number and/or email address on file were contacted to update their information and more than 18,000 members complied.

MainePERS conducted its most recent annual member survey for active and retired members in April 2024. Ninety-two percent (92%) of retirees and 51% of active members indicated they were "satisfied" or "very satisfied" with MainePERS. Over 90% of retirees and 61% of active members stated they "agree" or "strongly agree" that MainePERS acts with integrity. And, 80% of retirees and 43% of active members "agree" or "strongly agree" that MainePERS staff are knowledgeable.

Under **Goal V – Development of Stakeholder Relations**, MainePERS staff have continued to focus on improving stakeholder relations with our 500 plus employers. Improvements in employer support included the addition of a second employer training specialist, continued development of the employer training program and materials, updated documentation including employer information on our website, and more frequent email communications. As noted under Goal I, progress on employer account reconciliations continues, currently at 85% versus 73% last year and 51% the year before. We are also partnering with one of the large payroll application vendors to assist in developing reporting tools that will be used by their clients (our employers) and hope to expand to additional vendor partnerships as we work to develop the new pension administration system. Last year, when we reported on the employer satisfaction survey, seventy-nine percent (79%) of employers were "satisfied" or "very satisfied" with MainePERS. The next employer survey will be this October.

MainePERS worked closely with the Participating Local District (PLD) Advisory Committee, whose membership includes five employer representatives and five employee representatives. The Committee reviewed information on the PLD Consolidated Plan, developed contribution rates, and implemented two cost-of-living increases over the past year. Additionally, onboarding orientations were provided to several new members of the Committee.

MainePERS also worked closely with member organizations representing our active and retired members. Regular articles were drafted by MainePERS for the newsletters of the Maine Association of Retirees and MEA-Retired. I was also the keynote speaker for the Maine Association of Retirees Annual Meeting in May 2024, and spoke at the MEA-Retired Annual Meeting that same month.

In the last legislative session, MainePERS reported to the Labor and Housing Committee on divestment, ESG, the Social Security windfall elimination provision (WEP) and government pension offset (GPO), disability retirement, and the member portal, as well as providing our annual report on operations. We also worked closely and collaboratively with members of the Committee and other stakeholders on legislation impacting MainePERS members. Senior leaders met with legislators, members of the Governor's administration, labor unions, and other stakeholders on request to discuss issues related to services, legislation and investments. Stakeholders were also kept informed via email on important issues.

At the time the Strategic Plan was being developed, a sixth Goal was recommended by staff and adopted by the Board of Trustees, *Goal VI – Foster an Engaged Workforce that Advances the Organization's Mission*. The Organizational Values Steering Committee was chartered in fall 2022 to guide the work of institutionalizing the organizational values developed by the staff as part of the strategic planning process. The Steering Committee is staff-led and promotes interdepartmental communication and collaboration as we work to bring all MainePERS staff into one cohesive team. This past year the Committee focused on three areas for improvement: employee-facing system policies, organizational communication, and collaboration on system-wide projects. The Committee's sub-committee on policies reviewed 33 employee-facing policies for alignment with the organizational values. Proposed changes were then reviewed by senior management and supervisors, and were largely adopted. The communications sub-committee held a series of eight focus groups with staff and reported their findings to senior management and supervisors. Senior management, in collaboration with supervisors, developed a consensus response to all staff that included commitments related to the findings. Another sub-committee is focused on organizational collaboration for system-wide projects, such as the PAS system, and is in the process of developing its recommendations.

The staff-led Events Committee continues to plan social engagements and employee recognition events. The senior management team also organized and staffed the third annual cookout as a thank you to our employees for their work on behalf of our members. This past year we introduced a bi-monthly employee newsletter to keep everyone up to date on staff comings and goings, upcoming events, important reminders, and other items of interest. In addition, we have implemented monthly lunch and learn sessions, topics have included: MainePERS governance, the strategic plan, and organizational values; NextGen 529 plans; Social Security and the impacts of the WEP and GPO; the MaineStart program; an HR open house; and a variety of user application sessions hosted by our IT team.

In Year I we revamped the onboarding program for new staff to include education on MainePERS' governance, mission, vision, and strategic plan, which is led by senior managers. Members of the Organizational Values Steering Committee also participate by discussing the organizational values. Recently we expanded the program to include cross-departmental introductions as part of the onboarding process to promote communication and collaboration among departments.

A working group of staff, supervisors, and senior management reviewed the performance review process for bargaining unit employees and made recommendations to streamline the process and enhance employee participation. The performance review process now includes a voluntary self-evaluation for staff to reflect on their performance and highlight accomplishments. Work on diversity, equity and inclusion (DEI) continues with four of our staff completing a DEI certification course in the past year. Additionally, all staff are now receiving monthly DEI trainings through our online training academy.

Employee turnover was down in 2023 compared to 2022, 12.71% versus 21.63%. The most recent employee satisfaction survey was conducted in February 2024. The survey's response rate was 67%, of those responding 86% stated they "agree" or "strongly agree" they are satisfied with their job compared to 74% last year.

#### Conclusion

Over the past two years, much has been accomplished to move the 5-Year Strategic Plan adopted by the Trustees forward and the momentum is accelerating. The focus over the next three years will largely be on the development of the new pension administration system to ensure a successful implementation. On behalf of the staff at MainePERS, I am pleased to offer this update on the progress of the Plan and look forward to accomplishing even more in the year to come.



# 5-Year Strategic Plan Update to Board of Trustees

October 10, 2024

Dr. Rebecca Wyke, CEO

# Mission, Vision and Values

## Mission

MainePERS partners with public employers to deliver retirement and related services.

## Vision

MainePERS is a trusted and effective fiduciary focused on meeting the needs of active and retired members, beneficiaries, and employers.

## Values

Accountability – Respect – Collaboration – Stewardship – Agility

# Goal I. Preservation of the Trust Fund

- Trustee Charter
- Annual Board Work Plan
- > 3-Year Policy Review Cycle
- Board Education Plan
  - Governance
  - Fiduciary duties
  - Investments
  - Actuarial Practices
  - New Trustee orientation
  - Mission moments
- Board management system -Govenda
- Board self-evaluation

- Finance & Audit Committee
  - Budget & finance oversight
  - Employer reporting
  - Enterprise risk management
  - Internal audit
- Strategic asset allocation
- Staff succession plan
- Public website & live webinar meetings
- GFOA excellence in reporting certificate, 20<sup>th</sup> year

3

 PPCC funding recognition award, 16<sup>th</sup> year

# Goal II: Stability of the Contribution Rates

- FY2023 Valuation
  - State/Teacher Plan, 85% funded
  - PLD Consolidated Plan, 91% funded
- Adopted Employer Contribution Rates
- Reported on Funding Trends
  - Legislature
  - Members
  - Stakeholders
- Administered 2 COLAs for the State-sponsored Plans and 2 COLAs for the PLD Consolidated Plan

# Goal III: Security and Integrity of our Information Systems

- NIST cybersecurity framework audit
- 11 cybersecurity tests
  - including internal and external penetration testing
- Immutable replication solution for back-up

- New PAS system
  - ▶ RFP & bid evaluation
  - Staffing Plan
  - Organizational Change Management Plan
- Data cleansing project
- Microsoft Office 365
- SharePoint intranet

# Goal IV: Cultivation of a Membercentric Organization

- Member education
  - 40 webinars, 800 attendees
- New PLD member webinar & new PLD special plan webinar
- Benefit estimator
  - 21,000 scenarios generated
- Updated phone menu
  - > 96% answer rate
- Member Portal
  - 22,500 registrants, 2500 transactions

- Reduced number of backlogs
  - Exception is PB to final benefit
    - Additional staff
    - Process improvements
    - New PAS system
- GLI process improvements
- Disability retirement
  - Compassionate allowance list
  - Updated annual process for disability retirees
- Member survey
  - 92% retiree satisfaction rating
  - 51% member satisfaction rating

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# Goal V: Development of Stakeholder Relations

- Employers
  - Training program
  - Account reconciliations at 85%
  - 79% satisfaction rating
- PLD Advisory Committee
  - Contribution rates
  - COLAs
- Member organizations
  - Newsletter articles
  - Annual meetings

- Stakeholder meetings
  - Legislators
  - Governor's administration
  - Labor unions
  - Others
- Legislative reports
  - Divestment
  - ESG
  - SSA WEP & GPO
  - Disability retirement
  - Member portal

# VI. Foster an Engaged Workforce tha Advances the Organization's Mission

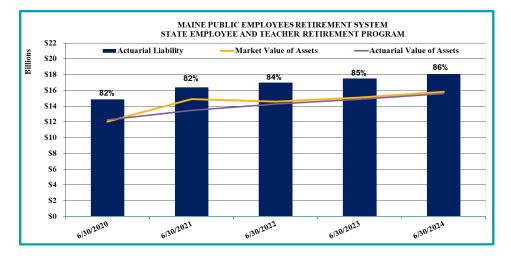
- Staff-led Organizational Values Steering Committee
  - Communications
  - Collaboration
  - Employee-facing policies
- Staff-led Events Committee
- Employee newsletter
- Lunch & learns

- New employee onboarding
  - Cross-departmental introductions
- Performance reviews
  - Employee selfevaluation
- Monthly DEI education
- Reduced turnover, 12.7% v 21.6% last year
- 86% job satisfaction rating

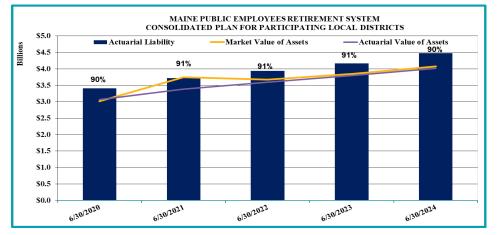
# Key Performance & Risk Metrics

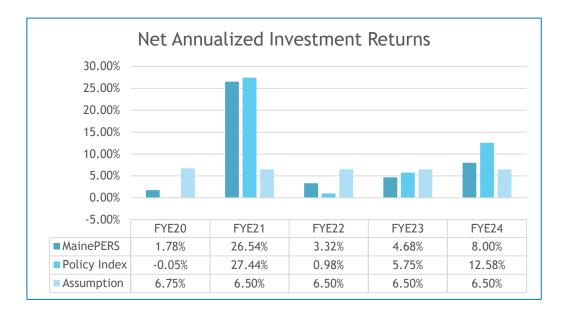
2024 Strategic Plan Update

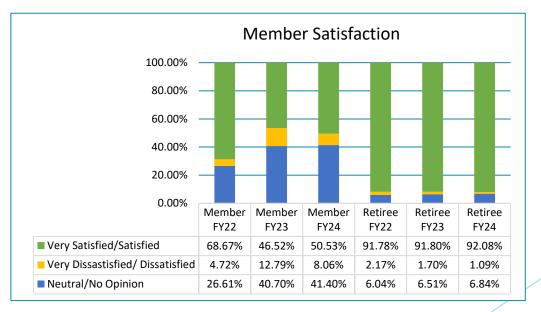
#### Funding Ratio, Actuarial Liability, and Market Value of Assets State Employee and Teacher Plan



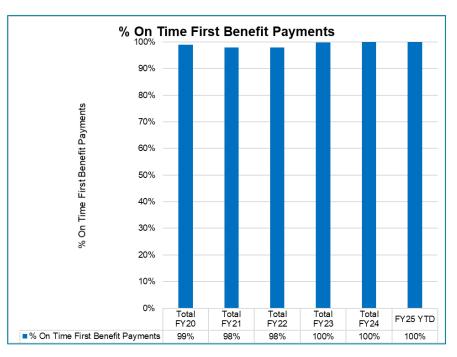
#### PLD Consolidated Plan

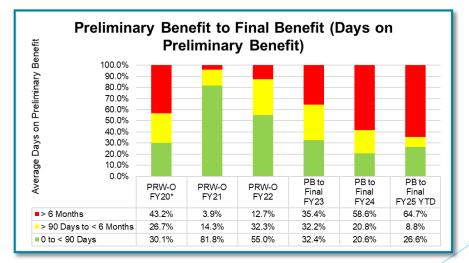






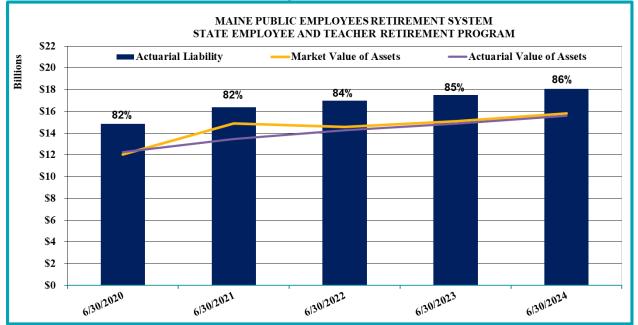
#### **Benefit Initiation**





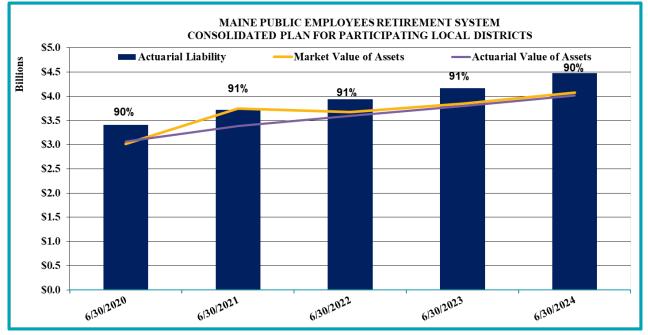
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#### Funding Ratio, Actuarial Liability, and Market Value of Assets



#### State Employee and Teacher Plan

Fiduciary Net Position, reported here as market value of assets (total assets minus liabilities other than actuarial liabilities), on 6/30/2024 is \$15.8 billion. The funded ratio is based on the actuarial value of assets.

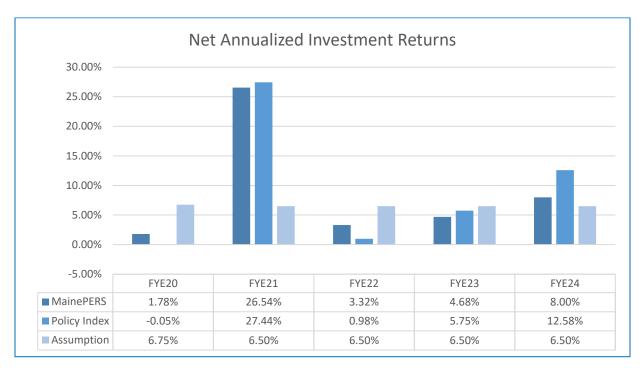


#### **PLD Consolidated Plan**

Fiduciary Net Position, reported here as market value of assets (total assets minus liabilities other than actuarial liabilities), on 6/30/24 is \$4.08 billion. The funded ratio is based on the actuarial value of assets.

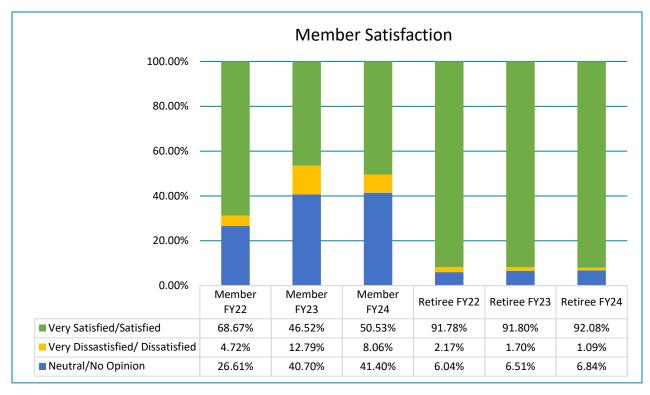
Legislative Plan: funded status is 149% and Fiduciary Net Position is \$17 million on 6/30/24. Judicial Plan: funded status is 109% and Fiduciary Net Position is \$89 million on 6/30/24.

The two charts on this page cover key performance and risk measures I, V, and VI under the Strategic Plan.



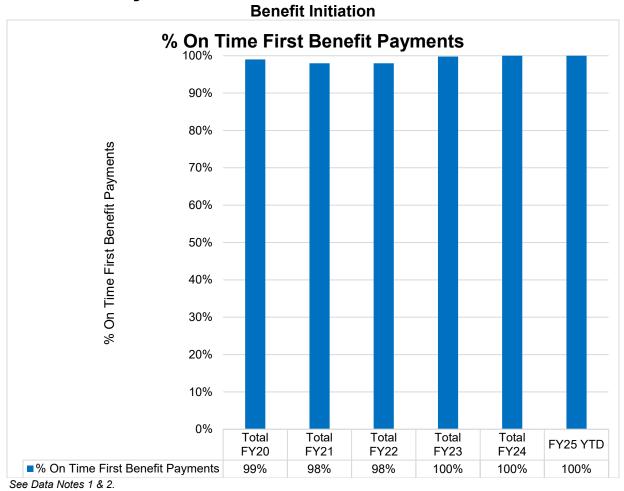
#### **Net Annualized Investment Returns**

This chart covers key performance and risk measure II under the Strategic Plan.

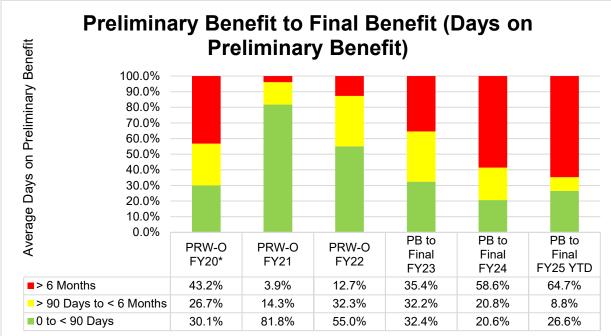


#### **Overall Member Satisfaction**

This chart covers key performance and risk measure IV under the Strategic Plan.



**Preliminary Benefit to Final Benefit** 



\*PRW-O FY20 is based on the last 6 months of the FY; back data not available. See Data Notes 3 & 4.

The two charts on this page cover key performance and risk measure III under the Strategic Plan.

#### **Data Notes**

#### **Benefit Initiation**

**NOTE 1:** MainePERS issues a first retirement benefit payment disbursement the payroll following the date a retirement application is found to be complete (if complete after the payroll cut-off that first disbursement is made the following month and deemed to be on time). This metric is manually calculated.

**NOTE 2:** The percent of late first benefits includes all first payments falling outside the on-time timeline. These include instances with extenuating circumstances including but not limited to: returned first payment (member changed banks or gave incorrect routing/account information); deceased prior to first payment; members first payment date is retroactive due to disability process; member applied to receive payment after they were eligible and collected a retroactive payment; first payment date changed, and/or the application was refiled after initial submission.

#### **Preliminary Benefit to Final Benefit**

**NOTE 3:** MainePERS members upon retirement are initially and rapidly paid a preliminary benefit that is an estimate of the person's final benefit. The final benefit requires significant diligence to be completed under current MainePERS laws, rules, processes and tools. The graph above includes two measures of the timeliness of moving retirees from their Preliminary Benefit (PB) to their Final Benefit. Each metric essentially shows an annualized snapshot of how long individuals received preliminary benefits before beginning to receive their final benefit. The two measures are looking at essentially the same data but each metric has a slightly different starting point and/or a slightly different ending point for measuring the time period, depending on precisely what information is desired. In general, they paint the same overall picture. MainePERS seeks to have retirees on their final benefit by their 3rd benefit payment and seeks to avoid that transition from requiring longer than 6 months. We have transitioned this metric to include only the "PB to FINAL" metric for FY 23, FY 24 and FY 25 YTD but have included the historic Pension Retirement Workflow-Open (PRW-O) metric that was available for FY 20, FY 21 and FY 22 at the time the reporting was initiated.

**NOTE 4:** In detail, the metrics above are: 1) PRW-O measures from the point at which MainePERS opens a Pension Retirement Workflow to the point when it is closed (when the Final service retirement benefit amount was established); and, 2) the PB to Final metric shows the number of days since the first preliminary benefit was paid and for which preliminary benefits still are being paid. That last metric is one of several ways to measure Preliminary to Final benefit processing time.

10/2024

#### 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: OCTOBER 2, 2024

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**

- <u>MEMBER AND EMPLOYER EDUCATION</u>: Nearly 30 member education sessions across all participant plan types are now open for registration and newly posted online with events occurring from now through the end of Fiscal Year 2025. MainePERS also will have a presence for members and employers at a variety of events involving hundreds of people this month, including the annual Maine Municipal Association Convention, the Maine School Management Association fall conference and the annual Maine Association for Career and Technical Education conference. MainePERS also will be represented and gathering information at the Municipal Employees Retirement System of Michigan's annual conference this month. That event is focused on member and employer education for that system.
- 2. <u>MAINESTART RECORDKEEPER TRANSITION:</u> In November, the MaineSTART plan is moving from Newport Group to Ascensus as a result of a joining of the two companies. Ascensus is the largest independent recordkeeping services provider, retirement plan third-party administrator, and government savings facilitator in the United States. Plan documents are not changing. MainePERS continues to work with Newport Group and Ascenus to ensure payrolls get processed, forms are up to date, and the transition is smooth for both employers and participants. Ascensus has been and will be communicating with participants between now the effective date of the change. MainePERS also will be communicating with participants prior to the effective date. The migration is scheduled to occur starting Friday Nov. 15, 2024 and continuing through that weekend.

#### BOARD OF TRUSTEES MEMORANDUM

- 3. <u>STANDARD SUPPLEMENTAL METRICS</u>: As mentioned at recent meetings, the supplemental Member Services metrics are provided this month in two formats. One is the current format. The other is a proposed and slightly updated format, which seeks to provides the same information and the same metrics but in a slightly condensed view.
- 4. <u>PENSION ADMINISTRATION SYSTEM (PAS) PROJECT</u>: A project for MainePERS to obtain a new or upgraded Pension Administration System through a request for proposals (RFP) process continues. The result of the RFP is expected to be a multi-year modernization project to refresh or replace MainePERS current system, known as V3. The evaluation process is approaching its conclusion and is expected to conclude in October. PAS related change management work with advisor Syntropy Partners is progressing.

Linea, MainePERS' PAS advisor, reports in their view the overall PAS project status is green. MainePERS agrees. Also, all four individual monitoring indicators are green, an improvement from last month with the schedule item was yellow due a slight adjustment in the schedule adjustment undertaken by MainePERS to accommodate further review and diligence. This is an excerpt from Linea's most recent status report.

Overall		Scope	
Schedule		Resources	
Project Lead	Denise Myers	Project Sponsor	CEO Rebecca Wyke
Project Start	July 17, 2023	Project End	October 30, 2024
Reporting Period	Aug 30 to Sep 30, 2024	Reporting Date	September 30, 2024
Audience	Chip Gavin, Michael Colleran, Joy Childs, Valerie Scott, Lauren Fowler, Domna Giatas, Timothy Poulin, Sherry Vandrell	Next Core Team Meeting with Linea	October 9, 2024

#### FINANCE

<u>EMPLOYER REPORTING</u>. Employers submitted defined benefit payrolls on time at rate of 88% in September. This compares to a rate of 95% for the same period last year. Of the 72 payrolls that missed the deadline, half of them were submitted within three days of deadline. This was a particularly challenging month for employers who reported a number of reasons for delays, including staff turnover in their offices. The percentage of fully reconciled accounts through July data is 83.6%, which is 1.7% lower than last month. This is in part due to the number of employers who were late reporting but also, making payments or responding to requests for data to be able to reconcile accounts.

The aging of the currently 114 not fully reconciled accounts breaks down as follows as of October 1, 2024. The numbers in green represent a decrease in count from the prior period and the number in red is an increase.

	Oldest Unreconciled Transactions								
Year	2024	2023	2022	2021	2020	2019	2018	2017	
# of Accts	56	19	3	9	10	16	-	1	

Work continues with Portland Public Schools and BerryDunn on the payroll reporting issues. Last month I reported on a new approach to clearing up individual accounts that is being tested – the work is producing good early results and we are moving forward with another test population of records to see if we can streamline the process further.

Portland Public Schools has engaged BerryDunn for additional supports and services in an effort to free their own office staff up to be able to focus on current reporting needs going forward.

- 2. <u>EMPLOYER AUDITING</u>. Two audits were opened during the month of September and three audits were closed. The percentage of resolved findings to date is 96.8%.
- 3. <u>ACCOUNTING AND FINANCE.</u> Work continued on the internal audit of the Business Continuity Program (BCP) this past month with initial documentation reviews completed followed by interviews of key staff with roles in the program. The next internal audit will be a review of MainePERS actuarial processes and practices. We are in the final stages of the annual financial statement audit for FY24 and BerryDunn will be at the October meeting to present the draft report.

#### **OPERATIONS**

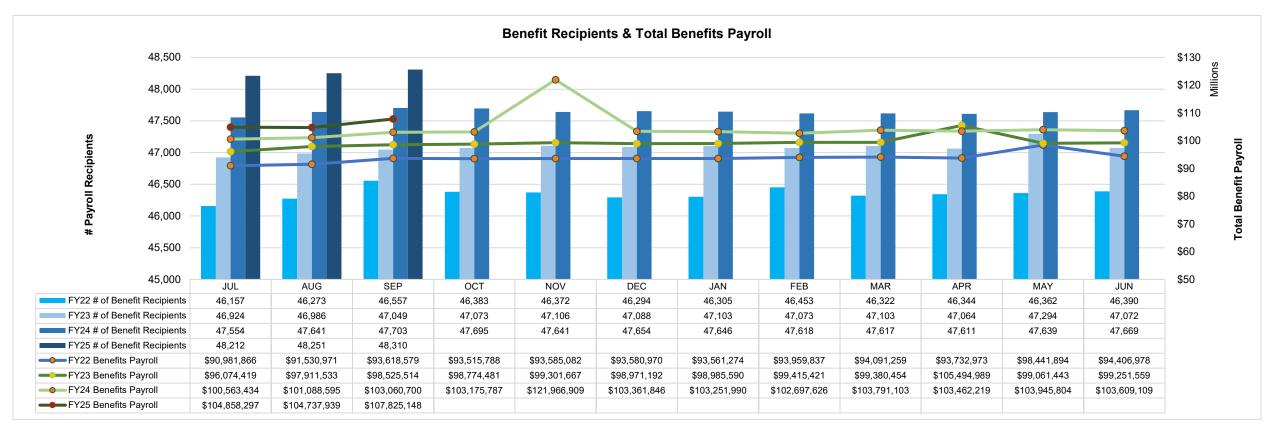
- <u>INFORMATION TECHNOLOGY</u>: Replacement of our Augusta data center Storage Area Network (SAN), which is closing in on end of life, has started and will be completed in late October. IT staff continue to be heavily involved in the PAS replacement and data cleansing projects. We have successfully filled one of the new Business Analyst positions to support the PAS project and are recruiting for the second position.
- 2. <u>FACILITIES</u>: We have begun excavation for the generator project, which we expect to be completed in the early spring.
- 3. <u>LEGAL</u>: We have selected four firms for the award of a securities litigation and monitoring contract through an RFP process. The bidders have been notified, and we are negotiating contracts with the selected bidders.
- 4. <u>HUMAN RESOURCES</u>: We had three new hires in September and one termination. We currently are recruiting for 11 open positions.
- 5. <u>RISK MANAGEMENT</u>. We have engaged BerryDunn to review our current practices on preventing benefit and refund fraud and advise us on any additional best practices.

#### RECOMMENDATION

No Board action is recommended at this time.

#### **RETIREMENT SERVICES**

**BENEFITS PAYROLL:** Regular monthly pension benefit payments were made to 48,310 recipients in September, totaling \$107,825,148. Note: Special payments paid outside of the regular payroll run are not reflected in the "Benefits Payroll" total.



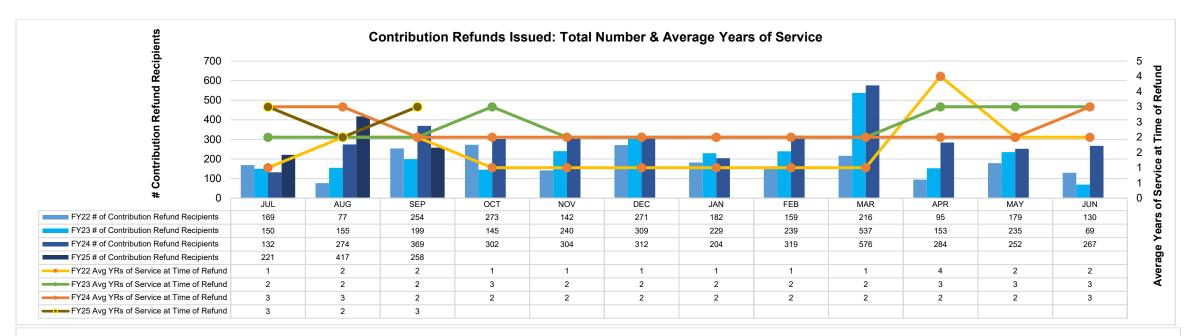
#### **RETIREMENT SERVICES: (CONTINUED)**

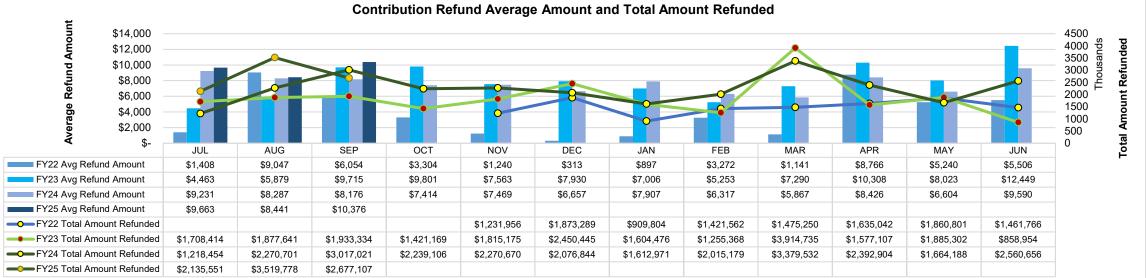
**FIRST TIME BENEFIT RECIPIENTS:** One hundred fifty-seven (157) individuals received their first benefit payment in September. The average benefit amount was \$2,447. First time recipients averaged twenty-two (22) years of service. The count of new recipients, payment amount, and service are comparable to data seen during the same month in recent prior years.



#### **RETIREMENT SERVICES: (CONTINUED)**

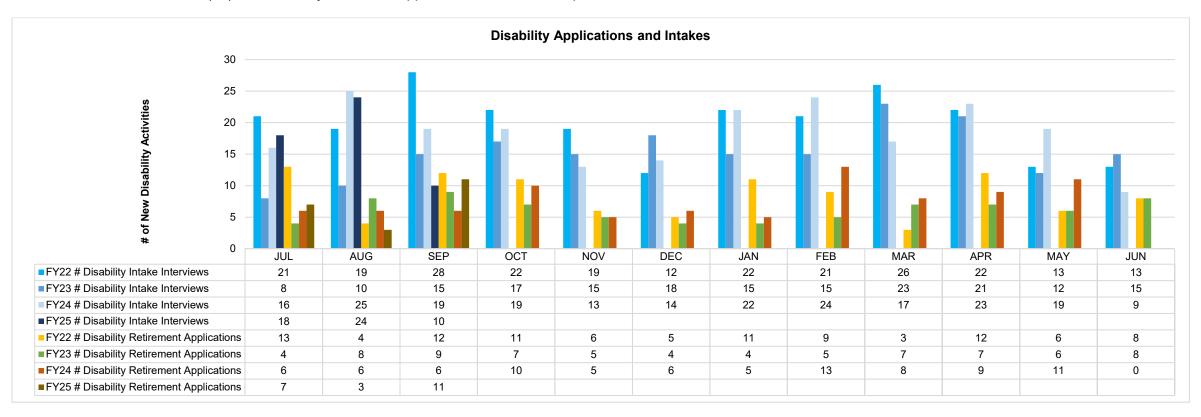
**CONTRIBUTION REFUNDS**: Two hundred fifty-eight (258) former members received a refund of their contributions in September. The average refund was \$10,376 as the result of an average three (3) years of service. The aggregate amount refunded was \$\$2,677,107.





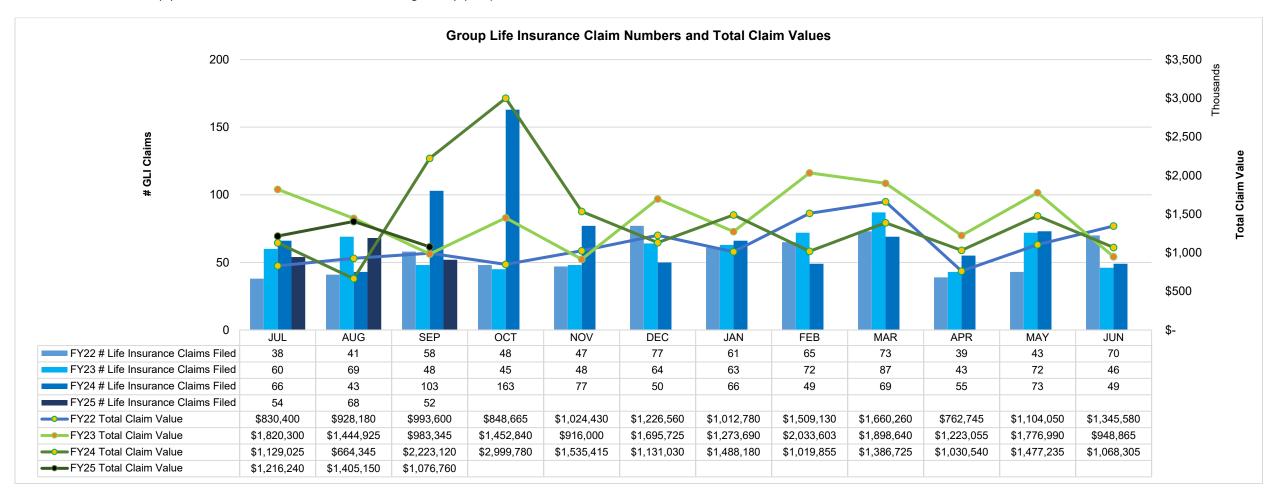
#### **DISABILITY SERVICES**

There were ten (10) intake interviews completed in September with varying levels of detail and duration. Intakes included three (3) State members, five (5) Teacher members, and two (2) PLD members. There were eleven (11) new disability retirement applications received in September.



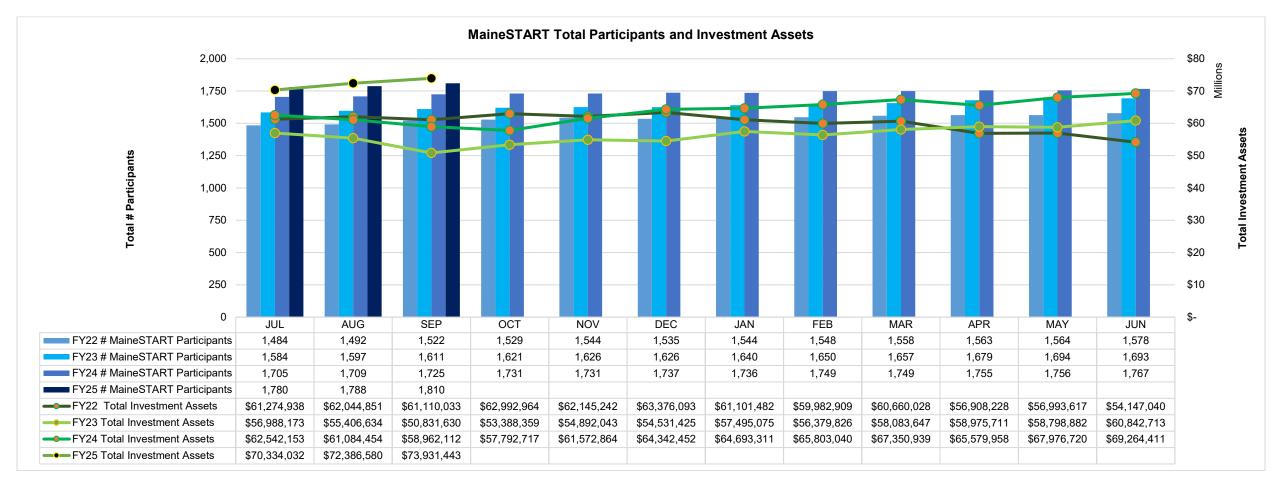
#### SURVIVOR SERVICES

Fifty-two (52) life insurance claims were sent to our carrier (The Hartford) in September with a total value of \$1,076,760 in payments due to beneficiaries. Of the claims, forty-six (46) were retiree claims and six (6) were active member claims including one (1) dependent claim.



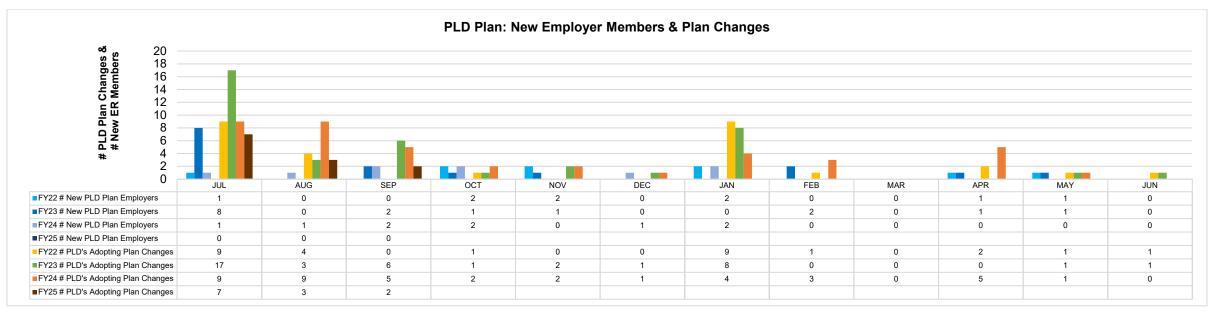
#### **DEFINED CONTRIBUTION PLAN SERVICES**

MaineSTART had one thousand eight hundred ten (1,810) participants at the end of September with \$73,931,443 of investment assets in the program.

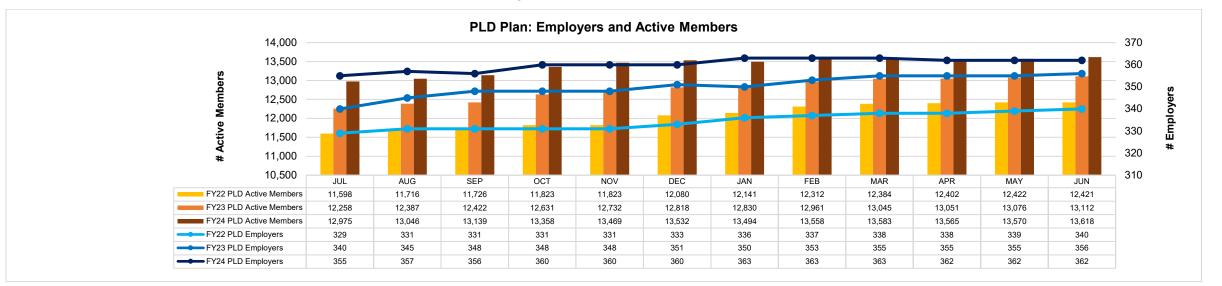


#### **PLD PLAN ADMINISTRATION**

No new employers joined the PLD Retirement Program effective September 1, 2024. There were two (2) employer plan changes effective September 1, 2024. <u>Note:</u> 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.



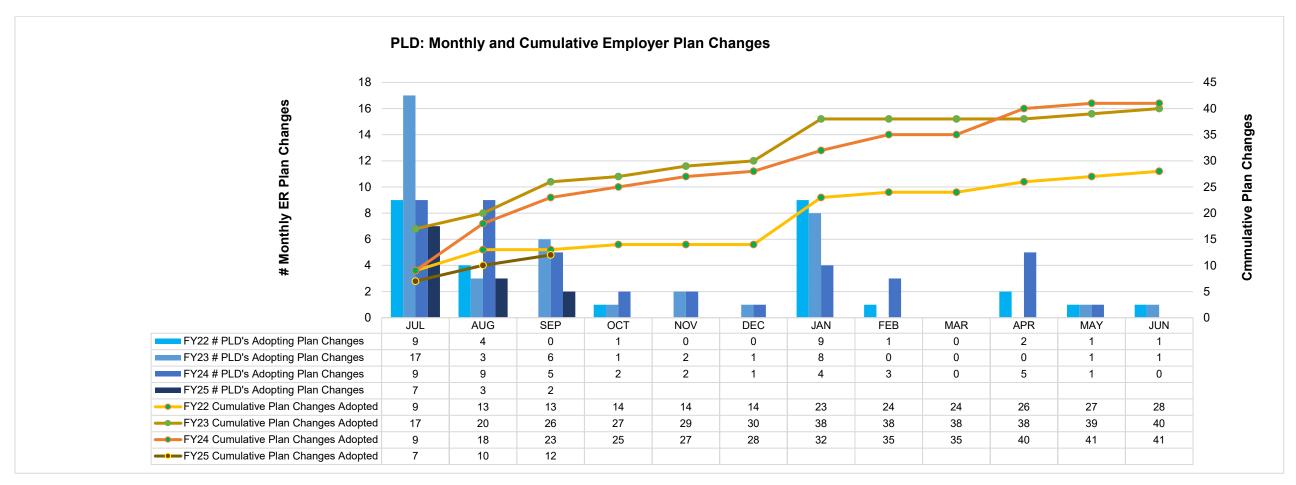
PLD employers remained at 362 from April to June; PLD Employee numbers fluctuated in April and May and landed on 13,618 in June. This data will be reported quarterly; the next update will be included in the October supplement numbers at the November 2024 meeting.



#### PLD PLAN ADMINISTRATION (CONTINUED)

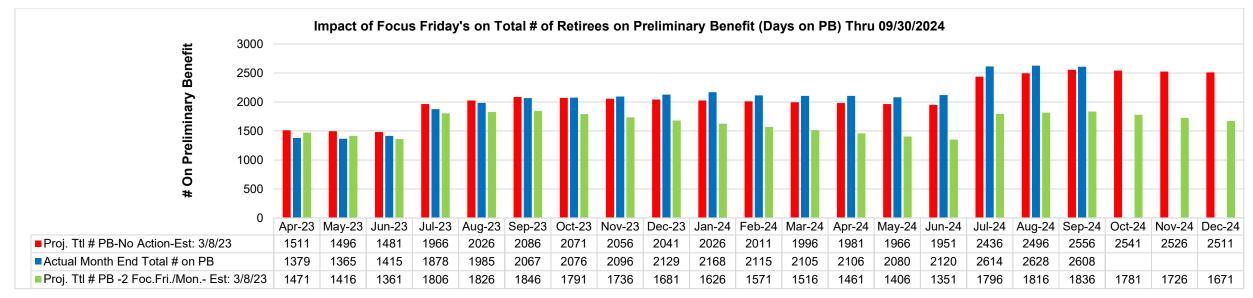
#### PLD PLAN - MONTHLY AND CUMULATIVE EMPLOYER PLAN CHANGES

There were no new employers joining the PLD Retirement Program. There were two (2) employer plan changes effective September 1, 2024. Total plan changes for FY25 is twelve (12). <u>Note:</u> 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.

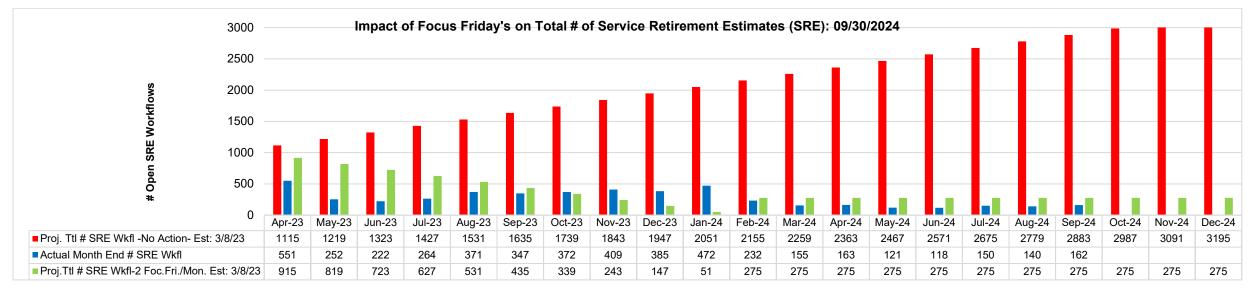


#### FOCUS FRIDAY IMPACT ON BACKLOG REDUCTION

**PRELIMINARY TO FINAL BENEFIT (PB TO FINAL)** BACKLOG THROUGH SEPTEMBER 30, 2024: 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.

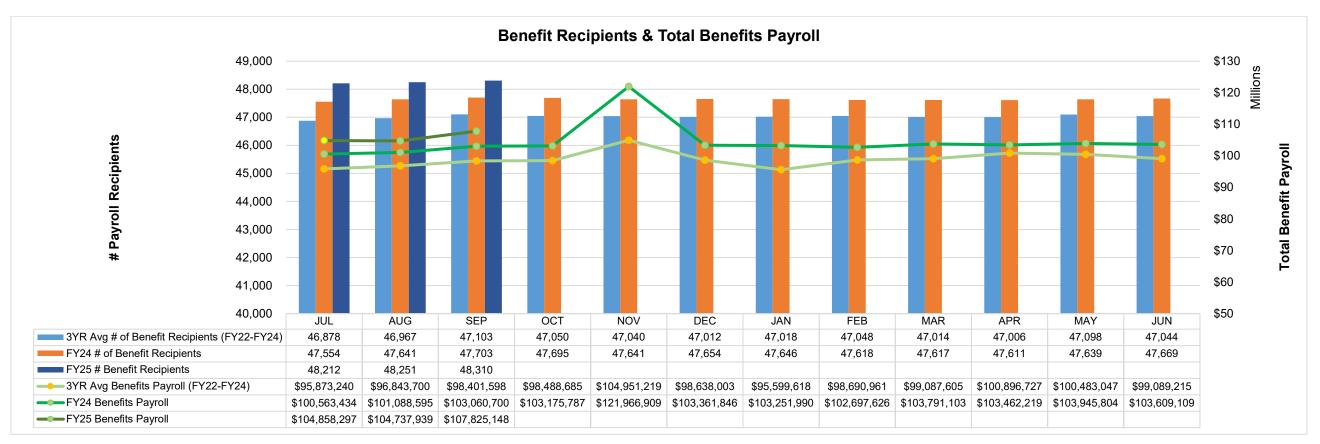


SERVICE RETIREMENT ESTIMATE BACKLOG THROUGH SEPTEMBER 30, 2024: The backlog projections and reporting below are based on data that count the total number of open Service Retirement Estimate workflows.



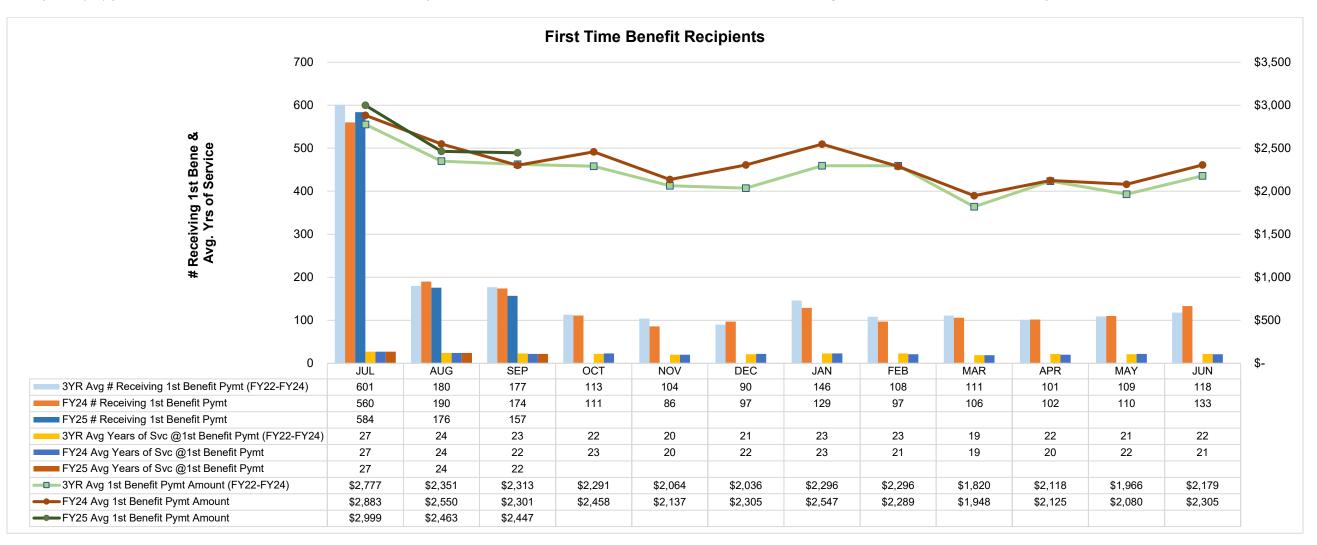
#### **RETIREMENT SERVICES**

**BENEFITS PAYROLL:** Regular monthly pension benefit payments were made to 48,310 recipients in September, totaling \$107,825,148. Applying to all graph in this report, instead of providing fiscal years of 2022, 2023 and 2024 individually, this graph provides the average of those years against fiscal years 2024 and 2025.



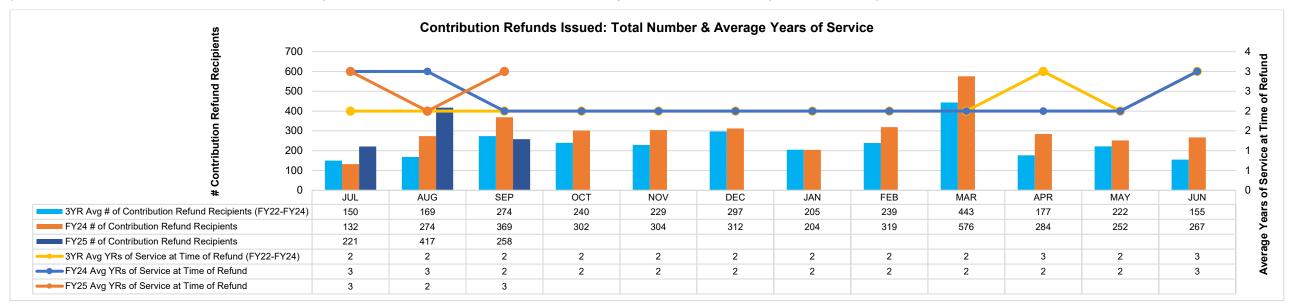
#### **RETIREMENT SERVICES: (CONTINUED)**

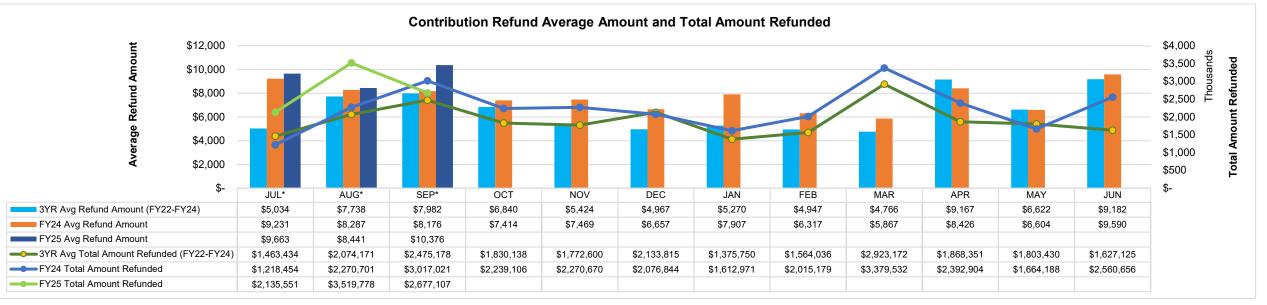
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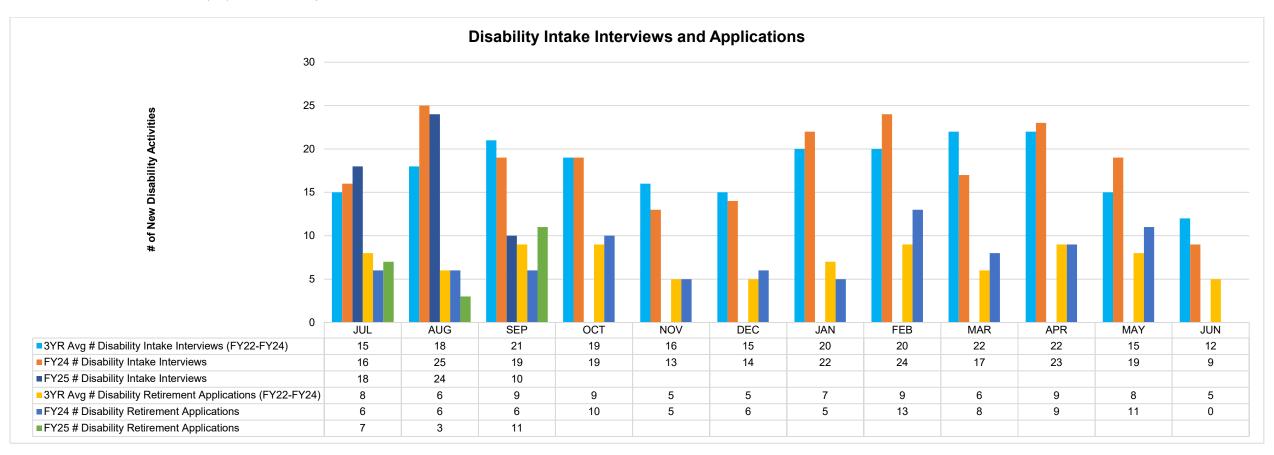
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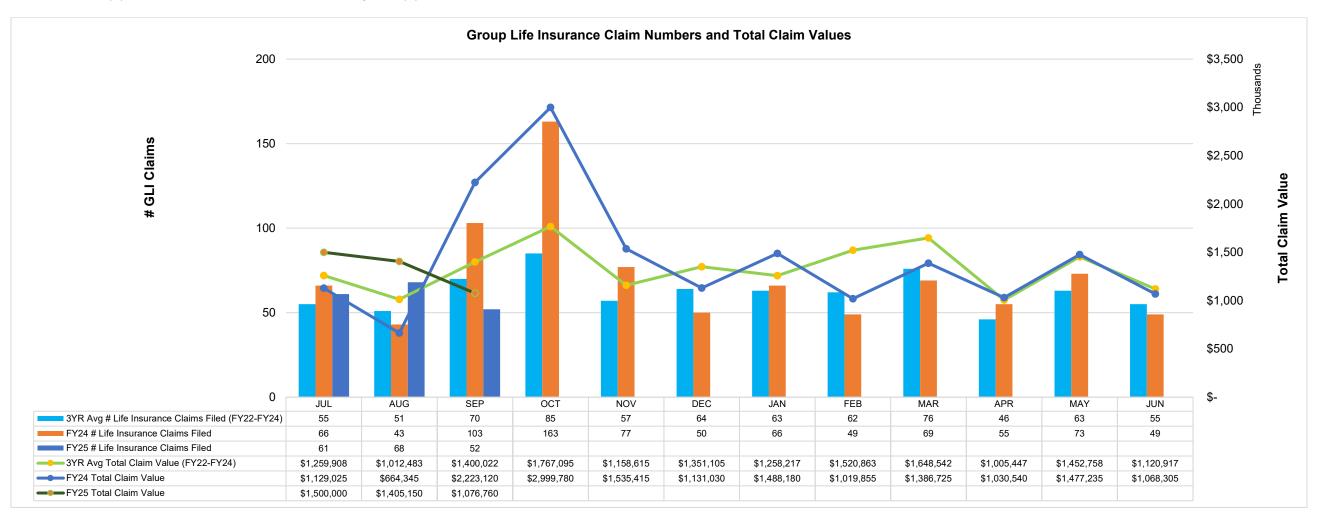
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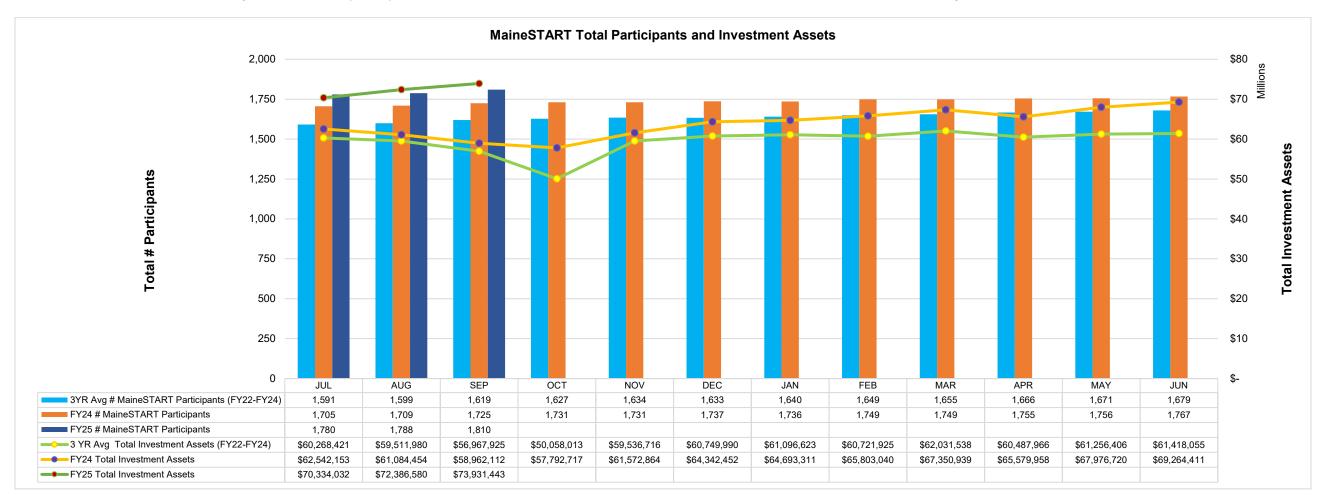
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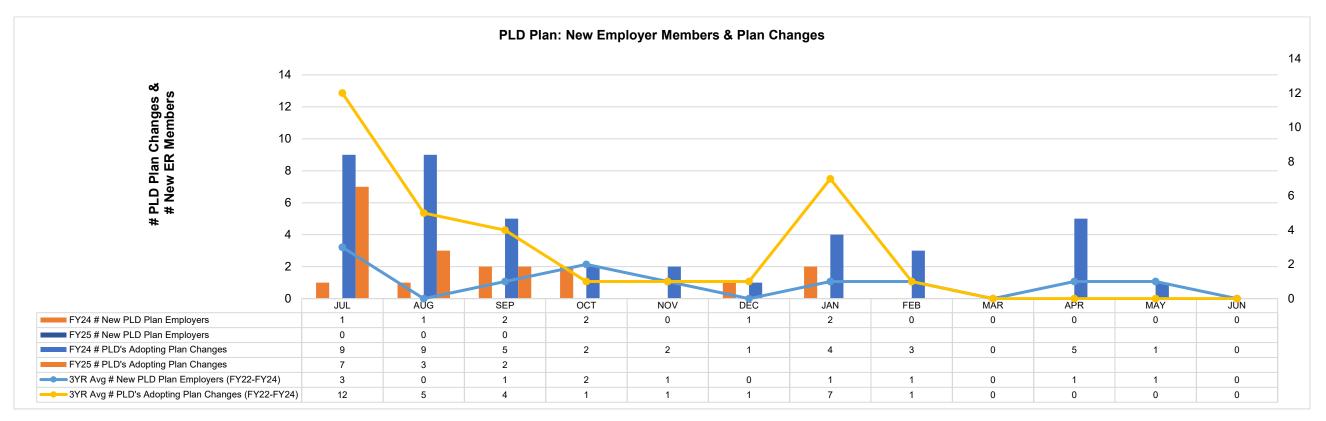
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#### <u>PLD</u>

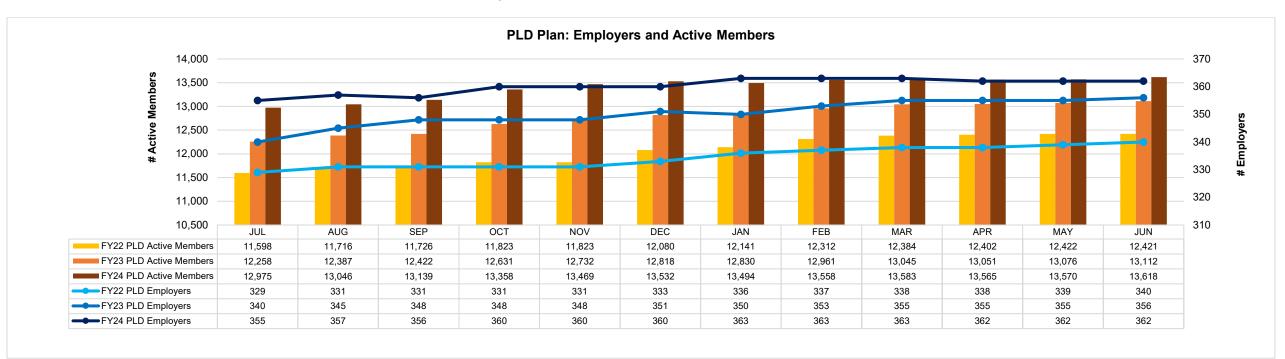
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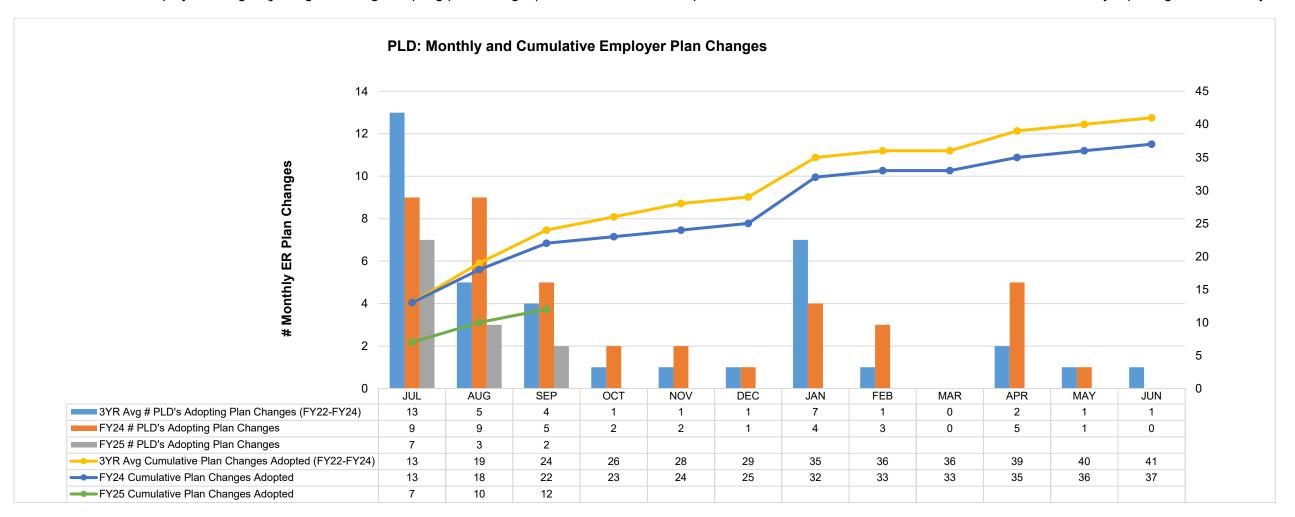
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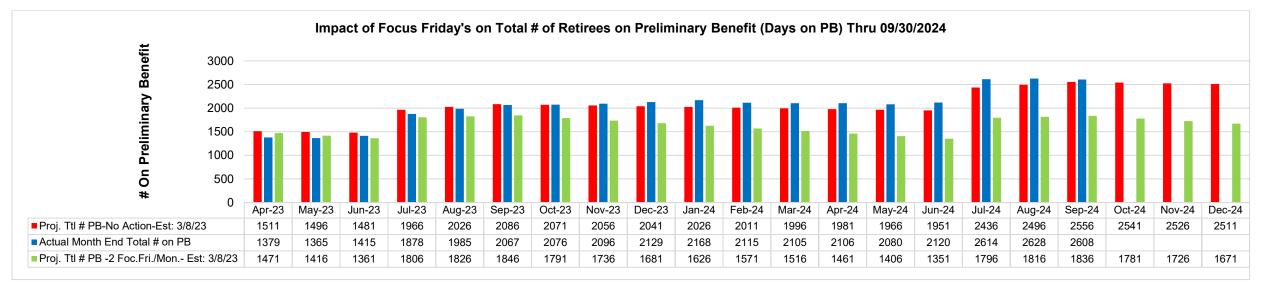
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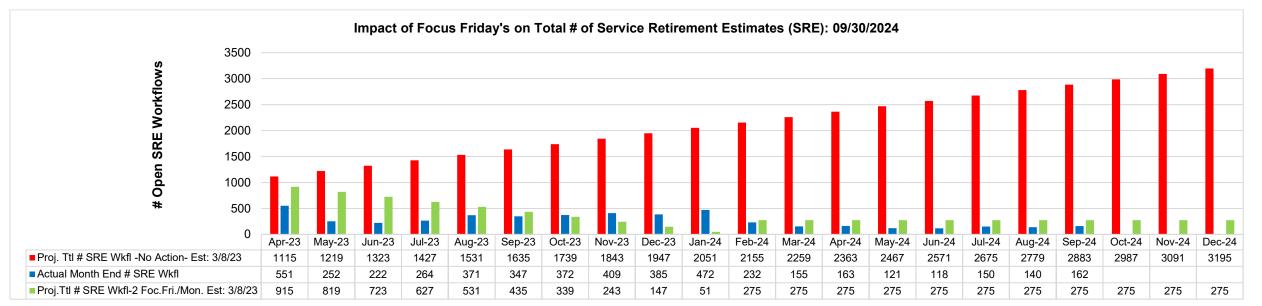


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SERVICE RETIREMENT ESTIMATE BACKLOG THROUGH SEPTEMBER 30, 2024: The backlog projections and reporting below are based on data that count the total number of open Service Retirement Estimate workflows.



#### MAINEPERS

#### **BOARD OF TRUSTEES MEMORANDUM**

TO: BOARD MEMBERS

FROM: MICHAEL COLLERAN, CHIEF OPERATING OFFICER AND GENERAL COUNSEL

SUBJECT: CEO ANNUAL EVALUATION

DATE: OCTOBER 2, 2024

Board Policy 4.3 provides for an annual performance evaluation of the Chief Executive Officer. At the October meeting, the Board Chair will lead a discussion of the evaluation process for this year.

#### POLICY REFERENCE

Board Policy 1.2 – Trustee Fiduciary Responsibility

Board Policy 4.3 – Monitoring Chief Executive Officer Performance

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 - Communication and Support to the Board

#### RECOMMENDATION

No Board action is required at this time.