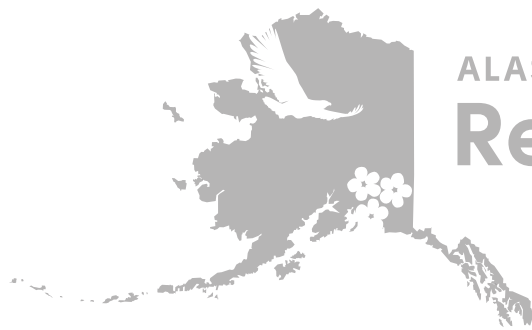




INVESTMENT SECTION



ALASKA DIVISION OF
**Retirement
and Benefits**



Callan Associates Inc.
1900 16th Street
Suite 1175
Denver, CO 80202



Main 303.861.1900
Fax 303.832.8230

www.callan.com

October 23, 2020

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, 2020.

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 market values reported by these sources.

Callan serves as the ARM Board's (Board) 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, the 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, the Board selects a strategic investment policy that balances long-term growth potential and acceptable risk. A policy benchmark is constructed that mirrors the Board'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 the ARMB's investment policy.

Investment Section

2020 Fiscal Year Market Overview

Despite a steep drop in the U.S. equity market during the first quarter of calendar year 2020 due to the COVID-19 pandemic, the U.S. equity markets finished fiscal year 2020 with a gain for the eleventh consecutive fiscal year. The Russell 3000 Index, a measure of broad U.S. equity, returned 6.53% in the period ended June 30, 2020. Non-U.S. stocks trailed their U.S. counterparts as major economies outside of the U.S. struggle to find growth while battling a global pandemic. The MSCI ACWI ex-U.S. IMI (Net) index, a broad benchmark reflecting developed and emerging markets but excluding U.S. equities dropped -4.74%. A broad measure of the total global equity market (including the U.S.), the MSCI All Country World Index (Net), rose 2.11%.

The Federal Reserve acted quickly to backstop the U.S. economy in the face of COVID-19, slashing interest rates and flattening the yield curve across all maturities. The Bloomberg U.S. Aggregate Bond Index, a widely-used gauge of the investment grade domestic U.S. bond market, climbed 8.74%. Prospective returns appear bleak given this low rate environment. Private real estate, as measured by the NCREIF Property Index, was positive for the ninth fiscal year in a row. In fiscal year 2020, the NCREIF Property Index returned 2.69% as the retail and hotel sectors faced increased pressure from the COVID-induced economic slowdown. Publicly traded real estate, as measured by the FTSE NAREIT All Equity Index, meaningfully lagged the private markets, dipping -6.47%.

ARMB's actual asset groupings delivered the following one-year returns through June 30, 2020¹:

Domestic Stocks:	2.62%
Global ex-U.S. Stocks:	(3.59%)
Opportunistic:	0.52%
Fixed Income:	7.31%
Real Assets:	2.06%
Private Equity:	10.47%

For the fiscal year ended 30 June 2020, the Public Employees Retirement System (PERS) had a time-weighted total return of 3.83%. The Teachers Retirement System (TRS) had a time-weighted total return of 3.83%. Both systems' gross return trailed their strategic policy target return of 4.64% but exceeded the median return for Callan's Public Fund Sponsor database of 3.26%.

Over longer trailing periods, PERS and TRS have outperformed their target index returns. PERS's 5-year annualized return was 6.46%. TRS also returned 6.46% over this same period. The 5-year annualized benchmark return for both Plans was 6.24%. The seven-year annualized return was 7.64% for PERS and 7.65% for TRS. Both were above the 7-year target return of 7.18%. Over 28.75 years – the longest period of available data – PERS and TRS achieved annualized total returns of 7.60% and 7.65%, respectively. Both exceeded the corresponding policy benchmark return of 7.49%.

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

Investment Section

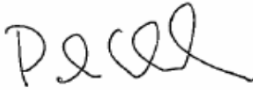
The 2020 fiscal-year returns of the PERS and TRS pension (“DB”) and health care (“HC”) programs are listed in the table below.

	PERS DB	PERS HC	TRS DB	TRS HC
FY 2020	3.83%	3.90%	3.82%	3.90%

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 2020 was a year in which the ARMB’s Total Fund returns were positive, as were those of most broad asset class returns. Only international stocks posted a loss in fiscal 2020. PERS and TRS produced higher returns than the average public fund, both ranking in the 41st percentile within the Public Fund Sponsor peer group for the one-year period ended June 30, 2020.

Sincerely,



Paul Erlendson
Senior Vice President

c: Zach Hanna
Steven Center

Investment Section

Department of Revenue Treasury Division Staff As of June 30, 2020

Commissioner
Lucinda Mahoney

Deputy Commissioner
Mike Barnhill

Treasury Division Director
Pamela Leary, CPA

Chief Investment Officer
Bob G. Mitchell

Comptroller
Kayla Wisner, CPA

Cash Management
Jesse Blackwell

ARMB Liaison Officer
Stephanie Alexander

Investment Officers

Casey Colton

Emily Howard

Josh McLin

Kevin Elliot

Kevin Liu

Mark Moon

Michelle Prebula

Nicholas Orr

Sean Howard

Shane Carson

Stephanie Pham

Stephen Sikes

Victor Djajalie

Zachary Hanna

External Money Managers and Consultants

Domestic Equity Small Capitalization

ArrowMark Partners

Denver, CO

BMO Global Asset Management

Chicago, IL

Frontier Capital Management

Boston, MA

Jennison Associates LLC

New York, NY

Sycamore Capital Management

Cincinnati, OH

T. Rowe Price Investment Services

Baltimore, MD

Domestic Equity Micro Capitalization

DePrince, Race & Zollo, Inc.

Winter Park, FL

Lord Abbett & Co.

Jersey City, NJ

Zebra Capital Management

Stanford, CT

International Small Capitalization

Mondrian Investment Partners

London, England

Schroders Investment Management NA

London, England

Emerging Market Income

Lazard Asset Management

New York, NY

International Fixed Income

Mondrian Investment Partners

London, England

Schroder Investment Management NA

New York, NY

High Yield/Convertible Bond/Tactical Bond

Fidelity Investment Asset Management

Smithfield, RI

MacKay Shields LLC

New York, NY

Tactical Asset Allocation

PineBridge Investments

New York, NY

McKinley Capital Management, Inc.

Anchorage, AK

Fidelity Investment Asset Management

Smithfield, RI

International Equity – MSCI ACWI Ex-U.S. IMI (Net), Emerging Markets, Non U.S., and Global Equity

Arrowstreet Capital, LP

Boston, MA

BlackRock

San Francisco, CA

Baillie Gifford Overseas Ltd.

Edinburgh, Scotland

Brandes Investment Partners, L.P.

San Diego, CA

Capital Group Trust Co.

Los Angeles, CA

DePrince, Race & Zollo, Inc

Winter Park, FL

Lazard Asset Management

New York, NY

Legal and General Investment Management America

Chicago, IL

Parametric Clifton

Seattle, WA

State Street Global Advisors

San Francisco, CA

Alternate Beta

J.P. Morgan Asset Management

New York, NY

Man Group

London, UK

Zebra Capital Management

Stanford, CT

Alternate Fixed Income

Crestline Investors, Inc

Fort Worth, TX

Prisma Capital

New York, NY

Alternative Equity

Analytic Investors

Los Angeles, CA

State Street Global Advisors

San Francisco, CA

Tactical Fixed Income

Fidelity Investment Asset Management

Merrimack, NH

Taxable Municipal Bonds

Western Asset Management Company

Pasadena, CA

External Money Managers and Consultants (cont.)

Private Equity

Abbott Capital Management, L.P.

New York, NY

Angelo, Gordon & Co.

New York, NY

Advent International,

Boston, MA

Clearlake Capital

Santa Monica, CA

Dyal Capital Partners

New York, NY

Glendon Capital

Santa Monica, CA

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

Irvine, TX

Onex

New York, NY

Pathway Capital Management, LLC

Irvine, CA

Summit Partners

Boston, MA

The Jordan Company

New York, NY

Warburg Pincus

New York, NY

Supplemental Benefits System, Deferred Compensation Plan and Defined Contribution Plan

BlackRock

San Francisco, CA

Baillie Gifford Overseas Ltd

Edinburgh, Scotland

Brandes Investment Partners

San Diego, CA

Northern Trust

Chicago, IL

State Street Global Advisors

Boston, MA

T. Rowe Price Investment Services

Baltimore, MD

Investment Consultants

Callan Associates, Inc.

Denver, CO

The Townsend Group

San Francisco, CA

Investment Advisory Council

Jerrold Mitchell

Wayland, MA

Ruth Ryerson

Colorado, CO

William Jennings

Colorado Springs, CO

Independent Auditors

KPMG, LLP

Anchorage, AK

Actuaries

Buck Global, LLC

Denver, CO

Gabriel Roeder Smith

Denver, CO

Master Limited Partnerships

Advisory Research

St. Louis, MO

Tortoise Capital Advisors LLC

Leawood, KS

Global Master Custodian

State Street Bank & Trust Co.

Boston, MA

Real Assets – Real Estate Core Separate Accounts

LaSalle Investment Management

Chicago, IL

Sentinel Real Estate Corporation

New York, NY

UBS Realty Investors, LLC

Hartford, CT

Real Assets – Energy

EIG Global Energy Partners

Washington, DC

Real Assets – Infrastructure

Brookfield Investment Management

New York, NY

IFM

New York, NY

JP Morgan Asset Management

New York, NY

Lazard Asset Management

New York, NY

Real Estate – Commingled Real Estate Funds

Almanac Realty Investors

New York, NY

BlackRock Realty

New York, NY

Clarion Partners

New York, NY

Colony NorthStar Capital

Los Angeles, CA

Coventry Real Estate Fund II, LLC

New York, NY

J.P. Morgan Investment Management Inc.

New York, NY

KKR & Co.

New York, NY

Silverpeak Real Estate Partners

New York, NY

Tishman Speyer Properties

New York, NY

UBS Realty Investors, LLC

Hartford, CT

Real Assets – Farmland and Timber

Hancock Agricultural Investment Group

Boston, MA

Hancock Timber Resource Group

Boston, MA

Timberland Investment Resources LLC

Atlanta, GA

UBS Farmland Investors, LLC

Hartford, CT

Investment Section

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 eight asset classes: Broad Domestic Equities, Global Equities Ex-U.S., Fixed Income, Opportunistic, Real Estate, 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 Index
Global Equities Ex-U.S.	MSCI ACWI Ex-U.S. IMI Net Index
Fixed Income	95% Bloomberg Barclays U.S. Aggregate Index 5% 3-Month Treasury Bill
Opportunistic	60% Russell 1000 Index 40% Bloomberg Barclays U.S. Aggregate Index
Real Assets	37.5% NFI-ODCE Index 10% FTSE-NAREIT 25% NCREIF Farmland Index 10% NCREIF Timberland Index 17.5% CPI+4%
Private Equity	1/3 S&P 500 Index 1/3 Russell 2000 Index 1/3 MSCI EAFE Net Index

The target asset allocation is determined by the ARMB, utilizing capital market assumptions provided by its independent general investment consultant, Callan LLC. During the 2020 fiscal year, the ARMB's target asset allocation was 26% Broad Domestic Equity, 18% Global Equities Ex-U.S., 24% Fixed Income, 8% Opportunistic, 13% Real Assets, and 11% Private Equity. Over the next 20 years, the target asset allocation is expected to generate a return of 7.13% with a standard deviation of 13.8%.

Investment Section

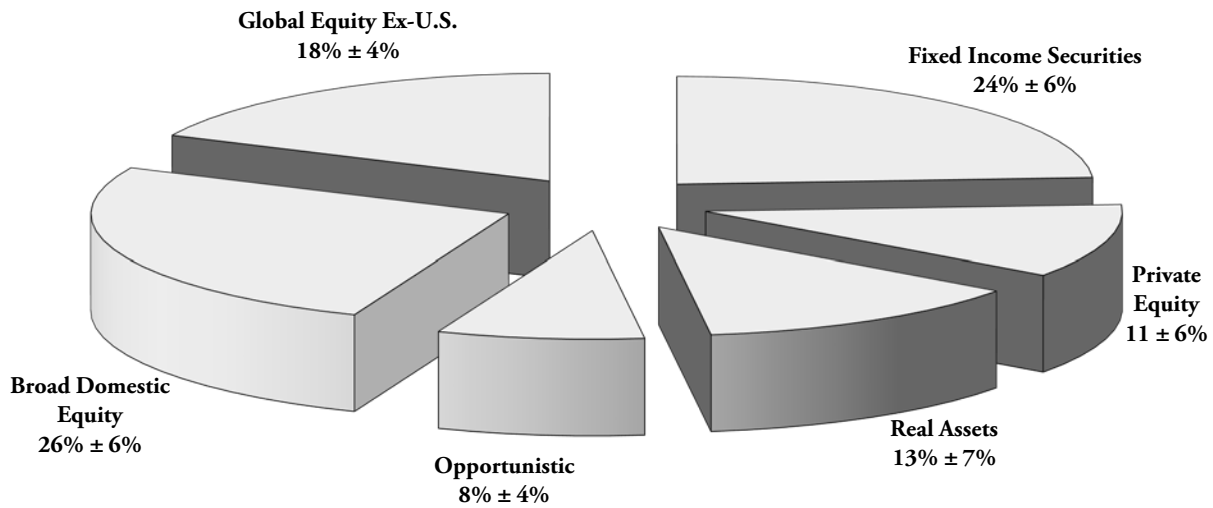
Public Employees' Retirement System Schedule of Investment Results Fiscal Years Ended June 30							
	2016	2017	2018	2019	2020	Annualized	
						3 Year	5 Year
Total Fund							
PERS	(0.36%)	13.35%	9.61%	6.40%	3.83%	6.59%	6.46%
<i>Custom Composite Index</i>	-	-	-	5.65	4.64	6.17	6.24
<i>Actuarial Earnings Rate</i>	8.00	8.00	8.00	7.38	7.38	7.38	7.38
Broad Domestic Equity							
PERS	0.58	18.55	15.21	8.41	2.62	8.62	8.85
<i>Custom Composite Index</i>	2.14	18.51	14.78	8.98	6.53	10.04	10.03
Fixed Income							
PERS	5.15	2.91	(0.71)	6.34	7.31	4.25	4.16
<i>Custom Composite Index</i>	4.79	0.02	(0.76)	6.19	7.67	4.30	3.47
Opportunistic							
PERS	-	-	5.64	7.21	0.52	4.42	-
<i>Custom Composite Index</i>	-	-	8.39	9.72	9.32	9.14	-
Real Assets							
PERS	4.76	5.98	7.53	6.08	2.06	5.20	5.27
<i>Custom Composite Index</i>	8.87	5.66	4.29	7.23	1.19	4.21	5.41
Global Equity Ex-US							
PERS	(9.15)	20.41	7.97	(0.08)	(3.59)	1.32	2.62
<i>MSCI ACWI ex-US</i>	(9.80)	21.00	7.75	0.26	(4.74)	0.96	2.16
Private Equity							
PERS	4.71	17.04	26.65	17.66	10.47	18.08	15.07
<i>Custom Composite Index</i>	(4.41)	21.04	12.92	2.71	(1.35)	4.59	5.77
Absolute Return							
PERS	(3.09)	8.47	4.78	4.08	-	-	-
<i>3-month Treasury Bill +5%</i>	5.19	5.49	5.18	1.15	-	-	-
Alternative Equity							
PERS	3.41	11.38	-	-	-	-	-
<i>Custom Composite Index</i>	2.09	15.07	-	-	-	-	-
Cash Equivalent							
PERS	0.55	0.79	1.51	2.50	-	-	-
<i>3-month Treasury Bill</i>	0.19	0.49	1.36	2.31	-	-	-

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.

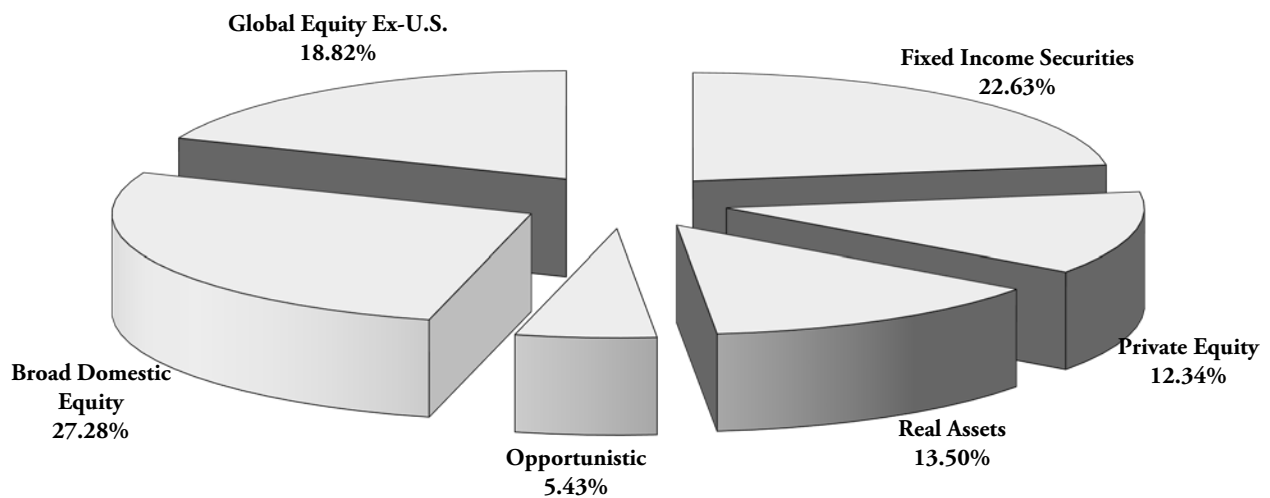
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2020

Policy

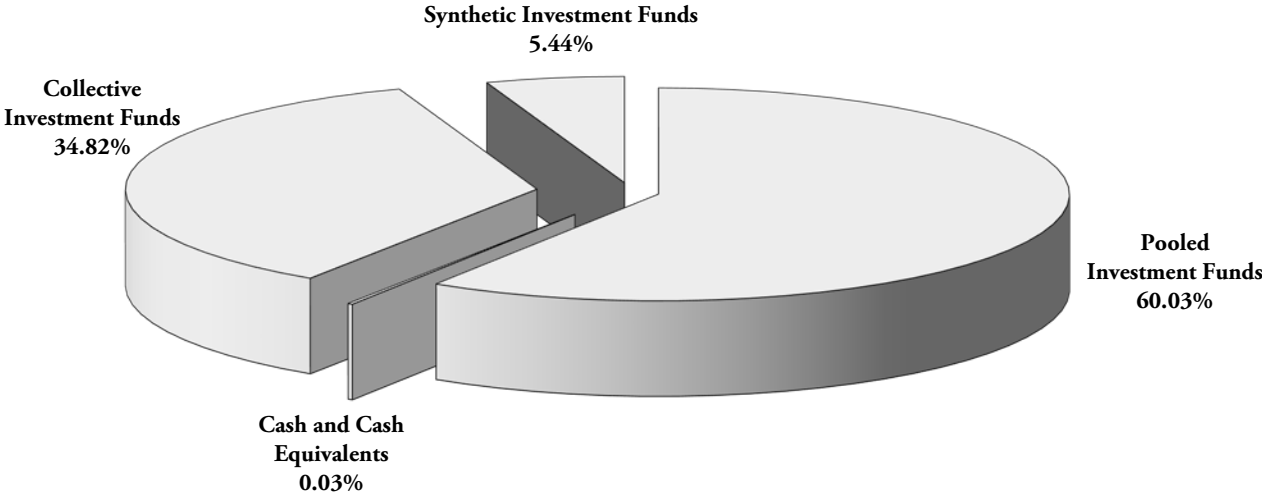


Actual – Defined Benefit Pension

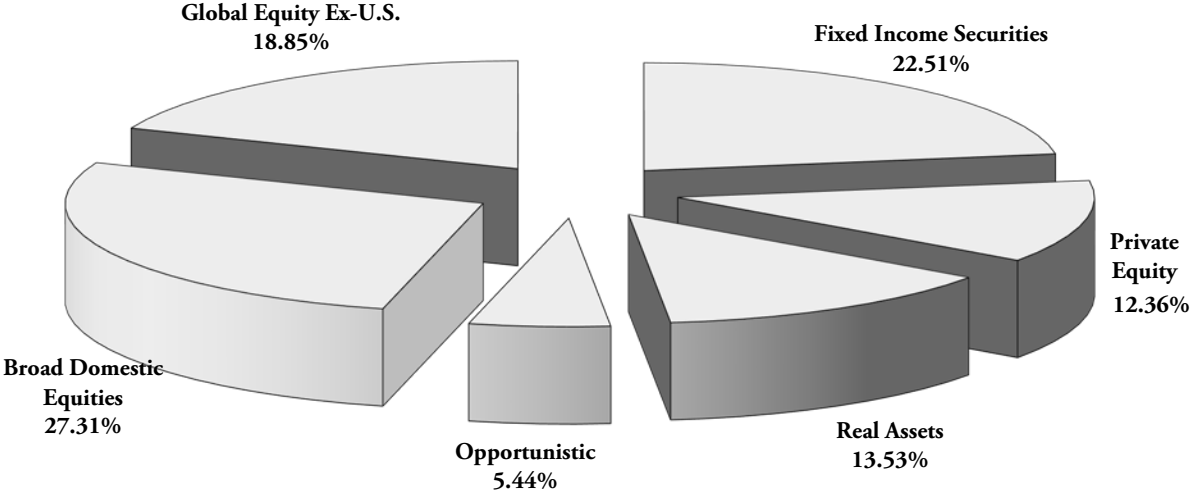


**Public Employees' Retirement System
Asset Allocation
June 30, 2020**

Actual – Defined Contribution Participant Directed



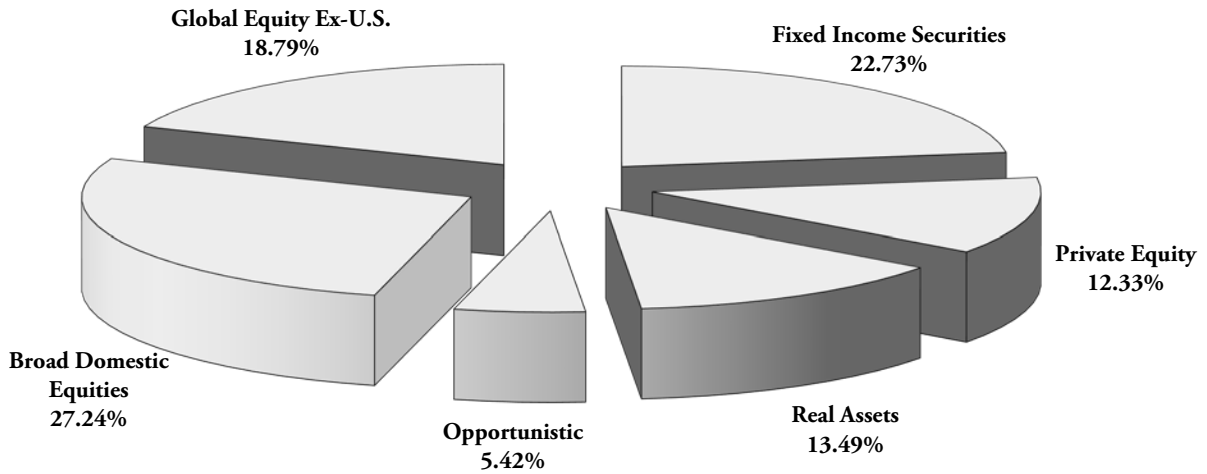
Actual – Defined Benefit Alaska Retiree Healthcare Trust



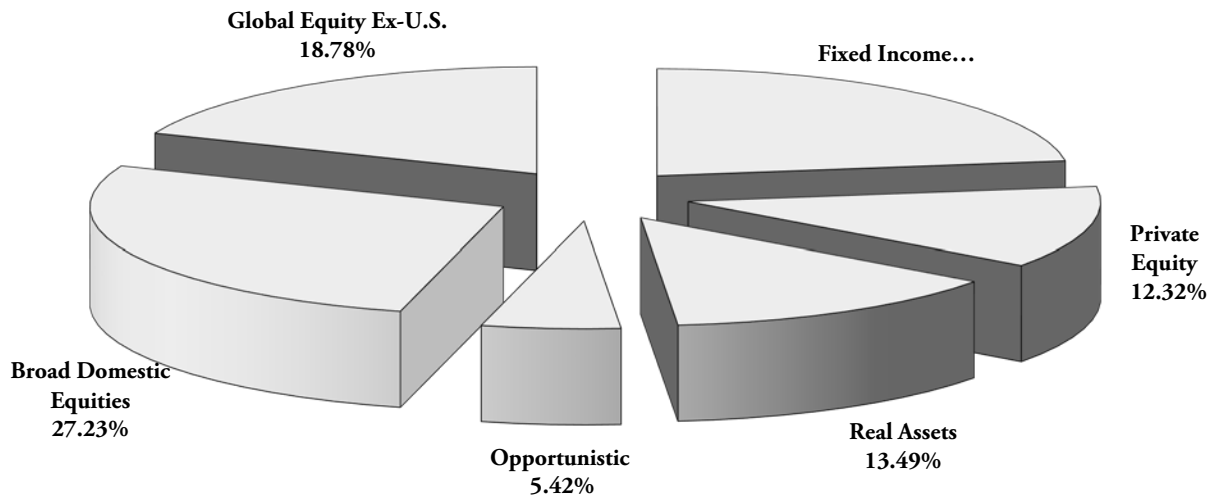
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2020

Actual — Health Reimbursement Arrangement

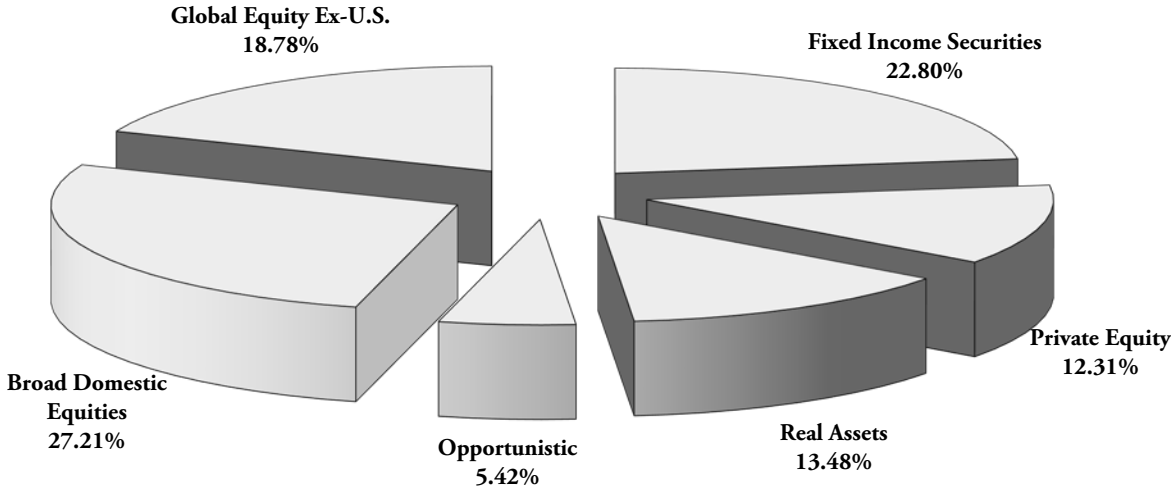


Actual — Occupational Death & Disability



**Public Employees' Retirement System
Asset Allocation
June 30, 2020**

Actual — Retiree Medical Plan



Investment Section

Alaska Retirement Management Board Top Ten Holdings by Asset Type June 30, 2020

Invested assets under the fiduciary responsibility of the Alaska Retirement Management Board (ARMB) 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

<u>Rank</u>	<u>Largest Fixed Income Holdings</u>	<u>Market Value</u>	<u>Par Value</u>
1	FNCL Pool RA15683	\$133,307,490	\$125,772,323
2	FNMA Pool CA4792	71,580,949	67,779,397
3	U.S. Treasury 2.125% 8/15/2021	68,638,169	67,179,123
4	U.S. Treasury 0.250% 6/15/2023	64,354,586	64,219,123
5	U.S. Treasury 1.250% 7/31/2023	54,768,621	53,022,603
6	U.S. Treasury 3.000% 5/15/2042	44,548,699	33,460,866
7	U.S. Treasury 2.875% 5/15/2028	42,326,186	35,864,900
8	U.S. Treasury 2.250% 8/15/2049	40,414,730	33,605,648
9	U.S. Treasury 4.000% 6/1/2049	37,099,610	35,018,023
10	U.S. Treasury 3.500% 2/15/2039	32,017,742	22,631,128

Equities

<u>Rank</u>	<u>Largest Equity Holdings</u>	<u>Market Value</u>	<u>Par Value</u>
1	Microsoft Corp.	\$187,460,161	\$921,135
2	Apple Inc.	179,738,676	492,705
3	Amazon.com Inc.	142,143,653	51,523
4	Facebook Inc. Class A	70,392,923	310,005
5	Alphabet Inc. CL A	54,495,751	38,430
6	Alphabet Inc. CL C	47,400,840	33,532
7	Johnson & Johnson	47,196,707	335,609
8	Berkshire Hathaway Inc.	47,188,094	264,344
9	UnitedHealth Group Inc.	44,460,374	150,739
10	JPMorgan Chase & Co	41,782,255	444,209

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, 2020
--

	Fair Value	Fees
Investment Management		
Total Fixed Income	\$ 1,127,373,124	\$ 7,573,067
Total Opportunistic	979,571,651	5,168,896
Total Broad Domestic Equity	4,903,253,723	777,913
Total Global Equity Ex-U.S.	3,382,835,859	6,950,562
Total Private Equity	2,016,529,963	9,556,670
Total Real Assets	2,425,470,719	16,533,509
 Custodian		
State Street Bank		838,998
 Investment Advisory and Performance		
Callan Associates		356,040
Investment Advisory Council		33,973
Total Investment Advisory and Performance		390,013
 Participant Directed		
Custodial		98,699
Investment Management		226,631
Synthetic Investment Contract Wrap Fees		108,686
Total Participant Directed		434,016
	\$ 14,835,035,039	\$ 48,223,644

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2020

<u>Investments (at Fair Value)</u>	<u>Asset Allocation</u>		<u>Fair Value</u>	<u>Total Assets</u>
	<u>Policy</u>	<u>Range</u>		
Defined Benefit - Pension				
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 92,242,016	
Securities Lending Cash Pool			36,673	
Opportunistic Fixed Income Pool			307,488,861	
ARMB US Aggregate Fixed Income			1,449,451,869	
Alternative Fixed Income			290,484,417	
Total Fixed Income Securities	24.00%	± 6%	2,139,703,836	22.63%
Opportunistic				
Alternative Equity Strategies Pool			101,492,858	
Tactical Allocation Strategies Pool			292,104,815	
Other Opportunities Pool			13,199,317	
Alternative Beta Pool			106,535,860	
Total Opportunistic	8.00%	± 4%	513,332,850	5.43%
Broad Domestic Equity				
Large Cap Pool			2,369,545,696	
Small Cap Pool			209,391,499	
Total Broad Domestic Equity	26.00%	± 6%	2,578,937,195	27.28%
Global Equity Ex-U.S.				
International Equity Pool			1,471,535,894	
Emerging Markets Equity Pool			307,715,542	
Total Global Equity Ex-U.S.	18.00%	± 4%	1,779,251,436	18.82%
Private Equity				
Private Equity Pool			1,166,939,170	
Total Private Equity	11.00%	± 6%	1,166,939,170	12.34%
Real Assets				
Real Estate Pool			474,696,858	
Real Estate Investment Trust Pool			106,163,028	
Infrastructure Private Pool			234,622,190	
Energy Pool			23,480,071	
Farmland Pool			311,205,498	
Timber Pool			126,090,785	
Total Real Assets	13.00%	± 7%	1,276,258,430	13.50%
Total Invested Assets	100.00%		\$ 9,454,422,917	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2020

<u>Investments (at Fair Value)</u>	Defined Contribution - Participant Directed			<u>% of Total Assets</u>
	Asset Allocation Policy	Range	Fair Value	
Cash and Cash Equivalents				
Short-Term Fixed Income Pool	100.00%	0%	\$ 2,662,199	
Total Cash and Cash Equivalents			2,662,199	0.19%
Pooled Investment Funds (1)				
T. Rowe Price				
Alaska Balanced Fund Trust			7,292,101	
Long-Term Balanced Fund			6,379,363	
Target 2010 Trust			2,983,957	
Target 2015 Trust			11,967,233	
Target 2020 Trust			38,381,644	
Target 2025 Trust			65,986,935	
Target 2030 Trust			70,179,786	
Target 2035 Trust			85,789,860	
Target 2040 Trust			100,270,739	
Target 2045 Trust			128,137,545	
Target 2050 Trust			152,468,145	
Target 2055 Trust			153,159,067	
Target 2060 Trust			2,050,335	
Target 2065 Trust			565,563	
Total Pooled Investment Funds			825,612,273	59.07%
Collective Investment Funds (1)				
State Street Global Advisors				
SSgA Treasury Money Market Fund			13,717,037	
S&P Stock Index Fund			57,114,631	
Russell 3000 Index			75,081,120	
World Equity Ex-U.S. Index			56,511,643	
Passive U.S. Bond Index Fund			84,014,828	
Brandes Institutional				
Alaska International Equity Fund			56,319,091	
BlackRock Institutional Trust Company				
Strategic Completion Fund			4,006,470	
RCM				
Sustainable Core Opportunities Fund			52,918,409	
T. Rowe Price				
Small-Cap Stock Fund			93,608,519	
Total Collective Investment Funds			493,291,748	35.30%
Synthetic Investment Funds (1)				
T. Rowe Price				
Stable Value Fund			76,045,505	
			76,045,505	5.44%
Total Invested Assets			\$ 1,397,611,725	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.

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2020

<u>Investments (at Fair Value)</u>	<u>Defined Benefit - Alaska Retiree Health Care Trust</u>		<u>Fair Value</u>	<u>Total Assets</u>
	<u>Asset Allocation</u>			
	<u>Policy</u>	<u>Range</u>		
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 67,085,088	
Securities Lending Cash Pool			30,416	
Opportunistic Fixed Income Pool			255,511,608	
ARMB US Aggregate Fixed Income			1,204,373,972	
Alternative Fixed Income			241,381,558	
Total Fixed Income Securities	24.00%	± 6%	1,768,382,642	22.51%
Opportunistic				
Alternative Equity Strategies Pool			84,336,724	
Tactical Allocation Strategies Pool			242,728,048	
Other Opportunities Pool			10,968,133	
Alternative Beta Pool			88,527,268	
Total Opportunistic	8.00%	± 4%	426,560,173	5.44%
Broad Domestic Equity				
Large Cap Pool			1,969,002,807	
Small Cap Pool			173,996,412	
Total Broad Domestic Equity	26.00%	± 6%	2,142,999,219	27.31%
Global Equity Ex-U.S.				
International Equity Pool			1,222,790,643	
Emerging Markets Equity Pool			255,699,971	
Total Global Equity Ex-U.S.	18.00%	± 4%	1,478,490,614	18.85%
Private Equity				
Private Equity Pool			969,682,292	
Total Private Equity	11.00%	± 6%	969,682,292	12.36%
Real Assets				
Real Estate Pool			395,444,811	
Real Estate Investment Trust Pool			88,217,459	
Infrastructure Private Pool			194,962,162	
Energy Pool			19,511,051	
Farmland Pool			258,599,992	
Timber Pool			104,776,671	
Total Real Assets	13.00%	± 7%	1,061,512,146	13.53%
Total Invested Assets	100.00%		\$ 7,847,627,086	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2020

Investments (at Fair Value)	Health Reimbursement Arrangement			Total Assets
	Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 5,359,131	
Securities Lending Cash Pool			1,852	
Opportunistic Fixed Income Pool			15,693,700	
ARMB US Aggregate Fixed Income			73,954,819	
Alternative Fixed Income			14,825,823	
Total Fixed Income Securities	24.00%	± 6%	109,835,325	22.73%
Opportunistic				
Alternative Equity Strategies Pool			5,180,020	
Tactical Allocation Strategies Pool			14,908,525	
Other Opportunities Pool			673,670	
Alternative Beta Pool			5,437,406	
Total Opportunistic	8.00%	± 4%	26,199,621	5.42%
Broad Domestic Equity				
Large Cap Pool			120,937,519	
Small Cap Pool			10,686,980	
Total Broad Domestic Equity	26.00%	± 6%	131,624,499	27.24%
Global Equity Ex-U.S.				
International Equity Pool			75,104,650	
Emerging Markets Equity Pool			15,705,270	
Total Global Equity Ex-U.S.	18.00%	± 4%	90,809,920	18.79%
Private Equity				
Private Equity Pool			59,558,559	
Total Private Equity	11.00%	± 6%	59,558,559	12.33%
Real Assets				
Real Estate Pool			24,288,495	
Real Estate Investment Trust Pool			5,418,378	
Infrastructure Private Pool			11,974,711	
Energy Pool			1,198,382	
Farmland Pool			15,883,391	
Timber Pool			6,435,456	
Total Real Assets	13.00%	± 7%	65,198,813	13.49%
Total Invested Assets	100.00%		\$ 483,226,737	100.00%

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2020

<u>Investments (at Fair Value)</u>	<u>Occupational Death and Disability</u>			<u>Total Assets</u>
	<u>Asset Allocation</u>		<u>Fair Value</u>	
	<u>Policy</u>	<u>Range</u>		
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 480,828	
Securities Lending Cash Pool			160	
Opportunistic Fixed Income Pool			1,359,446	
ARMB US Aggregate Fixed Income			6,406,204	
Alternative Fixed Income			1,284,267	
Total Fixed Income Securities	24.00%	± 6%	9,530,905	22.76%
Opportunistic				
Alternative Equity Strategies Pool			448,712	
Tactical Allocation Strategies Pool			1,291,431	
Other Opportunities Pool			58,356	
Alternative Beta Pool			471,008	
Total Opportunistic	8.00%	± 4%	2,269,507	5.42%
Broad Domestic Equity				
Large Cap Pool			10,476,054	
Small Cap Pool			925,746	
Total Broad Domestic Equity	26.00%	± 6%	11,401,800	27.23%
Global Equity Ex-U.S.				
International Equity Pool			6,505,842	
Emerging Markets Equity Pool			1,360,448	
Total Global Equity Ex-U.S.	18.00%	± 4%	7,866,290	18.78%
Private Equity				
Private Equity Pool			5,159,182	
Total Private Equity	11.00%	± 6%	5,159,182	12.32%
Real Assets				
Real Estate Pool			2,103,959	
Real Estate Investment Trust Pool			469,360	
Infrastructure Private Pool			1,037,294	
Energy Pool			103,808	
Farmland Pool			1,375,878	
Timber Pool			557,463	
Total Real Assets	13.00%	± 7%	5,647,762	13.49%
Total Invested Assets	100.00%		\$ 41,875,446	100.00%

**Public Employees' Retirement System
Investment Summary Schedule
June 30, 2020**

Investments (at Fair Value)	Retiree Medical Plan			Total Assets
	Asset Allocation		Fair Value	
	Policy	Range		
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 1,689,716	
Securities Lending Cash Pool			537	
Opportunistic Fixed Income Pool			4,565,469	
ARMB US Aggregate Fixed Income			21,512,738	
Alternative Fixed Income			4,312,994	
Total Fixed Income Securities	24.00%	± 6%	32,081,454	22.80%
Opportunistic				
Alternative Equity Strategies Pool			1,506,925	
Tactical Allocation Strategies Pool			4,337,053	
Other Opportunities Pool			195,978	
Alternative Beta Pool			1,581,801	
Total Opportunistic	8.00%	± 4%	7,621,757	5.42%
Broad Domestic Equity				
Large Cap Pool			35,182,050	
Small Cap Pool			3,108,960	
Total Broad Domestic Equity	26.00%	± 6%	38,291,010	27.21%
Global Equity Ex-U.S.				
International Equity Pool			21,848,766	
Emerging Markets Equity Pool			4,568,835	
Total Global Equity Ex-U.S.	18.00%	± 4%	26,417,601	18.78%
Private Equity				
Private Equity Pool			17,326,238	
Total Private Equity	11.00%	± 6%	17,326,238	12.31%
Real Assets				
Real Estate Pool			7,065,789	
Real Estate Investment Trust Pool			1,576,265	
Infrastructure Private Pool			3,483,575	
Energy Pool			348,623	
Farmland Pool			4,620,653	
Timber Pool			1,872,145	
Total Real Assets	13.00%	± 7%	18,967,050	13.48%
Total Invested Assets	100.00%		\$ 140,705,110	100.00%

Investment Section

Public Employees' Retirement System Recaptured Commission Fees Year Ended June 30, 2020

Fund	Broad Domestic Equity Pool	Global Equity Ex-U.S.	Opportunistic	Real Assets	Total
Defined Benefit Plan – Pension	\$ 3,034	104	1,677	50	4,865
Postemployment Benefit – Alaska Retiree Healthcare Trust	2,503	86	1,377	40	4,006
Postemployment Benefit – Health Reimbursement Arrangement	134	5	80	2	221
Postemployment Benefit – Retiree Medical Plan	38	1	23	1	63
Postemployment Benefit – Occupational Death & Disability	12	-	7	-	19
Total Recapture Commission Fees	<u>\$ 5,721</u>	<u>196</u>	<u>3,164</u>	<u>93</u>	<u>9,174</u>

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.