



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 29, 2018

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 the Alaska Retirement Management Board (ARMB) for the fiscal year ended June 30, 2018.

Callan LLC (Callan) calculates time-weighted performance statistics based on underlying custodial data provided by the Board's custodian, State Street Bank and Trust Company. The performance calculations were made using a time-weighted return methodology based upon current market values. ARMB's real estate consultant, Townsend Group, calculates returns for the real estate segment of the portfolio. The Townsend data has been incorporated into ARMB's Total Fund returns.

Callan serves as the ARMB 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 that assets under supervision be sufficient to pay promised benefits to members and beneficiaries. In pursuit of these objectives, 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.

2018 Fiscal Year Market Overview

Equity markets followed an extremely strong 2017 with further gains in fiscal year 2018. The Russell 3000 Index, a measure of broad U.S. equity, returned 14.78% in the period. Non-U.S. stocks trailed their U.S. counterparts as political developments including potential trade tariffs weighed on stocks outside of the U.S. International stocks, as measured by the MSCI ACWI ex-U.S. Index, gained 7.28% for the fiscal year. A broad measure of the total global equity market (MSCI All Country World Index) rose 10.73%.

Investment Section

Rising interest rates impaired fixed income performance. The Bloomberg U.S. Aggregate Bond Index, a widely-used gauge of the investment grade domestic bond market, fell 0.40% in the year after falling 0.31% the prior year. Absolute return strategies significantly trailed the equity markets; the Callan Absolute Return Hedge Fund-of-Funds Style median return was 5.30% (net-of-fees). Private real estate, as measured by the NCREIF Property Index, was positive for the eighth year in a row. In fiscal year 2018, the NCREIF Property Index returned 7.19%. Publicly traded real estate, as measured by the FTSE NAREIT All Equity Index, lagged the private markets but still gained 4.93%.

ARMB's actual asset groupings delivered the following one-year returns through June 30, 2018:

Domestic Stocks:	15.22%
Int'l Stocks:	9.02%
Opportunistic:	5.23%
Fixed Income:	(0.71%)
Real Assets:	7.59%
Private Equity:	26.65%
Absolute Return:	4.78%

For the fiscal year ended 30 June 2018, the Public Employees Retirement System (PERS) had a time-weighted total return of 9.61%. The Teachers Retirement System (TRS) had a time-weighted total return of 9.62%. Both systems' gross return exceeded their strategic policy target return of 8.25% and the median return for Callan's Public Fund Sponsor database of 8.23%.

Over most trailing periods, PERS and TRS have outperformed their target index returns. Both funds' 5-year annualized return was 8.68% versus a benchmark of 8.10%. The seven-year annualized return for PERS was 7.99% and 8.02% for TRS. Both were above the 7-year target return of 7.64%. Over 26.75 years – the longest period for which we have data – PERS and TRS achieved annualized total returns of 7.79% and 7.84%, respectively, while the policy benchmark return was 7.71%.

Both systems are well diversified and currently have asset allocation policies that, in Callan's opinion, are consistent with achieving a long-term "real" (above inflation) return of 4.5%.

In summary, fiscal 2018 was the second year in a row during which the ARMB's asset class returns had strong showings. Only the fixed income composite posted a negative return. PERS and TRS produced returns well above the average public fund, both ranking in the 18th percentile within the Public Fund Sponsor peer group for the one-year period ended June 30, 2018.

Sincerely,



Paul Erlendson
Senior Vice President

Department of Revenue Treasury Division Staff As of June 30, 2018

Commissioner Sheldon Fisher	Chief Investment Officer Bob G. Mitchell	Investment Officers Casey Colton Emily Howard Josh McLin Kekama Tuiofu Kevin Buckland Kevin Liu Mackenzie Willems Mark Moon	Nicholas Orr Ross Alexander Sean Howard Shane Carson Stephanie Pham Stephen Sikes Steve Verschoor Victor Djajalie
Deputy Commissioner Mike Barnhill	Comptroller Scott Jones, CPA		
Director Pamela Leary, CPA	Cash Management Michelle M. Prebula, MBA, CPA, CCM		
	ARMB Liaison Officer Stephanie Alexander		

External Money Managers and Consultants

Domestic Equity Large Capitalization

Allianz Global Investors
San Francisco, CA
Barrow, Hanley, Mewhinney & Strauss
Dallas, TX
McKinley Capital Management, Inc.
Anchorage, AK
Quantitative Management Associates
Newark, NJ
State Street Global Advisors
San Francisco, CA

Domestic Equity Small Capitalization

ArrowMark Partners
Denver, CO
Barrow, Hanley, Mewhinney & Strauss
Dallas, TX
BMO Global Asset Management
Chicago, IL
Fidelity Investments
Smithfield, RI
Frontier Capital Management
Boston, MA
Jennison Associates LLC
New York, NY
Lord Abbett & Co.
Jersey City, NJ
State Street Global Advisors
San Francisco, CA
Sycamore Capital Management
Cincinnati, OH
T. Rowe Price Investment
Baltimore, MD

Domestic Equity Micro Capitalization

DePrince, Race & Zollo, Inc.
Winter Park, FL
Lord Abbett & Co.
Jersey City, NJ
Zebra Capital Management
Mitford, 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 Equity – EAFE, Emerging Markets Non U.S., and Global Equity

Allianz Global Investors
San Francisco, CA
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
McKinley Capital Management, Inc.
Anchorage, AK
Parametric Clifton
Seattle, WA
State Street Global Advisors
San Francisco, CA

International Fixed Income

Lazard Asset Management
New York, NY
Mondrian Investment Partners
London, England
Schroders Investment Management NA
New York, NY

High Yield/Convertible Bond/Tactical Bond

Fidelity Investment Asset Management
Smithfield, RI
MacKay Shields LLC
New York, NY

Alternative Equity

Analytic Investors
Los Angeles, CA
Quantitative Management Associates
Newark, NJ
State Street Global Advisors
San Francisco, CA

Master Limited Partnerships

Advisory Research
St. Louis, MO
Tortoise Capital Advisors LLC
Leawood, KS

Investment Section

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

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

Investment Consultants

Callan Associates, Inc.
Denver, CO

The Townsend Group
San Francisco, CA

Investment Advisory Council

Jerrold Mitchell
Wayland, MA

Robert Shaw
San Francisco, CA

William Jennings
Colorado Springs, CO

Independent Auditors

KPMG, LLP
Anchorage, AK

Actuaries

Conduent HR Consulting, LLC
Denver, CO

Gabriel Roeder Smith
Denver, CO

Taxable Municipal Bonds

Western Asset Management Company
Pasadena, CA

Tactical Fixed Income

Fidelity Investment Asset Management
Merrimack, NH

Global Master Custodian

State Street Bank & Trust Co.
Boston, MA

Absolute Return

Allianz Global Investors
New York, NY

Crestline Investors, Inc.
Fort Worth, TX

Global Assets Management Inc.
New York, NY

J.P. Morgan Asset Management
New York, NY

Man Group
London, UK

Prisma Capital
New York, NY

Zebra Capital Management
Stanford, CT

Supplemental Benefits System, Deferred Compensation Plan and Defined Contribution Plan

Allianz Global Investors
San Francisco, CA

BlackRock
San Francisco, CA

Brandes Investment Partners
San Diego, CA

Russell Investment Implementation Services
Seattle, WA

State Street Global Advisors
Boston, MA

T. Rowe Price Investment Services
Baltimore, MD

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

Industry Funds Management
New York, NY

JP Morgan Asset Management
New York, NY

Lazard Asset Management
New York, NY

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

External Money Managers and Consultants (cont.)

Real Estate – Commingled Real Estate Funds

Almanac Realty Investors

New York, NY

Baring Real Estate Advisors

Hartford, CT

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

LaSalle Investment Management

Chicago, IL

Lowe Hospitality Investment Partners, LLC

Los Angeles, CA

Silverpeak Real Estate Partners

New York, NY

Tishman Speyer Properties

New York, NY

UBS Realty 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: domestic equities, global equities ex-U.S., opportunistic, private equity, real assets, fixed income, absolute return and cash equivalents. 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
Domestic Equity	Russell 3000 Index
Global Equities Ex-U.S.	MSCI All Country World Ex-U.S. Index
Opportunistic	60% Russell 1000 Index 40% Bloomberg Barclays Aggregate Index
Private Equity	1/3 S&P 500 Index 1/3 Russell 2000 Index 1/3 MSCI EAFE Index
Real Assets	31% NCREIF Total Property Index 25% NCREIF Farmland Index 10% NCREIF Timberland Index 17.5% S&P Global Infrastructure Index 12.5% Alerian MLP Index 4% FTSE NAREIT All Equity REIT Index
Fixed Income	Bloomberg Barclays Intermediate Treasury Index
Absolute Return	HFRI Fund of Funds Composite Index
Cash Equivalents	91 Day Treasury Bill

The target asset allocation is determined by the ARMB, utilizing capital market assumptions provided by its independent general investment consultant, Callan Associates. During the 2018 fiscal year, the ARMB's target asset allocation was 24% domestic equities, 22% global equities ex-U.S., 10% opportunistic, 9% private equity, 17% real assets, 10% fixed income, 7% absolute return, and 1% cash equivalents. Over the next 10 years, the target asset allocation is expected to generate a return of 6.6% with a standard deviation of 14.7%.

Investment Section

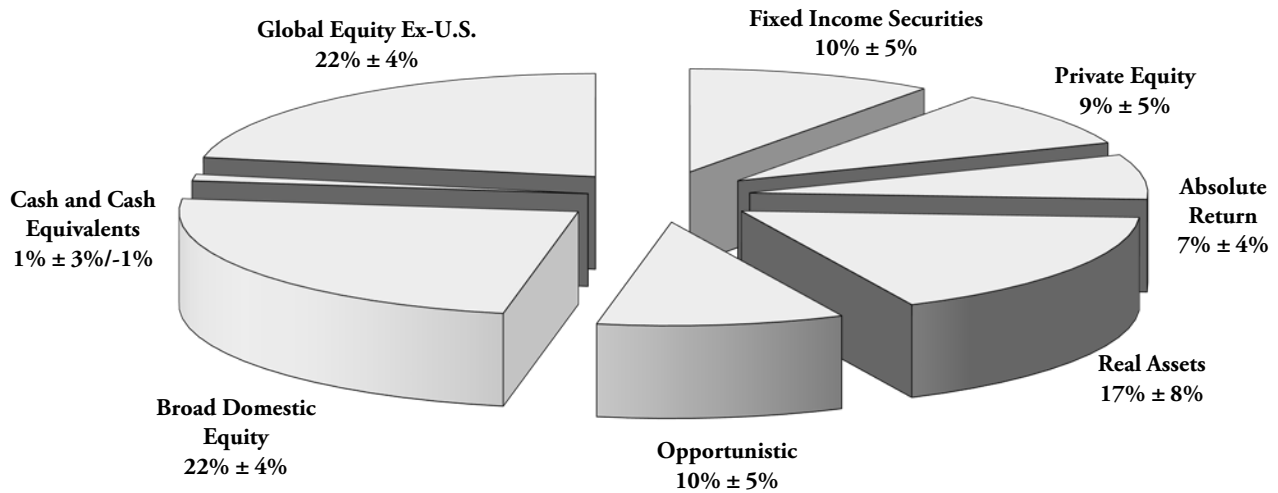
Public Employees' Retirement System Schedule of Investment Results Fiscal Years Ended June 30							
	2014	2015	2016	2017	2018	Annualized	
						3 Year	5 Year
Total Fund							
PERS	18.56%	3.29%	(0.36%)	13.35%	9.61%	7.37%	8.68%
<i>Actuarial Earnings Rate</i>	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Broad Domestic Equity							
PERS	25.81	7.84	0.58	18.55	15.21	11.17	13.26
<i>Custom Composite Index</i>	25.22	7.29	2.14	18.51	14.78	11.58	13.29
Fixed Income							
PERS	5.14	(0.74)	5.15	2.91	(0.71)	2.42	2.31
<i>Custom Composite Index</i>	3.31	0.41	4.79	0.02	(0.76)	1.22	1.33
Opportunistic							
<i>PERS</i>	-	-	-	-	5.64	-	-
<i>Custom Composite Index</i>	-	-	-	-	8.39	-	-
Real Assets							
PERS	13.28	3.70	4.76	5.98	7.53	6.09	7.00
<i>Custom Composite Index</i>	10.98	7.99	8.87	5.66	4.29	6.25	7.53
Global Equity Ex-US							
PERS	23.43	(3.32)	(9.15)	20.41	7.97	5.71	7.11
<i>MSCI ACWI ex-US</i>	22.27	(4.85)	(9.80)	21.00	7.75	5.55	6.47
Private Equity							
PERS	24.19	13.77	4.71	17.04	26.65	15.79	17.01
<i>Custom Composite Index</i>	24.01	3.33	(4.41)	21.04	12.92	9.32	10.86
Absolute Return							
PERS	6.51	9.24	(3.09)	8.47	4.78	3.27	5.09
<i>3-month Treasury Bill +5%</i>	5.05	5.02	5.19	5.49	5.18	5.28	5.18
Alternative Equity							
PERS	22.36	(0.89)	3.41	11.38	-	-	-
<i>Custom Composite Index</i>	18.70	4.26	2.09	15.07	-	-	-
Cash Equivalent							
PERS	0.27	0.28	0.55	0.79	1.51	0.95	0.68
<i>3-month Treasury Bill</i>	0.05	0.02	0.19	0.49	1.36	0.68	0.42

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.

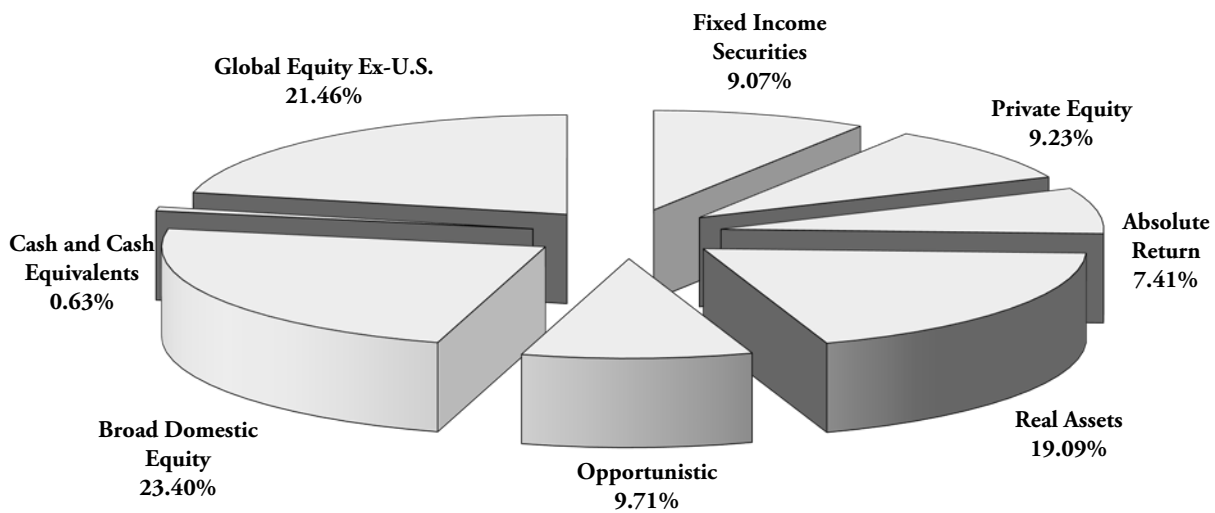
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2018

Policy

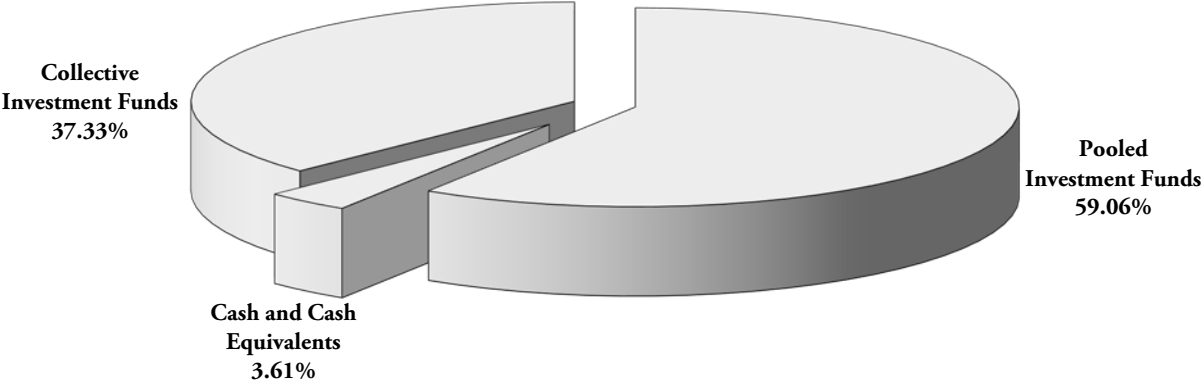


Actual – Defined Benefit Pension

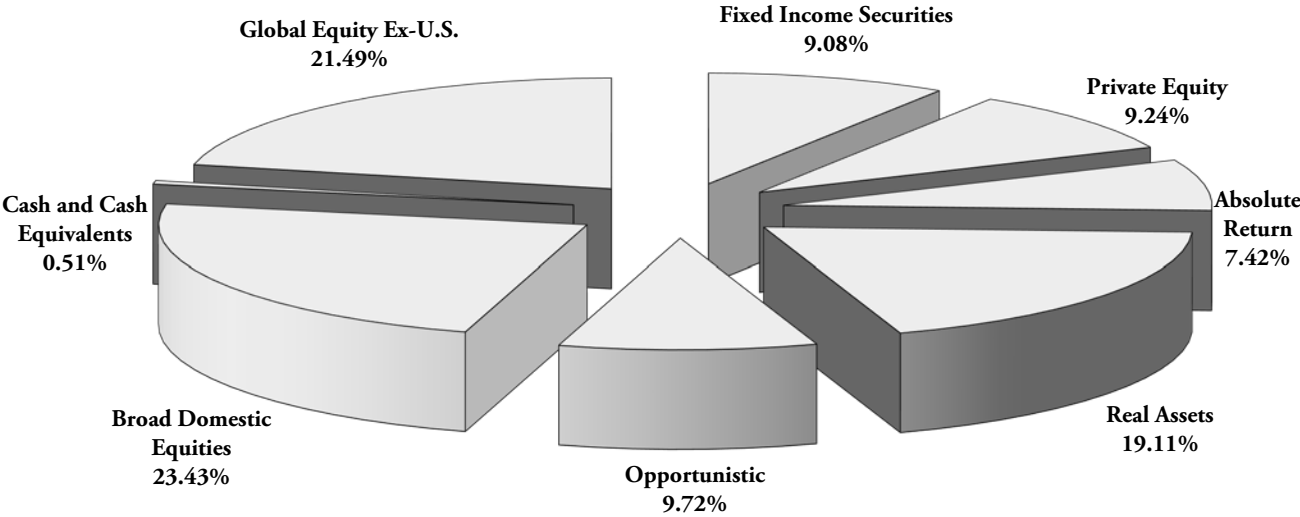


**Public Employees' Retirement System
Asset Allocation
June 30, 2018**

Actual – Defined Contribution Participant Directed



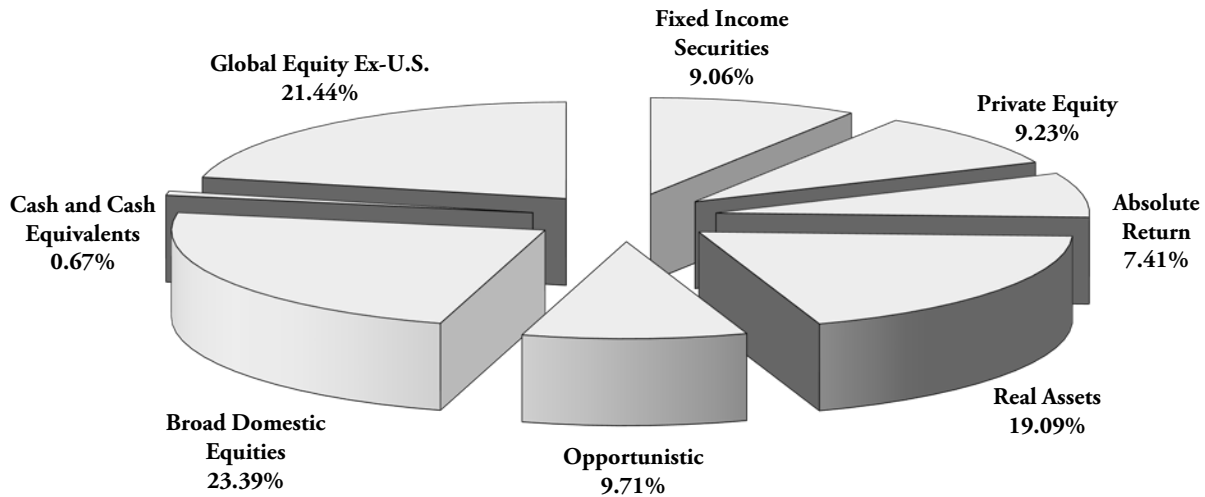
Actual – Defined Benefit Alaska Retiree Healthcare Trust



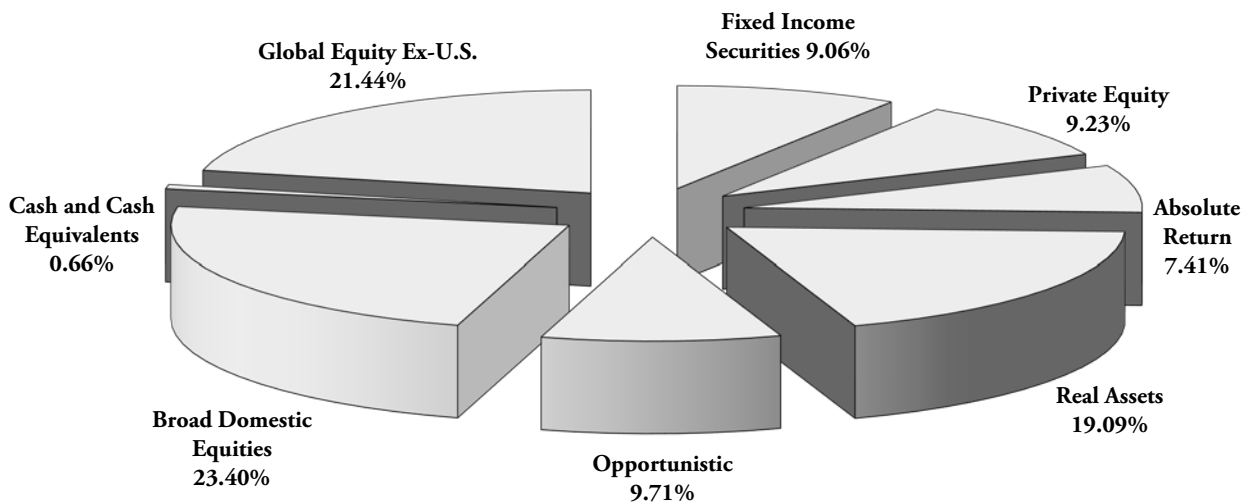
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2018

Actual — Health Reimbursement Arrangement

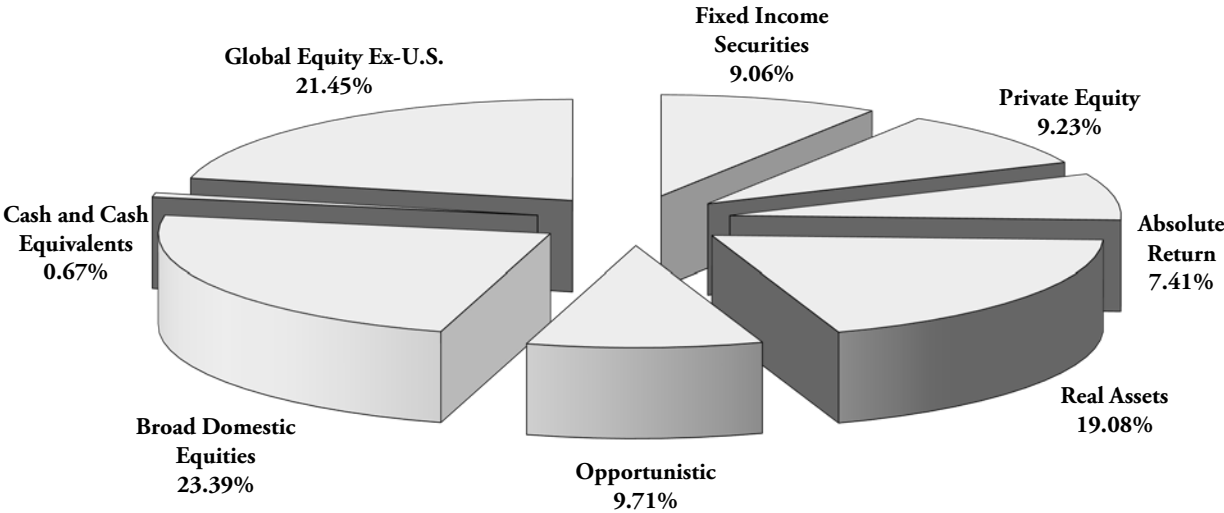


Actual — Occupational Death & Disability



**Public Employees' Retirement System
Asset Allocation
June 30, 2018**

Actual — Retiree Medical Plan



Investment Section

Alaska Retirement Management Board Top Ten Holdings by Asset Type June 30, 2018

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

Rank	Largest Fixed Income Holdings	Market Value	Par Value
1	US Treasury 2.125% 12/31/2022	\$146,911,491	\$150,696,566
2	US Treasury 1.375% 8/31/2020	69,503,671	71,274,394
3	US Treasury 1.875% 4/30/2022	66,904,443	68,948,663
4	US Treasury 2.000% 8/15/2025	64,754,007	68,358,869
5	US Treasury 2.750% 5/31/2023	56,103,695	56,033,653
6	US Treasury 2.125% 5/15/2025	55,779,675	58,291,207
7	US Treasury 2.375% 8/15/2024	45,960,614	47,080,617
8	US Treasury 2.375% 5/15/2027	43,233,092	44,893,813
9	US Treasury 1.750% 2/28/2022	39,056,192	40,363,268
10	US Treasury 1.125% 7/31/2021	37,489,781	39,233,848

Equities

Rank	Largest Equity Holdings	Market Value	Par Value
1	Apple Inc.	\$107,517,031	\$580,828
2	Microsoft Corp.	90,192,453	914,638
3	Amazon.com Inc	76,037,848	44,733
4	Exxon Mobil Corp.	55,691,202	673,168
5	Facebook Inc.	51,338,294	264,195
6	Alphabet, Inc	46,312,498	41,014
7	Pfizer Inc.	43,232,148	1,191,625
8	Johnson & Johnson	40,270,052	331,878
9	Home Depot Inc	39,047,046	200,139
10	Procter & Gamble Co./The	38,880,478	498,085

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, 2018

	<u>Total Fair Value</u>	<u>Fees</u>
Opportunistic		
** Advent Capital Management Convertible Bond Fund	N/A	\$ 569,218
** Analytic Buy Write Account	\$ 17,861,461	286,166
** Analytic SSgA Index Account - Index Fund	463,740,267	26,958
ARMB STOXX Min Var	400,389,217	57,571
** Columbia Threadneedle	N/A	304,440
** Eaton Vance High Yield	202,248	254,956
** Fidelity Institute Asset Management	134,771,652	347,550
** Fidelity Institute Asset Management High Yield	101,373,756	946,570
** Guggenheim Partners	N/A	120,346
** Lazard Emerging Income	109,310,031	843,496
** MacKay Shields	104,044,260	409,977
** Mondrian Investment Partners	65,465,621	413,198
** Quantitative Management Associates	N/A	214,354
** Schroders Insurance Linked Securities	224,925,233	1,046,570
** SSgA Managed Volatility-Russell 1000	N/A	26,764
** Western Asset Management Company	70,971,901	183,145
Total Opportunistic	1,693,055,647	6,051,279
Broad Domestic Equity		
** Allianz Global Investors	N/A	244,140
** ARMB Equity Yield	238,576,065	7,082
** ARMB Russell 1000 Growth	1,037,282,100	46,351
** ARMB Russell 1000 Value	896,902,321	39,391
** ARMB Russell Top 200	256,085,818	15,083
** ARMB S&P 600	176,484,778	6,248
** ARMB S&P 500 Equal Weight	243,573,572	10,280
** ARMB Scientific Beta	247,528,335	132,666
** Arrowmark	57,887,468	233,723
** Barrow, Hanley, Mewhinney & Strauss (Large Cap)	N/A	413,199
** Barrow, Hanley, Mewhinney & Strauss (Small Cap)	N/A	294,701
** BMO DSCC	59,415,785	320,471
** DePrince, Race & Zollo Inc.	81,851,725	746,800
** Fidelity Institutional Asset Management Small Company	N/A	629,075
** Frontier Capital Management Company	111,801,994	904,983
** Jennison Associates	81,187,854	572,156
** Lazard Asset Management	219,634,197	513,402
** Lord Abbett Small Cap Growth	N/A	169,640
** Lord Abbett & Co. - Mircor Cap	78,979,780	586,692
** McKinley Capital	N/A	352,814
** Portable Alpha	27,288,400	271,400
** Quantitative Management Associates	N/A	329,655
** SSgA Futures Large Cap	2,245,549	2,158
** SSgA Futures Small Cap	1,247,760	1,272
** SSgA Managed Volatility Russell 2000	105,839	35,941
** T.Rowe Small Cap Growth	51,211,317	108,052
** Victory Capital Management	133,691,500	809,828
** Zebra Capital Management, LLC	75,715,044	388,739
Total Broad Domestic Equity	4,078,697,201	8,185,942
Global Equity Ex-U.S.		
** Allianz Global Investors (International Large Cap)	667,831	519,266
** Arrowstreet Capital, Limited Partnership	255,439,655	1,182,341
** Baillie Gifford Overseas Limited	256,071,845	1,276,486
** BlackRock ACWI Ex-US IMI	412,223,159	208,020
** Brandes Investment Partners	535,372,091	1,732,416
** Capital Guardian Trust	380,872,525	1,463,269
** DePrince, Race & Zollo (Emerging Markets)	182,001,497	89,384
** Eaton Vance (Emerging Markets)	57,510,013	2,204,646
** Lazard Asset Management (Emerging Markets)	265,175,035	2,363,453
** Lazard Asset Management (International Large Cap)	219,224,675	244,536
** McKinley Capital (International Large Cap)	240,267,267	1,701,525
** Mondrian Investment Partners, Ltd	128,769,753	889,927
** Schroders Investment Management	141,347,596	1,076,657
** State Street Global Advisors	664,405,865	402,454
Total Global Equity Ex-U.S.	3,739,348,807	15,354,380

Investment Section

Public Employees' Retirement System Schedule of Investment Management Fees (continued) Year Ended June 30, 2018

	Total Fair Value	Fees
Private Equity		
Abbott Capital Management	622,628,411	1,445,692
Advent International GPE Fund VIII-B	8,533,204	249,681
Angelo, Gordon & Co.	N/A	6,225
Dyal Capital Partners III	14,655,117	665,455
Glendon Opportunities	24,734,499	416,082
KKR Lending Partners II	39,203,883	353,951
Lexington Capital Partners VII	16,512,180	219,134
Lexington Capital Partners VIII	18,917,914	263,736
Merit Capital Partners	9,353,017	65,747
Neuberger Berman Secondary Opportunities Fund III	20,025,423	233,084
Neuberger Berman Secondary Opportunities Fund IV	3,612,576	415,909
New Mountain Partners IV	14,868,645	47,672
New Mountain Partners V	8,178,772	446,248
NGP XI	32,615,700	466,262
Onex Partners III L.P.	9,168,165	69,790
Pathway Capital Management	691,336,836	1,875,850
Resolute Fund III	12,361,102	137,259
Warburg Pincus X	9,194,669	52,993
Warburg Pincus XI	18,444,967	122,455
Warburg Pincus XII	25,183,411	605,564
Total Private Equity	1,599,528,491	8,158,790
Absolute Return		
Allianz Global Investors (Absolute Return)	255,873,650	4,237,914
Crestline (Blue Glacier)	296,916,324	2,584,804
Crestline Specialty Fund	25,613,215	316,597
Crestline Specialty II	7,561,151	12,657
Global Asset Management (Glacier Bear)	878,421	38,481
JPM Systematic Alpha	121,043,693	313,511
KKR Apex Equity Fund	65,738,092	808,430
Man Group Alternative Risk Premia	143,513,233	910,151
Prisma Capital (Polar Bear)	282,717,244	1,815,529
Zebra Global Equity Advantage Fund	30,283,199	388,163
Zebra Global Equity Fund	61,935,985	739,981
Total Absolute Return	1,292,074,207	12,166,218
Real Assets		
Advisory Research MLP	321,677,401	913,706
Almanac Realty Securities V	1,548,734	37,940
Almanac Realty Securities VII, L.P.	21,070,879	333,894
ARMB REIT	134,580,003	11,849
** Brookfield Investment Management	70,736,549	479,815
Colony Investors VIII, L.P.	1,261,219	30,551
EIG Energy Fund XD	N/A	667
EIG Energy Fund XIV-A	7,615,047	386,408
EIG Energy Fund XV	19,445,608	304,204
EIG Energy Fund XVI	39,256,200	604,668
Hancock	176,889,154	1,471,926
Hancock Natural Resource Group	64,436,465	450,350
IFM Global Infrastructure Fund	262,436,737	1,510,020
ING Clarion Ventures IV, L.P.	14,916,970	84,840
JP Morgan	159,250,667	1,346,409
JPM Infrastructure Fund	78,105,475	658,932
KKR Real Estate Partners Americas II	1,426,784	32,544
KKR Real Estate Partners Americas	21,032,672	309,247
LaSalle Investment Management	134,992,242	769,383
** Lazard Asset Management Infrastructure Fund	100,118,161	647,621
Sentinel Separate Account	136,574,067	648,390
Silverpeak Real Estate Partners II (Lehman)	4,174,290	130,087
Silverpeak Real Estate Partners III (Lehman)	3,523,116	42,454
Timberland	182,299,527	1,436,711
Tishman Speyer Fund VI	15,064,620	110,542
Tishman Speyer Fund VII	849,273	46,035
** Tortoise MLP	350,517,140	1,311,549
UBS Agrivest	381,650,679	3,048,875
UBS Realty Trumbull Property Fund	104,011,687	996,766
UBS Realty Separate Account	340,898,003	1,619,502
Total Real Assets	3,150,359,369	19,775,885
Custodian		
* State Street Bank		809,742
Investment Advisory		
* Callan Associates		140,381
* Investment Advisory Council		56,151
* Townsend Group		106,480
Total Investment Advisory		303,012
Investment Performance		
* Callan Associates		167,498
		\$ 70,972,746

*These fees are paid through the Integrated Resource Information System (IRIS)

**These fees are deducted from earnings by the fund manager and are not directly recorded in IRIS

N/A indicates a closed fund during the fiscal year or an immaterial balance at year-end.

Public Employees' Retirement System Investment Summary Schedule June 30, 2018

<u>Investments (at Fair Value)</u>	<u>Defined Benefit - Pension</u>			<u>% of Total Assets</u>
	<u>Asset Allocation</u>		<u>Fair Value</u>	
	<u>Policy</u>	<u>Range</u>		
Cash and Cash Equivalents				
Short-Term Fixed Income Pool			\$ 57,402,769	
Securities Lending Income			75,618	
Total Cash and Cash Equivalents	1.00%	± 3% / - 1%	<u>57,478,387</u>	0.63%
Fixed Income Securities				
U.S. Treasury Fixed Income Pool			841,582,439	
Total Fixed Income Securities	10.00%	± 5%	<u>841,582,439</u>	9.07%
Opportunistic				
Alternative Equity Strategies			469,255,820	
Tactical Allocation Strategies			109,380	
Opportunistic Fixed Income			312,132,162	
Other Opportunities			119,818,978	
Convertible Bond Pool			(1,184)	
Total Opportunistic	10.00%	± 5%	<u>901,315,156</u>	9.71%
Broad Domestic Equity				
Large Cap Pool			1,825,223,013	
Small Cap Pool			346,553,889	
Total Broad Domestic Equity	24.00%	± 6%	<u>2,171,776,902</u>	23.40%
Global Equity Ex-U.S.				
International Equity Pool			1,578,835,273	
International Equity Small Cap Pool			143,801,766	
Emerging Markets Equity Pool			268,481,092	
Total Global Equity Ex-U.S.	22.00%	± 4%	<u>1,991,118,131</u>	21.46%
Private Equity				
Private Equity Pool			856,855,720	
Total Private Equity	9.00%	± 5%	<u>856,855,720</u>	9.23%
Absolute Return				
Absolute Return Pool			687,999,089	
Total Absolute Return	7.00%	± 4%	<u>687,999,089</u>	7.41%
Real Assets				
Real Estate Pool			585,788,361	
Real Estate Investment Trust Pool			71,660,683	
Infrastructure Private Pool			181,330,709	
Infrastructure Public Pool			90,976,110	
Master Limited Partnership Pool			357,927,764	
Energy Pool			35,312,164	
Farmland Pool			297,409,308	
Timber Pool			131,381,106	
Treasury Inflation Protected Securities Pool			20,066,225	
Total Real Assets	<u>17.00%</u>	± 8%	<u>1,771,852,430</u>	<u>19.09%</u>
Total Invested Assets	<u>100.00%</u>		<u>\$ 9,279,978,254</u>	<u>100.00%</u>

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2018

Investments (at Fair Value)	Asset Allocation		Fair Value	% of Total Assets
	Policy	Range		
Defined Contribution - Participant Directed				
Cash and Cash Equivalents				
Short-Term Fixed Income Pool	100.00%	0%	\$ 38,988,687	
Total Cash and Cash Equivalents			<u>38,988,687</u>	3.61%
Pooled Investment Funds (1)				
T. Rowe Price				
Alaska Balanced Fund Trust			26,747,401	
Long-Term Balanced Fund			24,484,716	
Target 2010 Trust			2,464,058	
Target 2015 Trust			11,697,702	
Target 2020 Trust			31,286,846	
Target 2025 Trust			50,340,790	
Target 2030 Trust			53,358,977	
Target 2035 Trust			62,718,058	
Target 2040 Trust			74,097,507	
Target 2045 Trust			95,199,847	
Target 2050 Trust			112,880,406	
Target 2055 Trust			92,056,790	
Target 2060 Trust			776,578	
Total Pooled Investment Funds			<u>638,109,676</u>	59.06%
Collective Investment Funds (1)				
State Street Global Advisors				
SSgA Treasury Money Market Fund			4,808,125	
Alaska Money Market			5,243,240	
S&P Stock Index Fund			95,885,001	
Russell 3000 Index			10,397,811	
U.S. Real Estate Investment Trust Index			16,328,981	
World Equity Ex-U.S. Index			45,595,536	
Long U.S. Treasury Bond Index			1,171,435	
U.S. Treasury Inflation Protected Securities Index			14,491,036	
World Government Bond Ex-U.S. Index			7,240,965	
Barclays				
Government/Credit Bond Fund			47,941,119	
Intermediate Bond Fund			22,563,122	
Brandes Institutional				
Alaska International Equity Fund			43,529,205	
RCM				
Sustainable Core Opportunities Fund			10,605,451	
T. Rowe Price				
Small-Cap Stock Fund			77,451,126	
Total Collective Investment Funds			<u>403,252,153</u>	37.33%
Total Invested Assets			<u>\$1,080,350,516</u>	<u>100.00%</u>

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

Public Employees' Retirement System Investment Summary Schedule June 30, 2018

Investments (at Fair Value)	Defined Benefit - Alaska Retiree Health Care Trust			% of Total Assets
	Asset Allocation		Fair Value	
	Policy	Range		
Cash and Cash Equivalents				
Short-Term Fixed Income Pool			\$ 38,974,626	
Securities Lending Income			62,365	
Total Cash and Cash Equivalents	1.00%	± 3% / - 1%	39,036,991	0.51%
Fixed Income Securities				
U.S. Treasury Fixed Income Pool			694,742,619	
Total Fixed Income Securities	10.00%	± 5%	694,742,619	9.08%
Opportunistic				
Alternative Equity Strategies			387,838,158	
Tactical Allocation Strategies			89,903	
Opportunistic Fixed Income			257,486,143	
Other Opportunities			98,841,870	
Convertible Bond Pool			(973)	
Total Opportunistic	10.00%	± 5%	744,255,101	9.72%
Broad Domestic Equity				
Large Cap Pool			1,507,804,525	
Small Cap Pool			285,512,945	
Total Broad Domestic Equity	24.00%	± 6%	1,793,317,470	23.43%
Global Equity Ex-U.S.				
International Equity Pool			1,303,120,665	
International Equity Small Cap Pool			118,787,113	
Emerging Markets Equity Pool			222,127,493	
Total Global Equity Ex-U.S.	22.00%	± 4%	1,644,035,271	21.49%
Private Equity				
Private Equity Pool			707,494,680	
Total Private Equity	9.00%	± 5%	707,494,680	9.24%
Absolute Return				
Absolute Return Pool			568,071,944	
Total Absolute Return	7.00%	± 4%	568,071,944	7.42%
Real Assets				
Real Estate Pool			483,720,467	
Real Estate Investment Trust Pool			59,169,298	
Infrastructure Private Pool			149,722,420	
Infrastructure Public Pool			75,117,797	
Master Limited Partnership Pool			295,536,323	
Energy Pool			29,156,797	
Farmland Pool			245,567,017	
Timber Pool			108,479,679	
Treasury Inflation Protected Securities Pool			16,568,422	
Total Real Assets	17.00%	± 8%	1,463,038,220	19.11%
Total Invested Assets	100.00%		\$ 7,653,992,296	100.00%

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2018

Investments (at Fair Value)	Health Reimbursement Arrangement		Fair Value	% of Total Assets
	Policy	Range		
Cash and Cash Equivalents				
Short-Term Fixed Income Pool			\$ 2,361,079	
Securities Lending Income			2,867	
Total Cash and Cash Equivalents	1.00%	± 3% / - 1%	2,363,946	0.67%
Fixed Income Securities				
U.S. Treasury Fixed Income Pool			32,266,084	
Total Fixed Income Securities	10.00%	± 5%	32,266,084	9.06%
Opportunistic				
Alternative Equity Strategies			18,012,453	
Tactical Allocation Strategies			4,175	
Opportunistic Fixed Income			11,958,485	
Other Opportunities			4,590,535	
Convertible Bond Pool			(45)	
Total Opportunistic	10.00%	± 5%	34,565,603	9.71%
Broad Domestic Equity				
Large Cap Pool			70,027,296	
Small Cap Pool			13,260,140	
Total Broad Domestic Equity	24.00%	± 6%	83,287,436	23.39%
Global Equity Ex-U.S.				
International Equity Pool			60,521,119	
International Equity Small Cap Pool			5,516,856	
Emerging Markets Equity Pool			10,316,316	
Total Global Equity Ex-U.S.	22.00%	± 4%	76,354,291	21.44%
Private Equity				
Private Equity Pool			32,858,331	
Total Private Equity	9.00%	± 5%	32,858,331	9.23%
Absolute Return				
Absolute Return Pool			26,383,090	
Total Absolute Return	7.00%	± 4%	26,383,090	7.41%
Real Assets				
Real Estate Pool			22,465,536	
Real Estate Investment Trust Pool			2,748,013	
Infrastructure Private Pool			6,953,591	
Infrastructure Public Pool			3,488,712	
Master Limited Partnership Pool			13,725,658	
Energy Pool			1,354,135	
Farmland Pool			11,404,923	
Timber Pool			5,038,146	
Treasury Inflation Protected Securities Pool			769,491	
Total Real Assets	17.00%	± 8%	67,948,205	19.09%
Total Invested Assets	100.00%		\$ 356,026,986	100.00%

Public Employees' Retirement System
Investment Summary Schedule
June 30, 2018

<u>Investments (at Fair Value)</u>	Occupational Death and Disability			<u>% of Total Assets</u>
	Policy	Range	Fair Value	
Cash and Cash Equivalents				
Short-Term Fixed Income Pool			\$ 197,817	
Securities Lending Income			248	
Total Cash and Cash Equivalents	1.00%	± 3%/ - 1%	198,065	0.66%
Fixed Income Securities				
U.S. Treasury Fixed Income Pool			2,778,138	
Total Fixed Income Securities	10.00%	± 5%	2,778,138	9.06%
Opportunistic				
Alternative Equity Strategies			1,550,888	
Tactical Allocation Strategies			359	
Opportunistic Fixed Income			1,029,636	
Other Opportunities			395,249	
Convertible Bond Pool			(4)	
Total Opportunistic	10.00%	± 5%	2,976,128	9.71%
Broad Domestic Equity				
Large Cap Pool			6,029,412	
Small Cap Pool			1,141,710	
Total Broad Domestic Equity	24.00%	± 6%	7,171,122	23.40%
Global Equity Ex-U.S.				
International Equity Pool			5,210,921	
International Equity Small Cap Pool			475,006	
Emerging Markets Equity Pool			888,244	
Total Global Equity Ex-U.S.	22.00%	± 4%	6,574,171	21.44%
Private Equity				
Private Equity Pool			2,829,131	
Total Private Equity	9.00%	± 5%	2,829,131	9.23%
Absolute Return				
Absolute Return Pool			2,271,607	
Total Absolute Return	7.00%	± 4%	2,271,607	7.41%
Real Assets				
Real Estate Pool			1,934,302	
Real Estate Investment Trust Pool			236,606	
Infrastructure Private Pool			598,710	
Infrastructure Public Pool			300,381	
Master Limited Partnership Pool			1,181,791	
Energy Pool			116,592	
Farmland Pool			981,974	
Timber Pool			433,789	
Treasury Inflation Protected Securities Pool			66,254	
Total Real Assets	17.00%	± 8%	5,850,399	19.09%
Total Invested Assets	100.00%		\$ 30,648,761	100.00%

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2018

Investments (at Fair Value)	Retiree Medical Plan			
	Asset Allocation		Fair Value	% of Total Assets
Policy	Range			
Cash and Cash Equivalents				
Short-Term Fixed Income Pool			\$ 663,134	
Securities Lending Income			798	
Total Cash and Cash Equivalents	1.00%	± 3% / - 1%	663,932	0.67%
Fixed Income Securities				
U.S. Treasury Fixed Income Pool			8,987,066	
Total Fixed Income Securities	10.00%	± 5%	8,987,066	9.06%
Opportunistic				
Alternative Equity Strategies			5,017,005	
Tactical Allocation Strategies			1,163	
Opportunistic Fixed Income			3,330,795	
Other Opportunities			1,278,601	
Convertible Bond Pool			(13)	
Total Opportunistic	10.00%	± 5%	9,627,551	9.71%
Broad Domestic Equity				
Large Cap Pool			19,504,689	
Small Cap Pool			3,693,344	
Total Broad Domestic Equity	24.00%	± 6%	23,198,033	23.39%
Global Equity Ex-U.S.				
International Equity Pool			16,856,935	
International Equity Small Cap Pool			1,536,609	
Emerging Markets Equity Pool			2,873,401	
Total Global Equity Ex-U.S.	22.00%	± 4%	21,266,945	21.45%
Private Equity				
Private Equity Pool			9,152,024	
Total Private Equity	9.00%	± 5%	9,152,024	9.23%
Absolute Return				
Absolute Return Pool			7,348,477	
Total Absolute Return	7.00%	± 4%	7,348,477	7.41%
Real Assets				
Real Estate Pool			6,257,321	
Real Estate Investment Trust Pool			765,403	
Infrastructure Private Pool			1,936,782	
Infrastructure Public Pool			971,710	
Master Limited Partnership Pool			3,823,005	
Energy Pool			377,167	
Farmland Pool			3,176,611	
Timber Pool			1,403,274	
Treasury Inflation Protected Securities Pool			214,326	
Total Real Assets	17.00%	± 8%	18,925,599	19.08%
Total Invested Assets	100.00%		\$ 99,169,627	100.00%

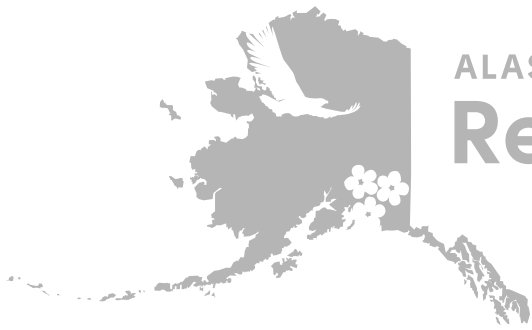
**Public Employees' Retirement System
Recaptured Commission Fees
Year Ended June 30, 2018**

Fund	Broad Domestic Equity Pool	Global Equity Ex-U.S.	Total
Defined Benefit Plan – Pension	\$25,786	\$22,568	\$48,354
Postemployment Benefit – Alaska Retiree Healthcare Trust	21,212	18,551	39,763
Postemployment Benefit – Health Reimbursement Arrangement	887	785	1,672
Postemployment Benefit – Retiree Medical Pan	246	218	464
Postemployment Benefit – Occupational Death & Disability	79	70	149
Total Recapture Commission Fees	\$48,210	\$42,192	\$90,402

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.



ALASKA DIVISION OF
**Retirement
and Benefits**