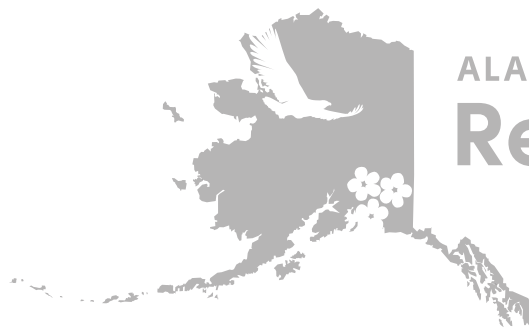




INVESTMENT SECTION



ALASKA DIVISION OF
**Retirement
and Benefits**

Callan

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



Main 303.861.1900
Fax 303.832.8230

www.callan.com

September 28, 2021

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, 2021.

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 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.

2021 Fiscal Year Market Overview

Fueled by rapid progress in vaccinations and re-opening economies, pent-up demand, and continued monetary and fiscal stimulus, consumer sentiment climbed and the U.S. equity markets finished fiscal year 2021 with a gain for the fifth consecutive fiscal year. The Russell 3000 Index, a measure of broad U.S. equity, returned 8.24% for the quarter and 44.16% for the one-year period ended June 30, 2021. Overseas markets were lifted by signs of recovery as vaccine rollouts

Investment Section

broadened to more countries with most developed markets making slower but steady economic progress. The MSCI ACWI ex-U.S. IMI (Net) index, a broad benchmark reflecting developed and emerging markets but excluding U.S. equities rose 5.60% for the quarter and 37.18% for the fiscal year. A broad measure of the total global equity market (including the U.S.), the MSCI All Country World Index (Net), rose 7.39% for the quarter and 39.26% for the fiscal year.

Inflation expectations were driven by robust consumer demand spurred by stimulus payments. These two economic forces combined with supply constraints and labor shortages to drive interest rates higher. The result? Headwinds for bonds. Although markets were seemingly undisturbed by the ongoing debate as to whether recent increases in inflation will be short-lived or not, most of Wall Street is in the Fed’s “transitory” camp. Investors were also unperturbed by the Fed’s move to a more “hawkish” stance coming out of its June 2021 meeting. The Bloomberg U.S. Aggregate Bond Index, a widely-used gauge of the investment grade domestic U.S. bond market, climbed 1.83% for the quarter but remains down 0.33% for the fiscal year.

Private real estate, as measured by the NCREIF Property Index, was positive for the tenth fiscal year in a row. In fiscal year 2021, the NCREIF Property Index returned 7.37% led by industrial property and aided by the return of retail and hotel sectors posting positive returns for the third quarter as the economy regained a sense of normalcy. Publicly traded real estate, as measured by the FTSE NAREIT All Equity Index, meaningfully led the private markets, returning 32.80% for the fiscal year 2021.

ARMB’s actual asset groupings delivered the following one-year returns through June 30, 2021¹:

Domestic Stocks:	42.69%
Global ex-U.S. Stocks:	38.54%
Opportunistic:	23.86%
Fixed Income:	2.20%
Real Assets:	9.86%
Private Equity:	50.67%

For the fiscal year ended June 30, 2021, the Public Employees Retirement System (PERS) had a time-weighted total return of 27.62%. The Teachers Retirement System (TRS) had a time-weighted total return of 27.65%. Both systems’ gross return exceeded their strategic policy target return of 24.95% and the median return for Callan’s Public Fund Sponsor database of 25.78%.

Over longer trailing periods, PERS and TRS have outperformed their target index returns. PERS’s 5- year annualized return was 11.86%. TRS returned 11.87% over this same period. The 5-year annualized benchmark return for both Plans was 11.09%. The seven-year annualized return was 8.78% for PERS and 8.79% for TRS. Both were above the 7-year target return of 8.18%. Over 29.75 years – the longest period of available data – PERS and TRS achieved annualized total returns of 8.22% and 8.26%, respectively. Both exceeded the corresponding policy benchmark return of 8.04%.

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

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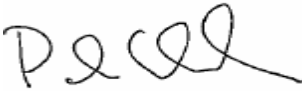
The 2021 fiscal-year returns of the PERS and TRS pension (“DB”) and health care (“HC”) programs are listed in the table below.

	PERS DB	PERS HC	TRS DB	TRS HC
FY 2021	27.62%	27.71%	27.65%	27.70%

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 2021 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 higher returns than the average public fund, both ranking in the 27th percentile within the Public Fund Sponsor peer group for the one-year period ended June 30, 2021.

Sincerely,



Paul Erlendson
Senior Vice President

c: Zach Hanna
Steven Center

Investment Section

Department of Revenue Treasury Division Staff As of June 30, 2021

Commissioner Lucinda Mahoney	Chief Investment Officer Zachary Hanna	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
Deputy Commissioner Mike Barnhill	Comptroller Kayla Wisner, CPA		
Treasury Division Director Pamela Leary, CPA	Cash Management Jesse Blackwell		
	ARMB Liaison Officer Alysia Jones		

External Money Managers and Consultants

Alternate Fixed Income

Crestline Investors, Inc
Fort Worth, TX
Prisma Capital
New York, NY

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 Group Trust Co.
Los Angeles, CA
Legal and General Investment Management America
Chicago, IL

Emerging Market Income

Legal and General Investment Management America
Chicago, IL
State Street Global Advisors
Boston, MA

Alternative Equity

McKinley Capital Management LLC
Anchorage, AK

Alternate Beta

Man Group
London, UK

Other Opportunities

Schroders Investment Management North America
New York, NY
Timberland Investment Resources
Atlanta, GA

Tactical Asset Allocation

PineBridge Investments
New York, NY
Fidelity Investment Asset Management
Smithfield, RI

Private Equity

Abbott Capital Management, L.P.
New York, NY
Advent International,
Boston, MA
Angelo, Gordon & Co.
New York, NY
Clearlake Capital
Santa Monica, CA
Dyal Capital Partners
New York, NY
Glendon Capital
Santa Monica, CA
Genstar Capital
San Francisco, 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
New York, NY
Pathway Capital Management, LLC
Irvine, CA
Summit Partners
Boston, MA
The Jordan 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, DC

Real Assets – Infrastructure

IFM
New York, NY
 JP Morgan Asset Management
New York, NY

Real Assets – Real Estate Core Separate Accounts

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

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

Supplemental Benefits System, Deferred Compensation Plan, and

Defined Contribution Plan

Baillie Gifford Overseas Ltd
Edinburgh, Scotland
 BlackRock
San Francisco, CA
 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

Investment Advisory Council

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

Independent Auditors

KPMG, LLP
Anchorage, AK

Actuaries

Buck Global, LLC
Denver, CO
 Gabriel Roeder Smith
Denver, CO

Global Master Custodian

State Street Bank & Trust Co.
Boston, MA

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 2021 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 6.88% with a standard deviation of 13.89%.

Investment Section

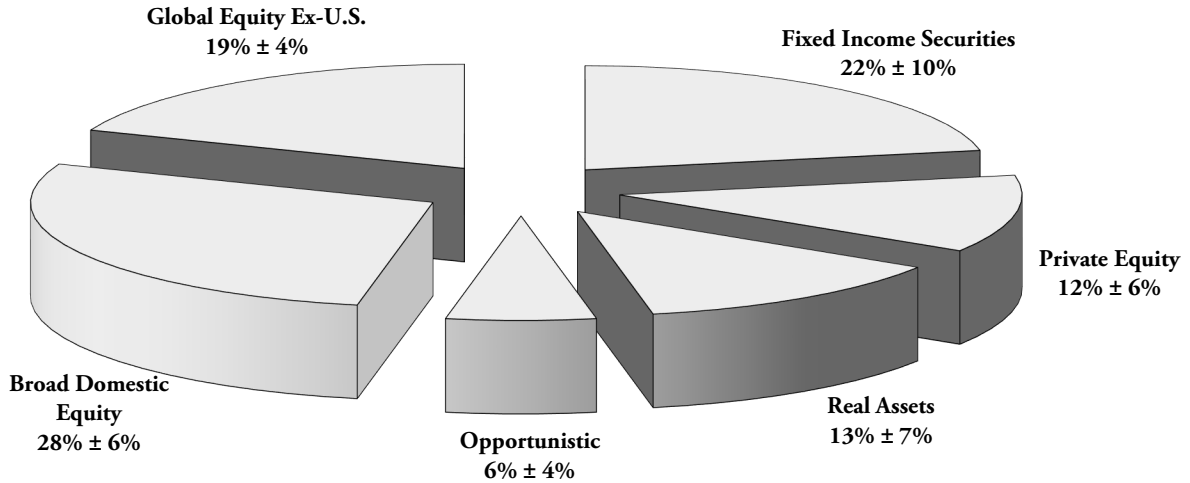
Public Employees' Retirement System Schedule of Investment Results Fiscal Years Ended June 30							
	2017	2018	2019	2020	2021	Annualized	
						3 Year	5 Year
Total Fund							
PERS	13.35%	9.61%	6.40%	3.83%	27.62%	12.13%	11.86%
<i>Custom Composite Index</i>	-	-	5.65	4.64	24.95	11.37	11.09
<i>Actuarial Earnings Rate</i>	8.00	8.00	7.38	7.38	7.38	7.38	7.38
Broad Domestic Equity							
PERS	18.55	15.21	8.41	2.62	42.69	16.65	16.74
<i>Custom Composite Index</i>	18.51	14.78	8.98	6.53	44.16	18.73	17.89
Fixed Income							
PERS	2.91	(0.71)	6.34	7.31	2.20	5.26	3.57
<i>Custom Composite Index</i>	0.02	(0.76)	6.19	7.67	(0.31)	4.46	2.50
Opportunistic							
PERS	-	5.64	7.21	0.52	23.86	10.10	-
<i>Custom Composite Index</i>	-	8.39	9.72	9.32	23.20	13.90	-
Real Assets							
PERS	5.98	7.53	6.08	2.06	9.86	5.95	6.27
<i>Custom Composite Index</i>	5.66	4.29	7.23	1.19	4.62	4.32	4.58
Global Equity Ex-US							
PERS	20.41	7.97	(0.08)	(3.59)	38.54	10.10	11.65
<i>MSCI ACWI ex-US</i>	21.00	7.75	0.26	(4.74)	37.18	9.43	11.20
Private Equity							
PERS	17.04	26.65	17.66	10.47	50.67	25.11	23.76
<i>Custom Composite Index</i>	21.04	12.92	2.71	(1.35)	36.80	11.50	13.63
Absolute Return							
PERS	8.47	4.78	4.08	-	-	-	-
<i>3-month Treasury Bill +5%</i>	5.49	5.18	1.15	-	-	-	-
Alternative Equity							
PERS	11.38	-	-	-	-	-	-
<i>Custom Composite Index</i>	15.07	-	-	-	-	-	-
Cash Equivalent							
PERS	0.79	1.51	2.50	-	-	-	-
<i>3-month Treasury Bill</i>	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.

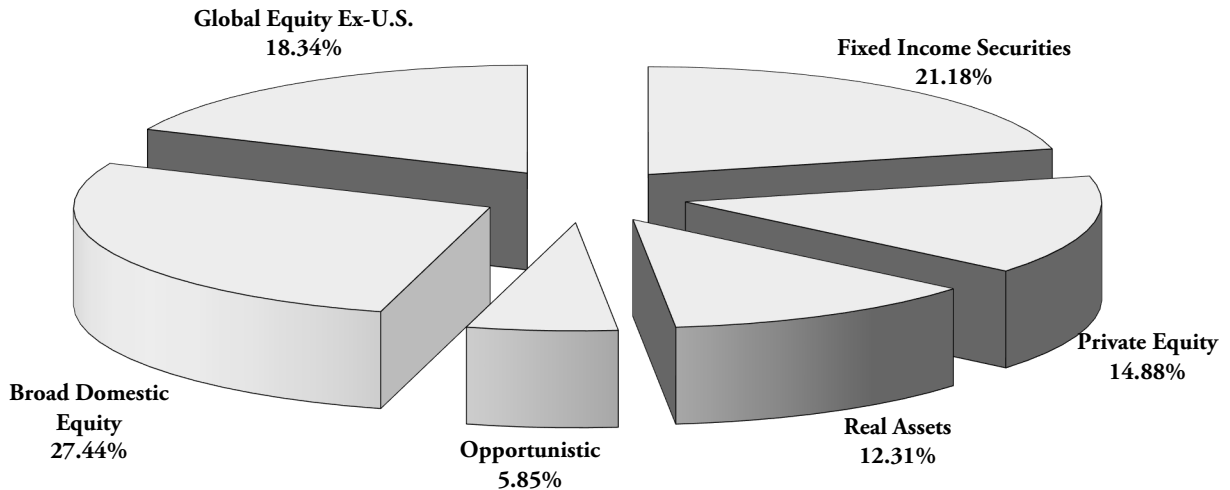
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2021

Policy

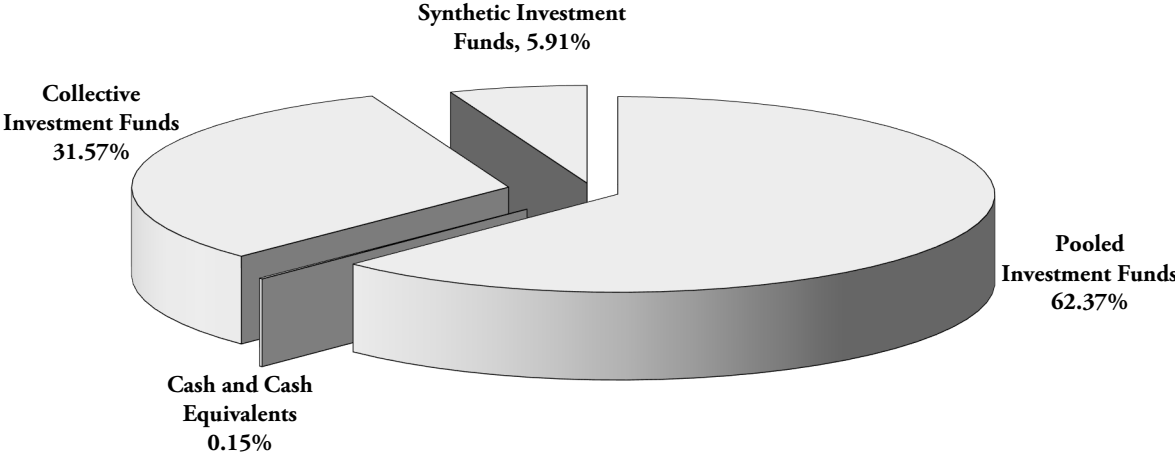


Actual – Defined Benefit Pension

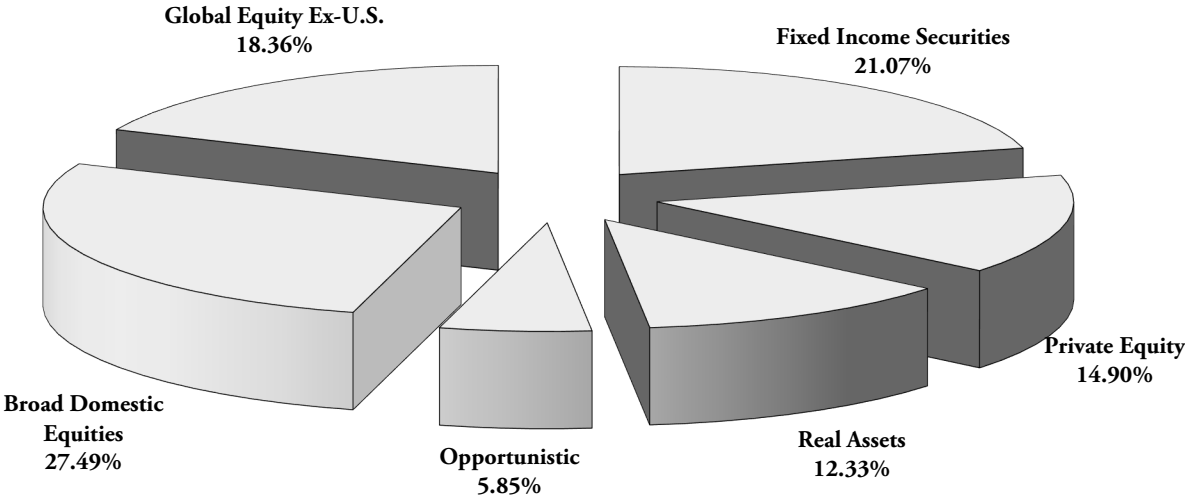


**Public Employees' Retirement System
Asset Allocation
June 30, 2021**

Actual – Defined Contribution Participant Directed



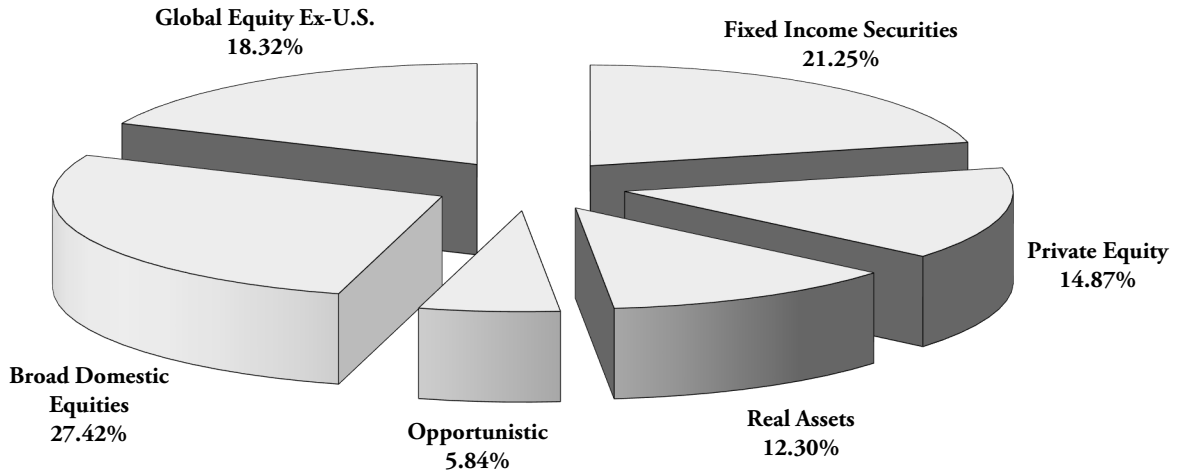
Actual – Defined Benefit Alaska Retiree Healthcare Trust



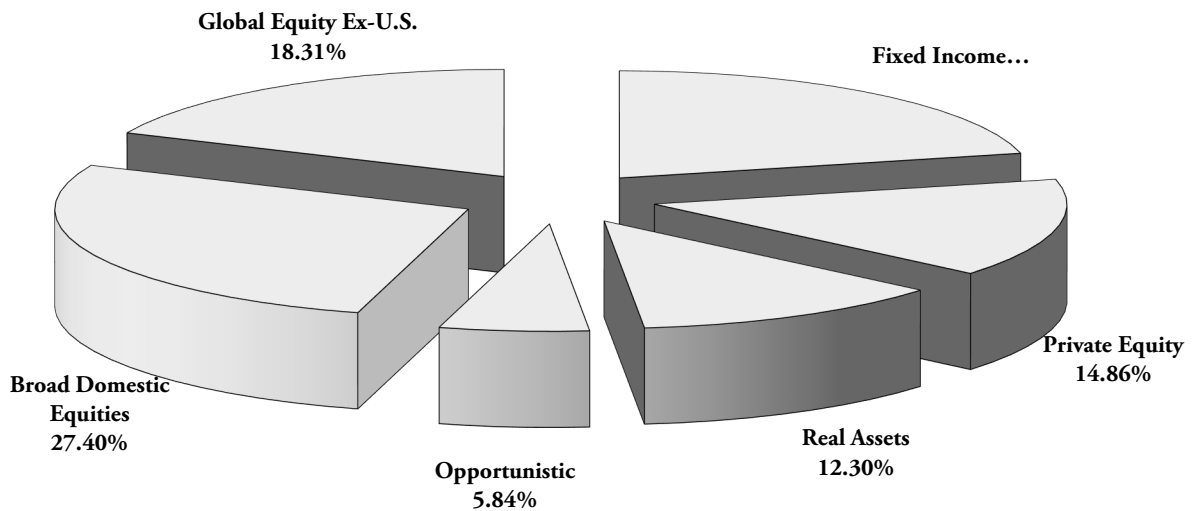
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2021

Actual — Health Reimbursement Arrangement

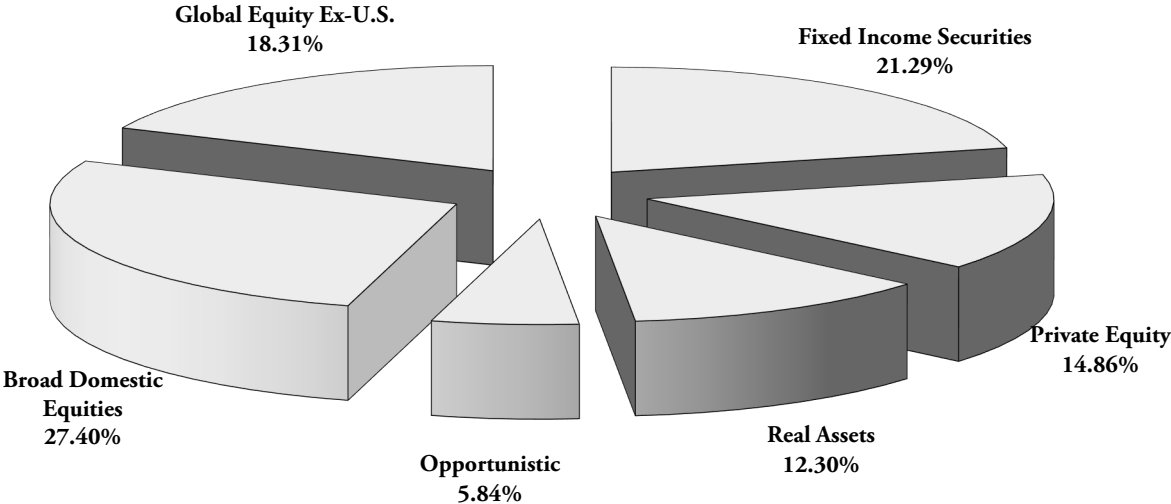


Actual — Occupational Death & Disability



**Public Employees' Retirement System
Asset Allocation
June 30, 2021**

Actual — Retiree Medical Plan



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Alaska Retirement Management Board Top Ten Holdings by Asset Type June 30, 2021

Invested assets under the fiduciary responsibility of the Alaska Retirement Management Board (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	U.S. Treasury N/B 0.5% 5/31/2027	\$201,117,933	\$207,739,634
2	FED HM LN PC Pool RA1568 3% 10/01/2049	89,915,535	85,264,567
3	U.S. Treasury N/B 0.5% 6/30/2027	61,054,720	63,126,044
4	FNMA Pool MA3305 3.5% 3/01/2048	58,105,584	54,956,337
5	U.S. Treasury N/B 1.875% 2/15/2041	54,257,127	55,426,275
6	FNMA Pool MA4281 2% 3/01/2051	45,266,429	44,801,567
7	FNMA Pool MA4182 2% 11/01/2050	44,226,882	43,773,099
8	U.S. Treasury N/B 2.875% 5/15/2028	35,274,982	31,754,678
9	FNMA Pool MA4255 2% 2/01/2051	35,066,647	34,706,534
10	U.S. Treasury N/B 1.125% 2/15/2031	34,492,031	35,530,179

Equities

<u>Rank</u>	<u>Largest Equity Holdings</u>	<u>Market Value</u>	<u>Par Value</u>
1	Apple Inc.	\$252,574,096	\$1,852,667
2	Microsoft Corp.	245,983,119	906,349
3	Amazon.com Inc.	185,410,040	53,771
4	Facebook Inc. Class A	125,085,363	355,467
5	Alphabet Inc. CL A	102,594,704	41,953
6	Alphabet Inc. CL C	83,365,635	33,077
7	Berkshire Hathaway Inc. CL B	67,715,439	245,159
8	Tesla Inc.	59,508,309	87,415
9	JPMorgan Chase & Co	58,876,958	381,971
10	UnitedHealth Group Inc.	58,303,928	146,455

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, 2021**

	Fair Value	Fees
Investment Management		
Total Fixed Income	\$ 1,364,980,490	8,370,877
Total Opportunistic	1,325,507,012	4,589,231
Total Broad Domestic Equity	6,223,413,819	709,618
Total Global Equity Ex-U.S.	4,158,454,027	5,726,928
Total Private Equity	3,374,963,195	10,373,263
Total Real Assets	2,791,301,755	15,246,617
 Custodian		
State Street Bank		1,005,000
 Investment Advisory and Performance		
Callan Associates		386,249
Investment Advisory Council		44,950
Total Investment Advisory and Performance		431,199
 Participant Directed		
Custodian - State Street Bank		367,559
Investment Management		2,093,420
Synthetic Investment Contract Wrap Fees		238,807
Total Participant Directed		2,699,786
	\$ 19,238,620,298	49,152,519

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2021

Investments (at Fair Value)	Defined Benefit - Pension			% of Total Assets
	Asset Allocation Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 105,886,626	
Securities Lending Cash Pool			18,379	
Opportunistic Fixed Income Pool			424,938,627	
ARMB US Aggregate Fixed Income			1,697,167,999	
Alternative Fixed Income			291,245,702	
Total Fixed Income Securities	22.00%	± 10%	2,519,257,333	21.18%
Opportunistic				
Alternative Equity Strategies Pool			137,332,746	
Tactical Allocation Strategies Pool			441,275,739	
Other Opportunities Pool			7,198,593	
Alternative Beta Pool			109,666,187	
Total Opportunistic	6.00%	± 4%	695,473,265	5.85%
Broad Domestic Equity				
Large Cap Pool			3,010,243,999	
Small Cap Pool			255,086,190	
Total Broad Domestic Equity	28.00%	± 6%	3,265,330,189	27.44%
Global Equity Ex-U.S.				
International Equity Pool			1,799,583,231	
Emerging Markets Equity Pool			382,294,172	
Total Global Equity Ex-U.S.	19.00%	± 4%	2,181,877,403	18.34%
Private Equity				
Private Equity Pool			1,770,791,588	
Total Private Equity	12.00%	± 6%	1,770,791,588	14.88%
Real Assets				
Real Estate Pool			541,244,518	
Real Estate Investment Trust Pool			190,926,214	
Infrastructure Private Pool			263,005,938	
Energy Pool			21,942,030	
Farmland Pool			317,463,364	
Timber Pool			129,417,497	
Total Real Assets	13.00%	± 7%	1,463,999,561	12.31%
Total Invested Assets	100.00%		\$ 11,896,729,339	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2021

<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%	\$ 2,993,449	
Total Cash and Cash Equivalents			2,993,449	0.15%
Pooled Investment Funds (1)				
T. Rowe Price				
Alaska Balanced Fund Trust			44,304,279	
Long-Term Balanced Fund			11,957,680	
Target 2010 Trust			3,405,066	
Target 2015 Trust			13,574,053	
Target 2020 Trust			46,730,275	
Target 2025 Trust			86,414,593	
Target 2030 Trust			96,299,486	
Target 2035 Trust			122,030,974	
Target 2040 Trust			143,556,974	
Target 2045 Trust			188,078,083	
Target 2050 Trust			224,811,755	
Target 2055 Trust			236,025,044	
Target 2060 Trust			6,955,843	
Target 2065 Trust			3,010,368	
Total Pooled Investment Funds			1,227,154,473	62.37%
Collective Investment Funds (1)				
State Street Global Advisors				
SSgA Treasury Money Market Fund			15,561,858	
S&P Stock Index Fund			77,318,601	
Russell 3000 Index			69,627,124	
World Equity Ex-U.S. Index			46,421,045	
Passive U.S. Bond Index Fund			83,012,900	
Brandes Institutional				
Alaska International Equity Fund			108,652,825	
BlackRock Institutional Trust Company				
Strategic Completion Fund			5,539,358	
RCM				
Sustainable Core Opportunities Fund			87,803,991	
T. Rowe Price				
Small-Cap Stock Fund			127,279,052	
Total Collective Investment Funds			621,216,754	31.57%
Synthetic Investment Funds (1)				
T. Rowe Price				
Stable Value Fund			116,276,613	
			116,276,613	5.91%
Total Invested Assets			\$ 1,967,641,289	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, 2021

Investments (at Fair Value)	Defined Benefit - Alaska Retiree Health Care Trust			% of Total Assets
	Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 74,235,238	
Securities Lending Cash Pool			15,176	
Opportunistic Fixed Income Pool			351,232,317	
ARMB US Aggregate Fixed Income			1,402,790,937	
Alternative Fixed Income			240,728,616	
Total Fixed Income Securities	22.00%	± 10%	2,069,002,284	21.07%
Opportunistic				
Alternative Equity Strategies Pool			113,512,109	
Tactical Allocation Strategies Pool			364,735,709	
Other Opportunities Pool			5,950,012	
Alternative Beta Pool			90,644,350	
Total Opportunistic	6.00%	± 4%	574,842,180	5.85%
Broad Domestic Equity				
Large Cap Pool			2,488,111,594	
Small Cap Pool			210,840,939	
Total Broad Domestic Equity	28.00%	± 6%	2,698,952,533	27.49%
Global Equity Ex-U.S.				
International Equity Pool			1,487,442,012	
Emerging Markets Equity Pool			315,984,552	
Total Global Equity Ex-U.S.	19.00%	± 4%	1,803,426,564	18.36%
Private Equity				
Private Equity Pool			1,463,644,492	
Total Private Equity	12.00%	± 6%	1,463,644,492	14.90%
Real Assets				
Real Estate Pool			448,327,393	
Real Estate Investment Trust Pool			157,809,795	
Infrastructure Private Pool			217,387,144	
Energy Pool			18,136,134	
Farmland Pool			262,398,810	
Timber Pool			106,969,710	
Total Real Assets	13.00%	± 7%	1,211,028,986	12.33%
Total Invested Assets	100.00%		\$ 9,820,897,039	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2021

<u>Investments (at Fair Value)</u>	Health Reimbursement Arrangement			<u>% of Total Assets</u>
	Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 6,702,883	
Securities Lending Cash Pool			1,043	
Opportunistic Fixed Income Pool			24,323,511	
ARMB US Aggregate Fixed Income			97,145,995	
Alternative Fixed Income			16,670,974	
Total Fixed Income Securities	22.00%	± 10%	144,844,406	21.25%
Opportunistic				
Alternative Equity Strategies Pool			7,860,936	
Tactical Allocation Strategies Pool			25,258,657	
Other Opportunities Pool			412,048	
Alternative Beta Pool			6,277,311	
Total Opportunistic	6.00%	± 4%	39,808,952	5.84%
Broad Domestic Equity				
Large Cap Pool			172,306,586	
Small Cap Pool			14,601,117	
Total Broad Domestic Equity	28.00%	± 6%	186,907,703	27.42%
Global Equity Ex-U.S.				
International Equity Pool			103,008,244	
Emerging Markets Equity Pool			21,882,517	
Total Global Equity Ex-U.S.	19.00%	± 4%	124,890,761	18.32%
Private Equity				
Private Equity Pool			101,360,262	
Total Private Equity	12.00%	± 6%	101,360,262	14.87%
Real Assets				
Real Estate Pool			31,047,580	
Real Estate Investment Trust Pool			10,928,594	
Infrastructure Private Pool			15,054,509	
Energy Pool			1,255,960	
Farmland Pool			18,171,659	
Timber Pool			7,407,913	
Total Real Assets	13.00%	± 7%	83,866,215	12.30%
Total Invested Assets	100.00%		\$ 681,678,299	100.00%

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2021

Investments (at Fair Value)	Occupational Death and Disability			% of Total Assets
	Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 620,931	
Securities Lending Cash Pool			92	
Opportunistic Fixed Income Pool			2,135,790	
ARMB US Aggregate Fixed Income			8,529,916	
Alternative Fixed Income			1,463,740	
Total Fixed Income Securities	22.00%	± 10%	12,750,469	21.29%
Opportunistic				
Alternative Equity Strategies Pool			690,174	
Tactical Allocation Strategies Pool			2,217,843	
Other Opportunities Pool			36,221	
Alternative Beta Pool			551,226	
Total Opportunistic	6.00%	± 4%	3,495,464	5.84%
Broad Domestic Equity				
Large Cap Pool			15,129,424	
Small Cap Pool			1,282,029	
Total Broad Domestic Equity	28.00%	± 6%	16,411,453	27.40%
Global Equity Ex-U.S.				
International Equity Pool			9,044,697	
Emerging Markets Equity Pool			1,921,413	
Total Global Equity Ex-U.S.	19.00%	± 4%	10,966,110	18.31%
Private Equity				
Private Equity Pool			8,900,013	
Total Private Equity	12.00%	± 6%	8,900,013	14.86%
Real Assets				
Real Estate Pool			2,726,175	
Real Estate Investment Trust Pool			959,646	
Infrastructure Private Pool			1,321,937	
Energy Pool			110,289	
Farmland Pool			1,595,503	
Timber Pool			650,445	
Total Real Assets	13.00%	± 7%	7,363,995	12.30%
Total Invested Assets	100.00%		\$ 59,887,504	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2021

<u>Investments (at Fair Value)</u>	Retiree Medical Plan			<u>% of Total Assets</u>
	Policy	Range	Fair Value	
Fixed Income Securities				
Short-term Fixed Income Pool			\$ 2,100,578	
Securities Lending Cash Pool			311	
Opportunistic Fixed Income Pool			7,263,130	
ARMB US Aggregate Fixed Income			29,008,423	
Alternative Fixed Income			4,978,082	
Total Fixed Income Securities	22.00%	± 10%	43,350,524	21.29%
Opportunistic				
Alternative Equity Strategies Pool			2,347,343	
Tactical Allocation Strategies Pool			7,542,393	
Other Opportunities Pool			123,010	
Alternative Beta Pool			1,874,405	
Total Opportunistic	6.00%	± 4%	11,887,151	5.84%
Broad Domestic Equity				
Large Cap Pool			51,451,917	
Small Cap Pool			4,360,023	
Total Broad Domestic Equity	28.00%	± 6%	55,811,940	27.40%
Global Equity Ex-U.S.				
International Equity Pool			30,758,923	
Emerging Markets Equity Pool			6,534,267	
Total Global Equity Ex-U.S.	19.00%	± 4%	37,293,190	18.31%
Private Equity				
Private Equity Pool			30,266,840	
Total Private Equity	12.00%	± 6%	30,266,840	14.86%
Real Assets				
Real Estate Pool			9,270,984	
Real Estate Investment Trust Pool			3,263,391	
Infrastructure Private Pool			4,495,405	
Energy Pool			375,037	
Farmland Pool			5,426,189	
Timber Pool			2,211,990	
Total Real Assets	13.00%	± 7%	25,042,996	12.30%
Total Invested Assets	100.00%		\$ 203,652,641	100.00%

Investment Section

Public Employees' Retirement System Recaptured Commission Fees Year Ended June 30, 2021

Fund	Opportunistic	Total
Defined Benefit Plan – Pension	\$ 4,065	4,065
Postemployment Benefit – Alaska Retiree Healthcare Trust	3,343	3,343
Postemployment Benefit – Health Reimbursement Arrangement	220	220
Postemployment Benefit – Retiree Medical Plan	65	65
Postemployment Benefit – Occupational Death & Disability	19	19
Total Recapture Commission Fees	<u>\$ 7,712</u>	<u>7,712</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.