# COMPREHENSIVE ANNUAL FINANCIAL REPORT 

For the Fiscal Year Ended June 30, 2020


# Comprehensive Annual Financial Report 

For the fiscal year ended June 30, 2020

# Maine Public Employees Retirement System 

## A Component Unit of the State of Maine

P.O. Box 349, Augusta, Maine 04332-0349

This report has been produced as required by 5 M.R.S.A. $\S 17102$ (10),
which states that the Maine Public Employees Retirement System must publish an annual report showing "the fiscal transactions of the retirement system for the fiscal year and the assets and liabilities of each of the programs of the retirement system at the end of the fiscal year; and the actuary's report on the actuarial valuation of the financial condition of each of the programs of the retirement system for the fiscal year."

This report was prepared by the Financial, Administrative and Investment staff of the Maine Public Employees Retirement System. Costs for producing this report were paid from the operating budget of the Maine Public Employees Retirement System.

This CAFR is printed and also made available online.

# Government Finance Officers Association 

Certificate of Achievement
for Excellence in Financial Reporting
Presented to
Maine Public Employees Retirement System
For its Comprehensive Annual Financial Report For the Fiscal Year Ended June 30, 2019


## Public Pension Coordinating Council

## Recognition Award for Funding 2020

Presented to
Maine Public Employees Retirement System
In recognition of meeting professional standards for plan funding as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of
National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)


Alan H. Winkle
Program Administrator

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## Introductory Section



West Quoddy Head Lighthouse, Lubec

## Letter of Transmittal

December 29, 2020
I am pleased to present the Comprehensive Annual Financial Report ("CAFR" or "Annual Report") of the Maine Public Employees Retirement System ("MainePERS" or the "System") for the fiscal year ended June 30, 2020 in accordance with the requirements of 5 M.R.S.A. §17102,. This CAFR, taken as a whole, provides information on all aspects of the System. It is written to conform to Governmental Accounting Standards Board (GASB) requirements. Management of the System takes full responsibility for the accuracy, completeness and fairness of the representations made in this report.

Berry, Dunn, McNeil \& Parker, LLC, has issued an unmodified opinion on the MainePERS' financial statements for the year ended June 30, 2020. The independent auditor's report is located at the front of the financial section.

Management's discussion and analysis (MD\&A) immediately follows the independent auditor's report and provides a narrative introduction, overview and analysis of the basic financial statements. MD\&A complements this letter of transmittal and should be read in conjunction with it.

## Funding of System Programs

The System administers seven retirement programs, often referred to as "plans." In addition, the System operates a Group Life Insurance Program (GLI) providing life insurance coverage for both active employees and for retirees, and a program of defined contribution retirement plans under sections 401(a), 403(b) and 457(b) of the Internal Revenue Code, collectively referred to as MaineSTART. The System also manages the Retiree Health Insurance Post Employment Investment Trust on behalf of the State of Maine. This is an irrevocable trust established for the purpose of accumulating assets to provide funding for the State's liability for retiree health benefits. Assets for the purpose of providing funding for the liability for retiree health and other post-employment benefits (OPEB) for the System's employees are held in the MainePERS OPEB Trust, also administered by the System.

The System's defined benefit retirement programs are the dominant element in its financial activities and position. The four major programs are the State Employee and Teacher Retirement Program, the Judicial Retirement Program, the Legislative Retirement Program and the Participating Local District (PLD) Consolidated Retirement Plan. In addition, the System continues to administer ten closed single-employer plans on behalf of participating local districts who at the time of consolidation, opted not to join the PLD Consolidated Plan. These plans are collectively referred to as the PLD Agent Plan.

The System also administers two pay-as-you-go retirement programs, one for judges who retired prior to the establishment of the Judicial Retirement Program in 1984 and the other for former governors and their surviving spouses. The programs are funded each biennium by a direct appropriation from the Legislature and, in the case of the active governor, by employee contributions required by statute.

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

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

The recent two-decade low-interest environment has affected the potential volatility of employer contributions. This is because low-interest rates means that the fund is no longer able to earn attractive returns from relatively safer fixedincome assets, and as a result is more reliant on earnings from riskier assets, such as equities. As interest rates have fallen and to help maintain employer contribution stability, the trust fund has decreased its earnings assumption by $1.25 \%$ (from $8 \%$ to $6.75 \%$ ) and shifted assets away from fixed-income. At the same time the trust fund has increased diversification by including more private market investments, thereby avoiding a concentration in public equity investments.

## Letter of Transmittal

As with all actuarially-funded defined benefit plans, the System uses actuarial methods and procedures that integrate short-term market behavior with the long-term time horizon of the plan. One of these methods is "smoothing" of investment results which moderates the volatility of employer contribution requirements.

The interplay of liabilities (i.e., the obligation to pay benefits) and assets (i.e., contributions and investment earnings on contributions) can be observed in changes in the programs' actuarial funded ratios over time. The funded ratio of the State Employee and Teacher Retirement Program had improved steadily from 1990 through 2008. Substantial investment losses in fiscal years 2008 and 2009 reduced the funding ratio. Fiscal years 2010 and 2011 experienced strong investment returns, and in combination with changes to plan provisions, the funding ratio again improved. Subsequent market gains and losses resulted in a funding ratio of 82.2 percent as of the end of fiscal year 2015. Low investment returns in fiscal years 2014 and 2015 reduced the funding ratio to 80.4 percent as of June 30, 2016, and subsequent gains increased it to 80.9 percent as of June 30,2017 and 81.4 percent as of June 30, 2018 as investment returns increased. As of June 30, 2020, the funding ratio was 82.4 percent, up slightly from 81.8 percent as of June 30, 2019.

The funded ratio of the Judicial Retirement Program has in recent years remained close to 100 percent. The funded ratio as of June 30, 2013 was 97.5 percent. In fiscal year 2014, the funded ratio of the plan increased to 101.6 percent and as of June 30, 2015 the funded ratio was 96.9 percent. The funded ratio of this plan increased again as of June 30, 2016 to 100.9 percent; as of June 30, 2017, the funded ratio rose to 102.7 percent. There was a slight decrease in the funded ratio at June 30, 2018 when it was 102.4 percent. As of June 30, 2020, the funding ratio was 103.6 percent, down from 105 percent at June 30, 2019.

The funded ratio of the Legislative Retirement Program has been above 100 percent for many years, and continues this year due primarily to member turnover in the Plan created by term limits. As of June 30, 2020, the funded ratio was 140.6 percent, compared to 144.4 percent at June 30, 2019 and 146.3 percent at June 30, 2018.

The funded ratio of the Participating Local District Consolidated Retirement Plan was 89.9 percent as of June 30, 2020. This compares to 89.6 percent as of June 30, 2019 and 89.5 percent as of June 30, 2018. Information concerning the funded status of the non-consolidated participating local district plans administered by the System is available by contacting the System.

Information regarding overall funding progress appears in the MD\&A beginning on page 20. More information on the funding levels of all of the System's retirement programs can be obtained from the System.

The System's defined contribution plans, collectively called MaineSTART, provide an important supplement for our defined benefit participants and a valuable alternative for other participants. MaineSTART offers a family of funds from Vanguard designed to be low cost and easy for participants to manage. The investment strategy for these assets is determined by each participant.

The Group Life Insurance Program is funded by premiums paid by its participants and the employers of those participants, and by investment returns on the Group Life Insurance Program assets. The investment strategy for these assets is a similar strategy to the strategy employed for the defined benefit programs' assets.

The Retiree Health Insurance Post Employment Investment Trust is funded through direct appropriations from the State of Maine.

## Investments

The basis of the investment policy is the mix of investment types in which assets are invested and the allocation of assets among asset classes. The System's Board of Trustees (Board) is responsible for establishing the policy that is the framework for investment of the programs' assets. The Board employs in-house investment professionals and outside investment consultants to advise it on investment matters, including policy.

The defined benefit program had a return of $1.8 \%$ while the group life insurance program had a return of $6 \%$ for fiscal year 2020. Total value of the defined benefit portfolio remained flat at $\$ 15.1$ billion at June 30, 2020 as compared to June 30, 2019. The positive returns for the year were offset by the negative cash flow experienced by the mature defined benefit programs.

## Letter of Transmittal

The current target asset allocation was last modified in September 2017 to increase investments in alternative strategies such as private equity, private credit, infrastructure, real estate, natural resources and risk diversifiers.

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

## Highlights of the Past Year

In March of 2020, MainePERS closed its office buildings to the public as a result of the COVID-19 pandemic. All staff except those required to perform their work in the buildings were sent home. Available equipment was identified and approximately $20 \%$ of staff were able to immediately begin working remotely. Incremental numbers of staff began working remotely as additional equipment was purchased. All personnel were again working by May of 2020.

To support remote work, a new previously researched cloud based telephone system planned for implementation in 2021 was deployed in July, 2020, allowing remote staff to conduct business without interruption. MainePERS continues to have approximately $80 \%$ of its workforce working remote either full or part-time.

## Acknowledgments

We are pleased to acknowledge that for the sixteenth consecutive year, the System was awarded the Certificate of Achievement for Excellence in Financial Reporting by the Government Finance Officers Association ("GFOA"). In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report ("CAFR"), with contents that meet or exceed program standards. We are pleased to share that we are recognized for handling and accounting for retirement funds in a manner that conforms to generally accepted accounting practices and all applicable legal requirements. We fully expect to be in compliance with all of the Certificate of Achievement program requirements into the future. This 2020 CAFR will also be submitted to the GFOA.

The System, through its management staff, is responsible for establishing and maintaining an internal control structure that is designed to provide reasonable assurance that assets are protected from theft, fraud, or misuse and that financial recordkeeping is transparent, complete and accurate. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. Management believes that the existing internal controls accomplish these objectives. Management is also responsible for the completeness, accuracy and fair presentation of financial information and for all disclosures. This responsibility notably encompasses the System's financial statements themselves, including the amounts therein that, necessarily, are based on estimates and judgments.

The preparation of this report has been a collaborative effort of Executive Management, the Accounting and Finance Department, the Investment Department and the Communications Department. The System takes responsibility for all of the information contained in the report and confidently presents it as a basis for the many decisions of the Board of Trustees, staff, and others who will rely on it.

I am joined in transmitting this Comprehensive Annual Financial Report to all of our constituencies by the System's Director of Finance.

Respectfully submitted,


Sandra J. Matheson
Executive Director


Sherry Tripp Vandrell
Director of Finance

## Appendix A to Letter of Transmittal

## Overview of the System

The Maine Public Employees Retirement System (MainePERS) is an independent public agency of the State of Maine that traces its history to 1942. By the authority granted to it by the Maine Legislature, the System administers seven defined benefit retirement programs that cover State employees, the State's public school teachers, judges, legislators, and employees of the 307 municipalities and other public entities, called "participating local districts" (PLDs) that have chosen to provide retirement plans to their employees through MainePERS. The System is also responsible for the payment of retirement and survivors' benefits to former governors and their surviving spouses and to former judges who retired prior to the establishment of the Judicial Retirement Program in 1984 and their surviving spouses. In addition, the System administers a Group Life Insurance Program that provides or makes available life insurance benefits for active and retired State employees and teachers, judges, and legislators as well as employees of those PLDs who have chosen to offer the Group Life Insurance Program. The System also administers defined contribution plans for eligible employers who choose to participate in the plans.

## Board of Trustees

Responsibility for the operation of the Maine Public Employees Retirement System rests with the System's Board of Trustees, which is comprised of eight members. State law specifies the Board's composition. With the exception of the State Treasurer, each trustee is subject to the legislative confirmation process. 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 a 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, 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.

The MainePERS Trustees serve as Trustees of the State and Teacher, Judicial and Legislative Retirement Programs as well as for the PLD Consolidated Program, the Group Life Insurance Programs, the Defined Contribution Plans, and the Retiree Health Insurance Post-Employment Benefits Investment Trust.

The Board contracts for the services of an actuary to prepare annual valuations of the assets and liabilities of each of the retirement programs administered by the System. The actuary also provides information and recommendations as to sound and appropriate actuarial assumptions, which are utilized, together with valuation information, to determine the programs' funding requirements. The System's actuary in fiscal years 2019 and 2020 was Cheiron, Inc.

The Board's management of MainePERS investments is embodied in its investment policy. The policy states the Board's underlying investment objectives, sets out the investment strategies intended to realize the objectives, and establishes guidelines and criteria for implementation of the strategies. The Board has engaged Cambridge Associates to advise it on the investment policy and the administration of the investment program.

The Board is the final administrative decision maker in matters involving the rights, credits, and benefits of members. It has established an administrative appeals process for the making of such decisions; in this process relevant factual information and legal requirements are identified and analyzed by independent Hearing Officers who serve under contract. In decisions on disability retirement appeals, statutorily established medical boards and individual medical advisors provide recommendations as to the medical aspects of disability. The Board's final administrative decisions are appealable to the Maine Superior Court.

## Administration

The Office of the Executive Director has administrative responsibility for all aspects of the System and its operations. The Executive Director oversees all actuarial work and investments, and has administrative responsibility for the internal audit function. Actuarial work is carried out with the assistance of an actuary; investment operations are carried out with the assistance of the System's Chief Investment Officer and staff, one or more investment consultants, investment

## Appendix A to Letter of Transmittal

managers and other appropriate advisors. In addition, the Office performs the executive functions of the System and has day-to-day responsibility for legal and legislative matters, appeals, federal, state, and local governmental relations, planning, organizational development, accounting and financial reporting, and numerous special projects.

The Department of Service Programs administers the service and disability retirement programs, MaineSTART defined contribution plans, survivor benefit and group life insurance programs. The Department is the System's primary contact for members, participating employers, and benefit recipients.

The Department of Administration is responsible for most administrative and support functions, including information technology supports, communications, facilities, and human resources.

The System's primary responsibility is the administration of defined benefit and defined contribution retirement plans. Retirement and related benefits provided by MainePERS include:

- service retirement benefits, that provide retirement income to qualified members;
- disability retirement benefits, that provide income to a member who becomes disabled under Maine law while the member is in service and before the member retires; and
- death benefits that are paid to a member's designated beneficiaries.

Administration of these programs includes financial administration, investments, recordkeeping of members' work and compensation data, and provision of retirement-related services to members, employers, and retirees.

The System also administers the MaineSTART defined contribution retirement plans that are established under sections 401(a), 403(b), and 457(b) of the Internal Revenue Code. These plans are presently available to employees of those employers in the PLD Consolidated Plan that have adopted one or more of the plans.

The System itself and all of its programs are established by and operate within the scope of Maine statutes. The operation of the System's defined benefit retirement plans is also governed by provisions of the Maine Constitution, not all of which apply to all of the plans.

## Membership and Contributions

State employees and teachers are covered under the Maine Public Employees Retirement System's State Employee and Teacher Retirement Program. State employees are required by law to become members of MainePERS when hired. There is an exception to this rule for elected and appointed officials, for whom membership is optional. Public school teachers, other than substitute teachers, for whom membership is also optional, must also become members of MainePERS when hired. PLD employees become members of MainePERS when they are hired if their employer participates as a PLD in MainePERS at that time and if they meet the membership eligibility requirements in effect when they are hired. For some PLD employees, membership is optional. These employees include those employed by their PLD before the PLD joined MainePERS, those whose employers provide Social Security or a qualified replacement plan under federal law, elected and appointed officials, and chief administrative officers.

The Legislative Retirement Program, also administered by MainePERS, was established to provide a retirement program for those serving in the Maine Legislature. Except as provided otherwise by statute, membership in the Maine Legislative Retirement Program is mandatory for legislators entering service on or after December 3, 1986.

The Judicial Retirement Program was established to provide a retirement program for Maine's judges. Membership in the Judicial Retirement Program is a condition of employment for all judges serving on or after December 1, 1984.

All members of the System contribute a percentage of their compensation to the System; employers may opt to contribute all or a portion of that percentage on behalf of their employees. Each employer also contributes to the System an amount for the normal costs of the programs that is a percentage of total wages paid to members who are employees of that employer.

## Appendix A to Letter of Transmittal

Prior to July 1, 2013 the State paid the employer normal cost contributions and unfunded actuarial liability contributions on behalf of all State employee and teacher members. As of July 1, 2013, teacher employers began paying the employer normal cost contributions on behalf of those teacher members they employed while the state continued to pay toward the unfunded actuarial liability associated with teacher members. The employer contribution percentages are actuarially determined by plan and vary from year to year.

Employer normal cost contributions, along with current member contributions, support benefits currently being earned by active members. The State's unfunded actuarial accrued liability (UAAL) contribution is a payment on the amortized debt that represents the liability for benefits in excess of the amount supported by assets of the System. The Maine Constitution requires that the UAAL established as of June 30, 1996 be fully funded in not more than 31 years from July 1, 1997. The amortization period at the end of FY 2020 is 8 years, requiring full payment of the UAAL by the end of FY 2028.

The System also administers pay-as-you-go retirement programs for former judges who retired prior to the establishment of the Judicial Retirement Program in 1984 and their surviving spouses and former governors and their surviving spouses. The programs are funded each biennium by a direct appropriation from the Legislature and, in the case of the active governor, by employee contributions required by statute.

The Group Life Insurance Program is provided or made available to all eligible State employees, public school teachers, and employees of those PLDs who elect to offer this coverage to their employees, as well as to members of the Legislative and Judicial Retirement Programs. Basic coverage for the employee is equal to the employee's annual base compensation rounded up to the next $\$ 1,000$; supplemental coverage for the employee and coverage for dependents are also available.

Further details regarding program and plan provisions can be found elsewhere in this report and in the actuarial valuation for each program.

## Financial Reporting

Total operating expenses for staff and all other costs of operations are allocated among each of the Programs administered by the System. The System's administrative budget is approved annually by the Board of Trustees, and is reported to the Legislature.

The System's financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis, in accordance with the standards and requirements of the Governmental Accounting Standards Board (GASB). The financial statements are presented in accordance with GASB Statement No. 34, Basic Financial Statements - Management's Discussion and Analysis for State and Local Governments, GASB Statement No. 67, Financial Reporting for Pension Plans, and, with respect to the Group Life Insurance Program, GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. Financial information presented throughout this Report is consistent with the financial statements. The financial statements are prepared on the accrual basis of accounting.

The System has an Internal Audit program, staffed by one internal auditor and two payroll compliance auditors. This program focuses on a plan of internal controls and efficiencies in all of the departments at the System as well as payroll reporting accuracy of the employers who participate in one or more plans administered by the System. The internal auditor presents audit reports to both management and the Finance and Audit Committee of the Board of Trustees.

The independent auditor, BerryDunn, has conducted an audit of the financial statements in accordance with, as stated in its audit report, generally accepted auditing standards and including those tests and procedures BerryDunn deemed necessary to express its opinion in its audit report.

The auditors have unrestricted access to the Board and the Board's Finance and Audit Committee to discuss the audit and their findings with respect to the integrity of the System's financial reporting and adequacy of the System's internal controls.

The System reports five defined benefit pension plans including two multiple-employer cost sharing plans (the State Employee and Teacher Plan and the PLD Consolidated Plan), two single employer plans (the Judicial and Legislative

## Appendix A to Letter of Transmittal

Plans) and an agent multiple employer plan which is an aggregation of single employer plans of those PLDs that elected not to join the consolidated cost sharing plan. Separate actuarial valuations are performed for each of the retirement programs that the System administers; contributions, inflows, and benefits payments are separately tracked and recorded, and separate trust fund balances are attributed to each such program. The System also reports the Group Life Insurance Program for active employees and two multiple-employer cost sharing Other Post-Employment Benefit (OPEB) plans providing life insurance coverage in retirement for state employees and teachers as well as for employees of those PLDs that participate in the life insurance program. In addition, the System reports the MaineSTART Defined Contribution plans as well as the Retiree Health Insurance Trust Fund. The System's financial statements, notes thereto and required supplementary information are prepared accordingly.

## Board of Trustees, Management Staff, and Principal Professional Consultants June 30, 2020

## Board of Trustees

Brian H. Noyes, Chair

Richard Metivier, Vice Chair
Henry Beck, State Treasurer
John S. Beliveau
Shirrin L. Blaisdell

Philip A. Brookhouse

Mark A. Brunton
Kenneth L. Williams

Appointed by the Governor
Appointed by the Maine Municipal Association
Ex-Officio Member
Appointed by the Governor
Appointed by the Governor from a List of Retired State and PLD Employees Nominated by Retirees

Appointed by the Governor from a List of Nominees Submitted by the Maine Education Association - Retired

Elected by the Maine State Employees Association
Elected by the Maine Education Association

## Senior Administrative Staff

| Sandra J. Matheson | Executive Director |
| :--- | :--- |
| Michael J. Colleran | General Counsel |
| James A. Bennett Ph.D., CFA, CAIA | Chief Investment Officer |
| Rebecca A. Grant | Deputy Executive Director |
| James Dusch | Deputy Executive Director |
| Sherry Tripp Vandrell, CMA, CGFM | Director of Finance |
| Valerie E. Scott | Associate Deputy Director |

## Principal Professional Consultants

Actuary:
Investment Consultant:
Auditors:
Internal Auditor:

Cheiron, Inc.
Cambridge Associates
BerryDunn
Randal L. Lloyd

See page 95 for a list of professional investment management firms. Information regarding commissions paid can be found on page 103.

Organizational Chart by Function


## 2020 Legislative Update

Legislation Enacted During the 129th Second Regular Session

An Act to Provide the Same Retirement Benefits
for State Employees Working as Emergency Communications Specialists as Are Provided to Law Enforcement Officers

PL 2019, c. 537 [L.D. 833]
Effective Date: June 16, 2020
This law expands the 1998 Special Plan to include emergency communications specialists effective July 1, 2020, on a prospective basis. Specialists employed on and before that date must elect whether to participate in the special plan or to remain in the regular plan.

## An Act to Clarify the State's Commitments

 Concerning Certain Public Service Retirement BenefitsPL 2019, c. 540 [L.D. 1104]
Effective Date: June 16, 2020

This bill enlarges the contractual commitment to maintain state-protected benefits to encompass cost-of-living adjustments for retired state employees and teachers.

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An Act to Expand the 1998 Special Retirement Plan to Include Detectives in the Office of Investigations within the Department of the Secretary of State, Bureau of Motor Vehicles
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$$
\text { PL 2019, c. } 541 \text { [L.D. 1207] }
$$

Effective Date: June 16, 2020

This law expands the 1998 Special Plan to include motor vehicle detectives effective July 1, 2020, on a prospective basis. Detectives employed on and before that date must elect whether to participate in the special plan or to remain in the regular plan.

An Act to Expand the 1998 Special Retirement Plan to Include Detectives in the Office of the Attorney General

PL 2019, c. 542 [L.D. 1208]
Effective Date: June 16, 2020
This law expands the 1998 Special Plan to include detectives in the employment of the Office of the Attorney General effective July 1, 2020, on a prospective basis. Detectives employed on and before that date must elect whether to participate in the special plan or to remain in the regular plan.

An Act To Implement Provisions Necessary
to the Health, Welfare and Safety of the Citizens of Maine in Response to the COVID-19 Public Health Emergency

PL 2019, c. 617 [L.D. 2167]
Effective Date: March 18, 2020
This law, among other provisions related to the pandemic, temporarily permits remote meetings of bodies like the Board
of Trustees and the PLD Advisory Committee if certain requirements are met.

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## Financial Section



Squirrel Point Light, Arrowsic

## Independent Auditor's Report

## Board of Trustees of Maine Public Employees Retirement System

## Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of Maine Public Employees Retirement System (the System), a component unit of the State of Maine, as of June 30, 2020 and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements.

## Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

## Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with U.S. generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2020, and the changes in its fiduciary net position for the year then ended, in accordance with U.S. generally accepted accounting principles.

## Other Matters

Required Supplementary Information
U.S. generally accepted accounting principles require that Management's Discussion and Analysis and the required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with U.S. generally accepted auditing, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Additional Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements. The accompanying additional supplementary information as listed in the table of contents is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the additional supplementary information is fairly stated in all material respects in relation to the basic financial statements as a whole.

The information in the introductory, investment, actuarial and statistical sections as listed in the table of contents has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on that information.

## Report on Summarized Comparative Information

We have previously audited the System's June 30, 2019 basic financial statements and we expressed an unmodified opinion on those statements in our report dated October 15, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019 is consistent, in all material respects, with the audited financial statements from which it has been derived.

## Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 15, 2020 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the System's internal control over financial reporting and compliance.

## Berry Dunn McNeil \& Parker, LLC

Manchester, New Hampshire
October 15, 2020

# Management's Discussion and Analysis (Unaudited) June 30, 2020 

## 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 and 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.

## Management's Discussion and Analysis (Unaudited) June 30, 2020

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, 2020, 2019, and 2018:

## Condensed Comparative Statements of Fiduciary Net Position <br> (Dollar Values Expressed in Millions)

|  | June 30, 2020 | June 30, 2019 | June 30, 2018 |
| :---: | :---: | :---: | :---: |
| Cash and Receivables | \$ 71.5 | \$ 106.9 | \$ 68.8 |
| Investments at Fair Value | 15,593.5 | 15,526.9 | 14,952.4 |
| Collateral on Loaned Securities | 206.3 | 200.0 | 208.0 |
| Other Assets | 17.5 | 19.3 | 6.0 |
| Total Assets | \$ 15,888.8 | \$ 15,853.1 | \$ 15,235.2 |
| Investment Management Fees Payable | \$ 19.2 | \$ 19.9 | \$16.3 |
| Obligations Under Securities Lending Activities | 206.3 | 200.0 | 208.0 |
| Other Liabilities | 22.8 | 57.5 | 14.1 |
| Total Liabilities | \$ 248.3 | \$ 277.4 | \$ 238.4 |
| Fiduciary Net Position - Restricted for Benefits | \$ 15,640.5 | \$ 15,575.7 | \$ 14,996.8 |

## Condensed Comparative Statements of Changes in Fiduciary Net Position <br> (Dollar Values Expressed in Millions)



# Management's Discussion and Analysis (Unaudited) June 30, 2020 

## Fiduciary Net Position

The Fiduciary Net Position of the System increased in fiscal year 2020 by $\$ 64.8$ million (.4\%) from the prior year Fiduciary Net Position. While lower than in 2019, investment returns were positive and contributed to the increase. Investment income was $\$ 468.5$ million in fiscal year 2020 compared to $\$ 996.1$ million in fiscal year 2019.

Comparatively, the Fiduciary Net Position of the System increased in fiscal year 2019 by $\$ 578.9$ million ( $3.9 \%$ ) from the prior year Fiduciary Net Position. While lower than in 2018, investment returns were strong and contributed to the increase. Investment income was $\$ 996.1$ million in fiscal year 2019 compared to $\$ 1,383.8$ million in fiscal year 2018.

## Assets

Investments at Fair Value increased by $\$ 66.6$ million (.4\%) in fiscal year 2020. This increase in Investments at Fair Value combined with a decrease in cash and receivables of $\$ 35.4$ million and an increase in collateral on loaned securities of $\$ 6.3$ million contributed to an increase in total assets of $\$ 35.7$ million during the fiscal year. The System records the collateral on loaned securities due to its securities lending activity as an asset and corresponding liability. The increase of $\$ 6.3$ 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.

Comparatively, Investments at Fair Value increased by $\$ 574.5$ million ( $3.8 \%$ ) in fiscal year 2019. This increase in Investments at Fair Value combined with a decrease in collateral on loaned securities of $\$ 8.0$ million and an increase in cash and receivables of $\$ 38.1$ million contributed to an increase in total assets of $\$ 617.9$ million during the fiscal year. The decrease of $\$ 8$ million in collateral on loaned securities arose due to a more conservative approach to securities lending.

There were $\$ 275.9$ thousand in pending sales at June 30, 2020. There were $\$ 32.1$ million in pending sales at June 30, 2019 and there were \$2.5 million in pending sales at June 30, 2018.

## Liabilities

On June 30, 2020, total loans outstanding in the securities lending program were $\$ 206.3$ million. On June 30, 2019 and 2018, the total loans outstanding in the securities lending program were $\$ 200$ million and $\$ 208$ million, respectively.

## Additions to Fiduciary Net Position

Additions to Fiduciary Net Position during fiscal year 2020 totaled $\$ 1,192.8$ million compared to additions of $\$ 1,634$ million to Fiduciary Net Position in fiscal year 2019. While contributions from all sources increased by $\$ 57.7$ million, investment income, net of fees and other deductions, decreased by $\$ 527.6$ million. The decrease in investment income relative to fiscal year 2019 is due to generally lower returns across all asset classes.

Additions to Fiduciary Net Position during fiscal year 2019 totaled $\$ 1,634$ million compared to additions of $\$ 1,991.9$ million to Fiduciary Net Position in fiscal year 2018. While contributions from all sources increased by $\$ 29.7$ million, investment income, net of fees and other deductions, decreased by $\$ 387.7$ million. The decrease in investment income relative to fiscal year 2018 is due to lower interest rates.

The State's contributions on behalf of State employees totaled $\$ 163.7$ million, $\$ 160.8$ million, and $\$ 156.5$ million for fiscal years 2020, 2019, and 2018, respectively. The State's contributions on behalf of teachers totaled $\$ 174.5$ million, $\$ 133$ million, and $\$ 129.4$ million, for fiscal years 2020, 2019, and 2018, respectively. The State's contribution on behalf of judges totaled $\$ 716$ thousand, $\$ 1.2$ million, and $\$ 1.2$ million for fiscal years 2020, 2019, and 2018, respectively. Based on the funding methodology used and considering the funded status of the Legislative Plan, no employer contribution was required in fiscal years 2020, 2019 or 2018.

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 as a percentage of earnable compensation for fiscal year 2020 was $4.16 \%$. For fiscal years 2019

## Management's Discussion and Analysis (Unaudited) June 30, 2020

and 2018 the normal cost rate was $3.97 \%$. The range of employer contributions in the PLD Consolidated Plan as a percent of earnable compensation in fiscal year 2020 was $4.5 \%$ to $16.2 \%$; for fiscal year 2019 the range was $4.1 \%$ to $16.3 \%$; and for fiscal year 2018 the range was $3.9 \%$ to $15.7 \%$. Historically, the PLD Consolidated Plan's funded status and established funding approach resulted in employers of the PLD Consolidated Plan paying less than what the true normal cost would otherwise require. The employer rates have been incrementally increased over the past several years to reach a contribution rate closer to true normal cost.

Member and employer data, contribution and benefit data for the 6 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 2020 increased by $\$ 72.9$ million (6.9\%). The fiscal year 2020 increase was due to an increase in the number of recipients receiving benefits, as well as the increased cost of benefits paid and refunds and withdrawals of contributions. Benefit payments in fiscal year 2020 exceeded contributions by $\$ 357.8$ million. Contributions totaled $\$ 695.1$ million, and benefit payments totaled \$1,052.9 million.

Comparatively, total deductions from Fiduciary Net Position restricted for benefits during fiscal year 2019 increased by $\$ 55.1$ million ( $5.5 \%$ ). The fiscal year 2019 increase was due in part to an increase in the number of recipients receiving benefits, as well as the increased cost of benefits paid and refunds and withdrawals of contributions. Benefit payments in fiscal year 2019 exceeded contributions by $\$ 372$ million. Contributions totaled $\$ 637.4$ million, and benefit payments totaled $\$ 1,009.4$ million.

## System Funding Status - Aggregate



At June 30, 2020, the State Employee and Teacher, Judicial, Legislative and PLD defined benefit plans were actuarially funded at 83.9\%, a slight increase from the actuarial funding level of $83.3 \%$ at June 30, 2019. As illustrated in the chart, the actuarial funded ratio of the System was $80.2 \%$ at June 30, 2011. This was followed by a slight decrease in 2012 to $79.1 \%$. Significant improvement in investment returns in 2011, combined with a decrease in the overall unfunded liabilities of the plan resulting from changes in plan benefit structure and changes in assumptions

## Management's Discussion and Analysis (Unaudited) June 30, 2020

adopted following the completion of an experience study in 2011, pushed the funding level up for this year. Modest investment returns, combined with increased deductions from the plan for benefits, contributed to the decrease in 2012. The increase in the funded ratio for 2013 and 2014 is attributable in part to strong investment returns during those years, in addition to changes in plan provisions and increased contribution rates. Lower investment returns combined with increased contribution rates in 2015 contributed to keeping the funding ratio 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 2020 are attributable, in large part, to investment returns during those years.

## Investments

The assets of all the defined benefit retirement plans that the System administers are commingled for investment purposes.

> Target Asset Allocation
> Defined Benefit Retirement Plans


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 December 2017 assigned strategic target allocations for these asset classes, as shown in the above chart.

Investments of the Group Life Insurance Plans and the Retiree Health Insurance Trust 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 (15\%), and US Government (10\%).

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, 2020, total fair value of assets in these portfolios (together with the amounts otherwise managed) was $\$ 15.6$ billion. The total fair value of assets as of June 30, 2019 and June 30, 2018, respectively, was $\$ 15.5$ billion and $\$ 15.0$ billion. The investment return, net of all fees, for the

## Management's Discussion and Analysis (Unaudited) June 30, 2020

year ended June 30, 2020 was $1.8 \%$ The investment return for the years ended June 30, 2019 and June 30, 2018, respectively, was $7.1 \%$ and $10.3 \%$. Investment returns in fiscal year 2020 were lower than in fiscal year 2019, due to generally lower returns across all asset classes. Over the five, ten and thirty year periods ended June 30, 2020, the average annual investment return for the total fund was $6.4 \%, 8.3 \%$, and $7.8 \%$, respectively.

## System Membership - Aggregate

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

|  | 2020 | 2019 | \% Change |
| :---: | :---: | :---: | :---: |
| Current active participants: |  |  |  |
| Vested and nonvested | 52,471 | 51,859 | 1.2\% |
| Terminated participants: |  |  |  |
| Vested | 10,679 | 10,680 | 0.0\% |
| Inactives Due Refunds | 46,515 | 47,029 | -1.1\% |
| Retirees and beneficiaries receiving benefits | 47,350 | 46,448 | 1.9\% |
| Total Membership | 157,015 | 156,016 | 0.6\% |

The number of active State employees at June 30, 2020 in the State Employee and Teacher plan was 12,830, an increase of 395 from June 30, 2019. The number of active Teachers at June 30, 2020 was 27,565, an increase of 124 from June 30, 2019. Membership for judges was 58, a decrease of 3 from the previous year. Membership for Legislators was 179 at June 30, 2020 and June 30, 2019. Total active membership in the PLD Consolidated Plan and the 6 non-consolidated plans at June 30, 2019 was 11,839, an increase of 96 from June 30, 2019.

## 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, teacher 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:

|  | 2020 |  | 2019 |  | \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total OPEB Liability | \$ | 242.9 | \$ | 242.1 | 0.3\% |
| Plan Net Position |  | 122.0 |  | 116.9 | 4.4\% |
| Net OPEB Liability | \$ | 120.9 | \$ | 125.2 | -3.4\% |

## 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

The Maine State Legislature established the Retiree Health Insurance Post Employment Investment Trust (the Fund) as an irrevocable trust for the sole purpose of holding and investing funds appropriated or otherwise provided to the 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 Fund. At June 30, 2020, the Fiduciary Net Position Held in Trust for the Fund was \$291,558,702.

Management's Discussion and Analysis (Unaudited) June 30, 2020

## Currently Known Facts, Decisions, or Conditions

In response to the global pandemic, coronavirus disease (COVID-19), management began taking a series of steps designed to protect staff and the public from exposure to the disease. This included re-assignment of roughly seventy-five percent of staff to remote work in March. The transition to remote work required that some operations be slowed for a period of time while the necessary infrastructure could be put in place. That transition was complete in May and operations continue with limited onsite staff.

Due to the uncertainty surrounding the duration of the pandemic, potential economic ramifications, and the impact of further government mitigating actions, management is alert to potential impacts on the System's financial position and operations. Management is unable to reasonably estimate any potential impact at this time.

## 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, Director of Finance, at PO Box 349, Augusta, Maine 04332 or at (207) 512-3100 or toll-free at (800) 4519800.

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## Statement of Fiduciary Net Position

June 30, 2020
With Summarized Information as of June 30, 2019


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

## Statement of Fiduciary Net Position

June 30, 2020
With Summarized Information as of June 30, 2019

| Group Life Insurance Plan Active | Group Life Insurance Plan Retired SET | Group Life Insurance Plan Retired PLD | Defined Contribution Plans | MainePERS OPEB Trust | Retiree Health Insurance Trust Fund | $\begin{aligned} & 2020 \\ & \text { Total } \end{aligned}$ | $2019$ <br> Summarized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 452,257 | \$ 631,623 | \$ 73,600 | \$ 37,136 | \$ - | \$ - | \$ 36,941,229 | \$ 38,577,286 |
| - | - | - | - | - | - | 2,557,861,687 | 2,299,562,007 |
| 15,157,749 | 106,919,027 | 16,586,645 | 45,629,459 | 14,406,261 | 291,583,042 | 5,896,509,580 | 6,450,026,494 |
| - | - | - | - | - | - | 7,139,093,388 | 6,777,266,879 |
| 15,157,749 | 106,919,027 | 16,586,645 | 45,629,459 | 14,406,261 | 291,583,042 | 15,593,464,655 | 15,526,855,380 |
| 388,405 | - | 73,285 | 882 | - | - | 30,420,775 | 33,899,217 |
| - | - | - | - | - | - | 3,969,787 | 2,387,427 |
| - | - | - | - | - | - | 275,880 | 32,050,628 |
| 388,405 | - | 73,285 | 882 | - | - | 34,666,442 | 68,337,272 |
| - | - | - | - | - | - | 206,264,894 | 199,994,962 |
| - | - | - | - | - | - | 17,492,713 | 19,342,711 |
| 15,998,411 | 107,550,650 | 16,733,530 | 45,667,477 | 14,406,261 | 291,583,042 | $15,888,829,933$ | 15,853,107,611 |
| 805 | 5,676 | 881 | - | - | - | 3,548,956 | 6,441,319 |
| - | - | - | - | - | - | - | 32,642,711 |
| 1,023,405 | 1,920,657 | 346,856 | 13,800 | 697,575 | 3,000 | 19,255,493 | 18,491,318 |
| 1,110 | 7,828 | 1,214 | - | 1,041 | 21,340 | 19,215,103 | 19,855,264 |
| - | - | - | - | - | - | 206,264,894 | 199,994,962 |
| 1,025,320 | 1,934,161 | 348,951 | 13,800 | 698,616 | 24,340 | 248,284,446 | 277,425,574 |

$\underline{\underline{\$ 14,973,091}} \xlongequal{\$ 105,616,489} \xlongequal{\$ 16,384,579} \$ 45,653,677 \$ 13,707,645 \$ 291,558,702$ \$15,640,545,487 \$15,575,682,037

## Statement of Changes in Fiduciary Net Position Year Ended June 30, 2020 With Summarized Information for the Year Ended June 30, 2019

|  | State <br> Employee and Teacher Plan |  | Judicial Plan |  | Legislative Plan |  | PLD <br> Consolidated Plan |  | $\begin{gathered} \text { PLD } \\ \text { Agent Plan } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions: |  |  |  |  |  |  |  |  |  |
| Investment income: |  |  |  |  |  |  |  |  |  |
| From investing activities: |  |  |  |  |  |  |  |  |  |
| Net appreciation in the fair value of plan investments | \$ 355,317,039 | \$ | 2,173,615 | \$ | 390,297 | \$ | 88,314,558 | \$ | 581,208 |
| Interest | 1,749,930 |  | 10,711 |  | 1,943 |  | 434,681 |  | 2,935 |
| Dividends | 98,329,166 |  | 600,141 |  | 109,800 |  | 24,592,077 |  | 68,080 |
| Less: investment expenses | $(103,290,753)$ |  | $(633,412)$ |  | $(114,296)$ |  | $(25,552,439)$ |  | $(232,397)$ |
| Net income from investing activities | 352,105,382 | Net income from |  |  |  |  | 87,788,877 |  | 419,826 |
| From securities lending activities: |  |  |  |  |  |  |  |  |  |
| Securities lending income | 779,364 |  | 4,757 |  | 870 |  | 194,919 |  | 540 |
| Borrower rebates refunded | 1,504,812 |  | 9,184 |  | 1,680 |  | 376,353 |  | 1,042 |
| Management fees | $(116,834)$ |  | (713) |  | (130) |  | $(29,220)$ |  | (81) |
| Net income from securities |  |  |  |  |  |  |  |  |  |
| Total investment income | 354,272,724 |  | 2,164,283 |  | 390,164 |  | 88,330,929 |  | 421,327 |
| Contributions and premiums (notes 6 and 7): |  |  |  |  |  |  |  |  |  |
| Members | 151,438, 850 |  | 616,095 |  | 156,306 |  | 54,090,044 |  | 28,694 |
| Employers | 225,468,763 |  | 715,963 |  | - |  | 66,717,733 |  | 345,323 |
| Non-employer contributing entities | 174,530,364 |  | - |  | - |  | - |  | - |
| Transfers from other plans | - |  | 764,902 |  | 365,766 |  | 27,886,461 |  | - |
| Total contributions and premiums | 551,437,977 |  | 2,096,960 |  | 522,072 |  | 148,694,238 |  | 374,017 |
| Total additions | 905,710,701 |  | 4,261,243 |  | 912,236 |  | 237,025,167 |  | 795,344 |
| Deductions: |  |  |  |  |  |  |  |  |  |
| Benefits paid | 863,977,621 |  | 4,313,483 |  | 520,364 |  | 167,897,392 |  | 1,759,029 |
| Refunds and withdrawals | 18,841,863 |  | 1,075 |  | 177,332 |  | 6,854,776 |  | 913,894 |
| Transfers to other plans | 2,193,752 |  | - |  | - |  | 203,000 |  | 26,823,377 |
| Claims processing expenses (note 7) | - |  | - |  | - |  | - |  | - |
| Administrative expenses | 11,343,928 |  | 69,406 |  | 12,458 |  | 2,797,728 |  | 20,772 |
| Total deductions | 896,357,164 |  | 4,383,964 |  | 710,154 |  | 177,752,896 |  | 29,517,072 |
| Net increase/(decrease) in fiduciary net position | 9,353,537 |  | $(122,721)$ |  | 202,082 |  | 59,272,271 |  | $(28,721,728)$ |
| Fiduciary net position - restricted for benefits, beginning of year | 12,035,565,075 |  | 73,637,441 |  | 13,248,022 |  | 2,953,156,096 |  | 37,061,229 |
| Fiduciary net position - restricted for benefits, end of year | \$12,044,918,612 |  | 73,514,720 |  | 13,450,104 |  | 3,012,428,367 | \$ | 8,339,501 |

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

## Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2020
With Summarized Information for the Year Ended June 30, 2019


## Notes to Financial Statements

June 30, 2020
With Summarized Information for June 30, 2019

# 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 307 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 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

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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, 2020 were calculated as part of a full 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, 2020, participation in the defined contribution plans was as follows:

|  | 401(a) Plan |  |  | 457 Plan |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 403(b) Plan |  |  |
| Employers | 7 |  | 66 |  | 1 |
| Participants | 80 |  | 796 |  | 518 |

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.

## 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 Trust (Investment Trust Fund) as an irrevocable trust 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 Fund.

## 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 generally accepted accounting principles. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2019, from which the summarized information was derived.

## Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (US 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

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

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.

## 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.

## 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.

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

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.

During the year ended June 30, 2020, local, U.S., and world governments encouraged self-isolation to curtail the spread of the global pandemic, coronavirus disease (COVID-19), by mandating the temporary shut-down of business in many sectors and imposing limitations on travel and size and duration of group meetings. While these mandates have slowly become less restrictive in some areas, most sectors are still experiencing disruption to business operations and may feel further impacts. There is unprecedented uncertainty surrounding the duration of the pandemic, its potential economic ramifications, and any government actions to mitigate them. Therefore, while management expects this matter could have a financial impact on the System's financial position and results of future operations, such potential impact cannot be reasonably estimated at this time.

## 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. 95, Postponement of the Effective Dates of Certain Authoritative Guidance, for the year ended June 30, 2020. This statement extended the effective dates of certain accounting and financial reporting provisions in Statements and Implementation guides that would have been effective for reporting periods beginning after June 15, 2018. Adopting this statement had no material impact 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

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

equity (15\%), traditional credit (7.5\%), alternative credit (5\%), real estate (10\%), infrastructure (10\%), natural resources (5\%), US Government (7.5\%), and risk diversifiers (10\%). For the group life insurance plan assets, the policy identifies four investment classes and targets: public equity (70\%), real estate (5\%), traditional credit (15\%), and US Government (10\%).

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.

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:


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 ${ }^{(1)}$ | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| AAA | \$ | 1,363,796,154 | \$ | 1,715,664,001 |
| AA |  | 60,689,501 |  | 85,449,969 |
| A |  | 247,338,345 |  | 270,631,239 |
| BBB |  | 236,650,886 |  | 308,476,768 |
| Total Credit Risk Debt | \$ | $1,908,474,886^{(2)}$ | \$ | 2,380,221,977 ${ }^{(2)}$ |

(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 2020 and 2019, all amounts are from common/collective trusts.

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, 2020.

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There were no individual investments that constitute $5 \%$ or more of fiduciary net position for the other postemployment benefit plans administered by the System as of June 30, 2020.

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, 2020 and 2019, 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, 2020

| Investment Type | Fair Value | Less than 1 Year |  | 1 to 6 Years |  | 6 to 10 Years |  | 10+ Years |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common/Collective Trusts | \$ 1,908,474,886 | \$ | 101,126,038 | \$ | 1,421,297,586 | \$ | 210,576,710 | \$ | 175,474,552 |
| Total | \$ 1,908,474,886 | \$ | 101,126,038 | \$ | 1,421,297,586 | \$ | 210,576,710 | \$ | 175,474,552 |


| Maturities as of June 30, 2019 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | Fair Value | Less than 1 Year |  | 1 to 6 Years |  | 6 to 10 Years |  | 10+ Years |  |
| Common/Collective Trusts | \$ 2,380,221,977 | \$ | 124,747,434 | \$ | 1,710,546,524 | \$ | 357,818,770 | \$ | 187,109,250 |
| Total | \$ 2,380,221,977 | \$ | 124,747,434 | \$ | 1,710,546,524 | \$ | 357,818,770 | \$ | 187,109,250 |

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. 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.

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The System's direct and indirect exposure to foreign currency risk in U.S. dollars as of June 30, 2020 is highlighted in the following table:

| Currency |  | Total |
| :---: | :---: | :---: |
| Argentine Peso | \$ | 215,741 |
| Australian Dollar |  | 87,197,843 |
| Bermudian Dollar |  | 1,414,251 |
| Brazilian Real |  | 30,181,569 |
| British Pound Sterling |  | 253,705,861 |
| Canadian Dollar |  | 131,902,107 |
| Chilean Peso |  | 3,432,752 |
| Chinese Yuan Renminbi |  | 221,663,719 |
| Colombian Peso |  | 1,220,944 |
| Czech Koruna |  | 655,727 |
| Danish Krone |  | 29,950,750 |
| Egyptian Pound |  | 683,476 |
| Euro |  | 1,027,850,583 |
| Hong Kong Dollar |  | 59,313,371 |
| Hungarian Forint |  | 1,325,537 |
| India Rupee |  | 46,694,044 |
| Indonesian Rupiah |  | 8,709,771 |
| Japanese Yen |  | 332,791,694 |
| Korean Won |  | 67,918,670 |
| Macao Pataca |  | 1,225,657 |
| Malaysian Ringgit |  | 10,276,595 |
| Mexican Peso |  | 10,118,708 |
| New Israeli Sheqel |  | 8,383,984 |
| New Zealand Dollar |  | 4,292,546 |
| Norwegian Krone |  | 6,830,937 |
| Pakistani Rupee |  | 117,386 |
| Papua New Guinea Kina |  | 436,543 |
| Peruvian Sol |  | 201,862 |
| Phillippine Peso |  | 4,736,811 |
| Polish Zloty |  | 4,206,617 |
| Qatar Riyal |  | 4,678,189 |
| Russian Ruble |  | 18,468,638 |
| Saudi Arabian Riyal |  | 15,308,725 |
| Singapore Dollar |  | 14,633,230 |
| South African Rand |  | 21,848,444 |
| Swedish Krona |  | 37,947,669 |
| Swiss Franc |  | 134,244,373 |
| Taiwan Dollar |  | 70,105,234 |
| Thai Baht |  | 13,210,770 |
| Turkish Lira |  | 2,442,475 |
| United Arab Emirates Dirham |  | 3,122,179 |
| Total | \$ | 2,693,665,982 |

The System has entered into contracts to invest in partnerships with a focus on private equity, infrastructure, and real estate investment strategies. As of June 30, 2020, the value of these investments is approximately $\$ 7.1$ billion and the remaining funding commitment is approximately $\$ 3.4$ billion.

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For the year ended June 30, 2020, the annual money-weighted rate of return on all defined benefit plan investments, net of investment expenses, was $1.8 \%$. For the year ended June 30, 2020, the annual money-weighted rate of return on all OPEB plan investments, net of investment expense, was 6\%. 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. Level 3 inputs are unobservable inputs. The System has the following recurring fair value measurements at June 30:

|  | June 30, 2020 |  | Fair Value Measurements Using |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Level 1 |  | Level 2 |  | Level 3 |  |
| Investments by fair value level |  |  |  |  |  |  |  |  |
| Common Equity | \$ | 2,557,861,687 | \$ | 2,557,861,687 | \$ | - | \$ | - |
| Common/Collective Trusts |  | 5,896,509,580 |  | - |  | 5,896,509,580 |  | - |
| Collateral from loaned securities |  | 206,264,894 |  | - |  | 206,264,894 |  | - |
| Total investments by fair value level | \$ | 8,660,636,161 | \$ | 2,557,861,687 | \$ | 6,102,774,474 | \$ | - |
|  |  |  |  |  |  |  |  |  |
| Investments measured at net asset value (NAV) |  |  |  |  |  |  |  |  |
| Alternative Credit |  | 711,496,903 |  |  |  |  |  |  |
| Infrastructure |  | 1,606,338,915 |  |  |  |  |  |  |
| Natural Resources |  | 809,944,319 |  |  |  |  |  |  |
| Private Equity |  | 2,618,109,220 |  |  |  |  |  |  |
| Real Estate |  | 1,393,204,031 |  |  |  |  |  |  |
| Total investments measured at NAV |  | 7,139,093,388 |  |  |  |  |  |  |
| Total investments measured at fair value |  | 15,799,729,549 |  |  |  |  |  |  |


|  | June 30, 2019 |  | Fair Value Measurements Using |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Level 1 |  | Level 2 |  | Level 3 |  |
| Investments by fair value level |  |  |  |  |  |  |  |  |
| Common Equity | \$ | 2,299,562,007 | \$ | 2,299,562,007 | \$ | - | \$ | - |
| Common/Collective Trusts |  | 6,450,026,494 |  | - |  | 6,450,026,494 |  | - |
| Collateral from loaned securities |  | 199,994,962 |  | - |  | 199,994,962 |  | - |
| Total investments by fair value level |  | 8,949,583,463 | \$ | 2,299,562,007 | \$ | 6,650,021,456 | \$ | - |
|  |  |  |  |  |  |  |  |  |
| Investments measured at net asset value (NAV) |  |  |  |  |  |  |  |  |
| Alternative Credit |  | 499,396,810 |  |  |  |  |  |  |
| Infrastructure |  | 1,787,351,032 |  |  |  |  |  |  |
| Natural Resources |  | 729,602,146 |  |  |  |  |  |  |
| Private Equity |  | 2,342,849,414 |  |  |  |  |  |  |
| Real Estate |  | 1,418,067,477 |  |  |  |  |  |  |
| Total investments measured at NAV |  | 6,777,266,879 |  |  |  |  |  |  |
| Total investments measured at fair value | \$ | 15,726,850,342 |  |  |  |  |  |  |

## Common Equity

Common equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets.

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## 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.

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, 2020 |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Investments Measured at NAV | Fair Value | Unfunded Commitments |  |  |
| Alternative Credit ${ }^{(1)}$ | $\$$ | $711,496,903$ | $\$$ | $477,518,466$ |
| Infrastructure funds ${ }^{(2)}$ |  | $1,606,338,915$ | $886,447,202$ |  |
| Natural Resources ${ }^{(3)}$ | $809,944,319$ | $290,067,434$ |  |  |
| Private Equity |  | $2,618,109,220$ | $1,377,978,443$ |  |
| Real estate funds ${ }^{(5)}$ |  | $1,393,204,031$ | $395,181,099$ |  |
| Total investments measured at NAV | $\$$ | $7,139,093,388$ | $\$ 3,427,192,644$ |  |

June 30, 2019

| Investments Measured at NAV |  | Fair Value | Unfunded Commitments |  |
| :---: | :---: | :---: | :---: | :---: |
| Alternative Credit ${ }^{(1)}$ | \$ | 499,396,810 | \$ | 240,925,967 |
| Infrastructure funds ${ }^{(2)}$ |  | 1,787,351,032 |  | 1,179,047,612 |
| Natural Resources ${ }^{(3)}$ |  | 729,602,146 |  | 278,317,653 |
| Private Equity ${ }^{(4)}$ |  | 2,342,849,414 |  | 1,378,782,275 |
| Real estate funds ${ }^{(5)}$ |  | 1,418,067,477 |  | 398,423,649 |
| Total investments measured at NAV | \$ | 6,777,266,879 | \$ | 3,475,497,156 |

(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 Credit funds are typically structured as partnerships with fixed lifetimes. A typical structure is a 7 -year fund life, where the fund can call capital for investments for 3 years, and then will return capital as loans mature throughout the life of the fund. These funds typically have no provisions for redemptions, though the System's interests could be sold on a secondary market.
(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.

## Notes to Financial Statements June 30, 2020 With Summarized Information for June 30, 2019

(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 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.

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With Summarized Information for June 30, 2019
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, 2020 or 2019 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. NonU.S. securities are loaned against collateral valued at $105 \%$ of the fair value of the securities plus any accrued interest.

Noncash 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, 2020 and 2019.

Cash collateral is invested in a short-term investment account which had an interest sensitivity of 10 and 14 days as of June 30, 2020 and 2019, 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 2020 and 2019, 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, 2020 and 2019, 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), plus accrued interest for fixed income securities, 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.

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

Aggregate securities on loan by asset class are as follows:

|  | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| Domestic equity securities on loan | \$ | 264,085,139 | \$ | 278,985,661 |
|  |  |  |  |  |
| Aggregate securities lending collateral: |  |  |  |  |
| Short-term investment collateral pool | \$ | 206,264,894 | \$ | 199,994,962 |
| Noncash collateral |  | 63,904,350 |  | 85,729,831 |
|  |  |  |  |  |
| Total collateral | \$ | 270,169,244 | \$ | 285,724,793 |
|  |  |  |  |  |
| Collateral ratio |  | 102.3\% |  | 102.4\% |

## 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, 2020, there were 237 employers, including the State of Maine, participating in the plan. The State of Maine is also a non-employer contributing entity in that the State pays 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:

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Current participants: |  |  |
| Vested and non-vested | 40,395 | 39,876 |
| Terminated participants: |  |  |
| Vested | 8,157 | 8,188 |
| Inactive due refunds | 37,653 | 38,640 |
| Retirees and beneficiaries receiving benefits | 37,151 | 36,471 |
|  |  |  |
|  | 123,356 | 123,175 |

## 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:

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Current participants: |  |  |
| Vested and non-vested | 58 | 61 |
| Terminated participants: |  |  |
| Vested | 3 | 3 |
| Inactive due refunds | 1 | 1 |
| Retirees and beneficiaries receiving benefits | 83 | 76 |
|  |  |  |
|  | 145 | 141 |

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

## 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:

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Current participants: |  |  |
| Vested and non-vested | 179 | 179 |
| Terminated participants: |  |  |
| Vested | 117 | 124 |
| Inactive due refunds | 94 | 111 |
| Retirees and beneficiaries receiving benefits | 206 | 204 |
|  |  |  |
|  | 596 | 618 |

## 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, 2020, there were 301 employers participating in the plan.

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

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Current participants: |  |  |
| Vested and non-vested | 11,838 | 11,731 |
| Terminated participants: |  |  |
| Vested | 2,402 | 2,350 |
| Inactive due refunds | 8,766 | 8,273 |
| Retirees and beneficiaries receiving benefits | 9,860 | 9,534 |
|  |  |  |
|  | 32,866 | 31,888 |

## 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, 2020, there were 6 employers in the plan.

## Notes to Financial Statements June 30, 2020 With Summarized Information for June 30, 2019

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

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Current participants: |  |  |
| Vested and non-vested | 1 | 12 |
| Terminated participants: |  |  |
| Vested | - | 15 |
| Inactive due refunds | 1 | 4 |
| Retirees and beneficiaries receiving benefits | 50 | 163 |
|  | 52 | 194 |

## 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 . 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 State employee and teacher members and by contract with other 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 1.92\%.

## 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 State Employee and Teacher Retirement Plan by the year 2028 (Unfunded Actuarial Accrued Liability (UAAL) payments). 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. For participating employers in the PLD Agent Plan, the level percentage of payroll method is also used.

## Notes to Financial Statements

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## 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, 2020, were as follows:

| Total pension liability | $\$ 14,865.4$ |
| :--- | ---: |
| Plan fiduciary net position | $12,044.9$ |
| Net pension liability | $\$$ |
| Plan fiduciary net position as a percentage of the total pension liability | $2,820.5$ |

## 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, 2020, were as follows:

| Total pension liability | \$ | 72.2 |
| :---: | :---: | :---: |
| Plan fiduciary net position |  | 73.5 |
| Net pension asset | \$ | (1.3) |

## 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, 2020, were as follows:

| Total pension liability | $\$ .7$ |
| :--- | ---: |
| Plan fiduciary net position | 13.4 <br> Net pension asset |

## Notes to Financial Statements

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With Summarized Information for June 30, 2019

## Net Pension Liability - PLD Consolidated Plan

The components of the net pension liability of the PLD Consolidated Plan participating employers, stated in millions of dollars as of June 30, 2020, were as follows:

| Total pension liability | $\$ \quad 3,409.7$ |
| :--- | :---: |
| Plan fiduciary net position | $3,012.4$ |
| Net pension liability | $\$$ |
| Plan fiduciary net position as a percentage of the total pension liability | 397.3 |

## 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, 2020 was 8 years. All other gains, losses, and changes are amortized over twenty-year 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 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.

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With Summarized Information for June 30, 2019
The total pension liability was determined by an actuarial valuation as of June 30, 2020, 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, 2019.

|  | State Employee and Teacher | Judicial Plan | Legislative Plan | PLD Consolidated Plan |
| :---: | :---: | :---: | :---: | :---: |
| Investment Rate of Return | 6.75\% Per annum, compounded annually |  |  |  |
| Inflation Rate | 2.75\% |  |  |  |
| Annual Salary Increases, including Inflation | 2.75\% plus merit component based on each employee's years of service | 2.75\% | 2.75\% | 2.75\% plus merit component based on each employee's years of service |
| Cost of Living Benefit Increases | 2.20\% |  |  | 1.91\% |
| Mortality Rates | For active members and non-disabled retirees, 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. |  |  |  |

The actuarial assumptions used in the June 30, 2020 and June 30, 2019 actuarial valuations were based on the results of an actuarial experience study for the period of June 30, 2012 to June 30, 2015.

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 geometric real rates of return for each major asset class included in the target asset allocation as of June 30, 2020 are summarized in the following table:

| Asset Class | Long-Term Expected <br> 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 | 3.0 |
| Alternative Credit | 3.0 |
| Diversifiers | 7.2 |

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

## Discount Rate

The discount rate used to measure the total pension liability for each of the Defined Benefit Plans was 6.75\%. 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 $6.75 \%$, as well as what the net pension liability would be if it were calculated using a discount rate of one percentage point lower (5.75\%) or one percentage point higher ( $7.75 \%$ ) than the current rate:


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 $\$ 338.2$ million and $\$ 293.9$ million, and for judges in the total amount of $\$ 716$ thousand and $\$ 1.2$ million, for the years ended June 30, 2020 and 2019, respectively. There were no contributions due from the State of Maine on behalf of legislators in 2020 or 2019.

Retirement contribution rates for all employee members are set by law. 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 2020 and 2019 are as follows:

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| Contribution Rates ${ }^{(1)}$ (effective July 1 through June 30 of each fiscal year) |  |  |
| :---: | :---: | :---: |
|  | 2020 | 2019 |
| State: |  |  |
| Employees ${ }^{(2)}$ | $7.65-8.65 \%$ | $7.65-8.65 \%$ |
| Employer ${ }^{(2)}$ | 20.93-32.68\% | 23.44-47.64\% |
| Teachers: |  |  |
| Employees | 7.65\% | 7.65\% |
| Employer | 4.16\% | 3.97\% |
| Non-employer entity | 14.33\% | 11.08\% |
| Judges: |  |  |
| Employees | 7.65\% | 7.65\% |
| Employer | 8.89\% | 14.94\% |
| Legislative: |  |  |
| Employees | 7.65\% | 7.65\% |
| Employer | 0.00\% | 0.00\% |
| Participating local districts: |  |  |
| Employees ${ }^{(2)}$ | $3.85-9.5 \%$ | 4.5-9.5\% |
| Employers ${ }^{(2)}$ | $4.5-16.2 \%$ | $4.1-16.3 \%$ |

(1) Employer Contribution Rates include normal cost and UAAL required payment, expressed as a percentage of payroll.
(2) Employer and Employee 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.

## 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, 2020 there were 233 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:

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

|  | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 1 9}$ |
| :--- | ---: | ---: |
| Retired State Employees | 8,741 | 8,768 |
| Retired Teachers | 7,534 |  |
| Active State Employees | 11,698 |  |
| Active Teachers | 11,362 |  |
|  | -029 | 14,592 |

## 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, 2020 there were 139 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:

|  | $\mathbf{2 0 2 0}$ |  |
| :--- | :--- | :--- |
| Retired PLD Employees | 2,879 | 2,498 |
| Active PLD Employees | $-2,850$ | 5,495 |
|  | 8,377 | 8,345 |

## 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.

## 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 $\$ 0.46$ 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, 2020, were as follows:

| Total OPEB liability | $\$ 213.3$ |
| :--- | ---: |
| Plan fiduciary net position | 105.6 |
| Net OPEB liability | $\$ 107.7$ |
| Plan fiduciary net position as a percentage of the total OPEB liability | $49.5 \%$ |

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

## 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, 2020, were as follows:

| Total OPEB liability | $\$ 22.6$ |  |
| :--- | ---: | :--- |
| Plan fiduciary net position | 16.4 |  |
|  | $\$$ | 13.2 |
| Plan fiduciary net position as a percentage of the total OPEB liability | $55.4 \%$ |  |

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.

## 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, 2020 are displayed in the table below. The valuation date is June 30, 2020. These same assumptions were used as of June 30, 2019 unless otherwise noted.

|  | State employees, including judges and legislators | Teachers | PLD employees |
| :---: | :---: | :---: | :---: |
| Investment Rate of Return | 6.75\% Per annum, compounded annually |  |  |
| Inflation Rate | 2.75\% |  |  |
| Annual Salary Increases, including Inflation | 2.75\% - 8.75\% | 2.75\% - 14.50\% | 2.75\% - 9.00\% |
| Mortality Rates | 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. |  |  |
| 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 |  |  |

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

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, 2020, there were 17 years remaining in the amortization schedule for state employees and teachers, and 10 years remaining for PLD employees.

The actuarial assumptions used in the June 30, 2020 and June 30, 2019 actuarial valuations were based on the results of an actuarial experience study conducted for the period of June 30, 2012 to June 30, 2015.

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 longterm 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, 2020 are summarized in the following table:

|  | Long-Term Expected <br> Real Rate of Return |  |
| :--- | :---: | :---: |
| Asset Class | Rublic equity | $6.0 \%$ |
| Real estate | 5.2 |  |
| Traditional credit | 3.0 |  |
| GS 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 $6.75 \%$ in 2020. 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.

In 2019, the discount rate used to measure the total OPEB liability for the PLD Plan was $4.98 \%$ which is a blend of the assumed long-term expected rate of return of $6.75 \%$ and a municipal bond index rate of $3.5 \%$, based on the Bond Buyer GO 20-Year Municipal Bond Index as of June 30, 2019. Projections of the Plan's fiduciary net position indicated that it was not expected to be sufficient to make projected benefit payments for current members beyond 2050. Therefore, the portion of future projected benefit payments after 2050 were discounted at the municipal bond index rate. 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.

## 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 $6.75 \%$, as well as what the net OPEB liability would be if it were calculated using a discount rate of one percentage point lower ( $5.75 \%$ ) or one percentage point higher ( $7.75 \%$ ) than the current rate:

|  |  | 1\% Decrease (5.75\%) |  | Current Rate (6.75\%) |  | 1\% Increase (7.75\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net OPEB Liability | \$ | 138,563,132 |  | 107,692,418 | \$ | 82,569,117 |

The following table presents the net OPEB liability for the PLD Plan calculated using the discount rate of 6.75\%, as well as what the net OPEB liability would be if it were calculated using a discount rate of one percentage point lower (5.75\%) or one percentage point higher (7.75\%) than the current rate:

|  | 1\% Decrease | Current Rate | 1\% Increase |
| :---: | :---: | :---: | :---: |
| Net OPEB Liability | $\underline{(5.75 \%)}$ | $\underline{(6.75 \%)}$ | $\underline{(7.75 \%)}$ |
|  | $\$ 17,767,413$ | $\$ 13,192,182$ | $\$$ |
| $9,514,819$ |  |  |  |

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

## 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 $\$ .82$ 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 $\$ .46$ per month for every $\$ 1,000$ in coverage for employees while active and retired. Employees' 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 \$10.8 and \$9.0 million, respectively, for the years ended June 30, 2020 and 2019.

## 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 under 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 $\$ 828,074$ and $\$ 900,911$ for the years ended June 30, 2020 and 2019, 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.

## Notes to Financial Statements <br> June 30, 2020 <br> With Summarized Information for June 30, 2019

## 9. The System's Employee Benefits <br> 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 $7.35 \%$ or $8.1 \%$ 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 $10 \%$ of annual covered payroll for 2020 and 2019.

The employer contributions on behalf of its employees, equal to the required contribution, were $\$ 732,879$ and $\$ 679,818$ for 2020 and 2019, 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 $\$ 0.46$ per $\$ 1,000$ of coverage for the 2020 and 2019 fiscal years. The total premiums the System paid on behalf of its active employees, equal to the required contributions, were $\$ 35,488$ and $\$ 35,307$ for 2020 and 2019, 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 2020 and 2019. The OPEB liability for this plan is immaterial and the Plan's assets exceed its actuarial liability at June 30, 2020 and 2019. 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 $\$ 7,748$ and $\$ 5,964$ for 2020 and 2019. 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 Supplementary Information

## Schedule of Historical Pension Information <br> State Employee and Teacher Plan June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net Pension Liability and Related Ratios <br> Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total pension liability |  |  |  |  |
| Service cost | \$ | 231,226,103 | \$ | 224,775,112 |
| Interest |  | 968,243,358 |  | 934,009,648 |
| Changes of benefit terms |  | 1,223,156 |  | - |
| Differences between expected and actual experience |  | 162,293 |  | 208,719,412 |
| Changes of assumption |  | - |  | - |
| Benefit payments, including refunds of member contributions |  | $(882,617,693)$ |  | $(851,469,104)$ |
| Net change in total pension liability |  | 318,237,217 |  | 516,035,068 |
| Total pension liability, beginning |  | 14,547,222,913 |  | 14,031,187,845 |
| Total pension liability, ending (a) |  | 14,865,460,130 |  | 14,547,222,913 |
| Plan fiduciary net position |  |  |  |  |
| Contributions - members | \$ | 151,438, 848 | \$ | 146,019,051 |
| Contributions - employers |  | 225,468,762 |  | 218,530,934 |
| Contributions - non-employer contributing entities |  | 174,530,364 |  | 132,980,832 |
| Investment income |  | 354,272,726 |  | 768,987,130 |
| Benefits paid, including refunds and withdrawals |  | $(882,819,483)$ |  | $(851,653,558)$ |
| Administrative expenses |  | $(11,343,928)$ |  | $(11,180,852)$ |
| Other |  | $(2,193,752)$ |  | $(311,233)$ |
| Net change in fiduciary net position |  | 9,353,537 |  | 403, 372,304 |
| Plan fiduciary net position, beginning |  | 12,035,565,075 |  | 11,632,192,771 |
| Plan fiduciary net position, ending (b) | \$ | 12,044,918,612 |  | 12,035,565,075 |
| Plan's net pension liability, ending (a)-(b) | \$ | 2,820,541,518 | \$ | 2,511,657,838 |
| Plan fiduciary net position as a percentage of the total pension liability |  | 81.03\% |  | 82.73\% |
| Covered payroll | \$ | 2,003,075,813 | \$ | 1,924,006,618 |
| Plan net pension liability as a percentage of covered payroll |  | 140.81\% |  | 130.54\% |

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.

## Required Supplementary Information

## Schedule of Historical Pension Information State Employee and Teacher Plan June 30, 2020 (Unaudited)

| 2018 | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ $215,826,380$ | \$ | 213,047,075 | \$ | 203,297,053 | \$ | 191,528,649 | \$ | 186,376,754 |
| 914,535,911 |  | 886,834,221 |  | 882,785,134 |  | 861,682,508 |  | 842,229,062 |
| - |  | - |  | - |  | 9,778,106 |  | - |
| 34,151,279 |  | 95,207,531 |  | 81,506,700 |  | $(44,287,643)$ |  | $(17,694,276)$ |
| 191,998,939 |  | - |  | 30,436,605 |  | - |  | 167,650,573 |
| $(810,211,176)$ |  | $(780,157,263)$ |  | $(744,357,598)$ |  | $(722,573,349)$ |  | $(689,053,212)$ |
| 546,301,333 |  | 414,931,564 |  | 453,667,894 |  | 296,128,271 |  | 489,508,901 |
| 13,484, 886,512 |  | 13,069,954,948 |  | 12,616,287,054 |  | 12,320,158,783 |  | 11,830,649,882 |
| \$ 14,031,187, 845 |  | 13,484,886,512 |  | 13,069,954,948 |  | 12,616,287,054 |  | 12,320,158,783 |
| \$ 140, 844, 880 | \$ | 139,464,284 | \$ | 125,523,987 | \$ | 123,528,807 | \$ | 121,033,152 |
| 211,251,144 |  | 211,037,365 |  | 199,212,719 |  | 173,935,492 |  | 162,920,147 |
| 129,421,735 |  | 116,080,164 |  | 112,477,836 |  | 147,283,716 |  | 142,303,104 |
| 1,077,827,554 |  | 1,256,043,735 |  | 40,540,759 |  | 191,829,057 |  | 1,517,432,345 |
| $(810,381,770)$ |  | $(780,325,980)$ |  | $(744,523,744)$ |  | $(722,724,258)$ |  | $(689,191,030)$ |
| $(10,076,242)$ |  | $(9,216,027)$ |  | $(8,649,031)$ |  | $(9,386,695)$ |  | $(8,246,740)$ |
| - |  | $(124,178)$ |  | $(6,342,010)$ |  | - |  | - |
| 738,887,301 |  | 932,959,363 |  | $(281,759,484)$ |  | $(95,533,881)$ |  | 1,246,250,978 |
| 10,893,305,470 |  | 9,960,346,107 |  | 10,242,105,591 |  | 10,337,639,472 |  | 9,091,388,494 |
| \$ 11,632,192,771 |  | 10,893,305,470 | \$ | 9,960,346,107 |  | 10,242,105,591 |  | 10,337,639,472 |
| \$ 2,398,995,074 | \$ | 2,591,581,042 | \$ | $\underline{3,109,608,841}$ | \$ | 2,374,181,463 | \$ | 1,982,519,311 |
| 82.90\% |  | 80.78\% |  | 76.21\% |  | 81.18\% |  | 83.91\% |
| \$ 1,808, 274,919 | \$ | 1,860,294,435 | \$ | 1,816,435,084 | \$ | 1,699,160,889 | \$ | 1,676,857,294 |
| 132.67\% |  | 139.31\% |  | 171.19\% |  | 139.73\% |  | 118.23\% |

## Required Supplementary Information

## Schedule of Historical Pension Information <br> Judicial Plan <br> June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net Pension Liability and Related Ratios <br> Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total pension liability |  |  |  |  |
| Service cost | \$ | 1,608,376 | \$ | 1,596,832 |
| Interest |  | 4,644,191 |  | 4,582,454 |
| Changes of benefit terms |  | - |  | - |
| Differences between expected and actual experience |  | 942,561 |  | $(1,087,164)$ |
| Changes of assumptions |  | - |  | - |
| Benefit payments, including refunds of member contributions |  | $(4,314,558)$ |  | $(4,067,506)$ |
| Net change in total pension liability |  | 2,880,570 |  | 1,024,616 |
| Total pension liability, beginning |  | 69,316,540 |  | 68,291,924 |
| Total pension liability, ending (a) |  | 72,197,110 | \$ | 69,316,540 |
| Plan fiduciary net position |  |  |  |  |
| Contributions - members | \$ | 616,095 | \$ | 620,075 |
| Contributions - employers |  | 715,963 |  | 1,212,666 |
| Investment income |  | 2,164,283 |  | 4,709,445 |
| Benefits paid, including refunds and withdrawals |  | $(4,314,558)$ |  | $(4,067,506)$ |
| Administrative expenses |  | $(69,406)$ |  | $(68,475)$ |
| Other |  | 764,902 |  | $(2,604)$ |
| Net change in fiduciary net position |  | $(122,721)$ |  | 2,403,601 |
| Plan fiduciary net position, beginning |  | 73,637,441 |  | 71,233,840 |
| Plan fiduciary net position, ending (b) |  | 73,514,720 |  | 73,637,441 |
| Plan's net pension (asset) liability, ending (a)-(b) | \$ | $(1,317,610)$ | \$ | $(4,320,901)$ |
| Plan fiduciary net position as a percentage of the total pension liability |  | 101.83\% |  | 106.23\% |
| Covered payroll | \$ | 8,053,577 | \$ | 8,116,908 |
| Plan net pension (asset) liability as a percentage of covered payroll |  | (16.36)\% |  | (53.23)\% |

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 auditor's report.

## Required Supplementary Information

## Schedule of Historical Pension Information Judicial Plan June 30, 2020 (Unaudited)

| 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 1,487,383 | \$ | 1,465,977 | \$ | 1,396,704 | \$ | 1,605,751 | \$ | 1,530,119 |
|  | 4,442,404 |  | 4,358,175 |  | 4,154,433 |  | 3,863,455 |  | 3,773,959 |
|  | - |  | - |  | 2,016,584 |  | 27,931 |  | - |
|  | 468,895 |  | $(893,352)$ |  | $(1,745,956)$ |  | 2,237,833 |  | $(324,891)$ |
|  | 697,807 |  | - |  | 2,489,800 |  | - |  | 426,150 |
|  | $(3,804,709)$ |  | $(3,651,927)$ |  | $(3,501,911)$ |  | $(3,383,995)$ |  | $(3,219,480)$ |
|  | 3,291,780 |  | 1,278,873 |  | 4,809,654 |  | 4,350,975 |  | 2,185,857 |
|  | 65,000,144 |  | 63,721,271 |  | 58,911,617 |  | 54,560,642 |  | 52,373,785 |
| \$ | 68,291,924 |  | 65,000,144 |  | 63,721,271 |  | 58,911,617 | \$ | 54,560,642 |
| \$ | 603,875 |  | 584,451 | \$ | 549,845 | \$ | 549,691 | \$ | 528,192 |
|  | 1,179,328 |  | 1,144,445 |  | 1,077,545 |  | 979,281 |  | 932,223 |
|  | 6,606,905 |  | 7,799,507 |  | 129,372 |  | 1,055,346 |  | 8,416,042 |
|  | $(3,804,709)$ |  | $(3,651,927)$ |  | $(3,501,911)$ |  | $(3,383,995)$ |  | $(3,219,480)$ |
|  | $(61,708)$ |  | $(56,436)$ |  | $(47,577)$ |  | $(49,399)$ |  | $(41,680)$ |
|  | - |  | - |  | 6,342,010 |  | - |  | - |
|  | 4,523,691 |  | 5,820,040 |  | 4,549,284 |  | $(849,076)$ |  | 6,615,297 |
|  | 66,710,149 |  | 60,890,109 |  | 56,340,825 |  | 57,189,901 |  | 50,574,604 |
| \$ | 71,233,840 |  | 66,710,149 |  | 60,890,109 |  | 56,340,825 | \$ | 57,189,901 |
| \$ | $(2,941,916)$ |  | $(1,710,005)$ | \$ | 2,831,162 | \$ | 2,570,792 | \$ | $(2,629,259)$ |
|  | 104.32\% |  | 102.63\% |  | 95.56\% |  | 95.64\% |  | 104.82\% |
| \$ | 7,893,762 | \$ | 7,639,818 | \$ | 7,188,426 | \$ | 7,185,501 | \$ | 6,742,444 |
|  | (37.27)\% |  | (22.38)\% |  | 39.39\% |  | 35.78\% |  | (39.00)\% |

## Required Supplementary Information

## Schedule of Historical Pension Information <br> Legislative Plan <br> June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net Pension Liability and Related Ratios <br> Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total pension liability |  |  |  |  |
| Service cost | \$ | 334,862 | \$ | 297,324 |
| Interest |  | 611,447 |  | 577,720 |
| Changes of benefit terms |  | - |  | - |
| Differences between expected and actual experience |  | 413,313 |  | 238,611 |
| Changes of assumptions |  | - |  | - |
| Benefit payments, including refunds of member contributions |  | $(697,697)$ |  | $(606,841)$ |
| Net change in total pension liability |  | 661,925 |  | 506,814 |
| Total pension liability, beginning |  | 9,066,764 |  | 8,559,950 |
| Total pension liability, ending (a) | \$ | 9,728,689 | \$ | 9,066,764 |
| Plan fiduciary net position |  |  |  |  |
| Contributions - members | \$ | 156,306 | \$ | 220,611 |
| Contributions - employers |  | - |  | - |
| Investment income |  | 390,165 |  | 845,407 |
| Benefits paid, including refunds and withdrawals |  | $(697,697)$ |  | $(606,840)$ |
| Administrative expenses |  | $(12,458)$ |  | $(12,262)$ |
| Other |  | 365,766 |  | 45,285 |
| Net change in fiduciary net position |  | 202,082 |  | 492,201 |
| Plan fiduciary net position, beginning |  | 13,248,022 |  | 12,755,821 |
| Plan fiduciary net position, ending (b) | \$ | 13,450,104 | \$ | 13,248,022 |
| Plan's net pension asset, ending (a)-(b) | \$ | $(3,721,415)$ | \$ | $(4,181,258)$ |
| Plan fiduciary net position as a percentage of the total pension liability |  | 138.25\% |  | 146.12\% |
| Covered payroll | \$ | 2,814,060 | \$ | 2,659,749 |
| Plan net pension asset as a percentage of covered payroll |  | (132.24)\% |  | (157.20)\% |

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## Required Supplementary Information

## Schedule of Historical Pension Information <br> Legislative Plan <br> June 30, 2020 (Unaudited)



## Required Supplementary Information

## Schedule of Historical Pension Information <br> PLD Consolidated Plan <br> June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net Pension Liability and Related Ratios Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total pension liability |  |  |  |  |
| Service cost | \$ | 82,715,056 | \$ | 78,317,217 |
| Interest |  | 219,752,007 |  | 208,360,684 |
| Changes in benefit terms |  | 29,759,516 |  | - |
| Differences between expected and actual experience |  | $(6,552,650)$ |  | 47,684,163 |
| Changes of assumptions |  | - |  |  |
| Benefit payments, including refunds of member contributions |  | $(174,752,167)$ |  | $(165,399,679)$ |
| Net change in total pension liability |  | 150,921,762 |  | 168,962,385 |
| Total pension liability, beginning |  | 3,258,819,605 |  | 3,089,857,220 |
| Total pension liability, ending (a) | \$ | 3,409,741,367 |  | 3,258,819,605 |
| Plan fiduciary net position |  |  |  |  |
| Contributions - members | \$ | 54,090,045 | \$ | 54,927,202 |
| Contributions - employers |  | 66,717,733 |  | 61,487,037 |
| Refunds of IUUAL account balances |  | - |  | - |
| Investment income |  | 88,330,927 |  | 188,620,107 |
| Benefits paid, including refunds and withdrawals |  | $(174,752,167)$ |  | $(165,399,680)$ |
| Administrative expenses |  | $(2,797,728)$ |  | $(2,706,977)$ |
| Other |  | 27,683,461 |  | 48,552 |
| Net change in fiduciary net position |  | 59,272,271 |  | 136,976,241 |
| Plan fiduciary net position, beginning |  | 2,953,156,096 |  | 2,816,179,855 |
| Plan fiduciary net position, ending (b) | \$ | 3,012,428,367 | \$ | 2,953,156,096 |
| Plan's net pension liability, ending (a)-(b) | \$ | 397,313,000 | \$ | 305,663,509 |
| Plan fiduciary net position as a percentage of the total pension liability |  | 88.35\% |  | 90.62\% |
| Covered payroll | \$ | 641,523,784 | \$ | 593,884,355 |
| Plan net pension liability as a percentage of covered payroll |  | 61.93\% |  | 51.47\% |

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.

## Required Supplementary Information

## Schedule of Historical Pension Information <br> PLD Consolidated Plan <br> June 30, 2020 (Unaudited)

| 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 76,190,510 | \$ | 76,271,766 | \$ | 74,208,414 | \$ | 75,805,492 | \$ | 72,651,025 |
|  | 207,492,397 |  | 198,972,490 |  | 192,774,429 |  | 187,928,506 |  | 178,293,576 |
|  | $(106,123,366)$ |  | - |  | - |  | - |  | - |
|  | 1,285,303 |  | $(2,160,603)$ |  | $(9,142,757)$ |  | $(54,634,906)$ |  | 19,939,857 |
|  | 46,439,540 |  | - |  | 50,884,219 |  | 37,593,598 |  | - |
|  | $(152,087,885)$ |  | $(146,163,566)$ |  | $(139,919,680)$ |  | $(135,414,526)$ |  | $(127,161,357)$ |
|  | 73,196,499 |  | 126,920,087 |  | 168,804,625 |  | 111,278,164 |  | 143,723,101 |
|  | 3,016,660,721 |  | 2,889,740,634 |  | 2,720,936,009 |  | 2,609,657,845 |  | 2,465,934,744 |
| \$ | 3,089,857,220 | \$ | 3,016,660,721 | \$ | 2,889,740,634 | \$ | $\underline{2,720,936,009}$ |  | 2,609,657,845 |
| \$ | 48,050,202 | \$ | 46,080,851 | \$ | 40,861,405 | \$ | 37,202,921 | \$ | 33,210,510 |
|  | 56,092,662 |  | 51,387,011 |  | 47,624,182 |  | 43,366,730 |  | 32,706,160 |
|  | - |  | - |  | - |  | $(43,000,526)$ |  |  |
|  | 259,699,519 |  | 299,780,948 |  | 10,200,342 |  | 46,075,304 |  | 361,125,177 |
|  | $(152,087,885)$ |  | $(146,163,566)$ |  | $(139,919,680)$ |  | $(135,414,526)$ |  | $(127,161,358)$ |
|  | $(2,411,666)$ |  | $(2,209,324)$ |  | $(2,028,294)$ |  | $(2,117,266)$ |  | $(1,779,304)$ |
|  | $(386,621)$ |  | $(62,201)$ |  | $(217,338)$ |  | - |  | - |
|  | 208,956,211 |  | 248,813,719 |  | $(43,479,383)$ |  | $(53,887,363)$ |  | 298,101,185 |
|  | 2,607,223,644 |  | 2,358,409,925 |  | 2,401,889,308 |  | 2,455,776,671 |  | 2,157,675,486 |
| \$ | 2,816,179,855 | \$ | 2,607,223,644 | \$ | 2,358,409,925 | \$ | 2,401,889,308 |  | ,455,776,671 |
| \$ | 273,677,365 | \$ | 409,437,077 | \$ | 531,330,709 | \$ | 319,046,699 | \$ | 153,881,174 |
|  | 91.14\% |  | 86.43\% |  | 81.61\% |  | 88.27\% |  | 94.10\% |
| \$ | 561,126,768 | \$ | 542,572,528 | \$ | 521,870,235 | \$ | 497,616,846 | \$ | 460,029,637 |
|  | 75.46\% |  | 75.46\% |  | 101.81\% |  | 64.11\% |  | 33.45\% |

## Required Supplementary Information

## Schedule of Historical Pension Information <br> State Employee and Teacher Plan <br> June 30, 2020 (Unaudited)

Schedule of Employer Contributions
Last Ten Fiscal Years

|  |  | 2020 |  | 2019 |  | 2018 | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 399,775,788 | \$ | 350,583,375 | \$ | 340,376,744 | \$ | 312,736,906 |
| Contributions in relation to the actuarially determined contribution |  | 399,775,788 |  | 350,583,375 |  | 340,376,744 |  | 312,736,906 |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | - |
| Covered payroll | \$ | 2,003,075,813 | \$ | 1,924,006,618 | \$ | 1,865,849,388 | \$ | $1,860,230,663$ |
| Contributions as a percentage of covered payroll |  | 19.96\% |  | 18.22\% |  | 18.24\% |  | 16.81\% |

See notes to historical pension and OPEB information.
See accompanying independent auditor's report.

## Required Supplementary Information

## Schedule of Historical Pension Information

Judicial Plan
June 30, 2020 (Unaudited)

## Schedule of Employer Contributions

Last Ten Fiscal Years

|  |  | 2020 |  | 2019 |  | 2018 |  | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 715,963 | \$ | 1,212,666 | \$ | 1,179,328 |  | 1,144,445 |
| Contributions in relation to the actuarially determined contribution |  | 715,963 |  | 1,212,666 |  | 1,179,328 |  | 1,144,445 |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | - |
| Covered payroll | \$ | 8,053,577 | \$ | 8,116,908 | \$ | 7,893,762 | \$ | 7,639,818 |
| Contributions as a percentage of covered payroll |  | 8.89\% |  | 14.99\% |  | 14.94\% |  | 14.98\% |
| See notes to historical pension and OPEB information. |  |  |  |  |  |  |  |  |
| See accompanying independent |  |  |  |  |  |  |  |  |


|  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 | 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 301,891,511 | \$ | 302,028,725 | \$ | 304,328,386 | \$ | 263,553,204 | \$ | 252,019,252 | \$ | 327,087,527 |
|  | 301,891,511 |  | 302,028,725 |  | 304,328, 386 |  | 263,553,204 |  | 252,019,252 |  | 332,956,361 |
| \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | $(5,868,837)$ |
| \$ | 1,816,435,084 | \$ | 1,699,160,889 | \$ | 1,676,857,294 |  | 1,672,857,294 | \$ | 1,718,449,172 |  | 643,389,735 |
|  | 16.62\% |  | 17.78\% |  | 18.15\% |  | 15.75\% |  | 14.67\% |  | 20.26\% |


| 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 | 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ 1,077,545 | \$ | 951,351 | \$ | 932,223 | \$ | 841,397 | \$ | 810,721 | \$ | 987,261 |
| 1,077,545 |  | 951,351 |  | 932,223 |  | 841,397 |  | 810,721 |  | 987,261 |
| \$ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| \$ 7,188,426 | \$ | 7,185,501 | \$ | 6,742,444 |  | 6,742,444 | \$ | 6,790,274 | \$ | 6,790,233 |
| 14.99\% |  | 13.24\% |  | 13.83\% |  | 12.48\% |  | 11.94\% |  | 14.54\% |

## Required Supplementary Information

## Schedule of Historical Pension Information <br> Legislative Plan <br> June 30, 2020 (Unaudited)

| Schedule of Employer Contributions Last Ten Fiscal Years |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Actuarially determined contribution | \$ | - | \$ | - | \$ | - | \$ | - |
| Contributions in relation to the actuarially determined contribution |  | - |  | - |  | - |  | - |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | - |
| Covered payroll |  | 2,814,060 | \$ | 2,659,749 |  |  |  |  |
| Contributions as a percentage of covered payroll |  | 0.00\% |  | 0.00\% |  |  |  |  |

See notes to historical pension and OPEB information.
See accompanying independent auditor's report.

## Required Supplementary Information

## Schedule of Historical Pension Information <br> PLD Consolidated Plan <br> June 30, 2020 (Unaudited)

## Schedule of Employer Contributions

Last Ten Fiscal Years

|  |  | 2020 |  | 2019 | 2018 |  | 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 66,717,733 | \$ | 61,170,089 | \$ | 55,551,550 | \$ | 51,387,011 |  |
| Contributions in relation to the actuarially determined contribution |  | 66,717,733 |  | 61,170,089 |  | 55,551,550 |  | 51,387,011 |  |
| Contribution deficiency (excess) | \$ | - | \$ | - | \$ | - | \$ | - |  |
| Covered payroll |  | 641,523,784 |  | 593,884,355 | \$ | 561,126,768 | \$ | 542,572,528 |  |
| Contributions as a percentage of covered payroll |  | 10.40\% |  | 10.30\% |  | 9.90\% |  | 9.47\% |  |

See notes to historical pension and OPEB information.
See accompanying independent auditor's report.


# Required Supplementary Information 

## Schedule of Historical Pension Information <br> All Defined Benefit Plans <br> June 30, 2020 (Unaudited)

Schedule of Investment Returns Last Ten Fiscal Years*

| $\underline{2020}$ | $\underline{\mathbf{2 0 1 9}}$ | $\underline{\mathbf{2 0 1 8}}$ | $\underline{\mathbf{2 0 1 7}}$ | $\underline{\mathbf{2 0 1 6}}$ | $\underline{\mathbf{2 0 1 5}}$ | $\underline{\mathbf{2 0 1 4}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1.8 \%$ | $7.08 \%$ | $10.30 \%$ | $12.49 \%$ | $0.48 \%$ | $1.98 \%$ | $16.66 \%$ |

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 Supplementary Information

## Schedule of Historical OPEB Information State Employee and Teacher Plan June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net OPEB Liability and Related Ratios <br> Last Ten Fiscal Years*



## Required Supplementary Information

## Schedule of Historical OPEB Information <br> PLD Consolidated Plan June 30, 2020 (Unaudited)

## Schedule of Changes in the Plan's Net OPEB Liability and Related Ratios Last Ten Fiscal Years*


*This information will be presented each year until 10 years of such information is available.
See accompanying independent auditor's report.

## Required Supplementary Information

## Schedule of Historical OPEB Information <br> State Employee and Teacher Plan <br> June 30, 2020 (Unaudited)

## Schedule of Employer Contributions

Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 10,671,443 | \$ | 9,040,284 | \$ | 8,805,704 | \$ | 8,239,903 |
| Contributions in relation to the actuarially determined contribution |  | 9,310,849 |  | 7,756,442 |  | 7,638,453 |  | 6,921,228 |
| Contribution deficiency | \$ | 1,360,594 | \$ | 1,283,842 | \$ | 1,167,251 | \$ | 1,318,675 |
| Covered payroll | \$ | 1,484,372,700 | \$ | 1,380,619,384 |  | 1,343,668,500 |  | 1,277,009,000 |
| Contributions as a percentage of covered payroll |  | 0.63\% |  | 0.56\% |  | 0.57\% |  | 0.54\% |
| See notes to historical pension and OP *This information will be presented eac See accompanying independent audit | fo | mation. <br> until 10 years of rt. | 兂 | information |  | ailable. |  |  |

## Required Supplementary Information

## Schedule of Historical OPEB Information PLD Plan <br> June 30, 2020 (Unaudited)

## Schedule of Employer Contributions

## Last Ten Fiscal Years*

|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 1,544,340 | \$ | 1,287,098 | \$ | 1,252,650 | \$ | 1,146,324 |
| Contributions in relation to the actuarially determined contribution |  | 1,127,014 |  | 1,100,509 |  | 1,069,640 |  | 1,037,124 |
| Contribution deficiency | \$ | 417,326 | \$ | 186,589 | \$ | 183,010 | \$ | 109,200 |
| Covered payroll | \$ | 291,745,500 | \$ | 283,884,893 | \$ | 276,287,000 | \$ | 260,552,680 |
| Contributions as a percentage of covered payroll |  | 0.39\% |  | 0.39\% |  | 0.39\% |  | 0.40\% |
| See notes to historical pension and OP *This information will be presented ea See accompanying independent audit | for | ation. <br> il 10 years of | c | nformation is | va | able. |  |  |

## Required Supplementary Information

## Schedule of Historical OPEB Information

All OPEB Plans
June 30, 2020 (Unaudited)

Schedule of Investment Returns
Last Ten Fiscal Years*

|  | $\underline{\mathbf{2 0 2 0}}$ | $\underline{\mathbf{2 0 1 9}}$ | $\underline{2018}$ | $\underline{2017}$ |
| :--- | :--- | :--- | :--- | :--- |
| Annual money-weighted rate of return, <br> net of investment expenses | $6.0 \%$ | $6.6 \%$ | $9.00 \%$ | $12.88 \%$ |

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.

## Notes to Historical Pension and OPEB Information June 30, 2020 (Unaudited)

## 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, 2020, 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 his expected future salary. The normal cost for each employee is the product of his pay and his 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.

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:

## Notes to Historical Pension and OPEB Information June 30, 2020 (Unaudited)

|  | State Employee and Teacher Plan | Judicial Plan | Legislative <br> Plan | PLD <br> Consolidated Plan |
| :---: | :---: | :---: | :---: | :---: |
| Investment Rate of Return | Per annum, compounded annually: $6.75 \%$ 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 |  |  | Per annum, compounded annually: $6.75 \%$ 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 |
| Inflation Rate | 2.75\% for 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 |  |  |  |
| Annual <br> Salary <br> Increases, including Inflation | For the periods ended June 30, 2020; June 30, 2019; June 30, 2018; June 30, 2017; and June 30, 2016: |  |  |  |
|  | State employees, $2.75 \%-8.75 \%$; <br> Teachers, 2.75\% - 14.50\% | 2.75\% | 2.75\% | 2.75\% - 9.00\% |
|  | For the periods ended June 30, 2015 and June 30, 2014: |  |  |  |
|  | State employees, $3.50 \%-10.50 \%$; <br> Teachers, 3.50\% - 13.50\% | 3.50\% | 3.50\% | 3.50\% - 9.50\% |
| Cost of <br> Living Benefit Increases | 2.20\% for 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 |  |  | 1.91\% for 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 |
| Mortality Rates | For the periods ended June 30, 2020; June 30, 2019; June 30, 2018; June 30, 2017; and June 30, 2016: |  |  |  |
|  | 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. |  |  |  |
|  | For the periods ended June 30, 2015 and June 30, 2014: |  |  |  |
|  | 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. |  |  |  |

## 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, 2020, 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 his expected future salary. The normal cost for each employee is the product of his pay and his normal cost rate. The normal cost for the group is the sum of the normal costs for all members.

## Notes to Historical Pension and OPEB Information June 30, 2020 (Unaudited)

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, 2020, there were 17 years remaining in the amortization schedule for state employees and teachers, and 10 years remaining for PLD employees.

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: |  |  |
|  | 6.75\% for June 30, 2020, June 30, 2019 and June 30, 2018; 6.875\% for June 30, 2017 |  | 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, 2020, June 30, 2019, June 30, 2018 and June 30, 2017 |  |  |
| Annual Salary | For June 30, 2020, June 30, 2019, June 30, 2018 and June 30, 2017 |  |  |
| Inflation | 2.75\%-8.75\% | 2.75\% - 14.50\% | 2.75\%-9.00\% |
|  | For June 30, 2020, June 30, 2019, June 30, 2018 and June 30, 2017 |  |  |
| Mortality Rates | 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 |  |  |

## Additional Supplementary Information <br> Schedule of Investment Expenses <br> For the Year Ended June 30, 2020

|  |  | State ployee and acher Plan |  | dicial Plan |  | lative <br> an |  | PLD <br> olidated Plan |  | D <br> t Plan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alternative Credit |  |  |  |  |  |  |  |  |  |  |
| Angelo Gordon Direct Lending III | \$ | 726,368 | \$ | 4,454 | \$ | 804 | \$ | 179,691 | \$ | 1,634 |
| Ares Capital Europe IV |  | 452,627 |  | 2,776 |  | 501 |  | 111,972 |  | 1,018 |
| Audax Senior Debt |  | 1,736,718 |  | 10,650 |  | 1,922 |  | 429,635 |  | 3,907 |
| Mesa West Core |  | 658,614 |  | 4,039 |  | 729 |  | 162,930 |  | 1,482 |
| Owl Rock |  | 1,784,941 |  | 10,946 |  | 1,975 |  | 441,565 |  | 4,016 |
| TCP Direct Lending VIII |  | 938,326 |  | 5,754 |  | 1,038 |  | 232,126 |  | 2,111 |
| Infrastructure |  |  |  |  |  |  |  |  |  |  |
| Alinda Infrastructure |  | 111,033 |  | 681 |  | 123 |  | 27,468 |  | 250 |
| ArcLight V |  | 382,849 |  | 2,348 |  | 424 |  | 94,710 |  | 861 |
| ArcLight VI |  | 1,202,793 |  | 7,376 |  | 1,331 |  | 297,551 |  | 2,706 |
| Brookfield Infrastructure II |  | 835,067 |  | 5,121 |  | 924 |  | 206,582 |  | 1,879 |
| Brookfield Infrastructure III |  | 1,003,868 |  | 6,156 |  | 1,111 |  | 248,341 |  | 2,259 |
| Carlyle Global Infrastructure |  | 3,106,217 |  | 19,048 |  | 3,437 |  | 768,427 |  | 6,989 |
| Carlyle Power Partners II |  | 557,705 |  | 3,420 |  | 617 |  | 137,967 |  | 1,255 |
| Cube Infrastructure |  | 148,636 |  | 911 |  | 164 |  | 36,770 |  | 334 |
| Cube Infrastructure II |  | 828,253 |  | 5,079 |  | 916 |  | 204,896 |  | 1,864 |
| EQT III |  | 850,732 |  | 5,217 |  | 941 |  | 210,457 |  | 1,914 |
| EQT IV |  | 1,312,782 |  | 8,050 |  | 1,453 |  | 324,761 |  | 2,954 |
| GIP Gas Natural Co-Invest |  | 200,925 |  | 1,232 |  | 222 |  | 49,705 |  | 452 |
| Global Infrastructure I |  | 58,830 |  | 361 |  | 65 |  | 14,553 |  | 132 |
| Global Infrastructure II |  | 729,966 |  | 4,476 |  | 808 |  | 180,582 |  | 1,642 |
| Global Infrastructure III |  | 1,939,338 |  | 11,893 |  | 2,146 |  | 479,760 |  | 4,363 |
| Global Infrastructure IV |  | 1,939,338 |  | 11,893 |  | 2,146 |  | 479,760 |  | 4,363 |
| GIP Stetson Co-Invest |  | 198,906 |  | 1,220 |  | 220 |  | 49,206 |  | 448 |
| Global Energy \& Power Infrastructure I |  | 234,782 |  | 1,440 |  | 260 |  | 58,081 |  | 528 |
| Global Energy \& Power Infrastructure II |  | 807,032 |  | 4,949 |  | 893 |  | 199,646 |  | 1,816 |
| IFM Global Infrastructure |  | 982,171 |  | 6,023 |  | 1,087 |  | 242,973 |  | 2,210 |
| KKR Infrastructure |  | 337,699 |  | 2,071 |  | 374 |  | 83,541 |  | 760 |
| KKR Infrastructure II |  | 1,423,073 |  | 8,727 |  | 1,575 |  | 352,045 |  | 3,202 |
| KKR Infrastructure III |  | 1,212,487 |  | 7,435 |  | 1,342 |  | 299,949 |  | 2,728 |
| Meridiam Europe I |  | 39,179 |  | 240 |  | 43 |  | 9,692 |  | 88 |
| Meridiam Europe II |  | 145,088 |  | 890 |  | 161 |  | 35,892 |  | 326 |
| Meridiam Europe III |  | 901,748 |  | 5,530 |  | 998 |  | 223,078 |  | 2,029 |
| Meridiam NA II |  | 429,058 |  | 2,631 |  | 475 |  | 106,142 |  | 965 |
| Meridiam NA II Secondary |  | 114,415 |  | 702 |  | 127 |  | 28,305 |  | 257 |
| Meridiam NA III |  | 477,376 |  | 2,927 |  | 528 |  | 118,095 |  | 1,074 |
| Stonepeak II |  | 1,149,619 |  | 7,050 |  | 1,272 |  | 284,397 |  | 2,587 |
| Stonepeak III | 1,730,025 |  | 10,609 |  | 1,914 |  | 427,980 |  | 3,892 |  |
| Natural Resources |  |  |  |  |  |  |  |  |  |  |
| Agriculture Cultural Management II |  | 487,322 |  | 2,988 |  | 539 |  | 120,555 |  | 1,096 |
| ACM Permanent Crops |  | 435,111 |  | 2,668 |  | 481 |  | 107,639 |  | 979 |

Additional Supplementary Information<br>Schedule of Investment Expenses<br>For the Year Ended June 30, 2020

| Group Life Insurance Plan Active | Group Life Insurance Plan Retired SET | Group Life Insurance Plan Retired PLD | Defined Contribution Plans | MainePERS OPEB Trust | Retiree Health Insurance Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 912,951 |
| - | - | - | - | - | - | 568,894 |
| - | - | - | - | - | - | 2,182,832 |
| - | - | - | - | - | - | 827,794 |
| - | - | - | - | - | - | 2,243,443 |
| - | - | - | - | - | - | 1,179,355 |
| - | - | - | - | - | - | 139,555 |
| - | - | - | - | - | - | 481,192 |
| - | - | - | - | - | - | 1,511,757 |
| - | - | - | - | - | - | 1,049,573 |
| - | - | - | - | - | - | 1,261,735 |
| - | - | - | - | - | - | 3,904,118 |
| - | - | - | - | - | - | 700,964 |
| - | - | - | - | - | - | 186,815 |
| - | - | - | - | - | - | 1,041,008 |
| - | - | - | - | - | - | 1,069,261 |
| - | - | - | - | - | - | 1,650,000 |
| - | - | - | - | - | - | 252,536 |
| - | - | - | - | - | - | 73,941 |
| - | - | - | - | - | - | 917,474 |
| - | - | - | - | - | - | 2,437,500 |
| - | - | - | - | - | - | 2,437,500 |
| - | - | - | - | - | - | 250,000 |
| - | - | - | - | - | - | 295,091 |
| - | - | - | - | - | - | 1,014,336 |
| - | - | - | - | - | - | 1,234,464 |
| - | - | - | - | - | - | 424,445 |
| - | - | - | - | - | - | 1,788,622 |
| - | - | - | - | - | - | 1,523,941 |
| - | - | - | - | - | - | 49,242 |
| - | - | - | - | - | - | 182,357 |
| - | - | - | - | - | - | 1,133,383 |
| - | - | - | - | - | - | 539,271 |
| - | - | - | - | - | - | 143,806 |
| - | - | - | - | - | - | 600,000 |
| - | - | - | - | - | - | 1,444,925 |
| - | - | - | - | - | - | 2,174,420 |
|  |  |  |  |  |  |  |
| - | - | - | - | - | - | 612,500 |
| - | - | - | - | - | - | 546,878 |

## Additional Supplementary Information Schedule of Investment Expenses (Continued) <br> For the Year Ended June 30, 2020

| Natural Resources (concluded) | State <br> Employee and Teacher Plan |  | Judicial Plan |  | Legislative Plan |  | PLD <br> Consolidated Plan |  | $\begin{gathered} \text { PLD } \\ \text { Agent Plan } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Amerra III | \$ | 361,819 | \$ | 2,219 | \$ | 400 | \$ | 89,508 | \$ | 814 |
| Denham Mining |  | 501,243 |  | 3,074 |  | 555 |  | 124,000 |  | 1,128 |
| Homestead Farmland II |  | 375,087 |  | 2,300 |  | 415 |  | 92,790 |  | 844 |
| Homestead Farmland III |  | 354,475 |  | 2,174 |  | 392 |  | 87,691 |  | 798 |
| IFC Canally |  | 61,617 |  | 378 |  | 68 |  | 15,243 |  | 139 |
| IFC US Farming |  | 1,193,117 |  | 7,317 |  | 1,320 |  | 295,157 |  | 2,684 |
| Orion II |  | 656,392 |  | 4,025 |  | 726 |  | 162,380 |  | 1,477 |
| Silver Creek Aggregates |  | 68,653 |  | 421 |  | 76 |  | 16,984 |  | 154 |
| Taurus Annex |  | 125,392 |  | 769 |  | 139 |  | 31,020 |  | 282 |
| Taurus Mining |  | 282,803 |  | 1,734 |  | 313 |  | 69,961 |  | 636 |
| Taurus Mining II |  | 897,539 |  | 5,504 |  | 993 |  | 222,036 |  | 2,019 |
| Twin Creeks |  | 268,435 |  | 1,646 |  | 297 |  | 66,406 |  | 604 |
| Domestic Equity |  |  |  |  |  |  |  |  |  |  |
| Blackrock Extended Equity |  | - |  | - |  | - |  | - |  | - |
| International Equity |  |  |  |  |  |  |  |  |  |  |
| Blackrock ACWI EX_US |  | 469,500 |  | 2,879 |  | 520 |  | 116,146 |  | 1,056 |
| Fixed Income |  |  |  |  |  |  |  |  |  |  |
| Blackrock Custom Fixed Income |  | 172,952 |  | 1,061 |  | 191 |  | 42,785 |  | 389 |
| Blackrock US Debt Index Fund B |  | - |  | - |  | - |  | - |  | - |
| Private Equity |  |  |  |  |  |  |  |  |  |  |
| ABRY ASF II |  | 45,277 |  | 278 |  | 50 |  | 11,201 |  | 102 |
| ABRY ASF III |  | 477,376 |  | 2,927 |  | 528 |  | 118,095 |  | 1,074 |
| ABRY Heritage |  | 154,981 |  | 950 |  | 171 |  | 38,340 |  | 349 |
| ABRY SE IV |  | 47,078 |  | 289 |  | 52 |  | 11,647 |  | 106 |
| ABRY SE V |  | 143,809 |  | 882 |  | 159 |  | 35,576 |  | 324 |
| ABRY Partners VII |  | 26,527 |  | 163 |  | 29 |  | 6,563 |  | 60 |
| ABRY Partners VIII |  | 113,453 |  | 696 |  | 126 |  | 28,066 |  | 255 |
| Advent GPE IX |  | 645,899 |  | 3,961 |  | 715 |  | 159,785 |  | 1,453 |
| Advent GPE VII |  | 181,437 |  | 1,113 |  | 201 |  | 44,885 |  | 408 |
| Advent GPE VIII |  | 506,796 |  | 3,108 |  | 561 |  | 125,373 |  | 1,140 |
| Advent LAPEF VI |  | 318,250 |  | 1,952 |  | 352 |  | 78,730 |  | 716 |
| Affinity Asia Pacific IV |  | 419,986 |  | 2,575 |  | 465 |  | 103,898 |  | 945 |
| Affinity Asia Pacific V |  | 556,939 |  | 3,415 |  | 616 |  | 137,777 |  | 1,253 |
| Berkshire IX |  | 795,626 |  | 4,879 |  | 880 |  | 196,825 |  | 1,790 |
| Berkshire VIII |  | 128,046 |  | 785 |  | 142 |  | 31,676 |  | 288 |
| Blackstone Capital Partners VI |  | 87,908 |  | 539 |  | 97 |  | 21,747 |  | 198 |
| Blackstone Capital Partners VII |  | 605,292 |  | 3,712 |  | 670 |  | 149,739 |  | 1,362 |
| Carlyle Asia Partners III |  | 13,733 |  | 84 |  | 15 |  | 3,397 |  | 31 |
| Carlyle Asia Partners IV |  | 410,667 |  | 2,518 |  | 454 |  | 101,592 |  | 924 |

## Additional Supplementary Information <br> Schedule of Investment Expenses (Continued) <br> For the Year Ended June 30, 2020

| Group Life Insurance Plan Active | Group Life Insurance Plan Retired SET | Group Life Insurance Plan Retired PLD | Defined Contribution Plans | MainePERS OPEB Trust | Retiree Health Insurance Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ - | \$ - | \$ - | \$ - | \$ - | \$ | \$ 454,760 |
| - | - | - | - | - | - | 630,000 |
| - | - | - | - | - | - | 471,436 |
| - | - | - | - | - | - | 445,530 |
| - | - | - | - | - | - | 77,445 |
| - | - | - | - | - | - | 1,499,595 |
| - | - | - | - | - | - | 825,000 |
| - | - | - | - | - | - | 86,288 |
| - | - | - | - | - | - | 157,602 |
| - | - | - | - | - | - | 355,447 |
| - | - | - | - | - | - | 1,128,091 |
| - | - | - | - | - | - | 337,388 |
| 653 | 4,729 | 747 | - | 640 | 12,860 | 19,629 |
| 1,070 | 7,756 | 1,226 | - | 1,053 | 21,327 | 622,533 |
| - | - | - | - | - | - | 217,378 |
| 2,088 | 15,137 | 2,392 | - | 1,997 | 41,356 | 62,970 |
| - | - | - | - | - | - | 56,908 |
| - | - | - | - | - | - | 600,000 |
| - | - | - | - | - | - | 194,791 |
| - | - | - | - | - | - | 59,172 |
| - | - | - | - | - | - | 180,750 |
| - | - | - | - | - | - | 33,342 |
| - | - | - | - | - | - | 142,596 |
| - | - | - | - | - | - | 811,813 |
| - | - | - | - | - | - | 228,044 |
| - | - | - | - | - | - | 636,978 |
| - | - | - | - | - | - | 400,000 |
| - | - | - | - | - | - | 527,869 |
| - | - | - | - | - | - | 700,000 |
| - | - | - | - | - | - | 1,000,000 |
| - | - | - | - | - | - | 160,937 |
| - | - | - | - | - | - | 110,489 |
| - | - | - | - | - | - | 760,775 |
| - | - | - | - | - | - | 17,260 |
| - | - | - | - | - | - | 516,155 |

## Additional Supplementary Information Schedule of Investment Expenses (Continued) For the Year Ended June 30, 2020



## Additional Supplementary Information <br> Schedule of Investment Expenses (Continued) <br> For the Year Ended June 30, 2020

| Group Life Insurance Plan Active | Group Life Insurance Plan Retired SET | Group Life Insurance Plan Retired PLD | Defined Contribution Plans | MainePERS OPEB Trust | Retiree Health Insurance Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 652,500 |
| - | - | - | - | - | - | 451,233 |
| - | - | - | - | - | - | 995,213 |
| - | - | - | - | - | - | 546,146 |
| - | - | - | - | - | - | 699,754 |
| - | - | - | - | - | - | 306,118 |
| - | - | - | - | - | - | 147,391 |
| - | - | - | - | - | - | 430,512 |
| - | - | - | - | - | - | 600,000 |
| - | - | - | - | - | - | 237,266 |
| - | - | - | - | - | - | 330,000 |
| - | - | - | - | - | - | 127,389 |
| - | - | - | - | - | - | 76,087 |
| - | - | - | - | - | - | 167,772 |
| - | - | - | - | - | - | 200,148 |
| - | - | - | - | - | - | 525,000 |
| - | - | - | - | - | - | 778,556 |
| - | - | - | - | - | - | 407,757 |
| - | - | - | - | - | - | 54,288 |
| - | - | - | - | - | - | 307,199 |
| - | - | - | - | - | - | 286,135 |
| - | - | - | - | - | - | 1,500,000 |
| - | - | - | - | - | - | 269,193 |
| - | - | - | - | - | - | 700,000 |
| - | - | - | - | - | - | 194,760 |
| - | - | - | - | - | - | 542,385 |
| - | - | - | - | - | - | 800,000 |
| - | - | - | - | - | - | 752,059 |
| - | - | - | - | - | - | 424,304 |
| - | - | - | - | - | - | 229,636 |
| - | - | - | - | - | - | 153,491 |
| - | - | - | - | - | - | 361,939 |
| - | - | - | - | - | - | 710,140 |
| - | - | - | - | - | - | 801,465 |
| - | - | - | - | - | - | 302,344 |
| - | - | - | - | - | - | 577,243 |
| - | - | - | - | - | - | 713,981 |
| - | - | - | - | - | - | 31,194 |
| - | - | - | - | - | - | 275,000 |
| - | - | - | - | - | - | 32,129 |
| - | - | - | - | - | - | 582,668 |
| - | - | - | - | - | - | 726,238 |
| - | - | - | - | - | - | 1,200,000 |

## Additional Supplementary Information Schedule of Investment Expenses (Continued) For the Year Ended June 30, 2020

|  |  | State ployee and acher Plan |  | dicial Plan |  | lative an |  | PLD <br> solidated <br> Plan |  | $\begin{aligned} & \text { LD } \\ & \text { t Plan } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private Equity (concluded) |  |  |  |  |  |  |  |  |  |  |
| Paine \& Partners V | \$ | 618,188 | \$ | 3,791 | \$ | 684 | \$ | 152,929 | \$ | 1,391 |
| Rhone V |  | 882,142 |  | 5,410 |  | 976 |  | 218,227 |  | 1,985 |
| Riverside Capital Appreciation VI |  | 528,763 |  | 3,243 |  | 585 |  | 130,807 |  | 1,190 |
| Riverside Micro-Cap III |  | 533,800 |  | 3,273 |  | 591 |  | 132,053 |  | 1,201 |
| Riverside Micro-Cap IV |  | 729,315 |  | 4,472 |  | 807 |  | 180,421 |  | 1,641 |
| Riverside Micro-Cap V |  | 636,501 |  | 3,903 |  | 704 |  | 157,460 |  | 1,432 |
| Shoreview Capital III |  | 385,083 |  | 2,361 |  | 427 |  | 95,263 |  | 866 |
| Shoreview Capital IV |  | 148,336 |  | 910 |  | 164 |  | 36,696 |  | 334 |
| Sovereign Capital |  | 899,217 |  | 5,514 |  | 995 |  | 222,452 |  | 2,023 |
| Summit Credit II |  | 451,601 |  | 2,769 |  | 500 |  | 111,719 |  | 1,016 |
| Summit GE IX |  | 705,699 |  | 4,328 |  | 781 |  | 174,579 |  | 1,588 |
| Summit GE V111 |  | 230,787 |  | 1,415 |  | 256 |  | 57,093 |  | 519 |
| Summit GE X |  | 328,196 |  | 2,013 |  | 363 |  | 81,190 |  | 738 |
| Summit VC III |  | 121,247 |  | 744 |  | 134 |  | 29,995 |  | 273 |
| Summit VC IV |  | 509,200 |  | 3,123 |  | 563 |  | 125,968 |  | 1,146 |
| TCV IX |  | 954,751 |  | 5,855 |  | 1,056 |  | 236,190 |  | 2,148 |
| TCV VIII |  | 835,407 |  | 5,123 |  | 924 |  | 206,666 |  | 1,880 |
| TCV X |  | 388,101 |  | 2,380 |  | 430 |  | 96,010 |  | 873 |
| Technology Impact Fund I |  | 436,634 |  | 2,678 |  | 483 |  | 108,016 |  | 982 |
| Technology Impact Growth Fund I |  | 278,468 |  | 1,708 |  | 308 |  | 68,889 |  | 627 |
| Thoma Bravo Special Opp II |  | 101,808 |  | 624 |  | 113 |  | 25,186 |  | 229 |
| Thoma Bravo XI |  | 593,508 |  | 3,640 |  | 657 |  | 146,824 |  | 1,335 |
| Thoma Bravo XII |  | 648,149 |  | 3,975 |  | 717 |  | 160,342 |  | 1,458 |
| Thoma Bravo XIII |  | 537,047 |  | 3,293 |  | 595 |  | 132,857 |  | 1,208 |
| Tillridge II |  | 796,723 |  | 4,886 |  | 882 |  | 197,096 |  | 1,793 |
| Water Street Healthcare III |  | 215,428 |  | 1,321 |  | 238 |  | 53,293 |  | 485 |
| Water Street Healthcare IV |  | 525,113 |  | 3,220 |  | 582 |  | 129,904 |  | 1,181 |
| Wayzata OPP III |  | 79,800 |  | 489 |  | 88 |  | 19,741 |  | 180 |
| Wynnchurch IV |  | 636,501 |  | 3,903 |  | 704 |  | 157,460 |  | 1,432 |
| Wynnchurch V |  | 138,238 |  | 848 |  | 153 |  | 34,198 |  | 311 |
| Real Estate |  |  |  |  |  |  |  |  |  |  |
| Blackrock US RE Securities Fund B |  | - |  | - |  | - |  | - |  | - |
| Barings Private Equity Asia II |  | 696,172 |  | 4,269 |  | 771 |  | 172,222 |  | 1,566 |
| Blackstone Property Partners |  | 2,452,047 |  | 15,037 |  | 2,713 |  | 606,596 |  | 5,517 |
| BREP IX |  | 354,053 |  | 2,171 |  | 392 |  | 87,587 |  | 797 |
| BREP VII |  | 303,746 |  | 1,863 |  | 336 |  | 75,142 |  | 683 |
| BREP VIII |  | 424,694 |  | 2,604 |  | 470 |  | 105,062 |  | 956 |
| EQT Real Estate |  | 1,004,200 |  | 6,158 |  | 1,111 |  | 248,423 |  | 2,259 |
| H/2 Credit Partners |  | 107,412 |  | 659 |  | 119 |  | 26,572 |  | 242 |
| Harrison Street Real Estate |  | 698,290 |  | 4,282 |  | 773 |  | 172,745 |  | 1,571 |
| High Street V |  | 235,375 |  | 1,443 |  | 260 |  | 58,228 |  | 530 |
| High Street VI |  | 239,681 |  | 1,470 |  | 266 |  | 59,293 |  | 539 |

## Additional Supplementary Information Schedule of Investment Expenses (Continued) <br> For the Year Ended June 30, 2020

| Group Life Insurance Plan Active | Group Life Insurance Plan Retired SET | Group Life Insurance Plan Retired PLD | Defined Contribution Plans | MainePERS OPEB Trust | Retiree Health Insurance Plan | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ - | \$ - | \$ - | \$ - | \$ | \$ - | \$ 776,983 |
| - | - | - | - | - | - | 1,108,740 |
| - | - | - | - | - | - | 664,588 |
| - | - | - | - | - | - | 670,918 |
| - | - | - | - | - | - | 916,656 |
| - | - | - | - | - | - | 800,000 |
| - | - | - | - | - | - | 484,000 |
| - | - | - | - | - | - | 186,440 |
| - | - | - | - | - | - | 1,130,201 |
| - | - | - | - | - | - | 567,605 |
| - | - | - | - | - | - | 886,975 |
| - | - | - | - | - | - | 290,070 |
| - | - | - | - | - | - | 412,500 |
| - | - | - | - | - | - | 152,393 |
| - | - | - | - | - | - | 640,000 |
| - | - | - | - | - | - | 1,200,000 |
| - | - | - | - | - | - | 1,050,000 |
| - | - | - | - | - | - | 487,794 |
| - | - | - | - | - | - | 548,793 |
| - | - | - | - | - | - | 350,000 |
| - | - | - | - | - | - | 127,960 |
| - | - | - | - | - | - | 745,964 |
| - | - | - | - | - | - | 814,641 |
| - | - | - | - | - | - | 675,000 |
| - | - | - | - | - | - | 1,001,380 |
| - | - | - | - | - | - | 270,765 |
| - | - | - | - | - | - | 660,000 |
| - | - | - | - | - | - | 100,298 |
| - | - | - | - | - | - | 800,000 |
| - | - | - | - | - | - | 173,748 |
|  |  |  |  |  |  |  |
| 631 | 4,574 | 723 | - | 665 | 12,731 | 19,324 |
| - | - | - | - | - | - | 875,000 |
| - | - | - | - | - | - | 3,081,910 |
| - | - | - | - | - | - | 445,000 |
| - | - | - | - | - | - | 381,770 |
| - | - | - | - | - | - | 533,786 |
| - | - | - | - | - | - | 1,262,151 |
| - | - | - | - | - | - | 135,004 |
| - | - | - | - | - | - | 877,661 |
| - | - | - | - | - | - | 295,836 |
| - | - | - | - | - | - | 301,249 |

## Additional Supplementary Information Schedule of Investment Expenses (Concluded) For the Year Ended June 30, 2020

|  | State <br> Employee and Teacher Plan | Judicial Plan |  | Legislative Plan |  | PLD <br> Consolidated Plan |  | PLD Agent Plan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real Estate (concluded) |  |  |  |  |  |  |  |  |  |
| Invesco Real Estate Asia IV | \$ 268,135 | \$ | 1,644 | \$ | 297 | \$ | 66,332 | \$ | 603 |
| Invesco US Income | 1,274,666 |  | 7,817 |  | 1,410 |  | 315,332 |  | 2,868 |
| IronPoint Data Centers | 358,031 |  | 2,196 |  | 396 |  | 88,571 |  | 806 |
| KKR REPA I | 142,396 |  | 873 |  | 158 |  | 35,227 |  | 320 |
| KKR REPA II | 566,147 |  | 3,472 |  | 626 |  | 140,055 |  | 1,274 |
| KKR REPE | 501,287 |  | 3,074 |  | 555 |  | 124,010 |  | 1,128 |
| Northbridge | 310,620 |  | 1,905 |  | 344 |  | 76,843 |  | 699 |
| PMIT | 195,227 |  | 1,197 |  | 216 |  | 48,296 |  | 439 |
| Prudential Senior Housing V | 324,229 |  | 1,988 |  | 359 |  | 80,209 |  | 729 |
| Rubenstein III | 301,072 |  | 1,846 |  | 334 |  | 74,480 |  | 677 |
| Smart Markets | 938,363 |  | 5,754 |  | 1,038 |  | 232,137 |  | 2,111 |
| Walton Street Co-Invest | 50,147 |  | 308 |  | 55 |  | 12,406 |  | 113 |
| Walton Street Real Estate VII | 329,946 |  | 2,023 |  | 365 |  | 81,624 |  | 742 |
| Walton Street Real Estate VIII | 436,408 |  | 2,676 |  | 483 |  | 107,960 |  | 982 |
| Westbrook IX | 48,383 |  | 296 |  | 54 |  | 11,969 |  | 109 |
| Westbrook X | 351,029 |  | 2,153 |  | 388 |  | 86,839 |  | 790 |
| Risk Diversifiers |  |  |  |  |  |  |  |  |  |
| AQR Liquid Enhanced Alternative Premia | a 997,571 |  | 6,117 |  | 1,104 |  | 246,783 |  | 2,245 |
| Bridgewater Pure Alpha | 3,214,802 |  | 19,714 |  | 3,557 |  | 795,289 |  | 7,234 |
| Bridgewater Pure Alpha Markets | 3,141,291 |  | 19,263 |  | 3,476 |  | 777,104 |  | 7,068 |
| FORT Global Contrarian Fund | 1,543,296 |  | 9,464 |  | 1,708 |  | 381,786 |  | 3,472 |
| Windham Capital | 1,177,267 |  | 7,219 |  | 1,303 |  | 291,236 |  | 2,649 |
| Windham Risk Premia | 1,024,035 |  | 6,280 |  | 1,133 |  | 253,329 |  | 2,304 |
| Other Investment Expenses | - |  | - |  | - |  | - |  | - |
| In-house investment management | 4,250,949 |  | 26,068 |  | 4,704 |  | 1,051,616 |  | 9,564 |
| Total investment expenses | $\underline{\text { \$103,290,753 }}$ | \$ | 633,412 | \$ | 114,296 | \$ | 25,552,439 | \$ | 232,397 |

## Additional Supplementary Information <br> Schedule of Investment Expenses (Concluded)

For the Year Ended June 30, 2020

| Group Life Insurance Plan Active |  | Group Life Insurance Plan Retired SET |  | Group Life Insurance Plan Retired PLD |  | Defined Contribution Plans |  | MainePERS OPEB Trust |  | Retiree Health Insurance Plan |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 337,011 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,602,093 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 450,000 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 178,974 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 711,574 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 630,054 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 390,411 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 245,375 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 407,514 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 378,409 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,179,403 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 63,029 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 414,700 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 548,509 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 60,811 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 441,199 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,253,820 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 4,040,596 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 3,948,202 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,939,726 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,479,674 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 1,287,081 |
|  | - |  | - |  | - |  | 52,496 |  | - |  | - |  | 52,496 |
|  | 5,049 |  | 36,591 |  | 5,782 |  | - |  | 4,780 |  | - |  | 5,395,105 |
| \$ | 9,491 | \$ | 68,787 | \$ | 10,870 | \$ | 52,496 | \$ | 9,135 | \$ | 88,274 | \$ | , ,062,350 |

## Additional Supplementary Information <br> Schedule of Administrative Expenses <br> For the Year Ended June 30, 2020

|  | State <br> Employee and Teacher Plan |  | Judicial Plan |  | Legislative Plan |  | PLD <br> Consolidated Plan |  | PLD <br> Agent Plan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personal services | \$ | 5,699,272 | \$ | 34,870 | \$ | 6,259 | \$ | 1,405,599 | \$ | 10,436 |
| Professional fees |  | 1,690,155 |  | 10,341 |  | 1,856 |  | 416,839 |  | 3,095 |
| Computer services |  | 1,337,767 |  | 8,185 |  | 1,469 |  | 329,931 |  | 2,450 |
| Telephone, data, and internet services |  | 72,161 |  | 442 |  | 79 |  | 17,797 |  | 132 |
| Printing and postage |  | 228,069 |  | 1,395 |  | 250 |  | 56,248 |  | 418 |
| Office rent and building operations |  | 271,658 |  | 1,662 |  | 298 |  | 66,998 |  | 497 |
| Depreciation |  | 1,367,175 |  | 8,365 |  | 1,501 |  | 337,183 |  | 2,503 |
| Miscellaneous operating expenses |  | 677,671 |  | 4,146 |  | 746 |  | 167,133 |  | 1,241 |
| Total administrative expenses |  | 11,343,928 | \$ | 69,406 | \$ | 12,458 | \$ | 2,797,728 | \$ | 20,772 |

# Additional Supplementary Information <br> Schedule of Professional Fees <br> For the Year Ended June 30, 2020 

| Professional fee | 63,160 |
| :--- | ---: |
| Audit | 372,422 |
| Actuarial services | 955,113 |
| IT service | 202,775 |
| Legal services | 422,716 |
| Medical consulting | 333,261 |
| Other services | $\$ 2,349,447$ |

## Additional Supplementary Information <br> Schedule of Administrative Expenses <br> For the Year Ended June 30, 2020

| Group Life Insurance Plan Active |  | Group Life Insurance Plan Retired SET |  | Group Life Insurance Plan Retired PLD |  | Defined Contribution Plans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 69,362 | \$ | 511,919 | \$ | 82,724 | \$ | 101,989 |
|  | 20,570 |  | 151,813 |  | 24,533 |  | 30,245 |
|  | 16,281 |  | 120,161 |  | 19,417 |  | 23,939 |
|  | 878 |  | 6,482 |  | 1,047 |  | 1,291 |
|  | 2,776 |  | 20,486 |  | 3,310 |  | 4,081 |
|  | 3,306 |  | 24,401 |  | 3,943 |  | 4,861 |
|  | 16,639 |  | 122,802 |  | 19,844 |  | 24,466 |
|  | 8,247 |  | 60,868 |  | 9,836 |  | 12,128 |
| \$ | 138,059 | \$ | 1,018,932 | \$ | 164,654 | \$ | 203,000 |


| Retiree Health Insurance Plan |  | Total |  |
| :---: | :---: | :---: | :---: |
| \$ | 3,000 | \$ | 7,925,430 |
|  | - |  | 2,349,447 |
|  | - |  | 1,859,600 |
|  | - |  | 100,309 |
|  | - |  | 317,033 |
|  | - |  | 377,624 |
|  | - |  | 1,900,478 |
|  | - |  | 942,016 |
| \$ | 3,000 |  | 5,771,937 |

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## Investment Section



Portland Head Lighthouse, Cape Elizabeth

## CAMBRIDGE ASSOCIATES

December 8, 2020

Board of Trustees (the "Board")
Maine Public Employees Retirement System
139 Capitol St
Augusta, ME 04332

RE: Maine Public Employees Retirement System ("MainePERS" or the "System")

To the Board:

Cambridge Associates, LLC has been retained by the Board of Trustees to advise on MainePERS' investment policy, perform quarterly reviews of performance and provide general investment advice.

It is our opinion that MainePERS' assets are managed under detailed and well-articulated policies, appropriate to the circumstances of the System. Per the MainePERS' Investment Policy Statement, the portfolio's investment objectives attempt to 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). It is our understanding that all performance measurements and comparisons have been made using standard performance evaluation methods consistent with industry standards. It is also our opinion that the Board, Executive Director, and staff have taken appropriate measures for overseeing the management of the System's assets and ensuring that investments have conformed with the Systems' investment policy statement. Furthermore, based upon our interactions with the Board, we believe the Board is providing prudent oversight of MainePERS' investments.

Sincerely,


[^1]
## Investment Process Overview

MainePERS is responsible for the investment of trust fund assets consistent with Maine law and the constitution, which requires that assets be invested for the sole purpose of future benefit payments. MainePERS Trustees are responsible for setting investment policy which is then implemented by the MainePERS Investment Team. External consultants play an important role in both the formulation and implementation of investment policy.

The MainePERS investment policy specifies an asset allocation that is consistent with a targeted portfolio risk level. Potential investments are judged on their ability to provide returns consistent with the risks taken. Overall risk is mitigated using a due diligence process which considers a comprehensive range of financial risks. Among the financial risks evaluated are those that fall into the categories of Environmental, Social, and Governance (ESG) because investments that don't consider these increasingly important factors are unlikely to achieve expected returns.

## Investment Activity

This section presents additional detail concerning investment activity and performance as reported by the MainePERS investment custodian. Certain assets, such as cash in the System's operating bank accounts are not considered part of the investment portfolio and are not included in this section. The investment values presented in this section are based in part on lagged values due to the delayed reporting schedule for alternative asset classes, and therefore differ from the actual June 30 values as reported in the statement of fiduciary net position. In addition, where applicable, investment values are presented on a net basis with securities lending liabilities netted against securities lending collateral. Rates of return presented in this section are as reported by the investment custodian, are time-weighted and reflect the impact of lagged values due to delayed reporting.

The table below summarizes the defined benefit portfolio values and returns for the ten years ended June 30, 2020. Assets grew by $\$ 5.8$ billion from $\$ 8.9$ billion to $\$ 14.7$ billion over this period.

## Summary of Investment Activity



## Investment Portfolio

In this section, the investment strategy MainePERS has adopted to optimize the financial health of the plans is reviewed.
The System invests plan assets in a number of major asset classes. The table and pie charts on the following page display the actual and strategic target allocations at June 30, 2020.

The Board of Trustees is of the view that a prudent investment strategy for these plan assets involves accepting some level of investment risk. Because most of its benefit payments are not due for several decades into the future, the System has concluded it is prudent to invest a substantial portion of its assets in equities and other return-seeking investments. The Board allocates $60 \%$ to $80 \%$ of assets to equities and equity-like securities and is of the view that this provides a prudent compromise between risk and return.

## Strategic Asset Allocation

|  | Public <br> Equity | Private <br> Equity | Traditional <br> Credit | Alternative <br> Credit | Real <br> Estate | Infrastructure | Natural <br> Resources | US Government | Diskersifiers | Cash | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual Allocation | $32.6 \%$ | $15.8 \%$ | $6.3 \%$ | $4.7 \%$ | $9.5 \%$ | $10.4 \%$ | $5.4 \%$ | $6.7 \%$ | $8.2 \%$ | $0.4 \%$ | $100.0 \%$ |
| Target Allocation | $30.0 \%$ | $15.0 \%$ | $7.5 \%$ | $5.0 \%$ | $10.0 \%$ | $10.0 \%$ | $5.0 \%$ | $7.5 \%$ | $10.0 \%$ | $0.0 \%$ | $100.0 \%$ |




## Strategic Asset Allocation

Essentially all of the assets of the System's plans are in portfolios managed by professional investment management firms. These managers act as fiduciaries and invest the assets allocated to them in accordance with the System's investment policies and the individual agreements between MainePERS and the investment managers.

Approximately $45 \%$ of assets were invested in passively managed index funds at June 30, 2020. The Board of Trustees views index funds as a cost-effective way of investing in most of the world's capital markets. However, the System does make use of actively managed portfolios where it has identified managers who are thought to be able to add value over an index fund, net of all costs.

The System uses a single firm to manage all of its passive investments. This enables the System to obtain attractive fees and also provides other cost savings on certain kinds of transactions. Since passively managed portfolios have a low risk of significantly underperforming their benchmarks, the Board, the investment staff, and the System's investment consultant find this concentration of assets to be appropriate.

The System typically conducts a thorough review of its strategic asset allocation every three to four years with the assistance of the System's actuary and its general investment consultant. This was last performed in fiscal year 2017.

## Benefit Plans - Investment Portfolio

|  | at 06/30/2020 |  |  | at 06/30/2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | millions of dollars |  | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ | millions of dollars |  | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ |
| Public Equity |  |  |  |  |  |  |
| BlackRock |  | 4,777 | 32.4\% | \$ | 4,579 | 30.7\% |
| Black Bear Asset Management |  | 21 | 0.1\% |  | - | 0.0\% |
| Total Public Equity |  | 4,797 | 32.6\% | \$ | 4,579 | 30.7\% |
| Traditional Credit |  |  |  |  |  |  |
| BlackRock | \$ | 928 | 6.3\% | \$ | 1,219 | 8.2\% |
| Total Traditional Credit | \$ | 928 | 6.3\% | \$ | 1,219 | 8.2\% |
| US Government |  |  |  |  |  |  |
| BlackRock | \$ | 981 | 6.7\% | \$ | 1,161 | 7.8\% |
| Total US Government | \$ | 981 | 6.7\% | \$ | 1,161 | 7.8\% |
| Private Equity |  |  |  |  |  |  |
| ABRY Advanced Securities Fund II | \$ |  | 0.0\% | \$ | 2 | 0.0\% |
| ABRY Advanced Securities Fund III |  | 19 | 0.1\% |  | 20 | 0.1\% |
| ABRY Senior Equity IV |  | 3 | 0.0\% |  | 7 | 0.0\% |
| ABRY Senior Equity V |  | 6 | 0.0\% |  |  | 0.0\% |
| ABRY Heritage |  | 4 | 0.0\% |  | 4 | 0.0\% |
| ABRY VIII |  |  | 0.0\% |  | 4 | 0.0\% |
| ABRY VIII |  | 12 | 0.1\% |  | 18 | 0.1\% |
| Advent International GPE VII |  | 17 | 0.1\% |  | 25 | 0.2\% |
| Advent International GPE VIII |  | 49 | 0.3\% |  | 49 | 0.3\% |
| Advent International GPE IX |  | 11 | 0.1\% |  | - | 0.0\% |
| Advent LAPEF VI |  | 11 | 0.1\% |  | 13 | 0.1\% |
| Affinity Asia Pacific IV |  | 27 | 0.2\% |  | 48 | 0.3\% |
| Affinity Asia Pacific V |  | 6 | 0.0\% |  | 8 | 0.1\% |
| Berkshire VIII |  | 10 | 0.1\% |  | 10 | 0.1\% |
| Berkshire IX |  | 27 | 0.2\% |  | 22 | 0.1\% |
| Blackstone Cap VI |  | 15 | 0.1\% |  | 26 | 0.2\% |
| Blackstone Cap VII |  | 50 | 0.3\% |  | 34 | 0.2\% |
| Carlyle Asia Partners Fund III |  | 1 | 0.0\% |  | 2 | 0.0\% |
| Carlyle Asia Partners Fund IV |  | 42 | 0.3\% |  | 55 | 0.4\% |
| Carlyle Asia Partners Fund V |  | 6 | 0.0\% |  | 3 | 0.0\% |
| Centerbridge Capital Partners III |  | 24 | 0.2\% |  | 18 | 0.1\% |
| Charterhouse VIII |  | 0 | 0.0\% |  | 0 | 0.0\% |
| Charterhouse IX |  | 1 | 0.0\% |  | 1 | 0.0\% |
| Charterhouse X |  | 39 | 0.3\% |  | 32 | 0.2\% |
| CVC Capital Partner VI |  | 71 | 0.5\% |  | 69 | 0.5\% |
| CVC Capital Partner VII |  | 23 | 0.2\% |  | 9 | 0.1\% |

## Benefit Plans - Investment Portfolio

|  | at 06/30/2020 |  | at 06/30/2019 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | millions of dollars | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ | millions of dollars | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ |
| EnCap Energy Capital Fund VIII | 4 | 0.0\% | 10 | 0.1\% |
| EnCap Energy Capital Fund IX | 7 | 0.1\% | 20 | 0.1\% |
| EnCap Energy Capital Fund X | 23 | 0.2\% | 34 | 0.2\% |
| EnCap Energy Capital Fund XI | 7 | 0.0\% | 6 | 0.0\% |
| EnCap Flatrock Midstream III | 15 | 0.1\% | 16 | 0.1\% |
| EnCap Flatrock Midstream IV | 8 | 0.1\% | 7 | 0.0\% |
| General Catalyst Group X - Early Venture | 1 | 0.0\% | - | 0.0\% |
| General Catalyst Group X - Growth Venture | 8 | 0.1\% | - | 0.0\% |
| GTCR X | 1 | 0.0\% | 6 | 0.0\% |
| GTCR XI | 28 | 0.2\% | 29 | 0.2\% |
| GTCR XII | 22 | 0.2\% | 9 | 0.1\% |
| Hellman \& Friedman VII | 34 | 0.2\% | 40 | 0.3\% |
| Hellman \& Friedman VIII | 43 | 0.3\% | 47 | 0.3\% |
| Hellman \& Friedman IX | 8 | 0.1\% | - | 0.0\% |
| HIG Bayside Loan Opportunity II | 2 | 0.0\% | 5 | 0.0\% |
| HIG Bayside Loan Opportunity III (Europe) | 7 | 0.0\% | 15 | 0.1\% |
| HIG Brazil \& Latin America | 33 | 0.2\% | 24 | 0.2\% |
| HIG Buyouts II | 20 | 0.1\% | 29 | 0.2\% |
| HIG Buyouts III | 1 | 0.0\% | 0 | 0.0\% |
| HIG Capital Partners V | 15 | 0.1\% | 14 | 0.1\% |
| HIG Europe Capital II | 13 | 0.1\% | 12 | 0.1\% |
| HIG Middle Market LBO Fund II | 32 | 0.2\% | 35 | 0.2\% |
| HIG Middle Market LBO Fund II | 1 | 0.0\% | - | 0.0\% |
| Inflexion Buyout Fund IV | 27 | 0.2\% | 24 | 0.2\% |
| Inflexion Supplemental Fund IV | 11 | 0.1\% | 11 | 0.1\% |
| Inflexion Partnership Capital Fund I | 14 | 0.1\% | 14 | 0.1\% |
| Kelso Investment Associates VIII | 0 | 0.0\% | 1 | 0.0\% |
| Kelso Investment Associates IX | 40 | 0.3\% | 52 | 0.3\% |
| Kelso Investment Associates X | 7 | 0.0\% | 4 | 0.0\% |
| KKR Americas XII | 32 | 0.2\% | 25 | 0.2\% |
| KKR North America XI | 48 | 0.3\% | 59 | 0.4\% |
| KKR Special Situations | 19 | 0.1\% | 35 | 0.2\% |
| KKR Special Situations II | 37 | 0.2\% | 46 | 0.3\% |
| Oaktree Opportunity Fund VIII | 1 | 0.0\% | 1 | 0.0\% |
| ONCAPIV | 6 | 0.0\% | 6 | 0.0\% |
| Onex Partners III | 2 | 0.0\% | 4 | 0.0\% |
| Onex Partners IV | 32 | 0.2\% | 50 | 0.3\% |
| Onex Partners V | 2 | 0.0\% | 0 | 0.0\% |
| Paine Schwartz Partners IV | 52 | 0.4\% | 44 | 0.3\% |
| Paine Schwartz Partners V | 3 | 0.0\% | - | 0.0\% |
| Rhone Partners V | 41 | 0.3\% | 36 | 0.2\% |
| Riverside Capital Appreciation VI | 30 | 0.2\% | 53 | 0.4\% |
| Riverside Micro Cap Fund III | 66 | 0.4\% | 64 | 0.4\% |
| Riverside Micro Cap Fund IV | 65 | 0.4\% | 59 | 0.4\% |
| Riverside Micro Cap Fund IV-B | 7 | 0.0\% |  | 0.0\% |
| Riverside Micro Cap Fund V | 8 | 0.1\% | 2 | 0.0\% |
| Shoreview Capital III | 20 | 0.1\% | 20 | 0.1\% |
| Shoreview Capital IV | 2 | 0.0\% |  | 0.0\% |
| Sovereign Capital IV | 30 | 0.2\% | 21 | 0.1\% |
| Summit Credit Partners II | 41 | 0.3\% | 46 | 0.3\% |
| Summit GE VIII | 12 | 0.1\% | 17 | 0.1\% |
| Summit GE IX | 69 | 0.5\% | 47 | 0.3\% |
| Summit GE X | 5 | 0.0\% | - | 0.0\% |
| Summit VC III | 13 | 0.1\% | 12 | 0.1\% |
| Summit VC IV | 26 | 0.2\% | 15 | 0.1\% |
| Technology Impact Fund | 32 | 0.2\% | 10 | 0.1\% |
| Technology Impact Growth Fund | 20 | 0.1\% | 20 | 0.1\% |
| TCV VIII | 79 | 0.5\% | 67 | 0.4\% |
| TCVIX | 54 | 0.4\% | 45 | 0.3\% |
| TCV X | 16 | 0.1\% | 2 | 0.0\% |
| Thoma Bravo XI | 64 | 0.4\% | 77 | 0.5\% |
| Thoma Bravo XII | 78 | 0.5\% | 69 | 0.5\% |
| Thoma Bravo XIII | 34 | 0.2\% | 15 | 0.1\% |

## Benefit Plans - Investment Portfolio

|  | at 06/30/2020 |  | at 06/30/2019 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | millions of dollars | \% of assets | millions of dollars | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ |
| Thoma Bravo Special Opportunities Fund II | 17 | 0.1\% | 22 | 0.1\% |
| Tillridge Global Agribusiness II | 9 | 0.1\% | 7 | 0.0\% |
| Water Street Healthcare III | 21 | 0.1\% | 20 | 0.1\% |
| Water Street Healthcare IV | 11 | 0.1\% | , | 0.1\% |
| Wayzata Opportunities III | 5 | 0.0\% | 6 | 0.0\% |
| Wynnchurch Capital IV | 30 | 0.2\% | 28 | 0.2\% |
| Wynnchurch Capital V | 0 | 0.0\% | - | 0.0\% |
| Co-Investments | 277 | 1.9\% | 233 | 1.6\% |
| Total Private Equity | \$ 2,325 | 15.8\% | \$ 2,240 | 15.0\% |
| Real Estate |  |  |  |  |
| Angelo Gordon Net Lease IV | \$ 11 | 0.1\% | \$ | 0.0\% |
| Barings Real Estate Asia II | 7 | 0.0\% | 5 | 0.0\% |
| Blackstone Property Partners | 360 | 2.4\% | 360 | 2.4\% |
| Blackstone RE Partners VII | 32 | 0.2\% | 44 | 0.3\% |
| Blackstone RE Partners VIII | 48 | 0.3\% | 42 | 0.3\% |
| Blackstone RE Partners IX | 10 | 0.1\% | - | 0.0\% |
| EQT Real Estate II | 11 | 0.1\% | - | 0.0\% |
| H/2 Credit Partners | - | 0.0\% | 54 | 0.4\% |
| Harrison Street Core Property Fund | 118 | 0.8\% | 114 | 0.8\% |
| High Street IV | 0 | 0.0\% | 0 | 0.0\% |
| High Street V | 27 | 0.2\% | 26 | 0.2\% |
| High Street VI | 8 | 0.1\% | - | 0.0\% |
| Invesco US Income | 200 | 1.4\% | 192 | 1.3\% |
| Invesco Real Estate Asia IV | 3 | 0.0\% | - | 0.0\% |
| IPI Data Center Partners I | 19 | 0.1\% | 19 | 0.1\% |
| KKR REPA I | 5 | 0.0\% | 12 | 0.1\% |
| KKR REPA II | 28 | 0.2\% | 17 | 0.1\% |
| KKR REPE | 38 | 0.3\% | 35 | 0.2\% |
| Northbridge Strategic Fund II | 30 | 0.2\% | 30 | 0.2\% |
| Prima Advisors Mortgage Fund | 82 | 0.6\% | 90 | 0.6\% |
| Prudential Senior Housing V | 51 | 0.3\% | 46 | 0.3\% |
| Rubenstein Partners III | 24 | 0.2\% | 22 | 0.2\% |
| Smart Markets | 198 | 1.3\% | 192 | 1.3\% |
| Walton Street VII | 12 | 0.1\% | 20 | 0.1\% |
| Walton Street VIII | 32 | 0.2\% | 33 | 0.2\% |
| Westbrook IX | 4 | 0.0\% | 6 | 0.0\% |
| Westbrook X | 28 | 0.2\% | 28 | 0.2\% |
| Co-Investments | 17 | 0.1\% | 6 | 0.0\% |
| Total Real Estate | \$ 1,401 | 9.5\% | \$ 1,394 | 9.3\% |
| Infrastructure |  |  |  |  |
| Alinda Infrastructure Fund II | \$ 14 | 0.1\% | \$ 23 | 0.2\% |
| ArcLight Energy Partners V | 27 | 0.2\% | 28 | 0.2\% |
| ArcLight Energy Partners VI | 95 | 0.6\% | 136 | 0.9\% |
| Brookfield Infrastructure Fund II | 102 | 0.7\% | 107 | 0.7\% |
| Brookfield Infrastructure Fund III | 74 | 0.5\% | 73 | 0.5\% |
| Carlyle Global Infrastructure Opportunity Fund | 5 | 0.0\% | - | 0.0\% |
| Carlyle Infrastructure Fund | 1 | 0.0\% | 0 | 0.0\% |
| Carlyle Power Partners II | 33 | 0.2\% | 23 | 0.2\% |
| Cube Infrastructure Fund | 19 | 0.1\% | 19 | 0.1\% |
| Cube Infrastructure Fund II | 44 | 0.3\% | 28 | 0.2\% |
| EQT Infrastructure Fund III | 81 | 0.6\% | 73 | 0.5\% |
| EQT Infrastructure Fund IV | 56 | 0.4\% | 2 | 0.0\% |
| Global Energy \& Power Infrastructure Fund I | 20 | 0.1\% | 27 | 0.2\% |
| Global Energy \& Power Infrastructure Fund II | 62 | 0.4\% | 78 | 0.5\% |
| Global Infrastructure Partners Fund | 1 | 0.0\% | 11 | 0.1\% |
| Global Infrastructure Partners Fund II | 73 | 0.5\% | 88 | 0.6\% |
| Global Infrastructure Partners Fund III | 104 | 0.7\% | 121 | 0.8\% |
| IFM Global Infrastructure | - | 0.0\% | 158 | 1.1\% |
| KKR Infrastructure | 7 | 0.0\% | 36 | 0.2\% |
| KKR Infrastructure II | 107 | 0.7\% | 163 | 1.1\% |
| KKR Infrastructure III | 32 | 0.2\% | 11 | 0.1\% |
| Meridiam Infrastructure Europe I (Secondary) | 25 | 0.2\% | 26 | 0.2\% |

## Benefit Plans - Investment Portfolio

|  | at 06/30/2020 |  |  | at 06/30/2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | millions dollars | $\% \text { of }$ assets |  | illions dollars | $\begin{array}{r} \% \text { of } \\ \text { assets } \end{array}$ |
| Meridiam Infrastructure Europe I Class B (Secondary) |  | 25 | 0.2\% |  | 24 | 0.2\% |
| Meridiam Infrastructure Europe II (Secondary) |  | 30 | 0.2\% |  | 30 | 0.2\% |
| Meridiam Infrastructure Europe II Class B (Secondary) |  | 6 | 0.0\% |  | 5 | 0.0\% |
| Meridiam Infrastructure Europe III |  | 18 | 0.1\% |  | 15 | 0.1\% |
| Meridiam Infrastructure North America II |  | 82 | 0.6\% |  | 75 | 0.5\% |
| Meridiam Infrastructure North America II (CIP) |  | 7 | 0.0\% |  | 6 | 0.0\% |
| Meridiam Infrastructure North America II (Secondary) |  | 21 | 0.1\% |  | 19 | 0.1\% |
| Meridiam Infrastructure North America III |  | 1 | 0.0\% |  | 0 | 0.0\% |
| Stonepeak Infrastructure II |  | 118 | 0.8\% |  | 114 | 0.8\% |
| Stonepeak Infrastructure III |  | 108 | 0.7\% |  | 57 | 0.4\% |
| Co-Investments |  | 138 | 0.9\% |  | 189 | 1.3\% |
| Total Infrastructure | \$ | 1,535 | 10.4\% | \$ | 1,765 | 11.8\% |
| Alternative Credit |  |  |  |  |  |  |
| AG Direct Lending II | \$ | 26 | 0.2\% | \$ | - | 0.0\% |
| AG Direct Lending III |  | 99 | 0.7\% |  | 40 | 0.3\% |
| AG Direct Lending IV |  | 22 | 0.9\% |  | - | 0.3\% |
| ARES Capital Europe IV |  | 79 | 0.5\% |  | 40 | 0.3\% |
| Audax |  | 94 | 0.6\% |  | 102 | 0.7\% |
| GIP Spectrum Fund |  | 13 | 0.1\% |  | - | 0.0\% |
| Mesa West Core |  | 106 | 0.7\% |  | 101 | 0.7\% |
| Owl Rock |  | 98 | 0.7\% |  | 107 | 0.7\% |
| SCP Private Corporate Lending Fund |  | 6 | 0.0\% |  | - | 0.0\% |
| Silver Point Specialty Credit II |  | 7 | 0.0\% |  | - | 0.0\% |
| TCP Direct Lending VIII |  | 93 | 0.6\% |  | 90 | 0.6\% |
| Co-Investments |  | 53 | 0.4\% |  | 13 | 0.1\% |
| Total Alternative Credit | \$ | 697 | 4.7\% | \$ | 493 | 3.3\% |
| Natural Resources |  |  |  |  |  |  |
| ACM Fund II | \$ | 24 | 0.2\% | \$ | 18 | 0.1\% |
| ACM Permanent Crops |  | 44 | 0.3\% |  | 40 | 0.3\% |
| AMERRA Agri Fund III |  | 41 | 0.3\% |  | 37 | 0.2\% |
| Denham Mining Fund |  | 11 | 0.1\% |  | 10 | 0.1\% |
| Homestead Farmland II |  | 35 | 0.2\% |  | 29 | 0.2\% |
| Homestead Farmland III |  | 3 | 0.0\% |  | - | 0.0\% |
| Orion Mine Finance II |  | 38 | 0.3\% |  | 27 | 0.2\% |
| Silver Creek Aggregate Reserves Fund I |  | 12 | 0.1\% |  | - | 0.0\% |
| Taurus Mining Finance |  | 26 | 0.2\% |  | 28 | 0.2\% |
| Taurus Mining Finance Annex |  | 12 | 0.1\% |  | 10 | 0.1\% |
| Taurus Mining Finance II |  | 30 | 0.2\% |  | - | 0.0\% |
| Teays River |  | 282 | 1.9\% |  | 288 | 1.9\% |
| Twin Creeks Timber |  | 101 | 0.7\% |  | 96 | 0.6\% |
| US Farming Realty III |  | 97 | 0.0\% |  | 80 | 0.5\% |
| Co-Investments |  | 38 | 0.3\% |  | 44 | 0.3\% |
| Total Natural Resources | \$ | 793 | 5.4\% | \$ | 708 | 4.8\% |
| Risk Diversifiers |  |  |  |  |  |  |
| AQR Liquid Enhanced Alternative Premia | \$ | 199 | 1.4\% | \$ | 270 | 1.8\% |
| Aspect Core Diversified |  | 75 | 0.5\% |  |  |  |
| Bridgewater Pure Alpha |  | 185 | 1.3\% |  | 205 | 1.4\% |
| Bridgewater Pure Alpha Major Markets |  | 195 | 1.3\% |  | 198 | 1.3\% |
| FORT Global Contrarian Fund |  | 210 | 1.4\% |  | 109 | 0.7\% |
| Windham Capital |  | 172 | 1.2\% |  | 327 | 2.2\% |
| Windham Risk Premia |  | 168 | 1.1\% |  | 144 | 1.0\% |
| Total Risk Diversifiers |  | 1,205 | 8.2\% | \$ | 1,252 | 8.4\% |
| Cash |  |  |  |  |  |  |
| Liquidity Account |  | 58 | 0.4\% |  | 75 | 0.5\% |
| Total Cash | \$ | 58 | 0.4\% | \$ | 75 | 0.5\% |
| Total Assets |  | 4,720 | 100\% |  | 4,886 | 100\% |

## Largest Holdings

## Largest Holdings

at June 30, 2020

| Top 10 Direct Common Stock Holdings | Market Value | \% of Assets |  |
| :--- | :--- | ---: | :--- |
| Microsoft | $\$$ | $135,509,372$ | $0.92 \%$ |
| Apple | $\$$ | $132,667,910$ | $0.90 \%$ |
| Amazon | $\$$ | $104,015,790$ | $0.71 \%$ |
| Alphabet | $\$$ | $75,096,387$ |  |
| Facebook | $\$$ | $48,483,078$ | $0.51 \%$ |
| Johnson \& Johnson | $\$$ | $32,973,516$ | $0.33 \%$ |
| Berkshire Hathaway | $\$$ | $30,945,780$ | $0.22 \%$ |
| Visa | $\$$ | $29,000,805$ | $0.21 \%$ |
| Procter \& Gamble | $\$$ | $25,909,384$ | $0.20 \%$ |
| JP Morgan Chase | $\$$ | $25,333,274$ | $0.18 \%$ |

Some of the System's index fund investments are made through commingled funds, with MainePERS owning units in the funds, and having beneficial, rather than direct ownership of the securities. The largest holdings list reports direct holdings held outside of the commingled funds. For a complete list of the System's holdings, please visit the Investments section of the MainePERS website.

## Securities Lending

MainePERS earns additional income on its investment portfolio by lending its securities. The System pays its custodian for managing the securities lending program. Information regarding the results of the securities lending program for the current and prior fiscal years may be found in the Financial Section starting on page 19.

Several of the collective trusts through which the System holds interests in commingled funds also lend securities. Because these trusts are legal entities separate from MainePERS, their lending activities are not reflected in the securities lending results reported in the financial statements. The System shares in the income and the risks of the securities lending activity in the commingled funds, and the income is included in the total income and return figures in this Investment Section and the Financial Statements.

## Investment Performance

The table on the following pages displays the rates of return on the System's investment portfolio over the last ten fiscal years, and for the three, five, and ten-year periods ended June 30, 2020.

Over the ten-year period, the annualized rate of return on the System's assets was $8.3 \%$. MainePERS experienced ten years of positive returns and zero years of negative returns. These results are consistent with the long-term risk/return strategy that forms the basis of the System's policies. At 8.3\%, the ten-year return has outperformed relative to the $6.75 \%$ investment return assumption utilized in the actuarial process.

The total return figures in the table on pages 100 and 101 are calculated by the MainePERS custodian and are net of investment management fees and expenses (see Expenses, page 102). The table reports time weighted rates of return and all figures for periods greater than one year are annualized.

Investment Performance

## Performance: Actual Returns vs. Benchmark Returns <br> (All returns are time weighted)

|  | Total Fund |  |  | Domestic Equity |  |  | Foreign Equity |  |  | Fixed Income |  |  | Real Estate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended June 30 | Actual Return | Benchmark Return ${ }^{2}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{3}$ | Excess Return ${ }^{1}$ | Actual Return | $\begin{gathered} \text { Benchmark } \\ \text { Return } \end{gathered}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{5}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{6}$ | Excess Return ${ }^{1}$ |
| 2020 | 1.8\% | 0.0\% | 1.8\% | 5.9\% | 6.5\% | -0.6\% | -4.8\% | -4.8\% | 0.0\% | 5.8\% | 8.7\% | -3.0\% | 3.8\% | 5.3\% | -1.5\% |
| 2019 | 7.3\% | 7.5\% | -0.2\% | 9.0\% | 9.0\% | 0.0\% | 1.5\% | 1.3\% | 0.2\% | 9.9\% | 5.2\% | 4.7\% | 8.2\% | 6.8\% | 1.4\% |
| 2018 | 10.3\% | 8.5\% | 1.8\% | 14.8\% | 14.8\% | 0.1\% | 7.7\% | 7.3\% | 0.4\% | 1.0\% | -0.4\% | 1.4\% | 8.6\% | 7.1\% | 1.4\% |
| 2017 | 12.5\% | 11.4\% | 1.1\% | 18.5\% | 18.5\% | 0.0\% | 20.8\% | 20.5\% | 0.4\% | 0.6\% | -0.3\% | 0.9\% | 9.8\% | 5.6\% | 4.1\% |
| 2016 | 0.6\% | 1.0\% | -0.4\% | 1.8\% | 2.0\% | -0.3\% | -10.1\% | -9.8\% | -0.3\% | 3.6\% | 6.0\% | -2.4\% | 10.2\% | 9.4\% | 0.8\% |
| 2015 | 2.0\% | 1.8\% | 0.3\% | 7.2\% | 7.2\% | 0.0\% | -5.1\% | -4.9\% | -0.2\% | -0.4\% | 1.9\% | -2.3\% | 11.4\% | 8.8\% | 2.6\% |
| 2014 | 16.7\% | 15.6\% | 1.1\% | 24.8\% | 25.0\% | -0.2\% | 22.0\% | 22.3\% | -0.3\% | 3.8\% | 4.4\% | -0.6\% | 10.7\% | 5.5\% | 5.1\% |
| 2013 | 11.1\% | 10.4\% | 0.8\% | 21.5\% | 21.5\% | 0.1\% | 13.9\% | 14.1\% | -0.2\% | -1.9\% | -0.7\% | -1.3\% | 10.2\% | 7.8\% | 2.4\% |
| 2012 | 0.6\% | 1.4\% | -0.8\% | 3.8\% | 4.0\% | -0.2\% | -14.3\% | -14.2\% | -0.2\% | 8.8\% | 9.0\% | -0.1\% | 11.1\% | 13.4\% | -2.3\% |
| 2011 | 22.4\% | 21.5\% | 0.9\% | 32.6\% | 32.4\% | 0.2\% | 30.0\% | 30.3\% | -0.3\% | 6.2\% | 3.9\% | 2.3\% | 22.5\% | 16.0\% | 6.5\% |
| 3 years ending 2020 | 6.4\% | 5.2\% | 1.1\% | 9.9\% | 10.0\% | -0.2\% | 1.3\% | 1.1\% | 0.2\% | 5.5\% | 4.4\% | 1.0\% | 6.8\% | 6.4\% | 0.4\% |
| 5 years ending 2020 | 6.4\% | 5.6\% | 0.8\% | 9.8\% | 10.0\% | -0.2\% | 2.5\% | 2.4\% | 0.2\% | 4.1\% | 3.8\% | 0.3\% | 8.1\% | 6.8\% | 1.2\% |
| 10 years ending 2020 | 8.3\% | 7.7\% | 0.6\% | 13.6\% | 13.7\% | -0.1\% | 5.2\% | 5.3\% | 0.0\% | 3.7\% | 3.7\% | -0.1\% | 10.6\% | 8.5\% | 2.0\% |

## Investment Performance

## Performance: Actual Returns vs. Benchmark Returns <br> (All returns are time weighted)

| Infrastructure |  |  | Private Equity |  |  | Natural Resources |  |  | Alternative Credit |  |  | Risk Diversifiers |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual Return | Benchmark Return ${ }^{7}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{8}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{9}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{11}$ | Excess Return ${ }^{1}$ | Actual Return | Benchmark Return ${ }^{12}$ | Excess Return ${ }^{1}$ |
| -0.7\% | 1.4\% | -2.1\% | 0.8\% | -10.7\% | 11.5\% | 4.1\% | -27.5\% | 31.6\% |  |  |  |  |  |  |
| 16.9\% | 10.2\% | 6.7\% | 11.2\% | 12.0\% | -0.8\% | 4.1\% | 0.3\% | 3.8\% |  |  |  |  |  |  |
| 16.6\% | 12.6\% | 4.0\% | 22.7\% | 17.8\% | 4.9\% | 11.5\% | 6.1\% | 5.3\% |  |  |  |  |  |  |
| 14.7\% | 12.4\% | 2.2\% | 19.8\% | 21.5\% | -1.8\% | 7.5\% | 21.2\% | -13.7\% |  |  |  |  |  |  |
| 6.8\% | 11.8\% | -5.0\% | 6.6\% | 5.1\% | 1.5\% | 5.5\% | -17.8\% | 23.2\% |  |  |  |  |  |  |
| 5.4\% | 3.6\% | 1.8\% | 8.9\% | 10.3\% | -1.4\% |  |  |  | Data | Not Meani | gful ${ }^{10}$ | Data | ot Meanin | gful ${ }^{10}$ |
| 15.5\% | 14.7\% | 0.8\% | 9.8\% | 7.9\% | 2.0\% |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.6\% | 8.0\% | 2.8\% | 11.2\% | 5.6\% | 5.1\% | 6.5\% | -8.3\% | 12.9\% |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.6\% | 9.6\% | 1.1\% | 11.9\% | 8.5\% | 3.0\% | 6.5\% | -5.1\% | 8.9\% |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Notes:

1. Excess Return is Actual Return minus Benchmark Return
2. Total Fund Benchmark: A combination of the benchmarks for the five major asset classes using the target asset class weights
3. Domestic Equity Benchmark: Russell 3000 Index
4. Foreign Equity Benchmark: Morgan Stanley Capital International All Country World Ex-U.S. Free, since Jan. 1, 1998
5. General Fixed Income Benchmark: Barclays Capital Aggregate Bond Index less Governments plus TIPS, since Oct 2008
6. Real Estate Benchmark: A combination of DJ Wilshire Real Estate Securities Index and National Council of Real Estate Investment Fiduciaries Property Index since July 1, 2005
7. Infrastructure Benchmark: CA Infrastructure Median
8. Private Equity Benchmark: Russell 3000 Index $+3 \%$
9. Natural Resources Benchmark: CA Natural Resources Median
10. Natural Resources, Alternative Credit and Risk Diversifiers returns are not meaningful at this stage of the program.
11. Alternative Credit Benchmark:50\% Bank of America US High Yield II $+50 \%$ S\&P/Loan Syndications \& Trading Association US Leverage Loan Index
12. Risk Diversifiers Benchmark: 0.3 Beta Morgan Stanley Capital International All Country World Index

## Investment Expenses

The table below displays investment management expenses directly attributable to the investment program and paid directly by the System. Examples of directly attributable expenses include fees paid to investment managers and compensation and expenses of the System's own investment professionals, including time spent on investment matters by staff other than full-time investment professionals to the extent it can be separately identified. Other expenses not paid directly by the System include the expenses of securities lending programs conducted by managers of the commingled funds.

The increase of expenses in 2020 can be attributed to the continued funding of the Alternatives Programs.

| Detail for year ended 6/30/2020 | Dollar Expense |
| :--- | ---: | ---: |
| Passive Equity | \$ |
| Domestic Equity | 0 |
| International Equity | 590,101 |
| Domestic Fixed Income | 217,378 |
| Alternative Credit | $7,915,269$ |
| Private Equity | $46,038,921$ |
| Real Estate | $16,228,431$ |
| Infrastructure | $31,913,234$ |
| Natural Resources | $7,627,960$ |
| Risk Diversifier | $13,949,100$ |
| Consultants | $1,124,353$ |
| Other Investment Expenses | 635,296 |
| In-house Expenses | $3,583,254$ |
| DC Investment Expenses | 52,496 |
| Retiree Health Insurance Trust Expenses | 88,274 |
| Group Life Insurance Expenses | 89,148 |
| MainePERS OPEB | 9,135 |
| Total Investment Expenses - All Plans | $\mathbf{1 3 0 , 0 6 2 , 3 5 0}$ |


| Total for FY ended June 30 <br> Defined Benefit Plans | \$ Millions | \% of Total Assets |
| :---: | :---: | :---: |
| 2020 | 130.1 | $0.88 \%$ |
| 2019 | 117.2 | $0.79 \%$ |
| 2018 | 101.5 | $0.71 \%$ |
| 2017 | 93.8 | $0.70 \%$ |
| 2016 | 76.0 | $0.62 \%$ |
| 2015 | 54.7 | $0.44 \%$ |
| 2014 | 41.1 | $0.32 \%$ |
| 2013 | 31.4 | $0.28 \%$ |
| 2012 | 24.3 | $0.23 \%$ |
| 2011 | 19.7 | $0.18 \%$ |

## Brokerage Commissions

Year Ended June 30, 2020

| Broker | Commissions | Amount Traded (Millions) | Cost of Trade (\%) | Total Shares (Millions) | Commissions (Cents per Share) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bank of Americas Securities | \$ 12,925 | \$ 95 | 0.014\% | 1.7 | 0.750 |
| Pershing | 7,998 | 71 | 0.011\% | 1.3 | 0.633 |
| Societe Generale | 3,426 | 105 | 0.003\% | 0.0 | 239.714 |
| Instinet Clearing Services | 3,115 | 92 | 0.003\% | 1.4 | 0.224 |
| Credit Suisse | 2,276 | 97 | 0.002\% | 1.7 | 0.136 |
| Wells Fargo | 1,842 | 67 | 0.003\% | 0.7 | 0.258 |
| JP Morgan Chase | 1,650 | 48 | 0.003\% | 0.0 | 4.354 |
| Morgan Stanley | 1,221 | 19 | 0.006\% | 0.3 | 0.392 |
| National Financial Services Corp | 987 | 6 | 0.016\% | 0.1 | 0.800 |
| UBS | 664 | 22 | 0.003\% | 0.3 | 0.254 |
| Loop Capital Markets | 603 | 4 | 0.014\% | 0.1 | 0.797 |
| Citigroup | 558 | 15 | 0.004\% | 0.2 | 0.308 |
| Barclays | 138 | 5 | 0.003\% | 0.2 | 0.082 |
| Goldman Sachs | 59 | 0 | 0.017\% | 0.0 | 0.800 |
| Other | - | 638 | 0.000\% | 10.3 | 0.000 |
| Total | \$ 37,461 | \$ 1,286 | 0.003\% | 18.2 | 0.049 |

Commissions reported above are those paid directly by MainePERS. The table does not include other transaction costs the System may incur, nor does it include brokerage commissions incurred indirectly through investments in commingled funds. Brokerage commissions and other transaction costs are excluded from the expense table on page 102. Those commissions and expenses are accounted for in the net income and total return figures reported elsewhere in this report.

Selection of brokers is at the discretion of the System's investment managers, subject to their fiduciary obligations. MainePERS does not have any directed brokerage programs, commission recapture programs, or similar arrangements. Some of the System's managers have soft dollar arrangements with brokers, in which the broker agrees to provide additional services to the manager beyond trade execution. In addition some of the System's managers employ placement agents to market their funds. MainePERS does not pay placement agent fees and requires managers that do use placement agents to disclose the identity of said parties and the method and amount of payment.

## A Note On Alternative Assets

The MainePERS Investment Team in 2008 recommended that the System increase its portfolio diversification by adding a number of alternative asset classes to its strategic asset allocation. Prior to this, essentially all of the volatility risk contained in the System's portfolio was due to its holdings of public equities. The expansion into alternative assets began with a strategic target allocation of $20 \%$ across Real Estate, Infrastructure, and Private Equity. In subsequent years the target overall allocation to alternative assets was increased to $55 \%$, and Natural Resources, Alternative Credit, and Risk Diversifiers were added to the System's alternatives portfolio. The below chart shows the evolution of the System's Alternative Asset portfolio:

Alternative Asset Investments Over Time


Each of these alternative asset classes plays a unique role in the overall portfolio. Private equity seeks to grow capital at a rate in excess of public equities by taking control positions in individual companies. Real Estate and Infrastructure provide the portfolio with stability, by generally investing in long-lived assets with predictable cash flows. Risk Diversifiers are investments specifically chosen for their ability to earn returns unrelated to public market returns. More in-depth descriptions of alternative asset classes can be found in the System's Investment Policy Statement available on the System's website. The decision to reduce portfolio risk by allocating capital across these asset classes was the result of a deliberative process involving the Trustees, Investment Team and consultants. This process weighed the risks of each asset class (return volatility, illiquidity, potential for extreme downside, adverse selection, etc.) against potential benefits (diversification, stability, higher returns, cash yields, etc.), and took into account interactions between asset classes. The goal of the process was to construct a portfolio that would best enable the System to make future benefit payments while keeping required contributions stable at a reasonable level.

The System's allocation to alternative assets is implemented largely via investments in private funds managed by specialized asset managers. Over the last decade the Investment Team has implemented the System's alternative asset allocation by carefully selecting investment managers in each asset class. This part of the process is crucial - academic research demonstrates the importance of manager selection, as the dispersion between good and poor managers is far wider in alternative assets than in traditional asset classes. The Investment Team has proceeded with the implementation of the System's target allocations in deliberate fashion, and has invested in over 180 individual funds managed by 75 or so managers. While it is likely that some of these investments may perform below expectations, we believe that the alternative asset portfolio is well-constructed and composed of top performers. While evaluating investment performance requires taking a long-term view, and this is especially true with alternative assets, we are pleased with the performance of the alternative asset portfolio to-date.

A Note On Alternative Assets


Finally, it is important to note that while in many cases expenses associated with alternative assets are higher than for traditional asset classes, all returns and asset values reported in this document are net of all fees and expenses. Many of the System's alternative investment partnership agreements provide for the manager to receive a share of profits, known as carried interest. Carried interest is generally only paid once the System has earned a sufficient return, generally in excess of the System's discount rate. Reported returns and asset values are net of carried interest. The Group Life Insurance program is supported by premiums paid by its participants and by reserves. Substantially all the reserves are maintained in an investment portfolio, for which the summary results are displayed below. (Certain assets, such as the cash in the operating bank account, are not considered part of the investment portfolio.) Over this period, the increase in portfolio value is attributable to positive investment return and positive cash flow.

## Group Life Insurance Program

Summary of Investment Activity

| FY Ended <br> June 30 | Opening <br> Market Value | Closing <br> Market Value | Actual <br> Return | Benchmark <br> Return | Performance |
| ---: | ---: | ---: | ---: | ---: | ---: |$|$| 138.7 |
| :--- |

In fiscal year 2009, the Group Life Insurance assets were separated from the defined benefit plan assets while maintaining the same type of investment strategy. Up until this change, beginning in November 2005, the assets had been combined with those of the other plans in the general investment portfolio. Prior to November 2005, the assets had been invested in either a medium term, investment grade fixed income portfolio or similar commingled funds. While the assets were invested in a mutual fund, they were not available for the System's own securities lending program. Any securities lending undertaken by the mutual fund is not covered in this report, although any results are reflected in the total return or gain/loss figures.

Over the ten-year period ended June 30, 2020, the actual return on the portfolio was essentially equivalent to the return of the performance benchmark.

The fees paid by the portfolio are consistent with those detailed in the fees and expenses tables of the previous section. For the period of time the portfolio was invested in a mutual fund, fees were consistent with other holders of the institutional class of shares, as detailed in the fund's prospectus.

## Actuarial Section



Bass Harbor Lighthouse, Bass Harbor


October 16, 2020
Board of Trustees
Maine Public Employees Retirement System
P.O. Box 349

Augusta, Maine 04332-0349
Dear Members of the Board:
At your request, we have conducted our annual actuarial valuation for each of the funded pension programs administered by the Maine Public Employees Retirement System (MainePERS) as of June 30, 2020 as well as the Group Life Insurance (GLI) Programs. The purpose of this report is to present the annual actuarial valuation results for the various Programs as they relate to financial reporting. Further information, including several risk assessments and stress testing projections, are included in the actuarial valuation report for each System. This report is for the use of the MainePERS Board of Trustees and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. 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 other user.

## Funding Objective

The funding objective for the pension Programs administered by MainePERS is to establish contribution rates that, over time, will remain level as a percentage of payroll while fully funding the Programs. In order to achieve this, we develop contribution rates for each Program that will provide for the current costs (i.e., normal cost expressed as a level percentage of payroll) plus a level percentage of payroll amortization of the unfunded liability over a specified period. To our knowledge, the plan sponsors have consistently funded the full amounts required based on the actuarial valuations and specific statutory provisions.

The funding objective for the retiree GLI Programs is to contribute at least the Actuarially Determined Contribution (ADC) for Teachers, and to contribute based on premium rates for all other State participants and participants of Participating Local Districts (PLDs). Sufficiency of premium rate funding is reviewed at least every 4 years, with the most recent study being performed in 2020. Rates for State participants, as well as the ADC for Teachers, are determined so that the liability will be fully funded by FYE 2038, and Rates for PLDs are determined so that the liability will be fully funded by FYE 2036.

## Assumptions and Methods

The actuarial assumptions and methods used in these valuations have been recommended by the actuary and adopted by the Board of Trustees based on the actuary's most recent review of each Program's experience.

We believe that all the costs, liabilities, rates of interest, and other factors for MainePERS have been determined on the basis of actuarial assumptions and methods that are individually reasonable (taking into account the experience of the Programs administered by MainePERS and reasonable expectations) and that, in the aggregate, offer our best estimate of anticipated experience affecting the Programs. Nevertheless, the emerging costs rely on future plan experience conforming to the underlying assumptions and methods as outlined in this report. To the extent that the actual experience of the Programs deviates from the underlying assumptions and methods, or there are any changes in plan provisions or applicable law, the results will vary accordingly.

The calculations in the following exhibits have been made on a basis consistent with our understanding of MainePERS's funding requirements and goals. The GLI numbers disclosed in the Financial Section were produced in accordance with our understanding of the requirements of Governmental Accounting Standards Board (GASB) Statement No. 74 while the accounting disclosure items in the Financial Section related to the pension Programs are developed in accordance with our understanding of the requirements of GASB Statement No. 67. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

## Reliance on Others

In preparing our report, we relied on information, some oral and some written, supplied by MainePERS. This information includes, but is not limited to, the plan provisions, membership data, and financial information. We performed a limited review of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial

Standard of Practice No. 23 and have found no material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable. Such a review was beyond the scope of our assignment.

## Determination of Discount Rate

We have not performed formal cash flow projections as described under Paragraph 41 of GASB No. 67. However, Paragraph 43 of No. 67 allow for alternative methods to confirm the sufficiency of the fiduciary net position if the evaluations "can be made with sufficient reliability without a separate projection of cash flows into and out of the pension plan..." In our professional judgment, adherence to the actuarial funding policy described above and detailed further in the individual valuation reports will result in the pension programs having projected fiduciary net positions being greater than or equal to the benefit payments projected for each future period for each Program within the System.

For the GLI Programs, we performed formal cash flow projections as described under Paragraph 49 of GASB No. 74. 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.

## Supporting Schedules

Cheiron is responsible for the following schedules included within the Financial and Actuarial Sections of the MainePERS Comprehensive Annual Financial Report:

- Schedule of Active Member Valuation Data
- Schedule of Benefit Recipients Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from the Rolls
- Schedule of Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Analysis of Financial Experience
- Schedule of Funded Liabilities by Type
- Schedule of Changes in Net OPEB Liability


## Certification

We believe that the Programs administered by MainePERS are adequately and appropriately financed including contributions that are determined and funded on a level cost as a percentage of payroll basis using reasonable actuarial methods and assumptions.

To the best of our knowledge, 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. This includes the use of assumptions and methods for funding purposes that comply with the Actuarial Standards of Practice. 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 does not contain any adjustments for potential impact of COVID-19 on either economic or demographic assumptions. We anticipate that the virus 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


## Section I <br> Demographic Information

## Schedule of Active Member Valuation Data

| Valuation Date June 30, | Number of Active Members | Annual Payroll of Active Members |  |  | Average Annual Pay | Percentage Increase in Average Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State Employee and Teacher Retirement Program |  |  |  |  |  |  |
| 2020 | 40,395 | \$ | 2,060,622,725 | \$ | 51,012 | 2.79\% |
| 2019 | 39,876 |  | 1,979,024,476 |  | 49,629 | 4.55\% |
| 2018 | 39,843 |  | 1,891,366,352 |  | 47,470 | 2.91\% |
| 2017 | 39,836 |  | 1,837,608,866 |  | 46,129 | 2.82\% |
| 2016 | 39,942 |  | 1,792,004,417 |  | 44,865 | 2.88\% |
| 2015 | 40,016 |  | 1,745,075,075 |  | 43,609 | 1.62\% |
| 2014 | 39,669 |  | 1,702,310,338 |  | 42,913 | 7.92\% |
| 2013 | 41,809 |  | 1,662,390,557 |  | 39,762 | (8.93)\% |
| 2012 | 39,360 |  | 1,718,449,172 |  | 43,660 | 2.97\% |
| 2011 | 38,759 |  | 1,643,389,735 |  | 42,400 | 1.13\% |
| Consolidated Plan for Participating Local Districts |  |  |  |  |  |  |
| 2020 | 11,838 | \$ | 623,587,639 | \$ | 52,677 | 3.84\% |
| 2019 | 11,731 |  | 595,083,006 |  | 50,727 | 2.87\% |
| 2018 | 11,416 |  | 562,952,637 |  | 49,313 | 3.93\% |
| 2017 | 11,195 |  | 531,168,594 |  | 47,447 | 3.37\% |
| 2016 | 11,019 |  | 505,798,133 |  | 45,902 | 1.63\% |
| 2015 | 10,870 |  | 490,974,092 |  | 45,168 | 6.51\% |
| 2014 | 10,848 |  | 460,029,637 |  | 42,407 | 2.79\% |
| 2013 | 11,112 |  | 458, 424,764 |  | 41,255 | (6.41)\% |
| 2012 | 10,772 |  | 474,828,262 |  | 44,080 | 7.55\% |
| 2011 | 10,614 |  | 435,012,940 |  | 40,985 | 6.99\% |
| Non-Consolidated Participating Local Districts |  |  |  |  |  |  |
| 2020 | 1 | \$ | 44,387 | \$ | 44,387 | (26.05)\% |
| 2019 | 12 |  | 720,245 |  | 60,020 | 4.15\% |
| 2018 | 16 |  | 922,083 |  | 57,630 | 2.09\% |
| 2017 | 19 |  | 1,072,561 |  | 56,451 | 5.54\% |
| 2016 | 21 |  | 1,123,218 |  | 53,487 | 1.85\% |
| 2015 | 23 |  | 1,207,796 |  | 52,513 | 3.86\% |
| 2014 | 24 |  | 1,213,514 |  | 50,563 | (0.92)\% |
| 2013 | 28 |  | 1,428,984 |  | 51,035 | 0.97\% |
| 2012 | 28 |  | 1,415,305 |  | 50,547 | 0.38\% |
| 2011 | 31 |  | 1,561,053 |  | 50,357 | 23.11\% |
| Judicial Retirement Program |  |  |  |  |  |  |
| 2020 | 58 | \$ | 7,803,741 | \$ | 134,547 | 2.72\% |
| 2019 | 61 |  | 7,989,945 |  | 130,983 | 0.02\% |
| 2018 | 62 |  | 8,119,342 |  | 130,957 | 6.17\% |
| 2017 | 63 |  | 7,770,523 |  | 123,342 | 6.44\% |
| 2016 | 62 |  | 7,184,400 |  | 115,877 | (5.29)\% |
| 2015 | 56 |  | 6,851,612 |  | 122,350 | 9.76\% |
| 2014 | 60 |  | 6,688,159 |  | 111,469 | (0.81)\% |
| 2013 | 60 |  | 6,742,444 |  | 112,374 | (2.36)\% |
| 2012 | 59 |  | 6,790,274 |  | 115,089 | 0.00\% |
| 2011 | 59 |  | 6,790,233 |  | 115,089 | (2.39)\% |
| Legislative Retirement Program* |  |  |  |  |  |  |
| 2020 | 179 | \$ | 2,814,060 | \$ | 15,721 | 5.80\% |
| 2019 | 179 |  | 2,659,749 |  | 14,859 | 1.41\% |
| 2018 | 185 |  | 2,710,694 |  | 14,652 | 2.24\% |
| 2017 | 185 |  | 2,651,195 |  | 14,331 | (2.06)\% |
| 2016 | 177 |  | 2,590,011 |  | 14,633 | 3.92\% |
| 2015 | 180 |  | 2,534,548 |  | 14,081 | 1.24\% |
| 2014 | 181 |  | 2,517,431 |  | 13,908 | (0.14)\% |
| 2013 | 182 |  | 2,534,740 |  | 13,927 | 0.53\% |
| 2012 | 175 |  | 2,424,480 |  | 13,854 | 0.04\% |
| 2011 | 173 |  | 2,395,694 |  | 13,848 | (1.25)\% |

*Legislative salaries in even-numbered valuation years have been increased to approximate a full session amount.

## Section I

Demographic Information

Schedule of Benefit Recipients Valuation Data

| Valuation | Total Number of |
| :---: | :---: | :---: | :---: |
| Date | Benefit Recipients |
| at Year End |  |$\quad$| Annual Payments to |
| :---: |
| June 30, |

Section I
Demographic Information

Schedule of Retirees and Beneficiaries Added to and Removed from the Rolls

| Valuation Date June 30, | Added to Rolls |  | Removed from Rolls |  |  | On Rolls at Year End |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Annual Allowance | No. |  | Annual Allowance | No. |  | Annual Allowance |
| State Employee and Teacher Retirement Program |  |  |  |  |  |  |  |  |
| 2020 | 1,755 | \$ 49,364,473 | 1,075 | \$ | 21,231,884 | 37,151 | \$ | 859,787,631 |
| 2019 | 1,868 | 58,337,066 | 998 |  | 18,776,679 | 36,471 |  | 831,655,042 |
| 2018 | 1,781 | 49,254,819 | 1,050 |  | 18,632,598 | 35,601 |  | 792,094,655 |
| 2017 | 1,641 | 49,809,275 | 952 |  | 16,468,670 | 34,870 |  | 761,472,435 |
| 2016 | 1,840 | 52,295,379 | 919 |  | 16,011,814 | 34,181 |  | 728,131,830 |
| 2015 | 1,834 | 49,547,474 | 965 |  | 16,294,480 | 33,260 |  | 691,848,265 |
| 2014 | 1,668 | 36,572,188 | 901 |  | 15,458,998 | 32,391 |  | 658,595,271 |
| 2013 | 1,995 | 37,073,840 | 856 |  | 13,895,682 | 31,624 |  | 637,482,081 |
| 2012 | 2,402 | 58,170,235 | 817 |  | 13,008,150 | 30,485 |  | 614,303, 923 |
| 2011 | 1,515 | 35,608,087 | 863 |  | 13,508,468 | 28,900 |  | 569,141,838 |
| Consolidated Plan for Participating Local Districts* |  |  |  |  |  |  |  |  |
| 2020 | 666 | \$ 14,079,408 | 340 | \$ | 4,388,153 | 9,860 | \$ | 169,508,194 |
| 2019 | 585 | 14,105,844 | 307 |  | 4,021,018 | 9,534 |  | 159,816,939 |
| 2018 | 602 | 12,950,872 | 352 |  | 4,679,743 | 9,256 |  | 149,732,113 |
| 2017 | 521 | 10,098,997 | 362 |  | 4,267,489 | 9,006 |  | 141,460,984 |
| 2016 | 543 | 8,643,493 | 277 |  | 3,661,341 | 8,847 |  | 135,629,476 |
| 2015 | 620 | 11,937,098 | 372 |  | 4,438,928 | 8,581 |  | 130,647,324 |
| 2014 | 516 | 9,816,061 | 305 |  | 3,206,304 | 8,333 |  | 123,149,154 |
| Non-Consolidated Participating Local Districts* |  |  |  |  |  |  |  |  |
| 2020 | 0 | \$ 9,470 | 113 | \$ | 2,293,679 | 50 | \$ | 747,849 |
| 2019 | 7 | 516,503 | 14 |  | 183,320 | 163 |  | 3,032,058 |
| 2018 | 4 | 72,079 | 8 |  | 67,858 | 170 |  | 2,698,875 |
| 2017 | 6 | 106,640 | 4 |  | 79,572 | 174 |  | 2,694,654 |
| 2016 | 2 | 64,941 | 6 |  | 63,999 | 172 |  | 2,667,586 |
| 2015 | 3 | 92,920 | 18 |  | 138,607 | 176 |  | 2,666,644 |
| 2014 | 6 | 162,335 | 11 |  | 55,706 | 191 |  | 2,712,331 |
| PLDs (Consolidated and Non-Consolidated Plans)* |  |  |  |  |  |  |  |  |
| 2013 | 881 | \$ 9,563,286 | 300 | \$ | 3,280,453 | 8,318 | \$ | 119,145,099 |
| 2012 | 425 | 10,710,058 | 316 |  | 3,014,263 | 7,719 |  | 112,862,266 |
| 2011 | 516 | 8,796,407 | 276 |  | 2,862,417 | 7,610 |  | 105,166,471 |
| Judicial Retirement Program |  |  |  |  |  |  |  |  |
| 2020 | 8 | \$ 607,435 | 1 | \$ | 82,609 | 83 | \$ | 4,602,349 |
| 2019 | 2 | 187,761 | 1 |  | 25,883 | 76 |  | 4,077,523 |
| 2018 | 5 | 460,761 | 5 |  | 229,489 | 75 |  | 3,915,645 |
| 2017 | 1 | 86,958 | 0 |  | 0 | 75 |  | 3,684,373 |
| 2016 | 7 | 426,643 | 4 |  | 230,879 | 74 |  | 3,597,415 |
| 2015 | 6 | 312,332 | 2 |  | 161,430 | 71 |  | 3,401,651 |
| 2014 | 6 | 254,034 | 4 |  | 262,201 | 67 |  | 3,250,749 |
| 2013 | 3 | 148,384 | 1 |  | 18,604 | 65 |  | 3,258,916 |
| 2012 | 3 | 142,235 | 2 |  | 112,433 | 63 |  | 3,129,136 |
| 2011 | 6 | 305,189 | 0 |  | 0 | 62 |  | 3,099,334 |
| Legislative Retirement Program |  |  |  |  |  |  |  |  |
| 2020 | 10 | \$ 36,369 | 8 | \$ | 14,089 | 206 | \$ | 461,644 |
| 2019 | 25 | 67,535 | 6 |  | 19,241 | 204 |  | 439,364 |
| 2018 | 8 | 30,692 | 8 |  | 14,151 | 185 |  | 391,070 |
| 2017 | 20 | 48,314 | 9 |  | 22,377 | 185 |  | 374,529 |
| 2016 | 12 | 38,391 | 8 |  | 17,268 | 174 |  | 348,592 |
| 2015 | 25 | 53,264 | 8 |  | 10,383 | 170 |  | 327,469 |
| 2014 | 5 | 10,934 | 7 |  | 7,779 | 153 |  | 284,588 |
| 2013 | 18 | 24,752 | 4 |  | 8,035 | 155 |  | 281,433 |
| 2012 | 2 | 9,025 | 6 |  | 13,289 | 141 |  | 264,716 |
| 2011 | 18 | 36,695 | 4 |  | 7,538 | 145 |  | 268,980 |

*This schedule was developed in aggregate for the Participating Local Districts prior to 2014. Beginning with 2014, it was developed split between the Consolidated Plan and the Non-Consolidated PLDs.
Section II
Accounting Information

|  | Schedule of Change in Net Pension Liability as of June 30, 2020 |  |  |  |  |  | Judicial Retirement Program |  | Legislative Retirement Program |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State Employee \& Teacher Retirement Program |  | Consolidated Plan for PLDs |  | NonConsolidated PLDs |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Cost | \$ | 231,226,103 | \$ | 82,715,056 | \$ | 51,825 | \$ | 1,608,376 | \$ | 334,862 |
| Interest |  | 968,243,358 |  | 219,752,007 |  | 1,484,635 |  | 4,644,191 |  | 611,447 |
| Change in benefit terms |  | 1,223,156 |  | 29,759,516 |  | $(29,907,766)$ |  | 0 |  | 0 |
| Difference between expected and actual experience |  | 162,293 |  | $(6,552,650)$ |  | 344,890 |  | 942,561 |  | 413,313 |
| Change in assumptions |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |
| Benefit payments, including refunds |  | $(882,617,693)$ |  | $(174,752,167)$ |  | $(2,672,923)$ |  | $(4,314,558)$ |  | $(697,697)$ |
| Net change in Total Pension Liability | \$ | 318,237,217 | \$ | 150,921,762 | \$ | $(30,699,339)$ | \$ | 2,880,570 | \$ | 661,925 |
| Total Pension Liability - beginning of year |  | 14,547,222,913 |  | 3,258,819,605 | \$ | 38,109,783 | \$ | 69,316,540 | \$ | 9,066,764 |
| Total Pension Liability - end of year | \$ | 14,865,460,130 | \$ | 3,409,741,367 | \$ | 7,265,280 | \$ | 72,197,110 | \$ | 9,728,689 |
| Plan Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |
| Contributions - Employer | \$ | 399,802,386 | \$ | 66,717,733 | \$ | 345,323 | \$ | 715,963 | \$ | 0 |
| Contributions - Member |  | 151,438,848 |  | 54,090,045 |  | 28,693 |  | 616,095 |  | 156,306 |
| Transfers |  | $(2,199,107)$ |  | 27,683,461 |  | $(26,823,377)$ |  | 764,902 |  | 365,766 |
| Net Investment Income |  | 354,272,726 |  | 88,330,927 |  | 421,329 |  | 2,164,283 |  | 390,165 |
| Benefit payments, including refunds |  | $(882,617,693)$ |  | $(174,752,167)$ |  | $(2,672,923)$ |  | $(4,314,558)$ |  | $(697,697)$ |
| Administrative Expenses |  | $(11,343,928)$ |  | $(2,797,728)$ |  | $(20,772)$ |  | $(69,406)$ |  | $(12,458)$ |
| Net Change in Plan Fiduciary Net Position | \$ | 9,353,232 | \$ | 59,272,271 | \$ | $(28,721,727)$ | \$ | $(122,721)$ | \$ | 202,082 |
| Plan Fiduciary Net Position - beginning of year | \$ | 12,035,563,047 | \$ | 2,953,156,096 | \$ | 37,061,228 | \$ | 73,637,441 | \$ | 13,248,022 |
| Plan Fiduciary Net Position - end of year |  | 12,044,916,279 | \$ | 3,012,428,367 | \$ | 8,339,501 | \$ | 73,514,720 | \$ | 13,450,104 |
| Net Pension Liability/(Asset) - end of year |  | 2,820,543,851 | \$ | 397,313,000 | \$ | $(1,074,221)$ | \$ | $(1,317,610)$ | \$ | $(3,721,415)$ |


| Section II Accounting Information |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sensitivity of Net Pension Liability to Changes in Discount Rate as of June 30, 2020 |  |  |  |  |  |  |  |  |  |
|  | State Employee \& Teacher Retirement Program |  | Consolidated Plan for PLDs |  | NonConsolidated PLDs |  | Judicial Retirement Program |  | Legislative Retirement Program |
|  | 5.75\% |  | 5.75\% |  | 5.75\% |  | 5.75\% |  | 5.75\% |
|  | 6.75\% |  | 6.75\% |  | 6.75\% |  | 6.75\% |  | 6.75\% |
|  | 7.75\% |  | 7.75\% |  | 7.75\% |  | 7.75\% |  | 7.75\% |
|  | \$ 4,238,894,263 | \$ | 834,991,553 | \$ | $(350,431)$ | \$ | 5,067,735 | \$ | $(2,758,540)$ |
|  | 2,820,543,851 |  | 397,313,000 |  | $(1,074,221)$ |  | $(1,317,610)$ |  | $(3,721,415)$ |
|  | 1,030,188,223 |  | 39,040,999 |  | $(1,736,964)$ |  | $(6,879,716)$ |  | $(4,557,481)$ |


Section II
Accounting Information
The table below is a gain／loss analysis of the changes in the actuarial liability，reflecting variances between actual experience and assumed experience for different kinds of risk as specified in the GFOA GAAFR．
Analysis of Financial Experience
Gain and Loss in Accrued Liability During Year
Resulting from Differences Between Assumed Experience and A

| （66ヤ＇62S） | \＄ | （6I6＇ZLS＇I） | \＄ | てZL＇とを0＇6て | \＄ | （0ヤ0＇โとT＇โて） | \＄ | （ISL＇9\＆と＇ヤ0I） | \＄ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  | 0 |  | 99L＇L06＇62 |  | （6EI＇9ع6＇ح） |  | （9GI＇£てて＇I） |  |
| （66ヵ＇62S） | \＄ | （6I6＇ZLS＇I） | \＄ |  | \＄ | （T06＇t6I＇8L） | \＄ |  | \＄ |
| （ $\overline{\left.\varepsilon \tau \varepsilon^{\prime} \varepsilon \tau \downarrow\right)}$ |  | （ $\overline{\text { ¢9G }}$＇乙ヤ6） |  | （068＇切） |  | OS9＇2Ss＇9 |  | （86て＇29I） |  |
| （98I「9II） | \＄ | （8ऽع＇0¢9） | \＄ |  | \＄ |  | \＄ | （20ع＇T56＇201） | \＄ |
| mentord <br>  әм！ұе！ธ！ |  | mentord ұиәшәл！！ұу ｜e！כ！pnc |  | sald рәұер！！osuos －uon |  | sald dof ueld рәұер！！osuoう |  | mentord ұиәшәม！ұәу дач <br>  |  | Type of Activity

Investment Income
Combined Liability Experience
Gain（or Loss）During Year from Financial Experience
Non－Recurring Items
Composite Gain（or Loss）During Year

## Section II

## Accounting Information

Schedule of Funded Liabilities by Type
Aggregate Actuarial Liabilities For

| Valuation Date |  | (1) <br> Active <br> Member |  | (2) <br> Retirees, Vested Terms, | (3) <br> Active Members (Employer Financed Portion) |  |  | Reported Assets* | Portion of Actuarial Liabilities Covered by Reported Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, |  | Contributions |  | Beneficiaries |  |  |  |  | (1) | (2) | (3) |
| State Employee and Teacher Retirement Program |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  | 11,419,986,651 | 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 |  | 10,375,552,498 | 100\% | 100\% | 8\% |
| 2014 |  | 2,315,075,905 |  | 7,572,038,284 |  | 2,433,044,594 |  | 10,017,512,006 | 100\% | 100\% | 5\% |
| 2013 |  | 2,290,505,939 |  | 7,181,259,077 |  | 2,358,884,866 |  | 9,177,749,627 | 100\% | 96\% | 0\% |
| 2012 |  | 2,271,164,594 |  | 6,656,860,191 |  | 2,625,281,496 |  | 8,880,730,120 | 100\% | 99\% | 0\% |
| 2011 |  | 2,229,984,967 |  | 6,453,384,730 |  | 2,598,295,489 |  | 8,736,885,121 | 100\% | 100\% | 2\% |
| Consolidated Plan for Participating Local Districts |  |  |  |  |  |  |  |  |  |  |  |
| 2020 | \$ | 556,727,111 |  | 2,036,858,811 | \$ | 816,155,445 | \$ | 3,063,710,040 | 100\% | 100\% | 58\% |
| 2019 |  | 521,610,261 |  | 1,927,683,260 |  | 809,526,084 |  | 2,918,585,814 | 100\% | 100\% | 58\% |
| 2018 |  | 494,411,535 |  | 1,818,566,082 |  | 776,879,603 |  | 2,764,807,391 | 100\% | 100\% | 58\% |
| 2017 |  | 472,362,260 |  | 1,721,058,286 |  | 823,240,175 |  | 2,609,806,231 | 100\% | 100\% | 51\% |
| 2016 |  | 452,446,198 |  | 1,654,981,662 |  | 782,312,774 |  | 2,489,157,281 | 100\% | 100\% | 49\% |
| 2015 |  | 438, 925,747 |  | 1,543,532,803 |  | 738,477,459 |  | 2,433,186,149 | 100\% | 100\% | 61\% |
| 2014 |  | 423,097,001 |  | 1,462,031,828 |  | 724,529,016 |  | 2,379,733,634 | 100\% | 100\% | 68\% |
| 2013 |  | 412,347,408 |  | 1,378,065,748 |  | 675,521,588 |  | 2,179,961,872 | 100\% | 100\% | 58\% |
| 2012 |  | 398,895,449 |  | 1,262,186,227 |  | 707,745,483 |  | 2,103,481,277 | 100\% | 100\% | 63\% |
| 2011 |  | 379,478,840 |  | 1,175,482,545 |  | 676,024,931 |  | 2,084,982,632 | 100\% | 100\% | 78\% |
| Non-Consolidated Participating Local Districts |  |  |  |  |  |  |  |  |  |  |  |
| 2020 | \$ | 622,269 | \$ | 6,901,654 | \$ | $(258,643)$ | \$ | 8,481,468 | 100\% | 100\% | 100\% |
| 2019 |  | 4,329,750 |  | 32,342,346 |  | 1,437,687 |  | 36,627,381 | 100\% | 100\% | 0\% |
| 2018 |  | 4,461,906 |  | 30,747,638 |  | 2,782,257 |  | 36,380,088 | 100\% | 100\% | 42\% |
| 2017 |  | 4,468,152 |  | 30,140,204 |  | 3,419,931 |  | 35,772,138 | 100\% | 100\% | 34\% |
| 2016 |  | 4,494,490 |  | 30,215,191 |  | 3,337,304 |  | 35,516,058 | 100\% | 100\% | 24\% |
| 2015 |  | 4,640,093 |  | 29,733,833 |  | 4,144,814 |  | 35,942,796 | 100\% | 100\% | 38\% |
| 2014 |  | 4,667,251 |  | 31,696,569 |  | 3,382,954 |  | 35,485,488 | 100\% | 97\% | 0\% |
| 2013 |  | 4,764,800 |  | 29,539,283 |  | 4,180,808 |  | 33,454,845 | 100\% | 97\% | 0\% |
| 2012 |  | 4,757,033 |  | 27,810,149 |  | 4,313,899 |  | 33,172,070 | 100\% | 100\% | 14\% |
| 2011 |  | 4,815,718 |  | 26,832,938 |  | 4,939,550 |  | 34,483,299 | 100\% | 100\% | 57\% |
| Judicial Retirement Program |  |  |  |  |  |  |  |  |  |  |  |
| 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\% |
| 2013 |  | 9,464,604 |  | 26,605,274 |  | 16,304,907 |  | 51,055,251 | 100\% | 100\% | 92\% |
| 2012 |  | 9,379,428 |  | 24,731,810 |  | 12,229,440 |  | 49,735,004 | 100\% | 100\% | 100\% |
| 2011 |  | 9,028,737 |  | 24,690,578 |  | 14,148,982 |  | 49,324,784 | 100\% | 100\% | 100\% |
| Legislative Retirement Program |  |  |  |  |  |  |  |  |  |  |  |
| 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\% |
| 2013 |  | 2,363,217 |  | 4,965,686 |  | $(456,289)$ |  | 9,771,955 | 100\% | 100\% | 100\% |
| 2012 |  | 2,321,819 |  | 3,895,976 |  | 25,844 |  | 9,322,419 | 100\% | 100\% | 100\% |
| 2011 |  | 2,228,233 |  | 4,002,993 |  | $(506,033)$ |  | 9,040,180 | 100\% | 100\% | 100\% |

*Reported assets are measured at actuarial value. Results would be different if 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 value of the Program.

## Section II

Accounting Information

The Maine Public Employees Retirement System covers Postretirement Group Life Insurance obligations for 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 Plans and the Participating Local Districts Plans (PLDs).

## Schedule of Changes in Net OPEB Liability <br> as of June 30, 2020

| Total OPEB Liability | State Sponsored Plans Retiree Group Life Insurance |  | PLD Retiree Group Life Insurance |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Service cost (BOY) | \$ | 2,190,471 | \$ | 522,353 |
| Interest (includes interest on service cost) |  | 14,274,714 |  | 1,941,994 |
| Change in benefit terms |  | 0 |  | $(636,731)$ |
| Difference between expected and actual experience |  | 589,478 |  | 727,053 |
| Change in assumptions |  | 0 |  | $(9,045,090)$ |
| Benefit payments, including refunds |  | $(8,177,754)$ |  | $(1,589,460)$ |
| Net change in total OPEB liability | \$ | 8,876,909 | \$ | $(8,079,881)$ |
| Total OPEB Liability - beginning of year | \$ | 204,431,998 | \$ | 37,656,642 |
| Total OPEB Liability - end of year | \$ | 213,308,907 | \$ | 29,576,761 |
| Plan Fiduciary Net Position |  |  |  |  |
| Contributions - Employer | \$ | 9,310,849 | \$ | 1,127,014 |
| Contributions - Member |  | 0 |  | 0 |
| Net Investment Income |  | 4,885,544 |  | 752,517 |
| Benefit payments, including refunds |  | $(8,177,754)$ |  | $(1,589,460)$ |
| Administrative Expense |  | $(1,018,932)$ |  | $(164,654)$ |
| Net Change in Plan Fiduciary Net Position | \$ | 4,999,707 | \$ | 125,417 |
| Plan Fiduciary Net Position - beginning of year | \$ | 100,616,782 | \$ | 16,259,162 |
| Plan Fiduciary Net Position - end of year | \$ | 105,616,489 | \$ | 16,384,579 |
| Net OPEB Liability - end of year | \$ | 107,692,418 | \$ | 13,192,182 |

## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

## State Employee and Teacher Program

## 1. Membership

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

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

## 2. Member Contributions

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

Contribution Requirements for Special State Employee Groups
State police and 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.

Forest rangers employed before September 1, 1984: required to contribute $8.65 \%$ of earnable compensation until eligible for retirement 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 and state fire marshal inspectors, oil and hazardous materials emergency response workers, and capitol security officers: 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 and fire marshal sergeants: required to contribute $8.65 \%$ of earnable compensation until eligible for retirement and 7.65\% thereafter.

## 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 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 ten years of service at 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.

## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

## 5. Service Retirement Benefits

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

i. Provisions for Members with at Least Ten 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 ten 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 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 Ten 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 ten 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.

## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

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

Normal Retirement Age: 65
Eligibility for Members in Active Service and Inactive Members: $\mathbf{2 5}$ 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 ten 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. State Police Employed Before September 16, 1984 and Inland Fisheries and Wildlife Officers Employed Before September 1, 1984

Eligibility: $\mathbf{2 0}$ 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. Forest Rangers Employed Before September 1, 1984

Eligibility: Age 50 with 25 years of creditable service as a forest ranger.
Benefit: One-half of average final compensation plus $2 \%$ for each year of service earned after qualification for retirement. 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: Life annuity.
iii. 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.

2002 Entrants: Capitol Police and oil and hazardous materials emergency response workers.
Eligibility: Ten years of creditable service under the 1998 Special Plan in one or a combination of the covered capacities and the attainment of age $55-O R-25$ years of creditable service in one or a combination of the covered capacities.

## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

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 employee, and Capitol Police 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.
iv. 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: $\mathbf{2 5}$ 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.
v. 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.
vi. Minimum Service Retirement Benefit
\$100 per month

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

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

Benefit: $66^{2 / 3} \%$ 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.

## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

Form of Payment: Payment begins on 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 ten years following normal retirement age or on 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 same rate as any cost-of-living adjustments for which the member is eligible (not subject to a cap) (see item 12). On the date when service benefits reach a level of $662 / 3 \%$ of average final compensation or ten 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 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 on 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 a 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-ofduty.

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


## State Employee and Teacher Program <br> Summary of Program and Plan Provisions

- 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 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

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

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA cap 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 twelve months as of that date. The maximum annual increase is $3 \%$. 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 Cap 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 | $\$ 22,810.25$ |

Members who did not have ten 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 twelve months of being in receipt of their benefit.

## State Employee and Teacher Program <br> Summary of Program and Plan 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 lowerpercentage 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. Plan Changes since Prior Valuation

Fire marshal investigators and fire marshal sergeants were removed from the 1998 Special Plan to their own Special Plan with 20 years of service requirement for retirement.

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.

# State Employee and Teacher Program <br> Actuarial Assumptions and Methods 

## A. Actuarial Assumptions

## 1. Annual Rate of Investment Return

| State Employees | $6.75 \%$ |
| :--- | :--- |
| Teachers | $6.75 \%$ |

Rate is net of both administrative and investment expense.
2. Cost-of-Living Adjustment (COLA) Assumed Rate

| State Employees | $2.20 \%$ |
| :--- | :--- |
| Teachers | $2.20 \%$ |

3. Annual Rate of Individual Salary Increase (\% at Selected Years of Service)

| Service | State Employees | Teachers |
| :---: | :---: | :---: |
| 0 | $8.75 \%$ | $14.50 \%$ |
| 5 | $5.00 \%$ | 5.75 |
| 10 | $3.75 \%$ | 4.75 |
| 15 | $3.20 \%$ | 4.00 |
| 20 | $2.95 \%$ | 2.75 |
| 25 and over | $2.75 \%$ | 2.75 |

The above rates include a $2.75 \%$ across-the-board increase at each year of service.
4. Sample Rates of Termination (\% at Selected Years of Service)

| Service | State Employees and Teachers |
| :---: | :---: |
| 0 | $33.50 \%$ |
| 5 | 10.50 |
| 10 | 5.95 |
| 15 | 4.25 |
| 20 | 4.00 |
| 25 | 4.00 |

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 time of termination.

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

| Age | (Showing values in 2020) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | State Employees |  | Teachers |  |
|  | Male | Female | Male | Female |
| 50 | 40 | 31 | 38 | 26 |
| 55 | 57 | 42 | 54 | 35 |
| 60 | 77 | 61 | 73 | 50 |
| 65 | 109 | 94 | 104 | 77 |
| 70 | 169 | 150 | 161 | 124 |
| 75 | 275 | 247 | 262 | 204 |
| 80 | 463 | 417 | 441 | 344 |
| 85 | 808 | 741 | 769 | 611 |
| 90 | 1,440 | 1,339 | 1,371 | 1,105 |
| 95 | 2,298 | 2,227 | 2,188 | 1,838 |

Rates for State Employees are based on $104 \%$ 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 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. Proposed rates for Teachers are based on $99 \%$ 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.

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

(Showing values in 2020)

|  | State Employees |  |  | Teachers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female |  | Male | Female |
| 20 | 4 | 2 |  | 3 | 1 |
| 25 | 4 | 2 |  | 4 | 2 |
| 30 | 4 | 2 |  | 4 | 2 |
| 35 | 5 | 3 |  | 5 | 3 |
| 40 | 6 | 5 |  | 6 | 4 |
| 45 | 9 | 7 |  | 9 | 6 |
| 50 | 17 | 12 |  | 16 | 10 |
| 55 | 28 | 19 |  | 26 | 16 |
| 60 | 46 | 29 |  | 44 | 24 |
| 65 | 82 | 43 |  | 78 | 35 |

* 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 $104 \%$ and $120 \%$ of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Total Employee Mortality Table, both projected from the 2006 base rates 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. Proposed rates for Teachers are based on 99\% of the RP-2014

## State Employee and Teacher Program Actuarial Assumptions and Methods

Total Dataset Healthy Annuitant Mortality Table for both males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Total Employee 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.

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

(Showing values in 2020)

|  | State Employees |  |  | Teachers |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male | Female |  | Male | Female |
| 25 | 80 | 23 |  | 80 | 23 |
| 30 | 77 | 30 |  | 77 | 30 |
| 35 | 91 | 41 |  | 91 | 41 |
| 40 | 109 | 57 |  | 109 | 57 |
| 45 | 170 | 89 |  | 170 | 89 |
| 50 | 208 | 117 |  | 208 | 117 |
| 55 | 240 | 147 |  | 240 | 147 |
| 60 | 273 | 175 |  | 273 | 175 |
| 65 | 326 | 212 |  | 326 | 212 |
| 70 | 422 | 289 |  | 422 | 289 |

Rates are based on $108 \%$ and $105 \%$ of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2006 base rates 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.

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

Teachers and State Regular Plans

|  | State Employees and Teachers |  |  |
| :---: | ---: | :---: | ---: |
| Age | Tier 1 | Tier 2 | Tier 3 |
| 45 | 13 | NA | NA |
| 50 | 29 | NA | NA |
| 55 | 40 | 40 | 40 |
| 59 | 150 | 40 | 40 |
| 60 | 250 | 75 | 40 |
| 61 | 200 | 175 | 40 |
| 62 | 200 | 250 | 40 |
| 63 | 200 | 150 | 75 |
| 64 | 250 | 200 | 225 |
| 65 | 350 | 250 | 300 |
| 70 | 200 | 200 | 300 |
| 75 | 1,000 | 1,000 | 1,000 |

In the case of State Regular and Teacher employees, Tier 1 refers to those who had accrued at least 10 years of service by July 1, 1993. Tier 2 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. Tier 3 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 Employee and Teacher Program Actuarial Assumptions and Methods

## 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 $<\mathbf{2 5}$ | Service $>=\mathbf{2 5}$ |
| 55 | $20.0 \%$ | $25.0 \%$ |
| 57 | 10.0 | 25.0 |
| 60 | 20.0 | 30.0 |
| 62 | 15.0 | 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 | Rate |
| $<24$ | $0.0 \%$ |
| $25-29$ | $25.0 \%$ |
| $30-34$ | $50.0 \%$ |
| $35+$ | $100.0 \%$ |

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.

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

State Employees

| Age | Regular | Special | Teachers |
| :---: | :---: | :---: | :---: |
| 25 | 5.0 | 5.4 | 2.1 |
| 30 | 6.1 | 6.5 | 2.3 |
| 35 | 9.3 | 9.9 | 2.3 |
| 40 | 14.8 | 15.8 | 3.1 |
| 45 | 22.8 | 24.4 | 7.0 |
| 50 | 34.0 | 36.4 | 10.9 |
| 55 | 39.9 | 42.6 | 14.9 |
| 60 | 43.4 | 46.4 | 18.8 |

* 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.


## 10. 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; female spouse is assumed to be three years younger than 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.

## State Employee and Teacher Program Actuarial Assumptions and Methods

## 11. Vacation/Sick Leave Credits

For members who had ten years of service on July 1, 1993, credits for unused vacation and sick leave may be used to increase final average compensation and/or creditable service. In order to reflect this, projected retirement benefits are increased by $0.48 \%$ for state (regular) employees and $0.75 \%$ for teachers for impacted members.

## 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 valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: 5\% assumed for all future years

## 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.

## 13. Rationale for Assumptions

The assumptions were adopted by the Board of Trustees at their July 14, 2016 meeting. The demographic assumptions adopted are based on an experience study covering the period from June 30, 2012 through June 30, 2015 and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants.

## 14. Changes since Last Valuation

None.

## 15. Rationale for Change in Actuarial Assumptions

N/A

## B. Actuarial Methods

## 1. Funding Method

For the Plans in this Program, the funding methodology employed is the entry age normal funding 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.

## State Employee and Teacher Program Actuarial Assumptions and Methods

The unfunded actuarial liability under the entry age normal funding 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 8 years of its prescribed amortization period remaining and all other gains and losses are amortized over twenty-year periods beginning on the date as of which they occur.

## 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.

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

## 3. Changes since Last Valuation

None.

## 4. Rationale for Change

N/A

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

## Consolidated Plan for Participating Local Districts

## 1. Member Contributions

Beginning with FY 2020, the contribution rates for members are determined annually based on the risk-sharing framework adopted by the Board of Trustees. The rates for members of Regular Plans (AC, AN, and BC) also vary based on whether the member joined the Plan prior to July 1, 2014 and thus has a normal retirement age of 60 or joined on or after this date and has a normal retirement age of 65 . See the Annual PLD Contribution Rate reports for further details.

Member contributions earn annual interest at the rate adopted by the Board of Trustees each February.

## 2. Average Final Compensation

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

## 3. Creditable Service

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

Effective August 1, 2019, the ability to use accrued, unused vacation and sick leave towards retirement benefits is available only to those who have 20 or more years of creditable service under the Plan at retirement.

## 4. Service Retirement Benefits

## Regular Plan AC

Normal Retirement Age:
Plan members prior to July 1, 2014: 60
New members to the Plan on or after July 1, 2014: 65
Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.
Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement and at least normal retirement age.

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

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

Benefit: 1/50 of average final compensation multiplied by years of membership service under Consolidated Plan AC reduced by:

Plan members prior to July 1, 2014: approximately $2 \frac{1}{4} \%$ for each year that a member is younger than age 60 at retirement.

New members to the Plan on or after July 1, 2014: 6\% for each year that a member is younger than age 65 at retirement.

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1,2019 . The above $2 \frac{1}{4} \%$ and $6 \%$ rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.
Regular Plan AN
This benefit plan is the same as Regular Benefit Plan AC, except that there is no provision for cost-of-living adjustments.

Regular Plan BC
Normal Retirement Age:
Plan members prior to July 1, 2014: 60
New members to the Plan on or after July 1, 2014: 65
Eligibility for Members in Active Service and Inactive Members: 25 years of creditable service.
Eligibility Alternative for Members in Active Service: At least one year of creditable service immediately before retirement and at least normal retirement age.

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

Benefit: 1/100 of average final compensation multiplied by years of membership service under Consolidated Plan BC reduced by:

Plan members prior to July 1, 2014: approximately $21 / 4 \%$ for each year that a member is younger than age 60 at retirement.

New members to the Plan on or after July 1, 2014: 6\% for each year that a member is younger than age 65 at retirement.

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1 , 2019. The above $21 \frac{1}{4} \%$ and $6 \%$ rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.

## Regular Plan Notes

1. Under certain circumstances, Regular Plan service can count, on a pro rata basis specific to the applicable Special Plan, toward meeting Special Plan benefit eligibility requirements.
2. The actual benefit for service earned prior to coverage under the Consolidated Plan may be based on a variable percentage of average final compensation multiplied by years of service under any previous Plan(s) (the percentage depends on the previous Plan(s)).

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

## Special Plan $1 C$

Eligibility: $\mathbf{2 0}$ 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 years of service.
Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.

## Special Plan 1N

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

## Special Plan 2C

Eligibility: $\mathbf{2 5}$ years of creditable service in named positions.
Benefit: One-half average final compensation plus $2 \%$ for each year of service in excess of 25 years of service.
Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.

## Special Plan 2N

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

## Special Plan 3C

Eligibility: 25 years of creditable service in named positions.
Benefit: Two thirds of average final compensation plus $2 \%$ for each year of service in excess of 25 years of service.
Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.

## Special Plan 3N

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

## Special PIan 4C

Eligibility: Age 55 with 25 years of creditable service in named positions.
Benefit: 1/50 of average final compensation multiplied by years of membership service under Consolidated Plan 4C reduced by:

Plan members prior to July 1, 2014: approximately $2 \frac{1}{4} \%$ for each year that a member is younger than age 55 at retirement.

New members to the Plan on or after July 1, 2014: 6\% for each year that a member is younger than age 55 at retirement.

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

Beginning July 1, 2019, the age reduction factors are a set of approximately actuarially equivalent rates rather than the above rates for members with less than 20 years of creditable service under the PLD Consolidated Plan on July 1,2019 . The above $2 \frac{1}{4} \%$ and $6 \%$ rates remain in effect for those members with 20 or more years of creditable service under the PLD Consolidated Plan on July 1, 2019.

Form of Payment: Life annuity ("full benefit"), unless an optional method of payment is selected.
Cost-of-Living Adjustment: See item 11.
Special Plan 4N
This benefit plan is identical to Special Benefit Plan 4C, except that there is no provision for cost-of-living adjustments.

## Special Plan Notes

1. If a Special Plan member fails to meet the Special Plan eligibility criteria, their service retirement benefit is that provided by the applicable underlying Regular Plan; Special Plan service credits are used toward Regular Plan eligibility requirements.
2. Service in all Special Plans counts, on a percentage basis, toward meeting the benefit eligibility requirements of any Special Plan.
3. The actual benefit for service earned prior to coverage under the Consolidated Plan may be based on a variable percentage of average final compensation multiplied by years of service under any previous Plan(s) (the percentage depends on the previous Plan(s)).

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

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

Benefit: $66^{2} / 3 \%$ 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 termination of service and ceases on cessation of disability or after five years, unless the member is unable to engage in any substantially gainful activity, in which case payments cease on the earlier of ten 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 same rate as any cost-of-living adjustments for which the member is eligible (see item 11). On the date when service benefits reach a level of $66^{2} / 3 \%$ of average final compensation or ten years after the normal retirement date, if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.

## 6. No-Age Disability 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.

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

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

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at the same rate as any cost-of-living adjustments for which the member is eligible (see item 11). On the date when service benefits reach a level of $59 \%$ of average final compensation, the disability benefit converts to a service retirement benefit based on service and average final compensation at that date.

## 7. Pre-Retirement Ordinary Death Benefits

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

Benefit: Designated beneficiary, spouse, children, or parents entitled to benefit calculated as if deceased member had retired under Option 2 (see item 12); however, beneficiary may elect survivor benefits payable to a surviving spouse, dependent children, parent, or other designated beneficiaries in monthly amounts varying by status of beneficiary and number of eligible survivors. Otherwise accumulated contributions with interest are payable to designated beneficiary, spouse, children, older parents, or estate.

## 8. Pre-Retirement Accidental Death Benefits

Eligibility: Death while active or disabled resulting from 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 twothirds of 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."


## 9. Termination Benefit

Eligibility: Termination of service other than by retirement or death with at least five years of creditable service.
Benefit: The member's choice of a refund of the accumulated contributions with interest or a retirement benefit using creditable service and average final compensation as of date of termination, deferred to normal retirement age.

## 10. Refund of Contributions

Eligibility: Termination of service other than by retirement or death with less than 5 years of creditable service.
Benefit: Refund of member's accumulated contributions with interest.

## Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions

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

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

Cost-of-living adjustments are effective September 1 and are applied to all benefits that have been in payment for six months for retirees who retire prior to September 1, 2015, 12 months for retirees who retired on or after September 1, 2015, and 24 months for those who retire on or after September 1, 2019.

The maximum annual increase is 2.5\%, applicable to COLAs issued in September 2018 and later (prior to this, 3\% for the 2014 through 2017 COLAs and $4 \%$ prior to the 2014 COLA).

Possible downward adjustments to future COLAs may occur if severe market losses result in contribution rates under the risk-sharing contribution methodology that exceed the contribution caps for PLD and member rates under this methodology. In this eventuality, a reduced COLA may be paid to retirees.

## 12. Methods of Payment of Service Retirement Benefits

At retirement, a member who retires with a benefit must choose from the following methods of payment:
Full Benefit: Unadjusted benefit paid for the life of the member only.
Option 1: Cash refund equal to the remaining member contribution balance, if any, at the date of death (where the member contribution balance has been reduced each month by the portion of the monthly benefit deemed to be provided by member contributions).

Option 2: 100\% joint and survivor annuity.
Option 3: 50\% joint and survivor annuity.
Option 4: Joint and survivor annuity at any percentage other than those available under Option 2 and Option 3.
Option 5: Designated percentage of the benefit (not less than 51\%) payable to the member, with the remaining percentage (the two to equal 100\%) payable to a beneficiary (may only be a sole beneficiary) while both are alive. At the death of either, the higher of the two percentages is paid to the survivor for the survivor's life, and the lowerpercentage 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*.

[^2]
# Consolidated Plan for Participating Local Districts Summary of Program and Plan Provisions 

## 13. Plan Changes since Prior Valuation

Three formerly withdrawn Participating Local Districts (PLDs) elected to re-enter the Consolidated Plan this year. The liability increase identified as a plan change represents the liability being transferred back into this Plan and is mostly offset by assets transferred in as well. The difference between the asset and liability transfer will be paid for by one of the PLDs as an IUUAL amount.

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

## Consolidated Plan for Participating Local Districts <br> Actuarial Assumptions and Methods

## A. Actuarial Assumptions

## 1. Annual Rate of Investment Return

$$
\text { PLDs } \quad 6.75 \%
$$

Rate is net of both administrative and investment expense.
2. Cost-of-Living Adjustment (COLA) Assumed Rate
PLDs $\quad 1.91 \%$
3. Sample Rates of Individual Salary Increases (\% at Selected Years of Service)

| Years of Service | Disability Rate |
| :---: | :---: |
| 0 | $9.00 \%$ |
| 1 | 4.80 |
| 2 | 3.60 |
| 3 | 3.10 |
| 4 | 2.75 |
| 5 | 2.75 |
| 10 | 2.75 |
| 15 | 2.75 |
| 20 | 2.75 |
| 25 | 2.75 |
| 30 | 2.75 |

The above rates include a $2.75 \%$ across-the-board increase at each year of service.
4. Sample Rates of Termination (\% at Selected Years of Service)

| Service | Regular | Special |
| :---: | :---: | :---: |
| 0 | $25.0 \%$ | $25.0 \%$ |
| 1 | 20.0 | 12.5 |
| 2 | 15.0 | 10.0 |
| 3 | 12.0 | 7.5 |
| 4 | 10.0 | 5.0 |
| 5 | 9.0 | 4.0 |
| 10 | 6.0 | 2.5 |
| 15 | 4.0 | 2.5 |
| 20 | 2.5 | 2.5 |

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 time of termination.

## Consolidated Plan for Participating Local Districts Actuarial 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 2020) |  |
| :---: | :---: | :---: |
| Age | Male | Female |
| 50 | 40 | 31 |
| 55 | 57 | 42 |
| 60 | 77 | 61 |
| 65 | 109 | 94 |
| 70 | 169 | 150 |
| 75 | 275 | 247 |
| 80 | 463 | 417 |
| 85 | 808 | 741 |
| 90 | 1,440 | 1,339 |
| 95 | 2,298 | 2,227 |

Rates are based on 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 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.

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

(Showing values in 2020)

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | 4 | 2 |
| 25 | 4 | 2 |
| 30 | 4 | 2 |
| 35 | 5 | 3 |
| 40 | 6 | 5 |
| 45 | 9 | 7 |
| 50 | 17 | 12 |
| 55 | 28 | 19 |
| 60 | 46 | 29 |
| 65 | 82 | 43 |

* For Regular Plans, 5\% of deaths assumed to arise out of and in the course of employment, while for Special Plans, $20 \%$ of deaths are assumed to arise out of and in the course of employment.

Rates are based on 104\% and 120\% of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Total Employee Mortality Table, both projected from the 2006 base rates 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.

## Consolidated Plan for Participating Local Districts Actuarial Assumptions and Methods

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

| Age | (Showing values in 2020) <br> Male | Female |
| :---: | :---: | :---: |
| 25 | 80 | 23 |
| 30 | 77 | 30 |
| 35 | 91 | 41 |
| 40 | 109 | 57 |
| 45 | 170 | 89 |
| 50 | 208 | 117 |
| 55 | 240 | 147 |
| 60 | 273 | 175 |
| 65 | 326 | 212 |
| 70 | 422 | 289 |

Rates are based on $108 \%$ and 105\% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2006 base rates 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.

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

## Regular Plans

| Age | Tier 1 | Tier 2 |
| :---: | ---: | ---: |
| 45 | 50 | 50 |
| 50 | 50 | 50 |
| 55 | 50 | 50 |
| 60 | 200 | 50 |
| 65 | 250 | 200 |
| 70 | 1,000 | 1,000 |

In the case of PLD employees, Tier 1 refers to those who were hired prior to July 1, 2014, and Tier 2 refers to those who were hired on or after July 1, 2014.

| Service | Special Plans |
| :---: | :---: |
| 20 | 400 |
| $21-24$ | 300 |
| 25 | 400 |
| $26-29$ | 300 |
| 30 | 400 |
| $31-34$ | 300 |
| $35+$ | 1,000 |

Note that the 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.

## Consolidated Plan for Participating Local Districts Actuarial Assumptions and Methods

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

| Age | Revised Assumption |
| :---: | :---: |
| 25 | 1.8 |
| 30 | 2.4 |
| 35 | 3.0 |
| 40 | 4.2 |
| 45 | 9.0 |
| 50 | 19.8 |
| 55 | 36.6 |
| 60 | 65.0 |

* 10\% assumed to receive Workers Compensation benefits offsetting disability benefit.


## 10. 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; female spouse is assumed to be three years younger than 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.

## 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 valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: 5\% assumed for all future years
COLA Timing: September 1
Member Contribution Rates: For purposes of developing liability amounts, the member contribution rates in effect for FY 2020 are assumed to continue for all periods in the future.

## 12. Rationale for Assumptions:

The assumptions were adopted by the Board of Trustees at their July 14, 2016 meeting. The demographic assumptions adopted are based on an experience study covering the period from June 30, 2012 through June 30, 2015 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.

# Consolidated Plan for Participating Local Districts <br> Actuarial Assumptions and Methods 

## B. Actuarial Methods

## 1. Funding Method

The entry age normal actuarial funding method is used to determine costs and the actuarially determined contributions needed to fund the Plan. The actuarially determined contributions are then used to develop the specific rates for both members and PLDs for each specific Regular and Special Plan within the Plan. Under this funding method, the Actuarially Determined Plan Total Rate consists of two elements: the Actuarially Determined Plan Normal Cost Rate and the Actuarially Determined Plan UAL Amortization Rate.

For each of the Regular and Special Plans in the Consolidated Plan, an individual entry age normal cost rate is determined for each active member. The normal cost is determined by the following steps. First, an individual normal cost rate is determined by taking the value, as of entry age into a Plan, of each active member's projected future benefits. Second, this value is then divided by the value, also at entry age, of the member's expected future salary. These rates are then multiplied by each member's salary as of the valuation date to get the total normal cost dollars as of the valuation date for that Plan. These individual amounts for each Regular and Special Plan are then added to get the total normal cost dollars for the Plan and then divided by the total payroll for the Plan to get the Actuarially Determined Plan Normal Cost Rate.

The unfunded actuarial liability under the entry age normal funding method equals the present value, at the time of valuation, of the future benefit payments less the present value of future normal costs, future member contributions, future IUUAL payments, and current assets. Under the Consolidated Plan, the Actuarially Determined Plan UAL Amortization Rate is calculated for the Consolidated Plan in total based on the pooled UAL being amortized over a 20 -year period commencing with the June 30,2015 valuation date and any layers of pooled UAL arising after that date amortized over individual 20-year periods. This amortization uses a level percentage of pay method with payroll assumed to increase at $2.75 \%$ per year. The amortization payment thus derived for the valuation year is then divided by the total payroll to develop the Actuarially Determined Plan UAL Amortization Rate.

The risk sharing framework adopted by the Board of Trustees is then used to develop individual PLD and member rates for each Regular and Special Plan within the Plan based on the Actuarially Determined Plan Total Rate. The allocation to each specific Plan from the Total Rate is based on the normal cost rate for each specific Plan relative to the Plan in total. For the three Regular Plans, member rates are developed separately for members under the provisions with an age 60 normal retirement age and members under the provisions with an age 65 normal retirement age.

In addition to the development of rates for each Plan, the actual contribution for a given PLD will include an Individual Unpooled Unfunded Actuarial Liability (IUUAL) payment as well, unless the PLD came into the Plan without an IUUAL or has paid off its IUUAL. The Initial Unpooled Unfunded Actuarial Liability (IUUAL) was calculated at entry into the Consolidated Plan for each PLD that entered with liabilities in excess of their assets and is paid off through payment of a specific dollar amount until paid off.

## 2. Asset Valuation Method

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

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

## 3. Changes since Last Valuation

None.

# Judicial Retirement Program Summary of Program and Plan Provisions 

## Judicial Retirement Program

## 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.

## 5. Service Retirement Benefits

Eligibility:
A. Eligibility for Members with at Least Ten 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 ten years of creditable service.

## Judicial Retirement Program Summary of Program and Plan Provisions

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 Ten 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 ten 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.
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 ten 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 ten years.

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

## Judicial Retirement Program Summary of Program and Plan Provisions

| 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 ten 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 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 Option, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: $662 / 3 \%$ 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 on 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 and the date that the service retirement benefit exceeds the disability benefit.

Conversion to Service Retirement: During the period of disability, service is credited and average final compensation is increased at same rate as any cost-of-living adjustments for which the member is eligible (not subject to a cap) (see item 12). On the date when service benefits reach a level of $662 / 3 \%$ of average final compensation or at age 70 , if earlier, the disability converts to a service retirement benefit based on service and average final compensation at that time.

## 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-ofduty or disabled with at least five years of creditable service.

## Judicial Retirement Program Summary of Program and Plan Provisions

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 on 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 a 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-ofduty.

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

## 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 twothirds of 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 date of termination, deferred to normal retirement age.

## Judicial Retirement Program Summary of Program and Plan 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

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

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA cap 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 twelve months as of that date. The maximum annual increase is $3 \%$. 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 Cap History: (value as of September 1 of listed year when COLA effective):

$$
\begin{aligned}
& 2014-\$ 20,000.00 \\
& 2015 \text { - } \$ 20,420.00 \\
& 2016 \text { - } \$ 20,940.71 \\
& 2017 \text { - } \$ 21,474.70 \\
& 2018 \text { - } \$ 21,818.30 \\
& 2019 \text { - } \$ 22,451.03 \\
& 2020-\$ 22,810.25
\end{aligned}
$$

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

## 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.

## Judicial Retirement Program <br> Summary of Program and Plan Provisions

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 lowerpercentage 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

None.
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.

## Judicial Retirement Program <br> Actuarial Assumptions and Methods

## A. Actuarial Assumptions

## 1. Annual Rate of Investment Return

$$
\text { Judicial } \quad 6.75 \%
$$

Rate is net of both administrative and investment expense.
2. Cost-of-Living Adjustment (COLA) Assumed Rate

Judicial 2.20\%
3. Annual Rate of Individual Salary Increase:

Judicial 2.75\%
4. 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 time of termination.
5. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members)

|  | Showing values in 2020 <br> Male |  |
| :---: | ---: | :---: |
| Age | Female |  |
| 50 | 40 | 31 |
| 55 | 57 | 42 |
| 60 | 77 | 61 |
| 65 | 109 | 94 |
| 70 | 169 | 150 |
| 75 | 275 | 247 |
| 80 | 463 | 417 |
| 85 | 808 | 741 |
| 90 | 1,440 | 1,339 |
| 95 | 2,298 | 2,227 |

Rates are based on 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 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.

## Judicial Retirement Program <br> Actuarial 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 2020

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | 4 | 2 |
| 25 | 4 | 2 |
| 30 | 4 | 2 |
| 35 | 5 | 3 |
| 40 | 6 | 5 |
| 45 | 9 | 7 |
| 50 | 17 | 12 |
| 55 | 28 | 19 |
| 60 | 46 | 29 |
| 65 | 82 | 43 |

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

Rates are based on $104 \%$ and $120 \%$ of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Total Employee Mortality Table, both projected from the 2006 base rates 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.

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

|  | Showing values in 2020 |  |
| :---: | :---: | :---: |
| Age | Male | Female |
| 25 | 80 | 23 |
| 30 | 77 | 30 |
| 35 | 91 | 41 |
| 40 | 109 | 57 |
| 45 | 170 | 89 |
| 50 | 208 | 117 |
| 55 | 240 | 147 |
| 60 | 273 | 175 |
| 65 | 326 | 212 |
| 70 | 422 | 289 |

Rates are based on $108 \%$ and 105\% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2006 base rates 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.

## Judicial Retirement Program Actuarial Assumptions and Methods

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

| Age | Tier 1 | Tier 2 | Tier 3 |
| :---: | :---: | ---: | ---: |
| $60-61$ | 1,000 | NA | NA |
| $62-64$ | 1,000 | 500 | NA |
| $65-69$ | 1,000 | 500 | 500 |
| $70-74$ | 1,000 | 500 | 500 |
| $75+$ | 1,000 | 1,000 | 1,000 |

In the case of judicial employees, Tier 1 refers to those who had accrued at least 10 years of service by July 1, 1993. Tier 2 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. Tier 3 refers to those who did not have five years of service by July 1, 2011.

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

| Age | Disability Rate |
| :---: | :---: |
| 25 | $0 \%$ |
| 30 | 0 |
| 35 | 0 |
| 40 | 0 |
| 45 | 0 |
| 50 | 0 |
| 55 | 0 |
| 60 | 0 |

## 10. 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; female spouse is assumed to be three years younger than 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.

## 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 valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: 5\% assumed for all future years
COLA Timing: September 1

## 12. Rationale for Actuarial Assumptions

The assumptions were adopted by the Board of Trustees at their July 14, 2016 meeting. The demographic assumptions adopted are based on an experience study covering the period from June 30, 2012 through June 30,2015 and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. The Board continuously reviews the investment return assumption and adopted a reduced rate of $6.75 \%$ effective with the 2018 valuation, at the advice of its investment consultant.

# Judicial Retirement Program <br> Actuarial Assumptions and Methods 

## 13. Changes since Last Valuation

None.

## 14. Rationale for Change in Actuarial Assumptions

N/A.

## B. Actuarial Methods

## 1. Funding 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 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 rate for this Program is developed by amortizing the unfunded liability over an open ten-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 rate.

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

By using an open amortization period, this funding 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.

## 2. Asset Valuation Method

For purposes of determining the State contribution 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 cash flow for the year and imputed returns at the actuarial assumption. This expected value is compared to the market value and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

## 3. Changes since Last Valuation

None.

# Legislative Retirement Program <br> Summary of Program and Plan Provisions 

## Legislative Retirement Program

## 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 Ten 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 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 ten 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.

## Legislative Retirement Program Summary of Program and Plan Provisions

B. Eligibility for Members with Less Than Ten 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 ten 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.
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 ten 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 ten years 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 ten 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 creditable service on July 1, 2011.

# Legislative Retirement Program Summary of Program and Plan Provisions 

Minimum benefit $\$ 100$ per month if at least ten 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 No Age Disability Option, and either disabled in the line-of-duty or disabled with at least five years of creditable service.

Benefit: $662 / 3 \%$ 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 on 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 ten years following normal retirement age and 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 same rate as any cost-of-living adjustments for which the member is eligible (not subject to a cap) (see item 12). On the date when service benefits reach a level of $66^{2} / 3 \%$ of average final compensation or ten 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 on 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 a 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-ofduty.

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

# Legislative Retirement Program <br> Summary of Program and Plan 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 twothirds of 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 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

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

Cost-of-living adjustments (COLA) are effective September 1 of each year and are applied to that portion of the benefit that is not in excess of a COLA cap 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 twelve months as of that date. The maximum annual increase is $3 \%$. 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.

## Legislative Retirement Program

 Summary of Program and Plan ProvisionsCOLA Cap History: (value as of September 1 of listed year when COLA effective):

$$
\begin{aligned}
& 2014-\$ 20,000.00 \\
& 2015-\$ 20,420.00 \\
& 2016-\$ 20,940.71 \\
& 2017-\$ 21,474.70 \\
& 2018-\$ 21,818.30 \\
& 2019-\$ 22,451.03 \\
& 2020-\$ 22,810.25
\end{aligned}
$$

Members who did not have ten years of service on July 1, 1993 will begin receiving cost of living adjustments at the latter of 12 months after their normal retirement age and the first September 1 following a minimum of twelve 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).

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 lowerpercentage 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

None.
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.

# Legislative Retirement Program <br> Actuarial Assumptions and Methods 

## A. Actuarial Assumptions

## 1. Annual Rate of Investment Return

$$
\text { Legislative } \quad 6.75 \%
$$

Rate is net of both administrative and investment expense.
2. Cost-of-Living Adjustment (COLA) Assumed Rate

$$
\text { Legislative } \quad 2.20 \%
$$

3. Annual Rate of Individual Salary Increase

$$
\text { Legislative } \quad 2.75 \%
$$

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

| Service | Termination Rate |
| :---: | :---: |
| 0 | $0 \%$ |
| 1 | 0 |
| 2 | 30 |
| 3 | 30 |
| 4 | 25 |
| 5 | 25 |
| 6 | 10 |
| 7 | 10 |
| 8 | 50 |
| 9 | 50 |
| 10 | 25 |
| 11 | 25 |
| 12 | 25 |
| 13 | 25 |
| 14 | 25 |
| 15 | 25 |
| $16+$ | 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.

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 time of termination.

## Legislative Retirement Program Actuarial 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 2020 |  |
| :---: | ---: | :---: |
| Age | Male | Female |
| 50 | 40 | 31 |
| 55 | 57 | 42 |
| 60 | 77 | 61 |
| 65 | 109 | 94 |
| 70 | 169 | 150 |
| 75 | 275 | 247 |
| 80 | 463 | 417 |
| 85 | 808 | 741 |
| 90 | 1,440 | 1,339 |
| 95 | 2,298 | 2,227 |

Rates are based on 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 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.

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

## Showing values in 2020

| Age | Male | Female |
| :---: | :---: | :---: |
| 20 | 4 | 2 |
| 25 | 4 | 2 |
| 30 | 4 | 2 |
| 35 | 5 | 3 |
| 40 | 6 | 5 |
| 45 | 9 | 7 |
| 50 | 17 | 12 |
| 55 | 28 | 19 |
| 60 | 46 | 29 |
| 65 | 82 | 43 |

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

Rates are based on $104 \%$ and $120 \%$ of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Total Employee Mortality Table, both projected from the 2006 base rates 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.

## Legislative Retirement Program <br> Actuarial 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 2020 |  |
| :---: | :---: | :---: |
| Age | Male | Female |
| 25 | 80 | 23 |
| 30 | 77 | 30 |
| 35 | 91 | 41 |
| 40 | 109 | 57 |
| 45 | 170 | 89 |
| 50 | 208 | 117 |
| 55 | 240 | 147 |
| 60 | 273 | 175 |
| 65 | 326 | 212 |
| 70 | 422 | 289 |

Rates are based on $108 \%$ and 105\% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2006 base rates 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.

## 8. 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 the 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)

| Age | Disability Rate |
| :---: | :---: |
| 25 | 0 |
| 30 | 0 |
| 35 | 0 |
| 40 | 0 |
| 45 | 0 |
| 50 | 0 |
| 55 | 0 |
| 60 | 0 |

## 10. 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; female spouse is assumed to be three years younger than 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.

# Legislative Retirement Program Actuarial 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 valuation date. Annual increases are applied as of the beginning of each subsequent valuation.

Member Contribution Interest Rate: 5\% assumed for all future years

## COLA Timing: September 1

## 12. Rationale for Actuarial Assumptions

The assumptions were adopted by the Board of Trustees at their July 14, 2016 meeting. The demographic assumptions adopted are based on an experience study covering the period from June 30, 2012 through June 30, 2015 and the economic assumptions are based on this experience study along with advice of the MainePERS investment consultants. The Board continuously reviews the investment return assumption and adopted a reduced rate of $6.75 \%$ effective with the 2018 valuation, at the advice of its investment consultant.

## 13. Changes since Last Valuation

None.

## 14. Rationale for Change in Actuarial Assumptions

N/A.

## B. Actuarial Methods

## 1. Funding 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 employer's 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 rate for this Program is developed by amortizing the unfunded liability over an open ten-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 rate.

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

## Legislative Retirement Program <br> Actuarial Assumptions and Methods

By using an open amortization period, this funding 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.

## 2. Asset Valuation Method

For purposes of determining the State contribution 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 cash flow for the year and imputed returns at the actuarial assumption. This expected value is compared to the market value and one-third of the difference is added to the preliminary actuarial value to arrive at the final actuarial value.

## 3. Changes since Last Valuation

None.

Retiree Group Life Insurance
Summary of Plan Provisions

## Membership

| Service Retirement: | A retiree must have participated in the group life insurance program for at least ten years <br> and possess coverage just prior to retirement. |
| :--- | :--- |
| Disability Retirement: | An employee must have participated in the group life insurance program immediately prior <br> 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 |
| PLD: | PLD must pay $\$ 0.21$ biweekly per $\$ 1,000$ of base benefit, based on the coverage amounts |
|  | declining from $100 \%$ to $40 \%$. Biweekly rates increase to $\$ 0.22$ in FYE 2022, \$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. MainePERS is charged a fee for those active employees who convert to an individual policy upon termination from employment. Conversion charges are considered a cost of active, not retiree group life insurance. Therefore, it is not included in these liabilities.)


## Retiree Group Life Insurance

Assumptions and Methods

## Economic Assumptions

| Valuation Date: June 30, 2020 |  |
| :--- | :--- |
| State Sponsored Plans Beginning of Year Investment Return: | 6.75\% per year |
| State Sponsored Plans End of Year Investment Return: | $6.75 \%$ per year |
| PLD GASB Beginning of Year Investment Return: | $4.98 \%$ per year |
| PLD GASB End of Year Investment Return: | $6.75 \%$ per year |
| Cost-of-Living Increases in Life Benefits: | N/A. Unlike pension benefits, Life Benefits do not <br> increase with Cost of Living. |
| Premium Expense Assumption: | To reflect administrative expenses associated with <br> the distribution of benefits, the following loads, <br> determined in the 2020 Premium Study, have been <br> added to the liabilities, normal cost, and benefit <br> payments. |
| State Employees, Judges and Legislators: | $9.84 \%$ |
| Teachers: | 16.51\% |
| Participating Local Districts: | $9.36 \%$ of claims |
| Conversion Charges: | Applies to the cost of active group life insurance, not <br> retiree group life insurance. |
| Form of Benefit Payment: | Lump Sum. |

## Other Assumptions and Methods

All other assumptions and methods match those used for the pension valuation as of June 30, 2020.

## Statistical Section



Marshall Lighthouse, Port Clyde

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## Maine Public Employees Retirement System Statistical Section (Unaudited)

This section of the Maine Public Employees Retirement System's Comprehensive Annual Financial Report presents detailed information as a context for understanding this year's financial statements, note disclosures, and supplementary information. This information has not been audited by the independent auditor.

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Defined Benefit Plan

Last Ten Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | 151,438,849 | \$ | 146,019,051 | \$ | 140,844,879 | \$ | 139,464,284 | \$ | 125,523,986 | \$ | 123,528,807 | \$ | 121,033,152 | \$ | 121,059,118 | \$ | 121,071,499 | \$ | 124,356,773 |
| Employer contributions |  | 225,468,763 |  | 218,530,934 |  | 211,251,144 |  | 211,037,365 |  | 199,212,719 |  | 173,935,492 |  | 162,920,147 |  | 136,937,972 |  | 125,839,206 |  | 184,423,671 |
| Non-employer entity contributions |  | 174,530,364 |  | 132,980,832 |  | 129,421,735 |  | 116,080, 164 |  | 112,477,836 |  | 147,283,716 |  | 142, 303, 104 |  | 126,762,206 |  | 126,343,975 |  | 148,728,049 |
| Investment Income (net of expenses) |  | 354,272,725 |  | 768,987,130 |  | 1,077,827,555 |  | 1,256,043,735 |  | 40,540,758 |  | 191,829,057 |  | 1,517,432,346 |  | 929, 806,764 |  | 43,821,836 |  | 1,583, 183,960 |
| Transfer from other funds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 905,710,701 |  | 1,266,517,947 |  | 1,559, 345,313 |  | 1,722,625,548 |  | 477,755,299 |  | 636,577,072 |  | 1,943,688,749 |  | 1,314, 566,060 |  | 417,076,516 |  | 2,040,692,453 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | 863,977,621 |  | 832,934,948 |  | 792,397,467 |  | 762,449,708 |  | 727,717,177 |  | 703,292,105 |  | 667,506,634 |  | 651,525,831 |  | 612,512,717 |  | 574,135,970 |
| Refunds |  | 18,841,863 |  | 18,718,610 |  | 17,984,303 |  | 17,876,272 |  | 16,806,566 |  | 19,432,153 |  | 21,684,397 |  | 17,891,255 |  | 21,024,589 |  | 20,747,236 |
| Administrative expenses |  | 11,343,928 |  | 11, 180, 852 |  | 10, 076,242 |  | 9,216,027 |  | 8,649,030 |  | 9,386,695 |  | 8,246,740 |  | 7,651,938 |  | 7,268,110 |  | 7,553,424 |
| Transfer to other funds |  | 2,193,752 |  | 311,233 |  | - |  | 124,178 |  | 6,342,010 |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 896,357,164 |  | 863,145,643 |  | 820,458,012 |  | 789,666,185 |  | 759,514,783 |  | 732,110,953 |  | 697,437,771 |  | 677,069,024 |  | 640,805,416 |  | 602, 436,630 |
| Change in fiduciary net position | \$ | 9,353,537 | \$ | 403,372,304 | \$ | 738,887,301 | \$ | 932,959,363 | \$ | $(281,759,484)$ | \$ | $(95,533,881)$ |  | 1,246,250,978 | \$ | 637,497,036 | \$ | $(223,728,900)$ |  | 1,438,255,823 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | ,035,565,075 |  | 11,632, 192,771 |  | 10,893, 305,470 | \$ | 9,960,346,107 |  | 0,242,105,591 |  | ,337,639,472 |  | 9,091,388,494 | \$ | 8,453,891,458 | \$ | 8,677,620,358 |  | 7,239,364,535 |
| End of Year |  | 12,044,918,612 |  | , 075 |  | 11,632, 192,771 |  | 10,893,305,470 |  | 9,960,346,107 |  |  |  |  |  | 9,091,388,494 |  | ,891,45 |  | 8,677,620,358 |

Defined Benefit Plan Changes in Fiduciary Net Position -

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| \$ | 616,095 | \$ | 620,075 | \$ | 603,875 | \$ | 584,451 | \$ | 549,845 | \$ | 549,691 | \$ | 528,192 | \$ | 518,094 | \$ | 517,419 | \$ | 518,138 |
|  | 715,963 |  | 1,212,666 |  | 1,179,328 |  | 1,144,445 |  | 1,077,545 |  | 979,281 |  | 932,223 |  | 841,397 |  | 810,721 |  | 987,261 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | 2,164,283 |  | 4,709,445 |  | 6,606,905 |  | 7,799,507 |  | 129,372 |  | 1,055,347 |  | 8,416,042 |  | 5,195,908 |  | 238,870 |  | 9,044,929 |
|  | 764,902 |  | - |  | - |  | - |  | 6,342,010 |  | - |  | - |  | - |  | - |  | - |
|  | 4,261,243 |  | 6,542,186 |  | 8,390,108 |  | 9,528,403 |  | 8,098,772 |  | 2,584,319 |  | 9,876,457 |  | 6,555,399 |  | 1,567,010 |  | 10,550,328 |
|  | 4,313,483 |  | 4,021,982 |  | 3,804,709 |  | 3,651,927 |  | 3,501,911 |  | 3,383,995 |  | 3,219,480 |  | 3,282,344 |  | 3,171,846 |  | 3,034,095 |
|  | 1,075 |  | 45,524 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 124 |
|  | 69,406 |  | 68,475 |  | 61,708 |  | 56,436 |  | 47,577 |  | 49,399 |  | 41,681 |  | 42,858 |  | 40,852 |  | 43,534 |
|  | - |  | 2,604 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
|  | 4,383,964 |  | 4,138,585 |  | 3,866,417 |  | 3,708,363 |  | 3,549,488 |  | 3,433,394 |  | 3,261,161 |  | 3,325,202 |  | 3,212,698 |  | 3,077,753 |
| \$ | (122,721) | \$ | 2,403,601 | \$ | 4,523,691 | \$ | 5,820,040 | \$ | 4,549,284 | \$ | (849,075) |  | 6,615,296 | \$ | 3,230,197 | \$ | $(1,645,688)$ |  | 7,472,575 |
| \$ | 73,637,441 | \$ | 71,233,840 | \$ | 66,710,149 | \$ | 60,890,109 | \$ | 56,340,825 | \$ | 57, 189,900 | \$ | 50,574,604 | \$ | 47,344,407 | \$ | 48,990,095 | \$ | 41,517,520 |
| \$ | 73,514,720 | \$ | 73,637,441 | \$ | 71,233,840 | \$ | 66,710,149 | \$ | 60,890,109 | \$ | 56,340,825 | \$ | 57,189,900 | \$ | 50,574,604 | \$ | 47,344,407 | \$ | 48,990,095 |

Additions
Member contributions
Employer contributions
Non-employer entity contributions
Investment Income (net of expenses)
Transfer from other funds
Total additions to fiduciary net position
Total deductions from fiduciary net position

## Deductions

Total additions to fiduciary net position

Change in fiduciary net position
Defined Benefit Plan
Changes Last Ton Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  |  | 2011 |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | 156,306 | \$ | 220,611 | \$ | 153,881 | \$ | 202,388 | \$ | 137,893 | \$ | 193,356 | \$ | 139,501 | \$ | 194,669 | \$ | 133,579 | \$ | 182,065 |
| Employer contributions |  | - |  | - |  | - |  | - |  | - |  | 4,418 |  | 3,857 |  | 6,507 |  | - |  | - |
| Non-employer entity contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 390,164 |  | 845,407 |  | 1,176,462 |  | 1,366,222 |  | 47,890 |  | 206,453 |  | 1,622,295 |  | 975,524 |  | 48,845 |  | 1,634,305 |
| Transfer from other funds |  | 365,766 |  | 45,285 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 912,236 |  | 1,111,303 |  | 1,330,343 |  | 1,568,610 |  | 185,783 |  | 404,227 |  | 1,765,653 |  | 1,176,700 |  | 182,424 |  | 1,816,370 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | 520,364 |  | 482,660 |  | 427,063 |  | 399,142 |  | 367,545 |  | 327,875 |  | 308,770 |  | 280,254 |  | 274,088 |  | 255,181 |
| Refunds |  | 177,332 |  | 124,180 |  | 32,682 |  | 69,901 |  | 77,786 |  | 111,237 |  | 8,836 |  | 82,768 |  | 5,613 |  | 93,809 |
| Administrative expenses |  | 12,458 |  | 12,262 |  | 11,002 |  | 10,003 |  | 9,353 |  | 9,584 |  | 7,975 |  | 8,040 |  | 7,241 |  | 7,551 |
| Transfer to other funds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 710,154 |  | 619,102 |  | 470,747 |  | 479,046 |  | 454,684 |  | 448,696 |  | 325,581 |  | 371,062 |  | 286,942 |  | 356,541 |
| Change in fiduciary net position | \$ | 202,082 | \$ | 492,201 | \$ | 859,596 | \$ | 1,089,564 | \$ | $(268,901)$ | \$ | $(44,469)$ | \$ | 1,440,072 | \$ | 805,638 | \$ | $(104,518)$ | \$ | 1,459,829 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 13,248,022 | \$ | 12,755,821 | \$ | 11,896,225 | \$ | 10,806,661 | \$ | 11,075,562 | \$ | 11,120,031 | \$ | 9,679,959 | \$ | 8,874,321 | \$ | 8,978,839 | \$ | 7,519,010 |
| End of Year | \$ | 13,450,104 | \$ | 13,248,022 | \$ | 12,755,821 | \$ | 11,896,225 | \$ | 10,806,661 | \$ | 11,075,562 | \$ | 11,120,031 | \$ | 9,679,959 | \$ | 8,874,321 | \$ | 8,978,839 |

Defined Benefit Plan
Last Ten Fiscal Years
Changes in Fiduciary Net Position - PLD Consolidated Plan
Last Ten Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | 54,090,045 | \$ | 54,927,202 | \$ | 48,050,202 | \$ | 46,080,851 | \$ | 40,861,405 | \$ | 37,202,921 | \$ | 33,210,510 | \$ | 31,658,619 | \$ | 32,343,655 | \$ | 35,022,928 |
| Employer contributions |  | 66,717,733 |  | 61,487,037 |  | 56,092,662 |  | 51,387,011 |  | 47,624,182 |  | 43,366,730 |  | 32,706,160 |  | 26,465,471 |  | 22,260,128 |  | 17,459, 677 |
| Non-employer entity contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 88,330,927 |  | 188,620,107 |  | 259,699,519 |  | 299,780,948 |  | 10,200,342 |  | 46,075,304 |  | 361,125,177 |  | 221,313,918 |  | 10,111,043 |  | 381,383,555 |
| Transfer from other funds |  | 27,886,461 |  | 268,552 |  | - |  | 124,177 |  | - |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 237,025,166 |  | 305,302,898 |  | 363,842,383 |  | 397,372,987 |  | 98,685,929 |  | 126,644,955 |  | 427,041,847 |  | 279,438,008 |  | 64,714,826 |  | 433,866,160 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | 167,897,392 |  | 158,671,037 |  | 147,516,358 |  | 140,413,488 |  | 134,834,445 |  | 129,476,010 |  | 121,559,257 |  | 114,627,512 |  | 108,646,611 |  | 101,288,867 |
| Refunds |  | 6,854,776 |  | 6,728,643 |  | 4,571,527 |  | 5,750,078 |  | 5,085,235 |  | 48,939,042 |  | 5,602,101 |  | 6,051,774 |  | 22,911,291 |  | 11,353,634 |
| Administrative expenses |  | 2,797,728 |  | 2,706,977 |  | 2,411,666 |  | 2,209,324 |  | 2,028,294 |  | 2,117,266 |  | 1,779,304 |  | 1,810,389 |  | 1,732,139 |  | 1,827,587 |
| Transfer to other funds |  | 203,000 |  | 220,000 |  | 386,621 |  | 186,378 |  | 217,338 |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 177,752,896 |  | 168,326,657 |  | 154,886, 172 |  | 148,559,268 |  | 142,165,312 |  | 180,532,318 |  | 128,940,662 |  | 122,489,675 |  | 133,290,041 |  | 114,470,088 |
| Change in fiduciary net position | \$ | 59,272,271 | \$ | 136,976,241 | \$ | 208,956,211 | \$ | 248,813,719 | \$ | $(43,479,383)$ | \$ | $(53,887,363)$ | \$ | 298,101,185 | \$ | 156,948,333 | \$ | $(68,575,215)$ | \$ | 319,396,072 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 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 | \$ | 2,000,727,153 | \$ | 2,069,302,368 | \$ | 1,749,906,296 |
| End of Year | \$ | 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 | \$ | 2,000,727,153 | \$ | 2,069,302,368 |

Defined Benefit Plan
Changes in

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  |  | 2019 | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | 28,694 | \$ | 68,708 | \$ | 68,609 | \$ | 76,783 | \$ | 83,614 | \$ | 94,468 | \$ | 94,136 | \$ | 106,000 | \$ | 105,380 | \$ | 124,472 |
| Employer contributions |  | 345,323 |  | 638,946 |  | 594,730 |  | 630,639 |  | 783,608 |  | 916,671 |  | 667,846 |  | 656,047 |  | 102,509 |  | 302,338 |
| Non-employer entity contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 421,327 |  | 2,377,478 |  | 3,477,465 |  | 4,160,113 |  | 112,396 |  | 662,680 |  | 5,581,964 |  | 3,591,957 |  | 79,872 |  | 6,669,837 |
| Transfer from other funds |  |  |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 795,344 |  | 3,085,132 |  | 4,140,804 |  | 4,867,535 |  | 979,618 |  | 1,673,819 |  | 6,343,946 |  | 4,354,004 |  | 287,761 |  | 7,096,647 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | 1,759,029 |  | 2,842,649 |  | 2,788,425 |  | 2,777,307 |  | 2,779,624 |  | 2,780,492 |  | 2,702,486 |  | 2,644,060 |  | 2,608,985 |  | 2,442,356 |
| Refunds |  | 913,894 |  | 201,763 |  | - |  | - |  | - |  | - |  | 1,897,634 |  | - |  | 201,244 |  | 9,190 |
| Administrative expenses |  | 20,772 |  | 35,552 |  | 33,056 |  | 4,005 |  | 29,962 |  | 32,253 |  | 27,981 |  | 30,704 |  | 30,884 |  | 33,525 |
| Transfer to other funds |  | 26,823,377 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 29,517,072 |  | 3,079,964 |  | 2,821,481 |  | 2,781,312 |  | 2,809,586 |  | 2,812,745 |  | 4,628,101 |  | 2,674,764 |  | 2,841,113 |  | 2,485,071 |
| Change in fiduciary net position | \$ | $(28,721,728)$ | \$ | 5,168 | \$ | 1,319,323 | \$ | 2,086,223 | \$ | $(1,829,968)$ | \$ | $(1,138,926)$ | \$ | 1,715,845 | \$ | 1,679,240 | \$ | $(2,553,352)$ | \$ | 4,611,576 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 37,061,229 | \$ | 37,056,061 | \$ | 35,736,738 | \$ | 33,650,515 | \$ | 35,480,483 | \$ | 36,619,409 | \$ | 34,903,564 | \$ | 33,224,324 | \$ | 35,777,676 | \$ | 31,166,100 |
| End of Year | \$ | 8,339,501 | \$ | 37,061,229 | \$ | 37,056,061 | \$ | 35,736,738 | \$ | 33,650,515 | \$ | 35,480,483 | \$ | 36,619,409 | \$ | 34,903,564 | \$ | 33,224,324 | \$ | 35,777,676 |

## Group Life Insurance Plan Changes in Fiduciary Net Position Last Ten Fiscal Years*

## Group Life Insurance Plan - Active Employees

| Fiscal Year |  |  |  |
| :--- | :--- | :--- | :--- |
| 2020 | 2019 | 2018 | 2017 |

## Additions

| Member contributions | \$ | 4,424,086 | \$ | 4,245,342 | \$ | 3,865,718 | \$ | 4,464,169 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer contributions |  | 1,499,430 |  | 1,231,777 |  | 1,041,734 |  | 1,066,443 |
| Non-employer entity contributions |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 699,113 |  | 869,669 |  | 754,459 |  | 947,664 |
| Total additions to fiduciary net position |  | 6,622,629 |  | 6,346,788 |  | 5,661,911 |  | 6,478,276 |
| Deductions |  |  |  |  |  |  |  |  |
| Benefit payments |  | 5,144,330 |  | 2,295,347 |  | 4,229,368 |  | 4,222,130 |
| Refunds |  | - |  | - |  | - |  | - |
| Administrative expenses |  | 138,058 |  | 73,556 |  | 73,496 |  | 56,138 |
| Transfer to other funds |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 5,282,388 |  | 2,368,903 |  | 4,302,864 |  | 4,278,268 |
| Change in fiduciary net position | \$ | 1,340,241 | \$ | 3,977,885 | \$ | 1,359,047 | \$ | 2,200,008 |

## Fiduciary Net Position

| Beginning of Year | $\$$ | $13,632,850$ | $\$$ | $9,654,965$ | $\$$ | $8,295,918$ | $\$$ | $6,095,910$ |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| End of Year | $\$$ | $14,973,091$ | $\$$ | $13,632,850$ | $\$$ | $9,654,965$ | $\$$ | $8,295,918$ |

[^3]
## Group Life Insurance Plan Changes in Fiduciary Net Position Last Ten Fiscal Years*

Group Life Insurance Plan - State Employee \& Teacher Retirees

|  | Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Additions |  |  |  |  |  |  |  |  |
| Employer contributions | \$ | 4,832,759 | \$ | 4,209,464 | \$ | 4,179,011 | \$ | 3,650,300 |
| Non-employer entity contributions |  | 4,478,090 |  | 3,546,978 |  | 3,459,442 |  | 3,270,928 |
| Investment Income (net of expenses) |  | 4,885,544 |  | 6,418,113 |  | 7,804,837 |  | 9,885,897 |
| Transfer from other funds |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 14,196,393 |  | 14,174,555 |  | 15,443,290 |  | 16,807,125 |
| Deductions |  |  |  |  |  |  |  |  |
| Benefit payments |  | 8,177,754 |  | 7,118,082 |  | 7,269,808 |  | 6,759,071 |
| Refunds |  | - |  | - |  | - |  | - |
| Administrative expenses |  | 1,018,932 |  | 726,320 |  | 769,717 |  | 580,641 |
| Total deductions from fiduciary net position |  | 9,196,686 |  | 7,844,402 |  | 8,039,525 |  | 7,339,712 |
| Change in fiduciary net position | \$ | 4,999,707 | \$ | 6,330,153 | \$ | 7,403,765 | \$ | 9,467,413 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 100,616,782 | \$ | 94,286,629 | \$ | 86,882,864 | \$ | 77,415,451 |
| End of Year | \$ | 105,616,489 | \$ | 100,616,782 | \$ | 94,286,629 | \$ | 86,882,864 |

Group Life Insurance Plan - PLD Retirees

|  | Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Additions |  |  |  |  |  |  |  |  |
| Employer contributions | \$ | 1,127,014 | \$ | 1,100,509 | \$ | 1,069,640 | \$ | 1,037,124 |
| Non-employer entity contributions |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 752,517 |  | 1,037,784 |  | 1,333,324 |  | 1,738,914 |
| Transfer from other funds |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 1,879,531 |  | 2,138,293 |  | 2,402,964 |  | 2,776,038 |
| Deductions |  |  |  |  |  |  |  |  |
| Benefit payments |  | 1,589,460 |  | 1,581,540 |  | 1,530,346 |  | 1,529,148 |
| Refunds |  | - |  | - |  | - |  | - |
| Administrative expenses |  | 164,654 |  | 119,519 |  | 133,624 |  | 104,294 |
| Total deductions from fiduciary net position |  | 1,754,114 |  | 1,701,059 |  | 1,663,970 |  | 1,633,442 |
| Change in fiduciary net position | \$ | 125,417 | \$ | 437,234 | \$ | 738,994 | \$ | 1,142,596 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 16,259,162 | \$ | 15,821,928 | \$ | 15,082,934 | \$ | 13,940,338 |
| End of Year | \$ | 16,384,579 | \$ | 16,259,162 | \$ | 15,821,928 | \$ | 15,082,934 |

* The System currently has this information available for the years indicated. Additional information will be added to the schedule each year until the requisite ten years is obtained.
Defined Contribution Plans Changes in Fiduciary Net Position Last Ten Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | 3,880,598 | \$ | 3,712,509 | \$ | 3,256,015 | \$ | 3,218,801 | \$ | 3,628,460 | \$ | 3,165,927 | \$ | 3,505,423 | \$ | 2,662,317 | \$ | 2,888,874 | \$ | 2,790,771 |
| Employer contributions |  | 735,443 |  | 634,731 |  | 587,906 |  | 560,505 |  | 47,768 |  | 131,589 |  | 109,515 |  | 111,327 |  | 43,434 |  | 47,377 |
| Other contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 2,043,343 |  | 2,488,685 |  | 2,801,636 |  | 3,447,427 |  | 226,942 |  | 719,767 |  | 3,210,308 |  | 1,815,398 |  | 318,640 |  | 1,939,674 |
| Transfer from other funds |  | 203,000 |  | 220,000 |  | 386,621 |  | 186,378 |  | 217,338 |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 6,862,384 |  | 7,055,925 |  | 7,032,178 |  | 7,413,111 |  | 4,120,508 |  | 4,017,283 |  | 6,825,246 |  | 4,589,042 |  | 3,250,948 |  | 4,777,822 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Refunds and withdrawals |  | 2,342,931 |  | 3,292,801 |  | 2,774,078 |  | 2,072,166 |  | 1,866,147 |  | 1,718,286 |  | 2,032,458 |  | 643,765 |  | 1,055,018 |  | 770,630 |
| Administrative expenses |  | 290,464 |  | 299,377 |  | 496,042 |  | 284,202 |  | 309,558 |  | 130,964 |  | 112,015 |  | 113,827 |  | 45,964 |  | 50,143 |
| Transfer to other funds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 2,633,395 |  | 3,592,178 |  | 3,270,120 |  | 2,356,368 |  | 2,175,705 |  | 1,849,250 |  | 2,144,473 |  | 757,592 |  | 1,100,982 |  | 820,773 |
| Change in fiduciary net position | \$ | 4,228,989 | \$ | 3,463,747 | \$ | 3,762,058 | \$ | 5,056,743 | \$ | 1,944,803 | \$ | 2,168,033 | \$ | 4,680,773 | \$ | 3,831,450 | \$ | 2,149,966 | \$ | 3,957,049 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 41,424,688 | \$ | 37,960,941 | \$ | 34,198,883 | \$ | 29,142,140 | \$ | 27,197,337 | \$ | 25,029,304 | \$ | 20,348,531 | \$ | 16,517,081 | \$ | 14,367,115 | \$ | 10,410,066 |
| End of Year | \$ | 45,653,677 | \$ | 41,424,688 | \$ | 37,960,941 | \$ | 34,198,883 | \$ | 29,142,140 | \$ | 27,197,337 | \$ | 25,029,304 | \$ | 20,348,531 | \$ | 16,517,081 | \$ | 14,367,115 |

Retiree Health Investment Trust Fund
Changes in Fiduciary Net Position
Last Ten Fiscal Years

|  | Fiscal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Member contributions | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Employer contributions |  | - |  | 2,000,000 |  | 2,000,000 |  | 4,000,000 |  | 5,584,992 |  | - |  | - |  | 1,840,385 |  | 6,000,000 |  | 14,411,368 |
| Other contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Investment Income (net of expenses) |  | 13,858,561 |  | 18,845,823 |  | 21,271,236 |  | 26,513,072 |  | 2,388,249 |  | 5,405,438 |  | 29,564,596 |  | 18,706,315 |  | 959,334 |  | 23,350,728 |
| Transfer from other funds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total additions to fiduciary net position |  | 13,858,561 |  | 20,845,823 |  | 23,271,236 |  | 30,513,072 |  | 7,973,241 |  | 5,405,438 |  | 29,564,596 |  | 20,546,700 |  | 6,959,334 |  | 37,762,096 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit payments |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Refunds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Administrative expenses |  | 3,000 |  | 3,000 |  | 6,480 |  | 5,844 |  | 5,354 |  | 117,844 |  | 90,030 |  | 85,609 |  | 68,643 |  | 64,510 |
| Transfer to other funds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total deductions from fiduciary net position |  | 3,000 |  | 3,000 |  | 6,480 |  | 5,844 |  | 5,354 |  | 117,844 |  | 90,030 |  | 85,609 |  | 68,643 |  | 64,510 |
| Change in fiduciary net position | \$ | 13,855,561 | \$ | 20,842,823 | \$ | 23,264,756 | \$ | 30,507,228 | \$ | 7,967,887 | \$ | 5,287,594 | \$ | 29,474,566 | \$ | 20,461,091 | \$ | 6,890,691 | \$ | 37,697,586 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year | \$ | 277,703,141 | \$ | 256,860,318 | \$ | 233,595,562 | \$ | 203,088,334 | \$ | 195,120,447 | \$ | 189,832,853 | \$ | 160,358,287 | \$ | 139,897,196 | \$ | 133,006,505 | \$ | 95,308,919 |
| End of Year | \$ | 291,558,702 | \$ | 277,703,141 | \$ | 256,860,318 | \$ | 233,595,562 | \$ | 203,088,334 | \$ | 195,120,447 | \$ | 189,832,853 | \$ | 160,358,287 | \$ | 139,897,196 | \$ | 133,006,505 |

State Employee and Teacher Plan

Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed.

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| \$ | 4,313,483 | \$ | 4,021,982 | \$ | 3,804,709 | \$ | 3,651,927 | \$ | 3,501,911 | \$ | 3,383,995 | \$ | 3,194,250 | \$ | 3,207,656 | \$ | 3,107,935 | \$ | 2,996,751 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | 25,230 |  | 74,688 |  | 63,911 |  | 37,344 |
|  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |


| $\$ 4,313,483$ | $\$ 4,021,982$ | $\$$ | $3,804,709$ | $\$$ | $3,651,927$ | $\$$ | $3,501,911$ | $\$$ | $3,383,995$ | $\$$ | $3,219,480$ | $\$$ | $3,282,344$ | $\$$ | $3,171,846$ | $\$$ | $3,034,095$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed
Type of Benefit
Service retirement benefits
Disability benefits
Disability benefits
Pre-Retirement deat
Total benefits
Type of Refund
Death
Separation
Total refunds
Defined Benefit Plans
Benefit and Refund Deductions from Fiduciary Net Position by Type Last Ten Fiscal Years
Judicial Plan
Defined Benefit Plans
Benefit and Refund Deductions from Fiduciary Net Position by Type

| Fiscal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |
| \$ 451,474 | \$ | 421,421 | \$ | 363,478 | \$ | 347,133 | \$ | 312,108 | \$ | 289,432 | \$ | 271,025 | \$ | 242,015 | \$ | 231,584 | \$ | 215,154 |
| 15,295 |  | 15,022 |  | 14,629 |  | 14,377 |  | 19,245 |  | 8,142 |  | 7,994 |  | 8,099 |  | 7,863 |  | 7,863 |
| 53,595 |  | 46,217 |  | 48,956 |  | 37,632 |  | 36,192 |  | 30,301 |  | 29,751 |  | 30,140 |  | 34,641 |  | 32,164 |
| \$ 520,364 | \$ | 482,660 | \$ | 427,063 | \$ | 399,142 | \$ | 367,545 | \$ | 327,875 | \$ | 308,770 | \$ | 280,254 | \$ | 274,088 | \$ | 255,181 |
| \$ 20,473 | \$ | - | \$ | - | \$ | 14,720 | \$ | 6,122 | \$ | 11,524 | \$ | - | \$ | - |  |  |  |  |
| 156,859 |  | 124,180 |  | 32,682 |  | 55,181 |  | 71,664 |  | 99,713 |  | 8,836 |  | 82,768 |  |  |  |  |
| - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  |  |  |  |
| \$ 177,332 | \$ | 124,180 | \$ | 32,682 | \$ | 69,901 | \$ | 77,786 | \$ | 111,237 | \$ | 8,836 | \$ | 82,768 | \$ | - | \$ | - |


| Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| \$ | 156,066,355 | \$ | 147,218,859 | \$ | 136,330,957 | \$ | 129,354,921 | \$ | 123,607,716 | \$ | 118,281,904 | \$ | 110,537,271 | \$ | 104,017,589 | \$ | 98,259,313 | \$ | 91,247,190 |
|  | 6,632,012 |  | 6,413,911 |  | 6,469,460 |  | 6,596,584 |  | 6,954,282 |  | 6,994,050 |  | 7,133,396 |  | 6,860,218 |  | 6,842,091 |  | 6,611,574 |
|  | 5,199,025 |  | 5,038,267 |  | 4,715,941 |  | 4,461,983 |  | 4,272,447 |  | 4,200,056 |  | 3,888,590 |  | 3,749,705 |  | 3,545,207 |  | 3,430,103 |
| \$ | 167,897,392 | \$ | 158,671,037 | \$ | 147,516,358 | \$ | 140,413,488 | \$ | 134,834,445 |  | 129,476,010 | \$ | 121,559,257 | \$ | 114,627,512 | \$ | 108,646,611 | \$ | 101,288,867 |
| \$ | 1,676,570 | \$ | 785,480 | \$ | 574,813 | \$ | 938,577 | \$ | 589,655 |  | 1,141,276 | \$ | 613,327 | \$ | 982,328 |  |  |  |  |
|  | 5,178,205 |  | 5,943,162 |  | 3,996,714 |  | 4,811,501 |  | 4,495,580 |  | 4,797,240 |  | 4,988,774 |  | 5,069,446 |  |  |  |  |
|  | - |  | - |  | - |  | - |  | - |  | 43,000,526 |  | - |  | - |  |  |  |  |
| \$ | 6,854,776 | \$ | 6,728,643 | \$ | 4,571,527 | \$ | 5,750,078 | \$ | 5,085,235 |  | 48,939,042 | \$ | 5,602,101 | \$ | 6,051,774 | \$ | - | \$ | - |

* Refunds in fiscal year 2015 reflect the return of approximately $\$ 43$ million of non-Plan cash being managed by the System on behalf of PLD Consolidated Plan employers.
Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed.

Legislative Plan


Total benefits
Type of Refund
Death
Separation
Other
Total refunds
Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed.
PLD Consolidated Plan
Type of Benefit
Service retirement benefits
Disability benefits
Pre-Retirement death benefits
Total benefits
Type of Refund
Death
Separation
Total refunds
Defined Benefit Plans
Benefit and Refund Deductions from Fiduciary Net Position by Type Last Ten Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 | 2013 |  | 2012 |  | 2011 |  |
| Type of Benefit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service retirement benefits |  | \$ 1,759,029 |  | \$ 2,842,649 |  | \$ 2,788,425 |  | \$ 2,777, 307 |  | \$ 2,779,624 |  | \$ 2,780,492 |  | \$ 2,702,486 |  | \$ 2,644,060 |  | \$ 2,608,985 |  | \$ 2,442,356 |
| Disability benefits |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Pre-Retirement death benefits |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total benefits |  | \$ 1,759,029 |  | \$ 2,842,649 |  | \$ 2,788,425 |  | \$ 2,777, 307 |  | \$ 2,779,624 |  | \$ 2,780,492 |  | \$ 2,702,486 |  | \$ 2,644,060 |  | \$ 2,608,985 |  | \$ 2,442,356 |
| Type of Refund |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Death |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ - |  | \$ |  | \$ - |  |  |  |  |
| Separation |  | 913,894 |  | 201,763 |  | - |  | - |  | - |  | - |  | - |  | - |  |  |  |  |
| Other |  | - |  | - |  | - |  | - |  | - |  | - |  | 1,897,634 |  | - |  |  |  |  |
| Total refunds |  | \$ 913,894 |  | \$ 201,763 |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ 1,897,634 |  | \$ |  | \$ |  | \$ - |
| Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pension Combined |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Fiscal | Yea |  |  |  |  |  |  |  |  |  |
|  |  | 2020 |  | 2019 |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |
| Type of Benefit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service retirement benefits | \$ | 983,874,218 | \$ | 944,143,159 | \$ | 892,184,190 | \$ | 854,190,558 | \$ | 813,719,565 | \$ | 782,849,118 | \$ | 738,713,955 | \$ | 714,823,347 | \$ | 670,876,190 | \$ | 625,577,708 |
| Disability benefits |  | 29,972,239 |  | 30,669,902 |  | 31,271,605 |  | 32,843,057 |  | 33,769,256 |  | 34,865,317 |  | 36,097,330 |  | 37,020,969 |  | 36,778,342 |  | 36,289,227 |
| Pre-Retirement death benefits |  | 24,621,431 |  | 24,140,215 |  | 23,478,228 |  | 22,657,957 |  | 21,711,881 |  | 21,546,043 |  | 20,485,341 |  | 20,515,684 |  | 19,559,715 |  | 19,289,534 |
| Total benefits |  | 1,038,467,888 | \$ | 998,953,276 | \$ | 946,934,023 | \$ | 909,691,572 | \$ | 869,200,702 | \$ | 839,260,478 | \$ | 795,296,626 | \$ | 772,360,000 | \$ | 727,214,247 | \$ | 681,156,469 |
| Type of Refund |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Death | \$ | 6,538,012 | \$ | 4,604,713 | \$ | 3,654,240 | \$ | 5,326,407 | \$ | 3,374,567 | \$ | 4,272,805 | \$ | 3,860,908 | \$ | 4,937,513 | \$ | 4,406,322 | \$ | 5,139,665 |
| Separation |  | 20,250,927 |  | 21,214,007 |  | 18,934,271 |  | 18,369,844 |  | 18,595,020 |  | 21,209,100 |  | 23,434,426 |  | 19,088,284 |  | 21,003,032 |  | 20,567,589 |
| Other* |  | - |  | - |  | - |  | - |  | - |  | 43,000,526 |  | 1,897,634 |  | - |  | 18,733,381 |  | 6,496,738 |
| Total refunds | \$ | 26,788,940 | \$ | 25,818,720 | \$ | 22,588,511 | \$ | 23,696,251 | \$ | 21,969,587 | \$ | 68,482,431 | \$ | 29,192,968 | \$ | 24,025,797 | \$ | 44,142,736 | \$ | 32,203,992 |

*Refunds in fiscal year 2015 reflect the return of approximately $\$ 43$ million of non-Plan cash being managed by the System on behalf of PLD Consolidated Plan employers.
Data by type of refund, by plan, was not readily available for the years prior to 2013. This information will continue to be populated until the requisite ten years is displayed.

## Group Life Insurance Plan Benefit and Refund Deductions from Fiduciary Net Position by Type Last Ten Fiscal Years*

## Group Life Insurance Plan - Active Employees

|  | Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Type of Benefit ** |  |  |  |  |  |  |  |  |
| Basic active claims | \$ | 2,538,518 | \$ | 1,528,091 | \$ | 2,118,390 | \$ | 1,717,860 |
| Supplemental claims |  | 2,037,102 |  | 438,000 |  | 1,758,000 |  | 1,886,684 |
| Dependent claims |  | 200,000 |  | 202,500 |  | 237,500 |  | 182,500 |
| Accidental Death \& Dismemberment claims |  | 256,000 |  | 125,000 |  | 60,000 |  | 309,000 |
|  |  | 5,031,620 |  | 2,293,591 |  | 4,173,890 |  | 4,096,044 |
| Conversion expense |  | 112,710 |  | 1,755 |  | 55,478 |  | 53,235 |
| Total benefits | \$ | 5,144,330 | \$ | 2,295,346 | \$ | 4,229,368 | \$ | 4,149,279 |

Group Life Insurance Plan - State Employee \& Teacher Retirees

|  | Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Type of Benefit ** |  |  |  |  |  |  |  |  |
| Basic retiree claims | \$ | 8,177,754 | \$ | 7,118,082 | \$ | 7,269,809 | \$ | 6,003,967 |
| Total benefits | \$ | 8,177,754 | \$ | 7,118,082 | \$ | 7,269,809 | \$ | 6,003,967 |

Group Life Insurance Plan - PLD Retirees

|  | Fiscal Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 |  | 2019 |  | 2018 |  | 2017 |  |
| Type of Benefit ** |  |  |  |  |  |  |  |  |
| Basic retiree claims | \$ | 1,589,460 | \$ | 1,581,539 | \$ | 1,530,346 | \$ | 1,394,586 |
| Total benefits | \$ | 1,589,460 | \$ | 1,581,539 | \$ | 1,530,346 | \$ | 1,394,586 |

* The System currently has this information available for the years indicated. Additional information will be added to the schedule each year until the requisite ten years is obtained.
** Benefit amounts displayed in 2018 and beyond include the cost of third-party processing activities.


## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## State Employee and Teacher Plan

Retirement Effective Dates
July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| Less than 5 |  |  | 5-10 |  | 10-15 |  | 15-20 |  | 20-25 |  | 25-30 | Greater than 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 153 | \$ | 513 | \$ | 874 | \$ | 1,363 | \$ | 1,968 | \$ | 2,309 | \$ 3,288 |
| \$ | 8,998 | \$ | 33,062 | \$ | 36,013 | \$ | 40,514 | \$ | 44,617 | \$ | 46,618 | \$ 53,611 |
|  | 1,630 |  | 1,616 |  | 3,036 |  | 2,882 |  | 3,590 |  | 6,928 | 10,273 |
| \$ | 157 | \$ | 504 | \$ | 856 | \$ | 1,333 | \$ | 1,940 | \$ | 2,269 | \$ 3,241 |
| \$ | 9,126 | \$ | 32,761 | \$ | 35,302 | \$ | 39,506 | \$ | 43,727 | \$ | 45,871 | \$ 52,845 |
|  | 1,482 |  | 1,526 |  | 2,925 |  | 2,817 |  | 3,528 |  | 6,893 | 10,009 |

Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 159 | $\$$ | 497 | $\$$ | 830 | $\$ 1,292$ | $\$$ | 1,889 | $\$$ | 2,205 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 9,253 | $\$$ | 32,389 | $\$ 34,666$ | $\$ 38,544$ | $\$ 42,761$ | $\$ 45,081$ | $\$ 3,165$ |  |  |
|  | 1,334 |  | 1,413 |  | 2,812 |  | 2,664 |  | 3,454 |  |
|  | 6,836 |  | 9,936 |  |  |  |  |  |  |  |

Period 7/1/2016 to 6/30/2017
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| \$ | 165 | \$ | 493 | \$ | 806 | \$ | 1,265 | \$ | 1,857 | \$ | 2,163 |  | 3,108 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 9,821 | \$ | 32,228 | \$ | 33,672 | \$ | 37,623 | \$ | 41,937 | \$ | 44,336 |  | 50,999 |
|  | 1,198 |  | 1,345 |  | 2,744 |  | 2,544 |  | 3,402 |  | 6,767 |  | 9,415 |

Period 7/1/2015 to 6/30/2016
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| \$ | 170 | \$ | 485 | \$ | 780 | \$ | 1,229 | \$ | 1,806 | \$ | 2,105 | \$ 3,040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 10,649 | \$ | 32,076 | \$ | 32,842 | \$ | 36,832 | \$ | 40,960 | \$ | 43,503 | \$ 50,158 |
|  | 1,070 |  | 1,259 |  | 2,663 |  | 2,467 |  | 3,331 |  | 6,670 | 9,164 |

Period 7/1/2014 to 6/30/2015

|  | $\$$ | 178 | $\$$ | 472 | $\$$ | 755 | $\$$ | 1,188 | $\$$ | 1,757 | $\$$ | 2,050 | $\$ 2,970$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$ 11,307$ | $\$ 31,831$ | $\$ 31,809$ | $\$ 35,631$ | $\$$ | 40,059 | $\$ 42,711$ | $\$ 49,231$ |  |  |  |  |  |
| Average Final Salary | 930 |  | 1,182 |  | 2,550 |  | 2,332 |  | 3,283 | 6,569 | 8,889 |  |  |

## Period 7/1/2013 to 6/30/2014

| Average Monthly Benefit | \$ | 189 | \$ | 463 | \$ | 725 | \$ | 1,153 | \$ | 1,715 | \$ | 2,002 | \$ 2,907 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Final Salary | \$ | 12,446 | \$ | 31,627 | \$ | 30,576 | \$ | 34,457 | \$ | 38,903 | \$ | 41,888 | \$ 48,257 |
| Number of Service Retirees |  | 786 |  | 1,105 |  | 2,426 |  | 2,245 |  | 3,215 |  | 6,430 | 8,586 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 210 | \$ | 465 | \$ | 708 | \$ | 1,139 | \$ | 1,700 | \$ | 1,987 | \$ 2,877 |
| Average Final Salary | \$ | 40,079 | \$ | 33,962 | \$ | 30,962 | \$ | 33,820 | \$ | 38,005 | \$ | 41,170 | \$ 47,284 |
| Number of Service Retirees |  | 650 |  | 1,009 |  | 2,319 |  | 2,160 |  | 3,123 |  | 6,337 | 8,360 |

*This table will continue to be populated until the requisite ten years of data is presented.

## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## Judicial Plan

Retirement Effective Dates
July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees


## Period 7/1/2018 to 6/30/2019

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2016 to 6/30/2017

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 442 | $\$$ | 1,729 | $\$$ | 4,358 | $\$$ | 4,244 | $\$$ | 4,738 | $\$$ | 5,586 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 10,273 | $\$$ | 57,420 | $\$$ | 84,234 | $\$$ | 89,784 | $\$ 103,183$ | $\$ 110,586$ | $\$ 111,268$ |  |
|  | 6 |  | 12 |  | 12 |  | 20 |  | 5 |  | 9 |

Period 7/1/2015 to 6/30/2016
Average Monthly Benefit

| $\$$ | 440 | $\$$ | 1,707 | $\$$ | 4,317 | $\$$ | 4,199 | $\$$ | 4,696 | $\$$ | 5,542 | $\$ 5,229$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 10,273 | $\$$ | 57,420 | $\$$ | 84,234 | $\$$ | 87,575 | $\$ 103,183$ | $\$ 110,586$ | $\$ 111,931$ |  |  |
|  | 6 |  | 12 |  | 12 |  | 19 |  | 5 |  | 9 | 5 |

Period 7/1/2014 to 6/30/2015
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 388 | $\$$ | 1,689 | $\$$ | 4,606 | $\$$ | 4,154 | $\$$ | 4,655 | $\$$ | 5,499 | $\$$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 17,129 | $\$$ | 57,420 | $\$$ | 79,169 | $\$$ | 86,262 | $\$ 103,183$ | $\$ 110,586$ | $\$ 111,931$ |  |  |
|  | 4 |  | 12 |  | 13 |  | 15 |  | 5 |  | 9 | 5 |

## Period 7/1/2013 to 6/30/2014

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 315 | $\$$ | 1,590 | $\$$ | 4,861 | $\$$ | 4,000 | $\$$ | 4,621 | $\$$ | 5,464 | $\$ 5,164$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 8,279 | $\$$ | 54,733 | $\$$ | 78,970 | $\$$ | 84,290 | $\$ 103,183$ | $\$ 110,586$ | $\$ 111,931$ |  |  |
|  | 1 |  | 9 |  | 15 |  | 12 |  | 5 |  | 9 | 5 |

Period 7/1/2012 to 6/30/2013
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 315 | $\$$ | 1,623 | $\$$ | 5,070 | $\$$ | 4,229 | $\$$ | 4,750 | $\$$ | 5,464 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 118,269$ | $\$ 112,541$ | $\$$ | 87,240 | $\$$ | 93,463 | $\$ 110,809$ | $\$ 110,586$ | $\$ 109,339$ |  |  |  |
| 1 | 5 |  | 17 |  | 9 |  | 6 |  | 9 | 4 |  |

*This table will continue to be populated until the requisite ten years of data is presented.

## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## Legislative Plan

Retirement Effective Dates
July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2018 to 6/30/2019

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2016 to 6/30/2017

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| Less than 5 |  |  | 5-10 |  | 10-15 |  | 15-20 | 20-25 |  | 25-30 |  | Greater than 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 93 | \$ | 176 | \$ | 286 | \$ | 362 | \$ | - | \$ | - | \$ |
| \$ | 9,768 | \$ | 12,641 | \$ | 12,538 | \$ | 14,524 | \$ | - | \$ | - | \$ |
|  | 29 |  | 111 |  | 18 |  | 7 | \$ | - | \$ | - | \$ |
| \$ | 88 | \$ | 169 | \$ | 282 | \$ | 358 | \$ | - | \$ | - | \$ - |
| \$ | 9,314 | \$ | 12,478 | \$ | 12,409 | \$ | 14,524 | \$ | - | \$ | - | \$ |
|  | 26 |  | 116 |  | 17 |  | 7 |  | 0 |  | 0 | 0 |

## Period 7/1/2015 to 6/30/2016

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2014 to 6/30/2015
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2013 to 6/30/2014

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2012 to 6/30/2013
Average Monthly Benefit
Average Final Salary
Number of Service Retirees


## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## PLD Consolidated Plan

## Retirement Effective Dates

July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| Less than 5 |  |  | 5-10 |  | 10-15 |  | 15-20 |  | 20-25 |  | 25-30 | Greater than 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 155 | \$ | 579 | \$ | 887 | \$ | 1,431 | \$ | 2,045 | \$ | 2,476 | \$ 3,323 |
| \$ | 7,702 | \$ | 24,757 | \$ | 30,632 | \$ | 36,562 | \$ | 40,068 | \$ | 45,538 | \$ 50,187 |
|  | 1,936 |  | 1,722 |  | 1,491 |  | 1,427 |  | 1,550 |  | 995 | 555 |
| \$ | 151 | \$ | 566 | \$ | 862 | \$ | 1,403 | \$ | 1,988 | \$ | 2,411 | \$ 3,252 |
| \$ | 7,750 | \$ | 24,631 | \$ | 30,073 | \$ | 35,969 | \$ | 38,828 | \$ | 44,497 | \$ 49,703 |
|  | 1,795 |  | 1,602 |  | 1,443 |  | 1,387 |  | 1,447 |  | 977 | 557 |

Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 145 | $\$$ | 545 | $\$$ | 820 | $\$$ | 1,350 | $\$$ | 1,923 | $\$$ | 2,337 | $\$$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 7,736 | $\$$ | 24,418 | $\$$ | 29,145 | $\$$ | 35,125 | $\$$ | 37,357 | $\$$ | 43,630 | $\$ 48,843$ |
|  | 1,639 |  | 1,451 |  | 1,329 |  | 1,331 |  | 1,326 |  | 994 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Period 7/1/2016 to 6/30/2017
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 139 | $\$$ | 528 | $\$$ | 790 | $\$$ | 1,307 | $\$$ | 1,859 | $\$$ | 2,268 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 7,669 | $\$$ | 24,049 | $\$$ | 28,550 | $\$$ | 34,100 | $\$$ | 35,609 | $\$$ | 42,422 |
|  | 1,478 |  | 1,297 |  | 1,271 |  | 1,276 |  | 1,233 |  | 1,008 |

Period 7/1/2015 to 6/30/2016
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2014 to 6/30/2015
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 138 | $\$$ | 511 | $\$$ | 748 | $\$$ | 1,281 | $\$$ | 1,809 | $\$$ | 2,228 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 7,707 | $\$$ | 23,663 | $\$$ | 27,128 | $\$$ | 33,490 | $\$$ | 33,885 | $\$$ | 41,686 |
|  | 1,328 |  | 1,176 |  | 1,201 |  | 1,252 |  | 1,139 |  | 1,031 |

Period 7/1/2013 to 6/30/2014
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| \$ | 139 | \$ | 471 | \$ | 675 | \$ | 1,178 | \$ | 1,748 | \$ | 2,138 | \$ | 2,919 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 8,018 | \$ | 23,316 | \$ | 25,525 | \$ | 31,381 | \$ | 31,737 | \$ | 40,026 | \$ | 46,278 |
|  | 1,007 |  | 926 |  | 1,064 |  | 1,046 |  | 1,072 |  | 1,063 |  | 656 |
| \$ | 136 | \$ | 449 | \$ | 629 | \$ | 1,103 | \$ | 1,710 | \$ | 2,086 | \$ | 2,858 |
| \$ | 39,573 | \$ | 35,552 | \$ | 28,806 | \$ | 36,407 | \$ | 32,317 | \$ | 39,707 | \$ | 46,137 |
|  | 882 |  | 779 |  | 1,002 |  | 906 |  | 1,083 |  | 1,076 |  | 656 |

*This table will continue to be populated until the requisite ten years of data is presented.

## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## PLD Agent Plan

Retirement Effective Dates
July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees


Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2016 to 6/30/2017

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2015 to 6/30/2016
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

Period 7/1/2014 to 6/30/2015
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2013 to 6/30/2014

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

## Period 7/1/2012 to 6/30/2013

Average Monthly Benefit
Average Final Salary
Number of Service Retirees
*This table will continue to be populated until the requisite ten years of data is presented.

## Defined Benefit Plans - Average Benefit Payments Last Ten Fiscal Years

## All Defined Benefit Pension Plans, Combined

## Retirement Effective Dates

July 1, 2012 - June 30, 2020*

Period 7/1/2019 to 6/30/2020
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| Less than 5 |  | $\mathbf{5 - 1 0}$ |  | $\mathbf{1 0 - 1 5}$ |  | $\mathbf{1 5 - 2 0}$ | $\mathbf{2 0 - 2 5}$ |  | $\mathbf{2 5 - 3 0}$ | Greater than 30 |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Period 7/1/2017 to 6/30/2018
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 173 | $\$$ | 530 | $\$$ | 839 | $\$$ | 1,326 | $\$$ | 1,906 | $\$$ | 2,226 | $\$ 3,164$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 8,388 | $\$$ | 27,950 | $\$$ | 32,915 | $\$$ | 37,612 | $\$ 41,281$ | $\$ 44,935$ | $\$ 51,762$ |  |  |
|  | 2,998 |  | 2,975 |  | 4,177 |  | 4,024 |  | 4,823 |  | 7,876 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\$$ | 172 | $\$$ | 518 | $\$$ | 812 | $\$$ | 1,295 | $\$$ | 1,863 | $\$$ | 2,181 | $\$$ |
| $\$$ | 8,593 | $\$$ | 27,750 | $\$$ | 32,079 | $\$ 36,657$ | $\$ 40,248$ | $\$ 44,131$ | $\$ 50,799$ |  |  |  |
|  | 2,701 |  | 2,757 |  | 4,047 |  | 3,853 |  | 4,675 | 7,821 | 10,048 |  |

## Period 7/1/2015 to 6/30/2016

Average Monthly Benefit Average Final Salary

Number of Service Retirees

## Period 7/1/2014 to 6/30/2015

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 172 | $\$$ | 504 | $\$$ | 782 | $\$$ | 1,262 | $\$$ | 1,812 | $\$$ | 2,126 | $\$ 3,038$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$$ | 8,943 | $\$$ | 27,562 | $\$$ | 31,106 | $\$$ | 35,902 | $\$$ | 39,162 | $\$$ | 43,310 | $\$ 49,980$ |
|  | 2,425 |  | 2,538 |  | 3,899 |  | 3,748 |  | 4,510 |  | 7,745 |  |
|  | 9,818 |  |  |  |  |  |  |  |  |  |  |  |

Period 7/1/2013 to 6/30/2014
Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| $\$$ | 179 | $\$$ | 470 |
| ---: | ---: | ---: | ---: |
| $\$$ | 9,877 | $\$$ | 27,33 |
|  | 1,821 |  | 2,12 |


| $\$$ | 727 | $\$$ | 1,168 | $\$$ | 1,728 | $\$$ | 2,026 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |$\quad 2,908$

## Period 7/1/2012 to 6/30/2013

Average Monthly Benefit
Average Final Salary
Number of Service Retirees

| \$ | 364 | \$ | 433 | \$ | 681 | \$ | 1,105 | \$ | 1,698 | \$ | 2,006 |  | 2,881 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 28,688 | \$ | 30,446 | \$ | 28,554 | \$ | 32,680 | \$ | 36,429 | \$ | 41,244 |  | 47,413 |
|  | 440 |  | 1,482 |  | 3,112 |  | 2,860 |  | 4,288 |  | 7,658 |  | 9,194 |
| \$ | 647 | \$ | 427 | \$ | 671 | \$ | 1,083 | \$ | 1,678 | \$ | 1,979 |  | 2,845 |
| \$ | 25,200 | \$ | 59,515 | \$ | 27,199 | \$ | 31,429 | \$ | 35,443 | \$ | 40,189 |  | 46,386 |
|  | 568 |  | 1,402 |  | 3,013 |  | 2,777 |  | 4,182 |  | 7,413 |  | 8,863 |
| \$ | 419 | \$ | 399 | \$ | 636 | \$ | 1,035 | \$ | 1,599 | \$ | 1,877 | \$ | 2,681 |
| \$ | 26,382 | \$ | 27,791 | \$ | 25,452 | \$ | 29,842 | \$ | 34,108 | \$ | 38,836 |  | 44,693 |
|  | 551 |  | 1,276 |  | 2,913 |  | 2,681 |  | 4,083 |  | 7,060 |  | 8,221 |

## Defined Benefit Plans <br> Retired Members by Type of Benefit and Option <br> As of June 30, 2020

## State Employees and Teacher Plan

|  |  | Type of Retirement Benefit |  |  |  | Benefit Option Selected * |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of Monthly Benefit | Number of Retired Members | Service Retiree | Beneficiary | Disability | Pre-Retire Death Benefit | Full Benefit to Retiree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Other |
| \$0-\$250 | 2,466 | 1,564 | 857 | 25 | 20 | 733 | 263 | 293 | 61 | 29 | 630 | 111 | 42 | 58 | 246 |
| \$251-\$500 | 2,783 | 1,383 | 1,276 | 10 | 114 | 721 | 215 | 260 | 70 | 18 | 947 | 109 | 25 | 36 | 382 |
| \$501-\$750 | 3,144 | 1,508 | 1,165 | 21 | 450 | 777 | 237 | 261 | 102 | 21 | 865 | 111 | 37 | 43 | 690 |
| \$751-\$1,000 | 2,218 | 1,526 | 662 | 30 | - | 780 | 218 | 251 | 125 | 21 | 442 | 97 | 42 | 60 | 182 |
| \$1,001-\$1,250 | 2,133 | 1,602 | 477 | 54 | - | 805 | 213 | 244 | 146 | 24 | 339 | 103 | 39 | 51 | 169 |
| \$1,251-\$1,500 | 2,146 | 1,690 | 366 | 90 | - | 769 | 233 | 221 | 139 | 20 | 357 | 120 | 64 | 53 | 170 |
| \$1,501-\$1,750 | 2,387 | 1,920 | 316 | 151 | - | 918 | 300 | 262 | 99 | 20 | 408 | 94 | 53 | 69 | 164 |
| \$1,751-\$2,000 | 2,567 | 2,124 | 267 | 176 | - | 997 | 298 | 249 | 120 | 31 | 442 | 132 | 55 | 73 | 170 |
| Over \$2,001 | 17,307 | 15,414 | 861 | 1,032 | - | 7,615 | 2,174 | 1,683 | 741 | 339 | 1,919 | 714 | 652 | 776 | 694 |
| Totals | 37,151 | 28,731 | 6,247 | 1,589 | 584 | 14,115 | 4,151 | 3,724 | 1,603 | 523 | 6,349 | 1,591 | 1,009 | 1,219 | 2,867 |

## Judicial Plan

|  |  | Type of Retirement Benefit |  |  |  | Benefit Option Selected* |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of Monthly Benefit | Number of Retired Members | Service Retiree | Beneficiary | Disability | Pre-Retire Death Benefit | Full Benefit to Retiree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Other |
| \$0-\$250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$251-\$500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$501-\$750 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| \$751-\$1,000 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| \$1,001-\$1,250 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| \$1,251-\$1,500 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| \$1,501-\$1,750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$1,751-\$2,000 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Over \$2,001 | 75 | 61 | 13 | 1 | 0 | 17 | 7 | 20 | 10 | 3 | 10 | 4 | 0 | 2 | 2 |
| Totals | 83 | 61 | 21 | 1 | 0 | 17 | 7 | 21 | 10 | 3 | 15 | 4 | 0 | 2 | 4 |

## Legislative Plan

|  |  | Type of Retirement Benefit |  |  |  | Benefit Option Selected* |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of Monthly Benefit | Number of Retired Members | Service Retiree | Beneficiary | Disability | Pre-Retire Death Benefit | Full Benefit to Retiree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Other |
| \$0-\$250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$251-\$500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$501-\$750 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| \$751-\$1,000 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| \$1,001-\$1,250 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| \$1,251-\$1,500 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| \$1,501-\$1,750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$1,751-\$2,000 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Over \$2,001 | 75 | 61 | 13 | 1 | 0 | 17 | 7 | 20 | 10 | 3 | 10 | 4 | 0 | 2 | 2 |
| Totals | 83 | 61 | 21 | 1 | 0 | 17 | 7 | 21 | 10 | 3 | 15 | 4 | 0 | 2 | 4 |

* There are eight options available to retirees for their monthly retirement benefit:

Full Benefit to Retiree: Provides the highest benefit to the retiree; there is no benefit provided for a beneficiary(ies).
Option 1: The monthly benefit is reduced, and remaining contributions and interest, if any, are paid to a beneficiary(ies) upon retiree's death in a one-time, lump-sum payment. Option 2: The monthly benefit is reduced, and the same monthly benefit is paid to a beneficiary(ies) upon the retiree's death.
Option 3: The monthly benefit is reduced, and one-half of the monthly benefit is paid to a beneficiary(ies) upon the retiree's death.
Option 4: The monthly benefit is reduced, and a retiree-designated percentage of the monthly benefit is paid to a beneficiary(ies) upon the retiree's death.
Option 5: The monthly benefit is split (up to $49 \%$ ) with a beneficiary(ies) while both the retiree and beneficiary(ies) are living; upon death of either, the other receives the higher benefit for the remainder of his/her life.
Option 6: Similar to Option 2, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree.
Option 7: Similar to Option 3, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree.
Option 8: Similar to Option 4, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree.
Other: Default option for specific circumstances such as disability benefits, survivor benefits, and qualified domestic relations order benefits.

## Defined Benefit Plans <br> Retired Members by Type of Benefit and Option <br> As of June 30, 2020

## PLD Consolidated Plan

|  |  | Type of Retirement Benefit |  |  |  | Benefit Option Selected * |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of Monthly Benefit | Number of Retired Members | Service <br> Retiree | Beneficiary | Disability | Pre-Retire Death Benefit | Full Benefit to Retiree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Other |
| \$0-\$250 | 1,540 | 1,051 | 461 | 21 | 7 | 538 | 148 | 191 | 58 | 17 | 309 | 70 | 32 | 46 | 131 |
| \$251-\$500 | 1,153 | 672 | 446 | 10 | 25 | 300 | 137 | 185 | 49 | 9 | 297 | 49 | 13 | 7 | 107 |
| \$501-\$750 | 1,151 | 664 | 345 | 13 | 129 | 283 | 125 | 146 | 44 | 12 | 245 | 49 | 17 | 22 | 208 |
| \$751-\$1,000 | 875 | 594 | 258 | 23 | - | 255 | 95 | 156 | 55 | 8 | 158 | 40 | 16 | 14 | 78 |
| \$1,001-\$1,250 | 720 | 540 | 149 | 31 | - | 214 | 94 | 128 | 40 | 10 | 93 | 47 | 14 | 13 | 67 |
| \$1,251-\$1,500 | 558 | 428 | 107 | 23 | - | 168 | 70 | 94 | 14 | 4 | 94 | 37 | 12 | 13 | 52 |
| \$1,501-\$1,750 | 544 | 428 | 80 | 36 | - | 153 | 69 | 94 | 21 | 4 | 109 | 31 | 9 | 5 | 49 |
| \$1,751-\$2,000 | 509 | 384 | 72 | 53 | - | 157 | 57 | 69 | 25 | 3 | 98 | 22 | 10 | 10 | 58 |
| Over \$2,001 | 2,810 | 2,461 | 168 | 180 | 1 | 916 | 304 | 434 | 138 | 51 | 448 | 191 | 89 | 81 | 158 |
| Totals | 9,860 | 7,222 | 2,086 | 390 | 162 | 2,984 | 1,099 | 1,497 | 444 | 118 | 1,851 | 536 | 212 | 211 | 908 |

## PLD Agent Plan

|  |  | Type of Retirement Benefit |  |  |  | Benefit Option Selected* |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amount of Monthly Benefit | Number of Retired Members | Service <br> Retiree | Beneficiary | Disability | Pre-Retire <br> Death Benefit | Full Benefit to Retiree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Other |
| \$0-\$250 | 6 | 5 | 1 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| \$251-\$500 | 5 | 2 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 |
| \$501-\$750 | 9 | 6 | 3 | 0 | 0 | 4 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| \$751-\$1,000 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| \$1,001 - \$1,250 | 9 | 8 | 1 | 0 | 0 | 4 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| \$1,251-\$1,500 | 5 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 |
| \$1,501-\$1,750 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$1,751-\$2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Over \$2,001 | 11 | 11 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| Totals | 50 | 38 | 12 | 0 | 0 | 14 | 3 | 13 | 5 | 0 | 8 | 3 | 1 | 0 | 3 |

* There are eight options available to retirees for their monthly retirement benefit:

Full Benefit to Retiree: Provides the highest benefit to the retiree; there is no benefit provided for a beneficiary(ies).
Option 1: The monthly benefit is reduced, and remaining contributions and interest, if any, are paid to a beneficiary(ies) upon retiree's death in a one-time, lump-sum payment. Option 2: The monthly benefit is reduced, and the same monthly benefit is paid to a beneficiary(ies) upon the retiree's death.
Option 3: The monthly benefit is reduced, and one-half of the monthly benefit is paid to a beneficiary(ies) upon the retiree's death.
Option 4: The monthly benefit is reduced, and a retiree-designated percentage of the monthly benefit is paid to a beneficiary(ies) upon the retiree's death
Option 5: The monthly benefit is split (up to 49\%) with a beneficiary(ies) while both the retiree and beneficiary(ies) are living; upon death of either, the other receives the higher benefit for the remainder of his/her life.
Option 6: Similar to Option 2, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree.
Option 7: Similar to Option 3, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree. Option 8: Similar to Option 4, except the retiree's monthly benefit will increase to the Full Benefit amount in the event the beneficiary(ies) dies before the retiree. Other: Default option for specific circumstances such as disability benefits, survivor benefits, and qualified domestic relations order benefits.
Employee Contribution Rates
Last Ten Fiscal Years

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| Judges | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% |
| Legislators | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% |
| School Teacher Employees | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% |
| State of Maine Employees |  |  |  |  |  |  |  |  |  |  |
| Employee Class: |  |  |  |  |  |  |  |  |  |  |
| General | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% | 7.65\% |
| Police - Grandfathered | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| Marine Wardens - Grandfathered | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| Game Wardens - Grandfathered | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| Prison Wardens - Grandfathered | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| Forest Rangers - Grandfathered | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| 1998 Special Plan Groups | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| $25-Y e a r / N o-A g e ~ S p e c i a l ~ P l a n ~ G r o u p s ~$ | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% | 8.65\% |
| Participating Local District Employees |  |  |  |  |  |  |  |  |  |  |
| Employee Class: |  |  |  |  |  |  |  |  |  |  |
| AC - Age 60 - General COLA * | 8.10\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| AC - Age 65 - General COLA* | 7.35\% | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| BC - Age 60 - General COLA * | 4.60\% | 4.50\% | 4.50\% | 4.50\% | 4.00\% | 3.50\% | 3.00\% | 3.00\% | 3.00\% | 3.00\% |
|  | 3.85\% | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| 1C - Special COLA | 8.30\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| 2C - Special COLA | 8.00\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| 3 C - Special COLA | 9.50\% | 9.50\% | 9.50\% | 9.50\% | 9.00\% | 8.50\% | 8.00\% | 8.00\% | 8.00\% | 8.00\% |
| 4C - Special COLA | 8.90\% | 9.00\% | 9.00\% | 9.00\% | 8.50\% | 8.00\% | 7.50\% | 7.50\% | 7.50\% | 7.50\% |
| AN - Age 60 - General No COLA * | 8.00\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| AN - Age 65 - General No COLA * | 7.25\% | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | NotApplicable | Not Applicable | Not Applicable | Not Applicable |
| 1 N - Special No COLA | 8.10\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| 2 N - Special No COLA | 7.80\% | 8.00\% | 8.00\% | 8.00\% | 7.50\% | 7.00\% | 6.50\% | 6.50\% | 6.50\% | 6.50\% |
| 3 N - Special No COLA | 9.30\% | 9.50\% | 9.50\% | 9.50\% | 9.00\% | 8.50\% | 8.00\% | 8.00\% | 8.00\% | 8.00\% |
| 4 N - Special No COLA | 8.70\% | 9.00\% | 9.00\% | 9.00\% | 8.50\% | 8.00\% | 7.50\% | 7.50\% | 7.50\% | 7.50\% |

Employer Contribution Rates
Last Ten Fiscal Years

|  |  |  |  |  | Fiscal |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
| Judges | 8.89\% | 14.94\% | 14.94\% | 14.98\% | 14.99\% | 13.24\% | 13.25\% | 11.98\% | 11.99\% | 14.12\% |
| Legislators | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| School Teacher Employers | 18.49\% | 15.05\% | 15.05\% | 13.38\% | 13.38\% | 15.68\% | 15.68\% | 13.85\% | 13.85\% | 17.28\% |
| State of Maine Employees |  |  |  |  |  |  |  |  |  |  |
| Employee Class: |  |  |  |  |  |  |  |  |  |  |
| General | 21.98\% | 24.01\% | 24.05\% | 22.69\% | 22.37\% | 18.43\% | 18.14\% | 14.21\% | 14.18\% | 16.92\% |
| Police - Grandfathered | 31.89\% | 46.42\% | 46.51\% | 38.56\% | 38.01\% | 41.05\% | 40.43\% | 39.36\% | 39.22\% | 51.26\% |
| Marine Wardens - Grandfathered | 0.00\% | 0.00\% | 0.00\% | 40.99\% | 40.41\% | 31.62\% | 31.20\% | 33.44\% | 33.33\% | 54.49\% |
| Game Wardens - Grandfathered | 32.68\% | 47.64\% | 47.73\% | 42.18\% | 41.59\% | 36.50\% | 35.98\% | 38.60\% | 38.47\% | 54.48\% |
| Prison Wardens - Grandfathered | 0.00\% | 0.00\% | 0.00\% | 27.75\% | 27.28\% | 29.51\% | 29.05\% | 26.83\% | 26.74\% | 27.03\% |
| Forest Rangers - Grandfathered | 20.93\% | 24.94\% | 24.99\% | 21.99\% | 21.64\% | 22.73\% | 22.36\% | 13.69\% | 13.65\% | 22.32\% |
| 1998 Special Plan Groups | 26.32\% | 26.19\% | 26.24\% | 29.16\% | 28.71\% | 23.04\% | 22.65\% | 17.39\% | 17.33\% | 19.06\% |
| 25-Year/No-Age Special Plan Groups | 22.94\% | 23.44\% | 23.48\% | 23.96\% | 23.57\% | 20.42\% | 20.08\% | 15.43\% | 15.38\% | 24.87\% |
| Participating Local District Employees |  |  |  |  |  |  |  |  |  |  |
| Employee Class: |  |  |  |  |  |  |  |  |  |  |
| AC - General COLA | 10.00\% | 10.00\% | 9.60\% | 9.50\% | 8.90\% | 7.80\% | 6.50\% | 5.30\% | 4.40\% | 3.50\% |
| BC - General COLA | 6.30\% | 6.30\% | 6.10\% | 6.40\% | 5.80\% | 4.70\% | 3.90\% | 3.20\% | 2.70\% | 2.10\% |
| 1C - Special COLA | 16.20\% | 16.30\% | 15.70\% | 14.20\% | 14.00\% | 13.40\% | 12.80\% | 12.20\% | 10.20\% | 8.10\% |
| 2C - Special COLA | 10.60\% | 10.50\% | 10.10\% | 9.10\% | 8.90\% | 8.30\% | 7.90\% | 7.50\% | 6.30\% | 5.00\% |
| 3C - Special COLA | 12.80\% | 12.70\% | 12.20\% | 11.40\% | 11.40\% | 11.00\% | 10.50\% | 10.00\% | 8.30\% | 6.60\% |
| 4 C - Special COLA | 8.90\% | 8.70\% | 8.40\% | 7.70\% | 7.60\% | 7.20\% | 6.90\% | 6.60\% | 5.50\% | 4.40\% |
| AN - General No COLA | 7.40\% | 7.30\% | 7.00\% | 6.50\% | 5.60\% | 4.10\% | 3.40\% | 2.80\% | 2.40\% | 1.90\% |
| 1 N - Special No COLA | 11.10\% | 10.90\% | 10.50\% | 9.30\% | 8.70\% | 7.50\% | 7.10\% | 6.80\% | 5.60\% | 4.50\% |
| 2 N - Special No COLA | 6.00\% | 5.70\% | 5.50\% | 5.60\% | 5.20\% | 4.40\% | 4.20\% | 4.00\% | 3.30\% | 2.60\% |
| 3 N - Special No COLA | 8.10\% | 7.80\% | 7.50\% | 7.40\% | 7.00\% | 6.10\% | 5.80\% | 5.50\% | 4.50\% | 3.60\% |
| 4 N - Special No COLA | 4.50\% | 4.10\% | 3.90\% | 4.60\% | 4.40\% | 4.00\% | 3.80\% | 3.60\% | 3.00\% | 2.40\% |

Principal Participating Employers


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Participating Entity | Covered Employees | Rank | Percentage of Total System |
| State of Maine | 14,993 | 1 | 26.11\% |
| Maine Veterans Home | 1,330 | 2 | 2.32\% |
| Portland School Department | 1,218 | 3 | 2.12\% |
| Portland, City of | 844 | 4 | 1.47\% |
| Lewiston School Department | 800 | 5 | 1.39\% |
| Bangor School Department | 655 | 6 | 1.14\% |
| Auburn School Department | 620 | 7 | 1.08\% |
| Regional School Unit No. 14 | 587 | 8 | 1.02\% |
| Regional School Unit No. 6 | 565 | 9 | 0.98\% |
| Regional School Unit No. 75 | 565 | 10 | 0.98\% |
| All Others * | 35,256 |  | 61.39\% |
| Total (547 Participating Entities) | 57,433 |  | 100.00\% |
| Note: Covered employees of these employers are eligible to participate in the Defined Benefit Plans administered by MainePERS, which provide normal and disability retirement benefits and certain survivor benefits, as well as benefits under the Group Life Insurance Plan. |  |  |  |


| 2020 |  |  |  |
| :---: | :---: | :---: | :---: |
| Participating Entity | Covered Employees | Rank | Percentage of Total System |
| State of Maine | 14,632 | 1 | 25.20\% |
| Maine Veterans Home | 1,391 | 2 | 2.40\% |
| Portland School Department | 1,210 | 3 | 2.08\% |
| Lewiston School Department | 975 | 4 | 1.68\% |
| Portland, City of | 957 | 5 | 1.65\% |
| Bangor School Department | 555 | 6 | 0.96\% |
| Regional School Unit No. 6 | 545 | 7 | 0.94\% |
| South Portland School Department | 543 | 8 | 0.94\% |
| Auburn School Department | 534 | 9 | 0.92\% |
| Regional School Unit No. 60 | 521 | 10 | 0.90\% |
| All Others * | 36,191 |  | 62.33\% |
| Total (538 Participating Entities) | 58,054 |  | 100.00\% |
| * "All Others" includes employees covered under two or more employer types. In 2020, "All Others" consisted of: |  |  |  |
|  | Employers | Members |  |
| Participating Local Districts | 299 | 11,232 |  |
| School Districts | 229 | 24,959 |  |
| Total | 528 | 36,191 |  |

## Participating Employers, Detailed Listing

## State Entities

State of Maine
Maine Community College System
Maine Dairy \& Nutrition Council
Maine Developmental Disabilities Council Maine Potato Board
MECDHH/Governor Baxter School for the Deaf Northern New England Passenger Rail Authority

## Teachers

Acton School Department
Andover School Department
AOS No. 43 Central Office
AOS No. 43 Howland
AOS No. 43 Milo
AOS No. 47 Central Office
AOS No. 47 Dedham
AOS No. 47 Orrington
AOS No. 77 Alexander
AOS No. 77 Central Office
AOS No. 77 Charlotte
AOS No. 77 Eastport
AOS No. 77 Lubec
AOS No. 77 Pembroke
AOS No. 77 Perry
AOS No. 90 Baileyville
AOS No. 90 Central Office
AOS No. 90 East Range
AOS No. 90 Lee
AOS No. 90 Princeton
AOS No. 91 Bar Harbor
AOS No. 91 Central Office
AOS No. 91 Cranberry Isle
AOS No. 91 Frenchboro
AOS No. 91 MDI High School
AOS No. 91 Mt Desert
AOS No. 91 Southwest Harbor
AOS No. 91 Swans Island
AOS No. 91 Tremont
AOS No. 91 Trenton
AOS No. 92 Vassalboro
AOS No. 92 Waterville
AOS No. 92 Winslow
AOS No. 93 Bristol
AOS No. 93 Central Office
AOS No. 93 Great Salt Bay
AOS No. 93 Jefferson
AOS No. 93 Nobleboro
AOS No. 93 South Bristol
AOS No. 94 Central Office
AOS No. 94 Harmony
AOS No. 94 MSAD 46
AOS No. 96 Central Office
AOS No. 96 Cutler
AOS No. 96 East Machias
AOS No. 96 Jonesboro
AOS No. 96 Machias
AOS No. 96 Machiasport
AOS No. 96 Marshfield

AOS No. 96 Northfield
AOS No. 96 Roque Bluffs
AOS No. 96 Wesley
AOS No. 96 Whiting
AOS No. 96 Whitneyville
AOS No. 98 Boothbay Harbor
AOS No. 98 Central Office
AOS No. 98 Edgecomb
AOS No. 98 Georgetown
AOS No. 98 Southport
Athens School Department
Auburn School Department
Augusta School Department
Bangor School Department
Biddeford School Department
Brewer School Department
Brunswick School Department
Calais School Department
Cape Elizabeth School Department
Caswell School Department
Chebeague Island School Department
Cherryfield School Department
Community School District No. 8 Airline
Community School District No. 13 Deer Isle-Stonington
Community School District No. 17 Moosabec
Community School District No. 18 Wells-Ogunquit
Community School District No. 19 Five Town
Dayton School Department
East Millinocket School Department
Easton School Department
Ellsworth School Department
Erskine Academy
Eustis School Department
Falmouth School Department
Fayette School Department
Foxcroft Academy
Fryeburg Academy
George Stevens Academy
Glenburn School Department
Gorham School Department
Greenbush School Department
Hancock School Department
Hermon School Department
Indian Island School
Indian Township School
Isle Au Haut School Department
Islesboro School Department
Kittery School Department
Lamoine School Department
Lee Academy
Lewiston School Department
Limestone Public Schools
Lincoln Academy
Lincolnville School Department
Lisbon School Department
Long Island School Department
Madawaska School Department
Maine Central Institute
Maine Education Association

## Participating Employers, Detailed Listing

Maine Indian Education
Maine Ocean School
Maine School Administrative District No. 4 Guilford
Maine School Administrative District No. 7 North Haven
Maine School Administrative District No. 8 Vinalhaven
Maine School Administrative District No. 12 Jackman
Maine School Administrative District No. 13 Bingham
Maine School Administrative District No. 20 Fort Fairfield
Maine School Administrative District No. 23 Carmel
Maine School Administrative District No. 24 Van Buren
Maine School Administrative District No. 27 Fort Kent
Maine School Administrative District No. 28 Camden
Maine School Administrative District No. 32 Ashland
Maine School Administrative District No. 33 St. Agatha
Maine School Administrative District No. 42 Mars Hill
Maine School Administrative District No. 45 Washburn
Maine School Administrative District No. 53 Pittsfield
Maine School Administrative District No. 58 Kingfield
Maine School Administrative District No. 59 Madison
Maine School Administrative District No. 65 Matinicus
Maine School of Science and Mathematics
Medway School Department
Milford School Department
Millinocket School Department
Monhegan Plantation School Department
Northport School Department
Otis School Department
Oxford Hills Technical School No. 11
Pleasant Point School
Portland School Department
Region 2 Southern Aroostook County
Region 3 Northern Penobscot County
Region 4 United Technologies Center
Region 7 Waldo County Technical Center
Region 8 Midcoast School of Technology
Region 9 School of Applied Technology
Region 10 Cumberland-Sagadahoc County
Regional School Unit No. 1
Regional School Unit No. 2
Regional School Unit No. 4
Regional School Unit No. 5
Regional School Unit No. 10
Regional School Unit No. 12
Regional School Unit No. 13
Regional School Unit No. 14
Regional School Unit No. 16
Regional School Unit No. 18
Regional School Unit No. 19
Regional School Unit No. 20
Regional School Unit No. 21
Regional School Unit No. 22
Regional School Unit No. 23
Regional School Unit No. 24
Regional School Unit No. 25
Regional School Unit No. 26
Regional School Unit No. 34
Regional School Unit No. 38
Regional School Unit No. 39
Regional School Unit No. 50

Regional School Unit No. 56
Regional School Unit No. 71
Regional School Unit No. 73
Regional School Unit No. 78
Regional School Unit No. 89
RSU No. 3 - MSAD No. 3 Unity
RSU No. 6 - MSAD No. 6 Bar Mills
RSU No. 9 - MSAD No. 9 Farmington
RSU No. 11 - MSAD No. 11 Gardiner
RSU No. 15 - MSAD No. 15 Gray
RSU No. 17 - MSAD No. 17 South Paris
RSU No. 29 - MSAD No. 29 Houlton
RSU No. 35 - MSAD No. 35 Eliot
RSU No. 37 - MSAD No. 37 Harrington
RSU No. 40 - MSAD No. 40 Waldoboro
RSU No. 44 - MSAD No. 44 Bethel
RSU No. 49 - MSAD No. 49 Fairfield
RSU No. 51 - MSAD No. 51 Cumberland Center
RSU No. 52 - MSAD No. 52 Turner
RSU No. 54 - MSAD No. 54 Skowhegan
RSU No. 55 - MSAD No. 55 Cornish
RSU No. 57 - MSAD No. 57 Waterboro
RSU No. 60 - MSAD No. 60 North Berwick
RSU No. 61 - MSAD No. 61 Bridgton
RSU No. 63 - MSAD No. 63
RSU No. 64 - MSAD No. 64 East Corinth
RSU No. 67 - MSAD No. 67 Lincoln
RSU No. 68 - MSAD No. 68 Dover-Foxcroft
RSU No. 70 - MSAD No. 70
RSU No. 72 - MSAD No. 72 Fryeburg
RSU No. 74 - MSAD No. 74 North Anson
RSU No. 75 - MSAD No. 75 Topsham
RSU No. 79 - MSAD No. 1 Presque Isle
RSU No. 84 - MSAD No. 14
Saco School Department
Sanford School Department
Scarborough School Department
School Agent Carrabassett
School Agent Coplin Plantation
School Agent Pleasant Ridge Plantation
Sebago Public Schools
South Portland School Department
St. George School Department
State of Maine
Thornton Academy
Union 60 Greenville
Union 69 Appleton
Union 69 Hope
Union 76 Brooklin
Union 76 Sedgwick
Union 93 Blue Hill
Union 93 Brooksville
Union 93 Castine
Union 93 Penobscot
Union 93 Surry School Department
Union 103 Beals
Union 103 Jonesport
Union 122 New Sweden
Union 122 Westmanland

## Participating Employers, Detailed Listing

Union 122 Woodland
Vanceboro School Department Veazie School Department Washington Academy West Bath School Department Westbrook School Department Winthrop School Department Wiscasset School Department Yarmouth School Department York School Department

## PLD Consolidated

Acton, Town of
Alfred, Town of
Androscoggin County
Androscoggin Valley Council of Governments
Anson-Madison Sanitary District
Aroostook County
Aroostook Waste Solutions (Tri Community Landfill)
Auburn Housing Authority
Auburn Lewiston Airport
Auburn Public Library
Auburn Water and Sewer District
Auburn, City of
Augusta Housing Authority
Augusta, City of
Baileyville, Town of
Bangor Housing Authority
Bangor Public Library
Bangor Water District
Bangor, City of
Bar Harbor, Town of
Bath Water District
Bath, City of
Baxter Academy of Technology and Science
Belfast Water District
Belfast, City of
Berwick Sewer District
Berwick, Town of
Bethel, Town of
Biddeford Housing Authority
Biddeford, City of
Boothbay Harbor Sewer District
Boothbay Harbor, Town of
Boothbay Region Water District
Bowdoinham Water District
Brewer Housing Authority
Brewer, City of
Bridgton, Town of
Brownville, Town of
Brunswick Fire and Police
Brunswick Public Library Association
Brunswick Sewer District
Brunswick, Town of
Buckfield, Town of
Bucksport, Town of
Calais, City of
Camden, Town of
Cape Elizabeth Police

Caribou Fire and Police
Carrabassett Valley, Town of
Chesterville, Town of
China, Town of
Coastal Counties Workforce
Community School District No. 12 East Range-Support
Community School District No. 18 Wells-Ogunquit-Support
Corinna, Town of
Cornville Regional Charter School
Cumberland County
Cumberland, Town of
Damariscotta, Town of
Danforth, Town of
Dayton, Town of
Dexter, Town of
Dover-Foxcroft Water District
Dover-Foxcroft, Town of
Durham, Town of
Eagle Lake Water \& Sewer District
East Millinocket, Town of
Easton, Town of
Eliot, Town of
Ellsworth, City of
Enfield, Town of
Erskine Academy
Fairfield, Town of
Falmouth Memorial Library
Falmouth, Town of
Farmington Village Corporation
Farmington, Town of
Fort Fairfield Housing Authority
Fort Fairfield Utilities District
Fort Fairfield, Town of
Fort Kent, Town of
Franklin County
Freeport, Town of
Frenchville, Town of
Fryeburg, Town of
Gardiner Water District
Gardiner, City of
Glenburn, Town of
Good Will Home Association
Gorham Fire and Police
Gorham, Town of
Gould Academy
Grand Isle, Town of
Greater Augusta Utility District
Greenville, Town of
Hallowell, City of
Hampden Water District
Hampden, Town of
Hancock County
Hancock, Town of
Harpswell, Town of
Harrison, Town of
Hartland, Town of
Hermon, Town of
Hodgdon, Town of
Holden, Town of

## Participating Employers, Detailed Listing

Houlton Water Company
Houlton, Town of
Jackman Utility District
Jay, Town of
Kennebec County
Kennebec Sanitary Treatment District
Kennebec Water District
Kennebunk Kennebunkport Wells Water District
Kennebunk Light and Power District
Kennebunk Sewer District
Kennebunk, Town of
Kennebunkport, Town of
Kittery Water District
Kittery, Town of
Knox County Sheriff's Office
Lebanon, Town of
Levant, Town of
Lewiston Auburn 911
Lewiston Housing Authority
Lewiston, City of
Lewiston-Auburn Water Pollution Control Authority
Limestone, Town of
Lincoln Academy
Lincoln and Sagadahoc Multi-County Jail Authority
Lincoln County
Lincoln County Sheriff's Office
Lincoln Sanitary District
Lincoln Water District
Lincoln, Town of
Linneus, Town of
Lisbon Water Department
Lisbon, Town of
Livermore Falls Water District
Livermore Falls, Town of
Lovell, Town of
Lubec Water District
Lubec, Town of
M.A.D.S.E.C.

Madawaska Water District
Madawaska, Town of
Maine Academy of Natural Sciences
Maine County Commissioners Association
Maine Housing Authority
Maine Maritime Academy
Maine Municipal Association
Maine Municipal Bond Bank
Maine Principals' Association
Maine Public Employees Retirement System
Maine School Administrative District No. 13 Bingham
Maine School Administrative District No. 31 Howland
Maine School Administrative District No. 41 Milo
Maine School Administrative District No. 53 Pittsfield
Maine School Management Association
Maine School of Science and Mathematics
Maine Turnpike Authority
Maine Veterans' Homes
Maine Virtual Academy
Mapleton, Castle Hill, and Chapman, Towns of Mars Hill Utility District

Mars Hill, Town of
Mechanic Falls Sanitary District
Mechanic Falls, Town of
Medway, Town of
Midcoast Council of Governments
Milford, Town of
Millinocket, Town of
Milo Water District
Monmouth, Town of
Monson, Town of
Mount Desert Island Regional School District
Mount Desert Water District
Mount Desert, Town of
New Gloucester, Town of
Newport Water District
Newport, Town of
North Berwick Water District
North Berwick, Town of
Northern Oxford Regional Solid Waste Board
Norway Water District
Norway, Town of
Ogunquit, Town of
Old Orchard Beach, Town of
Old Town Housing Authority
Old Town Water District
Old Town, City of
Orland, Town of
Orono, Town of
Orrington, Town of
Otis, Town of
Otisfield, Town of
Oxford County
Oxford, Town of
Paris Utility District
Paris, Town of
Penobscot County
Penquis
Phippsburg, Town of
Piscataquis County
Pittsfield, Town of
Pleasant Pt. Passamaquoddy Reservation Housing
Authority
Poland, Town of
Portland Housing Authority
Portland Public Library
Portland, City of
Presque Isle, City of
Princeton, Town of
Regional School Unit No. 1
Regional School Unit No. 2
Regional School Unit No. 4
Regional School Unit No. 5
Regional School Unit No. 9
Regional School Unit No. 10
Regional School Unit No. 16
Regional School Unit No. 20
Regional School Unit No. 21
Regional School Unit No. 23
Regional School Unit No. 25

## Participating Employers, Detailed Listing

Regional School Unit No. 26
Regional School Unit No. 29
Regional School Unit No. 34
Regional School Unit No. 39
Regional School Unit No. 49
Regional School Unit No. 51
Regional School Unit No. 54
Regional School Unit No. 56
Regional School Unit No. 60
Regional School Unit No. 67
Regional School Unit No. 71
Regional School Unit No. 73
Richmond Utilities District
Richmond, Town of
Rockland, City of
Rockport, Town of
Rumford Fire and Police
Rumford Mexico Sewerage District
Rumford Water District
Rumford, Town of
Sabattus, Town of
Saco, City of
Sagadahoc County
Sanford Housing Authority
Sanford Sewerage District
Sanford Water District
Sanford, City of
Scarborough, Town of
Searsport Water District
Searsport, Town of
Skowhegan, Town of
Somerset County
South Berwick Sewer District
South Berwick Water District
South Berwick, Town of
South Portland Housing Authority
South Portland, City of
Southwest Harbor, Town of
St. Agatha, Town of
Thomaston, Town of
Thompson Free Library
Topsham Sewer District
Topsham, Town of
Trenton, Town of
Union, Town of
United Technologies Center, Region 4
Van Buren Housing Authority
Van Buren, Town of
Vassalboro, Town of
Veazie Fire and Police
Waldo County
Waldo County Technical Center
Waldoboro, Town of
Washburn Water and Sewer District
Washburn, Town of
Washington County
Waterboro, Town of
Waterville Fire and Police
Waterville Sewerage District

Wells Fire and Police
Wells, Town of
West Bath, Town of
Westbrook Fire and Police
Westbrook, City of
Wilton, Town of
Windham, Town of
Winslow, Town of
Winter Harbor Utility District
Winterport Water District
Winthrop Utilities District
Winthrop, Town of
Wiscasset, Town of
Yarmouth Water District
Yarmouth, Town of
York County
York Sewer District
York Water District
York, Town of
PLD Non-Consolidated
Bingham Water District
Cape Elizabeth, Town of
Community School District No. 903
Knox County
Limestone Water and Sewer District
Western Maine Community Action

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Egg Rock Light, Bar Harbor


[^0]:    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.

[^1]:    Brian McDonnell
    Global Head of the Pension Practice

[^2]:    * 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.

[^3]:    * The System currently has this information available for the years indicated. Additional information will be added to the schedule each year until the requisite ten years is obtained.

