

Callan

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September 9, 2015

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, 2015.

Callan Associates Inc. (Callan) independently 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, the Townsend Group, calculates returns for the real estate segment of the portfolio. Callan incorporates that data into the total plan returns.

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 were made using methodology similar to Global Investment Performance Standards.

ARMB's primary investment objective is to prudently and expertly invest assets, in accordance with governing law and industry practices, in a manner that will help ensure assets under supervision are sufficient to pay promised benefits to its members and their beneficiaries. In pursuit of this objective, ARMB periodically evaluates liabilities, expected contributions and potential earnings. This analysis is used to consider a wide range of potentially viable investment strategies. 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 asset allocation policy. This policy benchmark is a custom index comprised of equity, fixed income, real estate and other market indices weighted in the same proportions as ARMB's investment policy.

Equity markets in the U.S. climbed steadily higher during the fiscal year 2015. The Russell 3000 Index, a measure of broad U.S. equity, gained 7.29%. Returns for equities outside of the U.S. did not fare as well. International stocks, as measured by the MSCI ACWI ex-U.S. Index, lost 4.85% for the period. A broad measure of the total global equity market (MSCI All Country World Index) rose 1.23%.

Investment Section

A flattening yield curve during the period boosted fixed income performance. The Barclays Capital Aggregate Bond Index, a widely used gauge of the investment grade domestic bond market, gained 1.86%. Absolute return strategies, such as hedge fund-of-funds, posted modest gains during the fiscal year. The Callan Absolute Return Hedge Fund-of-Funds Style median return was 2.28% (net- of-fee). Private real estate investments (NCREIF Property Index) turned in another solid year, returning 12.98%. Publicly traded real estate, as measured by the NAREIT Equity Index, did not perform as well and increased only 4.14%.

ARMB's various asset group returns performed as expected.

| | |
|--------------------|--------|
| Domestic stocks | 7.84% |
| Int'l Stocks | -3.32% |
| Alternative Equity | -0.81% |
| Fixed Income | -0.73% |
| Real Assets | 3.71% |
| Private Equity | 13.77% |
| Absolute Return | 9.24% |

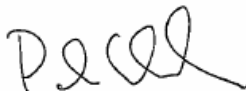
For the fiscal year, the Public Employees Retirement System (PERS) had a time-weighted total return of 3.29% and the Teachers Retirement System (TRS) had a time-weighted total return of 3.30%. Both systems outperformed their strategic policy benchmark target return of 2.74% and the median return for Callan's Public Fund database of 3.21%.

Over longer-term periods, PERS and TRS have closely tracked their target index returns. For example, PERS' 10-year annualized return was 6.69% while TRS's return was slightly higher at 6.73%. These returns were in line, but slightly above, their target return of 6.54%. Over the longest period for which Callan has detailed data (23.75 years), PERS and TRS have achieved annualized total returns of 7.84% and 7.90%, respectively, while the policy benchmark return was 7.80%.

Both systems are well diversified and currently have asset allocation policies that, in our opinion, are consistent with achievement of a long-term "real" return of 4.5% or better.

In summary, fiscal 2015 was a year in which asset class returns were varied and a well-diversified portfolio was able to produce positive results.

Sincerely,



Paul Erlendson
Senior Vice President

Department of Revenue Treasury Division Staff As of June 30, 2015

| | | | |
|---|--|--|---|
| Commissioner Randall Hoffbeck | Chief Investment Officer Gary Bader | Investment Officers Bob G. Mitchell Stephen R. Sikes Zachary Hanna Steve Verschoor Shane Carson Sean Howard | Casey Colton Nicholas Orr Victor Djajalie Joy Wilkinson Alyson Campbell Emily Peyton Paul Hackenmueller |
| Deputy Commissioner Jerry Burnett | Comptroller Scott Jones, CPA | | |
| Director Pamela Leary, CPA | Cash Management Michelle M. Prebula, MBA, CPA, CCM | ARMB Liaison Officer Judy Hall | |

External Money Managers and Consultants

Domestic Equity Large Capitalization

Allianz Global Investors
San Francisco, CA
Analytic Investors LLC
Los Angeles, CA
Barrow, Hanley, Mewhinney & Strauss
Dallas, TX
Capital Guardian Trust Co.
Los Angeles, CA
McKinley Capital Management, Inc.
Anchorage, AK
Relational Investors LLC
San Diego, CA
Quantitative Management Associates
Newark, NJ
State Street Global Advisors
San Francisco, CA

Domestic Equity Small Capitalization

Barrow, Hanley, Mewhinney & Strauss
Dallas, TX
Frontier Capital Management
Boston, MA
Jennison Associates LLC
New York, NY
Lord Abbett & Co.
Jersey City, NJ
Luther King Capital Management
Fort Worth, TX
State Street Global Advisors
San Francisco, CA
Victory Capital Management
St. Louis, MO

Domestic Equity MicroCap

DePrince, Race & Zollo, Inc.
Winter Park, FL
Lord Abbett & Co.
Jersey City, NJ
Zebra Capital Management
Mitford, CT

Domestic Equity Index Fund

State Street Global Advisors
San Francisco, CA

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 Guardian Trust Co.
Los Angeles, CA
Lazard Asset Management
New York, NY
McKinley Capital Management, Inc.
Anchorage, AK
Parametric Clifton
Seattle, WA
State Street Global Advisors
San Francisco, CA

International Small Cap

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

Emerging Market Income

Lazard Asset Management
New York, NY
NFJ Investment Group
Dallas, TX

International Fixed Income

Mondrian Investment Partners
London, England

High Yield/Convertible Bond/Tactical Bond

MacKay Shields LLC
New York, NY
Advent Capital Management
New York, NY
Pyramis Global Advisors
Smithfield, RI

External Money Managers and Consultants (cont.)

Taxable Municipal Bonds

Guggenheim Partners LLC
Santa Monica, CA
 Western Asset Management Company
Pasadena, CA

Master Limited Partnerships

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

Absolute Return

Allianz Global Investors
New York, NY
 Crestline Investors, Inc.
Fort Worth, TX
 Global Assets Management Inc.
Los Angeles, CA
 KKR (formerly Prisma Capital Partners)
New York, NY

Private Equity

Abbott Capital Management, L.P.
New York, NY
 Pathway Capital Management, LLC
Irvine, CA

Real Assets – Real Estate Core Separate Accounts

LaSalle Investment Management
Chicago, IL
 Sentinel Real Estate Corporation
New York, NY
 UBS Realty Investors, LLC
San Francisco, CA

Real Assets – Commingled Real Estate Funds

Almanac Realty Investors
Alpharetta, GA
 BlackRock Realty
San Francisco, CA
 Colony Capital
Los Angeles, CA
 Coventry Real Estate Fund II, LLC
New York, NY
 Clarion Partners
New York, NY
 J.P. Morgan Investment Management Inc.
New York, NY
 Silverpeake Real Estate Partners
New York, NY
 Lowe Hospitality Investment Partners, LLC
Los Angeles, CA
 Sentinel Real Estate Corporation
New York, NY
 Tishman Speyer Properties
New York, NY
 UBS Realty Investors, LLC
Hartford, CT

Real Assets – Energy

EIG Global Energy Partners
Washington, DC

Real Assets – Infrastructure

Brookfield Investment Management
Encinitas, CA
 Industry Funds Management
New York, NY
 JP Morgan Asset Management
San Francisco, CA
 Lazard Asset Management
New York, NY

Real Assets – Farmland and Timber

Hancock Agricultural Investment Group
Boston, MA
 UBS AgriVest, LLC
Hartford, CT
 Hancock Timber Resource Group
Charlotte, NC
 Timberland Investment Resources LLC
Brookline, MA

Supplemental Benefits System, Deferred Compensation Plan and Defined Contribution Plan

BlackRock
San Francisco, CA
 Allianz Global Investors (formerly RCM)
San Francisco, CA
 State Street Global Advisors
Boston, MA
 T. Rowe Price Investment Services
Baltimore, MD
 Brandes Investment Partners
San Diego, CA

Global Master Custodian

State Street Bank & Trust Co.
Boston, MA

Investment Consultants

Callan Associates, Inc.
Denver, CO
 The Townsend Group
San Francisco, CA

Investment Advisory Council

William Jennings
Colorado Springs, CO
 Jerrold Mitchell
Wayland, MA
 Robert Shaw
San Francisco, CA

Independent Auditors

KPMG, LLP
Anchorage, AK

Actuaries

Buck Consultants
Denver, CO
 Gabriel Roeder Smith
Denver, CO

Public Employees' Retirement System Investment Report

INVESTMENTS

The investment goals of the State of Alaska Public Employees' Retirement System (PERS) 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., alternative equity strategies, 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 |
| Alternative Equities Strategies | 50% S&P 500 Index 30% CBOE Buy Write Index 20% Bank of America Yield Alternative Index |
| Private Equity | 1/3 S&P 500 Index 1/3 Russell 2000 Index 1/3 MSCI EAFE Index |
| Real Assets | 50% NCREIF Property Index 15% Barclays TIPS Index 10% NCREIF Farmland Index 10% NCREIF Timberland Index 5% FTSE NAREIT All Equity REIT Index 10% S&P Global Infrastructure |
| Fixed Income | 80% Barclays Intermediate Treasury Index 10% Bank of America Merrill Lynch US High Yield Master II Constrained Index 7% Citigroup World Gov. Bond Ex-U.S. Index 3% JP Morgan Global Bond Index - Emerging Markets Global Diversified Index |
| Absolute Return | 91 Day Treasury Bill + 5% |
| 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 2015 fiscal year, the ARMB's target asset allocation was 26% domestic equities, 25% global equities ex-U.S., 3% alternative equity strategies, 9% private equity, 17% real assets, 12% fixed income, 5% absolute return, and 3% cash equivalents. The target asset allocation is expected to generate a return of 7.22% with a standard deviation of 15.01%.

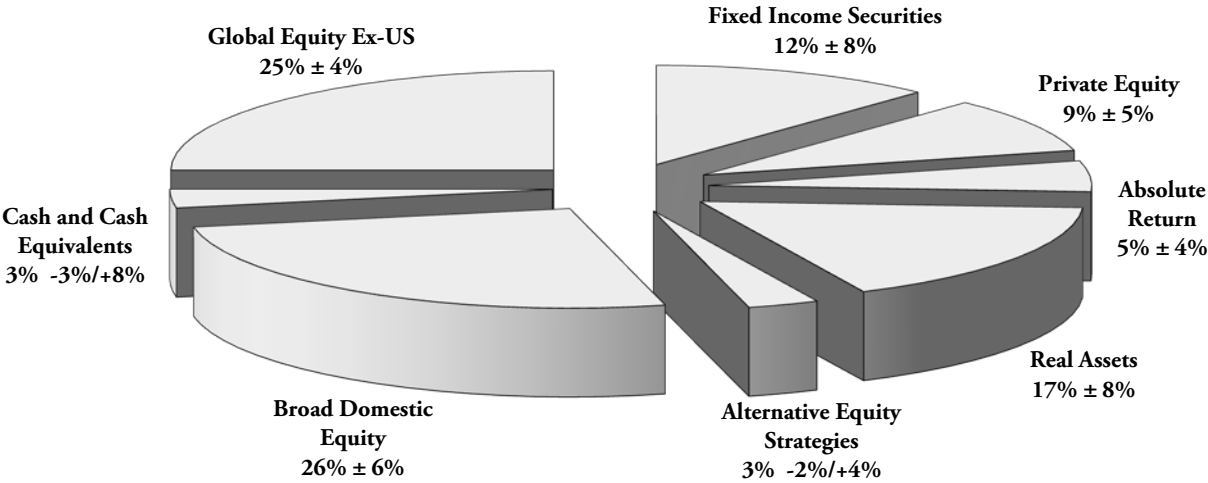
Investment Section

| Public Employees' Retirement System Schedule of Investment Results Fiscal Years Ended June 30 | | | | | | | |
|---|--------|---------|--------|--------|--------|------------|--------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | Annualized | |
| | | | | | | 3 Year | 5 Year |
| Total Fund | | | | | | | |
| PERS | 21.22% | 0.46% | 12.50% | 18.56% | 3.29% | 11.27% | 10.89% |
| <i>Actuarial Earnings Rate</i> | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| U.S. Common Stock Returns | | | | | | | |
| PERS Domestic Equities | 33.37 | 1.80 | 21.23 | 25.81 | 7.84 | 18.04 | 17.43 |
| <i>Custom Composite Index</i> | 32.37 | 3.84 | 21.46 | 25.22 | 7.29 | 17.73 | 17.54 |
| Fixed Income | | | | | | | |
| PERS | 5.46 | 4.90 | 0.57 | 5.14 | (0.74) | 1.63 | 3.03 |
| <i>Custom Composite Index</i> | 5.06 | 5.08 | (0.04) | 3.31 | 0.41 | 1.22 | 2.74 |
| Real Assets | | | | | | | |
| PERS | 15.25 | 10.46 | 10.47 | 13.28 | 3.70 | 9.07 | 10.51 |
| <i>Custom Composite Index</i> | 12.66 | 11.41 | 8.35 | 10.98 | 7.99 | 9.10 | 10.26 |
| International Stock Returns | | | | | | | |
| PERS International Equities | 28.27 | (13.67) | 15.01 | 23.43 | (3.32) | 11.13 | 8.73 |
| <i>MSCI ACWI ex-US</i> | 30.27 | (14.15) | 14.14 | 22.27 | (4.85) | 9.92 | 8.23 |
| Private Equity | | | | | | | |
| PERS | 20.14 | 9.44 | 11.61 | 24.19 | 13.77 | 16.40 | 15.70 |
| <i>Custom Composite Index</i> | 32.93 | (3.61) | 21.24 | 24.01 | 3.33 | 15.82 | 14.76 |
| Absolute Return | | | | | | | |
| PERS | 5.98 | (2.05) | 8.41 | 6.51 | 9.24 | 8.05 | 5.54 |
| <i>3-month Treasury Bill +5%</i> | 5.16 | 5.06 | 5.11 | 5.05 | 5.02 | 5.06 | 5.08 |
| Alternative Equity | | | | | | | |
| PERS | — | — | — | 22.36 | (0.89) | — | — |
| <i>Custom Composite Index</i> | — | — | — | 18.70 | 4.26 | — | — |
| Cash Equivalents | | | | | | | |
| PERS | 0.47 | 0.44 | 0.25 | 0.27 | 0.28 | 0.26 | 0.34 |
| <i>3-month Treasury Bill</i> | 0.16 | 0.06 | 0.11 | 0.05 | 0.02 | 0.06 | 0.08 |

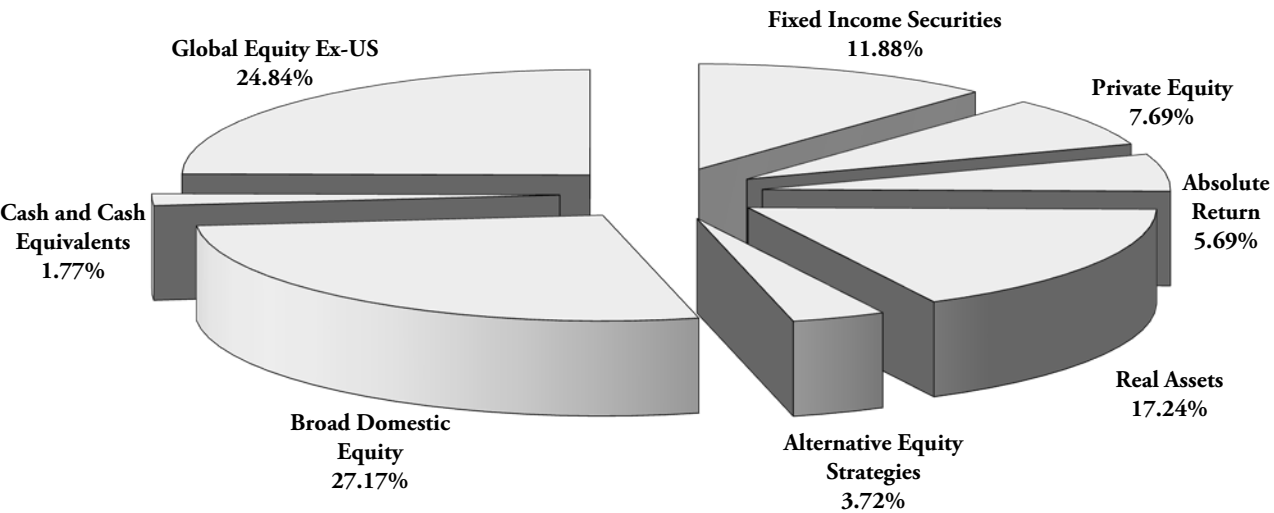
MSCI ACWI =Morgan Stanley Capital International All Country World Index
Returns for periods longer than one year are reported on an annualized basis.
Basis of calculation: Time-Weighed rate of return based on the market rate of return.

**Public Employees' Retirement System
Asset Allocation
June 30, 2015**

Policy



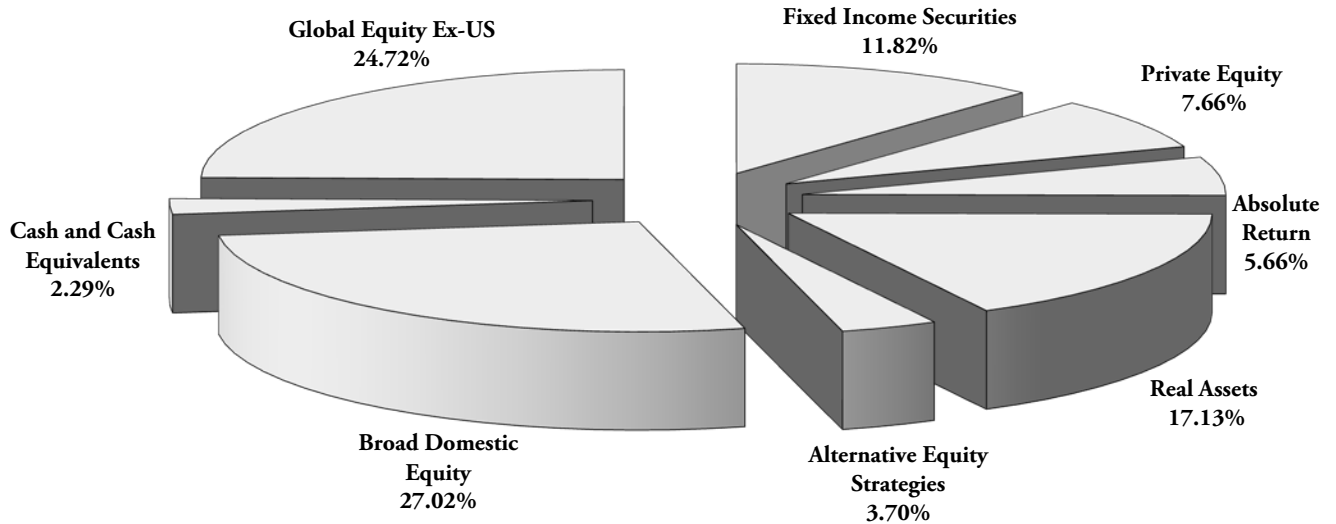
Actual – Defined Benefit Pension



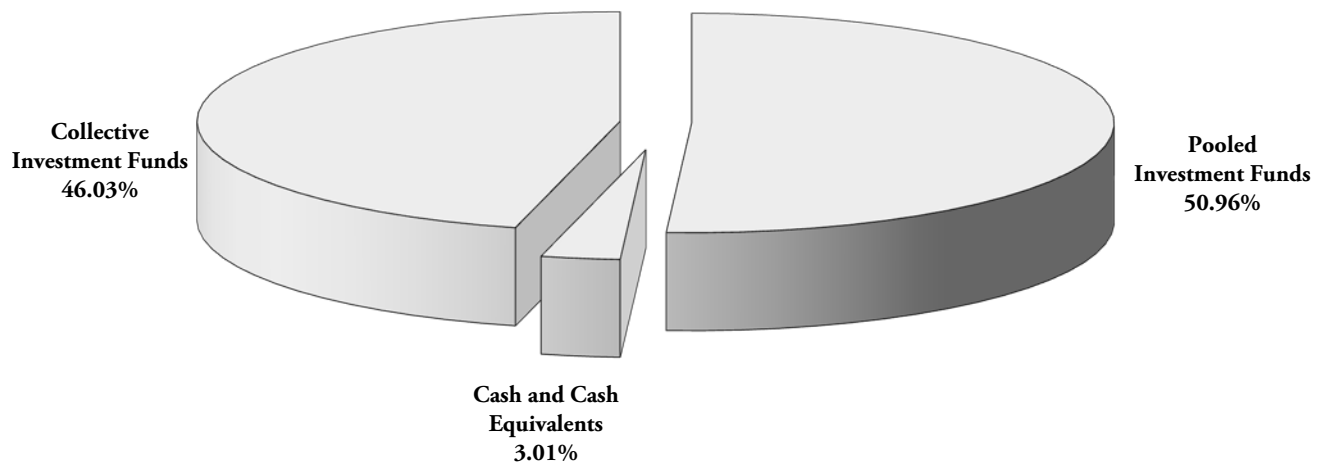
Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2015

Actual – Defined Benefit Alaska Retiree Healthcare Trust

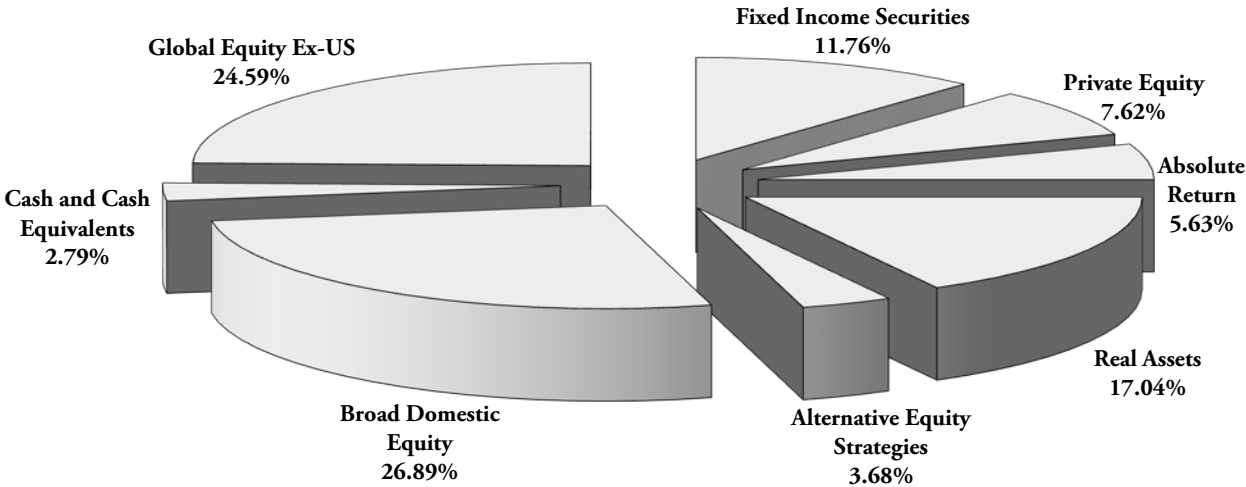


Actual – Defined Contribution Participant Directed

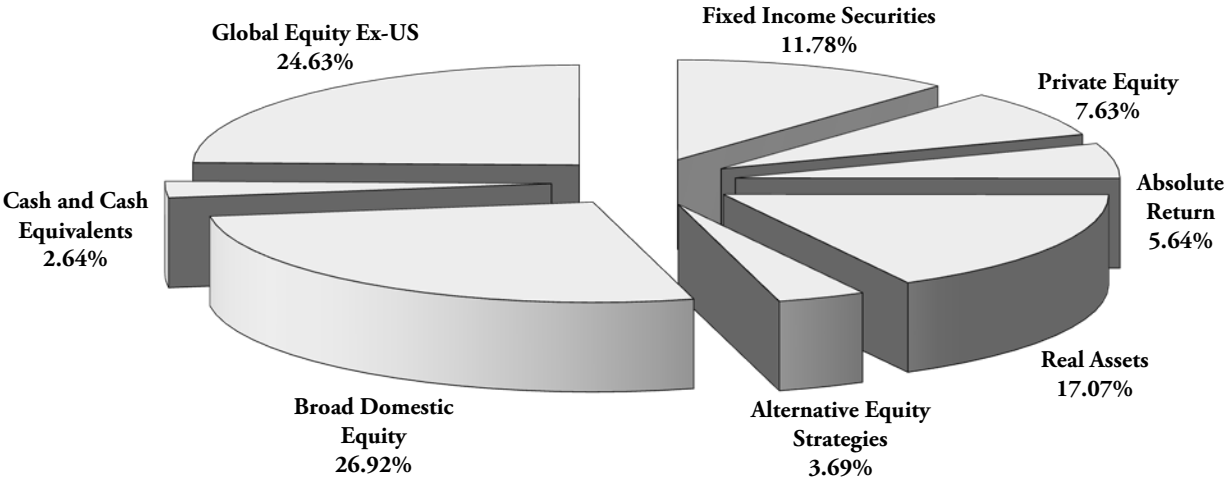


**Public Employees' Retirement System
Asset Allocation
June 30, 2015**

Actual — Health Reimbursement Arrangement



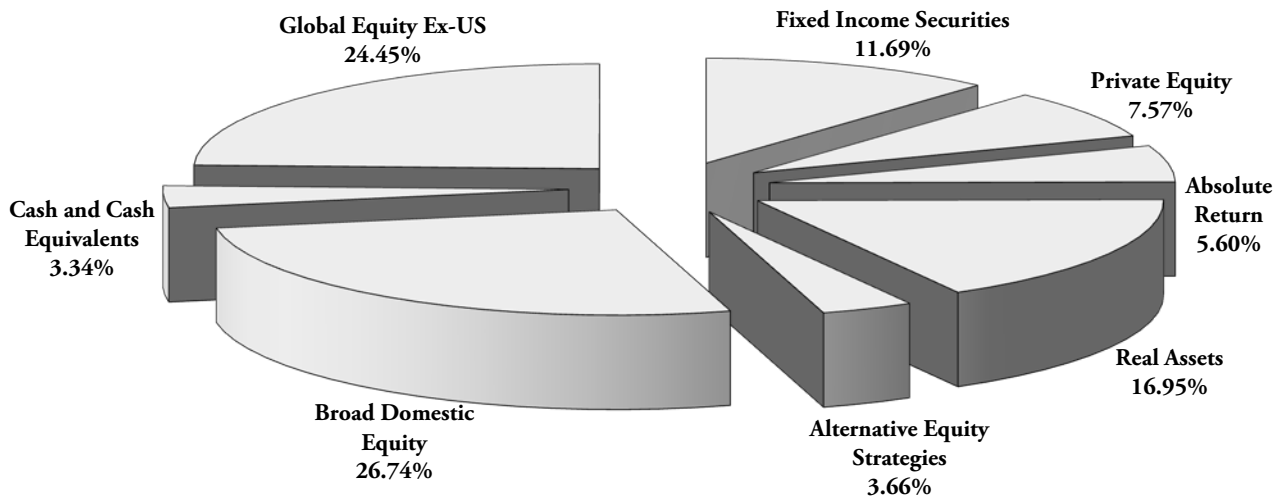
Actual — Occupational Death & Disability



Investment Section

Public Employees' Retirement System Asset Allocation June 30, 2015

Actual — Retiree Medical Plan



**Alaska Retirement Management Board
Top Ten Holdings by Asset Type
June 30, 2015**

Invested assets under the fiduciary responsibility of the Alaska Retirement Management Board (ARMB) have been commingled in various investment pools to minimize costs and maximize returns. Treasury Division has created twenty-six different mutual fund-like pools to accomplish the investment asset allocation policies of the ARMB. 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 | US Treasury 1.750% 9/30/2019 | \$122,489,881 | \$121,033,725 |
| 2 | US Treasury 1.375% 2/29/2020 | 100,098,022 | 100,973,666 |
| 3 | US Treasury 0.875% 5/15/2018 | 98,762,486 | 98,654,558 |
| 4 | US Treasury 2.125% 5/15/2025 | 59,302,629 | 60,397,331 |
| 5 | US Treasury 0.750% 4/15/2018 | 47,495,255 | 47,745,153 |
| 6 | US Treasury 1.500% 2/28/2019 | 46,591,585 | 46,201,735 |
| 7 | US Treasury 1.250% 10/31/2018 | 39,614,692 | 39,478,964 |
| 8 | US Treasury 1.500% 8/31/2018 | 37,339,178 | 36,858,288 |
| 9 | US Treasury 1.250% 1/31/2020 | 22,250,079 | 22,553,148 |
| 10 | US Treasury 1.625% 4/30/2019 | 20,749,394 | 20,520,143 |

Equities

| <u>Rank</u> | <u>Largest Equity Holdings</u> | <u>Market Value</u> |
|-------------|--------------------------------|---------------------|
| 1 | Apple Inc. | \$121,467,596 |
| 2 | Microsoft Corp. | 69,740,309 |
| 3 | Exxon Mobil Corp. | 58,298,599 |
| 4 | Wells Fargo & Co. | 55,543,208 |
| 5 | Pfizer Inc. | 50,596,008 |
| 6 | JPMorgan Chase & Co. | 50,064,945 |
| 7 | Johnson & Johnson | 47,836,235 |
| 8 | Citigroup Inc. | 41,269,218 |
| 9 | General Electric Co. | 41,219,805 |
| 10 | Procter & Gamble Co./The | 39,459,716 |

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

Investment Section

Public Employees' Retirement System Schedule of Investment Management Fees Year Ended June 30, 2015

| | <u>Total Fair Value</u> | <u>Fees</u> |
|---|-------------------------|-------------------|
| Fixed Income | | |
| Municipal Bond Pool | | |
| * Guggenheim Partners | \$ 73,787,990 | \$ 176,016 |
| * Western Asser Management | 76,625,219 | 191,233 |
| Total Municipal Bond Pool | <u>150,413,209</u> | <u>367,249</u> |
| High Yield Pool | | |
| * Mackay Shields, LLC | 412,089,270 | 1,889,261 |
| Tactical Fixed Income | | |
| * Pyramis Global Advisors | 80,800,149 | 216,575 |
| International Fixed Income | | |
| * Mondrian Investment Partners | 254,362,926 | 1,028,317 |
| Broad Domestic Equity Pools | | |
| * Allianz Global Investors | 243,040,323 | 682,407 |
| * Barrow, Hanley, Mewhinney & Strauss, INC (LC) | 237,724,906 | 853,651 |
| * Barrow, Hanley, Mewhinney & Strauss, INC (SC) | 74,433,811 | 416,381 |
| * DePrince, Race & Zollo Inc.-Micro Cap | 58,110,448 | 679,888 |
| * Frontier Capital Management | 71,807,734 | 625,616 |
| * Jennison Associates LLC | 74,775,663 | 628,245 |
| * Lazard Asset Management | 259,267,683 | 704,790 |
| * Lord Abbett & Co. (Micro) | 79,185,206 | 757,920 |
| * Lord Abbett & Co. (SC) | 76,685,363 | 549,439 |
| * Luther King Cap. Management | 72,421,749 | 412,492 |
| * McKinley Capital | 244,357,265 | 864,427 |
| * Quantitative Management Associates | 227,748,735 | 736,135 |
| * SSgA Future Small Cap | 7,970,910 | 8,002 |
| * SSgA Futures Large Cap | 9,422,434 | 9,828 |
| * SSgA Russell 1000 Growth | 778,099,874 | 99,194 |
| * SSgA Russell 1000 Value | 948,523,555 | 99,847 |
| * SSgA Russell 200 | 517,952,991 | 51,453 |
| * SSgA Russell 2000 Growth | 13,156,606 | 6,427 |
| * SSgA Russell 2000 Value | 43,221,047 | 22,377 |
| * SSgA Volatility - Russell 1000 | 65,856,764 | 28,645 |
| * SSgA Volatility - Russell 2000 | 65,403,073 | 28,102 |
| * Sycamore Capital Management | 77,257,126 | 618,293 |
| * Zebra Capital Management | 49,725,565 | 5,831 |
| Total Domestic Equities | <u>4,296,148,831</u> | <u>8,889,390</u> |
| Global Equity Ex-U.S. | | |
| * Allianz Global Investors | 169,860,415 | 707,224 |
| * Arrow Street Capital | 140,226,340 | 473,456 |
| * Baillie Gifford Overseas Limited | 183,181,916 | 737,345 |
| * Blackrock ACWI Ex-US IMI | 360,274,172 | 233,588 |
| * Brandes Investment Partners | 726,434,162 | 2,793,928 |
| * Capital Guardian Trust Co. | 537,565,335 | 1,996,092 |
| * Lazard Freres | 269,306,805 | 419,452 |
| * McKinley Capital Mgmt. | 346,935,511 | 1,587,642 |
| * Mondrian Investment Partners | 103,854,459 | 781,598 |
| * Schroder Investment Management | 111,419,900 | 880,139 |
| * SSgA | 558,324,134 | 299,905 |
| Total International Equities | <u>3,507,383,149</u> | <u>10,910,369</u> |
| Alternative Equity Strategies | | |
| Alternative Equity Pool | | |
| * Analytic SSgA Account | 189,712,126 | 255,398 |
| * Quantitative Management Associates MPS | 131,263,331 | 109,268 |
| ** Relational Investors, LLC | 45,207,278 | 915,095 |
| Total Alternative Equity | <u>366,182,735</u> | <u>1,279,761</u> |
| Convertible Bond Pool | | |
| * Advent Capital | 131,194,257 | 779,946 |
| Private Equity Pool | | |
| * Abbott Capital Management | 514,907,624 | 1,399,418 |
| ** Angelo Gordon & Co. | 3,972,071 | 80,867 |
| ** BlumCapital Partners-Strategic | 1,955,670 | 124,132 |
| ** Glendon Opportunities | 13,212,819 | 78,964 |
| ** Lexington Partners | 31,738,949 | 274,001 |
| ** Merit Capital Partners | 9,446,963 | 189,474 |
| ** Neuberger Berman Secondary Opportunities | 11,303,318 | 413,506 |
| ** New Mountain Partners | 3,601,187 | 414,936 |
| ** NGP XI | 1,481,826 | 214,397 |
| ** Onex Partners | 16,208,107 | 98,416 |
| * Pathway Capital Management | 553,202,873 | 1,716,849 |
| ** Warburg Pincus | 29,743,443 | 337,087 |
| Total Private Equities | <u>1,190,774,850</u> | <u>5,342,047</u> |

Public Employees' Retirement System Schedule of Investment Management Fees (cont.) Year Ended June 30, 2015

| | <u>Total Fair Value</u> | <u>Fees</u> |
|---|-------------------------|-----------------------------|
| Absolute Return Pool | | |
| ** Allianz Global Investors | \$ 140,267,387 | \$ 3,021,408 |
| ** Crestline Investors Inc. | 141,386,457 | 1,001,158 |
| ** Global Asset Management | 250,493,615 | 1,666,380 |
| ** Prisma Capital Partners | 297,397,438 | 1,911,000 |
| Total Absolute Return | <u>829,544,897</u> | <u>7,599,946</u> |
| Real Assets | | |
| Real Estate Pool | | |
| ** Almanac Realty Securities IV | 1,541,037 | 72,447 |
| ** Almanac Realty Securities V | 11,529,172 | 158,560 |
| ** BlackRock Diamond | 12,121,122 | 179,208 |
| ** Colony Investors VIII, L.P. | 12,769,181 | 383,567 |
| ** Cornerstone | - | 233,191 |
| ** Cornerstone Apartment Venture III | 157,046 | 25,487 |
| ** Coventry | 8,889,613 | 221,989 |
| ** ING Clarion Development Venture III | 9,064,387 | 164,827 |
| ** ING Clarion Development Venture 4 | 7,572,088 | 3,946 |
| ** JPM Strategic | 136,938,511 | 1,129,020 |
| ** KKR | 25,872,000 | 226,217 |
| ** LaSalle Separate | 103,196,431 | 563,754 |
| ** LaSalle Medical Office Fund II | 2,078,156 | 53,132 |
| ** Lowe Hospitality | 1,223,812 | 13,990 |
| ** Sentinel Separate | 139,742,356 | 677,100 |
| ** Silverpeak Real Estate Partners II | 29,757,809 | 219,283 |
| ** Silverpeak Real Estate Partners III | 4,756,011 | 113,823 |
| ** Tishman Speyer Fund VI | 24,970,908 | 259,910 |
| ** Tishman Speyer Fund VII | 5,131,268 | 106,346 |
| ** UBS Consolidated | 60,600,950 | 624,579 |
| ** UBS Separate | 275,652,892 | 1,303,032 |
| Total Real Estate | <u>873,564,750</u> | <u>6,733,408</u> |
| Infrastructure Public Pool | | |
| * Brookfield Investment Management | 83,500,944 | 510,978 |
| * Lazard Asset Management | 83,406,067 | 491,768 |
| Total Infrastructure Public Pool | <u>166,907,011</u> | <u>1,002,746</u> |
| Master Limited Partnerships Pool | | |
| * Advisory Research Inc | 169,851,431 | 824,779 |
| * Tortoise MLP | 179,648,148 | 1,128,797 |
| Total Master Limited Partnerships Pool | <u>349,499,579</u> | <u>1,953,576</u> |
| Energy Pool | | |
| ** EIG Energy Fund XV | 24,507,584 | 309,919 |
| ** EIG Energy Fund XD | 4,611,428 | 52,666 |
| ** EIG Energy Fund XIV-A | 29,307,122 | 450,252 |
| ** EIG Energy Fund XVI | 9,280,819 | 444,732 |
| Total Energy Pool | <u>67,706,953</u> | <u>1,257,569</u> |
| Farmland Pool | | |
| ** Hancock Agriculture Investment Group | 161,133,683 | 1,272,662 |
| ** UBS Agrivest | 350,935,761 | 2,695,954 |
| Total Farmland | <u>512,069,444</u> | <u>3,968,616</u> |
| Timber Pool | | |
| ** Hancock Natural Resource Group | 67,559,986 | 470,174 |
| ** Timberland Investment Resources | 187,698,647 | 1,433,325 |
| Total Timber Pool | <u>255,258,633</u> | <u>1,903,499</u> |
| Custodian | | |
| * State Street Bank | | 750,067 |
| Investment Advisory | | |
| * Callan Associates | | 156,762 |
| * Investment Advisory Council | | 57,830 |
| * Townsend Group | | 70,363 |
| Total Investment Advisory | | <u>284,955</u> |
| Investment Performance | | |
| * Callan Associates | | 189,564 |
| Total External Management Fees | | <u>\$ 56,346,861</u> |

*These fees are paid through the Alaska Statewide Accounting System (AKSAS)

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

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2015

| Investments (at Fair Value) | Defined Benefit - Pension | | | % of Total Assets |
|--|---------------------------|---------|-------------------------|-------------------|
| | Policy | Range | Fair Market Value | |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 3.00% | -3%/+8% | \$ 152,381,388 | |
| Total Cash and Cash Equivalents | | | 152,381,388 | 1.77% |
| Fixed Income Securities | | | | |
| U.S. Treasury Fixed Income Pool | | | 474,205,244 | |
| Taxable Municipal Bond Pool | | | 81,663,166 | |
| Tactical Fixed Income | | | 43,868,460 | |
| High Yield Pool | | | 223,733,776 | |
| International Fixed Income Pool | | | 138,100,118 | |
| Emerging Debt Pool | | | 58,535,933 | |
| Total Fixed Income Securities | 12.00% | ± 8% | 1,020,106,697 | 11.88% |
| Broad Domestic Equity | | | | |
| Large Cap Pool | | | 1,917,609,903 | |
| Small Cap Pool | | | 414,887,998 | |
| Total Broad Domestic Equity | 26.00% | ± 6% | 2,332,497,901 | 27.17% |
| Global Equity Ex-U.S. | | | | |
| International Equity Pool | | | 1,787,369,819 | |
| International Equity Small Cap Pool | | | 116,877,942 | |
| Frontier Markets Pool | | | 1,957,899 | |
| Emerging Markets Equity Pool | | | 226,889,145 | |
| Total Global Equity Ex-U.S. | 25.00% | ± 4% | 2,133,094,805 | 24.84% |
| Alternative Equity Strategies | | | | |
| Alternative Equity Strategies | | | 248,197,576 | |
| Convertible Bond Pool | | | 71,228,709 | |
| Total Alternative Equities | 3.00% | -2%/+4% | 319,426,285 | 3.72% |
| Private Equity | | | | |
| Private Equity Pool | | | 660,679,665 | |
| Total Private Equity | 9.00% | ± 5% | 660,679,665 | 7.69% |
| Absolute Return | | | | |
| Absolute Return Pool | | | 488,351,815 | |
| Total Absolute Return | 5.00% | ± 4% | 488,351,815 | 5.69% |
| Real Assets | | | | |
| Real Estate Pool | | | 476,473,855 | |
| Real Estate Investment Trust Pool | | | 117,787,050 | |
| Infrastructure Private Pool | | | 103,834,155 | |
| Infrastructure Public Pool | | | 90,618,072 | |
| Master Limited Partnership Pool | | | 189,752,233 | |
| Energy Pool | | | 36,759,831 | |
| Farmland Pool | | | 278,015,559 | |
| Timber Pool | | | 138,586,419 | |
| Treasury Inflation Protected Securities Pool | | | 48,123,779 | |
| Total Real Assets | 17.00% | ± 8% | 1,479,950,953 | 17.24% |
| Total Invested Assets | 100.00% | | \$ 8,586,489,509 | 100.00% |

Public Employees' Retirement System Investment Summary Schedule June 30, 2015

| Investments (at Fair Value) | Defined Benefit - Alaska Retiree Health Care Trust | | | % of Total Assets |
|--|--|---------|-------------------------|-------------------|
| | Asset Allocation Policy | Range | Fair Market Value | |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 3.00% | -3%/+8% | \$ 160,558,779 | |
| Total Cash and Cash Equivalents | | | 160,558,779 | 2.29% |
| Fixed Income Securities | | | | |
| U.S. Treasury Fixed Income Pool | | | 385,311,335 | |
| Taxable Municipal Bond Pool | | | 66,354,695 | |
| Tactical Fixed Income | | | 35,644,936 | |
| High Yield Pool | | | 181,792,925 | |
| International Fixed Income Pool | | | 112,212,049 | |
| Emerging Debt Pool | | | 47,562,864 | |
| Total Fixed Income Securities | 12.00% | ± 8% | 828,878,804 | 11.82% |
| Broad Domestic Equity | | | | |
| Large Cap Pool | | | 1,558,137,194 | |
| Small Cap Pool | | | 337,113,621 | |
| Total Broad Domestic Equity | 26.00% | ± 6% | 1,895,250,815 | 27.02% |
| Global Equity Ex-U.S. | | | | |
| International Equity Pool | | | 1,452,311,750 | |
| International Equity Small Cap Pool | | | 94,968,150 | |
| Frontier Markets Pool | | | 1,590,871 | |
| Emerging Markets Equity Pool | | | 184,356,792 | |
| Total Global Equity Ex-U.S. | 25.00% | ± 4% | 1,733,227,563 | 24.72% |
| Alternative Equity Strategies | | | | |
| Alternative Equity Strategies | | | 201,670,773 | |
| Convertible Bond Pool | | | 57,876,264 | |
| Total Alternative Equities | 3.00% | -2%/+4% | 259,547,037 | 3.70% |
| Private Equity | | | | |
| Private Equity Pool | | | 536,829,495 | |
| Total Private Equity | 9.00% | ± 5% | 536,829,495 | 7.66% |
| Absolute Return | | | | |
| Absolute Return Pool | | | 396,806,009 | |
| Total Absolute Return | 5.00% | ± 4% | 396,806,009 | 5.66% |
| Real Assets | | | | |
| Real Estate Pool | | | 385,733,074 | |
| Real Estate Investment Trust Pool | | | 95,706,842 | |
| Infrastructure Private Pool | | | 84,369,539 | |
| Infrastructure Public Pool | | | 73,630,926 | |
| Master Limited Partnership Pool | | | 154,181,523 | |
| Energy Pool | | | 29,868,882 | |
| Farmland Pool | | | 225,899,119 | |
| Timber Pool | | | 112,607,188 | |
| Treasury Inflation Protected Securities Pool | | | 39,102,559 | |
| Total Real Assets | 17.00% | ± 8% | 1,201,099,652 | 17.13% |
| Total Invested Assets | 100.00% | | \$ 7,012,198,154 | 100.00% |

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2015

| Investments (at Fair Value) | Asset Allocation | | Fair Market Value | % of Total Assets |
|--|------------------|-------|----------------------|-------------------|
| | Policy | Range | | |
| Defined Contribution - Participant Directed | | | | |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 100.00% | 0% | \$ 18,083,070 | |
| Total Cash and Cash Equivalents | | | 18,083,070 | 3.01% |
| Pooled Investment Funds (1) | | | | |
| T. Rowe Price | | | | |
| Target 2010 Trust | | | 1,862,149 | |
| Target 2015 Trust | | | 8,327,057 | |
| Target 2020 Trust | | | 17,577,899 | |
| Target 2025 Trust | | | 25,215,065 | |
| Target 2030 Trust | | | 26,396,139 | |
| Target 2035 Trust | | | 30,279,374 | |
| Target 2040 Trust | | | 36,779,493 | |
| Target 2045 Trust | | | 45,422,526 | |
| Target 2050 Trust | | | 53,074,196 | |
| Target 2055 Trust | | | 30,181,835 | |
| Alaska Balanced Fund | | | 4,091,491 | |
| Long-Term Balanced Fund | | | 21,981,048 | |
| Alaska Money Market | | | 4,766,551 | |
| Total Pooled Investment Funds | | | 305,954,823 | 50.96% |
| Collective Investment Funds (1) | | | | |
| State Street Global Advisors | | | | |
| Money Market Fund | | | 1,505,571 | |
| S&P Stock Index Fund | | | 36,708,397 | |
| Russell 3000 Index | | | 36,227,061 | |
| Real Estate Investment Trust Index | | | 9,277,992 | |
| World Equity Ex-U.S. Index | | | 29,686,386 | |
| Long U.S. Treasury Bond Index | | | 650,551 | |
| Treasury Inflation Protected Securities Index | | | 4,091,598 | |
| World Government Bond Ex-U.S. Index | | | 7,874,406 | |
| Global Balanced Fund | | | 22,188,774 | |
| Barclays | | | | |
| Daily Government/Corporate Bond Fund | | | 36,844,901 | |
| Intermediate Bond Fund | | | 508,387 | |
| Brandes Institutional | | | | |
| Alaska International Equity Fund | | | 36,016,071 | |
| RCM | | | | |
| Socially Responsible Fund | | | 2,833,436 | |
| T. Rowe Price | | | | |
| Small-Cap Fund | | | 52,000,312 | |
| Total Collective Investment Funds | | | 276,413,843 | 46.03% |
| Total Invested Assets | | | \$600,451,736 | 100.00% |

(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, 2015

| Investments (at Fair Value) | Health Reimbursement Arrangement | | | % of Total Assets |
|--|----------------------------------|---------|-----------------------|-------------------|
| | Asset Allocation Policy | Range | Fair Market Value | |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 3.00% | -3%/+8% | \$ 5,353,444 | |
| Total Cash and Cash Equivalents | | | 5,353,444 | 2.79% |
| Fixed Income Securities | | | | |
| U.S. Treasury Fixed Income Pool | | | 10,495,926 | |
| Taxable Municipal Bond Pool | | | 1,807,510 | |
| Tactical Fixed Income | | | 970,972 | |
| High Yield Pool | | | 4,952,061 | |
| International Fixed Income Pool | | | 3,056,669 | |
| Emerging Debt Pool | | | 1,295,618 | |
| Total Fixed Income Securities | 12.00% | ± 8% | 22,578,756 | 11.76% |
| Broad Domestic Equity | | | | |
| Large Cap Pool | | | 42,443,840 | |
| Small Cap Pool | | | 9,183,015 | |
| Total Broad Domestic Equity | 26.00% | ± 6% | 51,626,855 | 26.89% |
| Global Equity Ex-U.S. | | | | |
| International Equity Pool | | | 39,561,142 | |
| International Equity Small Cap Pool | | | 2,586,943 | |
| Frontier Markets Pool | | | 43,336 | |
| Emerging Markets Equity Pool | | | 5,021,900 | |
| Total Global Equity Ex-U.S. | 25.00% | ± 4% | 47,213,321 | 24.59% |
| Alternative Equity Strategies | | | | |
| Alternative Equity Strategies | | | 5,493,536 | |
| Convertible Bond Pool | | | 1,576,556 | |
| Total Alternative Equities | 3.00% | -2%/+4% | 7,070,092 | 3.68% |
| Private Equity | | | | |
| Private Equity Pool | | | 14,623,299 | |
| Total Private Equity | 9.00% | ± 5% | 14,623,299 | 7.62% |
| Absolute Return | | | | |
| Absolute Return Pool | | | 10,809,042 | |
| Total Absolute Return | 5.00% | ± 4% | 10,809,042 | 5.63% |
| Real Assets | | | | |
| Real Estate Pool | | | 10,507,414 | |
| Real Estate Investment Trust Pool | | | 2,607,066 | |
| Infrastructure Private Pool | | | 2,298,237 | |
| Infrastructure Public Pool | | | 2,005,715 | |
| Master Limited Partnership Pool | | | 4,199,922 | |
| Energy Pool | | | 813,632 | |
| Farmland Pool | | | 6,153,518 | |
| Timber Pool | | | 3,067,433 | |
| Treasury Inflation Protected Securities Pool | | | 1,065,159 | |
| Total Real Assets | 17.00% | ± 8% | 32,718,096 | 17.04% |
| Total Invested Assets | 100.00% | | \$ 191,992,905 | 100.00% |

Investment Section

Public Employees' Retirement System Investment Summary Schedule June 30, 2015

| Investments (at Fair Value) | Occupational Death and Disability | | Fair Market Value | % of Total Assets |
|--|-----------------------------------|---------|-----------------------------|-------------------|
| | Asset Allocation Policy | Range | | |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 3.00% | -3%/+8% | \$ 502,206 | |
| Total Cash and Cash Equivalents | | | <u>502,206</u> | 2.64% |
| Fixed Income Securities | | | | |
| U.S. Treasury Fixed Income Pool | | | 1,042,759 | |
| Taxable Municipal Bond Pool | | | 179,573 | |
| Tactical Fixed Income | | | 96,465 | |
| High Yield Pool | | | 491,981 | |
| International Fixed Income Pool | | | 303,677 | |
| Emerging Debt Pool | | | 128,718 | |
| Total Fixed Income Securities | 12.00% | ± 8% | <u>2,243,173</u> | 11.78% |
| Broad Domestic Equity | | | | |
| Large Cap Pool | | | 4,216,748 | |
| Small Cap Pool | | | 912,322 | |
| Total Broad Domestic Equity | 26.00% | ± 6% | <u>5,129,070</u> | 26.92% |
| Global Equity Ex-U.S. | | | | |
| International Equity Pool | | | 3,930,355 | |
| International Equity Small Cap Pool | | | 257,010 | |
| Frontier Markets Pool | | | 4,305 | |
| Emerging Markets Equity Pool | | | 498,921 | |
| Total Global Equity Ex-U.S. | 25.00% | ± 4% | <u>4,690,591</u> | 24.63% |
| Alternative Equity Strategies | | | | |
| Alternative Equity Strategies | | | 545,777 | |
| Convertible Bond Pool | | | 156,628 | |
| Total Alternative Equities | 3.00% | -2%/+4% | <u>702,405</u> | 3.69% |
| Private Equity | | | | |
| Private Equity Pool | | | 1,452,808 | |
| Total Private Equity | 9.00% | ± 5% | <u>1,452,808</u> | 7.63% |
| Absolute Return | | | | |
| Absolute Return Pool | | | 1,073,867 | |
| Total Absolute Return | 5.00% | ± 4% | <u>1,073,867</u> | 5.64% |
| Real Assets | | | | |
| Real Estate Pool | | | 1,043,899 | |
| Real Estate Investment Trust Pool | | | 259,009 | |
| Infrastructure Private Pool | | | 228,327 | |
| Infrastructure Public Pool | | | 199,265 | |
| Master Limited Partnership Pool | | | 417,258 | |
| Energy Pool | | | 80,833 | |
| Farmland Pool | | | 611,345 | |
| Timber Pool | | | 304,747 | |
| Treasury Inflation Protected Securities Pool | | | 105,823 | |
| Total Real Assets | 17.00% | ± 8% | <u>3,250,506</u> | 17.07% |
| Total Invested Assets | 100.00% | | <u>\$ 19,044,626</u> | 100.00% |

Public Employees' Retirement System Investment Summary Schedule June 30, 2015

| Investments (at Fair Value) | Asset Allocation | | Retiree Medical Plan | |
|--|------------------|---------|----------------------|-------------------|
| | Policy | Range | Fair Market Value | % of Total Assets |
| Cash and Cash Equivalents | | | | |
| Short-term Fixed Income Pool | 3.00% | -3%/+8% | \$ 1,455,419 | |
| Total Cash and Cash Equivalents | | | 1,455,419 | 3.34% |
| Fixed Income Securities | | | | |
| U.S. Treasury Fixed Income Pool | | | 2,370,727 | |
| Taxable Municipal Bond Pool | | | 408,265 | |
| Tactical Fixed Income | | | 219,315 | |
| High Yield Pool | | | 1,118,527 | |
| International Fixed Income Pool | | | 690,413 | |
| Emerging Debt Pool | | | 292,643 | |
| Total Fixed Income Securities | 12.00% | ± 8% | 5,099,890 | 11.69% |
| Broad Domestic Equity | | | | |
| Large Cap Pool | | | 9,586,840 | |
| Small Cap Pool | | | 2,074,179 | |
| Total Broad Domestic Equity | 26.00% | ± 6% | 11,661,019 | 26.74% |
| Global Equity Ex-U.S. | | | | |
| International Equity Pool | | | 8,935,722 | |
| International Equity Small Cap Pool | | | 584,316 | |
| Frontier Markets Pool | | | 9,788 | |
| Emerging Markets Equity Pool | | | 1,134,302 | |
| Total Global Equity Ex-U.S. | 25.00% | ± 4% | 10,664,128 | 24.45% |
| Alternative Equity Strategies | | | | |
| Alternative Equity Strategies | | | 1,240,831 | |
| Convertible Bond Pool | | | 356,099 | |
| Total Alternative Equities | 3.00% | -2%/+4% | 1,596,930 | 3.66% |
| Private Equity | | | | |
| Private Equity Pool | | | 3,302,981 | |
| Total Private Equity | 9.00% | ± 5% | 3,302,981 | 7.57% |
| Absolute Return | | | | |
| Absolute Return Pool | | | 2,441,451 | |
| Total Absolute Return | 5.00% | ± 4% | 2,441,451 | 5.60% |
| Real Assets | | | | |
| Real Estate Pool | | | 2,373,322 | |
| Real Estate Investment Trust Pool | | | 588,861 | |
| Infrastructure Private Pool | | | 519,105 | |
| Infrastructure Public Pool | | | 453,034 | |
| Master Limited Partnership Pool | | | 948,641 | |
| Energy Pool | | | 183,776 | |
| Farmland Pool | | | 1,389,902 | |
| Timber Pool | | | 692,845 | |
| Treasury Inflation Protected Securities Pool | | | 240,588 | |
| Total Real Assets | 17.00% | ± 8% | 7,390,074 | 16.95% |
| Total Invested Assets | 100.00% | | \$ 43,611,892 | 100.00% |

Investment Section

Public Employees' Retirement System Recaptured Commission Fees Year Ended June 30, 2015

| Fund | Domestic Equity Pool | International Equity Pool | Total |
|---|-------------------------------------|--------------------------------------|-----------------|
| Defined Benefit Plan - Pension | \$3,556 | \$2,431 | \$5,987 |
| Postemployment Benefit - Alaska Retiree Healthcare Trust | 2,890 | 1,975 | 4,865 |
| Postemployment Benefit - Health Reimbursement Arrangement | 79 | 54 | 133 |
| Postemployment Benefit - Occupational Death & Disability | 7 | 6 | 13 |
| Postemployment Benefit - Retiree Medical Pan | 18 | 12 | 30 |
| Total Recapture Commission Fees | \$6,550 | \$4,478 | \$11,028 |

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.