ALASKA

- PUBLIC EMPLOYEES' RETIREMENT SYSTEM -



A COMPONENT UNIT OF THE STATE OF ALASKA
ANNUAL COMPREHENSIVE FINANCIAL REPORT
FISCAL YEAR ENDED JUNE 30, 2023
MIKE DUNLEAVY, GOVERNOR



Public Employees' Retirement System

Annual Comprehensive Financial Report

A Component Unit of the State of Alaska

For the Fiscal Year Ended June 30, 2023



Mike Dunleavy, Governor

Prepared by

Department of Administration
Division of Retirement and Benefits
P.O. Box 110203
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INTRODUCTORY SECTION





Department of Administration

DIVISION OF RETIREMENT AND BENEFITS

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LETTER OF TRANSMITTAL

December 15, 2023

The Honorable Mike Dunleavy, Governor Members of the Alaska State Legislature Alaska Retirement Management Board Employers and Plan Members

We are pleased to present the Annual Comprehensive Financial Report (ACFR) of the Public Employees' Retirement System (PERS) (System) for the fiscal year ended June 30, 2023. The ACFR is intended to fulfill the legal requirements of Alaska Statute (AS) 39.35.004(a)(8).

The ACFR provides comprehensive information on the financial operations of the System for the fiscal year. Responsibility for the accuracy, completeness, and fairness of the information presented rests with the management of the System. To the best of our knowledge and belief, the enclosed information is accurate in all material respects and is reported in a manner designed to fairly present the financial position and results of operations of the System for the year ended June 30, 2023. All disclosures necessary to enable the reader to gain an understanding of the System's activities have been included.

KPMG LLP, Certified Public Accountants, has issued an unmodified opinion on the System's basic financial statements for the year ended June 30, 2023. The Independent Auditors' Report is located at the beginning of the Financial Section of this report.

The management's discussion and analysis (MD&A) is also located in the Financial Section of this report. The MD&A provides an analytical overview of the financial statements. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

Profile of the System

The System was established in 1961 to provide pension benefits for eligible state and local government employees. Post-employment health care benefits were added July 1, 1975. Senate Bill 141, signed into law on July 27, 2005, closed the Defined Benefit (DB) Plan effective July 1, 2006, to new members and created a Defined Contribution Retirement (DCR) Plan for members first hired on or after July 1, 2006. Beginning in fiscal year 2007, the System consists of: (1) the DB Plan and (2) the DCR Plan. This report includes both plans. The DB Plan includes the pension plan and the Alaska Retiree Health Care Trust (Tiers I, II, and III). The DCR Plan includes the defined contribution retirement trust, occupational death and disability plan, retiree major medical plan, and the health reimbursement arrangement plan (Tier IV).

Reporting Entity

The System is considered a component unit of the State of Alaska (State) for financial reporting purposes. Due to the closeness of the System's relationship to the State, it is included in the State ACFR as a fiduciary fund.

The Commissioner of the Department of Administration, appointed by the Governor, is responsible for administering the System. In order to meet the statutory requirements of administering the System, the Commissioner appoints the Plan Administrator of the Division of Retirement and Benefits (Division). The Plan Administrator is responsible for the daily operations of the System.

The Board, constituted effective October 1, 2005, replaced the Public Employees' Retirement Board (effective July 1, 2005) and the Alaska State Pension Investment Board (effective October 1, 2005).

The Board is responsible for:

- adopting investment policies and developing investment objectives;
- providing a range of investment options and establishing the rules by which participants can direct their investments among those options, when applicable;
- establishing crediting rates for members' individual contribution accounts, when applicable;
- assisting in prescribing policies for the proper operation of the System;
- coordinating with the System Administrator to have actuarial valuations performed;
- reviewing actuarial assumptions and conducting experience analyses;
- · contracting for an independent audit of actuarial valuations and external performance calculations; and
- reporting the financial condition of the Systems to the Governor, Legislature, and individual employers participating in the System.

Major Initiatives / Changes

The System continues making progress on several on-going projects. Most of these efforts are focused on improving the following: customer service, technology, methods for employers submitting information, methods for members to obtain information, and continued compliance with Governmental Accounting Standards Board (GASB) accounting requirements, as applicable. While COVID-19 continues to impact day-to-day and face-to-face interaction with members and employers, we continue providing via teleworking and hybrid telework arrangements the necessary services needed to meet stakeholder demands while maintaining appropriate security and safety measures.

The System is in the fourth year of a major member benefits system upgrade. The Division signed a contract with Sagitec, an industry leader in pension and healthcare software systems. The Division branded the new system <u>BE</u>nefits <u>A</u>nd <u>R</u>etirement <u>S</u>ystem, or BEARS. This integrated, enterprise-wide system will support all of our pension and health functions and will provide many modern tools to enable the Division to maintain and improve services to members. Staff is excited about this new system, the enhancements it provides, and looks forward to sharing more information with members and employers as we work toward implementation in November 2024.

The System endeavors to offer best in class health care benefits balanced by strong financial management and cost initiatives that focus on value. Examples include the implementation of enhanced coverage and cost controls for gene therapy services in the retiree health plan, streamlining administrative requirements, and removing monetary penalties related to precertification for certain services in the retiree health plan. These changes result in valuable medical coverage to the membership while striving to contain rising healthcare costs that impact the System.

Under the guidance of Director Ajay Desai, the System continues to assess and retool its communication efforts, including printed handbooks, newsletters, and website content. The System developed employee videos for employers' use and plan

information easily accessible online by members. While technology has enhanced our outreach, it does not replace in-person efforts to meet, discuss, and plan member benefits. The System strives to ensure that all communication material is clear, accurate, and user-friendly.

The System strives to provide the highest degree of customer service to all members. The Division continues to enhance and develop the central Member Services Section with the goals of improving phone service, faster processing of all customer requests, and improving member education services.

The System offers a broad array of fairs, town halls, and seminars as safely as possible for both members and employers. These efforts are directed at assisting employers with successful marketing of the plans, educating members about all benefits available from early career to retirement, encouraging healthy living, and how to best use the health plan.

Funding Requirements

The System's consulting actuary, Buck, A Gallagher Company, presented the results of the June 30, 2022, actuarial valuation report to the Plan Administrator, Division, and the Board. The assumptions and benefits are explained in the Actuarial Section of this report.

Based on the most recent valuation report dated June 5, 2023, the System's DB Pension Plan has a funded ratio (actuarial value of DB Plan assets divided by actuarial liabilities for benefits) of 68.1% and an unfunded actuarial accrued liability (actuarial liability minus actuarial value of DB plan assets) total of approximately \$5.13 billion. The System's DB healthcare trust has a funded ratio of 134.9% and a funding excess of \$2.32 billion. The DB Pension unfunded liability continues to be addressed at all levels of the State. The Governor's budget proposes to provide funding to System's employers in order to maintain an appropriate level of employer contributions while also paying the actuarially determined contribution rate adopted by the Board.

Investments

On June 30, 2023, the DB Plan's investment portfolio was valued at \$20.0 billion and earned an average 7.03% return for the fiscal year ended June 30, 2023. The DCR Plan's investment portfolio was valued at \$3.2 billion for the fiscal year ended June 30, 2023. Over the past five years ending June 30, 2023, the DB Plan's investments earned a 7.68% return. The Board has statutory oversight of the System's investments and the Department of Revenue, Treasury Division, provides staff for the Board. Actual investing is performed by investment officers in the Treasury Division or by contracted external investment managers. The Board reviews and updates investment policies and strategies and is responsible for safeguarding invested assets.

Accounting System

This ACFR has been prepared to conform to the principles of accounting and reporting established by the GASB. Specific accounting treatments are detailed in the Notes to Financial Statements found in the Financial Section of this report.

Internal Controls

Division management is responsible for establishing and maintaining a system of internal controls to protect System assets from loss, theft, or misuse and to ensure adequate accounting data is compiled for the preparation of financial statements in conformity with generally accepted accounting principles. The cost of internal control should not exceed anticipated benefits; the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its ACFR for the fiscal year ended June 30, 2022. The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards of preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government entity must publish an easily readable and efficiently organized ACFR. This report must satisfy both U.S. generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. The Division is confident our current ACFR continues to meet the Certificate of Achievement Program's requirements and are submitting it to the GFOA for consideration.

Additionally, the Public Pension Coordinating Council (PPCC) awarded the Public Pension Standards Award for Funding and Administration certificate to the Division for the fiscal year ended June 30, 2023. This award signifies that the Alaska PERS complies with the standard benchmarks for public defined benefit systems in the United States. The standards require a high level for the following: comprehensive benefit program, funding adequacy, accepted actuarial and audit practices, investment policy and evaluation, and member communications.

The Public Pension Standards Award for Funding and Administration certificate is valid for a period of one year. The Division is confident the System will continue to meet the standards award requirements and will apply to the PPCC for consideration in 2024.

Acknowledgements

The preparation of this report is made possible by the dedicated services of the staff of the Department of Administration, Division of Retirement and Benefits and Division of Finance; Department of Law; and the Department of Revenue, Treasury Division. This report is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means of determining responsible stewardship of the System's financial resources.

The report is available on the web at drb.alaska.gov/docs/reports/#pers and mailed to those who submit a formal request. This report forms the link between the System and the membership. The cooperation of the membership contributes significantly to the success of the System. We hope the employers and plan members find this report informative.

We are grateful to the Alaska Retirement Management Board, staff, advisors, and to the many people who have diligently worked to assure the successful operation of the System.

Respectfully submitted,

Paula Vrara

Paula Vrana

Commissioner

Ajay Desai

Division Director

Elizabeth "Betsy" Wood

Chief Health Administrator

Kevin Worley

Chief Financial Officer



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Alaska Public Employees' Retirement System

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

Presented to

State of Alaska Public Employees' Retirement System

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

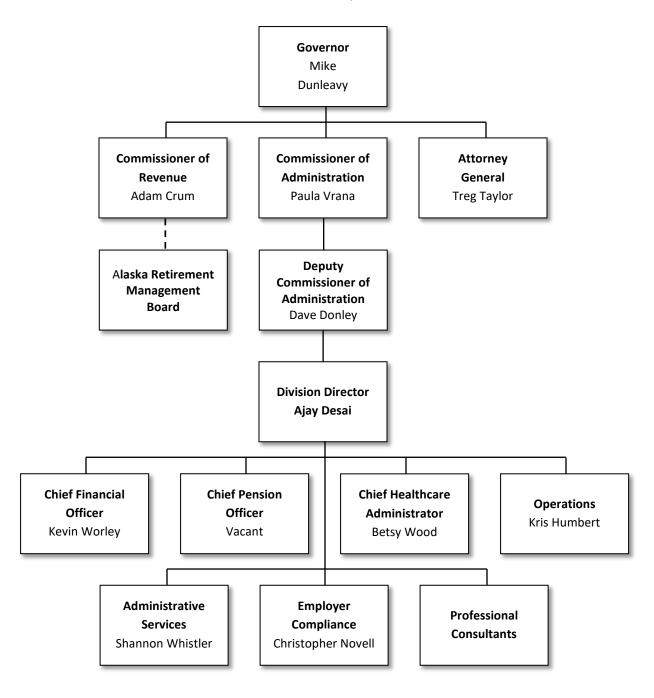
National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Alan H. Winkle Program Administrator

alan Helinble

ORGANIZATION CHART

As of June 30, 2023



Section Responsibilities

The **Member Services Section** is responsible for providing comprehensive retirement counseling to the participating members and employers in the plan. This section appoints members to retirement and maintains benefit payment information.

The **Health Plan Administration Section** is responsible for the administration of health, disability, and life insurance. This section provides benefits counseling and plan change information to the membership.

The **Financial Services Section** is responsible for maintaining the employee and employer records and accounts in each of the plans administered by the Division, producing financial statements and reports, and assuring compliance with Internal Revenue Service requirements.

The **Data Processing Services and Project Support Section** supports the information systems the System uses. Responsibilities include planning, development, database design, programming, and operational support of the data processing systems, including the Local Area Network.

The **Administrative Services Section** is responsible for budget preparation, fiscal management of appropriations, procuring professional services, supplies, and equipment. The section manages the System's record center containing the member's physical records and performs other administrative functions such as legislative tracking and personnel management.

Consulting Actuary	Legal Counsel	Legal Counsel (cont.)
Buck, A Gallagher Company	Andrew Bocanumenth	Laura Wolff
New York, New York	Kevin Dilg	Anchorage, AK
	Morgan A. Griffin	
Reviewing Actuary	Kevin Higgins	Ice Miller LLP
Gabriel, Roeder, Smith & Co.	Ben Hofmeister	Indianapolis, Indiana
Denver, Colorado	Grace Lee	
	Bill Milks	Third-Party Healthcare
Independent Auditors	Rebecca Polizzotto	Claim Administrators
KPMG LLP	Assistant Attorney Generals	Aetna Life Insurance Company
Anchorage, Alaska	Juneau, Alaska	Lexington, Kentucky
		CHCS Services, Inc.
Benefits Consultants	Jessie Alloway	Pensacola, Florida
Buck, A Gallagher Company	Colleen Bailey	Moda Health / Delta Dental of Alask
New York, New York	Katherine Demarest	Portland, Oregon
The Segal Company	Javier Diaz	PayFlex Systems USA, Inc.
Greenwood Village, Colorado	Kyle B. Emili	Omaha, Nebraska
	Kimberly Halstead	Optum Rx
IT Consultants	Eugene F. Hickey	Irvine, California
Alaska IT Group	Margaret Paton-Walsh	
Juneau, Alaska	Jeff Pickett	Consulting Physicians
Applied Microsystems, Inc.	Christopher Robison	Julius Goslin
Computer Task Group	Robert Schmidt	Anchorage, AK (HSS)
Anchorage, Alaska	Danielle Thurmond	
-	Rachel Witty	

A list of investment consultants can be found in the Investment Section on pages 84 - 85. Investment fees and commissions can be found on pages 92 and 99.

Alaska Retirement Management Board

As of June 30, 2023

Bob Williams, Board Chair / Chair of Defined Contribution Committee, was appointed by Governor Walker in March 2016 and reappointed by Governor Dunleavy in March 2020. Bob Williams was born and raised in Palmer, Alaska. He began his teaching career as a Peace Corps teacher in Gambia, Africa. He then taught for more than two decades as a secondary mathematics teach in Alaska with more than a decade of experience teaching AP Calculus. He is a nationally board-certified teacher and the recipient of both the Presidential Award for Excellence in Mathematics Teaching and the Horace Mann Teaching Excellence Award. He was the Alaska 2009 Teacher of the Year and was inducted into the National Teachers Hall of Fame in 2017. Mr. Williams has a B.S. in Petroleum Engineering, an M.A. in Mathematics Education, an M.Ed. in Educational Leadership, and a Ph.D. in Public Policy and Administration. Mr. Williams also serves as Chair of the ARMB Defined Contribution Plan Committee.

Sandra Ryan, Board Vice-Chair / Chair of Actuarial Committee, was a teacher of mathematics and computer science in the Fairbanks North Star Borough School District since 1994. She served as a member of the District's curriculum committee, an advanced placement teacher in both AP Computer Science and AP Statistics, on two school Accreditation Committees, on the Education Excellence for Teachers and Students Committee, and President of the Fairbanks Education Association representing over 800 certificated professionals. Ms. Ryan is a new local presidents' trainer for the National Education Association and a member of Alpha Delta Kappa. She holds a B.S. in Communications from the University of Texas at Austin, a B.S. in Mathematics from St. Edward's University, and an M.S. in Computer Science—Software Engineering from the University of Alaska Fairbanks.

Michael Williams, Board Secretary / Chair of Audit Committee, was appointed by Governor Dunleavy in March 2022. He previously served on the board from 2005 to 2012. He works for the Alaska Department of Revenue as a Revenue Audit Supervisor, managing the State's corporate income tax program. He also serves as Secretary/Treasurer for the Supervisory Unit of the Alaska Public Employees Association, and since 2005 has been the treasurer for the Pacific Health Coalition, a private health coalition representing 250,000 members through public and private unions and small businesses. He is an avid reader and travel enthusiast. Michael holds a B.A. in Accounting and a Master of Taxation from Weber State University. He is professionally licensed as an Enrolled Agent.

Adam Crum is the Commissioner of the Department of Revenue, appointed by Governor Dunleavy on November 16, 2022. He previously served as commissioner at the Alaska Department of Health. Mr. Crum was born and raised in Alaska and has experience in the private sector in strategic management, organizational development, executive consulting and working on mega-projects. Prior to his tenure with DHSS, he was executive vice president of his family's company, Northern Industrial Training. He is also active in community organizations and has served as a board member for groups like the Salvation Army and MyHouse. He has a bachelor's degree in psychology from Northwestern University and a Master of Science in Public Health from Johns Hopkins University.

Paula Vrana is the Commissioner of the Department of Administration, appointed by Governor Dunleavy on September 30, 2021. She served as deputy commissioner of the department since January 2019. Commissioner Vrana is an attorney and lifelong Alaskan, her family roots in Southeast Alaska date back to early World War II years in Skagway. She practiced law at the law firm of Brena, Bell & Clarkson and has served as the Chief Executive Officer of Copper River Native Association as well as Executive Director of Hospice of Anchorage.

Lorne Bretz was appointed by Governor Dunleavy in March 2019. Lorne immigrated to Alaska in 1992, and with its vast beauty, it quickly became home. Volunteering in the community, hiking and off-road adventuring are some of Lorne's favorite hobbies. Mr. Bretz is the Plan Administrator for the Municipality of Anchorage Retiree Medical Funding Program Trust for Police Officers and Firefighters. He has a Master's in Business Administration, a Retirement Plans Associate designation and is a Certified Financial Planner professional. He has a passion for finances and a desire to support the needs of retirees and future retirees of the state he calls home.

Donald Krohn was appointed by Governor Dunleavy in March 2021. He began his career in law enforcement more than 45 years ago with a four-year stint in the Air Force. From there, he joined the U.S. Customs Service in Chicago, working on narcotics interdiction. In 1979, he was transferred to Anchorage and after five more years working in inspections and intercepting drug traffic, he joined the Anchorage Police Department. Mr. Krohn worked for several years at the department as a detective specializing in white-collar crime. He was then promoted to the major crime's unit. He finished his 18 years at APD working major crimes and as a homicide detective. In January 2002, he joined First National Bank Alaska as Security Officer. During his first three years at the bank, he developed and implemented programs that resulted in an 80 percent reduction in successful criminal attacks against the bank and its customers. He retired in May 2020. Mr. Krohn also holds a B.S. in Occupational Education, with a minor in Criminal Justice from Wayland Baptist University.

Dennis Moen, Chair of Operations Committee, was appointed by Governor Dunleavy in 2020. He is a retired Facility Manager for the State of Alaska, Department of Transportation & Public Facilities, Northern Region. Mr. Moen established and managed a multi-million-dollar annual operating budget. Supervised over 50 employees. Developed an annual budget for over 400 state owned facilities and was the Contracting Officer for 100's of state vendors. Fourteen hours after retiring from the State of Alaska, he went to work for the Public Employees Local 71 Laborer's Union. He was elected as Business Manager/Secretary Treasurer in 2012. As Business Manager, Mr. Moen represented 2400 members statewide. He developed a multi-million-dollar budget and provided fiduciary oversight of Local 71's operating budget. Dennis directed investment bankers and economic consultants for PE Local 71's Health Trust Fund. He also oversaw actuarial analysis and audits. Mr. Moen was concurrently Business Manager/Secretary Treasurer for Alaska District Council of Laborers for three Alaska Laborer Locals. He was also the Vice President of the Pacific Health Coalition (PHC), a private health coalition representing 250,000 members through public and private unions and small businesses. Mr. Moen lived and raised his 2 children in Fairbanks, Alaska for 40 years. He is a private pilot, a Coast-Guard Captain for 100-ton vessels and since his retirement from the Union in 2019 enjoys commercial fishing in Southeast Alaska.

Spencer Moore was appointed by Governor Mike Dunleavey in June of 2023. He currently works in finance for a non-profit in Anchorage and is also a commercial fisherman out of Bristol Bay, Alaska. He attended Liberty University in Lynchburg, Virginia and graduated in 2014 with a Business Degree. There he met his wife and moved to Alaska in 2014 and together they have 4 children. He has a background in construction, church ministry and accounting. He is a Ramsey Certified Financial Coach and has taught personal finance for high school students, and inmates in Alaska as a volunteer chaplain. He enjoys playing or coaching basketball and ATV riding around our state. He is excited about serving the state of Alaska on the ARM Board, and ensuring all retirees can retire with dignity.







FINANCIAL SECTION





KPMG LLP Suite 600 701 West Eighth Avenue Anchorage, AK 99501

Independent Auditors' Report

The Division of Retirement and Benefits and Members of the Alaska Retirement Management Board State of Alaska Public Employees' Retirement System:

Opinion

We have audited the combining financial statements of the State of Alaska Public Employees' Retirement System (the System), a component unit of the State of Alaska, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying combining financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2023, and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with U.S. generally accepted accounting principles, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

Financial Section

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Report on Summarized Comparative Information

We have previously audited the System's 2022 combining financial statements, and we expressed an unmodified opinion on those financial statements in our report dated October 14, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and the required supplementary information listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 GAAS, 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.

Supplementary Information

Our audit for the year ended June 30, 2023 was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements for the year ended June 30, 2023. The supplemental schedules listed in the table of contents for the year ended June 30, 2023 are presented for purposes of additional analysis and are 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. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements for the year ended June 30, 2023 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 GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2023.

Financial Section

We also previously audited, in accordance with GAAS, the basic financial statements of the System as of and for the year ended June 30, 2022 (not presented herein), and have issued our report thereon dated October 14, 2022 which expressed an unmodified opinion. The supplemental schedules listed in the table of contents for the year ended June 30, 2022 are presented for purposes of additional analysis and are 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. The information was subjected to the audit procedures applied in the audit of the basic financial statements for the year ended June 30, 2022 and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated in all material respects, in relation to the basic financial statements as a whole for the year ended June 30, 2022.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory, investment, actuarial and statistical sections but does not include the basic financial statements and our auditors' report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.



Anchorage, Alaska

October 12, 2023, except for the Other Information section of our report, as to which the date is December 11, 2023.

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

This section presents management's discussion and analysis (MD&A) of the State of Alaska Public Employees' Retirement System's (the System) financial position and performance for the years ended June 30, 2023 and 2022. This section is presented as a narrative overview and analysis. Please read the MD&A in conjunction with the financial statements, notes to financial statements, required supplementary information, and supplemental schedules to better understand the financial condition and performance of the System during the fiscal years ended June 30, 2023 and 2022. Information for fiscal year 2021 is presented for comparative purposes.

Financial Highlights

The System's financial highlights for the year ended June 30, 2023 were as follows:

- The System's fiduciary net position restricted for pension benefits, postemployment healthcare benefits, and individuals increased by \$1.0 billion.
- The System's employers and plan members contributions decreased by \$9.0 million when compared to fiscal year
 2022.
- The State of Alaska (the State) directly appropriated \$33.9 million to the System.
- The System's net investment income increased \$3.4 billion when compared to fiscal year 2022, to \$1.8 billion.
- The System's pension benefit expenditures totaled \$1.0 billion.
- The System's postemployment healthcare benefit expenditures totaled \$552.6 million.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the System's financial statements. The System's financial statements are composed of three components: (1) combining statement of fiduciary net position, (2) combining statement of changes in fiduciary net position, and (3) notes to financial statements. This report also contains required supplementary information and other supplemental schedules.

Combining statement of fiduciary net position – This statement presents information regarding the System's assets, liabilities, and resulting net position restricted for pension benefits, postemployment healthcare benefits, and individuals. This statement reflects the System's investments at fair value, along with cash and cash equivalents, receivables, and other assets, less liabilities at June 30, 2023.

Combining statement of changes in fiduciary net position – This statement presents how the System's net position restricted for pension benefits, postemployment healthcare benefits, and individuals changed during the fiscal year ended June 30, 2023. This statement presents contributions and investment income during the period. Deductions for pension and postemployment healthcare benefits, refunds, and operating deductions are also presented.

The above statements represent resources available for investment and payment of benefits as of June 30, 2023, and the sources and uses of those funds during fiscal year 2023.

Notes to financial statements – The notes to financial statements are an integral part of the financial statements and provide additional detailed information and schedules that are essential to a full understanding of the System's financial statements.

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

Required supplementary information and related notes – The required supplementary information consists of 12 schedules and related notes concerning the funded status of the System and actuarial assumptions and methods used in the actuarial valuation.

Supplemental schedules – Supplemental schedules include detailed information on administrative and investment deductions incurred by the System and payments to consultants other than investment advisors for professional services.

Condensed Financial Information

System net position (In thousands)

				Increase (decrease)		
Description		2023	2022	Amount	Percentage	2021
Assets:						
Cash and cash equivalents	\$	235,485	286,503	(51,018)	(17.8)% \$	251,009
Contributions receivable		12,072	13,223	(1,151)	(8.7)	12,363
Due from State of Alaska General Fund		23,306	23,385	(79)	(0.3)	18,175
Due from Retiree Health Fund		_	_	_	_	2
Other accounts receivable		15,111	13,445	1,666	12.4	5,363
Investments		23,265,827	22,202,613	1,063,214	4.8	24,437,912
Other assets	_	981	982	(1)	(0.1)	984
Total assets	_	23,552,782	22,540,151	1,012,631	4.5	24,725,808
Liabilities:						
Claims payable		45,690	40,109	5,581	13.9	39,972
Accrued expenses		11,148	8,110	3,038	37.5	7,148
Forfeiture payable to employers		359	171	188	109.9	151
Securities lending collateral payable		23,811	39,071	(15,260)	(39.1)	57,659
Due to State of Alaska General Fund	_	1,484		1,484	100.0	
Total liabilities	_	82,492	87,461	(4,969)	(5.7)	104,930
Net position	\$_	23,470,290	22,452,690	1,017,600	4.5 % \$	24,620,878

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

Condensed Financial Information (continued)

Changes in system net position (In thousands)

			Increase (decrease)		
Description	2023	2022	Amount	Percentage	2021	
Net position, beginning of year \$_	22,452,690	24,620,878	(2,168,188)	(8.8)% \$_	19,357,542	
Additions:						
Contributions – employers and						
plan members	811,199	820,183	(8,984)	(1.1)	810,572	
Contributions – nonemployer						
State of Alaska	33,933	97,700	(63,767)	(65.3)	101,383	
Net investment income (loss)	1,768,040	(1,613,903)	3,381,943	209.6	5,748,837	
Employer group waiver plan	60,370	54,191	6,179	11.4	52,416	
Medicare retiree drug subsidy	453	595	(142)	(23.9)	189	
Pharmacy rebates	58,397	47,415	10,982	23.2	37,936	
Pharmacy management allowance	132	134	(2)	(1.5)	189	
Other income	690	292	398	136.3	1,309	
Total additions (deductions)	2,733,214	(593,393)	3,326,607	560.6	6,752,831	
Deductions:						
Pension and postemployment						
healthcare benefits	1,565,917	1,439,873	126,044	8.8	1,385,828	
Refunds of contributions	115,080	101,571	13,509	13.3	69,986	
Administrative	34,617	33,351	1,266	3.8	33,681	
Total deductions	1,715,614	1,574,795	140,819	8.9	1,489,495	
Increase (decrease) in	·				,	
net position	1,017,600	(2,168,188)	3,185,788	146.9	5,263,336	
Net position, end of year \$	23,470,290	22,452,690	1,017,600	4.5 % \$	24,620,878	

Financial Analysis of the System

The statements of fiduciary net position as of June 30, 2023 and 2022 show net position restricted for pension benefits, postemployment healthcare benefits, and individuals of \$23,470,290,000 and \$22,452,690,000, respectively. The entire amount is available to cover the System's obligation to pay pension and postemployment healthcare benefits to its members and their beneficiaries, as well as administrative costs.

This represents an increase in the System's net position restricted for pension benefits, postemployment healthcare benefits, and individuals of \$1,017,600,000 or 4.5% from fiscal year 2022 to 2023, and a decrease of \$2,168,188,000 or 8.8% from fiscal year 2021 to 2022. Over the long term, employers, plan members, and nonemployer contributions, as well as investment income earned, are anticipated to sufficiently fund the pension benefit and postemployment healthcare costs of the System.

During the 32nd Alaska State Legislature and as part of the State's Fiscal Year 2023 Operating Budget, House Bill 281 appropriated \$33,933,000 from the General Fund to the Department of Administration for deposit in the Defined Benefit Pension fund. The amount of the appropriation is allocated to participating employers (except the State of Alaska) and is reported as Contributions – Nonemployer State of Alaska.

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

The investment of pension funds is a long-term undertaking. On an annual basis, the Alaska Retirement Management Board (the Board) reviews and adopts an asset allocation strategy to ensure the asset mix will remain at an optimal risk/return level given the System's constraints and objectives.

System Asset Allocation

During fiscal years 2023 and 2022, the Board adopted the following asset allocation for the Defined Benefit Pension Plan (DB Plan), Alaska Retiree Healthcare Trust (ARHCT Plan), and Defined Contribution Retirement Pension Plan's (DCR Plan) occupational death and disability fund, retiree medical plan, and health reimbursement arrangement fund:

	2023		2022	
	Pension and Healt	hcare Trusts	Pension and Healt	hcare Trusts
	Allocation	Range	Allocation	Range
Broad domestic equity	27.0%	±6%	27.0%	±6%
Global equity (ex-U.S.)	18.0	± 4	18.0	±4
Fixed income	19.0	±10	21.0	±10
Multi-asset	8.0	± 4	6.0	± 4
Real assets	14.0	±7	14.0	±7
Private equity	14.0	± 7	14.0	±6
Total	100.0%		100.0%	
Expected return 20-year geometric mean	6.90%		6.88%	
Projected standard deviation	13.93		13.89	

For fiscal years 2023 and 2022, the DB Pension Plan's investments generated a 7.03% and (4.08%) rate of return, respectively. For fiscal years 2023 and 2022, the Alaska Retiree Healthcare Trust Plan's investments generated a 7.11% and (4.08%) rate of return, respectively.

Contributions, Investment Income, and Other Additions

The additions required to fund retirement benefits are accumulated through a combination of employer and plan member contributions, State appropriation, investment income, and other additions as follows:

	Additions (In thousands)				
			Increase (decrease)		
	 2023	2022	Amount	Percentage	2021
Contributions – employers	\$ 593,306	626,286	(32,980)	(5.3)% \$	622,103
Contributions – plan members	217,893	193,897	23,996	12.4	188,469
Contributions – nonemployer					
State of Alaska	33,933	97,700	(63,767)	(65.3)	101,383
Net investment income (loss)	1,768,040	(1,613,903)	3,381,943	209.6	5,748,837
Employer group waiver plan	60,370	54,191	6,179	11.4	52,416
Medicare retiree drug subsidy	453	595	(142)	(23.9)	189
Pharmacy rebates	58,397	47,415	10,982	23.2	37,936
Pharmacy management allowance	132	134	(2)	(1.5)	189
Other income	 690	292	398	136.3	1,309
Total	\$ 2,733,214	(593,393)	3,326,607	560.6% \$	6,752,831

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

The System's employer contributions decreased from \$626,286,000 in fiscal year 2022 to \$593,306,000 in fiscal year 2023, a decrease of \$32,980,000 or 5.3%. The System's employer contributions increased from \$622,103,000 in fiscal year 2021 to \$626,286,000 in fiscal year 2022, an increase of \$4,183,000 or 0.7%. The decreased employer contributions in fiscal year 2023 is attributed to a decrease in the total employer contribution rate from 30.11% in fiscal year 2022 to 24.79%. The State of Alaska as an employer, which represents roughly one-half of the employee population, is required by Alaska statute to pay the full actuarially determined contribution rate. The employer contribution rate reduction would be reflected here. The increase in employer contributions for both fiscal year 2022 and 2021 is primarily due to an increase in member salaries.

The System's plan member contributions increased from \$193,897,000 in fiscal year 2022 to \$217,893,000 in fiscal year 2023, an increase of \$23,996,000 or 12.4%. The System's plan member contributions increased from \$188,469,000 in fiscal year 2021 to \$193,897,000 in fiscal year 2022, an increase of \$5,428,000 or 2.9%. The increase in employer contributions for both fiscal year 2023 and 2022 is due to an increase in member salaries, as well as for funds paid by plan members for their conversion from the defined contribution retirement plan to the defined benefit plan due to the Metcalfe decision discussed in the notes to financial statements.

The State provided \$33,933,000 and \$97,699,500 for fiscal years 2023 and 2022, respectively, in nonemployer contributions per Alaska Statute (AS) 39.35.280. The employer on-behalf amount (or additional State contributions as defined in AS 39.35.280) is calculated by the System's actuary. It is based on projected payroll and the difference between the actuarially determined contribution rate and the statutory effective rate. The employer effective contribution rate of 22.00% is established in AS 39.35.255(a). These amounts are available to all participating employers, except the State of Alaska, which is required to pay the full actuarially determined contribution rate.

The System's net investment income in fiscal year 2023 increased by \$3,381,943,000 or 209.6% from amounts in fiscal year 2022. The System's net investment income in fiscal year 2022 decreased by \$7,362,740,000 or 128.1% from amounts in fiscal year 2021. The investment gains in fiscal year 2023 were substantially higher than the investment losses seen in fiscal year 2022, primarily due to improved investor sentiment in domestic stocks and an increase in overseas stocks aided through currency appreciation versus the U.S. dollar that exceeded the System's actuarial rate of return. However, other investment classes did not fare as well, ending the year below the 7.25% rate of return. Over the long term, investment earnings play a significant role in funding Plan benefits. The Board continues to look at investment classes and strategies best suited to meet the expected earnings returns to meet future benefit payments.

The Division of Retirement and Benefits (the Division) implemented a group Medicare Part D prescription drug plan known as an enhanced Employer Group Waiver Plan (EGWP) for all Medicare-eligible members covered under the Plan. During fiscal year 2023, the Plan received \$60,370,000 in EGWP funds from the Center of Medicare and Medicaid Services (CMS) through the EGWP Plan Sponsor, OptumRx, compared to fiscal year 2022 receipts of \$54,191,000, and fiscal year 2021 receipts of \$52,416,000. The increases each year is due to increased prescription drug usage as well as increased costs of those same prescription drugs that resulted in higher EGWP funds paid to the Plan.

Pharmacy rebates are reimbursed to the Plan by the third-party administrators. During fiscal year 2023, the Plan received \$58,397,000 in pharmacy rebates compared to \$47,415,000 from fiscal year 2022. In fiscal year 2021, the Plan received \$37,936,000. The Plan negotiated higher rebates beginning in calendar year 2022, however, those higher rebates were transmitted to the Plan during fiscal year 2023, which resulted in slightly higher collections due to timing of receipt of those funds.

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Management's Discussion and Analysis (Unaudited)

June 30, 2023

The DB Pension Plan's investment rates of return for the year ended June 30 were as follows:

	Year ended			
	2023	2022	2021	
Plan returns	7.03 %	(4.08)%	27.62 %	
Broad domestic equity	17.77	(11.74)	42.69	
Global equity (ex-U.S.)	15.14	(20.96)	38.54	
Fixed income	0.48	(6.96)	2.20	
Multi-asset	4.09	(10.58)	23.86	
Real assets	2.37	14.29	9.86	
Private equity	(3.29)	26.25	50.67	
Actuarially assumed rate of return	7.25	7.25	7.38	

The Alaska Retiree Healthcare Trust Plan's investment rates of return for the year ended June 30 were as follows:

	Year ended				
	2023	2022	2021		
Plan returns	7.11 %	(4.08)%	27.71 %		
Broad domestic equity	17.78	(11.73)	42.69		
Global equity (ex-U.S.)	15.13	(20.95)	38.57		
Fixed income	0.32	(7.04)	2.20		
Multi-asset	4.09	(10.58)	23.86		
Real assets	2.88	14.41	10.00		
Private equity	(3.29)	26.25	50.67		
Actuarially assumed rate of return	7.25	7.25	7.38		

Benefits and Other Deductions

The primary deduction of the DB Plan is the payment of pension and other postemployment benefits, primarily healthcare. The primary deduction of the DCR Plan is the refund of contributions. These benefit payments, healthcare claims paid, refunds of contributions, and the cost of administering the System comprise the cost of operations as follows:

		Deductions (In thousands)					
				Increase (decrease)			
	_	2023	2022	Amount	Percentage	2021	
Pension benefits	\$	1,013,321	953,511	59,810	6.3% \$	921,899	
Postemployment benefits		552,596	486,362	66,234	13.6	463,929	
Refunds of contributions		115,080	101,571	13,509	13.3	69,986	
Administrative		34,617	33,351	1,266	3.8	33,681	
Total	\$	1,715,614	1,574,795	140,819	8.9% \$	1,489,495	

The System's DB pension benefit payments in 2023 increased \$59,810,000 or 6.3% from fiscal year 2022, which increased \$31,612,000 or 3.4% from fiscal year 2021. The increase in pension benefits in fiscal year 2023 is the result of continued

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

increases in the number of retirees and an increase in average pension benefits which includes a 3.9% Post Retirement Pension Adjustment for eligible retirees.

The System's postemployment healthcare benefit payments in fiscal year 2023 increased \$66,234,000 or 13.6% from fiscal year 2022, which increased \$22,433,000 or 4.8% from fiscal year 2021. During fiscal year 2023, the System saw an increase in postemployment benefits due to an increase in per member claim costs. The increase in benefits is offset by those retirees who transition over to Medicare due to age, and costs shift from the System to Medicare. The System continues to look at ways for cost containment while providing benefits applicable to the plan.

The System's refund of contributions increased \$13,509,000 or 13.3% from fiscal year 2022 to 2023 and increased \$31,585,000 or 45.1% from fiscal year 2021 to 2022. The increase in refunds is primarily in the DCR Plan, where refunds increased \$12,712,000 between fiscal year 2022 to 2023, and increased \$30,390,000 between fiscal year 2021 to 2022. Increases in DCR Plan refunds are attributed to the increase in the number of DCR Plan member accounts and higher member balances being refunded. The System continues to look at ways to retain member contributions by emphasizing the low investment costs to members to maintain funds within the DCR Plan, with a number of investment options available.

The System's administrative costs in fiscal year 2023 increased \$1,266,000 or 3.8% from fiscal year 2022 and decreased \$330,000 or 1.0% from fiscal year 2021. The increase in administrative costs in fiscal year 2023 is related to increases in contractual costs charged to the System. For fiscal year 2022, the decrease in costs is related to reductions in contractual costs charged to the System.

Net Pension Liability

Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans, requires the DB Plan to report the total pension liability, fiduciary net position, and net pension liability. The total pension liability represents the total obligation for the Plan's pension benefits related to costs incurred as a result of years of service, changes in benefit terms, changes in actuarial assumptions, and any differences between the actuarial assumptions and actual experience. The Plan's fiduciary net position represents the assets available to pay the Plan's future payment stream. The assets are derived from contributions received from participating employers, plan members, and nonemployer contributions, as well as investment earnings, less benefit payments during the year and the related costs to administer the Plan. The difference between the total pension liability and fiduciary net position is the net pension liability, or the unfunded portion of the total pension liability.

The components of the net pension liability of the participating employers of the Plan as of June 30 were as follows (in thousands):

	2023	2022
Total pension liability	\$ 16,322,711	15,912,991
Plan fiduciary net position	(11,137,489)	(10,816,140)
Employers' net pension liability	\$ 5,185,222	5,096,851
Plan fiduciary net position as a percentage of the total pension liability	68.23 %	67.97 %

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Management's Discussion and Analysis (Unaudited)

June 30, 2023

Net OPEB (Asset) Liability

GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other than Penson Plans, requires the DB Other Postemployment Benefit (OPEB) Plans to report the total OPEB liability, fiduciary net position, and net OPEB liability for each plan. The total OPEB liability represents the total obligation for the Plan's postemployment healthcare benefits related to costs incurred as a result of years of service, changes in benefit terms, changes in actuarial assumptions, and any differences between the actuarial assumptions and actual experience. The Plan's fiduciary net position represents the assets available to pay the OPEB Plan's future payment stream. The assets are derived from contributions received from participating employers, plan members, and nonemployer contributions, as well as investment earnings, less benefit payments during the year and the related costs to administer the Plans. The difference between the total OPEB liability and fiduciary net position is the net OPEB liability (asset), or the unfunded (overfunded) portion of the total OPEB liability.

The components of the net OPEB asset of the participating employers of the Plans as of June 30, 2023 were as follows (in thousands):

	-	Alaska Retiree Healthcare Trust Plan (ARHCT Plan)	Occupational Death and Disability (ODD Plan)	Retiree Medical Plan (RMP)
Total OPEB liability Plan fiduciary net position	\$	6,775,291 (9,076,222)	20,584 (71,888)	195,493 (242,977)
Employers' net OPEB asset	\$	(2,300,931)	(51,304)	(47,484)
Plan fiduciary net position as a percentage of the total OPEB liability		133.96 %	349.24 %	124.29 %

The components of the net OPEB liability (asset) of the participating employers of the Plans as of June 30, 2022 were as follows (in thousands):

	_	Alaska Retiree Healthcare Trust Plan (ARHCT Plan)	Occupational Death and Disability (ODD Plan)	Retiree Medical Plan (RMP)
Total OPEB liability	\$	6,901,568	17,620	172,956
Plan fiduciary net position	-	(8,869,134)	(61,458)	(207,686)
Employers' net OPEB asset	\$ _	(1,967,566)	(43,838)	(34,730)
Plan fiduciary net position as a percentage of				
the total OPEB liability		128.51 %	348.80 %	120.08 %

Funding

Retirement benefits are financed by accumulations from employers, plan members, State nonemployer contributions, and income earned on System investments:

• The employer contribution rate is adopted and set by the Board annually based on actuarial determinations made by the System's consulting actuary as reviewed by the Board's contracted actuary. AS 39.35.255(a) sets the employer

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

effective contribution rate at 22.00%. The difference between the actuarially determined contribution rate adopted by the Board and the statutory employer effective rate is paid by the State as a direct appropriation per AS 39.35.280.

- Beginning July 1, 2022, the State of Alaska, as an employer, pays the full actuarial determined employer contribution rate adopted by the Board for each fiscal year. Senate Bill 55 (SB 55), an Act relating to employer contributions to the System, made changes to Alaska Statute (AS) 39.35.255 that indicated the State of Alaska, as a participating employer, shall contribute to the System every payroll period an amount sufficient to pay the full actuarially determined employer normal cost, all contributions required under AS 39.30.370 (HRA) and AS 39.35.750 (all DCR costs employer match, ODD, RMP), and past service costs for members at the contribution rate adopted by the Board under AS 37.10.220 for the fiscal year for that payroll period.
- AS 39.35.280 provides that additional State contributions are made each July 1 or as soon after July 1 for the ensuing
 fiscal year that when combined with the total employer contributions are sufficient to pay the System's past service
 liability at the contribution rate adopted by the Board for that fiscal year.
- Plan member contributions are set by AS 39.35.160 for the DB Plan and AS 39.35.730 for the DCR Plan.
- The Board works with an external consultant to determine the proper asset allocation strategy.

Legislation

During fiscal year 2023, the 33rd Alaska State Legislature enacted one law that affects the System. Senate Committee Substitute for Committee Substitute for House Bill 39, Section 74(a), appropriates \$37.9 million from the General Fund to the Department of Administration for deposit in the System's defined benefit plan account as partial payment of the participating employers' contribution for fiscal year ending June 30, 2024.

This appropriation is to fund the difference between the statutory employer required contribution of 22% paid by participating employers (excluding the State of Alaska as an employer) for both defined benefit and defined contribution members and the actuarially determined contribution rate of 25.10% adopted by the Board for Fiscal Year 2024. This additional state contribution is specified in AS 39.35.280 – Additional State Contributions.

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Management's Discussion and Analysis (Unaudited)

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Economic Conditions, Future Contribution Rates, and Status of Unfunded Liability

Fiscal year 2023 had positive investment returns. Net investment income increased from a loss of \$1,613,903,000 in fiscal year 2022, to a gain of \$1,768,040,000 in fiscal year 2023, an increase of \$3,381,943,000 or 209.6%. During fiscal year 2023, the System's actual rate of return on investments was below the 7.25% actuarially assumed rate of return. The Board continues to work with its investment counsel and the Alaska Department of Revenue, Treasury Division, to diversify the portfolio of the System to maintain an optimal risk/return ratio.

The consulting actuary recommended an increase from the System's actuarially determined contribution rate of 24.79% in fiscal year 2023 to 25.10% in fiscal year 2024. Additionally, the Board again discussed not contributing the healthcare normal cost contribution rate of 2.50% since the Alaska Retiree HealthCare Trust (ARHCT) is well above 100% funded. After the Board's actuarial committee discussed the healthcare trusts overfunding, they voted to not contribute the normal cost rate for fiscal year 2024. The Board adopted the fiscal year 2024 actuarially determined contribution rate of 25.10%, which represented an increase of 0.31%. The statutory employer effective contribution rate remains at 22% for fiscal years 2024 and 2023. With the passage of SB 55 and beginning July 1, 2022, the State of Alaska as an employer continues to pay the full actuarially determined contribution rate.

The June 30, 2022 and 2021 actuarial valuation reports for the DB Pension Plan reported funded ratios based on valuation assets of 68.1% and 67.9% respectively, as well as unfunded liabilities of \$5.13 billion and \$4.95 billion, respectively.

The June 30, 2022 and 2021 actuarial valuation reports for the DB ARHCT reported funded ratios based on valuation assets of 134.9% and 125.2%, respectively, as well as funding excesses of \$2.32 billion and \$1.73 billion, respectively.

For fiscal years 2024 and 2023, the DCR Plan's employer contribution rate was established by AS 39.35.255(a) at 22.00%, except for the State of Alaska as modified by SB 55. The DCR Plan's actuarially determined occupational death and disability rate was adopted by the Board for fiscal years 2024 and 2023 to be 0.68% for peace officers/firefighters; and 0.30% for all others. The DCR Plan retiree medical plan actuarially determined contribution rate was adopted by the Board for fiscal years 2024 and 2023 to be 1.01% and 1.10%, respectively.

The June 30, 2022 and 2021 actuarial valuation reports for the DCR Retiree Major Medical Plan reported funded ratios based on valuation assets of 125.5% and 107.2%, respectively, as well as funding excesses of \$43.2 million and \$12.1 million, respectively.

The June 30, 2022 and 2021 actuarial valuation reports for the DCR Occupational Death & Disability Plan reported funded ratios based on valuation assets of 420.9% and 452.1%, respectively, as well as funding excesses of \$47.9 million and \$41.3 million, respectively.

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Management's Discussion and Analysis (Unaudited)

June 30, 2023

Requests for Information

This financial report is designed to provide a general overview for those parties interested in the System's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to:

State of Alaska Public Employees' Retirement System Division of Retirement and Benefits, Finance Section P.O. Box 110203 Juneau, Alaska 99811-0203

Questions concerning any of the investment information provided in this report or requests for additional investment information should be addressed to:

State of Alaska Department of Revenue, Treasury Division P.O. Box 110405 Juneau, Alaska 99811-0405

(A Component Unit of the State of Alaska)

Combining Statement of Fiduciary Net Position

June 30, 2023

(With summarized financial information for June 30, 2022) (In thousands)

			Other postemployment benefit plans					
	Defined benefit pension	Defined contribution pension	Alaska Retiree Healthcare Trust	Occupational death and disability	Retiree medical	Health reimbursement arrangement	System total June 30, 2023	System total June 30, 2022
At	pension	pension		disability		urrangement	<u> </u>	ounc oo, rozz
Assets: Cash and cash equivalents:								
Short-term fixed-income pool	\$ 120,420	1,911	75,529	858	2,843	9,062	210,623	246,154
Empower money market fund – non-participant directed		1,051	=	_		.=	1,051	1,278
Securities lending collateral	12,394		10,192	79	268	878	23,811	39,071
Total cash and cash equivalents	132,814	2,962	85,721	937	3,111	9,940	235,485	286,503
Receivables:	40.070						10.070	40.000
Contributions Due from State of Alaska General Fund	12,072 10,378	9,294	_	274	855	2,505	12,072 23,306	13,223 23,385
Other accounts receivable	135		14,953		23	2,000	15,111	13,445
Total receivables	22,585	9,294	14,953	274	878	2,505	50,489	50,053
Investments, at fair value:								
Fixed income securities:								
Transition pool	140,647	_	115,676	905	3,061	10,034	270,323	- .
Barclays aggregate bond fund	1,485,391	_	1,221,670	9,562	32,332	105,972	2,854,927	3,102,484
Opportunistic fixed income pool	399,122		328,261	2,569	8,688	28,474	767,114	739,256
Total fixed-income securities	2,025,160		1,665,607	13,036	44,081	144,480	3,892,364	3,841,740
Broad domestic equity: Large cap pool	2,526,195	_	2,077,687	16,262	54,987	180,225	4,855,356	4,605,863
Small cap pool	227,544	_	187,145	1,465	4,953	16,234	437,341	405,822
Total broad domestic equity	2,753,739		2,264,832	17,727	59,940	196,459	5,292,697	5,011,685
Global equity ex-U.S.:								
International equity small cap pool	1,567,079	_	1.288.856	10,088	34,110	111,799	3,011,932	2,720,476
Emerging markets equity pool	342,774		281,917	2,207	7,461	24,454	658,813	608,821
Total global equity ex-U.S.	1,909,853		1,570,773	12,295	41,571	136,253	3,670,745	3,329,297
Multi-asset:								
Alternative beta pool	104,467	_	85,919	672	2,274	7,453	200,785	234,883
Alternative equity pool	112,220	_	92,297	722	2,443	8,006	215,688	213,117
Alternative fixed income pool	304,517	_	250,452	1,960	6,628	21,725	585,282	561,751
Tactical allocation strategies pool Other opportunities pool	384,047	_	315,862	2,472	8,359	27,399	738,139	754,665 2,900
Total multi-asset	905,251		744,530	5,826	19,704	64,583	1,739,894	1,767,316
Private equity pool	1,806,808		1,486,022	11,631	39,328	128,902	3,472,691	3,406,414
• • •	1,000,000		1,400,022	11,001	39,320	120,902	3,472,091	3,400,414
Real assets: Real estate pool	586,491	_	479,996	3,757	12,703	41,636	1,124,583	1,217,744
Real estate investment trust pool	169,925	_	139,756	1,094	3,699	12,123	326,597	340,296
Infrastructure private pool	304,667	_	250,575	1,961	6,631	21,736	585,570	539,003
Energy pool	19,000	_	15,626	122	413	1,355	36,516	42,938
Farmland pool	374,318	_	307,860	2,409	8,148	26,705	719,440	650,030
Timber pool	140,518		115,571	905	3,059	10,025	270,078	259,025
Total real assets	1,594,919		1,309,384	10,248	34,653	113,580	3,062,784	3,049,036
Other investment funds: Participant directed at fair value:								
Collective investment funds	_	583,252	_	_	_	_	583,252	517,247
Pooled investment funds	_	1,421,233	_	_	_	_	1,421,233	1,160,373
Participant directed at contract value:								
Synthetic investment contracts		130,167					130,167	119,505
Total other investment funds		2,134,652					2,134,652	1,797,125
Total investments	10,995,730	2,134,652	9,041,148	70,763	239,277	784,257	23,265,827	22,202,613
Other assets	14		967				981	982
Total assets	11,151,143	2,146,908	9,142,789	71,974	243,266	796,702	23,552,782	22,540,151
Liabilities:								
Claims payable	_	_	45,690	_	_	_	45,690	40,109
Accrued expenses	1,260	644	9,201	7	21	15	11,148	8,110
Forfeitures payable to employers		359					359	171
Securities lending collateral payable Due to State of Alaska General Fund	12,394	_	10,192 1,484	79 —	268	878 —	23,811 1,484	39,071
Total liabilities	13,654	1,003	66,567	86	289	893	82,492	87,461
Net position restricted for pension benefits,	,	.,,	,					,
postemployment healthcare benefits,								
and individuals	\$ 11,137,489	2,145,905	9,076,222	71,888	242,977	795,809	23,470,290	22,452,690

See accompanying notes to financial statements.

(A Component Unit of the State of Alaska)

Combining Statement of Changes in Fiduciary Net Position

Year ended June 30, 2023 (With summarized financial information for June 30, 2022) (In thousands)

		Other postemployment benefit plans							
	_	Defined benefit pension	Defined contribution pension	Alaska Retiree Healthcare Trust	Occupational death and disability	Retiree medical	Health reimbursement arrangement	System total June 30, 2023	System total June 30, 2022
Additions (Reductions):									
Contributions: Employers	\$	438,011	78,391	555	6,126	18,753	51,470	593,306	626,286
Plan members	φ	79,968	137,925	- 555	0,120	10,755	51,470	217,893	193,897
Nonemployer State of Alaska		33,933	107,320	_	_	_	_	33,933	97,700
Total contributions	_	551,912	216,316	555	6,126	18,753	51,470	845,132	917,883
Investment income (loss):	_	001,012			0,120	10,700		0.10,102	011,000
Net appreciation (depreciation) in fair value		658,417	234,041	541.145	4,103	13.864	45,618	1,497,188	(1,850,883)
Interest		53,904	715	44,334	325	1,099	3,629	104,006	78,930
Dividends		116,691	_	97,111	712	2,409	7,950	224,873	214,384
Total investment income (loss)	_	829,012	234,756	682,590	5,140	17,372	57,197	1,826,067	(1,557,569)
Less investment expense		29,490	2,608	23,943	179	604	1,939	58,763	56,842
· ·	-	25,450	2,000	20,040			1,000	50,700	50,042
Net investment income (loss) before securities lending activities	_	799,522	232,148	658,647	4,961	16,768	55,258	1,767,304	(1,614,411)
Securities lending income		480	_	395	3	10	33	921	635
Less securities lending expense		96	_	79	1	2	7	185	127
Net income from securities	_								
lending activities		384	_	316	2	8	26	736	508
Net investment income (loss)	_	799.906	232,148	658,963	4,963	16,776	55,284	1.768.040	(1,613,903)
* *	_	700,000			1,000		00,201	1,700,010	(1,010,000)
Other income:				60,209		161		60,370	54,191
Employer group waiver plan Medicare retiree drug subsidy		_	_	453	_	101	_	453	595
Pharmacy rebates		_	_	58,282	_	115		58,397	47,415
Pharmacy management allowance		_	_	132	_	_	_	132	134
Miscellaneous income		168	130	390	_	2	_	690	292
Total other income	_	168	130	119,466		278		120,042	102,627
Total additions (reductions)	-	1,351,986	448,594	778,984	11,089	35,807	106,754	2,733,214	(593,393)
· · ·	_	1,331,900	440,334	110,904	11,009	33,007	100,734	2,733,214	(595,595)
Deductions: Pension and postemployment benefits		1,012,696		551,353	625	405	838	1,565,917	1,439,873
Refunds of contributions		10.099	104,981	331,333	- 025	405	-	115.080	101,571
Administrative		7,842	6,040	20,543	34	111	47	34,617	33,351
Total deductions	_	1,030,637	111,021	571,896	659	516	885	1,715,614	1,574,795
	_								
Net increase (decrease)		321,349	337,573	207,088	10,430	35,291	105,869	1,017,600	(2,168,188)
Net position restricted for pension benefits, postemployment healthcare benefits, and individuals:									
Balance, beginning of year		10,816,140	1,808,332	8,869,134	61,458	207,686	689,940	22,452,690	24,620,878
Balance, end of year	\$	11,137,489	2,145,905	9,076,222	71,888	242,977	795,809	23,470,290	22,452,690
*	_								

See accompanying notes to financial statements.

(A Component Unit of the State of Alaska)

Notes to Financial Statements

June 30, 2023

(1) Description

The State of Alaska Public Employees' Retirement System (PERS or the System) is a component unit of the State of Alaska (the State). The System is administered by the Division of Retirement and Benefits within the Department of Administration. Benefit and contribution provisions are established by State law and may be amended only by the State legislature. The Alaska Retirement Management Board (the Board) is responsible for overseeing the management and investment of the System. The Board consists of nine trustees as follows: two trustees consisting of the commissioner of administration and the commissioner of revenue, two trustees who are members of the general public, one trustee who is employed as a finance officer for a political subdivision participating in either the PERS or Teachers' Retirement System (TRS), two trustees who are PERS members, and two trustees who are TRS members.

PERS acts as the common investment and administrative agency for the following multiple-employer plans:

Plan name	Type of plan
Defined Benefit Pension Plan	Cost-sharing, Defined Benefit Pension
Defined Contribution Pension Plan	Defined Contribution Pension
Defined Benefit Other Postemployment Benefits (OPEB)	
Alaska Retiree Healthcare Trust (ARHCT) Plan	Cost-sharing, Defined Benefit OPEB
Occupational Death and Disability (ODD) Plan	Cost-sharing, Defined Benefit OPEB
Retiree Medical Plan (RMP)	Cost-sharing, Defined Benefit OPEB
Defined Contribution Other Postemployment Benefits	
Healthcare Reimbursement Arrangement Plan	Defined Contribution OPEB

At June 30, 2023, the number of participating local government employers and public organizations, including the State, was as follows:

	Defined Benefit Pension	Defined Contribution Pension	OPEB plans
State of Alaska	1	1	1
Municipalities	72	73	73
School districts	52	52	52
Other	25	25	25
Total employers	150	151	151_

Inclusion in the plans is a condition of employment for eligible State employees, except as otherwise provided for judges, elected officers, and certain employees of the Alaska Marine Highway System. Any local government in the State may elect to have its permanent general and peace officer and firefighter employees covered by the System.

(A Component Unit of the State of Alaska)

Notes to Financial Statements

June 30, 2023

Defined Benefit Pension Plan

(a) General

The Defined Benefit Pension (DB) Plan provides pension benefits for eligible State and local government employees. Benefit and contribution provisions are established by State law and may be amended only by the State Legislature. With the passage of Senate Bill 141, the DB Plan is closed to all new members effective July 1, 2006.

The DB Plan's membership consisted of the following at June 30, 2023:

Retired plan members or beneficiaries currently receiving benefits	36,951
Inactive plan members entitled to but not yet receiving benefits	4,781
Inactive plan members not entitled to benefits	9,961
Active plan members	8,557
Total DB Plan membership	60,250

(b) Pension Benefits

Members hired prior to July 1, 1986, with five or more paid-up years of credited service, are entitled to monthly pension benefits beginning at normal retirement age, 55, or early retirement age, 50. For members first hired after June 30, 1986, the normal and early retirement ages are 60 and 55, respectively. Members with 30 or more years of credited service (20 years for peace officers and firefighters) may retire at any age and receive a normal benefit.

The normal monthly pension benefit is based on years of service and average monthly compensation. For members hired prior to July 1, 1996, and all peace officers and firefighters, the average monthly compensation is based upon the members' three highest, consecutive years' salaries. For all other members hired after June 30, 1996, average monthly compensation is based upon the members' five highest, consecutive years' salaries.

The benefit related to all years of credited service prior to July 1, 1986, and for years of service through a total of 10 years for general members, is equal to 2.00% of the member's average monthly compensation for each year of service. The benefit for each year over 10 years of service subsequent to June 30, 1986 is equal to 2.25% of the member's average monthly compensation for the second 10 years and 2.50% for all remaining years of service. For peace officers and firefighters, the benefit for years of service through a total of 10 years is equal to 2.00% of the member's average monthly compensation and 2.50% for all remaining years of service.

Minimum benefits for members eligible for retirement are \$25 per month for each year of credited service.

Married members must receive their benefits in the form of a joint and survivor annuity unless their spouse consents to another form of benefit or another person is eligible for benefits under a qualified domestic relations order.

The DB Plan has two types of postretirement pension adjustments (PRPA). The automatic PRPA is issued annually to all eligible benefit recipients when the cost of living increases in the previous calendar year. The automatic PRPA increase is paid beginning July 1 of each year. The discretionary PRPA may be granted to eligible recipients by the DB Plan's administrator if the funding ratio of the DB Plan meets or exceeds 105%. If both an automatic and discretionary PRPA are granted, and a retiree is eligible for both adjustments, the one that provides the retiree the greater increase will be paid.

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Notes to Financial Statements

June 30, 2023

(c) Contributions

Contribution requirements of the active plan members and the participating employers are actuarially determined and adopted by the Board as a contribution rate that, when combined, is expected to finance the costs of benefits earned by plan members during the year, with an additional contribution rate to finance any unfunded accrued liability. The DB Plan's members' contribution rates are 7.50% for peace officers and firefighters, 9.60% for some school district employees, and 6.75% for general DB Plan members, as required by statute. The statutory employer effective contribution rate is 22.00% of annual payroll, which for fiscal year 2023 is allocated 22.00% to the DB Pension Plan and 0.00% to the DB ARHCT Plan as determined by the actuary of the Plan. Alaska Statute (AS) 39.35.280 provides that the State, as a nonemployer contributing entity, contributes each July 1, or as soon after July 1 for the ensuing fiscal year, an amount that when combined with the total employer contribution rate is sufficient to pay the System's actuarially determined contribution rate adopted by the Board for that fiscal year. Additionally, there is a Defined Benefit Unfunded Liability (DBUL) amount levied against the Defined Contribution Retirement Pension (DCR) Plan payroll. The DBUL amount for employers is computed as the difference between:

- (A) The amount calculated for the statutory employer effective contribution rate of 22.00% on eligible salary (except for the State of Alaska which pays the full actuarially determined contribution rate) less
- (B) The total of the employer contributions for:
 - (1) The defined contribution employer matching amount
 - (2) Major medical
 - (3) Occupational death and disability
 - (4) Health reimbursement arrangement.
- (C) But not less than zero.

The difference is deposited based on an actuarial allocation into the DB Plan's pension and healthcare funds. For fiscal year 2023, the DBUL was allocated 100.00% to the DB Pension Plan and 0.00% to the DB ARHCT Plan.

(d) Refunds

DB Plan member contributions may be voluntarily or, under certain circumstances, involuntarily refunded to the member or a garnishing agency 60 days after termination of employment. Voluntary refund rights are forfeited on July 1 following the member's 75th birthday or within 50 years of the member's last termination date. Members who have had contributions refunded forfeit all retirement benefits, including postemployment healthcare benefits. Members are allowed to reinstate refunded service due to involuntary refunds by repaying the total involuntary refunded balance and accrued interest. Members are allowed to reinstate voluntarily refunded service by repaying the voluntarily refunded balance and accrued interest. Balances previously refunded to members accrue interest at the rate of 7.0% per annum compounded semiannually.

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Notes to Financial Statements

June 30, 2023

Defined Contribution Retirement Pension Plan

(a) General

The DCR Plan provides retirement benefits for eligible employees hired after July 1, 2006. Additionally, certain active members of the DB Plan were eligible to transfer to the DCR Plan if that member had not vested in the DB Plan. Benefit and contribution provisions are established by State law and may be amended only by the State Legislature.

At June 30, 2023, membership in the DCR Plan consisted of 2,559 peace officer and firefighter members and 23,702 other members.

(b) Retirement Benefits

A participating member is immediately and fully vested in that member's contributions and related earnings (losses). A member shall be fully vested in the employer contributions made on that member's behalf, and related earnings (losses), after five years of service. A member is partially vested in the employer contributions made on that member's behalf, and the related earnings, in the ratio of (a) 25% with two years of service; (b) 50% with three years of service; (c) 75% with four years of service; and (d) 100% with five years of service.

(c) Contributions

State statutes require an 8.0% contribution rate for DCR Plan members. Employers are required to contribute 5.0% of the member's compensation.

(d) Participant Distributions and Refunds of Contributions

A member is eligible to request a refund of contributions from their account 60 days after termination of employment.

(e) Participant Accounts

Participant accounts under the DCR Plan are self-directed with respect to investment options.

Each participant designates how contributions are to be allocated among the investment options. Each participant's account is credited with the participant's contributions and the appreciation or depreciation in unit value for the investment funds.

Record-keeping/administrative fees consisting of a fixed amount, applied in a lump sum each calendar year, and a variable amount, applied monthly, are deducted from each participant's account and applied pro rata to all the funds in which the employee participates. This fee is for all costs incurred by the recordkeeper and by the State. The investment management fees are netted out of the funds' performance.

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Notes to Financial Statements

June 30, 2023

Defined Benefit Other Postemployment Benefit Plans

(a) Alaska Retiree Healthcare Trust Plan

Beginning July 1, 2007, the ARHCT Plan, a healthcare trust fund of the State, was established. The ARHCT Plan is self-funded and provides major medical coverage to retirees of the DB Plan. The System retains the risk of loss of allowable claims for eligible members. The ARHCT Plan began paying member healthcare claims on March 1, 2008. Prior to that, healthcare claims were paid for by the Retiree Health Fund.

Membership in the plan consisted of the following at June 30, 2023:

Retired plan members or beneficiaries currently receiving benefits	36,951
Inactive plan members entitled to but not yet receiving benefits	4,781
Inactive plan members not entitled to benefits	9,961
Active plan members	8,557
Total DB Plan membership	60,250

(i) OPEB Benefits

Major medical benefits to cover medical expenses are provided to retirees and their surviving spouses at no premium cost for all members hired before July 1, 1986 (Tier 1), and disabled retirees. Members hired after June 30, 1986 (Tier 2), and their surviving spouses with 5 years of credited service (or 10 years of credited service for those first hired after June 30, 1996 [Tier 3]) must pay the full monthly premium if they are under age 60 and will receive benefits at no premium cost if they are over age 60. Tier 3 members with between 5 and 10 years of credited service must pay the full monthly premium regardless of their age. Tier 2 and Tier 3 members with less than 5 years of credited service are not eligible for postemployment healthcare benefits. Tier 2 members who are receiving a conditional benefit and are age eligible are eligible for postemployment healthcare benefits. In addition, peace officers and their surviving spouses with 25 years of peace officer membership service and all other members and their surviving spouses with 30 years of membership service receive benefits at no premium cost, regardless of their age or date of hire. Peace officers/firefighters who are disabled between 20 and 25 years must pay the full monthly premium.

(ii) Contributions

Employer contribution rates are actuarially determined and adopted by the Board. The 2023 statutory employer effective contribution rate is 22.00% of member's compensation, with 0.00% specifically allocated to ARHCT Plan.

(b) Occupational Death and Disability Plan

The Occupational Death and Disability Plan (ODD) provides death benefits for beneficiaries of plan participants and long-term disability benefits to all active members within the System. Members in the Death and Disability Plan consisted of the following at June 30, 2023:

Active plan members	26,261
Participating employers	151
Open claims	15

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Notes to Financial Statements

June 30, 2023

(i) Death Benefits

If (1) the death of an employee occurs before the employee's retirement and before the employee's normal retirement date, (2) the proximate cause of death is a bodily injury sustained or a hazard undergone while in the performance and within the scope of the employee's duties, and (3) the injury or hazard is not the proximate result of willful negligence of the employee, then a monthly survivor's pension shall be paid to the surviving spouse. If there is no surviving spouse or if the spouse later dies, the monthly survivor's pension shall be paid in equal parts to the dependent children of the employee.

If an active general DB Plan member dies from occupational causes, the spouse may receive a monthly pension equal to 40% of the DB Plan member's salary. If an active peace officer or firefighter DB Plan member dies from occupational causes, the spouse may receive a monthly pension equal to 50% of the DB Plan member's salary or 75% of the member's retirement benefit calculated as if the member had survived until normal retirement age, whichever is greater. When death is due to occupational causes and there is no surviving spouse, the DB Plan member's dependent child(ren) may receive the monthly pension until they are no longer dependents. If the member does not have a spouse or dependent children at the time of death, a lump-sum death benefit is payable to the named beneficiary(ies). The amount of the occupational death pension changes on the date the DB Plan member's normal retirement would have occurred if the DB Plan member had lived. The new benefit is based on the DB Plan member's average monthly compensation at the time of death and the credited service, including service that would have accrued if the DB Plan member had lived and continued to work until normal retirement. If the death was from nonoccupational causes and the DB Plan member was vested, the spouse may receive a monthly 50% joint and survivor option benefit based on the member's credited service and average monthly compensation at the time of death. If the DB Plan member is not married or vested, a lump-sum death benefit is payable to the named beneficiary(ies).

The monthly survivor's pension benefit for survivors of DCR Plan employees who were not peace officers or firefighters is 40% of the employee's monthly compensation in the month in which the employee dies. The monthly survivor's pension for survivors of employees who were peace officers or firefighters is 50% of the monthly compensation in the month in which the employee dies. While the monthly survivor's pension is being paid, the employer shall make contributions on behalf of the employee's beneficiaries based on the deceased employee's gross monthly compensation at the time of occupational death.

(ii) Disability Benefits

Active DB Plan members who become permanently disabled due to occupational or nonoccupational causes receive disability benefits until normal retirement age, or when the service requirement for normal retirement is met. Although there are no minimum service requirements for DB Plan members to be eligible for occupational disability, DB Plan members must be vested to receive nonoccupational disability benefits. The monthly occupational disability benefit is equal to 40% of the DB Plan member's salary at the time of the disability. The nonoccupational disability benefit is based on the DB Plan member's service and salary at the time of disability. At normal retirement age, a disabled general DB Plan member receives normal retirement benefits. A peace officer or firefighter DB Plan member may elect to receive normal retirement benefits calculated under the occupational disability benefit rules.

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Notes to Financial Statements

June 30, 2023

A DCR Plan member is eligible for an occupational disability benefit if employment is terminated because of a total and apparently permanent occupational disability before the member's normal retirement date. The occupational disability benefits accrue beginning the first day of the month following termination of employment as a result of the disability and are payable the last day of the month. If a final determination granting the benefit is not made in time to pay the benefit when due, a retroactive payment shall be made to cover the period of deferment.

(iii) Contributions

An employer shall contribute to each member's account based on the member's compensation. For fiscal year 2023, the rates are 0.68% for occupational death and disability for peace officers and firefighters and 0.30% for occupational death and disability for all other members.

(c) Retiree Medical Plan

The RMP is established under AS 39.35.880 – Medical Benefits. The Department of Administration, Division of Retirement and Benefits, which administers the System's health plans, finalized the Retiree Medical Plan for members eligible for the DCR Plan's health benefits plan in July 2016. The RMP provides major medical coverage to retirees of the DCR Plan. The RMP is self-insured. Members are not eligible to use the plan until they have at least 10 years of service and are Medicare age eligible.

Membership in the RMP was as follows at June 30, 2023:

Retired plan members or beneficiaries currently receiving benefits	1/5
Inactive plan members entitled to but not yet receiving benefits	2,773
Inactive plan members not entitled to benefits	19,395
Active plan members	26,261
Total RMP membership	48,604

(i) OPEB Benefits

The medical benefits available to eligible persons means that an eligible person may not be denied medical coverage except for failure to pay the required premium. Major medical coverage, to cover medical expenses, takes effect on the first day of the month following the date of the RMP administrator's approval of the election and stops when the person who elects coverage dies or fails to make the required premium payment. The coverage for persons 65 years of age or older is the same as that available for persons under 65 years of age. The benefits payable to those persons 65 years of age or older supplement any benefits provided under the federal old age, survivors, and disability insurance program. The medical and optional insurance premiums owed by the person who elects coverage may be deducted from the health reimbursement arrangement account until the account balance becomes insufficient to pay the premiums; at this time, the person who elects coverage shall pay the premiums directly.

The cost of premiums for retiree major medical coverage for an eligible member or surviving spouse who is:

(1) Not eligible for Medicare is an amount equal to the full monthly group premium for retiree major medical insurance coverage,

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Notes to Financial Statements

June 30, 2023

(2) Eligible for Medicare is the following percentage of the premium:

- (a) 30% if the member had 10 or more, but less than 15, years of service
- (b) 25% if the member had 15 or more, but less than 20, years of service
- (c) 20% if the member had 20 or more, but less than 25, years of service
- (d) 15% if the member had 25 or more, but less than 30, years of service
- (e) 10% if the member had 30 or more years of service.

(ii) Contributions

Employer contribution rates are actuarially determined and adopted by the Board. The 2023 employer effective contribution rate is 1.10% of member's compensation.

Defined Contribution Other Postemployment Benefit Plan

(a) General

The Health Reimbursement Arrangement (HRA) Plan is established under AS 39.30.300. The Department of Administration, Division of Retirement and Benefits administers the System's health plans. The HRA Plan allows for medical care expenses to be reimbursed from individual savings accounts established for eligible persons. The HRA Plan became effective July 1, 2006, at which time contributions by employers began.

Membership in the plan was as follows as of June 30, 2023:

Retired plan members or beneficiaries currently receiving benefits	239
Inactive plan members entitled to but not yet receiving benefits	2,773
Inactive plan members not entitled to benefits	19,395
Active plan members	26,261
Total HRA Plan membership	48,668

(b) OPEB Benefits

Persons who meet the eligibility requirements of AS 39.35.870 are eligible for reimbursements from the individual account established for a member under the HRA Plan but do not have to retire directly from the System.

The Plan Administrator may deduct the cost of monthly premiums from the HRA individual account for the RMP insurance on behalf of an eligible person who elected the retiree major medical insurance under AS 39.35.880. Upon application of an eligible person, the HRA Plan administrator shall reimburse the costs for medical care expenses defined in 26 USC 213(d). Reimbursement is limited to the medical expenses of (1) an eligible member, the spouse of an eligible member, and the dependent children of an eligible member; or (2) a surviving spouse and the dependent children of an eligible member dependent on the surviving spouse. When the member's individual account balance is exhausted, any deductions from the HRA individual account end. If all eligible persons die before exhausting the member's individual account, the account balance reverts to the HRA Plan.

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Notes to Financial Statements

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(c) Contributions

An employer shall contribute to the HRA Plan trust fund an amount equal to 3.00% of the average annual compensation of all employees in the TRS and PERS. The administrator maintains a record of each member to account for employer contributions on behalf of that member. The 2023 contribution amount was an annual contribution not to exceed \$2,237 and was required for every pay period in which the employee was enrolled in the DCR Plan, regardless of the compensation paid during the year. An amount less than \$2,237 would be deposited to a member's account if that member worked less than a full year.

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting

The accompanying financial statements have been prepared using the economic resources measurement focus and on the accrual basis of accounting in conformity with U.S. generally accepted accounting principles (GAAP), as prescribed by the Governmental Accounting Standards Board (GASB). Contributions are due to the System when employee services have been performed and paid. Contributions are recognized as revenue when due pursuant to statutory requirements. Benefits and refunds are recognized when due and payable and expenses are recorded when the corresponding liabilities are incurred, regardless of when contributions are received, or payment is made.

(b) Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

(c) Defined Benefit Pension and OPEB Investments

The System owns shares in various investment pools that are administered by the State of Alaska, Department of Revenue, Division of Treasury (Treasury). The System's investment in the pools, except for the short-term fixed-income pool, is reported at fair value based on the net asset value reported by the Treasury. The short-term fixed-income pool maintains a share price of \$1. Each participant owns shares in the pool, the number of which fluctuates daily with contributions and withdrawals.

(d) Defined Contribution Participant-directed Investments

The Board contracts with an external investment manager, through the Treasury, who is given the authority to invest in a wholly owned pooled environment to accommodate 14 participant-directed funds. Additionally, the Board contracts with external managers who manage a mix of collective investment funds and synthetic investment contracts. Income for the pooled investment and collective investment funds is credited to the fund's net asset value on a daily basis and allocated to pool participants daily on a pro rata basis.

Collective investment funds, held in trust, are stated at fair value based on the unit value as reported by the Trustees multiplied by the number of units held by the DCR Plan. The unit value is determined by the Trustees based on fair value of the underlying assets. Purchases and sales of securities are recorded on a trade-date basis.

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Notes to Financial Statements

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Pooled participant-directed investment funds, held in trust, are stated at fair value based on the unit value as reported by the Trustees multiplied by the number of units held by the DCR Plan. The unit value is determined by the Trustees based on fair value of the underlying assets. Purchases and sales of securities are recorded on a tradedate basis. Underlying assets comprise domestic and international stocks, investment-grade bonds, federally guaranteed mortgages, money market instruments, and other cash equivalent instruments with maturities of less than one year, which include but are not limited to commercial paper, asset-backed securities, banker acceptances, certificates of deposit with ratings of A1/P1 or better as well as obligations of the U.S. government and its agencies, and repurchase agreements collateralized by U.S. Treasury instruments.

Synthetic Investment Contracts (SICs) are included in the Plan's statements at contract value. The Board's investment manager entered into the investment contracts, on behalf of the Board, with four financial institutions who provide wrap contracts that cover separately managed SIC portfolios. The accounts are credited with earnings and investment deposits, less administrative expenses charged by the financial institutions and investment withdrawals. They are fully benefit-responsive. There are no reserves against contract value for the credit risk of the contract issuer or otherwise. The crediting interest rate is based on the approximate rate of interest that will amortize differences between contract and fair value over the portfolio's average duration.

(e) Contributions Receivable

Contributions from the System's members and employers applicable to payrolls received through July 15 for wages paid for service through June 30 are accrued. These contributions are considered fully collectible, and accordingly, no allowance for uncollectible receivables is reflected in the financial statements.

(f) Due from (to) State of Alaska General Fund

Amounts due from State of Alaska General Fund represent the amounts remitted by employers to the General Fund but not yet transmitted to the System. Amounts due to State of Alaska General Fund represent the amounts paid by others on behalf of the System.

(g) Other Income

Other income consists of Employer Group Waiver Plan (EGWP) rebates, Medicare Part D Retiree Drug Subsidy (RDS) rebates, pharmacy rebates, and other miscellaneous items. The RDS are rebates provided to the plan sponsor. The State has elected to voluntarily put the RDS back into the trust and treat it as a contribution for purposes of calculating the net OPEB liability. The EGWP and pharmacy rebates are provided to the Plan through the third-party administrators and are treated as a reduction to the benefit payments for purposes of calculating the net OPEB liability. RDS and pharmacy rebates are recognized on an accrual basis.

(h) Administrative Costs

Administrative costs are paid from contributions. The Board has established a funding policy objective that the required contributions be sufficient to pay the plan administrative expenses, normal costs, and past service costs.

(i) Federal Income Tax Status

The DB Plan and DCR Plan are qualified plans under Sections 401(a) and 414(d) of the Internal Revenue Code and are exempt from federal income taxes under Section 501(a).

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Notes to Financial Statements

June 30, 2023

(3) Investments

The Board is the investment oversight authority of the System's investments. As the fiduciary, the Board has the statutory authority to invest assets under the Prudent Investor Rule. Fiduciary responsibility for the Board's invested assets is pursuant to AS 37.10.210-390.

AS 37.10.071 provides that investments shall be made with the judgment and care under circumstances then prevailing that an institutional investor of ordinary professional prudence, discretion, and intelligence exercises in managing large investment portfolios.

Treasury provides staff for the Board. Treasury has created a pooled environment by which it manages investments of the Board. Additionally, Treasury manages a mix of pooled investment funds, collective investment funds and SICs for the DCR participant-directed pension plans under the Board's fiduciary responsibility.

Actual investing is performed by investment officers in Treasury or by contracted external investment managers. The Board has developed investment guidelines, policies, and procedures for Treasury staff and external investment managers to adhere to when managing investments. Treasury manages the U.S. Treasury Fixed-Income Pool, Real Estate Investment Trust Pool, and Treasury Inflation-Protected Securities Pool, in addition to acting as oversight manager for all externally managed investments. All other investments are managed by external management companies.

The short-term fixed-income pool is a State pool managed by Treasury that holds investments on behalf of the Board as well as other State funds.

Rate of Return

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The annual money-weighted rate of return, net of investment expense, for the year ended June 30, 2023 for the DB Pension Plan is 7.56%, the ARHCT Plan is 7.64%, the ODD Plan is 7.71%, and the RMP is 7.71%.

For additional information on securities lending, interest rate risk, credit risk, foreign exchange, derivatives, fair value, and counterparty credit risk, see the separately issued report on the Invested Assets of the State of Alaska Retirement and Benefits Plans at https://treasury.dor.alaska.gov/armb/reports-and-policies/annualaudited-financial-schedules.

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Notes to Financial Statements

June 30, 2023

(4) Net Pension Liability - Defined Benefit Pension Plan

The components of the net pension liability of the participating employers at June 30, 2023 were as follows (in thousands):

Total pension liability	\$ 16,322,711
Plan fiduciary net position	 (11,137,489)
Employers' net pension liability	\$ 5,185,222
Plan fiduciary net position as a percentage	
of the total pension liability	68.23%

(a) Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2022, using the following actuarial assumptions, applied to all periods included in the measurement, and rolled forward to the measurement date of June 30, 2023.

Inflation	2.50% per year
Salary increases	For Peace Officer/Firefighter, increases range from 8.50% to 3.85% based on service. For all others, increases range from 6.75% to 2.85% based on service.
Investment rate of return	7.25%, net of pension plan investment espenses. This is based on an average inflation rate of 2.50% and a real return of 4.75%.
Mortality - Peace Officer / Firefighter	Pre-commencement mortality rates were based on the Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupational causes 70% of the time.
	Post-commencement mortality rates for healthy retirees were based on the Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
	Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for beneficiaries were based on the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.

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Notes to Financial Statements

June 30, 2023

Mortality	/ - Others
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Pre-commencement mortality rates were based on the Pub-2010 General Employee table, amount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupational causes 35% of the time.

Post-commencement mortality rates for healthy retirees were based on 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for beneficiaries were based on 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.

Other

Please see Section 5 of the 2022 actuarial valuation report.

The actuarial assumptions used in the June 30, 2022 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2017 to June 30, 2021, resulting in changes in actuarial assumptions effective for the June 30, 2022 actuarial valuation, which were adopted by the Board to better reflect expected future experience.

The long-term expected rate of return on pension 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 asset class. 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 adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2023 are summarized in the following table (note that the rates shown below exclude an inflation component of 2.82%).

Asset class	Long-term expected real rate of return
Domestic equity	6.17%
Global equity (ex-U.S.)	6.55
Aggregate bonds	1.63
Real assets	4.87
Private equity	11.57
Cash equivalents	0.49

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Notes to Financial Statements

June 30, 2023

(b) Discount Rate

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows

used to determine the discount rate assumed that employer and State contributions will continue to follow the current funding policy which meets State statutes. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability in accordance with the method prescribed by GASB 67. In the event benefit payments are not covered by the plan's fiduciary net position, a municipal bond rate would be used to discount the benefit payments not covered by the plan's fiduciary net position. The S&P Municipal Bond 20-Year High Grade Index rate was 4.13% as of June 30, 2023.

(c) Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the System as of June 30, 2023, calculated using the discount rate of 7.25%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower or one-percentage-point higher than the current rate (in thousands):

		1.00%	Current	1.00%	
		decrease (6.25%)	discount rate (7.25%)	increase (8.25%)	
Net pension liability	\$	6,961,145	5,185,222	3,685,090	

(5) Net OPEB Asset

The components of the net OPEB asset of the participating employers for each Plan at June 30, 2023 were as follows (in thousands):

	_	ARHCT Plan	ODD Plan	RMP
Total OPEB liability	\$	6,775,291	20,584	195,493
Plan fiduciary net position	_	(9,076,222)	(71,888)	(242,977)
Employers' net OPEB asset	\$_	(2,300,931)	(51,304)	(47,484)
Plan fiduciary net position as a percentage of the total OPEB liability		133.96%	349.24%	124.29%

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June 30, 2023

(a) Actuarial Assumptions

The total OPEB liability for each plan was determined by actuarial valuations as of June 30, 2022, using the following actuarial assumptions, applied to all periods included in the measurement, and rolled forward to the measurement date of June 30, 2023.

Inflation 2.50% per year

Salary increases For peace officer/firefighter, increases range from 8.50% to 3.85%

based on service. For All Others, increases range from 6.75% to

2.85% based on service.

Investment rate of return 7.25%, net of post-retirement healthcare plan investment expenses.

This is based on an average inflation rate of 2.50% and a real

return of 4.75%.

Healthcare cost trend rates Pre-65 medical: 6.7% grading down to 4.5%

(ARHCT Plan and RMP) Post-65 medical: 5.5% grading down to 4.5%

> Rx/EGWP: 7.2% grading down to 4.5% Initial trend rates are for FY 2024 Ultimate trend rates reached in FY 2050

Mortality

Peace officer/firefighter (ARHCT Plan and RMP)

Pre-commencement mortality rates were based on the Pub-2010 Safety Employee table, headcount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupation causes 70% of the time.

Post-commencement mortality rates for healthy retirees were based on the Pub-2010 Safety Retiree table, headcount-

weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Safety Disabled Retiree table,

headcount-weighted, and projected with MP-2021 generational

improvement.

Post-commencement mortality rates for beneficiaries were based on the Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.

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Notes to Financial Statements

June 30, 2023

Peace officer/firefighter (ODD Plan)

Pre-commencement mortality rates were based on the Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupational causes 70% of the time.

Post-commencement mortality rates for healthy retirees were based on the Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for beneficiaries were based on the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.

Mortality
All Others
(ARHCT Plan and RMP)

Pre-commencement mortality rates were based on the Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupational causes 35% of the time.

Post-commencement mortality rates for healthy retirees were based on 101% of male and 110% of female rates of the Pub-2010 General Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-commencement mortality rates for beneficiaries were based on 101% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.

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Notes to Financial Statements

June 30, 2023

All Others (ODD Plan)	Pre-commencement mortality rates were based on the Pub-2010 General Employee table, amount-weighted, and projected with MP-2021 generational improvement. Deaths are assumed to result from occupational causes 35% of the time. Post-commencement mortality rates for healthy retirees were based on 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement. Post-commencement mortality rates for disabled retirees were based on the Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement. Post-commencement mortality rates for beneficiaries were based on 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement. These rates are applied only after the death of the original member.
Other	
ARHCT Plan	Please see Section 5 of the 2022 valuation report.
RMP and ODD Plans	Please see Section 4 of the 2022 valuation report.

The actuarial assumptions used in the June 30, 2022 actuarial valuation were based on the results of an actuarial experience study for the period from July 1, 2017 to June 30, 2021, resulting in changes in actuarial assumptions effective for the June 30, 2022 actuarial valuation, which were adopted by the Board to better reflect expected future experience. For the ARHCT and RMP plans, the per capita claims costs were updated to reflect recent experience for the June 30, 2022 actuarial valuation.

The long-term expected rate of return on postretirement healthcare 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 asset class. 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 adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the postretirement healthcare plans' target asset allocation as of June 30, 2023 are summarized in the following table (note that the rates shown below exclude an inflation component of 2.82%):

Asset class	Long-term expected real rate of return
Domestic equity	6.17%
Global equity (non-U.S.)	6.55
Aggregate bonds	1.63
Real assets	4.87
Private equity	11.57
Cash equivalents	0.49

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(b) Discount Rate

The discount rate used to measure the total OPEB liability as of June 30, 2023 was 7.25%. The projection of cash flows used to determine the discount rate assumed that employer and State contributions will continue to follow the current funding policy which meets State statutes. Based on those assumptions, the postretirement healthcare plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on postretirement healthcare plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability in accordance with the method prescribed by GASB 74. In the event benefit payments are not covered by the Plan's fiduciary net position, a municipal bond rate would be used to discount the benefit payments not covered by the plan's fiduciary net position. The S&P Municipal Bond 20-Year High Grade Index rate was 4.13% as of June 30, 2023.

(c) Sensitivity of the Net OPEB Asset to Changes in the Discount Rate

The following presents the net OPEB asset as of June 30, 2023, calculated using the discount rate of 7.25%, as well as what the System's net OPEB liability (asset) would be if it were calculated using a discount rate that is one-percentage-point lower or one-percentage-point higher than the current rate (in thousands):

	_	1.00% decrease (6.25%)	Current discount rate (7.25%)	1.00% increase (8.25%)	
ARHCT Plan	\$	1,529,414	2,300,931	2,949,048	
ODD Plan		48,205	51,304	53,716	
RMP		1,650	47,484	82,497	

(d) Sensitivity of the Net OPEB Asset to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB asset as of June 30, 2023, calculated using the healthcare cost trend rates as summarized in the 2022 actuarial valuation report, as well as what the System's net OPEB liability (asset) would be if it were calculated using trend rates that are one-percentage-point lower or one-percentage-point higher than the current healthcare cost trend rates (in thousands):

		1.00%	Current healthcare	1.00%
	_	decrease	cost trend rate	increase
ARHCT Plan	\$	(3,023,183)	(2,300,931)	(1,440,926)
ODD Plan		N/A	N/A	N/A
RMP		(87,196)	(47,484)	5,858

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Notes to Financial Statements

June 30, 2023

(6) Claims Payable

The liability for claims payable and claims incurred but not reported, included in the claims payable amount on the statement of fiduciary net position, represent the estimated amounts necessary to settle all outstanding claims incurred as of the balance sheet date. The ARHCT and Retiree Medical Plan's reserve estimates are based primarily on historical development patterns adjusted for current trends that would modify past experience. Claims are reevaluated periodically to consider the effects of inflation, claims settlement trends, and other economic factors. The process of establishing loss reserves is subject to uncertainties that are normal, recurring, and inherent in the healthcare business.

Changes in the balances of claims liabilities were as follows (in thousands):

	_	2023	2022
Total, beginning of year	\$	40,109	39,972
Healthcare benefits Benefits paid	_	551,758 (546,177)	485,832 (485,695)
Total, end of year	\$_	45,690	40,109

(7) Employer Group Waiver Program

Effective January 1, 2019, the Division implemented a group Medicare Part D prescription drug plan known as an enhanced EGWP for all Medicare-eligible members covered under the ARHCT Plan and the RMP. The enhanced EGWP leverages increased federal subsidies to the ARHCT Plan and the RMP for prescription drugs covered by Medicare Part D while also providing coverage for medications not covered by Medicare Part D through a "wrap" of additional benefits. Moving to an enhanced EGWP has resulted in the ARHCT Plan and RMP receiving significantly higher subsidies, while simultaneously maintaining the prescription drug coverage retirees had prior to implementation of the enhanced EGWP. Currently, EGWP is the primary program used by the Division; however, there are still retirees that are covered by the RDS if they do not meet the requirements of EGWP.

(8) Medicare Part D Retiree Drug Subsidy

One of the provisions of Medicare Part D provides sponsors of pension healthcare plans the opportunity to receive an RDS payment if the sponsor's plan provides a prescription drug benefit that is actuarially equivalent to the Medicare Part D benefit. The RDS is equal to 28% of the amount of eligible prescription drug benefit costs of retirees who are eligible for, but not enrolled in, Medicare Part D, by virtue of continuing to be covered by the sponsor's plan. The ARHCT Plan was approved for participation in the Medicare Part D program beginning calendar year 2006.

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

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Notes to Financial Statements

June 30, 2023

(9) Commitments and Contingencies

The Division is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the Division of Retirement and Benefits' counsel, the resolution of these matters will not have a material adverse effect on the financial condition of the Division.

The System was a defendant in a class action lawsuit against the State alleging that the passage of Senate Bill (SB) 141 violated the Alaska Constitution by extinguishing a former member's ability to re-enter the PERS / TRS defined benefits plan. According to SB 141, a PERS / TRS defined benefit former member would have to re-employ into an eligible defined benefit position by June 30, 2010 or lose that former member's status (tier standing). If that former member re-entered the workforce in a valid PERS / TRS position but after June 30, 2010, that person would become a defined contribution retirement plan member, rather than reinstated into their prior defined benefit status (tier standing). The lawsuit challenged the effect of SB 141 as an unconstitutional diminishment of a promised defined benefit.

In April 2022, the Alaska Supreme Court found that a former member's ability to reinstate PERS / TRS status is an accrued benefit protected by Article XII, Section 7 of the Alaska Constitution. The Court held that not allowing former members to buy back into PERS / TRS defined benefit status resulted in an unconstitutional diminishment. This decision could lead to an increase in the number of employees previously believed to be ineligible for the defined benefit plan by operation of SB 141 for PERS / TRS. The case was returned to the Superior Court and the Department of Law filed a motion for final judgment. The Superior Court granted the motion for final judgment, awarded judgment on attorney's fees, and ordered the Division to notify class members by the end of May 2022 of their right to seek reinstatement into the defined benefit plan and the procedures to do so.

The Division continues to determine the impact of this decision on PERS and TRS. The Division is working with impacted former members who meet the requirements to re-establish their position in the defined benefits plan. However, it is unclear exactly how many former members will seek to reinstate to the defined benefits plan or the precise cost of the reintroduction of those former members to the defined benefits plan.

REQUIRED SUPPLEMENTARY INFORMATION (Unaudited)

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer Net Pension Liability and Related Ratios Defined Benefit Pension Plan

Last 10 Fiscal Years (In thousands)

	_	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:											
Service cost Interest	\$	116,137 1,122,591	119,376 1,120,832	130,592 1,107,399	141,556 1,079,549	157,708 1,118,574	170,816 1,108,068	184,411 1,072,312	172,304 1,049,226	184,712 1,020,947	160,828 940,786
Differences between expected and actual experience Changes of assumptions Benefit payments, including refunds of		193,787 —	(172,703) 227,035	(97,514) —	81,120 —	(243,120) 502,790	(302,874)	(184,252) —	(118,947) —	10,791 541,390	= {
member contributions	_	(1,022,795)	(962,357)	(930,006)	(895,523)	(848,019)	(812,877)	(777,187)	(742,174)	(696,542)	(651,917)
Net change in total pension liability		409,720	332,183	210,471	406,702	687,933	163,133	295,284	360,409	1,061,298	449,697
Total pension liability – beginning	_	15,912,991	15,580,808	15,370,337	14,963,635	14,275,702	14,112,569	13,817,285	13,456,876	12,395,578	11,945,881
Total pension liability – ending (a)	_	16,322,711	15,912,991	15,580,808	15,370,337	14,963,635	14,275,702	14,112,569	13,817,285	13,456,876	12,395,578
Plan fiduciary net position: Contributions – employers Contributions – plan members Contributions – nonemployer State of Alaska Net investment income (loss) Benefit payments, including refunds of member contributions Administrative expenses Other income		438,011 79,968 33,933 799,906 (1,022,795) (7,842) 168	415,538 66,412 97,700 (704,611) (962,357) (9,038) 187	414,741 70,614 101,383 2,794,112 (930,006) (8,232) 536	350,028 74,514 79,487 378,119 (895,523) (7,017) 148	350,601 79,609 67,857 540,088 (848,019) (7,429) 23	299,665 84,956 72,719 725,310 (812,877) (6,250) 25	263,597 89,345 99,167 1,048,006 (777,187) (7,526) 38	235,360 96,024 88,586 (49,967) (742,175) (7,243) 240	226,136 100,036 1,000,000 253,311 (696,542) (7,553) 36	206,204 106,565 176,794 1,207,484 (651,917) (8,223)
Net change in plan fiduciary net position		321,349	(1,096,169)	2,443,148	(20,244)	182,730	363,548	715,440	(379,175)	875,424	1,036,956
Plan fiduciary net position – beginning	_	10,816,140	11,912,309	9,469,161	9,489,405	9,306,675	8,943,127	8,227,687	8,606,862	7,731,438	6,694,482
Plan fiduciary net position - ending (b)	_	11,137,489	10,816,140	11,912,309	9,469,161	9,489,405	9,306,675	8,943,127	8,227,687	8,606,862	7,731,438
Plan's net pension liability (a)-(b)	\$_	5,185,222	5,096,851	3,668,499	5,901,176	5,474,230	4,969,027	5,169,442	5,589,598	4,850,014	4,664,140
Plan fiduciary net position as a percentage of the total pension liability		68.23 %	67.97 %	76.46 %	61.61 %	63.42 %	65.19 %	63.37 %	59.55 %	63.96 %	62.37 %
Covered payroll	\$	813,896	831,409	893,910	956,120	1,033,526	1,096,605	1,166,107	1,251,066	1,328,384	1,405,197
Net pension liability as a percentage of covered payroll		637.09 %	613.04 %	410.39 %	617.20 %	529.67 %	454.37 %	443.31 %	446.79 %	365.11 %	331.92 %

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Employer and Nonemployer Contributions Defined Benefit Pension Plan

Last 10 Fiscal Years (In thousands)

Fiscal Year	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered Payroll	Contribution as a percentage of covered payroll
2023	\$ 448,841	471,944	(23, 103)	813,896	57.99 %
2022	502,772	513,238	(10,466)	831,409	61.73 %
2021	495,499	516,123	(20,624)	893,910	57.74 %
2020	429,322	429,515	(193)	956,120	44.92 %
2019	414,243	418,458	(4,215)	1,033,526	40.49 %
2018	395,663	372,383	23,280	1,096,605	33.96 %
2017	368,766	362,764	6,002	1,166,107	31.11 %
2016	566,615	323,946	242,669	1,251,066	25.89 %
2015	529,264	1,226,136	(696,872)	1,328,384	92.30 %
2014	358,718	382,998	(24,280)	1,405,197	27.26 %

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Investment Returns Defined Benefit Pension Plan

Last 10 Fiscal Years

Fiscal Year	Annual money-weighted rate of return, net of investment expense	
2023	7.56 %	
2022	(6.00)%	
2021	29.77 %	
2020	4.03 %	
2019	5.88 %	
2018	8.26 %	
2017	12.99 %	
2016	(0.36)%	
2015	3.12 %	
2014	18.43 %	

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer Net OPEB (Asset) Liability and Related Ratios Alaska Retiree Healthcare Trust Plan

(In thousands)

	_	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability:								
Service cost Interest Change in benefit terms	\$	58,773 488,658 —	73,661 523,716 (63,712)	82,428 535,241	95,615 577,711 —	119,782 684,429 —	110,333 647,310	114,109 623,599
Change in berieff terms Differences between expected and actual experience Changes of assumptions Benefit payments, including refunds of member contributions EGWP rebates		28,664 (254,054) (508,527) 60,209	(60,449) (391,276) (453,211) 54,052	(80,821) (290,836) (440,234) 52,356	(88,229) (766,624) (407,069) 33,177	(147,463) (965,602) (420,429) 7,066	(149,287) 259,497 (413,273)	(28,042) — (405,872)
Net change in total OPEB liability	-	(126,277)	(317,219)	(141,866)	(555,419)	(722,217)	454,580	303,794
Total OPEB liability – beginning	_	6,901,568	7,218,787	7,360,653	7,916,072	8,638,289	8,183,709	7,879,915
Total OPEB liability – ending (a)	_	6,775,291	6,901,568	7,218,787	7,360,653	7,916,072	8,638,289	8,183,709
Plan fiduciary net position: Contributions – employers Contributions – Employer group waiver plan rebates Contributions – Medicare retiree drug subsidy Net investment income (loss)	=	555 60,209 453 658,963	64,990 54,052 594 (578,684)	68,191 52,356 189 2,294,391	107,298 33,177 — 318,157	102,266 7,066 20,481 449,098	85,731 — 5,965 598,342	124,541 — — 859,980
	_	720,180	(459,048)	2,415,126	458,632	578,911	690,038	984,521
Benefit payments Pharmacy rebates Pharmacy management allowance		(551,353) 58,282 132	(485,327) 47,329 134	(462,977) 37,901 189	(439,785) 48,006	(444,143) 36,921	(422,378) 20,268 —	(405,872) — —
Administrative Services Only (ASO) fees	_	(15,588)	(15,347)	(15,347)	(15,290)	(13,207)	(11,163)	
Net benefit payments	_	(508,527)	(453,211)	(440,234)	(407,069)	(420,429)	(413,273)	(405,872)
Administrative expenses, excluding ASO fees Other	_	(4,955) 390	(2,873) 125	(4,859) 597	(6,203) 459	(3,665) 874	(3,822) 106	(15,960) 43,009
Net change in plan fiduciary net position		207,088	(915,007)	1,970,630	45,819	155,691	273,049	605,698
Plan fiduciary net position – beginning	_	8,869,134	9,784,141	7,813,511	7,767,692	7,612,001	7,338,952	6,733,254
Plan fiduciary net position – ending (b)	_	9,076,222	8,869,134	9,784,141	7,813,511	7,767,692	7,612,001	7,338,952
Plan's net OPEB (asset) liability (a)-(b)	\$	(2,300,931)	(1,967,566)	(2,565,354)	(452,858)	148,380	1,026,288	844,757
Plan fiduciary net position as a percentage of the total OPEB liability		133.96%	128.51%	135.54%	106.15%	98.13%	88.12%	89.68%
Covered payroll	\$	813,896	831,409	893,910	956,120	1,033,526	1,096,605	1,166,107
Net OPEB (asset) liability as a percentage of covered payro	II	(282.71%)	(236.65%)	(286.98%)	(47.36%)	14.36%	93.59%	72.44%

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Employer and Nonemployer Contributions Alaska Retiree Healthcare Trust Plan

Last 10 Fiscal Years (In thousands)

Fiscal Year	_	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered Payroll	Contribution as a percentage of covered payroll
2023	\$	69,353	555	68,798	813,896	0.07 %
2022		75,091	64,990	10,101	831,409	7.82 %
2021		101,330	68,191	33,139	893,910	7.63 %
2020		114,783	107,298	7,485	956,120	11.22 %
2019		99,083	102,266	(3,183)	1,033,526	9.89 %
2018		71,251	85,731	(14,480)	1,096,605	7.82 %
2017		133,845	124,541	9,304	1,166,107	10.68 %
2016		790,824	193,564	597,260	1,251,066	15.47 %
2015		782,258	171,028	611,230	1,328,384	12.87 %
2014		783,827	340,458	443,369	1,405,197	24.23 %

12.69 %

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Investment Returns Alaska Retiree Healthcare Trust Plan

Fiscal Year	Annual money-weighted rate of return, net of investment expense	
2023	7.64 %	
2022	(6.03)%	
2021	30.00′%	
2020	4.16 %	
2019	6.03 %	
2018	8.35 %	

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

See accompanying notes to required supplementary information (unaudited) and independent auditors' report.

2017

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer Net OPEB (Asset) Liability and Related Ratios Occupational Death and Disability Plan

(In thousands)

	_	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability:								
Service cost	\$	5,068	5,456	5,133	4,808	3,870	3,565	3,419
Interest		1,623	1,572	1,458	1,244	1,205	1,275	977
Differences between expected and actual experience		(3,102)	(5,014)	(4,919)	(3,022)	(3,252)	(5,625)	(470)
Changes in assumptions			(10)	_		(528)		
Benefit payments, including refunds of member contributions	_	(625)	(456)	(431)	(479)	(398)	(392)	(313)
Net change in total OPEB liability		2,964	1,548	1,241	2,551	897	(1,177)	3,613
Total OPEB liability – beginning	_	17,620	16,072	14,831	12,280	11,383	12,560	8,947
Total OPEB liability – ending (a)	_	20,584	17,620	16,072	14,831	12,280	11,383	12,560
Plan fiduciary net position:								
Contributions – employers		6,126	5,769	5,334	4,387	4,083	2,215	2,196
Net investment income (loss)		4,963	(3,968)	13,182	1,658	2,036	2,233	2,938
Benefit payments		(625)	(456)	(431)	(479)	(398)	(392)	(313)
Administrative expenses		(34)	(33)	(32)	_	(1)	_	(18)
Other	_			2			 .	
Net change in plan fiduciary net position		10,430	1,312	18,055	5,566	5,720	4,056	4,803
Plan fiduciary net position – beginning	_	61,458	60,146	42,091	36,525	30,805	26,749	21,946
Plan fiduciary net position – ending (b)	_	71,888	61,458	60,146	42,091	36,525	30,805	26,749
Plan's net OPEB asset (a)-(b)	\$_	(51,304)	(43,838)	(44,074)	(27,260)	(24,245)	(19,422)	(14,189)
Plan fiduciary net position as a								
percentage of the total OPEB liability		349.24 %	348.80 %	374.23 %	283.80 %	297.43 %	270.62 %	212.97 %
Covered payroll	\$	1,708,930	1,575,906	1,460,483	1,353,078	1,256,848	1,133,799	1,040,377
Net OPEB asset as a percentage of covered payroll		(3.00)%	(2.78)%	(3.02)%	(2.01)%	(1.93)%	(1.71)%	(1.36)%

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Employer Contributions Occupational Death and Disability Plan

Last 10 Fiscal Years (In thousands)

Fiscal Year	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered Payroll	Contribution as a percentage of covered payroll
2023	\$ 5,885	6,126	(241)	1,708,930	0.36 %
2022	5,617	5,769	(152)	1,575,906	0.37 %
2021	5,266	5,334	(68)	1,460,483	0.37 %
2020	4,321	4,387	(66)	1,353,078	0.32 %
2019	3,944	4,083	(139)	1,256,848	0.32 %
2018	2,190	2,215	(25)	1,133,799	0.20 %
2017	2,226	2,196	30	1,040,377	0.21 %
2016	2,601	3,104	(503)	867,000	0.36 %
2015	2,337	2,790	(453)	778,980	0.36 %
2014	2,080	2,372	(292)	678,840	0.35 %

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Investment Returns Occupational Death and Disability Plan

Fiscal Year	Annual money-weighted rate of return, net of investment expense
2023	7.71 %
2022	(6.30)%
2021	29.55 %
2020	4.28 %
2019	6.22 %
2018	8.06 %
2017	11.97 %

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Changes in Employer Net OPEB (Asset) Liability and Related Ratios Retiree Medical Plan

(In thousands)

	_	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability: Service cost Interest Change in benefit terms Differences between expected and actual experience Change of assumptions Benefit payments EGWP rebates	\$	13,969 13,545 — (535) (4,247) (356) 161	16,428 14,317 (2,376) (406) (32,415) (444) 139	15,100 12,079 — 2,233 (184) (237) 60	15,726 11,651 42 (20,884) (69) 34	13,465 10,093 (1,340) 7,303 (109)	12,269 7,916 — (724) 6,623 (41)	10,394 6,425 — (46) —
Net change in total OPEB liability		22,537	(4,757)	29,051	6,500	29,422	26,043	16,773
Total OPEB liability – beginning	_	172,956	177,713	148,662	142,162	112,740	86,697	69,924
Total OPEB liability – ending (a)	_	195,493	172,956	177,713	148,662	142,162	112,740	86,697
Plan fiduciary net position: Contributions – employers Contributions – Employer group waiver plan rebates Contributions – Medicare retiree drug subsidy Net investment income (loss)	_	18,753 161 — 16,776 35,690	16,920 139 1 (13,410) 3,650	18,559 60 44,619 63,238	17,846 35 - 5,546 23,427	11,736 10 9 6,591 18,346	11,657 — — 6,919 18,576	12,280 — — 8,506 20,786
Benefit payments Pharmacy rebates ASO fees		(405) 115 (66)	(505) 86 (25)	(247) 35 (25)	(98) 29	(128) 19	(41) — —	
Net benefit payments	_	(356)	(444)	(237)	(69)	(109)	(41)	
Administrative expenses, excluding ASO fees Other	_	(45) 2	(75) —	(22) 7	(27)	(14) —	(4) 2	(12)
Net change in plan fiduciary net position		35,291	3,131	62,986	23,331	18,223	18,533	20,775
Plan fiduciary net position – beginning	_	207,686	204,555	141,569	118,238	100,015	81,482	60,707
Plan fiduciary net position – ending (b)	_	242,977	207,686	204,555	141,569	118,238	100,015	81,482
Plan's net OPEB (asset) liability (a)-(b)	\$	(47,484)	(34,730)	(26,842)	7,093	23,924	12,725	5,215
Plan fiduciary net position as a percentage of the total OPEB liability Covered payroll	\$	124.29 % 1,708,930	120.08 % 1,575,906	115.10 % 1,460,483	95.23 % 1,353,078	83.17 % 1,256,848	88.71 % 1,133,799	93.98 % 1,040,377
Net OPEB (asset) liability as a percentage of covered payroll		(2.78)%	(2.20)%	(1.84)%	0.52 %	1.90 %	1.12 %	0.50 %

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Employer Contributions Retiree Medical Plan

Last 10 Fiscal Years (In thousands)

Fiscal Year	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency (excess)	Covered Payroll	Contribution as a percentage of covered payroll
2023	\$ 18,099	18,753	(654)	1,708,930	1.10 %
2022	16,565	16,920	(355)	1,575,906	1.07 %
2021	18,326	18,559	(233)	1,460,483	1.27 %
2020	17,725	17,846	(121)	1,353,078	1.32 %
2019	11,451	11,736	(285)	1,256,848	0.93 %
2018	11,654	11,657	(3)	1,133,799	1.03 %
2017	12,506	12,280	226	1,040,377	1.18 %
2016	16,907	16,184	723	867,000	1.87 %
2015	15,190	14,552	638	778,980	1.87 %
2014	3,937	3,708	229	678,840	0.55 %

(A Component Unit of the State of Alaska)

Required Supplementary Information (Unaudited)

Schedule of Investment Returns Retiree Medical Plan

Fiscal Year	Annual money-weighted rate of return, net of investment expense
2023	7.71 %
2022	(6.28)%
2021	29.54 %
2020	4.33 %
2019	6.21 %
2018	7.89 %
2017	11.93 %

This schedule is intended to present information for 10 years. Additional years will be displayed as they become available.

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(1) Actuarial Assumptions and Methods

The actuarial valuation was prepared by Buck. The significant actuarial methods and assumptions used in the defined benefit pension and postemployment healthcare benefit plan valuation as of June 30, 2022 were as follows:

(a) Actuarial cost method – Liabilities and contributions in the report are computed using the Entry Age Normal Actuarial Cost Method, level percent of pay.

Effective June 30, 2018, the Board adopted a layered UAAL amortization method: Layer #1 equals the sum of (i) the UAAL at June 30, 2018 based on the 2017 valuation, plus (ii) the FY18 experience gain/loss. Layer #1 is amortized over the remainder of the 25-year closed period that was originally established in 2014. Layer #2 equals the change in UAAL at June 30, 2018 due to the experience study and EGWP implementation. Layer #2 is amortized over a separate closed 25-year period starting in 2018. Future layers will be created each year based on the difference between actual and expected UAAL occurring that year and will be amortized over separate closed 25-year periods. The UAAL amortization continues to be on a level percent of pay basis. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined.

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members, and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

- (b) Valuation of assets The actuarial asset value was reinitialized to equal fair value of assets as of June 30, 2014. Beginning in FY15, the asset value method recognizes 20% of the gain or loss each year, for a period of five years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from audited financial statements.
- (c) Valuation of retiree medical and prescription drug benefits Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods (i.e., medical claims,

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

prescription drug claims, administrative costs, etc.). Separate analysis is limited by the availability and historical credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A claim data is not available by individual, nor is this status incorporated into historical claim data.

- (d) Investment return 7.25% per year, net of investment expenses.
- (e) Salary scale Rates based upon the 2017–2021 actual experience. Inflation 2.50% per year and productivity 0.25% per year.
- (f) Payroll growth 2.75% per year (2.50% inflation + 0.25% productivity).
- (g) Total inflation Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 2.50% annually.
- (h) Mortality (pre-commencement) Mortality rates based on the 2017–2021 actual experience, to the extent the experience was statistically credible.

Employee mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Employee mortality for Others in accordance with the following tables:

- Pension: Pub-2010 General Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Deaths are assumed to result from occupational causes 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

(i) Mortality (post-commencement) – Mortality rates based on the 2017–2021 actual experience, to the extent the experience was statistically credible.

Retiree mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Retiree mortality for Others in accordance with the following tables:

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

- Pension: 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 110% of female rates of the Pub-2010 General Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Peace Officer/Firefighters in accordance with the following tables. These tables are applied only after the death of the original member.

- Pension: Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Others in accordance with the following tables. These tables are applied only after the death of the original member.

- Pension: 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, headcountweighted, and projected with MP-2021 generational improvement.
- (j) Total turnover Select and ultimate rates based upon the 2017–2021 actual experience.
- (k) Disability No changes to the incidence rates from the prior valuation due to insufficient 2017–2021 actual experience. Disability rates cease once a member is eligible for retirement.

Disabilities are assumed to be occupational 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

Post-disability mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-disability mortality for Others in accordance with the following tables:

- Pension: Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.
- (I) Retirement Retirement rates based on the 2017–2021 actual experience. Deferred vested members are assumed to retire at their earliest unreduced retirement date. The modified cash refund annuity is valued as a three-year certain and life annuity.

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

- (m) Spouse age difference Males are assumed to be three years older than their wives. Females are assumed to be two years younger than husbands.
- (n) Percent married for pension For Peace Officer/Firefighters, 85% of male members and 60% of female members are assumed to be married at termination of active service. For Others, 75% of male members and 70% of female members are assumed to be married at termination of active service.
- (o) Dependent spouse medical coverage election Applies to members who do not have double medical coverage. For Peace Officer/Firefighters, 75% of male members and 50% of female members are assumed to be married and cover a dependent spouse. For others, 60% of male members and 50% of female members are assumed to be married and cover a dependent spouse.
- (p) Dependent children -
 - Pension: None.
 - Healthcare: Benefits for dependent children have been valued only for members currently covering their dependent children. These benefits are only valued through the dependent children's age 23 (unless the child is disabled).
- (q) Imputed data Data changes from the prior year which are deemed to have an immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data. Non-vested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage.
- (r) Active data adjustment No adjustment was made to reflect participants who terminate employment before the valuation date and are subsequently rehired after the valuation date.
- (s) Administrative expenses The investment return assumption is net of investment expenses. The Normal Cost as of June 30, 2022 was increased by the following amounts. These amounts are based on the average of actual administrative expenses during the last two fiscal years. For projections, the percent increase was assumed to remain constant in future years.
 - Pension \$8,635,000
 - Healthcare \$3,818,000
- (t) Rehire assumption The normal cost used for determining contribution rates and in the projections includes a rehire assumption to account for anticipated rehires. The normal cost shown in the report includes the following assumptions based on the four years of rehire loss experience through June 30, 2021. For projections, these assumptions were assumed to grade to zero uniformly over a 20-year period.
 - Pension 15.30%
 - Healthcare 2.40%
- (u) Re-employment option All re-employed retirees are assumed to return to work under the standard option.

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

- (v) Service Total credited service is provided by the State. This service is assumed to be the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs service). Claimed service is used for vesting and eligibility purposes.
- (w) Part-time status Peace Officer/Firefighter members are assumed to be full-time employees. For Other members, part-time employees are assumed to earn 0.75 years of service per year.
- (x) Final average earnings Final average earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.
- (y) Contribution refunds 5% of terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non-vested benefits are assumed to have their contributions refunded.
- (z) Early retirement factors Division staff provided the early retirement factors, which reflect grandfathered factors.
- (aa) Alaska Cost of Living Allowance (COLA) Of those benefit recipients who are eligible for the COLA, 60% of Others and 65% of peace officer/firefighters are assumed to remain in Alaska and receive the COLA.
- (bb) Postretirement pension adjustment (PRPA) 50% and 75% of assumed inflation, or 1.25% and 1.875%, respectively, is valued for the annual automatic PRPA as specified in the statute.
- (cc) Healthcare participation 100% of System paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. For Peace Officer/Firefighters, 20% of non-System paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. For Others, 25% of non-System paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.
- (dd) Medicare Part B Only It's assumed that 2% of actives hired before April 1, 1986 and current retirees who are not yet Medicare eligible will not be eligible for Medicare Part A.
- (ee) Healthcare per capita claims cost Sample claims cost rates adjusted to age 65 for FY23 medical and prescription drug benefits are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medications. The pre-Medicare medical costs reflect the coverage of additional preventive benefits.

	Medical	Prescription drugs
	ivicuicui	<u> </u>
Pre-Medicare	\$ 15,706	3,712
Medicare Parts A and B	1,625	3,907
Medicare Part B only	5,363	3,907
Medicare Part D – EGWP	N/A	1,309

Members are assumed to attain Medicare eligibility at age 65. All costs are for the 2023 fiscal year (July 1, 2022–June 30, 2023).

The EGWP subsidy is assumed to increase in future years by the trend rates shown on the following page. No future legislative changes or other events are anticipated to impact the EGWP subsidy. If any legislative or other changes occur in the future that impact the EGWP subsidy (which could either increase or decrease the Plan's actuarial accrued liability), those changes will be evaluated and quantified when they occur.

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(ff) Healthcare morbidity – Morbidity rates (also called aging factors) are used to estimate utilization of healthcare benefits at each age to reflect the fact that healthcare utilization typically increases with age. Separate morbidity rates are used for medical and prescription drug benefits. These rates are based on the 2017-2021 actual experience.

Age	Medical	Prescription drugs
0–44	2.0%	4.5%
45–54	2.5	3.5
55–64	2.5	1.0
65–74	2.0	2.1
75–84	2.2	(0.3)
85–94	0.5	(2.5)
95+	_	_

- (gg) Healthcare third-party administrator fees \$449 per person per year; assumed to increase at 4.50% per year.
- (hh) Healthcare cost trend The table below shows the rates used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.00% is applied to the FY23 pre-Medicare medical claims cost to get the FY24 medical claims cost:

	Medical		Prescription
Fiscal year	Pre-65	Post-65	drugs/EGWP
2023	7.00%	5.50%	7.50%
2024	6.70	5.50	7.20
2025	6.40	5.40	6.90
2026	6.20	5.40	6.65
2027	6.05	5.35	6.35
2028	5.85	5.35	6.10
2029	5.65	5.30	5.80
2030	5.45	5.30	5.55
2031–2038	5.30	5.30	5.30
2039	5.25	5.25	5.25
2040	5.20	5.20	5.20
2041	5.10	5.10	5.10
2042	5.05	5.05	5.05
2043	4.95	4.95	4.95
2044	4.90	4.90	4.90
2045	4.80	4.80	4.80
2046	4.75	4.75	4.75
2047	4.70	4.70	4.70
2048	4.60	4.60	4.60
2049	4.55	4.55	4.55
2050 +	4.50	4.50	4.50

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

For the June 30, 2014 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model estimates trend amounts that are projected out for 80 years. The model has been populated with assumptions that are specific to the State of Alaska.

(ii) Retired member contributions for medical benefits – Currently, contributions are required for System members who are under age 60 and have less than 30 years of service (25 for Peace Officers/Firefighters). Eligible tier 1 members are exempt from contribution requirements. Annual FY23 contributions based on monthly rates shown below for calendar 2023 are assumed based on the coverage category for current retirees. The retiree only rate shown is used for current active and inactive members and spouses in tier 2 or 3 who are assumed to retire prior to age 60 with less than 30 years of service and who are not disabled. For dependent children, the System values one-third of the annual retiree contribution to estimate the per-child rate based upon the assumed number of children in rates where children are covered.

	Calenda	Calendar 2022	
Coverage category	Annual contribution	Monthly contribution	Monthly contribution
Retiree only	\$ 8,448	704	704
Retiree and spouse	16,896	1,408	1,408
Retiree and child(ren)	11,940	995	995
Retiree and family	20,388	1,699	1,699
Composite	12,552	1,046	1,046

(jj) Trend rate for retired member medical contributions – The table below shows the rate used to project the retired member medical contributions from the shown fiscal year to the next fiscal year. For example, 4.0% is applied to the FY23 retired member medical contributions to get the FY24 retired member medical contributions.

	Trend
Fiscal year	assumption
2023 +	4.0%

Graded trend rates for retired member medical contributions are consistent with the rates used for the June 30, 2021 valuation. Actual FY23 retired member medical contributions are reflected in the valuation.

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

The significant actuarial methods and assumptions used in the defined contribution occupational death and disability and retiree medical benefit plans valuation as of June 30, 2022 were as follows:

- (a) Actuarial cost method Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method, level percent of pay. Each year's difference between actual and expected unfunded actuarial accrued liability is amortized over 25 years as a level percentage of expected payroll.
- (b) Valuation of assets Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method was phased in over five years. Fair value of assets was \$0 as of June 30, 2006. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from audited financial statements. Valuation assets are constrained to a range of 80% to 120% of the fair value of assets.
- (c) Valuation of retiree medical and prescription drug benefits Due to the lack of experience for the DCR retiree medical plan only, base claims costs are based on those described in the actuarial valuation as of June 30, 2022 for the Defined Benefit (DB) retiree medical plan covering TRS and PERS. The DB rates were used with some adjustments. The claims costs were adjusted to reflect the differences between the DCR medical plan and the DB medical plan. These differences include network steerage, different coverage levels, different Medicare coordination for medical benefits, and an indexing of the retiree out-of-pocket dollar amounts. To account for higher initial copays, deductibles, and out-of-pocket limits, projected FY23 claims costs were reduced 4.4% for pre-Medicare medical claims, 3.1% for Medicare medical claims, and 8.9% for prescription drugs. In addition, to account for the difference in Medicare coordination, projected FY23 medical claims costs for Medicare eligible retirees were further reduced 29.5%.

FY21 and FY22 experience was thoroughly reviewed to assess the impact of COVID-19 and whether an adjustment to FY21 and FY22 claims was appropriate for use in the June 30, 2022 valuation. FY21 medical per capital claims cost were noticeably lower than expected, so a 4% load was added to the FY21 medical claims used in the per capita claims cost development to better reflect future expected long-term costs of the plan. FY22 medical per capita claims were reasonable when compared to pre-COVID levels, so no adjustments were made to the FY22 medical claims used in the per capita claims cost development.

Starting in 2022, prior authorization is required for certain specialty medications. There is no change to the medications that are covered by the plan. Segal provided an estimate of the impact of this change to the DB retiree health plan cost for calendar year 2022. The resulting adjustment factors for pre-Medicare prescription drug, Medicare prescription drug, and EGWP costs were applied to claims experience incurred before January 1, 2022. Those base claims costs were used for the DCR valuation with further adjustments as noted below. Additionally, starting in 2022, certain common preventive benefits are covered for the DB plan. The resulting adjustment factor for pre-Medicare medical costs was applied to claims experience incurred before January 1, 2022. However, preventive benefits were already covered under the DCR plan, so the pre-65 DCR medical adjustment factor referenced above was increased from 3.1% to 4.4%.

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

No implicit subsidies are assumed. Employees projected to retire with 30 years of service (25 years of service for Peace/Fire) prior to Medicare are valued with commencement deferred to Medicare eligibility because those members will be required to pay the full plan premium prior to Medicare. Explicit subsidies for disabled and normal retirement are determined using the plan-defined percentages of age-related total projected plan costs, again with no implicit subsidy assumed.

The State transitioned to an Employer Group Waiver Program (EGWP) for DCR participants effective January 1, 2019. The estimated 2023 reimbursements under EGWP were provided by Segal Consulting (who worked with the EGWP administrator, Optum, to develop those estimates).

- (d) Investment return 7.25% per year, net of investment expenses.
- (e) Salary scale Salary scale rates based upon the 2017–2021 actual experience. Inflation 2.50% per year and productivity 0.25% per year.
- (f) Payroll growth 2.75% per year (2.50% inflation + 0.25% productivity).
- (g) Total inflation Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 2.50% annually.
- (h) Mortality (pre-commencement) Mortality rates based on the 2017–2021 actual experience, to the extent the experience was statistically credible.

Employee mortality for Peace Officer/Firefighters in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Employee mortality for Others in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 General Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Deaths are assumed to result from occupational causes 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(i) Mortality (post-commencement) – Mortality rates based on the 2017–2021 actual experience, to the extent the experience was statistically credible.

Retiree mortality for Peace Officer/Firefighters in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Retiree mortality for Others in accordance with the following tables:

- Occupational Death & Disability: 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 110% of female rates of the Pub-2010 General Retiree table, headcountweighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Peace Officer/Firefighters in accordance with the following tables. These tables are applied only after the death of the original member.

- Occupational Death & Disability: Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Others in accordance with the following tables. These tables are applied only after the death of the original member.

- Occupational Death & Disability: 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.
- (j) Total turnover Select and ultimate rates based upon the 2017–2021 actual experience.
- (k) Disability No changes to the incidence rates from the prior valuation due to insufficient 2017–2021 actual experience. For retiree medical benefits, the disability rates cease once a member is eligible for retirement. However, the disability rates continue after retirement eligibility for occupational death & disability benefits.

Disabilities are assumed to be occupational 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

For Peace Officer/Firefighters, members are assumed to take the monthly annuity 100% of the time.

Financial Section

STATE OF ALASKA | PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

Post-disability mortality for Peace Officer/Firefighters in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-disability mortality for Others in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.
- (I) Retirement Retirement rates based upon the 2017–2021 actual experience.
- (m) Spouse age difference Males are assumed to be three years older than their wives. Females are assumed to be two years younger than husbands.
- (n) Percent married for occupational death and disability For Peace Officer/Firefighters, 85% of male members and 60% of female members are assumed to be married at termination from active service. For others, 75% of male members and 70% female members are assumed to be married at termination from active service.
- (o) Dependent spouse medical coverage election Applies to members who do not have double medical coverage. For Peace Officer/Firefighters, 75% of male members and 50% of female members are assumed to be married and cover a dependent spouse. For others, 60% of male members and 50% of female members are assumed to be married and cover a dependent spouse.
- (p) Part-time service Peace Officer/Firefighter member are assumed to be full-time employees. For Other members, part-time employees are assumed to earn 0.75 years of service per year.
- (q) Peace officer/firefighter occupational disability retirement benefit commencement The occupational disability retirement benefit is assumed to be first payable from the member's DC account and the retirement benefit payable from the occupational death and disability trust will commence five years later.
- (r) Imputed data Data changes from the prior year that are deemed to have immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data. Non-vested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage.
- (s) Administrative expenses The investment return assumption is net of investment expenses. The Normal Cost as of June 30, 2022 was increased by the following amounts. These amounts are based on the average of actual administrative expenses during the last two fiscal years.
 - Occupational Death & Disability \$33,000
 - Healthcare \$39,000

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Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(t) Retiree medical participation:

Death / Dis	ability Decrement		Retirement Decremen	t
Age	Percent participation	Age	_	Percent participation
<56	75.0 %	55		50.0 %
56	77.5	56		55.0
57	80.0	57		60.0
58	82.5	58		65.0
59	85.0	59		70.0
60	87.5	60		75.0
61	90.0	61		80.0
62	92.5	62		85.0
63	95.0	63		90.0
64	97.5	64		95.0
65+	100.0	65+	Years of service	
			<15	75.0%
			15-19	80.0
			20–24	85.0
			25–29	90.0
			30+	95.0

Participation assumption is a combination of (i) the service-based rates for retirement from employment at age 65+ and (ii) the age-based rates for retirement from employment before age 65. These rates reflect the expected plan election rate that varies by reason for decrement, duration that a member may pay full cost prior to Medicare eligibility, and availability of alternative and/or lower cost options, particularly in the Medicare market. This assumption is based on observed trends in participation from a range of other plans.

(u) Healthcare per capita claims cost – Sample claims cost rates (before base claims cost adjustments described below) adjusted to age 65 for FY23 medical and prescription drug benefits are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medications.

	_	Medical	Prescription drugs
Pre-Medicare	\$	15,706	3,712
Medicare Parts A and B		1,625	3,907
Medicare Part D - EGWP		N/A	1,309

Members are assumed to attain Medicare eligibility at age 65. All other costs are for the 2023 fiscal year (July 1, 2022–June 30, 2023).

The EGWP subsidy is assumed to increase in future years by the trend rates shown on the following pages. No future legislative changes or other events are anticipated to impact the EGWP subsidy. If any legislative or other changes occur in the future that impact the EGWP subsidy (which could either increase or decrease the Plan's actuarial accrued liability), those changes will be evaluated and quantified at the next measurement date.

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Notes to Required Supplementary Information (Unaudited)

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- (v) Base claims cost adjustments Due to higher initial copays, deductibles, out-of-pocket limits, and member cost sharing compared to the DB medical plan, the following cost adjustments are applied to the per capita claims cost rates above:
 - 0.956 for pre-Medicare medical
 - 0.674 for both Medicare medical plan and the Medicare coordination method (3.1% reduction for the medical plan and 29.5% reduction for the coordination method)
 - 0.911 for prescription drug plan
- (w) Healthcare morbidity: Morbidity rates (also called aging factors) are used to estimate utilization of healthcare benefits at each age to reflect the fact that healthcare utilization typically increases with age. Separate morbidity rates are used for medical and prescription drug benefits. These rates are based on the 2017–2021 actual experience.

		Prescription
Age	Medical	Drugs
0–44	2.0%	4.5%
45–54	2.5	3.5
55–64	2.5	1.0
65–74	2.0	2.1
75–84	2.2	(0.3)
85–94	0.5	(2.5)
95+	_	_

(x) Healthcare third-party administrator fees – \$449 per person per year; assumed to increase at 4.50% per year.

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(y) Healthcare cost trend – The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.00% is applied to the FY23 pre-Medicare medical claims costs to get the FY24 medical claims costs.

Fiscal year	Medical Pre-65	Medical Post-65	Prescription drugs/EGWP
1 iscar year		1 0 3 1 0 3	41465/2011
2023	7.00%	5.50%	7.50%
2024	6.70	5.50	7.20
2025	6.40	5.40	6.90
2026	6.20	5.40	6.65
2027	6.05	5.35	6.35
2028	5.85	5.35	6.10
2029	5.65	5.30	5.80
2030	5.45	5.30	5.55
2031–2038	5.30	5.30	5.30
2039	5.25	5.25	5.25
2040	5.20	5.20	5.20
2041	5.10	5.10	5.10
2042	5.05	5.05	5.05
2043	4.95	4.95	4.95
2044	4.90	4.90	4.90
2045	4.80	4.80	4.80
2046	4.75	4.75	4.75
2047	4.70	4.70	4.70
2048	4.60	4.60	4.60
2049	4.55	4.55	4.55
2050 +	4.50	4.50	4.50

For the June 30, 2014 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model estimates trend amounts that are projected out for 80 years. The model has been populated with assumptions that are specific to the State of Alaska.

(A Component Unit of the State of Alaska)

Notes to Required Supplementary Information (Unaudited)

June 30, 2023

(2) Changes in Actuarial Assumptions, Methods, and Benefits Since the Prior Valuation

Defined Benefit Pension and Postemployment Healthcare Benefit Plan

(a) Changes in Methods Since the Prior Valuation – June 30, 2021 to June 30, 2022

There were no changes in actuarial methods since the prior valuation.

(b) Changes in Assumptions Since the Prior Valuation – June 30, 2021 to June 30, 2022

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the actuarial accrued liability as of June 30, 2022 by approximately \$206 million for pension and decrease by approximately \$88 million for healthcare.

The healthcare per capital claims cost assumption is updated for each valuation. The amounts included in the Normal Cost for the administrative expenses were updated based on the last two years of actual administrative expenses paid from plan assets.

(c) Changes in Benefit Provisions Since the Prior Valuation – June 30, 2021 to June 30, 2022

There were no changes in benefit provisions valued since the prior valuation.

Defined Contribution Occupational Death and Disability and Retiree Medical Benefits Plan

(a) Changes in Methods Since the Prior Valuation – June 30, 2021 to June 30, 2022

There were no changes in the actuarial methods since the prior valuation.

(b) Changes in Assumptions Since the Prior Valuation – June 30, 2021 to June 30, 2022

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the actuarial accrued liability as of June 30, 2022 by approximately \$1,222,000 for occupational death & disability and decrease by approximately \$22,348,000 for retiree medical.

The healthcare per capital claims cost assumption is updated for each valuation. The amounts included in the Normal Cost for the administrative expenses were updated based on the last two years of actual administrative expenses paid from plan assets.

(c) Changes in Benefit Provisions Since the Prior Valuation – June 30, 2021 to June 30, 2022

There have been no changes in benefit provisions valued since the prior valuation.

SUPPLEMENTAL SCHEDULES

(A Component Unit of the State of Alaska)

Schedule of Administrative and Investment Deductions

Years ended June 30, 2023 and 2022 (In thousands)

Personal services: \$ 5,311 2,506 7,817 Benefits 3,292 1,169 4,461 Total personal services 8,603 3,675 12,278 Travel: 19 53 72	7,678 4,803 12,481 23 5 28
Wages \$ 5,311 2,506 7,817 Benefits 3,292 1,169 4,461 Total personal services 8,603 3,675 12,278 Travel:	4,803 12,481 23 5
Wages \$ 5,311 2,506 7,817 Benefits 3,292 1,169 4,461 Total personal services 8,603 3,675 12,278 Travel:	4,803 12,481 23 5
Benefits 3,292 1,169 4,461 Total personal services 8,603 3,675 12,278 Travel:	4,803 12,481 23 5
Travel:	23 5
	5
	5
	5
Per diem	28
Total travel 24 63 87	
Contractual services:	
Management and consulting 19,840 394 20,234	19,997
Investment management and custodial fees — 53,398 53,398	52,207
Accounting and auditing 102 18 120	144
Data processing 4,294 883 5,177	3,430
Communications 117 9 126	123
Advertising and printing 81 2 83	72
Rentals/leases 669 89 758	244
Legal 132 59 191	338
Medical specialists 17 — 17	14
Repairs and maintenance 5 2 7	5
Transportation 62 1 63	299
Securities lending expense — 185 185	127
Other professional services 617 61 678	707
Total contractual services <u>25,936</u> <u>55,101</u> <u>81,037</u>	77,707
Other:	
Equipment 9 24 33	18
Supplies 45 85 130	86
Total other	104
Total administrative and investment deductions \$ 34,617 58,948 93,565	90,320

See accompanying independent auditors' report.

(A Component Unit of the State of Alaska)

Schedule of Payments to Consultants Other Than Investment Advisors

Years ended June 30, 2023 and 2022 (In thousands)

Firm	Services	_	2023	2022
Buck Global LLC	Actuarial services	\$	328	399
KPMG LLP	Auditing services		86	63
Groundswell Communications	Communications services		29	70
State Street Bank and Trust	Custodial banking services		1,207	1,325
Alaska IT Group	Data processing services		230	221
Applied Microsystems Incorporated	Data processing services		450	460
International Business Machines	Data processing services		28	21
Sagitec Solutions	Data processing services		2,795	2,104
SHI International Corporation	Data processing services		25	23
Sungard Availability Services	Data processing services		23	27
TechData Service Company	Data processing services		341	368
Unicom Systems	Data processing services		15	15
State of Alaska, Department of Law	Legal services		170	338
Agnew Beck Consulting	Management consulting services		10	25
Symphony Performance Health	Management consulting services		23	30
The Segal Company Incorporated	Management consulting services		196	93
Federal Hearings and Appeals Services	Medical specialist and consulting	_	17_	14
		\$	5,973	5,596

This schedule presents payments to consultants receiving greater than \$10,000.

See accompanying independent auditors' report.







INVESTMENT SECTION



Callan

Callan Associates Inc. 1900 16th Street Suite 1175 Denver, CO 80202 Main 303.861.1900 Fax 303.832.8230 www.callan.com

August 28, 2023

Alaska Retirement Management Board State of Alaska, Department of Revenue Treasury Division 333 Willoughby Avenue, 11th Floor Juneau, Alaska 99801

Dear Board Members:

This letter reviews the investment performance of assets under the purview of the Alaska Retirement Management Board (ARMB) for the fiscal year ended June 30, 2023.

Callan LLC (Callan) calculates time-weighted performance statistics based primarily on underlying custodial data provided by the Board's custodian, State Street Bank and Trust Company. Additional manager-level data is obtained directly from the Department of Revenue. The performance calculations were made using a time-weighted return methodology based upon fair values reported by these sources.

Callan serves as ARMB's independent general investment consultant and evaluates ARMB's performance in relation to market benchmarks, appropriate manager peer groups and other public pension systems. The performance calculations are made using a methodology broadly similar to the Global Investment Performance Standards.

ARMB purposely seeks to invest assets prudently, expertly, and according to governing law and industry practices. The objective of this approach is to responsibly invest Plan assets that, in combination with contributions, will be sufficient to pay promised benefits to members and beneficiaries. In pursuit of this objective, ARMB periodically evaluates liabilities, expected contributions and potential earnings. This analysis considers a wide range of potentially viable investment strategies. With thoughtful consideration of multiple factors, ARMB selects a strategic investment policy that balances long-term growth potential and acceptable risk. A policy benchmark is constructed that mirrors ARMB's strategic decision regarding asset allocation policy. The custom policy benchmark comprises equity, fixed income, real estate, and other market indices weighted in proportions corresponding to ARMB's investment policy.

2023 Fiscal Year Market Overview

A recession in the U.S. does not appear imminent, despite the most aggressive rate hikes since the 1980s over the past 15 months. The labor market remains strong, expectations for 2Q23 GDP growth are positive, consumer spending has exceeded expectations, and even housing has shown signs of life. Further good news comes from inflation, which has moderated, though largely due to falling energy prices. We have also successfully weathered a couple of storms this year; regional bank worries have abated after the collapse of Signature Bank, Silicon Valley Bank, and First Republic, and the debt ceiling saga is behind us.

On the good news front: 1Q23 GDP was a robust 2% (raised sharply from the most recent estimate of 1.3%). Consumer spending rose 4.2% in 1Q, the strongest growth seen in nearly two years. In June, the Conference Board reported a sharp 7% monthly jump in its Consumer Confidence Index, bringing it to its highest level since January 2022. New home sales surged more than 12% in May (+20% year-over- year (YOY)) with gains broad-based geographically, according to data from the Census Bureau. Housing prices have risen in 2023 and are now just 2.4% off the June peak, according to the S&P Case-Shiller National Home Price Index. The labor market remained resilient. The Bureau of Labor Statistics reported April job openings, according to the Job Openings and Labor Turnover Survey (JOLTS), remained at just over 10 million with about 6 million unemployed. Unemployment remained low at 3.7% in May and average hourly earnings (\$33.44) were up 4.3% over the past year, a bit higher than core inflation.

But is this all too good to be true? The Fed has not abandoned its rate hike path and goal of 2% inflation and has suggested that further hikes are coming. Higher interest rates have a lagged effect, but the impact can already be seen in some areas. In April, nearly 50% of U.S. banks reported tightening lending standards for loans to small businesses. Rising payments for credit card debt, auto loans, commercial mortgage payments, and corporate debt all have the potential to put the brakes on economic growth. While the default rate for corporations has not ticked up materially, a June report from S&P Global was a bit ominous: "...the tally of companies that have gone bankrupt so far in 2023 is higher than the first four months of any year since 2010." Commercial real estate woes, especially office and retail, are also on the radar of the more pessimistic crowd. The resumption of student loan payments in August could also temper growth later this year. Americans owe roughly \$1.8 trillion in federal and private student loan debt.

And there is mixed news: Headline CPI was up 4.0% over the past 12 months (as of May), the lowest since March 2021, with Core up 5.3% (down from a 6.6% cycle high in September). Headline CPI has benefited from falling energy prices (-12% YOY) while Core has not moderated as much and has the Fed's attention. Within Core, shelter costs (+8% YOY) have been particularly sticky and comprise around 40% of the measure. The Fed's favored inflation metric, the Personal Consumption Expenditures Index, showed progress with a +3.8% gain in May (YOY), down from 5.4% in January. As with CPI, the Core measure remains more stubborn and was up 4.6% in May (YOY), down only slightly from January's 4.7%.

U.S. equity markets finished the fiscal year 2023 in the positive territory after a tumultuous 2022. The Russell 3000 Index, a measure of broad U.S. equity, was down 4.46% at the start of the fiscal year before rising 7.18% in 4Q22, 7.18% in 1Q23, and 8.39% in 2Q23 as investor sentiment improved. Domestic stocks soared over the exuberance for any company associated with AI. Overseas markets also rebounded throughout the fiscal year aided by currency appreciation vs. the U.S. dollar. The MSCI ACWI ex-U.S. IMI (Net) Index, a broad benchmark reflecting developed and emerging markets, but excluding U.S. equities, climbed 2.38% for the quarter and 12.47% for the fiscal year. The MSCI AII Country World Index (Net), a broad measure of the total global equity market (including the U.S.), increased 6.18% in the most recent quarter and 16.53% for the fiscal year.

The Fed took a pause at its June meeting, leaving the Fed Funds target at 5.00% – 5.25%. The Fed's median prediction is 4.6% for the end of 2024, but the distribution reflects a wide range of views that range from 3.6% to 5.9%. The Bloomberg U.S. Aggregate Bond Index, a widely-used gauge of the investment grade domestic U.S. bond market, fell modestly for the quarter (-0.84%) and for the fiscal year (-0.94%) as interest rates rose. The 10-year U.S. Treasury yield was 3.81% as of fiscal yearend, up from 3.48% as of 3/31. The yield curve was sharply inverted at quarter-end with the 2-year U.S. Treasury yielding 4.87%.

Private real estate, as measured by the NCREIF Property Index, was negative for the first time since fiscal year 2010. In fiscal year 2023, the NCREIF Property Index returned -6.60% hurt by office property. Publicly traded real estate, as measured by the FTSE NAREIT All Equity Index, outperformed private markets on the downside, returning -4.39% for the fiscal year 2023.

ARMB's actual asset groupings delivered the following one-year returns through June 30, 20231:

Domestic Stocks: 17.77%

Global ex-U.S. Stocks: 15.14%

Multi-Asset: 4.09%

Fixed Income: 0.48%

Real Assets: 2.37%

Private Equity: -3.29%

For the fiscal year ended June 30, 2023, the Public Employees Retirement System (PERS) had a time-weighted total return of 7.03%. The Teachers Retirement System (TRS) had a time-weighted total return of 7.02%. Both systems' gross return trailed their strategic policy target return of 7.53% and the median return for Callan's Public Fund Sponsor database of 11.97%.

Over longer trailing periods, PERS and TRS have outperformed their target index returns. The 5-year annualized return was 7.68% for PERS and 7.67% for TRS, compared to the benchmark return of 6.52% for both Plans. The tenyear annualized return was 8.17% for PERS and 8.18% for TRS. Both were above the 10–year target return of 7.26%. Over 31.75 years – the longest period of available data – PERS and TRS achieved annualized total returns of 7.77% and 7.81%, respectively. Both exceeded the corresponding policy benchmark return of 7.49%.

The 2023 fiscal year returns of the PERS and TRS pension ("DB") and health care ("HC") programs are listed in the table below.

	PERS DB	PERS HC	TRS DB	TRS HC
FY 2023	7.03%	7.11%	7.02%	7.11%

The pension and health care systems are well diversified and currently have asset allocation policies that, in our opinion, are consistent with achieving a long-term "real" (above inflation) return of 4.5%.

In summary, fiscal year 2023 was a year in which ARMB's Total Fund returns were positive, as were those of most broad asset class returns. PERS and TRS produced lower returns than the average public fund, both ranking in the 84th percentile within the Public Fund Sponsor peer group for the one-year period ended June 30, 2023. Lower peer group rankings were a result of the Funds' relative underweight to equities and relative overweight to alternatives vs peers.

Sincerely,

Steve Center Senior Vice President

con T Cot

c: Zach Hanna Ivan Cliff

¹Note PERS asset class returns are used to represent the asset class performance of all plans.

Department of Revenue **Treasury Division Staff**

As of June 30, 2023

Commissioner

Adam Crum

Deputy Commissioner

Fadil Limani

Treasury Division Director

Pamela Leary, CPA

Chief Investment Officer

Zachary Hanna

Comptroller Vacant

Cash Management

Jesse Blackwell

ARMB Liaison Officer

Alysia Jones

Investment Officers

Shane Carson James Cheng **Casey Colton**

Victor Djajalie Kevin Elliot Benjamin Garrett **Emily Howard**

Sean Howard

Nicholas Orr Stephanie Pham

Cahal Morehouse

Mark Moon

Steve Sikes

Kevin Liu Robyn Mesdag

External Money Managers and Consultants

Opportunistic Fixed Income

Fidelity Investment Asset Management

Merrimack, NH MacKay Shields LLC New York, NY

Global Equities - Large Cap

Arrowstreet Capital, LP

Boston, MA

Baille Gifford Overseas Ltd.

Edinburgh, Scotland

Brandes Investment Partners, L.P.

San Diego, CA

Capital Guardian Trust Co.

Los Angeles, CA

State Street Global Advisors

Boston, MA

Legal and General Investment Management America

Chicago, IL

First Eagle Investments

New York, NY

Acadian Asset Management

Boston, MA

Emerging Markets

Legal and General Investment Management America, Inc.

Chicago, IL

Alternative Equity

McKinley Capital Management LLC

Anchorage, AK

Alternate Beta

Man Group

London, UK

Alternate Fixed Income

Ares Management

Los Angeles, CA

Crestline Investors, Inc.

Fort Worth, TX

Prisma Capital

New York, NY

Other Opportunities

Schroders Investment Management North America

New York, NY

Tactical Asset Allocation

Fidelity Investment Asset Management

Smithfield, RI

PineBridge Investments

New York, NY

Private Equity

Abbott Capital Management, L.P.

New York, NY

Advent International

Boston, MA

Battery Ventures

Boston, MA

Clearlake Capital

Santa Monica, CA

Dyal Capital Partners

New York, NY

Genstar Capital

San Francisco, CA

Glendon Capital

Santa Monica, CA

Insight Partners

New York, NY

KKR Lending Partners

New York, NY

Lexington Partners New York, NY

Merit Capital Partners

Chicago, IL

Neuberger Berman

New York, NY

New Mountain Partners

New York, NY

NGP

Irving, TX

Onex Partners

New York, NY

Pathway Capital Management, LLC

Irvine, CA

Sentinel Capital Partners

New York, NY **Summit Partners**

Boston, MA

The Jordan Company

New York, NY

The Riverside Company

New York, NY

Warburg Pincus

New York, NY

External Money Managers and Consultants (cont.)

Real Assets - Farmland and Timber

Timberland Investment Resources LLC Atlanta, GA UBS Farmland Investors, LLC Hartford, CT

Real Assets - Energy

EIG Global Energy Partners Washington, D.C.

Real Assets - Infrastructure

IENA

New York, NY
J.P. Morgan Asset Management
New York, NY

Real Assets - Real Estate Core Commingled Accounts

BlackRock Realty
New York, NY
J.P. Morgan Asset Management Inc.
New York, NY
UBS Realty Investors, LLC
Hartford, CT

Real Assets - Real Estate Core Separate Accounts

Sentinel Real Estate Corporation New York, NY UBS Realty Investors, LLC Hartford, CT

Real Assets - Non-Core Commingled Real Estate Funds

Almanac Realty Investors
New York, NY
Clarion Partners
New York, NY
KKR & Co.
New York, NY
Silverpeak Real Estate Partners
New York, NY

Supplemental Benefits System, Deferred Compensation Plan, and Defined Contribution Plans

Baillie Gifford Overseas Ltd.

Edinburgh, Scotland

BlackRock

San Francisco, CA

Brandes Investment Partners

San Diego, CA

J.P. Morgan Asset Management Inc.

New York, NY

Northern Trust

Chicago, IL

State Street Global Advisors

Boston, MA

T. Rowe Price Investment Services

Baltimore, MD

Investment Consultants

Callan Associates, Inc.

Denver, CO

Investment Advisory Council

Jerrold Mitchell
Johns Island, SC
Ruth Traylor
Monument, CO
William Jennings
Colorado Springs, CO

Independent Auditors

KPMG, LLP Anchorage, AK

Actuaries

Buck, A Gallagher Company
New York, NY
Gabriel, Roeder, Smith & Company
Denver, CO

Global Master Custodian

State Street Bank & Trust Co. Boston, MA

Public Employees' Retirement System Investment Report

INVESTMENTS

The investment goals of the State of Alaska Public Employees' Retirement System are the long-term return and sustainability of the pension funds under management. Annually, the Alaska Retirement Management Board (ARMB) sets its asset allocation strategy in order to reflect changes in the marketplace while still retaining an expected optimal risk/return level within the set constraints and objectives of the ARMB.

The ARMB categorizes its investments into six asset classes: Broad Domestic Equity, Global Equity Ex-U.S., Fixed Income, Multi-Asset, Real Assets, and Private Equity. The performance of each asset class is compared with a benchmark comprised of one or more market indices. The performance for the total portfolio is compared with its policy portfolio, determined by calculating the weighted performance of the underlying asset class benchmarks at the portfolio's target asset allocation. The asset class benchmarks are illustrated below:

Asset Class	Benchmark
Broad Domestic Equity	Russell 3000
Global Equities Ex-U.S.	MSCI All Country World Ex-U.S. IMI Net
Fixed Income	95% Bloomberg Barclays U.S. Aggregate 5% 3-Month Treasury Bill
Multi-Asset	60% MSCI All Country World IMI Net 40% Bloomberg Barclays U.S. Aggregate
Real Assets	35% NFI-ODCE 15% FTSE-NAREIT 25% NCREIF Farmland 10% NCREIF Timberland 15% CPI+4%
Private Equity	1/3 S&P 500 1/3 Russell 2000 1/3 MSCI EAFE Net

The target asset allocation is determined by the ARMB, utilizing capital market assumptions provided by its independent general investment consultant, Callan LLC. During the fiscal year, the ARMB's target asset allocation was 27% Broad Domestic Equity, 18% Global Equities Ex-U.S., 19% Fixed Income, 8% Multi-Asset, 14% Real Assets, and 14% Private Equity. Over the next 20 years, the target asset allocation is expected to generate a return of 6.90% with a standard deviation of 13.93%.

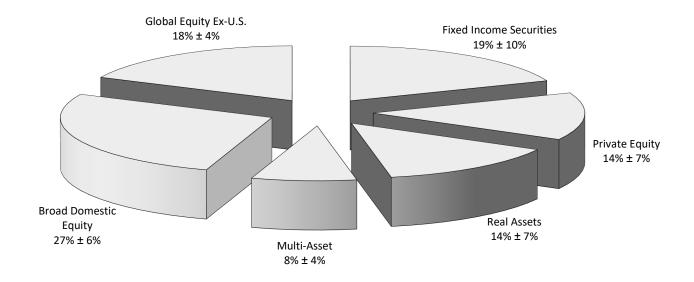
Public Employees' Retirement System Schedule of Investment Results Fiscal Years Ended June 30

						Annua	alized
	2019	2020	2021	2022	2023	3 Year	5 Year
Total Fund							
PERS Custom Composite Index Actuarial Earnings Rate	6.40%	3.83%	27.62%	(4.08%)	7.03%	9.42%	7.68%
	5.65	4.64	24.95	(7.86)	7.53	7.44	6.52
	7.38	7.38	7.38	7.38	7.25	7.25	7.25
Broad Domestic Equity PERS Custom Composite Index	8.41	2.62	42.69	(11.74)	17.77	14.04	10.53
	8.98	6.53	44.16	(13.87)	18.95	13.89	11.39
Fixed Income PERS Custom Composite Index	6.34	7.31	2.20	(6.96)	0.48	(1.51)	1.74
	6.19	7.67	(0.31)	(9.78)	(0.71)	(3.70)	0.42
Multi-Asset							
PERS	7.21	0.52	23.86	(10.58)	4.09	4.86	4.44
Custom Composite Index	9.72	9.32	23.20	(13.89)	9.14	5.01	6.79
Real Assets PERS Custom Composite Index	6.08	2.06	9.86	14.29	2.37	8.73	6.83
	7.23	1.19	4.62	14.80	3.41	8.01	6.53
Global Equity Ex-U.S.							
PERS	(0.08)	(3.59)	38.54	(20.96)	15.14	8.03	3.97
<i>MSCI ACWI ex-U.S.</i>	0.26	(4.74)	37.18	(19.86)	12.47	7.33	3.38
Private Equity PERS Custom Composite Index	17.66	10.47	50.67	26.25	(3.29)	22.53	19.05
	2.71	(1.35)	36.80	3.42	(6.83)	9.65	5.96
Absolute Return PERS 3-month Treasury Bill +5%	4.08	-	-	-	-	-	-
	1.15	-	-	-	-	-	-
Cash Equivalent PERS 3-month Treasury Bill	2.50 2.31	- -	-	<u>-</u> -	- -	- -	- -

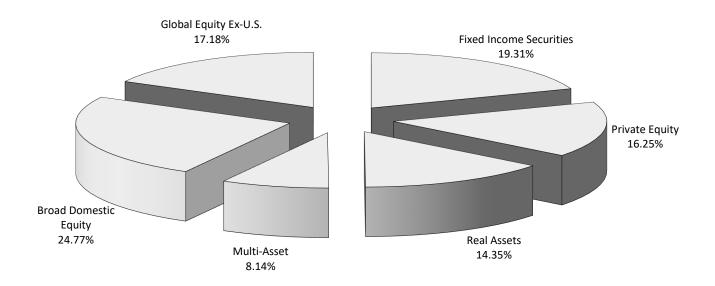
MSCI ACWI = Morgan Stanley Capital International All Country World Index Returns for periods longer than one year are reported on an annualized basis. Basis of calculation: Time-Weighed rate of return based on the market rate of return.

Public Employees' Retirement System Asset Allocation June 30, 2023

Policy

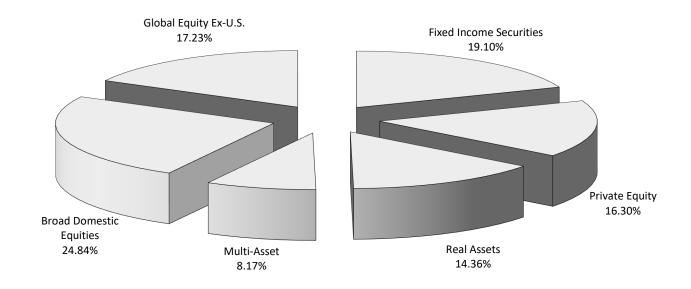


Actual - Defined Benefit Pension

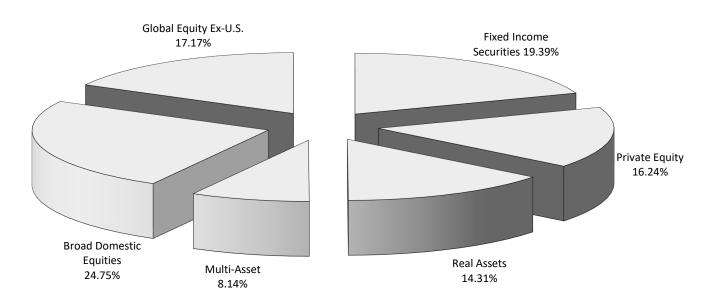


Public Employees' Retirement System Asset Allocation June 30, 2023

Actual - Defined Benefit Alaska Retiree Healthcare Trust

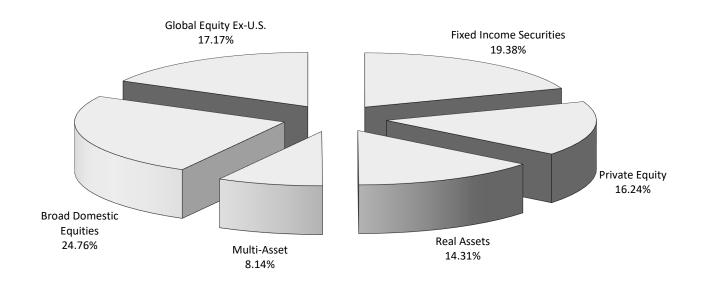


Actual — Occupational Death & Disability

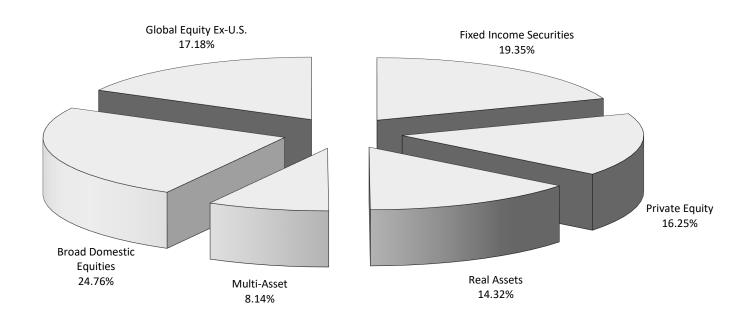


Public Employees' Retirement System Asset Allocation June 30, 2023

Actual — Retiree Medical Plan



Actual — Health Reimbursement Arrangement



Alaska Retirement Management Board Top Ten Holdings by Asset Type June 30, 2023

Invested assets under the fiduciary responsibility of the ARMB have been commingled in various investment pools to manage the overall cost of the program. Using investment pools increases investment efficiency in three ways. First, combining individual funds' cash inflows and outflows to offset each other reduces the amount of cash on hand needed to support daily operations. Second, pooling investments significantly reduces accounting, budgeting, and administrative costs. Finally, the ARMB can achieve economies of scale by making available investment options that could not otherwise be practically provided for smaller retirement funds. Below are the ten largest fixed income and equity holdings.

Fixed Income

Rank	Largest Fixed Income Holdings	Fair Value	Par Value
1	U.S. Treasury N/B 3.875% 5/15/2043	\$119,713,389	\$122,684,658
2	U.S. Treasury N/B 4.125% 6/15/2026	97,592,195	98,585,754
3	U.S. Treasury N/B 4.0% 6/30/2028	87,772,119	88,254,762
4	U.S. Treasury N/B 3.75% 6/30/2030	83,242,910	84,363,361
5	U.S. Treasury N/B 3.625% 2/15/2053	81,524,810	84,949,330
6	U.S. Treasury N/B 1.375% 11/15/2040	74,169,168	110,855,366
7	FNMA Pool CB2662 3.0% 1/1/2052	66,239,403	74,921,977
8	FED HM LN PC Pool SD8230 4.5% 6/1/2052	63,827,237	66,373,555
9	FNMA Pool MA4644 4.0% 5/1/2052	58,401,722	62,196,712
10	U.S. Treasury N/B 3.625% 3/31/2028	57,824,782	59,203,104

Equities

Rank	Largest Equity Holdings	Fair Value	Shares
1	Apple Inc.	\$298,882,334	1,540,869
2	Microsoft Corp.	292,802,565	859,818
3	Amazon.com Inc.	118,823,544	911,503
4	Nvidia Corp.	103,966,094	245,771
5	Meta Platforms Inc. Class A	81,203,773	282,960
6	Alphabet Inc. Class A	80,337,667	671,158
7	Berkshire Hathaway Inc. Class B	75,688,003	221,959
8	Alphabet Inc. Class C	68,553,539	566,699
9	Tesla Inc.	67,292,296	257,066
10	UnitedHealth Group Inc.	56,878,612	118,339

Additional investment information may be obtained from the Department of Revenue, Treasury Division, P.O. Box 110405, Juneau, Alaska 99811-0405.

Public Employees' Retirement System Schedule of Investment Management Fees Year Ended June 30, 2023

	Fair Value	Fees
Investment Management		
Total Fixed Income	\$ 767,114,382	2,410,800
Total Multi-Asset	1,739,894,962	10,039,098
Total Broad Domestic Equity	5,292,695,918	476,923
Total Global Equity Ex-U.S.	3,670,744,913	6,154,025
Total Private Equity	3,472,691,708	13,977,432
Total Real Assets	3,062,783,720	16,507,120
Total Investment Management		49,565,398
Custodian		
State Street Bank		955,417
Investment Advisory and Performance		
Callan Associates		475,321
Investment Advisory Council		52,797
Total Investment Advisory and Performance		528,118
Participant Directed		
Custodian - State Street Bank		251,709
Investment Management		1,907,857
Synthetic Investment Contract Wrap Fees		189,275
Total Participant Directed	 	2,348,841
	\$ 18,005,925,603	53,397,774

	Defined Benefit - Pension					
	Asset Al	location		% of Total		
Investments (at Fair Value)	Policy	Range	Fair Value	Assets		
Fixed Income Securities			_			
Short-term Fixed Income Pool			\$ 120,367,967			
Securities Lending Cash Pool			52,506			
Opportunistic Fixed Income Pool			399,122,150			
ARMB U.S. Aggregate Fixed Income			1,485,390,888			
Transition Pool			140,646,553			
Total Fixed Income Securities	19.00%	±10%	2,145,580,064	19.31%		
Multi-Asset						
Alternative Equity Strategies Pool			112,220,476			
Tactical Allocation Strategies Pool			384,046,559			
Other Opportunities Pool			(38)			
Alternative Beta Pool			104,466,546			
Alternative Fixed Income			304,517,003			
Total Multi-Asset	8.00%	±4%	905,250,546	8.14%		
Broad Domestic Equity						
Large Cap Pool			2,526,195,265			
Small Cap Pool			227,543,931			
Total Broad Domestic Equity	27.00%	±6%	2,753,739,196	24.77%		
Global Equity Ex-U.S.						
International Equity Pool			1,567,079,285			
Emerging Markets Equity Pool			342,774,162			
Total Global Equity Ex-U.S.	18.00%	±4%	1,909,853,447	17.18%		
Private Equity						
Private Equity Pool			1,806,808,241			
Total Private Equity	14.00%	± 7%	1,806,808,241	16.25%		
Real Assets						
Real Estate Pool			586,491,266			
Real Estate Investment Trust Pool			169,924,889			
Infrastructure Private Pool			304,666,537			
Energy Pool			18,999,624			
Farmland Pool			374,317,585			
Timber Pool			140,518,472			
Total Real Assets	14.00%	±7%	1,594,918,373	14.35%		
Total Invested Assets	100.00%		\$ 11,116,149,867	100.00%		

	Defined Contribution - Pension Participant Dire				ted
	Asset Allocation				% of Total
Investments (at Fair Value)	Policy	Range		Fair Value	Assets
Cash and Cash Equivalents					
Short-Term Fixed Income Pool	N/A	N/A	\$	2,961,981	
Total Cash and Cash Equivalents				2,961,981	0.14%
Pooled Investment Funds (1)					
T. Rowe Price					
Alaska Balanced Fund Trust				58,643,169	
Long-Term Balanced Fund				56,262,645	
Target 2010 Trust				2,951,543	
Target 2015 Trust				10,647,888	
Target 2020 Trust				38,034,651	
Target 2025 Trust				84,532,362	
Target 2030 Trust				101,877,292	
Target 2035 Trust				132,649,047	
Target 2040 Trust				154,315,497	
Target 2045 Trust				208,705,775	
Target 2050 Trust				252,051,541	
Target 2055 Trust				278,818,806	
Target 2060 Trust				25,985,249	
Target 2065 Trust				15,689,821	
JP Morgan Smart Spending 2015 R6				9,526	
JP Morgan Smart Retirement Blend				58,367	
Total Pooled Investment Funds				1,421,233,179	66.48%
Collective Investment Funds (1)					
State Street Global Advisors					
SSgA Treasury Money Market Fund				21,707,179	
S&P Stock Index Fund				136,044,270	
Russell 3000 Index				66,919,460	
World Equity Ex-U.S. Index				61,454,369	
Passive U.S. Bond Index Fund				86,472,069	
Brandes Institutional				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Alaska International Equity Fund				55,569,105	
BlackRock Institutional Trust Company				, ,	
Strategic Completion Fund				36,647,948	
RCM					
Sustainable Core Opportunities Fund				31,264,550	
T. Rowe Price					
Small-Cap Stock Fund				87,172,427	
Total Collective Investment Funds				583,251,377	27.29%
Synthetic Investment Funds (1)					
T. Rowe Price					
Stable Value Fund				130,167,035	
				130,167,035	6.09%
Total Invested Assets			\$	2,137,613,572	100.00%

⁽¹⁾ Pooled Investment Funds, Collective Investment Funds and Synthetic Investment Funds are participant directed and therefore are not subject to an asset allocation.

	Asset Al	location		% of Tota
Investments (at Fair Value)	Policy	Range	Fair Value	Assets
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 75,485,524	
Securities Lending Cash Pool			43,180	
Opportunistic Fixed Income Pool			328,261,096	
ARMB U.S. Aggregate Fixed Income			1,221,670,324	
Transition Pool			115,675,751	
Total Fixed Income Securities	19.00%	±10%	1,741,135,875	19.10%
Multi-Asset				
Alternative Equity Strategies Pool			92,296,548	
Tactical Allocation Strategies Pool			315,861,811	
Other Opportunities Pool			(32)	
Alternative Beta Pool			85,919,328	
Alternative Fixed Income			250,452,274	
Total Multi-Asset	8.00%	±4%	744,529,929	8.17%
Broad Domestic Equity				
Large Cap Pool			2,077,687,136	
Small Cap Pool			187,145,100	
Total Broad Domestic Equity	27.00%	±6%	2,264,832,236	24.84%
Global Equity Ex-U.S.				
International Equity Pool			1,288,855,526	
Emerging Markets Equity Pool			281,917,110_	
Total Global Equity Ex-U.S.	18.00%	±4%	1,570,772,636	17.23%
Private Equity				
Private Equity Pool			1,486,022,411	
Total Private Equity	14.00%	±7%	1,486,022,411	16.30%
Real Assets				
Real Estate Pool			479,995,662	
Real Estate Investment Trust Pool			139,755,886	
Infrastructure Private Pool			250,575,133	
Energy Pool			15,626,406	
Farmland Pool			307,860,295	
Timber Pool			115,570,477	
Total Real Assets	14.00%	±7%	1,309,383,859	14.36%
	400.000		A 0.440.000.000	400.000

Total Invested Assets

100.00%

100.00%

9,116,676,946

	Occupational Death and Disability				
	Asset All	location		% of Total	
Investments (at Fair Value)	Policy	Range	Fair Value	Assets	
Fixed Income Securities					
Short-term Fixed Income Pool			\$ 857,340		
Securities Lending Cash Pool			336		
Opportunistic Fixed Income Pool			2,569,203		
ARMB U.S. Aggregate Fixed Income			9,561,774		
Transition Pool			905,370		
Total Fixed Income Securities	19.00%	±10%	13,894,023	19.39%	
Multi-Asset					
Alternative Equity Strategies Pool			722,375		
Tactical Allocation Strategies Pool			2,472,211		
Other Opportunities Pool			-		
Alternative Beta Pool			672,449		
Alternative Fixed Income			1,960,221		
Total Multi-Asset	8.00%	±4%	5,827,256	8.14%	
Broad Domestic Equity					
Large Cap Pool			16,261,623		
Small Cap Pool			1,464,789		
Total Broad Domestic Equity	27.00%	±6%	17,726,412	24.75%	
Global Equity Ex-U.S.					
International Equity Pool			10,087,578		
Emerging Markets Equity Pool			2,206,512		
Total Global Equity Ex-U.S.	18.00%	±4%	12,294,090	17.17%	
Private Equity					
Private Equity Pool			11,630,782		
Total Private Equity	14.00%	±7%	11,630,782	16.24%	
Real Assets					
Real Estate Pool			3,756,786		
Real Estate Investment Trust Pool			1,093,890		
Infrastructure Private Pool			1,961,181		
Energy Pool			122,266		
Farmland Pool			2,409,559		
Timber Pool			904,577		
Total Real Assets	14.00%	±7%	10,248,259	14.31%	
Total Invested Assets	100.00%		\$ 71,620,822	100.00%	

Public Employees' Retirement System Investment Summary Schedule June 30, 2023

	Asset All	ocation		% of Total
Investments (at Fair Value)	Policy	Range	Fair Value	Assets
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 2,841,829	
Securities Lending Cash Pool			1,134	
Opportunistic Fixed Income Pool			8,687,559	
ARMB U.S. Aggregate Fixed Income			32,331,813	
Transition Pool			3,061,387	
Total Fixed Income Securities	19.00%	±10%	46,923,722	19.38%
Multi-Asset				
Alternative Equity Strategies Pool			2,442,703	
Tactical Allocation Strategies Pool			8,359,360	
Other Opportunities Pool			(1)	
Alternative Beta Pool			2,273,928	
Alternative Fixed Income			6,628,310	
Total Multi-Asset	8.00%	±4%	19,704,300	8.14%
Broad Domestic Equity				
Large Cap Pool			54,986,503	
Small Cap Pool			4,952,897	
Total Broad Domestic Equity	27.00%	±6%	59,939,400	24.76%
Global Equity Ex-U.S.				
International Equity Pool			34,109,934	
Emerging Markets Equity Pool			7,461,037	
Total Global Equity Ex-U.S.	18.00%	±4%	41,570,971	17.17%
Private Equity				
Private Equity Pool			39,328,028	
Total Private Equity	14.00%	±7%	39,328,028	16.24%
Real Assets				
Real Estate Pool			12,703,182	
Real Estate Investment Trust Pool			3,698,682	
Infrastructure Private Pool			6,631,511	
Energy Pool			413,562	
Farmland Pool			8,147,591	
Timber Pool			3,058,594	
Total Real Assets	14.00%	± 7%	34,653,122	14.31%
Total Invested Assets	100.00%		\$ 242,119,543	100.00%

Public Employees' Retirement System Investment Summary Schedule June 30, 2023

	Health Reimbursement Arrangement						
	Asset All	ocation		% of Total			
Investments (at Fair Value)	Policy	Range	Fair Value	Assets			
Fixed Income Securities			· ·				
Short-term Fixed Income Pool			\$ 9,058,765				
Securities Lending Cash Pool			3,721				
Opportunistic Fixed Income Pool			28,474,375				
ARMB U.S. Aggregate Fixed Income			105,971,501				
Transition Pool			10,034,080				
Total Fixed Income Securities	19.00%	±10%	153,542,442	19.35%			
Multi-Asset							
Alternative Equity Strategies Pool			8,006,107				
Tactical Allocation Strategies Pool			27,398,898				
Other Opportunities Pool			(3)				
Alternative Beta Pool			7,452,921				
Alternative Fixed Income			21,725,010				
Total Multi-Asset	8.00%	±4%	64,582,933	8.14%			
Broad Domestic Equity							
Large Cap Pool			180,225,145				
Small Cap Pool			16,233,530				
Total Broad Domestic Equity	27.00%	±6%	196,458,675	24.76%			
Global Equity Ex-U.S.							
International Equity Pool			111,799,431				
Emerging Markets Equity Pool			24,454,338				
Total Global Equity Ex-U.S.	18.00%	±4%	136,253,769	17.18%			
Private Equity							
Private Equity Pool			128,902,246				
Total Private Equity	14.00%	±7%	128,902,246	16.25%			
Real Assets							
Real Estate Pool			41,636,313				
Real Estate Investment Trust Pool			12,122,879				
Infrastructure Private Pool			21,735,682				
Energy Pool			1,355,495				
Farmland Pool			26,704,819				
Timber Pool			10,024,920				
Total Real Assets	14.00%	± 7%	113,580,108	14.32%			
Total Invested Assets	100.00%		\$ 793,320,173	100.00%			

Investment Section

Public Employees' Retirement System Recaptured Commission Fees Year Ended June 30, 2023

Fund	Equity U.S.	Multi-Asset	Total
Defined Benefit Plan – Pension	\$ 21	1,408	1,429
Postemployment Benefit – Alaska Retiree Healthcare Trust	17	1,158	1,175
Postemployment Benefit – Occupational Death and Disability	-	9	9
Postemployment Benefit – Retiree Medical Plan	-	29	29
Postemployment Benefit – Health Reimbursement Arrangement	 2	95	97
Total Recapture Commission Fees	\$ 40	2,699	2,739

The ARMB's Commission Recapture program has been in place since 1995, first working with various brokers then switching to the State Street program in 2005. Under a commission recapture program, a portion of the commissions and mark-ups on trades (placed through the State Street broker network) flow directly back to the fund.

The program allows managers to place trades for commission recapture purposes. The ARMB has established direction percentages for the managers to strive for, but is only requiring best efforts to meet them given their fiduciary obligation to achieve best execution of transactions.

The current rebate arrangement with State Street Global Markets (SSGM) is: 90% of the commissions received in excess of executing the brokers' execution-only rates; 100% of commissions in excess of its execution-only rates for all trading directed through SSGM.







ACTUARIAL SECTION





June 5, 2023

State of Alaska
The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
P.O. Box 110203
Juneau, AK 99811-0203

Certification of Actuarial Valuation

Dear Members of The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration:

This report summarizes the annual actuarial valuation results of the State of Alaska Public Employees' Retirement System (PERS) as of June 30, 2022 performed by Buck Global, LLC (Buck).

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP, member data provided by the Division of Retirement and Benefits, and medical enrollment data provided by the healthcare claims administrator (Aetna), as summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2022. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities, and other factors under PERS were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of PERS as of June 30, 2022.

PERS is funded by Employer, State, and Member Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board) and as required by Alaska state statutes. The funding objective for PERS is to pay required contributions that remain level as a percent of total PERS compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, plan expenses, and amortize the Unfunded Actuarial Accrued Liability (UAAL) as a level percentage of total PERS compensation over a closed 25-year period as required by Alaska state statutes. The closed 25-year period was originally established effective June 30, 2014. Effective June 30, 2018, the Board adopted a 25-year layered UAAL amortization method as described in Section 5.2. The UAAL amortization continues to be on a level percent of pay basis. The compensation used to determine required contributions is the total compensation of all active members in PERS, including those hired after July 1, 2006 who are members of the Defined Contribution Retirement (DCR) Plan. This objective is currently being met and is projected to continue to be met. Absent future gains/losses, actuarially determined contributions are expected to remain level as a percent of pay and the funded status of the pension trust is expected to increase to 100% in FY63. The funded status of the healthcare trust is expected to remain at or above 100%.

The Board and staff of the State of Alaska may use this report for the review of the operations of PERS. Use of this report for any other purpose or by anyone other than the Board or staff of the State of Alaska may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or

inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the actuarial assumptions, changes expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. In particular, retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the plan. The actuary performs an analysis of plan experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed for the period July 1, 2017 to June 30, 2021. Based on that experience study, the Board adopted new assumptions effective beginning with the June 30, 2022 valuation to better reflect expected future experience. Based on our annual analysis of recent claims experience, changes were made to the healthcare per capita claims cost rates effective June 30, 2022 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this actuarial valuation is shown in Sections 5.2 and 5.3. We certify that the assumptions and methods described in Sections 5.2 and 5.3 of this report meet the requirements of all applicable Actuarial Standards of Practice.

Actuarial Standards of Practice No. 27 (ASOP 27) and No. 35 (ASOP 35) require the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. Buck provides advice on reasonable assumptions when performing periodic experience studies. The Board selects the assumptions used and annually the signing actuary reviews the assumptions through discussions with the Board staff and analyzing actuarial gain/loss experience. In the case of the Board's selection of the expected return on assets (EROA), the signing actuary has used economic information and tools provided by Buck's Financial Risk Management (FRM) practice. A spreadsheet tool created by the FRM practice converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, the percentiles generated by the spreadsheet tool described above, and review of actuarial gain/loss analysis, the actuary believes the assumptions do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement

Annual Comprehensive Financial Report (ACFR) Information

We have prepared the following information in this report for the Actuarial Section and Statistical Section of the ACFR: (i) member data tables in Section 4; (ii) analysis of financial experience in Section 1.6; (iii) summary of actuarial assumptions in Section 5.3; and (iv) historical information in Section 7.

Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB 67) was effective for PERS beginning with fiscal year ending June 30, 2014, and Statement No. 74 (GASB 74) was effective for PERS beginning with fiscal year ending June 30, 2017. Please see our separate GASB 67 and GASB 74 reports for other information needed for the ACFR.

The following schedules provide further related information. Buck is responsible for the following schedules:

- Funding Excess / (Unfunded Liability)
- Employer Contribution Rates
- Schedule of Active Member Valuation Data
- Schedule of Pension Benefit Recipients Added to and Removed from Rolls
- Pension and Healthcare Solvency Test
- Analysis of Financial Experience
- Schedule of Funding Progress

Assessment of Risks

Actuarial Standard of Practice No. 51 (ASOP 51) applies to actuaries performing funding calculations related to a pension plan. ASOP 51 does not apply to actuaries performing services in connection with other post-employment benefits, such as medical benefits. Accordingly, ASOP 51 does not apply to the healthcare portion of PERS. See Section 6 of this report for further details regarding ASOP 51.

Use of Models

Actuarial Standard of Practice No. 56 (ASOP 56) provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. In addition to the EROA analysis spreadsheet model disclosed above, Buck uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the plan using data and assumptions as of the measurement date under the funding methods specified in this report. The output from the third-party vendor software is used as input to internally developed models that apply applicable funding methods and policies to the derived liabilities and other inputs, such as plan assets and contributions, to generate many of the exhibits found in this report. Buck has an extensive review process in which the results of the liability calculations are checked using detailed sample life output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other funding outputs and the internal models are similarly reviewed in detail and at a higher level for accuracy, reasonability, and consistency with prior results. Buck also reviews the thirdparty model when significant changes are made to the software. This review is performed by experts within Buck who are familiar with applicable funding methods, as well as the manner in which the model generates its output. If significant changes are made to the internal models, extra checking and review are completed. Significant changes to the internal models that are applicable to multiple clients are generally developed, checked, and reviewed by multiple experts within Buck who are familiar with the details of the required changes.

Additional models used in valuing health benefits are described later in the report.

COVID-19

The potential impact of the ongoing COVID-19 pandemic on costs and liabilities was considered and an adjustment was made in setting the medical per capita claims cost assumption. FY21 medical claims were adjusted for a COVID-19 related decline in those claims during the fiscal year. FY22 medical claims were not adjusted. A more detailed explanation on these adjustments is shown in Section 5.2.

This report was prepared under the overall direction of David Kershner, who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries.

Respectfully submitted,

David J. Kershner, FSA, EA, MAAA, FCA Principal, Buck Brett Hunter, ASA, EA, MAAA Senior Consultant, Buck

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms his qualification to render opinions in such matters in accordance with the Qualification Standards of the American Academy of Actuaries.

Stephen R. Oates, ASA, EA, MAAA. FCA

Principal, Buck

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006. Changes in methods were adopted by the Board in January 2019 based on the experience study for the period July 1, 2013 to June 30, 2017. The asset smoothing method used to determine valuation assets was changed effective June 30, 2014.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

A. Actuarial Cost Method

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method, level percent of pay.

Effective June 30, 2018, the Board adopted a layered UAAL amortization method: Layer #1 equals the sum of (i) the UAAL at June 30, 2018 based on the 2017 valuation, plus (ii) the FY18 experience gain/loss. Layer #1 is amortized over the remainder of the 25-year closed period that was originally established in 2014¹. Layer #2 equals the change in UAAL at June 30, 2018 due to the experience study and EGWP implementation. Layer #2 is amortized over a separate closed 25-year period starting in 2018. Future layers will be created each year based on the difference between actual and expected UAAL occurring that year, and will be amortized over separate closed 25-year periods. The UAAL amortization continues to be on a level percent of pay basis. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined.

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

¹Layer #1 is referred to as "initial amount" in Section 1.2 and 1.3 of the Actuarial Valuation

State of Alaska Public Employees' Retirement System

Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

B. Valuation of Assets

The actuarial asset value was reinitialized to equal Fair Value of Assets as of June 30, 2014. Beginning in FY15, the asset valuation method recognizes 20% of the gain or loss each year, for a period of five years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP.

C. Valuation of Retiree Medical and Prescription Drug Benefits

This section outlines the detailed methodology used in the internal model developed by Buck to calculate the initial per capita claims cost rates for the PERS postemployment healthcare plan. Note that the methodology reflects the results of our annual experience rate update for the period from July 1, 2021 to June 30, 2022.

Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods (i.e., medical claims, prescription drug claims, administrative costs, etc.). Separate analysis is limited by the availability and historical credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A claim data is not available by individual, nor is this status incorporated into historical claim data.

Benefits

Medical, prescription drug, dental, vision and audio coverage is provided through the AlaskaCare Retiree Health Plan and is available to employees of the State and subdivisions who meet retirement criteria based on the retirement plan tier in effect at their date of hire. Health plan provisions do not vary by retirement tier or age, except for Medicare coordination for those Medicare-eligible. Dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation because those are retiree-pay all benefits where rates are assumed to be self-supporting. Buck relies upon rates set by a third-party for the DVA benefits. Buck reviewed historical rate-setting information and views contribution rate adjustments made are not unreasonable.

Administration and Data Sources

The plan was administered by Wells Fargo Insurance Services (acquired by HealthSmart, in January 2012) from July 1, 2009 through December 31, 2013 and by Aetna effective January 1, 2014.

Claims incurred for the period from July 2020 through June 2022 (FY21 through FY22) were provided by the State of Alaska from reports extracted from their data warehouse, which separated claims by Medicare status. Monthly enrollment data for the same period was provided by Aetna.

Aetna also provided census information identifying Medicare Part B only participants. These participants are identified when hospital claims are denied by Medicare; Aetna then flags that participant as a Part B only participant. Buck added newly identified participants to our list of Medicare Part B only participants. Buck assumes that once identified as Part B only, that participant remains in that status until we are notified otherwise.

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan

Description of Actuarial Methods and Valuation Procedures

Aetna provided a snapshot file as of July 1, 2022 of retirees and dependents that included a coverage level indicator. The monthly enrollment data includes double coverage participants. These are participants whereby both the retiree and spouse are retirees from the State and both are reflected with Couple coverage in the enrollment. In this case, such a couple would show up as four members in the monthly enrollment (each would be both a retiree and a spouse). As a result, the snapshot census file was used to adjust the total member counts in the monthly enrollment reports to estimate the number of unique participants enrolled in coverage. Based on the snapshot files from the last two valuations, the total member count in the monthly enrollment reports needs to be reduced by approximately 13% to account for the number of participants with double coverage.

Aetna does not provide separate experience by Medicare status in standard reporting so the special reports mentioned above from the data warehouse were used this year to obtain that information and incorporate it into the per capita rate development for each year of experience (with corresponding weights applied in the final per capita cost).

Methodology

Buck projected historical claim data to FY23 for retirees using the following summarized steps:

- Develop historical annual incurred claim cost rates an analysis of medical costs was completed based on claims information and enrollment data provided by the State of Alaska and Aetna for each year in the experience period of FY21 through FY22.
 - Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed
 to project expected future medical and prescription costs for the valuation year (e.g. from the experience period
 up through FY23).
 - Because the reports provided reflected incurred claims, no additional adjustment was needed to determine incurred claims to be used in the valuation.
 - An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For the "no-Part A" individuals who are required to enroll in Medicare Part B, the State is the primary payer for hospital bills and other Part A services. Claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. For Medicare Part B only participants, a lower average claims cost was applied to retirees covered by both Medicare Part A and B vs. retirees covered only by Medicare Part B based upon manual rate models that estimate the Medicare covered proportion of medical costs. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate.
 - Based on census data received from Aetna, less than 1% of the current retiree population was identified as
 having coverage only under Medicare Part B. We assume that 2% of actives hired before April 1, 1986 and
 current retirees who are not yet Medicare eligible will not be eligible for Medicare Part A.
 - Based upon a reconciliation of valuation census data to the snapshot eligibility files provided by Aetna as of July
 1, 2021, and July 1, 2022, Buck adjusted member counts used for duplicate records where participants have
 double coverage; i.e. primary coverage as a retiree and secondary coverage as the covered spouse of another

Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

retiree. This is to reflect the total cost per distinct individual/member which is then applied to distinct members in the valuation census.

- Buck understands that pharmacy claims reported do not reflect rebates. Based on actual pharmacy rebate
 information provided by Optum, rebates were assumed to be 16.2% of pre-Medicare, and 14.3% of Medicare
 prescription drug claims for FY21; and 20.1% of pre-Medicare, and 13.5% of Medicare prescription drug claims
 for FY22.
- 2. Develop estimated EGWP reimbursements Segal provided estimated 2023 EGWP subsidies, developed with the assistance of OptumRx. These amounts are applicable only to Medicare-eligible participants.
- 3. Adjust for claim fluctuation, anomalous experience, etc. explicit adjustments are often made for anticipated large claims or other anomalous experience. FY21 and FY22 experience was thoroughly reviewed to assess the impact of COVID-19 and whether an adjustment to FY21 and FY22 claims was appropriate for use in the June 30, 2022 valuation. FY21 medical per capita claims were noticeably lower than expected, so a 4% load was added to the FY21 medical claims used in the per capita claims cost development to better reflect future expected long-term costs of the plan. FY22 medical per capita claims were reasonable when compared to pre-COVID levels, so no adjustments were made to the FY22 medical claims used in the per capita claims cost development. Total prescription drug claims experience for FY21 and FY22 was reasonable and consistent with FY19 and FY20 experience. Therefore, no adjustment was made to FY21 and FY22 prescription drug claims. Due to group size and demographics, we did not make any additional large claim adjustments. We do blend both Alaska plan-specific and national trend factors as described below. Buck compared data utilized to lag reports and quarterly plan experience presentations provided by the State and Aetna to assess accuracy and reasonableness of data.
- 4. Trend all data points to the projection period project prior years' experience forward to FY23 for retiree benefits on an incurred claim basis. Trend factors derived from historical Alaska-specific experience and national trend factors are shown in the table in item 5 below.
- 5. Apply credibility to prior experience adjust prior year's data by assigning weight to recent periods, as shown at the right of the table below. The Board approved a change in the weighting of experience periods beginning with the June 30, 2017 valuation as outlined below. Note also that for both years of prescription drugs we averaged projected plan costs using Alaska-specific trend factors and national trend factors, assigning 75% weight to Alaska-specific trends and 25% to national trends. For both years of medical we applied 100% weight to national trends because the Alaska-specific trends were impacted by COVID-19:

Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year

Trom Experience Ferrod to Variation real					
Experience Period	Medical	Prescription	Weighting Factors		
FY21 to FY22	8.1% Pre-Medicare / 4.8% Medicare	8.0%	50%		
FY22 to FY23	7.4% Pre-Medicare / 5.6% Medicare	9.5%	50%		

Trend assumptions used for rate development are assessed annually and as additional/improved reporting becomes available, we will incorporate into rate development as appropriate.

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

- 6. Starting in 2022, prior authorization is required for certain specialty medications. There is no change to the medications that are covered by the plan. Segal provided an estimate of the impact of this change to the DB retiree health plan cost for calendar year 2022. The resulting adjustment factors for pre-Medicare prescription drug, Medicare prescription drug, and EGWP costs were applied to claims experience incurred before January 1, 2022. Additionally, starting in 2022, certain preventive benefits for pre-Medicare participants are covered by the plan. Segal provided an estimate of the impact of this change to the DB retiree health plan cost for calendar year 2022. The resulting adjustment factor for pre-Medicare medical costs was applied to claims experience incurred before January 1, 2022.
- 7. Develop separate administration costs no adjustments were made for internal administrative costs. Third party retiree plan administration fees for FY23 are based upon total fees projected to 2023 by Segal based on actual FY22 fees. The annual per participant per year administrative cost rate for medical and prescription benefits is \$449.

D. Healthcare Reform

Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact due to these provisions.

Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions of the health reform legislation apply to the State plan. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.

Because Transitional Reinsurance fees are only in effect until 2016, we excluded these for valuation purposes.

The Further Consolidated Appropriations Act, 2020 passed in December 2019 repealed several healthcare-related taxes, including the Cadillac Tax.

The Tax Cuts and Jobs Act passed in December 2017 included the elimination of the individual mandate penalty and changed the inflation measure for purposes of determining the limits for the High Cost Excise Tax to use chained CPI. It is our understanding the law does not directly impact other provisions of the ACA. While the nullification of the ACA's individual mandate penalty does not directly impact employer group health plans, it could contribute to the destabilization of the individual market and increase the number of uninsured. Such destabilization could translate to increased costs for employers. We have considered this when setting our healthcare cost trend assumptions and will continue to monitor this issue.

The Inflation Reduction Act was signed into law on August 16, 2022. The law contains several provisions that are expected to impact Alaska's Medicare prescription drug plan (EGWP), which will be considered at the next measurement date.

We have not identified any other specific provisions of healthcare reform or its potential repeal that would be expected to have a significant impact on the measured obligation. We will continue to monitor legislative activity.

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

E. Data

In accordance with actuarial standards, we note the following specific data sources and steps taken to value retiree medical benefits:

The Division of Retirement and Benefits provided pension valuation census data, which for people currently in receipt of healthcare benefits was supplemented by coverage data from the healthcare claims administrator (Aetna).

Certain adjustments and assumptions were made to prepare the data for valuation:

- All records provided with retiree medical coverage on the Aetna data were included in this valuation and we
 relied on the Aetna data as the source of medical coverage for current retirees and their dependents.
- Some records in the Aetna data were duplicates due to the double coverage (i.e. coverage as a retiree and as a
 spouse of another retiree) allowed under the plan. Records were adjusted for these members so that each
 member was only valued once. Any additional value of the double coverage (due to coordination of benefits) is
 small and reflected in the per capita costs.
- Covered children included in the Aetna data were valued until age 23, unless disabled. We assumed that those dependents over 23 were only eligible and valued due to being disabled.
- For individuals included in the pension data expecting a future pension, we valued health benefits starting at the same point that the pension benefit is assumed to start.

We are not aware of any other data issues that would be expected to have a material impact on the results and there are no unresolved matters related to the data.

Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

The chart below shows the basis of setting the per capita claims cost assumption, which includes both PERS and TRS.

	Medical				Prescription Drugs (Rx)			
	P	re-Medicare		Medicare		Pre-Medicare		Medicare
A. Fiscal 2021								
1. Incurred Claims	\$	196,566,470	\$	86,512,435	\$	60,691,609	\$	207,822,858
2. Adjustments for Rx Rebates and COVID (Medical only)		7,862,659		3,460,497		(9,832,041)		(29,718,669)
3. Net incurred claims	\$	204,429,129	\$	89,972,932	\$	50,859,568	\$	178,104,189
4. Average Enrollment		18,106		47,025		18,106		47,025
5. Claim Cost Rate (3) / (4)		11,291		1,913		2,809		3,787
6. Trend to Fiscal 2023		1.161		1.107		1.183		1.183
7. Fiscal 2023 Incurred Cost Rate (5) x (6)	\$	13,108	\$	2,117	\$	3,322	\$	4,479
8. Adjustment Factor for 2022 Plan Changes		1.014		1.000		0.913		0.976
9. Adjusted Fiscal 2023 Incurred Cost Rate (7) x (8)	\$	13,290	\$	2,117	\$	3,034	\$	4,371
B. Fiscal 2022								
1. Incurred Claims	\$	197,733,173	\$	98,249,082	\$	64,076,270	\$	230,832,315
2. Adjustments for Rx Rebates		-		-		(12,879,330)		(31,162,363)
3. Net incurred claims	\$	197,733,173	\$	98,249,082	\$	51,196,940	\$	199,669,953
4. Average Enrollment	-	17,072	_	48,698	-	17,072	-	48,698
5. Claim Cost Rate (3) / (4)		11,582		2,018		2,999		4,100
6. Trend to Fiscal 2023		1.074		1.056		1.095		1.095
7. Fiscal 2023 Incurred Cost Rate (5) x (6)	\$	12,439	\$	2,131	\$	3,284	\$	4,490
8. Adjustment Factor for 2022 Plan Changes	-	1.007	_	1.000	-	0.957	-	0.988
9. Adjusted Fiscal 2023 Incurred Cost Rate (7) x (8)	\$	12,526	\$	2,131	\$	3,141	\$	4,436
,			1.			D D	(1	
	P	Med re-Medicare	пса	Medicare		Prescription Dru	gs (I	Medicare
C. Incurred Cost Rate by Fiscal Year								
1. Fiscal 2021 A. (9)		13,290		2,117		3,034		4,371
2. Fiscal 2022 B. (9)		12,526		2,131		3,141		4,436
D. Weighting by Fiscal Year								
1. Fiscal 2021		50%		50%		50%		50%
2. Fiscal 2022		50%		50%		50%		50%
E. Fiscal 2023 Incurred Cost Rate								
1. Rate at Average Age C x D	\$	12,908	\$	2,124	\$	3,088	\$	4,403
2. A verage Aging Factor		0.822		1.279		0.832		1.127
3. Rate at Age 65 (1) / (2)	\$	15,706	\$	1,661	\$	3,712	\$	3,907
E. Dovolomment of Bent A 8rP and Bent P								
F. Development of Part A&B and Part B Only Cost from Pooled Rate Above								
1. Part A&B Average Enrollment				48,233				
2. Part B Only Average Enrollment				465				
3. Total Medicare Average Enrollment B(4)				48,698				
4. Cost ratio for those with Part B only to those with				40,090				
Part A &B				3.300				
5. Factor to determine cost for those with Parts A&B				3.300				
(2) / (3) x (4) + (1) / (3) x 1.00				1.022				
6. Medicare per capita cost for all participants: E(3)			\$	1,661				
7. Cost for those eligible for Parts A &B: (6) / (5)			\$	1,625	1			
8. Cost for those eligible for Part B only: (7) x (4)			\$	5,363				
				2,500	J			

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Description of Actuarial Methods and Valuation Procedures

Following the development of total projected costs, a distribution of per capita claims cost was developed. This was accomplished by allocating total projected costs to the population census used in the valuation. The allocation was done separately for each of prescription drugs and medical costs for the Medicare eligible and pre-Medicare populations. The allocation weights were developed using participant counts by age and assumed morbidity and aging factors. Results were tested for reasonableness based on historical trend and external benchmarks for costs paid by Medicare.

Below are the results of this analysis:

Distribution of Per Capita Claims Cost by Age for the Period July 1, 2022 through June 30, 2023

	Medical and Medicare	Medical and Medicare	Prescription	Medicare EGWP
Age	Parts A & B	Part B Only	Drug	Subsidy
45	\$ 9,585	\$ 9,585	\$ 2,382	\$ —
50	10,844	10,844	2,829	_
55	12,270	12,270	3,369	_
60	13,882	13,882	3,532	_
65	1,625	5,363	3,907	1,309
70	1,794	5,921	4,335	1,452
75	1,981	6,537	4,810	1,611
80	2,209	7,289	4,738	1,587

F. Changes in Methods Since the Prior Valuation

There were no changes in the asset or valuation methods since the prior valuation.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2022 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board at the June 2022 meeting based on the experience study for the period July 1, 2017 to June 30, 2021.

1.	Investment Return	7.25% per year, net of investment expenses.

Salary Scale Salary scale rates based on upon the 2017-2021 actual experience (see Table 1).

Inflation – 2.50% per year. Productivity – 0.25% per year.

3. Payroll Growth 2.75% per year (2.50% inflation + 0.25% productivity).

4. Total Inflation Total inflation as measured by the Consumer Price Index for urban and clerical workers

for Anchorage is assumed to increase 2.50% annually.

Mortality Mortality rates based upon the 2017-2021 actual experience, to the extent the (Pre-commencement) experience was statistically credible.

Employee mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Employee mortality for Others in accordance with the following tables:

- Pension: Pub-2010 General Employee table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Deaths are assumed to result from occupational causes 70% of the time for Peace Officers/Firefighters, and 35% of the time for Others.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Mortality (Post-commencement)

Mortality rates based upon the 2017-2021 actual experience, to the extent the experience was statistically credible.

Retiree mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Retiree mortality for Others in accordance with the following tables:

- Pension: 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 110% of female rates of the Pub-2010 General Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Peace Officer/Firefighters in accordance with the following tables. These tables are applied only after the death of the original member.

- Pension: Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficial mortality for Others in accordance with the following tables. These tables are applied only after the death of the original member.

- Pension: 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Select and ultimate rates based upon the 2017-2021 actual experience (see Tables 2a and 2b).

No changes to the incidence rates from the prior valuation due to insufficient 2017-2021 actual experience (see Tables 3a and 3b). Disability rates cease once a member is eligible for retirement.

Disabilities are assumed to be occupational 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

- 7. Turnover
- 8. Disability

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Post-disability mortality for Peace Officer/Firefighters in accordance with the following tables:

- Pension: Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-disability mortality for Others in accordance with the following tables:

- Pension: Pub-2010 Non-Safety Disabled Retiree table, amount weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

9. Retirement

Retirement rates based on the 2017-2021 actual experience (see Tables 4a and 4b).

Deferred vested members are assumed to retire at their earliest unreduced retirement date.

The modified cash refund annuity is valued as a three-year certain and life annuity.

- 10. Spouse Age Difference
- Males are assumed to be three years older than their wives. Females are assumed to two years younger than husbands.
- 11. Percent Married for Pension
- For Peace Officer/Firefighter, 85% of male members and 60% of female members are assumed to be married at termination from active service. For Others, 75% of male members and 70% of female members are assumed to be married at termination from active service.
- 12. Dependent Spouse Medical Coverage Election
- Applies to members who do not have double medical coverage. For Peace Officer/Firefighters, 75% of male members and 50% of female members are assumed to be married and cover a dependent spouse. For Others, 60% of male members and 50% of female members are assumed to be married and cover a dependent spouse.
- 13. Dependent Children
- Pension: None.
- Healthcare: Benefits for dependent children have been valued only for members currently covering their dependent children. These benefits are only valued through the dependent children's age 23 (unless the child is disabled).
- 14. Imputed Data

Data changes from the prior year which are deemed to have an immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data. Non-vested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

15. Active Data Adjustment	No adjustment was made to reflect participants who terminate employment before the valuation date and are subsequently rehired after the valuation date.
16. Administrative Expenses	The Normal Cost as of June 30, 2022 was increased by the following amounts. These amounts are based on the average of actual administrative expenses during the last two fiscal years. For projections, the percent increase was assumed to remain constant in future years.
	 Pension – \$8,635,000 Healthcare – \$3,818,000
17. Rehire Assumption	The Normal Cost used for determining contribution rates and in the projections includes a rehire assumption to account for anticipated rehires. The Normal Cost shown in the report includes the following assumptions based on the four years of rehire loss experience through June 30, 2021). For projections, these assumptions were assumed to grade to zero uniformly over a 20-year period.
	 Pension – 15.30% Healthcare – 2.40%
18. Re-Employment Option	All re-employed retirees are assumed to return to work under the Standard Option.
19. Service	Total credited service is provided by the State. This service is assumed to be the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs Service). Claimed service is used for vesting and eligibility purposes as described in Section 5.1.
20. Part-Time Service	Peace Officer/Firefighter members are assumed to be full-time employees. For Other members, part-time employees are assumed to earn 0.75 years of service per year.
21. Final Average Earnings	Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.
22. Contribution Refunds	5% of terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non-vested benefits are assumed to have their contributions refunded.
23. Early Retirement Factors	State of Alaska staff provided the early retirement factors, which reflect grandfathered factors.
24. Alaska Cost-of-Living Adjustments (COLA)	Of those benefit recipients who are eligible for the Alaska COLA, 60% of Peace Officers/Firefighters and 65% of Others are assumed to remain in Alaska and receive the COLA.
25. Post-Retirement Pension	50% and 75% of assumed inflation, or 1.25% and 1.875% respectively, is valued for the

Adjustment (PRPA)

annual automatic PRPA as specified in the statute.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

26. Healthcare Participation

100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. For Peace Officer/Firefighters, 20% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible. For Others, 25% of non-system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

27. Medicare Part B Only

We assume that 2% of actives hired before April 1, 1986 and current retirees who are not yet Medicare eligible will not be eligible for Medicare Part A.

28. Healthcare Per Capita Claims Cost

Sample claims cost rates adjusted to age 65 for FY23 medical and prescription drugs are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medications. The pre-Medicare medical cost reflects the coverage of additional preventive benefits.

	_	Medical	_	Prescription Drugs
Pre-Medicare	\$	15,706	\$	3,712
Medicare Parts A & B		1,625		3,907
Medicare Part B Only		5,363		3,907
Medicare Part D - EGWP		N/A		1,309

Members are assumed to attain Medicare eligibility at age 65. All other costs are for the 2023 fiscal year (July 1, 2022 – June 30, 2023).

The EGWP subsidy is assumed to increase in future years by the trend rates shown on the following pages. No future legislative changes or other events are anticipated to impact the EGWP subsidy. If any legislative or other changes occur in the future that impact the EGWP subsidy (which could either increase or decrease the Plan's Actuarial Accrued Liability), those changes will be evaluated and quantified when they occur.

29. Healthcare Morbidity

Morbidity rates (also called aging factors) are used to estimate utilization of healthcare benefits at each age to reflect the fact that healthcare utilization typically increases with age. Separate morbidity rates are used for medical and prescription drug benefits. These rates are based on the 2017-2021 actual experience.

Age	Medical	Prescription drugs
0–44	2.0%	4.5%
45-54	2.5	3.5
55-64	2.5	1.0
65-74	2.0	2.1
75-84	2.2	(0.3)
85-94	0.5	(2.5)
95 +	_	_

30. Healthcare Third Party
Administrator Fees

\$449 per person per year; assumed to increase at 4.50% per year.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

31. Healthcare Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.0% is applied to the FY23 pre-Medicare medical claims costs to get the FY24 medical claims costs.

Fiscal year	Medical pre-65	Medical post-65	Prescription Drugs / EGWP
2023	7.00%	5.50%	7.50%
2024	6.70	5.50	7.20
2025	6.40	5.40	6.90
2026	6.20	5.40	6.65
2027	6.05	5.35	6.35
2028	5.85	5.35	6.10
2029	5.65	5.30	5.80
2030	5.45	5.30	5.55
2031-2038	5.30	5.30	5.30
2039	5.25	5.25	5.25
2040	5.20	5.20	5.20
2041	5.10	5.10	5.10
2042	5.05	5.05	5.05
2043	4.95	4.95	4.95
2044	4.90	4.90	4.90
2045	4.80	4.80	4.80
2046	4.75	4.75	4.75
2047	4.70	4.70	4.70
2048	4.60	4.60	4.60
2049	4.55	4.55	4.55
2050+	4.50	4.50	4.50

For the June 30, 2014 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model estimates trend amounts that are projected out for 80 years. The model has been populated with assumptions that are specific to the State of Alaska.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

 Retired Member Contributions for Medical Benefits Currently contributions are required for PERS members who are under age 60 and have less than 30 years of service (25 for Peace Officer/Firefighter). Eligible Tier 1 members are exempt from contribution requirements. Annual FY23 contributions based on monthly rates shown below for calendar 2023 are assumed based on the coverage category for current retirees. The retiree only rate shown is used for current active and inactive members and spouses in Tier 2 or 3 who are assumed to retire prior to age 60 with less than 30 years of service and who are not disabled. For dependent children, we value 1/3 of the annual retiree contribution to estimate the per child rate based on the assumed number of children in rates where children are covered.

		Calendar 2023				Calendar 2022
Coverage category	_	Annual contribution		Monthly contribution		Monthly contribution
Retiree only	\$	8,448	\$	704	\$	704
Retiree and spouse		16,896		1,408		1,408
Retiree and child(ren)		11,940		995		995
Retiree and family		20,388		1,699		1,699
Composite		12,552		1,046		1,046

33. Trend Rate for Retired Member Medical Contributions

The table below shows the rate used to project the retired member medical contributions from the shown fiscal year to the next fiscal year. For example, 4.0% is applied to the FY23 retired member medical contributions to get the FY24 retired member medical contributions.

Trend Assumptions

Fiscal year:

2023 + 4.0%

Graded trend rates for retired member medical contributions are consistent with the rates used for the June 30, 2021 valuation. Actual FY23 retired member medical contributions are reflected in the valuation.

34. Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting.

The healthcare per capita claims cost assumption is updated annually as described in Section 5.2. The amounts included in the Normal Cost for administrative expenses were changed from \$7,625,000 to \$8,635,000 for pension, and from \$5,531,000 to \$3,318,000 for healthcare (based on the most recent two years of actual administrative expenses paid from plan assets).

Public Employees' Retirement System Defined Benefit Retirement Plan

Summary of Actuarial Assumptions and Changes in Assumptions

Table 1 **Salary Scales**

Peace Officer/Firefighter:	
Years of Service	Percent Increase
< 1	8.50%
1	7.75
2	7.25
3	7.00
4	6.75
5	6.25
6	5.75
7	5.50
8	5.25
9	5.05
10	4.95
11	4.85
12	4.75
13	4.65
14	4.55
15	4.45
16	4.35
17	4.25
18	4.05
19	4.05
20+	3.85

Others:

• • • • • • • • • • • • • • • • • • • •	
Years of Service	Percent Increase
< 1	6.75%
1	6.00
2	5.50
3	5.00
4	4.75
5	4.25
6	4.05
7	3.95
8	3.75
9	3.55
10	3.45
11	3.25
12	3.10
13	3.05
14	3.00
15	2.95
16	2.90
17+	2.85

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 2a Turnover rates for Peace Office/Fighter

Select Rates during the First 5 years of Employment

Years of Service	Male	Female
0	15.00%	15.00%
1	12.00	8.00
2	7.20	6.40
3	5.67	5.60
4	6.48	7.20

Ultimate Rates after the First 5 years of Employment

Years of Service	Male	Female
< 30	2.40%	5.80%
30 - 34	2.00	5.10
35 - 39	1.60	3.00
40 - 44	1.30	3.00
45 - 49	1.50	2.90
50 - 54	3.00	5.00
55 +	2.25	1.80

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 2b Turnover Rates for Others

Select Rates during the First 5 Years of Employment

Hire Age Under 35		Hire Age (Age Over 35	
Years of Service	Male	Female	Male	Female
< 1	29.00%	29.00%	20.00%	20.00%
1	16.25	20.00	12.00	15.00
2	13.00	16.00	10.00	12.50
3	10.40	12.80	8.50	10.00
4	8.45	10.40	8.50	9.00

Ultimate Rates after the First 5 years of Employment

Years of Service	Male	Female
< 30	7.80%	8.20%
30 - 34	7.00	7.10
35 - 39	5.70	5.50
40 - 44	4.50	5.20
45 - 49	4.20	4.40
50 - 54	3.60	4.70
55 +	2.90	4.90

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 3b Disability Rates Other Member Rates

Male	Female	Age	Male	Female
0.0327%	0.0376%	47	0.1208%	0.1236%
0.0360	0.0400	48	0.1329	0.1360
0.0392	0.0424	49	0.1451	0.1484
0.0425	0.0448	50	0.1572	0.1608
0.0456	0.0472	51	0.1694	0.1734
0.0489	0.0496	52	0.1815	0.1858
0.0501	0.0510	53	0.2132	0.2168
0.0513	0.0524	54	0.2450	0.2478
0.0524	0.0538	55	0.2766	0.2788
0.0536	0.0554	56	0.3084	0.3098
0.0548	0.0568	57	0.3401	0.3408
0.0566	0.0586	58	0.4068	0.4096
0.0584	0.0606	59	0.4736	0.4784
0.0602	0.0624	60	0.5405	0.5470
0.0620	0.0644	61	0.6072	0.6158
0.0638	0.0662	62	0.6740	0.6844
0.0669	0.0696	63	0.8526	0.8450
0.0701	0.0728	64	1.0314	1.0054
0.0734	0.0762	65	1.2101	1.1660
0.0765	0.0794	66	1.3889	1.3264
0.0797	0.0826	67	1.5675	1.4870
0.0879	0.0908	68	1.0451	0.9914
0.0962	0.0990	69	0.5225	0.4956
0.1043	0.1072	70+	0.5225	0.4956
0.1125	0.1154			
	0.0327% 0.0360 0.0392 0.0425 0.0456 0.0489 0.0501 0.0513 0.0524 0.0536 0.0548 0.0566 0.0584 0.0602 0.0620 0.0638 0.0669 0.0701 0.0734 0.0765 0.0797 0.0879 0.0962 0.1043	0.0327% 0.0376% 0.0360 0.0400 0.0392 0.0424 0.0425 0.0448 0.0456 0.0472 0.0489 0.0496 0.0501 0.0510 0.0513 0.0524 0.0536 0.0538 0.0536 0.0554 0.0548 0.0568 0.0586 0.0586 0.0584 0.0606 0.0602 0.0624 0.0620 0.0644 0.0638 0.0662 0.0701 0.0728 0.0734 0.0762 0.0797 0.0826 0.0879 0.0908 0.0962 0.0990 0.1043 0.1072	0.0327% 0.0376% 47 0.0360 0.0400 48 0.0392 0.0424 49 0.0425 0.0448 50 0.0456 0.0472 51 0.0489 0.0496 52 0.0501 0.0510 53 0.0513 0.0524 54 0.0524 0.0538 55 0.0536 0.0554 56 0.0548 0.0568 57 0.0566 0.0586 58 0.0584 0.0606 59 0.0602 0.0624 60 0.0620 0.0644 61 0.0638 0.0662 62 0.0669 0.0696 63 0.0701 0.0728 64 0.0734 0.0762 65 0.0797 0.0826 67 0.0879 0.0908 68 0.0962 0.0990 69 0.1043 0.1072 70+	0.0327% 0.0376% 47 0.1208% 0.0360 0.0400 48 0.1329 0.0392 0.0424 49 0.1451 0.0425 0.0448 50 0.1572 0.0456 0.0472 51 0.1694 0.0489 0.0496 52 0.1815 0.0501 0.0510 53 0.2132 0.0513 0.0524 54 0.2450 0.0524 0.0538 55 0.2766 0.0536 0.0554 56 0.3084 0.0548 0.0568 57 0.3401 0.0566 0.0586 58 0.4068 0.0584 0.0606 59 0.4736 0.0602 0.0624 60 0.5405 0.0620 0.0644 61 0.6072 0.0638 0.0662 62 0.6740 0.0696 63 0.8526 0.0701 0.0728 64 1.0314 0.0734 0.0762 <t< td=""></t<>

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 4a Peace Officer / Firefighter Retirement Table

Retirement Rate

	Red	luced	Unre	educed
Age at Retirement	Male	Female	Male	Female
<47	N/A	N/A	9.00%	7.50%
47	N/A	N/A	13.00	18.50
48	N/A	N/A	13.00	18.50
49	N/A	N/A	13.00	18.50
50	5.00%	5.00%	20.00	21.00
51	5.00	5.00	20.00	21.00
52	7.00	7.00	20.00	21.00
53	7.00	7.00	20.00	21.00
54	7.00	7.00	20.00	21.00
55	7.50	7.50	29.00	20.00
56	7.50	7.50	29.00	20.00
57	7.50	7.50	29.00	20.00
58	7.50	7.50	29.00	20.00
59	20.00	20.00	29.00	20.00
60 - 64	N/A	N/A	29.00	31.50
65 - 69	N/A	N/A	45.00	45.00
70+	N/A	N/A	100.00	100.00

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 4b All Others Retirement Table

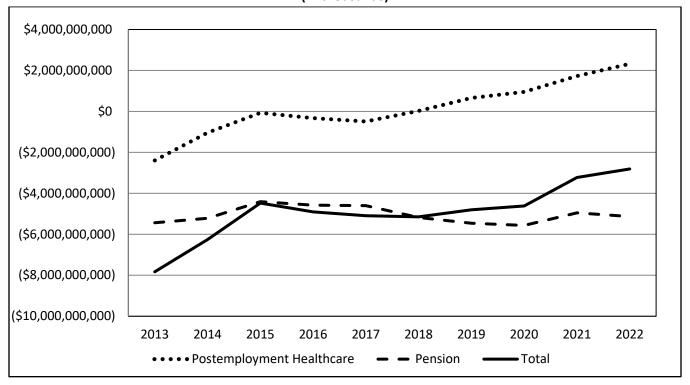
Retirement Rate

	Red	uced	Unre	duced
Age at Retirement	Male	Female	Male	Female
< 50	N/A	N/A	11.50%	11.50%
50	7.00%	8.50%	37.50	40.50
51	7.00	8.50	37.50	40.50
52	11.00	8.50	37.50	40.50
53	11.00	8.50	37.50	40.50
54	24.00	16.50	37.50	24.00
55	7.00	6.50	25.50	24.00
56	7.00	6.50	25.50	24.00
57	7.00	6.50	25.50	24.00
58	7.00	6.50	25.50	24.00
59	18.00	22.00	25.50	24.00
60 - 64	N/A	N/A	26.50	24.50
65 - 69	N/A	N/A	30.50	28.50
70 - 74	N/A	N/A	27.50	27.50
75 - 79	N/A	N/A	50.00	50.00
80 +	N/A	N/A	100.00	100.00

Public Employees' Retirement System Defined Benefit Retirement Plan Funding Excess/(Unfunded Liability) (In thousands)

Actuarial Valuation Year Ended June 30	Postemployment Healthcare	Pension	Total Funding Excess/ (Unfunded Liability)	Funded Ratio
2022	\$ 2,322,874	(5,132,181)	(2,809,307)	87.7%
2021	1,724,985	(4,953,266)	(3,228,281)	85.5
2020	952,808	(5,565,815)	(4,613,007)	79.3
2019	658,797	(5,462,487)	(4,803,690)	78.4
2018	28,405	(5,175,841)	(5,147,436)	76.0
2017	(492,197)	(4,602,427)	(5,094,624)	74.4
2016	(325,127)	(4,576,371)	(4,901,498)	70.0
2015	(68,435)	(4,406,769)	(4,475,204)	75.4
2014	(1,036,453)	(5,216,321)	(6,252,774)	70.1
2013	(2,395,001)	(5,435,132)	(7,830,133)	60.8

10-YEAR TREND OF FUNDING EXCESS/(UNFUNDED) LIABLITY (In thousands)



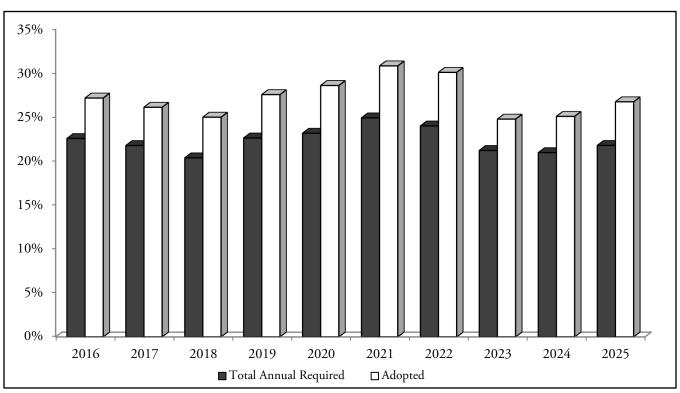
Public Employees' Retirement System Defined Benefit Retirement Plan Employer Contribution Rates

	Actuarially Determined				
Year Ended June 30	Actuarial Valuation Year Ended June 30	Normal Cost ¹	Past Service	Total Annual Required	Adopted
2025	2022	4.09	17.70	21.79	26.76
2024	2021	4.64	16.33	20.97	25.10
2023	2020	5.21	16.01	21.22	24.79
2022	2019	5.70	18.31	24.01	30.11
2021	2018	6.70	18.23	24.93	30.85
2020	2017	5.74	17.44	23.18	28.62
2019	2016	6.11	16.53	22.64	27.58
2018	2015	5.10	15.28	20.38	25.01
2017	2014	5.76	16.02	21.78	26.14
2016	2013	6.05	16.53	22.58	27.19

¹ Also referred to as the consolidated rate.

Beginning with the June 30, 2014 valuation, contribution rates for FY17 and beyond are determined using new methodology in accordance with 2014 legislation under HB 385 and SB 119, 2014 Alaska Laws, which changed the amortization methodology to a closed 25-year period as a level percentage of pay, and eliminated the time lag on the contribution rate calculation by using a 2-year year "roll-forward" approach and assuming 0% population growth. Investment gains and losses are recognized over a 5-year period beginning in FY15. Beginning with the June 30, 2018 valuation, the UAAL amortization was changed as described in Section 5.2.

10-YEAR COMPARISON OF AVERAGE EMPLOYER CONTRIBUTION RATES



Public Employees' Retirement System
Defined Benefit Retirement Plan
Schedule of Active Member Data

Valuation Date	Number	Annual Earnings (In thousands)	Annual Average Earnings	Percent Increase in Average Earnings	Number of Participating Employers			
All Others								
June 30, 2022	7,781	\$ 650,807	\$ 83,641	3.3%	150			
June 30, 2021	8,751	708,718	80,987	3.0	151			
June 30, 2020	9,767	767,817	78,613	1.7	153			
June 30, 2019	10,770	832,832	77,329	4.6	155			
June 30, 2018	11,927	881,716	73.926	1.0	155			
June 30, 2017	13,113	960,106	73,218	1.4	155			
June 30, 2016	14,401	1,039,960	72,214	3.2	155			
June 30, 2015	15,833	1,108,218	69,994	2.1	159			
June 30, 2014	17,339	1,188,918	68,569	3.4	159			
June 30, 2013	18,890	1,252,786	66,320	4.5	159			
Peace Officer / Firefighter								
June 30, 2022	1,014	\$ 137,252	\$ 135,357	6.3%	150			
June 30, 2021	1,137	144,771	127,327	3.2	151			
June 30, 2020	1,266	156,271	123,436	2.8	153			
June 30, 2019	1,382	165,963	120,089	10.6	155			
June 30, 2018	1,507	163,630	108,580	1.5	155			
June 30, 2017	1,606	171,821	106,987	1.6	155			
June 30, 2016	1,704	179,461	105,317	3.8	155			
June 30, 2015	1,827	185,350	101,450	2.5	159			
June 30, 2014	1,958	193,737	98,946	3.4	159			
June 30, 2013	2,065	197,534	95,658	4.8	159			

Total and average annual earnings ("valuation pay") are the annualized earnings for the fiscal year ending on the valuation date.

Public Employees' Retirement System Defined Benefit Retirement Plan Schedule of Pension Benefit Recipients Added to and Removed from Rolls

	Added to Rolls		Removed from Rolls Rolls		Rolls -	End of Year			
Year Ended	No.*	Annual Pension Benefits*	No.*	Annual Pension Benefits*	No.	Annual Pension Benefits	Percent Increase in Annual Pension Benefits	Average Annual Pension Benefit	
All Others									
June 30, 2022	1,453	\$ 44,793,084	1,009	\$ (5,580,072)	34,488	\$ 846,462,743	6.3%	\$ 24,544	
June 30, 2021	1,576	44,216,256	1,070	20,522,550	34,044	796,089,587	3.1	23,384	
June 30, 2020	1,472	42,340,608	779	9,911,423	33,538	772,395,881	4.4	23,030	
June 30, 2019	1,543	43,301,707	765	3,096,594	32,845	739,966,696	5.7	22,529	
June 30, 2018	1,708	46,316,673	673	10,533,376	32,067	699,761,583	5.4	21,823	
June 30, 2017	1,699	44,619,382	816	14,610,212	31,032	663,978,286	4.7	21,397	
June 30, 2016	1,780	44,409,702	660	12,099,362	30,149	633,969,116	5.4	21,028	
June 30, 2015	1,583	39,939,292	627	7,232,812	29,029	601,658,776	5.7	20,726	
June 30, 2014	1,778	44,823,611	603	3,011,383	28,073	568,952,296	7.9	20,267	
June 30, 2013	1,808	43,247,667	554	4,861,626	26,898	527,140,068	7.9	19,598	
Peace Officer / Firefighter									
June 30, 2022	157	\$ 8,928,276	75	\$ (1,692,346)	3,755	\$ 153,738,267	7.4%	\$ 40,942	
June 30, 2021	191	9,635,568	86	2,931,719	3,673	143,117,645	4.9	38,965	
June 30, 2020	164	8,472,240	61	1,078,932	3,568	136,413,796	5.7	38,233	
June 30, 2019	149	6,713,940	71	233,335	3,465	129,020,488	5.3	37,235	
June 30, 2018	153	7,002,504	81	2,573,694	3,387	122,539,883	3.7	36,179	
June 30, 2017	165	6,971,580	54	2,132,027	3,315	118,111,073	4.3	35,629	
June 30, 2016	137	6,618,744	49	1,594,394	3,204	113,271,520	4.6	35,353	
June 30, 2015	136	5,617,344	46	633,046	3,116	108,247,168	4.8	34,739	
June 30, 2014	109	4,270,620	50	(145,771)	3,026	103,262,870	4.5	34,125	
June 30, 2013	113	4,162,920	42	240,775	2,967	98,846,479	4.1	33,315	

^{*} Numbers are estimated and include other internal transfers.

Public Employees' Retirement System Defined Benefit Retirement Plan Pension Solvency Test (In thousands)

	Pension Actuarial Accrued Liability For:				Portion of Actuarial Accrued Liabilities Covered by Assets:		
Valuation Date	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)	Pension Valuation Assets	(1)	(2)	(3)
June 30, 2022	\$ 1,220,552	\$ 12,209,639	\$ 2,663,488	\$ 10,961,498	100.0%	79.8%	-%
June 30, 2021	1,291,313	11,524,330	2,604,332	10,466,709	100.0	79.6	_
June 30, 2020	1,336,269	11,210,836	2,732,420	9,713,710	100.0	74.7	_
June 30, 2019	1,375,913	10,801,729	2,861,538	9,576,693	100.0	75.9	_
June 30, 2018	1,411,881	10,300,818	2,893,334	9,430,192	100.0	77.8	_
June 30, 2017	1,435,091	9,505,267	2,891,772	9,229,703	100.0	82.0	_
June 30, 2016	1,458,830	9,147,818	3,026,385	9,056,662	100.0	83.1	_
June 30, 2015	1,475,852	8,762,863	3,099,214	8,931,160	100.0	85.1	_
June 30, 2014	1,486,335	8,264,683	3,196,741	7,731,438	100.0	75.6	_
June 30, 2013	1,479,538	7,514,255	2,952,088	6,510,749	100.0	67.0	_

Change in assumptions reflected in 2022, 2018, and 2014 valuation reports. Change in methods reflected in 2014 valuation report.

Public Employees' Retirement System Defined Benefit Retirement Plan Healthcare Solvency Test (In thousands)

	Actuari	Healthcare Il Accrued Liability For:				of Actuarial s Covered b	
Valuation Date	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)	Healthcare Valuation Assets	(1)	(2)	(3)
June 30, 2022	\$ —	\$ 5,188,441	\$ 1,468,628	\$ 8,979,943	100.0%	100.0%	100.0%
June 30, 2021	_	5,260,804	1,595,366	8,581,155	100.0	100.0	100.0
June 30, 2020	_	5,306,689	1,729,861	7,989,358	100.0	100.0	100.0
June 30, 2019	_	5,304,790	1,846,904	7,810,491	100.0	100.0	100.0
June 30, 2018	_	5,546,497	2,111,607	7,686,509	100.0	100.0	100.0
June 30, 2017	_	5,671,509	2,377,756	7,557,068	100.0	100.0	79.3
June 30, 2016	_	5,393,537	2,342,920	7,411,330	100.0	100.0	86.1
June 30, 2015	_	5,159,283	2,151,451	7,242,299	100.0	100.0	96.8
June 30, 2014	_	5,455,114	2,494,499	6,913,160	100.0	100.0	58.5
June 30, 2013	-	5,298,380	2,748,498	5,651,877	100.0	100.0	12.9

Change in assumptions reflected in 2022, 2018, 2016, and 2014 valuation reports. Change in methods reflected in 2018 and 2014 valuation reports.

Public Employees' Retirement System Defined Benefit Retirement Plan Analysis of Financial Experience

Change in Employer/State Contribution Rate Due to (Gains) and Losses in Actuarial Accrued Liabilities During the Last Five Fiscal Years Resulting from Differences Between Assumed Experience and Actual Experience

	Change in Employer/State Contribution Rate During Fiscal Year Total				
Type of (Gain) or Loss	2022	2021	2020	2019	2018
Health Claims	(0.11)%	(0.12)%	(0.87)%	(2.39)%	(1.51)%
Salary Experience	0.13	0.05	(0.03)	0.16	(0.30)
Investment Experience	(0.34)	(1.06)	0.75	0.88	0.92
Demographic Experience and Miscellaneous	0.15	(0.80)	0.19	0.71	(0.82)
Actual vs Expected Contributions	(0.14)	(0.06)	(0.01)	0.13	0.20
(Gain) or Loss During Year From Experience	(0.31)	(1.99)	0.03	(0.51)	(1.51)
Assumption / Method Changes	0.32	_	_	_	3.85
System Benefit Changes	_	(0.03)	_	_	_
Composite (Gain) or Loss During Year	0.01	(2.02)	0.03	(0.51)	2.34
Beginning Total Employer/State Contribution Rate	22.09	24.11	24.08	24.59	22.25
Ending Valuation Year Employer/State Contribution Rate	<u>22.10</u> %	<u>22.09</u> %	<u>24.11</u> %	<u>24.08</u> %	<u>24.59</u> %
Fiscal Year Employer/State Contribution Rate	20.03%	18.47%	18.38%	24.01%	24.93%
Fiscal Year for which Rate Applies	FY25	FY24	FY23	FY22	FY21

Public Employees' Retirement System Defined Benefit Retirement Plan Analysis of Financial Experience

Change in Employer/State Contribution Rate Due to (Gains) and Losses in Actuarial Accrued Liabilities During the Last Three Fiscal Years Resulting from Differences Between Assumed Experience and Actual Experience

	Change in Employer/State Contribution Rate During Fiscal Year					
_ ,		Pension		Healthcare		
Type of (Gain) or Loss	2022	2021	2020	2022	2021	2020
Health Claims	N/A	N/A	N/A	(0.11)%	(0.12)%	(0.87)%
Salary Experience	0.13%	0.05%	(0.03)%	N/A	N/A	N/A
Investment Experience	(0.34)	1.06	0.44	_	_	0.31
Demographic Experience and Miscellaneous	0.52	(0.54)	(0.19)	(0.37)	(0.26)	0.38
Actual vs Expected Contributions	(0.14)	(0.06)	0.15	_	_	(0.16)
(Gain) or Loss During Year From Experience	0.17	(1.61)	0.37	(0.48)	(0.38)	(0.34)
Assumption and Method Changes	0.54	_	_	(0.22)	_	_
System Benefit Changes	_	_	_	_	(0.03)	_
Composite (Gain) or Loss During Year	0.71	(1.61)	0.37	(0.70)	(0.41)	(0.34)
Beginning Employer/State Contribution Rate	18.93	20.54	20.17	3.16	3.57	3.91
Ending Valuation year Employer/State Contribution Rate	<u>19.64%</u>	<u>18.93%</u>	<u>20.54</u> %	<u>2.46</u> %	<u>3.16</u> %	<u>3.57</u> %
Fiscal Year Employer/State Contribution Rate	20.03%	18.47%	18.38%	1.94%	0.00%	0.00%
Fiscal Year for Which Rate Applies	FY25	FY24	FY23	FY25	FY24	FY23

Public Employees' Retirement System Defined Benefit Retirement Plan Defined Benefit Pension Schedule of Funding Progress (In thousands)

Valuation Date June 30*	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Annual Active Member Payroll	UAAL as a Percent of Annual Active Member Payroll
2022	\$ 16,093,679	\$ 10,961,498	68.1%	\$ 5,132,181	\$ 796,666	644.2%
2021	15,419,975	10,466,709	67.9%	4,953,266	858,641	576.9%
2020	15,279,525	9,713,710	63.6%	5,565,815	930,061	598.4%
2019	15,039,180	9,576,693	63.7%	5,462,487	1,004,467	543.8%
2018	14,606,033	9,430,192	64.6%	5,175,841	1,049,152	493.3%
2017	13,832,130	9,229,703	66.7%	4,602,427	1,159,599	396.9%
2016	13,633,033	9,056,662	66.4%	4,576,371	1,247,884	366.7%
2015	13,337,929	8,931,160	67.0%	4,406,769	1,322,925	333.1%
2014	12,947,759	7,731,438	59.7%	5,216,321	1,412,237	369.4%
2013	11,945,881	6,510,749	54.5%	5,435,132	1,514,034	359.0%

Public Employees' Retirement System Defined Benefit Retirement Plan Alaska Retiree Healthcare Trust Schedule of Funding Progress (In thousands)

Valuation Date June 30*	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded / (Excess funded) Actuarial Accrued Liability (UAAL)	Annual Active Member Payroll	UAAL as a Percent of Annual Active Member Payroll
2022	\$ 6,657,069	\$ 8,979,943	134.9%	\$ (2,322,874)	\$ 796,666	(291.6)%
2021	6,856,170	8,581,155	125.2%	(1,724,985)	858,641	(200.9)%
2020	7,036,550	7,989,358	113.5%	(952,808)	930,061	(102.4)%
2019	7,151,694	7,810,491	109.2%	(658,797)	1,004,467	(65.6)%
2018	7,658,104	7,686,509	100.4%	(28,405)	1,049,152	(2.7)%
2017	8,049,265	7,557,068	93.9%	492,197	1,159,599	42.4%
2016	7,736,457	7,411,330	95.8%	325,127	1,247,884	26.1%
2015	7,310,734	7,242,299	99.1%	68,435	1,322,925	5.2%
2014	7,949,613	6,913,160	87.0%	1,036,453	1,412,237	73.4%
2013	8,046,878	5,651,877	70.2%	2,395,001	1,514,034	158.2%

State of Alaska Public Employees' Retirement System Defined Benefit Retirement Plan

Summary of Plan Provisions and Changes in Plan Provisions

1. Effective Date

January 1, 1961, with amendments through June 30, 2022. Chapter 82, 1986 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under PERS before July 1, 1986 (Tier 1) are eligible for different benefits than members hired after June 30, 1986 (Tier 2). Chapter 4, 1996 Session Laws of Alaska created a third tier for members who were first hired after June 30, 1996 (Tier 3). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

2. Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the system. The Attorney General of the state is the legal counsel for the system and shall advise the administrator and represent the system in legal proceedings.

Prior to June 30, 2005, the Public Employees' Retirement Board prescribed policies and adopted regulations and performed other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division was responsible for investing PERS funds.

On July 27, 2005, Senate Bill 141, enacted as Chapter 9, 2005 Session laws of Alaska, replaced the Public Employees' Retirement Board and the Alaska State Pension Investment Board with the Alaska Retirement Management Board.

3. Employers Included

Currently there are 150 employers participating in PERS, including the State of Alaska and 149 political subdivisions and public organizations. Two additional political subdivisions participate in PERS for healthcare benefits only.

4. Membership

PERS membership is mandatory for all permanent full-time and part-time employees of the State of Alaska and participating political subdivisions and public organizations, unless they are specifically excluded by Alaska Statute or employer participation agreements. Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by PERS. Elected officials may waive PERS membership.

Certain members of the Alaska Teachers' Retirement System (TRS) are eligible for PERS retirement benefits for their concurrent elected public official service with municipalities. In addition, employees who work half-time in PERS and TRS simultaneously are eligible for half-time PERS and TRS credit.

Senate Bill 141, signed into law on July 27, 2005, closes the plan effective July 1, 2006, to new members first hired on or after July 1, 2006.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

5. Credited Service

Permanent employees who work at least 30 hours a week earn full-time credit; part-time employees working between 15 and 30 hours a week earn partial credit based on the number of hours worked. Members receiving PERS occupational disability benefits continue to earn PERS credit while disabled. Survivors who are receiving occupational death benefits continue to earn PERS service credit while occupational survivor benefits are being paid.

Members may claim other types of service, including:

- part-time State of Alaska service rendered after December 31, 1960, and before January 1, 1976;
- service with the State, former Territory of Alaska, or U.S. Government in Alaska before January 1, 1961;
- past Peace Officer, correctional officer, fire fighter, and special officer service after January 1, 1961;
- military service (not more than five years may be claimed);
- temporary service after December 31, 1960;
- elected official service before January 1, 1981;
- Alaska Bureau of Indian Affairs service;
- past service rendered by employees who worked half-time in PERS and TRS simultaneously;
- leave without pay service after June 13, 1987, while receiving Workers' Compensation;
- Village Public Safety Officer service; and
- service as a temporary employee of the legislature before July 1, 1979, but this service must have been claimed no later than July 1, 2003, or by the date of retirement, if sooner (not more than ten years may be claimed).

Except for service before January 1, 1961, with the State, former Territory of Alaska, or U.S. Government in Alaska, contributions are required for all past service.

Past employment with participating political subdivisions that occurred before the employers joined PERS is creditable if the employers agree to pay the required contributions.

At the election of certain PERS members, certain service may be credited in the same fashion as members in TRS.

Members employed as dispatchers or within a state correctional facility may, at retirement, elect to convert their dispatcher or correctional facility service from "all other" service to Peace Officer/Firefighter service and retire under the 20-year retirement option. Members pay the full actuarial cost of conversion.

6. Employer Contributions

PERS employers contribute the amounts required, in addition to employees' contributions, to fund the benefits of the system.

The normal cost rate is a uniform rate for all participating employers (less the value of members' contributions).

The past service rate is a uniform rate for all participating employers to amortize the unfunded past service liability with

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

payments that are a level percentage of payroll amount over a closed 25-year period starting June 30, 2014. Effective June 30, 2018, each future year's unfunded service liability is separately amortized on a level percent of pay basis over 25 years.

Employer rates cannot be less than the normal cost rate.

Pursuant to AS 39.35.255 effective July 1, 2008, and subsequently amended on July 1, 2021, each non-state PERS employer will pay a simple uniform contribution rate of 22% of non-state member payroll and the State as an employer will pay the total contribution rate, adopted by the Board, of State member payroll.

7. Additional State Contributions

Pursuant to AS 39.35.280 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that, when combined with the total employer contributions, will be sufficient to pay the total contribution rate adopted by the Board.

8. Member Contributions

Mandatory Contributions: Peace Officer/Firefighter members are required to contribute 7.5% of their compensation; all Others contribute 6.75%. Those all Others who have elected to have their service calculated under TRS rules contribute 9.76% of their compensation. Members' contributions are deducted from gross wages before federal income taxes are withheld.

Contributions for Claimed Service: Member contributions are also required for most of the claimed service described above

Voluntary Contributions: Members may voluntarily contribute up to 5% of their salary on an after-tax basis. Voluntary contributions are recorded in a separate account and are payable to the:

- a. member in lump sum payment upon termination of employment;
- b. member's beneficiary if the member dies; or
- c. member in a lump sum, life annuity, or payments over a designated period of time when the member retires.

Interest: Members' contributions earn 4.5% interest, compounded semiannually on June 30 and December 31.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts which includes their mandatory and voluntary contributions, indebtedness payments, and interest earned. Terminated members' accounts may be attached to satisfy claims under Alaska Statute 09.38.065, federal income tax levies, and valid Qualified Domestic Relations Orders.

Reinstatement of Contributions: Refunded accounts and the corresponding PERS service may be reinstated upon reemployment in PERS prior to July 1, 2010. Interest accrues on refunds until paid in full or members retire.

Public Employees' Retirement System Defined Benefit Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

9. Retirement Benefits

Eligibility:

- a. Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1986 (Tier 1), and 60 or early retirement at age 55 if they were hired after July 1, 1986 (Tiers 2 & 3). Additionally, they must have at least:
 - i. five years of paid-up PERS service;
 - ii. 60 days of paid-up PERS service as employees of the legislature during each of the five legislative sessions and they were first hired by the legislature before May 30, 1987;
 - iii. 80 days of paid-up PERS service as employees of the legislature during each of the five legislative sessions and they were first hired by the legislature after May 29, 1987;
 - iv. two years of paid-up PERS service and they are vested in the Teachers' Retirement System (TRS); or
 - v. two years of paid-up PERS service and a minimum three years of TRS service to qualify for a public service benefit.
- b. Members may retire at any age when they have:
 - vi. 20 paid-up years of PERS Peace Officer/Firefighter service; or
 - vii. 30 paid-up years of PERS "all other" or "elected official" service.

Benefit Type: Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements under the "20 and out" or "30 and out" provisions. Members may receive early, reduced benefits when they reach early retirement age and complete the service required. Benefits are reduced by 6% per year prior to a member's normal retirement date.

Members may select a joint and survivor option. Members who entered PERS prior to July 1, 1996 may also select a 66-2/3 last survivor option or a level income option. Under these options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculations: Retirement benefits are calculated by multiplying the average monthly compensation (AMC) times credited PERS service times the percentage multiplier. The AMC is determined by averaging the salaries earned during the five highest (three highest for Peace Officer/Firefighter members or members hired prior to July 1, 1996) consecutive payroll years. Members must earn at least 115 days of credit in the last year worked to include it in the AMC calculation. PERS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers for Peace Officer/Firefighter members are 2% for the first ten years of service and 2.5% for all service over ten years.

The percentage multipliers for all Others are 2% for the first ten years, 2.25% for the next ten years, and 2.5% for all remaining service earned on or after July 1, 1986. All service before that date is calculated at 2%.

Salaries are subject to compensation limits under IRC 401(a)(17) for members first hired on or after July 1, 1996. Retirement benefit amounts are subject to IRC 415(b) limits regardless of hire date.

Indebtedness: Members who terminate and refund their PERS contributions are not eligible to retire unless they return to PERS employment and pay back their refunds plus interest or accrue additional service which qualifies them for retirement. PERS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded PERS service is included in total service for the purpose of calculating retirement benefits. However, when refunds are not completely paid before retirement, benefits are actuarially reduced for life. Indebtedness balances may also be created when a member purchases qualified claimed service.

Reemployment of Retired Members: Retirement and retiree healthcare benefits are suspended while retired members are reemployed under PERS. During reemployment, members earn additional PERS service and contributions are withheld from their wages. A member who retired with a normal retirement benefit can elect to waive payment of PERS contributions. The waiver allows the member to continue receiving the retirement benefit during the period of reemployment. Members who elect the waiver option do not earn additional PERS service. The Waiver Option first became effective July 1, 2005 and applies to reemployment periods after that date. The Waiver Option is not available to members who retired early or under the Retirement Incentive Programs (RIPs). The Waiver Option is no longer available after June 30, 2009.

Members retired under the Retirement Incentive Programs (RIPs) who return to employment will:

- a. forfeit the three years of incentive credits that they received;
- b. owe PERS 150% of the benefits that they received for state and political subdivision members, and 110% for school district employees, under the 1996-2000 RIP, which may include costs for health insurance, excluding amounts that they paid to participate for the 1986 and 1989 RIPs. Under prior RIPs, the penalty is 110% of the benefits received; and
- c. be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

Employers make contributions to the unfunded liability of the plan on behalf of rehired retired members at the rate the employer is making contributions to the unfunded liability of the plan for other members.

10. Postemployment Healthcare Benefits

Major medical benefits are provided to retirees and their surviving spouses by PERS for all employees hired before July 1, 1986 (Tier 1) and disabled retirees. Employees hired after June 30, 1986 (Tier 2) and their surviving spouses with five years of credited service (or ten years of credited service for those first hired after June 30, 1996 (Tier 3)) must pay the full monthly premium if they are under age sixty and will receive benefits paid by PERS if they are over age sixty. Tier 3 Members with between five and ten years of credited service must pay the full monthly premium regardless of their age. Tier 2 and Tier 3 Members with less than five years of credited service are not eligible for postemployment healthcare benefits. Tier 2 Members who are receiving a conditional benefit and are age eligible are eligible for postemployment healthcare benefits. In addition, Peace Officers and their surviving spouses with twenty-five years of Peace Officer membership service, Other employees and their surviving spouses with thirty years of membership service, and any disabled member receive benefits paid by PERS, regardless of their age or date of hire.

Medical, prescription drug, dental, vision and audio coverage is provided through the AlaskaCare Retiree Health Plan. Health plan provisions do not vary by retirement tier or age, except for Medicare coordination. Participants in dental, vision, and audio coverage pay a full self-supporting rate and those benefits are not included in this valuation.

Starting in 2022, prior authorization will be required for certain specialty medications for all participants. There is no change to the medications that are covered by the plan.

Starting in 2022, certain preventive benefits for pre-Medicare participants will now be covered by the plan.

Surviving spouses continue coverage only if a pension payment form that provided survivor benefits was elected. Alternate payees (i.e. individuals who are the subject of a domestic relations order or DRO) are allowed to participate in the plan, but must pay the full cost.

Where premiums are required prior to age 60, the valuation bases this payment upon the age of the retiree.

Participants in the defined benefit plan are covered under the following benefit design:

Plan Feature	Amount
Deductible (single/family)	\$150 / \$450
Coinsurance - most services	20%
Outpatient surgery/testing	0%
Maximum Out-of-Pocket (single/family, excl. deductible)	\$800 / \$2,400
Rx Copays (generic/brand/mail-order), does not apply to OOP max	\$4 / \$8 / \$0
Lifetime Maximum	\$2,000,000

The plan coordinates with Medicare on a traditional Coordination of Benefits Method. Starting in 2019, the prescription drug coverage will be through a Medicare Part D EGWP arrangement.

11. Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover, or become eligible for normal retirement. Members are appointed to normal retirement on the first of the month after they become eligible.

Occupational Disability: Members are not required to satisfy age or service requirements to be eligible for occupational disability. Monthly benefits are equal to 40% of their gross monthly compensation on the date of their disability. Members on occupational disability continue to earn PERS service until they become eligible for normal retirement. Peace Officer/Firefighter members may elect to retain the disability benefit formula for the calculation of their normal retirement benefits.

At the time a disabled Peace Officer/Firefighter member retires, the retirement benefit will be increased by a percentage equal to the total cumulative percentage that has been applied to the disability benefit.

Nonoccupational Disability: Members must be vested (five paid up years of PERS service) to be eligible for nonoccupational disability benefits. Monthly benefits are calculated based on the member's average monthly compensation and PERS service on the date of termination from employment because of disability. Members do not earn PERS service while on non-occupational disability.

12. Death Benefits

Monthly death benefits may be paid to a spouse or dependent children upon the death of a member. If monthly benefits are not payable under the occupational and non-occupational death provisions, the designated beneficiary receives the lump sum benefit described below.

Occupational Death: When an active member (vested or non-vested) dies from occupational causes, a monthly survivor's pension may be paid to the spouse. The pension equals 40% of the member's gross monthly compensation on the date of death or disability, if earlier. If there is no spouse, the pension may be paid to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit. The normal benefit is based on the member's salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date. Survivors of Peace Officer/Firefighter members receive the greater of 50% of the member's gross monthly compensation on the date of death or disability, or 75% of the member's monthly normal retirement benefit (including service projected to Normal Retirement). If the member is unmarried with no children, a refund of contributions is payable to the estate.

Death after Occupational Disability: When a member dies while occupationally disabled, benefits are paid as described above in Occupational Death.

Nonoccupational Death: When a vested member dies from non-occupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit. The monthly benefit is calculated on the member's average monthly compensation and PERS service at the time of termination or death.

Lump Sum Non-occupational Death Benefit: Upon the death of a member who has less than one year of service, the designated beneficiary receives the member's contribution account, which includes mandatory and voluntary contributions, indebtedness payments, and interest earned. If the member has more than one year of PERS service or is vested, the beneficiary also receives \$1,000 and \$100 for each year of PERS service.

Death After Retirement: When a retired member dies, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check. If the member selected a survivor option at retirement, the eligible spouse receives continuing, lifetime monthly benefits.

13. Postretirement Pension Adjustments

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit including past PRPAs, but excluding the Alaska COLA, times:

- a. The lesser of 75% of the CPI increase in the preceding calendar year or 9%, if the recipient is at least age 65 or on PERS disability; or
- b. The lesser of 50% of the CPI increase in the preceding calendar year or 6%, if the recipient is at least age 60, or has been receiving benefits for at least five years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1986 (Tier 1) if the CPI increases and the funded ratio is at least 105%.

In a year where an ad-hoc PRPA is granted, eligible recipients will receive the higher of the two calculations.

14. Alaska Cost of Living Allowance

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits or \$50, whichever is more. The following benefit recipients are eligible:

- a. members who first entered PERS before July 1, 1986 (Tier 1) and their survivors;
- b. members who first entered PERS after June 30, 1986 (Tiers 2 & 3) and their survivors if they are at least age 65; and
- c. all disabled members.

15. Changes in Benefit Provisions Valued Since the Prior Valuation

There were no changes in benefit provisions since the prior valuation.



April 24, 2023

State of Alaska
The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
P.O. Box 110203
Juneau, AK 99811-0203

Certification of Actuarial Valuation

Dear Members of The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration:

This report summarizes the annual actuarial valuation results of the State of Alaska Public Employees' Retirement System Defined Contribution Retirement (PERS DCR) Plan as of June 30, 2022 performed by Buck Global, LLC (Buck).

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP, member data provided by the Division of Retirement and Benefits, and medical enrollment data provided by the healthcare claims administrator (Aetna), as summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2022. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under PERS DCR were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of PERS DCR as of June 30, 2022.

PERS DCR is funded by Employer Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board). The funding objective for PERS DCR is to pay required contributions that remain level as a percent of PERS DCR compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, plan expenses, and amortize the Unfunded Actuarial Accrued Liability as a level percent of PERS DCR compensation over closed layered 25-year periods. This objective is currently being met and is projected to continue to be met as required by the Alaska State statutes. Absent future gains/losses, actuarially determined contributions are expected to remain level as a percent of pay and the funded status of the occupational death & disability trust and the retiree medical trust are expected to remain at or above 100%.

The Board and staff of the State of Alaska may use this report for the review of the operations of PERS DCR. Use of this report for any other purpose or by anyone other than the Board or staff of the State of Alaska may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the actuarial assumptions, changes expected as part of the natural operation of the

methodology used for these measurements, and changes in plan provisions or applicable law. In particular, retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the plan. The actuary performs an analysis of plan experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed for the period July 1, 2017 to June 30, 2021. Based on that experience study, the Board adopted new assumptions effective beginning with the June 30, 2022 valuation to better reflect expected future experience. Based on our annual analysis of recent claims experience, changes were made to the healthcare per capita claims cost rates effective June 30, 2022 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this actuarial valuation is shown in Sections 4.2 and 4.3. We certify that the assumptions and methods described in Sections 4.2 and 4.3 of this report meet the requirements of all applicable Actuarial Standards of Practice.

Actuarial Standards of Practice No. 27 (ASOP 27) and No. 35 (ASOP 35) require the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. Buck provides advice on reasonable assumptions when performing periodic experience studies. The Board selects the assumptions used and annually the signing actuary reviews the assumptions through discussions with the Board staff and analyzing actuarial gain/loss experience. In the case of the Board's selection of the expected return on assets (EROA), the signing actuary has used economic information and tools provided by Buck's Financial Risk Management (FRM) practice. A spreadsheet tool created by the FRM practice converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, the percentiles generated by the spreadsheet tool described above, and review of actuarial gain/loss analysis, the actuary believes the assumptions do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement.

Annual Comprehensive Financial Report (ACFR)

We have prepared the following information in this report for the Actuarial Section and Statistical Section of the ACFR: (i) member data tables in Section 3; (ii) summary of actuarial assumptions in Section 4.3; and (iii) historical information in Section 5.

Governmental Accounting Standards Board (GASB) Statement No. 74 (GASB 74) was effective for PERS DCR beginning with fiscal year ending June 30, 2017. Please see our separate GASB 74 report for other information needed for the ACFR.

The following schedules provide further related information. Buck is responsible for the following schedules:

- Occupational Death and Disability and Retiree Medical Funding Excess / (Unfunded Liability)
- Occupational Death and Disability and Retiree Medical Benefits Employer Contribution Rates
- Occupational Death and Disability and Retiree Medical Benefits Schedule of Active Member Valuation Data
- Occupational Death and Disability and Retiree Medical Solvency Test
- Occupational Death and Disability and Retiree Medical Schedule of Funding Progress

Assessment of Risks

Actuarial Standard of Practice No. 51 (ASOP 51) applies to actuaries performing funding calculations related to a pension plan. ASOP 51 does not apply to actuaries performing services in connection with other post-employment benefits, such as medical benefits. Accordingly, ASOP 51 does not apply to the retiree medical portion of PERS DCR. We also believe ASOP 51 does not apply to the occupational death & disability portion of PERS DCR. Therefore, information related to ASOP 51 is not included in this report. However, it may be beneficial to review the ASOP 51 information provided in the PERS valuation report for information on risks that may also relate to the occupational death & disability benefits provided by this plan.

Use of Models

Actuarial Standard of Practice No. 56 (ASOP 56) provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. In addition to the EROA analysis spreadsheet model disclosed above, Buck uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the plan using data and assumptions as of the measurement date under the funding methods specified in this report. The output from the third-party vendor software is used as input to an internally developed model that applies applicable funding methods and policies to the derived liabilities and other inputs, such as plan assets and contributions, to generate many of the exhibits found in this report. Buck has an extensive review process in which the results of the liability calculations are checked using detailed sample life output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other funding outputs and the internal model are similarly reviewed in detail and at a higher level for accuracy, reasonability, and consistency with prior results. Buck also reviews the thirdparty model when significant changes are made to the software. This review is performed by experts within Buck who are familiar with applicable funding methods, as well as the manner in which the model generates its output. If significant changes are made to the internal model, extra checking and review are completed. Significant changes to the internal model that are applicable to multiple clients are generally developed, checked, and reviewed by multiple experts within Buck who are familiar with the details of the required changes.

Buck used manual rate models to determine relative plan values for the defined benefit (DB) retiree medical plan and the DCR retiree medical plan, and to reflect the different Medicare coordination methods between the two plans. The manual rate models are intended to provide benchmark data and pricing capabilities, calculate per capita costs, and calculate actuarial values of different commercial health plans. Buck relied on the models, which were developed using industry data by actuaries and consultants at OptumInsight.

COVID-19

The potential impact of the ongoing COVID-19 pandemic on costs and liabilities was considered and an adjustment was made in setting the medical per capita claims cost assumption. FY21 medical claims were adjusted for a COVID-19 related decline in those claims during the fiscal year. FY22 medical claims were not adjusted. A more detailed explanation on these adjustments is shown in Sections 4.2 and 4.3 and in the valuation report for the DB plan.

This report was prepared under the overall direction of David Kershner, who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries.

Respectfully submitted,

David J. Kershner, FSA, EA, MAAA, FCA

ILK!

Principal, Buck

Brett Hunter, ASA, EA, MAAA Senior Consultant, Buck

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms his qualification to render opinions in such matters in accordance with the Qualification Standards of the American Academy of Actuaries.

Stephen R. Oates, ASA, EA, MAAA, FCA

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Principal, Buck

Public Employees' Retirement System Defined Contribution Retirement Plan Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006, and was modified as part of the experience study for the period July 1, 2013 to June 30, 2017. The asset smoothing method used to determine valuation assets was implemented effective June 30, 2006.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

Valuation of Liabilities

A. Actuarial Method

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method, level percent of pay. Each year's difference between actual and expected unfunded actuarial accrued liability is amortized over 25 years as a level percentage of expected payroll.

Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for death & disability benefits and retiree medical benefits, from the assumed entry age to the last age with a future benefit were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total DCR Plan payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for beneficiaries and disabled members currently receiving benefits (if any) was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

B. Valuation of Assets

Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method was phased in over five years. Fair Value of Assets was \$0 as of June 30, 2006. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the fair value of assets.

Public Employees' Retirement System Defined Contribution Retirement Plan Description of Actuarial Methods and Valuation Procedures

C. Valuation of Retiree Medical and Prescription Drug Benefits

The methodology used for the valuation of the retiree medical benefits is described in Section 5.2 of the State of Alaska Public Employees' Retirement System Defined Benefit Plan Actuarial Valuation Report as of June 30, 2022.

Starting in 2022, prior authorization is required for certain specialty medications. There is no change to the medications that are covered by the plan. Segal provided an estimate of the impact of this change to the DB retiree health plan cost for calendar year 2022. The resulting adjustment factors for pre-Medicare prescription drug, Medicare prescription drug, and EGWP costs were applied to claims experience incurred before January 1, 2022. Those base claims costs were used for the DCR valuation with further adjustments as noted below. Additionally, starting in 2022, certain common preventive benefits are covered for the DB plan. The resulting adjustment factor for pre-Medicare medical costs was applied to claims experience incurred before January 1, 2022. However, preventive benefits were already covered under the DCR plan so the pre-65 DCR medical adjustment factor referenced below was increased from 3.1% to 4.4%.

Due to the lack of experience for the DCR retiree medical plan, base claims costs are based on those described in the actuarial valuation as of June 30, 2022 for the Defined Benefit (DB) retiree medical plan covering TRS and PERS. The DB rates were used with some adjustments. The claims costs were adjusted to reflect the differences between the DCR medical plan and the DB medical plan. These differences include network steerage, different coverage levels, different Medicare coordination for medical benefits, and an indexing of the retiree out-of-pocket dollar amounts. To account for higher initial copays, deductibles, and out-of-pocket limits, projected FY23 claims costs were reduced 4.4% for pre Medicare medical claims, 3.1% for Medicare medical claims, and 8.9% for prescription drugs. In addition, to account for the difference in Medicare coordination, projected FY23 medical claims costs for Medicare eligible retirees were further reduced 29.5%.

FY21 and FY22 experience was thoroughly reviewed to assess the impact of COVID-19 and whether an adjustment to FY21 and FY22 claims was appropriate for use in the June 30, 2022 valuation. FY21 medical per capita claims were noticeably lower than expected, so a 4% load was added to the FY21 medical claims used in the per capita claims cost development to better reflect future expected long-term costs of the plan. FY22 medical per capita claims were reasonable when compared to pre-COVID levels, so no adjustments were made to the FY22 medical claims used in the per capita claims cost development.

No implicit subsidies are assumed. Employees projected to retire with 30 years of service (25 years of service for Peace/Fire) prior to Medicare are valued with commencement deferred to Medicare eligibility, because those members will be required to pay the full plan premium prior to Medicare. Explicit subsidies for disabled and normal retirement are determined using the plan-defined percentages of age-related total projected plan costs, again with no implicit subsidy assumed.

The State transitioned to an Employer Group Waiver Program (EGWP) for DCR participants effective January 1, 2019. The estimated 2023 reimbursements under EGWP were provided by Segal Consulting (who worked with the EGWP administrator, Optum, to develop those estimates).

State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan Description of Actuarial Methods and Valuation Procedures

D. Healthcare Reform

Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact due to these provisions.

Because the State plan is retiree-only, not all provisions are required. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. The adopted DCR plan does not place lifetime limits on benefits, but does restrict dependent child coverage.

The Further Consolidated Appropriations Act, 2020 passed in December 2019 repealed several healthcare-related taxes, including the Cadillac Tax.

The Tax Cuts and Jobs Act passed in December 2017 included the elimination of the individual mandate penalty and changed the inflation measure for purposes of determining the limits for the High Cost Excise Tax to use chained CPI. It is our understanding the law does not directly impact other provisions of the ACA. While the nullification of the ACA's individual mandate penalty does not directly impact employer group health plans, it could contribute to the destabilization of the individual market and increase the number of uninsured. Such destabilization could translate to increased costs for employers. We have considered this when setting our healthcare cost trend assumptions and will continue to monitor this issue.

The Inflation Reduction Act was signed into law on August 16, 2022. The law contains several provisions that are expected to impact Alaska's Medicare prescription drug plan (EGWP), which will be considered at the next measurement date.

We have not identified any other specific provisions of healthcare reform or its potential repeal that would be expected to have a significant impact on the measured obligation. We will continue to monitor legislative activity.

E. Changes in Methods Since the Prior Valuation

There were no changes in the asset or valuation methods since the prior valuation.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

The demographic and economic assumptions used in the June 30, 2022 valuation are described below. Unless noted

otherwise, these assumptions were adopted by the Board at the June 2022 meeting based on the experience study for the	!
period July 1, 2017 to June 30, 2021.	

Investment Return 7.25% per year, net of investment expenses.

Salary Scale Salary scale rates based upon the 2017-2021 actual experience (see Table 1). Inflation —

2.50% per year. Productivity – 0.25% per year.

2.75% per year (2.50% inflation + 0.25% productivity). Payroll Growth

Total Inflation Total inflation as measured by the Consumer Price Index for urban and clerical workers

for Anchorage is assumed to increase 2.50% annually.

5. Mortality Mortality rates based on the 2017-2021 actual experience, to the extent the experience (Pre-commencement) was statistically credible.

Employee mortality for Peace Officer/Firefighters in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Safety Employee table, amountweighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Employee mortality for Others in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 General Employee table, amountweighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Deaths are assumed to result from occupational causes 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

6. Mortality (Post-commencement) Mortality rates based upon the 2017-2021 actual experience, to the extent the experience was statistically credible.

Retiree mortality for Peace Officer/Firefighters in accordance with the following tables:

- Occupational Death & Disability: Pub-2010 Safety Retiree table, amountweighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Retiree mortality for Others in accordance with the following tables:

Occupational Death & Disability: 98% of male and 106% of female rates of the Pub-2010 General Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

 Healthcare: 101% of male and 110% of female rates of the Pub-2010 General Employee table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Peace Officer/Firefighters in accordance with the following tables. These tables are applied only after the death of the original member.

- Occupational Death & Disability: Pub-2010 Contingent Survivor table, amountweighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality for Others in accordance with the following tables. These tables are applied only after the death of the original member.

- Occupational Death & Disability: 102% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: 101% of male and 108% of female rates of the Pub-2010 Contingent Survivor table, headcount-weighted, and projected with MP-2021 generational improvement.

Select and ultimate rates based upon the 2017-2021 actual experience (see Table 2a and 2b).

No changes to the incidence rates from the prior valuation due to insufficient 2017-2021 actual experience (see Tables 3a and 3b). For retiree medical benefits, the disability rates cease once a member is eligible for retirement. However, the disability rates continue after retirement eligibility for occupational death & disability benefits.

Disabilities are assumed to be occupational 70% of the time for Peace Officer/Firefighters, and 35% of the time for Others.

For Peace Officer/Firefighters, members are assumed to take the monthly annuity 100% of the time.

Post-disability mortality for Peace Officer/Firefighters in accordance with the following tables.

- Occupational Death & Disability: Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Post-disability mortality for Others in accordance with the following tables:

Occupational Death & Disability: Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

- 7. Turnover
- 8. Disability

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

 Healthcare: Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

9. Retirement

Retirement rates based upon the 2017-2021 actual experience (see Table 4).

10. Spouse Age Difference

Males are assumed to be three years older than their wives. Females are assumed to be two years younger than their husbands.

 Percent Married for Occupational Death & Disability For Others, 75% of male members and 70% of female members are assumed to be married at termination from active service. For Peace Officer/Firefighters, 85% of male members and 60% of female members are assumed to be married at termination from active service.

12. Dependent Spouse Medical Coverage Election

Applies to members who do not have double medical coverage. For Peace Officer/Firefighters, 75% of male members and 50% of female members are assumed to be married and cover a dependent spouse. For Others, 60% of male members and 50% of female members are assumed to be married and cover a dependent spouse.

13. Part-Time Service

Peace Officer/Firefighter members are assumed to be full-time employees. For Other members, part-time employees are assumed to earn 0.75 years of service per year.

Peace Officer/Firefighter
 Occupational Disability
 Retirement Benefit
 Commencement

The occupational disability retirement benefit is assumed to be first payable from the member's DC account and the retirement benefit payable from the occupational death & disability trust will commence five years later.

15. Imputed Data

Data changes from the prior year which are deemed to have immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data.

Non-vested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

16. Administrative Expenses

The Normal Cost as of June 30, 2022 was increased by the following amounts. These amounts are based on the average of actual administrative expenses during the last two fiscal years.

- Occupational Death & Disability \$33,000
- Healthcare \$39,000

17. Retiree Medical Participation

Death / Dis	Death / Disability Decrement		Retirement Decrement	
Age	Percent Participation	Age	Percent Participatio	n *
< 56	75.0%	55	50.	0%
56	77.5	56	55.	0
57	80.0	57	60.	0
58	82.5	58	65.	0
59	85.0	59	70.	0
60	87.5	60	75.	0
61	90.0	61	80.	0
62	92.5	62	85.	0
63	95.0	63	90.	0
64	97.5	64	95.	0
65+	100.0	65+	Years o	f Service
			< 15	75.0%
			15-19	80.0
			20-24	85.0
			25-29	90.0
			30+	95.0

^{*}Participation assumption is a combination of (i) the service-based rates for retirement from employment at age 65+ and (ii) the age-based rates for retirement from employment before age 65. These rates reflect the expected plan election rate that varies by reason for decrement, duration that a member may pay full cost prior to Medicare eligibility, and availability of alternative and/or lower cost options, particularly in the Medicare market. This assumption is based on observed trends in participation from a range of other plans.

18. Healthcare Per Capita Claims Cost

Sample claims cost rates (before base claims cost adjustments described below) adjusted to age 65 for FY23 medical and prescription drugs are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medications.

	Medical	 Prescription drugs
Pre-Medicare	\$ 15,706	\$ 3,712
Medicare Parts A & B	1,625	3,907
Medicare Part D - EGWP	N/A	1,309

Members are assumed to attain Medicare eligibility at age 65. All costs are for the 2023 fiscal year (July 1, 2022 – June 30, 2023).

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

The EGWP subsidy is assumed to increase in future years by the trend rates shown on the following pages. No future legislative changes or other events are anticipated to impact the EGWP subsidy. If any legislative or other changes occur in the future that impact the EGWP subsidy (which could either increase or decrease the plan's Actuarial Accrued Liability), those changes will be evaluated and quantified at the next measurement date.

19. Base Claims Cost Adjustments

Due to higher initial copays, deductibles, out-of-pocket limits, and member cost sharing compared to the DB medical plan, the following cost adjustments are applied to the per capita claims cost rates above:

- 0.956 for the pre-Medicare plan.
- 0.674 for both the Medicare medical plan and Medicare coordination method (3.1% reduction for the medical plan and 29.5% reduction for the coordination method).
- 0.911 for the prescription drug plan.

20. Healthcare Morbidity

Morbidity rates (also called aging factors) are used to estimate utilization of healthcare benefits at each age to reflect the fact that healthcare utilization typically increases with age. Separate morbidity rates are used for medical and prescription drug benefits. These rates are based on the 2017-2021 actual experience.

Age	Medical	Prescription drugs
0–44	2.0%	4.5%
45-54	2.5	3.5
55-64	2.5	1.0
65-74	2.0	2.1
75-84	2.2	(0.3)
85-94	0.5	(2.5)
95+	_	

21. Third Party Administrator Fees

\$449 per person per year; assumed trend rate of 4.5% per year.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

22. Healthcare Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.0% is applied to the FY23 pre-Medicare medical claims costs to get the FY24 medical claims costs.

Fiscal	Medical	Medical	Prescription
year	pre-65	post-65	Drugs / EGWP
2023	7.00%	5.50%	7.50%
2024	6.70	5.50	7.20
2025	6.40	5.40	6.90
2026	6.20	5.40	6.65
2027	6.05	5.35	6.35
2028	5.85	5.35	6.10
2029	5.65	5.30	5.80
2030	5.45	5.30	5.55
2031 - 38	5.30	5.30	5.30
2039	5.25	5.25	5.25
2040	5.20	5.20	5.20
2041	5.10	5.10	5.10
2042	5.05	5.05	5.05
2043	4.95	4.95	4.95
2044	4.90	4.90	4.90
2045	4.80	4.80	4.80
2046	4.75	4.75	4.75
2047	4.70	4.70	4.70
2048	4.60	4.60	4.60
2049	4.55	4.55	4.55
2050+	4.50	4.50	4.50

For the June 30, 2014 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model estimates trend amounts that are projected out for 80 years. The model has been populated with assumptions that are specific to the State of Alaska.

23. Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting.

(The healthcare per capita claims cost assumption is updated annually as described in Section 4.2. The amounts included in the Normal Cost for administrative expenses were changed from \$16,000 to \$33,000 for occupational death & disability, and from \$24,000 to \$39,000 for retiree medical (based on the most recent two years of actual administrative expenses paid from plan assets).

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 1 Salary Scale

Peace Officer/Firefighter:

Others:

Years of Service	Percent Increase	Years of Service	Percent Increase
< 1	8.50%	< 1	6.75%
1	7.75	1	6.00
2	7.25	2	5.50
3	7.00	3	5.00
4	6.75	4	4.75
5	6.25	5	4.25
6	5.75	6	4.05
7	5.50	7	3.95
8	5.25	8	3.75
9	5.05	9	3.55
10	4.95	10	3.45
11	4.85	11	3.25
12	4.75	12	3.10
13	4.65	13	3.05
14	4.55	14	3.00
15	4.45	15	2.95
16	4.35	16	2.90
17	4.25	17 +	2.85
18	4.05		
19	4.05		
20 +	3.85		

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 2a Turnover Assumptions

Peace Officer/Firefighter:

Select Rates of Turnover During the First 5 Years of Employment

Male	Female
17.00%	27.00%
12.00	21.00
11.00	15.00
11.00	13.00
10.00	9.00
	17.00% 12.00 11.00 11.00

Ultimate Rates After the First 5 Years of Employment

Age	Male	Female
< 30	6.60%	10.20%
30 - 34	6.80	10.00
35 - 39	6.70	9.90
40 - 44	6.50	9.50
45 - 49	6.50	9.30
50 - 54	8.50	9.10
55 - 59	9.80	9.60
60 - 64	12.50	10.30
65 +	19.20	10.70

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 2b Turnover Assumptions

Other:

Select Rates during the First 5 Years of Employment

Years of Service	Male	Female
< 1	28.00%	29.00%
1	20.00	24.00
2	16.00	19.00
3	14.00	16.00
4	12.00	14.00

Ultimate Rates After the First 5 Years of Employment

Age	Male	Female
< 30	13.70%	15.80%
30 - 34	12.20	11.20
35 - 39	9.70	10.20
40 - 44	8.50	10.60
45 - 49	8.90	8.90
50 - 54	8.40	8.70
55 - 59	8.70	9.50
60 - 64	10.10	11.80
65 +	11.20	15.70

State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan

Summary of Actuarial Assumptions and Changes in Assumptions

Table 3a Disability Rates Peace Officer/ Firefighter Rate

Age	Male	Female	Age	Male	Female
< 23	0.0179 %	0.0112%	47	0.1337%	0.0836%
23	0.0244	0.0153	48	0.1462	0.0914
24	0.0310	0.0194	49	0.1588	0.0993
25	0.0374	0.0234	50	0.1714	0.1071
26	0.0440	0.0275	51	0.1839	0.1150
27	0.0505	0.0316	52	0.1965	0.1228
28	0.0526	0.0329	53	0.2294	0.1434
29	0.0548	0.0343	54	0.2624	0.1640
30	0.0570	0.0356	55	0.2954	0.1846
31	0.0591	0.0370	56	0.3283	0.2052
32	0.0612	0.0383	57	0.3613	0.2258
33	0.0634	0.0397	58	0.4112	0.2570
34	0.0657	0.0411	59	0.4611	0.2882
35	0.0679	0.0425	60	0.5110	0.3194
36	0.0702	0.0439	61	0.5610	0.3506
37	0.0724	0.0453	62	0.6109	0.3818
38	0.0757	0.0473	63	0.6109	0.3818
39	0.0789	0.0493	64	0.6109	0.3818
40	0.0822	0.0514	65	0.6109	0.3818
41	0.0854	0.0534	66	0.6109	0.3818
42	0.0886	0.0554	67	0.6109	0.3818
43	0.0977	0.0611	68	0.4073	0.2546
44	0.1066	0.0667	69	0.2036	0.1273
45	0.1157	0.0723	70+	0.2036	0.1273
46	0.1247	0.0780			

State of Alaska Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

Table 3b Disability Rates Other Member Rates

Age	Male	Female	Age	Male	Female
< 23	0.0327%	0.0376%	47	0.1208%	0.1236%
23	0.0360	0.0400	48	0.1329	0.1360
24	0.0392	0.0424	49	0.1451	0.1484
25	0.0425	0.0448	50	0.1572	0.1608
26	0.0456	0.0472	51	0.1694	0.1734
27	0.0489	0.0496	52	0.1815	0.1858
28	0.0501	0.0510	53	0.2132	0.2168
29	0.0513	0.0524	54	0.2450	0.2478
30	0.0524	0.0538	55	0.2766	0.2788
31	0.0536	0.0554	56	0.3084	0.3098
32	0.0548	0.0568	57	0.3401	0.3408
33	0.0566	0.0586	58	0.4068	0.4096
34	0.0584	0.0606	59	0.4736	0.4784
35	0.0602	0.0624	60	0.5405	0.5470
36	0.0620	0.0644	61	0.6072	0.6158
37	0.0638	0.0662	62	0.6740	0.6844
38	0.0669	0.0696	63	0.8526	0.8450
39	0.0701	0.0728	64	1.0314	1.0054
40	0.0734	0.0762	65	1.2101	1.1660
41	0.0765	0.0794	66	1.3889	1.3264
42	0.0797	0.0826	67	1.5675	1.4870
43	0.0879	0.0908	68	1.0451	0.9914
44	0.0962	0.0990	69	0.5225	0.4956
45	0.1043	0.1072	70+	0.5225	0.4956
46	0.1125	0.1154			

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Actuarial Assumptions and Changes in Assumptions

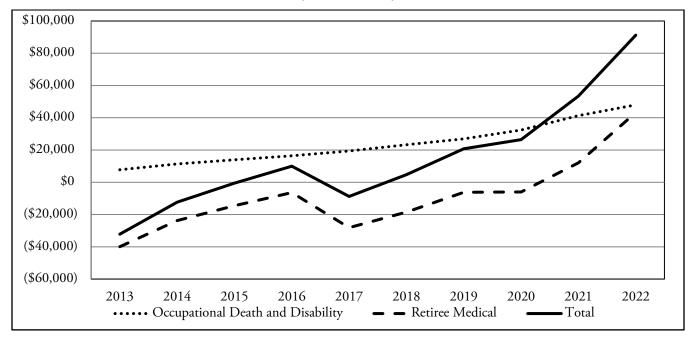
Table 4 Retirement Rates

Age	Rate
< 55	2.00%
55	3.00
56	3.00
57	3.00
58	3.00
59	3.00
60	5.00
61	5.00
62	10.00
63	5.00
64	5.00
65	25.00
66	25.00
67	25.00
68	20.00
69	20.00
70+	100.00

Public Employees' Retirement System Defined Contribution Retirement Plan Occupational Death and Disability and Retiree Medical Benefits Funding Excess/(Unfunded Liability) (In thousands)

Actuarial Valuation Year Ended June 30	Occupational Death and Disability	Retiree Medical	Total Funding Excess/ (Unfunded Liability)	Funded Ratio
2022	47,986	43,242	91,228	149.5%
2021	41,335	12,064	53,399	146.9
2020	13,965	(5,954)	26,441	113.8
2019	16,413	(6,163)	20,764	114.9
2018	19,404	(18,501)	4,747	103.8
2017	23,248	(28,144)	(8,740)	92.5
2016	26,927	(6,438)	9,975	112.9
2015	32,395	(14,495)	(530)	99.2
2014	11,368	(23,751)	(12,383)	77.0
2013	7,770	(39,946)	(32,176)	49.6

10-YEAR TREND OF FUNDING EXCESS/(UNFUNDED) LIABILITY (In thousands)



Public Employees' Retirement System Defined Contribution Retirement Plan Occupational Death and Disability and Retiree Medical Benefits Employer Contribution Rates

			Actuarially Determined				
		Occupational Death and Disability					
Fiscal Year	Actuarial Valuation Year Ended June 30	Peace Officer/ Firefighter	All Others	Retiree Medical	Total Required	Adopted	
2025	2022	0.69	0.24	0.83	1.76	1.76	
2024	2021	0.68	0.30	1.01	1.99	1.99	
2023	2020	0.68	0.30	1.10	2.08	2.08	
2022	2019	0.68	0.31	1.07	2.06	2.06	
2021	2018	0.70	0.31	1.27	2.28	2.28	
2020	2017	0.72	0.26	1.32	2.30	2.30	
2019	2016	0.76	0.26	0.94	1.96	1.96	
2018	2015	0.43	0.16	1.03	1.62	1.62	
2017	2014	0.49	0.17	1.18	1.84	1.84	
2016	2013	1.05	0.22	1.68	2.95	2.95	

Valuations are used to set contribution rates in future years.

Public Employees' Retirement System Defined Contribution Retirement Plan Occupational Death and Disability and Retiree Medical Benefits Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Earnings (In thousands)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2022	24,702	\$1,622,742	\$65,693	2.7%	150
June 30, 2021	23,933	1,530,905	63,966	2.7	151
June 30, 2020	22,923	1,428,140	62,302	2.7	153
June 30, 2019	21,902	1,328,934	60,676	2.3	155
June 30, 2018	20,378	1,209,152	59,336	2.3	155
June 30, 2017	19,171	1,112,398	58,025	1.5	157
June 30, 2016	18,215	1,041,437	57,175	3.4	157
June 30, 2015	17,098	945,496	55,299	1.9	159
June 30, 2014	15,800	857,150	54,250	3.7	159
June 30, 2013	14,316	748,658	52,295	4.7	159

Total and average annual earnings ("valuation pay") are the annualized earnings for the fiscal year ending on the valuation date.

Public Employees' Retirement System Defined Contribution Retirement Plan Occupational Death and Disability Plan Solvency Test (In thousands)

	-	tional Death & Di ial Accrued Liabili	-		of Actuarial s Covered b		
Valuation Date	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)	Pension Valuation Assets	(1)	(2)	(3)
June 30, 2022	\$ —	\$ 7,593	\$ 7,359	\$ 62,938	100.0%	100.0%	100.0%
June 30, 2021	_	5,743	5,997	53,075	100.0	100.0	100.0
June 30, 2020	_	5,432	5,202	43,029	100.0	100.0	100.0
June 30, 2019	_	5,350	4,424	36,701	100.0	100.0	100.0
June 30, 2018	_	3,978	3,735	30,961	100.0	100.0	100.0
June 30, 2017	_	3,437	4,103	26,944	100.0	100.0	100.0
June 30, 2016	_	3,147	3,616	23,176	100.0	100.0	100.0
June 30, 2015	_	2,502	2,547	19,014	100.0	100.0	100.0
June 30, 2014	_	1,367	2,260	14,995	100.0	100.0	100.0
June 30, 2013		666	2,937	11,373	100.0	100.0	100.0

Change in assumptions reflected in 2022, 2018, and 2014 valuation reports.

Public Employees' Retirement System Defined Contribution Retirement Plan Retiree Medical Plan Solvency Test (In thousands)

	Retiree Medical Actuarial Accrued Liability For:					of Actuarial s Covered b	
Valuation Date	(1) Active Member Contributions	(2) Inactive Members	(3) Active Members (Employer- Financed Portion)	Pension Valuation Assets	(1)	(2)	(3)
June 30, 2022	\$ —	\$ 9,069	\$ 160,327	\$ 212,638	100.0%	100.0%	100.0%
June 30, 2021	_	5,191	163,281	180,536	100.0	100.0	100.0
June 30, 2020	_	3,885	146,816	144,747	100.0	100.0	95.9
June 30, 2019	_	2,647	122,299	118,783	100.0	100.0	95.0
June 30, 2018	_	1,915	116,683	100,097	100.0	100.0	84.1
June 30, 2017	_	982	108,721	81,559	100.0	100.0	74.1
June 30, 2016	_	528	69,761	63,851	100.0	100.0	90.8
June 30, 2015	_	339	58,344	44,188	100.0	100.0	75.2
June 30, 2014	_	124	50,093	26,466	100.0	100.0	52.6
June 30, 2013	_	101	60,181	20,336	100.0	100.0	33.6

Change in assumptions reflected in 2022, 2020, 2018, 2017, and 2014 valuation reports.

Change in plan provisions reflected in 2021 and 2016 valuations.

Change in methods reflected in 2018 valuation reports.

Actuarial Section

Public Employees' Retirement System Defined Contribution Retirement Plan Occupational Death and Disability Plan Schedule of Funding Progress (In thousands)

Valuation Date June 30*	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Annual Active Member Payroll	UAAL as a Percent of Annual Active Member Payroll
2022	\$ 14,952	\$ 62,938	420.9%	\$ (47,986)	\$1,645,341	(2.9)%
2021	11,740	53,075	452.1%	(41,335)	1,548,116	(2.7)%
2020	10,634	43,029	404.6%	(32,395)	1,443,017	(2.2)%
2019	9,774	36,701	375.5%	(26,927)	1,342,839	(2.0)%
2018	7,713	30,961	401.4%	(23,248)	1,218,186	(1.9)%
2017	7,540	26,944	357.3%	(19,404)	1,131,441	(1.7)%
2016	6,763	23,176	342.7%	(16,413)	1,059,791	(1.5)%
2015	5,049	19,014	376.6%	(13,965)	958,135	(1.5)%
2014	3,627	14,995	413.4%	(11,368)	865,146	(1.3)%
2013	3,603	11,373	315.7%	(7,770)	802,645	(1.0)%

Actuarial Section

Public Employees' Retirement System Defined Contribution Retirement Plan Retiree Medical Plan Schedule of Funding Progress (In thousands)

Valuation Date June 30*	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Annual Active Member Payroll	UAAL as a Percent of Annual Active Member Payroll
2022	\$ 169,396	\$ 212,638	125.5%	\$ (43,242)	\$ 1,645,341	(2.6)%
2021	168,472	180,536	107.2%	(12,064)	1,548,116	(0.8)%
2020	150,701	144,747	96.0%	5,954	1,443,017	0.4%
2019	124,946	118,783	95.1%	6,163	1,342,839	0.5%
2018	118,598	100,097	84.4%	18,501	1,218,186	1.5%
2017	109,703	81,559	74.3%	28,144	1,131,441	2.5%
2016	70,289	63,851	90.8%	6,438	1,059,791	0.6%
2015	58,683	44,188	75.3%	14,495	958,135	1.5%
2014	50,217	26,466	52.7%	23,751	865,146	2.7%
2013	60,282	20,336	33.7%	39,946	802,645	5.0%

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

1. Effective Date

July 1, 2006, with amendments through June 30, 2022.

2. Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the Plan. The Attorney General of the state is the legal counsel for the Plan and shall advise the administrator and represent the Plan in legal proceedings.

The Alaska Retirement Management Board prescribes policies, adopts regulations, invests the funds, and performs other activities necessary to carry out the provisions of the Plan.

3. Employers Included

Currently there are 150 employers participating in PERS DCR, including the State of Alaska, and 149 political subdivisions and public organizations.

4. Membership

An employee of a participating employer who first enters service on or after July 1, 2006, or a member of the defined benefit plan who works for an employer who began participation on or after July 1, 2006, and meets the following criteria is a member in the Plan:

- Permanent full-time or part-time employees of the State of Alaska, participating political subdivisions or public
 organizations. An employee must be regularly scheduled to work 30 or more hours per week to be considered
 full-time by the PERS. An employee must be regularly scheduled to work 15 or more hours per week but less
 than 30 hours to be considered a part-time employee for PERS purposes.
- Elected state officials.
- Elected municipal officials who are compensated and receive at least \$2,001.00 per month.

Members can convert to PERS DCR if they are an eligible non-vested member of the PERS defined benefit plan whose employer consents to transfers to the defined contribution plan and they elect to transfer his or her account balance to PERS DCR.

5. Member Contributions

Other than the member-paid premiums discussed later in this section, there are no member contributions for the occupational death & disability and retiree medical benefits.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

6. Retiree Medical Benefits

- Member must retire directly from the plan to be eligible for retiree medical coverage. Normal retirement eligibility
 is the earlier of a) 25 years of service as a peace officer or firefighter and 30 years of service for any other employee
 or b) Medicare eligible and 10 years of service.
- No subsidized retiree medical benefits are provided until normal retirement eligibility. The member's and any
 covered dependent's premium is 100% until the member is Medicare eligible. Upon the member's Medicareeligibility, the required contribution will follow the service-based schedule shown below.
- Coverage cannot be denied except for failure to pay premium.
- Members who are receiving disability benefits or survivors who are receiving monthly survivor benefits are not
 eligible until the member meets, or would have met if he/she had lived, the normal retirement eligibility
 requirements.
- The following is a summary of the medical benefit design adopted in July 2016. The plan description below is used for valuation purposes and indicates participant cost-sharing. Please refer to the benefit handbook for more details.

Plan Design Feature	In-Network ⁽¹⁾	Out-of-Network (1)(2)	
Deductible (single/family)	\$300 / \$600	\$300 / \$600	
Medical services (participant share)	20%	40%	
Emergency Room Copay (non-emergent use)	\$100	\$100	
Medical Out-of-Pocket Maximum			
(single/famly, after deductible)	\$1,500 / \$3,000	\$3,000 / \$6,000	
Medicare Coordination	Exclusion	Exclusion	
Pharmacy	No Deductible	No Deductible	
Retail Generic (per 30-day fill)	20% \$10 min / \$50 max		
Retail Non-Formulary Brand (per 30-day fill)	25% \$25 min / \$75 max	40%	
Retail Formulary Brand (per 30-day fill)	35% \$80 min / \$150 max		
Mail-Order Generic	\$20 copay		
Mail-Order Non-Formulary Brand	\$50 copay	40%	
Mail-Order Formulary Brand	\$100 copay		
Pharmacy Out-of-Pocket Max (single/family)	\$1,000 / \$2,000	\$1,000 / \$2,000	
Medicare Pharmacy Arrangement	Retiree Drug Subsidy / Employer Group Waiver Plan		
	Effective 1/1/2019		
Wellness/Preventative	100% covered, not	20%, after deductible	
	subject to deductible		

⁽¹⁾ Section 1.1 of the Alaska Care Defined Contribution Retiree Benefit Plan states that this health plan shall be updated from time

to time to reflect changes in benefits, including annual adjustments to the premium, deductible, coinsurance, medical

⁽²⁾ OON applies only to non-Medicare elgibile participants.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

- Buck used manual rate models to determine relative plan values for the defined benefit (DB) retiree medical plan and the DCR retiree medical plan outlined above. We applied the ratio of the DCR retiree medical plan value to the DB retiree medical plan value to the per capita costs determined for each of pre/post-Medicare medical and pharmacy benefits to estimate corresponding values for the DCR retiree medical plan design. These factors are noted in Section 4.3. We further adjusted the Medicare medical manual rate to reflect the Medicare coordination method adopted. The estimated 2023 reimbursements under EGWP were provided by Segal Consulting (who worked with the EGWP administrator, Optum, to develop those estimates). We reflect estimated discounts and pharmacy rebates in the defined benefit medical cost so no further adjustment was needed for the DCR retiree medical plan. The medical network differential is reflected in the relative plan value adjustments.
- Starting in 2022, prior authorization is required for certain specialty medications. There is no change to the medications that are covered by the plan.
- The retiree medical plan's coverage is supplemental to Medicare. Medicare coordination is described in the DCR
 Plan Handbook, referred to in the industry as exclusion coordination: Medicare payment is deducted from the
 Medicare allowable expense and plan parameters are applied to the remaining amount. Starting in 2019, the
 prescription drug coverage is through a Medicare Part D EGWP arrangement.
- The premium for Medicare-eligible retirees will be based on the member's years of service. The percentage of premium paid by the member is as follows:

Years of Service	Percent of Premium Paid by Member
< 15	30%
15 – 19	25
20 – 24	20
25 – 29	15
30+	10

- The premium for dependents who are not eligible for Medicare aligns with the member's subsidy. While a member is not Medicare-eligible, premiums are 100% of the estimated cost.
- Members have a separate defined contribution Health Reimbursement Arrangement account, which is not reflected in this valuation, that can be used to pay for premiums or other medical expenses.
- For valuation purposes, retiree premiums were assumed to equal the percentages outlined in the table above times
 the age-related plan costs. Future premiums calculated and charged to DCR participants will need to be determined
 reflecting any appropriate adjustments to the defined benefit (DB) plan data because current DB premiums were
 determined using information based upon enrollment with members who have double coverage.
- Coverage will continue for surviving spouses of covered retired members.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

7. Occupational Disability Benefits

- Benefit is 40% of salary at date of disability.
- For Peace Officer and Firefighters there is a Disability Benefit Adjustment such that:
 - The disability benefit is increased by 75% of the cost of living increase in the preceding calendar year or 9%, whichever is less.
 - At the time the disabled member retires, the retirement benefit will be increased by a percentage equal to the total cumulative percentage that has been applied to the disability benefit. Monthly annuity payments are made from the member's contribution balance until the fund is exhausted, at which the plan pays all remaining payments.
- For Others, there is no increase in the occupational disability benefit after commencement.
- Member earns service while on occupational disability.
- Benefits cease when the member becomes eligible for normal retirement at Medicare-eligible age and 10 years of service, or at any age with 30 years of service for Others members or 25 years of service for Peace Officer/Firefighter members.
- Peace Officer/Firefighter members may select the defined contribution account or the monthly benefit payable as
 if they were retiring under Tier 3 (service continues during disability, final average salary is as of date of disability),
 but with payments first made from the member's DC account until it's exhausted.
- No subsidized retiree medical benefits are provided until normal retirement eligibility. The member's premium is 100% of the estimated cost until they are Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

8. Occupational Death Benefits

- Benefit is 40% of salary for Others members and 50% of salary for Peace Officer/Firefighter members.
- Survivor's Pension Adjustment: A survivor's pension is increased by 50% of the cost of living increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60 on July 1, or under age 60 if the recipient has been receiving PERS benefits for at least 5 years as of July 1.
- Benefits cease when the member would have become eligible for normal retirement.
- The period during which the survivor is receiving benefits is counted as service credit toward retiree medical benefits.
- No subsidized retiree medical benefits are provided until the member would have been eligible for normal retirement. The surviving spouse's premium is 100% of the estimated cost until the member would have been Medicare eligible. Medicare-eligible premiums follow the service-based schedule above.

Public Employees' Retirement System Defined Contribution Retirement Plan Summary of Plan Provisions and Changes in Plan Provisions

9. Changes Since the Prior Valuation

There were no changes in benefit provisions since the prior valuation.







STATISTICAL SECTION



Statistical Section Overview

The statistical section of the Public Employees' Retirement System (System) annual comprehensive financial report provides additional detail in the form of financial trends, operating statistics, and demographic information. This data is provided to enhance the reader's understanding of the System.

F:! -	Trends		40	•
FINANCIAL	ΙΓΩΝΛΙΣ	. /h-		

These schedules contain financial trend information utilizing a multi-year presentation so the reader can better understand how the System's financial performance has changed over time. Financial information is presented on an accrual basis.

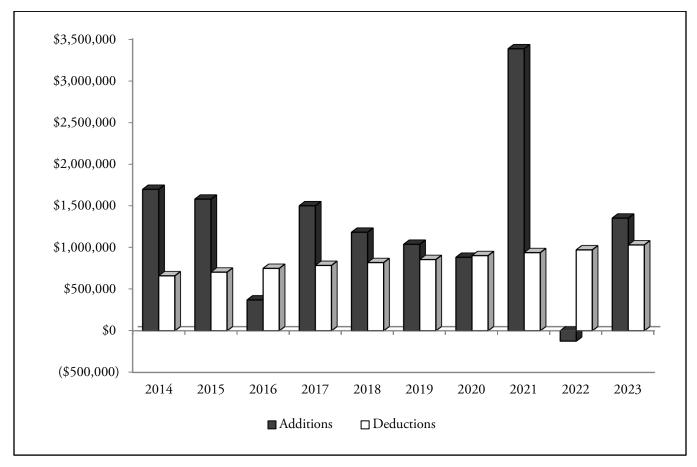
These schedules contain detailed benefit payment information to provide the reader a better understanding of the pension benefits provided by the Division.

These schedules contain detailed demographic data to provide the reader a better understanding of the membership and employer participation in the System.

Public Employees' Retirement System Defined Benefit Pension Changes in Fiduciary Net Position (In thousands)

Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 6,694,482	\$ 1,697,096	\$ 660,140	\$ 1,036,956	\$ 7,731,438
2015	7,731,438	1,579,519	704,095	875,424	8,606,862
2016	8,606,862	370,243	749,418	(379,175)	8,227,687
2017	8,227,687	1,500,153	784,713	715,440	8,943,127
2018	8,943,127	1,182,675	819,127	363,548	9,306,675
2019	9,306,675	1,038,178	855,488	182,730	9,489,405
2020	9,489,405	882,296	902,540	(20,244)	9,469,161
2021	9,469,161	3,381,386	938,238	2,443,148	11,912,309
2022	11,912,309	(124,774)	971,395	(1,096,169)	10,816,140
2023	10,816,140	1,351,986	1,030,637	321,349	11,137,489

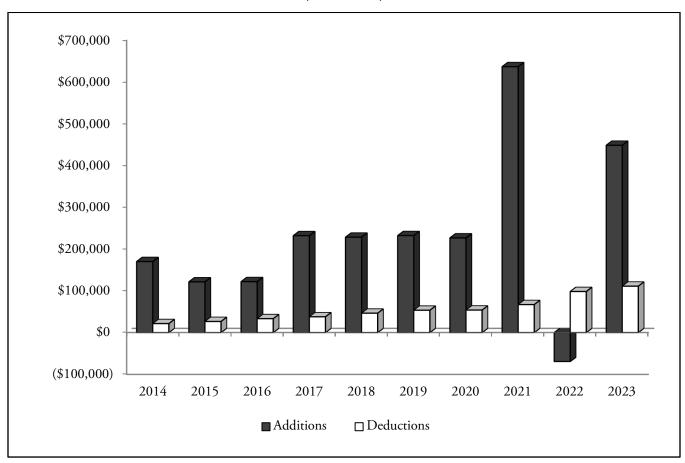
10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS



Public Employees' Retirement System Defined Contribution Retirement Plan Participant Directed Fund Changes in Fiduciary Net Position (In thousands)

	l				
Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 346,118	\$ 169,983	\$ 21,428	\$ 148,555	\$ 494,673
2015	494,673	121,343	26,554	94,789	589,462
2016	589,462	121,871	33,215	88,656	678,118
2017	678,118	231,977	37,774	194,203	872,321
2018	872,321	228,316	46,343	181,973	1,054,294
2019	1,054,294	232,177	53,437	178,740	1,233,034
2020	1,233,034	226,612	53,845	172,767	1,405,801
2021	1,405,801	636,965	67,019	569,946	1,975,747
2022	1,975,747	(69,221)	98,194	(167,415)	1,808,332
2023	1,808,332	448,594	111,021	337,573	2,145,905

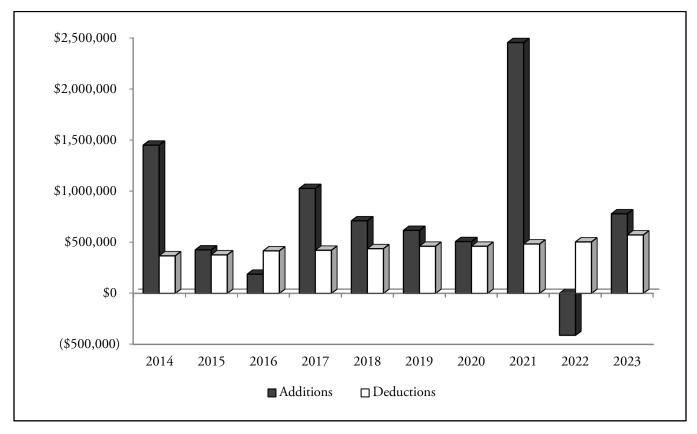
10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS



Public Employees' Retirement System Defined Benefit Alaska Retiree Healthcare Trust Changes in Fiduciary Net Position (In thousands)

Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 5,829,571	\$ 1,450,755	\$ 367,166	\$ 1,083,589	\$ 6,913,160
2015	6,913,160	425,380	376,577	48,803	6,961,963
2016	6,961,963	187,309	416,018	(228,709)	6,733,254
2017	6,733,254	1,027,530	421,832	605,698	7,338,952
2018	7,338,952	710,412	437,363	273,049	7,612,001
2019	7,612,001	616,706	461,015	155,691	7,767,692
2020	7,767,692	507,097	461,278	45,819	7,813,511
2021	7,813,511	2,453,813	483,183	1,970,630	9,784,141
2022	9,784,141	(411,460)	503,547	(915,007)	8,869,134
2023	8,869,134	778,984	571,896	207,088	9,076,222

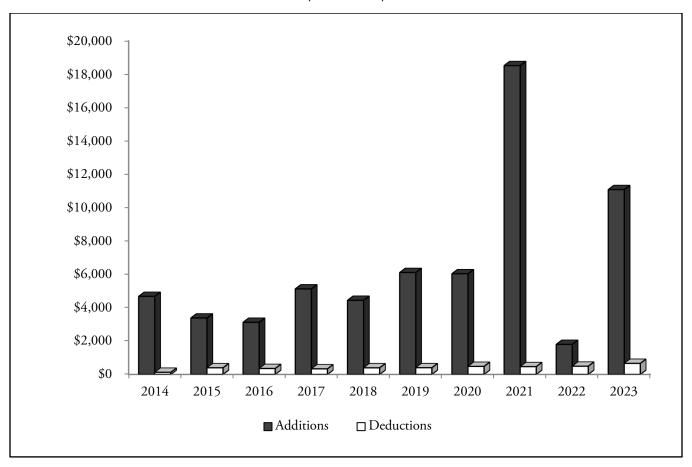
10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS



Public Employees' Retirement System Defined Contribution Retirement Plan Defined Benefit Occupational Death and Disability Changes in Fiduciary Net Position (In thousands)

Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 11,621	\$ 4,685	\$ 124	\$ 4,561	\$ 16,182
2015	16,182	3,385	395	2,990	19,172
2016	19,172	3,126	352	2,774	21,946
2017	21,946	5,134	331	4,803	26,749
2018	26,749	4,448	392	4,056	30,805
2019	30,805	6,119	399	5,720	36,525
2020	36,525	6,045	479	5,566	42,091
2021	42,091	18,518	463	18,055	60,146
2022	60,146	1,801	489	1,312	61,458
2023	61,458	11,089	659	10,430	71,888

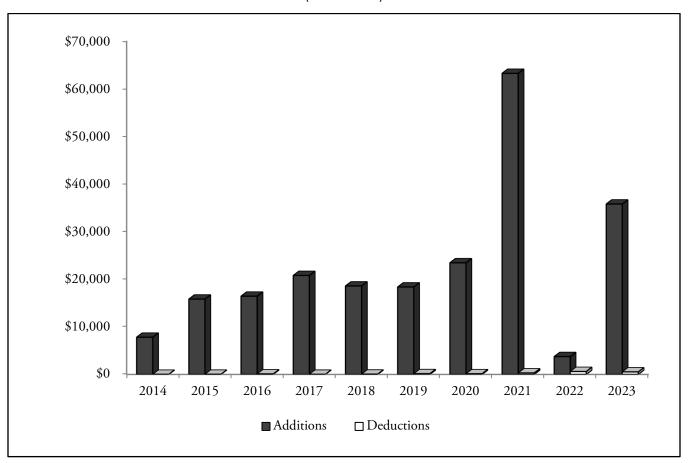
10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS



Public Employees' Retirement System Defined Contribution Retirement Plan Defined Benefit Retiree Medical Plan Changes in Fiduciary Net Position (In thousands)

Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 20,776	\$ 7,802	\$ 10	\$ 7,792	\$ 28,568
2015	28,568	15,819	19	15,800	44,368
2016	44,368	16,430	91	16,339	60,707
2017	60,707	20,787	12	20,775	81,482
2018	81,482	18,578	45	18,533	100,015
2019	100,015	18,365	142	18,223	118,238
2020	118,238	23,456	125	23,331	141,569
2021	141,569	63,280	294	62,986	204,555
2022	204,555	3,736	605	3,131	207,686
2023	207,686	35,807	516	35,291	242,977

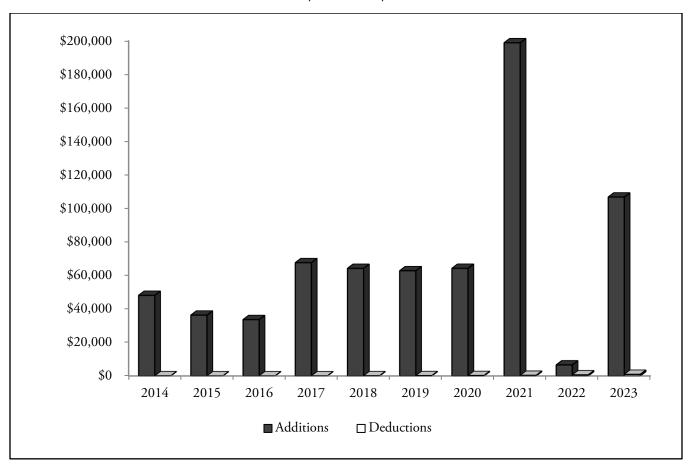
10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS



Public Employees' Retirement System Defined Contribution Retirement Plan Health Reimbursement Arrangement Changes in Fiduciary Net Position (In thousands)

Year Ended June 30	Fiduciary Net Position, Beginning of Year	Additions	Deductions	Increase / (Decrease) in Fiduciary Net Position	Fiduciary Net Position, End of Year
2014	\$ 109,231	\$ 48,055	\$ 9	\$ 48,046	\$ 157,277
2015	157,277	36,239	_	36,239	193,516
2016	193,516	33,568	_	33,568	227,084
2017	227,084	67,566	4	67,562	294,646
2018	294,646	64,152	47	64,105	358,751
2019	358,751	62,758	100	62,658	421,409
2020	421,409	64,172	172	64,000	485,409
2021	485,409	198,869	298	198,571	683,980
2022	683,980	6,525	565	5,960	689,940
2023	689,940	106,754	885	105,869	795,809

10-YEAR COMPARISON OF ADDITIONS AND DEDUCTIONS

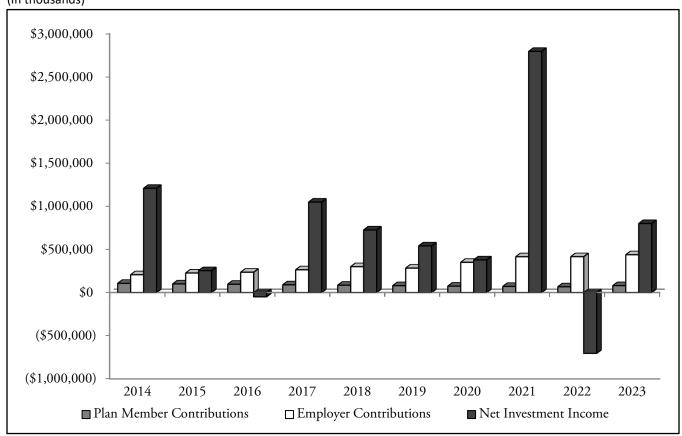


Public Employees' Retirement System Defined Benefit Pension Additions by Source (In thousands)

Year Ended June 30	Plan Member Contributions	Employer Contributions	State of Alaska – Additional State Contribution	Net Investment Income (Loss)	Other	Total
2014	\$ 106,565	\$ 206,204	\$ 176,794	\$ 1,207,484	\$ 49	\$ 1,697,096
2015	100,036	226,136	1,000,000	253,311	36	1,579,519
2016	96,024	235,360	88,586	(49,967)	240	370,243
2017	89,345	263,597	99,167	1,048,006	38	1,500,153
2018	84,956	299,665	72,719	725,310	25	1,182,675
2019	79,609	283,098	135,360	540,088	23	1,038,178
2020	74,514	350,028	79,487	378,119	148	882,296
2021	70,614	414,741	101,383	2,794,112	536	3,381,386
2022	66,412	415,538	97,700	(704,611)	187	(124,774)
2023	79,968	438,011	33,933	799,906	168	1,351,986

Note: This schedule shows the full appropriated amount of the additional state contribution as required by AS 39.35.280, a portion of which is included in "Employer Contributions" on the audited financial statements.

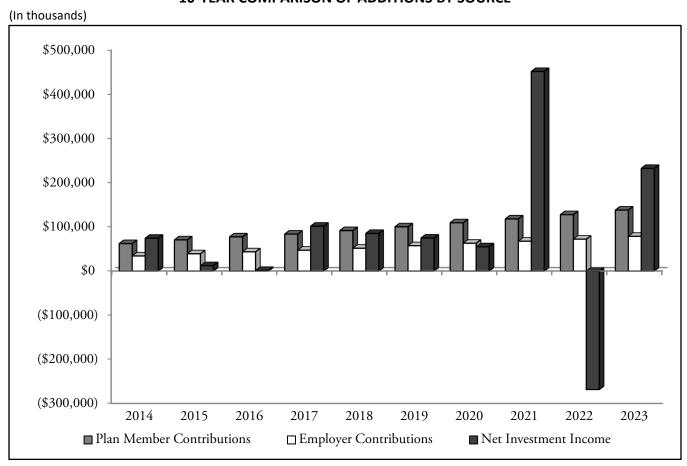
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Contribution Retirement Plan Participant Directed Fund Additions by Source (In thousands)

Year Ended June 30	Plan Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other	Total
2014	\$ 61,989	\$ 33,942	\$ 74,031	\$ 21	\$ 169,983
2015	70,462	38,949	11,931	1	121,343
2016	77,196	43,350	1,168	157	121,871
2017	83,493	46,982	101,317	185	231,977
2018	91,413	51,424	85,059	420	228,316
2019	99,995	57,221	74,507	454	232,177
2020	109,124	62,715	54,754	19	226,612
2021	117,855	67,389	451,573	148	636,965
2022	127,485	71,983	(268,653)	(36)	(69,221)
2023	137,925	78,391	232,148	130	448,594

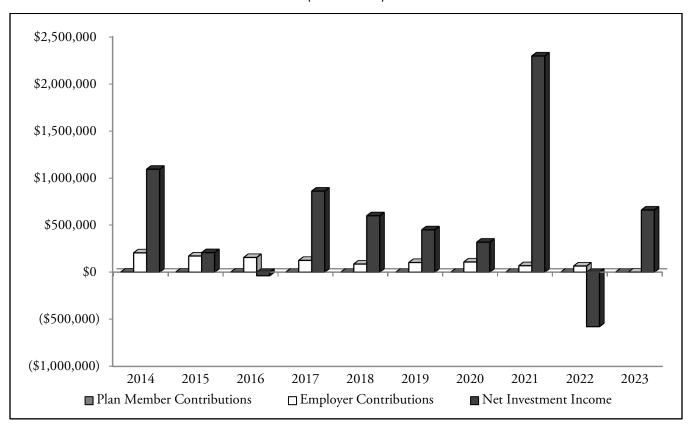
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Benefit Alaska Retiree Healthcare Trust Additions by Source (In thousands)

Year Ended June 30	Plan Member Premiums	Employer Contributions	State of Alaska – Additional State Contribution	Net Investment Income (Loss)	Other	Total
2014	\$ 717	\$ 204,779	\$ 135,679	\$ 1,092,212	\$ 17,368	\$ 1,450,755
2015	656	171,028	_	206,713	46,983	425,380
2016	621	155,630	37,934	(38,442)	31,566	187,309
2017	_	124,541	_	859,980	43,009	1,027,530
2018	_	85,731	_	598,343	26,338	710,412
2019	_	102,266	_	449,098	65,342	616,706
2020	_	107,298	_	318,158	81,641	507,097
2021	_	68,191	_	2,294,390	91,232	2,453,813
2022	_	64,990	_	(578,684)	102,234	(411,460)
2023	_	555	_	658,963	119,466	778,984

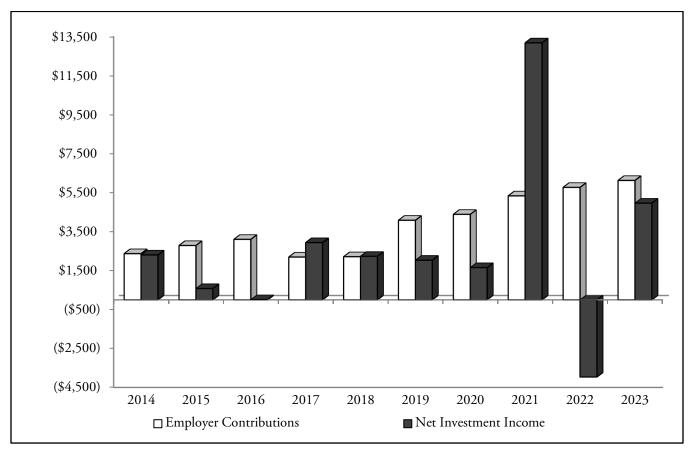
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Contribution Retirement Plan Defined Benefit Occupational Death and Disability Additions by Source (In thousands)

Plan Ended June 30	Plan Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other	Total
2014	\$ 8	\$ 2,372	\$ 2,305	\$ —	\$ 4,685
2015	14	2,790	581	_	3,385
2016	14	3,104	8	_	3,126
2017	_	2,196	2,938	_	5,134
2018	_	2,215	2,233	_	4,448
2019	_	4,083	2,036	_	6,119
2020	_	4,387	1,658	_	6,045
2021	_	5,334	13,182	2	18,518
2022	_	5,769	(3,968)	_	1,801
2023	_	6,126	4,963	_	11,089

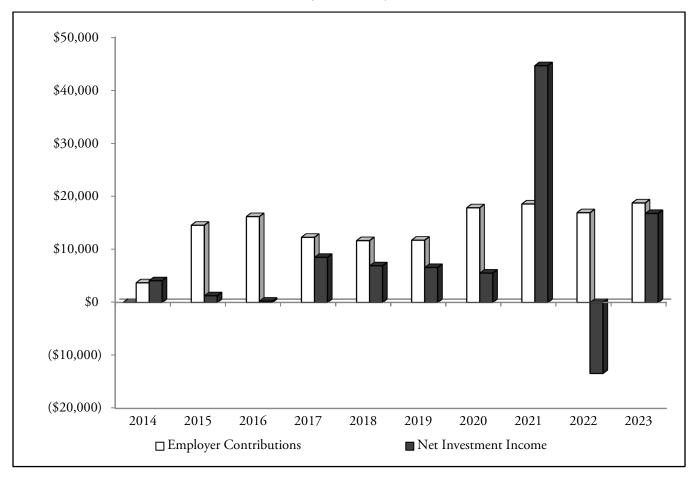
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Benefit Retiree Medical Plan Additions by Source (In thousands)

Plan Ended June 30	Plan Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other	Total
2014	\$ —	3,708	4,094	\$ —	7,802
2015	_	14,552	1,267	_	15,819
2016	_	16,184	246	_	16,430
2017	_	12,280	8,506	1	20,787
2018	_	11,657	6,919	2	18,578
2019	_	11,736	6,591	38	18,365
2020	_	17,846	5,546	64	23,456
2021	_	18,559	44,619	102	63,280
2022	_	16,920	(13,410)	226	3,736
2023	_	18,753	16,776	278	35,807

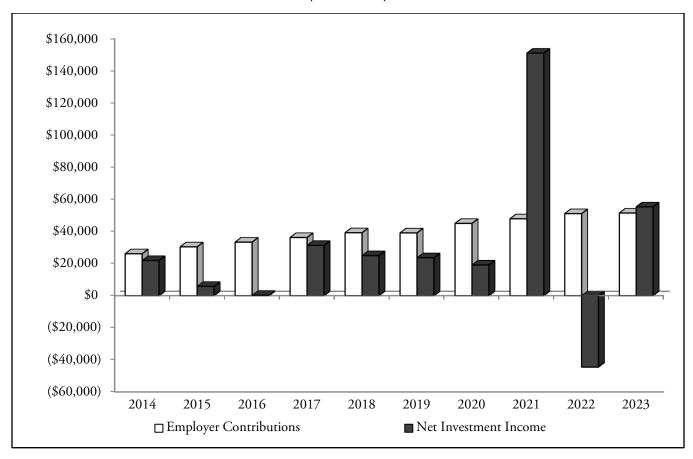
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Contribution Retirement Plan Health Reimbursement Arrangement Additions by Source (In thousands)

Plan Ended June 30	Employer Contributions	Net Investment Income (Loss)	Other	Total
2014	\$ 26,128	\$ 21,927	\$ —	\$ 48,055
2015	30,426	5,813	_	36,239
2016	33,351	217	_	33,568
2017	36,241	31,325	_	67,566
2018	39,195	24,957	_	64,152
2019	39,101	23,657	_	62,758
2020	45,014	19,158	_	64,172
2021	47,889	150,961	19	198,869
2022	51,086	(44,577)	16	6,525
2023	51,470	55,284	_	106,754

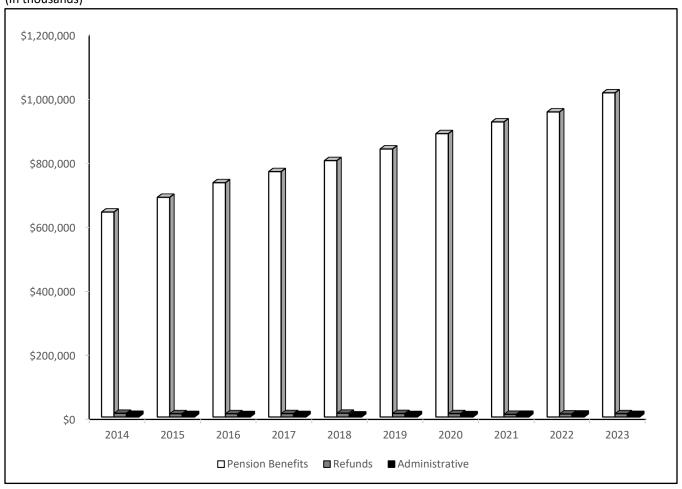
10-YEAR COMPARISON OF ADDITIONS BY SOURCE



Public Employees' Retirement System Defined Benefit Pension Deductions by Type (In thousands)

Year Ended June 30	Pension Benefits	Refunds of Contributions	Administrative	Total
2014	\$ 640,518	\$ 11,399	\$ 8,223	\$ 660,140
2015	686,493	10,049	7,553	704,095
2016	732,141	10,034	7,243	749,418
2017	766,766	10,421	7,526	784,713
2018	801,155	11,722	6,250	819,127
2019	837,381	10,638	7,429	855,448
2020	885,252	10,271	7,017	902,540
2021	921,899	8,107	8,232	938,238
2022	953,055	9,302	9,038	971,395
2023	1,012,696	10,099	7,842	1,030,637

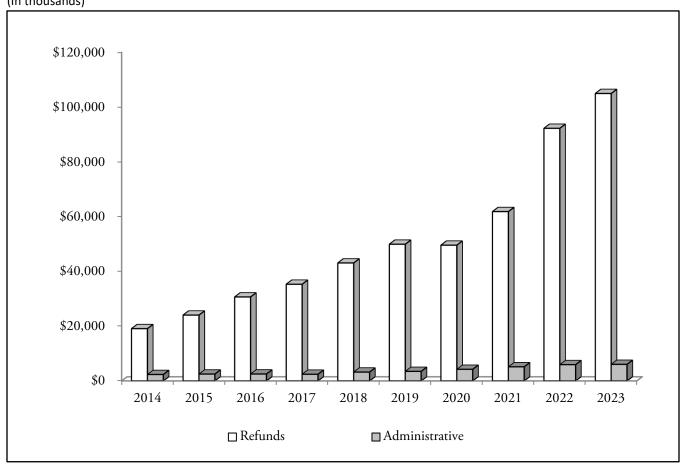
10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



Public Employees' Retirement System Defined Contribution Retirement Plan Participant Directed Fund Deductions by Type (In thousands)

Plan Ended June 30	Refund of Contributions	Administrative	Total
2014	\$ 19,104	\$ 2,324	\$ 21,428
2015	24,067	2,487	26,554
2016	30,709	2,506	33,215
2017	35,355	2,419	37,774
2018	43,132	3,211	46,343
2019	49,972	3,465	53,437
2020	49,620	4,225	53,845
2021	61,879	5,140	67,019
2022	92,269	5,925	98,194
2023	104,981	6,040	111,021

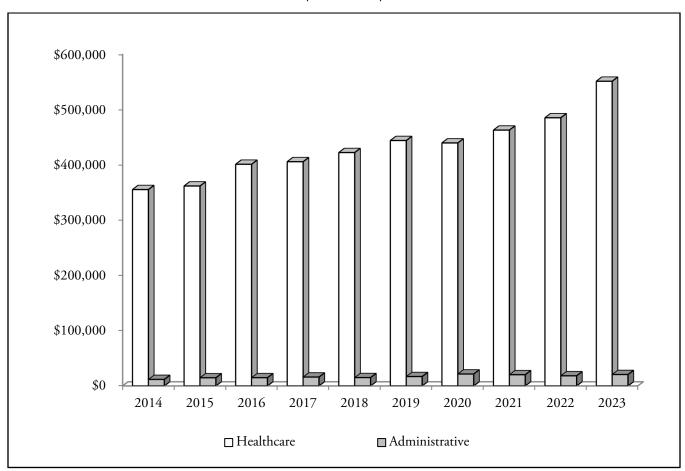
10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



Public Employees' Retirement System Defined Benefit Alaska Retiree Healthcare Trust Deductions by Type (In thousands)

Plan Ended June 30	Healthcare	Administrative	Total
2014	\$ 355,487	\$ 11,679	\$ 367,166
2015	361,930	14,647	376,577
2016	401,233	14,785	416,018
2017	405,872	15,960	421,832
2018	422,378	14,985	437,363
2019	444,143	16,872	461,015
2020	439,785	21,493	461,278
2021	462,977	20,206	483,183
2022	485,327	18,220	503,547
2023	551,353	20,543	571,896

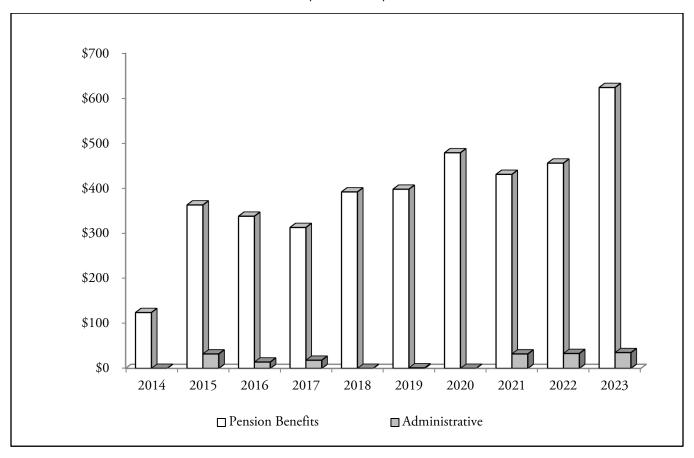
10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



Public Employees' Retirement System Defined Contribution Retirement Plan Defined Benefit Occupational Death and Disability Deductions by Type (In thousands)

Plan Ended June 30	Pension Benefits	Administrative	Total
2014	\$ 124	\$ —	\$ 124
2015	363	32	395
2016	338	14	352
2017	313	18	331
2018	392	_	392
2019	398	1	399
2020	479	_	479
2021	431	32	463
2022	456	33	489
2023	625	34	659

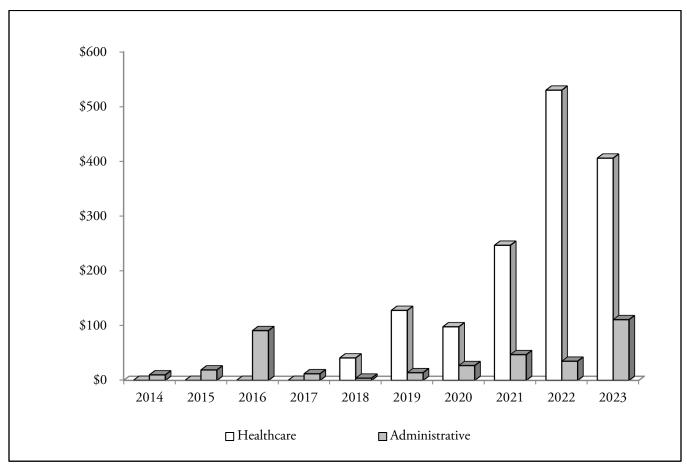
10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



Public Employees' Retirement System Defined Benefit Retiree Medical Plan Deductions by Type (In thousands)

Plan Ended June 30	Healthcare	Administrative	Total
2014	\$ —	\$ 10	\$ 10
2015	_	19	19
2016	_	91	91
2017	_	12	12
2018	41	4	45
2019	128	14	142
2020	98	27	125
2021	247	47	294
2022	505	100	605
2023	405	111	516

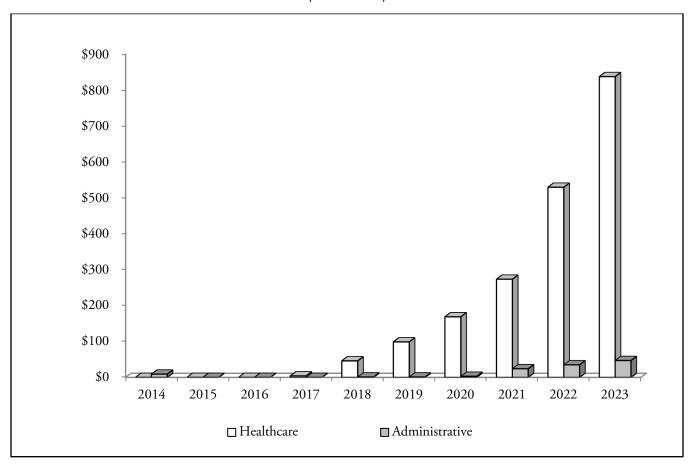
10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



Public Employees' Retirement System Defined Contribution Retirement Plan Healthcare Reimbursement Arrangement Deductions by Type (In thousands)

Plan Ended June 30	Healthcare	Administrative	Total
2014	\$ —	\$ 9	\$ 9
2015	_	_	_
2016	_	_	_
2017	4	_	4
2018	46	1	47
2019	99	1	100
2020	169	3	172
2021	274	24	298
2022	530	35	565
2023	838	47	885

10-YEAR COMPARISON OF DEDUCTIONS BY TYPE



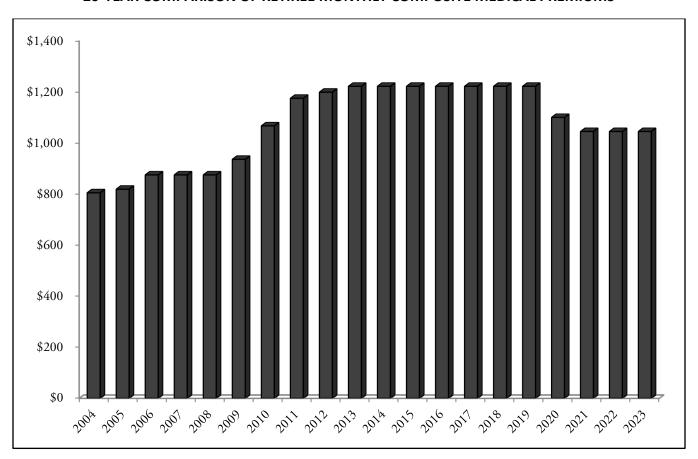
Public Employees' Retirement System Schedule of Average Benefit Payments New Benefit Recipients							
		Years of	Credited Ser	vice			
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
		Į.	All Others				
Period 7/1/17 - 6/30/18: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$414 \$34,603 26	\$607 \$48,524 221	\$1,299 \$61,668 351	\$1,982 \$67,811 280	\$3,034 \$78,675 223	\$4,475 \$88,707 214	\$6,085 \$97,703 127
Period 7/1/18 – 6/30/19: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$652 \$49,840 21	\$646 \$52,459 190	\$1,301 \$60,651 266	\$2,071 \$69,110 289	\$3,058 \$76,946 222	\$4,596 \$92,620 205	\$5,685 \$94,857 105
Period 7/1/19 – 6/30/20: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$492 \$42,520 32	\$601 \$47,573 165	\$1,311 \$61,357 218	\$2,065 \$69,829 258	\$3,040 \$78,632 183	\$4,686 \$93,182 197	\$6,213 \$100,366 122
Period 7/1/20 – 6/30/21: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$553 \$37,456 17	\$628 \$50,287 163	\$1,317 \$62,986 228	\$2,213 \$73,819 281	\$3,091 \$78,565 194	\$4,607 \$91,034 188	\$6,054 \$98,834 114
Period 7/1/21 – 6/30/22: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$1,453 \$61,752 6	\$623 \$48,643 147	\$1,340 \$63,167 181	\$2,181 \$73,283 286	\$3,373 \$84,361 227	\$4,644 \$91,984 165	\$6,822 \$105,569 115
		Peace O	fficer/Firefigl	nter			
Period 7/1/17 - 6/30/18: Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$ - \$ -	\$1,063 \$86,908 4	\$2,133 \$91,941 18	\$3,747 \$107,039 19	\$4,847 \$115,635 35	\$6,024 \$121,972 30	\$7,717 \$132,459 3
Period 7/1/18 – 6/30/19 Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$3,792 \$94,797 2	\$651 \$56,617 5	\$1,933 \$89,247 11	\$3,362 \$99,086 25	\$4,786 \$114,079 38	\$6,196 \$125,509 26	\$5,688 \$110,542 6
Period 7/1/19 – 6/30/20 Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$ — \$ — —	\$694 \$60,557 6	\$2,212 \$107,689 11	\$3,626 \$111,341 23	\$5,531 \$131,016 40	\$6,829 \$140,297 32	\$8,636 \$127,620 6
Period 7/1/20 – 6/30/21 Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$2,612 \$68,013 2	\$767 \$63,962 5	\$1,619 \$79,481 9	\$3,711 \$116,789 26	\$5,196 \$129,218 42	\$6,960 \$141,383 40	\$7,970 \$135,765 9
Period 7/1/21 – 6/30/22 Average Monthly Benefit Average Final Avg Salary Number of Recipients	\$ — \$ — —	\$860 \$60,646 2	\$2,227 \$97,870 7	\$4,341 \$122,607 33	\$5,743 \$137,018 42	\$7,831 \$144,961 27	\$7,566 \$119,732 7

[&]quot;Average Monthly Benefit" includes post-retirement pension adjustments and cost-of-living increases.

Public Employees' Retirement System Schedule of Pension and Healthcare Benefits Deductions by Type (In thousands)

Year Ended June 30	Service	Disability	Survivor	Healthcare	Total
2014	\$ 601,705	\$ 5,630	\$ 33,183	\$ 415,926	\$ 1,056,444
2015	645,895	5,220	35,742	361,930	1,048,786
2016	689,487	4,878	38,115	401,233	1,133,713
2017	721,300	4,812	40,967	405,876	1,172,955
2018	753,409	4,861	43,277	422,465	1,224,012
2019	786,301	5,052	46,426	444,370	1,282,149
2020	831,325	4,439	49,967	440,052	1,325,783
2021	865,048	4,260	53,022	463,498	1,385,828
2022	892,826	3,902	56,783	486,362	1,439,873
2023	948,051	3,953	61,317	552,596	1,565,917

20-YEAR COMPARISON OF RETIREE MONTHLY COMPOSITE MEDICAL PREMIUMS



Public Employees' Retirement System Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Elected Valuation as of June 30, 2022

	Number	Туре	of Pension Be	enefit		Op	tion Selecte	d	
Amount of Monthly Pension Benefit	of Recipients	1	2	3	1	2	3	4	5
All Others									
\$ 1 - 300	1,924	1,400	524	_	939	350	251	58	326
301 - 600	4,908	4,087	817	4	2,632	1,100	804	236	136
601 - 900	4,198	3,481	707	10	2,253	1,015	655	174	101
901 - 1,200	3,394	2,889	500	5	1,716	794	637	166	81
1,201 - 1,500	3,042	2,646	383	13	1,538	741	590	105	68
1,501 - 1,800	2,411	2,127	272	12	1,129	655	493	83	51
1,801 - 2,100	2,075	1,843	221	11	994	550	384	89	58
2,101 - 2,400	1,834	1,660	165	9	818	530	370	70	46
2,401 - 2,700	1,482	1,363	108	11	662	395	314	66	45
2,701 - 3,000	1,352	1,235	114	3	607	405	265	43	32
3,001 - 3,300	1,166	1,104	59	3	479	359	256	48	24
3,301 - 3,600	931	879	47	5	363	307	204	30	27
3,601 - 3,900	857	827	29	1	353	275	168	47	14
3,901 - 4,200	759	732	27	_	305	254	157	31	12
over \$4,200	4,155	4,089	60	6	1,467	1,417	990	228	53
Totals	34,488	30,362	4,033	93	16,255	9,147	6,538	1,474	1,074
		Peac	e Officer/I	Firefighter					
\$ 1 - 300	47	13	34	_	37	2	_	1	7
301 - 600	168	102	66	_	96	35	18	8	11
601 - 900	186	103	82	1	110	42	14	11	9
901 - 1,200	160	84	76	_	106	30	12	7	5
1,201 - 1,500	176	106	69	1	107	36	21	5	7
1,501 - 1,800	164	109	55	_	95	34	24	6	5
1,801 - 2,100	147	99	47	1	69	40	27	5	6
2,101 - 2,400	218	168	49	1	98	69	34	9	8
2,401 - 2,700	190	146	41	3	85	54	35	8	8
2,701 - 3,000	209	180	26	3	79	81	30	12	7
3,001 - 3,300	268	231	33	4	98	102	51	11	6
3,301 - 3,600	257	227	28	2	89	96	44	17	11
3,601 - 3,900	208	180	26	2	83	84	28	8	5
3,901 - 4,200	208	197	10	1	58	98	36	13	3
over \$4,200	1,149	1,113	31	5	322	524	222	70	11
Totals	3,755	3,058	673	24	1,532	1,327	596	191	109

Type of Pension Benefit

- 1 Regular retirement
- 2 Survivor payment
- 3 Disability

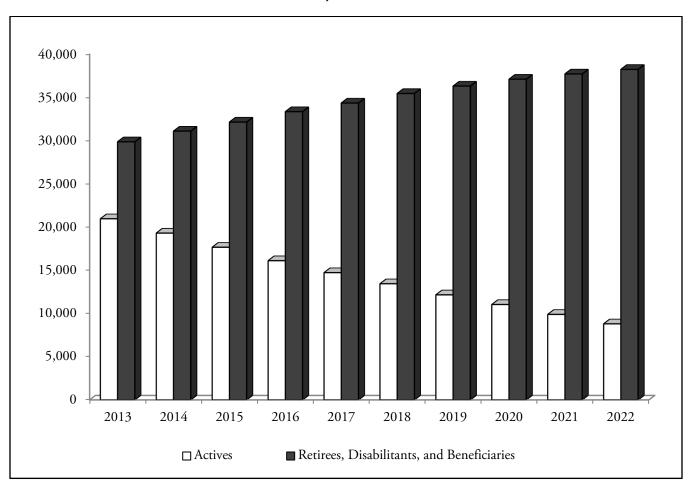
Option Selected

- 1 Whole Life Annuity
- 2 75% Joint and Contingent Annuity
- 3 50% Joint and Contingent Annuity
- 4 66 2/3% Joint and Survivor Annuity
- 5 Level Income Option

Public Employees' Retirement System
System Membership by Status

Year Ended June 30	Active	Retirees, Disabilitants & Beneficiaries	Vested Terminations	Nonvested Terminations w/Balance	Total
2013	20,955	29,865	6,230	13,162	70,212
2014	19,297	31,099	6,167	12,713	69,276
2015	17,660	32,145	6,304	12,339	68,448
2016	16,105	33,353	6,160	11,880	67,498
2017	14,719	34,347	5,962	11,506	66,534
2018	13,434	35,454	5,660	11,192	65,740
2019	12,152	36,310	5,499	10,921	64,882
2020	11,033	37,106	5,327	10,642	64,108
2021	9,888	37,717	5,135	10,432	63,172
2022	8,795	38,243	4,955	10,223	62,216

10-YEAR COMPARISON OF ACTIVE MEMBERS AND RETIREES, DISABILITANTS, AND BENEFICIARIES



Public Employees' Retirement System Principal Participating Employers June 30, 2023

Employer	Non-retired Members	Rank	Percentage of Total Non-retired Members
State of Alaska	28,114	1	38.90%
Anchorage School District	6,328	2	8.76
University of Alaska	<u>5,116</u>	3	<u>7.08</u>
Total	<u>39,558</u>		<u>54.74%</u>

Public Employees' Retirement System Participating Employers June 30, 2023

Akutan, City of Alaska, State of

Alaska Gasline Development Corporation

Alaska Gateway School District
Alaska Housing Finance Corporation

Aleutian Housing Authority Aleutians East Borough

Aleutians East Borough School District

Allakaket, City of

Anchorage, Municipality of

Anchorage Community Development Authority

Anchorage School District

Anderson, City of Aniak, City of

Annette Island School District

Atka, City of

Baranof Island Housing Authority

Barrow, City of

Bartlett Regional Hospital Bering Strait School District

Bering Straits Regional Housing Authority

Bethel, City of Bristol Bay Borough

Bristol Bay Borough School District Bristol Bay Housing Authority

Chatham School District
Chugach School District
Cook Inlet Housing Authority

Copper River Basin Regional Housing Authority

Copper River School District

Cordova, City of

Cordova City School District

Cordova Community Medical Center

Craig, City of

Craig City School District

Delta-Greely School District Delta Junction, City of

Denali Borough

Denali Borough School District

Dillingham, City of

Dillingham City School District

Egegik, City of Elim, City of

Fairbanks, City of

Fairbanks North Star Borough

Fairbanks North Star Borough School District

Fort Yukon, City of

Galena, City of

Galena City School District

Haines Borough

Haines Borough School District

Homer, City of Hoonah, City of

Hoonah City School District

Hooper Bay, City of Huslia, City of

Hydaburg City School District

Iditarod Area School District

Ilisagvik College

Interior Regional Housing Authority

Inter-Island Ferry Authority

Juneau School District, City and Borough of

Juneau, City and Borough of

Public Employees' Retirement System Participating Employers June 30, 2023 (continued)

Kachemak, City of

Kake City School District

Kaltag, City of

Kashunamiut School District

Kenai, City of

Kenai Peninsula Borough

Kenai Peninsula Borough School District

Ketchikan, City of

Ketchikan Gateway Borough

Ketchikan Gateway Borough School District

King Cove, City of Kivalina, City of Klawock, City of

Klawock City School District

Kodiak, City of

Kodiak Island Borough

Kodiak Island Borough School District

Kotzebue, City of Koyuk, City of

Kuspuk School District

Lake and Peninsula Borough

Lake and Peninsula Borough School District

Lower Kuskokwim School District Lower Yukon School District

Matanuska-Susitna Borough

Matanuska-Susitna Borough School District

Mekoryuk, City of

Nenana, City of

Nenana City School District

Nome, City of

Nome City School District Nome Joint Utility System

Noorvik, City of

North Pacific Fishery Management Council

North Pacific Rim Housing Authority

North Pole, City of North Slope Borough

North Slope Borough School District

Northwest Arctic Borough

Northwest Arctic Borough School District Northwest Inupiat Housing Authority

Palmer, City of Pelican, City of

Pelican City School District

Petersburg Borough

Petersburg City School District
Petersburg Medical Center
Pribilof School District

Saint George, City of

Saint Mary's School District

Saint Paul, City of Sand Point, City of Saxman, City of Saxman Seaport Selawik, City of Seldovia, City of Seward, City of Shaktoolik, City of

Sitka Borough School District Sitka, City and Borough of Skagway City School District Skagway, Municipality of

Soldotna, City of

Southeast Island School District Southeast Regional Resource Center Southwest Region School District Special Education Service Agency

Public Employees' Retirement System Participating Employers June 30, 2023 (continued)

Tagiugmiullu Nunamiullu Housing Authority

Tanana, City of

Tanana School District

Thorne Bay, City of

Tlingit-Haida Regional Housing Authority

Toksook Bay, City of

Unalaska, City of

Unalaska City School District

University of Alaska

Upper Kalskag, City of

Valdez, City of

Valdez City School District

Wasilla, City of Whittier, City of

Wrangell, City and Borough of

Wrangell Public School District

Yakutat, City and Borough of

Yakutat School District

Yukon Flats School District

Yukon-Koyukuk School District

Yupiit School District





STATE OF ALASKA • DEPARTMENT OF ADMINISTRATION

- DIVISION OF RETIREMENT AND BENEFITS P.O. BOX 110203 JUNEAU, ALASKA 99811-0203

333 WILLOUGHBY AVENUE, STATE OFFICE BUILDING, 6TH FLOOR TOLL-FREE (800) 821-2251 • IN JUNEAU (907) 465-4460