# ALASKA RETIREMENT MANAGEMENT BOARD FINANCIAL REPORT 

As of October 31, 2017

# ALASKA RETIREMENT MANAGEMENT BOARD <br> Schedule of Investment Income and Changes in Invested Assets by Fund 

Fiscal Year-to-Date through October 31, 2017

## Public Employees' Retirement System (PERS)

Defined Benefit Plans:
Retirement Trust
Retirement Health Care Trust
Total Defined Benefit Plans
Defined Contribution Plans:
Participant Directed Retirement
Health Reimbursement Arrangement
Retiree Medical Plan
Defined Benefit Occupational Death and Disability:
Public Employees
Police and Firefighters
Total Defined Contribution Plans

## Total PERS

Teachers' Retirement System (TRS)
Defined Benefit Plans:
Retirement Trust
Retirement Health Care Trust Total Defined Benefit Plans
Defined Contribution Plans:
Participant Directed Retirement
Health Reimbursement Arrangement
Retiree Medical Plan
Defined Benefit Occupational Death and Disability Total Defined Contribution Plans

## Total TRS

Judicial Retirement System (JRS)
Defined Benefit Plan Retirement Trust
Defined Benefit Retirement Health Care Trust

## Total JRS

National Guard/Naval Militia Retirement System (MRS)
Defined Benefit Plan Retirement Trust

## Other Participant Directed Plans

Supplemental Annuity Plan
Deferred Compensation Plan

## Total All Funds

Total Non-Participant Directed
Total Participant Directed
Total All Funds

| \$ | 8,922,461,847 | \$ | 375,901,147 | \$ | $(83,059,441)$ \$ | 9,215,303,553 | 3.28\% | 4.23\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7,371,307,996 |  | 309,091,903 |  | $(100,952,739)$ | 7,579,447,160 | 2.82\% | 4.22\% |
|  | 16,293,769,843 |  | 684,993,050 |  | (184,012,180) | 16,794,750,713 | 3.07\% | 4.23\% |
|  | 860,873,883 |  | 47,913,245 |  | 28,009,480 | 936,796,608 | 8.82\% | 5.48\% |
|  | 292,327,555 |  | 12,548,266 |  | 11,861,593 | 316,737,414 | 8.35\% | 4.21\% |
|  | 80,644,156 |  | 3,473,616 |  | 3,730,366 | 87,848,138 | 8.93\% | 4.21\% |
|  | 17,976,260 |  | 766,857 |  | 454,506 | 19,197,623 | 6.79\% | 4.21\% |
|  | 8,626,606 |  | 366,659 |  | 141,942 | 9,135,207 | 5.90\% | 4.22\% |
|  | 1,260,448,460 |  | 65,068,643 |  | 44,197,887 | 1,369,714,990 | 8.67\% | 5.07\% |
|  | 17,554,218,303 |  | 750,061,693 |  | (139,814,293) | 18,164,465,703 | 3.48\% | 4.29\% |
|  | 5,308,501,928 |  | 224,376,628 |  | $(26,940,511)$ | 5,505,938,045 | 3.72\% | 4.24\% |
|  | 2,768,186,277 |  | 116,067,439 |  | $(36,511,129)$ | 2,847,742,587 | 2.87\% | 4.22\% |
|  | 8,076,688,205 |  | 340,444,067 |  | $(63,451,640)$ | 8,353,680,632 | 3.43\% | 4.23\% |
|  | 367,437,623 |  | 20,405,377 |  | 4,872,228 | 392,715,228 | 6.88\% | 5.52\% |
|  | 87,760,833 |  | 3,735,419 |  | 2,167,874 | 93,664,126 | 6.73\% | 4.20\% |
|  | 30,598,161 |  | 1,302,854 |  | 711,495 | 32,612,510 | 6.58\% | 4.21\% |
|  | 3,532,341 |  | 148,953 |  | $(1,180)$ | 3,680,114 | 4.18\% | 4.22\% |
|  | 489,328,958 |  | 25,592,603 |  | 7,750,417 | 522,671,978 | 6.81\% | 5.19\% |
|  | 8,566,017,163 |  | 366,036,670 |  | (55,701,223) | 8,876,352,610 | 3.62\% | 4.29\% |
|  | 162,899,812 |  | 6,983,921 |  | 3,933,582 | 173,817,315 | 6.70\% | 4.24\% |
|  | 30,014,394 |  | 1,263,499 |  | $(135,657)$ | 31,142,236 | 3.76\% | 4.22\% |
|  | 192,914,206 |  | 8,247,420 |  | 3,797,925 | 204,959,551 | 6.24\% | 4.23\% |
|  | 38,151,192 |  | 1,286,964 |  | 517,219 | 39,955,375 | 4.73\% | 3.35\% |
|  | 3,691,373,402 |  | 146,932,230 |  | $(8,028,961)$ | 3,830,276,671 | 3.76\% | 3.98\% |
|  | 877,970,832 |  | 38,232,930 |  | $(4,497,241)$ | 911,706,521 | 3.84\% | 4.37\% |
|  | 30,920,645,098 |  | 1,310,797,907 |  | (203,726,574) | 32,027,716,431 |  |  |
|  | 25,122,989,358 |  | 1,057,314,125 |  | $(224,082,080)$ | 25,956,221,403 | 3.32\% | 4.23\% |
|  | 5,797,655,740 |  | 253,483,782 |  | 20,355,506 | 6,071,495,028 | 4.72\% | 4.36\% |
| S | 30,920,645,098 | \$ | 1,310,797,907 | \$ | (203,726,574) $\$$ | 32,027,716,431 | 3.58\% | 4.25\% |

Notes:
(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: http://www.revenue.state.ak. us/treasury/programs/programs/other/armb/investmentresults.aspx

## ALASKA RETIREMENT MANAGEMENT BOARD

## Schedule of Investment Income and Changes in Invested Assets by Fund

## For the Month Ended October 31, 2017

## Public Employees' Retirement System (PERS)

Defined Benefit Plans:
Retirement Trust
Retirement Health Care Trust
Total Defined Benefit Plans
Defined Contribution Plans:
Participant Directed Retirement
Health Reimbursement Arrangement
Retiree Medical Plan
Defined Benefit Occupational Death and Disability: Public Employees
Police and Firefighters
Total Defined Contribution Plans

## Total PERS

Teachers' Retirement System (TRS)
Defined Benefit Plans:
Retirement Trust
Retirement Health Care Trust
Total Defined Benefit Plans
Defined Contribution Plans:
Participant Directed Retirement
Health Reimbursement Arrangement
Retiree Medical Plan
Defined Benefit Occupational Death and Disability
Total Defined Contribution Plans

## Total TRS

Judicial Retirement System (JRS)
Defined Benefit Plan Retirement Trust
Defined Benefit Retirement Health Care Trust

## Total JRS

National Guard/Naval Militia Retirement System (MRS)
Defined Benefit Plan Retirement Trust

## Other Participant Directed Plans

Supplemental Annuity Plan
Deferred Compensation Plan

## Total All Funds

Total Non-Participant Directed
Total Participant Directed
Total All Funds
Notes:
(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: http://www.revenue.state.ak.us//reasury/programs/programs/other/armb/investmentresults.aspx

Total Assets History


5-year Annualized Returns as of Fiscal Year End


Income by Fiscal Year



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Public Employees' Retirement Pension Trust Fund

## Fiscal Year-to-Date through October 31, 2017



Total Assets History


Year-to-date Income by Month
$\simeq$ Prior Year

- Current Year


Actual Asset Allocation vs Target Allocation

- Actual * Policy


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## Public Employees' Retirement Health Care Trust Fund

## Fiscal Year-to-Date through October 31, 2017



Total Assets History



Actual Asset Allocation vs Target Allocation

- Actual * Policy


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Teachers' Retirement Pension Trust Fund


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Teachers' Retirement Health Care Trust Fund
Fiscal Year-to-Date through October 31, 2017


Total Assets History



Actual Asset Allocation vs Target Allocation
-Actual - Policy


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Judicial Retirement Pension Trust Fund


Total Assets History



Actual Asset Allocation vs Target Allocation
-Actual - Policy


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Judicial Retirement Health Care Trust Fund
Fiscal Year-to-Date through October 31, 2017


Total Assets History


Year-to-date Income by Month
CCurrent Ye


Actual Asset Allocation vs Target Allocation

- Actual • Policy


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Military Retirement Trust Fund
Fiscal Year-to-Date through October 31, 2017



## Total Assets History



Actual Asset Allocation vs Target Allocation
-Actual • Policy


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# ALASKA RETIREMENT MANAGEMENT BOARD 

Reporting of Funds by Manager

All Non-Participant Directed Plans

# Alaska Retirement Management Board 

## All Non-Participant Directed Plans by Manager

## Schedule of Investment Income and Changes in Invested Assets

For the Month Ended October 31, 2017

## Cash

Short-Term Fixed Income Pool Securities Lending Income

## Total Cash

## Fixed Income

US Treasury Fixed Income

## Domestic Equities

Small Cap
Passively Managed
S\&P 600 Internally Managed
SSgA Russell 2000 Growth
SSgA Russell 2000 Value Total Passive
Actively Managed Barrow, Haney, Mewhinney \& Strauss BMO Global Asset Management DePrince, Race \& Zollo Inc.- Micro Cap Fidelity (FIAM) Small Company Frontier Capital Mgmt. Co. Jennison Associates, LLC Lord Abbett \& Co.- Micro Cap Lord Abbett Small Cap Growth Fund SSgA Futures Small Cap
SSgA Volatility-Russell 2000
Transition Account
Victory Capital Management Zebra Capital Management
Total Active

## Total Small Cap

# Alaska Retirement Management Board <br> All Non-Participant Directed Plans by Manager <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> For the Month Ended October 31, 2017 

## Large Cap

Passively Managed
SSgA Russell 1000 Growth
SSgA Russell 1000 Value
SSgA Russell 200
Total Passive
Actively Managed
Allianz Global Investors
ARMB Equity Yield Strategy
Barrow, Haney, Mewhinney \& Strauss
Lazard Freres
McKinley Capital Mgmt.
Portable Alpha
Quantitative Management Assoc.
S\&P 500 Equal Weight
Scientific Beta, Internally Managed
SSgA Futures large cap
Transition Account
Total Active
Total Large Cap
Total Domestic Equity
Global Equities Ex US

## Small Cap

Mondrian Investment Partners
Schroder Investment Management
Total Small Cap

## Large Cap

Allianz Global Investors
Arrow Street Capital
Baillie Gifford Overseas Limited
Blackrock ACWI Ex-US IMI
Brandes Investment Partners
Cap Guardian Trust Co
Lazard Freres
McKinley Capital Management
SSgA Futures International
State Street Global Advisors
Total Large Cap

| 1,110,837,701 | 42,951,805 | - | 1,153,789,506 | 3.87\% |
| :---: | :---: | :---: | :---: | :---: |
| 955,489,872 | 6,953,659 | - | 962,443,531 | 0.73\% |
| 349,650,530 | 8,853,963 | - | 358,504,493 | 2.53\% |
| 2,415,978,103 | 58,759,427 | - | 2,474,737,530 | 2.43\% |
| 165,021,194 | 4,937,371 | 126,422 | 170,084,987 | 3.07\% |
| 330,807,396 | 11,171,747 | - | 341,979,143 | 3.38\% |
| 177,042,491 | 1,759,863 | 209,060 | 179,011,414 | 1.11\% |
| 328,661,425 | 3,179,749 | $(18,734,651)$ | 313,106,523 | -4.73\% |
| 155,642,028 | 4,234,354 | - | 159,876,382 | 2.72\% |
| 381,496,233 | 13,275,886 | $(3,738,562)$ | 391,033,557 | 2.50\% |
| 206,818,733 | 2,715,442 | 166,181 | 209,700,356 | 1.39\% |
| 310,015,043 | 3,413,301 | - | 313,428,344 | 1.10\% |
| 313,502,622 | 5,609,565 | 176,049 | 319,288,236 | 1.85\% |
| 5,940,687 | 400,026 | - | 6,340,713 | 6.73\% |
| 176,034 | 171 | $(176,049)$ | 156 | -99.91\% |
| 2,375,123,886 | 50,697,475 | (21,971,550) | 2,403,849,811 | 1.21\% |
| 4,791,101,989 | 109,456,902 | (21,971,550) | 4,878,587,341 | 1.83\% |
| 5,853,098,012 | 120,990,665 | (21,240,328) | 5,952,848,349 | 1.70\% |


| 180,529,290 | 2,654,873 | - | 183,184,163 | 1.47\% |
| :---: | :---: | :---: | :---: | :---: |
| 203,255,980 | 2,730,414 | - | 205,986,394 | 1.34\% |
| 383,785,270 | 5,385,287 | - | 389,170,557 | 1.40\% |
| 301,940,385 | 5,655,004 | 247,322 | 307,842,711 | 1.95\% |
| 375,367,353 | 11,294,360 | - | 386,661,713 | 3.01\% |
| 461,157,239 | 11,728,889 | 474,231 | 473,360,359 | 2.65\% |
| 608,683,424 | 11,444,297 | - | 620,127,721 | 1.88\% |
| 659,045,858 | $(4,853,123)$ | 634,165 | 654,826,900 | -0.64\% |
| 538,429,363 | 11,601,030 | - | 550,030,393 | 2.15\% |
| 306,725,243 | 4,643,572 | 19,058,026 | 330,426,841 | 7.73\% |
| 542,036,542 | 17,835,223 | - | 559,871,765 | 3.29\% |
| - | - | - | - | - |
| 981,273,160 | 18,250,965 | - | 999,524,125 | 1.86\% |
| 4,774,658,567 | 87,600,217 | 20,413,744 | 4,882,672,528 | 2.26\% |

# Alaska Retirement Management Board <br> <br> All Non-Participant Directed Plans by Manager <br> <br> All Non-Participant Directed Plans by Manager <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> For the Month Ended October 31, 2017 

## Emerging Markets Equity <br> Eaton Vance Lazard Asset Management <br> Total Emerging Markets

Total Global Equities

| 290,865,755 | 2,855,358 | - | 293,721,113 | 0.98\% |
| :---: | :---: | :---: | :---: | :---: |
| 489,759,344 | 11,520,737 | - | 501,280,081 | 2.35\% |
| 780,625,099 | 14,376,095 | - | 795,001,194 | 1.84\% |
| 5,939,068,936 | 107,361,599 | 20,413,744 | 6,066,844,279 | 2.15\% |
| - | - | - | - | - |
| 295,975,343 | 1,985,154 | - | 297,960,497 | 0.67\% |
| 358,505,843 | 3,696,636 | 43,328 | 362,245,807 | 1.04\% |
| 169,673,640 | 3,517,541 | 107,442 | 173,298,623 | 2.14\% |
| 1,080,903 | - | - | 1,080,903 | - |
| 96,819,111 | 730,368 | - | 97,549,479 | 0.75\% |
| 922,054,840 | 9,929,699 | 150,770 | 932,135,309 | 1.09\% |
| 104,551,980 | 352,491 | 57,461 | 104,961,932 | 0.39\% |
| 135,842,869 | 866,628 | - | 136,709,497 | 0.64\% |
| 240,394,849 | 1,219,119 | 57,461 | 241,671,429 | 0.53\% |
| 137,568,527 | 519,768 | - | 138,088,295 | 0.38\% |
| 88,908,734 | $(7,665,510)$ | - | 81,243,224 | -8.62\% |
| 226,477,261 | $(7,145,742)$ | - | 219,331,519 | -3.16\% |
| 165,612,597 | $(2,817,821)$ | - | 162,794,776 | -1.70\% |
| 158,459,926 | 410,277 | - | 158,870,203 | 0.26\% |
| 129,690,413 | 447,453 | 126,109 | 130,263,975 | 0.44\% |
| 213,638,828 | 853,613 | - | 214,492,441 | 0.40\% |
| 153,732,462 | 346,842 | - | 154,079,304 | 0.23\% |
| 655,521,629 | 2,058,185 | 126,109 | 657,705,923 | 0.33\% |
| 168,984,479 | $(2,407,402)$ | - | 166,577,077 | -1.42\% |
| 168,984,479 | $(2,407,402)$ | - | 166,577,077 | -1.42\% |

# Alaska Retirement Management Board <br> All Non-Participant Directed Plans by Manager <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> For the Month Ended October 31, 2017 

## Convertible Bond <br> Advent Capital <br> Total Opportunistic

## Private Equity

Abbott Capital
Advent International GPE Fund VIII-B
Angelo, Gordon \& Co.
Dyal Capital Partners III
Glendon Opportunities
KKR Lending Partners II
Lexington Capital Partners VIII
Lexington Partners VII
Merit Capital Partners
NB SOF III
NB SOF IV
New Mountain Partners IV
NGP XI
Onex Partnership III
Pathway Capital Management LLC
Resolute Fund III
Summit Partners GE IX
Warburg Pincus X
Warburg Pincus XI
Warburg Pincus XII
Total Private Equity

## Absolute Return

Allianz Global Investors
Crestline Investors, Inc.
Crestline Specialty Fund
Global Asset Management (USA) Inc.
KKR Apex Equity Fund
Prisma Capital Partners
Zebra Global Equity Advantage Fund
Zebra Global Equity Fund
Man Group Alternative Risk Premia
Total Absolute Return Investments

| 194,142,364 | 217,916 | - | 194,360,280 | 0.11\% |
| :---: | :---: | :---: | :---: | :---: |
| 2,573,188,019 | 1,053,954 | 334,340 | 2,574,576,313 | 0.05\% |
| 872,444,297 | 7,535,850 | $(8,369,304)$ | 871,610,843 | -0.10\% |
| 11,678,266 | - | - | 11,678,266 | - |
| 337,089 | - | - | 337,089 | - |
| 15,603,240 | - | - | 15,603,240 | - |
| 31,190,673 | - | - | 31,190,673 | - |
| 81,135,439 | - | - | 81,135,439 | - |
| 23,245,845 | - | $(1,248,355)$ | 21,997,490 | -5.37\% |
| 27,830,382 | - | 318,856 | 28,149,238 | 1.15\% |
| 15,648,203 | - | $(1,918,247)$ | 13,729,956 | -12.26\% |
| 31,317,345 | - | - | 31,317,345 | - |
| 1,410,618 | - | - | 1,410,618 | - |
| 21,214,164 | - | 1,648,925 | 22,863,089 | 7.77\% |
| 35,892,056 | - | - | 35,892,056 | - |
| 16,389,660 | - | $(29,337)$ | 16,360,323 | -0.18\% |
| 946,619,860 | 4,830,774 | $(1,590,088)$ | 949,860,546 | 0.34\% |
| 10,901,549 | - | 1,696,656 | 12,598,205 | 15.56\% |
| 6,930,489 | - | 1,660,000 | 8,590,489 | 23.95\% |
| 13,970,015 | - | - | 13,970,015 | - |
| 29,362,261 | 4,877 | $(3,248,850)$ | 26,118,288 | -11.05\% |
| 27,627,429 | - | - | 27,627,429 | - |
| 2,220,748,880 | 12,371,501 | (11,079,744) | 2,222,040,637 | 0.06\% |
| 364,876,390 | 4,061,810 | - | 368,938,200 | 1.11\% |
| 396,337,883 | 1,456,795 | (9,834,281) | 387,960,397 | -2.11\% |
| 32,145,170 | - | $(1,032,588)$ | 31,112,582 | -3.21\% |
| 1,301,409 | - | - | 1,301,409 | - |
| 96,861,859 | $(1,005,797)$ | - | 95,856,062 | -1.04\% |
| 394,064,825 | 717,166 | - | 394,781,991 | 0.18\% |
| 67,545,378 | 2,039,188 | - | 69,584,566 | 3.02\% |
| 129,245,236 | 2,095,558 | - | 131,340,794 | 1.62\% |
| 200,000,000 | (1,009,945) | - | 198,990,055 | -0.50\% |
| 1,682,378,150 | 8,354,775 | $(10,866,869)$ | 1,679,866,056 | -0.15\% |

# Alaska Retirement Management Board <br> <br> All Non-Participant Directed Plans by Manager <br> <br> All Non-Participant Directed Plans by Manager <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> For the Month Ended October 31, 2017 

| Real Assets |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Farmland |  |  |  |  |  |
| Hancock Agricultural Investment Group | 265,373,648 | 1,586,280 | - | 266,959,928 | 0.60\% |
| UBS Agrivest, LLC | 569,398,302 | - | - | 569,398,302 | - |
| Total Farmland | 834,771,950 | 1,586,280 | - | 836,358,230 | 0.19\% |
| Timber |  |  |  |  |  |
| Hancock Natural Resource Group | 92,880,538 | 921,110 | - | 93,801,648 | 0.99\% |
| Timberland Invt Resource LLC | 259,255,918 | - | - | 259,255,918 | - |
| Total Timber | 352,136,456 | 921,110 | - | 353,057,566 | 0.26\% |
| Energy |  |  |  |  |  |
| EIG Energy Fund XD | 51,947 | - | - | 51,947 | - |
| EIG Energy Fund XIV-A | 13,575,705 | $(1,258,062)$ | - | 12,317,643 | -9.27\% |
| EIG Energy Fund XV | 31,375,803 | 309,155 | - | 31,684,958 | 0.99\% |
| EIG Energy Fund XVI | 47,921,675 | - | - | 47,921,675 | - |
| Total Energy | 92,925,130 | $(948,907)$ | - | 91,976,223 | -1.02\% |
| REIT |  |  |  |  |  |
| REIT Transition Account | - | - | - | - | - |
| REIT Holdings | 354,515,725 | 694,197 | - | 355,209,922 | 0.20\% |
| Total REIT | 354,515,725 | 694,197 | - | 355,209,922 | 0.20\% |
| TIPS |  |  |  |  |  |
| TIPS Internally Managed Account | 55,724,711 | 122,583 | - | 55,847,294 | 0.22\% |
| Master Limited Partnerships |  |  |  |  |  |
| Advisory Research MLP | 225,417,643 | $(10,155,497)$ | 282,080 | 215,544,226 | -4.38\% |
| Tortoise Capital Advisors | 265,365,336 | $(11,032,572)$ | 418,404 | 254,751,168 | -4.00\% |
| Total Master Limited Partnerships | 490,782,979 | $(21,188,069)$ | 700,484 | 470,295,394 | -4.17\% |
| Infrastructure Private |  |  |  |  |  |
| IFM Global Infrastructure Fund-Private | 298,539,140 | - | - | 298,539,140 | - |
| JP Morgan Infrastructure Fund-Private | 105,290,672 | - | - | 105,290,672 | - |
| Total Infrastructure Private | 403,829,812 | - | - | 403,829,812 | - |
| Infrastructure Public |  |  |  |  |  |
| Brookfield Investment Mgmt.-Public | 107,574,227 | $(1,021,557)$ | 183,947 | 106,736,617 | -0.78\% |
| Lazard Asset Mgmt.-Public | 151,918,129 | $(1,069,084)$ | - | 150,849,045 | -0.70\% |
| Total Infrastructure Public | 259,492,356 | (2,090,641) | 183,947 | 257,585,662 | -0.73\% |

Total Infrastructure Public

# Alaska Retirement Management Board 

## All Non-Participant Directed Plans by Manager

## Schedule of Investment Income and Changes in Invested Assets

For the Month Ended October 31, 2017

## Real Estate

Core Commingled Accounts JP Morgan
UBS Trumbull Property Fund Total Core Commingled
Core Separate Accounts
LaSalle Investment Management
Sentinel Separate Account
UBS Realty
Total Core Separate
Non-Core Commingled Accounts
Almanac Realty Securities V
Almanac Realty Securities VII
BlackRock Diamond Property Fund
Clarion Ventures 4
Colony Investors VIII, L.P.
Cornerstone Apartment Venture III
Coventry
ING Clarion Development Ventures III
KKR Real Estate Partners Americas LP.
LaSalle Medical Office Fund II
Lowe Hospitality Partners
Silverpeak Legacy Pension Partners II, L.P.
Silverpeak Legacy Pension Partners III, L.P.
Tishman Speyer Real Estate Venture VI
Tishman Speyer Real Estate Venture VII
Total Non-Core Commingled

## Total Real Estate <br> Total Real Assets

Total Assets

|  | 248,584,159 |  | 1,792,426 |  | $(2,022,425)$ |  | 248,354,160 | -0.09\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 175,578,675 |  | 644,306 |  | 23,537,607 |  | 199,760,588 | 13.77\% |
|  | 424,162,834 |  | 2,436,732 |  | 21,515,182 |  | 448,114,748 | 5.65\% |
|  | 187,609,128 |  | - |  | $(289,139)$ |  | 187,319,989 | -0.15\% |
|  | 192,502,129 |  | - |  | $(780,917)$ |  | 191,721,212 | -0.41\% |
|  | 518,180,797 |  | - |  | $(1,080,198)$ |  | 517,100,599 | -0.21\% |
|  | 898,292,054 |  | - |  | (2,150,254) |  | 896,141,800 | -0.24\% |
|  | 2,191,419 |  | - |  | $(165,700)$ |  | 2,025,719 | -7.56\% |
|  | 20,962,217 |  | - |  | $(3,541,919)$ |  | 17,420,298 | -16.90\% |
|  | 282,974 |  | 19,641 |  | - |  | 302,615 | 6.94\% |
|  | 15,524,067 |  | - |  | - |  | 15,524,067 | - |
|  | 5,644,100 |  | - |  | - |  | 5,644,100 | - |
|  | 39,901 |  | - |  | - |  | 39,901 | - |
|  | 851,447 |  | - |  | - |  | 851,447 | - |
|  | 6,152,867 |  | - |  | - |  | 6,152,867 | - |
|  | 35,574,901 |  | - |  | 136,632 |  | 35,711,533 | 0.38\% |
|  | 197 |  | - |  | - |  | 197 | - |
|  | 148,689 |  | - |  | - |  | 148,689 | - |
|  | 10,486,129 |  | - |  | - |  | 10,486,129 | - |
|  | 5,479,406 |  | - |  | - |  | 5,479,406 | - |
|  | 30,437,391 |  | - |  | - |  | 30,437,391 | - |
|  | 4,938,040 |  | - |  | - |  | 4,938,040 | - |
|  | 138,713,745 |  | 19,641 |  | $(3,570,987)$ |  | 135,162,399 | -2.56\% |
|  | 1,461,168,633 |  | 2,456,373 |  | 15,793,941 |  | 1,479,418,947 | 1.25\% |
|  | 4,305,347,752 |  | $(18,447,074)$ |  | 16,678,372 |  | 4,303,579,050 | -0.04\% |
| \$ | 25,826,691,461 | \$ | 229,051,201 | \$ | (99,521,259) | \$ | 25,956,221,403 | 0.50\% |

# ALASKA RETIREMENT MANAGEMENT BOARD 

Reporting of Funds by Manager

Participant Directed Plans

# Supplemental Annuity Plan 

Schedule of Investment Income and Changes in Invested Assets for the Month Ended

## October 31, 2017

## Participant Options

T. Rowe Price

Stable Value Fund
Small Cap Stock Fund
Alaska Balanced Trust
Long Term Balanced Fund
AK Target Date 2010 Trust
AK Target Date 2015 Trust
AK Target Date 2020 Trust
AK Target Date 2025 Trust
AK Target Date 2030 Trust
AK Target Date 2035 Trust
AK Target Date 2040 Trust
AK Target Date 2045 Trust
AK Target Date 2050 Trust
AK Target Date 2055 Trust
AK Target Date 2060 Trust
Total Investments with T. Rowe Price
State Street Global Advisors
State Street Treasury Money Market Fund - Inst.
S\&P 500 Stock Index Fund Series A
Russell 3000 Index
US Real Estate Investment Trust Index
World Equity Ex-US Index
Long US Treasury Bond Index
US Treasury Inflation Protected Securities Index
World Government Bond Ex-US Index
Global Balanced Fund
Total Investments with SSGA
BlackRock
Government/Credit Bond Fund
Intermediate Bond Fund
Total Investments with Barclays Global Investors
Brandes/Allianz (2)
AK International Equity Fund RCM

Sustainable Core Opportunities Fund

## Total All Funds

Notes: Source data provided by the record keeper, Empower Retirement.
(1) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates
(2) This investment is comprised of two funds, Brandes International Equity Fund and Allianz NFJ International Fund
effective March 30, 2015.


# Supplemental Annuity Plan <br> Schedule of Invested Assets with 

## Schedule of Investment Income and Changes in Invested Assets

By Month Through the Month Ended
October 31, 2017
\$ (Thousands)

| Invested Assets (at fair value) | July |  | August |  | September |  | October |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investments with T. Rowe Price |  |  |  |  |  |  |  |  |
| Stable Value Fund | \$ | 364,205 | \$ | 365,780 | \$ | 366,528 | \$ | 360,106 |
| Small Cap Stock Fund |  | 151,659 |  | 149,061 |  | 157,924 |  | 161,449 |
| Alaska Balanced Trust |  | 1,166,736 |  | 1,166,729 |  | 1,165,400 |  | 1,166,101 |
| Long Term Balanced Fund |  | 603,356 |  | 606,504 |  | 615,295 |  | 622,919 |
| AK Target Date 2010 Trust |  | 10,245 |  | 11,149 |  | 11,196 |  | 10,887 |
| AK Target Date 2015 Trust |  | 89,263 |  | 89,336 |  | 89,792 |  | 89,638 |
| AK Target Date 2020 Trust |  | 89,967 |  | 89,740 |  | 90,248 |  | 90,595 |
| AK Target Date 2025 Trust |  | 65,664 |  | 66,609 |  | 67,492 |  | 68,163 |
| AK Target Date 2030 Trust |  | 49,989 |  | 50,353 |  | 51,472 |  | 53,158 |
| AK Target Date 2035 Trust |  | 46,892 |  | 47,291 |  | 48,293 |  | 48,778 |
| AK Target Date 2040 Trust |  | 46,230 |  | 46,371 |  | 47,597 |  | 49,138 |
| AK Target Date 2045 Trust |  | 50,533 |  | 50,963 |  | 53,109 |  | 54,347 |
| AK Target Date 2050 Trust |  | 57,910 |  | 58,733 |  | 61,314 |  | 61,443 |
| AK Target Date 2055 Trust |  | 45,609 |  | 46,097 |  | 48,736 |  | 50,146 |
| AK Target Date 2060 Trust |  | 1,345 |  | 1,691 |  | 1,785 |  | 2,346 |
| State Street Global Advisors |  |  |  |  |  |  |  |  |
| State Street Treasury Money Market Fund - Inst. |  | 39,235 |  | 39,998 |  | 41,419 |  | 41,218 |
| S\&P 500 Stock Index Fund Series A |  | 415,373 |  | 415,419 |  | 420,961 |  | 431,632 |
| Russell 3000 Index |  | 70,128 |  | 66,839 |  | 66,734 |  | 68,099 |
| US Real Estate Investment Trust Index |  | 36,464 |  | 33,654 |  | 34,246 |  | 33,176 |
| World Equity Ex-US Index |  | 45,537 |  | 47,473 |  | 49,676 |  | 52,249 |
| Long US Treasury Bond Index |  | 15,882 |  | 16,900 |  | 16,777 |  | 15,734 |
| US Treasury Inflation Protected Securities Index |  | 24,194 |  | 26,184 |  | 27,809 |  | 28,354 |
| World Government Bond Ex-US Index |  | 6,402 |  | 6,945 |  | 6,826 |  | 7,812 |
| Global Balanced Fund |  | 56,694 |  | 57,232 |  | 58,342 |  | 58,885 |
| Investments with BlackRock |  |  |  |  |  |  |  |  |
| Government/Credit Bond Fund |  | 40,956 |  | 41,207 |  | 40,767 |  | 42,910 |
| Intermediate Bond Fund |  | 41,854 |  | 41,690 |  | 43,475 |  | 44,557 |
| Investments with Brandes/Allianz Institutional |  |  |  |  |  |  |  |  |
| AK International Equity Fund |  | 66,833 |  | 66,981 |  | 69,881 |  | 70,770 |
| Investments with RCM |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 44,360 |  | 43,226 |  | 44,319 |  | 45,667 |
| Total Invested Assets | \$ | 3,743,516 | \$ | 3,750,154 | \$ | 3,797,411 | \$ | 3,830,277 |
| Change in Invested Assets |  |  |  |  |  |  |  |  |
| Beginning Assets | \$ | 3,691,373 | \$ | 3,743,516 | \$ | 3,750,154 | \$ | 3,797,411 |
| Investment Earnings |  | 49,638 |  | 12,834 |  | 43,128 |  | 41,332 |
| Net Contributions (Withdrawals) |  | 2,504 |  | $(6,195)$ |  | 4,129 |  | $(8,467)$ |
| Ending Invested Assets | \$ | 3,743,516 | \$ | 3,750,154 | \$ | 3,797,411 | \$ | 3,830,277 |
|  |  | 18 |  |  |  |  |  |  |


|  | Beginning Invested Assets |  | Investment Income |  | Net Contributions (Withdrawals) |  | Transfers In (Out) |  | Ending Invested Assets |  | \% Change in Invested Assets | \% Change due to Investment Income (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participant Options |  |  |  |  |  |  |  |  |  |  |  |  |
| T. Rowe Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest Income Fund | \$ | 182,797,814 | \$ | 359,489 | \$ | $(1,126,065)$ | \$ | $(2,441,075)$ | \$ | 179,590,163 | -1.75\% | 0.20\% |
| Small Cap Stock Fund |  | 104,610,615 |  | 1,399,276 |  | $(393,274)$ |  | 125,782 |  | 105,742,399 | 1.08\% | 1.34\% |
| Alaska Balanced Trust |  | 25,370,122 |  | 185,804 |  | $(70,529)$ |  | 67,727 |  | 25,553,124 | 0.72\% | 0.73\% |
| Long Term Balanced Fund |  | 52,393,445 |  | 635,509 |  | $(150,121)$ |  | $(287,479)$ |  | 52,591,354 | 0.38\% | 1.22\% |
| AK Target Date 2010 Trust |  | 3,844,724 |  | 35,607 |  | $(57,293)$ |  | 256,859 |  | 4,079,897 | 6.12\% | 0.90\% |
| AK Target Date 2015 Trust |  | 9,083,239 |  | 98,126 |  | $(158,692)$ |  | 291,392 |  | 9,314,065 | 2.54\% | 1.07\% |
| AK Target Date 2020 Trust |  | 23,964,170 |  | 300,678 |  | $(77,351)$ |  | $(110,248)$ |  | 24,077,249 | 0.47\% | 1.26\% |
| AK Target Date 2025 Trust |  | 15,170,680 |  | 214,098 |  | 38,866 |  | $(78,018)$ |  | 15,345,626 | 1.15\% | 1.41\% |
| AK Target Date 2030 Trust |  | 9,627,718 |  | 149,477 |  | 8,394 |  | 154,534 |  | 9,940,123 | 3.24\% | 1.54\% |
| AK Target Date 2035 Trust |  | 6,275,095 |  | 104,505 |  | 35,681 |  | $(118,844)$ |  | 6,296,437 | 0.34\% | 1.68\% |
| AK Target Date 2040 Trust |  | 7,073,424 |  | 124,517 |  | 40,478 |  | 93,739 |  | 7,332,158 | 3.66\% | 1.74\% |
| AK Target Date 2045 Trust |  | 4,738,316 |  | 85,581 |  | 15,724 |  | $(14,814)$ |  | 4,824,807 | 1.83\% | 1.81\% |
| AK Target Date 2050 Trust |  | 3,474,941 |  | 62,394 |  | 28,970 |  | $(153,921)$ |  | 3,412,384 | -1.80\% | 1.83\% |
| AK Target Date 2055 Trust |  | 3,759,929 |  | 69,703 |  | 30,685 |  | 28,326 |  | 3,888,643 | 3.42\% | 1.84\% |
| AK Target Date 2060 Trust |  | 198,103 |  | 3,811 |  | 1,986 |  | 96,377 |  | 300,277 | 51.58\% | 1.54\% |
| Total Investments with T. Rowe Price |  | 452,382,335 |  | 3,828,575 |  | $(1,832,541)$ |  | $(2,089,663)$ |  | 452,288,706 |  |  |
| State Street Global Advisors |  |  |  |  |  |  |  |  |  |  |  |  |
| State Street Treasury Money Market Fund - Inst. |  | 13,573,019 |  | 10,614 |  | $(30,200)$ |  | $(463,717)$ |  | 13,089,716 | -3.56\% | 0.08\% |
| Russell 3000 Index |  | 38,079,890 |  | 836,201 |  | 27,842 |  | 730,865 |  | 39,674,798 | 4.19\% | 2.17\% |
| US Real Estate Investment Trust Index |  | 12,472,027 |  | $(140,109)$ |  | $(69,943)$ |  | $(20,800)$ |  | 12,241,175 | -1.85\% | -1.13\% |
| World Equity Ex-US Index |  | 17,037,884 |  | 323,821 |  | $(10,513)$ |  | 818,556 |  | 18,169,748 | 6.64\% | 1.86\% |
| Long US Treasury Bond Index |  | 5,507,835 |  | $(1,047)$ |  | $(6,651)$ |  | $(44,572)$ |  | 5,455,565 | -0.95\% | -0.02\% |
| US Treasury Inflation Protected Securities Index |  | 11,277,081 |  | 23,114 |  | $(141,811)$ |  | 696,406 |  | 11,854,790 | 5.12\% | 0.20\% |
| World Government Bond Ex-US Index |  | 2,815,312 |  | $(21,003)$ |  | $(8,074)$ |  | 39,743 |  | 2,825,978 | 0.38\% | -0.74\% |
| Global Balanced Fund |  | 39,253,237 |  | 466,562 |  | $(123,240)$ |  | $(112,605)$ |  | 39,483,954 | 0.59\% | 1.19\% |
| Total Investments with SSGA |  | 140,016,285 |  | 1,498,153 |  | $(362,590)$ |  | 1,643,876 |  | 142,795,724 |  |  |
| BlackRock |  |  |  |  |  |  |  |  |  |  |  |  |
| S\&P 500 Index Fund |  | 203,415,094 |  | 4,731,930 |  | $(733,806)$ |  | $(1,537,339)$ |  | 205,875,879 | 1.21\% | 2.34\% |
| Government/Credit Bond Fund |  | 26,670,571 |  | 22,837 |  | $(70,489)$ |  | 810,610 |  | 27,433,529 | 2.86\% | 0.08\% |
| Intermediate Bond Fund |  | 24,063,661 |  | $(30,034)$ |  | 11,143 |  | 572,494 |  | 24,617,264 | 2.30\% | -0.12\% |
| Total Investments with Barclays Global Investors |  | 254,149,326 |  | 4,724,733 |  | $(793,152)$ |  | $(154,235)$ |  | 257,926,672 |  |  |
| Brandes/Allianz (2) |  |  |  |  |  |  |  |  |  |  |  |  |
| AK International Equity Fund |  | 37,923,301 |  | 216,044 |  | $(85,815)$ |  | 302,753 |  | 38,356,283 | 1.14\% | 0.57\% |
| RCM |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 19,665,821 |  | 423,001 |  | $(46,955)$ |  | 297,269 |  | 20,339,136 | 3.42\% | 2.14\% |
| Total All Funds | \$ | 904,137,068 | \$ | 0,690,506 | \$ | (3,121,053) | \$ | - | \$ | 911,706,521 | 0.84\% | 1.18\% |

Notes: Source data provided by the record keeper, Empower Retirement.
(1) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.
(2) This investment is comprised of two funds, $50 \%$ Brandes International equity Fund and $50 \%$ Allianz NFJ International Fund
effective March 30, 2015.

# Deferred Compensation Plan 

Schedule of Invested Assets with

## Schedule of Investment Income and Changes in Invested Assets

By Month Through the Month Ended
October 31, 2017
\$ (Thousands)

## Invested Assets (at fair value)

Investments with T. Rowe Price
Interest Income Fund
Cash and cash equivalents
Synthetic Investment Contracts
mall Cap Stock Fund

Small Cap Stock Fund
Alaska Balanced Trust
Long Term Balanced Fund
AK Target Date 2010 Trust
AK Target Date 2015 Trust
AK Target Date 2020 Trust
AK Target Date 2025 Trust
AK Target Date 2030 Trust
AK Target Date 2035 Trust
AK Target Date 2040 Trust
AK Target Date 2045 Trust
AK Target Date 2050 Trust
AK Target Date 2055 Trust
AK Target Date 2060 Trust

State Street Global Advisors

| State Street Treasury Money Market Fund - Inst. | 12,513 | 13,224 | 13,573 | 13,090 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Russell 3000 Index | 36,758 | 36,700 | 38,080 | 39,675 |
| US Real Estate Investment Trust Index | 13,056 | 12,700 | 12,472 | 12,241 |
| World Equity Ex-US Index | 16,229 | 16,514 | 17,038 | 18,170 |
| Long US Treasury Bond Index | 5,216 | 5,661 | 5,508 | 5,456 |
| US Treasury Inflation Protected Securities Index | 10,201 | 10,563 | 11,277 | 11,855 |
| World Government Bond Ex-US Index | 2,683 | 2,840 | 2,815 | 2,826 |
| Global Balanced Fund | 39,497 | 39,731 | 39,253 | 39,484 |
|  |  |  |  |  |

Change in Invested Assets
Beginning Assets
Investment Earnings
Net Contributions (Withdrawals)
Ending Invested Assets

# Defined Contribution Retirement - Participant Directed PERS <br> Schedule of Investment Income and Changes in Invested Assets <br> for the Month Ended <br> October 31, 2017 

|  | Beginning InvestedAssets |  | Investment Income |  | Net Contributions (Withdrawals) |  | Transfers In (Out) |  | Ending Invested Assets |  | \% Change in Invested Assets | \% Change due to Investment Income (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participant Options |  |  |  |  |  |  |  |  |  |  |  |  |
| T. Rowe Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Alaska Money Market | \$ | 5,097,715 | \$ | 4,697 | \$ | 43,791 | \$ | 24,511 | \$ | 5,170,714 | 1.43\% | 0.09\% |
| Small Cap Stock Fund |  | 72,828,844 |  | 977,217 |  | 182,645 |  | 652,323 |  | 74,641,029 | 2.49\% | 1.33\% |
| Alaska Balanced Trust |  | 18,910,437 |  | 137,352 |  | 48,472 |  | 209,637 |  | 19,305,898 | 2.09\% | 0.72\% |
| Long Term Balanced Fund |  | 12,777,933 |  | 156,059 |  | 823 |  | 594,556 |  | 13,529,371 | 5.88\% | 1.19\% |
| AK Target Date 2010 Trust |  | 2,227,235 |  | 20,302 |  | $(20,907)$ |  | 118,011 |  | 2,344,641 | 5.27\% | 0.89\% |
| AK Target Date 2015 Trust |  | 10,885,678 |  | 116,596 |  | 97,032 |  |  |  | 11,099,314 | 1.96\% | 1.07\% |
| AK Target Date 2020 Trust |  | 28,119,650 |  | 354,549 |  | 249,637 |  | $(8,483)$ |  | 28,715,353 | 2.12\% | 1.26\% |
| AK Target Date 2025 Trust |  | 44,364,240 |  | 629,731 |  | 612,577 |  | $(160,895)$ |  | 45,445,653 | 2.44\% | 1.41\% |
| AK Target Date 2030 Trust |  | 46,673,607 |  | 726,815 |  | 510,989 |  | $(50,386)$ |  | 47,861,025 | 2.54\% | 1.55\% |
| AK Target Date 2035 Trust |  | 54,798,824 |  | 923,904 |  | 749,926 |  | $(43,291)$ |  | 56,429,363 | 2.98\% | 1.68\% |
| AK Target Date 2040 Trust |  | 64,609,157 |  | 1,150,323 |  | 906,913 |  | $(243,645)$ |  | 66,422,748 | 2.81\% | 1.77\% |
| AK Target Date 2045 Trust |  | 81,599,500 |  | 1,485,628 |  | 1,013,600 |  | $(32,113)$ |  | 84,066,615 | 3.02\% | 1.81\% |
| AK Target Date 2050 Trust |  | 97,922,208 |  | 1,783,956 |  | 1,044,931 |  | $(215,121)$ |  | 100,535,974 | 2.67\% | 1.81\% |
| AK Target Date 2055 Trust |  | 73,230,424 |  | 1,337,545 |  | 1,498,741 |  | $(23,125)$ |  | 76,043,585 | 3.84\% | 1.81\% |
| AK Target Date 2060 Trust |  | 371,251 |  | 6,870 |  | 5,826 |  | 14,150 |  | 398,097 | 7.23\% | 1.80\% |
| Total Investments with T. Rowe Price |  | 614,416,703 |  | 9,811,544 |  | 6,944,996 |  | 836,137 |  | 632,009,380 |  |  |
| State Street Global Advisors |  |  |  |  |  |  |  |  |  |  |  |  |
| Money Market |  | 4,512,384 |  | 3,518 |  | $(109,619)$ |  | $(160,782)$ |  | 4,245,501 | -5.91\% | 0.08\% |
| S\&P 500 Stock Index Fund Series A |  | 88,928,311 |  | 2,090,993 |  | 170,998 |  | 399,935 |  | 91,590,237 | 2.99\% | 2.34\% |
| Russell 3000 Index |  | 10,716,117 |  | 234,730 |  | 87,099 |  | $(183,036)$ |  | 10,854,910 | 1.30\% | 2.20\% |
| US Real Estate Investment Trust Index |  | 14,660,858 |  | $(160,978)$ |  | 11,038 |  | 16,668 |  | 14,527,586 | -0.91\% | -1.10\% |
| World Equity Ex-US Index |  | 41,579,646 |  | 792,385 |  | 56,353 |  | $(188,853)$ |  | 42,239,531 | 1.59\% | 1.91\% |
| Long US Treasury Bond Index |  | 1,390,999 |  | $(3,234)$ |  | $(60,366)$ |  | $(284,105)$ |  | 1,043,294 | -25.00\% | -0.27\% |
| US Treasury Inflation Protected Securities Index |  | 14,116,521 |  | 26,129 |  | 7,768 |  | $(572,114)$ |  | 13,578,304 | -3.81\% | 0.19\% |
| World Government Bond Ex-US Index |  | 3,957,528 |  | $(32,119)$ |  | 4,709 |  | 676,863 |  | 4,606,981 | 16.41\% | -0.75\% |
| Global Balanced Fund |  | 13,468,506 |  | 154,385 |  | 13,396 |  | $(1,171,865)$ |  | 12,464,422 | -7.46\% | 1.20\% |
| Total Investments with SSGA |  | 193,330,870 |  | 3,105,809 |  | 181,376 |  | $(1,467,289)$ |  | 195,150,766 |  |  |
| BlackRock |  |  |  |  |  |  |  |  |  |  |  |  |
| Government/Credit Bond Fund |  | 35,772,858 |  | 28,804 |  | 42,648 |  | 430,099 |  | 36,274,409 | 1.40\% | 0.08\% |
| Intermediate Bond Fund |  | 24,075,658 |  | $(29,170)$ |  | $(29,846)$ |  | (1,045,506) |  | 22,971,136 | -4.59\% | -0.12\% |
| Total Investments with Barclays Global Investors |  | 59,848,516 |  | (366) |  | 12,802 |  | $(615,407)$ |  | 59,245,545 |  |  |
| Brandes/Allianz (2) |  |  |  |  |  |  |  |  |  |  |  |  |
| AK International Equity Fund |  | 44,728,300 |  | 261,258 |  | 128,442 |  | 1,071,638 |  | 46,189,638 | 3.27\% | 0.58\% |
| RCM |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 3,941,340 |  | 85,635 |  | (617) |  | 174,921 |  | 4,201,279 | 6.60\% | 2.13\% |
| Total All Funds | \$ | 916,265,729 | \$ | 13,263,880 | \$ | 7,266,999 | \$ |  | \$ | 936,796,608 | 2.24\% | 1.44\% |

Notes: Source data provided by the record keeper, Empower Retirement.
(1) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.
(2) This investment is comprised of two funds, $50 \%$ Brandes International equity Fund and $50 \%$ Allianz NFJ International Fund
effective March 30, 2015.

# Defined Contribution Retirement - Participant Directed PERS <br> Schedule of Invested Assets with <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> By Month Through the Month Ended <br> October 31, 2017 <br> \$ (Thousands) 

| Invested Assets (at fair value) | July |  | August |  | September |  | October |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investments with T. Rowe Price |  |  |  |  |  |  |  |  |
| Alaska Money Market | \$ | 5,421 | \$ | 5,197 | \$ | 5,098 | \$ | 5,171 |
| Small Cap Stock Fund |  | 67,548 |  | 68,375 |  | 72,829 |  | 74,641 |
| Alaska Balanced Trust |  | 17,217 |  | 18,558 |  | 18,910 |  | 19,306 |
| Long Term Balanced Fund |  | 12,163 |  | 12,618 |  | 12,778 |  | 13,529 |
| AK Target Date 2010 Trust |  | 2,178 |  | 2,226 |  | 2,227 |  | 2,345 |
| AK Target Date 2015 Trust |  | 10,630 |  | 10,672 |  | 10,886 |  | 11,099 |
| AK Target Date 2020 Trust |  | 27,548 |  | 27,692 |  | 28,120 |  | 28,715 |
| AK Target Date 2025 Trust |  | 42,579 |  | 43,234 |  | 44,364 |  | 45,446 |
| AK Target Date 2030 Trust |  | 44,774 |  | 45,446 |  | 46,674 |  | 47,861 |
| AK Target Date 2035 Trust |  | 52,490 |  | 53,122 |  | 54,799 |  | 56,429 |
| AK Target Date 2040 Trust |  | 62,149 |  | 62,813 |  | 64,609 |  | 66,423 |
| AK Target Date 2045 Trust |  | 78,543 |  | 79,273 |  | 81,600 |  | 84,067 |
| AK Target Date 2050 Trust |  | 93,494 |  | 94,928 |  | 97,922 |  | 100,536 |
| AK Target Date 2055 Trust |  | 68,678 |  | 70,301 |  | 73,230 |  | 76,044 |
| AK Target Date 2060 Trust |  | 344 |  | 372 |  | 371 |  | 398 |
| State Street Global Advisors |  |  |  |  |  |  |  |  |
| Money Market |  | 4,137 |  | 4,644 |  | 4,512 |  | 4,246 |
| S\&P 500 Stock Index Fund Series A |  | 83,318 |  | 85,208 |  | 88,928 |  | 91,590 |
| Russell 3000 Index |  | 12,842 |  | 11,264 |  | 10,716 |  | 10,855 |
| US Real Estate Investment Trust Index |  | 15,007 |  | 14,807 |  | 14,661 |  | 14,528 |
| World Equity Ex-US Index |  | 40,608 |  | 40,674 |  | 41,580 |  | 42,240 |
| Long US Treasury Bond Index |  | 1,201 |  | 1,490 |  | 1,391 |  | 1,043 |
| US Treasury Inflation Protected Securities Index |  | 13,538 |  | 14,160 |  | 14,117 |  | 13,578 |
| World Government Bond Ex-US Index |  | 3,969 |  | 4,135 |  | 3,958 |  | 4,607 |
| Global Balanced Fund |  | 17,025 |  | 14,867 |  | 13,469 |  | 12,464 |
| Investments with BlackRock |  |  |  |  |  |  |  |  |
| Government/Credit Bond Fund |  | 35,968 |  | 36,547 |  | 35,773 |  | 36,274 |
| Intermediate Bond Fund |  | 23,575 |  | 24,238 |  | 24,076 |  | 22,971 |
| Investments with Brandes/Allianz |  |  |  |  |  |  |  |  |
| International Equity Fund |  | 42,711 |  | 42,865 |  | 44,728 |  | 46,190 |
| Investments with RCM |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 3,887 |  | 3,827 |  | 3,941 |  | 4,201 |
| Total Invested Assets | \$ | 883,542 | \$ | 893,551 | \$ | 916,266 | \$ | 936,797 |
| Change in Invested Assets |  |  |  |  |  |  |  |  |
| Beginning Assets | \$ | 860,874 | \$ | 883,542 | \$ | 893,551 | \$ | 916,266 |
| Investment Earnings |  | 16,290 |  | 2,484 |  | 15,875 |  | 13,264 |
| Net Contributions (Withdrawals) |  | 6,378 |  | 7,525 |  | 6,839 |  | 7,267 |
| Ending Invested Assets | \$ | 883,542 | \$ | 893,551 | \$ | 916,266 | \$ | 936,797 |

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## October 31, 2017

|  | Beginning Invested Assets |  | Investment Income |  | Net Contributions (Withdrawals) |  | Transfers In (Out) |  | Ending Invested Assets |  | \% Change in Invested Assets | \% Change due to Investment Income (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Participant Options |  |  |  |  |  |  |  |  |  |  |  |  |
| T. Rowe Price |  |  |  |  |  |  |  |  |  |  |  |  |
| Alaska Money Market | \$ | 1,873,410 | \$ | 1,785 | \$ | 23,233 | \$ | 97,032 | \$ | 1,995,460 | 6.51\% | 0.09\% |
| Small Cap Stock Fund |  | 30,608,793 |  | 412,135 |  | 178,505 |  | 450,144 |  | 31,649,577 | 3.40\% | 1.33\% |
| Alaska Balanced Trust |  | 8,558,204 |  | 62,109 |  | 49,069 |  | 31,394 |  | 8,700,776 | 1.67\% | 0.72\% |
| Long Term Balanced Fund |  | 5,298,278 |  | 64,597 |  | 32,590 |  | 256,559 |  | 5,652,024 | 6.68\% | 1.19\% |
| AK Target Date 2010 Trust |  | 538,419 |  | 4,891 |  | 4,899 |  | - |  | 548,209 | 1.82\% | 0.90\% |
| AK Target Date 2015 Trust |  | 3,056,733 |  | 32,763 |  | 26,694 |  | - |  | 3,116,190 | 1.95\% | 1.07\% |
| AK Target Date 2020 Trust |  | 8,292,424 |  | 105,007 |  | 146,598 |  | - |  | 8,544,029 | 3.03\% | 1.26\% |
| AK Target Date 2025 Trust |  | 13,807,673 |  | 196,126 |  | 269,211 |  | 92 |  | 14,273,102 | 3.37\% | 1.41\% |
| AK Target Date 2030 Trust |  | 16,399,825 |  | 256,070 |  | 252,445 |  | $(34,470)$ |  | 16,873,870 | 2.89\% | 1.55\% |
| AK Target Date 2035 Trust |  | 24,037,033 |  | 404,615 |  | 335,053 |  | $(53,393)$ |  | 24,723,308 | 2.86\% | 1.67\% |
| AK Target Date 2040 Trust |  | 25,712,733 |  | 457,880 |  | 411,444 |  | $(17,121)$ |  | 26,564,936 | 3.31\% | 1.77\% |
| AK Target Date 2045 Trust |  | 40,095,393 |  | 727,969 |  | 448,219 |  | 68,771 |  | 41,340,352 | 3.10\% | 1.80\% |
| AK Target Date 2050 Trust |  | 56,491,180 |  | 1,027,050 |  | 791,239 |  | $(16,299)$ |  | 58,293,170 | 3.19\% | 1.81\% |
| AK Target Date 2055 Trust |  | 22,805,554 |  | 417,300 |  | 804,979 |  | - |  | 24,027,833 | 5.36\% | 1.80\% |
| AK Target Date 2060 Trust |  | 149,321 |  | 2,706 |  | 1,269 |  | 442 |  | 153,738 | 2.96\% | 1.80\% |
| Total Investments with T. Rowe Price |  | 257,724,973 |  | 4,173,003 |  | 3,775,447 |  | 783,151 |  | 266,456,574 |  |  |
| State Street Global Advisors |  |  |  |  |  |  |  |  |  |  |  |  |
| Money Market |  | 537,969 |  | 395 |  | 7,393 |  | $(66,690)$ |  | 479,067 | -10.95\% | 0.08\% |
| S\&P 500 Stock Index Fund Series A |  | 36,172,004 |  | 848,859 |  | 51,451 |  | 254,479 |  | 37,326,793 | 3.19\% | 2.34\% |
| Russell 3000 Index |  | 3,805,960 |  | 82,299 |  | 41,638 |  | $(252,744)$ |  | 3,677,153 | -3.38\% | 2.22\% |
| US Real Estate Investment Trust Index |  | 5,648,398 |  | $(61,985)$ |  | 35,670 |  | $(14,708)$ |  | 5,607,375 | -0.73\% | -1.10\% |
| World Equity Ex-US Index |  | 18,129,935 |  | 345,294 |  | 98,901 |  | $(57,837)$ |  | 18,516,293 | 2.13\% | 1.90\% |
| Long US Treasury Bond Index |  | 241,038 |  | (270) |  | 4,567 |  | $(10,737)$ |  | 234,598 | -2.67\% | -0.11\% |
| US Treasury Inflation Protected Securities Index |  | 5,679,315 |  | 10,439 |  | 30,210 |  | $(315,696)$ |  | 5,404,268 | -4.84\% | 0.19\% |
| World Government Bond Ex-US Index |  | 1,647,488 |  | $(13,117)$ |  | 10,834 |  | 257,796 |  | 1,903,001 | 15.51\% | -0.74\% |
| Global Balanced Fund |  | 6,783,441 |  | 77,764 |  | 40,050 |  | $(609,682)$ |  | 6,291,573 | -7.25\% | 1.20\% |
| Total Investments with SSGA |  | 78,645,548 |  | 1,289,678 |  | 320,714 |  | $(815,819)$ |  | 79,440,121 |  |  |
| BlackRock |  |  |  |  |  |  |  |  |  |  |  |  |
| Government/Credit Bond Fund |  | 16,334,920 |  | 13,222 |  | 99,045 |  | $(88,584)$ |  | 16,358,603 | 0.14\% | 0.08\% |
| Intermediate Bond Fund |  | 10,022,773 |  | $(12,088)$ |  | 52,377 |  | $(522,001)$ |  | 9,541,061 | -4.81\% | -0.12\% |
| Total Investments with Barclays Global Investors |  | 26,357,693 |  | 1,134 |  | 151,422 |  | $(610,585)$ |  | 25,899,664 |  |  |
| Brandes/Allianz Institutional (2) |  |  |  |  |  |  |  |  |  |  |  |  |
| AK International Equity Fund |  | 18,359,464 |  | 107,532 |  | 123,266 |  | 643,211 |  | 19,233,473 | 4.76\% | 0.57\% |
| RCM |  |  |  |  |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 1,633,839 |  | 34,973 |  | 16,542 |  | 42 |  | 1,685,396 | 3.16\% | 2.13\% |
| Total All Funds | \$ | $\underline{ } 382,721,517$ | \$ | 5,606,320 | \$ | 4,387,391 | \$ | - | \$ | 392,715,228 | 2.61\% | 1.46\% |

Notes: Source data provided by the record keeper, Empower Retirement.
(1) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates.
(2) This investment is comprised of two funds, $50 \%$ Brandes International equity Fund and $50 \%$ Allianz NFJ International Fund
effective March 30, 2015

# Defined Contribution Retirement - Participant Directed TRS <br> Schedule of Invested Assets with <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> <br> Schedule of Investment Income and Changes in Invested Assets <br> By Month Through the Month Ended <br> October 31, 2017 <br> \$ (Thousands) 

| Invested Assets (at fair value) | July |  | August |  | September |  | October |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investments with T. Rowe Price |  |  |  |  |  |  |  |  |
| Alaska Money Market | \$ | 1,937 | \$ | 1,878 | \$ | 1,873 | \$ | 1,995 |
| Small Cap Stock Fund |  | 28,707 |  | 28,667 |  | 30,609 |  | 31,650 |
| Alaska Balanced Trust |  | 7,912 |  | 8,511 |  | 8,558 |  | 8,701 |
| Long Term Balanced Fund |  | 5,161 |  | 5,307 |  | 5,298 |  | 5,652 |
| AK Target Date 2010 Trust |  | 529 |  | 531 |  | 538 |  | 548 |
| AK Target Date 2015 Trust |  | 3,158 |  | 3,055 |  | 3,057 |  | 3,116 |
| AK Target Date 2020 Trust |  | 8,280 |  | 8,243 |  | 8,292 |  | 8,544 |
| AK Target Date 2025 Trust |  | 13,635 |  | 13,648 |  | 13,808 |  | 14,273 |
| AK Target Date 2030 Trust |  | 15,899 |  | 15,882 |  | 16,400 |  | 16,874 |
| AK Target Date 2035 Trust |  | 23,490 |  | 23,450 |  | 24,037 |  | 24,723 |
| AK Target Date 2040 Trust |  | 24,842 |  | 24,987 |  | 25,713 |  | 26,565 |
| AK Target Date 2045 Trust |  | 39,520 |  | 39,406 |  | 40,095 |  | 41,340 |
| AK Target Date 2050 Trust |  | 55,405 |  | 55,421 |  | 56,491 |  | 58,293 |
| AK Target Date 2055 Trust |  | 22,066 |  | 22,168 |  | 22,806 |  | 24,028 |
| AK Target Date 2060 Trust |  | 138 |  | 138 |  | 149 |  | 154 |
| State Street Global Advisors |  |  |  |  |  |  |  |  |
| Money Market |  | 475 |  | 636 |  | 538 |  | 479 |
| S\&P 500 Stock Index Fund Series A |  | 34,267 |  | 34,650 |  | 36,172 |  | 37,327 |
| Russell 3000 Index |  | 4,690 |  | 3,996 |  | 3,806 |  | 3,677 |
| US Real Estate Investment Trust Index |  | 5,838 |  | 5,598 |  | 5,648 |  | 5,607 |
| World Equity Ex-US Index |  | 17,781 |  | 17,679 |  | 18,130 |  | 18,516 |
| Long US Treasury Bond Index |  | 261 |  | 265 |  | 241 |  | 235 |
| US Treasury Inflation Protected Securities Index |  | 5,529 |  | 5,771 |  | 5,679 |  | 5,404 |
| World Government Bond Ex-US Index |  | 1,689 |  | 1,744 |  | 1,647 |  | 1,903 |
| Global Balanced Fund |  | 8,517 |  | 7,529 |  | 6,783 |  | 6,292 |
| Investments with BlackRock |  |  |  |  |  |  |  |  |
| Government/Credit Bond Fund |  | 16,784 |  | 16,984 |  | 16,335 |  | 16,359 |
| Intermediate Bond Fund |  | 10,039 |  | 10,238 |  | 10,023 |  | 9,541 |
| Investments with Brandes/Allianz |  |  |  |  |  |  |  |  |
| AK International Equity Fund |  | 17,504 |  | 17,430 |  | 18,359 |  | 19,233 |
| Investments with RCM |  |  |  |  |  |  |  |  |
| Sustainable Core Opportunities Fund |  | 1,586 |  | 1,589 |  | 1,634 |  | 1,685 |
| Total Invested Assets | \$ | 375,637 | \$ | 375,400 | \$ | 382,722 | \$ | 392,715 |
| Change in Invested Assets |  |  |  |  |  |  |  |  |
| Beginning Assets | \$ | 367,438 | \$ | 375,637 | \$ | 375,400 | \$ | 382,722 |
| Investment Earnings |  | 7,056 |  | 1,040 |  | 6,703 |  | 5,606 |
| Net Contributions (Withdrawals) |  | 1,144 |  | $(1,277)$ |  | 619 |  | 4,387 |
| Ending Invested Assets | \$ | 375,637 | \$ | 375,400 | \$ | 382,722 | \$ | 392,715 |

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