MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Board of Trustees

Public Meeting Packet

October 12, 2023

MainePERS Board of Trustees
October 12, 2023
139 Capitol Street, Augusta

AGENDA

9:00 a.m.[1]		CALL TO ORDER		Brian Noyes
9:00 – 9:05 a.m.	1.	CONSIDERATION OF CONSENT CALENDAR • Minutes of September 14, 2023 • Decision, E.P. Appeal • Consideration of Items Removed	ACTION	Brian Noyes
9:05 – 10:00 a.m.	2.	ACTUARIAL VALUATIONS and UAL UPDATE	ACTION	Dr. Rebeca M. Wyke, Kathy Morin Gene Kalwarski, Bonnie Rightnour, Cheiron
10:00 – 10:45 a.m.	3.	AUDITED FINANCIAL STATEMENTS	ACTION	Mark Laprade, Leah Clair, BerryDunn Sherry Vandrell
10:45 – 11:00 a.m.		*BREAK*		
11:00 – 11:10 a.m.	4.	PRIVATE MARKETS REVIEW • Private Markets Activity • Quarterly Rebalancing Report		James Bennett
11:10 – 11:40 a.m.	5.	INVESTMENT MONTHLY REVIEW • Investment Monthly Review		James Bennett Brian McDonnell, Stuart Cameron, Cambridge Assocs.
11:40 – 12:00 p.m.	6.	GLI/RHIT INVESTMENT POLICY STATEMENTS • Amendment to Board Policy 2.1A – GLI Investment Policy Statement • Amendment to Board Policy 2.1B – RHIT Investment Policy Statement	ACTION	James Bennett
12:00 – 12:10 p.m.	7.	BOARD MEETING POLICY • Amendment to Board Policy 1.10 – Board Meetings	ACTION	Michael Colleran
12:10 – 12:40 p.m.		*LUNCH*		

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

12:40 – 1:40 p.m.	8.	CEO REPORT • Strategic Plan Update • Key Performance and Risk Measures • Member Satisfaction Survey Results • Pension Administration System Project Education	Dr. Rebecca M. Wyke Chip Gavin
1:40 – 1:50 p.m.	9.	MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT	Chip Gavin Sherry Vandrell Michael Colleran
1:50 – 1:55 p.m.	10.	LITIGATION UPDATE	Betsy Stivers
1:55 p.m.		ADJOURNMENT	Brian Noyes

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

Minutes

Board of Trustees	MainePERS
Board Meeting	Augusta
September 14, 2023	9:00 a.m.

The Board of Trustees met at MainePERS, 139 Capitol Street, Augusta, ME 04332 at 9:00 a.m. on September 14, 2023. Brian Noyes, Chair, presided. Other Trustees participating were: Dick Metivier, Vice Chair; Henry Beck, State Treasurer; Shirrin Blaisdell; Mark Brunton; John Kimball; and Ken Williams. Joining the Trustees were Dr. Rebecca Wyke, Chief Executive Officer; Michael Colleran, Chief Operating Officer and General Counsel; James Bennett, Chief Investment Officer; Sherry Vandrell, Chief Financial Officer; Chip Gavin, Chief Services Officer; Monica Gorman, Secretary to the Board of Trustees; and Betsy Stivers, Assistant Attorney General and Board Counsel. The Board also was joined for select portions of the meeting by Douglas Porter, Managing Director, Investments; Kathy Morin, Director of Actuarial and Legislative Affairs; Brian McDonnell, Cambridge Associates; Tom Lynch and George Bumeder, Cliffwater; and, William Greenwood and Jennifer Yeung, Albourne.

Brian Noyes called the meeting to order at 9:00 a.m.

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 10, 2023

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

PRIVATE MARKET ACTION

- Action. Ken Williams made the motion, seconded by Mark Brunton, to enter into executive session pursuant to 1 M.R.S. §405(6)(F); 5 M.R.S. §17057(4) to discuss private market investment information contained in non-public documents.

Board moves out of executive session.

Henry Beck joined the meeting at 9:10 a.m.

FORT Global Contrarian

- Action: Dick Metivier made the motion, seconded by Mark Brunton, that the Board authorize the Chief Executive Officer, Chief Investment Officer, and General Counsel as signatories to execute the documents necessary to redeem the System's investment in FORT Global Contrarian. Voted unanimously by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

PRIVATE MARKET REVIEW

Private Markets Activity

Jim Bennett reviewed the table of private market funds and co-investments that had closed during the past 12 months. Jim shared there are no manager meetings scheduled for September. He also stated the Investment Team continues to evaluate new fund investments in General Catalyst Group XII and Bain Capital Real Estate III.

INVESTMENT REVIEW

Investment Monthly Review

Jim Bennett reported that as of August 31, 2023 the MainePERS fund had a preliminary market value of $18.7 billion, the preliminary return for the month was -0.9%, and the preliminary calendar year-to-date return was 4.9%.

Quarterly Comprehensive Reports

Jim Bennett reviewed the comprehensive quarterly reports as of June 30, 2023. Jim answered questions from the Trustees.

QUARTERLY INVESTMENT EDUCATION

Private Equity

Tom Lynch presented the Trustees with an in-depth session on the role of private equity in the portfolio. Tom answered questions from the Trustees.

ACTUARIAL EDUCATION

Gene Kalwarski and Bonnie Rightnour provided an educational presentation that responded to various questions from the July meeting, reviewed the actuarial valuation process, discussed a new actuarial standard of practice, and previewed the June 30, 2023 valuation. They discussed and answered questions from the Trustees.

BOARD POLICY 2.1-B – RHIT AND 2.1-A GLI INVESTMENT POLICY STATEMENTS

Jim Bennett shared that a review has been completed of the RHIT and GLI Investment Policies and discussed potential changes to those policies. Jim told Trustees that revised policies would be brought for Trustees' consideration at the October meeting.

CEO REPORT

Member Portal

Dr. Rebecca Wyke shared internal and external user testing is complete along with final testing of the security and fraud prevention measures. Dr. Wyke stated the fall rollout of the portal is on schedule.

Board Education

Dr. Wyke provided a list of educational opportunities that MainePERS offers Trustees in order to maintain current knowledge on programs and services.

MaineSTART QUARTERLY REPORT

Michael Colleran presented the MaineSTART report for the quarter ending June 30, 2023. Michael reviewed participation levels, plans available to participants, investment options, fees, and operational updates.

Chip Gavin shared MaineSTART outreach to teachers continues. Chip stated MainePERS staff will be a vendor at the annual Maine School Management Association's Fall Conference.

MEMBER SERVICES, FINANCE, AND OPERATIONS REPORT

Chip Gavin provided an update on the member portal. Chip stated mailings have begun to active members and retirees who have missing contact information in their records.

Chip shared information gathering and discussion sessions with the pension administration software consultant are being scheduled for the next couple of months. These discussions will help in drafting the request for proposals in order to update or replace the system.

Michael Colleran stated retention and recruitment continues to be a major focus. He shared there were no departures and five new hires in August. Michael shared the IT group is fully-staffed. Michael thanked the Document Center staff for their work in updating contact information for more than 3,000 members and retirees and successfully processing benefits payroll from the disaster recovery site. He answered questions from the Trustees.

Michael updated the Trustees on precautions being taken should there be water or wind damage caused by Hurricane Lee.

Sherry Vandrell reported 93.8% of employers reported payrolls on time in August. She shared ten audits were opened in August and eleven were completed.

PERSONNEL DISCUSSION

- Action. Mark Brunton made the motion, seconded by Ken Williams, to enter into executive session pursuant to 1 M.R.S. §405(6)(A) to discuss compensation of an employee. Voted unanimously by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

Board moves out of executive session.

- Action. Motion by John Kimball, seconded by Shirrin Blaisdell, that the $15,000 in annual deferred compensation that the Chief Executive Officer has been receiving shall continue, except that this amount and the retention bonus for which the Chief Executive Officer is eligible shall be paid, if earned, through the purchase of creditable service time in the State/Teacher Retirement Program to be ported over to the MainePERS PLD

Consolidated Plan; and that the Board Chair is authorized to execute any documents necessary to implement this action. Voted unanimously by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

CEO ANNUAL EVALUATION

Establishment of CEO Review Committee

Brian Noyes discussed the comprehensive evaluation of the CEO called for by Board policy for this year. The policy provides for a Board CEO Review Committee to be established as part of this process. After discussion, the Board reached consensus that the Committee would be composed of the Board Chair, Board Vice Chair, and Shirrin Blaisdell.

ADJOURNMENT

- Action. Ken Williams made the motion, seconded by Mark Brunton to adjourn the September meeting of the Board of Trustees. Unanimously voted by seven Trustees (Beck, Blaisdell, Brunton, Kimball, Metivier, Noyes, and Williams).

The meeting adjourned at approximately 2:30 p.m.

10/12/23
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 2023 ACTUARIAL VALUATION REPORTS

DATE: OCTOBER 5, 2023

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 12, 2023 meeting and will answer any questions you may have at that time. A copy of their presentation will be provided in advance of the meeting. If the Board accepts the reports, they will be immediately finalized.

RECOMMENDATION

Accept the FY 2023 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.

Classic Values, Innovative Advice

Maine Public Employees Retirement System

State Employee and Teacher Retirement Program

Actuarial Valuation Report as of June 30, 2023

Produced by Cheiron
October 2023

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October 12, 2023

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, 2023 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.

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.

This report does not contain any adjustments for the potential impact of COVID-19 on either economic or demographic assumptions. We anticipate that the pandemic may have implications in both the short and long term, but the net impact of these is not determinable at this time.

Sincerely,
Cheiron

Gene Kalwarski, FSA, EA	Fiona E. Liston, FSA, EA	Bonnie Rightnour, FSA, EA
Principal Consulting Actuary	Principal Consulting Actuary	Principal Consulting Actuary

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, 2023. 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) 2023 were developed in the budgeting process in July 2020, based on a roll-forward of the June 30, 2019 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) 2022 and FY 2023 were developed through this ratemaking process in 2020. The assets used in developing these rates were the preliminary June 30, 2020 assets. These were then combined with liability measures as of June 30, 2020, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2019 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, 2019 valuation date and the June 30, 2020 measurement date. Similarly, the contributions for FY 2024 and FY 2025 were developed in 2022 and were based on estimated assets as of June 30, 2022 and liabilities based on the June 30, 2021 actuarial valuation liabilities adjusted to our best estimate of the June 30, 2022 liabilities.

The results of this June 30, 2023 valuation will be adjusted to a June 30, 2024 measurement date, and combined with preliminary assets as of June 30, 2024, will be used as the basis for the applicable FY 2026 and FY 2027 employer contributions.

Experience from July 1, 2022 through June 30, 2023 (FY 2023)

With respect to investment experience measured on a market value of asset (MVA) basis, MainePERS experienced an investment return of positive 6.05% for the fiscal year ending June 30, 2023. This is less than the assumed rate of return of 6.5%. However, given the three-year asset smoothing method in place, only one-third of that loss is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore, asset smoothing also resulted in recognizing one-third of prior deferred assets gains of $0.321 billion during FY 2023 for this Program. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.15%. This is greater than the 6.50% assumed rate of return in effect for FY 2023, resulting in a gain on investments for the year of $92 million in addition to the expected increase of $556 million had the assumed 6.50% been exactly achieved on an AVA basis.

With respect to liability experience, the Program's liabilities increased by $174 million more than the expected growth of $358 million (a 1.0% growth in total liabilities beyond expected growth). Of this increase, approximately $113 million was attributable to demographic experience, primarily higher salary increases than expected, in addition to a liability loss of $61 million attributable to the payment of cost-of-living adjustments (COLA) exceeding the assumed COLA. A one percent ad-hoc COLA was paid to eligible retirees during FYE 2023. An amount of $6.6 million was funded immediately to cover this payment.

Combining the investment and liability experience produced an informational total employer contribution of 20.53% of payroll as of June 30, 2023. This is a decrease of 0.12% compared to the June 30, 2022 informational valuation contribution rate of 20.65% of payroll.

SECTION I – BOARD SUMMARY

Finally, as of the June 30, 2023 valuation, the Program has an unfunded actuarial liability (UAL) of $2.632 billion based on the AVA. This represents a decrease of $102 million from the $2.734 billion AVA UAL measured as of June 30, 2022. This compares to an expected decrease in the UAL of $184 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 2023 as well as their combined effect on the UAL.

Table I-1
(Amounts in Billions)

	Liabilities	Assets*	UAL
Value as of June 30, 2022	$ 16.982	$ 14.248	$ 2.734
Expected Change	0.358	0.542	(0.184)
Impact of Program Changes	0.007	0.007	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Recognized Investment Gain	0.000	0.092	(0.092)
Recognized Liability Loss	0.174	0.000	0.174
Value as of June 30, 2023	$ 17.521	$ 14.889	$ 2.632

* 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.

Trends

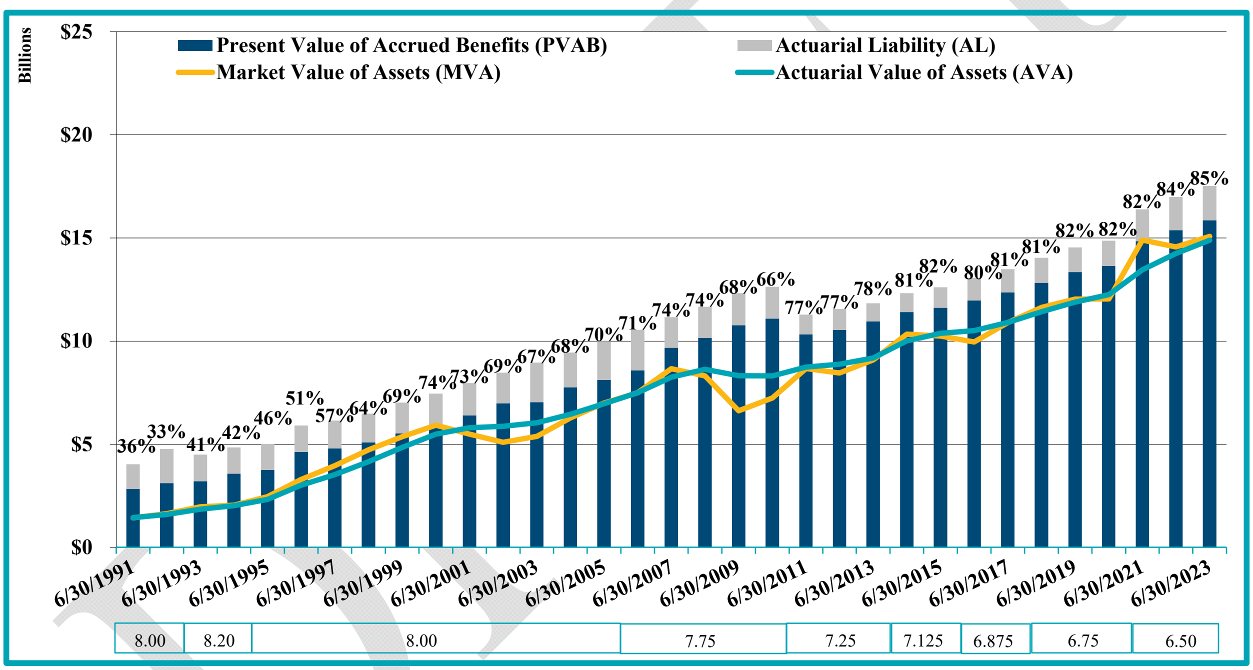
It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition. In addition to considering the past, examining future possible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

SECTION I – BOARD SUMMARY

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.

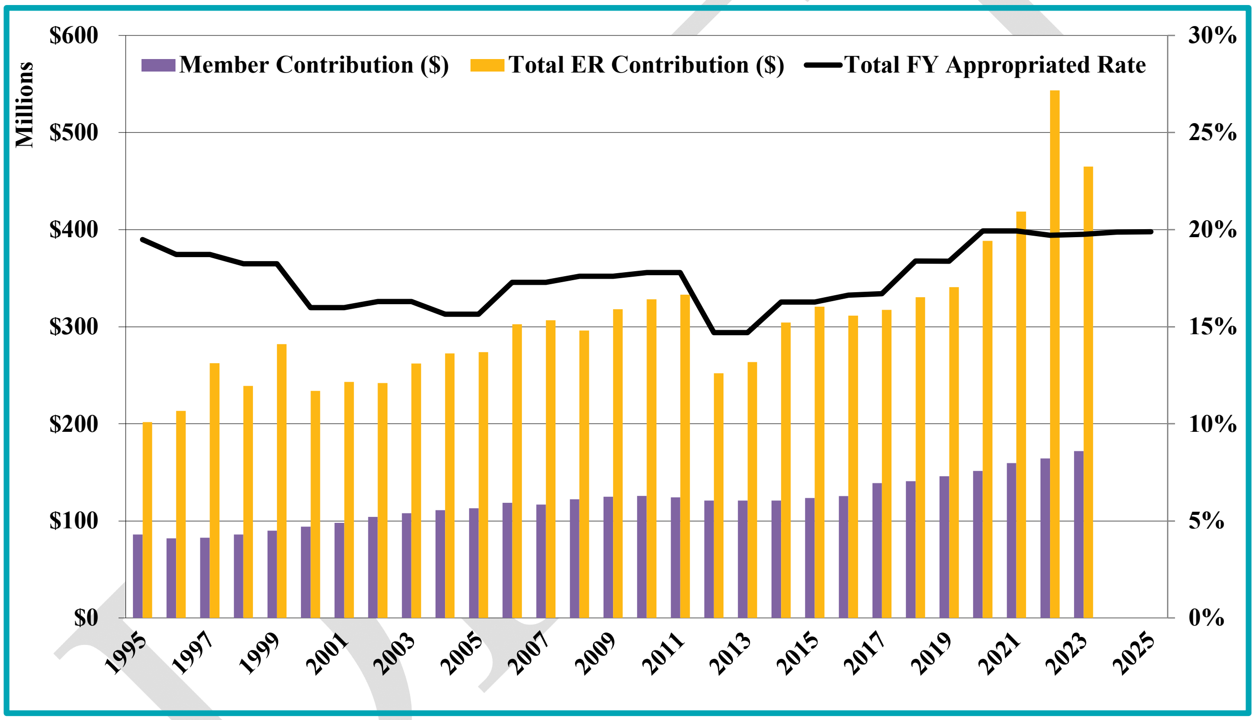


Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2023, the Program is funded 85.0% based on the AVA funded ratio, which represents a slight increase from the 83.9% ratio reported in the prior valuation. Measured on an MVA basis, the funded ratio is 86.0% as of June 30, 2023, also a slight increase over last year's 85.8% MVA funded ratio.

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 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 2024 through FY 2025 contribution rates have already been determined based on the ratemaking process, so two additional years of the contribution rate are shown versus dollars received. The total employer contribution for FY 2023 includes the approximately $6.6 million extra payment to fund the one-time additional COLA payment.



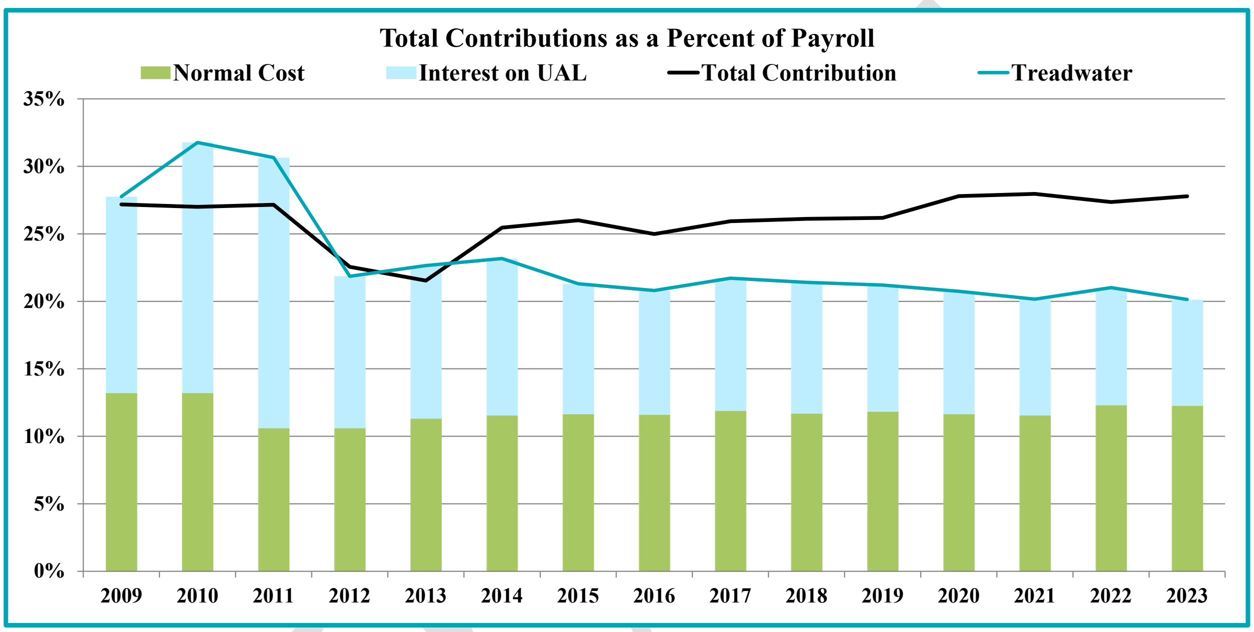
The member contribution rates are set by statute, based on the Plan within the Program in which each member participates. The total employer contribution rate is set by the ratemaking process on a biennial basis. The contribution rate for FY 2023 was based on a roll-forward of the June 30, 2019 valuation to June 30, 2020, as previously described in this 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%.

SECTION I – BOARD SUMMARY

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.

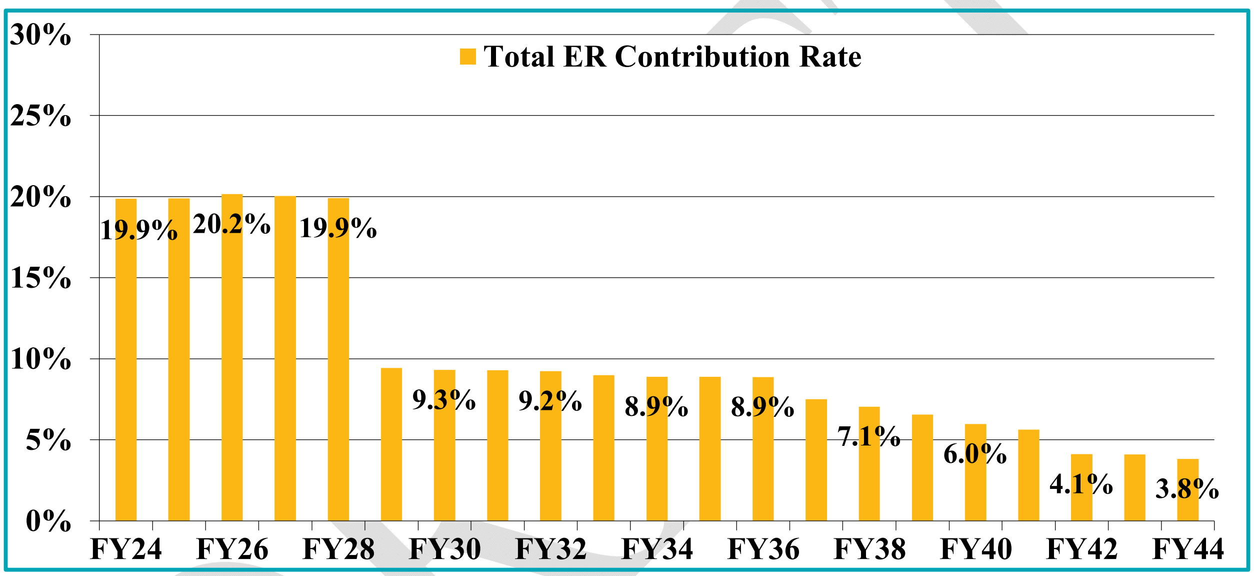
As can be seen in the following chart, the total contribution rate has exceeded the tread water rate since 2014.



SECTION I – BOARD SUMMARY

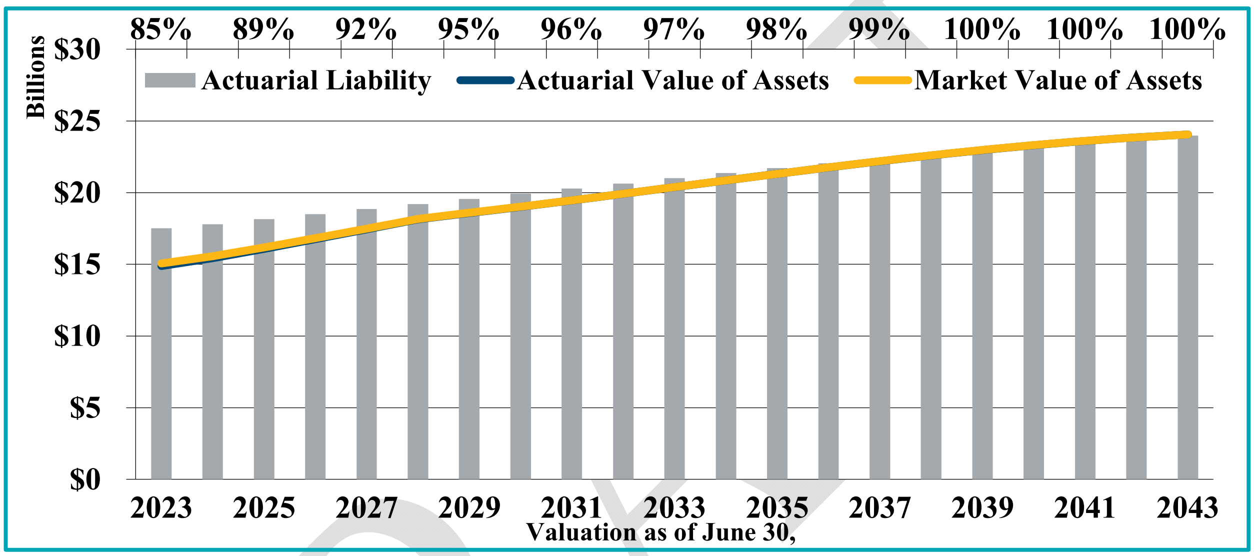
Baseline Projections

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 similar 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 2024 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 9.4%, 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 85% as of FY 2023 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
Summary of Principal Results
Total State Employee and Teacher Program

	Valuation as of June 30, 2022	Valuation as of June 30, 2023	% Change
Member Counts			
Active Members	40,121	40,586	1.2%
Retired Members	30,036	30,686	2.2%
Beneficiaries of Retired Members	6,281	6,270	(0.2)%
Survivors of Deceased Members	584	574	(1.7)%
Disabled Members	1,507	1,508	0.1%
Terminated Vested Members	8,843	9,202	4.1%
Inactives Due Refunds	38,807	39,038	0.6%
Total Membership	126,179	127,864	1.3%
Annual Payroll of Active Members	$ 2,265,365,936	$ 2,384,910,774	5.3%
Annual Payments to Benefit Recipients	$ 931,378,044	$ 973,327,522	4.5%
Assets and Liabilities			
Actuarial Liability (AL)	$ 16,981,792,082	$ 17,520,535,684	3.2%
Actuarial Value of Assets (AVA)	14,248,105,921	14,889,086,583	4.5%
Unfunded AL (UAL)	$ 2,733,686,161	$ 2,631,449,101	(3.7)%
AVA Funded Ratio (AVA/AL)	83.9%	85.0%	
MVA Funded Ratio (MVA/AL)	85.8%	86.0%	
Accrued Benefit Liability (PVAB)	$ 15,382,801,444	$ 15,859,583,162	3.1%
Market Value of Assets (MVA)	14,568,691,334	15,073,148,465	3.5%
Unfunded PVAB	$ 814,110,110	$ 786,434,697	N/A
MVA Accrued Benefit Funded Ratio	94.7%	95.0%	
Contributions as a Percentage of Payroll			
Employer Normal Cost Rate	4.58%	4.56%	
UAL Amortization Rate	16.07%	15.97%	
Total Employer Calculated Rate	20.65%	20.53%	

	2020 Ratemaking		2022 Ratemaking	
Total Employer Budgeted Rates	FY 2022	19.71%	FY 2024	19.87%
Total Employer Budgeted Rates	FY 2023	19.75%	FY 2025	19.89%

SECTION I – BOARD SUMMARY

Table I-3
Summary of Principal Results
Teacher Program

	Valuation as of June 30, 2022	Valuation as of June 30, 2023	% Change
Member Counts			
Active Members	27,718	27,897	0.6%
Retired Members	18,738	19,227	2.6%
Beneficiaries of Retired Members	2,997	3,008	0.4%
Survivors of Deceased Members	286	284	(0.7)%
Disabled Members	659	660	0.2%
Terminated Vested Members	5,693	5,920	4.0%
Inactives Due Refunds	29,784	29,843	0.2%
Total Membership	85,875	86,839	1.1%
Annual Payroll of Active Members	$ 1,473,733,403	$ 1,538,137,420	4.4%
Annual Payments to Benefit Recipients	$ 592,819,578	$ 620,531,499	4.7%
Assets and Liabilities			
Actuarial Liability (AL)	$ 11,149,845,760	$ 11,507,894,703	3.2%
Actuarial Value of Assets (AVA)	9,452,256,233	9,868,754,960	4.4%
Unfunded Actuarial Liability (UAL)	$ 1,697,589,527	$ 1,639,139,743	(3.4)%
AVA Funded Ratio (AVA/AL)	84.8%	85.8%	
MVA Funded Ratio (MVA/AL)	86.7%	86.8%	
Accrued Benefit Liability (PVAB)	$ 10,012,727,541	$ 10,326,394,915	3.1%
Market Value of Assets (MVA)	9,664,934,008	9,990,754,493	3.4%
Unfunded PVAB	$ 347,793,533	$ 335,640,422	N/A
MVA Accrued Benefit Funded Ratio	96.5%	96.7%	
Contributions as a Percentage of Payroll			
Employer Normal Cost Rate	4.41%	4.36%	
UAL Rate	15.05%	15.08%	
Total Employer Rate	19.46%	19.44%	

	2020 Ratemaking		2022 Ratemaking	
Total Employer Budgeted Rates	FY 2022	18.13%	FY 2024	18.98%
Total Employer Budgeted Rates	FY 2023	18.13%	FY 2025	18.98%

SECTION I – BOARD SUMMARY

Table I-4
Summary of Principal Results
State Program (Regular and Special Plans)

	Valuation as of June 30, 2022		Valuation as of June 30, 2023		% Change
Member Counts					
Active Members	12,403		12,689		2.3%
Retired Members	11,298		11,459		1.4%
Beneficiaries of Retired Members	3,284		3,262		(0.7)%
Survivors of Deceased Members	298		290		(2.7)%
Disabled Members	848		848		0.0%
Terminated Vested Members	3,150		3,282		4.2%
Inactives Due Refunds	9,023		9,195		1.9%
Total Membership	40,304		41,025		1.8%
Annual Payroll of Active Members	$ 791,632,533		$ 846,773,354		7.0%
Annual Payments to Benefit Recipients	$ 338,558,466		$ 352,796,023		4.2%
Assets and Liabilities					
Actuarial Liability (AL)	$ 5,831,946,322		$ 6,012,640,981		3.1%
Actuarial Value of Assets (AVA)	4,795,849,688		5,020,331,623		4.7%
Unfunded Actuarial Liability (UAL)	$ 1,036,096,634		$ 992,309,358		(4.2)%
AVA Funded Ratio (AVA/AL)	82.2%		83.5%		
MVA Funded Ratio (MVA/AL)	84.1%		84.5%		
Accrued Benefit Liability (PVAB)	$ 5,370,073,903		$ 5,533,188,247		3.0%
Market Value of Assets (MVA)	4,903,757,326		5,082,393,972		3.6%
Unfunded PVAB	$ 466,316,577		$ 450,794,275		(3.3)%
MVA Accrued Benefit Funded Ratio	91.3%		91.9%		
Contributions as a Percentage of Payroll					
Employer Normal Cost Rate	4.90%		4.92%		
UAL Rate	18.00%		17.59%		
Total Employer Rate	22.90%		22.51%		
	2020 Ratemaking		2022 Ratemaking		
Total Employer Budgeted Rates	FY 2022	22.74%	FY 2024	21.51%	
Total Employer Budgeted Rates	FY 2023	22.88%	FY 2025	21.58%	

SECTION I – BOARD SUMMARY

Table I-5
Summary of Principal Results
State Program – Regular Plans Only

	Valuation as of June 30, 2022		Valuation as of June 30, 2023		% Change
Member Counts					
Active Members	10,787		11,043		2.4%
Retired Members	10,224		10,599		3.7%
Beneficiaries of Retired Members	2,899		3,032		4.6%
Survivors of Deceased Members	281		273		(2.8)%
Disabled Members	772		764		(1.0)%
Terminated Vested Members	2,759		2,876		4.2%
Inactives Due Refunds	7,837		1,795		(77.1)%
Total Membership	35,559		30,382		(14.6)%
Annual Payroll of Active Members	$ 666,124,924		$ 711,537,956		6.8%
Annual Payments to Benefit Recipients	$ 294,619,012		$ 318,716,700		8.2%
Assets and Liabilities					
Actuarial Liability (AL)	$ 4,907,347,328		$ 5,144,517,887		4.8%
Actuarial Value of Assets (AVA)	4,053,902,852		4,328,207,614		6.8%
Unfunded Actuarial Liability (UAL)	$ 853,444,476		$ 816,310,273		(4.4)%
AVA Funded Ratio (AVA/AL)	82.6%		84.1%		
MVA Funded Ratio (MVA/AL)	84.5%		85.2%		
Accrued Benefit Liability (PVAB)	$ 4,529,855,680		$ 4,753,994,274		4.9%
Market Value of Assets (MVA)	4,145,116,528		4,381,713,786		5.7%
Unfunded PVAB	$ 384,739,152		$ 372,280,488		(3.2)%
MVA Accrued Benefit Funded Ratio	91.5%		92.2%		
Contributions as a Percentage of Payroll					
Employer Normal Cost Rate	4.79%		4.81%		
UAL Rate	17.59%		17.21%		
Total Employer Rate	22.38%		22.02%		
	2020 Ratemaking		2022 Ratemaking		
Total Employer Budgeted Rates	FY 2022	22.11%	FY 2024	21.07%	
Total Employer Budgeted Rates	FY 2023	22.24%	FY 2025	21.14%	

Table I-6
Summary of Principal Results
State Program – Special Plans Only

	Valuation as of June 30, 2022		Valuation as of June 30, 2023		% Change
Member Counts					
Active Members	1,616		1,646		1.9%
Retired Members	1,074		860		(19.9)%
Beneficiaries of Retired Members	385		230		(40.3)%
Survivors of Deceased Members	17		17		0.0%
Disabled Members	76		84		10.5%
Terminated Vested Members	391		406		3.8%
Inactives Due Refunds	1,186		7,400		523.9%
Total Membership	4,745		10,643		124.3%
Annual Payroll of Active Members	$ 125,507,609		$ 135,235,398		7.8%
Annual Payments to Benefit Recipients	$ 43,939,454		$ 34,079,323		(22.4)%
Assets and Liabilities					
Actuarial Liability (AL)	$ 924,598,994		$ 868,123,094		(6.1)%
Actuarial Value of Assets (AVA)	741,946,836		692,124,009		(6.7)%
Unfunded Actuarial Liability (UAL)	$ 182,652,158		$ 175,999,085		(3.6)%
AVA Funded Ratio (AVA/AL)	80.2%		79.7%		
MVA Funded Ratio (MVA/AL)	82.1%		80.7%		
Accrued Benefit Liability (PVAB)	$ 840,218,223		$ 779,193,973		(7.3)%
Market Value of Assets (MVA)	758,640,798		700,680,186		(7.6)%
Unfunded PVAB	$ 81,577,425		$ 78,513,787		(3.8)%
Accrued Benefit Funded Ratio	90.3%		89.9%		
Contributions as a Percentage of Payroll					
Employer Normal Cost Rate	5.48%		5.49%		
UAL Rate	20.00%		19.53%		
Total Employer Rate	25.48%		25.02%		
	2020 Ratemaking		2022 Ratemaking		
Total Employer Budgeted Rates	FY 2022	25.82%	FY 2024	23.83%	
Total Employer Budgeted Rates	FY 2023	25.98%	FY 2025	23.92%	

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. 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 effect of this longevity and other demographic risk as seen in the liability gains and losses has only been about a third of the investment gains and losses over this same period.

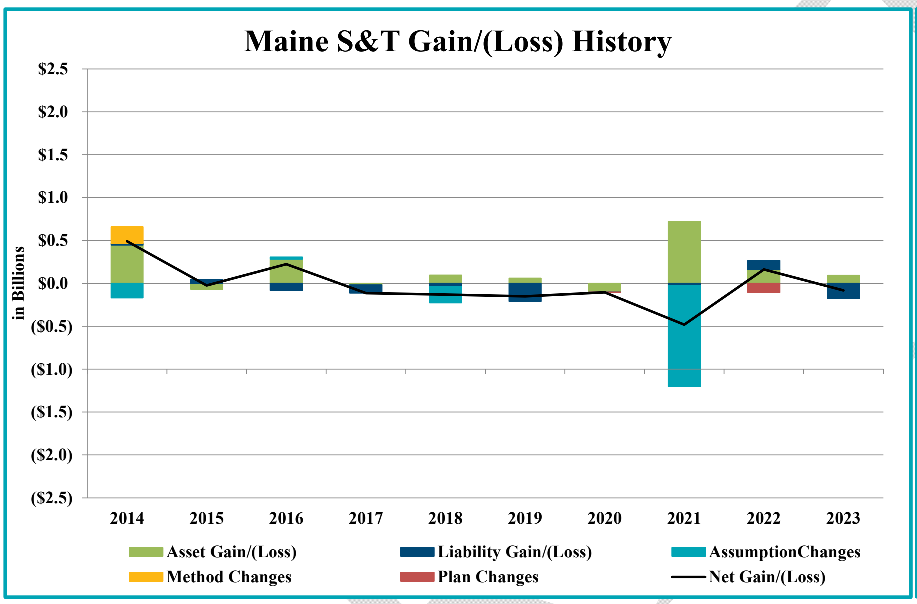
Plan Change Risk is the potential for the provisions of the Program to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Program being changed, future valuation measurements can also be impacted, with Program changes leading to deviations 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. Over the period shown in the 10 years of the historical section, the only significant plan change for this Program was the additional COLA paid and increase in the COLA base related to the September 1, 2021 COLA. However, it is worth noting that there have been significant plan changes in other periods, in particular, changes in 2011, which produced a large gain.

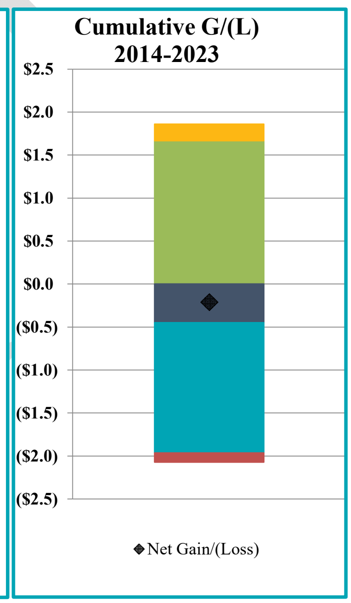
Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier 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 second most significant risk for this Program over the period. In addition to changes in individual assumptions, changes to the methods used in valuing the

Program can have a significant impact on the valuation results as can be seen based on the method change items in the Program's historical experience, where these changes have produced a gain for the Program over the period shown.

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 is evident in this chart, assumption changes and asset gains and losses have been the most significant risks for the Program over this 10-year period on a cumulative basis. The next two causes of experience deviations, the liability gains/(losses) and the method changes, were much less significant over this period. Over this period, plan changes were relatively insignificant.

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.

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.

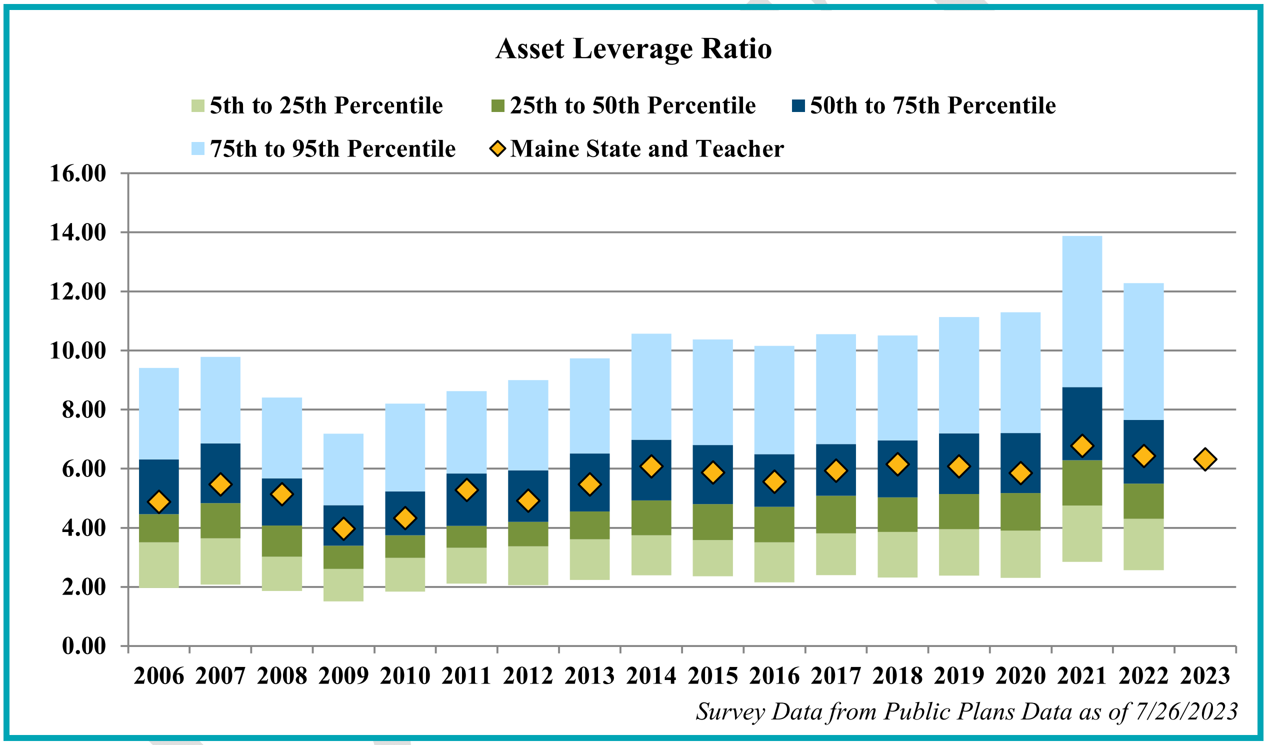
As an example, here are two plans that both experience a 10% investment loss equaling $500 million on their existing assets of five billion dollars. Plan A's asset leverage ratio is 10 and Plan B's ratio is five. This means that Plan A has to spread, or amortize, that loss over a payroll that is half 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.

	($ in millions)	
	Plan A	**Plan 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 2005. 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 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, the rate is now back within the previous range at 632%, or 6.32 times salary.

Note that the charts showing the Program versus this universe of public plans in this section show one more year for the Program than the universe as the 2023 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.

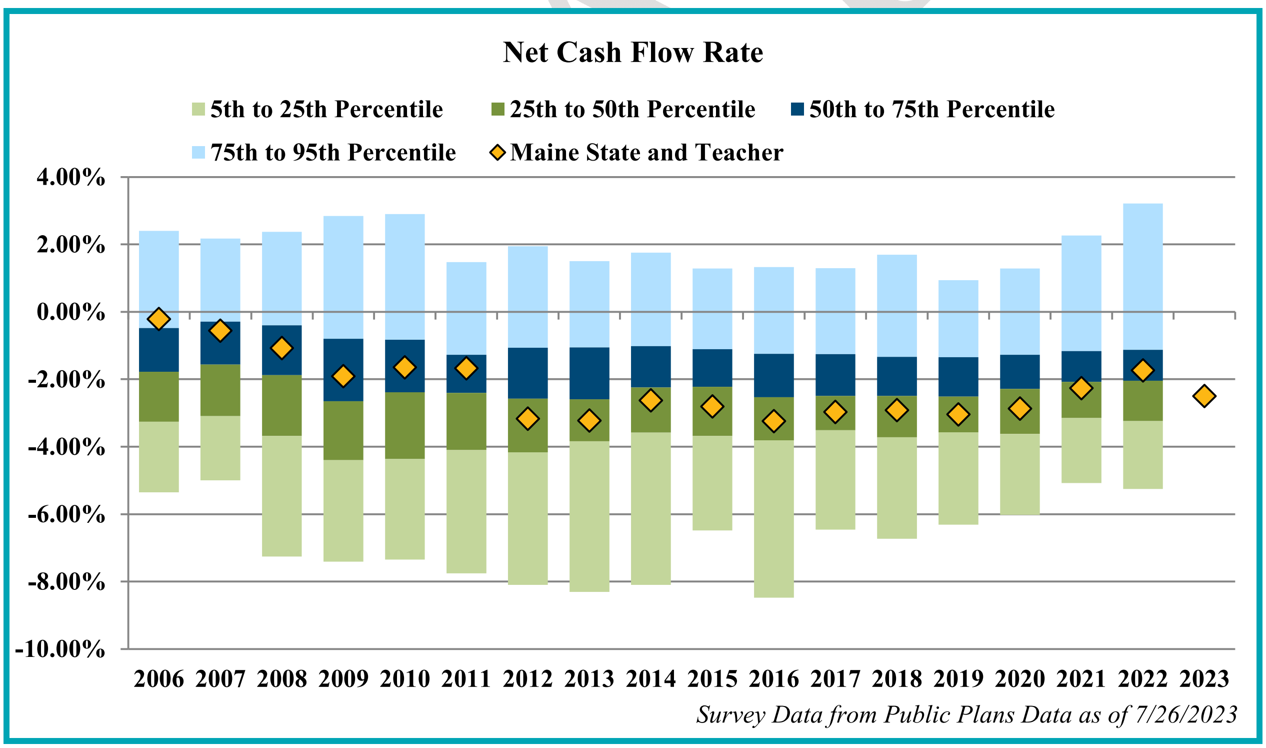


SECTION II – RISK ASSESSMENT AND DISCLOSURE

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 2006 was about negative 0.2% 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 until 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 again improved, 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 2023, the cash flow rate is negative 2.5%. 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 in recent years has had net cash flows that have been generally trending closer to those of the median plan in this universe. Since the results for other systems as of 2023 are not yet available, we do not yet know how the change in the net cash flow ratio for this System in 2023 will compare relative to that of other systems.



SECTION II – RISK ASSESSMENT AND DISCLOSURE

Assessing Future Risk

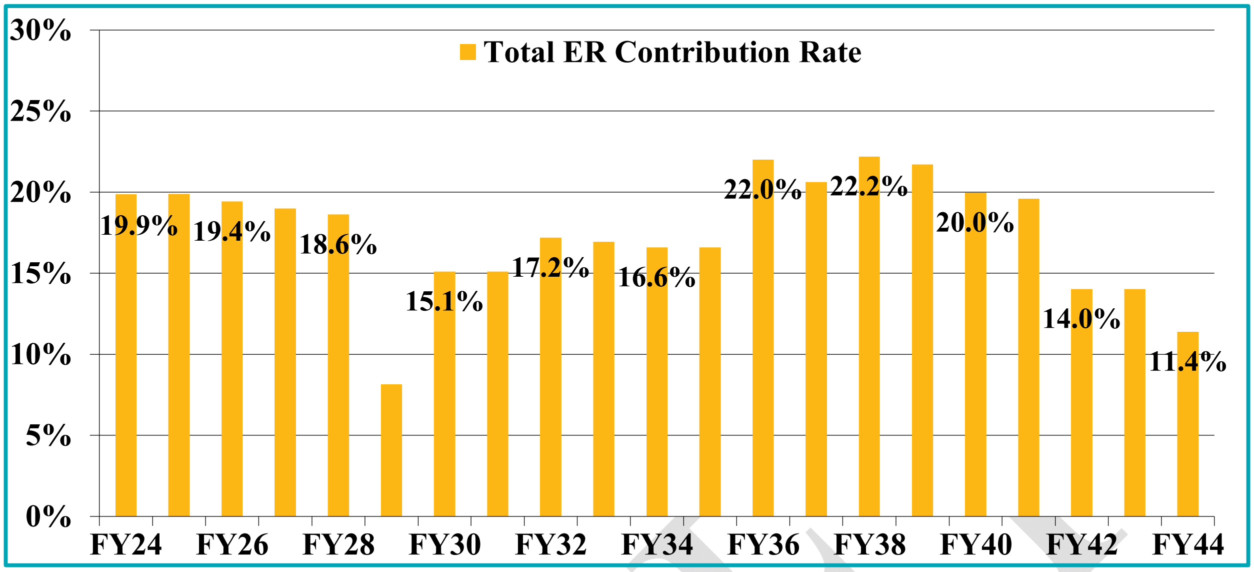
Assessing the future risk that the expected measurements produced by the actuarial valuations will deviate from the actual values over time is complex and can never be exactly known. However, to try to assist the Board in its review of this report, we have attempted to develop some basic assessments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

Pages 4-6 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.

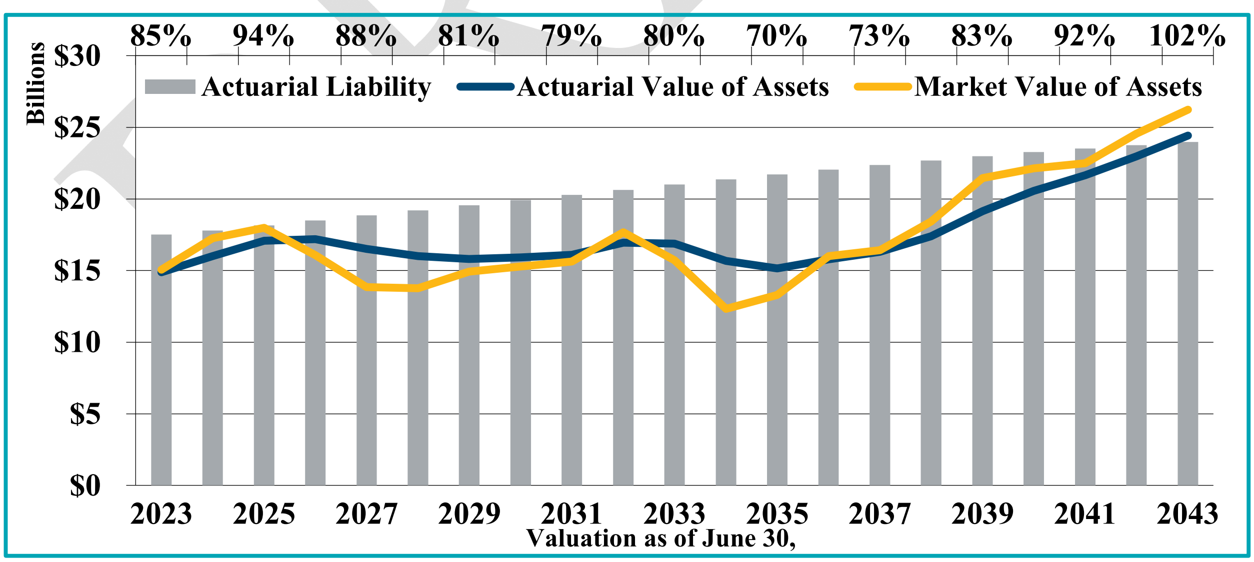
FY	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Return	17.9%	6.6%	-8.3%	-11.3%	2.8%	14.4%	6.4%	6.3%	17.0%	-8.1%
FY	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Return	-18.1%	13.2%	24.0%	6.0%	15.3%	19.6%	6.0%	4.5%	13.3%	10.7%

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 22% 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 actuarial value 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 end at approximately the same funded ratio, 100% in the baseline and 102% in the illustrative varying returns scenario. However, where the baseline projection has the funded ratio steadily increasing from the current 85% to 100% over the forecasted period, in this illustrative varying returns scenario, the funded ratio is much more volatile, reflecting the volatility of the modeled returns. Note also that the timing of contribution development and payment, as well as the combination of the amortization layers, results in the Plan being funded over 100% at the end of this scenario.



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, 2022 and June 30, 2023,
- 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 2023.

Table III-1
Changes in Market Value of Total MainePERS Defined Benefit (DB) Assets

Market Value of Total MainePERS DB Assets – June 30, 2022		**$ 18,357,298,853**
Additions		
Contributions:		
Employer Contributions	$ 558,234,714	
Member Contributions	238,543,081	
Transfers	(249,956)	
Total Contributions	$ 796,527,839	
Investment Income:		
Net Appreciation (Depreciation) in Fair Value of Investments	$ 1,255,864,120	
Interest on Bank Balances	2,837,912	
Total Investment Income	$ 1,258,702,032	
Investment Activity Expenses:		
Management Fees	$ (139,763,371)	
Investment Related Expense	(5,727,189)	
Banking Fees	(34,855)	
Total Investment Activity Expenses	$ (145,525,415)	
Net Income from Investing Activities	$ 1,113,176,617	
Total Additions		$ 1,909,704,456
Deductions		
Retirement Benefits	$ (1,136,706,647)	
Disability Benefits	(27,348,917)	
Survivor Benefits	(27,703,181)	
Refunds	(27,668,683)	
Administrative Expenses	(15,075,412)	
Total Deductions		$ (1,234,502,840)
Total		
Net Increase (Decrease)		$ 675,201,616
Market Value of Total MainePERS DB Assets – June 30, 2023		**$ 19,032,500,469**

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, 2023 using the adopted actuarial valuation methodology.

Table III-2
Development of Actuarial Value of Total MainePERS Defined Benefit (DB) Assets as of June 30, 2023

1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2022	$ 17,953,344,777
2.	Amount in (1) with Interest to June 30, 2023	19,120,312,188
3.	Employer and Member Contributions for FY 2023	796,527,839
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2023	25,479,629
5.	Total Disbursements without Administrative Expenses, for FY 2023	(1,219,427,428)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2023	(39,007,498)
7.	Expected Value of Total MainePERS DB Assets at June 30, 2023 = (2) + (3) + (4) + (5) + (6)	$ 18,683,884,730
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2023	19,032,500,469
9.	Excess of (8) Over (7)	348,615,739
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023 = (7) + [33⅓% of (9)]	$ 18,800,089,976

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 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, 2023.

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, 2023 valuation as shown in Table III-2 is 0.987789 ($18,800,089,976 ÷ $19,032,500,469). 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 chart.

Table III-3
Allocation of Actuarial Value of Total MainePERS DB Assets
as of June 30, 2023

Program	Market Value	Actuarial Value
Teacher	$ 9,990,754,493	$ 9,868,754,960
State (Regular & Special)	5,082,393,972	5,020,331,623
Judicial	87,423,240	86,355,694
Legislative	16,681,900	16,478,192
Participating Local Districts (Consolidated & Non-Consolidated)	3,855,246,864	3,808,169,507
Total	$ 19,032,500,469	$ 18,800,089,976

Investment Performance

The market value of assets for the total MainePERS DB assets returned a positive 6.05% during FY 2023. This is lower than the assumed return of 6.50% for FY 2023. The equivalent market value returns for the total MainePERS DB assets for FY 2022 and FY 2021 were negative 0.62% and positive 26.76%, respectively.

On an actuarial value of assets basis, the return for FY 2023 was a positive 7.15% for the total MainePERS DB assets. This return is greater than both the return on a market value basis and the 6.50% assumption in effect for FY 2023. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.

Cash Flow Projections

Table III-4
Projection of State Employee and Teacher Program
Benefit Payments and Contributions

FY Ending June 30,	Expected Benefit Payments	Expected Employer Contributions	Expected Member Contributions	Total Expected Contributions
2024	$ 1,135,224,000	$ 480,353,000	$ 186,388,000	$ 666,741,000
2025	1,079,306,000	494,060,000	191,513,000	685,573,000
2026	1,111,666,000	514,570,000	196,780,000	711,350,000
2027	1,143,473,000	525,567,000	202,192,000	727,759,000
2028	1,173,570,000	536,244,000	207,752,000	743,996,000
2029	1,203,943,000	261,213,000	213,465,000	474,678,000
2030	1,235,351,000	264,842,000	219,335,000	484,177,000
2031	1,265,765,000	271,887,000	225,367,000	497,254,000
2032	1,295,220,000	277,466,000	231,565,000	509,031,000
2033	1,323,934,000	277,359,000	237,933,000	515,292,000

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 2024 through FY 2025. 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 contributions are shown graphically in the baseline projection on page five.

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 2024.

SECTION IV – LIABILITIES

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

- Disclosure of the Program's liabilities as of June 30, 2022 and June 30, 2023,
- 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. Note that last year, the amount of assets exceeded this liability basis, so there was a surplus of the MVA compared to the PVAB, but for the current year the MVA is once again less than this liability basis so there is a net unfunded amount of the PVAB compared to the MVA.

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.

SECTION IV – LIABILITIES

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

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, 2022	June 30, 2023
Present Value of Benefits (PVB)		
Active Member Benefits	$ 8,366,730,693	$ 8,597,464,148
Retired, Disabled, Survivor, and Beneficiary Benefits	10,061,113,007	10,421,363,188
Terminated Vested Benefits	764,170,145	837,556,738
Terminated Nonvested Benefits	85,668,598	88,700,930
Total PVB	**$ 19,277,682,443**	**$ 19,945,085,004**
Market Value of Assets (MVA)	$ 14,568,691,334	$ 15,073,148,465
Future Member Contributions	1,517,909,749	1,606,361,272
Future Employer Contributions	3,636,826,533	3,582,879,952
Projected (Surplus)/Shortfall	(445,745,173)	(317,304,685)
Total Resources	**$ 19,277,682,443**	**$ 19,945,085,004**
Actuarial Liability (AL)		
Present Value of Benefits (PVB)	$ 19,277,682,443	$ 19,945,085,004
Present Value of Future Normal Costs (PVFNC)		
Employer Portion	777,980,612	818,188,048
Member Portion	1,517,909,749	1,606,361,272
Actuarial Liability (AL = PVB – PVFNC)	$ 16,981,792,082	$ 17,520,535,684
Actuarial Value of Assets (AVA)	14,248,105,921	14,889,086,583
Net (Surplus)/Unfunded (AL – AVA)	$ 2,733,686,161	$ 2,631,449,101
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 19,277,682,443	$ 19,945,085,004
Present Value of Future Benefit Accruals (PVFBA)	3,894,880,999	4,085,501,842
Accrued Liability (PVAB = PVB – PVFBA)	$ 15,382,801,444	$ 15,859,583,162
Market Value of Assets (MVA)	14,568,691,334	15,073,148,465
Net (Surplus)/Unfunded (PVAB – MVA)	**$ 814,110,110**	**$ 786,434,697**

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, 2023, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 3.91% compared to the System's discount rate of 6.50%, and the LDROM would be $24.1 billion compared to the Actuarial Liability of $17.5 billion. The $6.6 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 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, 2022	$ 19,277,682,443	$ 16,981,792,082	$ 15,382,801,444
Liability Measurement – June 30, 2023	19,945,085,004	17,520,535,684	15,859,583,162
Liability Measurement Increase/ (Decrease) Due to:	$ 667,402,561	$ 538,743,602	$ 476,781,718
Program Amendment	$ 6,574,283	$ 6,574,283	$ 6,574,283
Assumption Change	0	0	0
Actuarial (Gain)/Loss	N/C	174,376,812	N/C
Benefits Accumulated and Other Sources	$ 660,828,278	$ 357,792,507	$ 470,207,435

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.

Table IV-3
Allocation of Actuarial Liability as of June 30, 2023

	Total Program	Teacher Program	State Regular Plans	State Special Plans
1. Actuarial Liabilities for:				
a. Active Members	$ 6,172,914,828	$ 4,192,113,975	$ 1,604,985,012	$ 375,815,841
b. Retired, Disabled, Survivor, and Beneficiary Members	10,421,363,188	6,667,703,480	3,310,875,679	442,784,029
c. Terminated (Vested & Nonvested) Members	926,257,668	648,077,248	228,657,196	49,523,224
2. Total Actuarial Liability [1(a) + 1(b) + 1(c)]	$ 17,520,535,684	$ 11,507,894,703	$ 5,144,517,887	$ 868,123,094
3. Actuarial Value of Assets	14,889,086,583	9,868,754,960	4,328,207,614	692,124,009
4. Unfunded Actuarial Liability (2 – 3)	$ 2,631,449,101	$ 1,639,139,743	$ 816,310,273	$ 175,999,085

SECTION V – CONTRIBUTIONS

In this section, we present detailed information on informational employer contribution rates as developed in this June 30, 2023 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 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 five years of its amortization period remaining, the UAL amount for the period from 1997 through 2011 has five years of its amortization period 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 five years as of June 30, 2023. This June 30, 2023 valuation is the second 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, 2022**	**June 30, 2023**
Composite Employer NC Rate	4.58%	4.56%
Composite UAL Amortization Rate	16.07%	15.97%
Composite Total Employer Rate	20.65%	20.53%

The rates developed in this section are for valuation 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-2
Total Employer Contribution Rates by Plan

Valuation Date June 30, 2023	Total NC Rate	Employee Contribution Rate	Employer NC Rate	UAL Contribution Rate	Total Employer Contribution Rate
Total Program	12.27%	7.71%	4.56%	15.97%	20.53%
Teacher Program	12.01%	7.65%	4.36%	15.08%	19.44%
State Program	12.73%	7.81%	4.92%	17.59%	22.51%
State Regular	12.46%	7.65%	4.81%	17.21%	22.02%
25 & Out Plan	14.07%	8.65%	5.42%	19.43%	24.85%
1998 Special Plan	14.06%	8.65%	5.41%	19.43%	24.84%
Fire Marshals	19.83%	8.65%	11.18%	27.40%	38.58%
Inland F&W*	23.14%	8.65%	14.49%	31.98%	46.47%

* Closed plan

Table V-3 that follows provides the development of the 15.97% 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 Unfunded Actuarial Liability Rates

Valuation Date June 30, 2023	Teacher Program	State Program (Regular and Special Plans)	Total Program
1. Actuarial Liability (AL)	$ 11,507,894,703	$ 6,012,640,981	$ 17,520,535,684
2. Actuarial Value of Assets (AVA)	9,868,754,960	5,020,331,623	14,889,086,583
3. Unfunded Actuarial Liability (UAL)	$ 1,639,139,743	$ 992,309,358	$ 2,631,449,101
4. Remaining Balances of Prior Amortization Bases			
a. 1996 UAL Amount	$ 1,405,251,128	$ 809,181,435	$ 2,214,432,563
b. 1997-2011 UAL Base	(535,827,995)	(308,544,186)	(844,372,181)
c. 2012 (Gain)/Loss Base	23,624,861	21,047,473	44,672,334
d. 2013 (Gain)/Loss Base	(106,395,784)	119,588,367	13,192,583
e. 2014 (Gain)/Loss Base	(157,369,923)	(71,168,383)	(228,538,306)
f. 2015 (Gain)/Loss Base	3,335,517	(5,341,549)	(2,006,032)
g. 2016 (Gain)/Loss Base	159,379,714	178,579,721	337,959,435
h. 2017 (Gain)/Loss Base	98,003,775	17,820,134	115,823,909
i. 2018 (Gain)/Loss Base	106,336,050	27,839,874	134,175,924
j. 2019 (Gain)/Loss Base	140,985,789	23,536,901	164,522,690
k. 2020 (Gain)/Loss Base	26,239,635	83,116,484	109,356,119
l. 2021 (Gain)/Loss Base	400,104,349	76,605,249	476,709,598
m. 2022 (Gain)/Loss Base	15,545,243	(15,962,441)	(417,198)
n. 2023 (Gain)/Loss Base	59,927,384	36,010,279	95,937,663
o. Sum of the Bases	$ 1,639,139,743	$ 992,309,358	$ 2,631,449,101
5. UAL Amortizations			
a. 1996 UAL Amount 5 Years	$ 311,197,721	$ 179,196,026	$ 490,393,747
b. 1997-2011 UAL Base 5 Years	(118,660,962)	(68,328,177)	(186,989,139)
c. 2012 (Gain)/Loss Base 9 Years	3,113,251	2,773,606	5,886,857
d. 2013 (Gain)/Loss Base 10 Years	(12,833,785)	14,425,115	1,591,330
e. 2014 (Gain)/Loss Base 5 Years*	(34,850,114)	(15,760,484)	(50,610,598)
f. 2015 (Gain)/Loss Base 12 Years	346,705	(555,218)	(208,513)
g. 2016 (Gain)/Loss Base 13 Years	15,547,907	17,420,918	32,968,825
h. 2017 (Gain)/Loss Base 14 Years	9,025,173	1,641,057	10,666,230
i. 2018 (Gain)/Loss Base 15 Years	9,290,576	2,432,369	11,722,945
j. 2019 (Gain)/Loss Base 16 Years	11,737,497	1,959,519	13,697,016
k. 2020 (Gain)/Loss Base 17 Years	2,089,537	6,618,802	8,708,339
l. 2021 (Gain)/Loss Base 18 Years	30,578,578	5,854,672	36,433,250
m. 2022 (Gain)/Loss Base 19 Years	1,143,642	(1,174,335)	(30,693)
n. 2023 (Gain)/Loss Base 20 Years	4,255,259	2,556,979	6,812,238
o. Sum of Amortization Payments	$ 231,980,985	$ 149,060,849	$ 381,041,834

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

SECTION V – CONTRIBUTIONS

Table V-3 (continued)
Derivation of Unfunded Actuarial Liability Rates

Valuation Date June 30, 2023	Teacher Program	State Program (Regular and Special Plans)	Total Program
6. Covered Payroll	$ 1,538,137,420	$ 846,773,354	$ 2,384,910,774
7. UAL Amortization Rates			
a. 1996 UAL Amount 5 Years	20.23%	21.16%	20.54%
b. 1997-2011 UAL Base 5 Years	(7.71)%	(8.07)%	(7.84)%
c. 2012 (Gain)/Loss Base 9 Years	0.20%	0.33%	0.25%
d. 2013 (Gain)/Loss Base 10 Years	(0.83)%	1.70%	0.07%
e. 2014 (Gain)/Loss Base 5 Years	(2.27)%	(1.86)%	(2.12)%
f. 2015 (Gain)/Loss Base 12 Years	0.02%	(0.07)%	(0.01)%
g. 2016 (Gain)/Loss Base 13 Years	1.01%	2.06%	1.38%
h. 2017 (Gain)/Loss Base 14 Years	0.59%	0.19%	0.45%
i. 2018 (Gain)/Loss Base 15 Years	0.60%	0.29%	0.49%
j. 2019 (Gain)/Loss Base 16 Years	0.76%	0.23%	0.57%
k. 2020 (Gain)/Loss Base 17 Years	0.14%	0.78%	0.37%
l. 2021 (Gain)/Loss Base 18 Years	1.99%	0.69%	1.53%
m. 2022 (Gain)/Loss Base 19 Years	0.07%	(0.14)%	0.00%
n. 2023 (Gain)/Loss Base 20 Years	0.28%	0.30%	0.29%
o. Sum of UAL Amortization Rates	**15.08%**	**17.59%**	**15.97%**

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, 2023	Total State Program	State Regular Plan	25 & Out Plan	1998 Special Plan	Fire Marshals	Inland F&W (Closed)
1. Employer NC Rate	4.92%	4.81%	5.42%	5.41%	11.18%	14.49%
2. Member Contribution Rate	7.81%	7.65%	8.65%	8.65%	8.65%	8.65%
3. Total NC Rate	12.73%	12.46%	14.07%	14.06%	19.83%	23.14%
4. UAL Amortization Rates*						
a. 1996 UAL Amount	21.16%	20.71%	23.39%	23.37%	32.96%	38.46%
b. 1997-2011 UAL Base	(8.07)%	(7.90)%	(8.92)%	(8.91)%	(12.57)%	(14.67)%
c. 2012 Loss Base	0.33%	0.32%	0.36%	0.36%	0.51%	0.60%
d. 2013 Loss Base	1.70%	1.66%	1.88%	1.88%	2.65%	3.09%
e. 2014 Gain Base	(1.86)%	(1.82)%	(2.06)%	(2.05)%	(2.90)%	(3.38)%
f. 2015 Gain Base	(0.07)%	(0.07)%	(0.08)%	(0.08)%	(0.11)%	(0.13)%
g. 2016 Loss Base	2.06%	2.02%	2.28%	2.28%	3.21%	3.74%
h. 2017 Loss Base	0.19%	0.19%	0.21%	0.21%	0.30%	0.35%
i. 2018 Loss Base	0.29%	0.28%	0.32%	0.32%	0.45%	0.53%
j. 2019 Loss Base	0.23%	0.23%	0.25%	0.25%	0.36%	0.42%
k. 2020 Loss Base	0.78%	0.76%	0.86%	0.86%	1.22%	1.42%
l. 2021 Gain Base	0.69%	0.68%	0.76%	0.76%	1.07%	1.25%
m. 2022 Gain Base	(0.14)%	(0.14)%	(0.15)%	(0.15)%	(0.22)%	(0.25)%
n. 2023 Gain Base	0.30%	0.29%	0.33%	0.33%	0.47%	0.55%
o. Sum of Amortization Rates	**17.59%**	**17.21%**	**19.43%**	**19.43%**	**27.40%**	**31.98%**

* 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 12.73% 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.

Table V-5
Original UAL Amortization
Total Program

June 30,	UAL Balance	UAL Payment
2023	$1,370,060,382	$303,404,608
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	

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, 2023 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, 2022 and June 30, 2023 as well as a reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1
Accrued Benefits Information

	June 30, 2022	June 30, 2023
FASB ASC Topic 960 Basis		
1. Present Value of Benefits Accrued to Date (PVAB)		
a. Members Currently Receiving Payments	$ 10,061,113,007	$ 10,421,363,188
b. Terminated Vested Members	764,170,145	837,556,738
c. Terminated Nonvested Members	85,668,598	88,700,930
d. Active Members	4,471,849,694	4,511,962,306
e. Total PVAB	$ 15,382,801,444	$ 15,859,583,162
2. Market Value of Assets (MVA)	14,568,691,334	15,073,148,465
3. Unfunded Present Value of Accrued Benefits, but not less than Zero	$ 814,110,110	$ 786,434,697
4. Ratio of MVA to PVAB (2)/(1)(e)	94.7%	95.0%
Change in Present Value of Benefits Accrued to Date during FY 2023		
Increase/(Decrease) during Year Attributable to:		
Passage of Time		$ 967,847,954
Benefits Paid		(1,001,430,769)
Assumption Changes		0
Program Changes		6,574,283
Benefits Accrued, Other Gains/Losses		503,790,250
Net Increase (Decrease)		$ 476,781,718

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, 2023 as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2023 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 2023

	Teacher Program	State Program	Total State and Teacher Program
Total Pension Liability (TPL)			
Service Cost (SC)	$ 177,717,236	$ 100,610,154	$ 278,327,390
Interest (includes Interest on SC)	710,101,922	370,793,964	1,080,895,886
Changes of Benefit Terms	4,046,615	2,527,668	6,574,283
Differences Between Actual and Expected Experience	105,552,434	68,824,378	174,376,812
Changes of Assumptions	0	0	0
Benefit Payments, including Refunds of Member Contributions	(639,369,264)	(362,061,505)	(1,001,430,769)
Net Change in TPL	**358,048,943**	**180,694,659**	**538,743,602**
Beginning of Year (BOY) TPL	**11,149,845,760**	**5,831,946,322**	**16,981,792,082**
End of Year (EOY) TPL	**$ 11,507,894,703**	**$ 6,012,640,981**	**$ 17,520,535,684**
Program Fiduciary Net Position (FNP)			
Employer Contributions	$ 274,787,877	$ 190,129,992	$ 464,917,869
Member Contributions	113,962,816	57,974,703	171,937,519
Transfers	0	(909,916)	(909,916)
Net Investment Income	584,351,750	297,554,804	881,906,554
Benefit Payments, including Refunds of Member Contributions	(639,369,264)	(362,061,505)	(1,001,430,769)
Administrative Expense	(7,912,694)	(4,051,432)	(11,964,126)
Net Change in FNP	325,820,485	178,636,646	504,457,131
BOY FNP	**9,664,934,008**	**4,903,757,326**	**14,568,691,334**
EOY FNP	**$ 9,990,754,493**	**$ 5,082,393,972**	**$ 15,073,148,465**
EOY Net Pension Liability (NPL)	**$ 1,517,140,210**	**$ 930,247,009**	**$ 2,447,387,219**
FNP as a Percentage of TPL	86.8%	84.5%	86.0%
Covered Payroll*	1,492,682,765	819,730,772	2,312,413,537
NPL as a Percentage of Covered Payroll	101.6%	113.5%	105.8%

* For FY 2023

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, 2023, 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-3
Sensitivity of Net Pension Liability to Changes in Discount Rate
FY 2023

	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Teacher Program			
Total Pension Liability (TPL)	$ 12,973,805,751	$ 11,507,894,703	$ 10,287,601,820
Program Fiduciary Net Position (FNP)	9,990,754,493	9,990,754,493	9,990,754,493
Net Pension Liability (NPL)	$ 2,983,051,258	$ 1,517,140,210	$ 296,847,327
FNP as a Percentage of TPL	77.0%	86.8%	97.1%
State Program			
Total Pension Liability (TPL)	$ 6,717,851,572	$ 6,012,640,981	$ 5,420,800,360
Program Fiduciary Net Position (FNP)	5,082,393,972	5,082,393,972	5,082,393,972
Net Pension Liability (NPL)	$ 1,635,457,600	$ 930,247,009	$ 338,406,388
FNP as a Percentage of TPL	75.7%	84.5%	93.8%
Total State Employee and Teacher Program			
Total Pension Liability (TPL)	$ 19,691,657,323	$ 17,520,535,684	$ 15,708,402,180
Program Fiduciary Net Position (FNP)	15,073,148,465	15,073,148,465	15,073,148,465
Net Pension Liability (NPL)	$ 4,618,508,858	$ 2,447,387,219	$ 635,253,715
FNP as a Percentage of TPL	76.5%	86.0%	96.0%

A one percent decrease in the discount rate increases the TPL for the total Program by approximately 12% and increases the NPL by approximately 89%. A one percent increase in the discount rate decreases the TPL by approximately 10% and decreases the NPL by approximately 74%.

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, 2023, 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 2023

	Teacher Program	State Program	Total State and Teacher Program
Actuarially Determined Contribution (ADC)	$ 270,623,385	$ 187,554,401	$ 458,177,786
Contributions in Relation to the ADC	270,623,385	187,554,401	458,177,786
Contribution Deficiency/(Excess)	$ 0	$ 0	$ 0
Covered Payroll (Payroll)*	$ 1,492,682,765	$ 819,730,772	$ 2,312,413,537
Contributions as a Percentage of Payroll	18.13%	22.88%	19.81%

* For FY 2023

SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Notes to Schedule of Employer Contributions

Valuation Date:	June 30, 2019
Timing:	June 30, 2023 ADC rates are calculated based on 2020 liabilities developed as a roll-forward of the 2019 valuation liability, adjusted for expected experience and any assumption or methodology changes during FY 2020 using preliminary actual assets as of June 30, 2020.

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:	6.75%
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: 104% and 120% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to the start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using MP_2015 model with an ultimate rate of 0.85% for ages 20-85 grading down to an ultimate rate of 0.00% for ages 111-120, and convergence to the ultimate rate in the year 2020. Teacher Program: 99% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table for both males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to the start of the Healthy Annuitant Mortality Table, respectively, both projected using the RPEC_2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0.00% for ages 111-120, and convergence to the ultimate rate in the year 2020.

SECTION VI – FINANCIAL DISCLOSURE INFORMATION

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023 can be found in the June 30, 2020 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 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, 2023, these values are thus developed as of June 30, 2022. 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, 2023

Teacher Program

Status	Total Expected Future Service	Count	Average Remaining Service Lives
Active Members	318,249	27,718	11
In-Pay Members	0	22,680	0
Terminated Vested Members	0	5,693	0
Inactives Due Refunds	0	29,784	0
Total Membership	318,249	85,875	4

State Program

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	118,227	12,403	10
In-Pay Members	0	15,728	0
Terminated Vested Members	0	3,150	0
Inactives Due Refunds	0	9,023	0
Total Membership	118,227	40,304	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

Type of Activity	Gain (or Loss) For Fiscal Year Ended June 30, 2018	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
Investment Income	$ 94,329,730	$ 57,985,155	$ (102,951,302)	$ 720,053,045	$ 160,575,868	$ 92,030,355
Combined Liability Experience	(34,151,279)	(208,719,412)	(162,293)	(25,575,263)	(107,921,791)	(174,376,812)
Gain (or Loss) during Year from Financial Experience	$ 60,178,451	$ (150,734,257)	$ (103,113,595)	$ 694,477,782	$ 52,654,077	$ (82,346,457)
Non-Recurring Items	(191,998,939)	0	(1,223,156)	(1,175,893,728)	(104,916,162)	0
Composite Gain (or Loss) During Year	**$ (131,820,488)**	**$ (150,734,257)**	**$ (104,336,751)**	**$ (481,415,946)**	**$ (52,262,085)**	**$ (82,346,457)**

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, 2023, 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

Valuation Date June 30,	Aggregate Actuarial Liabilities for: (1) Active Member Contributions	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets*	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
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
2014	2,315,075,905	7,572,038,284	2,433,044,594	10,017,512,006	100	100	5

* 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, 2023	
Teacher Plan	
Count	27,897
Average Current Age	45.6
Average Benefit Service	11.8
Average Vesting Service	12.0
Average Valuation Pay	$ 55,136
State Employee Regular Plan	
Count	11,043
Average Current Age	47.7
Average Benefit Service	10.9
Average Vesting Service	11.4
Average Valuation Pay	$ 64,433
Inland Fisheries & Wildlife Officers Special Plan (Closed Plan)	
Count	1
Average Current Age	67.9
Average Benefit Service	45.2
Average Vesting Service	45.2
Average Valuation Pay	$ 87,680
State Employee Special 25 & Out Plan	
Count	446
Average Current Age	40.5
Average Benefit Service	13.5
Average Vesting Service	14.1
Average Valuation Pay	$102,102

APPENDIX A – MEMBERSHIP INFORMATION

Active Member Data as of June 30, 2023	
State Employee 1998 Special Plan	
Count	1,185
Average Current Age	43.1
Average Benefit Service	10.6
Average Vesting Service	11.0
Average Valuation Pay	$ 74,273
Fire Marshal Special Plan	
Count	14
Average Current Age	44.3
Average Benefit Service	10.6
Average Vesting Service	14.1
Average Valuation Pay	$114,028
State Employee Totals (Excludes Teachers)	
Count	12,689
Average Current Age	47.0
Average Benefit Service	10.9
Average Vesting Service	11.5
Average Valuation Pay	$ 66,733

Non-Active Member Data as of June 30, 2023
Teachers

	Count	Average Age	Total Annual Benefit	Average Annual Benefit
Retired	19,227	74.3	$ 557,288,013	$ 28,985
Retired – Concurrent Beneficiary	1,288	75.2	8,207,846	6,373
Disability – Section 1122	0		0	0
Disability – Sections 3 and 3A	660	70.0	20,682,820	31,338
Beneficiary of Above	1,720	74.2	32,428,640	18,854
Pre-Retirement Death Beneficiary	284	62.1	1,924,180	6,775
Terminated Vested	5,920	52.5	60,149,670	10,160
Inactive Due Refund	29,843	NA	NA	NA

APPENDIX A – MEMBERSHIP INFORMATION

Non-Active Member Data as of June 30, 2023 State Regular				
	Count	**Average Age**	**Total Annual Benefit**	**Average Annual Benefit**
Retired	10,599	73.9	$ 257,056,820	$ 24,253
Retired – Concurrent Beneficiary	913	73.5	5,242,998	5,743
Disability – Section 1122	0		0	N/A
Disability – Sections 3 and 3A	764	68.7	20,443,228	26,758
Beneficiary of Above	2,119	64.7	34,111,083	16,098
Pre-Retirement Death Beneficiary	273	68.3	1,862,571	6,823
Terminated Vested	2,876	52.7	25,545,559	8,882
Inactive Due Refund	1,795	NA	NA	NA

Non-Active Member Data as of June 30, 2023 State Special				
	Count	**Average Age**	**Total Annual Benefit**	**Average Annual Benefit**
Retired	860	68.7	$ 28,263,763	$ 32,865
Retired – Concurrent Beneficiary	98	67.4	713,350	7,279
Disability – Section 1122	0		0	NA
Disability – Sections 3 and 3A	84	61.3	2,700,351	32,147
Beneficiary of Above	132	73.4	2,296,266	17,396
Pre-Retirement Death Beneficiary	17	48.0	105,593	6,211
Terminated Vested	406	46.0	3,504,567	8,632
Inactive Due Refund	7,400	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.

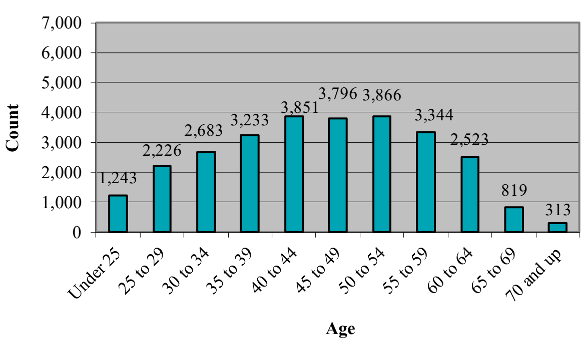
APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Active Members
As of June 30, 2023

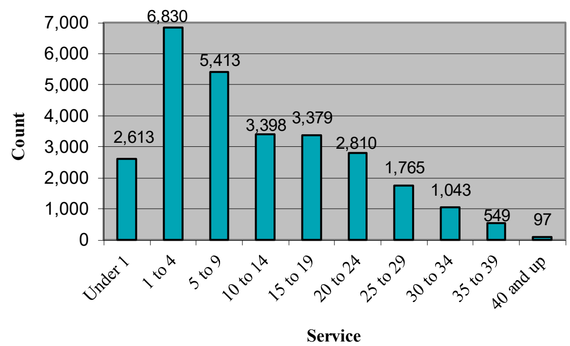
Teachers

	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	684	559	0	0	0	0	0	0	0	0	1,243
25 to 29	379	1,341	506	0	0	0	0	0	0	0	2,226
30 to 34	274	966	1,094	349	0	0	0	0	0	0	2,683
35 to 39	276	949	869	804	335	0	0	0	0	0	3,233
40 to 44	271	895	804	587	983	311	0	0	0	0	3,851
45 to 49	225	705	702	515	580	829	240	0	0	0	3,796
50 to 54	174	541	621	443	565	596	719	204	3	0	3,866
55 to 59	120	388	401	365	469	484	407	539	171	0	3,344
60 to 64	118	302	263	241	327	423	280	231	308	30	2,523
65 to 69	52	127	107	68	96	143	85	53	42	46	819
70 and up	40	57	46	26	24	24	34	16	25	21	313
Total	2,613	6,830	5,413	3,398	3,379	2,810	1,765	1,043	549	97	27,897

Age Distribution



Service Distribution



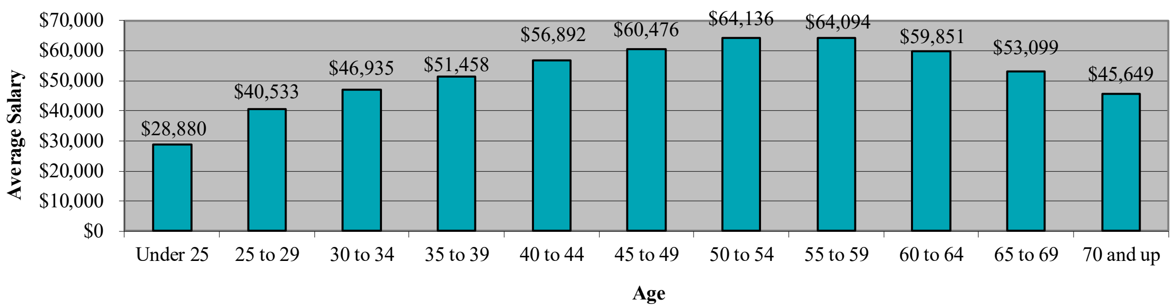
APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Active Members
As of June 30, 2023

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	23,257	35,761	0	0	0	0	0	0	0	0	28,880
25 to 29	30,082	40,590	48,213	0	0	0	0	0	0	0	40,533
30 to 34	30,905	42,735	50,828	58,945	0	0	0	0	0	0	46,935
35 to 39	29,080	43,549	52,194	60,843	67,865	0	0	0	0	0	51,458
40 to 44	31,240	43,251	52,350	62,009	71,269	75,140	0	0	0	0	56,892
45 to 49	31,516	43,918	51,414	61,937	69,529	76,620	82,003	0	0	0	60,476
50 to 54	32,245	43,232	51,151	61,489	67,999	76,185	81,819	83,936	56,928	0	64,136
55 to 59	32,817	43,697	47,172	56,586	62,027	69,497	80,952	82,200	81,220	0	64,094
60 to 64	28,737	40,453	46,021	52,697	57,348	62,058	71,861	79,294	80,859	74,913	59,851
65 to 69	33,037	39,673	40,427	50,285	53,788	56,954	60,990	70,285	78,458	75,521	53,099
70 and up	25,545	28,735	36,815	36,881	50,404	54,950	57,931	65,820	70,054	79,680	45,649
A	28,718	41,865	50,313	59,670	66,811	71,759	78,601	81,039	80,165	76,234	55,136

Average Salary Distribution



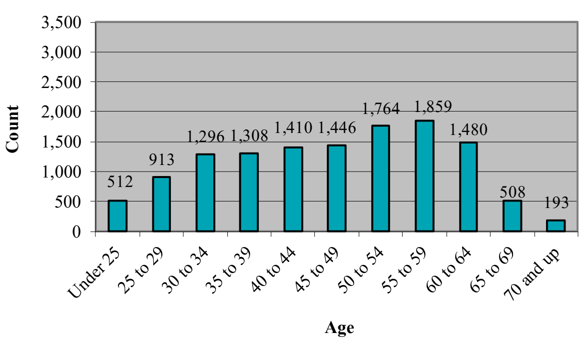
APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Active Members
As of June 30, 2023

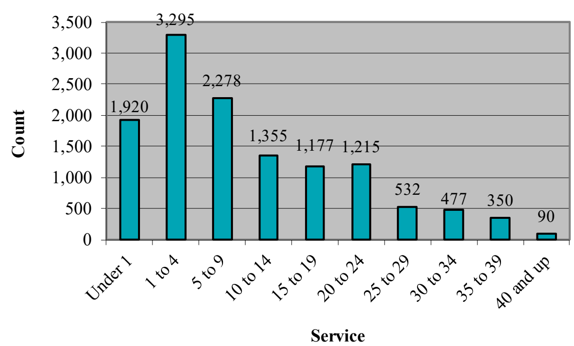
State

	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	338	172	2	0	0	0	0	0	0	0	512
25 to 29	262	502	148	1	0	0	0	0	0	0	913
30 to 34	279	546	386	84	1	0	0	0	0	0	1,296
35 to 39	222	417	360	228	77	4	0	0	0	0	1,308
40 to 44	190	377	302	226	227	87	1	0	0	0	1,410
45 to 49	171	321	224	181	207	280	61	1	0	0	1,446
50 to 54	165	339	298	176	228	261	183	100	14	0	1,764
55 to 59	149	298	255	199	183	272	156	196	146	5	1,859
60 to 64	92	216	209	170	168	220	88	132	153	32	1,480
65 to 69	32	73	76	68	65	69	31	36	24	34	508
70 and up	20	34	18	22	21	22	12	12	13	19	193
Total	1,920	3,295	2,278	1,355	1,177	1,215	532	477	350	90	12,689

Age Distribution



Service Distribution



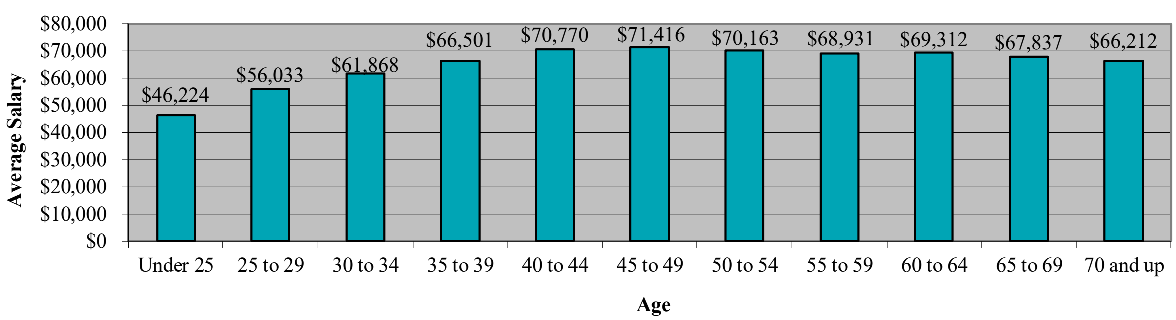
APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Active Members
As of June 30, 2023

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	41,523	55,473	45,287	0	0	0	0	0	0	0	46,224
25 to 29	46,582	57,013	69,362	67,820	0	0	0	0	0	0	56,033
30 to 34	50,421	59,627	71,021	72,615	43,296	0	0	0	0	0	61,868
35 to 39	53,189	62,012	69,687	78,769	76,319	98,154	0	0	0	0	66,501
40 to 44	51,414	66,165	73,276	77,059	80,826	81,869	57,352	0	0	0	70,770
45 to 49	52,352	63,322	70,883	74,668	76,525	83,398	87,089	92,169	0	0	71,416
50 to 54	50,535	61,358	64,686	72,351	74,430	79,715	86,702	78,404	81,164	0	70,163
55 to 59	50,913	58,563	66,256	68,895	71,920	74,577	78,165	79,506	74,956	66,442	68,931
60 to 64	48,801	57,531	62,445	71,559	68,309	75,246	85,823	77,822	78,688	79,848	69,312
65 to 69	43,091	58,761	65,601	66,516	69,653	71,463	77,372	85,428	77,230	73,473	67,837
70 and up	44,916	54,240	60,269	83,910	66,598	58,632	65,181	89,147	82,323	78,683	66,212
Average	48,712	60,292	68,550	73,827	74,462	77,969	83,014	79,525	77,266	76,449	66,733

Average Salary Distribution

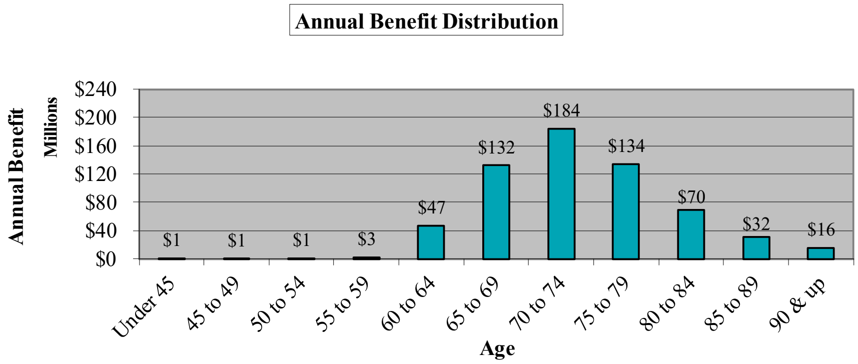


APPENDIX A – MEMBERSHIP INFORMATION

Distribution of Retirees, Disabled Members, Beneficiaries, and Survivors As of June 30, 2023

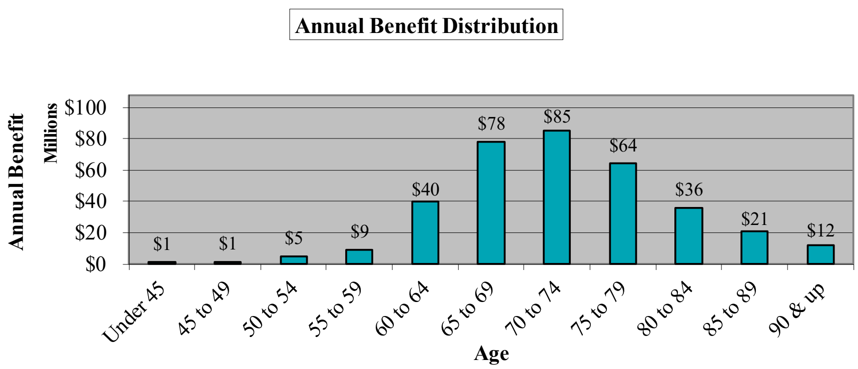
Teachers

Age	Count	Annual Benefit
Under 45	157	$ 1,127,689
45 to 49	50	510,082
50 to 54	99	1,172,360
55 to 59	164	2,809,716
60 to 64	1,527	46,904,784
65 to 69	4,675	132,177,385
70 to 74	6,666	184,275,029
75 to 79	5,051	134,416,809
80 to 84	2,737	69,663,658
85 to 89	1,317	31,568,000
90 & up	736	15,905,987
Total	23,179	$ 620,531,499



State

Age	Count	Annual Benefit
Under 45	137	$ 1,224,744
45 to 49	83	1,449,035
50 to 54	241	4,940,666
55 to 59	409	9,191,190
60 to 64	1,573	39,727,338
65 to 69	3,492	78,122,722
70 to 74	3,785	85,123,812
75 to 79	2,867	64,274,546
80 to 84	1,632	35,970,900
85 to 89	997	20,697,069
90 & up	643	12,074,001
Total	15,859	$ 352,796,023



APPENDIX A – MEMBERSHIP INFORMATION

Status Reconciliation - Teachers	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members[1]	Terminated Vested Members[2]
As of June 30, 2022	**27,718**	**18,738**	**2,997**	**286**	**659**	**5,693**
New hires	2,433					
Rehires	750				-	(309)
Movement between plans	(1)					(4)
New retirees	(470)	955				(484)
New beneficiaries due to retirements			42			
New disabled retirees	(16)				22	(6)
New deferred vested members	(1,084)					1,155
Non-vested terminations	(1,165)					
Refunds	(255)					(104)
Deaths, no future benefits	(3)	(374)	(126)	(14)	(10)	-
Deaths with a survivor or beneficiary	(10)	(93)	97	16	(10)	(26)
Benefits expired			(2)	(4)		
Data correction	-	1	-	-	(1)	5
As of June 30, 2023	**27,897**	**19,227**	**3,008**	**284**	**660**	**5,920**

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	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members[1]	Terminated Vested Members[2]
As of June 30, 2022	**12,403**	**11,298**	**3,284**	**298**	**848**	**3,150**
New hires	1,746					
Rehires	142					(55)
Movement between plans	(3)					(2)
New retirees	(408)	559				(151)
New beneficiaries due to retirements			36			
New disabled retirees	(19)				29	(10)
New deferred vested members	(366)					429
Non-vested terminations	(573)					
Refunds	(212)					(52)
Deaths, no future benefits	(11)	(285)	(173)	(12)	(16)	(10)
Deaths with a survivor or beneficiary	(10)	(111)	115	5	(13)	(11)
Benefits expired				(1)		
Data correction	-	(2)	-	-	-	(6)
As of June 30, 2023	**12,689**	**11,459**	**3,262**	**290**	**848**	**3,282**

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 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.

<u>Contribution Requirements for Special State Employee Groups</u>

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: 66⅔% 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 66⅔% 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-of-duty.

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 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

* 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 1% non-cumulative COLA was paid in May 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.

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).

APPENDIX B – SUMMARY OF PROGRAM PROVISIONS

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 1% non-cumulative COLA was paid in May 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

State Employees	3.91%
Teachers	3.91%

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)

Service	State 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

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

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

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 2023)			
	State Employees		Teachers	
Age	Male	Female	Male	Female
50	31	24	10	6
55	46	34	21	17
60	71	48	36	26
65	103	69	58	37
70	158	111	97	59
75	267	198	177	113
80	482	367	340	318
85	889	699	711	626
90	1,552	1,312	1,331	1,188
95	2,424	2,144	2,243	2,118

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 2023)				
	State Employees		Teachers	
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	18	11	15	10
60	27	17	25	16
65	39	25	41	24

* For State Regular and Teachers, 5% of deaths 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

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

(Showing values in 2023)				
	State Employees		Teachers	
Age	Male	Female	Male	Female
25	36	21	32	25
30	54	37	47	45
35	74	58	65	69
40	91	76	80	92
45	113	99	99	119
50	160	142	141	171
55	218	183	191	219
60	277	211	243	254
65	328	221	289	265
70	386	260	339	312

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)

Teachers and State Regular Plans

	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

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 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

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

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

None

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 applied to member payroll is expected to amortize the UAL according to the Program's amortization policy. Specifically, the remaining original UAL has five 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 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 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.

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, 2023

Presented by Cheiron
October 2023

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October 12, 2023

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, 2023, for the Maine Public Employees' Retirement System (MainePERS or System) based on a roll-forward valuation of the obligations as of June 30, 2022.

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) from the valuation date to the measurement 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 2020. The basic premiums remain at $0.22 bi-weekly per $1,000 of coverage for fiscal year (FY) 2023 for both active and retired PLD participants. Basic premiums will increase to $0.23 for FY 2024 and $0.24 for FY 2026. For active participants, $0.11 is allocated to fund active benefits in all years, while the difference is allocated to fund future retiree benefits. Any further increases would be determined by the next premium study in 2024.

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.

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	Ryan Benitez, ASA, MAAA
Principal Consulting Actuary	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, 2023, Measurements as of the reporting date are based on the fair value of assets as of June 30, 2023 and the Total OPEB Liability (TOL) as of the valuation date June 30, 2022, rolled forward to June 30, 2023. Therefore, the update procedures included the addition of service cost and interest cost offset by actual benefit payments as permitted under GASB No. 74.

Beginning of year measurements presented in this report are based on the actuarial valuation as of June 30, 2022 rolled forward to June 30, 2023. Because the beginning and ending values are based on the same actuarial valuation and there were no significant events, no liability gains, or losses due to experience are reported in either year shown in this report. During full valuation years, liability gains and losses will be reported reflecting the liability gains and losses between actuarial valuation dates as well as any significant events during the update period.

Table I-1 below provides a summary of the key results during this reporting period ending on June 30, 2023.

Table I-1
Summary of Results

	Measurement Date 06/30/2022	Measurement Date 06/30/2023
Total OPEB Liability	$ 32,823,884	$ 33,868,278
Plan Fiduciary Net Position	18,340,729	20,223,634
Net OPEB Liability	$ 14,483,155	$ 13,644,644

SECTION II – DETERMINATION OF DISCOUNT RATE

MainePERS's funding policy is for PLD employees to pay $0.22 biweekly per $1,000 in coverage for all participants. Of the $0.22 for actives, $0.11 is allocated to the Retiree Fund for retiree benefits.

As recommended in Option 3 of the 2020 Premium Study, the following increases are assumed:

- FYE 2024: $0.23 for retirees with $0.12 of active premiums allocated to the Retiree Fund
- FYE 2026: $0.24 for retirees with $0.13 of active premiums allocated to the Retiree Fund

The discount rate at June 30, 2023 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 at the beginning of the current measurement year is measured as of the valuation date June 30, 2022. The TOL at the end of the measurement year, June 30, 2023, is measured as of the valuation date June 30, 2022 and projected to June 30, 2023. This is a roll-forward valuation and full valuations are completed at least every two years. 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 projects the TOL from the valuation date to the end of the fiscal year 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, 6/30/2022			
Actives	$ 11,860,631	$ 9,471,040	$ 7,651,621
Deferred Vested	0	0	0
Retirees	26,137,141	23,352,844	21,018,128
Total	**$ 37,997,772**	**$ 32,823,884**	**$ 28,669,749**
Service Cost, Beginning of Year			
Service Cost at Valuation Date	$ 447,369	$ 308,456	$ 212,190
Service Cost Rate	0.15%	0.10%	0.07%
Expected Payroll During Year	301,040,000	301,040,000	301,040,000
Service Cost	$ 447,369	$ 308,456	$ 212,190
Benefit Payments	$ (1,373,721)	$ (1,373,721)	$ (1,373,721)
Interest	$ 2,077,211	$ 2,109,659	$ 2,115,562
Change in Benefits	0	0	0
Change in Assumptions	0	0	0
Other Significant Events	0	0	0
Total OPEB Liability, 6/30/2023	$ 39,148,631	$ 33,868,278	$ 29,623,780

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. There were no significant changes in benefits during the year. No difference between expected and actual experience, i.e., experience adjustments, is included in this report since the same participant data was used as in the full valuation.

Table IV-1
Change in Net OPEB Liability - PLD

	Increase (Decrease)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a) - (b)**
Balances at 06/30/2022	$ 32,823,884	$ 18,340,729	$ 14,483,155
Changes for the year:			
Service cost	308,456		308,456
Interest	2,109,659		2,109,659
Changes of benefits	0		0
Changes of assumptions	0		0
Differences between expected and actual experience	0		0
Contributions - employer		1,332,464	(1,332,464)
Contributions - member		0	0
Net investment income		2,065,791	(2,065,791)
Benefit payments	(1,373,721)	(1,373,721)	0
Administrative expense	0	(141,629)	141,629
Net changes	**1,044,394**	**1,882,905**	**(838,511)**
Balances at 6/30/2023	$ 33,868,278	$ 20,223,634	$ 13,644,644

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	$ 39,148,631	$ 33,868,278	$ 29,623,780
Plan Fiduciary Net Position	20,223,634	20,223,634	20,223,634
Collective Net OPEB Liability	$ 18,924,997	$ 13,644,644	$ 9,400,146
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	51.7%	59.7%	68.3%

A one percent decrease in the discount rate increases the TOL by approximately 15.6% and increases the NOL by approximately 38.7%. A one percent increase in the discount rate decreases the TOL by approximately 12.5% and decreases the NOL by approximately 31.1%.

SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-1
Schedule of Changes in Net OPEB Liability and Related Ratios

	FY 2023
Total OPEB Liability	
Service cost (BOY)	$ 308,456
Interest (includes interest on service cost)	2,109,659
Changes of benefit terms	0
Differences between expected and actual experience	0
Changes of assumptions	0
Benefit payments	(1,373,721)
Net change in total OPEB liability	**1,044,394**
Total OPEB liability - beginning	**32,823,884**
Total OPEB liability - ending	**$ 33,868,278**
Plan fiduciary net position	
Contributions - employer	$ 1,332,464
Contributions - member	0
Net investment income	2,065,791
Benefit payments	(1,373,721)
Administrative expense	(141,629)
Net change in plan fiduciary net position	**$ 1,882,905**
Plan fiduciary net position - beginning	**18,340,729**
Plan fiduciary net position - ending	**$ 20,223,634**
Net OPEB liability - ending	**$ 13,644,644**
Plan fiduciary net position as a percentage of the total OPEB liability	59.71%
Covered employee payroll	$ 309,318,600
Net OPEB liability as a percentage of covered employee payroll	4.41%

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, 2023, 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 2023

		PLD
Actuarially Determined Contribution	$	1,996,217
Contributions in Relation to the Actuarially Determined Contribution		1,332,464
Contribution Deficiency/(Excess)	$	663,753
Covered Payroll	$	309,318,600
Contributions as a Percentage of Covered Payroll		0.43%

Notes to Schedule

Valuation Date: June 30, 2018

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 2022 and 2023 are based on the June 30, 2018 valuation rolled forward and adjusted for changes in assumptions.

Key Methods and Assumptions Used to Determine Contribution Rates for FY 2023

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market Value
Amortization Method:	Level percent closed with 13 years remaining for FY 2023
Discount Rate:	6.750%
Salary Inflation:	2.750%
Administrative Expense Load:	8.66%

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023, can be found in the June 30, 2018 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, 2023, 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, 2023

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	53,162	5,248	10
Inactives	0	3,015	0
Total Membership	53,162	8,263	6

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

Participant Data as of June 30, 2022

Table A-1
Active Member Data

Group	Count	Average Age	Average Service	Average Salary
PLDs	5,248	48.8	10.5	$ 57,363

Table A-2
Non-Active Member Data

Group	Count	Average Age	Average Benefit[1]
PLDs	3,015	72.7	$ 19,266

[1] 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

PLDs	6.50%

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)

Years of Service	Rate of Increase
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 A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

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

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

	Showing values in 2022	
Age	Male	Female
50	31	25
55	47	35
60	71	48
65	103	69
70	159	112
75	269	200
80	485	370
85	894	703
90	1,556	1,314
95	2,428	2,146

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

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

	(showing values in 2022)	
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	18	11
60	28	17
65	39	25

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)

	(showing values in 2022)	
Age	Male	Female
25	36	21
30	54	37
35	73	57
40	90	76
45	113	99
50	161	143
55	219	184
60	278	213
65	330	222
70	389	262

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 Plans	
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

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

	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. Premium Expense Assumption

To reflect administrative expenses associated with the distribution of benefits, the following loads, determined in the 2020 Premium Study, have been added to the liabilities, normal cost, and benefit payments.

PLDs: 9.36%

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

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

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

None

14. Rationale for Change in Actuarial Assumptions

N/A

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 ten 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 $0.22 biweekly per $1,000 of base benefit, based on the coverage amounts declining from 100% to 40%. Biweekly rates increase to $0.23 in FYE 2024 and $0.24 in FYE 2026.

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

Maine Public Employees Retirement System

Judicial Retirement Program

Actuarial Valuation Report as of June 30, 2023

Produced by Cheiron

October 2023

www.cheiron.us 1.877.CHEIRON (243.4766)

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October 12, 2023

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, 2023 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.

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.

This report does not contain any adjustments for the potential impact of COVID-19 on either economic or demographic assumptions. We anticipate that the pandemic may have implications in both the short and long term, but the net impact of these is not determinable at this time.

Sincerely,
Cheiron

Gene Kalwarski, FSA, EA
Principal Consulting Actuary

Fiona E. Liston, FSA, EA
Principal Consulting Actuary

Bonnie Rightnour, FSA, EA
Principal Consulting Actuary

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, 2023. 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) 2023 were developed in the budgeting process in July 2020, based on a roll-forward of the June 30, 2019 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) 2022 and FY 2023 were developed through this ratemaking process in 2020. The assets used in developing these rates were the preliminary June 30, 2020 assets. These were then combined with liability measures as of June 30, 2020, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2019 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, 2019 valuation date and the June 30, 2020 measurement date. Similarly, the contributions for FY 2024 and FY 2025 were developed in 2022 and were based on estimated assets as of June 30, 2022 and liabilities based on the June 30, 2021 actuarial valuation liabilities adjusted to our best estimate of the June 30, 2022 liabilities.

The results of this June 30, 2023 valuation will be adjusted to a June 30, 2024 measurement date, combined with preliminary assets as of June 30, 2024, and used as the basis for the applicable FY 2026 and FY 2027 employer contributions. Next year's June 30, 2024 valuation will be used primarily for accounting disclosures.

Experience from July 1, 2022 through June 30, 2023 (FY 2023)

With respect to investment experience, measured on a market value of asset (MVA) basis, MainePERS experienced an investment return of positive 6.05% for the fiscal year ending June 30, 2023. This is less than the assumed rate of return of 6.5%. However, given the three-year asset smoothing method in place, only one-third of that loss is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore, asset smoothing also resulted in recognizing one-third of prior deferred asset gains of $1.889 million during FY 2023 for this Program. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.15%. This is greater than the 6.50% assumed rate of return in effect for FY 2023, resulting in a gain on investments for the year of $0.498 million in addition to the expected increase of $1.906 million had the assumed 6.50% been exactly achieved on an AVA basis.

With respect to liability experience, the Program's liabilities increased by $0.110 million less than the expected growth of $1.251 million (a 0.1% decrease in total liabilities which offset expected growth). Of this net decrease, approximately $0.266 million was attributable to demographic experience, primarily fewer retirements than expected, partially offset by a liability loss of $0.156 million attributable to the payment of cost-of-living adjustments (COLA) exceeding the assumed COLA. A one percent ad-hoc COLA was paid to eligible retirees during FYE 2023. An amount of $0.019 million was funded immediately to cover this payment.

Combining the investment and liability experience produced an informational total employer contribution of 1.70% of payroll as of June 30, 2023. This is a decrease of 1.98% compared to the June 30, 2022 informational valuation contribution rate of 3.68% of payroll.

SECTION I – BOARD SUMMARY

Finally, as of the June 30, 2023 valuation, the Program has an unfunded actuarial liability (UAL) of ($7.770) million (i.e., a surplus) based on the actuarial value of assets (AVA). This represents an increase in the surplus position of $1.263 million from the ($6.507) million AVA UAL measured as of June 30, 2022. This compares to an expected increase in the surplus position of $0.655 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 2023 as well as their combined effect on the UAL.

Table I-1
(Amounts in Millions)

	Liabilities	Assets*	UAL
Value as of June 30, 2022	$ 77.426	$ 83.933	$ (6.507)
Expected Change	1.251	1.906	(0.655)
Impact of Plan Changes	0.019	0.019	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Recognized Investment Gain	0.000	0.498	(0.498)
Recognized Liability Gain	(0.110)	0.000	(0.110)
Value as of June 30, 2023	$ 78.586	$ 86.356	$ (7.770)

* 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

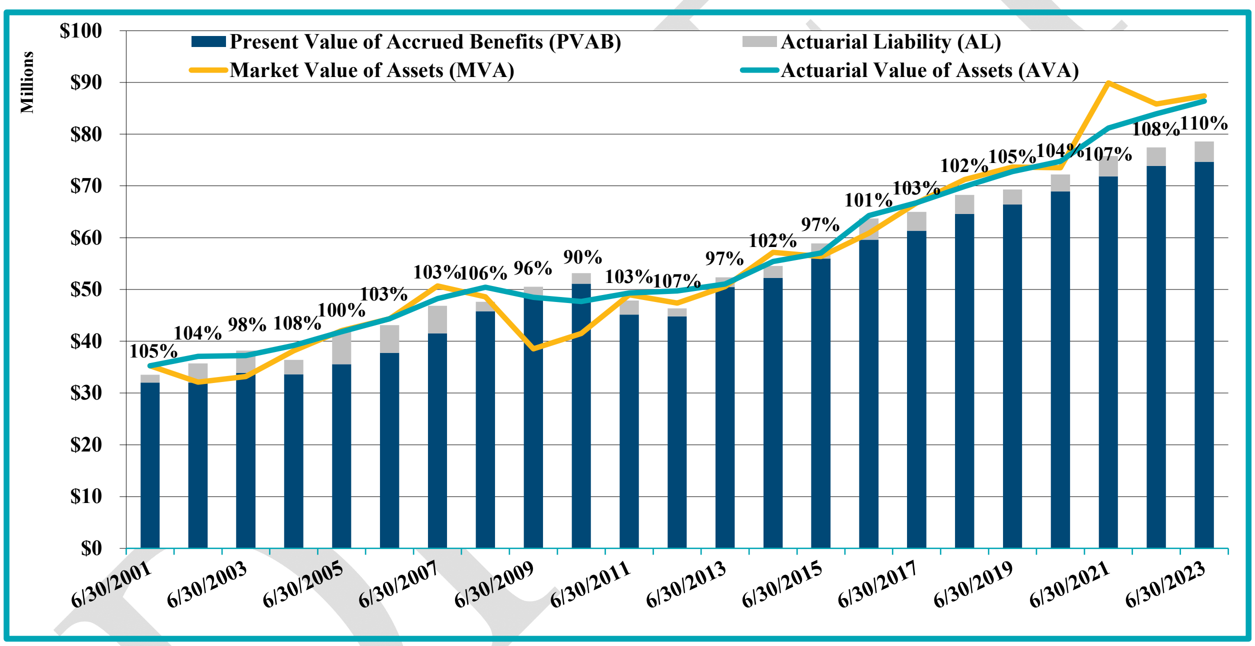
It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition.

SECTION I – BOARD SUMMARY

<u>Assets and Liabilities</u>

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.

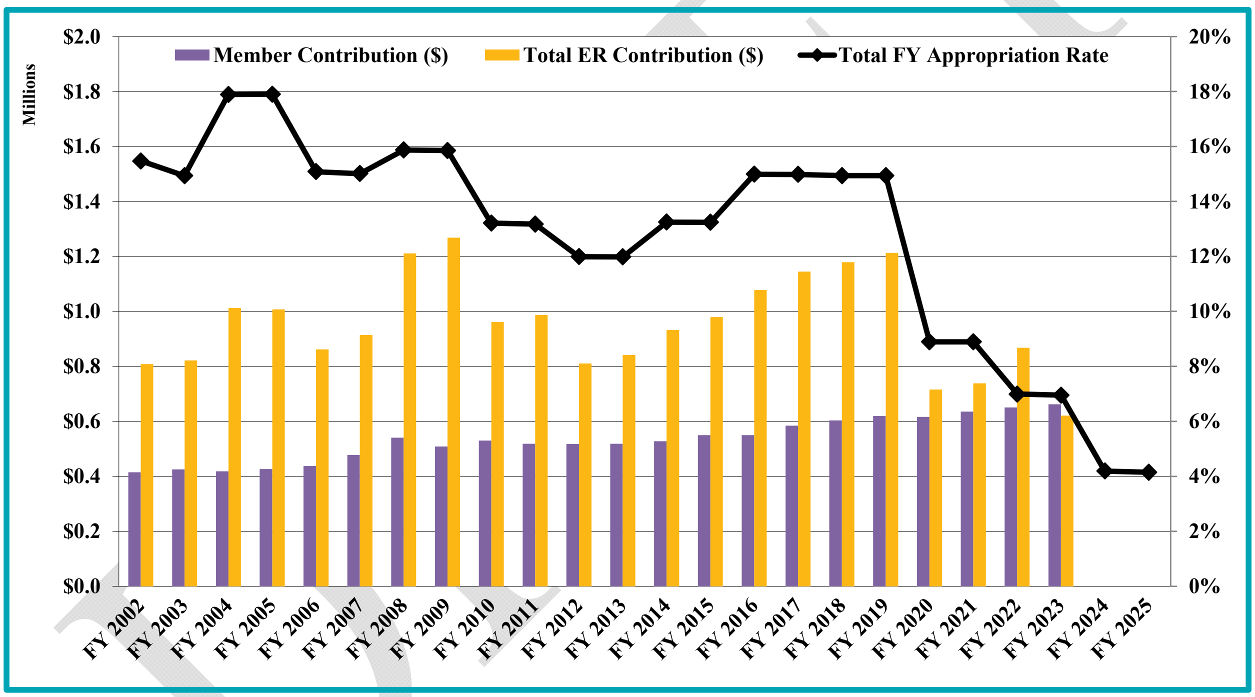


Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2023, the Program is funded 109.9% based on the AVA funded ratio, which represents a slight increase from the 108.4% ratio reported in the prior valuation. The 23-year history in the graph shows that over this period the Program has generally been within a few percentage points, either over or under, being fully funded at a 100% funded ratio on an AVA basis. Measured on an MVA basis, the funded ratio is 111.2% as of June 30, 2023.

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 2024 through FY 2025 contribution rates have already been determined based on the ratemaking process, so two additional years of the contribution rates are shown versus dollars received. The total employer contribution for FY 2023 includes the approximately $19 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 2023 was based on a roll-forward of the June 30, 2019 valuation to June 30, 2020, 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

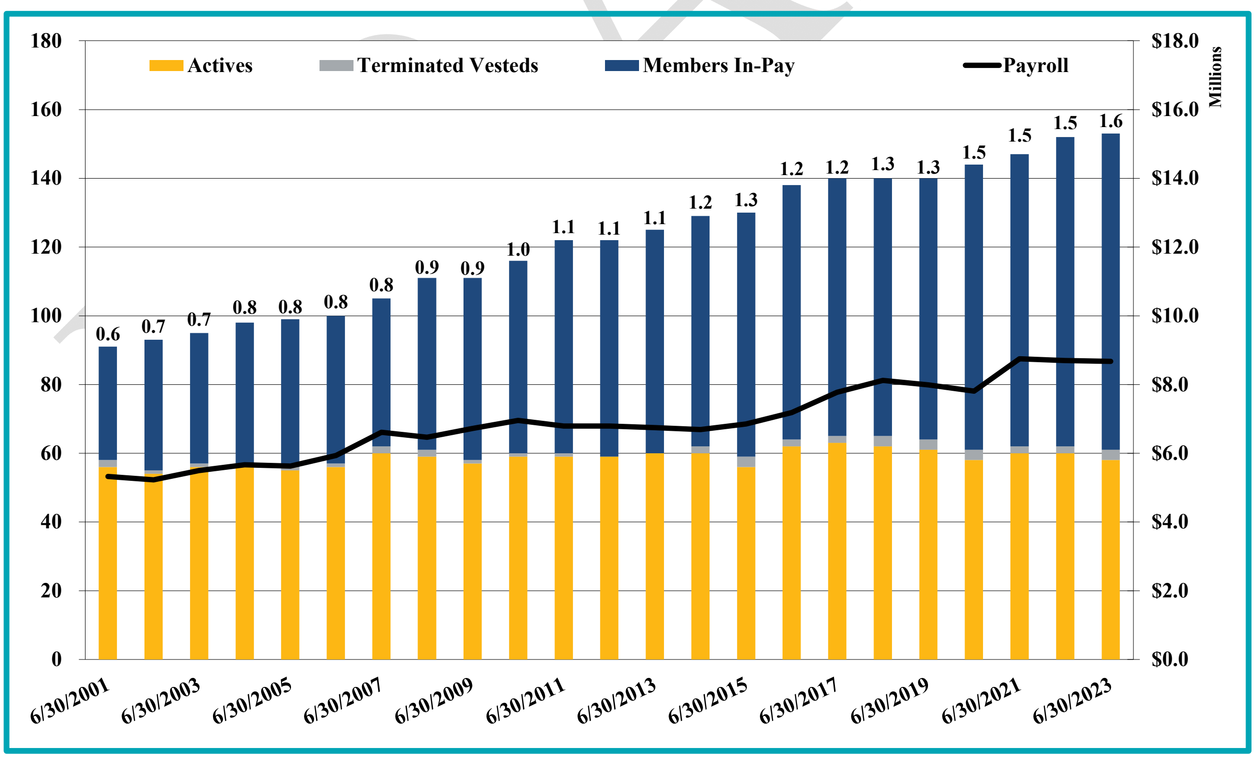
The current total contribution rate exceeds the Program's full normal cost plus the interest on the UAL. This is an indication that if experience matches the assumptions, the Plan's funded position is expected to improve in the upcoming year.

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.



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

	Valuation as of June 30, 2022	Valuation as of June 30, 2023	% Change
Member Counts			
Active Members	60	58	(3.3%)
Retired Members	70	73	4.3%
Beneficiaries of Retired Members	19	18	(5.3%)
Survivors of Deceased Members	0	0	0.0%
Disabled Members	1	1	0.0%
Terminated Vested Members	2	3	50.0%
Inactives Due Refunds	1	1	0.0%
Total Membership	153	154	0.7%
Annual Payroll of Active Members	$ 8,693,820	$ 8,670,579	(0.3%)
Annual Payments to Benefit Recipients	$ 5,350,392	$ 5,511,079	3.0%
Assets and Liabilities			
Actuarial Liability (AL)	$ 77,425,685	$ 78,586,151	1.5%
Actuarial Value of Assets (AVA)	83,932,655	86,355,694	2.9%
Unfunded AL (UAL)	$ (6,506,970)	$ (7,769,543)	19.4%
AVA Funded Ratio (AVA/AL)	108.4%	109.9%	
MVA Funded Ratio (MVA/AL)	110.8%	111.2%	
Accrued Benefit Liability (PVAB)	$ 73,878,079	$ 74,679,305	1.1%
Market Value of Assets (MVA)	85,821,158	87,423,240	1.9%
Unfunded PVAB	$ (11,943,079)	$ (12,743,935)	6.7%
MVA Accrued Benefit Funded Ratio	116.2%	117.1%	
Contributions as a Percentage of Payroll			
Employer Normal Cost Rate	12.71%	12.51%	
UAL Amortization Rate	(9.03)%	(10.81)%	
Total Employer Rate	3.68%	1.70%	

	2020 Ratemaking		2022 Ratemaking	
Total Employer Budgeted Rates	FY 2022	6.99%	FY 2024	4.19%
Total Employer Budgeted Rates	FY 2023	6.95%	FY 2025	4.15%

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.

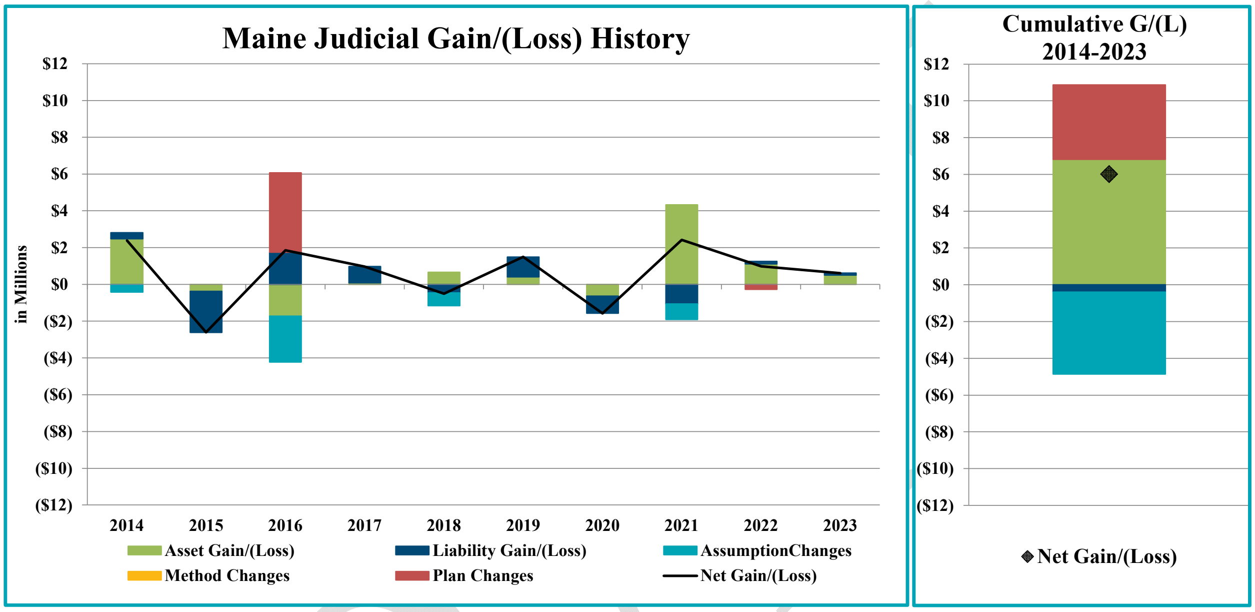
Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expectations. In addition, the extensive number of assumptions 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. The historical review section will show that plan change risk has been a significant driver of deviations in the actual measurements for this Program from those expected by the valuations.

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.

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 is 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)	
	Plan A	**Plan 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 just over 10.0. 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 9.1.

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, 2022 and June 30, 2023,
- 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 2023.

Table III-1
Changes in Market Value of Total MainePERS Defined Benefit (DB) Assets

Market Value of Total MainePERS DB Assets – June 30, 2022		**$ 18,357,298,853**
Additions		
Contributions:		
Employer Contributions	$ 558,234,714	
Member Contributions	238,543,081	
Transfers	(249,956)	
Total Contributions	$ 796,527,839	
Investment Income:		
Net Appreciation (Depreciation) in Fair Value of Investments	$ 1,255,864,120	
Interest on Bank Balances	2,837,912	
Total Investment Income	$ 1,258,702,032	
Investment Activity Expenses:		
Management Fees	$ (139,763,371)	
Investment Related Expense	(5,727,189)	
Banking Fees	(34,855)	
Total Investment Activity Expenses	$ (145,525,415)	
Net Income from Investing Activities	$ 1,113,176,617	
Total Additions		$ 1,909,704,456
Deductions		
Retirement Benefits	$(1,136,706,647)	
Disability Benefits	(27,348,917)	
Survivor Benefits	(27,703,181)	
Refunds	(27,668,683)	
Administrative Expenses	(15,075,412)	
Total Deductions		$ (1,234,502,840)
Total		
Net Increase (Decrease)		$ 675,201,616
Market Value of Total MainePERS DB Assets – June 30, 2023		**$ 19,032,500,469**

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, 2023 using the adopted actuarial valuation methodology.

Table III-2
Development of Actuarial Value of Total MainePERS Defined Benefit (DB) Assets as of June 30, 2023

1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2022	$ 17,953,344,777
2.	Amount in (1) with Interest to June 30, 2023	19,120,312,188
3.	Employer and Member Contributions for FY 2023	796,527,839
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2023	25,479,629
5.	Total Disbursements without Administrative Expenses for FY 2023	(1,219,427,428)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2023	(39,007,498)
7.	Expected Value of Total MainePERS DB Assets at June 30, 2023 = (2) + (3) + (4) + (5) + (6)	$ 18,683,884,730
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2023	19,032,500,469
9.	Excess of (8) Over (7)	348,615,739
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023 = (7) + [33⅓% of (9)]	$ 18,800,089,976

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 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, 2023.

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, 2023 valuation as shown in Table III-2 above is 0.987789 ($18,800,089,976 ÷ $19,032,500,469). 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, 2023

Program	**Market Value**	**Actuarial Value**
Teachers	$ 9,990,754,493	$ 9,868,754,960
State (Regular & Special)	5,082,393,972	5,020,331,623
Judicial	87,423,240	86,355,694
Legislative	16,681,900	16,478,192
Participating Local Districts (Consolidated & Non-Consolidated)	3,855,246,864	3,808,169,507
Total	$ 19,032,500,469	$18,800,089,976

Investment Performance

The market value of assets for the total MainePERS DB assets returned a positive 6.05% during FY 2023. This is lower than the assumed return of 6.50% for FY 2023. The equivalent market value returns for the total MainePERS DB assets for FY 2022 and FY 2021 were negative 0.62% and positive 26.76%, respectively.

On an actuarial value of assets basis, the return for FY 2023 was a positive 7.15% for the total MainePERS DB assets. This return is greater than both the return on a market value basis and the 6.50% assumption in effect for FY 2023. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.

Cash Flow Projections

Table III-4 Projection of Judicial Program Benefit Payments and Contributions				
FY Ending June 30,	Expected Benefit Payments	Expected Employer Contributions	Expected Member Contributions	Total Expected Contributions
2024	$ 5,910,700	$ 363,300	$ 663,300	$ 1,026,600
2025	6,300,400	369,700	681,500	1,051,200
2026	6,559,000	379,900	700,300	1,080,200
2027	6,737,700	390,300	719,500	1,109,800
2028	6,829,600	401,100	739,300	1,140,400
2029	6,883,500	412,100	759,700	1,171,800
2030	6,929,000	423,400	780,500	1,203,900
2031	6,966,100	435,100	802,000	1,237,100
2032	6,986,400	447,000	824,100	1,271,100
2033	6,973,300	459,300	846,700	1,306,000

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 2024 through FY 2025. Future contributions beyond that point are assumed to continue at the FY 2025 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 2024.

SECTION IV – LIABILITIES

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

- Disclosure of the Program's liabilities as of June 30, 2022 and June 30, 2023, 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

	June 30, 2022	June 30, 2023
Present Value of Benefits (PVB)		
Active Member Benefits	$ 35,990,484	$ 36,388,414
Retired, Disabled, Survivor, and Beneficiary Benefits	49,804,907	50,383,705
Terminated Vested Benefits	995,126	1,161,849
Terminated Nonvested Benefits	10,711	4,149
Total PVB	**$ 86,801,228**	**$ 87,938,117**
Market Value of Assets (MVA)	$ 85,821,158	$ 87,423,240
Future Member Contributions	3,828,998	3,883,886
Future Employer Contributions	1,212,674	1,209,432
Projected (Surplus)/Shortfall	(4,061,602)	(4,578,441)
Total Resources	**$ 86,801,228**	**$ 87,938,117**
Actuarial Liability (AL)		
Present Value of Benefits (PVB)	$ 86,801,228	$ 87,938,117
Present Value of Future Normal Costs (PVFNC)		
Employer Portion	5,546,545	5,468,080
Member Portion	3,828,998	3,883,886
Actuarial Liability (AL = PVB – PVFNC)	**$ 77,425,685**	**$ 78,586,151**
Actuarial Value of Assets (AVA)	83,932,655	86,355,694
Net (Surplus)/Unfunded (AL – AVA)	**$ (6,506,970)**	**$ (7,769,543)**
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 86,801,228	$ 87,938,117
Present Value of Future Benefit Accruals (PVFBA)	12,923,149	13,258,812
Accrued Liability (PVAB = PVB – PVFBA)	**$ 73,878,079**	**$ 74,679,305**
Market Value of Assets (MVA)	85,821,158	87,423,240
Net (Surplus)/Unfunded (PVAB – MVA)	**$ (11,943,079)**	**$ (12,743,935)**

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, 2023, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 3.91% compared to the System's discount rate of 6.50%, and the LDROM would be $98.8 million compared to the Actuarial Liability of $78.6 million. The $20.2 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 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.

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.

Table IV-2

	Present Value of Future Benefits	Actuarial Liability	Present Value of Accrued Benefits
Liability Measurement – June 30, 2022	$ 86,801,228	$ 77,425,685	$ 73,878,079
Liability Measurement – June 30, 2023	87,938,117	78,586,151	74,679,305
Liability Measurement Increase/ (Decrease) Due to:	$ 1,136,889	$ 1,160,466	$ 801,226
Program Amendment	$ 18,706	$ 18,706	$ 18,706
Assumption Change	0	0	0
Actuarial (Gain)/Loss	N/C	(110,488)	N/C
Benefits Accumulated and Other Sources	$ 1,118,183	$ 1,252,248	$ 782,520

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, 2023 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 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-1
Judicial Total Employer Rate

Valuation Date	June 30, 2022	June 30, 2023
Employer NC Rate	12.71%	12.51%
UAL Amortization Rate	(9.03)%	(10.81)%
Total Employer Rate	3.68%	1.70%

The rates developed in this section are for valuation 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, 2023 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, 2022 and June 30, 2023 as well as a reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1
Accrued Benefits Information

	June 30, 2022	June 30, 2023
FASB ASC Topic 960 Basis		
1. Present Value of Benefits Accrued to Date (PVAB)		
a. Members Currently Receiving Payments	$ 49,804,907	$ 50,383,705
b. Terminated Vested Members	995,126	1,161,849
c. Terminated Nonvested Members	10,711	4,149
d. Active Members	23,067,335	23,129,602
e. Total PVAB	$ 73,878,079	$ 74,679,305
2. Market Value of Assets (MVA)	85,821,158	87,423,240
3. Unfunded Present Value of Accrued Benefits, but not less than Zero	$ 0	$ 0
4. Ratio of MVA to PVAB (2)/(1)	116.2%	117.1%
Change in Present Value of Benefits Accrued to Date during FY 2023		
Increase/(Decrease) during Year Attributable to:		
Passage of Time		$ 4,628,254
Benefits Paid		(5,433,883)
Assumption Changes		0
Program Changes		18,706
Benefits Accrued, Other Gains/Losses		1,588,149
Net Increase (Decrease)		$ 801,226

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, 2023, as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2023 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 Related Ratios
FY 2023

Total Pension Liability (TPL)		
Service Cost (SC)	$	1,770,062
Interest (includes Interest on SC)		4,916,069
Changes of Benefit Terms		18,706
Differences Between Actual and Expected Experience		(110,488)
Changes of Assumptions		0
Benefit Payments, including Refunds of Member Contributions		(5,433,883)
Net Change in TPL	**$**	**1,160,466**
Beginning of Year (BOY) TPL		**77,425,685**
End of Year (EOY) TPL	**$**	**78,586,151**
Program Fiduciary Net Position (FNP)		
Employer Contributions	$	620,462
Member Contributions		662,365
Transfers		729,841
Net Investment Income		5,093,775
Benefit Payments, including Refunds of Member Contributions		(5,433,883)
Administrative Expense		(70,478)
Net Change in FNP	**$**	**1,602,082**
BOY FNP		**85,821,158**
EOY FNP	**$**	**87,423,240**
EOY Net Pension Liability (NPL)	**$**	**(8,837,089)**
FNP as a Percentage of TPL		111.2%
Covered Payroll*	$	8,658,366
NPL as a Percentage of Covered Payroll		(102.1)%

* For FY 2023

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, 2023, 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-3
Sensitivity of Net Pension Liability to Changes in Discount Rate
FY 2023

	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Total Pension Liability (TPL)	$ 85,541,694	$ 78,586,151	$ 72,516,368
Program Fiduciary Net Position (FNP)	87,423,240	87,423,240	87,423,240
Net Pension Liability (NPL)	$ (1,881,546)	$ (8,837,089)	$ (14,906,872)
FNP as a Percentage of TPL	102.2%	111.2%	120.6%

A one percent decrease in the discount rate increases the TPL by approximately 9% and increases the NPL by approximately 79%. A one percent increase in the discount rate decreases the TPL by approximately 8% and decreases the NPL by approximately 69%.

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, 2023, 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 2023

Actuarially Determined Contribution (ADC)	$ 601,756
Contributions in Relation to the ADC	601,756
Contribution Deficiency/(Excess)	$ 0
Covered Payroll (Payroll)*	$ 8,658,366
Contributions as a Percentage of Payroll	6.95%

*For FY 2023

Notes to Schedule of Employer Contributions

Valuation Date: June 30, 2019

Timing: June 30, 2023 ADC rates are calculated based on 2020 liabilities developed as a roll-forward of the 2019 valuation liability, adjusted for expected experience, and any assumption or methodology changes during FY 2020 using preliminary actual assets as of June 30, 2020.

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, open 10-year amortization

Discount Rate: 6.75%

SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Amortization Growth Rate:	2.75%
Price Inflation:	2.75%
Salary Increases:	2.75%
Mortality:	104% and 120% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to the start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using MP_2015 model with an ultimate rate of 0.85% for ages 20-85 grading down to an ultimate rate of 0.00% for ages 111-120, and convergence to the ultimate rate in the year 2020.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023 can be found in the June 30, 2020 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, 2023, these values are thus developed as of June 30, 2022. 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, 2023

Status	Total Expected Future Service	Count	Average Remaining Service Lives
Active Members	438	60	7
In-Pay Members	0	90	0
Terminated Vested Members	0	2	0
Inactives Due Refunds	0	1	0
Total Membership	438	153	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

Type of Activity	Gain (or Loss) For Fiscal Year Ended June 30, 2018	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
Investment Income	$ 657,144	$ 408,141	$ (630,358)	$ 4,321,879	$ 1,106,736	$ 498,070
Combined Liability Experience	(468,895)	1,087,164	(942,561)	(1,066,613)	150,154	110,488
Gain (or Loss) during Year from Financial Experience	188,249	1,495,305	(1,572,919)	3,255,266	1,256,890	608,558
Non-Recurring Items	(697,807)	0	0	(836,266)	(273,590)	0
Composite Gain (or Loss) During Year	**$ (509,558)**	**$1,495,305**	**$ (1,572,919)**	**$ 2,419,000**	**$ 983,300**	**$ 608,558**

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, 2023, 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:				Portion of Actuarial Liabilities Covered by Reported Assets		
Valuation Date June 30,	(1) Active Member Contributions	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets*	(1)	(2)	(3)
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
2014	9,466,378	28,785,537	16,308,727	55,419,017	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, 2023	
Count	58
Average Current Age	59.9
Average Benefit Service	14.4
Average Vesting Service	14.6
Average Valuation Pay	$ 149,493

Non-Active Member Data as of June 30, 2023	Count	Average Age	Total Annual Benefit	Average Annual Benefit
Retired	73	76.0	$ 4,795,686	$ 65,694
Retired – Concurrent Beneficiary	4	71.9	48,332	12,083
Disability	1	77.6	41,210	41,210
Beneficiary of Above	14	84.3	625,851	44,704
Pre-Retirement Death Beneficiary	0	0.0	0	0
Terminated Vested	3	61.6	110,136	36,712
Inactive Due Refund	1	NA	NA	NA

	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members[1]	Deferred Vested Members[2]
As of June 30, 2022	**60**	**70**	**19**	**0**	**1**	**2**
New hires	5					
Rehires						
Movement between plans	0					
New retirees	(4)	4				0
New beneficiaries due to retirements			0			
New deferred vested members	(1)					1
Non-vested terminations	(1)					
Refunds	0					
Deaths, no future benefits	0	(1)	(1)			
Deaths with a survivor or beneficiary		0	0			
Benefits expired						
Data correction	(1)					
As of June 30, 2023	**58**	**73**	**18**	**0**	**1**	**3**

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: 66⅔% 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 66⅔% 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):

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

* 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 1% non-cumulative COLA was paid in May 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 1% non-cumulative COLA was paid in May 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	3.91%

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)

Age	Termination Rate
25	7%
30	6
35	5
40	4
45	3
50	2
55	1

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

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

	Showing values in 2023	
Age	Male	Female
50	31	24
55	46	34
60	71	48
65	103	69
70	158	111
75	267	198
80	482	367
85	889	699
90	1,552	1,312
95	2,424	2,144

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 2023	
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	18	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 2023	
Age	Male	Female
25	36	21
30	54	37
35	74	58
40	91	76
45	113	99
50	160	142
55	218	183
60	277	211
65	328	221
70	386	260

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

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

Age	NRA 60	NRA 62	NRA 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.

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

None

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.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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.

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 is then divided by the total salary for the Program at the valuation date to get the 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 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 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.

Classic Values, Innovative Advice

Maine Public Employees Retirement System

Legislative Retirement Program

Actuarial Valuation Report as of June 30, 2023

Produced by Cheiron
October 2023

TABLE OF CONTENTS

October 12, 2023

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, 2023 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.

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.

This report does not contain any adjustments for the potential impact of COVID-19 on either economic or demographic assumptions. We anticipate that the pandemic may have implications in both the short and long term, but the net impact of these is not determinable at this time.

Sincerely,
Cheiron

Gene Kalwarski, FSA, EA	Fiona E. Liston, FSA, EA	Bonnie Rightnour, FSA, EA
Principal Consulting Actuary	Principal Consulting Actuary	Principal Consulting Actuary

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, 2023. 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) 2023 were developed in the budgeting process in July 2020, based on a roll-forward of the June 30, 2019 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) 2022 and FY 2023 were developed through this ratemaking process in 2020. The assets used in developing these rates were the preliminary June 30, 2020 assets. These were then combined with liability measures as of June 30, 2020, developed as an adjustment (i.e., roll-forward) of the liabilities of the June 30, 2019 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, 2019 valuation date and the June 30, 2020 measurement date. Similarly, the contributions for FY 2024 and FY 2025 were developed in 2022 and were based on estimated assets as of June 30, 2022 and liabilities based on the June 30, 2021 actuarial valuation liabilities adjusted to our best estimate of the June 30, 2022 liabilities.

The results of this June 30, 2023 valuation will be adjusted to a June 30, 2024 measurement date, combined with preliminary assets as of June 30, 2024, and used as the basis for the applicable FY 2026 and FY 2027 employer contributions. Next year's June 30, 2024 valuation will be used primarily for accounting disclosures.

Experience from July 1, 2022 through June 30, 2023 (FY 2023)

With respect to investment experience, measured on a market value of asset (MVA) basis, MainePERS experienced an investment return of positive 6.05% or the fiscal year ending June 30, 2023. This is less than the assumed rate of return assumption of 6.5%. However, given the three-year asset smoothing method in place, only one-third of that loss is recognized in this valuation on an actuarial value of assets (AVA) basis. Furthermore, asset smoothing also resulted in recognizing one-third of prior deferred asset gains of $0.355 million during FY 2023 for this Program. As a result, the investment return measured on a smoothed, actuarial value of assets basis was 7.15%. This is greater than the 6.50% assumed rate of return in effect for FY 2023, resulting in a gain on investments for the year of $0.101 million in addition to the expected increase of $0.583 million had the assumed 6.50% been exactly achieved on an AVA basis.

With respect to liability experience, the Program's liabilities increased by $0.065 million more than the expected growth of $0.358 million (a 0.6% increase in total liabilities compared to expected growth). This increase includes an approximately $0.040 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 loss of $0.025 million primarily attributable to higher salary increases than expected and fewer retirements than expected. A one percent ad-hoc COLA was paid to eligible retirees during FYE 2023. An amount of $0.006 million was funded immediately to cover this payment.

Combining the investment and liability experience produced an informational total employer contribution of 0.00% of payroll as of June 30, 2023. This is the same as the June 30, 2022 informational valuation contribution rate of 0.00% of payroll.

SECTION I – BOARD SUMMARY

Finally, as of the June 30, 2023 valuation, the Program has an unfunded actuarial liability (UAL) of ($5.072) million (i.e., a surplus) based on the actuarial value of assets (AVA). This represents an increase in the surplus position of $0.261 million from the ($4.811) million AVA UAL measured as of June 30, 2022. This compares to an expected increase in the surplus position of $0.225 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 assets during FY 2023 as well as their combined effect on the UAL.

Table I-1
(Amounts in Millions)

	Liabilities	Assets*	UAL
Value as of June 30, 2022	$ 10.977	$ 15.788	$ (4.811)
Expected Change	0.358	0.583	(0.225)
Impact of Plan Changes	0.006	0.006	0.000
Impact of Assumption Changes	0.000	0.000	0.000
Recognized Investment Gain	0.000	0.101	(0.101)
Recognized Liability Loss	0.065	0.000	0.065
Value as of June 30, 2023	$ 11.406	$ 16.478	$ (5.072)

* 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

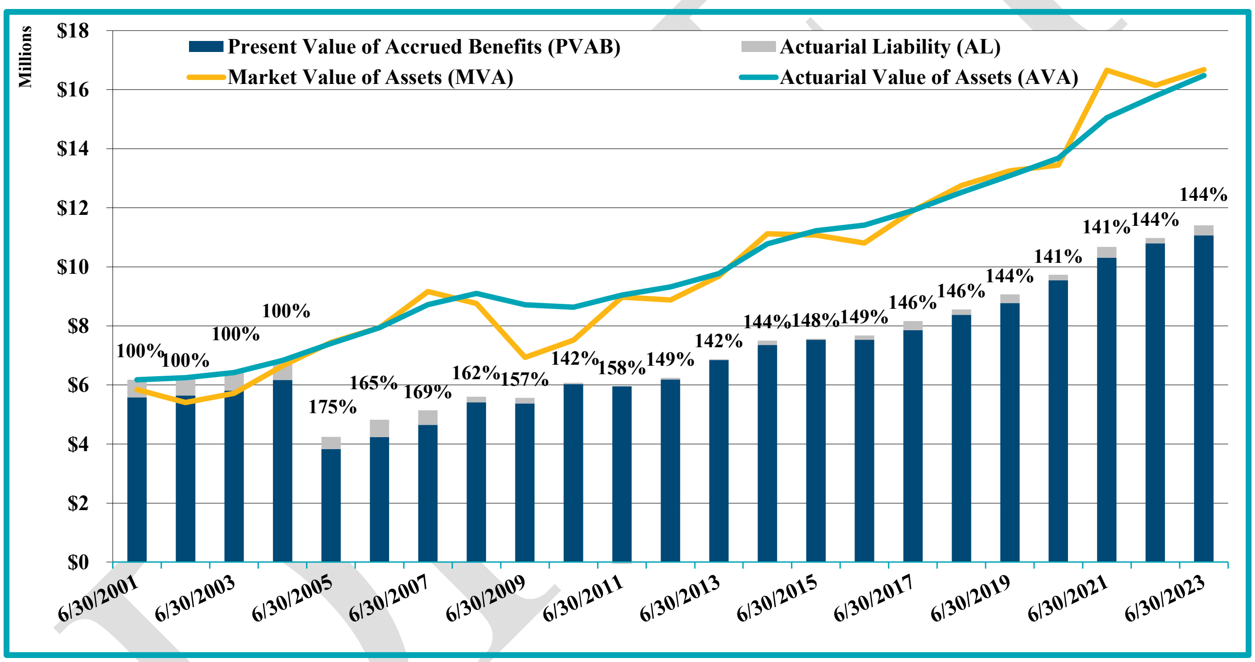
It is important to take a step back from the latest results and view them in the context of the Program's history. On the next few pages, we present a series of graphs that display key historical trends relating to the Program's condition.

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.

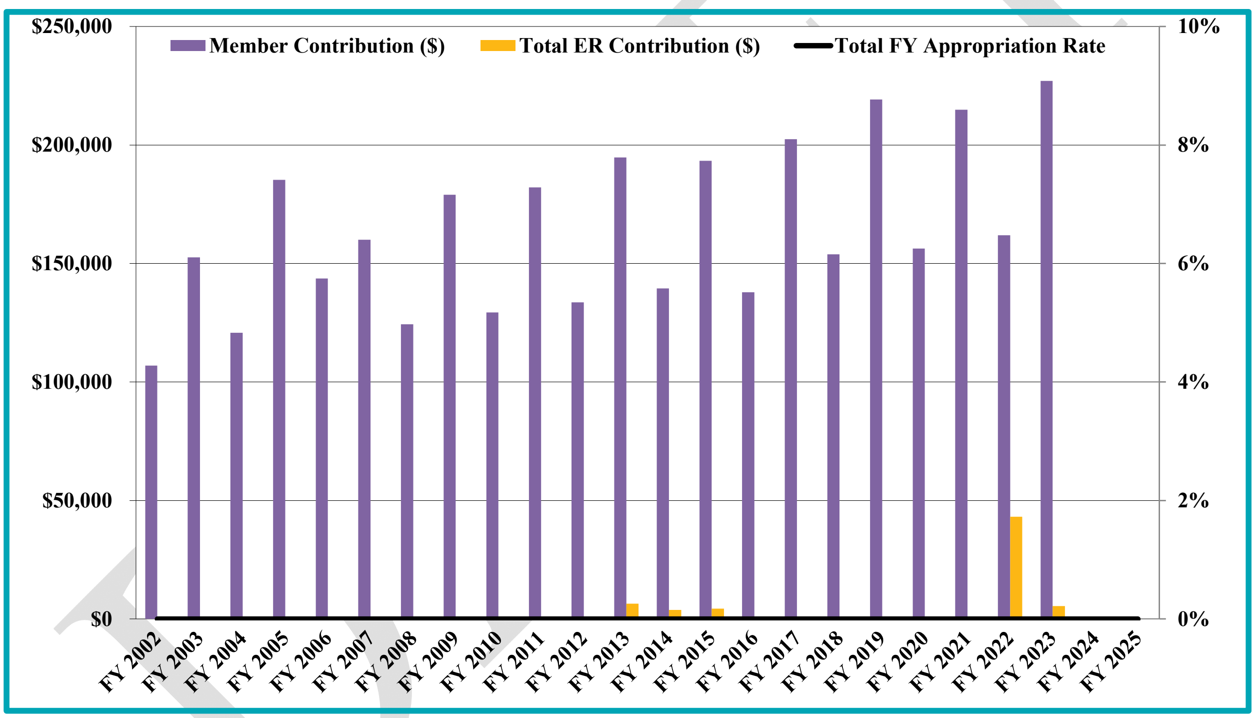


Between the 2004 and 2005 valuations, there was a change in cost method used for this Program that resulted in the large drop in stated liabilities between those dates. Plan changes were legislated during 2010 and first reflected in the 2011 valuation, resulting in the reduction in liability seen for that year. As of June 30, 2023, the Program is funded 144.5% based on the AVA funded ratio, which represents an increase from the 143.8% reported in the prior valuation. The 23-year history in the graphs 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 146.3%.

SECTION I – BOARD SUMMARY

<u>Contributions</u>

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 2024 through FY 2025 contribution rates have already been determined based on the ratemaking process, so two additional years of the contribution rates are shown versus dollars received. The total employer contribution for FY 2023 includes the approximately $5.5 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 2023 was based on a roll-forward of the June 30, 2019 valuation to June 30, 2020, 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 percent. The yellow bars showing employer contributions in dollars represent transfers or cost-of-living adjustment (COLA) payments made during the fiscal year indicated.

SECTION I – BOARD SUMMARY

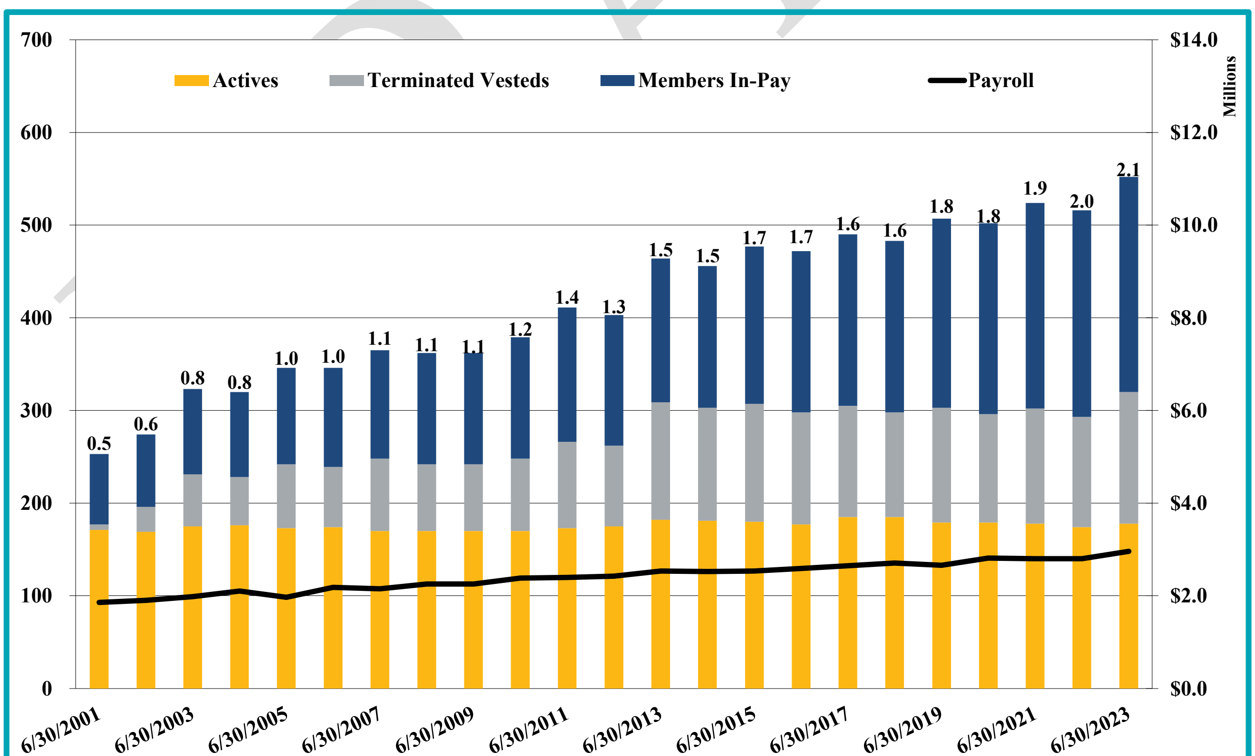
The current total contribution rate exceeds the Program's full normal cost plus the interest on the UAL. This is an indication that if experience matches the assumptions, the Plan's funded position is expected to improve in the upcoming year.

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.



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

	Valuation as of June 30, 2022	Valuation as of June 30, 2023	% Change
Member Counts			
Active Members	174	178	2.3%
Retired Members	184	191	3.8%
Beneficiaries of Retired Members	28	30	7.1%
Survivors of Deceased Members	9	9	0.0%
Disabled Members	2	2	0.0%
Terminated Vested Members	119	142	19.3%
Inactives Due Refunds	95	96	1.1%
Total Membership	611	648	6.1%
Annual Payroll of Active Members	$ 2,801,166	$ 2,962,483	5.8%
Annual Payments to Benefit Recipients	$ 529,008	$ 564,301	6.7%
Assets and Liabilities			
Actuarial Liability (AL)	$ 10,977,282	$11,406,177	3.9%
Actuarial Value of Assets (AVA)	15,787,715	16,478,192	4.4%
Unfunded AL (UAL)	$ (4,810,433)	$(5,072,015)	(5.4)%
AVA Funded Ratio (AVA/AL)	143.8%	144.5%	
MVA Funded Ratio (MVA/AL)	147.1%	146.3%	
Accrued Benefit Liability (PVAB)	$ 10,791,193	$11,061,412	2.5%
Market Value of Assets (MVA)	16,142,942	16,681,900	3.3%
Unfunded PVAB	$ (5,351,749)	$(5,620,488)	(5.0)%
MVA Accrued Benefit Funded Ratio	149.6%	150.8%	
Contributions as a Percentage of Payroll			
Employer Normal Cost Rate	3.46%	5.59%	
UAL Amortization Rate	(20.71)%	(20.65)%	
Total Employer Rate, Not Less Than Zero	0.00%	0.00%	

	2020 Ratemaking		2022 Ratemaking	
Total Employer Budgeted Rates	FY 2022	0.00%	FY 2024	0.00%
Total Employer Budgeted Rates	FY 2023	0.00%	FY 2025	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, with the magnitude of the cumulative gains and losses from liability experience for the period shown being about 50% larger than those from investment experience.

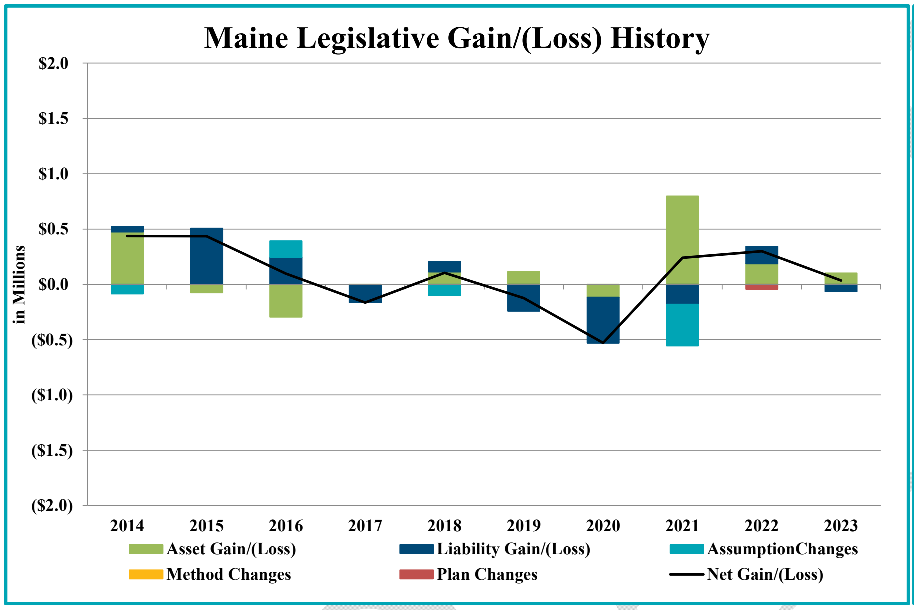
Plan Change Risk is the potential for the provisions of the Program to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Program being changed, future valuation measurements can also be impacted, with Program changes leading to deviations 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 is 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

SECTION II – RISK ASSESSMENT AND DISCLOSURE

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)	
	Plan A	**Plan 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 5.6. As a result of the increasing trend of this ratio, investment losses representan 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 3.9.

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, 2022 and June 30, 2023,
- 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 2023.

Table III-1
Changes in Market Value of Total MainePERS Defined Benefit (DB) Assets

Market Value of Total MainePERS DB Assets – June 30, 2022		**$ 18,357,298,853**
Additions		
Contributions:		
Employer Contributions	$ 558,234,714	
Member Contributions	238,543,081	
Transfers	(249,956)	
Total Contributions	$ 796,527,839	
Investment Income:		
Net Appreciation (Depreciation) in Fair Value of Investments	$ 1,255,864,120	
Interest on Bank Balances	2,837,912	
Total Investment Income	$ 1,258,702,032	
Investment Activity Expenses:		
Management Fees	$ (139,763,371)	
Investment Related Expense	(5,727,189)	
Banking Fees	(34,855)	
Total Investment Activity Expenses	$ (145,525,415)	
Net Income from Investing Activities	$ 1,113,176,617	
Total Additions		$ 1,909,704,456
Deductions		
Retirement Benefits	$ (1,136,706,647)	
Disability Benefits	(27,348,917)	
Survivor Benefits	(27,703,181)	
Refunds	(27,668,683)	
Administrative Expenses	(15,075,412)	
Total Deductions		$ (1,234,502,840)
Total		
Net Increase (Decrease)		$ 675,201,616
Market Value of Total MainePERS DB Assets – June 30, 2023		**$ 19,032,500,469**

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, 2023 using the adopted actuarial valuation methodology.

Table III-2
Development of Actuarial Value of Total MainePERS Defined Benefit (DB) Assets as of June 30, 2023

1.	Actuarial Value of Total MainePERS DB Assets at June 30, 2022	$ 17,953,344,777
2.	Amount in (1) with Interest to June 30, 2023	19,120,312,188
3.	Employer and Member Contributions for FY 2023	796,527,839
4.	Interest on Contributions in (3), Assuming Received Uniformly throughout FY 2023	25,479,629
5.	Total Disbursements without Administrative Expenses for FY 2023	(1,219,427,428)
6.	Interest on Disbursements in (5), Assuming Payments made Uniformly throughout FY 2023	(39,007,498)
7.	Expected Value of Total MainePERS DB Assets at June 30, 2023 = (2) + (3) + (4) + (5) + (6)	$ 18,683,884,730
8.	Actual Market Value of Total MainePERS DB Assets at June 30, 2023	19,032,500,469
9.	Excess of (8) Over (7)	348,615,739
10.	Actuarial Value of Total MainePERS DB Assets at June 30, 2023 = (7) + [33⅓% of (9)]	$ 18,800,089,976

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 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, 2023.

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, 2023 valuation as shown in Table III-2 above is 0.987789 (18,800,089,976 ÷ 19,032,500,469). 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, 2023

Program	Market Value	Actuarial Value
Teachers	$ 9,990,754,493	$ 9,868,754,960
State (Regular & Special)	5,082,393,972	5,020,331,623
Judicial	87,423,240	86,355,694
Legislative	16,681,900	16,478,192
Participating Local Districts (Consolidated & Non-Consolidated)	3,855,246,864	3,808,169,507
Total	$ 19,032,500,469	$ 18,800,089,976

Investment Performance

The market value of assets for the total MainePERS DB assets returned a positive 6.05% during FY 2023. This is lower than the assumed return of 6.50% for FY 2023. The equivalent market value returns for the total MainePERS DB assets for FY 2022 and FY 2021 were negative 0.62% and positive 26.76%, respectively.

On an actuarial value of assets basis, the return for FY 2023 was a positive 7.15% for the total MainePERS DB assets. This return is greater than both the return on a market value basis and the 6.50% assumption in effect for FY 2023. Therefore, this return gave rise to an investment gain on the total MainePERS DB assets this year.

Cash Flow Projections

Table III-4
Projection of Legislative Program
Benefit Payments and Contributions

FY Ending June 30,	Expected Benefit Payments	Expected Employer Contributions	Expected Member Contributions	Total Expected Contributions
2024	$ 723,800	$ 0	$ 158,600	$ 158,600
2025	835,100	0	232,900	232,900
2026	771,100	0	167,500	167,500
2027	834,600	0	245,800	245,800
2028	805,600	0	176,800	176,800
2029	869,200	0	259,600	259,600
2030	850,800	0	186,700	186,700
2031	879,500	0	274,000	274,000
2032	864,300	0	197,100	197,100
2033	862,200	0	289,300	289,300

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 2024 through FY 2025. Future contributions beyond that point are assumed to continue at the FY 2025 rate and include an assumption that payroll grows at 2.75% per year. However, since that FY 2025 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 2024.

SECTION IV – LIABILITIES

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

- Disclosure of the Program's liabilities as of June 30, 2022 and June 30, 2023, 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

	June 30, 2022	June 30, 2023
Present Value of Benefits (PVB)		
Active Member Benefits	$ 3,884,993	$ 4,178,125
Retired, Disabled, Survivor, and Beneficiary Benefits	5,045,709	5,399,748
Terminated Vested Benefits	2,456,411	2,743,117
Terminated Nonvested Benefits	421,254	422,642
Total PVB	**$** 11,808,367	**$** 12,743,632
Market Value of Assets (MVA)	$ 16,142,942	$ 16,681,900
Future Member Contributions	578,635	787,092
Future Employer Contributions	0	0
Projected (Surplus)/Shortfall	(4,913,210)	(4,725,360)
Total Resources	**$** 11,808,367	**$** 12,743,632
Actuarial Liability (AL)		
Present Value of Benefits (PVB)	$ 11,808,367	$ 12,743,632
Present Value of Future Normal Costs (PVFNC)		
Employer Portion	252,450	550,363
Member Portion	578,635	787,092
Actuarial Liability (AL = PVB – PVFNC)	**$** 10,977,282	**$** 11,406,177
Actuarial Value of Assets (AVA)	15,787,715	16,478,192
Net (Surplus)/Unfunded (AL – AVA)	**$** (4,810,433)	**$** (5,072,015)
Present Value of Accrued Benefits		
Present Value of Future Benefits (PVB)	$ 11,808,367	$ 12,743,632
Present Value of Future Benefit Accruals (PVFBA)	1,017,174	1,682,220
Accrued Liability (PVAB = PVB – PVFBA)	**$** 10,791,193	**$** 11,061,412
Market Value of Assets (MVA)	16,142,942	16,681,900
Net (Surplus)/Unfunded (PVAB – MVA)	**$** (5,351,749)	**$** (5,620,488)

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, 2023, we estimate that a portfolio composed only of US Treasury securities would have an expected return of 3.91% compared to the System's discount rate of 6.50%, and the LDROM would be $15.0 million compared to the Actuarial Liability of $11.4 million. The $3.6 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 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 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.

Table IV-2

	Present Value of Future Benefits	Actuarial Liability	Present Value of Accrued Benefits
Liability Measurement – June 30, 2022	$ 11,808,367	$ 10,977,282	$ 10,791,193
Liability Measurement – June 30, 2023	12,743,632	11,406,177	11,061,412
Liability Measurement Increase/ (Decrease) Due to:	$ 935,265	$ 428,895	$ 270,219
Program Amendment	$ 5,513	$ 5,513	$ 5,513
Assumption Change	0	0	0
Actuarial (Gain)/Loss	N/C	64,885	N/C
Benefits Accumulated and Other Sources	$ 929,752	$ 358,497	$ 264,706

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, 2023 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 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.

Table V-1
Legislative Total Employer Rate

Valuation Date	June 30, 2022	June 30, 2023
Employer NC Rate	3.46%	5.59%
UAL Amortization Rate	(20.71)%	(20.65)%
Total Employer Rate*	(17.25)%	(15.06)%

* Limited to 0% for actual contributions

The rates developed in this section are for valuation 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, 2023 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, 2022 and June 30, 2023 as well as reconciliation between the two dates under FASB ASC Topic 960.

Table VI-1
Accrued Benefits Information

	June 30, 2022	June 30, 2023
FASB ASC Topic 960 Basis		
1. Present Value of Benefits Accrued to Date (PVAB)		
a. Members Currently Receiving Payments	$ 5,045,709	$ 5,399,748
b. Terminated Vested Members	2,456,411	2,743,117
c. Terminated Nonvested Members	421,254	422,642
d. Active Members	2,867,819	2,495,905
e. Total PVAB	$ 10,791,193	$ 11,061,412
2. Market Value of Assets (MVA)	16,142,942	16,681,900
3. Unfunded Present Value of Accrued Benefits, but not less than Zero	$ 0	$ 0
4. Ratio of MVA to PVAB (2)/(1)(e)	149.6%	150.8%
Change in Present Value of Benefits Accrued to Date during FY 2023		
Increase/(Decrease) during Year Attributable to:		
Passage of Time		$ 680,462
Benefits Paid		(655,401)
Assumption Changes		0
Program Changes		5,513
Benefits Accrued, Other Gains/Losses		239,645
Net Increase (Decrease)		$ 270,219

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, 2023, as well as related ratios calculated under the provisions of GASB Statement No. 67 for the Program.

As of the June 30, 2023 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 Related Ratios
FY 2023

Total Pension Liability (TPL)	
Service Cost (SC)	$ 311,209
Interest (includes Interest on SC)	702,689
Changes of Benefit Terms	5,513
Differences Between Actual and Expected Experience	64,885
Changes of Assumptions	0
Benefit Payments, including Refunds of Member Contributions	(655,401)
Net Change in TPL	428,895
Beginning of Year (BOY) TPL	**10,977,282**
End of Year (EOY) TPL	**$ 11,406,177**
Program Fiduciary Net Position (FNP)	
Employer Contributions	$ 5,513
Member Contributions	226,997
Transfers	0
Net Investment Income	975,106
Benefit Payments, including Refunds of Member Contributions	(655,401)
Administrative Expense	(13,257)
Net Change in FNP	$ 538,958
BOY FNP	**16,142,942**
EOY FNP	**$ 16,681,900**
EOY Net Pension Liability (NPL)	**$ (5,275,723)**
FNP as a Percentage of TPL	146.3%
Covered Payroll*	$ 2,962,483
NPL as a Percentage of Covered Payroll	(178.1)%

* For FY 2023

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, 2023, 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-3
Sensitivity of Net Pension Liability to Changes in Discount Rate
FY 2023

	1% Decrease 5.50%	**Discount Rate** 6.50%	**1% Increase** 7.50%
Total Pension Liability (TPL)	$ 12,580,813	$ 11,406,177	$ 10,417,004
Program Fiduciary Net Position (FNP)	16,681,900	16,681,900	16,681,900
Net Pension Liability (NPL)	$ (4,101,087)	$ (5,275,723)	$ (6,264,896)
FNP as a Percentage of TPL	132.6%	146.3%	160.1%

A one percent decrease in the discount rate increases the TPL by approximately 10% and increases the NPL by approximately 22%. A one percent increase in the discount rate decreases the TPL by approximately 9% and decreases the NPL by approximately 19%.

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, 2023, 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 2023

Actuarially Determined Contribution (ADC)	$ 0
Contributions in Relation to the ADC	0
Contribution Deficiency/(Excess)	$ 0
Covered Payroll (Payroll)*	$ 2,962,483
Contributions as a Percentage of Payroll	0.00%

* For FY 2023

Notes to Schedule of Employer Contributions

Valuation Date: June 30, 2019

Timing: June 30, 2022 ADC rates are calculated based on 2020 liabilities developed as a roll-forward of the 2019 valuation liability, adjusted for expected experience and any assumption or methodology changes during FY 2020 using preliminary actual assets as of June 30, 2020.

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, open 10-year amortization

Discount Rate: 6.75%

SECTION VI – FINANCIAL DISCLOSURE INFORMATION

Amortization
Growth Rate: 2.75%

Price Inflation: 2.75%

Salary Increases: 2.75%

Mortality: 104% and 120% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using MP_2015 model with an ultimate rate of 0.85% for ages 20-85 grading down to an ultimate rate of 0.00% for ages 111-120, and convergence to the ultimate rate in the year 2020.

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023 can be found in the June 30, 2020 Actuarial Valuation Report.

<u>Other Information</u>

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, 2023, these values are thus developed as of June 30, 2022. 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, 2023

Status	Total Expected Future Service	Count	Average Remaining Service Lives
Actives	530	174	3
In-Pay Members	0	223	0
Terminated Vested Members	0	119	0
Inactives Due Refunds	0	95	0
Total Membership	530	611	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

Type of Activity	Gain (or Loss) For Fiscal Year Ended June 30, 2018	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
Investment Income	$ 112,650	$ 115,981	$ (116,186)	$ 796,071	$ 187,103	$ 100,695
Combined Liability Experience	90,816	(238,611)	(413,313)	(180,989)	199,354	(64,885)
Gain (or Loss) during Year from Financial Experience	203,466	(122,630)	(529,499)	615,082	386,457	35,810
Non-Recurring Items	(99,915)	0	0	(374,000)	(43,111)	0
Composite Gain (or Loss) During Year	**$ 103,551**	**$ (122,630)**	**$ (529,499)**	**$ 241,082**	**$ 343,346**	**$ 35,810**

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, 2023, 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

Valuation Date June 30,	Aggregate Actuarial Liabilities for: (1) Active Member Contributions	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets*	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
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
2014	2,464,847	5,073,388	(33,042)	10,775,701	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, 2023	
Count	178
Average Current Age	56.8
Average Benefit Service	4.6
Average Vesting Service	5.2
Average Valuation Pay	$16,643

Non-Active Member Data as of June 30, 2023	Count	Average Age	Total Annual Benefit	Average Annual Benefit
Retired	191	77.5	$ 440,315	$ 2,305
Retired – Concurrent Beneficiary	6	73.6	2,985	498
Disability	2	68.4	16,525	8,263
Beneficiary of Above	24	81.7	39,014	1,626
Pre-Retirement Death Beneficiary	9	75.2	65,462	7,274
Terminated Vested	142	56.8	296,688	2,089
Inactive Due Refund	96	NA	NA	NA

	Active Members	Retired Members	Beneficiaries of Retired Members	Survivors of Deceased Members	Disabled Members[1]	Deferred Vested Members[2]
As of June 30, 2022	**174**	**184**	**28**	**9**	**2**	**119**
New hires	63					
Rehires	9	0				(3)
Movement between plans	0					
New retirees	(17)	20				(3)
New beneficiaries due to retirements			1			
New deferred vested members	(28)					29
Non-vested terminations	(14)					
Refunds	(9)					0
Deaths, no future benefits	0	(8)	(4)	0		0
Deaths with a survivor or beneficiary	0	(5)	5	0		
Benefits expired						
Data correction		0		0		0
As of June 30, 2023	**178**	**191**	**30**	**9**	**2**	**142**

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.

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

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: 66⅔% 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 66⅔% 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

* 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 1% non-cumulative COLA was paid in May 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 1% non-cumulative COLA was paid in May 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	3.91%

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
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 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 2023	
Age	Male	Female
50	31	24
55	46	34
60	71	48
65	103	69
70	158	111
75	267	198
80	482	367
85	889	699
90	1,552	1,312
95	2,424	2,144

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 2023	
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	18	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)

	Showing values in 2023	
Age	Male	Female
25	36	21
30	54	37
35	74	58
40	91	76
45	113	99
50	160	142
55	218	183
60	277	211
65	328	221
70	386	260

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

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

Age	Fiscal Years Ending Even	Fiscal Years 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.

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

None

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 used in this report. This tool is updated and published annually by the Society of Actuaries

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

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 is then divided by the total salary for the Program at the valuation date to get the 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 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 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.

Classic Values, Innovative Advice

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, 2023

Presented by Cheiron

October 2023

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October 12, 2023

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, 2023 for the Maine Public Employees Retirement System (MainePERS or System) based on a roll-forward of the obligations as of June 30, 2022.

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 2020. The basic premiums were unchanged for the Teacher group. 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 State group employees remain at $0.42 bi-weekly per $1,000 of coverage for Fiscal Year (FY) 2023. This includes $0.09 for active coverage and $0.33 for retiree coverage. Premiums for retiree coverage will increase to $0.36 for FY 2024. Any further increases would be determined by the next premium study in 2024.

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

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, 2023. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2023, and the Total OPEB Liability (TOL) as of the valuation date, June 30, 2022, rolled forward to June 30, 2023. Therefore, the update procedures included the addition of service cost and interest cost offset by actual benefit payments as permitted under GASB No. 74.

Beginning of year measurements presented in this report are based on the actuarial valuation as of June 30, 2022 rolled forward to June 30, 2023. Because the beginning and ending values are based on the same actuarial valuation and there were no significant events, no liability gains, or losses due to experience are reported in either year shown in this report. During full valuation years, liability gains and losses will be reported reflecting the liability gains and losses between actuarial valuation dates as well as any significant events during the update period.

Table I-1 below provides a summary of the key results during this reporting period ending on June 30, 2023. 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 06/30/2022	Measurement Date 06/30/2023
State Total OPEB Liability	$ 119,403,083	$ 124,426,546
State Plan Fiduciary Net Position	46,031,286	53,277,904
State Net OPEB Liability	$ 73,371,797	$ 71,148,642
Teacher Total OPEB Liability	$ 115,657,004	$ 121,023,616
Teacher Plan Fiduciary Net Position	77,123,482	86,558,606
Teacher Net OPEB Liability	$ 38,533,522	$ 34,465,010
Combined Total OPEB Liability	$ 235,060,087	$ 245,450,162
Combined Plan Fiduciary Net Position	123,154,768	139,836,510
Combined Net OPEB Liability	$ 111,905,319	$ 105,613,652

SECTION II – DETERMINATION OF DISOUNT 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 $0.33 in (FY) 2023 and $0.36 beginning FY 2024. 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 15 years remaining as of FY 2023 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, 2023, was based on the valuation as of June 30, 2018, rolled forward to June 30, 2020.

The discount rate at June 30, 2023 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 at the beginning of the current measurement year is measured as of the valuation date June 30, 2022. The TOL at the end of the measurement year, June 30, 2023, is measured as of the valuation date June 30, 2022 and projected to June 30, 2023. This is a roll-forward valuation and full valuations are completed at least every two years. 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 projects the Total OPEB Liability from the valuation date to the end of the fiscal year 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, 06/30/2022			
Actives	$ 84,625,006	$ 68,090,687	$ 55,411,016
Deferred Vested	0	0	0
Retirees	186,409,917	166,969,400	150,539,283
Total	**$ 271,034,923**	**$ 235,060,087**	**$ 205,950,299**
Service Cost, Beginning of Year			
Service Cost at Valuation Date	$ 3,891,723	$ 2,855,954	$ 2,121,969
Service Cost Rate	0.24%	0.18%	0.13%
Expected Payroll During Year	1,600,464,673	1,600,464,673	1,600,464,673
Service Cost	$ 3,891,723	$ 2,855,954	$ 2,121,969
Benefit Payments	$ (7,684,604)	$ (7,684,604)	$ (7,684,604)
Interest	$ 14,912,467	$ 15,218,725	$ 15,322,457
Change in Benefits	0	0	0
Change in Assumptions	0	0	0
Other Significant Events	0	0	0
Total OPEB Liability, 06/30/2023	**$ 282,154,509**	**$ 245,450,162**	**$ 215,710,121**

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. There were no significant changes in benefits during the year. No difference between expected and actual experience, i.e., experience adjustments, are included in this report since the same participant data was used as in the full valuation.

We provide separate tables for State (IV-1), Teachers (IV-2), and the combined results of the State Sponsored Groups (IV-3) results.

Table IV-1
Change in Net OPEB Liability - State

	Increase (Decrease)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a) - (b)**
Balances at 06/30/2022	$ 119,403,083	$ 46,031,286	$ 73,371,797
Changes for the year:			
Service cost	1,387,608		1,387,608
Interest	7,720,727		7,720,727
Changes of benefits	0		0
Changes of assumptions	0		0
Differences between expected and actual experience	0		0
Contributions - employer		6,326,832	(6,326,832)
Contributions - member		0	0
Net investment income		5,360,116	(5,360,116)
Benefit payments	(4,084,872)	(4,084,872)	0
Administrative expense	0	(355,458)	355,458
Net changes	**5,023,463**	**7,246,618**	**(2,223,155)**
Balances at 06/30/2023	$ 124,426,546	$ 53,277,904	$ 71,148,642

SECTION IV – NOTE DISCLOSURES

Table IV-2
Change in Net OPEB Liability - Teacher

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
		Increase (Decrease)	
Balances at 06/30/2022	$ 115,657,004	$ 77,123,482	$ 38,533,522
Changes for the year:			
Service cost	1,468,346		1,468,346
Interest	7,497,998		7,497,998
Changes of benefits	0		0
Changes of assumptions	0		0
Differences between expected and actual experience	0		0
Contributions - employer		4,726,664	(4,726,664)
Contributions - member		0	0
Net investment income		8,903,749	(8,903,749)
Benefit payments	(3,599,732)	(3,599,732)	0
Administrative expense	0	(595,557)	595,557
Net changes	**5,366,612**	**9,435,124**	**(4,068,512)**
Balances at 06/30/2023	$ 121,023,616	$ 86,558,606	$ 34,465,010

Table IV-3
Change in Net OPEB Liability - Combined

	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
		Increase (Decrease)	
Balances at 06/30/2022	$ 235,060,087	$ 123,154,768	$ 111,905,319
Changes for the year:			
Service cost	2,855,954		2,855,954
Interest	15,218,725		15,218,725
Changes of benefits	0		0
Changes of assumptions	0		0
Differences between expected and actual experience	0		0
Contributions - employer		11,053,496	(11,053,496)
Contributions - member		0	0
Net investment income		14,263,865	(14,263,865)
Benefit payments	(7,684,604)	(7,684,604)	0
Administrative expense	0	(951,015)	951,015
Net changes	**10,390,075**	**16,681,742**	**(6,291,667)**
Balances at 06/30/2023	$ 245,450,162	$ 139,836,510	$ 105,613,652

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.

Table IV-4
Sensitivity of Total Net OPEB Liability to Changes in Discount Rate

	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Teacher			
Total OPEB Liability	$ 140,435,777	$ 121,023,616	$ 105,412,937
Plan Fiduciary Net Position	86,558,606	86,558,606	86,558,606
Collective Net OPEB Liability	$ 53,877,171	$ 34,465,010	$ 18,854,331
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	61.6%	71.5%	82.1%
State			
Total OPEB Liability	$ 141,718,732	$ 124,426,546	$ 110,297,184
Plan Fiduciary Net Position	53,277,904	53,277,904	53,277,904
Collective Net OPEB Liability	$ 88,440,828	$ 71,148,642	$ 57,019,280
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	37.6%	42.8%	48.3%
Combined			
Total OPEB Liability	$ 282,154,509	$ 245,450,162	$ 215,710,121
Plan Fiduciary Net Position	139,836,510	139,836,510	139,836,510
Collective Net OPEB Liability	$ 142,317,999	$ 105,613,652	$ 75,873,611
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	49.6%	57.0%	64.8%

For the combined State-Sponsored Groups a one percent decrease in the discount rate increases the TOL by approximately 15.0% and increases the NOL by approximately 34.8%. A one percent increase in the discount rate decreases the TOL by approximately 12.1% and decreases the NOL by approximately 28.2%.

SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-1
Schedule of Changes in Net OPEB Liability and Related Ratios

		FY 2023
Total OPEB Liability		
Service cost (BOY)	$	2,855,954
Interest (includes interest on service cost)		15,218,725
Changes of benefit terms		0
Differences between expected and actual experience		0
Changes of assumptions		0
Benefit payments		(7,684,604)
Net change in total OPEB liability		**10,390,075**
Total OPEB liability - beginning		**235,060,087**
Total OPEB liability - ending	**$**	**245,450,162**
Plan fiduciary net position		
Contributions - employer	$	11,053,496
Contributions - member		0
Net investment income		14,263,865
Benefit payments		(7,684,604)
Administrative expense		(951,015)
Net change in plan fiduciary net position	**$**	**16,681,742**
Plan fiduciary net position - beginning		**123,154,768**
Plan fiduciary net position - ending	**$**	**139,836,510**
Net OPEB liability - ending	**$**	**105,613,652**
Plan fiduciary net position as a percentage of the total OPEB liability		56.97%
Covered employee payroll	$	1,644,477,452
Net OPEB liability as a percentage of covered employee payroll		6.42%

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, 2023, 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 Contributions
During Fiscal Year 2023

	State	Teacher	Combined
Actuarially Determined Contribution	$ 6,866,520	$ 4,726,664	$ 11,593,184
Contributions in Relation to the Actuarially Determined Contribution	6,326,832	4,726,664	11,053,496
Contribution Deficiency/(Excess)	$ 539,688	$ 0	$ 539,688
Covered Payroll	$ 750,056,505	$ 894,420,947	$ 1,644,477,452
Contributions as a Percentage of Covered Payroll	0.84%	0.53%	0.67%

Notes to Schedule

Valuation Date: June 30, 2018

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 2022 and 2023 are based on the June 30, 2018 valuation rolled forward and adjusted for changes in assumptions.

Key Methods and Assumptions Used to Determine Contribution Rates for FY 2023

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market Value
Amortization Method:	Level percent closed with 15 years remaining for FY 2023
Discount Rate:	6.75%
Salary Inflation:	2.75%
Administrative Expense Loads:	State Employees, Judges, and Legislators: 9.52% Teachers: 13.07%

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023, can be found in the June 30, 2018 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, 2023, 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, 2023

State Program

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	146,240	11,399	13
Inactives	0	8,977	0
Total Membership	146,240	20,376	7

Teacher Program

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	241,064	15,374	16
Inactives	0	8,039	0
Total Membership	241,064	23,413	10

Combined Programs

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	387,304	26,773	14
Inactives	0	17,016	0
Total Membership	387,304	43,789	9

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

Participant Data as of June 30, 2022

Table A-1
Active Member Data

Group	Count	Average Age	Average Service	Average Salary
State	11,286	47.9	12.3	$ 63,945
Teachers	15,374	46.4	13.3	56,620
Judges	59	60.0	14.5	140,627
Legislators	54	63.2	6.1	14,000
TOTAL	26,773	47.1	12.8	59,807

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.

Table A-2
Non-Active Member Data

Group	Count	Average Age	Average Benefit[1]
State	8,909	73.2	$ 19,066
Teachers	8,039	74.3	21,496
Judges	55	76.0	46,642
Legislators	13	81.2	5,622
TOTAL	17,016	73.7	20,293

[1] 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 two years ago. 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. 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)

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

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

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

Age	Judges
25	7%
30	6
35	5
40	4
45	3
50	2
55	1

Service	Legislators
0	0%
1	5
2	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

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

(showing values in 2022)				
	State Employees		Teachers	
Age	Male	Female	Male	Female
50	31	25	10	6
55	47	35	21	17
60	71	48	36	26
65	103	69	59	37
70	159	112	97	60
75	269	200	179	114
80	485	370	342	320
85	894	703	715	629
90	1,556	1,314	1,335	1,191
95	2,428	2,146	2,246	2,119

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.

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

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

(showing values in 2022)				
	State Employees		Teachers	
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	18	11	15	10
60	28	17	25	16
65	39	25	41	24

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

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

(showing values in 2022)				
	State Employees		Teachers	
Age	Male	Female	Male	Female
25	36	21	32	25
30	54	37	47	42
35	73	57	64	69
40	90	76	79	91
45	113	99	99	119
50	161	143	141	172
55	219	184	192	221
60	278	213	244	255
65	330	222	289	267
70	389	262	341	314

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)

Teachers and State Regular Plans

	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

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 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

Age	NRA 60	NRA 62	NRA 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 ten years of service by July 1, 1993. NRA 62 refers to those who had not accrued at least ten 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	
Age	Fiscal Years Ending Even	Fiscal Years 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 2020 Premium Study, have been added to the liabilities, normal cost, and benefit payments.

State Employees, Judges, and Legislators: 9.84%
Teachers: 16.51%

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

None

14. Rationale for Change in Actuarial Assumptions

N/A

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 ten 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 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, 2023

Presented by Cheiron
October 2023

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October 12, 2023

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, 2023, for the Maine Public Employees' Retirement System (MainePERS or System) based on a roll-forward valuation of the obligations as of June 30, 2022.

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) from the valuation date to the measurement 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 2020. The basic premiums remain at $0.22 bi-weekly per $1,000 of coverage for fiscal year (FY) 2023 for both active and retired PLD participants. Basic premiums will increase to $0.23 for FY 2024 and $0.24 for FY 2026. For active participants, $0.11 is allocated to fund active benefits in all years, while the difference is allocated to fund future retiree benefits. Any further increases would be determined by the next premium study in 2024.

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.

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, 2023, Measurements as of the reporting date are based on the fair value of assets as of June 30, 2023 and the Total OPEB Liability (TOL) as of the valuation date June 30, 2022, rolled forward to June 30, 2023. Therefore, the update procedures included the addition of service cost and interest cost offset by actual benefit payments as permitted under GASB No. 74.

Beginning of year measurements presented in this report are based on the actuarial valuation as of June 30, 2022 rolled forward to June 30, 2023. Because the beginning and ending values are based on the same actuarial valuation and there were no significant events, no liability gains, or losses due to experience are reported in either year shown in this report. During full valuation years, liability gains and losses will be reported reflecting the liability gains and losses between actuarial valuation dates as well as any significant events during the update period.

Table I-1 below provides a summary of the key results during this reporting period ending on June 30, 2023.

Table I-1
Summary of Results

	Measurement Date 06/30/2022	Measurement Date 06/30/2023
Total OPEB Liability	$ 32,823,884	$ 33,868,278
Plan Fiduciary Net Position	18,340,729	20,223,634
Net OPEB Liability	$ 14,483,155	$ 13,644,644

SECTION II – DETERMINATION OF DISCOUNT RATE

MainePERS's funding policy is for PLD employees to pay $0.22 biweekly per $1,000 in coverage for all participants. Of the $0.22 for actives, $0.11 is allocated to the Retiree Fund for retiree benefits.

As recommended in Option 3 of the 2020 Premium Study, the following increases are assumed:

- FYE 2024: $0.23 for retirees with $0.12 of active premiums allocated to the Retiree Fund
- FYE 2026: $0.24 for retirees with $0.13 of active premiums allocated to the Retiree Fund

The discount rate at June 30, 2023 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 at the beginning of the current measurement year is measured as of the valuation date June 30, 2022. The TOL at the end of the measurement year, June 30, 2023, is measured as of the valuation date June 30, 2022 and projected to June 30, 2023. This is a roll-forward valuation and full valuations are completed at least every two years. 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 projects the TOL from the valuation date to the end of the fiscal year 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, 6/30/2022			
Actives	$ 11,860,631	$ 9,471,040	$ 7,651,621
Deferred Vested	0	0	0
Retirees	26,137,141	23,352,844	21,018,128
Total	**$ 37,997,772**	**$ 32,823,884**	**$ 28,669,749**
Service Cost, Beginning of Year			
Service Cost at Valuation Date	$ 447,369	$ 308,456	$ 212,190
Service Cost Rate	0.15%	0.10%	0.07%
Expected Payroll During Year	301,040,000	301,040,000	301,040,000
Service Cost	$ 447,369	$ 308,456	$ 212,190
Benefit Payments	$ (1,373,721)	$ (1,373,721)	$ (1,373,721)
Interest	$ 2,077,211	$ 2,109,659	$ 2,115,562
Change in Benefits	0	0	0
Change in Assumptions	0	0	0
Other Significant Events	0	0	0
Total OPEB Liability, 6/30/2023	$ 39,148,631	$ 33,868,278	$ 29,623,780

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. There were no significant changes in benefits during the year. No difference between expected and actual experience, i.e., experience adjustments, is included in this report since the same participant data was used as in the full valuation.

Table IV-1
Change in Net OPEB Liability - PLD

	Increase (Decrease)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a) - (b)**
Balances at 06/30/2022	$ 32,823,884	$ 18,340,729	$ 14,483,155
Changes for the year:			
Service cost	308,456		308,456
Interest	2,109,659		2,109,659
Changes of benefits	0		0
Changes of assumptions	0		0
Differences between expected and actual experience	0		0
Contributions - employer		1,332,464	(1,332,464)
Contributions - member		0	0
Net investment income		2,065,791	(2,065,791)
Benefit payments	(1,373,721)	(1,373,721)	0
Administrative expense	0	(141,629)	141,629
Net changes	**1,044,394**	**1,882,905**	**(838,511)**
Balances at 6/30/2023	$ 33,868,278	$ 20,223,634	$ 13,644,644

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	$ 39,148,631	$ 33,868,278	$ 29,623,780
Plan Fiduciary Net Position	20,223,634	20,223,634	20,223,634
Collective Net OPEB Liability	$ 18,924,997	$ 13,644,644	$ 9,400,146
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	51.7%	59.7%	68.3%

A one percent decrease in the discount rate increases the TOL by approximately 15.6% and increases the NOL by approximately 38.7%. A one percent increase in the discount rate decreases the TOL by approximately 12.5% and decreases the NOL by approximately 31.1%.

SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Table V-1
Schedule of Changes in Net OPEB Liability and Related Ratios

	FY 2023
Total OPEB Liability	
Service cost (BOY)	$ 308,456
Interest (includes interest on service cost)	2,109,659
Changes of benefit terms	0
Differences between expected and actual experience	0
Changes of assumptions	0
Benefit payments	(1,373,721)
Net change in total OPEB liability	**1,044,394**
Total OPEB liability - beginning	**32,823,884**
Total OPEB liability - ending	**$ 33,868,278**
Plan fiduciary net position	
Contributions - employer	$ 1,332,464
Contributions - member	0
Net investment income	2,065,791
Benefit payments	(1,373,721)
Administrative expense	(141,629)
Net change in plan fiduciary net position	**$ 1,882,905**
Plan fiduciary net position - beginning	**18,340,729**
Plan fiduciary net position - ending	**$ 20,223,634**
Net OPEB liability - ending	**$ 13,644,644**
Plan fiduciary net position as a percentage of the total OPEB liability	59.71%
Covered employee payroll	$ 309,318,600
Net OPEB liability as a percentage of covered employee payroll	4.41%

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, 2023, 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 2023

		PLD
Actuarially Determined Contribution	$	1,996,217
Contributions in Relation to the Actuarially Determined Contribution		1,332,464
Contribution Deficiency/(Excess)	$	663,753
Covered Payroll	$	309,318,600
Contributions as a Percentage of Covered Payroll		0.43%

Notes to Schedule

Valuation Date: June 30, 2018

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 2022 and 2023 are based on the June 30, 2018 valuation rolled forward and adjusted for changes in assumptions.

Key Methods and Assumptions Used to Determine Contribution Rates for FY 2023

Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Market Value
Amortization Method:	Level percent closed with 13 years remaining for FY 2023
Discount Rate:	6.750%
Salary Inflation:	2.750%
Administrative Expense Load:	8.66%

A complete description of the methods and assumptions used to determine contribution rates for the year ending June 30, 2023, can be found in the June 30, 2018 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, 2023, 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, 2023

Status	Total Expected Future Service	Count	Average Remaining Service Life
Actives	53,162	5,248	10
Inactives	0	3,015	0
Total Membership	53,162	8,263	6

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

Participant Data as of June 30, 2022

Table A-1
Active Member Data

Group	Count	Average Age	Average Service	Average Salary
PLDs	5,248	48.8	10.5	$ 57,363

Table A-2
Non-Active Member Data

Group	Count	Average Age	Average Benefit[1]
PLDs	3,015	72.7	$ 19,266

[1] 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

PLDs	6.50%

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)

Years of Service	Rate of Increase
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 A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

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

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

	Showing values in 2022	
Age	Male	Female
50	31	25
55	47	35
60	71	48
65	103	69
70	159	112
75	269	200
80	485	370
85	894	703
90	1,556	1,314
95	2,428	2,146

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

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

	(showing values in 2022)	
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	18	11
60	28	17
65	39	25

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)

	(showing values in 2022)	
Age	Male	Female
25	36	21
30	54	37
35	73	57
40	90	76
45	113	99
50	161	143
55	219	184
60	278	213
65	330	222
70	389	262

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 Plans	
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

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

	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. Premium Expense Assumption

To reflect administrative expenses associated with the distribution of benefits, the following loads, determined in the 2020 Premium Study, have been added to the liabilities, normal cost, and benefit payments.

PLDs: 9.36%

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

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS, AND METHODS

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

None

14. Rationale for Change in Actuarial Assumptions

N/A

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 ten 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 $0.22 biweekly per $1,000 of base benefit, based on the coverage amounts declining from 100% to 40%. Biweekly rates increase to $0.23 in FYE 2024 and $0.24 in FYE 2026.

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.

Maine Public Employees Retirement System

Classic Values, Innovative Advice

2023 Actuarial Valuation Results For All Programs

October 12, 2023

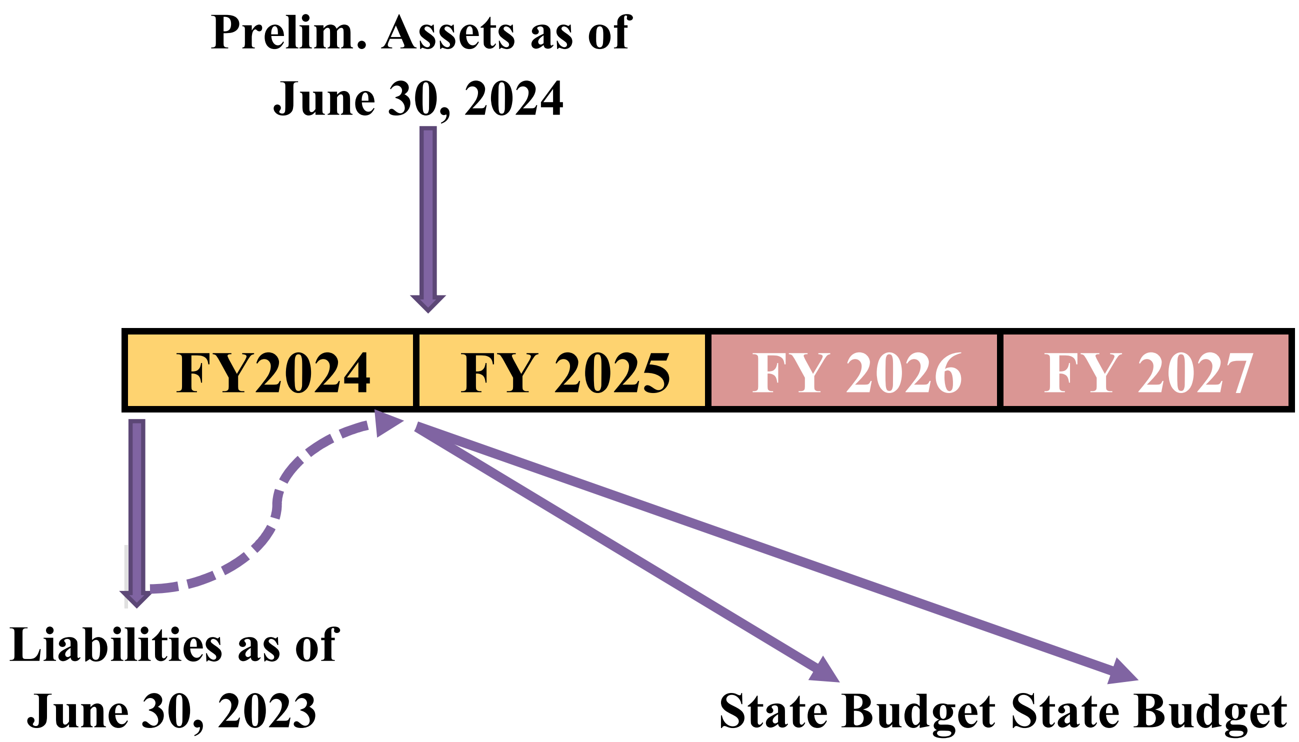
Gene Kalwarski, FSA, FCA, MAAA, EA
Bonnie Rightnour, FSA, MAAA, EA
Ryan Benitez, ASA, MAAA

Agenda

- MainePERS Valuation Cycle
- MainePERS Cashflows
- June 30, 2023 Valuation Results
  - State Programs
    - State & Teachers
    - Judicial and Legislative
  - Consolidated PLDs
  - Group Life Insurance
- Appendix
  - NASRA Peer Comparisons

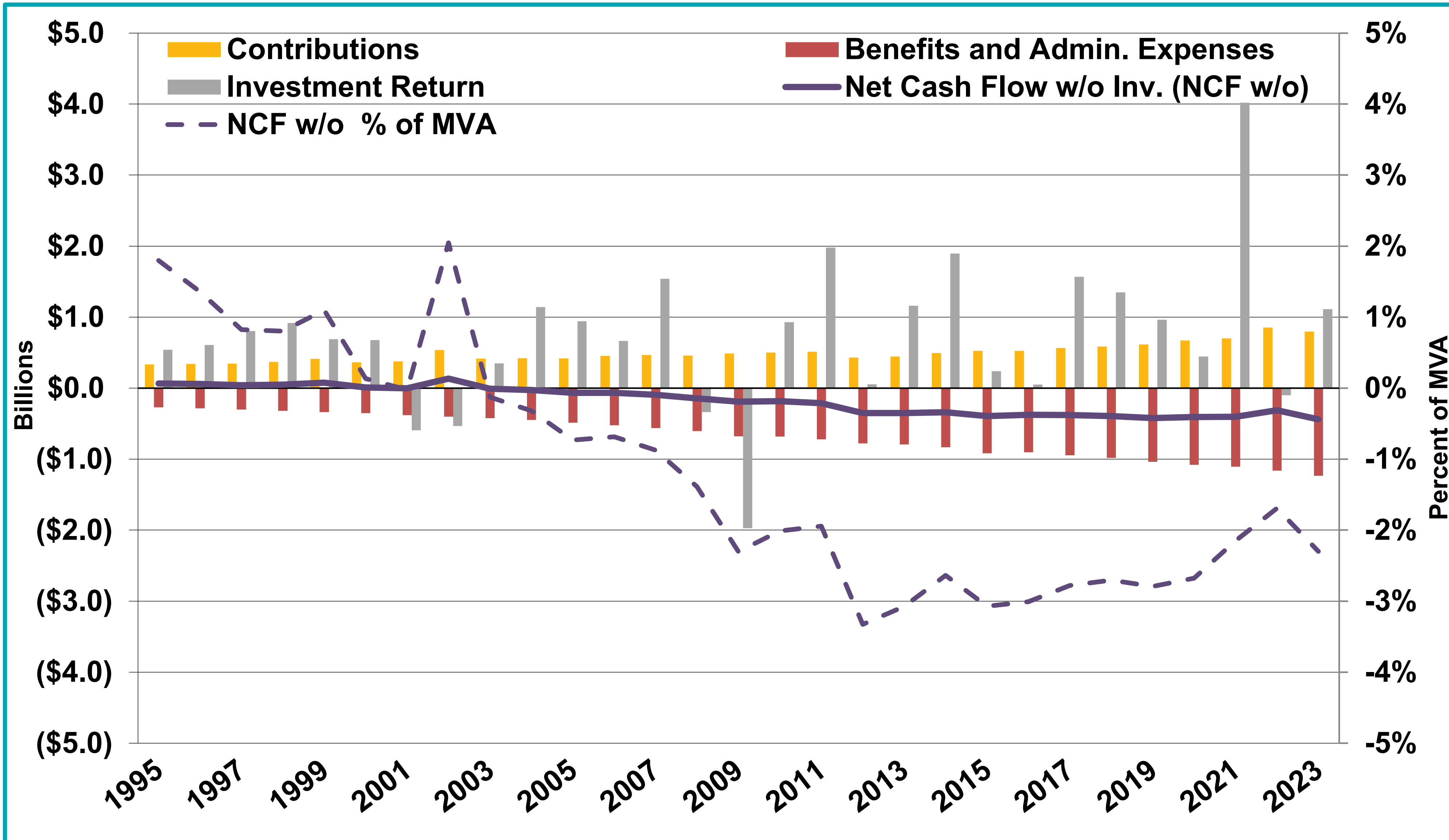
June 30, 2023 Pension Actuarial Valuations

- State Employee and Teacher Programs and Judicial and Legislative Programs



- Participating Local Districts (PLDs)
  - June 30, 2023 Valuation used for FY 2025 PLD and member contributions

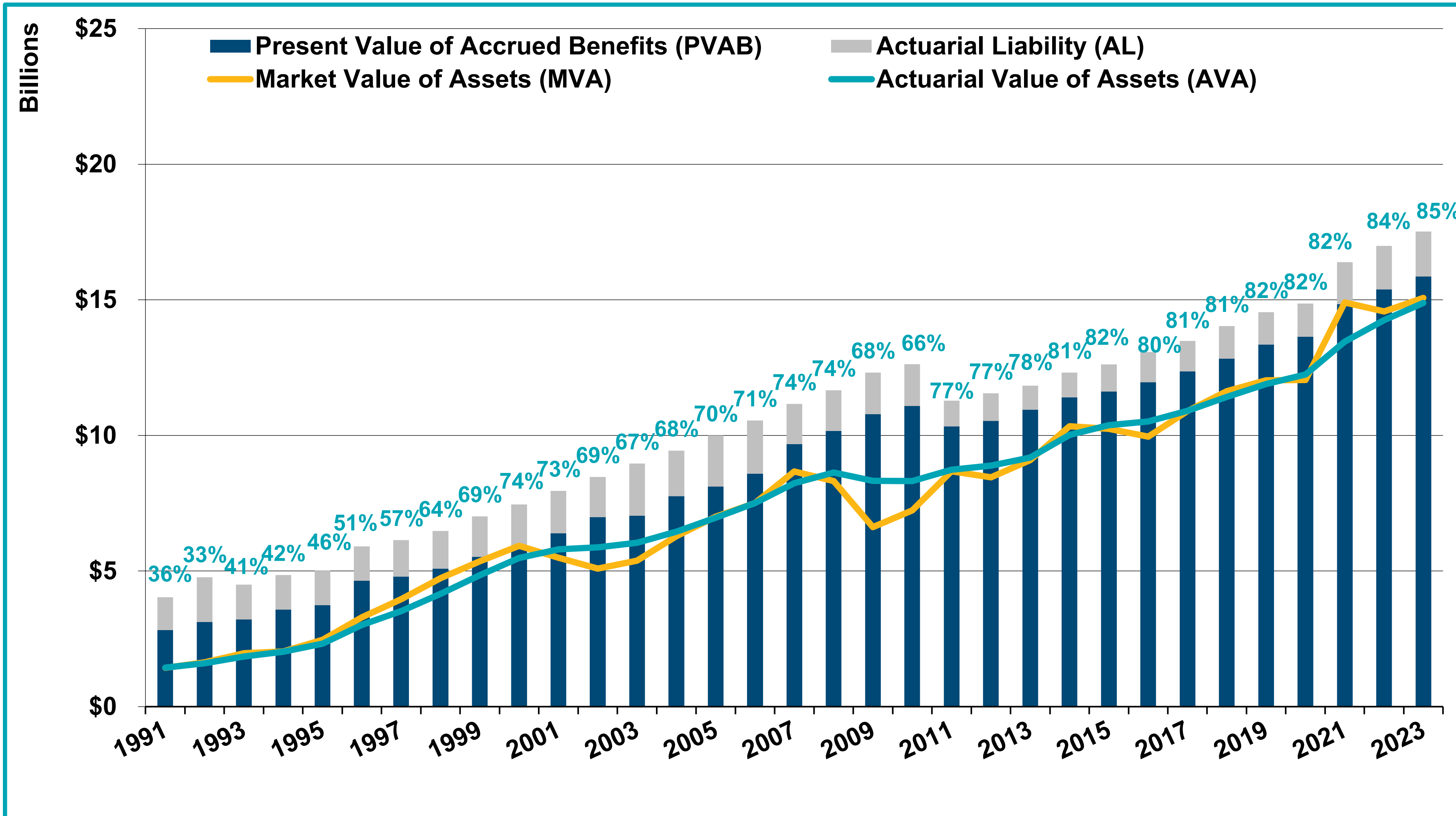
Total Fund – System Cash Flows



June 30, 2023 Valuation Results

State & Teacher

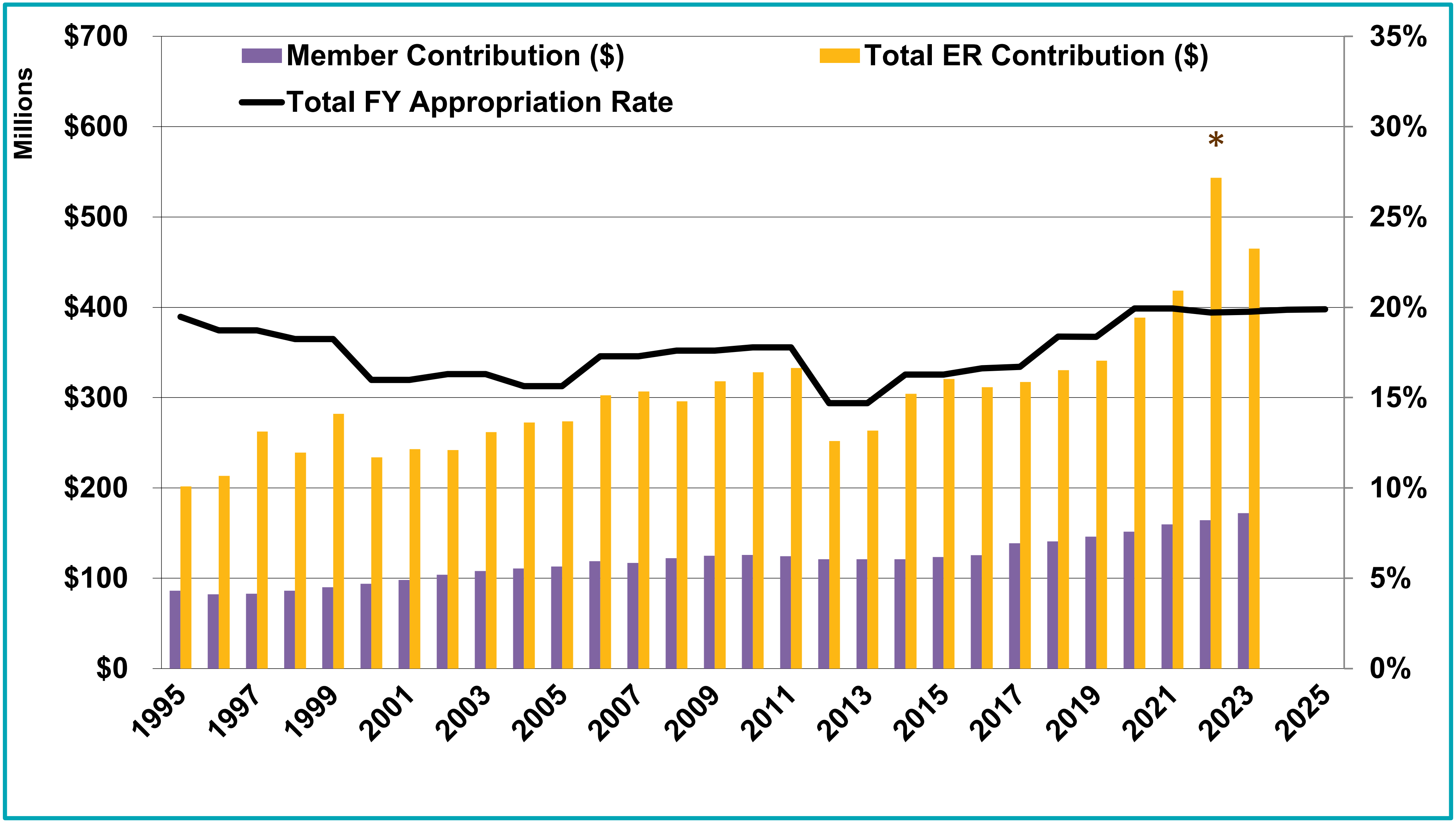
State & Teacher, Historical Funded Status



Percentages shown are AVA funded ratios.

State Employee and Teacher Only

State & Teacher, Historical Contributions



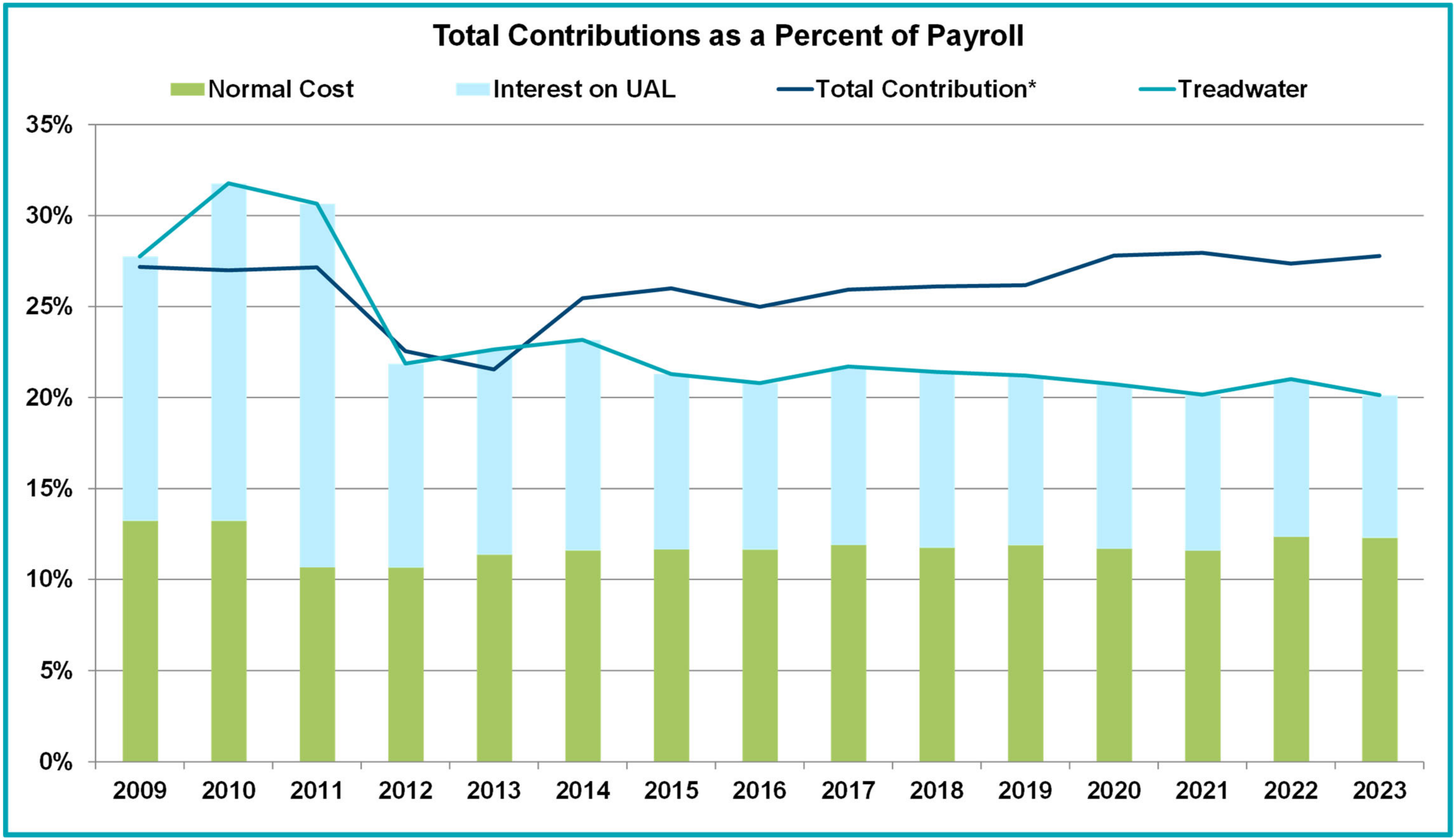
State Employee and Teacher Only

* increase largely due to requirement to fully fund program changes (COLA)

"Treadwater" Analysis

- This metric is increasing in importance for Public Penson Funds
- Definition
  - Treadwater = Normal Cost + Interest on the UAL
  - Analogous to paying for purchases and the finance charge on a credit card
- If Contributions > Treadwater, Funded Status is expected to improve
- If Contributions < Treadwater, Funded Status is expected to decline

State & Teacher, Historical Treadwater

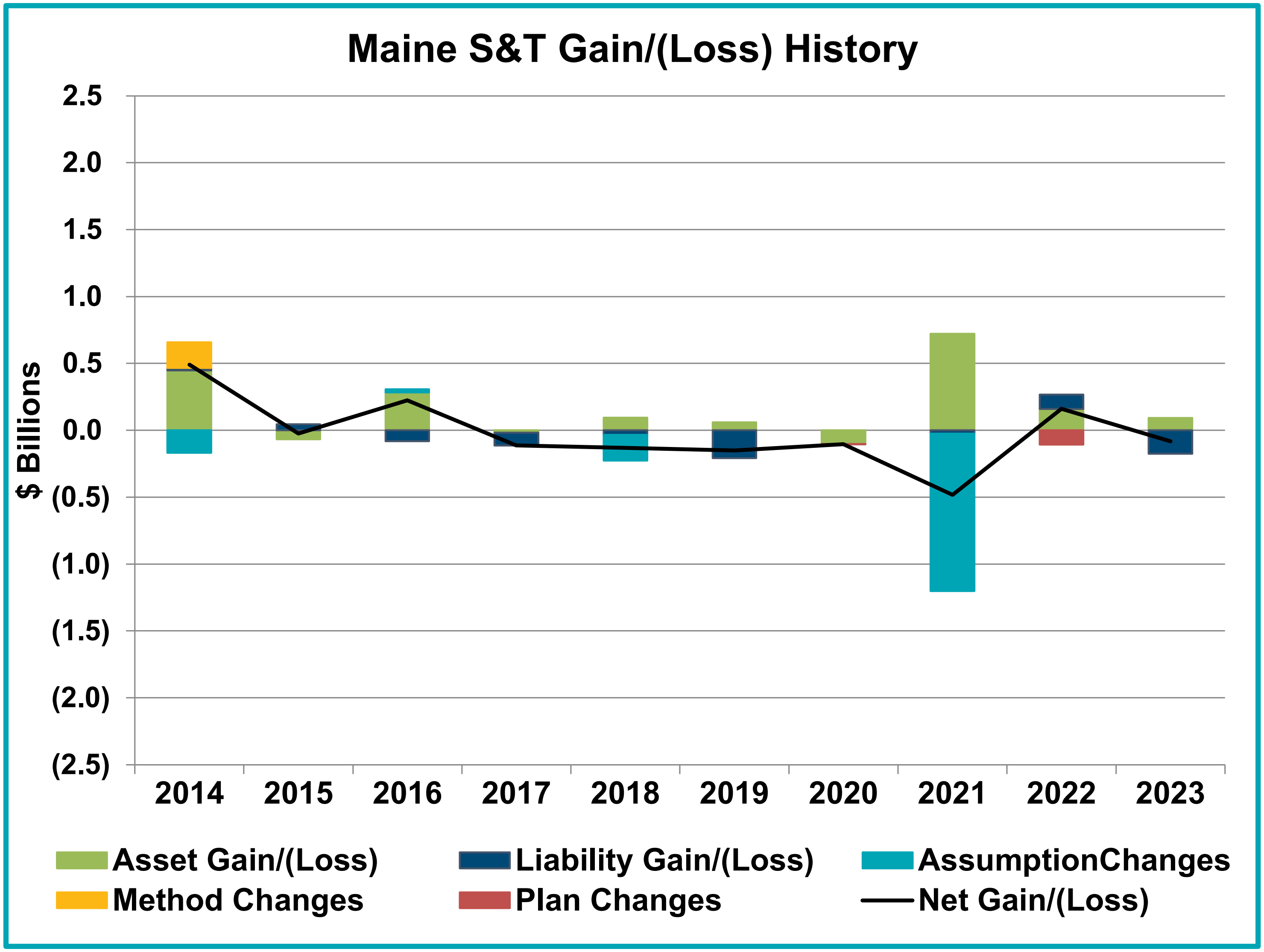


*** Contributions shown exclude those for service purchases and Program changes**

State Employee and Teacher Only

October 12, 2023

State & Teacher, Historical Gains/Losses, Other



State Employee and Teacher Only

State & Teacher – Key FY 2023 Results

	June 30, 2022 Valuation	June 30, 2023 Valuation	2022 to 2023 % change
Membership			
Actives	40,121	40,586	1.2%
Payroll ($millions)	$ 2,265	$ 2,385	5.3%
Average Salary	$ 56,463	$ 58,762	4.1%
In Pay Status	38,408	39,038	1.6%
Total Annual Benefits ($millions)	$ 931	$ 973	4.5%
Average Benefit	$ 24,250	$ 24,933	2.8%
Assets and Liabilities ($millions)			
Actuarial Liability	$ 16,982	$ 17,521	3.2%
Actuarial Value of Assets (AVA)	$ 14,248	$ 14,889	4.5%
Unfunded Actuarial Liability (UAL)	$ 2,734	$ 2,632	-3.7%
AVA Funded Ratio	83.9%	85.0%	
Market Value of Assets (MVA)	$ 14,569	$ 15,073	3.5%
MVA Funded Ratio	85.8%	86.0%	
Accrued Liabilities	$ 15,383	$ 15,860	3.1%
Unfunded Accrued (using MVA)	$ 814	$ 787	-3.3%
Accrued MVA Funded Ratio	94.7%	95.0%	
LDROM Liabilities	N/A	$ 24,105	
Total Contribution Rate			
Normal Cost Rate	4.58%	4.56%	
UAL Rate	16.07%	15.97%	
Total Calculated Rate	20.65%	20.53%	

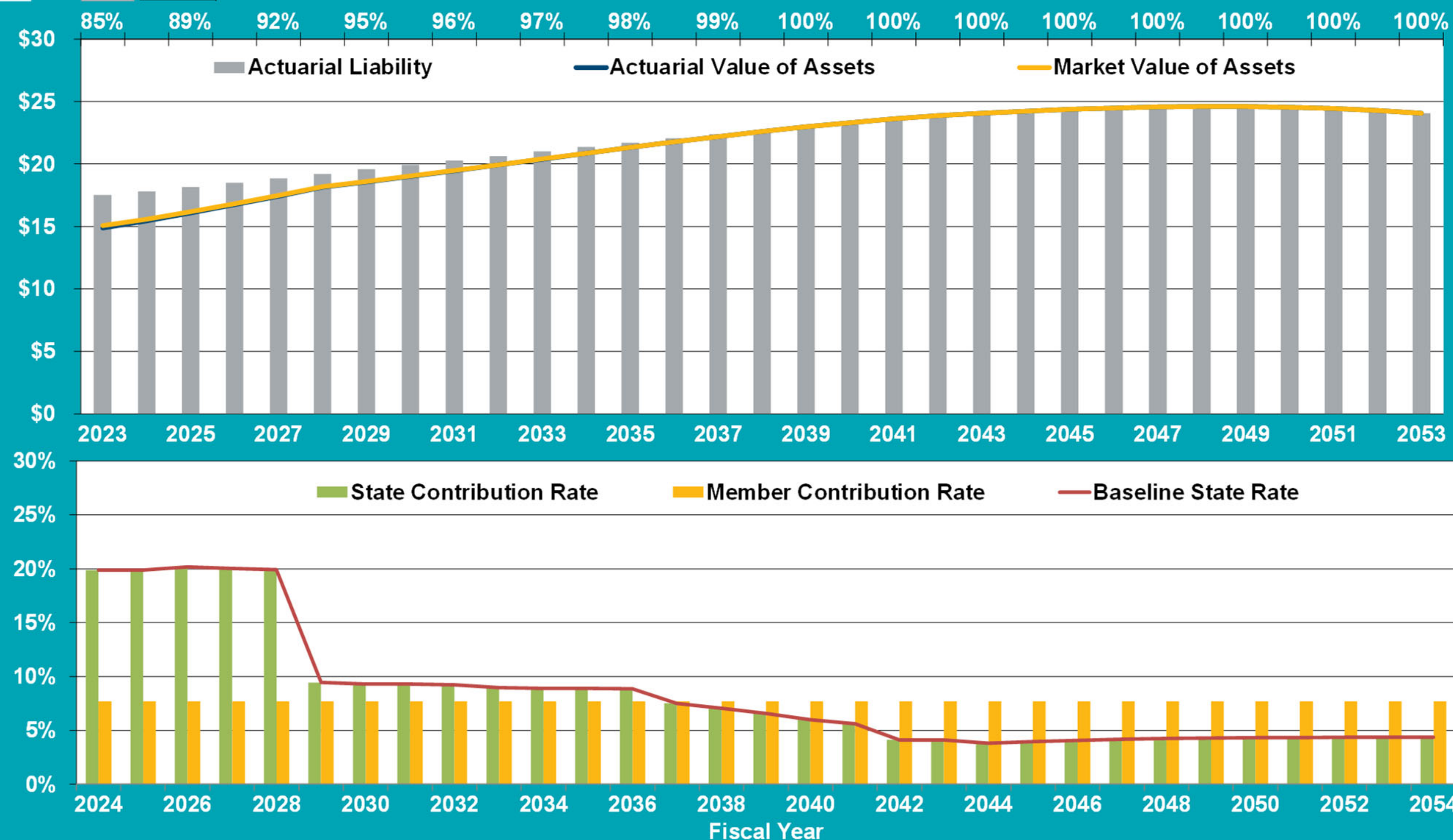
State & Teacher – FY 2023 Experience

- Smoothed assets (AVA) grew $92 million more than expected
  - Market Return +6.05%
  - AVA Return +7.15%
- Liabilities grew $174 million more than expected
  - $6.6 mill – Program changes (one-time COLA payment) (fully offset by additional contributions)
  - $61 mill – 3% COLA vs. assumed 2.2%
  - $113 mill – due to liability experience (0.7% of total)
- Net Impact
  - UAL declined by $102 million
  - Calculated employer contribution rate dropped from 20.65% to 20.53% of payroll

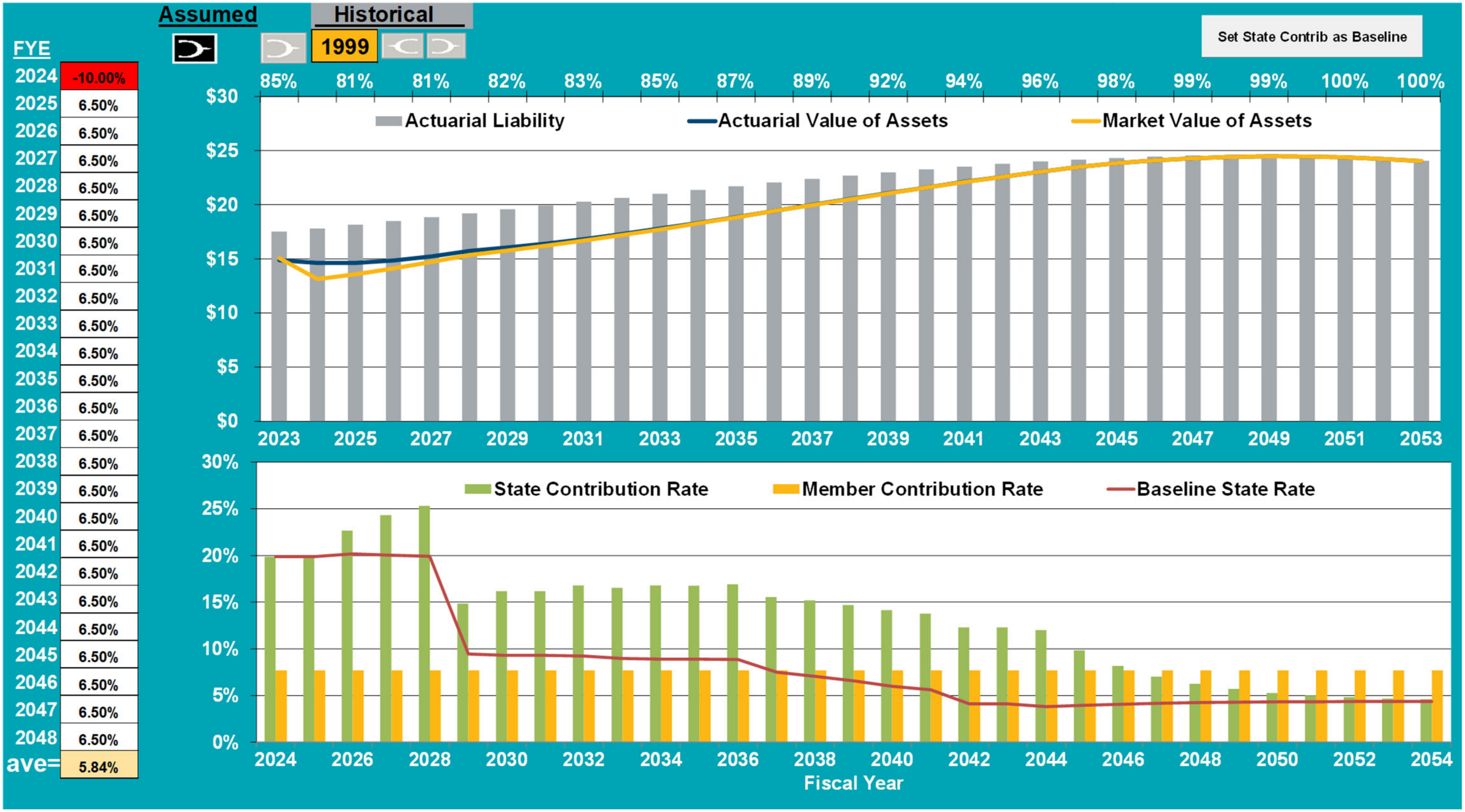
State & Teacher Baseline Projection

Assumed | Historical 1999 | Set State Contrib as Baseline

FYE	
2024	6.50%
2025	6.50%
2026	6.50%
2027	6.50%
2028	6.50%
2029	6.50%
2030	6.50%
2031	6.50%
2032	6.50%
2033	6.50%
2034	6.50%
2035	6.50%
2036	6.50%
2037	6.50%
2038	6.50%
2039	6.50%
2040	6.50%
2041	6.50%
2042	6.50%
2043	6.50%
2044	6.50%
2045	6.50%
2046	6.50%
2047	6.50%
2048	6.50%
ave=	6.50%

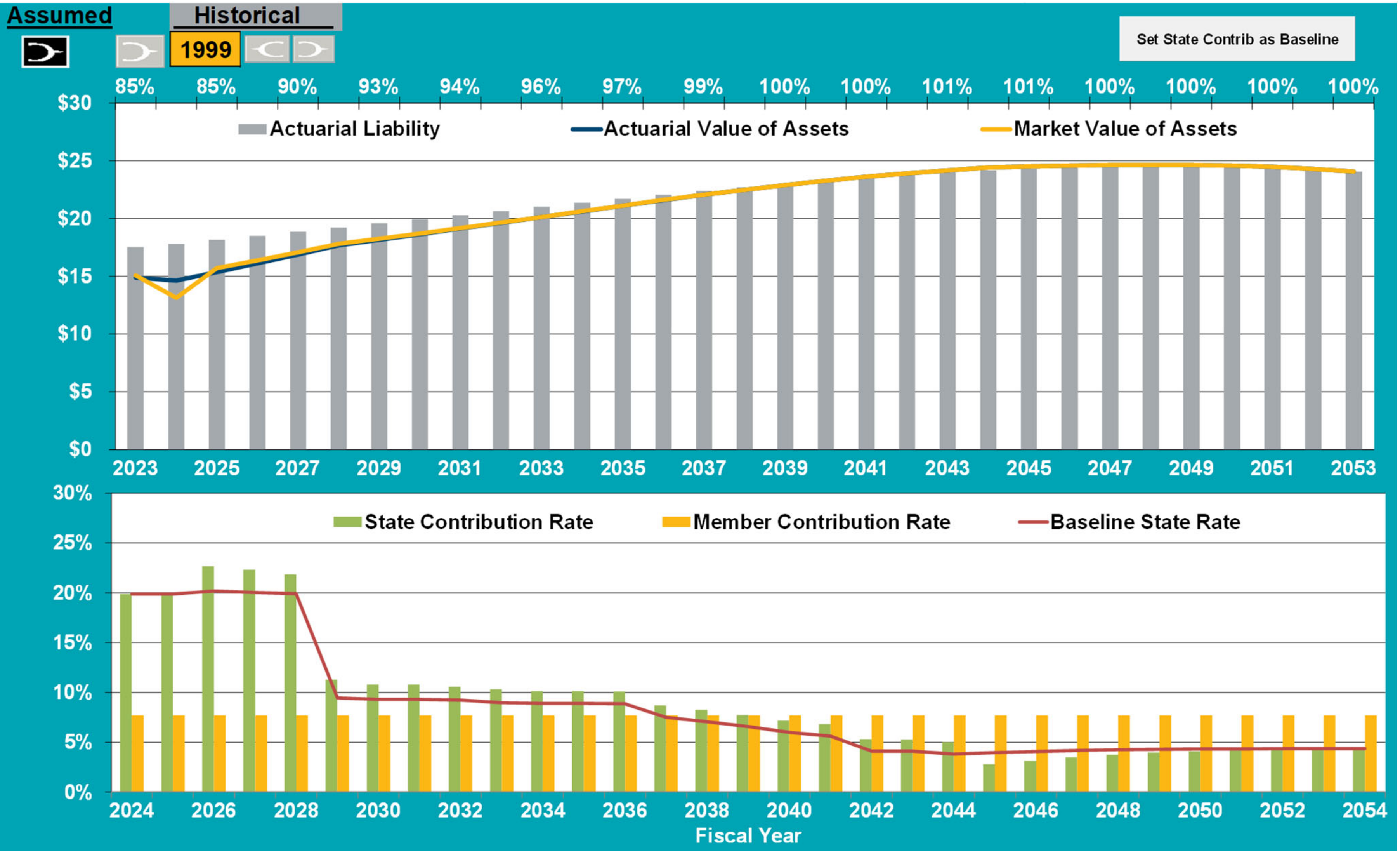


State & Teacher w/ Loss



State & Teacher w/ Loss then Gain

FYE	
2024	-10.00%
2025	23.00%
2026	6.50%
2027	6.50%
2028	6.50%
2029	6.50%
2030	6.50%
2031	6.50%
2032	6.50%
2033	6.50%
2034	6.50%
2035	6.50%
2036	6.50%
2037	6.50%
2038	6.50%
2039	6.50%
2040	6.50%
2041	6.50%
2042	6.50%
2043	6.50%
2044	6.50%
2045	6.50%
2046	6.50%
2047	6.50%
2048	6.50%
ave=	6.50%

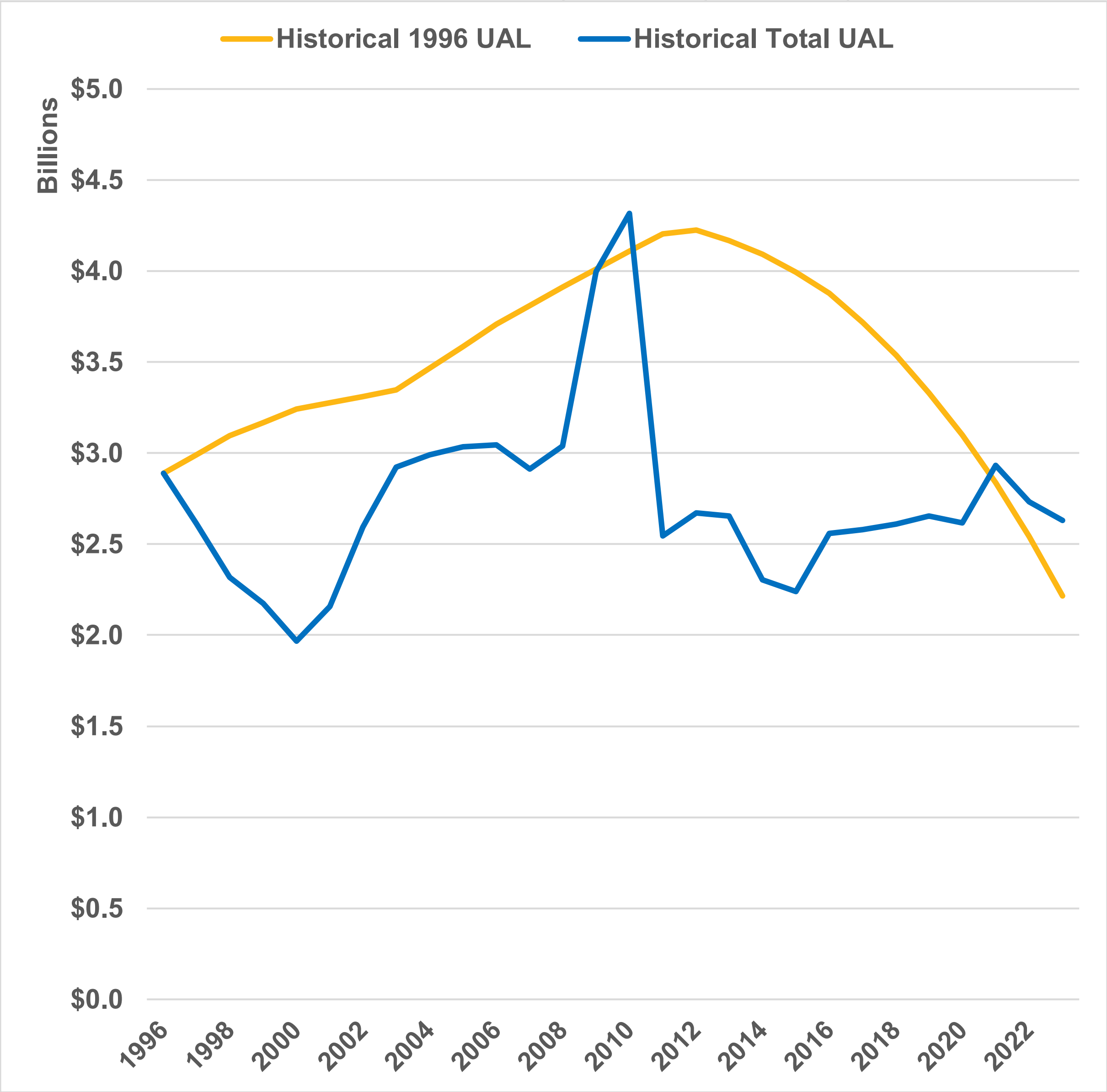


State & Teachers – 1996 UAL Payoff

- The Maine Constitution requires that the 1996 UAL be paid off by 2028
- The UAL is amortized using a level percentage of pay methodology

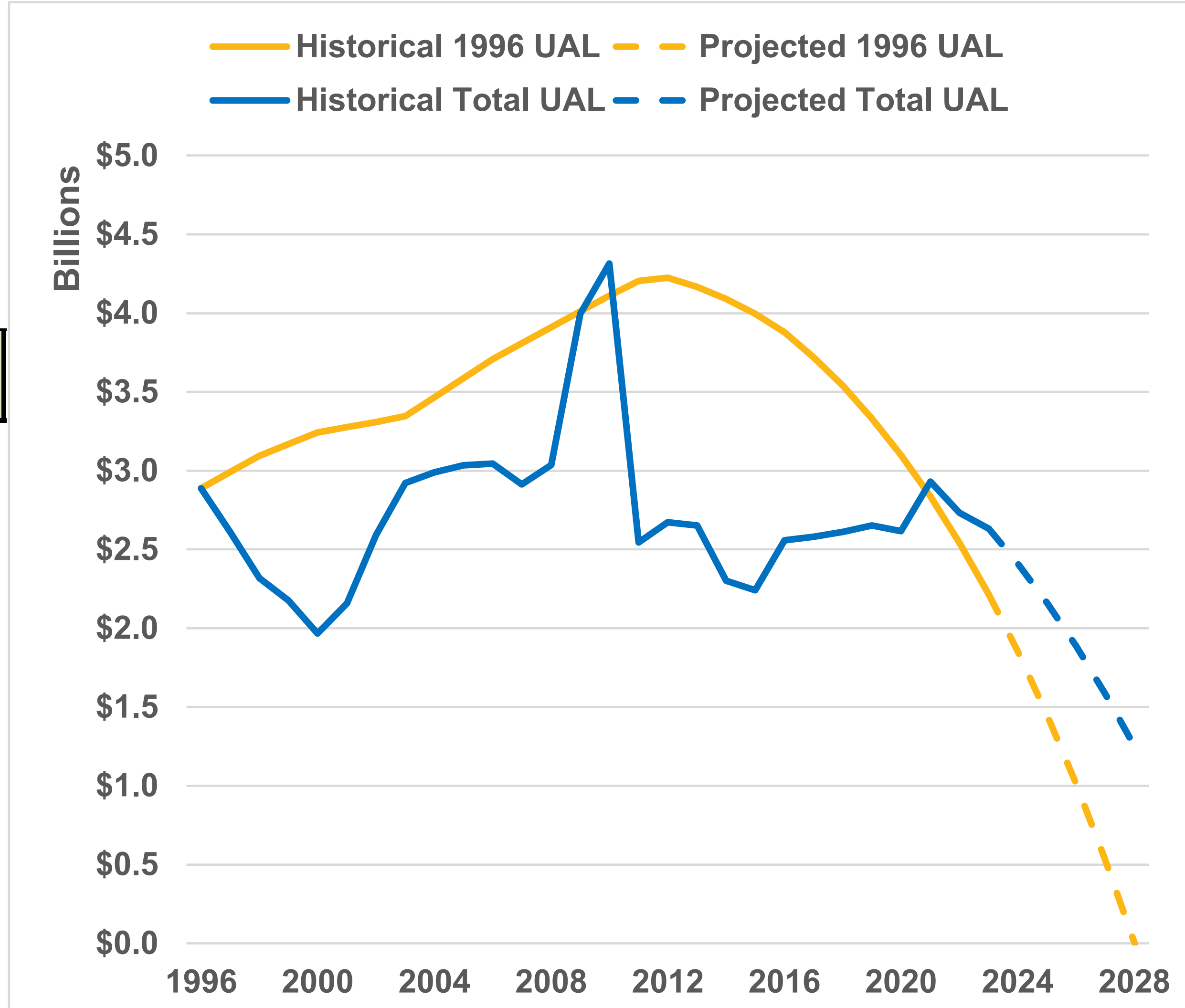
State & Teachers – Historical UAL's

FYB 1-Jul	1996 UAL	1996 UAL Payment
1996	2,888,985,772	123,965,519
1997	2,991,275,887	130,268,348
1998	3,095,199,119	168,011,907
1999	3,168,211,953	171,975,150
2000	3,242,947,092	217,206,330
2001	3,276,655,419	221,419,138
2002	3,308,682,335	218,375,512
2003	3,346,434,432	143,010,284
2004	3,465,528,540	150,875,849
2005	3,585,976,041	159,174,021
2006	3,707,435,629	178,320,289
2007	3,809,660,620	186,790,503
2008	3,911,015,737	195,663,052
2009	4,011,015,931	204,957,047
2010	4,109,118,723	214,693,269
2011	4,204,718,019	274,642,115
2012	4,225,136,373	352,384,829
2013	4,166,523,477	364,718,298
2014	4,090,888,412	374,661,964
2015	3,994,584,554	387,775,133
2016	3,877,846,758	411,021,472
2017	3,719,533,222	422,324,562
2018	3,538,650,454	431,567,895
2019	3,331,613,879	443,436,012
2020	3,098,340,210	455,630,502
2021	2,836,721,233	464,495,235
2022	2,541,754,432	477,268,854
2023	2,214,432,563	490,393,747



State & Teachers –1996 UAL Projection

FYB 1-Jul	1996 UAL	1996 UAL Payment
2023	2,214,432,562	490,393,747
2024	1,852,290,034	503,879,575
2025	1,452,691,024	517,736,263
2026	1,012,818,137	531,974,010
2027	529,660,323	546,603,294
2028	0	0



June 30, 2023 Valuation Results

Judicial and Legislative

Judicial – Key FY 2023 Results

	June 30, 2022	June 30, 2023	2022 to 2023
Membership	Valuation	Valuation	% change
Actives	60	58	-3.3%
Payroll ($thousands)	$ 8,694	$ 8,671	-0.3%
Average Salary	$ 144,897	$ 149,493	3.2%
In Pay Status	90	92	2.2%
Total Annual Benefits ($thousands)	$ 5,350	$ 5,511	3.0%
Average Benefit	$ 59,449	$ 59,903	0.8%
Assets and Liabilities ($thousands)			
Actuarial Liability	$ 77,426	$ 78,586	1.5%
Actuarial Value of Assets (AVA)	$ 83,933	$ 86,356	2.9%
Unfunded Actuarial Liability (UAL)	$ (6,507)	$ (7,770)	19.4%
AVA Funded Ratio	108.4%	109.9%	
Market Value of Assets (MVA)	$ 85,821	$ 87,423	1.9%
MVA Funded Ratio	110.8%	111.2%	
Accrued Liabilities	$ 73,878	$ 74,679	1.1%
Unfunded Accrued (using MVA)	$ (11,943)	$ (12,744)	6.7%
Accrued MVA Funded Ratio	116.2%	117.1%	
LDROM Liabilities	N/A	$ 98,843	
Total Contribution Rate			
Normal Cost Rate	12.71%	12.51%	
UAL Rate	-9.03%	-10.81%	
Total Calculated Rate	3.68%	1.70%	

Legislative – Key FY 2023 Results

	June 30, 2022	June 30, 2023	2022 to 2023
Membership	**Valuation**	**Valuation**	**% change**
Actives	174	178	2.3%
Payroll ($thousands)	$ 2,801 *	$ 2,962	5.8%
Average Salary	$ 16,099	$ 16,643	3.4%
In Pay Status	223	232	4.0%
Total Annual Benefits ($thousands)	$ 529	$ 564	6.7%
Average Benefit	$ 2,372	$ 2,432	2.5%
Assets and Liabilities			
Actuarial Liability	$ 10,977	$ 11,406	3.9%
Actuarial Value of Assets (AVA)	$ 15,788	$ 16,478	4.4%
Unfunded Actuarial Liability (UAL)	$ (4,810)	$ (5,072)	5.4%
AVA Funded Ratio	143.8%	144.5%	
Market Value of Assets (MVA)	$ 16,143	$ 16,682	3.3%
MVA Funded Ratio	147.1%	146.3%	
Accrued Liabilities	$ 10,791	$ 11,061	2.5%
Unfunded Accrued (using MVA)	$ (5,352)	$ (5,621)	5.0%
Accrued MVA Funded Ratio	149.6%	150.8%	
LDROM Liabilities	N/A	$ 14,958	
Total Contribution Rate			
Normal Cost Rate	3.46%	5.59%	
UAL Rate	-3.46%	-5.59%	
Total Calculated Rate	0.00%	0.00%	*No less than 0%*

* Annualized to approximate long-session rate of pay.

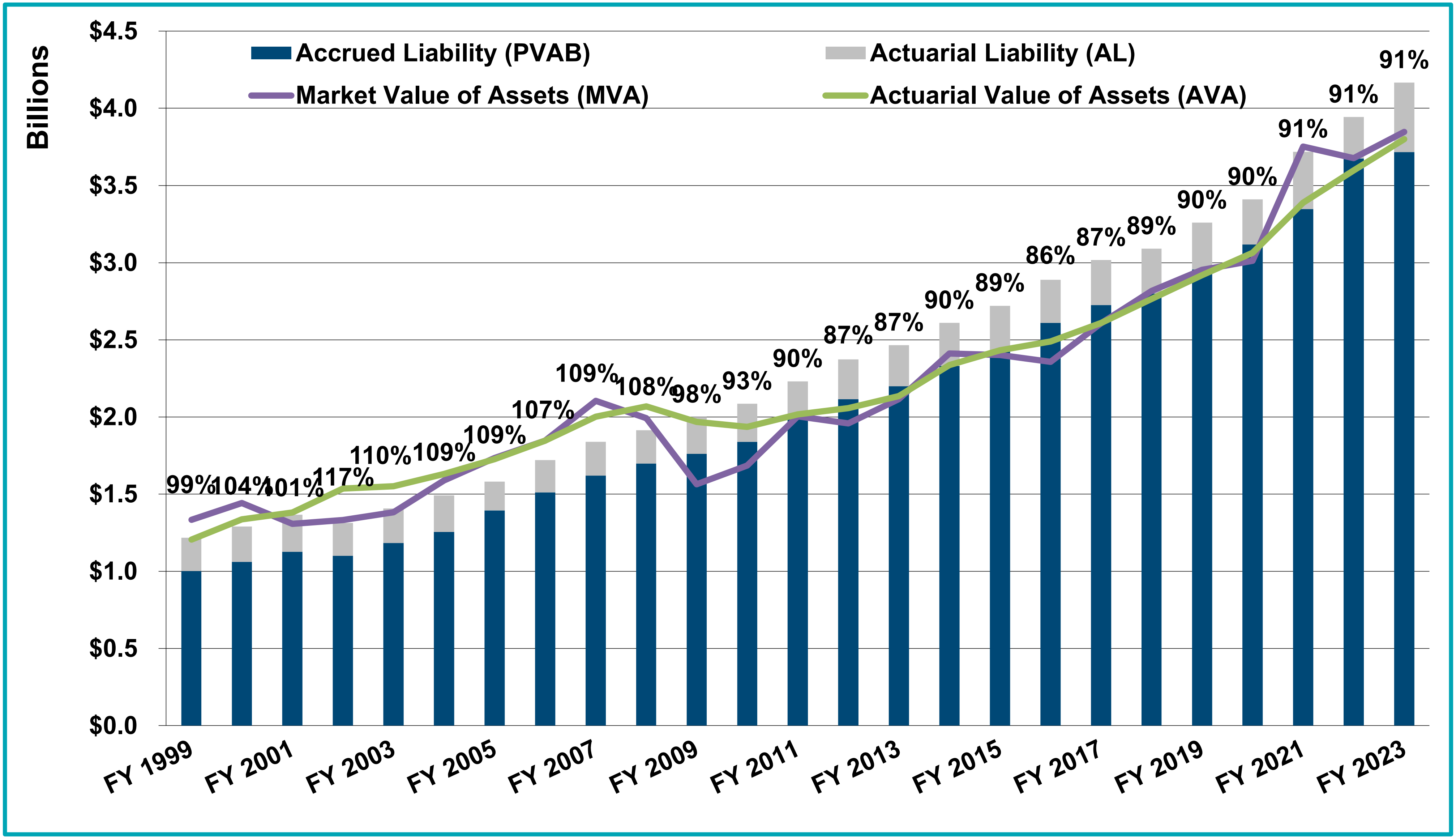
Judicial & Legislative FY 2023 Experience

- Judicial smoothed asset gain of $498 thousand
- Judicial liabilities $110 thousand lower than expected
- Legislative smoothed asset gain of $101 thousand
- Legislative liabilities grew $65 thousand more than expected
- Net Impact
  - Both Programs remain overfunded
  - Judicial contribution rate decreased from 3.68% to 1.70%

June 30, 2023 Valuation Results

Consolidated PLDs

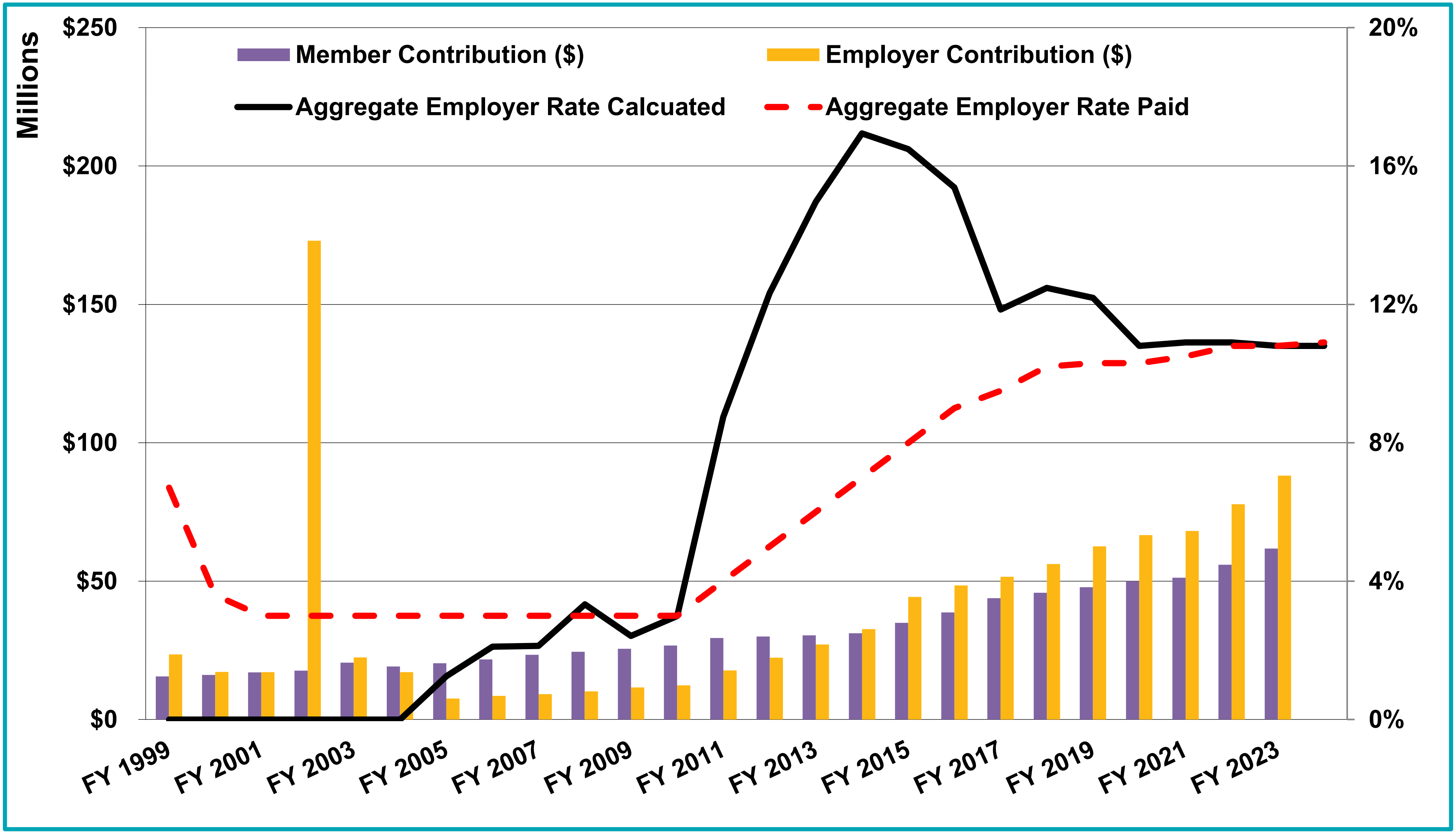
Consol. PLDs, Historical Funded Status



Percentages shown are AVA funded ratios.

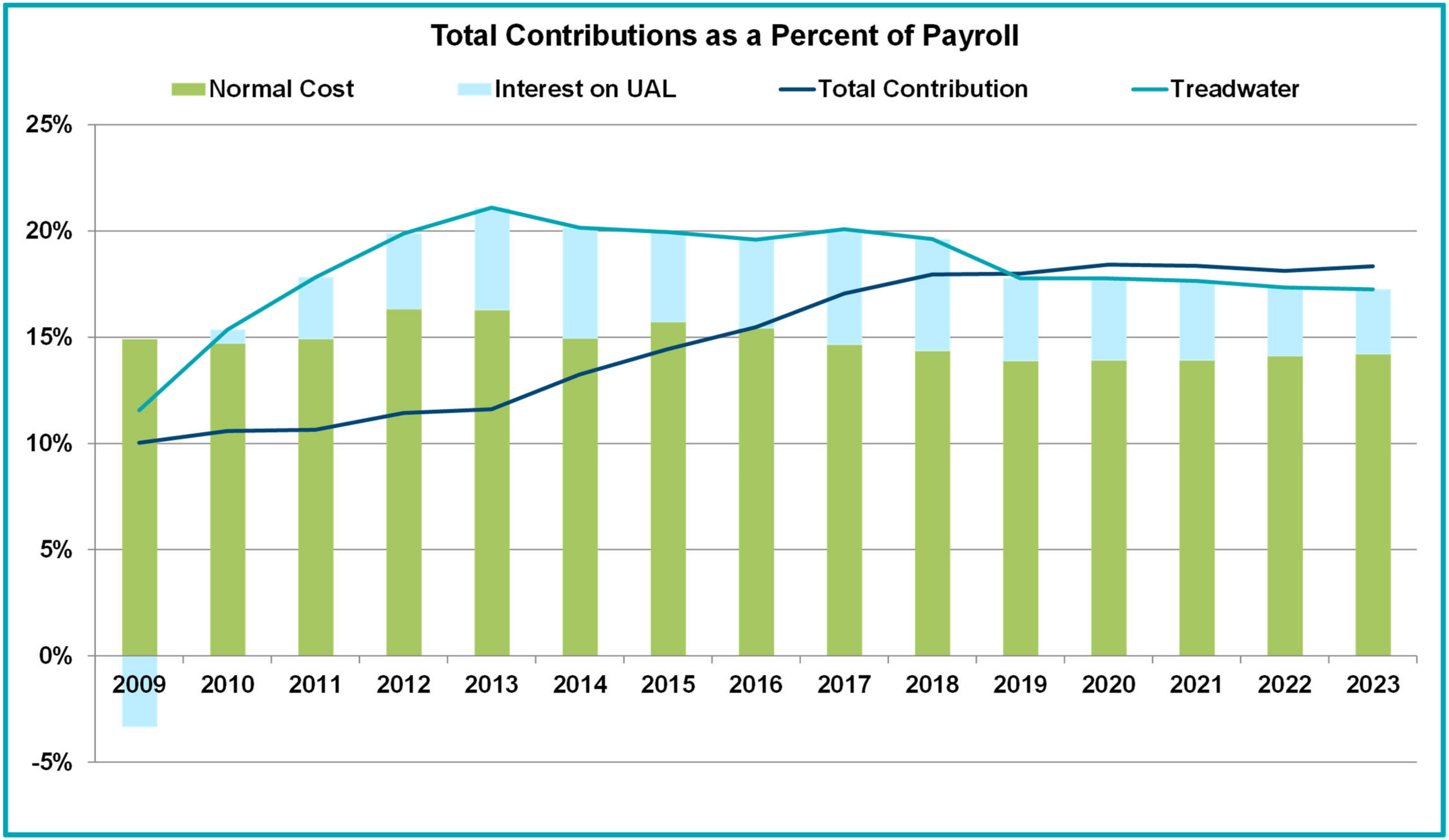
Consolidated Plans Only

Consol. PLDs, Historical Contributions



Consolidated Plans Only

Consol. PLDs, Historical Treadwater



Consolidated Plans Only

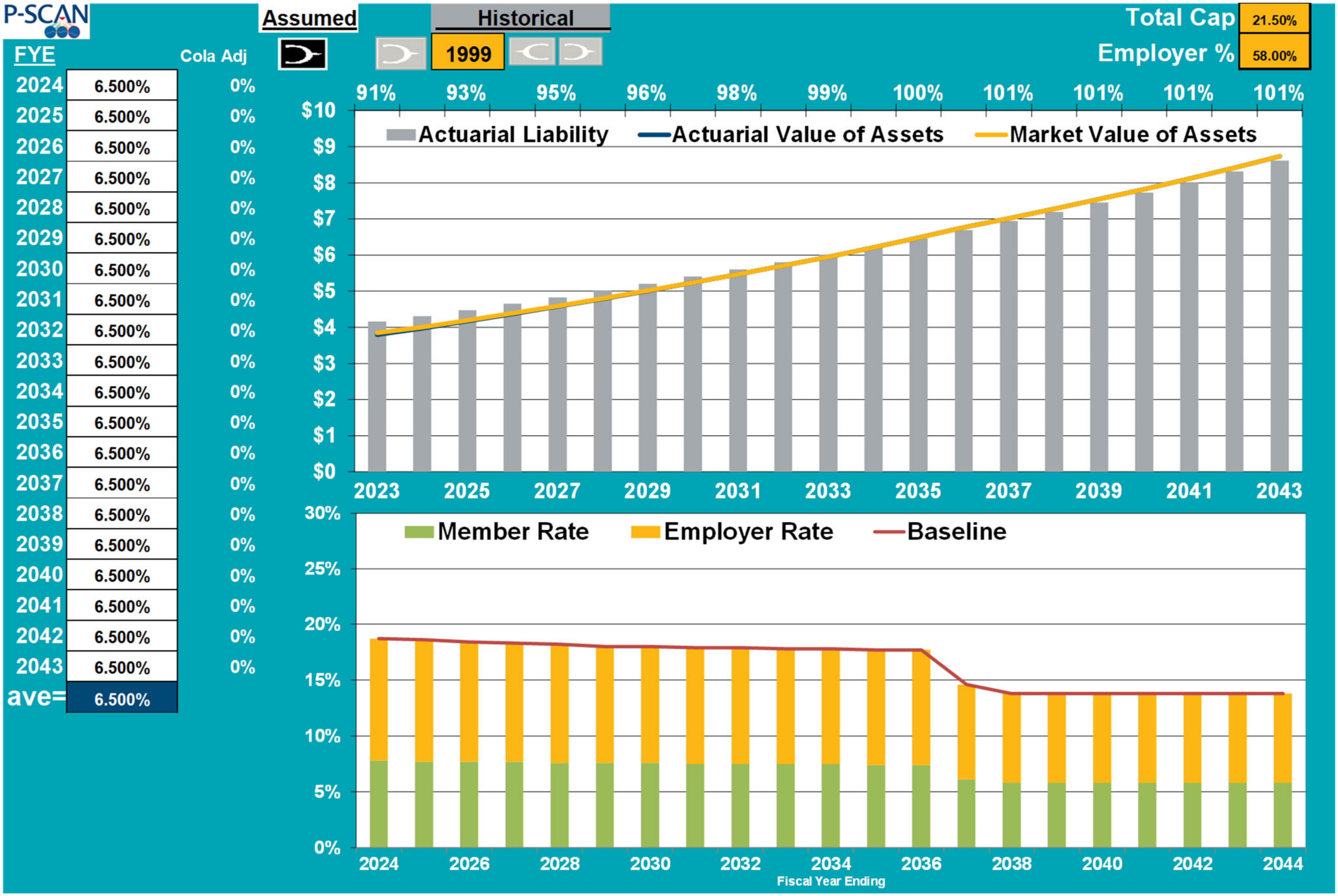
Consol. PLDs – Key FY 2023 Results

	June 30, 2022	June 30, 2023	2022 to 2023
Membership	**Valuation**	**Valuation**	**% change**
Actives	12,362	13,122	6.1%
Payroll ($millions)	$ 738	$ 832	12.7%
Average Salary	$ 59,704	$ 63,398	6.2%
In Pay Status	10,400	10,615	2.1%
Total Annual Benefits ($millions)	$ 190	$ 203	7.3%
Average Benefit	$ 18,224	$ 19,159	5.1%
Assets and Liabilities ($millions)			
Actuarial Liability	$ 3,944	$ 4,166	5.6%
Actuarial Value of Assets (AVA)	$ 3,597	$ 3,800	5.6%
Unfunded Actuarial Liability (UAL)	$ 347	$ 366	5.6%
AVA Funded Ratio	91.2%	91.2%	
Market Value of Assets (MVA)	$ 3,678	$ 3,847	4.6%
MVA Funded Ratio	93.3%	92.3%	
Accrued Liabilities	$ 3,674	$ 3,717	1.2%
Unfunded Accrued (using MVA)	$ (3)	$ (130)	3821.7%
Accrued MVA Funded Ratio	100.1%	103.5%	
LDROM Liabilities	N/A	$ 5,877	
Composite Contribution Rate	**for FY 2023**	**for FY 2024**	
Total Normal Cost Rate	14.2%	14.3%	
UAL Rate	4.5%	4.3%	
Total Calculated Rate	18.7%	18.6%	
Final Aggregate Employer Paid	10.9%	TBD	
Final Aggregate Member Paid	7.8%	TBD	

Consolidated PLDs FY 2023 Experience

- Consolidated PLD smoothed asset gain of $23.5 million
- Consolidated PLD liabilities grew by $55.1 million more than expected
  - $20.7 million increase due to Program changes (COLA)
  - $12.2 million increase due to COLA of 2.5% vs. assumed 1.91%
  - $42.9 million increase due to other liability experience
- Net Impact
  - UAL increased by $19.3 million to $366.1 million
  - Calculated Total Contribution Rate decreased by 0.1%

Cons. PLDs Baseline Projection



Consolidated Plans Only

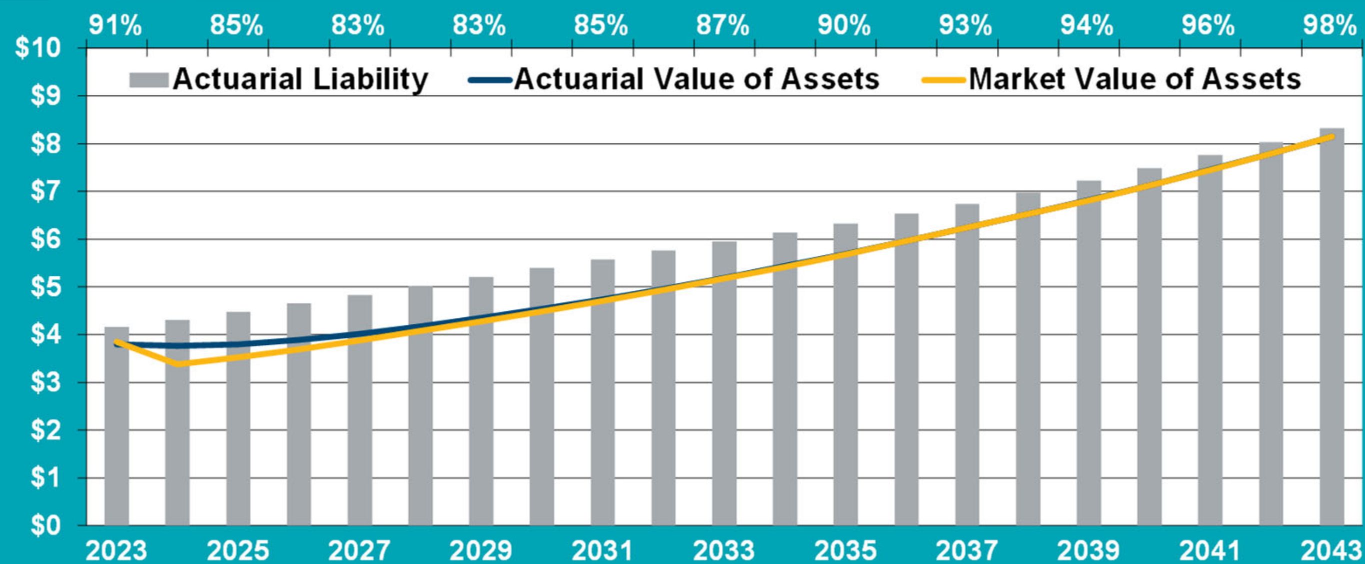
Cons. PLDs w/ Loss

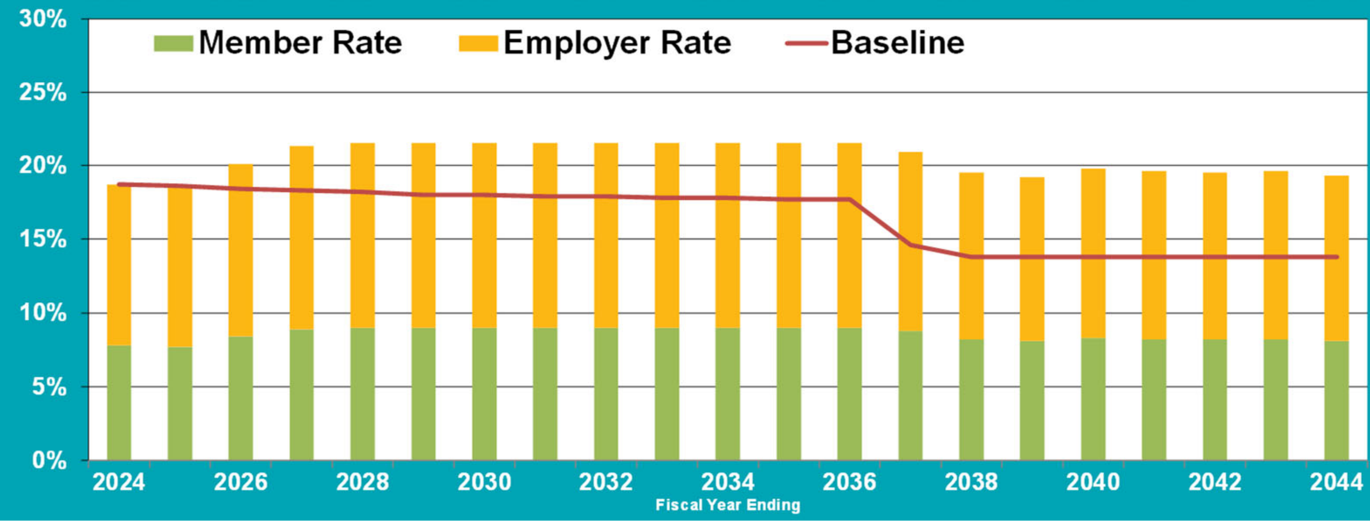
P-SCAN

Assumed | Historical | 1999

Total Cap 21.50%
Employer % 58.00%

FYE		Cola Adj
2024	-10.000%	0%
2025	6.500%	0%
2026	6.500%	0%
2027	6.500%	0%
2028	6.500%	0%
2029	6.500%	0%
2030	6.500%	-19%
2031	6.500%	-26%
2032	6.500%	-31%
2033	6.500%	-35%
2034	6.500%	-37%
2035	6.500%	-38%
2036	6.500%	-39%
2037	6.500%	-39%
2038	6.500%	0%
2039	6.500%	0%
2040	6.500%	0%
2041	6.500%	0%
2042	6.500%	0%
2043	6.500%	0%
ave=	5.675%	





Consolidated Plans Only

Cons. PLDs w/ Loss then Gain

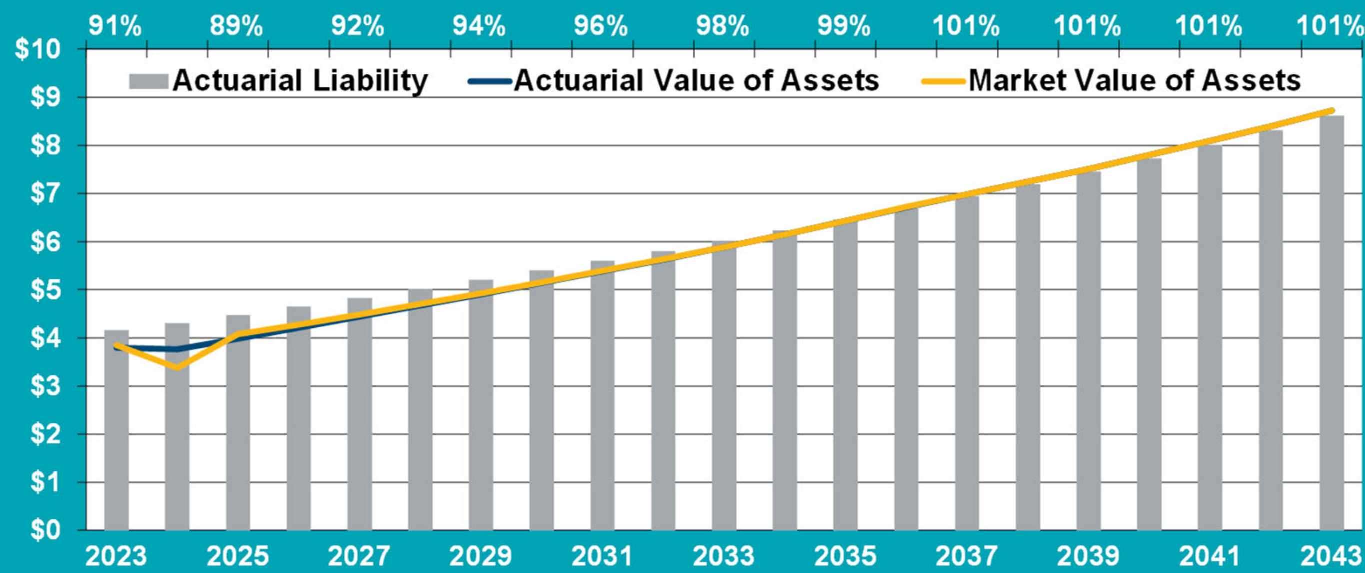
P-SCAN

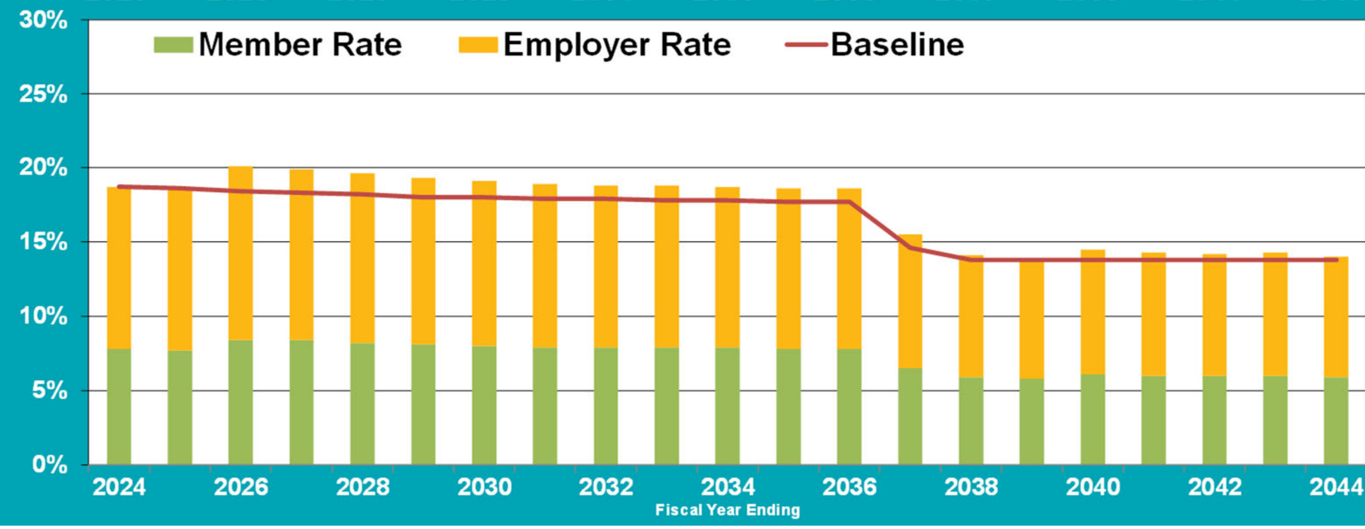
Assumed | Historical | 1999

Total Cap 21.50%

Employer % 58.00%

FYE		Cola Adj
2024	-10.000%	0%
2025	23.000%	0%
2026	6.500%	0%
2027	6.500%	0%
2028	6.500%	0%
2029	6.500%	0%
2030	6.500%	0%
2031	6.500%	0%
2032	6.500%	0%
2033	6.500%	0%
2034	6.500%	0%
2035	6.500%	0%
2036	6.500%	0%
2037	6.500%	0%
2038	6.500%	0%
2039	6.500%	0%
2040	6.500%	0%
2041	6.500%	0%
2042	6.500%	0%
2043	6.500%	0%
ave=	6.500%	



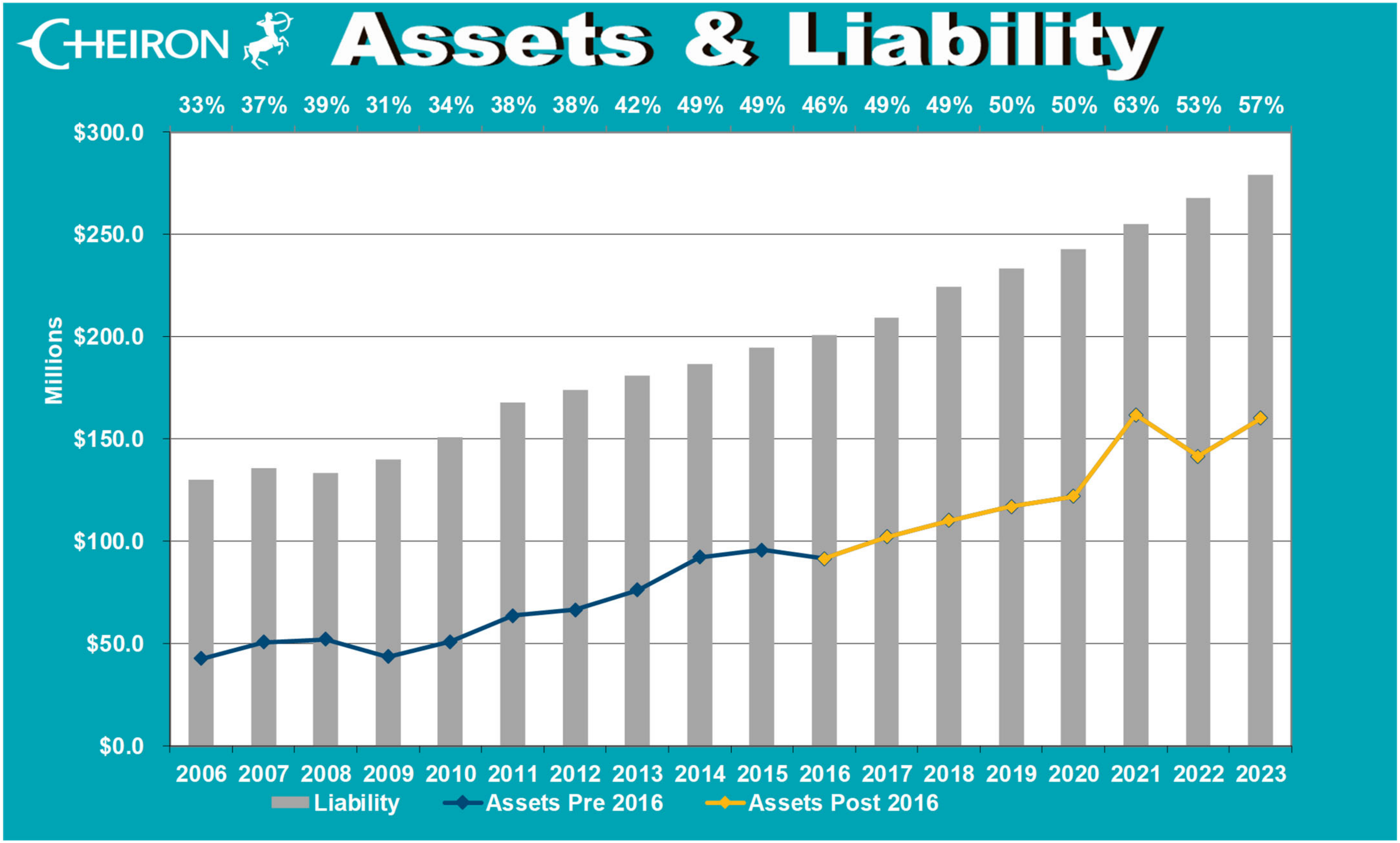


Consolidated Plans Only

June 30, 2023 Valuation Results

Retiree Group Life Insurance (GLI)

Historical Review Assets and Liabilities – All



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.

GLI Key FY 2023 Results

	June 30, 2022 Total	June 30, 2023 State[1]	June 30, 2023 Teachers	June 30, 2023 PLD	June 30, 2023 Total	2022 to 2023 % Change
Membership[2]						
Actives	32,021					
Active Average Age	47.4					
Average Salary	$ 59,407					
Retirees	20,031					
Retiree Average Age	73.6					
Average Life Insurance Benefit	$ 20,138					
Assets and Liabilities						
Discount Rate	6.50%	6.50%	6.50%	6.50%		
Actuarial Liability	$ 267.9	$ 124.4	$ 121.0	$ 33.8	$ 279.2	4.2%
Market Value of Assets (MVA)	$ 141.4	$ 53.3	$ 86.5	$ 20.2	$ 160.0	13.2%
Unfunded Actuarial Liability (UAL)	$ 126.4	$ 71.1	$ 34.5	$ 13.6	$ 119.2	-5.7%
MVA Funded Ratio	53%	43%	71%	60%	57%	

*($ amounts in millions)

[1] State group includes Judicial and Legislative members as well as those in the State Employees Program
[2] Valuation as of June 30, 2023 is a roll-forward so census data is the same as June 30, 2022.

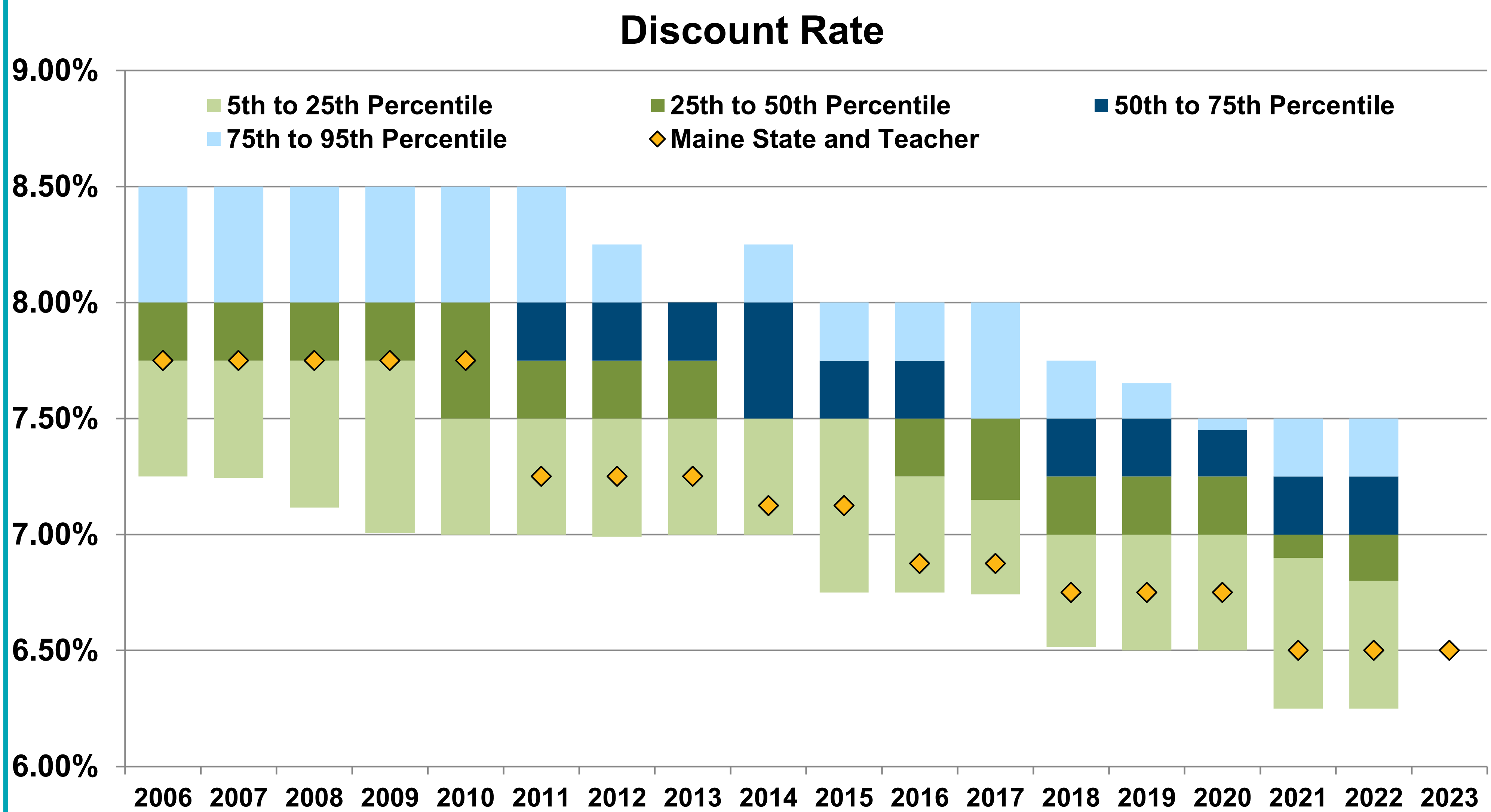
Appendix

Comparisons to Other Public Plans

NASRA

CENTER for RETIREMENT RESEARCH at BOSTON COLLEGE

Discount Rate

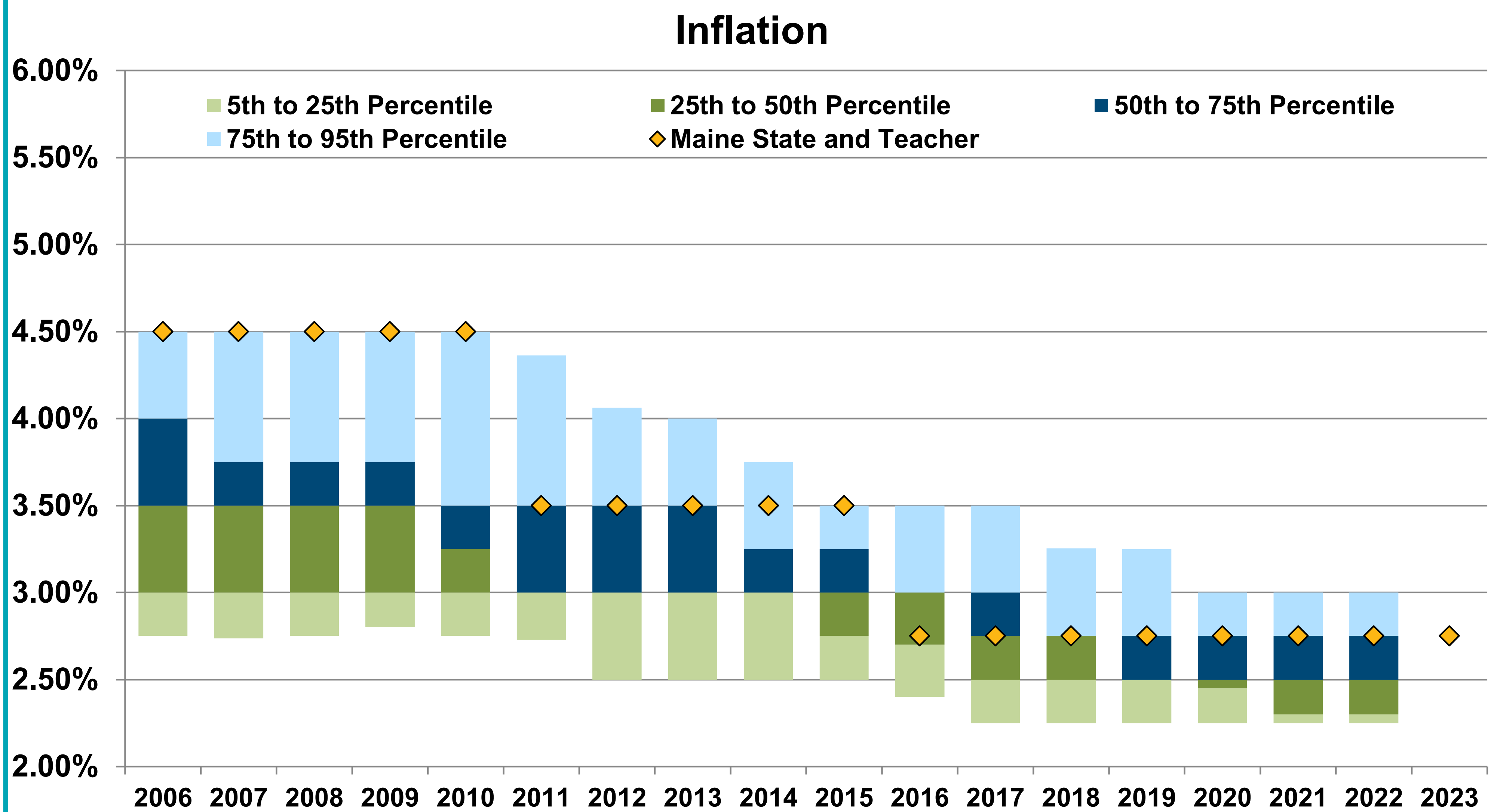


Survey Data from Public Plans Data as of 7/26/2023

State Employee and Teacher Only

October 12, 2023

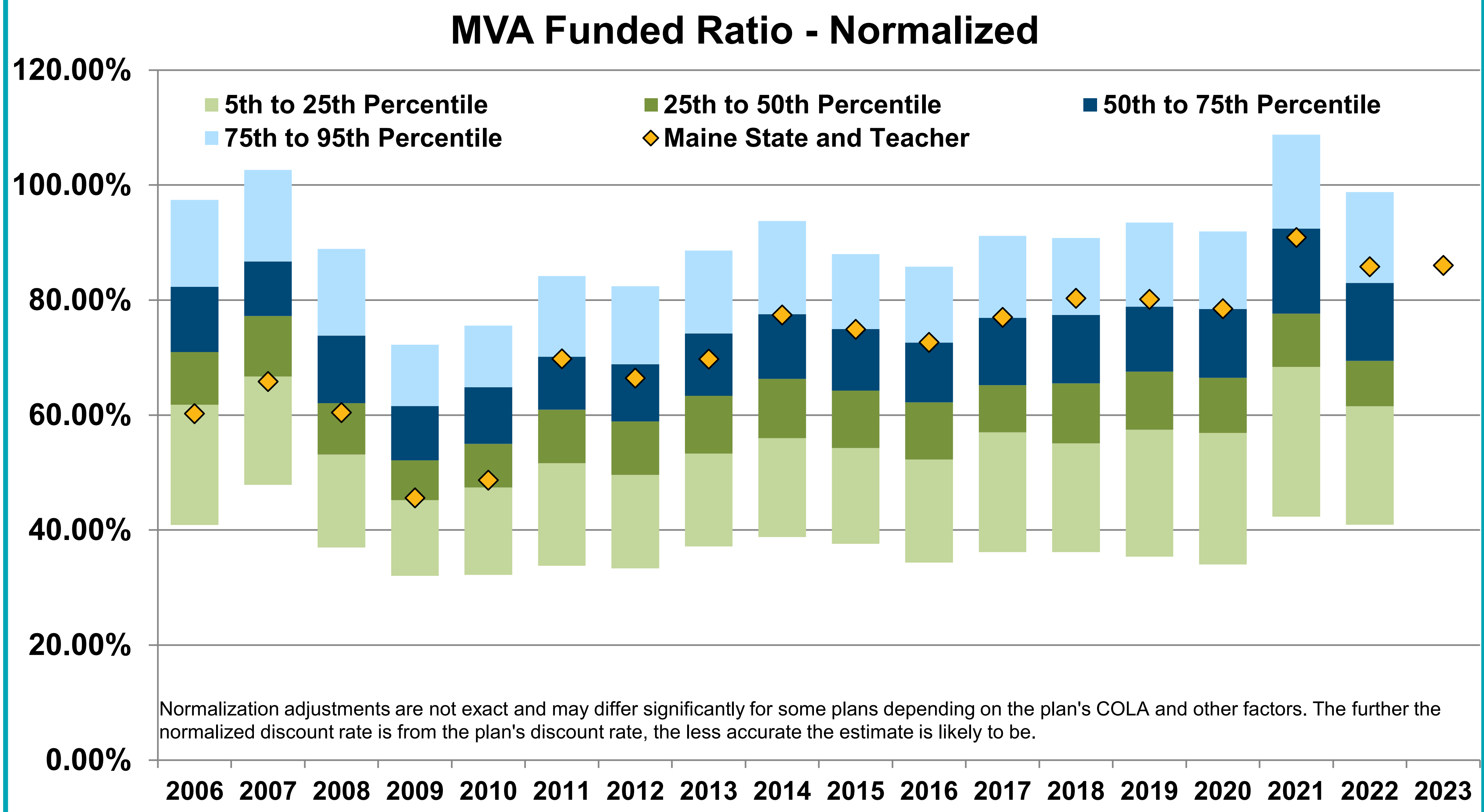
Inflation Rate



Survey Data from Public Plans Data as of 7/26/2023

State Employee and Teacher Only

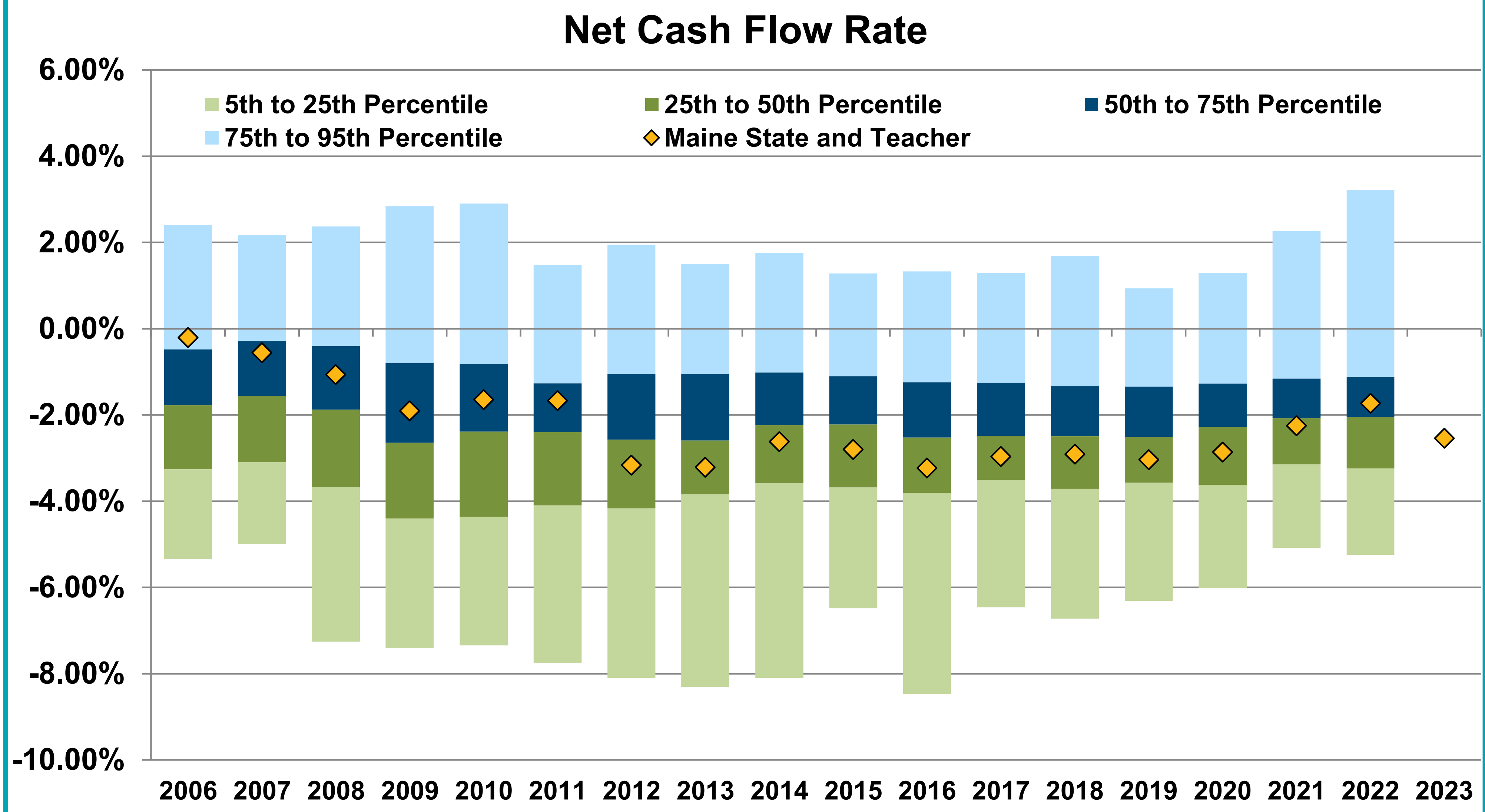
MVA Funded Ratio – All Plans at 6.5%



Survey Data from Public Plans Data as of 7/26/2023

State Employee and Teacher Only

Net Cash Flow as a Percent of MVA



Survey Data from Public Plans Data as of 7/26/2023

State Employee and Teacher Only

Required Disclosures

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, 2023.

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.

Gene Kalwarski, FSA, FCA, MAAA, EA
Principal Consulting Actuary

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Ryan Benitez, ASA, MAAA
Consulting Actuary

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: SHERRY VANDRELL, DIRECTOR OF FINANCE

SUBJECT: FY23 AUDITED FINANCIAL STATEMENTS

DATE: OCTOBER 4, 2023

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 FY23 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 prior to your meeting.

Mark LaPrade, Principal, and Leah Clair, Audit Manager, will present the draft financial statements at the October 12, 2023 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 FY23 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, 2023
With Independent Auditor's Report

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM

FINANCIAL STATEMENTS,
REQUIRED SUPPLEMENTARY INFORMATION
AND ADDITIONAL SUPPLEMENTARY INFORMATION

Year Ended June 30, 2023
With Summarized Information for June 30, 2022

TABLE OF CONTENTS

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

June 30, 2023

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.

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 money-weighted 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 money-weighted 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, 2023, 2022, and 2021:

Condensed Comparative Statements of Fiduciary Net Position
(Dollar Values Expressed in Millions)

	June 30, 2023	June 30, 2022	June 30, 2021
Cash and Receivables	$ 248.2	$ 153.2	$ 71.9
Investments at Fair Value	19,586.8	18,814.7	19,365.3
Collateral on Loaned Securities	6.9	10.3	80.3
Other Assets	12.3	13.2	15.0
Total Assets	**$ 19,854.2**	**$ 18,991.4**	**$ 19,532.5**
Investment Management Fees Payable	$ 1.9	$ 19.5	$ 17.9
Obligations Under Securities Lending Activities	25.4	10.3	80.3
Other Liabilities	10.2	50.0	24.8
Total Liabilities	**$ 37.5**	**$ 79.8**	**$ 123.0**
Fiduciary Net Position - Restricted for Benefits	**$ 19,816.7**	**$ 18,911.6**	**$ 19,409.5**

Condensed Comparative Statements of Changes in Fiduciary Net Position
(Dollar Values Expressed in Millions)

	June 30, 2023	June 30, 2022	June 30, 2021
ADDITIONS:			
Member Contributions	$ 248.9	$ 239.9	$ 222.9
Employer Contributions	536.6	440.5	319.7
Non-Employer Contributing Entities Contributions	204.7	199.3	183.9
Total Investment Income (Loss)	1,175.0	(190.2)	4,167.8
Transfers from Other Plans	1.1	0.3	0.7
Total Additions	**$ 2,166.3**	**$ 689.8**	**$ 4,895.0**
DEDUCTIONS:			
Benefits Paid	$ 1,209.1	$ 1,141.3	$ 1,085.1
Other	52.1	46.4	40.9
Total Deductions	**$ 1,261.2**	**$ 1,187.7**	**$ 1,126.0**
Net Increase (Decrease)	**$ 905.1**	**$ (497.9)**	**$ 3,769.0**
Fiduciary Net Position - Restricted for Benefits, Beginning of Year	**$ 18,911.6**	**$ 19,409.5**	**$ 15,640.5**
Fiduciary Net Position - Restricted for Benefits, End of Year	**$ 19,816.7**	**$ 18,911.6**	**$ 19,409.5**

Fiduciary Net Position

The 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.

Comparatively, Fiduciary Net Position of the System decreased in fiscal year 2022 by $497.9 million (2.6%) from the prior year Fiduciary Net Position. This was due, in part, to investment losses of $190.2 million combined with benefit payments that exceeded contributions in the amount of $262 million. Investment income in fiscal year 2021 was $4,167.8 million as compared to investment losses of $190.2 million in fiscal year 2022.

Assets

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.

Comparatively, Investments at Fair Value decreased by $550.6 million (2.8%) in fiscal year 2022. This decrease in Investments at Fair Value combined with a decrease in collateral on loaned securities of $70 million contributed to a decrease in total assets of $541.1 million during fiscal year 2022. 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 $233.7 thousand in pending sales at June 30, 2023. There were $33.4 thousand in pending sales at June 30, 2022 and there were $770.9 thousand in pending sales at June 30, 2021.

Liabilities

On June 30, 2023, total loans outstanding in the securities lending program were $6.9 million. On June 30, 2022 and 2021, the total loans outstanding in the securities lending program were $10.3 million and $80.3 million, respectively.

Additions to Fiduciary Net Position

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 relative to 2022.

Additions to Fiduciary Net Position during fiscal year 2022 totaled $689.8 million compared to additions of $4,895.0 million to Fiduciary Net Position in fiscal year 2021. Contributions from all sources increased by $153.2 million. Investment income, net of fees and other deductions, decreased by $4,358 million. The decrease in investment income in fiscal year 2022 is due to lower returns across the majority of asset classes.

The State's contributions on behalf of State employees totaled $190.3 million, $243.1 million, and $172.2 million for fiscal years 2023, 2022, and 2021, respectively. The State's contributions on behalf of teachers totaled $261.4 million, $232.1 million, and $179.3 million, for fiscal years 2023, 2022, and 2021, respectively. The State's contribution on behalf of judges totaled $620 thousand, $868 thousand, and $739 thousand for fiscal years 2023, 2022, and 2021, respectively. The State's contributions on behalf of legislative employees totaled $5.5 thousand and $43 thousand for fiscal years 2023 and 2022. Based on the funding methodology used and considering the funded status of the Legislative Plan, no employer contribution was required in fiscal year 2021.

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 years 2023 and 2022 was 3.84%. For fiscal years 2021 the normal cost rate was 4.16%. The range of employer contributions in the PLD Consolidated Plan as a percent of earnable compensation in fiscal year 2023 was 5.6% to 14.7%; for fiscal year 2022 the range was 5.5% to 15.2%; and for fiscal year 2021 the range was 5.2% to 16%.

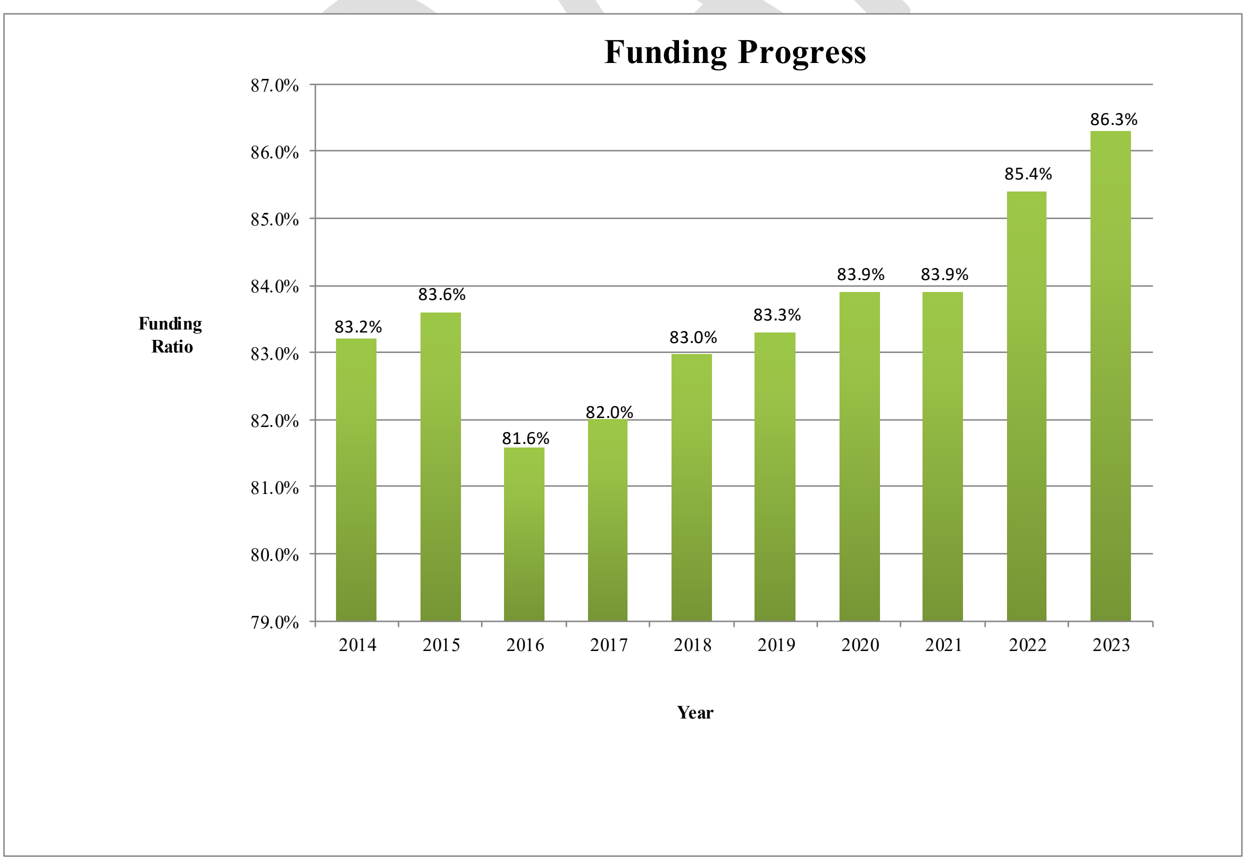
Member and employer data, contribution and benefit data for the 5 non-consolidated PLDs are specific to each PLD and are obtainable from the System.

Deductions from Fiduciary Net Position

Total deductions from Fiduciary Net Position restricted for benefits during fiscal year 2023 increased by \$67.8 million (5.9%). 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.

Comparatively, deductions from Fiduciary Net Position restricted for benefits during fiscal year 2022 increased by \$56.2 million (5.2%). There was an increase in the number of recipients receiving benefits, as well as the increased cost of benefits paid in 2022 combined with an increase in refunds and withdrawals of contributions and other deductions. Benefit payments in fiscal year 2022 exceeded contributions by \$261.6 million. Contributions totaled \$879.7 million, and benefit payments totaled \$1,141.3 million.

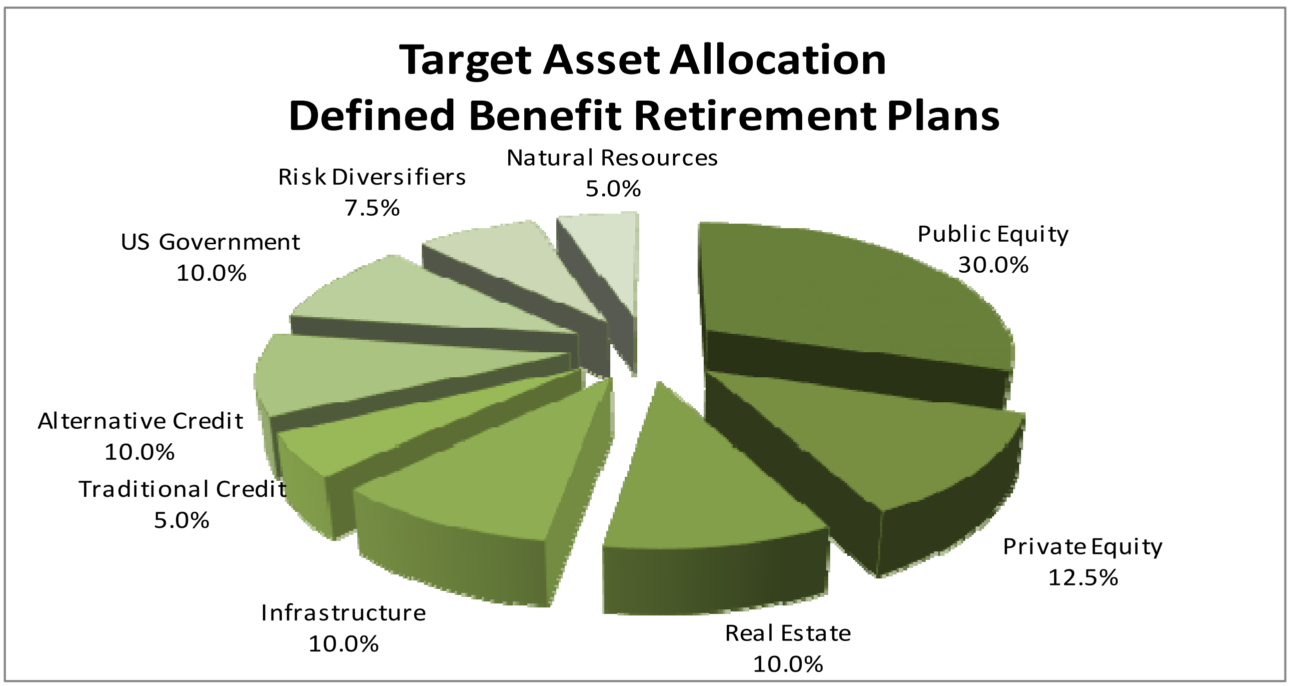
System Funding Status – Aggregate



At June 30, 2023, the State Employee and Teacher, Judicial, Legislative and PLD defined benefit plans were actuarially funded at 86.3%, up from 85.4% at June 30, 2022. As illustrated in the chart, the actuarial funded ratio of the System was 83.2% at June 30, 2014. Lower investment returns combined with increased contribution rates in 2015 contributed to keeping the funding ratio fairly level. 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 contributed to an increase in the funding level.

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.

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, 2023, total fair value of assets in these portfolios (together with the amounts otherwise managed) was $19.6 billion. The total fair value of assets as of June 30, 2022 and June 30, 2021, respectively, was $18.8 billion and $19.4 billion.

The investment return for the defined benefit plan assets, net of all fees, for the year ended June 30, 2023 was 4.7% The investment return for the years ended June 30, 2022 and June 30, 2021, respectively, was 3.3% and 26.5%. Investment returns in fiscal year 2023 were higher than in fiscal year 2022, due to generally higher returns across public market asset classes. Over the five, ten and thirty year periods ended June 30, 2023, the average annual investment return for the total fund was 8.4%, 8.3%, and 7.7%, respectively.

System Membership – Aggregate

The following membership counts for all of the defined benefit plans are derived from actuarial valuation data:

	2023	2022	% Change
Current active participants:			
Vested and nonvested	53,944	52,717	2.3%
Terminated participants			
Vested	12,212	11,688	4.5%
Inactives Due Refunds	49,603	48,984	1.3%
Retirees and beneficiaries receiving benefits	50,021	49,166	1.7%
Total Membership	**165,780**	**162,555**	**2.0%**

The number of active State employees at June 30, 2023 in the State Employee and Teacher plan was 12,689, an increase of 286 from June 30, 2022. The number of active Teachers at June 30, 2023 was 27,897, an increase of 453 from June 30, 2022. Membership for judges decreased by 2 to 58. Membership for Legislators was 178 at June 30, 2023, an increase of 4 from the previous year. Total active membership in the PLD Consolidated Plan at June 30, 2023 was 13,122, an increase of 760 from June 30, 2022. There are no active members in the 5 remaining non-consolidated plans.

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:

	2023	2022	% Change
Total OPEB Liability	$279.2	$267.9	4.2%
Plan Net Position	160.0	141.5	13.1%
Net OPEB Liability	**$119.2**	**$126.4**	**-5.7%**

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, 2023, the Fiduciary Net Position Held in Trust for the Investment Trust Fund was $432.7 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, 2023, the Fiduciary Net Position Held in Trust for the Investment Trust Fund was $103.0 million.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED, CONCLUDED)

June 30, 2023

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.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

STATEMENT OF FIDUCIARY NET POSITION

June 30, 2023
With Summarized Information as of June 30, 2022

	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	2023 Total	2022 Summarized
Assets														
Cash and cash equivalents (note 3)	$ 29,591,327	$ 329,370	$ 62,742	$ 60	$ 32,055	$ 2,655,031	$ -	$ 67,063	$ 40,444	$ -	$ 65,000,000	$ 103,000,000	$ 200,778,092	$ 108,716,021
Investments at fair value (note 3):														
Common equity securities	2,171,148,618	12,592,497	2,402,887	554,084,080	1,228,556	-	-	-	-	-	-	-	2,741,456,638	2,502,487,888
Common/collective trusts	4,532,882,357	26,290,374	5,016,701	1,156,806,094	2,564,956	11,725,537	144,348,087	20,876,114	60,798,543	17,962,661	367,710,336	-	6,346,981,760	6,561,218,051
Partnerships	8,314,334,417	48,222,509	9,201,767	2,121,844,770	4,704,712	-	-	-	-	-	-	-	10,498,308,175	9,750,976,391
Total investments	15,018,365,392	87,105,380	16,621,355	3,832,734,944	8,498,224	11,725,537	144,348,087	20,876,114	60,798,543	17,962,661	367,710,336	-	19,586,746,573	18,814,682,330
Receivables:														
Contributions and premiums (notes 6 and 7)	23,803,792	-	-	17,868,724	-	374,775	-	58,054	6,917	-	-	-	42,112,262	39,796,792
Accrued interest and dividends	4,031,760	23,384	4,462	1,028,918	2,281	-	-	-	-	-	-	-	5,090,805	4,640,102
Due from brokers for securities sold	185,062	1,073	205	47,228	105	-	-	-	-	-	-	-	233,673	33,435
Total receivables	28,020,614	24,457	4,667	18,944,870	2,386	374,775	-	58,054	6,917	-	-	-	47,436,740	44,470,329
Collateral on loaned securities (note 5)	5,433,140	31,512	6,013	1,386,555	3,074	-	-	-	-	-	-	-	6,860,294	10,280,553
Capital assets, net of accumulated depreciation	9,780,642	56,727	10,825	2,496,051	5,534	-	-	-	-	-	-	-	12,349,779	13,212,827
Total assets	15,091,191,115	87,547,446	16,705,602	3,855,562,480	8,541,273	14,755,343	144,348,087	21,001,231	60,845,904	17,962,661	432,710,336	103,000,000	19,854,171,478	18,991,362,060
Liabilities														
Accounts payable	2,559,664	14,846	2,833	653,234	1,448	257	3,163	458	-	-	-	-	3,235,903	5,492,115
Due to brokers for securities purchased	13,138	76	15	3,353	7	-	-	-	-	-	-	-	16,589	19,893,222
Other liabilities	8,536,181	69,111	13,188	6,420,558	6,743	3,394,249	4,486,507	773,971	49,306	1,633,198	3,200	-	25,386,212	24,633,511
Accrued investment management fees	1,493,211	8,661	1,653	381,072	845	1,779	21,906	3,168	-	2,711	28,080	-	1,943,086	19,482,455
Obligations under securities lending activities (note 5)	5,433,140	31,512	6,013	1,386,555	3,074	-	-	-	-	-	-	-	6,860,294	10,280,553
Total liabilities	18,035,334	124,206	23,702	8,844,772	12,117	3,396,285	4,511,576	777,597	49,306	1,635,909	31,280	-	37,442,084	79,781,856
Fiduciary net position - restricted for benefits	$ 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

The accompanying notes are an integral part of these financial statements.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Year Ended June 30, 2023
With Summarized Information for the Year Ended June 30, 2022

	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	2023 Total	2022 Summarized
Additions (subtractions):														
Investment income (loss):														
From investing activities:														
Net appreciation (depreciation) in the fair value of plan investments	$ 843,231,152	$ 4,871,260	$ 932,146	$ 214,670,117	$ 497,427	$ 1,230,969	$ 14,327,001	$ 2,075,018	$ 6,092,179	$ 1,789,615	$ 36,611,061	$ -	$ 1,126,327,945	$ (222,596,992)
Interest	7,743,481	44,850	8,550	1,971,159	4,434	1,791	19,704	2,876	-	-	-	-	9,796,845	634,362
Dividends	145,864,503	846,003	161,433	37,225,088	82,538	-	-	-	-	-	-	-	184,179,565	162,793,097
Less: Investment expenses	(115,338,887)	(670,694)	(127,472)	(29,284,963)	(68,544)	(7,602)	(82,840)	(12,103)	(46,911)	(10,090)	(109,188)	-	(145,759,294)	(131,397,306)
Net income (loss) from investing activities	881,500,249	5,091,419	974,657	224,581,401	515,855	1,225,158	14,263,865	2,065,791	6,045,268	1,779,525	36,501,873	-	1,174,545,061	(190,566,839)
From securities lending activities:														
Securities lending income	474,813	2,754	525	121,174	269	-	-	-	-	-	-	-	599,535	325,654
Borrower rebates refunded	2,663	15	3	680	2	-	-	-	-	-	-	-	3,363	95,256
Management fees	(71,165)	(413)	(79)	(18,161)	(40)	-	-	-	-	-	-	-	(89,858)	(48,798)
Net income from securities lending activities	406,311	2,356	449	103,693	231	-	-	-	-	-	-	-	513,040	372,112
Total investment income (loss)	881,906,560	5,093,775	975,106	224,685,094	516,086	1,225,158	14,263,865	2,065,791	6,045,268	1,779,525	36,501,873	-	1,175,058,101	(190,194,727)
Contributions and premiums (notes 6 and 7):														
Members	171,937,520	662,365	226,997	65,716,199	-	4,858,384	-	-	5,449,703	-	-	-	248,851,168	239,876,146
Employers	265,119,318	620,462	5,513	92,595,758	95,112	1,725,402	6,326,833	1,332,464	752,824	8,868	65,000,000	103,000,000	536,582,554	440,495,042
Non-employer contributing entities (note 1)	200,007,456	-	-	-	-	-	4,726,664	-	-	-	-	-	204,734,120	199,247,288
Transfers from other plans	-	729,841	-	147,934	-	-	-	-	244,600	-	-	-	1,122,375	341,271
Total contributions and premiums	637,064,294	2,012,668	232,510	158,459,891	95,112	6,583,786	11,053,497	1,332,464	6,447,127	8,868	65,000,000	103,000,000	991,290,217	879,959,747
Total additions	1,518,970,854	7,106,443	1,207,616	383,144,985	611,198	7,808,944	25,317,362	3,398,255	12,492,395	1,788,393	101,501,873	103,000,000	2,166,348,318	689,765,020
Deductions:														
Benefits paid	982,389,457	5,433,883	566,719	202,819,400	762,783	9,104,925	6,548,303	1,203,755	-	269,774	-	-	1,209,098,999	1,141,338,070
Refunds and withdrawals	19,254,811	-	88,681	8,325,191	-	-	-	-	5,247,286	-	-	-	32,915,969	28,504,748
Transfers to other plans	904,562	-	-	-	217,813	-	-	-	-	-	-	-	1,122,375	341,271
Claims processing expenses (note 7)	-	-	-	-	-	131,313	1,136,301	169,966	108,846	-	-	-	1,546,426	1,192,554
Administrative expenses	11,964,126	70,478	13,257	3,020,236	7,314	99,505	951,014	141,629	244,600	-	3,200	-	16,515,359	16,350,152
Total deductions	1,014,512,956	5,504,361	668,657	214,164,827	987,910	9,335,743	8,635,618	1,515,350	5,600,732	269,774	3,200	-	1,261,199,128	1,187,726,795
Net increase (decrease) in fiduciary net position	504,457,898	1,602,082	538,959	168,980,158	(376,712)	(1,526,799)	16,681,744	1,882,905	6,891,663	1,518,619	101,498,673	103,000,000	905,149,190	(497,961,775)
Fiduciary net position - restricted for benefits, beginning of year	14,568,697,883	85,821,158	16,142,941	3,677,737,550	8,905,868	12,885,857	123,154,767	18,340,729	53,904,935	14,808,133	331,180,383	-	18,911,580,204	19,409,541,979
Fiduciary net position - restricted for benefits, end 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

The accompanying notes are an integral part of these financial statements.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

NOTES TO FINANCIAL STATEMENTS

June 30, 2023
With Summarized Information for June 30, 2022

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, who serves ex-officio. All trustee terms are three years, except for the two-year term of 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

1. Overview of the Maine Public Employees Retirement System Benefit Plans (Continued)

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, 2023, participation in the defined contribution plans was as follows:

	401(a) Plan	457 Plan	403(b) Plan
Employers	7	77	1
Participants	95	1,020	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.

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. Summary of Significant Accounting Policies

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, 2022, 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.

2. Summary of Significant Accounting Policies (Continued)

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.

2. Summary of Significant Accounting Policies (Continued)

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.

2. Summary of Significant Accounting Policies (Concluded)

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. 96, Subscription-Based Information Technology Arrangements, for the year ended June 30. 2023. This statement defines subscription-based information technology (IT) arrangements 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.

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:

	2023	2022
Cash and Cash Equivalents	$ 200,778,092	$ 108,716,021
Investments	19,586,746,573	18,814,682,330
Total Fair Value	$ 19,787,524,665	$ 18,923,398,351

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 [1]	2023	2022
AAA	$ 1,226,461,555	$ 2,132,229,634
AA	101,773,568	26,790,410
A	446,272,591	109,314,443
BBB	477,119,889	122,709,648
Not Rated	-	956,800
Total Credit Risk Debt	$ 2,251,627,603 [2]	$ 2,392,000,935 [2]

[1] 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.

[2] Includes direct investments in debt securities held by the System as well as debt securities underlying investments in common/collective trusts. In 2023 and 2022, all amounts are from common/collective trusts.

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, 2023.

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, 2023.

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, 2023 and 2022, 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, 2023			
Investment Type	Fair Value	Less than 1 Year	1 to 6 Years	6 to 10 Years	10+ 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

		Maturities as of June 30, 2022			
Investment Type	Fair Value	Less than 1 Year	1 to 6 Years	6 to 10 Years	10+ Years
Common/ Collective Trusts	$ 2,392,000,935	$ 36,324,854	$ 1,318,277,989	$ 639,563,081	$ 397,835,011
Total	$ 2,392,000,935	$ 36,324,854	$ 1,318,277,989	$ 639,563,081	$ 397,835,011

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.

3. Cash and Cash Equivalents and Investments (Continued)

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, 2023 is highlighted in the following table:

Currency	Total
Australian Dollar	$ 81,382,839
Bermudian Dollar	318,534
Brazilian Real	26,535,914
British Pound Sterling	233,980,649
Canadian Dollar	132,965,206
Chilean Peso	2,693,769
Chinese Yuan Renminbi	134,669,367
Colombian Peso	543,968
Czech Koruna	773,114
Danish Krone	33,408,766
Egyptian Pound	388,667
Euro	1,289,780,200
Hong Kong Dollar	36,006,579
Hungarian Forint	1,141,412
India Rupee	74,179,436
Indonesian Rupiah	9,802,719
Japanese Yen	253,093,034
Korean Won	60,190,586
Kuwaiti Dinar	4,062,296
Macanese Pataca	599,510
Malaysian Ringgit	6,530,835
Mexican Peso	13,722,077
New Israeli Sheqel	7,164,107
New Zealand Dollar	3,035,186
Peruvian Sol	870,845
Philippine Peso	3,196,649
Polish Zloty	3,771,065
Qatar Riyal	4,431,700
Russian Ruble	805
Saudi Arabian Riyal	20,719,424
Singapore Dollar	16,100,172
South African Rand	15,298,564
Swedish Krona	33,730,208
Swiss Franc	113,900,955
Taiwan Dollar	75,090,752
Thai Baht	9,426,637
Turkish Lira	2,688,788
United Arab Emirates Dirham	6,355,366
Total	$ 2,719,823,737

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, 2023, the value of these investments is approximately $10.4 billion and the remaining funding commitment is approximately $3.0 billion.

For the year ended June 30, 2023, the annual money-weighted rate of return on all defined benefit plan investments, net of investment expenses, was 4.7%. For the year ended June 30, 2023 the annual money-weighted rate of return on all OPEB plan investments, net of investment expense, was 11.0%. 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, 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			

3. Cash and Cash Equivalents and Investments (Continued)

	June 30, 2022	Fair Value Measurements Using Level 1	Level 2	Level 3
Investments by fair value level				
Common Equity	$ 2,502,487,888	$ 2,502,487,888	$ -	$ -
Common/Collective Trusts	6,561,218,051	-	6,561,218,051	-
Collateral from loaned securities	10,280,553	-	10,280,553	-
Total investments by fair value level	9,073,986,492	$ 2,502,487,888	$ 6,571,498,604	$ -
Investments measured at net asset value (NAV)				
Alternative Credit	1,256,693,328			
Infrastructure	1,999,797,510			
Natural Resources	956,469,081			
Private Equity	3,628,981,470			
Real Estate	1,909,035,002			
Total investments measured at NAV	9,750,976,391			
Total investments measured at fair value	$ 18,824,962,883			

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.

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:

	June 30, 2023	
Investments Measured at NAV	Fair Value	Unfunded Commitments
Alternative Credit [1]	$ 1,642,543,480	$ 660,676,171
Infrastructure [2]	2,297,418,917	587,308,315
Natural Resources [3]	982,880,475	216,635,744
Private Equity [4]	3,679,607,538	1,134,338,166
Real Estate [5]	1,895,857,765	447,044,551
Total investments measured at NAV	$ 10,498,308,175	$ 3,046,002,947

	June 30, 2022	
Investments Measured at NAV	Fair Value	Unfunded Commitments
Alternative Credit [1]	$ 1,256,693,328	$ 706,529,331
Infrastructure [2]	1,999,797,510	933,516,913
Natural Resources [3]	956,469,081	219,184,033
Private Equity [4]	3,628,981,470	1,114,996,820
Real Estate [5]	1,909,035,002	605,678,679
Total investments measured at NAV	$ 9,750,976,391	$ 3,579,905,776

(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

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., asset-backed 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

4. Derivative Securities (Concluded)

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, 2023 or 2022 or during the years then ended.

5. Securities Lending

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, 2023 and 2022.

Cash collateral is invested in a short-term investment account which had an interest sensitivity of 1 and 3 days as of June 30, 2023 and 2022, 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 2023 and 2022, 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, 2023 and 2022, 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.

5. Securities Lending (Concluded)

Aggregate securities on loan by asset class are as follows:

	2023	2022
Domestic equity securities on loan	$ 115,182,125	$ 143,149,657
Aggregate securities lending collateral:		
Short-term investment collateral pool	$ 6,860,294	$ 10,280,553
Non-cash collateral	110,973,315	136,387,502
Total collateral	$ 117,833,609	$ 146,668,055
Collateral ratio	102.3%	102.5%

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, 2023, there were 239 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:

	2023	2022
Current participants:		
Vested and non-vested	40,586	40,121
Terminated participants:		
Vested	9,202	8,843
Inactive due refunds	39,038	38,807
Retirees and beneficiaries receiving benefits	39,038	38,408
	127,864	126,179

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:

	2023	2022
Current participants:		
Vested and non-vested	58	60
Terminated participants:		
Vested	3	2
Inactive due refunds	1	1
Retirees and beneficiaries receiving benefits	92	90
	154	153

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:

	2023	2022
Current participants:		
Vested and non-vested	178	174
Terminated participants:		
Vested	142	119
Inactive due refunds	96	95
Retirees and beneficiaries receiving benefits	232	223
	648	611

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, 2023, there were 327 employers participating in the plan.

Plan membership counts for the PLD Consolidated Plan at June 30 are as follows:

	2023	2022
Current participants:		
Vested and non-vested	13,122	12,362
Terminated participants:		
Vested	2,865	2,724
Inactive due refunds	10,467	10,080
Retirees and beneficiaries receiving benefits	10,615	10,400
	37,069	35,566

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, 2023, there were 5 employers in the plan.

Plan membership counts for the PLD Agent Plan at June 30 are as follows:

	2023	2022
Current participants:		
Vested and non-vested	–	–
Terminated participants:		
Vested	–	–
Inactive due refunds	1	1
Retirees and beneficiaries receiving benefits	44	45
	45	46

6. Defined Benefit Plans (Continued)

Benefits

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.

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, 2023, were as follows:

Total pension liability	$ 17,520.5
Plan fiduciary net position	15,073.1
Net pension liability	$ 2,447.4
Plan fiduciary net position as a percentage of the total pension liability	86.0%

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, 2023, were as follows:

Total pension liability	$ 78.6
Plan fiduciary net position	87.4
Net pension asset	$ (8.8)
Plan fiduciary net position as a percentage of the total pension liability	111.2%

Net Pension Liability – Legislative Plan

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, 2023, were as follows:

Total pension liability	$ 11.4
Plan fiduciary net position	16.7
Net pension asset	$ (5.3)
Plan fiduciary net position as a percentage of the total pension liability	146.3%

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, 2023, were as follows:

Total pension liability	$ 4,165.8
Plan fiduciary net position	3,846.7
Net pension liability	$ 319.1
Plan fiduciary net position as a percentage of the total pension liability	92.3%

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, 2023 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

6. Defined Benefit Plans (Continued)

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, 2023, 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, 2022, 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, 2023 and June 30, 2022			
Inflation Rate	2.75%			
Annual Salary Increases, including Inflation	For June 30, 2023 and June 30, 2022			
	State employees, 3.26% - 9.43%; Teachers, 2.80% - 13.03%	2.75%	2.75%	2.75% - 11.48%
Cost of Living Benefit Increases	2.20%			1.91%
Mortality Rates	For June 30, 2023 and June 30, 2022			
	State Employee, Judicial, and Legislative: based on the 2010 Public Plan 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 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.

The actuarial assumptions used in the June 30, 2023 and June 30, 2022 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

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, 2023 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Public equities	6.0%
US Government	2.3
Private equity	7.6
Real assets	
Real estate	5.2
Infrastructure	5.3
Natural resources	5.0
Traditional Credit	3.2
Alternative Credit	7.4
Diversifiers	5.0

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:

6. Defined Benefit Plans (Continued)

	1% Decrease (5.5%)	Current Rate (6.5%)	1% Increase (7.5%)
Net Pension Liability/(Asset):			
State Employee and Teacher Plan	$ 4,618,508,857	$ 2,447,387,218	$ 635,253,714
Judicial Plan	(1,881,546)	(8,837,089)	(14,906,872)
Legislative Plan	(4,101,087)	(5,275,723)	(6,264,896)
PLD Consolidated Plan	874,343,735	319,095,093	(138,939,920)

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 $451.7 million and $475.2 million, and for judges in the total amount of $620 thousand and $868 thousand, for the years ended June 30, 2023 and 2022, respectively. There were no contributions due from the State of Maine on behalf of legislators in 2023 or 2022.

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 2023 and 2022 are as follows:

6. Defined Benefit Plans (Concluded)

Contribution Rates[1] (effective July 1 through June 30 of each fiscal year)

	2023	2022
State:		
Employees[2]	7.65 – 8.65%	7.65 – 8.65%
Employer[2]	22.09 – 47.23%	21.95 – 46.97%
Teachers:		
Employees	7.65%	7.65%
Employer	3.84%	3.84%
Non-employer entity	14.29%	14.29%
Judges:		
Employees	7.65%	7.65%
Employer	6.95%	6.99%
Legislative:		
Employees	7.65%	7.65%
Employer	0.00%	0.00%
Participating local districts:		
Employees[2]	3.35 – 9.7%	3.85 – 9.7%
Employers[2]	5.6 – 14.7%	5.5 – 15.2%

[1] 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.

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, 2023 there were 234 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:

	2023	2022
Retired State Employees	8,977	8,741
Retired Teachers	8,039	7,534
Active State Employees	11,399	11,698
Active Teachers	15,374	15,029
	43,789	43,002

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, 2023 there were 146 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:

	2023	2022
Retired PLD Employees	3,015	2,879
Active PLD Employees	5,248	5,498
	8,263	8,377

Benefits

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.

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 employers with retired PLD employees are required to remit a premium of $0.48 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, 2023, were as follows:

Total OPEB liability	$ 245.4
Plan fiduciary net position	139.8
Net OPEB liability	$ 105.6
Plan fiduciary net position as a percentage of the total OPEB liability	57.0%

Net OPEB Liability – PLD Plan

The components of the net OPEB liability of the PLD Plan participating employers, stated in millions of dollars as of June 30, 2023, were as follows:

Total OPEB liability	$ 33.8
Plan fiduciary net position	20.2
Net OPEB liability	$ 13.6
Plan fiduciary net position as a percentage of the total OPEB liability	59.7%

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.

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, 2023 are displayed in the table below. The valuation date is June 30, 2023. These same assumptions were used as of June 30, 2022 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, 2023 and June 30, 2022		
Inflation Rate	2.75%		
Annual Salary Increases, including Inflation	For June 30, 2023 and June 30, 2022		
	State employees: 3.26% - 9.43%; Judges and Legislators: 2.75%	2.80 - 13.03%	2.75% - 11.48%
Mortality Rates	For June 30, 2023 and June 30, 2022		
	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.
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		

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, 2023, there were 14 years remaining in the amortization schedule for state employees and teachers, and 7 years remaining for PLD employees.

The actuarial assumptions used in the June 30, 2023 and June 30, 2022 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, 2023 are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Public equity	6.0%
Real estate	5.2
Traditional credit	3.2
US Government securities	2.3

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 2023 and 2022. 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.

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% Decrease (5.5%)	Current Rate (6.5%)	1% Increase (7.5%)
Net OPEB Liability	$142,317,999	$105,613,652	$ 75,873,611

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% Decrease (5.5%)	Current Rate (6.5%)	1% Increase (7.5%)
Net OPEB Liability	$ 18,924,997	$ 13,644,644	$ 9,400,146

Premiums

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 $.91 per month for every $1,000 of coverage. The State remits premiums for retired teachers at a rate of $.33 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 $.48 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 $12.8 and $12.2 million, respectively, for the years ended June 30, 2023 and 2022.

7. Group Life Insurance Plan (Concluded)

Benefits

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 $1.4 million and $1.1 million for the years ended June 30, 2023 and 2022, 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 6.85% or 7.6% 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 10.3% of annual covered payroll for 2023 and 2022, respectively.

9. The System's Employee Benefits (Concluded)

The employer contributions on behalf of its employees, equal to the required contribution, were $901,534 and $790,723 for 2023 and 2022, 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 $0.48 per $1,000 of coverage for the 2023 and 2022 fiscal years. The total premiums the System paid on behalf of its active employees, equal to the required contributions, were $46,471 and $41,086 for 2023 and 2022, 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 2023 and 2022. The OPEB liability for this plan is immaterial and the Plan's assets exceed its actuarial liability at June 30, 2023 and 2022. 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 $8,868 and $8,759 for 2023 and 2022, 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.

REQUIRED SUPPLEMENTAL SCHEDULE

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 *

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability										
Service cost	$ 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	1,080,895,886	1,052,840,572	989,560,149	968,243,358	934,009,648	914,535,911	886,834,221	882,785,134	861,682,508	842,229,062
Changes of benefit terms	6,574,283	104,916,162	-	1,223,156	-	-	-	-	9,778,106	-
Differences between expected and actual experience	174,376,812	107,921,791	25,575,263	162,293	208,719,412	34,151,279	95,207,531	81,506,700	(44,287,643)	(17,694,276)
Changes of assumptions	-	-	1,175,893,728	-	-	191,998,939	-	30,436,605	-	167,650,573
Benefit payments, including refunds of member contributions	(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	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	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)	$ 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
Plan fiduciary net position										
Contributions - member	$ 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	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	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)	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	(1,001,644,268)	(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	(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	(904,562)	(341,271)	(384,565)	(2,193,752)	(311,233)	-	(124,178)	(6,342,010)	-	-
Net change in fiduciary net position	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	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)	$ 15,073,155,781	$ 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
Plan's net pension liability, ending (a)-(b)	$ 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	86.03%	85.79%	90.90%	81.03%	82.73%	82.90%	80.78%	76.21%	81.18%	83.91%
Covered payroll	$ 2,312,413,537	$ 2,221,410,193	$ 2,096,365,332	$ 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	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.

* This information will be presented each year until 10 years of such information is available.

See accompanying independent auditors' report.

REQUIRED SUPPLEMENTAL SCHEDULE

SCHEDULE OF HISTORICAL PENSION INFORMATION
JUDICIAL PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS
LAST TEN FISCAL YEARS *

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability										
Service cost	$ 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	$ 1,530,119
Interest	4,916,069	4,875,889	4,822,289	4,644,191	4,582,454	4,442,404	4,358,175	4,154,433	3,863,455	3,773,959
Changes of benefit terms	18,706	273,590	-	-	-	-	-	2,016,584	27,931	-
Differences between expected and actual experience	(110,488)	(150,154)	1,066,613	942,561	(1,087,164)	468,895	(893,352)	(1,745,956)	2,237,833	(324,891)
Changes of assumptions	-	-	836,266	-	-	697,807	-	2,489,800	-	426,150
Benefit payments, including refunds of member contributions	(5,433,883)	(5,094,485)	(4,681,415)	(4,314,558)	(4,067,506)	(3,804,709)	(3,651,927)	(3,501,911)	(3,383,995)	(3,219,480)
Net change in total pension liability	1,160,466	1,638,121	3,590,454	2,880,570	1,024,616	3,291,780	1,278,873	4,809,654	4,350,975	2,185,857
Total pension liability, beginning	77,425,685	75,787,564	72,197,110	69,316,540	68,291,924	65,000,144	63,721,271	58,911,617	54,560,642	52,374,785
Total pension liability, ending (a)	$ 78,586,151	$ 77,425,685	$ 75,787,564	$ 72,197,110	$ 69,316,540	$ 68,291,924	$ 65,000,144	$ 63,721,271	$ 58,911,617	$ 54,560,642
Plan fiduciary net position										
Contributions - member	$ 620,462	$ 650,172	$ 635,871	$ 616,095	$ 620,075	$ 603,875	$ 584,451	$ 549,845	$ 549,691	$ 528,192
Contributions - employer	662,365	867,895	738,939	715,963	1,212,666	1,179,328	1,144,445	1,077,545	979,281	932,223
Contributions - non-employer	-	-	-	-	-	-	-	-	-	-
Net investment income (loss)	5,093,775	(453,509)	19,279,640	2,164,283	4,709,445	6,606,904	7,799,507	129,372	1,055,346	8,416,042
Benefit payments, including refunds of member contributions	(5,433,883)	(5,094,485)	(4,681,415)	(4,314,558)	(4,067,506)	(3,804,709)	(3,651,927)	(3,501,911)	(3,383,995)	(3,219,480)
Administrative expenses	(70,478)	(72,167)	(67,680)	(69,406)	(68,475)	(61,708)	(56,436)	(47,577)	(49,399)	(41,681)
Other	729,841	29,746	473,431	764,902	(2,604)	-	-	6,342,010	-	-
Net change in fiduciary net position	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)	6,615,296
Plan fiduciary net position, beginning	85,821,158	89,893,506	73,514,720	73,637,441	71,233,840	66,710,149	60,890,109	56,340,825	57,189,901	50,574,605
Plan fiduciary net position, ending (b)	$ 87,423,240	$ 85,821,158	$ 89,893,506	$ 73,514,720	$ 73,637,441	$ 71,233,840	$ 66,710,149	$ 60,890,109	$ 56,340,825	$ 57,189,901
Plan's net pension (asset) liability, ending (a)-(b)	$ (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	$ (2,629,259)
Plan fiduciary net position as a percentage of the total pension liability	111.25%	110.84%	118.61%	101.83%	106.23%	104.31%	102.63%	95.56%	95.64%	104.82%
Covered payroll	$ 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	$ 6,742,444
Plan net pension (asset) liability as a percentage of covered payroll	(102.06)%	(98.74)%	(169.71)%	(16.36)%	(53.23)%	(37.27)%	(22.38)%	39.39%	35.78%	(39.00)%

See notes to historical pension and OPEB information.

* This information will be presented each year until 10 years of such information is available.

See accompanying independent auditors' report.

REQUIRED SUPPLEMENTAL SCHEDULE

SCHEDULE OF HISTORICAL PENSION INFORMATION
LEGISLATIVE PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS
LAST TEN FISCAL YEARS *

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability										
Service cost	$ 311,209	$ 375,207	$ 286,472	$ 334,862	$ 297,324	$ 282,199	$ 264,807	$ 411,624	$ 451,393	$ 400,072
Interest	702,689	698,694	657,782	611,447	577,720	565,088	530,313	547,268	544,526	510,813
Changes of benefit terms	5,513	43,111	-	-	-	-	-	-	4,418	-
Differences between expected and actual experience	64,885	(199,354)	180,989	413,313	238,611	(90,816)	157,775	(245,867)	(508,125)	(46,483)
Changes of assumptions	-	-	374,000	-	-	99,915	-	(146,529)	-	85,783
Benefit payments, including refunds of member contributions	(655,401)	(618,847)	(549,461)	(697,697)	(606,841)	(459,746)	(469,043)	(445,331)	(439,112)	(317,606)
Net change in total pension liability	428,895	298,811	949,782	661,925	506,814	396,640	483,852	121,165	53,100	632,579
Total pension liability, beginning	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	6,872,614
Total pension liability, ending (a)	$ 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
Plan fiduciary net position										
Contributions - member	$ 226,997	$ 161,937	$ 214,905	$ 156,306	$ 220,611	$ 153,881	$ 202,388	$ 137,893	$ 193,356	$ 139,501
Contributions - employer	5,513	43,111	-	-	-	-	-	-	4,418	3,857
Contributions - non-employer	-	-	-	-	-	-	-	-	-	-
Net investment income (loss)	975,107	(89,007)	3,559,227	390,165	845,408	1,176,463	1,366,222	47,890	206,454	1,622,296
Benefit payments, including refunds of member contributions	(655,401)	(618,847)	(549,461)	(697,697)	(606,841)	(459,746)	(469,043)	(445,331)	(439,112)	(317,606)
Administrative expenses	(13,257)	(13,374)	(12,383)	(12,458)	(12,262)	(11,002)	(10,003)	(9,353)	(9,584)	(7,975)
Other	-	-	(3,271)	365,766	45,285	-	-	-	-	-
Net change in fiduciary net position	538,959	(516,180)	3,209,017	202,082	492,201	859,596	1,089,564	(268,901)	(44,468)	1,440,073
Plan fiduciary net position, beginning	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	9,679,957
Plan fiduciary net position, ending (b)	$ 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's net pension asset ending (a)-(b)	$ (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)	$ (3,614,837)
Plan fiduciary net position as a percentage of the total pension liability	146.25%	147.06%	156.01%	138.25%	146.12%	149.02%	145.73%	140.72%	146.54%	148.16%
Covered payroll	$ 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	$ 2,534,740
Plan net pension liability as a percentage of covered payroll	(178.08)%	(184.41)%	(213.43)%	(132.24)%	(157.20)%	(154.79)%	(140.80)%	(120.74)%	(139.16)%	(142.61)%

See notes to historical pension and OPEB information.

* This information will be presented each year until 10 years of such information is available.

See accompanying independent auditors' report.

SCHEDULE OF HISTORICAL PENSION INFORMATION
PLD CONSOLIDATED PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF CHANGES IN THE PLAN'S NET PENSION LIABILITY AND RELATED RATIOS
LAST TEN FISCAL YEARS *

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability										
Service cost	$ 104,583,699	$ 93,851,265	$ 86,845,610	$ 82,715,056	$ 78,317,217	$ 76,190,510	$ 76,271,766	$ 74,208,414	$ 75,805,492	$ 72,651,025
Interest	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	178,293,576
Changes of benefit terms	20,744,234	16,214,107	-	29,759,516	-	(106,123,366)	-	-	-	-
Differences between expected and actual experience	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)	19,939,857
Changes of assumptions	-	-	161,866,111	-	-	46,439,540	-	50,884,219	37,593,598	-
Benefit payments, including refunds of member contributions	(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)	(127,161,357)
Net change in total pension liability	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	143,723,101
Total pension liability, beginning	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	2,465,934,744
Total pension liability, ending (a)	$ 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
Plan fiduciary net position										
Contributions - member	$ 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	$ 33,210,510
Contributions - employer	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	32,706,160
Refund of IUUAL account balances	-	-	-	-	-	-	-	-	(43,000,526)	-
Net investment income (loss)	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	361,125,177
Benefit payments, including refunds of member contributions	(211,144,591)	(194,576,381)	(182,691,917)	(174,752,167)	(165,399,679)	(152,087,885)	(146,163,566)	(139,919,680)	(135,414,526)	(127,161,358)
Administrative expenses	(3,020,237)	(3,011,451)	(2,773,340)	(2,797,728)	(2,706,977)	(2,411,666)	(2,209,324)	(2,028,294)	(2,117,266)	(1,779,304)
Other	147,934	89,325	(306,895)	27,683,461	48,552	(386,621)	(62,201)	(217,338)	-	-
Net change in fiduciary net position	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)	298,101,185
Plan fiduciary net position, beginning	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	2,157,675,486
Plan fiduciary net position, ending (b)	$ 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's net pension (asset) liability, ending (a)-(b)	$ 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	$ 153,881,174
Plan fiduciary net position as a percentage of the total pension liability	92.34%	93.26%	100.86%	88.35%	90.62%	91.14%	86.43%	81.61%	88.27%	94.10%
Covered payroll	$ 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	$ 460,029,637
Plan net pension (asset) liability as a percentage of covered payroll	37.22%	35.72%	(4.97)%	61.93%	51.47%	48.77%	75.46%	101.81%	64.11%	33.45%

See notes to historical pension and OPEB information.

* This information will be presented each year until 10 years of such information is available.

See accompanying independent auditors' report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL PENSION INFORMATION
STATE EMPLOYEE AND TEACHER PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last Ten Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 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	$ 304,328,386
Contributions in relation to the actuarially determined contribution	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	304,328,386
Contribution deficiency (excess)	$ –	$ –	$ –	–	$ –	$ –	$ –	$ –	$ –	$ –
Covered payroll	$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	$1,676,857,294
Contributions as a percentage of covered payroll	19.81%	19.73%	19.97%	19.96%	18.22%	18.24%	16.81%	16.62%	17.78%	18.15%

See notes to historical pension and OPEB information.

See accompanying independent auditor's report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL PENSION INFORMATION
JUDICIAL PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last Ten Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 601,756	$ 594,305	$ 738,939	$ 715,963	$ 1,212,666	$ 1,179,328	$ 1,144,445	$ 1,077,545	$ 951,351	$ 932,223
Contributions in relation to the actuarially determined contribution	601,756	594,305	738,939	715,963	1,212,666	1,179,328	1,144,445	1,077,545	951,351	932,223
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 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	$ 6,742,444
Contributions as a percentage of covered payroll	6.95%	6.99%	8.89%	8.89%	14.94%	14.94%	14.98%	14.99%	13.24%	13.83%

See notes to historical pension and OPEB information.

See accompanying independent auditor’s report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL PENSION INFORMATION
LEGISLATIVE PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last Ten Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Contributions in relation to the actuarially determined contribution	–	–	–	–	–	–	–	–	–	–
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 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	$ 2,534,740
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 pension and OPEB information.

See accompanying independent auditor's report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL PENSION INFORMATION
PLD CONSOLIDATED PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last Ten Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 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	$ 35,263,952
Contributions in relation to the actuarially determined contribution	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	35,263,952
Contribution deficiency (excess)	$ –	$ –	$ –	–	$ –	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 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	$ 460,029,637
Contributions as a percentage of covered payroll	10.80%	10.60%	10.60%	10.40%	10.30%	9.90%	9.47%	9.00%	8.10%	7.67%

See notes to historical pension and OPEB information.

See accompanying independent auditor's report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL PENSION INFORMATION
ALL DEFINED BENEFIT PLANS

June 30, 2023
(UNAUDITED)

SCHEDULE OF INVESTMENT RETURNS
Last Ten Fiscal Years *

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses	4.7%	3.4%	26.5%	1.8%	7.08%	10.30%	12.49%	0.48%	1.98%	16.66%

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.

See accompanying independent auditor's report.

REQUIRED SUPPLEMENTAL SCHEDULES

SCHEDULE OF HISTORICAL OPEB INFORMATION
STATE EMPLOYEE AND TEACHER PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF CHANGES IN THE PLAN'S NET OPEB LIABILITY AND RELATED RATIOS

*Last Ten Fiscal Years**

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability							
Service cost	$ 2,855,954	$ 2,756,810	$ 2,683,027	$ 2,190,471	$ 2,131,845	$ 2,122,079	$ 2,065,283
Interest	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	-	365,044	-	589,478	-	1,957,220	-
Changes of assumptions	-	-	291,076	-	-	3,199,639	-
Benefit payments, including refunds of member contributions	(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	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	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)	$ 245,450,162	$ 235,060,087	$ 223,515,902	$ 213,308,907	$ 204,431,998	$ 196,262,903	$ 183,722,693
Plan fiduciary net position for retirees							
Contributions - member	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Contributions - employer	11,053,497	10,584,751	9,866,578	9,310,849	7,756,442	7,638,453	6,921,228
Net investment income	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	(7,684,604)	(6,817,681)	(6,613,935)	(8,177,754)	(7,118,082)	(7,269,810)	(6,003,967)
Administrative expenses	(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	16,681,743	(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	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)	$ 139,836,511	$ 123,154,768	$ 140,599,594	$ 105,616,489	$ 100,616,782	$ 94,286,629	$ 86,882,864
Net OPEB liability, ending (a)-(b)	$ 105,613,651	$ 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	56.97%	52.39%	62.90%	49.51%	49.22%	48.04%	47.29%
Covered payroll	$ 1,644,477,452	$ 1,600,464,673	$ 1,525,192,949	$ 1,484,372,700	$ 1,380,619,384	$ 1,343,668,500	$ 1,277,009,000
Net OPEB liability as a percentage of covered payroll	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.

See accompanying independent auditors' report.

REQUIRED SUPPLEMENTAL SCHEDULES

SCHEDULE OF HISTORICAL OPEB INFORMATION
PLD CONSOLIDATED PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF CHANGES IN THE PLAN'S NET OPEB LIABILITY AND RELATED RATIOS
*Last Ten Fiscal Years**

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability							
Service cost	$ 308,456	$ 308,456	$ 309,875	$ 522,353	$ 488,545	$ 442,863	$ 619,735
Interest	2,109,659	2,121,985	1,962,386	1,941,994	1,832,881	1,706,200	1,616,253
Changes of benefit terms	-	-	-	(636,731)	-	-	-
Differences between expected and actual experience	-	(149,516)	-	727,053	-	2,045,678	-
Changes of assumptions	-	-	906,229	(9,045,090)	893,851	1,554,074	(5,591,242)
Benefit payments, including refunds of member contributions	(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	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	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)	$ 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	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Contributions - employer	1,332,464	1,277,664	1,186,563	1,127,014	1,100,509	1,069,640	1,037,124
Net investment income	2,065,791	(3,031,547)	4,987,761	752,517	1,037,784	1,333,324	1,738,914
Benefit payments, including refunds of member contributions	(1,373,721)	(988,402)	(1,223,890)	(1,589,460)	(1,581,540)	(1,530,346)	(1,394,586)
Administrative expenses	(141,629)	(124,368)	(127,631)	(164,654)	(119,519)	(133,624)	(238,856)
Other	-	-	-	-	-	-	-
Net change in fiduciary net position for retirees	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	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)	$ 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)	$ 13,644,644	$ 14,483,155	$ 10,323,979	$ 13,192,182	$ 21,397,480	$ 20,200,977	$ 16,721,502
Plan fiduciary net position for retirees as a percentage of the total OPEB liability	59.71%	55.88%	67.26%	55.40%	43.18%	43.92%	47.42%
Covered payroll	$ 309,318,600	$ 301,040,000	$ 299,768,500	$ 291,745,500	$ 283,884,893	$ 276,287,000	$ 260,552,680
Net OPEB liability as a percentage of covered payroll	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.

See accompanying independent auditors' report.

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL OPEB INFORMATION
STATE EMPLOYEE AND TEACHER PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
*Last Ten Fiscal Years**

	2023	2022	2021	2020
Actuarially determined contribution	$ 11,593,184	$ 11,242,005	$ 10,964,907	$ 10,671,443
Contributions in relation to the actuarially determined contribution	11,053,496	10,584,751	9,866,578	9,310,849
Contribution deficiency	$ 539,688	$ 657,254	$ 1,098,329	$ 1,360,594
Covered payroll	$ 1,644,477,452	$ 1,600,464,673	$ 1,525,192,949	$ 1,484,372,700
Contributions as a percentage of covered payroll	0.67%	0.66%	0.65%	0.63%

See notes to historical pension and OPEB information.

*This information will be presented each year until 10 years of such information is available.

See accompanying independent auditor's report.

	2019	2018	2017
	$ 9,040,284	$ 8,805,704	$ 8,239,903
	7,756,442	7,638,453	6,921,228
	$ 1,283,842	$ 1,167,251	$ 1,318,675
	$ 1,380,619,384	$ 1,343,668,500	$ 1,277,009,000
	0.56%	0.57%	0.54%

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL OPEB INFORMATION
PLD CONSOLIDATED PLAN

June 30, 2023
(UNAUDITED)

SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last Ten Fiscal Years

	2023	2022	2021	2020
Actuarially determined contribution	$ 1,996,217	$ 1,942,791	$ 1,586,809	$ 1,544,340
Contributions in relation to the actuarially determined contribution	1,332,464	1,277,664	1,186,563	1,127,014
Contribution deficiency	$ 663,753	$ 665,127	$ 400,246	$ 417,326
Covered payroll	$ 309,318,600	$ 301,040,000	$ 299,768,500	$ 291,745,500
Contributions as a percentage of covered payroll	0.43%	0.42%	0.40%	0.39%

See notes to historical pension and OPEB information.

*This information will be presented each year until 10 years of such information is available.

See accompanying independent auditor's report.

	2019	2018	2017
	$ 1,287,098	$ 1,252,650	$ 1,146,324
	1,100,509	1,069,640	1,037,124
	$ 186,589	$ 183,010	$ 109,200
	$ 283,884,893	$ 276,287,000	$ 260,552,680
	0.39%	0.39%	0.40%

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF HISTORICAL OPEB INFORMATION
ALL OPEB PLANS

June 30, 2023
(UNAUDITED)

SCHEDULE OF INVESTMENT RETURNS
*Last Ten Fiscal Years **

	2023	2022	2021	2020	2019	2018	2017
Annual money-weighted rate of return, net of investment expenses	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.

See accompanying independent auditor's report.

1. Basis of Presentation

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, 2023, 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.

2. <u>Actuarial Methods and Assumptions – Defined Benefit Plans (Concluded)</u>

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:

<table>
<tr><th></th><th>State Employee and Teacher Plan</th><th>Judicial Plan</th><th>Legislative Plan</th><th>PLD Consolidated Plan</th></tr>
<tr><td>Investment Rate of Return</td><td colspan="3">Per annum, compounded annually: 6.50% for 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 and June 30, 2014</td><td>Per annum, compounded annually: 6.50% for 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; 7.25% for June 30, 2014</td></tr>
<tr><td>Inflation Rate</td><td colspan="4">2.75% for June 30, 2023, June 30, 2022, June 30, 2021, June 30, 2020, June 30, 2019, June 30, 2018, June 30, 2017, and June 30, 2016; 3.50% for June 30, 2015 and June 30, 2014</td></tr>
<tr><td rowspan="6">Annual Salary Increases, including Inflation</td><td colspan="4">For the period ended June 30, 2023, June 30, 2022 and June 30, 2021</td></tr>
<tr><td>State employees, 3.26% - 9.43%;
Teachers, 2.80% - 13.03%</td><td>2.75%</td><td>2.75%</td><td>2.75% - 11.48%</td></tr>
<tr><td colspan="4">For the periods ended June 30, 2020; June 30, 2019; June 30, 2018; June 30, 2017; and June 30, 2016:</td></tr>
<tr><td>State employees, 2.75% - 8.75%;
Teachers, 2.75% - 14.50%</td><td>2.75%</td><td>2.75%</td><td>2.75% - 9.00%</td></tr>
<tr><td colspan="4">For the periods ended June 30, 2015 and June 30, 2014:</td></tr>
<tr><td>State employees, 3.50% - 10.50%;
Teachers, 3.50% - 13.50%</td><td>3.50%</td><td>3.50%</td><td>3.50% - 9.50%</td></tr>
<tr><td>Cost of Living Benefit Increases</td><td colspan="3">2.20% for June 30, 2023, June 30, 2022, June 30, 2021, June 30, 2020, June 30, 2019, June 30, 2018, June 30, 2017 and June 30, 2016; 2.55% for June 30, 2015 and June 30, 2014</td><td>1.91% for 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 and 3.12% for June 30, 2014</td></tr>
<tr><td rowspan="6">Mortality Rates</td><td colspan="4">For the period ended June 30, 2023, June 30, 2022 and June 30, 2021</td></tr>
<tr><td colspan="3">State Employee, Judicial, and Legislative: based on the 2010 Public Plan 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 Mortality Table, for males and females, projected generationally using the RPEC_2020 model.</td><td>Based on the 2010 Public Plan General Benefits-Weighted Healthy Retiree Mortality Table, for males and females, projected generationally using the RPEC_2020 model.</td></tr>
<tr><td colspan="4">For the periods ended June 30, 2020; June 30, 2019; June 30, 2018; June 30, 2017; and June 30, 2016:</td></tr>
<tr><td colspan="4">For active members and non-disabled retirees of the State employees and teachers, legislative, judicial, and PLD plans, the RP2014 Total Dataset Healthy Annuitant Mortality Table, for males and females, is used. For all recipients of disability benefits, the RP2014 Total Dataset Disabled Annuitant Mortality Table, for males and females, is used.</td></tr>
<tr><td colspan="4">For the periods ended June 30, 2015 and June 30, 2014:</td></tr>
<tr><td colspan="4">For active members and non-disabled retirees of the State employees and teachers, legislative, judicial, and PLD plans, the RP2000 Tables projected forward to 2015 using Scale AA are used; the ages are set back two years for employees of the teacher plan. Mortality assumptions were also reviewed and updated in 2011 for the PLD Consolidated Plan, and in 2012 for the other Plans, based on actual demographic data of the Plans. For all recipients of disability benefits, the Revenue Ruling 96-7 Disabled Mortality Table for Males and Females is used.</td></tr>
</table>

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, 2023, 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, 2023, there were 15 years remaining in the amortization schedule for state employees and teachers, and 8 years remaining for PLD employees.

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
Investment Rate of Return	Per annum, compounded annually:		
	6.50% for 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		6.50% for June 30, 2023, June 30, 2022 and June 30, 2021; 6.75% for June 30, 2020; 4.98% for June 30, 2019; 5.13% for June 30, 2018; 5.41% for June 30, 2017
Inflation Rate	2.75% for June 30, 2023, June 30, 2022, June 30, 2021, June 30, 2020, June 30, 2019, June 30, 2018 and June 30, 2017		
Annual Salary Increases, including Inflation	For June 30, 2023, June 30, 2022 and June 30, 2021		
	State employees: 3.26% - 9.43%; Judges and Legislators: 2.75%	2.80 - 13.03%	2.75% - 11.48%
	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%
Mortality Rates	For June 30, 2023, June 30, 2022 and June 30, 2021		
	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		
	For active members and non-disabled retirees of the State employees, legislative, judicial, and PLD plans, the RP2014 Total Dataset Healthy Annuitant Mortality Table, for males and females, is used. For all recipients of disability benefits, the RP2014 Total Dataset Disabled Annuitant Mortality Table, for males and females, is used.		
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		

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

ADDITIONAL SUPPLEMENTARY INFORMATION

SCHEDULE OF INVESTMENT EXPENSES

For the Year Ended June 30, 2023

	State Employee and Teacher Plan	Judicial Plan	Legislative Plan	PLD Consolidated Plan	PLD Agent Plan
Asset Class					
Alternative Credit	$13,631,499	$ 79,271	$15,067	$3,461,094	$ 8,102
Infrastructure	19,244,539	111,899	21,270	4,886,257	11,438
Natural Resources	5,702,970	33,164	6,302	1,448,003	3,390
Public Equity	543,475	3,161	601	137,990	322
Fixed Income	262,578	1,527	290	66,670	156
Private Equity	40,188,322	233,694	44,413	10,203,959	23,880
Real Estate	18,945,412	110,168	20,938	4,810,308	11,258
Risk Diversifier	12,279,814	71,408	13,573	3,117,889	7,300
Other Investment Expenses	–	–	–	–	–
In-house investment management	4,540,278	26,402	5,018	1,152,793	2,698
Total investment expenses	$ 115,338,887	$ 670,694	$127,472	$29,284,963	$ 68,544

Group Life Insurance Plan Actives	Group Life Insurance Plan Retired SET	Group Life Insurance Plan Retired PLD	Defined Contribution Plans	MainePERS OPEB Trust	Retiree Health Insurance Trust Fund	Total
$ –	$ –	$ –	$ –	$ –	$ –	$17,195,033
–	–	–	–	–	–	24,275,403
–	–	–	–	–	–	7,193,829
1,536	16,738	2,445	–	2,103	43,166	751,537
1,838	20,029	2,926	–	2,518	51,631	410,163
–	–	–	–	–	–	50,694,268
517	5,638	824	–	709	14,391	23,920,163
–	–	–	–	–	–	15,489,984
–	–	–	46,911	–	–	46,911
3,711	40,435	5,908	–	4,760	–	5,782,003
$ 7,602	$ 82,840	$ 12,103	$ 46,911	$ 10,090	$ 109,188	$145,759,294

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

ADDITIONAL SUPPLEMENTARY INFORMATION

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the Year Ended June 30, 2023

	State Employee and Teacher Plan	Judicial Plan	Legislative Plan	PLD Consolidated Plan	PLD Agent Plan
Personal services	$ 7,182,050	$ 42,308	$ 7,958	$1,813,044	$ 4,391
Professional fees	1,602,541	9,440	1,776	404,547	979
Computer services	1,292,221	7,612	1,432	326,210	790
Telephone, data, and internet services	105,769	623	117	26,700	65
Printing and postage	331,881	1,955	368	83,780	203
Office rent and building operations	357,334	2,105	396	90,206	218
Depreciation	547,395	3,225	607	138,185	335
Other operating expenses	544,935	3,210	603	137,564	333
Total administrative expenses	$11,964,126	$ 70,478	$13,257	$3,020,236	$ 7,314

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
$ 59,733	$ 570,892	$ 85,020	$ 146,833	$ 3,200	$ 9,915,429
13,328	127,384	18,970	32,763	-	2,211,728
10,747	102,717	15,297	26,419	-	1,783,445
880	8,407	1,252	2,162	-	145,975
2,760	26,381	3,929	6,785	-	458,042
2,972	28,404	4,230	7,305	-	493,170
4,553	43,512	6,480	11,191	-	755,483
4,532	43,317	6,451	11,142	-	752,087
$ 99,505	$ 951,014	$ 141,629	$ 244,600	$ 3,200	$16,515,359

MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM
(A Component Unit of the State of Maine)

ADDITIONAL SUPPLEMENTARY INFORMATION

SCHEDULE OF PROFESSIONAL FEES

For the Year Ended June 30, 2023

Professional fee	
Audit*	$ 108,487
Actuarial services	405,168
IT service	882,342
Legal services	152,916
Medical consulting	248,783
Other services	414,034
Total professional fees	$2,211,730

*Including outsourced internal audit services

Auditor Communications to Those Charged with Governance

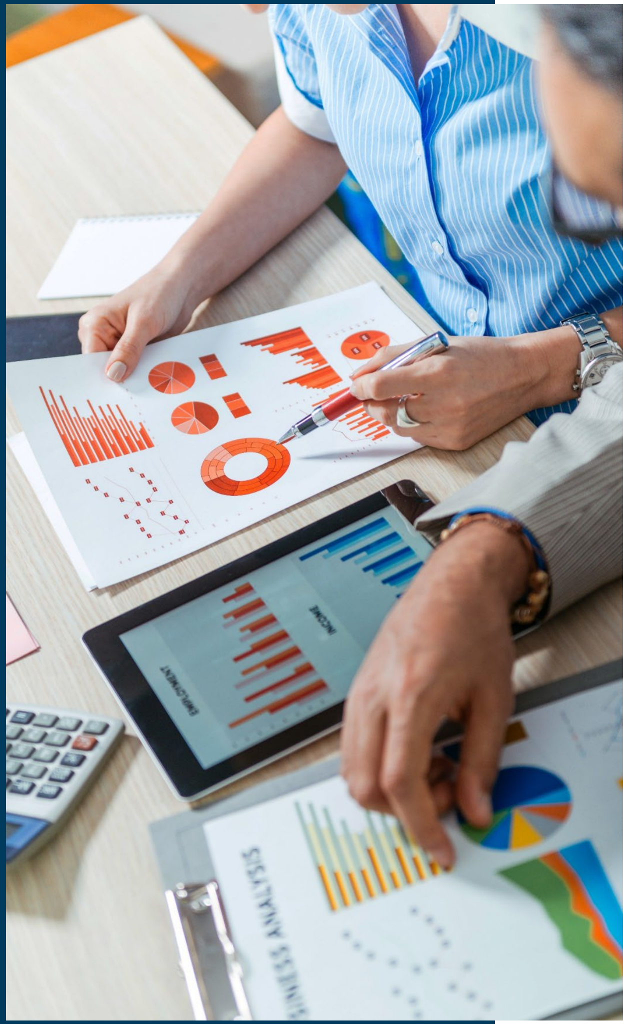
2023 Executive Summary

October 12, 2023

Independent Auditor’s Report

Management’s Responsibility

- The preparation and fair presentation of the financial statements
- Design, implementation and maintenance of internal control over financial reporting
- Selection and use of appropriate accounting policies
- Evaluate whether there are conditions that raise substantial doubt about the System’s ability to continue as a going concern.

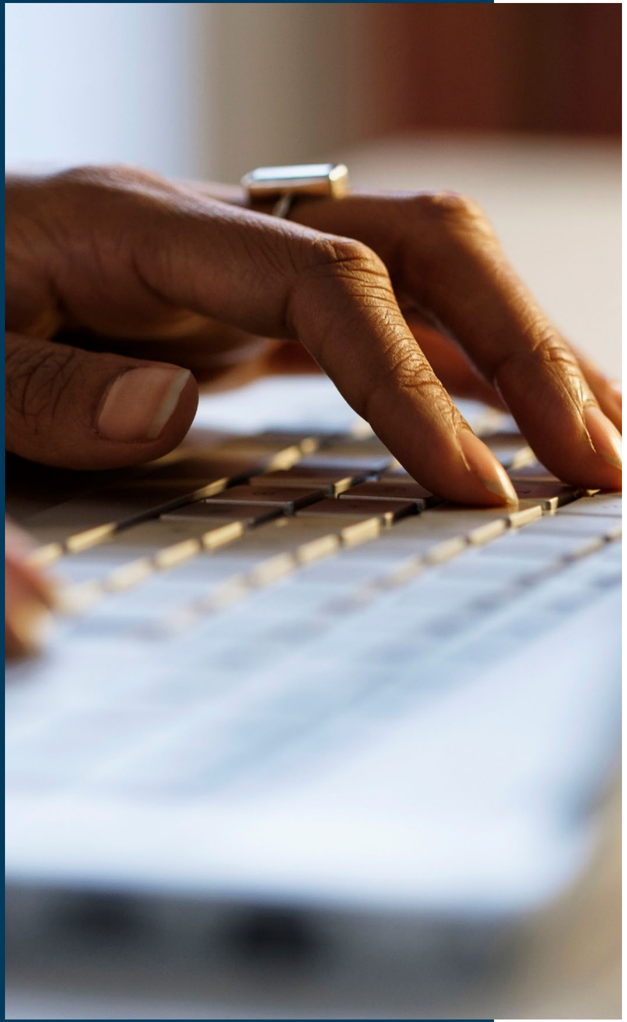


Independent Auditor's Report

Our Responsibility

- To express an opinion on the financial statements in accordance with U.S. generally accepted auditing standards (U.S. GAAS), *Government Auditing Standards*
- Designed to obtain reasonable (not absolute) assurance that the financial statements are free from material misstatement
- Examine on a test basis, evidence supporting amounts and disclosures in the financial statements
- Select audit procedures, based on our assessment of the risk of material misstatement
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures appropriate under the circumstances

UNMODIFIED OPINION on the financial statements



Independent Auditor's Report

Supplementary Information

Management's Discussion & Analysis

- Presented as a supplement to the basic financial statements as required by the Governmental Accounting Standards Board
- We have applied certain limited procedures to this required supplementary information in accordance with U.S. GAAS
- We do not express an opinion or provide assurance on it

Required Supplementary Information

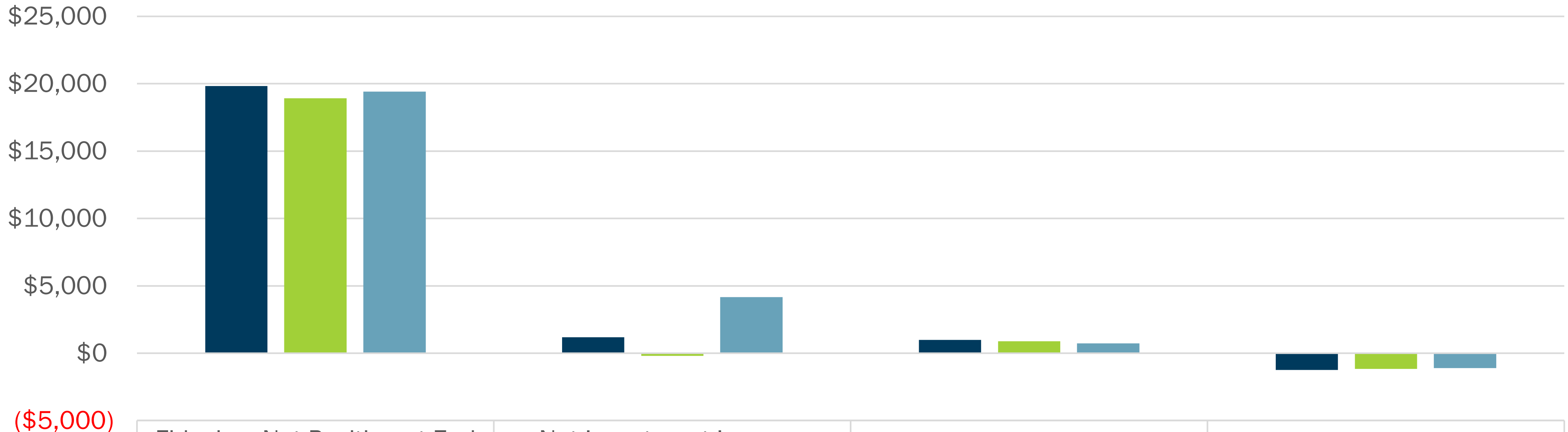
- We have applied certain limited procedures to this required supplementary information in accordance with U.S. GAAS
- Fairly stated, in all material respects, in relation to the financial statements

Additional Supplementary Information

- We do not express an opinion or provide any assurance on the other information

Statement of Fiduciary Net Position (in Millions)

Highlights



	Fiduciary Net Position at End of Year	Net Investment Income (Loss)	Total Contributions	Benefit Payments
2023	$19,817	$1,175	$991	($1,242)
2022	$18,912	($190)	$880	($1,170)
2021	$19,410	$4,168	$727	($1,110)

Statement of Changes in Fiduciary Net Position (in Millions)

Change in Net Position

Financial Statement

Footnotes

- Note 2 – Risks and Uncertainties
- Note 3 – Fair Value Measurement
- Notes 3 & 4 – Deposit and Investment Risks
- Note 6 – Defined Benefit Plans
- Note 7 – Group Life Insurance Program
- Notes 6 & 7 – Actuarial Valuation Method and Assumptions

Yellow Book Report

Internal Controls Over Financial Reporting

- We considered the internal controls over financial reporting in connection with designing our audit procedures
- We did not perform an audit of the internal controls, therefore, we do not express an opinion of the internal controls over financial reporting

Internal Control Matters

- We did not identify any control matters that we would consider to be material weaknesses
- Material weaknesses or significant deficiencies may exist that have were not identified

Compliance with Laws, Regulations, Contracts, and Grant Agreements

- We performed certain tests of compliance with certain provisions of laws, regulations, contracts and agreements
- Focus on potential noncompliance that would be direct and material to the financial statements

Results of Compliance Testing

- We did not note any instances of noncompliance or other matters that are required to be reported
- We did not perform an audit of compliance, therefore, we do not express an opinion on compliance

Required Auditor Communications

Accounting Policies

- Adopted Governmental Accounting Standards (GASB Statement) No. 96, *Subscription-Based Information Technology Arrangements* and GASB Statement No. 93, *Replacement of Interbank Offered Rates*
- No transactions lacked authoritative guidance
- All significant transactions were recorded in the correct period

Management's Judgment and Estimates

- Actuarially calculated contributions and Total Pension and OPEB Liability
- Estimated fair value of investments reported at Level 2 and NAV

Corrected and Uncorrected Misstatements

- No significant audit adjustments
- Unrecorded adjustments to true-up fair value of investments subsequently reported by investment managers

Thank you

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MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS

FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER

SUBJECT: **MONTHLY INVESTMENT REVIEW**

DATE: OCTOBER 4, 2023

Following this memo is the Monthly Investment Review for September.

POLICY REFERENCE

Board Policy 2.1 – Investment Policy Statement

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 – Communication and Support to the Board

MONTHLY INVESTMENT REVIEW: HIGHLIGHTS AND OBSERVATIONS

Preliminary Fund results for the month include:

- Month-end fund value of $18.4 billion.
- Monthly return of -1.3%.
- Calendar year-to-date return of 3.4%.
- Fiscal year-to-date return of -1.2%.

MainePERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Investment Review

October 12, 2023

Investment Policy Objective

Investment Objective

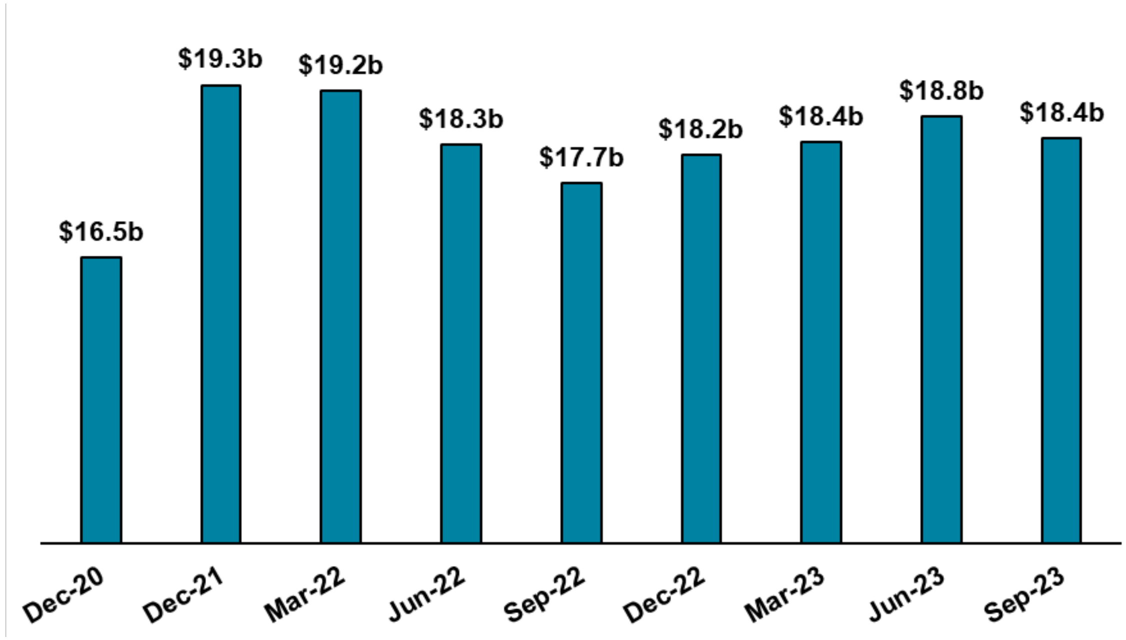
MainePERS' investment objectives balance the System's twin goals of generating investment returns (to ensure growth of the trust funds) and minimizing investment risks (loss of capital and cash flow shortfalls).

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 2023 Performance (Preliminary)

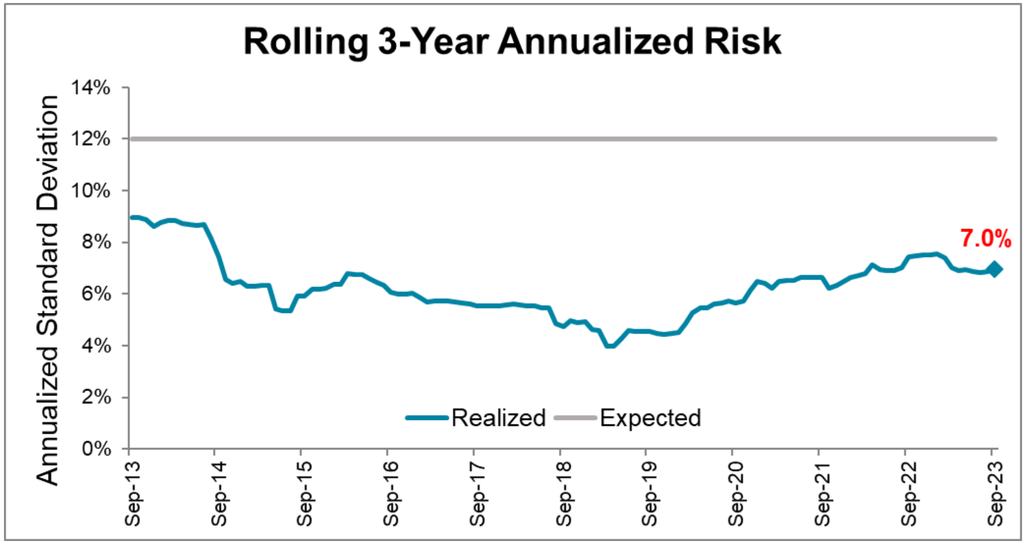
The preliminary fund value at the end of September is $18.4 billion.



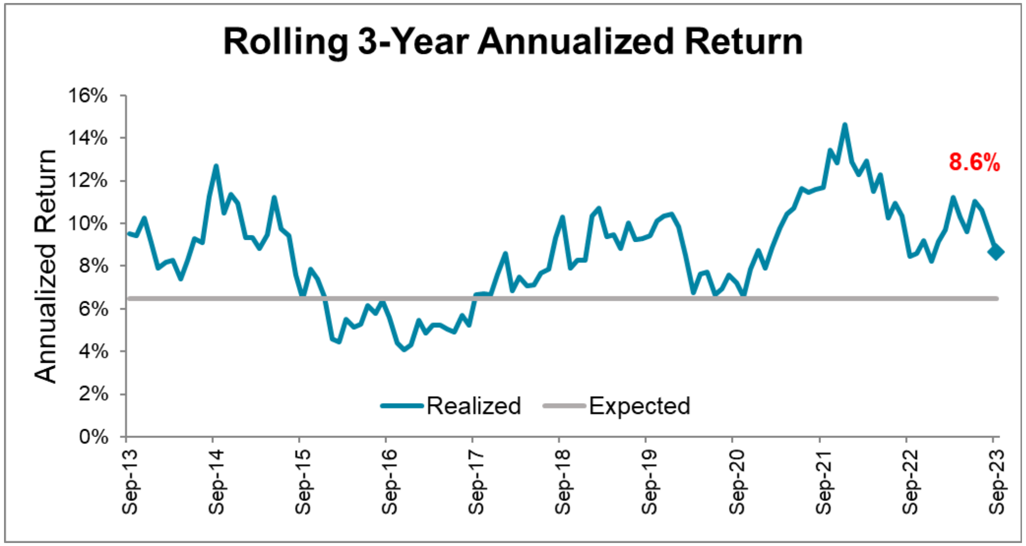
Fund and Benchmark Returns

	Sep-23	CYTD 2023	FYTD 2024
Total Fund	-1.3%	3.4%	-1.2%
Russell 3000	-4.8%	12.4%	-3.3%
MSCI ACWI ex-USA	-3.2%	5.3%	-3.8%
Bloomberg US Aggregate	-2.5%	-1.2%	-3.2%

Investment Objective Measurement: Risk and Return



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



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

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

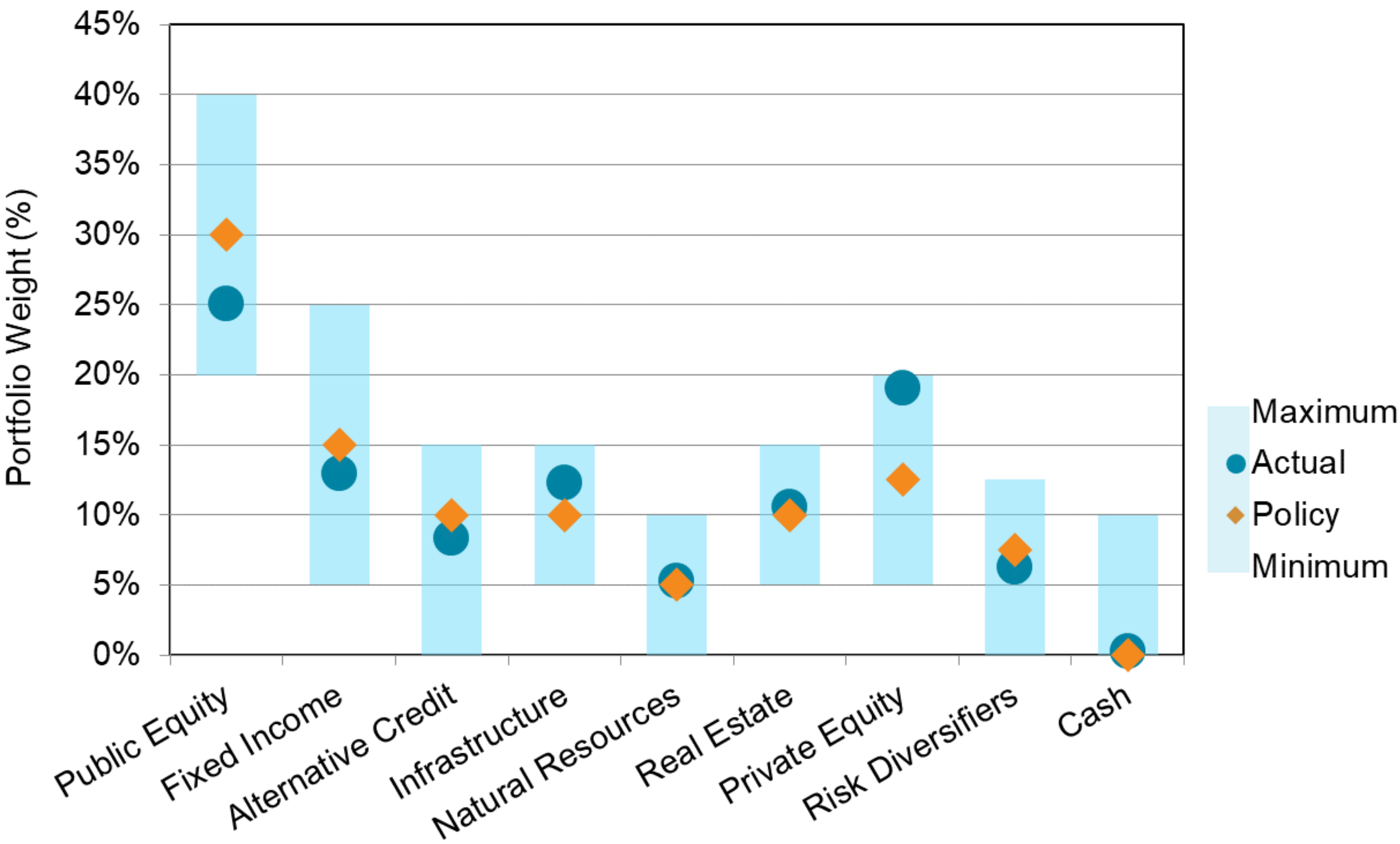
September 2023 Asset Allocation (Preliminary)

Assets (Millions)		Value	% of Fund	Policy %
MainePERS Portfolio	**$**	**18,440**	**100.0%**	**100.0%**
Domestic Equity	$	2,893	15.7%	18.8%
International Equity	$	1,733	9.4%	11.2%
Fixed Income	$	2,381	12.9%	15.0%
Alternative Credit	$	1,537	8.3%	10.0%
Infrastructure	$	2,274	12.3%	10.0%
Natural Resources	$	971	5.3%	5.0%
Private Equity	$	3,513	19.1%	12.5%
Real Estate	$	1,942	10.5%	10.0%
Risk Diversifiers	$	1,152	6.2%	7.5%
Cash	$	44	0.2%	0.0%

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

Private equity remains overweight at ~19% of Fund value, and private markets assets in aggregate comprise 55.5% of the overall portfolio, above the 47.5% policy weight.

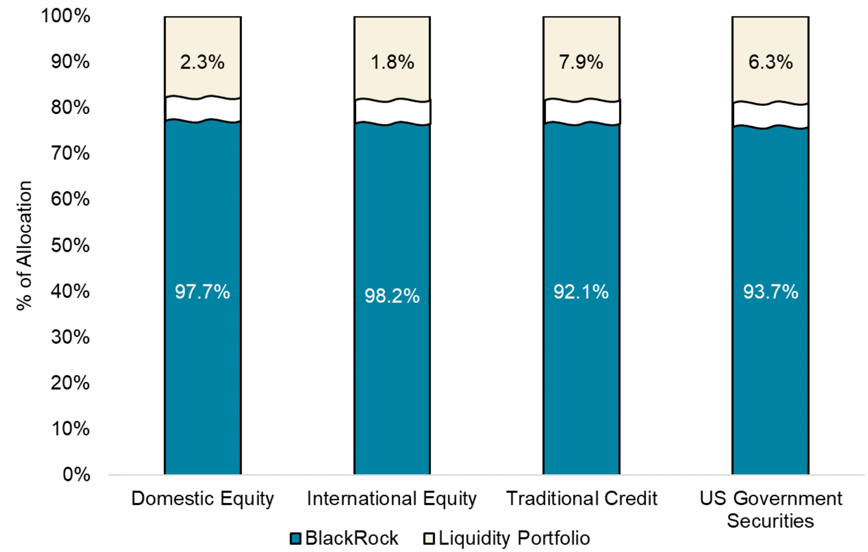
September 2023 Asset Allocation (Preliminary)



Public Securities: Liquidity Portfolio

At the end of August, 1.4% of Fund assets were invested via ETFs and futures contracts in an account managed by Parametric Associates.

The Liquidity Portfolio accounts for 3.7% of MainePERS' total exposure to public securities.



MainePERS Liquidity Portfolio	Market Value (Millions)	Exposure Type
Parametric Domestic Equity	$67.2	Futures
Parametric International Equity	$31.4	Futures
Parametric Traditional Credit	$62.7	ETFs
Parametric US Government Securities	$100.3	Futures
Total Liquidity Portfolio	**$261.6**	

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 2023

Description	FYTD 24	FY 23	FY 22	FY 21	FY 20
Investment Mgmt. Fees	$33,089,418	$132,357,668	$130,884,088	$120,429,567	$122,567,451
Securities Lending Fees [1]	252,337	1,303,543	1,744,317	1,653,172	2,239,396
Consulting Fees	303,750	1,193,543	1,120,000	1,120,000	1,120,000
Broker Commissions [2]	14,460	136,039	77,558	52,364	37,461
Placement Agent Fees	0	0	0	0	0
Total	**$33,659,965**	**$134,990,793**	**$133,825,963**	**$123,255,103**	**$125,964,308**
Percentage of Fund [3]	**0.73%**	**0.72%**	**0.73%**	**0.68%**	**0.86%**

1. Securities Lending Fees are through 8/31/2023
2. Actual paid commissions reported by JP Morgan
3. For FY24: Total fees projected for the full fiscal year divided by current Fund value.
   For prior FY: Total fees divided by FYE Fund value.

Securities Lending: August 2023

	Average Lendable Assets	Average Assets On Loan	Total Sec Lending Revenue	Revenue Split	MainePERS Net Income	MainePERS Net Income, FYTD
BlackRock						
Fixed Income	$1,833,174,754	$1,320,445,865	$220,400	60%/40%	$132,240	$256,786
Total Equity	$1,639,645,216	$187,614,278	$100,670	60%/40%	$67,728	$129,559
Total Blackrock	$3,472,819,970	$1,508,060,143	$321,070		$199,968	$386,345
JP Morgan						
Domestic Equities	$2,751,080,447	$104,471,491	$63,941	85%/15%	$54,355	$97,663
Total JP Morgan	$2,751,080,447	$104,471,491	$63,941		$54,355	$97,663
Total	**$6,223,900,417**	**$1,612,531,634**	**$385,011**		**$254,323**	**$484,008**

Total Annualized Securities Lending Income, FY 2024:	$2,904,045 (0.02%, or 1.6 bps)
Total Actual Securities Lending Income, FY 2023:	$2,557,153 (0.01%, or 1.4 bps)

Liquidity Schedule: September 2023

Term	Market Value	Percent of Portfolio
Liquid[1]	$7,051m	38.2%
Semi-Liquid[2]	$2,435m	13.2%
Illiquid[3]	$8,954m	48.6%
Total	**$18,440m**	**100.0%**

Sources and Uses of Liquidity		
Private Markets Activity	**Last 12 Months Actual**	**Next 12 Months Projection**
Capital Contributions	-$1,378m	-$770m
Distributions	$1,189m	$1,810m
Net Private Markets Activity	**-$190m**	**$1,040m**
Benefit Payments	**-$440m**	**-$460m**
Net Cash Flows	**-$630m**	**$580m**

[1]Liquid assets includes public equities and public fixed income
[2]Semi-liquid assets includes risk diversifiers, open-end real estate investments, and listed alternative credit funds
[3]Illiquid assets includes closed-end alternative credit, infrastructure, natural resources, private equity, and real estate funds

MainePERS Alternative Investments Summary

as of 09/30/2023	# of Funds	# of GP Relationships
Alternative Credit	25	13
Infrastructure	35	11
Natural Resources	16	10
Private Equity	124	34
Real Estate	33	18
Risk Diversifiers	11	10
Total*	**244**	**87**

*GP Total may not add due to overlapping relationships

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

MainePERS Alternative Investments Summary

(in $millions) as of 09/30/2023	Current Market Value Dollars	Current Market Value % of Fund	Policy %*	Unfunded Commitment Dollars	Unfunded Commitment % of Fund
Alternative Credit	$ 1,537	8.3%	10.0%	$ 759	4.1%
Infrastructure	$ 2,274	12.3%	10.0%	$ 535	2.9%
Natural Resources	$ 971	5.3%	5.0%	$ 210	1.1%
Private Equity	$ 3,513	19.1%	12.5%	$ 1,039	5.6%
Real Estate	$ 1,942	10.5%	10.0%	$ 393	2.1%
Risk Diversifiers	$ 1,152	6.2%	7.5%	$ 105	0.6%
Total Alternatives	**$ 11,389**	**61.8%**	**55.0%**	**$ 3,042**	**16.5%**

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 3/31/2023 values, adjusted for subsequent cash flows.

(in $millions) as of 09/30/2023	Private Market Commitments by Vintage Year 2020	2021	2022	2023	3-Year Average[1]
Alternative Credit	$ 275	$ 410	$ 550	$ 180	$ 412
Infrastructure	$ 235	$ 180	$ 200	$ 50	$ 205
Natural Resources	$ -	$ -	$ 30	$ 40	$ 10
Private Equity	$ 276	$ 438	$ 218	$ 130	$ 311
Real Estate	$ 80	$ 285	$ 180	$ 15	$ 182
Total Commitments	**$ 866**	**$ 1,313**	**$ 1,178**	**$ 415**	**$ 1,119**

[1]3-Year Average: 2020-2022

MainePERS Private Market Investments Summary: 06/30/2023

Asset Class Summary	Commitment (A)	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit	$ 2,378,725	$ 1,900,417	$ 691,352	$ 1,538,663	$ 2,230,014	7.4%
Infrastructure	$ 3,442,946	$ 3,528,753	$ 2,777,854	$ 2,305,186	$ 5,083,040	11.3%
Natural Resources	$ 1,060,500	$ 1,096,444	$ 443,446	$ 982,880	$ 1,426,327	6.4%
Private Equity	$ 4,890,371	$ 4,757,030	$ 4,068,610	$ 3,681,135	$ 7,749,745	16.0%
Real Estate	$ 2,742,800	$ 2,673,612	$ 1,901,803	$ 1,895,727	$ 3,797,530	6.9%
Total	$ 14,515,342	$ 13,956,255	$ 9,883,065	$ 10,403,591	$ 20,286,656	10.5%

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

Co-Investment Summary	Commitment (A)	# of Co-Investments	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alternative Credit Co-Investments	$ 253,700	35	$ 257,381	$ 83,105	$ 211,391	$ 294,496	9.2%
Infrastructure Co-Investments	$ 219,004	11	$ 215,216	$ 252,582	$ 128,829	$ 381,411	14.6%
Natural Resources Co-Investments	$ 32,500	2	$ 32,662	$ 37	$ 48,853	$ 48,890	11.3%
Private Equity Co-Investments	$ 372,922	32	$ 372,944	$ 310,156	$ 264,013	$ 574,170	13.5%
Real Estate Co-Investments	$ 67,001	5	$ 58,567	$ 7,306	$ 41,903	$ 49,209	-6.3%
Total	$ 945,127	85	$ 936,770	$ 653,187	$ 694,988	$ 1,348,175	12.6%

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

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Alternative Credit

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Angelo Gordon Direct Lending Fund II	$ 25,000	3/31/2020	$ 23,749	$ 22,083	$ 11,213	$ 33,297	18.7%
Angelo Gordon Direct Lending Fund III	$ 100,000	7/20/2018	$ 102,285	$ 75,242	$ 64,264	$ 139,506	10.6%
Participation Agreement #1	$ 7,500	10/11/2019	$ 7,497	$ 2,294	$ 7,041	$ 9,335	8.4%
Participation Agreement #2	$ 5,000	10/11/2019	$ 4,994	$ 5,422	$ -	$ 5,422	8.8%
Participation Agreement #3	$ 5,000	10/11/2019	$ 5,000	$ 5,700	$ -	$ 5,700	7.3%
Participation Agreement #4	$ 10,000	10/18/2019	$ 9,915	$ 2,376	$ 9,578	$ 11,954	8.6%
Participation Agreement #5	$ 5,000	12/6/2019	$ 5,000	$ 2,413	$ 4,085	$ 6,497	9.5%
Participation Agreement #6	$ 10,000	12/6/2019	$ 9,991	$ 2,447	$ 9,535	$ 11,983	9.0%
Participation Agreement #7	$ 5,000	12/11/2019	$ 5,000	$ 1,927	$ 4,543	$ 6,470	8.7%
Participation Agreement #8	$ 5,000	8/13/2020	$ 4,914	$ 1,302	$ 4,828	$ 6,130	8.8%
Participation Agreement #9	$ 7,500	4/9/2021	$ 7,425	$ 1,477	$ 7,331	$ 8,808	10.0%
Participation Agreement #10	$ 5,000	4/20/2021	$ 5,007	$ 1,365	$ 4,549	$ 5,914	9.0%
Participation Agreement #11	$ 5,000	5/5/2021	$ 5,000	$ 995	$ 4,676	$ 5,671	6.6%
Angelo Gordon Direct Lending Fund IV	$ 100,000	1/24/2020	$ 90,000	$ 12,658	$ 99,776	$ 112,434	12.1%
Participation Agreement #1	$ 5,000	10/23/2020	$ 4,913	$ 1,551	$ 4,373	$ 5,925	8.5%
Participation Agreement #2	$ 12,500	8/17/2021	$ 12,295	$ 1,839	$ 12,233	$ 14,072	NM
Participation Agreement #3	$ 7,500	10/5/2021	$ 7,500	$ 7,913	$ -	$ 7,913	NM
Participation Agreement #4	$ 5,000	12/21/2021	$ 4,925	$ 747	$ 4,877	$ 5,624	NM
Participation Agreement #5	$ 5,000	12/21/2021	$ 4,925	$ 902	$ 4,694	$ 5,596	NM
Participation Agreement #6	$ 5,000	1/12/2022	$ 4,925	$ 743	$ 4,868	$ 5,611	NM
Participation Agreement #7	$ 7,500	1/12/2022	$ 7,388	$ 1,109	$ 7,286	$ 8,394	NM
Participation Agreement #8	$ 12,500	6/16/2022	$ 12,406	$ 1,424	$ 12,253	$ 13,677	NM
Angelo Gordon Direct Lending Fund IV Annex	$ 50,000	11/18/2021	$ 47,500	$ 3,449	$ 49,741	$ 53,190	NM
Angelo Gordon Direct Lending Fund V	$ 125,000	8/3/2022	$ 53,125	$ -	$ 58,013	$ 58,013	NM
Participation Agreement #1	$ 7,500	9/1/2022	$ 7,388	$ 674	$ 7,328	$ 8,002	NM
Participation Agreement #2	$ 12,500	10/7/2022	$ 12,263	$ 565	$ 12,277	$ 12,842	NM
Participation Agreement #3	$ 10,000	10/19/2022	$ 9,850	$ 819	$ 9,770	$ 10,589	NM
Participation Agreement #4	$ 10,000	10/27/2022	$ 9,800	$ 805	$ 9,720	$ 10,524	NM
Participation Agreement #5	$ 10,000	2/27/2023	$ 9,821	$ 442	$ 9,783	$ 10,225	NM
Ares Capital Europe IV	$ 122,000	4/30/2018	$ 96,890	$ 24,885	$ 88,496	$ 113,381	4.9%
Ares Capital Europe V	$ 122,000	9/4/2020	$ 88,965	$ 4,738	$ 92,330	$ 97,069	7.3%
Ares Capital Europe VI	$ 82,500	3/17/2023	$ 0	$ -	$ 248	$ 248	NM
Ares Senior Direct Lending Fund II	$ 100,000	12/10/2021	$ 53,930	$ 5,758	$ 54,717	$ 60,476	NM
Audax Senior Debt (MP), LLC	$ 100,000	6/30/2017	$ 100,000	$ 39,300	$ 90,894	$ 130,194	5.0%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Alternative Credit

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Brookfield Infrastructure Debt Fund III	$ 100,000	7/15/2022	$ 45,341	$ 6,628	$ 39,737	$ 46,366	NM
Comvest Credit Partners VI	$ 125,000	5/20/2022	$ 68,750	$ -	$ 72,257	$ 72,257	NM
Deerpath Capital VI	$ 75,000	9/30/2021	$ 54,590	$ 5,743	$ 55,563	$ 61,306	NM
Global Infrastructure Partners Spectrum	$ 100,000	2/20/2019	$ 72,889	$ 28,392	$ 50,712	$ 79,104	6.9%
Mesa West Core Lending Fund	$ 100,000	6/18/2013	$ 127,612	$ 62,055	$ 115,891	$ 177,945	5.5%
Owl Rock Capital Corporation	$ 100,000	3/10/2017	$ 116,571	$ 50,068	$ 103,353	$ 153,421	7.2%
Participation Agreement #1	$ 5,000	5/7/2018	$ 4,851	$ 5,499	$ -	$ 5,499	12.7%
Participation Agreement #2	$ 6,185	7/31/2018	$ 6,196	$ 7,745	$ -	$ 7,745	9.9%
Participation Agreement #3	$ 5,000	8/7/2018	$ 4,938	$ 5,634	$ -	$ 5,634	7.9%
Participation Agreement #4	$ 5,000	8/20/2018	$ 4,566	$ 5,835	$ -	$ 5,835	8.1%
Participation Agreement #5	$ 5,000	12/21/2018	$ 4,988	$ 1,843	$ 4,627	$ 6,470	7.3%
Participation Agreement #6	$ 11,653	8/7/2020	$ 12,181	$ 3,513	$ 10,540	$ 14,053	9.2%
Participation Agreement #7	$ 7,500	7/26/2021	$ 6,558	$ 1,220	$ 6,501	$ 7,721	NM
Participation Agreement #8	$ 12,500	6/17/2022	$ 12,778	$ 1,660	$ 12,383	$ 14,043	NM
Participation Agreement #9	$ 7,500	9/26/2022	$ 7,388	$ 655	$ 7,350	$ 8,006	NM
Owl Rock Capital Corporation III	$ 100,000	6/19/2020	$ 118,400	$ 18,400	$ 121,972	$ 140,372	10.1%
Pathlight Capital Fund II	$ 75,000	4/22/2021	$ 108,651	$ 54,950	$ 63,695	$ 118,645	9.7%
Participation Agreement #1	$ 7,500	4/1/2022	$ 7,368	$ 1,333	$ 7,008	$ 8,341	NM
Participation Agreement #2	$ 7,500	4/1/2022	$ 7,429	$ 918	$ 7,354	$ 8,272	NM
Pathlight Capital Fund III	$ 75,000	6/24/2022	$ 66,468	$ 18,843	$ 50,271	$ 69,115	NM
Solar Capital Private Corporate Lending Fund	$ 50,000	6/26/2019	$ 40,188	$ 7,644	$ 41,335	$ 48,980	11.8%
Solar Capital Debt Fund	$ 50,000	6/26/2019	$ 25,000	$ 2,473	$ 26,277	$ 28,750	12.9%
SLR Private Corporate Lending Fund II	$ 125,000	12/23/2022	$ -	$ -	$ -	$ -	NM
Silver Point Specialty Credit II	$ 50,000	1/31/2020	$ 57,821	$ 26,206	$ 39,334	$ 65,540	9.7%
Tennenbaum Direct Lending VIII	$ 100,000	11/30/2017	$ 100,883	$ 83,247	$ 40,535	$ 123,782	6.4%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Infrastructure

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Alinda Infrastructure Fund II	$ 50,000	9/17/2009	$ 68,297	$ 74,099	$ 214	$ 74,314	1.9%
ArcLight Energy V	$ 75,000	10/28/2011	$ 76,031	$ 103,624	$ -	$ 103,624	8.0%
Shore Co-Investment Holdings II	$ 20,000	1/30/2014	$ 17,709	$ 19,737	$ -	$ 19,737	8.4%
ArcLight Energy VI	$ 150,000	11/25/2014	$ 159,687	$ 127,354	$ 60,942	$ 188,297	4.0%
Great River Hydro Partners	$ 12,000	6/17/2017	$ 10,718	$ 45,094	$ -	$ 45,094	39.5%
Brookfield Infrastructure Fund II	$ 100,000	6/28/2013	$ 117,103	$ 108,637	$ 90,867	$ 199,504	10.0%
Brookfield Infrastructure Fund III	$ 100,000	4/15/2016	$ 110,004	$ 58,327	$ 105,676	$ 164,004	12.1%
Co-Investment #1	$ 20,000	3/31/2017	$ 15,951	$ 20,057	$ 18,529	$ 38,586	28.1%
Carlyle Global Infrastructure Opportunity Fund	$ 100,000	5/1/2019	$ 85,007	$ 16,111	$ 89,348	$ 105,459	13.0%
Carlyle Infrastructure Partners	$ 50,000	11/2/2007	$ 57,366	$ 64,289	$ 372	$ 64,661	2.5%
Carlyle Power Partners II	$ 50,000	11/19/2015	$ 63,926	$ 33,971	$ 56,874	$ 90,845	10.5%
Cube Infrastructure	$ 45,000	4/16/2010	$ 60,063	$ 96,665	$ 422	$ 97,087	8.0%
Cube Infrastructure II	$ 90,000	9/11/2018	$ 77,017	$ 5,744	$ 70,669	$ 76,413	-0.2%
Cube Infrastructure III	$ 90,000	8/16/2021	$ 40,821	$ -	$ 42,313	$ 42,313	NM
EQT Infrastructure III	$ 68,000	12/3/2016	$ 102,922	$ 154,917	$ 24,311	$ 179,228	20.9%
EQT Infrastructure IV	$ 100,000	12/17/2018	$ 94,746	$ 17,140	$ 105,333	$ 122,473	10.7%
EQT Infrastructure V	$ 75,000	12/8/2020	$ 57,888	$ 6,451	$ 58,072	$ 64,523	10.4%
First Reserve Energy Infrastructure Fund	$ 50,000	6/30/2010	$ 59,778	$ 52,235	$ 4,147	$ 56,383	-1.6%
First Reserve Energy Infrastructure Fund II	$ 100,000	10/21/2013	$ 128,143	$ 127,258	$ 32,764	$ 160,022	13.4%
Global Infrastructure Partners Sonic	$ 35,000	7/31/2020	$ 32,521	$ -	$ 19,842	$ 19,842	-16.4%
Global Infrastructure Partners	$ 75,000	3/31/2008	$ 101,173	$ 205,062	$ 237	$ 205,298	17.2%
Global Infrastructure Partners II	$ 75,000	12/3/2011	$ 105,524	$ 145,737	$ 37,281	$ 183,018	15.8%
Global Infrastructure Partners III	$ 150,000	4/15/2016	$ 184,409	$ 104,294	$ 155,738	$ 260,031	10.2%
Co-Investment #1	$ 29,000	2/28/2017	$ 27,782	$ 16,891	$ 35,630	$ 52,520	14.3%
Co-Investment #2	$ 25,000	8/16/2018	$ 26,980	$ 3,029	$ 18,213	$ 21,242	-5.5%
Global Infrastructure Partners IV	$ 150,000	12/21/2018	$ 130,542	$ 15,348	$ 122,304	$ 137,652	4.2%
IFM Global Infrastructure (US), L.P.	$ 100,000	12/20/2012	$ 144,550	$ 208,040	$ -	$ 208,040	9.8%
KKR Diversified Core Infrastructure Fund	$ 100,000	4/29/2022	$ 100,000	$ -	$ 101,266	$ 101,266	NM
KKR Global Infrastructure Investors	$ 75,000	9/29/2010	$ 87,917	$ 154,328	$ 89	$ 154,418	13.1%
KKR Global Infrastructure Investors II	$ 150,000	10/24/2014	$ 184,831	$ 243,203	$ 77,264	$ 320,467	17.0%

(all dollar amounts in thousands)

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Infrastructure

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

(all dollar amounts in thousands)

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Natural Resources

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
ACM Permanent Crops	$ 35,000	10/24/2014	$ 39,100	$ 12,107	$ 57,989	$ 70,096	9.2%
ACM Permanent Crops II	$ 35,000	5/12/2016	$ 41,556	$ 8,885	$ 19,807	$ 28,692	-10.4%
AMERRA Agri Fund III	$ 50,000	2/11/2016	$ 98,675	$ 77,368	$ 26,208	$ 103,576	1.9%
Denham Mining Fund	$ 35,000	6/29/2018	$ 31,349	$ 659	$ 38,790	$ 39,449	8.3%
Homestead Capital Farmland II	$ 50,000	8/8/2016	$ 55,063	$ 11,016	$ 57,554	$ 68,570	5.8%
Homestead Capital Farmland III	$ 30,000	10/26/2018	$ 27,356	$ 2,610	$ 28,180	$ 30,790	7.7%
Orion Mine Finance Fund II	$ 50,000	5/25/2016	$ 101,839	$ 77,793	$ 48,191	$ 125,984	9.3%
Orion Mine Finance Co-Fund II	$ 20,000	8/13/2018	$ 20,125	$ -	$ 34,263	$ 34,263	12.0%
Silver Creek Aggregate Reserves Fund	$ 100,000	11/6/2018	$ 15,340	$ 2,572	$ 17,775	$ 20,347	NM
Sprott Private Resource Lending Fund III	$ 30,000	8/31/2022	$ 2,436	$ 537	$ 1,658	$ 2,195	NM
Sprott Private Resource Streaming and Royalty Annex	$ 40,000	5/17/2023	$ 18,215	$ -	$ 18,114	$ 18,114	NM
Taurus Mining Fund	$ 50,000	3/27/2015	$ 41,459	$ 46,116	$ 4,112	$ 50,228	7.6%
Taurus Mining Fund Annex	$ 23,000	12/1/2016	$ 18,366	$ 23,384	$ 950	$ 24,335	17.8%
Taurus Mining Fund No. 2	$ 75,000	4/18/2019	$ 64,374	$ 45,393	$ 31,911	$ 77,304	18.5%
Teays River Integrated Agriculture	$ 200,000	7/1/2015	$ 198,974	$ 28,770	$ 315,267	$ 344,037	7.6%
Twin Creeks Timber	$ 200,000	1/7/2016	$ 199,664	$ 94,635	$ 124,867	$ 219,502	2.5%
U.S. Farming Realty Trust III	$ 100,000	7/7/2015	$ 110,017	$ 11,565	$ 142,655	$ 154,220	6.8%
Canally Coinvest Holdings	$ 12,500	12/9/2019	$ 12,537	$ 37	$ 14,590	$ 14,627	7.6%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

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

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Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Charterhouse Capital Partners X	$ 67,000	5/13/2015	$ 58,597	$ 65,409	$ 40,609	$ 106,017	20.5%
Charterhouse Acrostone	$ 12,000	8/24/2018	$ 13,254	$ 21,268	$ 0	$ 21,269	16.9%
Charterhouse Capital Partners XI	$ 45,000	4/23/2021	$ 13,385	$ -	$ 14,762	$ 14,762	NM
CVC Capital Partners VI	$ 67,000	7/12/2013	$ 101,033	$ 121,740	$ 57,244	$ 178,985	16.9%
CVC Capital Partners VII	$ 48,000	5/9/2017	$ 72,939	$ 43,129	$ 66,501	$ 109,630	23.0%
CVC Capital Partners VIII	$ 44,000	6/11/2020	$ 46,581	$ 21,835	$ 27,038	$ 48,873	9.1%
CVC Capital Partners IX	$ 44,000	6/29/2023	$ -	$ -	$ -	$ -	NM
EnCap Energy Capital VIII	$ 30,000	1/31/2011	$ 34,186	$ 23,364	$ 11,702	$ 35,066	0.5%
EnCap Energy Capital Fund VIII Co-Investors	$ 16,238	12/8/2011	$ 16,506	$ 5,997	$ 6,373	$ 12,370	-4.0%
EnCap Energy Capital Fund IX	$ 30,000	12/19/2012	$ 34,541	$ 40,196	$ 10,041	$ 50,237	10.4%
EnCap Energy Capital Fund X	$ 40,000	3/5/2015	$ 42,225	$ 49,332	$ 28,948	$ 78,280	15.5%
EnCap Energy Capital Fund XI	$ 40,000	5/31/2017	$ 40,343	$ 17,226	$ 42,157	$ 59,382	18.8%
EnCap Flatrock Midstream Fund III	$ 20,000	4/9/2014	$ 25,178	$ 20,835	$ 13,620	$ 34,455	10.4%
EnCap Flatrock Midstream Fund IV	$ 22,000	11/17/2017	$ 19,661	$ 9,245	$ 13,847	$ 23,091	8.0%
General Catalyst X - Early Venture	$ 19,565	3/26/2020	$ 18,880	$ -	$ 33,270	$ 33,270	27.8%
General Catalyst X - Endurance	$ 22,826	3/26/2020	$ 22,859	$ -	$ 22,819	$ 22,819	-0.1%
General Catalyst X - Growth Venture	$ 32,609	3/26/2020	$ 31,467	$ -	$ 35,114	$ 35,114	4.7%
General Catalyst XI - Creation	$ 8,823	10/29/2021	$ 3,082	$ -	$ 3,269	$ 3,269	NM
General Catalyst XI - Endurance	$ 29,412	10/29/2021	$ 20,731	$ -	$ 19,821	$ 19,821	NM
General Catalyst XI - Ignition	$ 11,765	10/29/2021	$ 7,723	$ -	$ 7,172	$ 7,172	NM
GTCR Fund X	$ 30,000	1/28/2011	$ 31,766	$ 64,646	$ -	$ 64,646	21.4%
GTCR Fund XI	$ 35,000	11/15/2013	$ 34,961	$ 76,701	$ 38,690	$ 115,391	33.5%
GTCR Fund XII	$ 50,000	9/29/2017	$ 51,223	$ 31,746	$ 53,657	$ 85,403	24.0%
Co-Investment #1	$ 5,238	4/26/2019	$ 4,556	$ -	$ 9,150	$ 9,150	18.3%
Co-Investment #2	$ 5,997	11/1/2019	$ 5,806	$ 10,935	$ 2,722	$ 13,657	46.4%
GTCR XIII	$ 50,000	10/27/2020	$ 25,573	$ 5,447	$ 24,926	$ 30,373	19.1%
GTCR XIV	$ 50,000	12/16/2022	$ -	$ -	$ -	$ -	NM
H.I.G. Bayside Loan Fund II	$ 25,000	5/28/2010	$ 24,020	$ 32,189	$ 272	$ 32,461	7.1%
H.I.G. Bayside Loan Ops Fund III (Europe)	$ 30,000	7/27/2012	$ 26,707	$ 31,070	$ 3,812	$ 34,882	7.5%
H.I.G. Brazil & Latin America Partners	$ 60,000	7/1/2015	$ 69,005	$ 24,546	$ 78,959	$ 103,504	13.9%
H.I.G. Capital Partners V	$ 15,000	2/28/2013	$ 20,501	$ 28,359	$ 11,694	$ 40,054	23.3%

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Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
H.I.G. Europe Capital Partners II	$ 22,500	7/1/2013	$ 25,240	$ 20,667	$ 15,673	$ 36,340	12.1%
H.I.G. Growth Buyouts & Equity Fund II	$ 17,500	6/30/2011	$ 23,547	$ 26,958	$ 14,369	$ 41,327	14.4%
H.I.G. Growth Buyouts & Equity Fund III	$ 35,000	9/13/2018	$ 16,048	$ -	$ 16,604	$ 16,604	NM
H.I.G Middle Market LBO Fund II	$ 40,000	2/7/2014	$ 49,049	$ 68,278	$ 25,419	$ 93,698	27.9%
Co-Investment #1	$ 9,000	10/12/2017	$ 9,000	$ -	$ (31)	$ (31)	-100.0%
Co-Investment #2	$ 686	6/19/2020	$ 686	$ -	$ 925	$ 925	10.3%
Co-Investment #3	$ 1,000	6/1/2021	$ 1,079	$ -	$ 12	$ 12	-88.4%
H.I.G. Middle Market LBO Fund III	$ 40,000	7/23/2019	$ 34,486	$ 1,694	$ 41,233	$ 42,927	19.5%
Hellman & Friedman Capital Partners VII	$ 30,000	6/19/2009	$ 44,355	$ 105,844	$ 6,537	$ 112,382	24.7%
Hellman & Friedman Capital Partners VIII	$ 45,000	9/24/2014	$ 48,742	$ 26,913	$ 56,723	$ 83,636	14.0%
Hellman & Friedman Capital Partners IX	$ 45,000	9/28/2018	$ 44,605	$ 1,069	$ 61,442	$ 62,511	14.8%
Hellman & Friedman Capital Partners X	$ 45,000	5/10/2021	$ 32,383	$ -	$ 34,519	$ 34,519	5.4%
Inflexion Buyout Fund IV	$ 27,000	9/30/2014	$ 34,338	$ 38,539	$ 23,110	$ 61,649	15.9%
Inflexion Partnership Capital Fund I	$ 17,000	9/30/2014	$ 25,813	$ 39,627	$ 7,453	$ 47,080	22.3%
Inflexion Supplemental Fund IV	$ 10,000	5/31/2016	$ 14,912	$ 20,957	$ 8,436	$ 29,393	24.3%
Kelso Investment Associates VIII	$ 3,000	1/6/2011	$ 3,022	$ 4,263	$ 126	$ 4,388	8.1%
Kelso Investment Associates IX	$ 60,000	11/5/2014	$ 70,159	$ 86,523	$ 34,174	$ 120,698	19.8%
KIA IX (Hammer) Investor	$ 25,000	8/12/2016	$ 25,426	$ 69,298	$ 310	$ 69,608	21.4%
Kelso Investment Associates X	$ 45,000	3/16/2018	$ 46,763	$ 13,311	$ 72,197	$ 85,508	33.0%
Kelso Investment Associates XI	$ 45,000	12/22/2021	$ 8,192	$ 652	$ 10,474	$ 11,127	NM
Kelso XI Heights Co-Investment	$ 12,000	8/19/2022	$ 10,013	$ -	$ 10,841	$ 10,841	NM
KKR North American Fund XI	$ 60,000	2/7/2012	$ 100,494	$ 166,162	$ 21,231	$ 187,393	19.3%
KKR North America Fund XI (Platinum)	$ 8,003	2/26/2016	$ 8,040	$ 2,313	$ 5,323	$ 7,636	-1.0%
KKR Element Co-Invest	$ 10,000	8/29/2016	$ 10,050	$ 24,030	$ -	$ 24,030	23.5%
KKR Americas XII	$ 60,000	3/3/2016	$ 62,049	$ 30,802	$ 74,925	$ 105,727	19.5%
KKR Sigma Aggregator	$ 15,000	6/22/2018	$ 15,000	$ -	$ 23,606	$ 23,606	9.5%
KKR Enterprise Co-Invest	$ 15,000	10/11/2018	$ 15,000	$ -	$ -	$ -	-100.0%
KKR Enterprise Co-Invest AIV A	$ 8,936	11/8/2019	$ 8,936	$ 7,243	$ 911	$ 8,154	-10.8%
KKR North America XIII	$ 40,000	6/25/2021	$ 14,209	$ -	$ 14,865	$ 14,865	NM
KKR Special Situations Fund	$ 60,000	12/19/2012	$ 118,957	$ 99,865	$ 12,352	$ 112,216	-2.0%
KKR Special Situations Fund II	$ 60,000	12/19/2014	$ 98,291	$ 77,594	$ 23,778	$ 101,372	1.3%

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Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Long Ridge Equity Partners IV	$ 15,000	6/26/2023	$ -	$ -	$ -	$ -	NM
Metwest Enhanced TALF Strategy Fund L. P.	$ 75,000	7/31/2009	$ 53,350	$ 67,405	$ -	$ 67,405	10.2%
Oaktree Opportunities VIII	$ 30,000	12/9/2009	$ 30,000	$ 43,920	$ 86	$ 44,005	9.1%
ONCAP IV	$ 15,000	11/8/2016	$ 13,085	$ 3,296	$ 18,115	$ 21,411	14.6%
Onex Partners III	$ 10,000	1/6/2011	$ 11,202	$ 17,022	$ 1,763	$ 18,786	13.1%
Onex Partners IV	$ 60,000	11/22/2013	$ 62,871	$ 50,953	$ 38,805	$ 89,758	8.0%
Co-Investment #1	$ 10,000	2/27/2017	$ 10,471	$ 1,235	$ 7,235	$ 8,470	-3.8%
Onex Partners V	$ 45,000	7/11/2017	$ 39,000	$ 5,911	$ 43,783	$ 49,694	13.4%
Paine & Partners Capital Fund IV	$ 60,000	12/18/2014	$ 56,550	$ 29,070	$ 48,785	$ 77,855	7.7%
Wawona Co-Investment Fund I	$ 15,000	3/31/2017	$ 15,023	$ -	$ 3	$ 3	-92.3%
Lyons Magnus Co-Investment Fund I	$ 15,000	11/8/2017	$ 15,016	$ -	$ 24,991	$ 24,991	9.5%
PSP Maverick Co-Invest	$ 7,238	9/12/2019	$ 7,264	$ -	$ 517	$ 517	-50.4%
PSP AH&N Co-Investment Fund	$ 19,724	11/27/2019	$ 17,539	$ -	$ 31,750	$ 31,750	19.2%
Paine Schwartz Food Chain Fund V	$ 45,000	8/3/2018	$ 46,537	$ 21,166	$ 42,550	$ 63,716	24.2%
SNFL Co-Investment Fund	$ 5,000	10/11/2019	$ 5,024	$ 265	$ 9,960	$ 10,225	21.3%
Rhone Partners V	$ 56,000	3/12/2015	$ 71,743	$ 35,889	$ 86,905	$ 122,795	16.6%
Riverside Capital Appreciation Fund VI	$ 60,000	7/3/2013	$ 63,008	$ 79,860	$ 19,409	$ 99,269	12.0%
RCAF VI CIV XXXII	$ 12,399	10/21/2015	$ 12,687	$ 35,260	$ -	$ 35,260	19.9%
Riverside Micro-Cap Fund III	$ 35,000	6/30/2014	$ 49,448	$ 183,115	$ 51,304	$ 234,419	36.3%
Riverside Micro-Cap Fund IV	$ 60,000	10/23/2015	$ 55,659	$ 5,112	$ 80,064	$ 85,176	8.0%
Riverside Micro-Cap Fund IV-B	$ 20,000	8/9/2019	$ 24,292	$ 5,583	$ 35,233	$ 40,817	23.2%
Riverside Micro-Cap Fund V	$ 40,000	8/21/2018	$ 33,000	$ 2,513	$ 46,456	$ 48,968	17.0%
Riverside Micro-Cap Fund VI	$ 45,000	8/26/2021	$ 12,766	$ 263	$ 12,994	$ 13,258	NM
Shoreview Capital Partners III	$ 24,000	7/24/2013	$ 25,657	$ 28,779	$ 24,511	$ 53,290	18.2%
Shoreview Capital Partners IV	$ 30,000	6/3/2019	$ 13,902	$ 5,989	$ 13,924	$ 19,912	NM
Sovereign Capital IV	$ 46,500	7/7/2014	$ 40,344	$ 26,905	$ 33,889	$ 60,794	10.8%
Summit Partners Credit II	$ 60,000	10/25/2013	$ 90,831	$ 87,991	$ 18,173	$ 106,165	5.9%
Summit Europe Growth Equity III	$ 22,000	3/18/2020	$ 15,638	$ -	$ 17,317	$ 17,317	8.0%
Summit Europe Growth Equity IV	$ 22,000	2/10/2023	$ -	$ -	$ -	$ -	NM
Summit Growth Equity VIII	$ 25,000	5/27/2011	$ 33,445	$ 63,535	$ 11,978	$ 75,513	26.3%
Co-Investment #1	$ 16,000	6/3/2015	$ 16,000	$ 38,735	$ 19,728	$ 58,463	31.8%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Summit Growth Equity IX	$ 60,000	8/26/2015	$ 83,784	$ 88,968	$ 93,001	$ 181,969	31.9%
Co-Investment #1	$ 15,000	11/29/2016	$ 14,895	$ 41,743	$ -	$ 41,743	159.6%
Summit Partners Co-Invest (Ironman)	$ 15,530	4/20/2018	$ 15,534	$ -	$ 15,509	$ 15,509	0.0%
Summit Partners Co-Invest (Giants-B)	$ 15,000	10/22/2019	$ 15,000	$ 41,780	$ 5,439	$ 47,219	81.4%
Summit Growth Equity X	$ 60,000	2/26/2019	$ 59,876	$ 18,176	$ 61,929	$ 80,105	19.1%
Summit Partners Co-Invest (Lions)	$ 7,534	10/14/2020	$ 7,534	$ -	$ 14,476	$ 14,476	28.6%
Summit Partners Co-Invest (Indigo)	$ 10,000	12/11/2020	$ 11,436	$ -	$ 11,425	$ 11,425	0.0%
Summit Growth Equity XI	$ 45,000	10/1/2021	$ 10,983	$ -	$ 11,536	$ 11,536	NM
Summit Venture Capital III	$ 13,150	5/27/2011	$ 18,044	$ 32,899	$ 2,902	$ 35,802	17.6%
Summit Venture Capital IV	$ 40,000	8/26/2015	$ 50,767	$ 48,377	$ 60,888	$ 109,265	38.1%
Summit Venture Capital V	$ 45,000	6/16/2020	$ 25,742	$ 2,771	$ 23,649	$ 26,421	2.1%
Summit Partners Co-Invest (CS)	$ 13,753	10/22/2021	$ 13,798	$ -	$ 11,714	$ 11,714	NM
Technology Crossover Ventures VIII	$ 60,000	5/8/2013	$ 52,307	$ 39,509	$ 74,765	$ 114,275	12.2%
Technology Crossover Ventures IX	$ 60,000	2/19/2016	$ 48,428	$ 48,612	$ 53,319	$ 101,931	20.8%
TCV Sports	$ 8,000	9/25/2018	$ 8,000	$ -	$ 11,167	$ 11,167	7.3%
Technology Crossover Ventures X	$ 45,000	8/31/2018	$ 36,448	$ 6,801	$ 65,121	$ 71,922	24.9%
Technology Crossover Ventures XI	$ 45,000	10/2/2020	$ 23,033	$ -	$ 20,587	$ 20,587	-6.6%
Technology Impact Fund*	$ 40,000	12/18/2017	$ 37,492	$ 23,745	$ 85,098	$ 108,843	49.5%
Technology Impact Fund II*	$ 40,000	4/13/2021	$ 11,992	$ 325	$ 11,789	$ 12,114	NM
Technology Impact Growth Fund*	$ 40,000	11/26/2018	$ 48,109	$ 26,676	$ 28,895	$ 55,571	7.7%
Technology Impact Growth Fund II	$ 40,000	8/6/2021	$ 13,066	$ -	$ 11,640	$ 11,640	NM
Thoma Bravo Fund XI	$ 50,000	5/1/2014	$ 74,040	$ 145,149	$ 59,279	$ 204,428	27.0%
Thoma Bravo Fund XII	$ 60,000	4/27/2016	$ 78,447	$ 80,943	$ 64,890	$ 145,834	16.3%
Thoma Bravo Fund XIII	$ 45,000	12/7/2018	$ 59,671	$ 31,856	$ 71,784	$ 103,640	29.4%
Thoma Bravo Special Opportunities Fund II	$ 15,000	3/27/2015	$ 18,113	$ 21,091	$ 16,545	$ 37,636	16.5%
Thoma Bravo Discover Fund IV	$ 45,000	7/1/2022	$ 14,963	$ -	$ 15,636	$ 15,636	NM
Tillridge Global Agribusiness Partners II	$ 50,000	10/21/2016	$ 28,819	$ 2,900	$ 24,991	$ 27,891	-1.1%
Water Street Healthcare Partners III	$ 25,000	7/25/2012	$ 30,122	$ 78,657	$ 8,782	$ 87,439	35.4%
Water Street Healthcare Partners IV	$ 33,000	9/15/2017	$ 34,936	$ 10,624	$ 41,382	$ 52,006	16.5%
Water Street Healthcare Partners V	$ 43,000	4/15/2022	$ 5,719	$ -	$ 4,815	$ 4,815	NM
Wayzata Opportunities Fund III	$ 30,000	9/11/2012	$ 14,718	$ 11,338	$ 3,861	$ 15,199	0.7%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Private Equity

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Wynnchurch Capital Partners IV	$ 40,000	10/23/2014	$ 38,209	$ 39,897	$ 60,278	$ 100,175	27.3%
Wynnchurch Capital Partners V	$ 40,000	1/15/2020	$ 28,231	$ 538	$ 33,666	$ 34,204	15.1%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Real Estate

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
Angelo Gordon Net Lease IV	$ 50,000	2/17/2020	$ 45,944	$ 2,943	$ 47,708	$ 50,650	6.3%
Angelo Gordon Realty Fund XI	$ 50,000	3/31/2022	$ 5,000	$ -	$ 4,290	$ 4,290	NM
Bain Capital Real Estate II	$ 50,000	3/5/2021	$ 25,803	$ 2,365	$ 26,299	$ 28,664	10.8%
Blackrock Granite Property Fund	$ 63,791	9/30/2006	$ 68,771	$ 53,312	$ -	$ 53,312	-4.9%
Blackstone Property Partners	$ 350,000	6/29/2017	$ 350,000	$ 41,647	$ 409,102	$ 450,749	5.7%
Blackstone Real Estate Partners VII	$ 75,000	2/26/2012	$ 104,422	$ 155,916	$ 13,153	$ 169,068	14.9%
Blackstone Real Estate Partners VIII	$ 50,000	3/27/2015	$ 63,719	$ 65,135	$ 37,900	$ 103,035	15.7%
Blackstone Real Estate Partners IX	$ 40,000	12/21/2018	$ 43,884	$ 15,219	$ 47,476	$ 62,695	23.7%
Barings Asia Real Estate II	$ 50,000	7/31/2018	$ 21,041	$ -	$ 17,992	$ 17,992	NM
EQT Real Estate II	$ 55,000	4/26/2019	$ 31,496	$ 5,268	$ 29,914	$ 35,182	6.9%
EQT Real Estate Rock Co-Investment	$ 11,000	8/10/2020	$ 9,090	$ -	$ 10,607	$ 10,607	7.2%
H/2 Credit Partners, L.P.	$ 75,000	6/21/2011	$ 75,000	$ 112,177	$ -	$ 112,177	5.9%
Harrison Street Core Property Fund, L.P.	$ 75,000	4/30/2012	$ 95,749	$ 52,811	$ 132,721	$ 185,532	8.5%
HSRE-Coyote Maine PERS Core Co-Investment	$ 20,000	12/4/2020	$ 14,184	$ 1,669	$ 13,364	$ 15,034	2.4%
High Street Real Estate Fund IV, L.P.	$ 25,000	8/23/2013	$ 24,717	$ 34,157	$ -	$ 34,157	14.7%
High Street Real Estate Fund V	$ 25,000	7/24/2015	$ 24,925	$ 36,176	$ -	$ 36,176	13.2%
High Street Real Estate Fund VI	$ 25,000	3/22/2019	$ 25,000	$ 5,106	$ 38,269	$ 43,375	24.0%
HSREF VI Elgin Co-Invest	$ 10,000	4/9/2021	$ 10,000	$ 1,477	$ 13,677	$ 15,153	22.2%
High Street Real Estate Fund VII	$ 35,000	8/16/2021	$ 33,151	$ -	$ 38,524	$ 38,524	NM
High Street Real Estate VII Venture	$ 15,000	3/17/2023	$ 1,765	$ -	$ -	$ -	NM
Hines US Property Partners	$ 200,000	9/9/2021	$ 99,107	$ 11,550	$ 88,217	$ 99,767	NM
Invesco Real Estate Asia IV	$ 30,000	3/25/2020	$ 22,739	$ 13,923	$ 10,492	$ 24,414	9.7%
Invesco US Income Fund	$ 195,000	7/17/2014	$ 223,678	$ 64,955	$ 320,060	$ 385,016	10.6%
IPI Data Center Partners I	$ 30,000	12/15/2017	$ 34,676	$ 19,043	$ 36,242	$ 55,285	17.4%
IPI Data Center Partners II	$ 25,000	12/20/2019	$ 18,540	$ 1,619	$ 17,813	$ 19,432	4.2%
JPMCB Strategic Property Fund	$ 130,000	11/15/2005	$ 186,941	$ 297,519	$ -	$ 297,519	5.8%
KKR Real Estate Partners Europe I	$ 50,000	12/2/2015	$ 52,860	$ 54,632	$ 14,222	$ 68,854	9.8%
KKR Real Estate Partners Europe II	$ 25,000	12/23/2019	$ 19,592	$ 5,644	$ 14,866	$ 20,510	3.9%
KKR Real Estate Partners Americas I	$ 50,000	12/20/2013	$ 50,037	$ 59,408	$ 2,310	$ 61,717	10.9%
KKR Real Estate Partners Americas II	$ 50,000	6/2/2016	$ 59,546	$ 67,721	$ 14,725	$ 82,446	20.4%
Northbridge-Strategic Fund II	$ 30,000	2/8/2019	$ 30,000	$ 4,169	$ 44,596	$ 48,765	12.3%
Prima Mortgage Investment Trust, LLC	$ 75,000	7/29/2011	$ 97,490	$ 131,918	$ -	$ 131,918	3.8%
Principal Life Insurance Company U.S. Property	$ 60,000	5/20/2005	$ 60,000	$ 125,410	$ -	$ 125,410	6.2%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Real Estate

Fund Name	Commitment (A)	Date of Commitment	Amount Contributed (B)	Total Distributions (C)	Current Market Value (D)	Total Value (C+D)	Interim Net IRR
PRISA	$ 90,000	6/30/2005	$ 139,622	$ 222,450	$ -	$ 222,450	5.3%
Rubenstein Properties Fund III	$ 30,000	10/23/2015	$ 30,606	$ 627	$ 19,302	$ 19,929	-9.2%
LCC Co-Investor B	$ 15,000	10/18/2019	$ 15,000	$ -	$ 4,255	$ 4,255	-33.2%
Rubenstein Properties Fund IV	$ 25,000	4/16/2019	$ 8,232	$ 2	$ 5,055	$ 5,056	NM
Prudential Senior Housing Fund V	$ 50,000	3/17/2015	$ 41,333	$ 5,453	$ 47,943	$ 53,397	4.8%
Smart Markets Fund, L.P.	$ 195,000	6/17/2013	$ 222,335	$ 69,476	$ 303,527	$ 373,003	9.0%
Stonelake Opportunity Partners VII	$ 40,000	6/30/2022	$ 0	$ -	$ (1,020)	$ (1,020)	NM
Walton Street Real Estate Fund VII	$ 50,000	5/9/2012	$ 43,990	$ 49,882	$ 10,666	$ 60,548	9.1%
Walton Street Real Estate Fund VIII	$ 50,000	10/23/2015	$ 42,685	$ 35,493	$ 23,133	$ 58,626	10.0%
Co-Investment #1	$ 10,000	9/27/2017	$ 10,293	$ 4,160	$ -	$ 4,160	-60.0%
Westbrook Real Estate Fund IX	$ 15,000	6/30/2014	$ 17,418	$ 17,500	$ 2,794	$ 20,294	5.6%
Westbrook Real Estate Fund X	$ 50,000	1/15/2015	$ 48,688	$ 42,649	$ 16,513	$ 59,162	8.6%
Westbrook Real Estate Fund XI	$ 40,000	1/31/2019	$ 24,541	$ 11,223	$ 17,388	$ 28,610	18.5%

(all dollar amounts in thousands)

MainePERS Private Market Investments Summary: 06/30/2023

Notes: *As of 3/31/2023. NM = Not Meaningful. MainePERS only reports IRRs for funds with more than 24 months of history and for which Amount Contributed is greater than 50% of Commitments. "Date of Commitment" is not the date of first capital draw. The "IRR" presented uses interim estimates and may not be indicative of ultimate performance of partnership investments due to a number of factors including lags in valuation, maturity of fund, and differences in investment pace and strategy of various funds. Performance figures should not be used to compare returns among multiple funds or different limited partners. Private market investments are long-term investments which are expected to generate returns over the course of their entire life cycle of 10 or more years. Common industry practice dictates that any performance analysis on these funds while they are still in the early years of their investment cycle would not generate meaningful results. The Interim Net IRR figures presented in this table are based on cash flow information provided by the general partner. The above information was not prepared, reviewed, or approved by any of the partnerships, general partners, or their affiliates and may differ from those generated by the general partner or other limited partners due to differences in timing of investments, disposal of in-kind distributions, and accounting and valuation policies.

MAINEPERS

BOARD OF TRUSTEES INVESTMENTS MEMORANDUM

TO: BOARD MEMBERS

FROM: JAMES BENNETT, CHIEF INVESTMENT OFFICER

SUBJECT: **RHIT AND GLI INVESTMENT POLICY REVIEWS**

DATE: OCTOBER 4, 2023

I have worked with Cambridge Associates over the past several months to review the Investment Policy Statements (IPS) guiding the investment of Group Life Insurance (GLI) and Retiree Health Insurance Post-Employment Benefits Investment Trust Fund (RHIT) assets. This review has resulted in a number of proposed changes, including changes to the funds' asset allocations, as shown in the individual policy statements following this memo. Cambridge Associates' analysis of the proposed allocations also follows this memo and will be used as a basis for discussion at this meeting.

POLICY REFERENCE

Board Policy 2.1 – Investment Policy Statement

Board Policy 2.1-A – GLI Investment Policy Statement

Board Policy 2.1-B – RHIT Investment Policy Statement

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 – Communication and Support to the Board

RECOMMENDATION

That MainePERS update Policy 2.1-A – GLI Investment Policy Statement and Policy 2.1-B – RHIT Investment Policy Statement as shown in the marked-up documents following this memo.

GLI AND RHIT INVESTMENT POLICY STATEMENT REVIEW

As a reminder, the current GLI and RHIT investment policies specify that asset allocations be set in reference to the System's Defined Benefit (DB) asset allocation, and call for replacing DB allocations to private market asset classes with "replicating" investments in public market securities.

The proposed changes remove this reference to the DB asset allocation, and instead call for GLI and RHIT assets to be invested in “a diversified portfolio containing a moderate-to-high level of investment risk.” The specific allocation being recommended is shown below, and is consistent with the long-term nature of the GLI and RHIT assets, their investment goals of principal growth and preservation, and their potential need for liquidity.

	Target Allocation
Public Equity	70%
Traditional Credit	15%
US Governement Securities	15%
Cash	0%

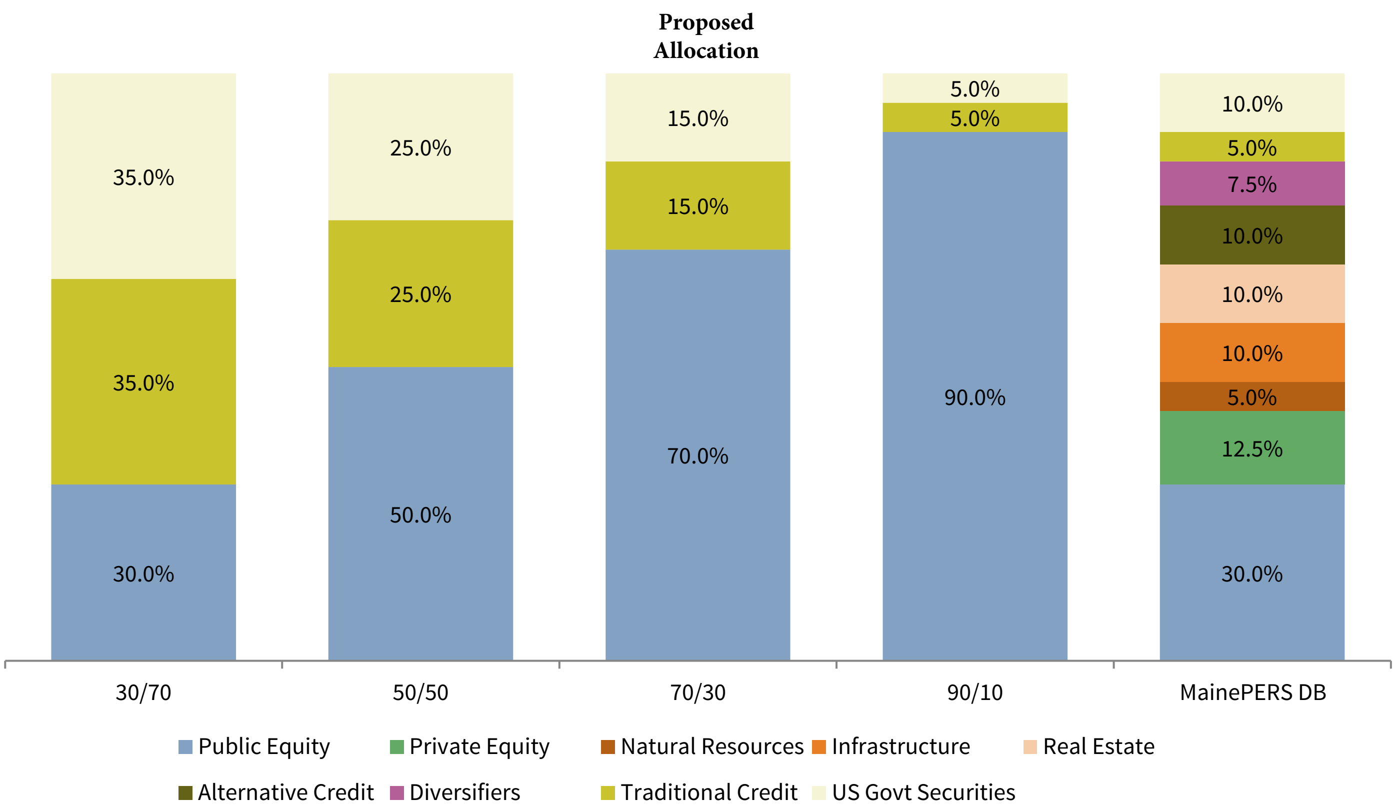
Cambridge’s analysis reports the Risk-Return attributes of this portfolio (70% allocation to equities), as well as a variety of other portfolio ranging from less risky (30% allocation to equities) to more risky (90% allocation to equities). Their analysis also contains the attributes of the DB portfolio, for reference purposes. A variety of risk measures are reported, including the probability of a loss over various time horizons and the performance of the different allocations during historical market scenarios.

RHIT ASSET ALLOCATION METRICS

CAMBRIDGE ASSOCIATES

OCTOBER 2023

Comparative Asset Allocation

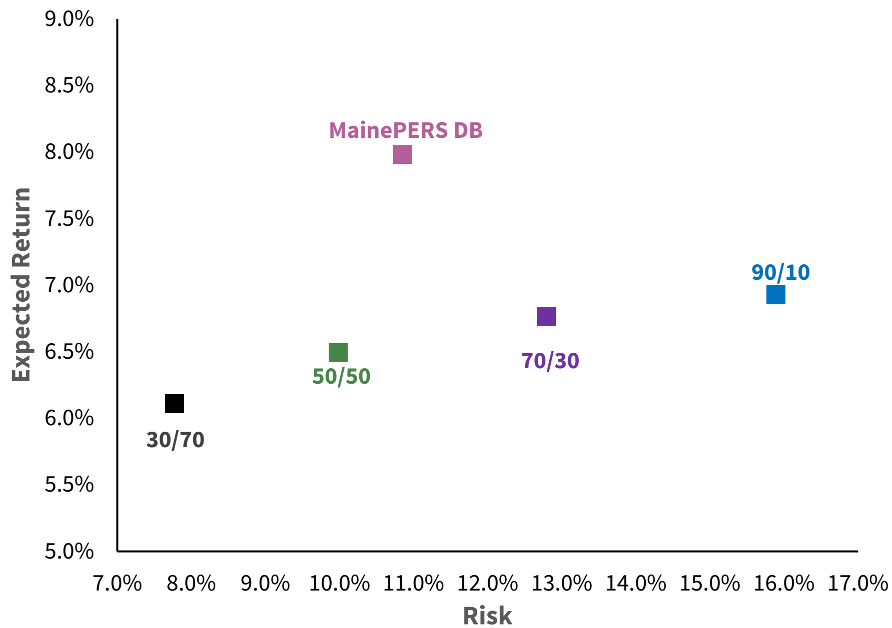


Note(s):Assumes 10 years of RTN assumptions and 15 years of Equilibrium assumptions.
Public Equities assumptions are a blend of Cambridge Associates assumptions: 60% US Equity, 28% Developed ex US Equity, 12% Emerging Markets Equity. Infrastructure assumptions are a blend of Cambridge Associates assumptions: 60% Oil & Gas, 20% Timber, and 20% Commodities. Diversifiers assumptions are a blend Cambridge Associates assumptions: 70% Absolute Return and 30% cash plus 300bps of alpha. Alternative Credit assumptions is Cambridge Associate’s High Yield assumption plus 300bps of alpha. US Government Securities are a blend of Cambridge Associates assumptions: 50% US TIPS, 50% US Govt Bonds.
1. Average Annual Compound Return

Risk/Return

As of August 31, 2023 • Nominal AACR[1] (%)

Blended 25-Year Assumptions + 2.7% annual inflation

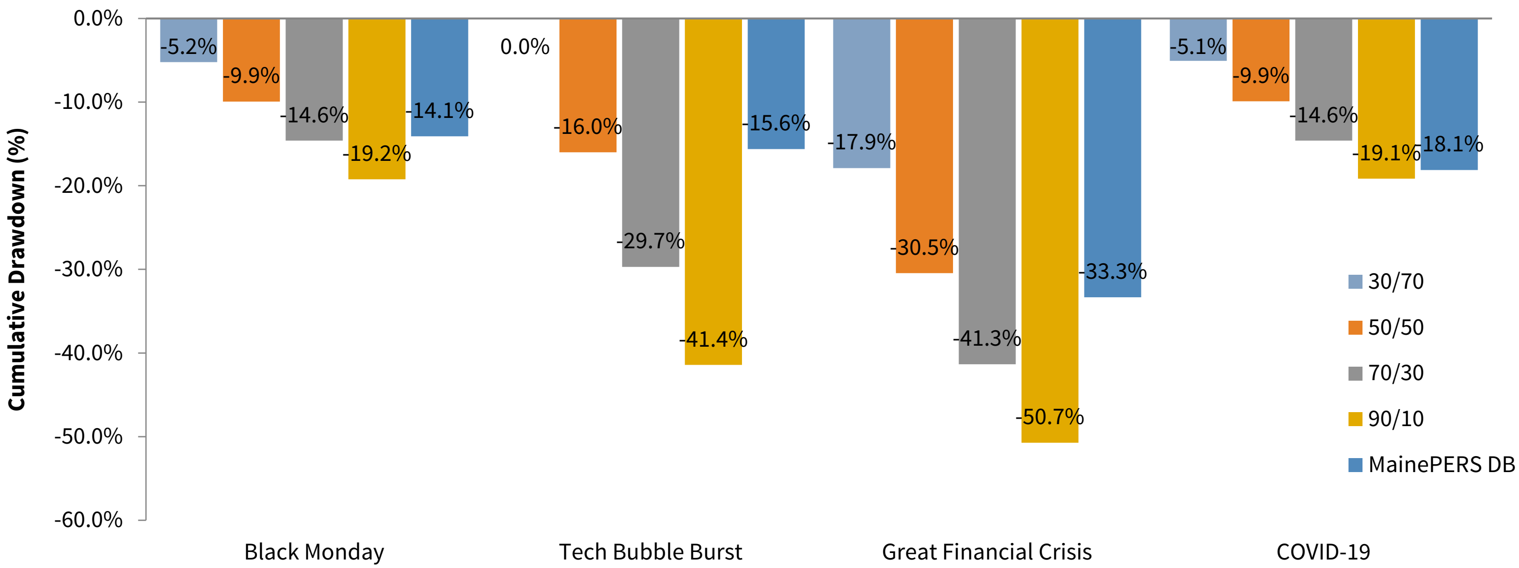


	30/70	50/50	70/30	90/10	MainePERS DB
Expected Return	6.1%	6.5%	6.8%	6.9%	8.0%
Standard Deviation	7.8%	10.0%	12.8%	15.9%	10.9%
Beta	0.35	0.54	0.72	0.91	0.57
Sharpe Ratio	0.07	0.09	0.09	0.09	0.18
Probability of a Negative Return					
1 Yr	25.3%	30.3%	34.9%	38.4%	27.7%
3 Yr	12.4%	18.6%	25.0%	30.4%	15.3%
5 Yr	6.8%	12.5%	19.2%	25.4%	9.3%
10 Yr	1.8%	5.2%	10.9%	17.5%	2.2%

Note(s):Assumes 10 years of RTN assumptions and 15 years of Equilibrium assumptions.
Public Equities assumptions are a blend of Cambridge Associates assumptions: 60% US Equity, 28% Developed ex US Equity, 12% Emerging Markets Equity. Infrastructure assumptions are a blend of Cambridge Associates assumptions: 60% Oil & Gas, 20% Timber, and 20% Commodities. Diversifiers assumptions are a blend Cambridge Associates assumptions: 70% Absolute Return and 30% cash plus 300bps of alpha. Alternative Credit assumptions is Cambridge Associate's High Yield assumption plus 300bps of alpha. US Government Securities are a blend of Cambridge Associates assumptions: 50% US TIPS, 50% US Govt Bonds.
1. Average Annual Compound Return

Portfolio Performance Under Historical Scenarios

- Black Monday: September 1, 1987 - November 30, 1987
- Tech Bubble Burst: April 1, 2000 - September 30, 2002
- Great Financial Crisis: November 1, 2007 - February 28, 2009
- COVID-19: January 1, 2020 - March 31, 2020



CAMBRIDGE ASSOCIATES

Board Responsibilities – Investment Policy for Group Life Insurance
2.1-A – GLI Investment Policy Statement

Date Adopted: October 12, 2017

Date Amended: November 12, 2020, October 12, 2023

Policy

The Board of Trustees of the Maine Public Employees Retirement System is authorized and responsible for administering group life insurance ("GLI") benefits for MainePERS members and for prudently investing GLI premiums until needed to pay benefits. The Board carries out its investment responsibility by adopting investment objectives and strategic asset allocations and delegating implementation to the investment staff (the "Investment Team").

Statutory/Legal Provisions

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

Investment Objectives

~~MainePERS' GLI investment objectives are the same as the investment objectives set forth in Board Policy 2.1, Investment Policy for Defined Benefit Plans, except that an additional goal for GLI investments is to maintain sufficient liquidity to pay benefits when due under existing GLI plan provisions and to provide flexibility should plan provisions change. The Board balances these goals by starting with the asset allocations used for the defined benefit funds, substituting public market securities for illiquid private market investments, and adjusting asset class target weights and ranges to reflect the differences. Substitute securities should be selected from~~

~~asset classes that replicate to the extent feasible the private market investments they are replacing~~.

MainePERS' GLI investment goals are the preservation and growth of principal in accordance with long-term investment assumptions established from time to time by the Board for the defined benefits plans of the System, as considered appropriate by the Trustees. An additional consideration for the GLI investments is to maintain sufficient liquidity to pay benefits when due under existing GLI plan provisions and to provide flexibility should plan provisions change.

The Board recognizes and accepts that these investment goals are in opposition, and that a trade-off exists between expected risk and return. The Board seeks to achieve these goals by constructing a diversified portfolio containing a moderate-to-high level of investment risk.

Strategic Asset Allocation and Rebalancing

The strategic asset allocation and asset class target weights set forth in Appendix 1 are established, in consultation with investment and actuarial consultants, for the GLI investments. The Investment Team shall maintain asset class weights within target ranges. The Investment Team will provide Trustees with reports showing current asset allocations at least quarterly. The Investment Team and Board consultants shall annually review the GLI investments and asset allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes for implementation by the Investment Team.

Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 2) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

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

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

Investment Implementation

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

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 2. Any exceptions must be approved by the Board.
- Investments within each asset class should be consistent with the asset class definitions appended to Board Policy 2.1.

Environmental, Social, and Governance; Engagement

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

Investment Manager Selection and Allocation Process

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

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

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

Derivatives/Leverage

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. Derivatives are not to be used as a means of obtaining leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval.

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

Transaction Costs and Brokerage

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

Emergency Measures

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

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

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

Board Responsibilities – Investment Policy for Group life Insurance
Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: October 12, 2017

Date Amended: ~~New~~*October 12, 2023*

The System's Group Life Insurance assets are invested across four asset classes that play distinct roles. The asset classes and target policy weights and ranges are set forth below.

	Weights		
	Minimum	Policy	Maximum
Public Equity	60%	70%	80%
~~Real Estate~~	~~0%~~	~~5%~~	~~8%~~
Traditional Credit	10%	~~16%~~15%	20%
US Government Securities	~~5%~~10%	~~9%~~15%	20%
Cash	0%	0%	10%

Board Responsibilities – Investment Policy for Group life Insurance
Appendix 2: Policy Benchmarks

Date Adopted: October 12, 2017

Date Amended: ~~New~~*October 12, 2023*

Asset	Benchmark	Weight
Total Public Equity	Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights	70%
~~Real Estate~~	~~NCREIF Property (lagged one quarter)~~	~~5%~~
Traditional Credit	Barclays US Aggregate, ex Treasury	~~16%~~15%
U.S. Government Securities	50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index ~~Custom Fixed Income Benchmark~~	~~9%~~15%

Board Responsibilities – Investment Policy for Retiree Health Insurance Post-Employment Benefits Investment Trust

2.1-B – RHIT Investment Policy Statement

Date Adopted: July 12, 2018

Date Amended: November 18, 2021, October 12, 2023

Policy

The members of the Board of Trustees, as trustees of the Retiree Health Insurance Post-Employment Benefits Investment Trust Fund ("RHIT" or "Investment Trust Fund"), are authorized and responsible for investing and managing the assets of the Investment Trust Fund in accordance with statutory requirements and the Investment Trust Fund Agreement dated January 10, 2008. The Board carries out its investment responsibility by adopting investment objectives and strategic asset allocations and delegating implementation to the investment staff (the "Investment Team").

Statutory/Legal Provisions

- 5 M.R.S. §§ 17431 - 17439; 18-B M.R.S. § 801, et seq. (Maine Uniform Trust Code); 18-B M.R.S. § 901, et seq. (Maine Uniform Prudent Investor Act).
- 5 M.R.S. §§ 17153(4).
- 5 M.R.S. § 286-B.
- Restatement (Third) of Trusts § 78(1) (2007) (the "sole interest rule").
- Restatement (Third) of Trusts formally permits, and in some cases requires, the delegation of investment decisions from trustees to internal staff or external agents with the necessary skills and knowledge.
- The Employee Retirement Income Security Act ("ERISA"), codified at 29 U.S.C. § 1002, *et seq.*, provides a description of the standard of care that applies to trustees of private sector retirement plans. Although the System as a public retirement plan is not specifically governed by the fiduciary duty standard set forth in ERISA, courts will often consider the standard set forth in ERISA when addressing public pension plan issues. Under ERISA, a fiduciary must act with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person (expert) acting in a like capacity would act. This statutory standard is derived from the common law of trusts, which is applicable in the State of Maine.

Background

The RHIT is established in statute to hold and invest funds for the benefit of the Irrevocable Trust Funds for Other Post-Employment Benefits ("Benefit Trusts"), which are separate trusts established to meet the State's unfunded liability obligations for retiree health benefits. The statute names the Board members as the trustees of the Investment Trust Fund.

The Benefit Trusts provide funding for the Investment Trust Fund pursuant to the Benefit Trusts'~~s~~ funding plans. ~~This~~ These funding plans include~~s~~ payment of the unfunded liability as of June 30, 2007, by June 30, 2037.~~; amortizing gains and losses over fixed 15-year periods; and amortizing assumption and plan changes over fixed 20-year periods.~~ The funding plans are ~~is~~ based on an expected rate of return of 6.5%. No disbursement of funds is expected from the Investment Trust Fund before the year 2027. The Investment Trust Fund may be required to make disbursements subsequent to 2027, and requests for disbursement may be received at any time.

Investment Objectives

The assets of the Investment Trust Fund are to be invested with a long-term time horizon in accordance with the Maine Uniform Trust Code and the Maine Uniform Prudent Investor Act.

The primary goals of Investment Trust Fund are the preservation and growth of principal in accordance with long-term investment assumptions established from time to time by the Board for the defined benefits plans of the System, as considered appropriate by the Trustees.

~~The Board works toward these goals by starting with the asset allocations used for the defined benefit funds, substituting public market securities for illiquid private market investments, and adjusting asset class target weights and ranges to reflect the differences. Substitute securities should be selected from asset classes that replicate to the extent feasible the private market investments they are replacing.~~

The Board recognizes and accepts that these goals are in opposition, and that a trade-off exists between expected risk and return. The Board seeks to achieve these goals by constructing a diversified portfolio containing a moderate-to-high level of investment risk.

Strategic Asset Allocation and Rebalancing

The strategic asset allocation and asset class target weights set forth in Appendix 1 are established for the RHIT investments. The Investment Team shall maintain asset class weights within target ranges. The Investment Team will provide Trustees with reports showing current asset allocations at least quarterly. The Investment Team shall annually review the RHIT investments and asset allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes for implementation by the Investment Team.

Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 2) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

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

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

Investment Implementation

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

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 2. Any exceptions must be approved by the Board.
- Investments within each asset class should be consistent with the asset class definitions appended to Board Policy 2.1.

Environmental, Social, and Governance; Engagement

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

Investment Manager Selection and Allocation Process

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

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

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

Derivatives/Leverage

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. Derivatives are not to be used as a means of obtaining leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval.

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

Transaction Costs and Brokerage

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

Emergency Measures

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

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

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

Board Responsibilities – Investment Policy for RHIT
Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: July 12, 2018

Date Amended: ~~*New*~~*October 12, 2023*

The RHIT assets are invested across four asset classes that play distinct roles. The asset classes and target policy weights and ranges are set forth below.

	Weights		
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US Government Securities	~~5%~~10%	~~9%~~15%	20%
Cash	0%	0%	10%

Board Responsibilities – Investment Policy for RHIT

Appendix 2: Policy Benchmarks

Date Adopted: July 12, 2018

Date Amended: ~~*New*~~*October 12, 2023*

Asset	Benchmark	Weight
Total Public Equity	Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights	70%
~~Real Estate~~	~~NCREIF Property (lagged one quarter)~~	~~5%~~
Traditional Credit	Barclays US Aggregate, ex Treasury	~~16%~~15%
U.S. Government Securities	~~Custom Fixed Income Benchmark~~ 50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index	~~9%~~15%

MAINEPERS

BOARD OF TRUSTEES GOVERNANCE MEMORANDUM

TO: BOARD MEMBERS

FROM: MICHAEL COLLERAN, CHIEF OPERATING OFFICER & GENERAL COUNSEL

SUBJECT: **BOARD MEETING POLICY AMENDMENT**

DATE: OCTOBER 5, 2023

We recommend amending Board Policy 1.10 – Board Meetings to provide more flexibility to the Board Chair to approve remote participation of Board members. A draft of the proposed amended policy is attached. In addition to the increased flexibility, the proposed amendment makes explicit that the policy also applies to meetings of Board committees and fixes a typographic error.

The statute requires that remote meeting policies be adopted after notice and hearing. We advertised that the Board would be considering this amended policy at this meeting, and an opportunity for public comment should be provided during the meeting.

POLICY REFERENCE

Board Policy 1.1 – Governance Principles and Commitment

Board Policy 1.4 – Trustee Responsibilities and Position Description

Board Policy 4.6 – Communication and Support to the Board

RECOMMENDATION

That the Board approve amended Board Policy 1.10.

Attachment

Board Governance
1.10 – Board Meetings

Date Adopted: October 8, 2015

Date Amended: October 11, 2018; November 12, 2020; August 12, 2021 (after notice and hearing); August 11, 2022 (after notice and hearing); October 12, 2023 (after notice and hearing)

Policy

The MainePERS Board of Trustees typically meets at least once a month. Board meetings are scheduled and held on the second Thursday of each month unless rescheduled to another date in that month due to holidays, weather or other conflicts. Additional Board meetings may be scheduled as needed.

Board meetings shall be managed by the Chair or the Chair's designee and through the use of agenda and Board materials provided to Trustees prior to each Board meeting.

This policy also applies to meetings of Board committees.

Statutory/Legal Provisions

1 M.R.S. § 400 et seq.
5 M.R.S. § 17103

Meeting Notice

MainePERS Board of Trustee meetings shall comply with open public meeting laws. Notice shall be given in advance of each meeting in compliance with Maine law.

Agenda

Board meeting agendas shall be set to enable Trustees to meet their legal, fiduciary, and oversight responsibilities. The agenda for each meeting shall be published to the Board meeting distribution list maintained by the Executive Department. Requests by an organization or member of the public to place an item on a Board meeting agenda must be made to the Chief Executive Officer at least two weeks prior to the meeting date and must clearly state the action requested. There is no right to have an item placed on the agenda, and items will be placed on the agenda only if determined by the Chief Executive Officer to be appropriate for the Trustees to address in meeting their responsibilities.

Copies of the agenda shall be available for guests and visitors outside the door of the boardroom.

Board Meeting Materials

Board meeting materials shall be prepared with the purpose of efficiently assisting Trustees in meeting their legal, fiduciary and oversight responsibilities. The Chief Executive Officer shall ensure that Board meeting materials provide Trustees with a comprehensive understanding of issues and decisions before them in a clear and concise format. Unnecessary or extraneous information shall not be distributed as it detracts from Trustee time available to focus on important matters. All decisions before the Board shall be presented with a range of available options accompanied by a staff recommendation of which option best serves the System and its related parties and why.

Trustees shall read the materials provided and come prepared to all meetings.

Guests and Visitors

Guests and visitors include MainePERS consultants and vendors, parties to an appeal process and their representatives, legislators, and members of the public, including MainePERS members, retirees, and employers. Vendors and consultants with pre-issued access badges may sign-in and enter the building upon arrival and are not subject to the following escort requirements. All other visitors must be escorted to the Board room either at the designated time on the agenda or at the beginning of the morning or afternoon session, as applicable, in accordance with MainePERS security policies and practices.

The Chair shall call on guests and visitors who are not known to the Board to introduce themselves and identify whom they represent, if applicable.

Guests and visitors must be escorted to and stay in the designated waiting area when Trustees are in executive session in accordance with MainePERS security policies and practices. Guests and visitors leaving the meeting must be escorted to the reception area.

Public Comment

The MainePERS Board of Trustees delegates the receipt, evaluation and response to public comment to the Chief Executive Officer. The MainePERS Board of Trustees receives public comment through the Chief Executive Officer in written form only and only if relevant to business currently before the Board. Public comment should be provided to the Chief Executive Officer at least one week prior to the Board meeting.

Unsolicited written information or verbal statements received on the day of the meeting are considered untimely for consideration in any of that day's discussions or decisions. Members of the public wishing to provide information to the Board can do so in writing through the Chief Executive Officer for possible consideration at a future date.

The Chair shall acknowledge the receipt of written public comment at the beginning of the meeting and, if necessary, inform guests and visitors that public comment must be received in writing through the Chief Executive Officer prior to the meeting to allow Trustees time to consider the material. The Chair will re-state that Trustees do not use written materials or verbal comments received on the day of the Board meeting in that day's discussions or decisions. The Chair shall ask guests to respect this policy. Disruptive guests shall be asked to leave the meeting.

Trustees and staff shall respect this policy by directing additional or new written or verbal public comment offered at Board meetings to the Chief Executive Officer. This will enable the Board to make decisions based on a common universe of information and speak with one voice.

The Chief Executive Officer shall work with stakeholders providing information to individual Trustees or the Board as a whole to understand their concerns. If the concerns are relevant to the business of the Board, the Chief Executive Officer will work first to resolve these concerns to the satisfaction of the stakeholder(s) and subsequently notify the Board of the concerns and the resolution. If the concerns are not resolved before a related scheduled Board action, the Chief Executive Officer shall forward the concerns to Trustees before the start of the meeting in which Board action is considered. The Chief Executive Officer shall also keep the Board informed of stakeholder concerns that are not addressed to the Board but, in the Chief Executive Officer's judgement, are relevant to the Board's legal, fiduciary, and oversight responsibilities.

The above provisions on receipt of public comment do not apply to rulemaking proceedings. Rulemaking is addressed in Board Governance Policy 2.3.

Remote Participation in Board Meetings

Board members are expected to attend and participate in Board meetings in person when feasible. However, under ~~certain~~ circumstances when being physically present is not feasible~~practicable~~, the Board Chair or presiding officer may permit one or more Board members to participate remotely using audio or videoconferencing. ~~This will be permitted only under the following circumstances:~~

- ~~A weather, public health, or other emergency or urgent issue in the judgment of the Chief Executive Officer requires the Board to meet by remote methods;~~
- ~~Illness or other medical condition prevents a Board member from attending in person; or~~
- ~~Temporary absence from the State of Maine prevents a Board member from attending in person.~~

If one or more Board members participate in a Board meeting by remote means, members of the public must also be permitted to attend remotely and the meeting must be conducted in accordance with 1~~5~~ M.R.S. § 403-B.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CEO

SUBJECT: CEO REPORT

DATE: OCTOBER 4, 2023

Member Portal

The Member Portal is a key strategic objective under the Strategic Plan *Goal IV: Cultivation of a Member-centric Organization*. Respondents to the 2023 Member Satisfaction Survey indicated significant support for a secure online portal with 88% of active and 68% of retired members saying they will use the member portal when available. I am pleased to announce that the phased launch of the portal began on October 2, 2023. Additionally, five member portal information sessions have been scheduled before the end of the calendar year to orient interested members to the features of the portal. Rolling out the member portal is truly a milestone for MainePERS and I am grateful to the many staff who have and are contributing to the rollout of this new service.

FY2023 Year End

At the October meeting, the Board will vote on the acceptance of the FY2023 valuation reports for the System's defined benefit plans. MainePERS experienced an investment return of 6.05% for the fiscal year, which is less than the assumed rate of return of 6.5%. The most important takeaway from the FY2023 defined benefit plan valuations, however, is that on an actuarial basis the plans' funded ratios are constant or improving, and the contribution rates remain stable. This is largely due to the three-year asset smoothing method employed by Board Policy 2.2, resulting in an investment return of 7.15% on a smoothed actuarial value of assets basis.

The actuarial value of assets (AVA) funded ratio for the State Employee/Teacher Plan increased from 83.9% in FY2022 to 85% in FY2023, while the calculated employer contribution rates decreased from 20.65% to 20.53%. The AVA funded ratio for the PLD Consolidated Plan remained constant at 91.2%, while the calculated aggregate contribution rate decreased slightly from 18.7% to 18.6%. The Legislative and Judicial Plans' AVA funded status remain overfunded at 144.5% and 109.9%, respectively. The Legislative Plan continues to have a calculated employer contribution rate of 0%, while the Judicial Plan rate dropped from 3.68% to 1.7%.

The Board will also vote on the acceptance of the FY2023 valuation reports for the System's retiree group life insurance plans. The net OPEB liability for the state-sponsored plan decreased from $111.9 million to $105.6 million. The net OPEB liability for the PLD plan decreased from $14.5 million to $13.6 million.

Today you will also hear from Berry Dunn about the audited financial statements for the year ending June 30, 2023. MainePERS has a “clean” audit for the year. The fiduciary net position increased in FY2023 by $905.1 million (4.8%), due in part to State contributions to the Retiree Health Insurance Post-Employment Benefits Investment Trust for state employees ($65 million) and teachers ($103 million).

State Employee and Teacher Plan Maturity

At the September Board Meeting a question arose around the planning timeline for the post-2028 full funding of the1996 unfunded actuarial liability (UAL). Staff have consulted with Cheiron and offer the following information.

Maturity of the State/Teacher Plan
Defined benefit plans are more vulnerable to market volatility as they mature and reach full funding. One reason is that in a market downturn the same plan that is 100% funded loses more actual dollars than if it were 40% funded, making a rebound more challenging. Another reason is that when a majority of members are in retired status, more money is flowing out of the plan to pay benefits than is flowing into the plan from contributions -- so when a market downturn occurs, there is less money invested in the fund to make up for the loss the following year. As the State/Teacher plan approaches maturity over the next 5 years -- with the payoff of the 1996 UAL and more members in retired than active status – de-risking the plan should be explored.

Strategic Plan
Under *Goal I: Preservation of the Trust Fund*, the Strategic Plan calls for us to plan for the post-2028 full funding of the 1996 State Employee and Teacher Plan UAL. This work is anticipated to culminate before rates are set for the FY2028 & FY2029 biennium, which occurs in July 2026. We were asked to evaluate the risk of an early payoff of the 1996 UAL and a corresponding drop in the contribution rates prior to 2028. Concerns included the impact on Net Cash Flow (NCF) should an early payoff occur.

Potential for an Early Payoff of the 1996 UAL
At issue, is whether a significant market surge would cause an early payoff of the 1996 UAL, resulting in the reduction of state contributions before reaching FY2028. In order to affect the rate-setting for the FY2026 & FY2027 biennium, such a surge would need to occur in the current fiscal year -- as rates for the upcoming biennium will be set in July 2024. More significantly, due to the 20-year amortization of gains and losses and three-year asset smoothing, even a market surge sufficient to bring the total UAL to zero would not result in a payoff of the 1996 UAL. This is because the total UAL consists of layers for each year, reflecting the gains/losses for that year:

- The 1996 layer is amortized over a period ending on 6/30/28, with 5 years remaining.
- The years 1997 through 2011, are reflected as a single layer that is also amortized over a period ending on 6/30/28, with 5 years remaining.
- Beginning with 2012, each layer is amortized over a period of 20 years.

Therefore, a large gain in FY2024 would be reflected in the FY2024 layer of the UAL – amortized over 20 years – and would not result in an early payoff of the 1996 layer of the UAL, which is amortized to be paid off in 2028.

Potential for Net Cash Flow (NCF) as a percent of assets to reach -5.0% prior to 2028
NCF equals contributions minus benefit payments and plan expenses. As Cheiron noted in their September presentation, sensitivity to investment risk becomes very significant when NCF as a percentage of assets reaches -5.0%. Cheiron's current projection based on annual earnings of 6.5%, is that NCF as a percentage of assets would reach -5.0% in 2040, more than 10 years after the 1996 UAL payoff in 2028. Cheiron ran a projection for us based on a 30% return in FY2024, and then annual earnings of 6.5% thereafter. In this scenario, NCF as a percentage of assets would reach -5.0% in 2042 – two years later than their current projection. This reflects the real driver towards the NCF as a % of assets reaching -5.0% is the growth in benefits. Additionally, even if there were a significant drop in state contributions, ongoing analysis by our investment team and consultants suggests that we can adjust the pacing of private market investments to ensure sufficient cash flow.

Strategic Plan Update & Key Performance and Risk Measures

The 5-Year Strategic Plan was adopted by the Board of Trustees in August 2022. At the October meeting I will present the first annual update on the plan. Included in the meeting materials is the memorandum, presentation, and updated key performance and risk measures.

Member Satisfaction Survey Results

MainePERS completed its second annual member satisfaction survey this August. At the October meeting I will present the survey results. Included in the meeting materials is the memorandum, presentation, and complete results for both the active and retired member surveys.

Pension Administration System Project Education

MainePERS' current pension administration system (PAS) is at end of life and in need of replacement. Planning for this transition began in fall 2022. At the October meeting Chip Gavin, Chief Services Officer, and I will present an overview of the project and detail on the current phase, which includes development of a request for proposal and contract award. The presentation is designed to identify areas of risk and provide education for Board oversight of the project. The presentation is included in the meeting materials.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CEO

SUBJECT: 5-YEAR STRATEGIC PLAN UPDATE

DATE: OCTOBER 4, 2023

POLICY REFERENCE

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 – Communications and Support to the Board

Following the Board's adoption of the 5-Year Strategic Plan in August 2022, much work has been done to implement and operationalize 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 System
IV. Cultivation of a Member-centric Organization
V. Development of Stakeholder Relations
VI. Foster an Engaged Workforce that Advances the Organization's Mission

Additionally, the four legislatively directed objectives in the Strategic Plan have been substantially completed, 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 2023 was adopted by the Board in October 2022. 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. Additionally a Trustee Charter was adopted by the Board in March 2023. The Charter sets forth the Board's principles, duties, and oversight responsibilities for the Governance of MainePERS and its programs. The Board also transitioned to an electronic board management system, Govenda, in February 2023 to better manage current and archived Board information.

The Board conducted its annual self-evaluation in September 2022. As part of this process an assessment of good governance practices was conducted, as well as annual education on those practices. Following receipt of the Board's input on educational needs, an Education Plan was developed for the Board. The Plan includes educational presentations during Board Meetings, conferences conducted by national associations, and materials for self-study. As part of this plan, fiduciary education was offered to the Board in November 2022 outlining the legal grounding of the Trustee's fiduciary duties. In April 2023, the governance consultant joined the Board to provide additional fiduciary education focusing on two case studies. Quarterly investment and annual actuarial practices education continued, education on diversity, equity and inclusion was held for the first time, and "mission moments" -- introducing the Board to various programs under MainePERS -- were instituted. Additionally, onboarding for the Trustee-elect from MEA was undertaken. The orientation was delivered by senior management over several meetings, and the topics covered include the governance framework, fiduciary duties, actuarial valuation, rate-setting, cost-of-living increases, finances, investments, member services and employer services. The Trustee-elect participated in the annual education on best practices in Board governance and is regularly attending Board meetings to observe.

To address key risk areas identified in the Strategic Plan, a Succession Plan for key staff was developed and presented to the Board in April 2023 and an Enterprise Risk Management (ERM) Plan was developed and presented to the Board in July 2023. Next steps call for amending Board Policy to require an annual review of the ERM by the Finance and Audit Committee.

After a year in development, the first annual Divestment Report to the Legislature was reviewed with Trustees in advance of filing as were key components of the report, notably the NEPC analysis of the impact of divestment and the legal advice provided by the Attorney General's Office. Staff proposed and the Board adopted an amendment to the Investment Policy Statement (Policy 2.1) to acknowledge the divestment laws, provide for disclosure of certain investments, and require annual reporting on the progress of divestment.

With assistance from the Board's general investment consultant, Cambridge Associates, staff reviewed the strategic asset allocation and the Board adopted minor adjustments to prepare for the post-2028 full funding of the 1996 unfunded actuarial liability (UAL). Additionally, available MaineSTART options were reviewed and modified. MainePERS also worked closely with the State Treasurer and State Controller on funding the Retiree Health Insurance Post-Employment Benefits Investment Trust for teachers, an agreement was signed in September 2022 and the trust received initial funding in June 2023.

Through its Finance and Audit Committee the Board reviewed the 2022 Annual Comprehensive Financial Report prior to its acceptance by the Board, with MainePERS receiving a "clean" audit for the year from its external auditor, Berry Dunn. For the eighteenth year in a row MainePERS was awarded a certificate of achievement for excellence in reporting from the Government Finance Officers Association.

The Finance and Audit Committee also reviewed the FY 2024 Annual Administration Operations and Investment Operations Budgets prior to their adoption by the Board. The budgets were developed to support ongoing operational needs as well as the 5-Year Strategic Plan. FY 2023 ended within budgets as approved by the Board. Additionally, the Committee oversaw a new outsourced internal audit program, which included the development of a risk assessment and 5-year internal audit plan. Audits of the disability retirement services program and investment controls were completed over the past year. An audit is currently in process for cash receipts and disbursements and an audit of facilities operations is scheduled to begin this month.

From an investment perspective, FY 2023 ended on a strong note as stock and bond markets reacted positively to the economy's resilience and the increased likelihood of a soft landing. Fund returns reported by the System's custodian for the 1, 5, and 10-year periods ending 6/30/23 were 4.7%, 8.4%, and 8.3%. The preliminary trust fund balance is $18.7 billion.

Efforts to improve the transparency of Board operations were put in place to post all public meeting materials on the MainePERS website in advance of meetings, in addition to agendas and minutes. These materials are now archived on the website so members of the public may easily review prior meeting materials. MainePERS also now posts materials for the Finance and Audit Committee and the PLD Advisory Committee online, as well as materials for ad hoc meeting groups, such as the Disability Working Group and the stakeholder meetings related to consensus-based rulemaking. Additionally, all Board and Committee meetings are now available live, and also recorded, via an online webinar platform.

Under ***Goal II – Stability of the Contribution Rates***, the Board reviewed and approved the FY 2022 actuarial valuations. On an actuarial basis for FY 2022, the State Employee and Teacher Plan had an investment return of 7.7% (market value of assets, -0.62%) and is 83.9% funded. The calculated employer contribution rate was stable at 20.65%. And, for the fifteenth consecutive year the System was awarded the Public Pension Coordinating Council's Recognition Award for Funding. The Board also adopted the FY 2024 and FY 2025 composite employer contribution rates at 19.87% and 19.89%, respectively. To support stabilization of the contribution rates over the biennium, the process of rate-setting included an acceleration of the amortization of the 2014 experience gain by six years, from 2034 to 2028, to coincide with the payoff of the 1996 UAL. The Legislative and Judicial Plans remain fully funded at 143.8% and 108.4%, respectively.

MainePERS also administered the award of three cost-of-living adjustments for the State-sponsored Plans. The Consumer Price Index-Urban (CPI-U) for the twelve months ended June 30, 2022 was 9.1%. Pursuant to Maine law, the Board of Trustees awarded an annual cumulative COLA of 3% in September 2022. The Legislature then authorized the awarding of a 1% one-time COLA, which was processed in April 2023 and a 3% one-time COLA, which will be processed 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 2022, the Plan is 91.2% funded. The calculated contribution rate was stable at 18.7%. 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%.

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 2022. The PLD Advisory Committee recommended and the Board of Trustees authorized the awarding of an additional 1% cumulative COLA, which was processed in February 2023.

For ***Goal III – Security and Integrity of our Information System***, staff worked with the current pension administration (line-of-business) system vendor, Vitech, to make some critical updates to the System and work began on the planning for a new pension administration system (PAS). An oversight team was chartered in fall 2022, which issued a Request for Information to potential PAS providers to better understand the vendor landscape. The team also hired a consultant to help develop the Request for Proposal to procure the new PAS and this work is currently underway.

We successfully completed an audit by CBIZ of our compliance with the National Institute of Standards and Technology (NIST) cybersecurity framework and several security tests and assessments conducted by Tyler Technologies. We explored a self-insured model for cybersecurity risk with the assistance of Monarch Information Security Consulting, but chose to renew our cyber-insurance policy when the insurer offered to reduce premiums and expand coverage.

An AirGap system was implemented to retain a full backup of our computing environment vaulted from any access and replicated hourly. We also implemented Manage Engine Endpoint Central to enhance our desktop patching program to ensure all security patches for all software are successfully deployed and tracked.

Our Information Technology staff upgraded the wireless infrastructure in the Augusta and Portland offices and replaced the uninterrupted power supplies in both locations. Planning has also begun to transition from an on-premises environment to a more secure cloud-based environment beginning in 2025.

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***. To this end, staff implemented an annual Member Account Statement for active members that proactively communicates key retirement information including the member's service credit, contributions, and interest earned to date. MainePERS developed educational videos and unveiled an online Benefit Estimator, which are published on our website to support members in actively planning for their retirement. Additionally, we added an online workshop for new and mid-career members to better understand their retirement benefit and associated retirement services. MainePERS expanded the availability of its defined contribution program, MaineSTART, to teachers and to date two school districts have elected to join the program. MaineSTART ended FY 2023 with a 7.3% increase in participation and 12.5% increase in total assets invested.

MainePERS conducted the first annual member survey for active and retired members in August 2022. Ninety-two percent (92%) of retirees and 69% of active members indicated they were "satisfied" or "very satisfied" with MainePERS. Over 91%, of retirees and more than three quarters of active members, 76%, stated they "agree" or "strongly agree" that MainePERS acts with integrity. And, 83% of retirees and 66% of active members "agree" or "strongly agree" that MainePERS staff are knowledgeable.

To better understand and address chronic backlogs of member requests for services, staff developed and refined tracking tools for key metrics and now monitor workflow on a weekly basis. Focus Friday's were introduced in April 2023 as a temporary measure to prevent the backlogs from worsening. 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. Backlogs in requests for benefit verification, beneficiary elections, and member account statements were eliminated. As additional attention was needed to reduce the backlog in moving retired members from a preliminary to a final benefit, staff recommended continuation of the Focus Fridays for an additional six months with a report back to the Board at that time.

MainePERS conducted an extensive review of the disability retirement program following the implementation of Public Law 2021, c. 277. The review included a program audit to ensure the law had been fully implemented, an evaluation of the medical review service provider, a member experience survey, and the engagement of stakeholders in consensus-based rulemaking to update the rules for compliance with the law. The program and rules are compliant with the law and 92% of members who applied for disability retirement under the new law were "satisfied" or "very satisfied" the process was fair.

Perhaps one of the most significant achievements in the past year is the development and implementation of a member portal for which a phased rollout begins in fall 2023. To date the program has undergone rigorous user and cybersecurity testing to ensure it is both easy to use and secure. In advance of the rollout, members are receiving information about the portal including a form to update their contact information in preparation for the multi-factor authentication security feature of the portal. We also dedicated our July member newsletter to educating members on the portal's features.

Under ***Goal V – Development of Stakeholder Relations***, MainePERS staff focused on improving stakeholder relations with our 600 plus employers. With the support of the Board, employer reporting staff was increased to address demand and provide employers with a single point of contact. Staff developed tools for key metrics to monitor workflow and made significant improvement in addressing a backlog of account reconciliations bringing the percentage of reconciled accounts up to 73% as of July, from 51% a year earlier. Staff have also been working with employers and payroll providers to educate and improve reporting compliance. Additionally, staff recommended and the Board adopted policy assigning the oversight of employer reporting to the Finance and Audit Committee following news stories on two employers that were out of compliance with reporting requirements. Finally, an employer satisfaction survey was conducted in July 2023. Seventy-nine percent (79%) of employers were "satisfied" or "very satisfied" with MainePERS.

A Disability Working Group made up of employer and employee representatives was convened to develop a long-term disability insurance option for public employees and to review the reforms to the disability retirement program following the implementation of Public Law 2021, c. 277. The work and observations of the working group were included in the Disability Retirement Report and the Long-term Disability Insurance Report filed with the Legislature.

MainePERS worked closely with the members of the Participating Local District Advisory Committee sharing information on the PLD Consolidated Plan, developing contribution rates, and implementing two cost-of-living increases. Additionally, we provided an onboarding orientation for two new members of the Committee.

Presentations were made by staff to the Joint Standing Committees of the Legislature on Labor and Housing and Appropriations and Financial Affairs on the FY 2022 Valuation and funding trends, as well as the 5-Year Strategic Plan. MainePERS also worked closely and collaboratively with the Labor and Housing Committee and other stakeholders on legislation impacting MainePERS members. Senior leaders met with stakeholders on request to discuss issues related to services, legislation and investments. Stakeholders were also kept informed via email on important issues.

A sixth Goal was recommended by staff and adopted by the Board of Trustees for the Strategic Plan, ***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 is organizing to promote interdepartmental communication and collaboration as we work to bring all MainePERS staff into one cohesive team. A staff-led Events Committee was also established to plan social engagements and employee recognition events. Additionally, the senior management team organized and staffed the second annual All Staff Cookout as a thank you to our employees for their work on behalf of our members.

Strategic performance management was implemented in fall 2022 for all confidential staff, including an annual self-evaluation, performance review, and performance compensation program. Prior to this, there was no formal process in place for confidential staff. Diversity, equity and inclusion (DEI) training was held for all staff, including an expanded program for senior management. Four of our staff are pursuing a DEI certification, including two from Human Resources. With the support of the Board, two training positions were added for Member Services and Employer Services to improve the quality of training for staff, and accelerate staff productivity and advancement. Emerging leaders were offered a cohort leadership educational experience to support advancement. Additionally, senior leaders and the investment team participated in fiduciary training led by the Board's governance consultant and the General Counsel.

Also with the support of the Board of Trustees, staffing for member services was increased and MainePERS implemented retention payments to address an attrition rate of 36% in calendar 2022. Turnover declined in the first half of 2023, down 30% from the prior calendar year. An employee satisfaction survey was conducted in February 2023. The survey's response rate was 72%, of those responding 74% stated they "agree" or "strongly agree" they are satisfied with their job. Responses to the survey suggest some optimism that the work culture and environment are moving in a positive direction, but also acknowledge there is more work to do and that transformation takes time. Employees noted that interdepartmental relationships need attention and that the work backlogs were burdensome. Additionally, employees expressed concerns that the compensation structure did not value seasoned employees and that entry-level compensation was too low. Subsequent to the employee survey, MainePERS completed a market compensation study and position review in spring 2023, leading to agreement with the employee union on a third-year wage reopener which was approved by the Board of Trustees.

In August 2023 we revamped the onboarding program for new staff to include education on the MainePERS mission and strategic plan by senior managers. Members of the Organizational Values Steering Committee also participate by discussing the organizational values. And soon, new employees will receive cross-departmental introductions as part of their onboarding to promote communication and collaboration among departments.

Conclusion

Much has been accomplished to move the 5-Year Strategic Plan adopted by the Trustees forward and the momentum is accelerating. 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 12, 2023

Dr. Rebecca Wyke, CEO

Mission and Vision Statements

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.

Organizational Values

Accountability – We act with integrity. We educate, equip, and empower all to consistently deliver knowledgeable and respectful service to our constituents and colleagues.

Respect – We are mindful of culture and diversity in all we do, exercising empathy, compassion, kindness, and appreciation in valuing all others.

Collaboration – We work together, proactively sharing information and knowledge and acting transparently in all interactions.

Stewardship – We secure and safeguard assets (data, funds) entrusted to our care and consistently comply with our obligations to ensure benefits are sustained.

Agility – We strive for personal and organizational excellence through continuous improvement.

Goal I: Preservation of the Trust Fund

Strategic Objectives:

A. Continuously review governance and risk management practices that drive accountability, consistency, and transparency and engage trustees in annual fiduciary education

B. Continuously review the strategic asset allocation to optimize earnings, manage risk, and ensure sufficient liquidity

C. Plan for post-2028 full funding of the 1996 State Employee and Teacher Plan UAL and engage with stakeholders

D. Develop policy to address the recent divestment legislation in accordance with sound investment criteria and consistent with fiduciary obligations

E. Exercise efficient use of resources in the administration of the retirement plans and related services

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

I. Preservation of the Trust Fund

- Conducted a good governance assessment of Board practices, as well as annual education - A
- Conducted the annual Board self-evaluation - A
- Developed a Trustee Charter for the Board – A
- Developed an Annual Work Plan for the Board - A
- Developed a Board Education Plan - A
- Conducted annual Fiduciary Duty Education for the Board – A
- Conducted new Trustee orientation - A
- Developed an Enterprise Risk Management Plan - A
- Developed a Staff Succession Plan - A
- Transitioned to an electronic board management system, Govenda, to better manage current and archived Board information - A
- Added Board Meeting materials to the MainePERS website and an archive of prior meeting materials to improve transparency - A

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

I. Preservation of the Trust Fund cont.

- Implemented an online webinar platform to broadcast and record Board Meetings – A
- Executed agreement to fund the Retiree Health Insurance Post-Employment Benefits Investment Trust for Teachers– B
- Reviewed and modified available MaineSTART options – B
- Reviewed and modified the strategic asset allocation - B & C
- Began work with actuary for post-2028 planning – C
- Developed response to the divestment legislation and filed the first Divestment Report with the Legislature - D
- Amended Policy 2.1 to acknowledge the divestment laws, provide for disclosures, and annual reporting - D
- Adopted the FY 2023 Budget & completed fiscal year within budget - E
- Received a “clean” audit for the FY 2022 financial statements - E
- Developed a risk assessment and 5-year internal audit plan; completed audits for disability retirement services and investment controls - E

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Goal II: Stability of the Contribution Rates

Strategic Objectives:

A. Employ periodic experience studies and annual actuarial valuations to identify the trust fund’s future financial needs

B. Apply sound actuarial methods to promote stability of the contribution rates

C. Ensure employers and other stakeholders are informed of funding trends

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

II. Stability of the Contribution Rates

- Reviewed and approved the FY 2022 actuarial valuation - A
  - State/Teacher Plan 83.9% funded; calculated employer contribution rate stable at 20.65%
  - Legislative & Judicial Plans fully funded at 143.8% & 108.4%
  - PLD Consolidated Plan 91.2% funded; calculated contribution rate stable at 18.7%
- Adopted the FY 2024 & FY 2025 employer contribution rates for the State/Teacher Plan of 19.87% and 19.89% respectively - B
  - Rate-setting included an acceleration of the amortization of the 2014 experience gain by 6 years to coincide with the payoff of the 1986 UAL
- Adopted the FY 2024 aggregate contribution rate for the PLD Consolidated Plan of 18.6% - B
- Reported on funding trends to the Joint Standing Committees of Labor and Housing and Appropriations and Financial Affairs - C
- Communicated funding trends via the newsletter to members and other stakeholders - C

II. Stability of the Contribution Rates cont.

- Reported on funding trends to the Joint Standing Committees of Labor and Housing and Appropriations and Financial Affairs - C
- Communicated funding trends via the newsletter to members and other stakeholders – C
- Administered the award of three cost-of-living adjustments for the State-sponsored Plans and two for the PLD Consolidated Plan - C

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Goal III: Security and Integrity of our Information Systems

Strategic Objectives:

A. Ensure the cybersecurity management program meets current and future needs
B. Maintain and upgrade core information systems
C. Explore a cloud strategy to host information systems

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

III. Security and Integrity of our Information Systems

- Successfully completed an audit of our compliance with the National Institute of Standards and Technology (NIST) cybersecurity framework – A
- Completed security tests and assessments with Tyler Technologies, including for the new member portal -A
- Implemented an AirGap system to retain a full backup of our computing environment - A
- Implemented Manage Engine Endpoint Central to enhance our desktop patching program -A
- Upgraded the wireless infrastructure in Augusta & Portland - A
- Replaced the uninterrupted power supply in Augusta & Portland - A

III. Security and Integrity of our Information Systems cont.

- Worked with current Pension Administration System (PAS) vendor to make critical updates to the System - B
- Began planning for a new PAS - B
  - PAS Team chartered
  - RFI issued to explore vendor landscape
  - Consultant hired to develop the RFP for the new PAS
- Began planning the transition from an on-premises environment to a more secure cloud-based environment - C

Goal IV: Cultivation of a Member-centric Organization

Strategic Objectives:

A. Develop a comprehensive member education, communications, and service model that supports planning for retirement security

B. Improve processes to promote timely and accurate service by ensuring the integrity of the data, streamlining and automating workflow processes, and reducing processing times

C. Document workflow policies, practices, and procedures and develop staff training programs

D. Institute a quality assurance and control program

E. Implement a member self-service portal, including access to annual member statements

F. Expand the availability of defined contribution plans (MaineSTART)

G. Assess the experience of the system and its members following the implementation of the new disability legislation

H. Seek member input and measure satisfaction

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

IV. Member Centric Organization

- Implemented an annual Member Account Statement - A
- Developed an online Benefit Estimator - A
- Developed on demand educational videos for pending retirees: - A
  - *When Should I Begin Planning for My Retirement?*
  - *How Do You Select Your Benefit Payment Option?*
  - *How Do You Receive Your Benefit Payments?*
  - *Can My Benefits Be Used to Cover the Costs of Insurance?*
- Developed an early and mid-career online information session to introduce members to the defined benefit plan and associated retirement services - A

IV. Member Centric Organization cont.

- Began planning for a new Pension Administration System – A & B
- Developed tracking tools for key metrics to monitor workflow - B
- Introduced Focused Fridays to reduce a chronic backlog of member requests - B
  - Reduced the backlog for service retirement estimates from 1,011 in May to 264 at the end of July
  - Eliminated the backlogs for benefit verifications, beneficiary elections, and member account statements
  - Maintained the backlog of preliminary to final benefits and prevented it from worsening
- Established a staff training program for Member Services Staff – C & D
- Developed an online member portal -E
  - Phased rollout began October 2, 2023

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

IV. Member Centric Organization cont.

- Expanded the availability of MaineStart to teachers - F
  - Promoted the program to superintendents in July 2022
  - Two school districts have opted to participate to date
  - Plans to attend Maine School Management Assn annual meeting in October to promote the program
- Conducted an expansive review of the Disability Retirement Program and presented report to the Board of Trustees and the Joint Standing Committee on Labor and Housing - G
  - Program Audit
  - Medical Review Service Provider Evaluation
  - Member Experience Survey
  - Consensus-based Rulemaking
- Conducted the first annual member survey for active and retired members in August 2022 - H

Goal V: Development of Stakeholder Relations

Strategic Objectives:

A. Provide legislators, employers, and other stakeholders with information on defined benefit retirement plans and related services
B. Continue to explore with stakeholders potential post-2028 pension plan options that enhance benefit portability, including Social Security participation
C. Engage stakeholders to develop an implementation plan for providing mandatory long-term disability insurance coverage to members through their employers
D. Develop a comprehensive employer education, communications, and service model and partner with employers and third-party payroll vendors to streamline processing and improve reporting
E. Seek employer input and measure satisfaction

V. Development of Stakeholder Relations

- Delivered an overview of MainePERS to the Joint Standing Committees of the Legislature for Labor and Housing and Appropriations and Financial Affairs – A
  - Worked with legislators and other stakeholders on legislation impacting MainePERS members
- Met with stakeholders on request to discuss issues related to services, legislation, and investments – A
- Met with actuary to begin planning for the post-2028 payoff of the 1998 UAL - B
- Convened the Disability Working Group made up of employee and employer representatives to develop a long-term disability insurance option for public employers and address lingering concerns with the Disability Retirement Program - C

V. Development of Stakeholder Relations cont.

- Increased employer reporting staff and provided employers with a single point of contact – D
- Began development of a training program for employer services- D
- Developed tracking tools in Employer Services for key metrics to monitor workflow and made significant improvement in addressing a backlog of account reconciliations - D
  - Percentage of reconciled accounts increased to 73% from 51% a year ago
- Amended Board Policy to provide oversight of employer reporting to the Finance and Audit Committee - D
- Began partnering with payroll providers to improve reporting - D
- Began planning for a new Pension Administration System - D
- Worked with the PLD Advisory Committee to develop contribution rates and implement COLAs – D
- Conducted an employer satisfaction survey - E

Goal VI: Foster an Engaged Workforce that Advances the Organization’s Mission

Strategic Objectives:

A. Institutionalize the Organizational Values developed by the staff
B. Develop an onboarding, training, and development plan
C. Support and empower staff in the performance of their work
D. Create a staff working group to advance a positive organizational culture
E. Implement strategic performance management
F. Increase awareness and knowledge related to diversity, equity, and inclusion (DEI)
G. Develop and maintain a succession plan

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

VI. Foster an Engaged Workforce that Advances the Organization's Mission

- Chartered the Organizational Values Steering Committee – A & D
  - Issued an RFP for a consultant to facilitate work of the Committee
  - Currently organizing to promote interdepartmental communication and collaboration
- Added training positions for both Member Services and Employer Services to improve the quality of training for staff and accelerate staff productivity – B
- Senior leaders and the investment team participated in fiduciary training – B
- Revised the new staff onboarding plan to include education on the MainePERS mission and the strategic plan - B
  - Including staff participation in presenting the organizational values

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

VI. Foster an Engaged Workforce that Advances the Organization's Mission cont.

- Offered emerging leaders a cohort leadership educational experience through the Kennebec Leadership Institute – B
- Conducted an employee satisfaction survey – C
- Retention bonuses implemented to stabilize staffing - C
- Completed a market compensation study & position review - C
  - Reaching agreement with MSEA on third-year wage reopener approved by the Board of Trustees
- Chartered the Events Committee to plan social engagement - D
- Implemented strategic performance management for confidential staff, including annual self-evaluations & performance reviews - E
- Conducted DEI education, including an expanded program for the senior management team - F
- Developed a staffing succession plan – G

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Objectives

All short-term legislatively directed objectives listed in the Strategic Plan have been completed.

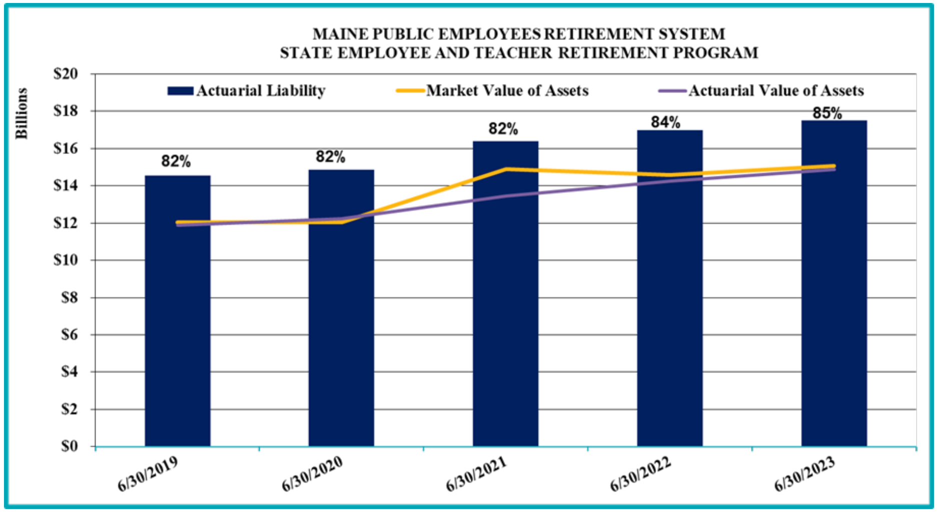
- Planning for the post-2028 full funding of the Unfunded Actuarial Liability (UAL), including potential public pension plan options that include social security *Resolves 2021, c. 66 & 72*
- Responding to the recent divestment legislation *PL 2021, c. 231 & 234*
- Expanding the availability of defined contribution plans to teachers *PL 2021, c. 548*
- Exploring mandatory long-term disability insurance coverage *PL 2021, c. 277*

Key Performance & Risk Metrics

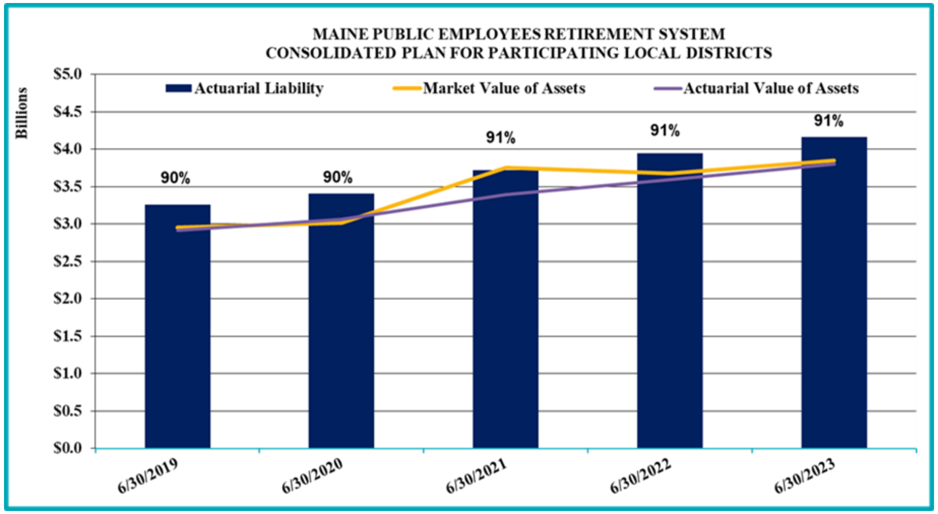
2023 Strategic Plan Update

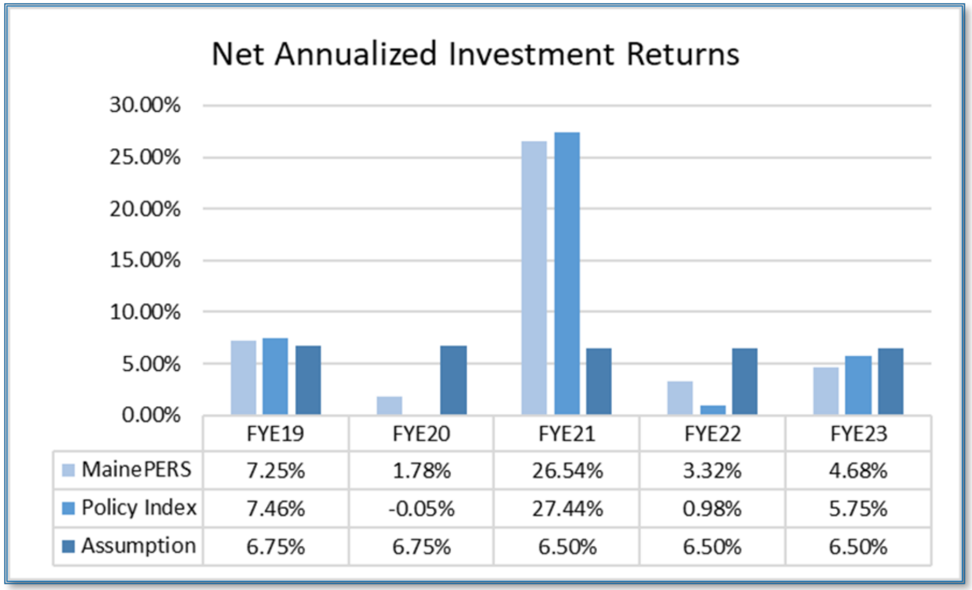
Funding Ratio, Actuarial Liability, and Market Value of Assets

State Employee and Teacher Plan

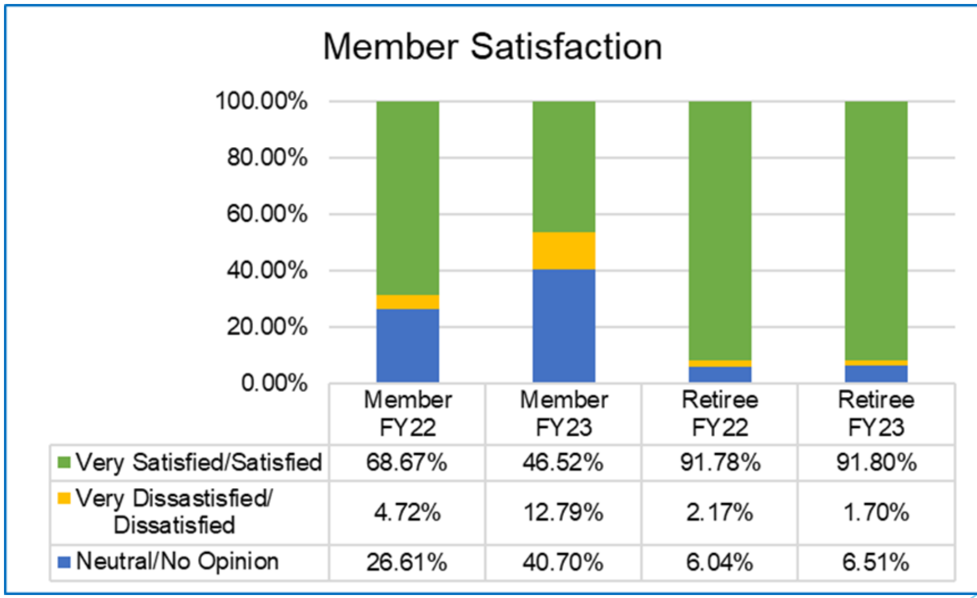


PLD Consolidated Plan



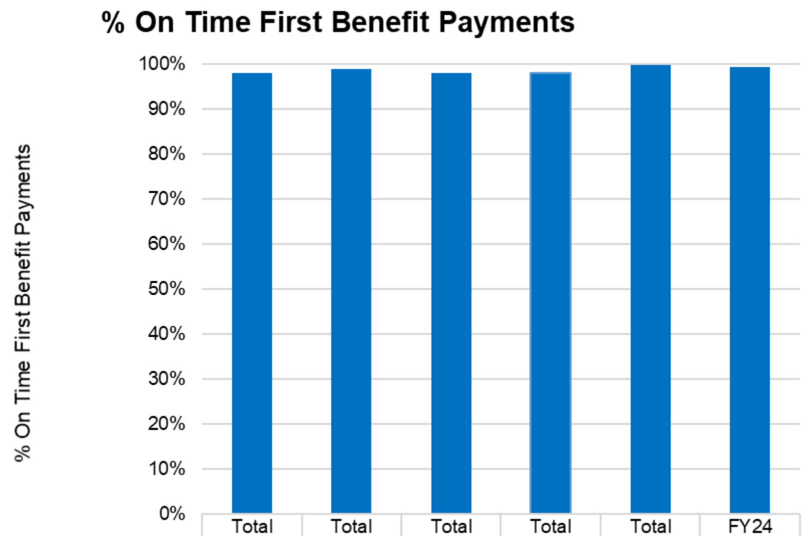


	FYE19	FYE20	FYE21	FYE22	FYE23
MainePERS	7.25%	1.78%	26.54%	3.32%	4.68%
Policy Index	7.46%	-0.05%	27.44%	0.98%	5.75%
Assumption	6.75%	6.75%	6.50%	6.50%	6.50%

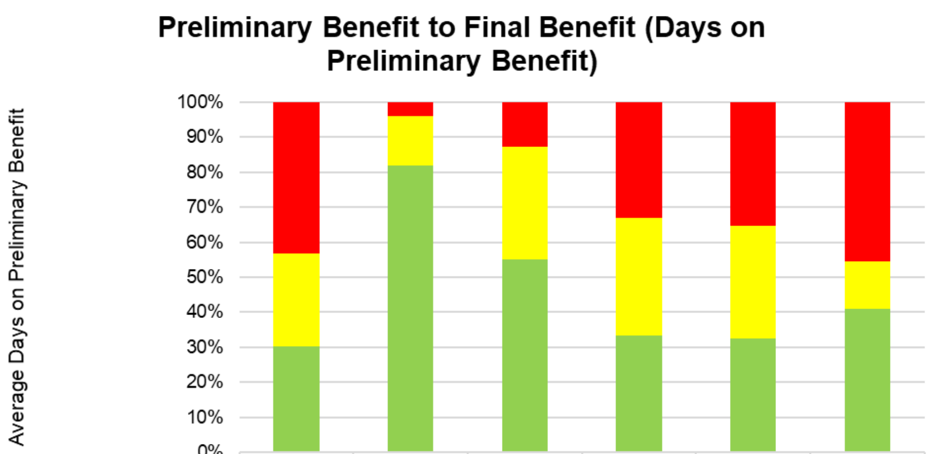


	Member FY22	Member FY23	Retiree FY22	Retiree FY23
Very Satisfied/Satisfied	68.67%	46.52%	91.78%	91.80%
Very Dissastisfied/ Dissatisfied	4.72%	12.79%	2.17%	1.70%
Neutral/No Opinion	26.61%	40.70%	6.04%	6.51%

Benefit Initiation



	Total FY19	Total FY20	Total FY21	Total FY22	Total FY23	FY24 YTD
% On Time First Benefit Payments	98%	99%	98%	98%	100%	99%



	PRW-O FY20*	PRW-O FY21	PRW-O FY22	PRW-O FY23	PB to Final FY23	PB to Final FY24 YTD
> 6 Months	43.2%	3.9%	12.7%	33.1%	35.4%	45.5%
> 90 Days to < 6 Months	26.7%	14.3%	32.3%	33.5%	32.2%	13.5%
0 to < 90 Days	30.1%	81.8%	55.0%	33.4%	32.4%	41.0%

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

5-Year Strategic Plan
Update to Board of Trustees

October 12, 2023

Dr. Rebecca Wyke, CEO

Mission and Vision Statements

Mission

MainePERS partners with public employers to deliver retirement and related services.

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MainePERS is a trusted and effective fiduciary focused on meeting the needs of active and retired members, beneficiaries, and employers.

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Collaboration – We work together, proactively sharing information and knowledge and acting transparently in all interactions.

Stewardship – We secure and safeguard assets (data, funds) entrusted to our care and consistently comply with our obligations to ensure benefits are sustained.

Agility – We strive for personal and organizational excellence through continuous improvement.

Goal I: Preservation of the Trust Fund

Strategic Objectives:

A. Continuously review governance and risk management practices that drive accountability, consistency, and transparency and engage trustees in annual fiduciary education

B. Continuously review the strategic asset allocation to optimize earnings, manage risk, and ensure sufficient liquidity

C. Plan for post-2028 full funding of the 1996 State Employee and Teacher Plan UAL and engage with stakeholders

D. Develop policy to address the recent divestment legislation in accordance with sound investment criteria and consistent with fiduciary obligations

E. Exercise efficient use of resources in the administration of the retirement plans and related services

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

I. Preservation of the Trust Fund

- Conducted a good governance assessment of Board practices, as well as annual education - A
- Conducted the annual Board self-evaluation - A
- Developed a Trustee Charter for the Board – A
- Developed an Annual Work Plan for the Board - A
- Developed a Board Education Plan - A
- Conducted annual Fiduciary Duty Education for the Board – A
- Conducted new Trustee orientation - A
- Developed an Enterprise Risk Management Plan - A
- Developed a Staff Succession Plan - A
- Transitioned to an electronic board management system, Govenda, to better manage current and archived Board information - A
- Added Board Meeting materials to the MainePERS website and an archive of prior meeting materials to improve transparency - A

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

I. Preservation of the Trust Fund cont.

- Implemented an online webinar platform to broadcast and record Board Meetings – A
- Executed agreement to fund the Retiree Health Insurance Post-Employment Benefits Investment Trust for Teachers– B
- Reviewed and modified available MaineSTART options – B
- Reviewed and modified the strategic asset allocation - B & C
- Began work with actuary for post-2028 planning – C
- Developed response to the divestment legislation and filed the first Divestment Report with the Legislature - D
- Amended Policy 2.1 to acknowledge the divestment laws, provide for disclosures, and annual reporting - D
- Adopted the FY 2023 Budget & completed fiscal year within budget - E
- Received a "clean" audit for the FY 2022 financial statements - E
- Developed a risk assessment and 5-year internal audit plan; completed audits for disability retirement services and investment controls - E

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Goal II: Stability of the Contribution Rates

Strategic Objectives:

A. Employ periodic experience studies and annual actuarial valuations to identify the trust fund’s future financial needs

B. Apply sound actuarial methods to promote stability of the contribution rates

C. Ensure employers and other stakeholders are informed of funding trends

II. Stability of the Contribution Rates

- Reviewed and approved the FY 2022 actuarial valuation - A
  - State/Teacher Plan 83.9% funded; calculated employer contribution rate stable at 20.65%
  - Legislative & Judicial Plans fully funded at 143.8% & 108.4%
  - PLD Consolidated Plan 91.2% funded; calculated contribution rate stable at 18.7%
- Adopted the FY 2024 & FY 2025 employer contribution rates for the State/Teacher Plan of 19.87% and 19.89% respectively - B
  - Rate-setting included an acceleration of the amortization of the 2014 experience gain by 6 years to coincide with the payoff of the 1986 UAL
- Adopted the FY 2024 aggregate contribution rate for the PLD Consolidated Plan of 18.6% - B
- Reported on funding trends to the Joint Standing Committees of Labor and Housing and Appropriations and Financial Affairs - C
- Communicated funding trends via the newsletter to members and other stakeholders - C

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

II. Stability of the Contribution Rates cont.

- Reported on funding trends to the Joint Standing Committees of Labor and Housing and Appropriations and Financial Affairs - C
- Communicated funding trends via the newsletter to members and other stakeholders – C
- Administered the award of three cost-of-living adjustments for the State-sponsored Plans and two for the PLD Consolidated Plan - C

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Goal III: Security and Integrity of our Information Systems

Strategic Objectives:

A. Ensure the cybersecurity management program meets current and future needs

B. Maintain and upgrade core information systems

C. Explore a cloud strategy to host information systems

III. Security and Integrity of our Information Systems

- Successfully completed an audit of our compliance with the National Institute of Standards and Technology (NIST) cybersecurity framework – A
- Completed security tests and assessments with Tyler Technologies, including for the new member portal -A
- Implemented an AirGap system to retain a full backup of our computing environment - A
- Implemented Manage Engine Endpoint Central to enhance our desktop patching program -A
- Upgraded the wireless infrastructure in Augusta & Portland - A
- Replaced the uninterrupted power supply in Augusta & Portland - A

III. Security and Integrity of our Information Systems cont.

- Worked with current Pension Administration System (PAS) vendor to make critical updates to the System - B
- Began planning for a new PAS - B
  - PAS Team chartered
  - RFI issued to explore vendor landscape
  - Consultant hired to develop the RFP for the new PAS
- Began planning the transition from an on-premises environment to a more secure cloud-based environment - C

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Goal IV: Cultivation of a Member-centric Organization

Strategic Objectives:

A. Develop a comprehensive member education, communications, and service model that supports planning for retirement security

B. Improve processes to promote timely and accurate service by ensuring the integrity of the data, streamlining and automating workflow processes, and reducing processing times

C. Document workflow policies, practices, and procedures and develop staff training programs

D. Institute a quality assurance and control program

E. Implement a member self-service portal, including access to annual member statements

F. Expand the availability of defined contribution plans (MaineSTART)

G. Assess the experience of the system and its members following the implementation of the new disability legislation

H. Seek member input and measure satisfaction

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

IV. Member Centric Organization

- Implemented an annual Member Account Statement - A
- Developed an online Benefit Estimator - A
- Developed on demand educational videos for pending retirees: - A
  - *When Should I Begin Planning for My Retirement?*
  - *How Do You Select Your Benefit Payment Option?*
  - *How Do You Receive Your Benefit Payments?*
  - *Can My Benefits Be Used to Cover the Costs of Insurance?*
- Developed an early and mid-career online information session to introduce members to the defined benefit plan and associated retirement services - A

IV. Member Centric Organization cont.

- Began planning for a new Pension Administration System – A & B
- Developed tracking tools for key metrics to monitor workflow - B
- Introduced Focused Fridays to reduce a chronic backlog of member requests - B
  - Reduced the backlog for service retirement estimates from 1,011 in May to 264 at the end of July
  - Eliminated the backlogs for benefit verifications, beneficiary elections, and member account statements
  - Maintained the backlog of preliminary to final benefits and prevented it from worsening
- Established a staff training program for Member Services Staff – C & D
- Developed an online member portal -E
  - Phased rollout began October 2, 2023

IV. Member Centric Organization cont.

- Expanded the availability of MaineStart to teachers - F
  - Promoted the program to superintendents in July 2022
  - Two school districts have opted to participate to date
  - Plans to attend Maine School Management Assn annual meeting in October to promote the program
- Conducted an expansive review of the Disability Retirement Program and presented report to the Board of Trustees and the Joint Standing Committee on Labor and Housing - G
  - Program Audit
  - Medical Review Service Provider Evaluation
  - Member Experience Survey
  - Consensus-based Rulemaking
- Conducted the first annual member survey for active and retired members in August 2022 - H

Goal V: Development of Stakeholder Relations

Strategic Objectives:

A. Provide legislators, employers, and other stakeholders with information on defined benefit retirement plans and related services

B. Continue to explore with stakeholders potential post-2028 pension plan options that enhance benefit portability, including Social Security participation

C. Engage stakeholders to develop an implementation plan for providing mandatory long-term disability insurance coverage to members through their employers

D. Develop a comprehensive employer education, communications, and service model and partner with employers and third-party payroll vendors to streamline processing and improve reporting

E. Seek employer input and measure satisfaction

V. Development of Stakeholder Relations

- Delivered an overview of MainePERS to the Joint Standing Committees of the Legislature for Labor and Housing and Appropriations and Financial Affairs – A
  - Worked with legislators and other stakeholders on legislation impacting MainePERS members
- Met with stakeholders on request to discuss issues related to services, legislation, and investments – A
- Met with actuary to begin planning for the post-2028 payoff of the 1998 UAL - B
- Convened the Disability Working Group made up of employee and employer representatives to develop a long-term disability insurance option for public employers and address lingering concerns with the Disability Retirement Program - C

V. Development of Stakeholder Relations cont.

- Increased employer reporting staff and provided employers with a single point of contact – D
- Began development of a training program for employer services- D
- Developed tracking tools in Employer Services for key metrics to monitor workflow and made significant improvement in addressing a backlog of account reconciliations - D
  - Percentage of reconciled accounts increased to 73% from 51% a year ago
- Amended Board Policy to provide oversight of employer reporting to the Finance and Audit Committee - D
- Began partnering with payroll providers to improve reporting - D
- Began planning for a new Pension Administration System - D
- Worked with the PLD Advisory Committee to develop contribution rates and implement COLAs – D
- Conducted an employer satisfaction survey - E

Goal VI: Foster an Engaged Workforce that Advances the Organization’s Mission

Strategic Objectives:

A. Institutionalize the Organizational Values developed by the staff
B. Develop an onboarding, training, and development plan
C. Support and empower staff in the performance of their work
D. Create a staff working group to advance a positive organizational culture
E. Implement strategic performance management
F. Increase awareness and knowledge related to diversity, equity, and inclusion (DEI)
G. Develop and maintain a succession plan

VI. Foster an Engaged Workforce that Advances the Organization's Mission

- Chartered the Organizational Values Steering Committee – A & D
  - Issued an RFP for a consultant to facilitate work of the Committee
  - Currently organizing to promote interdepartmental communication and collaboration
- Added training positions for both Member Services and Employer Services to improve the quality of training for staff and accelerate staff productivity – B
- Senior leaders and the investment team participated in fiduciary training – B
- Revised the new staff onboarding plan to include education on the MainePERS mission and the strategic plan - B
  - Including staff participation in presenting the organizational values

VI. Foster an Engaged Workforce that Advances the Organization's Mission cont.

- Offered emerging leaders a cohort leadership educational experience through the Kennebec Leadership Institute – B
- Conducted an employee satisfaction survey – C
- Retention bonuses implemented to stabilize staffing - C
- Completed a market compensation study & position review - C
  - Reaching agreement with MSEA on third-year wage reopener approved by the Board of Trustees
- Chartered the Events Committee to plan social engagement - D
- Implemented strategic performance management for confidential staff, including annual self-evaluations & performance reviews - E
- Conducted DEI education, including an expanded program for the senior management team - F
- Developed a staffing succession plan – G

Objectives

All short-term legislatively directed objectives listed in the Strategic Plan have been completed.

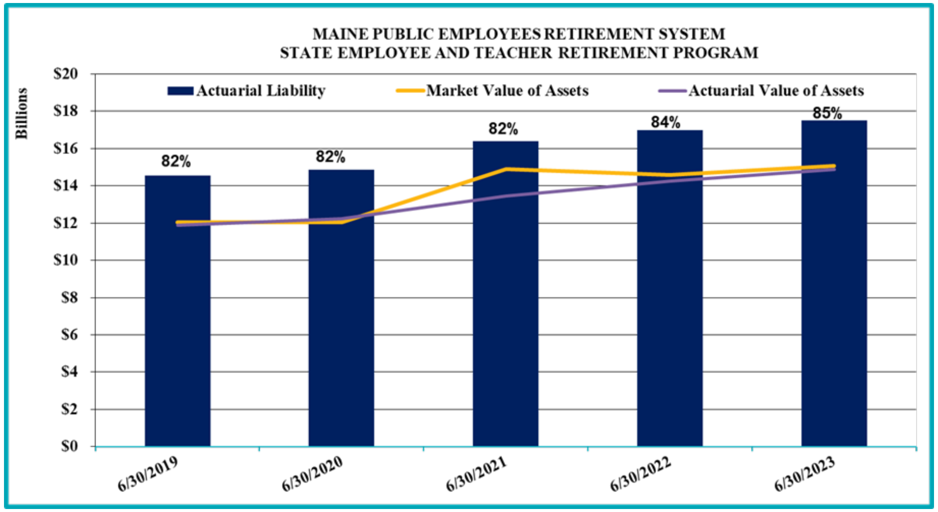
- Planning for the post-2028 full funding of the Unfunded Actuarial Liability (UAL), including potential public pension plan options that include social security *Resolves 2021, c. 66 & 72*
- Responding to the recent divestment legislation *PL 2021, c. 231 & 234*
- Expanding the availability of defined contribution plans to teachers *PL 2021, c. 548*
- Exploring mandatory long-term disability insurance coverage *PL 2021, c. 277*

Key Performance & Risk Metrics

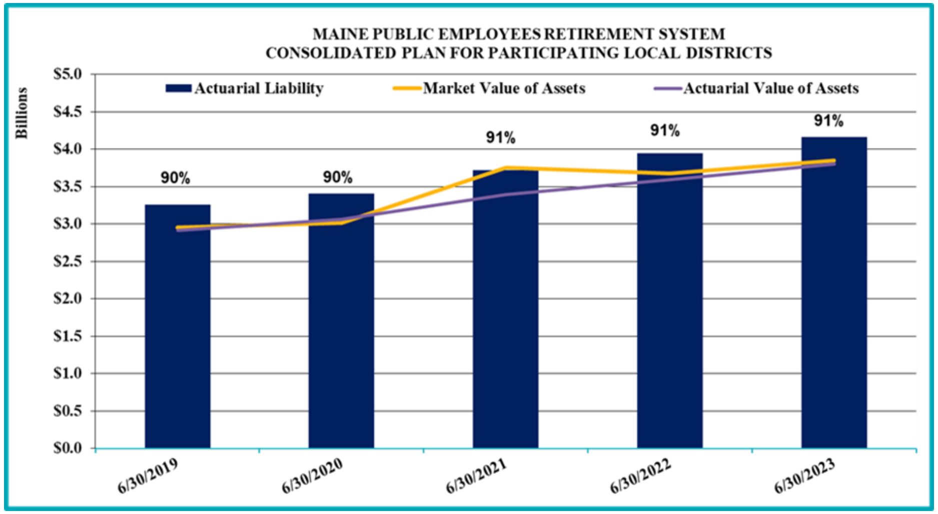
2023 Strategic Plan Update

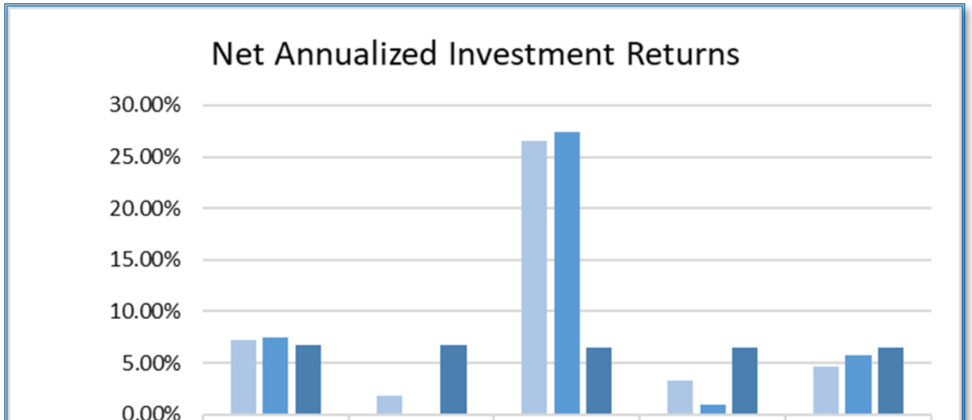
Funding Ratio, Actuarial Liability, and Market Value of Assets

State Employee and Teacher Plan



PLD Consolidated Plan

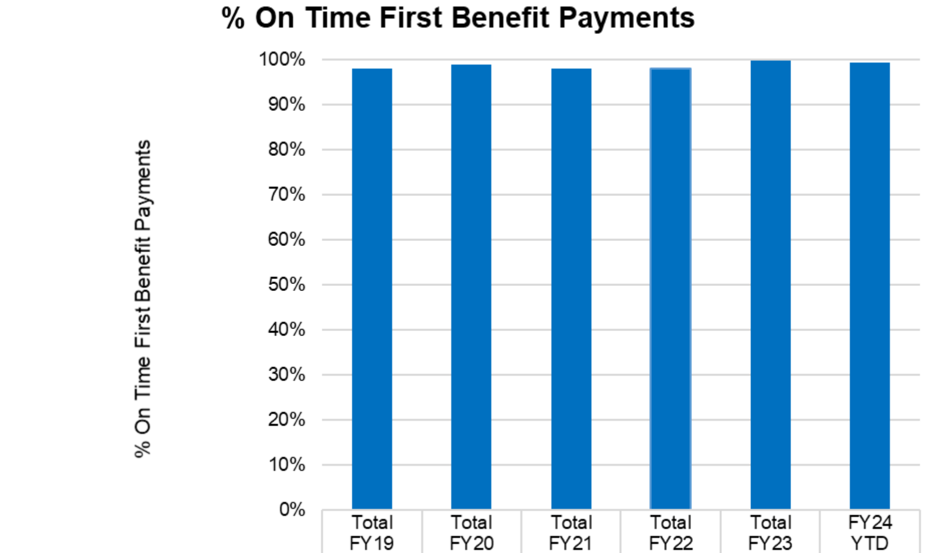




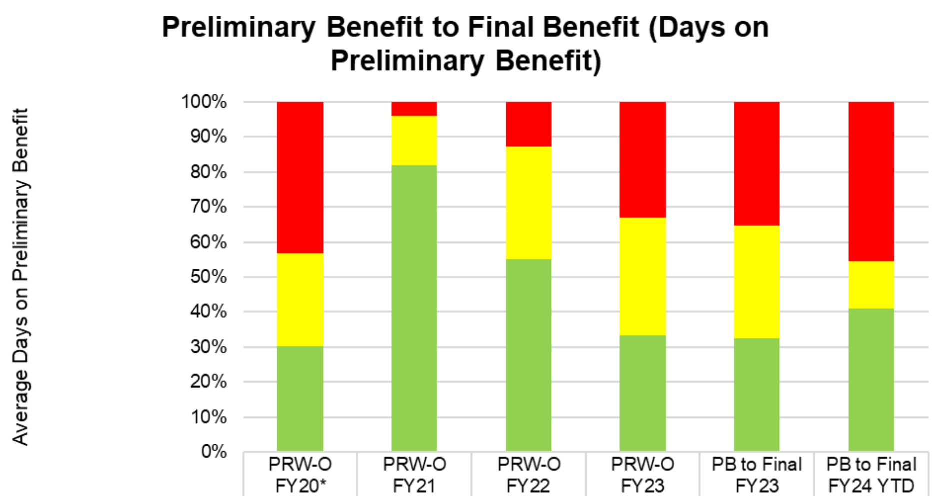
	FYE19	FYE20	FYE21	FYE22	FYE23
MainePERS	7.25%	1.78%	26.54%	3.32%	4.68%
Policy Index	7.46%	-0.05%	27.44%	0.98%	5.75%
Assumption	6.75%	6.75%	6.50%	6.50%	6.50%

	Member FY22	Member FY23	Retiree FY22	Retiree FY23
Very Satisfied/Satisfied	68.67%	46.52%	91.78%	91.80%
Very Dissastisfied/ Dissatisfied	4.72%	12.79%	2.17%	1.70%
Neutral/No Opinion	26.61%	40.70%	6.04%	6.51%

Benefit Initiation



	Total FY19	Total FY20	Total FY21	Total FY22	Total FY23	FY24 YTD
% On Time First Benefit Payments	98%	99%	98%	98%	100%	99%

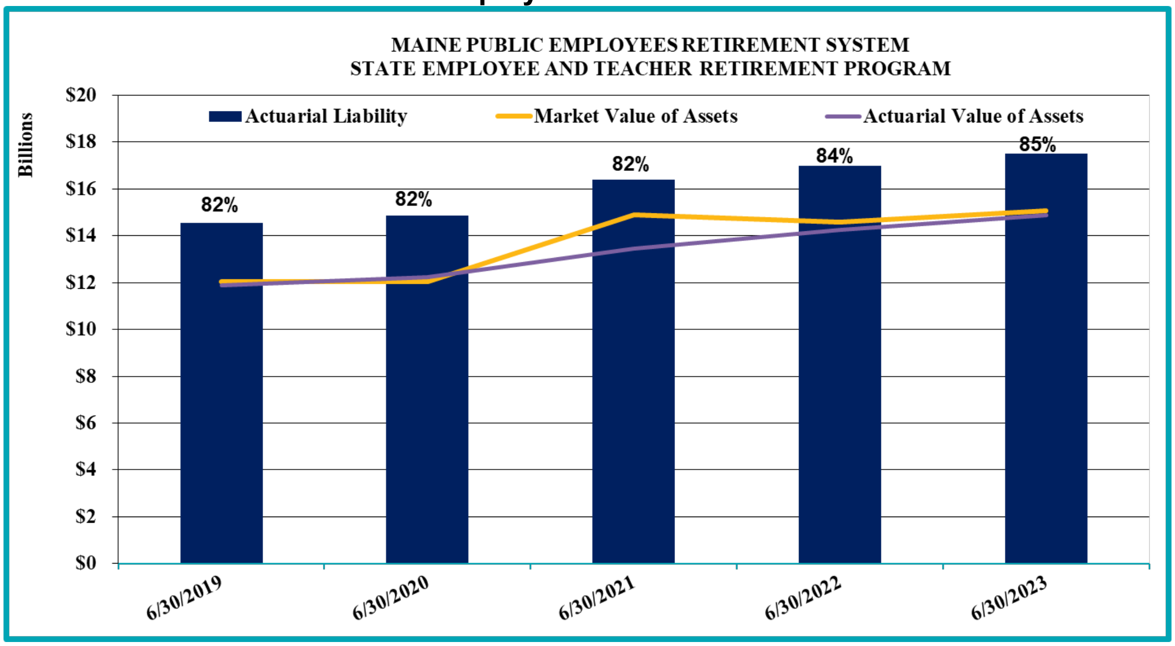


	PRW-O FY20*	PRW-O FY21	PRW-O FY22	PRW-O FY23	PB to Final FY23	PB to Final FY24 YTD
> 6 Months	43.2%	3.9%	12.7%	33.1%	35.4%	45.5%
> 90 Days to < 6 Months	26.7%	14.3%	32.3%	33.5%	32.2%	13.5%
0 to < 90 Days	30.1%	81.8%	55.0%	33.4%	32.4%	41.0%

Key Performance and Risk Measures

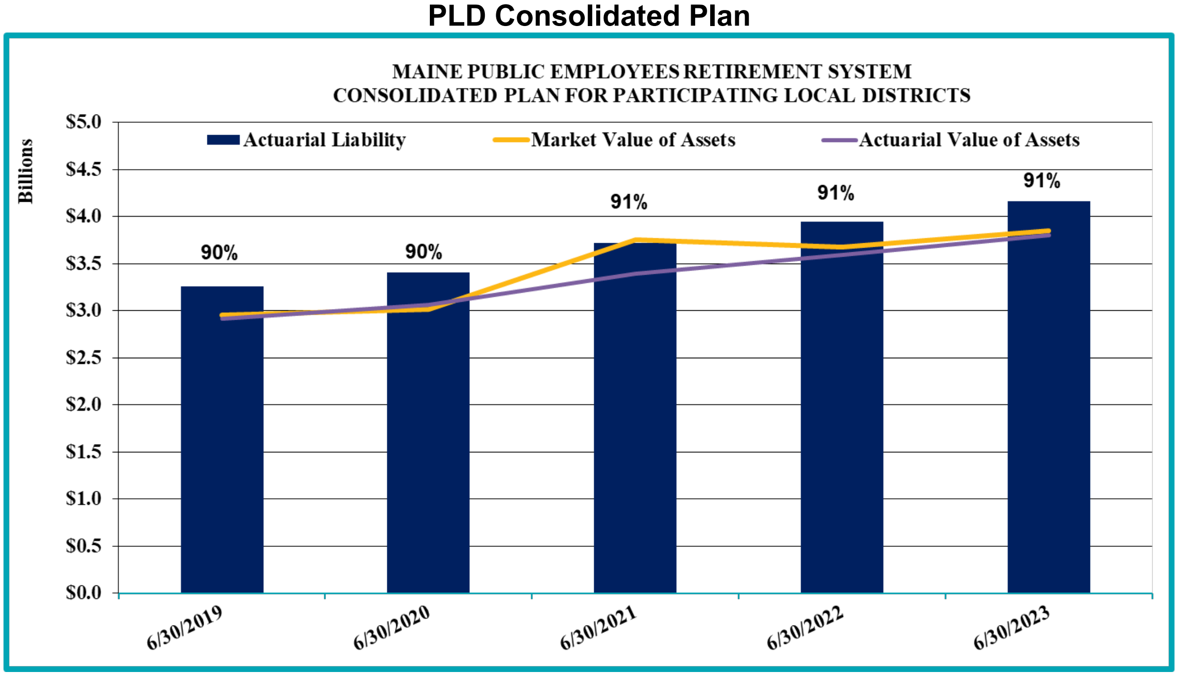
Funding Ratio, Actuarial Liability, and Market Value of Assets

State Employee and Teacher Plan



Fiduciary Net Position, reported here as market value of assets (total assets minus liabilities other than actuarial liabilities), on 6/30/2023 is $15.1 billion. The funded ratio is based on the actuarial value of assets.

PLD Consolidated Plan



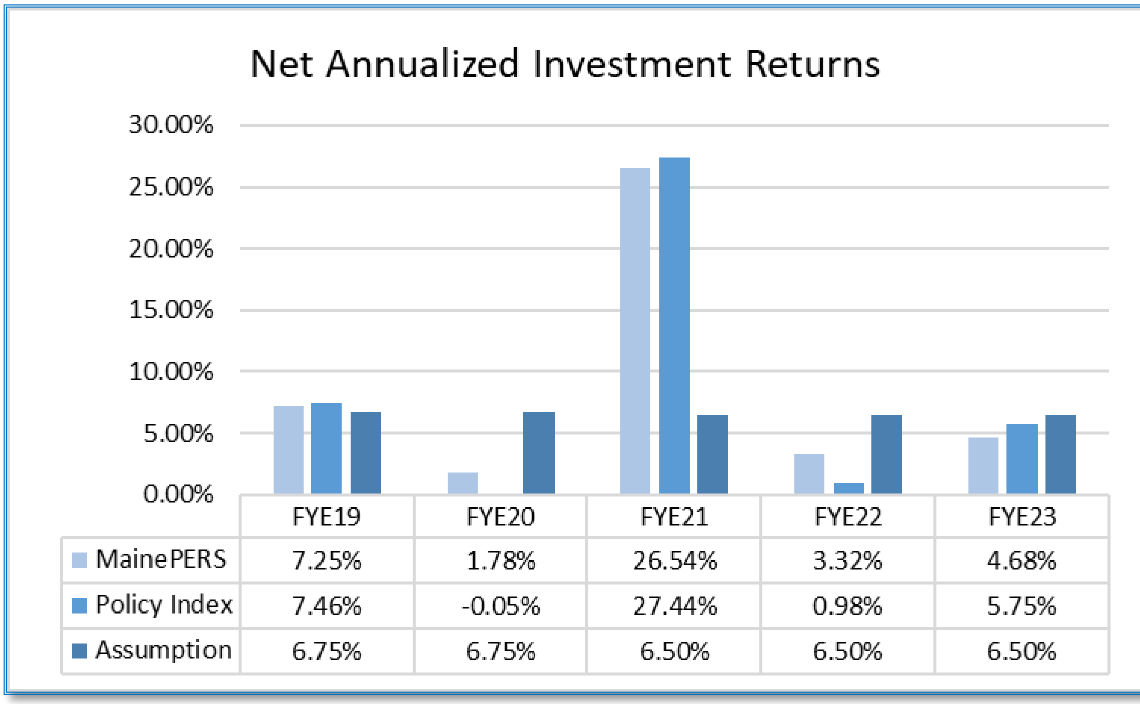
Fiduciary Net Position, reported here as market value of assets (total assets minus liabilities other than actuarial liabilities), on 6/30/23 is $3.85 billion. The funded ratio is based on the actuarial value of assets.

***Legislative Plan**: funded status is 144% and Fiduciary Net Position is $17 million on 6/30/23.*
***Judicial Plan**: funded status is 110% and Fiduciary Net Position is $87 million on 6/30/23.*

The two charts on this page cover key performance and risk measures I., V. and VI. under the Strategic Plan.

Key Performance and Risk Measures

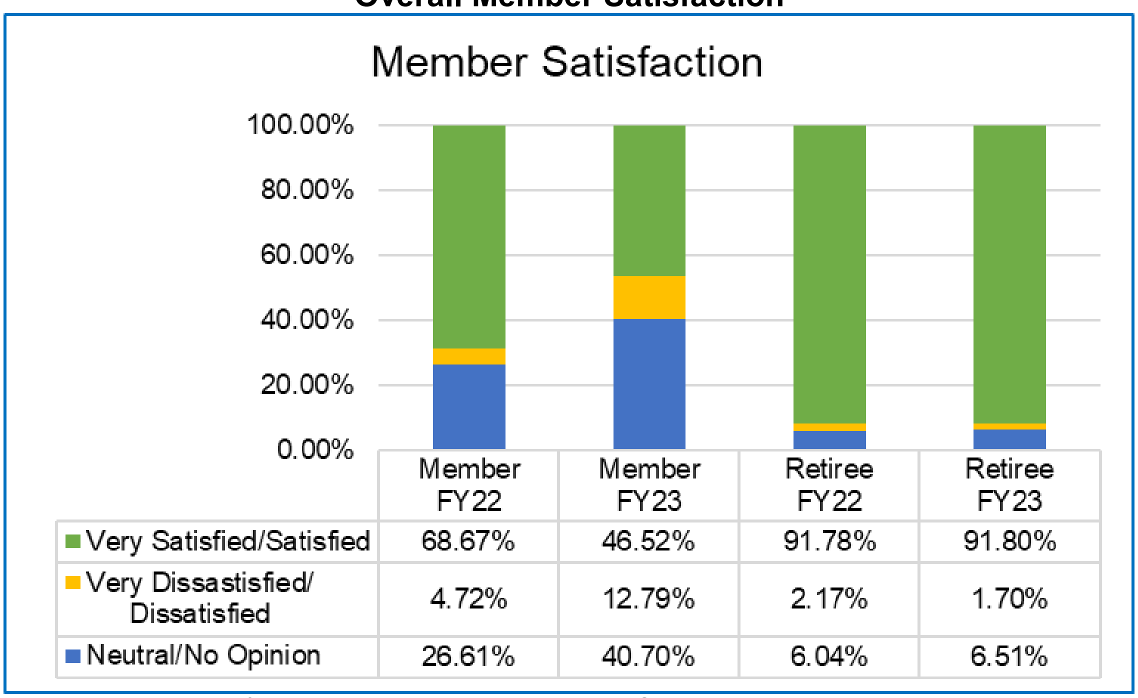
Net Annualized Investment Returns



	FYE19	FYE20	FYE21	FYE22	FYE23
MainePERS	7.25%	1.78%	26.54%	3.32%	4.68%
Policy Index	7.46%	-0.05%	27.44%	0.98%	5.75%
Assumption	6.75%	6.75%	6.50%	6.50%	6.50%

This chart covers key performance and risk measure II. under the Strategic Plan.

Overall Member Satisfaction



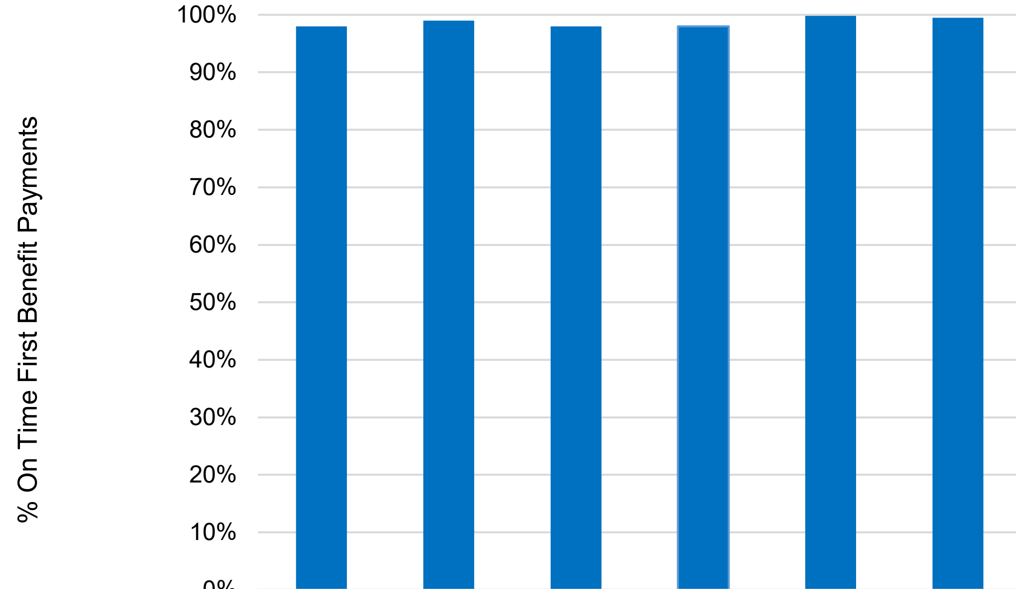
	Member FY22	Member FY23	Retiree FY22	Retiree FY23
Very Satisfied/Satisfied	68.67%	46.52%	91.78%	91.80%
Very Dissastisfied/ Dissatisfied	4.72%	12.79%	2.17%	1.70%
Neutral/No Opinion	26.61%	40.70%	6.04%	6.51%

This chart covers key performance and risk measure IV. under the Strategic Plan.

Key Performance and Risk Measures

Benefit Initiation

% On Time First Benefit Payments

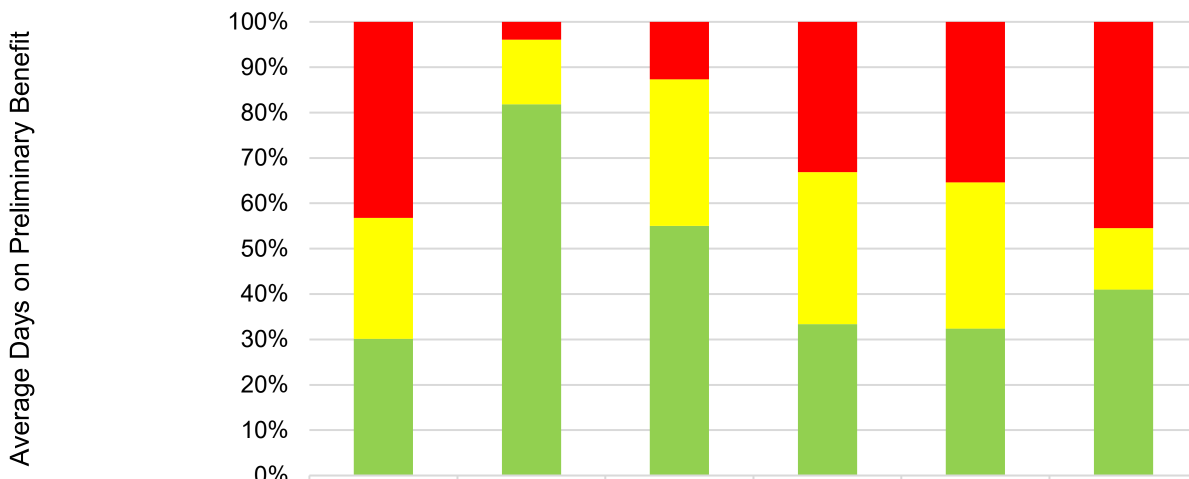


	Total FY19	Total FY20	Total FY21	Total FY22	Total FY23	FY24 YTD
% On Time First Benefit Payments	98%	99%	98%	98%	100%	99%

See Data Notes 1 & 2.

Preliminary Benefit to Final Benefit

Preliminary Benefit to Final Benefit (Days on Preliminary Benefit)



	PRW-O FY20*	PRW-O FY21	PRW-O FY22	PRW-O FY23	PB to Final FY23	PB to Final FY24 YTD
> 6 Months	43.2%	3.9%	12.7%	33.1%	35.4%	45.5%
> 90 Days to < 6 Months	26.7%	14.3%	32.3%	33.5%	32.2%	13.5%
0 to < 90 Days	30.1%	81.8%	55.0%	33.4%	32.4%	41.0%

**PRW-O FY20 is based on the last 6 months of the FY; back data not available. See Data Notes 3 & 4.*
These two charts on this page cover key performance and risk measure III. under the Strategic Plan

Key Performance and Risk Measures

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; or open applications where the application was withdrawn, member remained on the employer payroll so benefit could not begin, retirement date was deferred, 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 estimated 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. In the future we expect to transition this graph to show only the "PB to FINAL" metric but have also included the Pension Retirement Workflow-Open (PRW-O) metric at this time because of the availability of historic data.

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.

MAINEPERS

BOARD OF TRUSTEES MEMORANDUM

TO: BOARD MEMBERS

FROM: DR. REBECCA M. WYKE, CEO

SUBJECT: MAINEPERS 2023 MEMBER SATISFACTION SURVEY

DATE: OCTOBER 3, 2023

POLICY REFERENCE

Board Policy 5.2 – Service to Members, Retirees, Employers and Stakeholders

MainePERS conducted a member satisfaction survey August 15 – 31, 2023. A random selection of 5000 members from the State Sponsored and Participating Local District Plans were identified to receive the survey. A copy of the active and retired member surveys are attached.

Active Members Survey

MainePERS has approximately 53,000 active members currently employed by a participating employer. In the summer of 2023, 2,500 active members were randomly selected to receive the survey. Those selected had a mailing and email address on file, received a pension contribution from their employer within the last 60 days, and had no disbursement of contributions. One hundred and seventy-two (172) active members responded to the survey, an 8% response rate of those delivered. The confidence level of the survey is between 80% and 85%, with a margin of error = 7.3%

Of those responding, 46.52% rate their overall satisfaction with MainePERS as “satisfied” or “very satisfied”, 40.7% “neutral” or “no opinion”, and 12.79% “dissatisfied” or “very dissatisfied”. More than half of respondents, 53.49%, stated they “agree” or “strongly agree” that MainePERS acts with integrity, 43.61% “neutral” or “no opinion”, and 2.91% “disagree” or “strongly disagree”. And, 42.11% “agree” or “strongly agree” that MainePERS staff are knowledgeable, 53.21% “neutral” or “no opinion”, and 4.68% “disagree” or “strongly disagree”.

Responses to the survey questions suggest some desire for more frequent communication, information that is easier to understand, and more timely responses to questions raised. Responses also indicated an interest in pre-retirement informational meetings, retirement security planning seminars, and participation in defined contribution plans. In their comments, active members expressed appreciation for the new services available: the member portal, the benefit estimator, and the annual member account statements.

Compared to the 2022 survey results for active members, there were fewer respondents (172 v 236) and a lower response rate (8% v 11%). Respondents generally had more neutral responses, a larger percentage had not vested (25.14% v 11.96%), and fewer had contact with MainePERS within the twelve months preceding the survey (37.21% v 56.6%).

Retired Members Survey

MainePERS has approximately 49,000 retired members. In the summer of 2023, 2,500 retired members were randomly selected to receive the survey. Those selected had a mailing and email address on file and were service retirees who had received a benefit payment within the last 60 days. Five hundred and eighty-five (585) retired members responded to the survey, a 26% response rate of those delivered. The confidence level of the survey is 98%, with a margin of error = 3.9%

Of those responding, 91.8% rate their overall satisfaction with MainePERS as “satisfied” or “very satisfied”, 6.51% “neutral” or “no opinion”, and 1.7% “dissatisfied” or “very dissatisfied”. Over ninety percent, 91.78%, stated they “agree” or “strongly agree” that MainePERS acts with integrity, 7.36% “neutral” or “no opinion”, and 0.85% “disagree” or “strongly disagree”. And, 79.04% “agree” or “strongly agree” that MainePERS staff are knowledgeable, 19.9% “neutral” or “no opinion”, and 1.03% “disagree” or “strongly disagree”.

Responses to the survey suggest retired members are generally satisfied with frequency of communication, clarity of information, and timeliness of responses to questions raised. Responses also indicated an interest in cybersecurity awareness and preventing identity fraud.

In their comments, retired members expressed concerns about the Social Security Windfall Elimination Provision and the Government Pension Offset, as well as the insufficiency of the annual cost-of-living-adjustments to keep up with inflation. Many retired members also expressed appreciation for the work of MainePERS and its staff.

Compared to the 2022 survey results for retired members, there were more respondents (585 v 415) and a higher response rate (26% v 14%). Respondents were generally consistent with the prior year in the percentage of favorable comments. A smaller percentage of respondents had retired within the past five years (36.48% v 44.44%), and fewer had contact with MainePERS within the twelve months preceding the survey (39.69% v 43.38%).

RECOMMENDATION

No Board action is recommended at this time.

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

2023 Member Satisfaction Survey

Board of Trustees
October 12, 2023

Dr. Rebecca Wyke, CEO

Member Satisfaction Survey

August 15 - 31, 2023

Actives

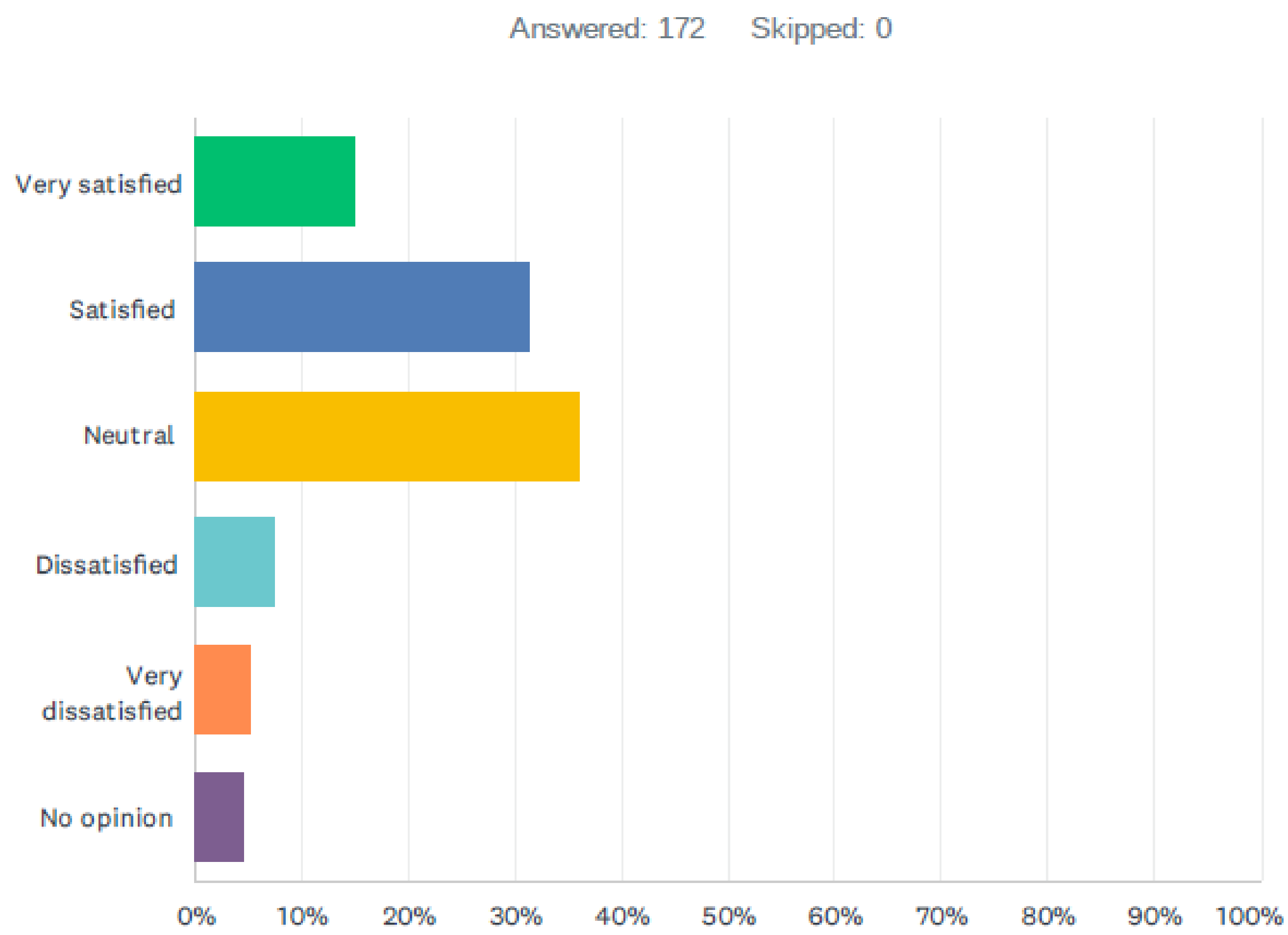
- Approx. 53,000
- Random selection of 2500 members
- 172 respondents
- 8% response rate
- 80% confidence level

Retirees

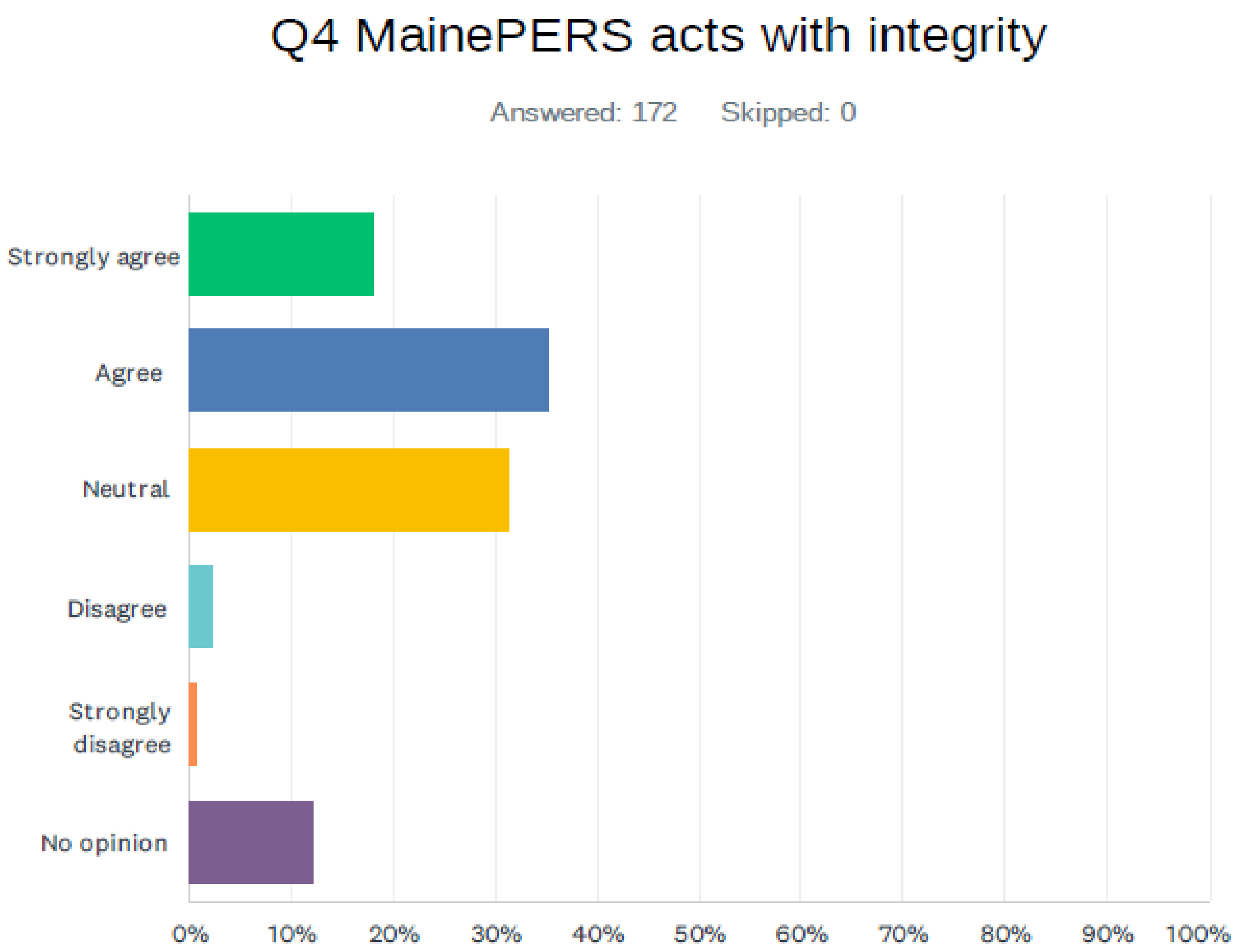
- Approx. 49,000
- Random selection of 2500 members
- 585 respondents
- 26% response rate
- 98% confidence level

Active Member Survey

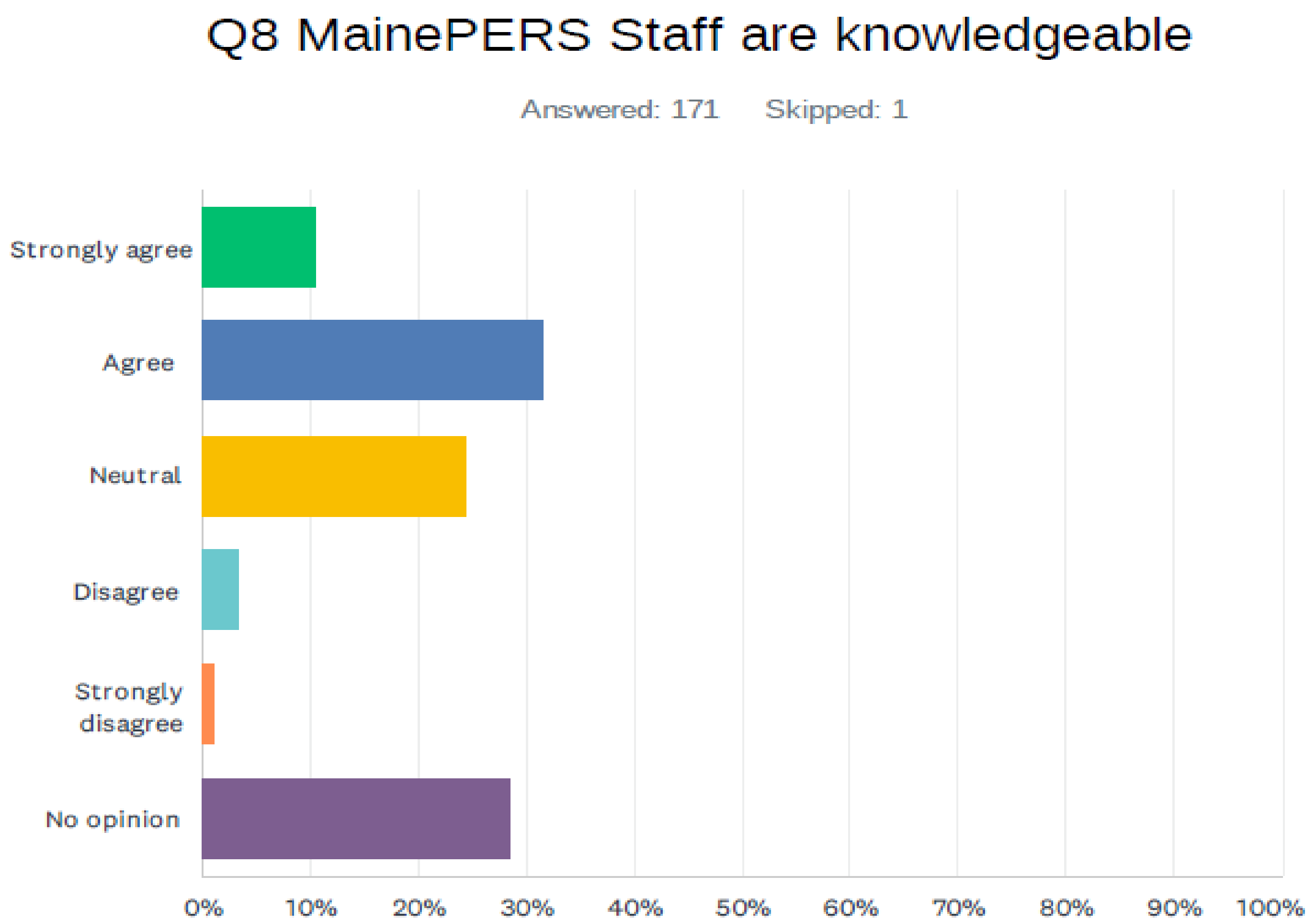
Q1 Please rate your overall satisfaction with MainePERS



Active Member Survey



Active Member Survey



Active Member Survey

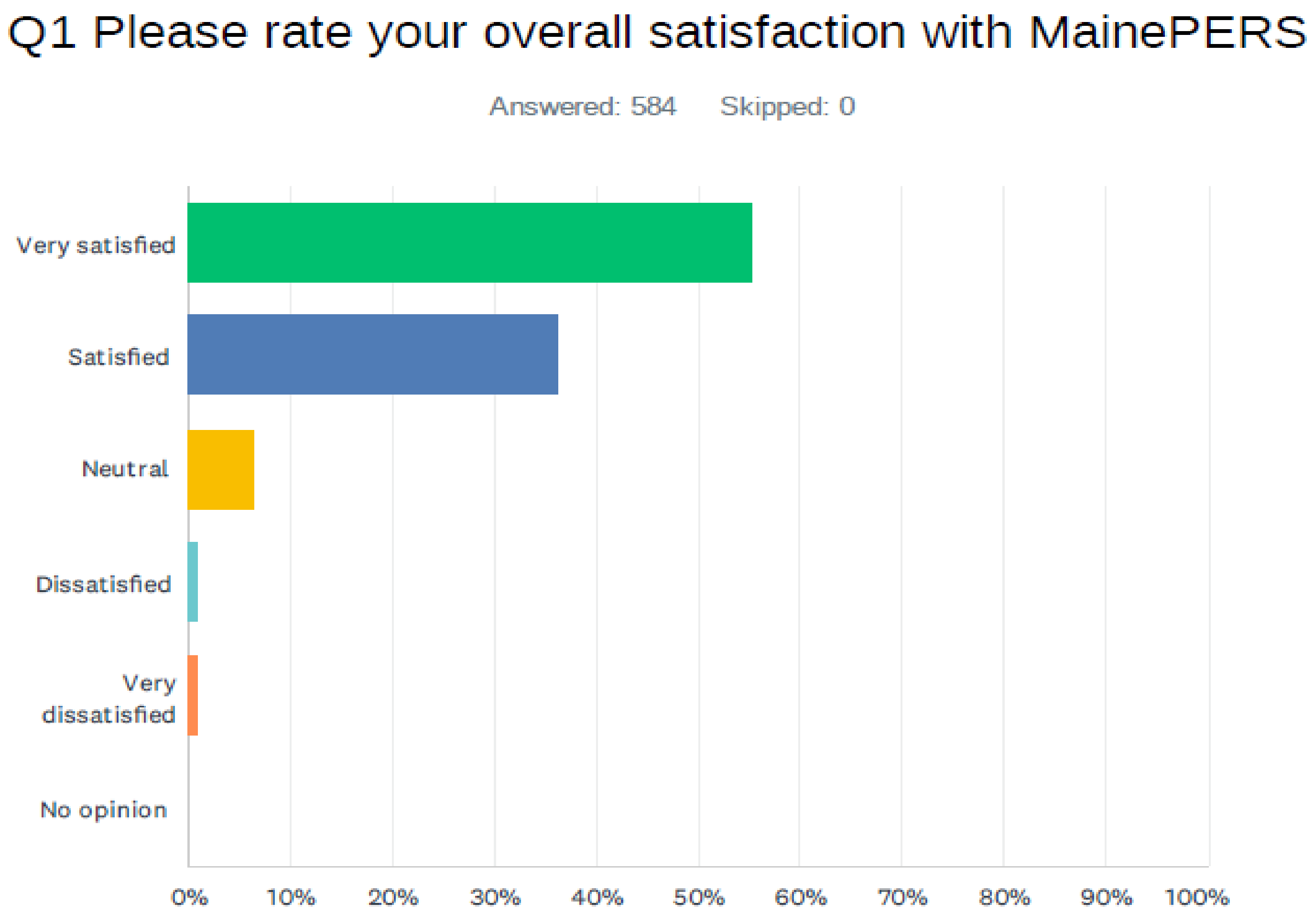
- More frequent communications
- Information that is easier to understand
- More timely responses to requests
- Interest in pre-retirement meetings
- Retirement security planning seminars
- Information on defined contribution plans
- Appreciation for new services:
  - Member Portal
  - Benefit Estimator
  - Annual Member Account Statements

Active Member Survey

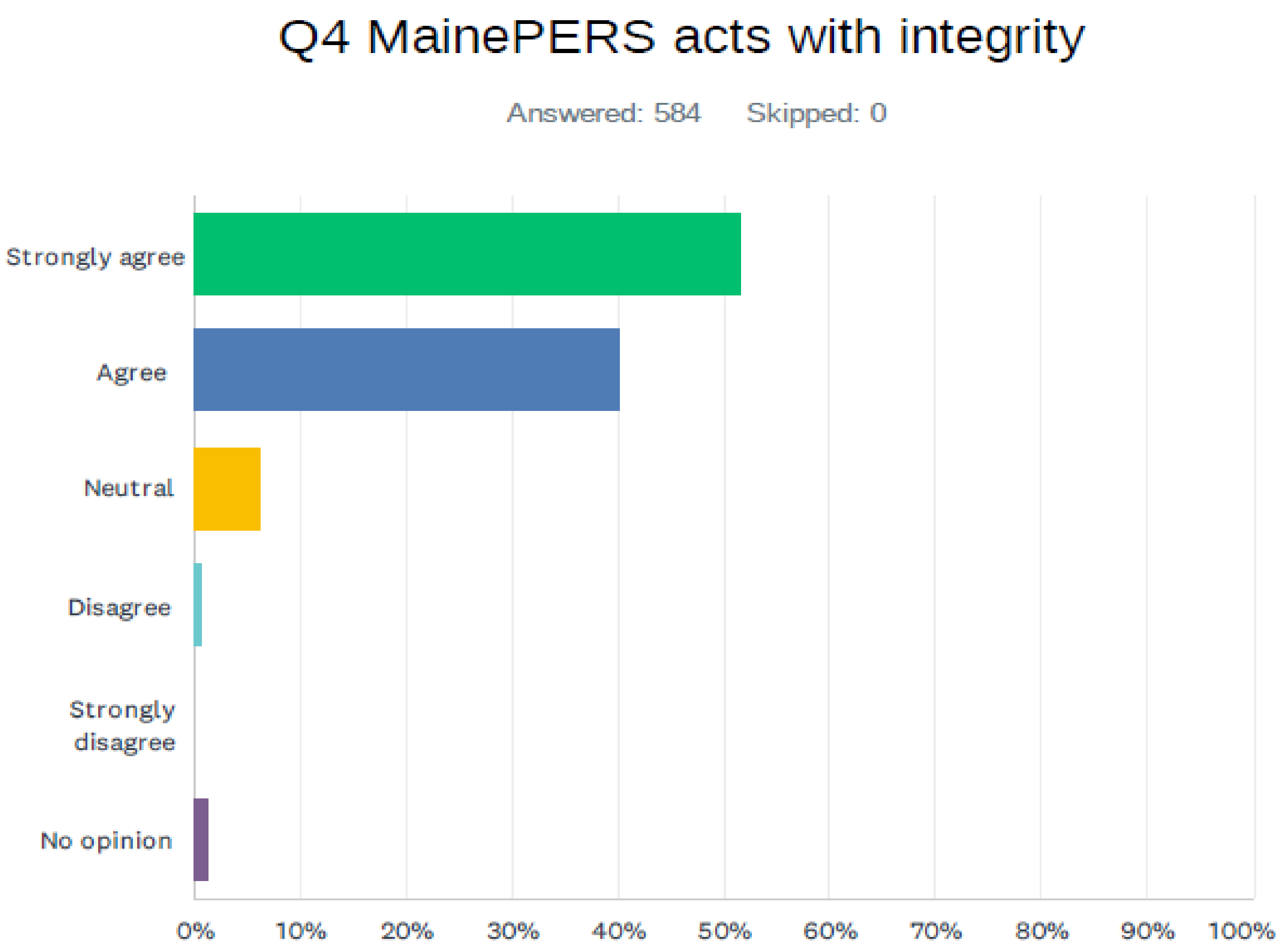
Compared to the 2022 Survey:

- Fewer respondents, 172 v 236
- Lower response rate, 8% v 11%
- Generally more neutral responses
- Larger percentage not vested, 25.14% v 11.96%
- Fewer had contacted us within a year of survey, 37.21% v 56.6%

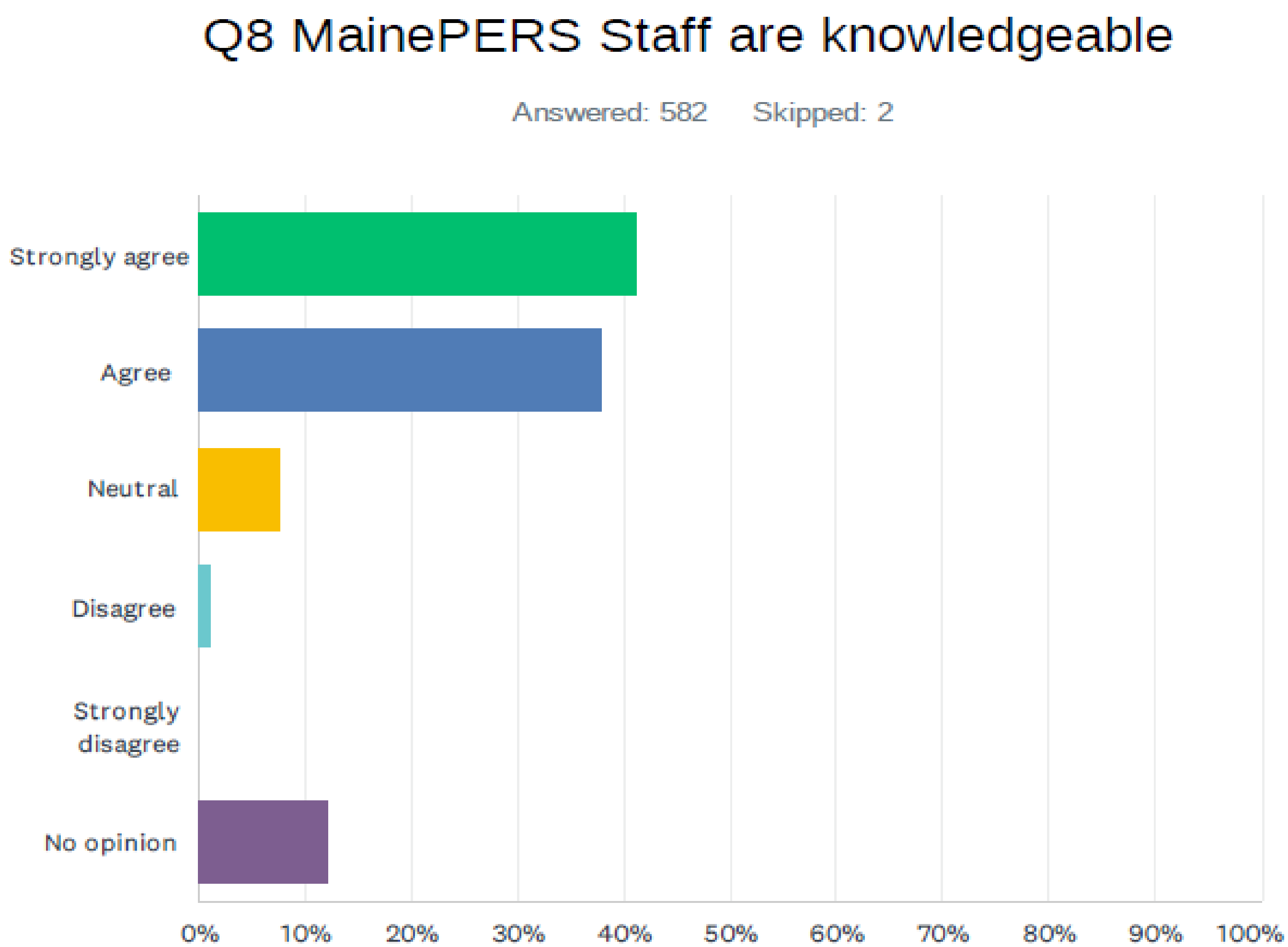
Retired Member Survey



Retired Member Survey



Retired Member Survey



Retired Member Survey

- Generally satisfied with frequency of communication, clarity of information, & timeliness of responses
- Interested in information on cybersecurity awareness & preventing identity fraud
- Concerns beyond MainePERS control:
  - Impact of WEP & GPO
  - COLA not keeping pace with inflation
  - Issues with health & dental insurance
- Many retired members expressed appreciation for MainePERS and its staff

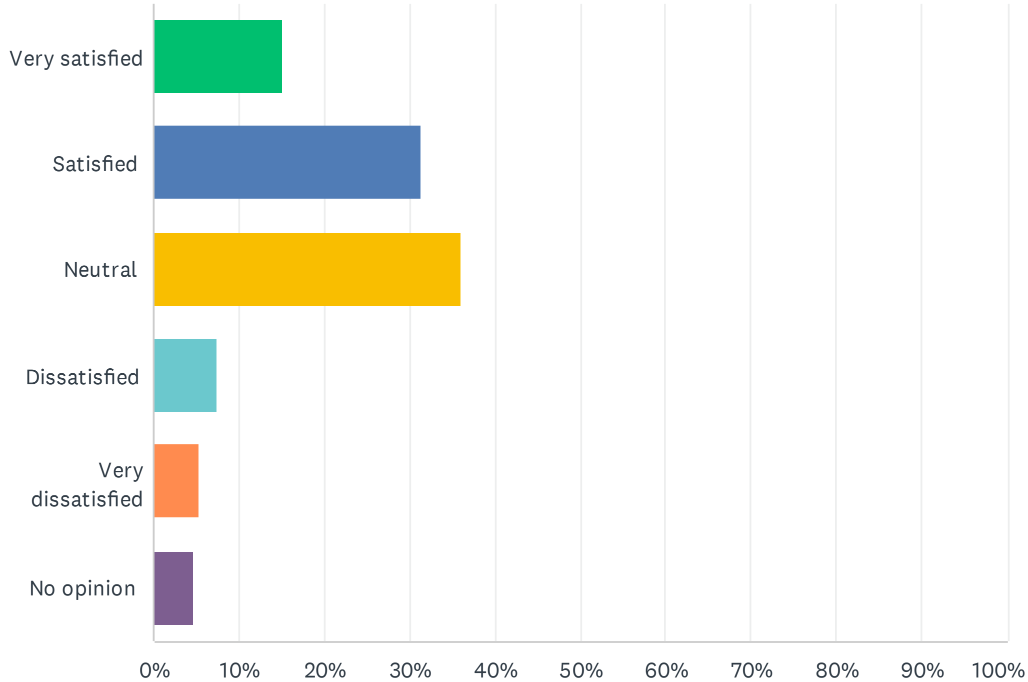
Retired Member Survey

Compared to the 2022 Survey:

- More respondents, 585 v 415
- Higher response rate, 26% v 14%
- Generally consistent responses
- Fewer retired less than 5 years, 36.48% v 44.44%
- Fewer had contacted us within a year of survey, 39.69% v 43.38%

Q1 Please rate your overall satisfaction with MainePERS

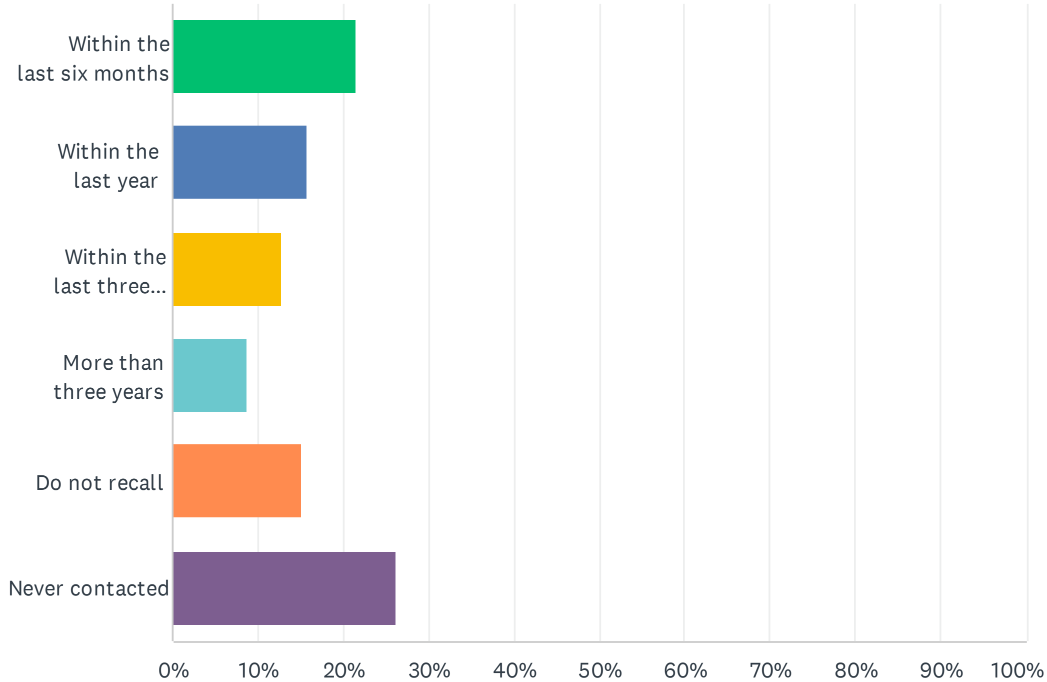
Answered: 172   Skipped: 0



ANSWER CHOICES	RESPONSES	
Very satisfied	15.12%	26
Satisfied	31.40%	54
Neutral	36.05%	62
Dissatisfied	7.56%	13
Very dissatisfied	5.23%	9
No opinion	4.65%	8
TOTAL		172

Q2 When was the last time you contacted MainePERS?

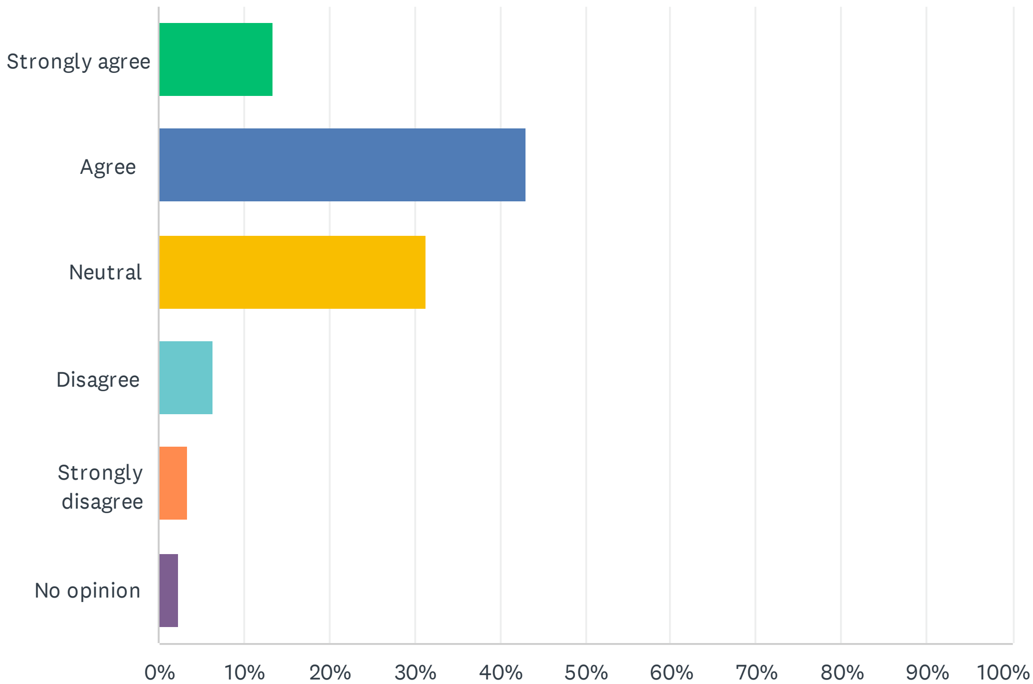
Answered: 172 Skipped: 0



ANSWER CHOICES	RESPONSES	
Within the last six months	21.51%	37
Within the last year	15.70%	27
Within the last three years	12.79%	22
More than three years	8.72%	15
Do not recall	15.12%	26
Never contacted	26.16%	45
TOTAL		172

Q3 I am confident my MainePERS retirement is secure and will be there for me

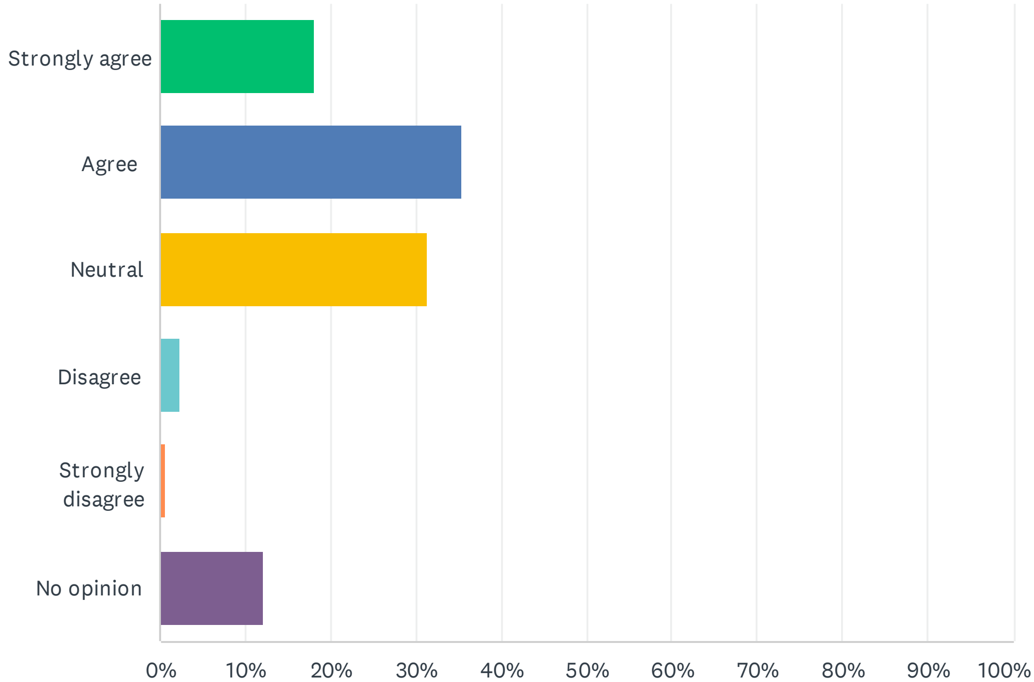
Answered: 172 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	13.37%	23
Agree	43.02%	74
Neutral	31.40%	54
Disagree	6.40%	11
Strongly disagree	3.49%	6
No opinion	2.33%	4
TOTAL		172

Q4 MainePERS acts with integrity

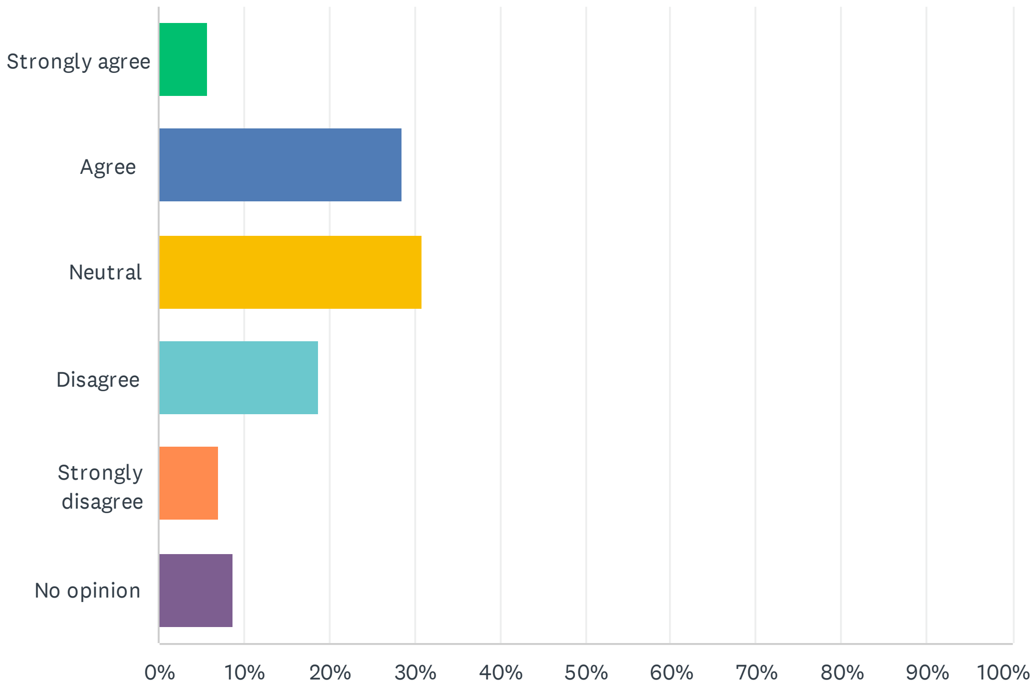
Answered: 172 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	18.02%	31
Agree	35.47%	61
Neutral	31.40%	54
Disagree	2.33%	4
Strongly disagree	0.58%	1
No opinion	12.21%	21
TOTAL		172

Q5 The frequency with which MainePERS communicates with me meets my expectations

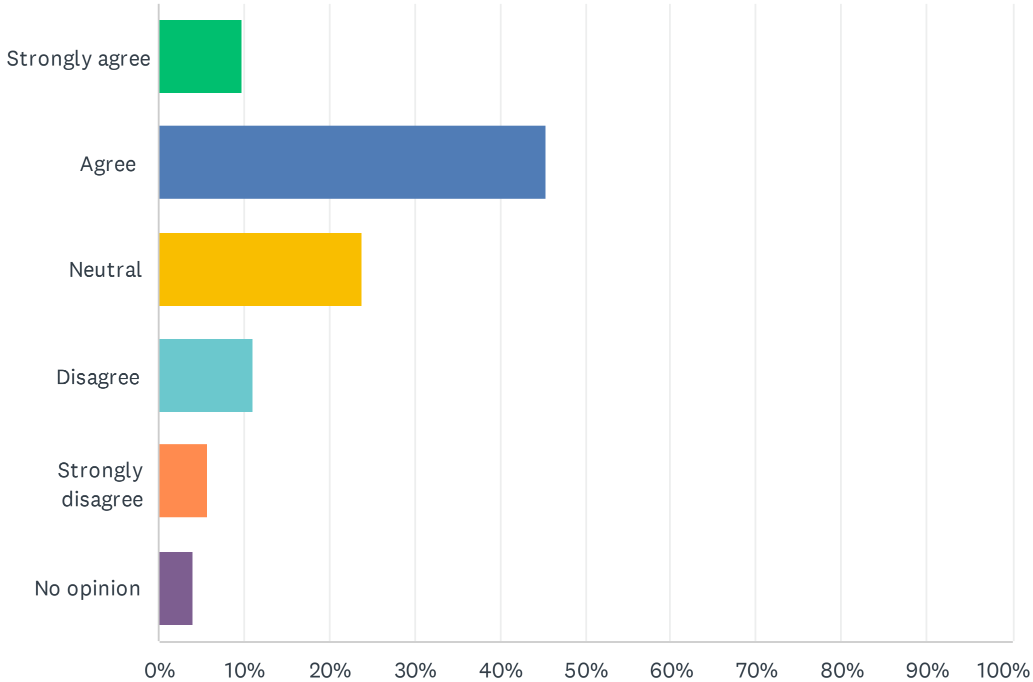
Answered: 171 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	5.85%	10
Agree	28.65%	49
Neutral	30.99%	53
Disagree	18.71%	32
Strongly disagree	7.02%	12
No opinion	8.77%	15
TOTAL		171

Q6 Information I receive from MainePERS is easy to understand

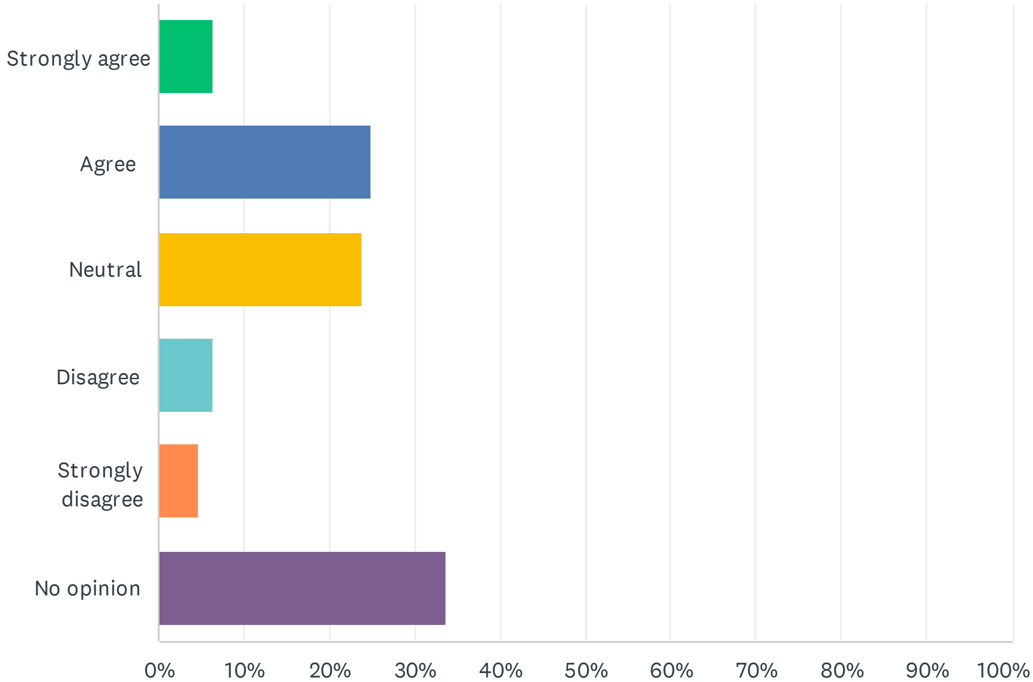
Answered: 172 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	9.88%	17
Agree	45.35%	78
Neutral	23.84%	41
Disagree	11.05%	19
Strongly disagree	5.81%	10
No opinion	4.07%	7
TOTAL		172

Q7 MainePERS responds to my questions in a timely manner

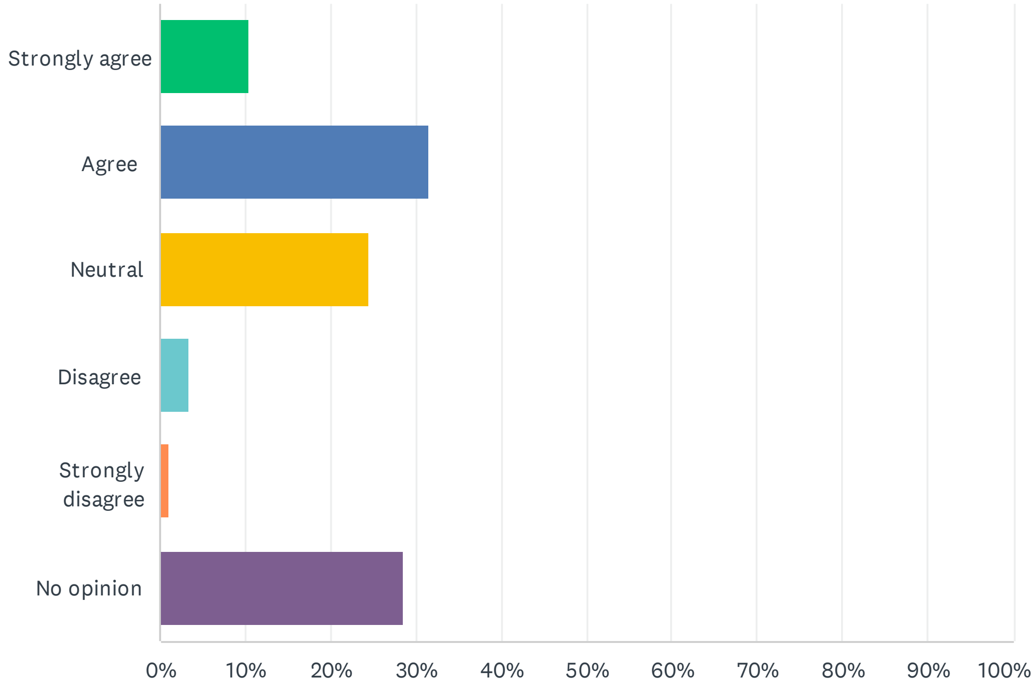
Answered: 172   Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	6.40%	11
Agree	25.00%	43
Neutral	23.84%	41
Disagree	6.40%	11
Strongly disagree	4.65%	8
No opinion	33.72%	58
TOTAL		172

Q8 MainePERS Staff are knowledgeable

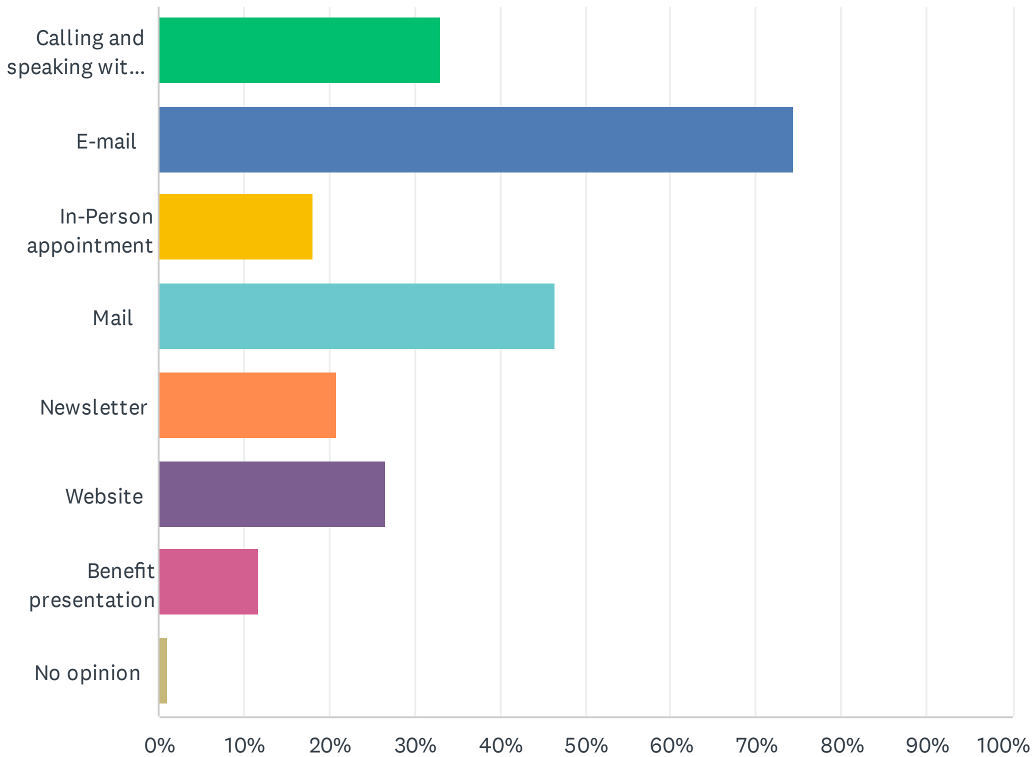
Answered: 171   Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	10.53%	18
Agree	31.58%	54
Neutral	24.56%	42
Disagree	3.51%	6
Strongly disagree	1.17%	2
No opinion	28.65%	49
TOTAL		171

Q9 I prefer to receive information from MainePERS by this method: (Please select up to three options)

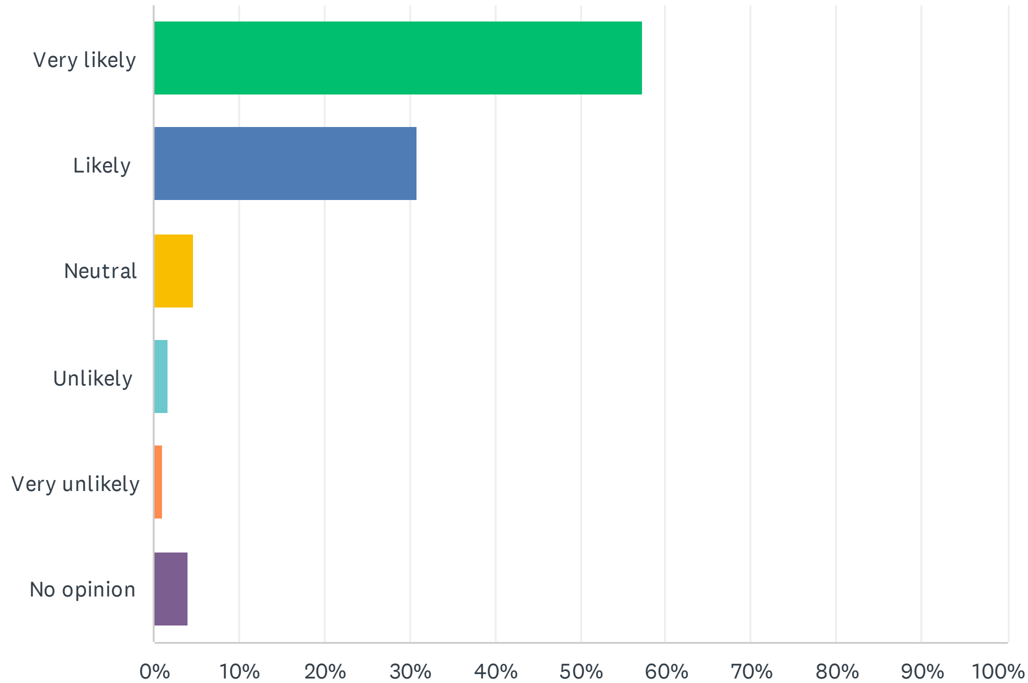
Answered: 172 Skipped: 0



ANSWER CHOICES	RESPONSES	
Calling and speaking with a Member Services Representative	33.14%	57
E-mail	74.42%	128
In-Person appointment	18.02%	31
Mail	46.51%	80
Newsletter	20.93%	36
Website	26.74%	46
Benefit presentation	11.63%	20
No opinion	1.16%	2
Total Respondents: 172		

Q10 How likely is it that you will use the MainePERS Member Portal (offering convenient online access to your account information) when it is made available to you?

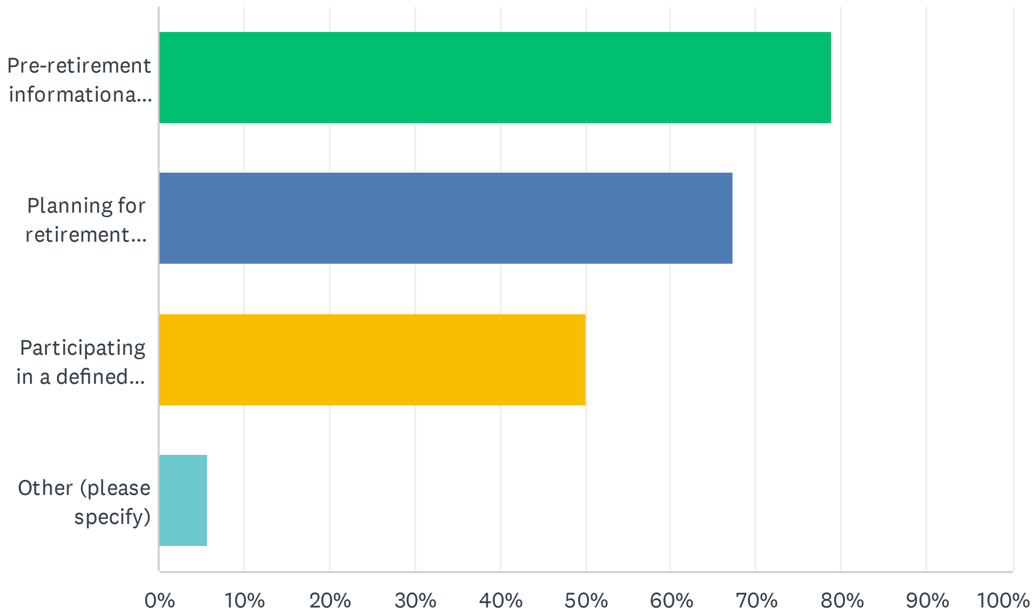
Answered: 171 Skipped: 1



ANSWER CHOICES	RESPONSES	
Very likely	57.31%	98
Likely	30.99%	53
Neutral	4.68%	8
Unlikely	1.75%	3
Very unlikely	1.17%	2
No opinion	4.09%	7
TOTAL		171

Q11 From the items below, please check items which you would be interested in (Please select all that apply):

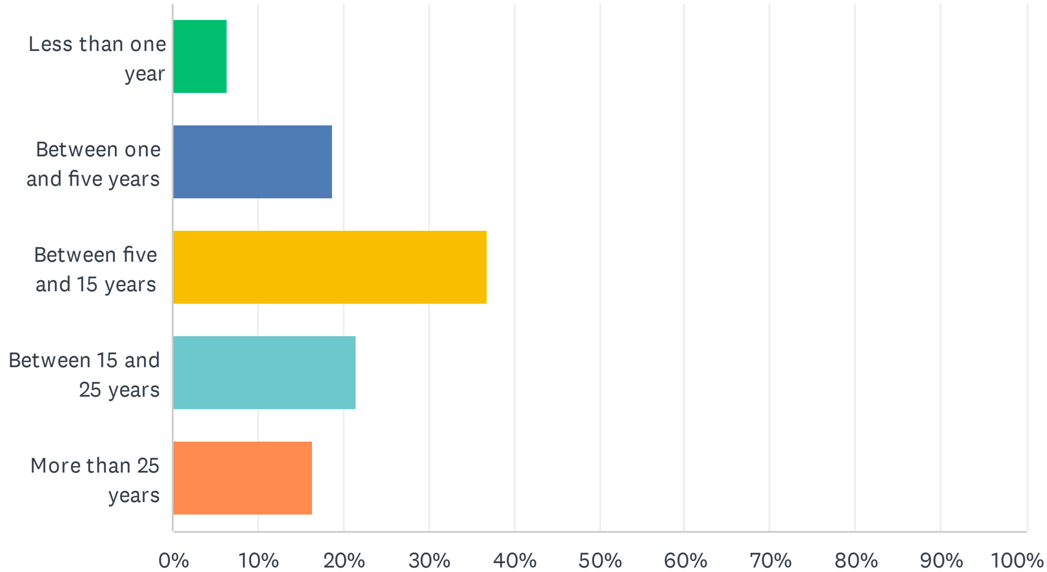
Answered: 156 Skipped: 16



ANSWER CHOICES	RESPONSES	
Pre-retirement informational meetings	78.85%	123
Planning for retirement security seminars/webinars	67.31%	105
Participating in a defined contribution plan (401 and 457 plans or Roth IRA)	50.00%	78
Other (please specify)	5.77%	9
Total Respondents: 156		

Q12 How long have you been a member of MainePERS?

Answered: 171 Skipped: 1



ANSWER CHOICES	RESPONSES	
Less than one year	6.43%	11
Between one and five years	18.71%	32
Between five and 15 years	36.84%	63
Between 15 and 25 years	21.64%	37
More than 25 years	16.37%	28
TOTAL		171

Q13 Please feel welcome to provide any additional feedback.

Answered: 34 Skipped: 138

	11) Topics of interest additiona feedback (Open Ended)	13) Please feel welcome to provide any additional feedback.
	Other (please specify)	Open-Ended Response
5		Have had little to no information about retirement and possible early retirement without penalty. Would be helpful to have more info about specific personal $ when retirement potentially happens for future planning.
10	Why paying in the Maine PERS penalizes my Social Security	I greatly resent the fact that I am not able to collect full social security due to the years I will work for the state of Maine. I would rather just get out of Maine PERS so that I am not penalized by social security.
13		I really appreciate the new online tool for estimating benefits upon retirement in a variety of scenarios. It’s helped me be more confident that my calculations are accurate.
18		I look forward to the membership portal and appreciate updates and statements.
30		I can't attend anything during the work day unless I use vacation time and still must drive over an hour to attend anything (gas is expensive). We need more ways to get our information.
32		I was very happy with the speed with which I received my pension quote this summer.
38	Receiving my estimate, and clear information about next steps in a timely way.	I requested a retirement estimate in mid-July and received no information. in mid-August I requested an estimate as to when I might get a response, and was simply told I was in line. This is really frustrating. I also tried to call a few times and could not reach a person. It would be very helpful to be able to talk with a person who is knowledgeable. thank you
39		I do not understand the retirement system
53		I appreciate recent efforts to provide regular updated information re retirement status (similar to social security). It’s very important for planning.
58		Thanks for everything you do!

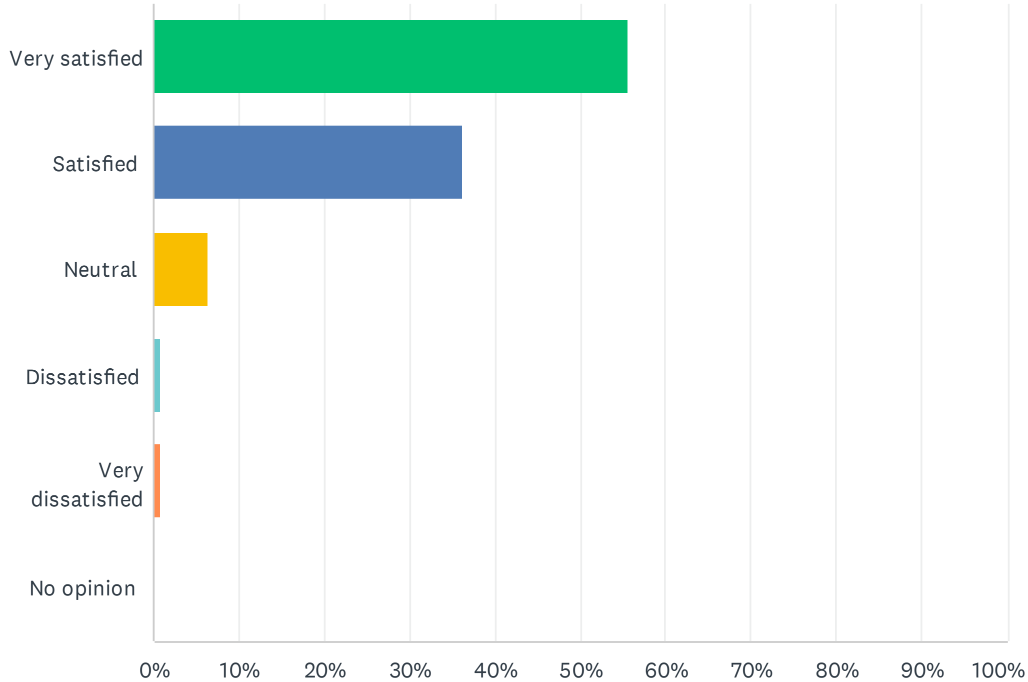
61		The staff is amazing when i connect with them however, sometimes there is a long wait to connect with someone, they do not return emails in a timely fashion and lastly, they do not return messages.
63	I want to be able to calculate when I can retire. How much does contributing to the 457 change the monthly payout?	I need to know when I can afford to retire. When I have called, the representative has said they can't give any information unless I am planning to retire within a few months. But I don't know if I can afford to retire. The new widget helps, but I still don't know if that calculation includes the contributions to the 457 plan. how can I know that?
64		I feel that MainePER should more actively communicate with all members but should make direct contact with members on a basis based on years of service.
65		It is difficult to get through and it takes a long time to get information. I would love to sit down and meet with someone.
70		It would be extremely helpful to have online access to view our retirement accounts. I have no idea what is even in my account, nor do I know how to find that information, not that I have tried too hard as I am still a long way from retirement. Still, I have been frustrated by the fact that I don't know where to find my account information.
73		I feel frustrated that I am obliged to pay into Maine PERS and that I don't accrue social security credits as a teacher. I also do not understand why am accruing credits two years in but that I would not get a pay out at retirement if I quit this job now. My generation is so mobile that we can't be sure we'll stay in one state our whole professional life. It seems really provincial to be stuck in a Maine-specific retirement plan. I feel like other, bigger, more urban states would understand this and give employees an option.
74	Detailed, technical actuarial information about how retirement benefits are calculated, in a written form like a whitepaper or other technical document.	

76		Information given by phone call of considerable length never came to me. I was told to expect two separate emails that never arrived. Follow up attempts to call back were not even answered after waiting on hold for ten minutes. Thanks for wasting my time.
77	Basic information on pros and cons.	
78		I really wish I could have 3 different estimates for 3 timeframes at once. I also wish that I could request a new estimate annually or 12 months from my last request date verses the date MEPERS calculated it. I had to wait 15 months to request a second estimate.
80		I am happy we will be able to access our retirement account. It's long overdue. What is the timeframe for this?
86		This is the first communication I've received. I would like to receive detailed information of my contributions and how they are working for me.
91	To also be able to collect my Social Security.	I should be able to collect my Social Security as well.
94		I miss the old letters that came out annually which said how many years of service I had at the end of the calendar year.
95		Still waiting on calculations on buying 4 years for retirement.
98	Want to meet with someone in person to go my retirement benefits. I do better face to face and I do not go zoom.	I love my job with m.r.s. but am looking forward to retiring as soon as I can,my son passed in 2030 and my parents are getting up there in age and I want to spend quality time with them, plus I'm really not able to heal/ have more acceptance with the loss of my son.
99	Disability	
106		It would be nice to be able to see how much $ I have in PERS on a yearly basis.
113		I don't feel like I know allot about my benefits.

129		I worry about a number of things, but here I am thinking of a few- Windfall. GPO. How can I best prepare for those things married to a non-PERS spouse? How can I best protect my family in retirement when I can't afford to pay today's bills, so I can't save enough outside the pension? What if another hostile administration comes in and they again threaten people's pensions as they scapegoat staff? It's not like we can fall back on the social security safety net. I have a lot of fears and am losing more sleep every night as I contemplate our future.
134		When two or more members with the same address (PO Box) receive their newsletters, they are only sent one newsletter, though they may not be living in the same household. Can each member receive their own newsletter? We have tried to correct this before without success.
135		Yearly statements would be awesome
137		I have tried over two years (maybe three) to get an appointment with Maine PERS. My phone calls, messages and emails have all gone unanswered. When I finally was able to speak with someone they said they can’t help me because my DOB is wrong in their system. Literally, they would not talk to me because of a clerical error on their part until I guessed the incorrect DOB someone had entered. The person on the phone told me I was close to guessing it??? Honestly, it is madness. I really need information to make informed career and life choices and the people who get paid off our contributions will not speak to me. It is absolutely infuriating.
154		It would be nice to be able to borrow against your retirement that you put in yourself
164		It would be helpful to have clearer ways to see what we have invested and what what equates to in actual $$ at the time of retirement on a monthly basis
165		I am waiting on action for my MainePers account now and have been since March 2023.
172		Thank you for all you do

Q1 Please rate your overall satisfaction with MainePERS

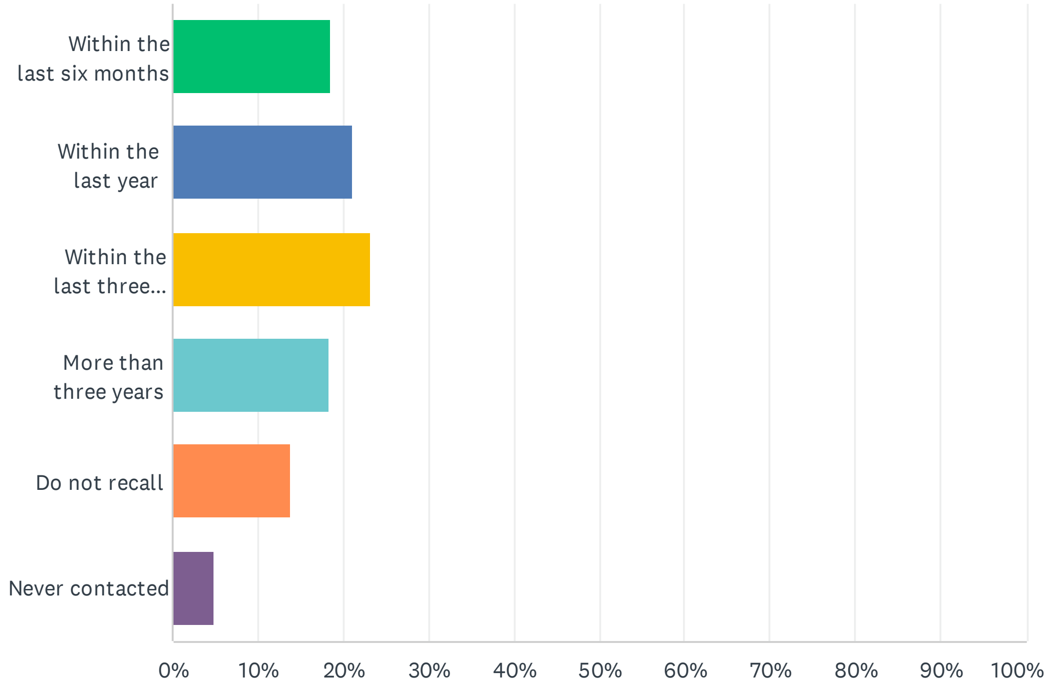
Answered: 585   Skipped: 0



ANSWER CHOICES	RESPONSES	
Very satisfied	55.56%	325
Satisfied	36.24%	212
Neutral	6.32%	37
Dissatisfied	0.85%	5
Very dissatisfied	0.85%	5
No opinion	0.17%	1
TOTAL		585

Q2 When was the last time you contacted MainePERS?

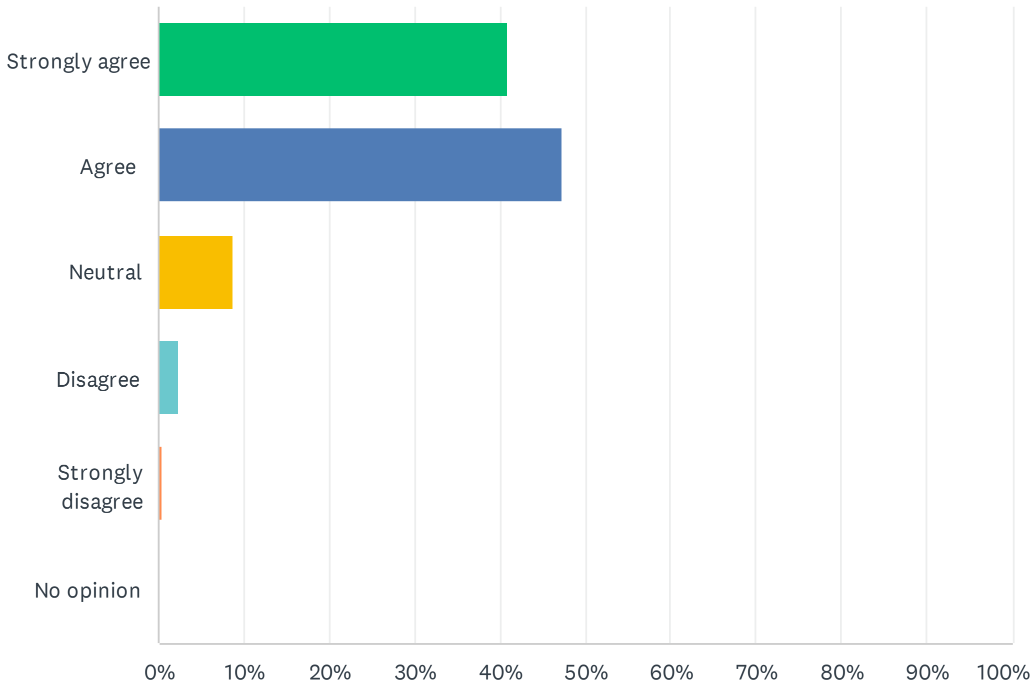
Answered: 583 Skipped: 2



ANSWER CHOICES	RESPONSES	
Within the last six months	18.52%	108
Within the last year	21.10%	123
Within the last three years	23.33%	136
More than three years	18.35%	107
Do not recall	13.89%	81
Never contacted	4.80%	28
TOTAL		583

Q3 I am confident my MainePERS retirement is secure and will be there for me

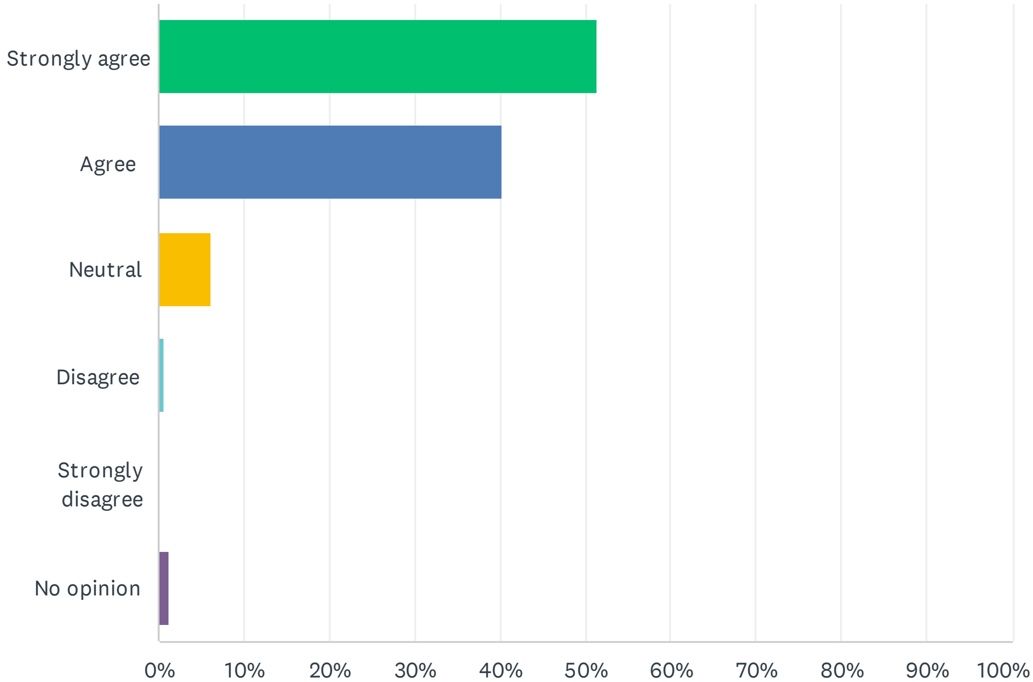
Answered: 585 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	41.03%	240
Agree	47.35%	277
Neutral	8.72%	51
Disagree	2.39%	14
Strongly disagree	0.34%	2
No opinion	0.17%	1
TOTAL		585

Q4 MainePERS acts with integrity

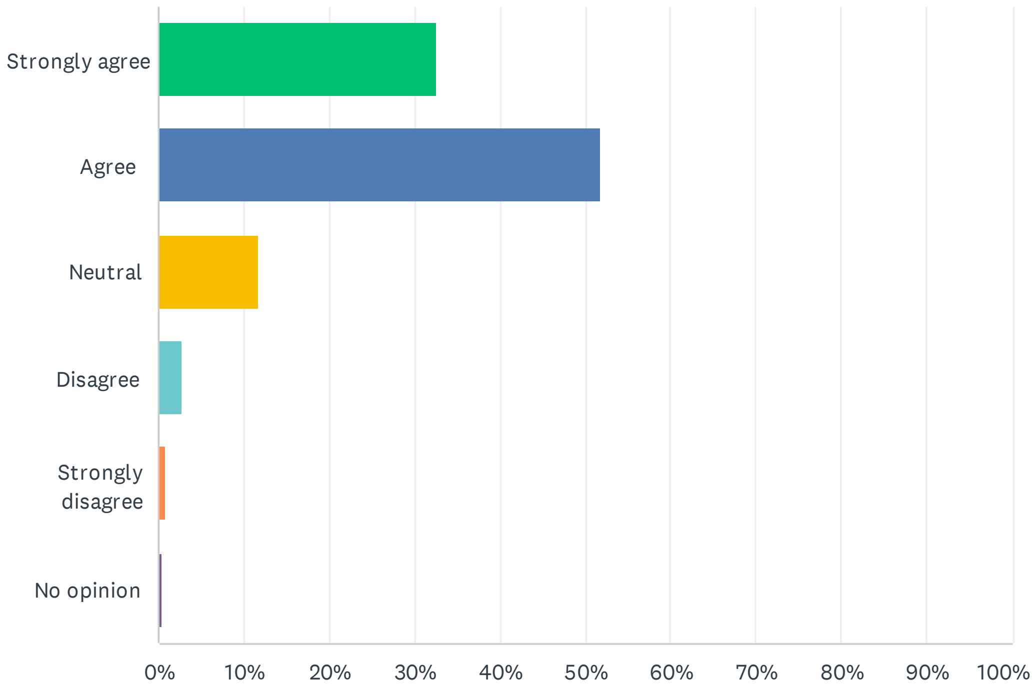
Answered: 585 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	51.45%	301
Agree	40.34%	236
Neutral	6.15%	36
Disagree	0.68%	4
Strongly disagree	0.17%	1
No opinion	1.20%	7
TOTAL		585

Q5 The frequency with which MainePERS communicates with me meets my expectations

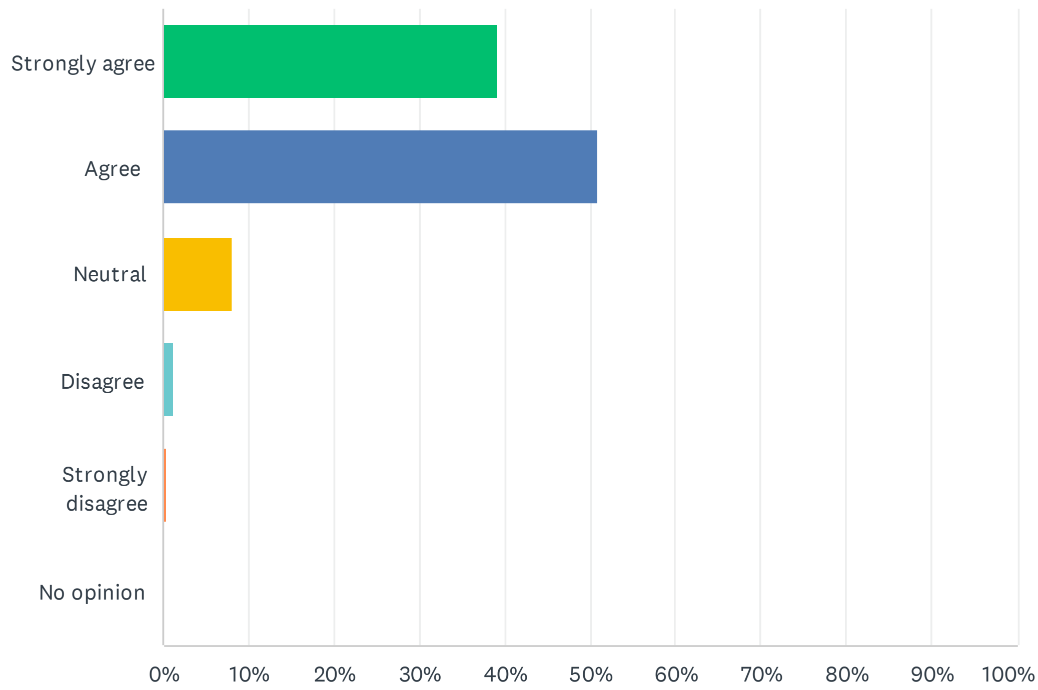
Answered: 584 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	32.53%	190
Agree	51.88%	303
Neutral	11.64%	68
Disagree	2.74%	16
Strongly disagree	0.86%	5
No opinion	0.34%	2
TOTAL		584

Q6 Information I receive from MainePERS is easy to understand

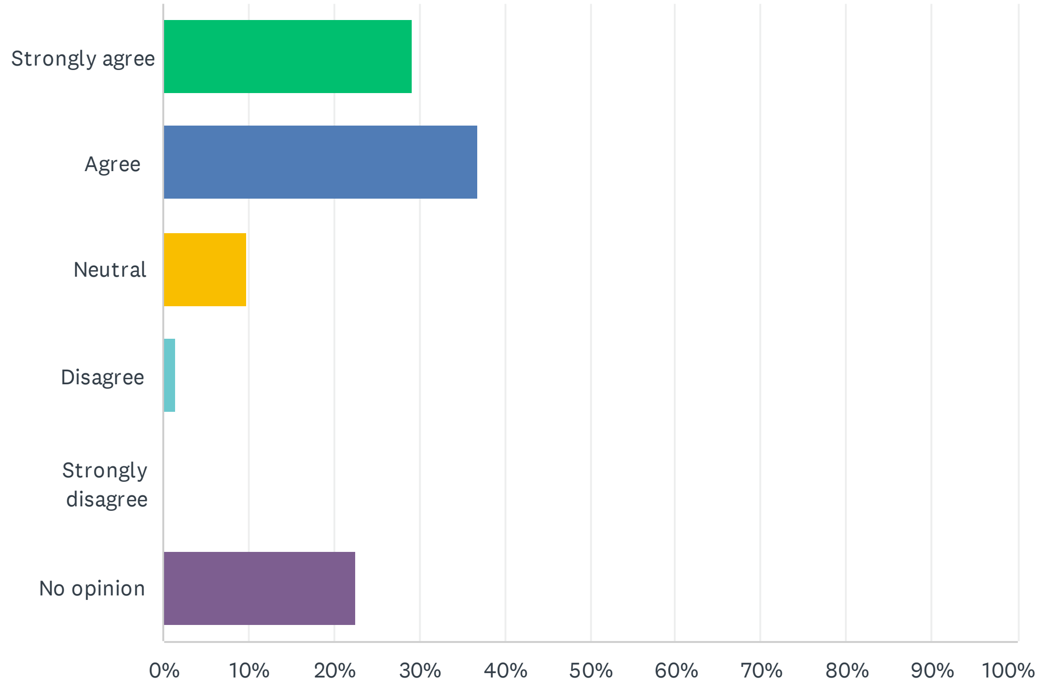
Answered: 584 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	39.21%	229
Agree	50.86%	297
Neutral	8.05%	47
Disagree	1.37%	8
Strongly disagree	0.34%	2
No opinion	0.17%	1
TOTAL		584

Q7 MainePERS responds to my questions in a timely manner

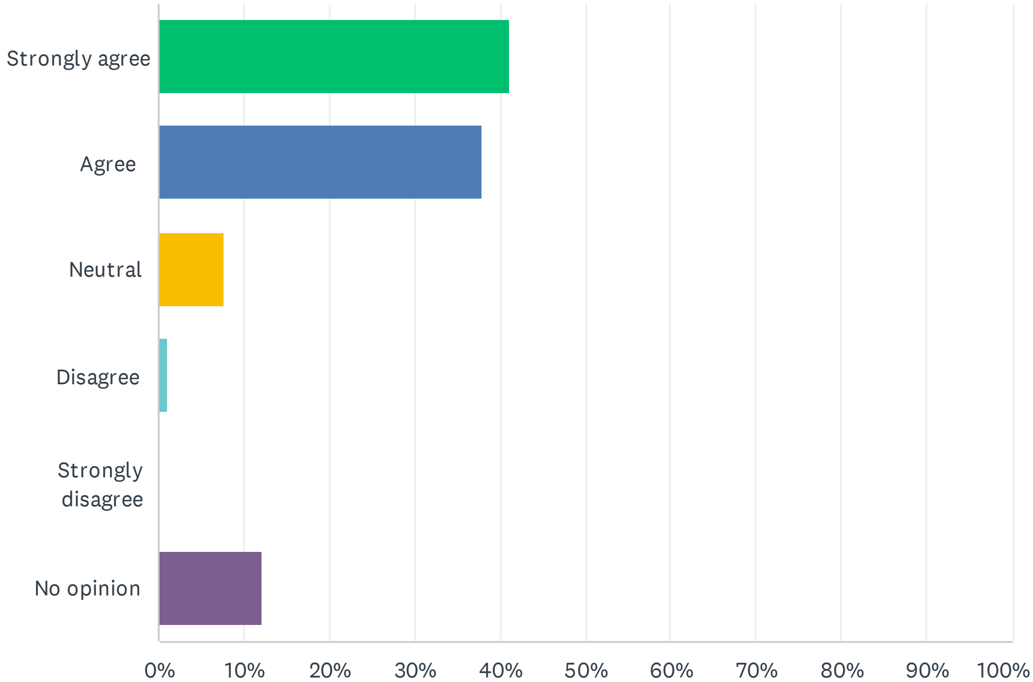
Answered: 584 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	29.11%	170
Agree	36.82%	215
Neutral	9.76%	57
Disagree	1.54%	9
Strongly disagree	0.17%	1
No opinion	22.60%	132
TOTAL		584

Q8 MainePERS Staff are knowledgeable

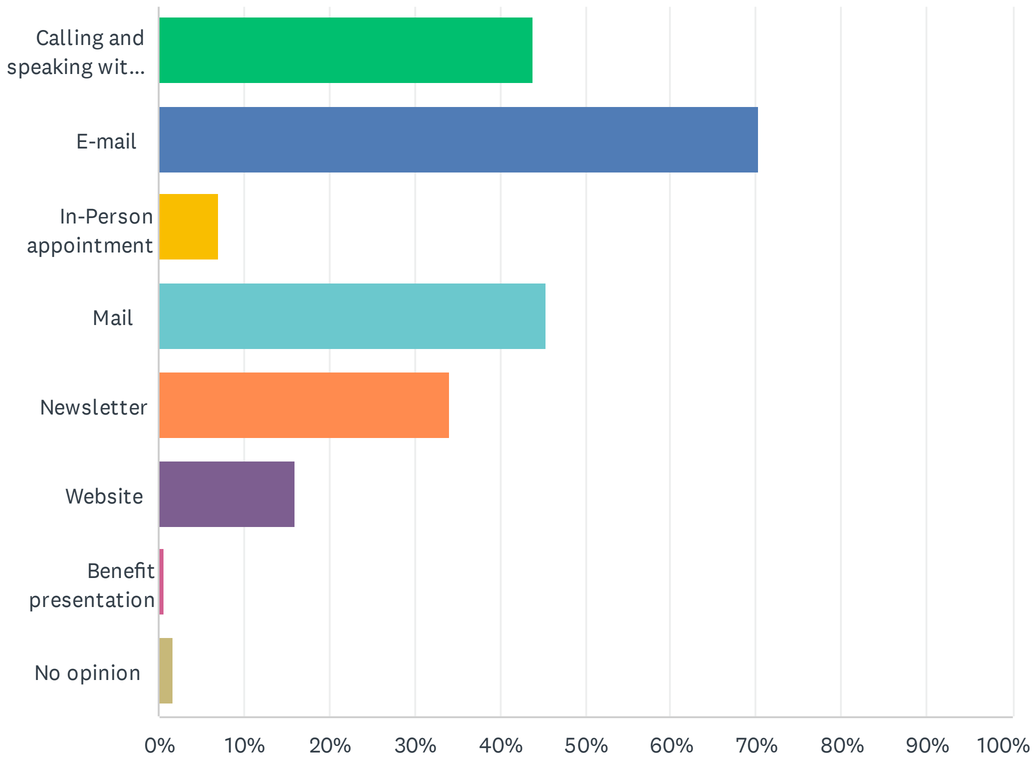
Answered: 583 Skipped: 2



ANSWER CHOICES	RESPONSES	
Strongly agree	41.17%	240
Agree	37.91%	221
Neutral	7.72%	45
Disagree	1.03%	6
Strongly disagree	0.00%	0
No opinion	12.18%	71
TOTAL		583

Q9 I prefer to receive information from MainePERS by this method: (Please select up to three options)

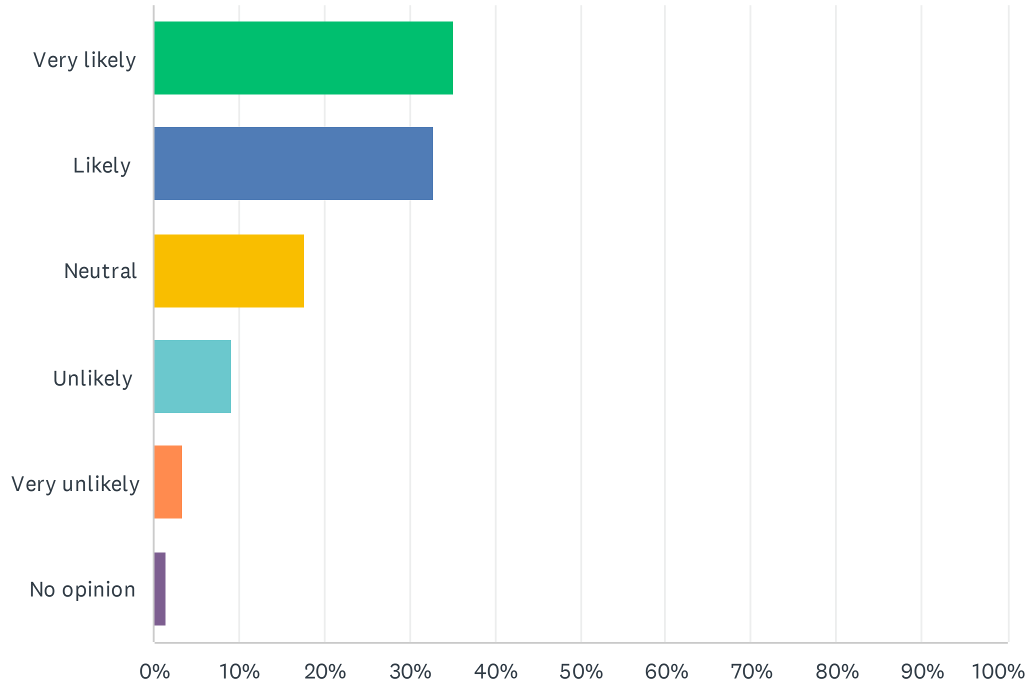
Answered: 585 Skipped: 0



ANSWER CHOICES	RESPONSES	
Calling and speaking with a Member Services Representative	43.93%	257
E-mail	70.26%	411
In-Person appointment	7.01%	41
Mail	45.47%	266
Newsletter	34.19%	200
Website	16.07%	94
Benefit presentation	0.68%	4
No opinion	1.71%	10
Total Respondents: 585		

Q10 How likely is it that you will use the MainePERS Member Portal (offering convenient online access to your account information) when it is made available to you?

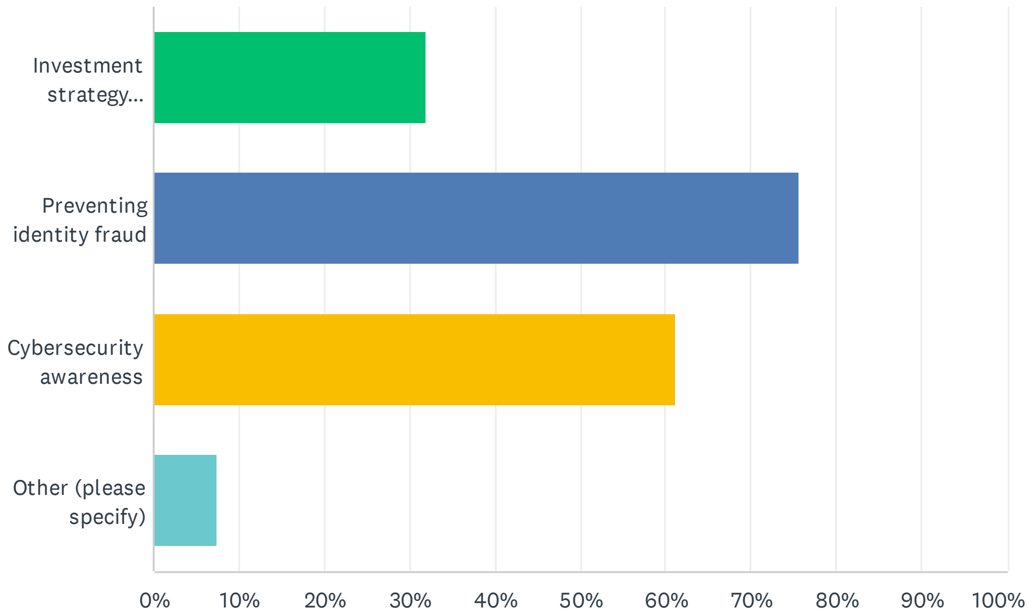
Answered: 585 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very likely	35.21%	206
Likely	32.82%	192
Neutral	17.78%	104
Unlikely	9.23%	54
Very unlikely	3.42%	20
No opinion	1.54%	9
TOTAL		585

Q11 From the items below, please check items which you would be interested in (Please select all that apply):

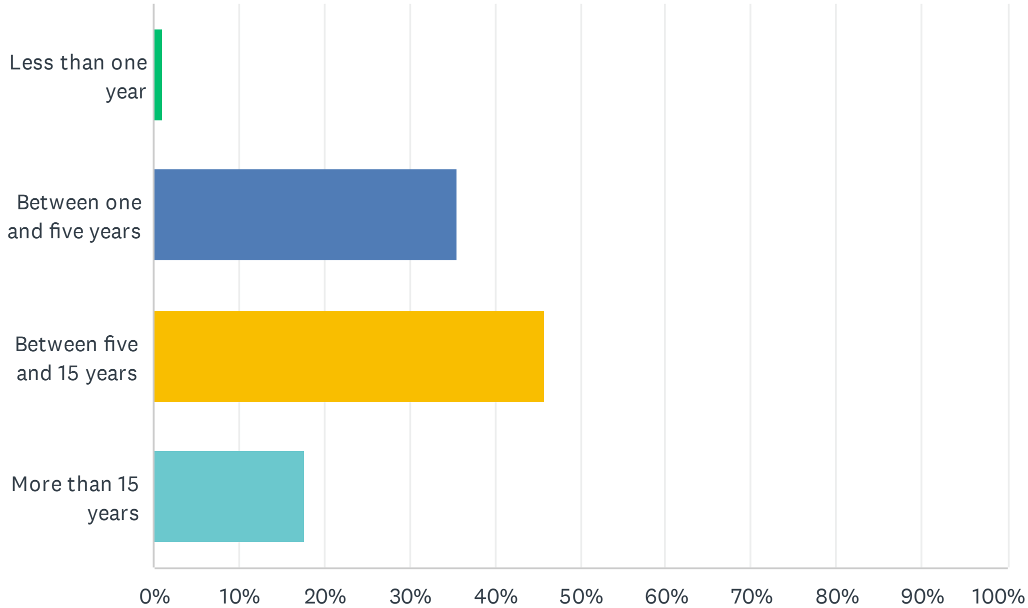
Answered: 484 Skipped: 101



ANSWER CHOICES	RESPONSES	
Investment strategy overviews	32.02%	155
Preventing identity fraud	75.62%	366
Cybersecurity awareness	61.16%	296
Other (please specify)	7.44%	36
Total Respondents: 484		

Q12 How long have you been receiving MainePERS retirement benefits?

Answered: 585 Skipped: 0



ANSWER CHOICES	RESPONSES	
Less than one year	1.03%	6
Between one and five years	35.56%	208
Between five and 15 years	45.81%	268
More than 15 years	17.61%	103
TOTAL		585

Q13 Please feel welcome to provide any additional feedback.

Answered: 121 Skipped: 464

#	11) From the items below, please check items which you would be interested in (Please select all that apply): Other (please specify)	13) Please feel welcome to provide any additional feedback. (Open-Ended Response)
	Other (please specify)	
1		Getting better and cheaper dental insurance. We are on limited income and the cost for dental insurance is too high. Maybe getting it as part of our health insurance.
2		I understand that a new portal is in the works. It would be ideal to have access via portal for all information and updating documents without the need for US postal service. Technology is available for all forms of communications and can't wait until MePers portal is fully functional and is in the 21st century. □
5		You are doing great! Thank you!
10		I appreciate MainePERS' interest in providing members the best customer service poss ble, this survey being a good example of this. Thank you very much.
16		Our deposits are always on time and correct. Thank you for all your hard work on our behalf.
21		I trust Maine PERS to protect my retirement benefits. It's the Maine Legislature that I don't trust! The slashing of COLAs has had and will continue to have a big negative impact on my retirement.
22		This question was difficult: I am confident my MainePERS retirement is secure. I don't think anyone can be confident that investments are secure in today's economy. I hopel that MainePers is making purdent decisions and doing the best they can for us.
28		I would like to see my monthly pay stub EVERY month. Online viewing would be fine as opposed to paper.
32		Thanks for asking me to take part in the survey. Looking forward to using the Member Portal.
34	COL raise	Retired and can't enjoy it the last three years !
40		I would like to be informed of the COL increase before it is deposited in my checking account. The information is always late.
43		Thanks
46		Would like to see aggressive action granting teachers their full Social Security Benefits., not pro rated. After 35 years of teaching at very low wages, always working two jobs and still working part time at the age of 75 and still paying into SS, it is time to receive the benefits many other states provide their retired teachers. I am a cancer survivor with recent vision issues who would be one of many who would benefit from what we deserve. I thank you for the hard work you do in our name.
49		Staff has great attitude and a lot of patience.. [redacted]
50		I have concerns regarding the Governor's intervention concerning PERS funds investments.
61		I have just recently retired and have had many questions. During my transition I have had the opportunity to speak with several representatives. Each time I have been very satisfied with the person I spoke with. Always kind polite and patient with me. It has made this somewhat scary time in my life much more relaxing to enter.
62		The portal will make it easier to change contact information. I am looking forward to that.
66		MePers employees have always been very helpful, knowledgeable and pleasant whenever I've had questions needing to be answered, changes needing to be addressed. Thank you for being there.
70		I have had virtually no contact with MPERS for over 2 years with the exception of newsletters. Other contact has been minimal. Therefore, most of my survey responses are generic. I appreciate all the work MPERS staff and board do to manage the program and provide excellent service to us members.
73		Unsure about the on-line Portal. We will see in time if it is helpful & worthwhile.
76		Any time I contacted MainePERS I was very pleased with the courtesy and help I received. Thank you.
79		How is Mainpers helping retirees with increasing costs of living that exceed what we currently receive? Costs increase all the time but my retirement cannot keep pace.
82		Thank you for all you do!
90		I know I only get a MPERS check stub when something has changed in the amount. Sometimes I don't know what has changed. I think an explanation of what has changed would be beneficial.
97		Your staff have always been pleasant and quick to respond to my calls. Thank you.
98		When I *do* call in, everyone is exceptionally helpful and resourceful.
115		I called about a month ago to ask a question. I found out they had reduced their contact days. Never called back.
119	How is the Cola determined?	Providing updates on the status of legislative bills impacting retirees would be helpful. The percent of the cola continues to be well below inflation. Does Maine PERS have a plan to address the disparity between cola and inflation.
120		Thank you for your efforts!
122		Have received bad information regarding federal tax withholding.
125		my checks are on time
126		Good Job everyone at MPERS

#	11) From the items below, please check items which you would be interested in (Please select all that apply): Other (please specify)	13) Please feel welcome to provide any additional feedback. (Open-Ended Response)
130	Why isn't the federal annual cost of living applied to our retirement instead of a board deciding what we will get?	The restrictions of the cost of living increases being limited to the first $ 20000 is bad enough without someone also deciding what percentage below the cost of living would be applied. Is this what we get for the state not paying our retirement for years and borrowing millions that they never paid back. Along with a 50% penalty on Social Security for having a state retirement, it is impossible to keep up. Does anyone really care.
140		Good job.
146	More aggressive action toward ending WEP and GPO	WEP and GPO are unfair and Maine PERS needs to help end these policies that rob us of our money we earned.
147		I am not certain if this is Maine PERS issue, or if it has determined by the legislature. However, the meager amount we get each year for cost of living compared to Social Security increases is shameful. Consequently, Maine PERS recipients have gone further behind for several years in these economic climate. Wages for workers has increased so much in the past few years, but retired state employees at the lower end of earning keep reducing our ability to keep up with inflation. PLEASE HELP! Thank you!
149	Unrelated game or two, more informal wording, retail discounts	
157	Retirement education	
158		Send a payment advice for each payment
159		I don't mind checking my account online myself, as long as, the portal is user friendly.
160		I just wish that I could have bought back out of state and In State hours back at the Teacher/ Admin rate for both in state and out of state. Now I will be working until am 105.
162		I'm looking forward to using the Member Portal.
175		Keep up the good work.
176	MainePERS investment portfolio	Snail mail tax forms
182	Immediate alerts if MainePers data is breeched and my personal information compromised.i	
183	Results of any new legislation affecting retirees	
185	Social security reduction	Social security reduction as it is not double dipping. I work two jobs at same time
188	Progress on the SS windfall and other money issues affecting our retirement	I'd l ke to be updated on the Windfall progress and other bills in the legislative process that affect our retirement benefits WITH EACH MONTHLY NEWSLETTER. Thank you!
189		**I am not sure how often a newsletter is sent out but I don't think I am receiving all newsletters that are being sent. Could you let me know how often they are sent? I would suggest atleast 2 times per year. Please let me know how often I should be receiving ME PERS newsletter in the mail. My email address is: [redacted] Thank You**
195		Surveys l ke this make me question why you are doing this ... what is it we don't know yet.
198		I wish you spent more time covering and protecting the City employee retirees as you do State and Teachers. I know State and Teachers make up a larger percentage of retirees. There is very little mentioned about us.
205		More advocacy to increase retriement benefits for all.
210	I don't really know	I know you don't feel it is your role to provide health insurance information but I feel that I got no information from anyone that I would no longer be eligible after 5 years of collecting retirement income benefits but not accessing insurance. At the time, my benefit was only 45% of single coverage. I went to work and received insurance through work. At some point the shift to 55% was implemented and I considered stopping work and accessing my insurance only to find out then, there was a 5 year window. I worked 35 years in public education and that is not the treatment I deserved.
211		Thank you □
212	What is PERS doing about the decrease in Social Security Benefits when there is an increase in Me. St. Retirement Benefits? Thus there is no financial gain for the retiree.	
220		Being cheated fofor 40 years when my benefits were recalculated by new Director
223	dental insurance	
224		I have always found anyone I talk to at Maine PERS to be very helpful and knowledgeable. Thank you so much. [redacted]
226		Thanks for asking..
227	How to legally earn money after retirement	
231		Thanks for your great service.
233		I appreciate your outreach and would l ke to comment on how long it took for me to get my final retirement pension. It took a year and was quite surprised the length of time was so long. I have a colleague who retired on the same day as me and still has not received her final retirement determination. It is 14 plus months.

#	11) From the items below, please check items which you would be interested in (Please select all that apply): Other (please specify)	13) Please feel welcome to provide any additional feedback. (Open-Ended Response)
239	WEP	
241		You send me my money, but you're just a shadow figure to my life. But frankly, do you need to be more?
243		How I wish I wasn't losing so much of my Social Security because I became a teacher after being a physical therapist. For this reason, I am working after retirement. So very upsetting, unfair and WRONG
245		Thank you for all you do
251		Thank you
256		I appreciate the ability to call and talk with a representative- all interactions have been professional, timely and informative.
257		The newsletters are very informative
258	N/a	
259		Good job Maine PERS!
264		Resolving questions/ problems takes an unreasonably long time. I think you need more staff.
268		Very professional, easy to work with, respectful. Thank you very much for providing such great service.
272		I anticipate making use of the portal when it becomes available. Somewhat overdue. Secondly, a few years ago my wife received mail from MePERS expressing condolences for my passing and that processing of my life insurance and alteration of benefits would begin. Apparently someone who checks obituaries had only done a cursory check of the records and prematurely decided I was deceased. Hopefully that has been tightened up.
279		I'm looking forward to when I can access the portal. I realize it's staggered but I'm excited about it
282		I don't think retirees need info for current members.
288		Keep up the great work you do for us!!
290		I feel like I am in good hands with PERS! (Now, if the state would just do something about teachers not getting social security from previous out of state jobs :(
292	None. Just looking forward to easy access to my info on a portal	
306		I very much appreciate your good work.
307		I had been in the process of buying back years from teaching at a parochial school. I received no updates for 15 years. A few years before retiring I was shocked to find out that my initial buyback monetary amount needed to be bumped up to $1000.00 a month. Every time I spoke with a MainePers employee I was given different information. I was very frustrated and upset with MainePers. I have heard the same complaints from fellow educators. MainePers is finally mailing out newsletters. Still room for improvement in supporting educators preparing for retirement.
313		I would like to have access to all account information online much like NVPERS. I also appreciated the newsletter.
314		Please realize that the monthly amount we receive as retired teachers is insufficient. The $181 "bonus" was an insult. Maine can not attract young teachers with this retirement; they are going to Mass, Conn or NY. Is it still true that I won't be able to collect my husband's social security if he precedes me in death? Please work harder at increasing our monthly benefit!!!
317		It's important for me to get a live person when I call
329		Very excited to see and use the new portal!! Thank you for making it available!
330		Always had excellent, knowelabe representatives. Very pleased as they have answered all my questions with patience and understanding.
339	Advocating so I can get my full Social Security benefits, along with mepers	Again because I worked for Maine DHS I am unable to receive my full Social Security benefits, even though I worked for Social Security more than I work for the state of Maine. I know I need to take a supplemental job to survive.
342		Exceptional professional service
343		Staff at Maine PERS always helpful and attentive to my questions and needs.
357		The portal will only work if a real person is available to help with unique situations.
364	N/A	

#	11) From the items below, please check items which you would be interested in (Please select all that apply): Other (please specify)	13) Please feel welcome to provide any additional feedback. (Open-Ended Response)
365	Restoring COLA taken away in 2011	With the inflation of the last 3 years, the loss of the full COLA benefit (up to 3%) is really hurting, devaluing the retirement benefit promised when I worked for the State.
366		Income tax withholding is not at the level with the school system and I sent forms to request higher amounts be withheld. That process and follow through is not clear or easy to navigate.
374		none
375		Thank you to the PERS employees who work on our behalf.
378	How to legally earn money after retirement	
380		All is good.
385		When receiving a Cola an explanation of the increase should be explained with each note nctease.
387		The only contact I have is when I receive my payment stub in the mail so my survey isn't much help, sorry.
391		I have been pleased with MainePers stability and flawless pension schedules. Thank you for your continued .
394		I struggle some with technology. (I am 80 years old). That is the reason I prefer mail and direct contact via phone or in person . Thank you for asking.
398		Thank you for keeping us (retirees) up to date on information regarding our retirement. You are doing a great job.
405		Professional and knowledgeable staff that quickly address any problems that I may encounter. Great people to work with.
426	Not receiving paper statements	Looking forward to having access to my account on your website!
443		where can i get COLA information/updates in the most timely manner?
444	?	
449		I would be interested in the progress of receiving Social Security benefits of which we deserve but do not receive fully.
452	Income tax info	
456		Experienced a difficult time in March of this year after completing our income tax form. Not enough money had been taken out of my checks for federal taxes and needed to pay in due to this. After being asked to complete an updated W-4P, it took three monthly checks to get it fixed completely!!!!! This was extremely frustrating and there needs to be a more accurate system in place to help retirees.
457		I don't understand why MEPERS does not even try to keep up with cost of living increases. 2% is a joke
466		You are wonderful!!!
468	Updates on MPER related Legislation in the works and passed to law.	Hope the portal has our base income info. Why do you make 4 separate deposits in our bank account? My wife and I have split benefits so each "check" is deposited when I think you could safe money if you made it one deposit to that bank account. We could see the breakdown in the new portal.
470		N/A
472		It took a long time to get thru to a human being my last two calls….
481	Make it easier to split my retirement between different accounts	
485		THANK YOU FOR ALL YOU DO!! :-)
497	to know if I'm getting a COLA	Just wondering when do I get a COLA, thanks
499		Knowledgeable, ready-to-help staff: a great way to go!
505	how to increase the cola percentage to meet rising prices	I am trying to survive on a teacher's pension that does not provide me sufficient money to meet basic rising costs of living. When social security raises their retirement to a decent %, PERS is so little in comparison. Why aren't the people we are paying salaries for able to fight for increased pension amount. I am living on just my salary and have had to do without many necessities just to pay federal taxes and real estate. I'll bet employees working for PERS do not hesitate to raise their salaries by a good percentage. No wonder it is hard to entice students to work as teachers in Maine. I've been disgusted and discouraged by the lack of attention to this needed help for retirees that have worked hard as teachers.
513		I would love to see updated WEP status information in each newsletter. Explanations of health insurance changes would be helpful as well. I suspect these are the two biggest challenges for Maine State retirees.
514		I prefer to receive an email about new information and then a phone number if I need [or anyone needs] further clarification.
516		Being a snowbird, I have to change my mailing address to Florida for the winter and then change it back to Maine in the Spring. Hopefully the new portal will allow me to do this on line rather than having to call your office to make the change.

#	11) From the items below, please check items which you would be interested in (Please select all that apply): Other (please specify)	13) Please feel welcome to provide any additional feedback. (Open-Ended Response)
518		Good program, nice people... pity that my Social Security gets whacked and i lose about $400/month, ever since Ronald Raegan said that people like me are "double-dipping.." Senators and Representatives are amune from double dipping... but folks l ke me have money that was set aside for me gets stolen by bureaucrats.
519	On-line access to check statements, lifetime payments, COLA amounts, deductions, etc.	
522	100% social security benefit	
526		Would like a yearly estimate on what my retirement benefits would approximately be as I am still working under a MEPERS plan while receiving retirement benefits from another.
529		I feel relatively secure that my retirement will continue until my death-, only a very corrupt and destructive administration could change that which has happened in the past and is possible in the future. I like that you keep my informed and up to date on all relevant information- thank you!
536		Would like to see progress made towards windfall elimination and government pension offsets (based on income needs). ID 341 was a joke.
539		My income is very low because of the Social Security off set for state employees. I wish we could work on changing that law.
540		thank you
541	I would l ke to know when the state is going to put our retirement savings back after having used them.	
544		I have worked many jobs in addition to my 29 years for the state of Maine; aged 15-72 and still paying into SS but not a high wage earner so the formula does not get me above the 40%. I am very much hurt financially by WEP. I think this must be a focus - please work to eliminate WEP for all these years paying in and not receiving full benefit on investment paid into SS throughout my life. It is just plain wrong as all I want is what I saved through the program. Please make this a focus.
547		I have difficulty using automated systems, frequently opting to give up because I need to talk to somebody and can't get through.
564		Reduction of COLA against the intent of Retirement
565	account	
571		I find talking to a clerical person is the worst thing someone can do that is trying to get answers for retirement. I was lucky to finally speak to a counselor after three phone calls and they were most helpful.
578	Taxes	
580		When I retired 3 years ago I found when I called with a question anyone who answered was very helpful, knowlegeble and pleasant to deal with.
581		I am very pleased with Pers, especially when I went through the retirement process! The staff were extremely helpful and very patient!
582		Very satisfied with Maine PERS
584	I'm good.	

Pension Administration System Project Education

Board of Trustees
October 12, 2023

Dr. Rebecca Wyke, Chief Executive Officer
Chip Gavin, Chief Services Officer

New PAS System

- MainePERS current PAS is at end of life and in need of replacement
- A new PAS also offers several advantages:
  - Improved accuracy and efficiency
  - Enhanced data security
  - Reduction of risk
  - Convenient user access for members, employers, and staff
  - Comprehensive reporting tools

5-Year Strategic Plan

The new PAS is integral to achieving the goals of the Strategic Plan:

Goal III: Security and Integrity of our Information Systems

- Ensure the cybersecurity management program meets current and future needs
- Maintain and upgrade core information systems
- Explore a cloud strategy to host information systems

Goal IV: Cultivation of a Member-centric Organization

- Develop a comprehensive member education, communications, and service model that supports planning for retirement security
- Improve processes to promote timely and accurate service by ensuring the integrity of the data, streamlining and automating workflow processes, and reducing processing times

Goal V: Development of Stakeholder Relations

- Develop a comprehensive employer, education, communications, and service model and partner with employers and third-party payroll vendors to streamline processing and improve reporting

Project Steering Committee

Project Sponsor

- Rebecca Wyke, Chief Executive Officer

Team Lead

- Chip Gavin, Chief Services Officer

Project Lead

- Joy Childs, Director of Information Technology

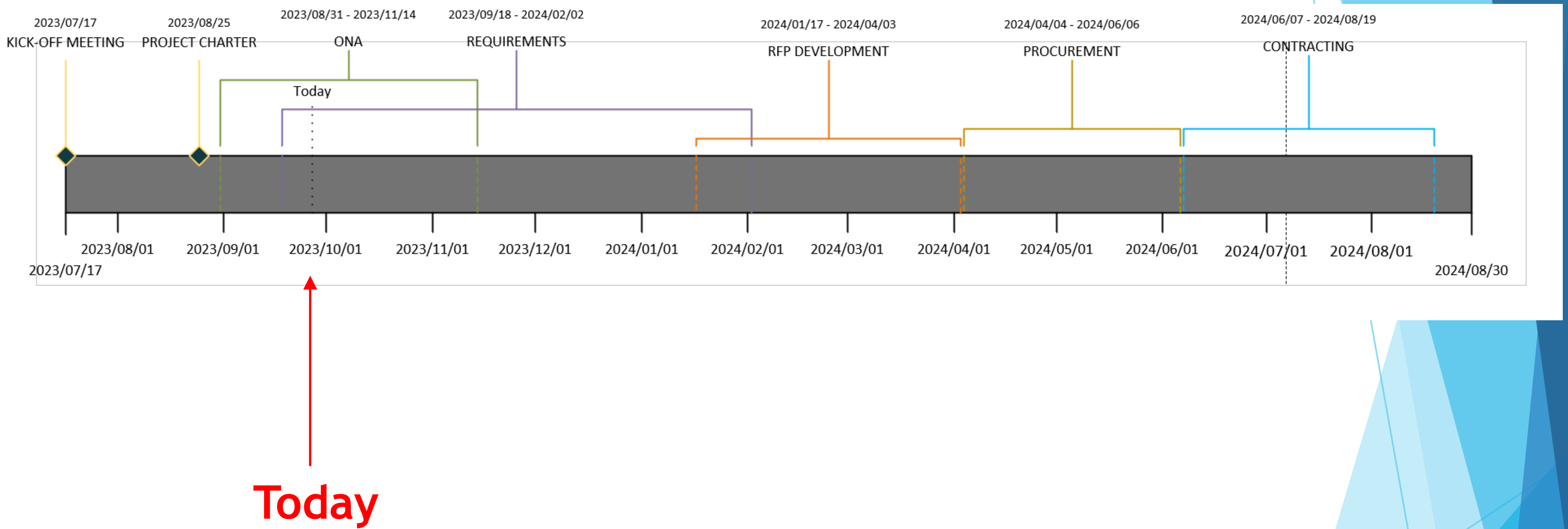
Steering Committee

- Mike Colleran, Chief Operating Officer/General Counsel
- Sherry Vandrell, Chief Financial Officer
- Val Scott, Director of Special Projects
- Domna Giatas, Director of Communications

Overview of the Project

- **Phase I: Project Initiation** - *began fall 2022 & completed spring 2023*
  - Steering Committee charged
  - Marketspace assessment of PAS Vendors
  - Advisory services procurement – Linea
- **Phase II: RFP Development & Award** – *current, ends summer 2024*
  - Project charter
  - Organizational needs analysis
  - System requirements
  - RFP development
  - Procurement
  - Contracting
- **Phase III: System Development & Testing** – *begins summer 2024*
- **Phase IV: User Training & Implementation** - *ends summer 2027*
- **Phase V: Maintenance & Support** – *begins summer 2027 & ongoing*

Phase II Timeline



Phase II Risk Register

		Likeli-hood	Impact	Priority
1	Data Migration - risk of migrating low quality data to new system	5	5	High
2	Technology Adoption – risk of not managing scope & timeline	5	4	High
3	Loss of Knowledge – risk of loss of institutional knowledge	5	4	High
4	Resource Constraint – risk of not having subject matter experts available to the project due to competing demands	3	3	High

Likelihood and Impact scale: 1 is low and 5 is high

Phase II Risk Oversight

Oversight Level	Type of Risk
Board of Trustees	Risks that place the programs, resources or reputation of MainePERS at risk
PAS Project Core Team	Risks that impact project strategy regarding schedule, scope, and resources • CEO to keep Board informed on risk status • If risk impacts the MainePERS program, resources or reputation, it is elevated by the CEO to the Board
PAS Project Management	Risks that affect the successful completion of a project or its specific components for both MainePERS and Linea. • Project Management to keep PAS Project Core Team informed of issues • If risk impacts the project schedule, scope, resources, or other project elements, it is elevated to the PAS Project Core Team

Phase II Status Update *– as of Oct 2nd*

Overall		**Scope**	
Schedule		**Resources**	

Overall Project Status

Overall project status is green as there are no expected scope changes, schedule development is progressing well, no budget implications. Resource health has dropped to Yellow as there is a risk of insufficient availability of MainePERS resources due to conflicting schedule of internal projects.

Scope

Project scope status is green as there are no changes to the project scope.

Schedule

Project schedule status is green as schedule has not been baselined yet. Discussions in progress for finalizing schedule.

Resources

The project resources status is primarily green with a slight yellow indication, signifying a manageable risk due to the insufficient availability of MainePERS resources, stemming from conflicting schedules of internal projects. In response to this, close monitoring and strategic allocation of resources are being rigorously implemented. Additionally, the requirements schedule has been adjusted to accommodate the available resources, ensuring that project timelines and quality are sustainably maintained

Phase II Board Oversight

- Review Phase II Status Update monthly:
  - Is the overall project status green?
  - Are there issues with the schedule, scope or resources?
  - What is management's plan to address any issues identified?
  - What questions do you have?

- Do any of the issues identified rise to the Board level because they place the programs, resources or reputation of MainePERS at risk?

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 4, 2023

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

POLICY REFERENCE

Board Policy 4.5 – Board/Staff Relations

Board Policy 4.6 – Communications and Support to the Board

MEMBER SERVICES

1. MEMBER PORTAL: The member portal has launched. The inaugural invitations were sent via U.S. mail to an initial random group of active PLD Plan members on Monday, October 2. Invitations to subsequent random groups of members and retirees from the various plans is expected to continue on a weekly basis. Five webinars are scheduled in the coming weeks and are among the education and support efforts in place to assist members with the portal. A series of parallel mailings also are ongoing to members and retirees with missing contact information inviting them to update their information with MainePERS to facilitate their future portal access and account registration. The portal effort is part of Goal IV, Strategic Objectives (E) and (B) and other related components of the Strategic Plan, and the related contact information data project supports efforts to communicate with active and retired members.

2. MEMBER EDUCATION: A new member education webinar – Intro to PLD Plan –launched September 26, 2023. This means introductory webinars for new and mid-career members are newly available for members of all three plans. Online registration is available for all introductory sessions. These new sessions are tailored for new and mid-career members looking to understand their benefits and to plan for retirement. They complement MainePERS long-standing Ready to Retire sessions tailored for members who are typically within a year of retirement. This survey comment from a webinar participant reflects MainePERS intent regarding the new webinars: "Very helpful information. A great refresher for those that have been in the plan for a while, but still not close to retirement. Employees are offered and educated about MainePERS upon hire, but then may not receive information

again. This webinar was great and I believe will be well received." The most recent new and mid-career member sessions, which included one for each plan and two that occurred in September, attracted a total of 142 registrants.

3. PENSION ADMINISTRATION SOFTWARE: MainePERS staff are in the midst of fact-finding and information gathering discussion sessions with its pension administration software advisor. These discussions are intended to help establish the requirements and otherwise to inform the drafting of the request for proposals to be issued to obtain a software solution to renew or refresh MainePERS current pension administration system. Discussions involving dozens of MainePERS staff members from across the organization have been and are occurring. This effort is part of Goal III, Strategic Objective (B) and other related components of the Strategic Plan.

4. COLA: The standard annual COLA for the state-sponsored plans was implemented with the September payroll. A special one-time COLA payment for state-sponsored plans for the period ending August 31, 2022, which was authorized by the recently adjourned session of the Legislature and becomes effective 10/25/23, is on track to be implemented by MainePERS in November 2023. Communication for members and retirees is posted to the MainePERS website www.mainepers.org and other communication efforts are scheduled.

5. CUSTOMARY SERVICES DATA: The customary data about routine member services are attached to this report.

FINANCE

1. EMPLOYER REPORTING. Employers submitted defined benefit payrolls on time at a 96.5% rate in September. This compares to a rate of 85% for the same period last year. The number of accounts now fully reconciled through August data is now 493, or 75.7%. Progress on reconciling accounts continues at a slower pace as we move to accounts that are more complex.

2. EMPLOYER AUDITING. One audit was opened in September and one was completed. In the one audit that was completed, we identified seven retired-returned to work (RRTW) members who were not being reported. The employer has since corrected their reporting to include RRTWs and staff is working to calculate any underpaid UAL contributions due. Ninety-four percent of all findings to date have been resolved satisfactorily, which is the same rate reported last month.

3. ACCOUNTING AND FINANCE. Work on the internal audit of investment processes and controls has been completed, and a final report will be presented to the finance and audit committee at the November meeting. There were no significant findings. We have engaged the audit firm of CliftonLarsonAllen to conduct an internal audit of cash receipts and disbursements, and that audit is underway.

OPERATIONS

1. HUMAN RESOURCES: We hired one new employee in September and had no terminations. We had an additional two employees start on October 2. We had 45 employees attend a voluntary "Lunch and Learn" session on MainePERS governance, the strategic plan and organizational values led by Dr. Rebecca M. Wyke. We held two flu and COVID vaccination clinics at our Augusta offices.

2. INFORMATION TECHNOLOGY: Members of the IT Team have been participating in Linea business and operational needs assessment meetings as well as a migration assessment with our current PAS vendor, Vitech. The entire IT Team was integral to the launch of the member portal discussed above.

   We provided vishing (i.e., voice phishing) training in September to staff who frequently receive outside phone calls. We will follow this up with testing by our security vendor, Tyler Technologies, in the coming weeks.

3. FACILITIES: We are exploring with an engineering firm generator options to provide electricity in the event of a power outage. We anticipate this work will result in a request for proposals later this fiscal year.

   We are upgrading our physical security system, including additional cameras and motion sensors to eliminate blind spots.

   Our safety marshals are scheduled to receive education on armed aggressors.

4. DOCUMENT CENTER: Our Quality Control Technicians have updated contact information for 4,148 members and retirees since the beginning of our member portal mailing campaign in August. Document Center staff processed 8,700 mailings and imaged 12,200 documents in September.

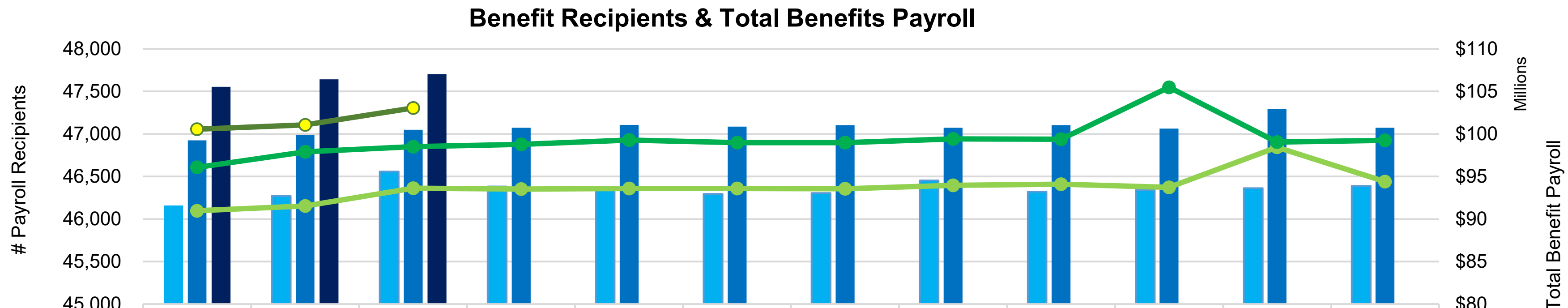
RECOMMENDATION

No Board action is recommended at this time.

October 2023 Board of Trustees Operations – Member Services Supplemental Numbers

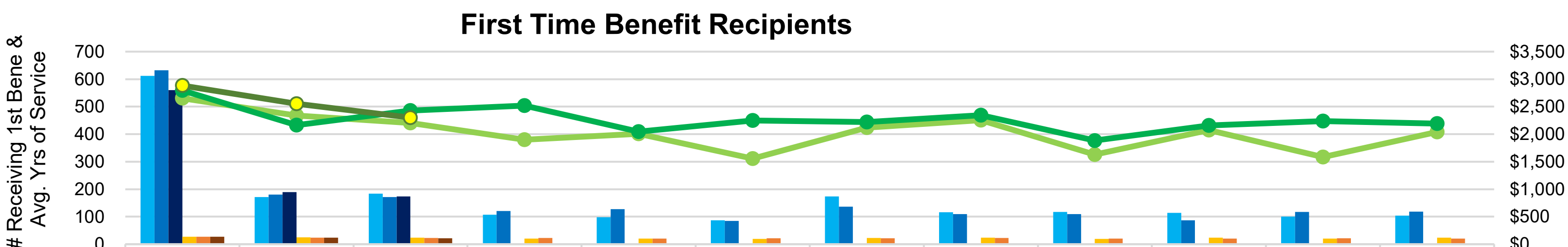
<u>Retirement Services</u>

Benefits Payroll. Regular monthly pension benefit payments were made to 47,703 recipients in September, totaling $103,060,700. *Note: Special payments paid outside of the regular payroll run are not reflected in the "Benefits Payroll" total.*



	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 Benefit Recipients (#)	46,157	46,273	46,557	46,383	46,372	46,294	46,305	46,453	46,322	46,344	46,362	46,390
FY23 Benefit Recipients (#)	46,924	46,986	47,049	47,073	47,106	47,088	47,103	47,073	47,103	47,064	47,294	47,072
FY24 Benefit Recipients (#)	47,554	47,641	47,703									
FY22 Benefits Payroll	$90,981,866	$91,530,971	$93,618,579	$93,515,788	$93,585,082	$93,580,970	$93,561,274	$93,959,837	$94,091,259	$93,732,973	$98,441,894	$94,406,978
FY23 Benefits Payroll	$96,074,419	$97,911,533	$98,525,514	$98,774,481	$99,301,667	$98,971,192	$98,985,590	$99,415,421	$99,380,454	$105,494,989	$99,061,443	$99,251,559
FY24 Benefits Payroll	$100,563,434	$101,088,595	$103,060,700									

First Time Benefit Recipients. One-hundred-seventy-four (174) individuals received their first benefit payment in September. The average benefit amount was $2,301. 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.

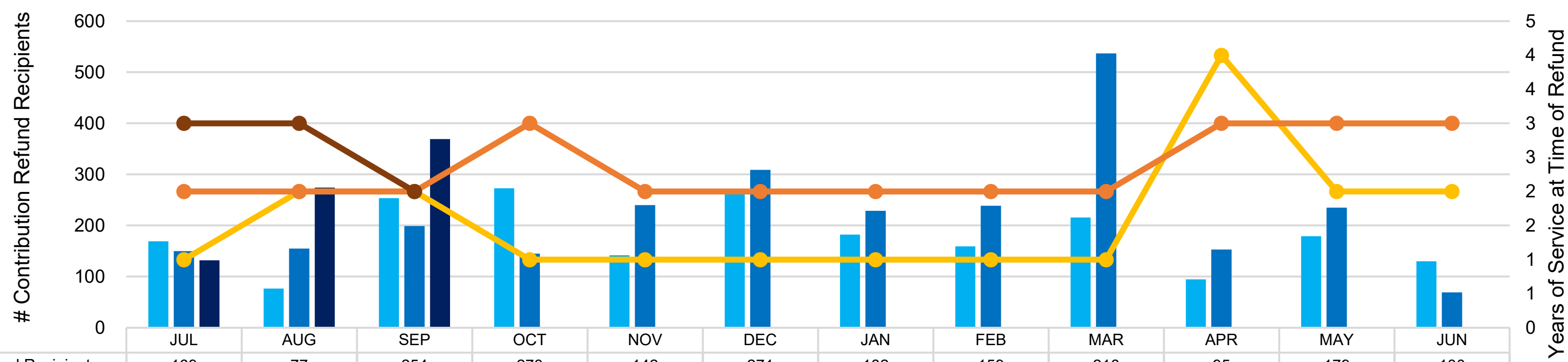


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # Receiving 1st Benefit Pmt	612	171	184	107	98	87	174	116	117	114	100	104
FY23 # Receiving 1st Benefit Pmt	632	180	172	121	128	85	136	110	109	87	117	118
FY24 # Receiving 1st Benefit Pmt	560	190	174									
FY22 Avg Years of Svc @1st Benefit Pmt	27	25	24	21	20	19	23	24	19	24	20	24
FY23 Avg Years of Svc @1st Benefit Pmt	27	24	23	23	21	22	22	23	20	21	22	21
FY24 Avg Years of Svc @1st Benefit Pmt	27	24	22									
FY22 Avg. 1st Benefit Pmt Amount	$2,652	$2,341	$2,206	$1,897	$2,008	$1,556	$2,118	$2,253	$1,628	$2,073	$1,584	$2,038
FY23 Avg. 1st Benefit Pmt Amount	$2,795	$2,163	$2,431	$2,519	$2,048	$2,246	$2,220	$2,342	$1,885	$2,157	$2,235	$2,195
FY24 Avg. 1st Benefit Pmt Amount	$2,883	$2,550	$2,301									

Retirement Services: Continued

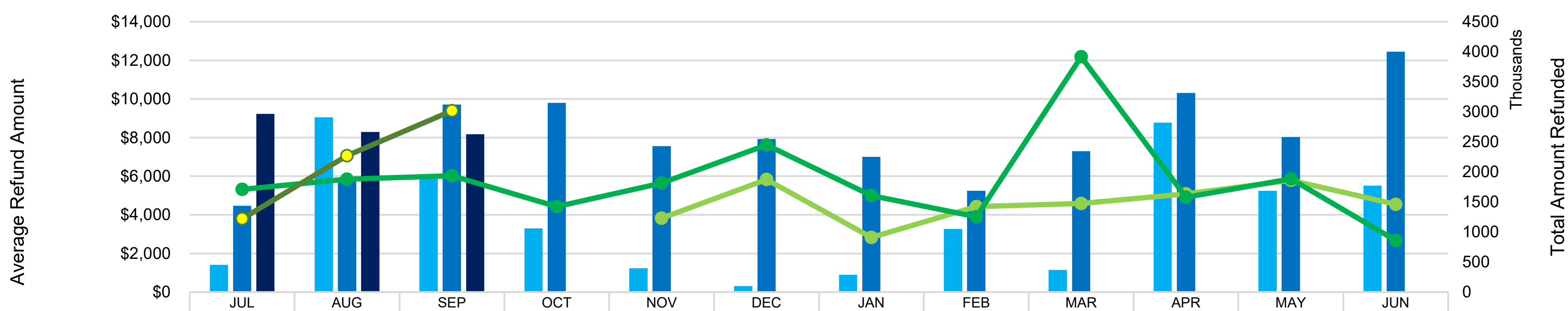
Contribution Refunds: Three-hundred sixty-nine (396) former members received a refund of their contributions in September. The average refund was $8,176 as the result of an average two (2) years of service. The aggregate amount refunded was $3,017,021.

Contribution Refunds Issued: Total Number & Avg. Yrs of Service



	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # of Contribution Refund Recipients	169	77	254	273	142	271	182	159	216	95	179	130
FY23 # of Contribution Refund Recipients	150	155	199	145	240	309	229	239	537	153	235	69
FY24 # of Contribution Refund Recipients	132	274	369									
FY22 Avg. YRs of Service at Time of Refund	1	2	2	1	1	1	1	1	1	4	2	2
FY23 Avg. YRs of Service at Time of Refund	2	2	2	3	2	2	2	2	2	3	3	3
FY24 Avg. YRs of Service at Time of Refund	3	3	2									

Contribution Refund Average Amount and Total Amount Refunded

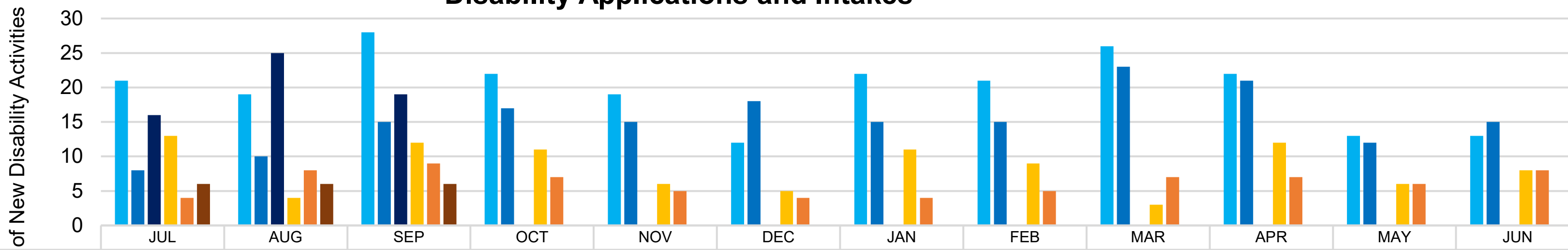


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 Avg. Refund Amount	$1,408	$9,047	$6,054	$3,304	$1,240	$313	$897	$3,272	$1,141	$8,766	$5,240	$5,506
FY23 Avg. Refund Amount	$4,463	$5,879	$9,715	$9,801	$7,563	$7,930	$7,006	$5,253	$7,290	$10,308	$8,023	$12,449
FY24 Avg. Refund Amount	$9,231	$8,287	$8,176									
FY22 Total Amount Refunded					$1,231,956	$1,873,289	$909,804	$1,421,562	$1,475,250	$1,635,042	$1,860,801	$1,461,766
FY23 Total Amount Refunded	$1,708,414	$1,877,641	$1,933,334	$1,421,169	$1,815,175	$2,450,445	$1,604,476	$1,255,368	$3,914,735	$1,577,107	$1,885,302	$858,954
FY24 Total Amount Refunded	$1,218,454	$2,270,701	$3,017,021									

Disability Services

Nineteen (19) intake interviews were completed in September with varying levels of detail and duration. Intakes included six (6) State members, eight (8) Teacher members and five (5) PLD members. Six (6) new disability retirement applications were received in September.

Disability Applications and Intakes

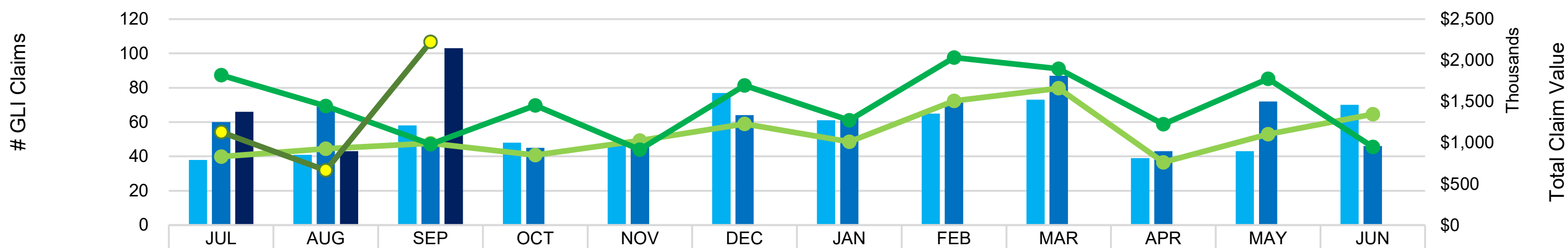


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # Disability Intake Interviews	21	19	28	22	19	12	22	21	26	22	13	13
FY23 # Disability Intake Interviews	8	10	15	17	15	18	15	15	23	21	12	15
FY24 # Disability Intake Interviews	16	25	19									
FY22 # Disability Retirement Applications	13	4	12	11	6	5	11	9	3	12	6	8
FY23 # Disability Retirement Applications	4	8	9	7	5	4	4	5	7	7	6	8
FY24 # Disability Retirement Applications	6	6	6									

Survivor Services

One-hundred-three (103) life insurance claims were sent to our carrier (The Hartford) in September with a total value of $2,223,120 in payments due to beneficiaries. Of the claims, ninety-eight (98) were retirees and three (3) were active members. There were two (2) Active dependent claims. *Note: Current claim volume this month reflects an influx of claims filed with MainePERS' 3rd-party insurer due to a change in work process. A portion of these claims are attributed to monthly processing under the new practices and a portion of the claims are associated with new efforts surrounding previously unresponsive beneficiaries which are being provided to our 3rd-party insurer for further outreach and potential payment.*

Group Life Insurance Claim Numbers and Total Claim Values

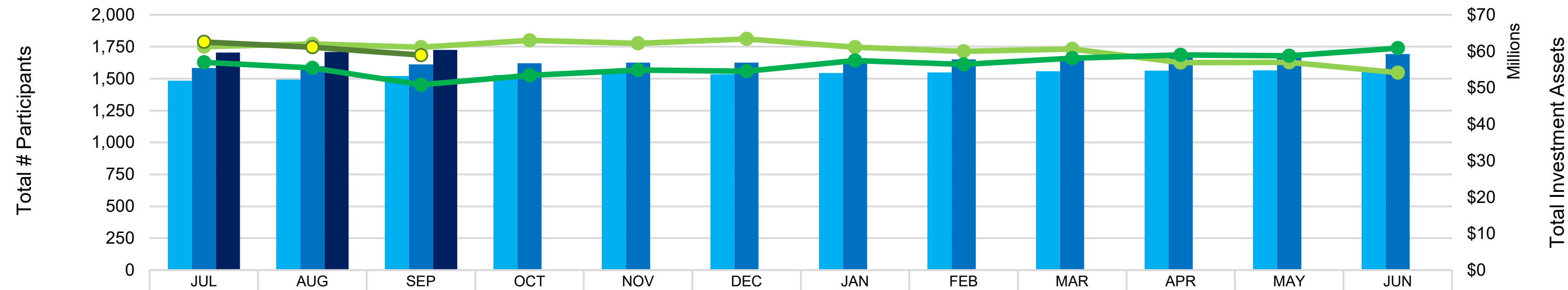


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # Life Insurance Claims Filed	38	41	58	48	47	77	61	65	73	39	43	70
FY23 # Life Insurance Claims Filed	60	69	48	45	48	64	63	72	87	43	72	46
FY24 # Life Insurance Claims Filed	66	43	103									
FY22 Total Claim Value	$830,400	$928,180	$993,600	$848,665	$1,024,430	$1,226,560	$1,012,780	$1,509,130	$1,660,260	$762,745	$1,104,050	$1,345,580
FY23 Total Claim Value	$1,820,300	$1,444,925	$983,345	$1,452,840	$916,000	$1,695,725	$1,273,690	$2,033,603	$1,898,640	$1,223,055	$1,776,990	$948,865
FY24 Total Claim Value	$1,129,025	$664,345	$2,223,120									

Defined Contribution Plan Services

MaineSTART had one thousand seven hundred twenty-five (1,725) participants at the end of September, with $58,962,112 of investment assets in the program.

MaineSTART Total Participants and Investment Assets

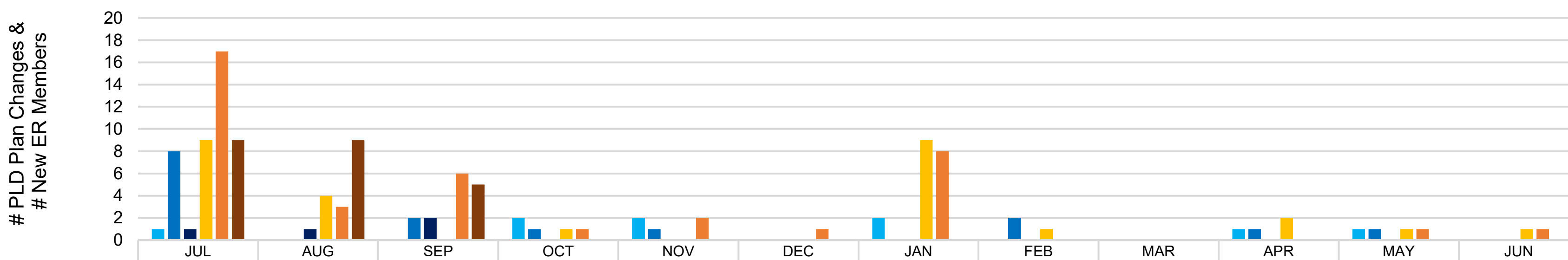


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # MaineSTART Participants	1,484	1,492	1,522	1,529	1,544	1,535	1,544	1,548	1,558	1,563	1,564	1,578
FY23 # MaineSTART Participants	1,584	1,597	1,611	1,621	1,626	1,626	1,640	1,650	1,657	1,679	1,694	1,693
FY24 # MaineSTART Participants	1,705	1,709	1,725									
FY22 Total Investment Assets	$61,274,938	$62,044,851	$61,110,033	$62,992,964	$62,145,242	$63,376,093	$61,101,482	$59,982,909	$60,660,028	$56,908,228	$56,993,617	$54,147,040
FY23 Total Investment Assets	$56,988,173	$55,406,634	$50,831,630	$53,388,359	$54,892,043	$54,531,425	$57,495,075	$56,379,826	$58,083,647	$58,975,711	$58,798,882	$60,842,713
FY24 Total Investment Assets	$62,542,153	$61,084,454	$58,962,112									

PLD Plan Administration

Two (2) new employers (Town of Machias and Town of Raymond), joined the PLD Retirement Program effective September 01, 2023. There were five (5) employer plan changes effective in September 01, 2023. <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 Plan: New ER Members & Plan Changes

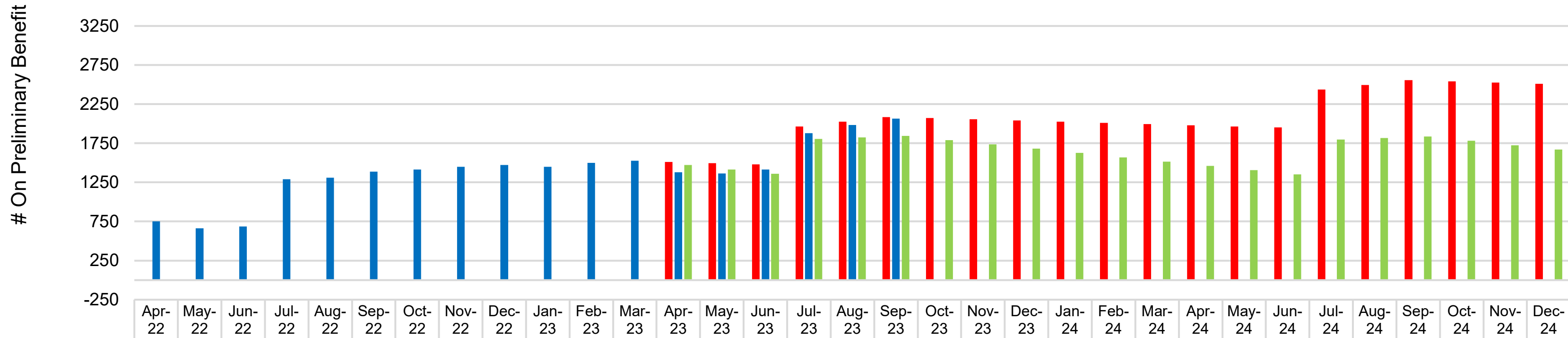


	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY22 # New PLD Plan Employers	1	0	0	2	2	0	2	0	0	1	1	0
FY23 # New PLD Plan Employers	8	0	2	1	1	0	0	2	0	1	1	0
FY24 # New PLD Plan Employers	1	1	2									
FY22 # PLD's Adopting Plan Changes	9	4	0	1	0	0	9	1	0	2	1	1
FY23 # PLD's Adopting Plan Changes	17	3	6	1	2	1	8	0	0	0	1	1
FY24 # PLD's Adopting Plan Changes	9	9	5									

<u>FOCUS FRIDAY IMPACT ON BACKLOG REDUCTION</u>

Preliminary to Final Benefit (PB to Final) Backlog thru 10/01/23: 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.

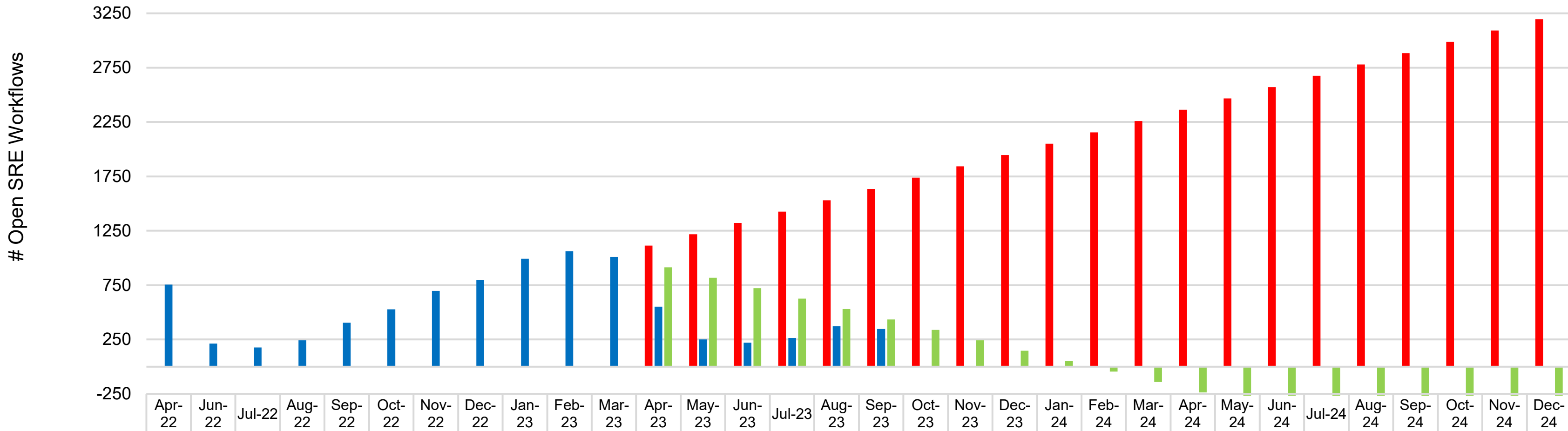
Impact of Focus Friday's on Total # of Retirees on Preliminary Benefit (Days on PB) Thru 10/01/2023



	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Proj. Ttl # PB-No Action-Est: 3/8/23													1511	1496	1481	1966	2026	2086	2071	2056	2041	2026	2011	1996	1981	1966	1951	2436	2496	2556	2541	2526	2511
Actual Month End Total # on PB	753	662	684	1289	1310	1387	1413	1449	1472	1450	1501	1526	1379	1365	1415	1878	1985	2067															
Proj. Ttl # PB -2 Foc.Fri./Mon.- Est: 3/8/23													1471	1416	1361	1806	1826	1846	1791	1736	1681	1626	1571	1516	1461	1406	1351	1796	1816	1836	1781	1726	1671

SERVICE RETIREMENT ESTIMATE BACKLOG THRU 10/01/23: The backlog projections and reporting below are based on data that count the total number of open Service Retirement Estimate workflows.

Impact of Focus Friday's on Total # of Service Retirement Estimates (SRE): 10/01/2023



	Apr-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Proj. Ttl # SRE Wkfl -No Action- Est: 3/8/23												1115	1219	1323	1427	1531	1635	1739	1843	1947	2051	2155	2259	2363	2467	2571	2675	2779	2883	2987	3091	3195
Actual Month End # SRE Wkfl	755	213	177	242	405	529	697	795	993	1061	1011	551	252	222	264	371	347															
Proj.Ttl # SRE Wkfl-2 Foc.Fri./Mon. Est: 3/8/23												915	819	723	627	531	435	339	243	147	51	-45	-141	-237	-333	-429	-525	-621	-717	-813	-909	-1005