

**ALASKA RETIREMENT MANAGEMENT BOARD
FINANCIAL REPORT**

As of August 30, 2019

ALASKA RETIREMENT MANAGEMENT BOARD
Schedule of Investment Income and Changes in Invested Assets by Fund
Fiscal Year-to-Date through August 30, 2019

	Beginning Invested Assets	Investment Income ⁽¹⁾	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income ⁽²⁾
<u>Public Employees' Retirement System (PERS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	\$ 9,465,719,458	\$ 3,037,708	\$ 65,961,572	\$ 9,534,718,738	0.73%	0.03%
Retirement Health Care Trust	7,807,287,545	(32,108)	(55,106,504)	7,752,148,933	-0.71%	0.00%
Total Defined Benefit Plans	17,273,007,003	3,005,600	10,855,068	17,286,867,671	0.08%	0.02%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	1,218,753,974	(10,060,764)	14,433,037	1,223,126,247	0.36%	-0.82%
Health Reimbursement Arrangement	419,023,779	(1,326)	6,085,989	425,108,442	1.45%	0.00%
Retiree Medical Plan	117,399,406	1,355	2,393,534	119,794,295	2.04%	0.00%
<u>Defined Benefit Occupational Death and Disability:</u>						
Public Employees	24,859,446	19	443,877	25,303,342	1.79%	0.00%
Police and Firefighters	11,367,334	(128)	189,236	11,556,442	1.66%	0.00%
Total Defined Contribution Plans	1,791,403,939	(10,060,844)	23,545,673	1,804,888,768	0.75%	-0.56%
Total PERS	19,064,410,942	(7,055,244)	34,400,741	19,091,756,439	0.14%	-0.04%
<u>Teachers' Retirement System (TRS)</u>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	5,505,314,103	2,725,992	66,948,706	5,574,988,801	1.27%	0.05%
Retirement Health Care Trust	2,940,744,859	(10,062)	(20,118,055)	2,920,616,742	-0.68%	0.00%
Total Defined Benefit Plans	8,446,058,962	2,715,930	46,830,651	8,495,605,543	0.59%	0.03%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	516,072,656	(4,636,805)	1,974,195	513,410,046	-0.52%	-0.90%
Health Reimbursement Arrangement	124,841,136	2,157	1,580,432	126,423,725	1.27%	0.00%
Retiree Medical Plan	41,730,124	(30)	385,828	42,115,922	0.92%	0.00%
Defined Benefit Occupational Death and Disability	4,293,954	(13)	34,805	4,328,746	0.81%	0.00%
Total Defined Contribution Plans	686,937,870	(4,634,691)	3,975,260	686,278,439	-0.10%	-0.67%
Total TRS	9,132,996,832	(1,918,761)	50,805,911	9,181,883,982	0.54%	-0.02%
<u>Judicial Retirement System (JRS)</u>						
Defined Benefit Plan Retirement Trust	183,941,036	97,885	3,610,749	187,649,670	2.02%	0.05%
Defined Benefit Retirement Health Care Trust	33,156,612	(34)	(88,567)	33,068,011	-0.27%	0.00%
Total JRS	217,097,648	97,851	3,522,182	220,717,681	1.67%	0.04%
<u>National Guard/Naval Militia Retirement System (MRS)</u>						
Defined Benefit Plan Retirement Trust	40,994,203	70,639	553,085	41,617,927	1.52%	0.17%
<u>Other Participant Directed Plans</u>						
Supplemental Annuity Plan	4,111,631,106	(1,624,565)	(9,926,125)	4,100,080,416	-0.28%	-0.04%
Deferred Compensation Plan	983,593,517	(557,558)	(3,533,234)	979,502,725	-0.42%	-0.06%
Total All Funds	33,550,724,248	(10,987,638)	75,822,560	33,615,559,170		
Total Non-Participant Directed	26,720,672,995	5,892,054	72,874,687	26,799,439,736	0.29%	0.02%
Total Participant Directed	6,830,051,253	(16,879,692)	2,947,873	6,816,119,434	-0.20%	-0.25%
Total All Funds	\$ 33,550,724,248	\$ (10,987,638)	\$ 75,822,560	\$ 33,615,559,170	0.19%	-0.03%

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 August 30, 2019

	Beginning Invested Assets	Investment Income (1)	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
<u>Public Employees' Retirement System (PERS)</u>						
Defined Benefit Plans:						
Retirement Trust	\$ 9,602,065,501	\$ (20,605,535)	\$ (46,741,228)	\$ 9,534,718,738	-0.70%	-0.22%
Retirement Health Care Trust	7,798,815,158	(19,458,099)	(27,208,126)	7,752,148,933	-0.60%	-0.25%
Total Defined Benefit Plans	17,400,880,659	(40,063,634)	(73,949,354)	17,286,867,671	-0.66%	-0.23%
Defined Contribution Plans:						
Participant Directed Retirement	1,231,376,469	(15,573,385)	7,323,163	1,223,126,247	-0.67%	-1.26%
Health Reimbursement Arrangement	422,910,078	(1,036,364)	3,234,728	425,108,442	0.52%	-0.24%
Retiree Medical Plan	118,714,159	(288,591)	1,368,727	119,794,295	0.91%	-0.24%
Defined Benefit Occupational Death and Disability:						
Public Employees	25,142,007	(61,326)	222,661	25,303,342	0.64%	-0.24%
Police and Firefighters	11,491,962	(28,152)	92,632	11,556,442	0.56%	-0.24%
Total Defined Contribution Plans	1,809,634,675	(16,987,818)	12,241,911	1,804,888,768	-0.26%	-0.94%
Total PERS	19,210,515,334	(57,051,452)	(61,707,443)	19,091,756,439	-0.62%	-0.30%
<u>Teachers' Retirement System (TRS)</u>						
Defined Benefit Plans:						
Retirement Trust	5,627,253,443	(11,067,599)	(41,197,043)	5,574,988,801	-0.93%	-0.20%
Retirement Health Care Trust	2,938,893,960	(7,325,986)	(10,951,232)	2,920,616,742	-0.62%	-0.25%
Total Defined Benefit Plans	8,566,147,403	(18,393,585)	(52,148,275)	8,495,605,543	-0.82%	-0.22%
Defined Contribution Plans:						
Participant Directed Retirement	521,760,982	(6,905,429)	(1,445,507)	513,410,046	-1.60%	-1.33%
Health Reimbursement Arrangement	126,666,522	(306,208)	63,411	126,423,725	-0.19%	-0.24%
Retiree Medical Plan	42,191,601	(103,121)	27,442	42,115,922	-0.18%	-0.24%
Defined Benefit Occupational Death and Disability	4,339,369	(10,622)	(1)	4,328,746	-0.24%	-0.24%
Total Defined Contribution Plans	694,958,474	(7,325,380)	(1,354,655)	686,278,439	-1.25%	-1.06%
Total TRS	9,261,105,877	(25,718,965)	(53,502,930)	9,181,883,982	-0.86%	-0.28%
<u>Judicial Retirement System (JRS)</u>						
Defined Benefit Plan Retirement Trust	188,706,493	(362,739)	(694,084)	187,649,670	-0.56%	-0.19%
Defined Benefit Retirement Health Care Trust	33,216,798	(82,409)	(66,378)	33,068,011	-0.45%	-0.25%
Total JRS	221,923,291	(445,148)	(760,462)	220,717,681	-0.54%	-0.20%
<u>National Guard/Naval Militia Retirement System (MRS)</u>						
Defined Benefit Plan Retirement Trust	41,809,805	(27,744)	(164,134)	41,617,927	-0.46%	-0.07%
<u>Other Participant Directed Plans</u>						
Supplemental Annuity Plan	4,126,219,004	(21,625,040)	(4,513,548)	4,100,080,416	-0.63%	-0.52%
Deferred Compensation Plan	989,786,576	(7,979,063)	(2,304,788)	979,502,725	-1.04%	-0.81%
Total All Funds	33,851,359,887	(112,847,412)	(122,953,305)	33,615,559,170		
Total Non-Participant Directed	26,982,216,856	(60,764,495)	(122,012,625)	26,799,439,736	-0.68%	-0.23%
Total Participant Directed	6,869,143,031	(52,082,917)	(940,680)	6,816,119,434	-0.77%	-0.76%
Total All Funds	\$ 33,851,359,887	\$ (112,847,412)	\$ (122,953,305)	\$ 33,615,559,170	-0.70%	-0.33%

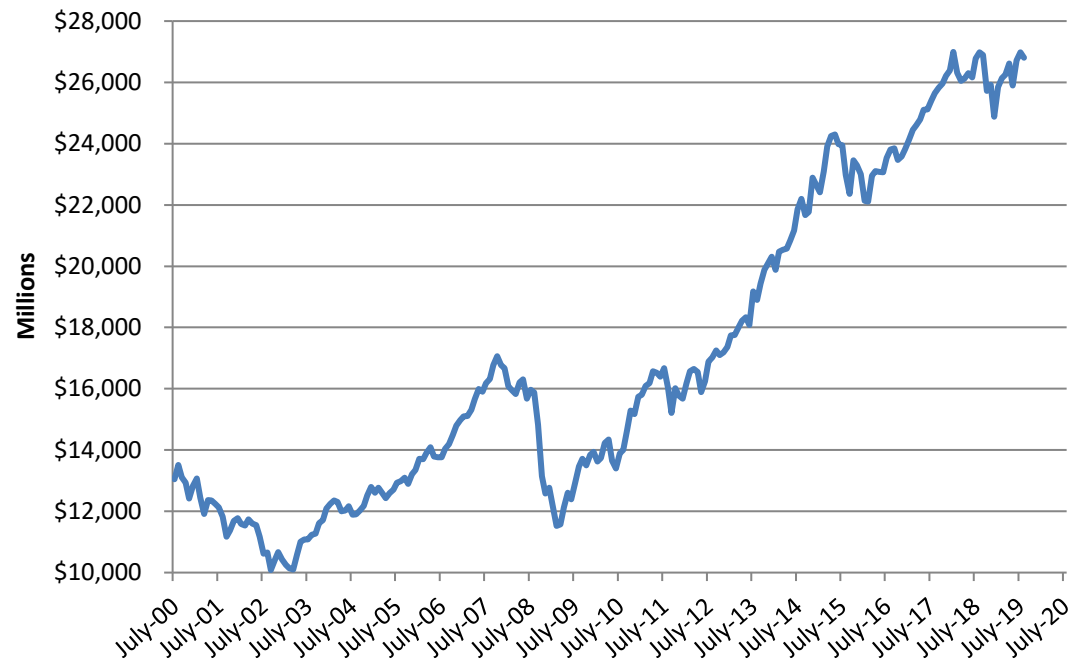
Notes:

(1) Includes interest, dividends, securities lending, expenses, realized and unrealized gains/losses

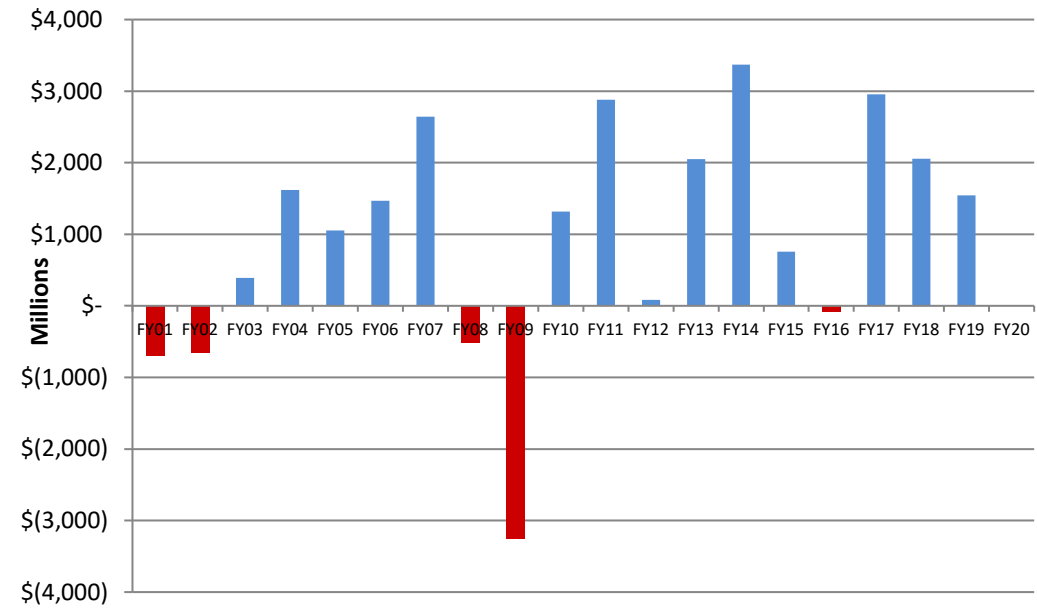
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: <http://www.revenue.state.ak.us/treasury/programs/programs/other/armb/investmentresults.aspx>

Total Non Participant Directed Assets As of August 30, 2019

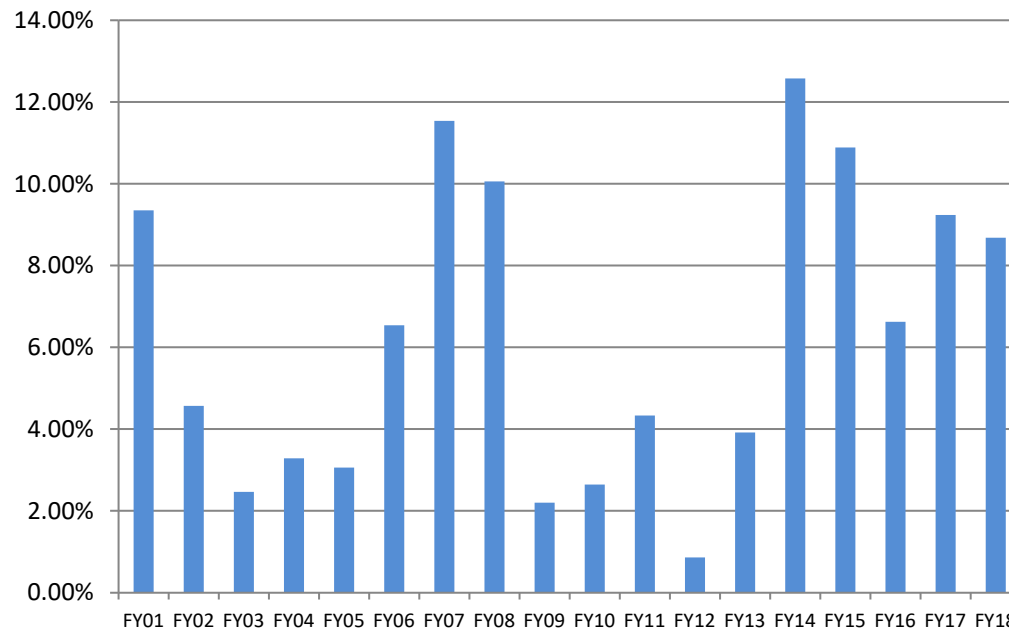
Total Assets History



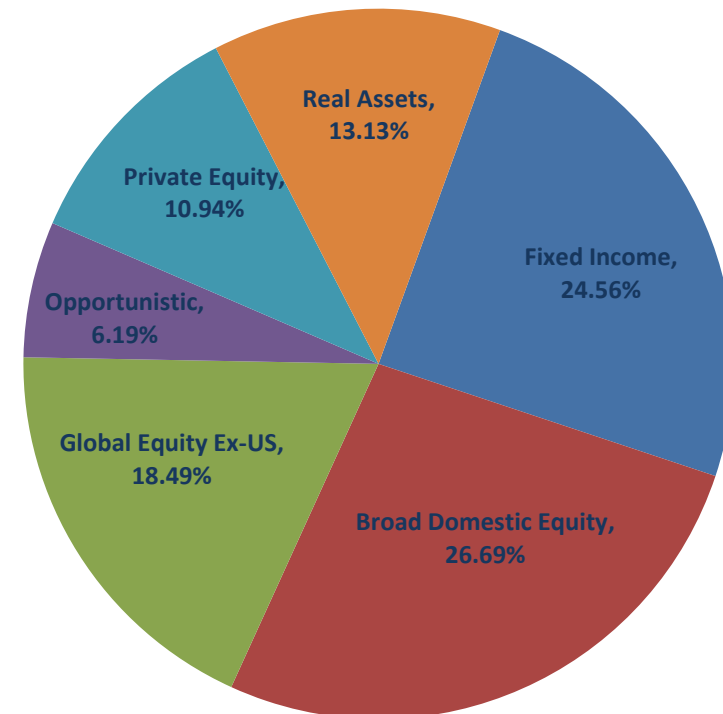
Income by Fiscal Year



5-year Annualized Returns as of Fiscal Year End



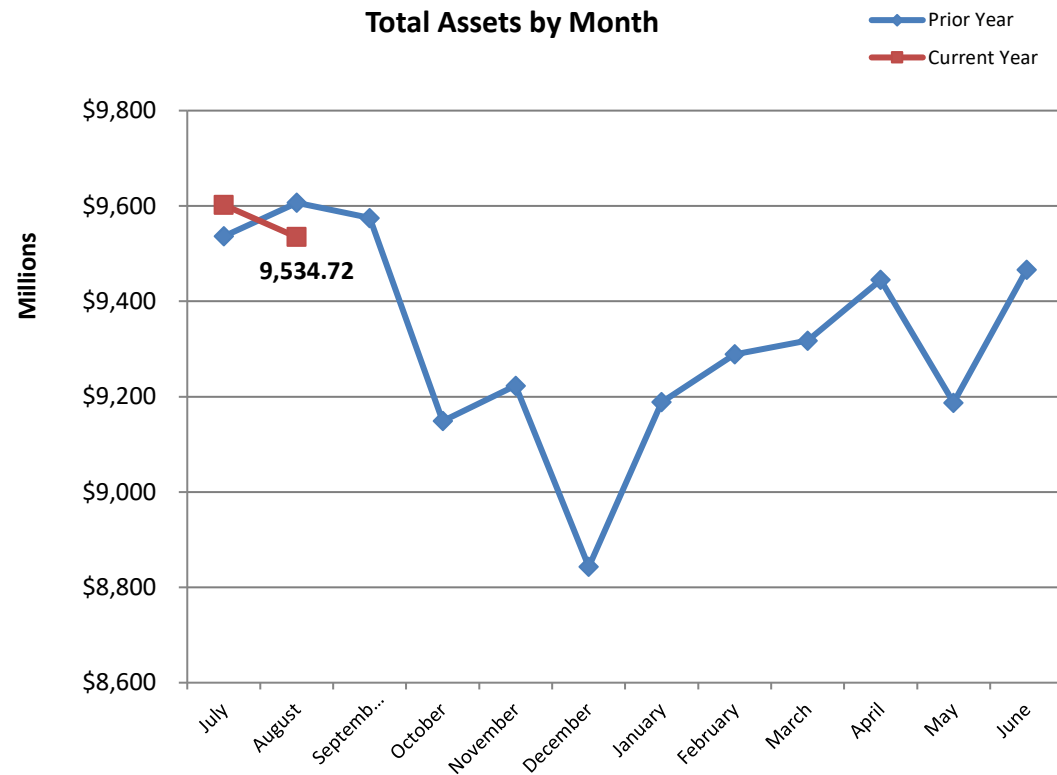
Actual Asset Allocation



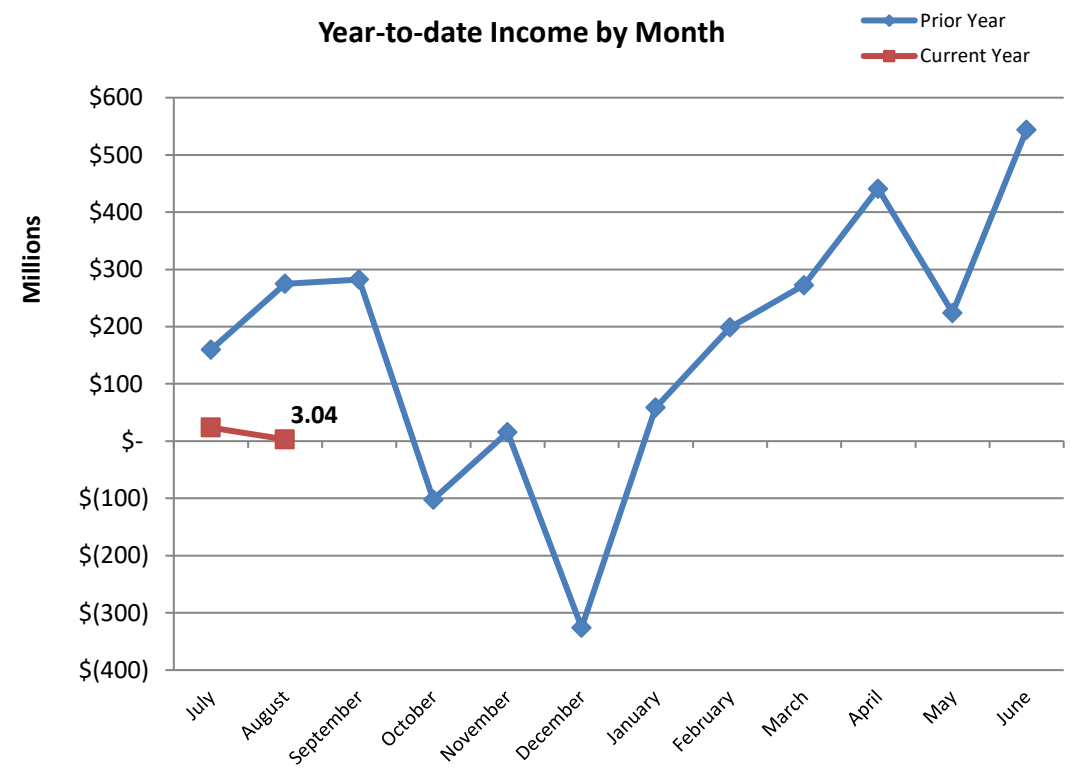
Public Employees' Retirement Pension Trust Fund

Fiscal Year-to-Date through August 30, 2019

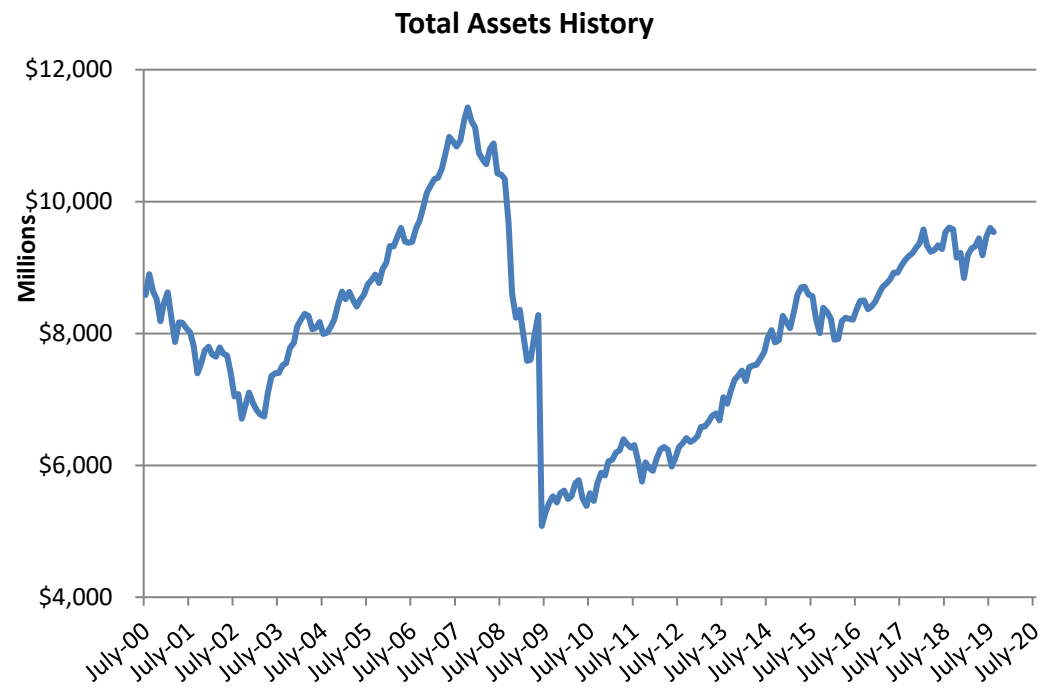
Total Assets by Month



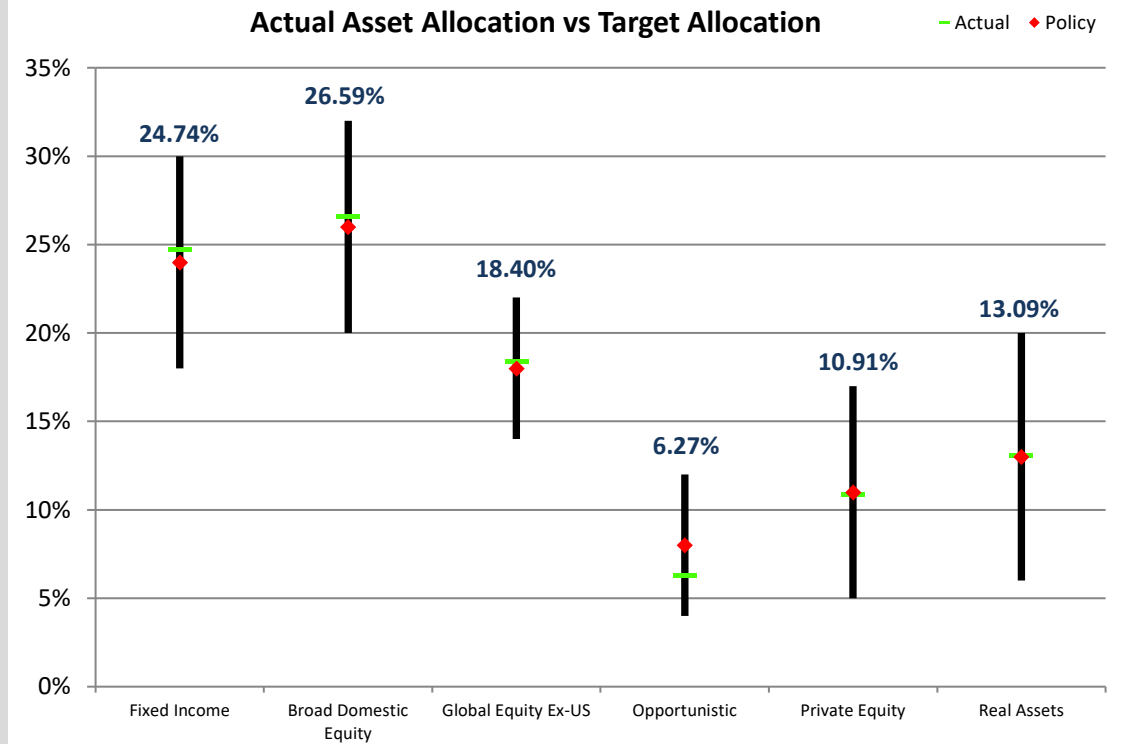
Year-to-date Income by Month



Total Assets History



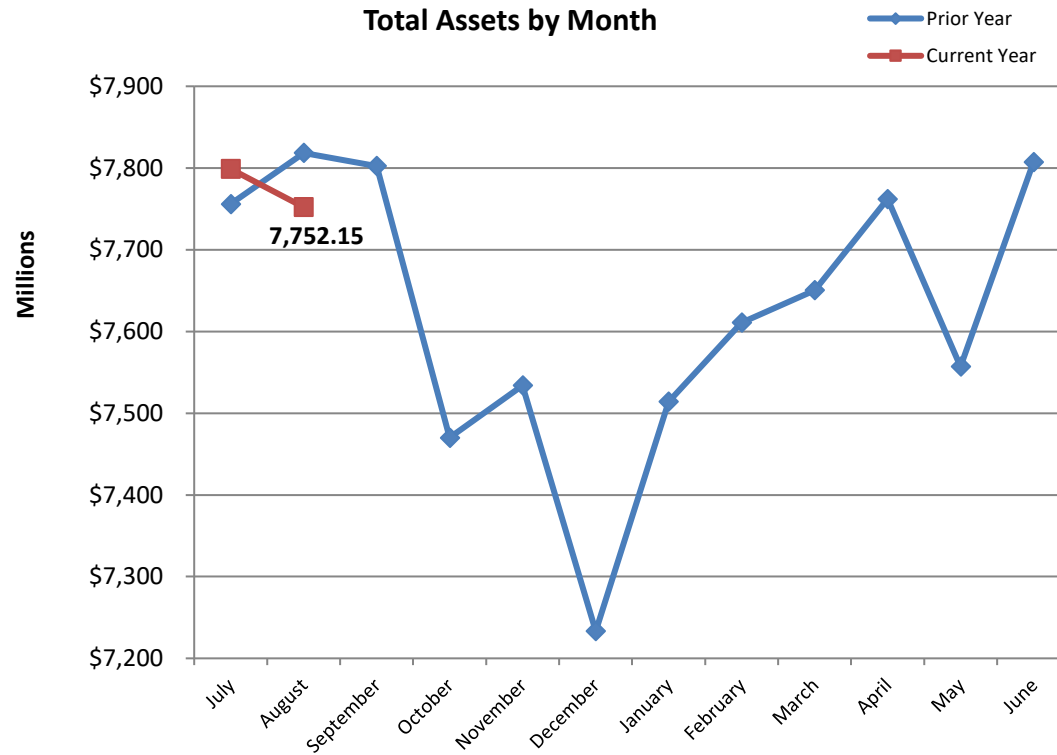
Actual Asset Allocation vs Target Allocation



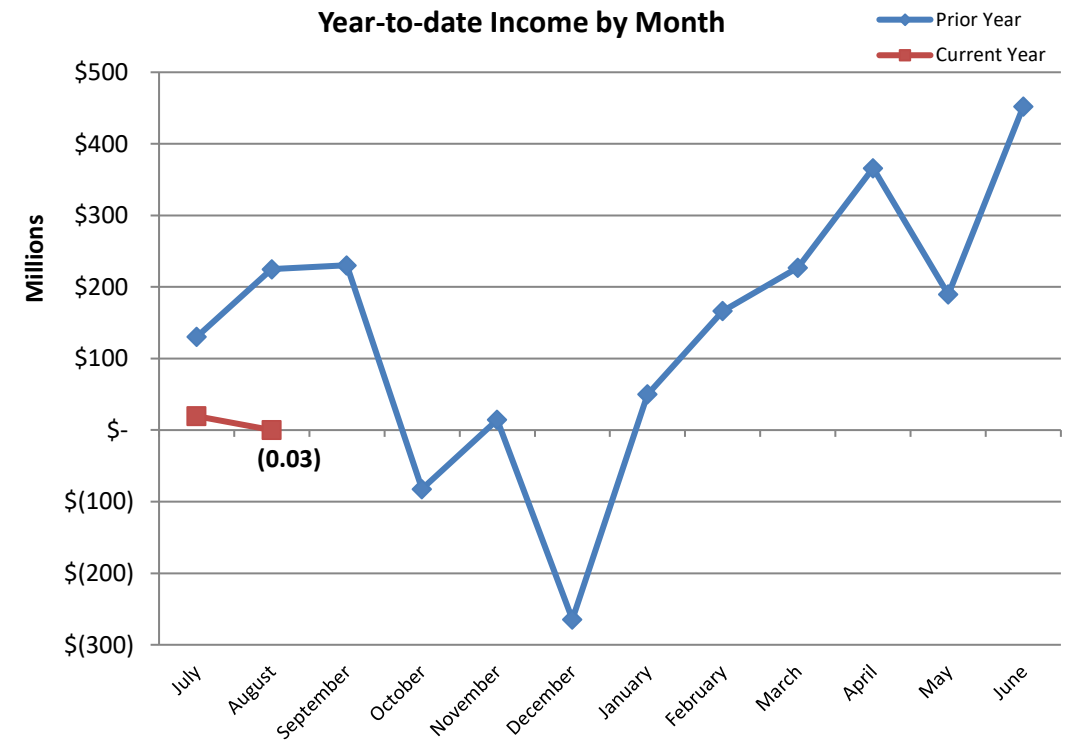
Public Employees' Retirement Health Care Trust Fund

Fiscal Year-to-Date through August 30, 2019

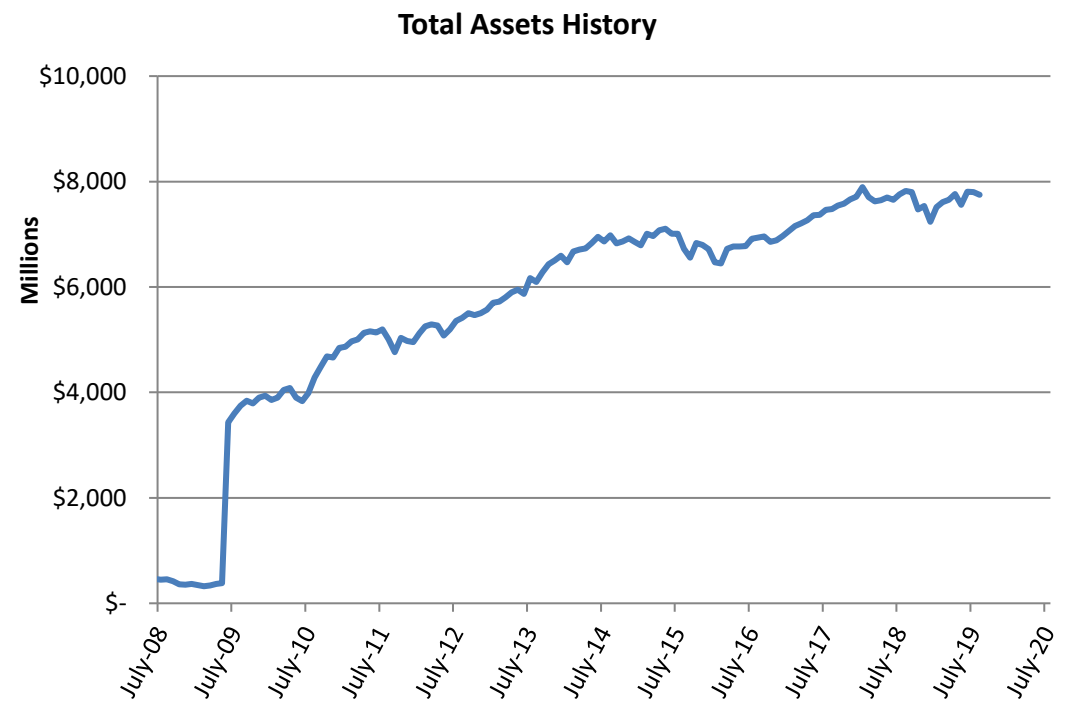
Total Assets by Month



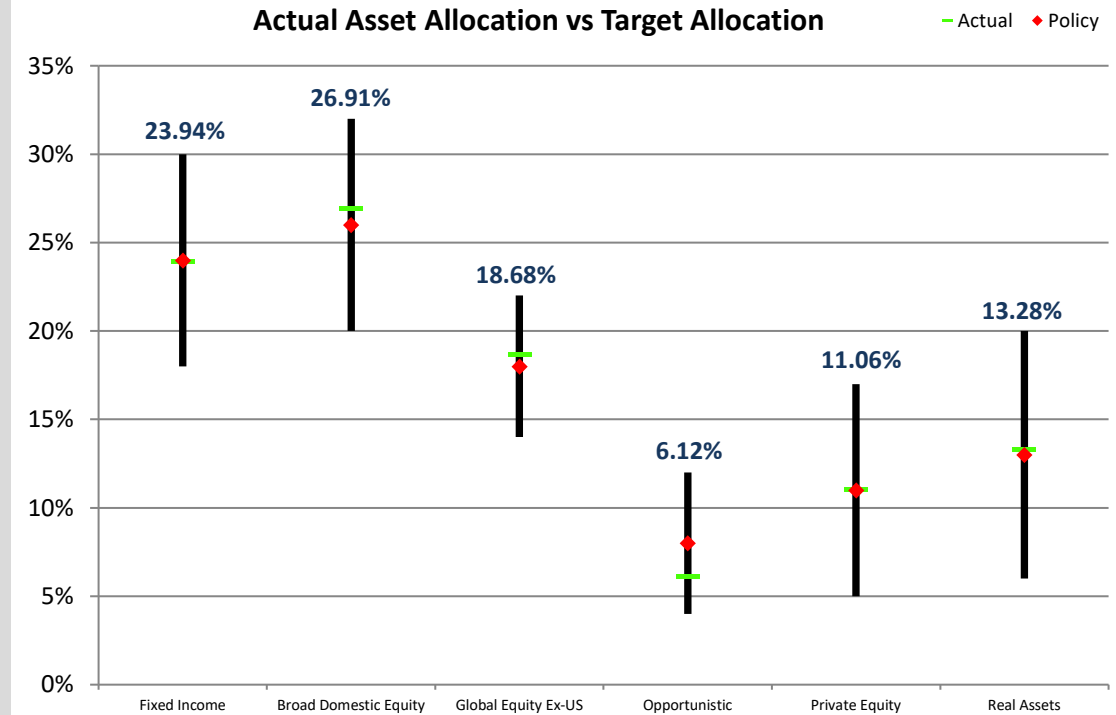
Year-to-date Income by Month



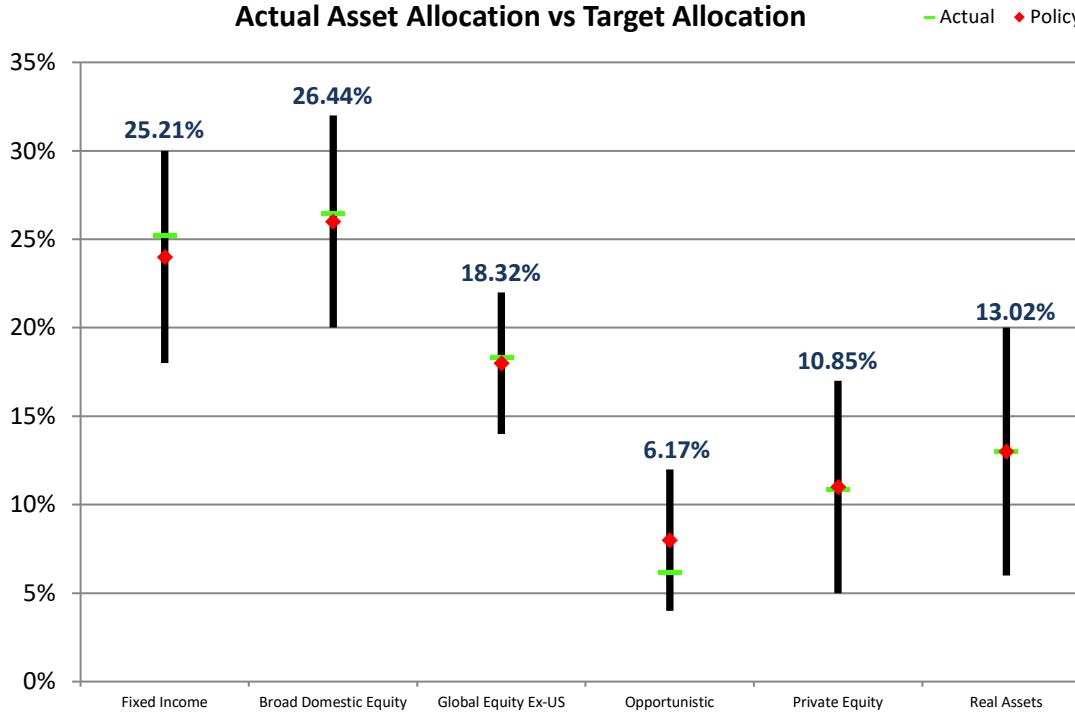
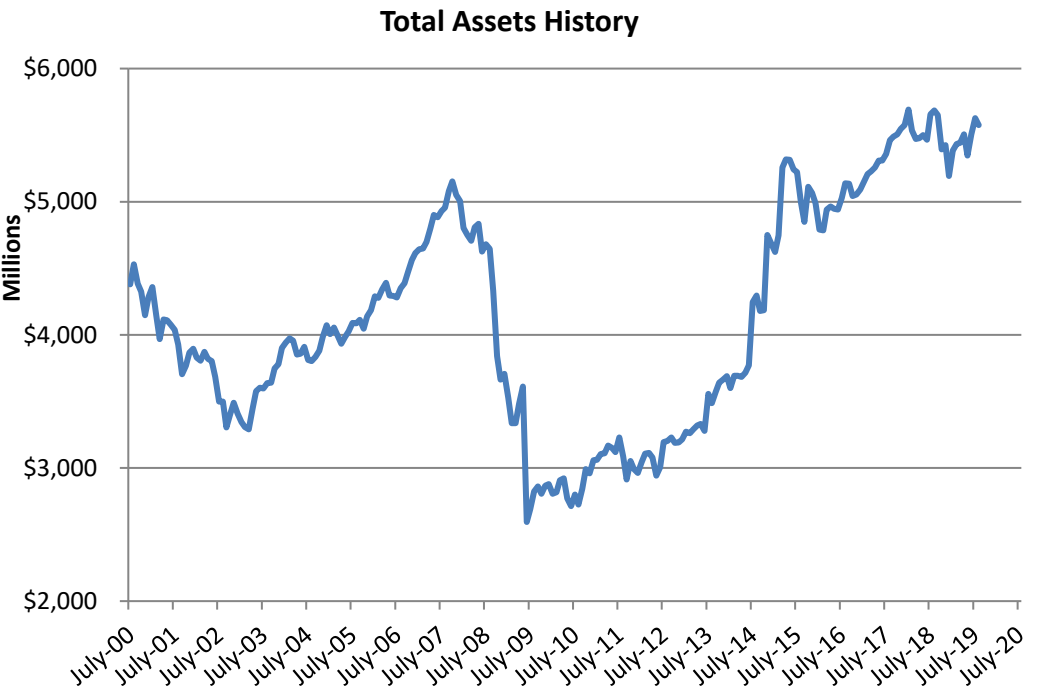
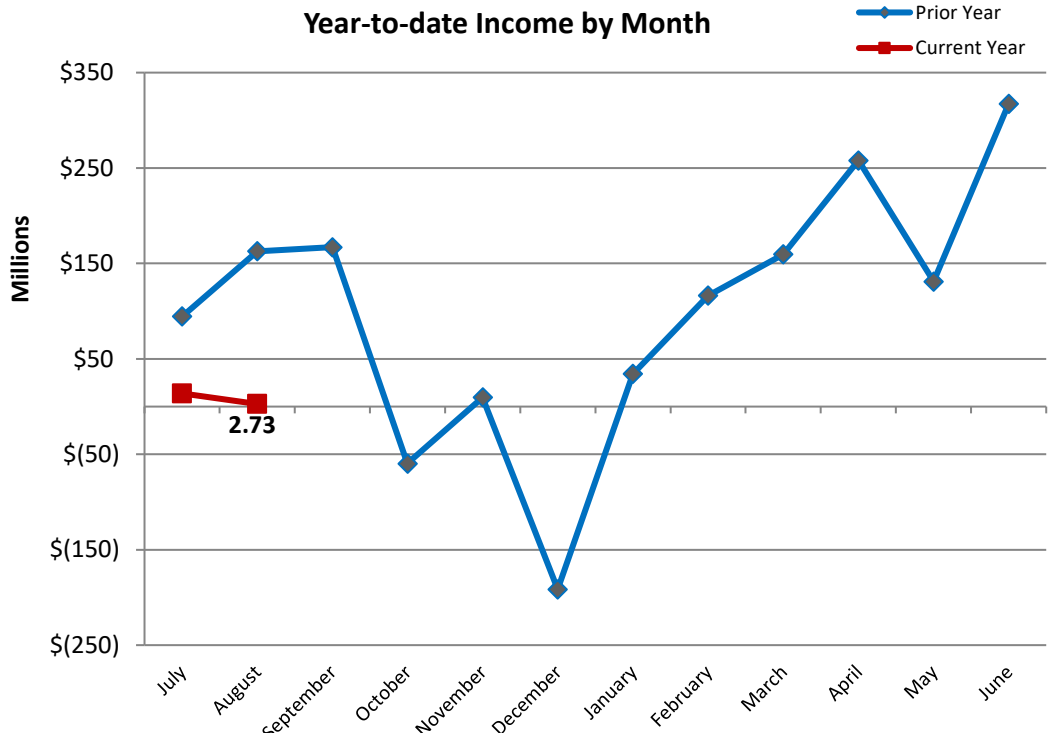
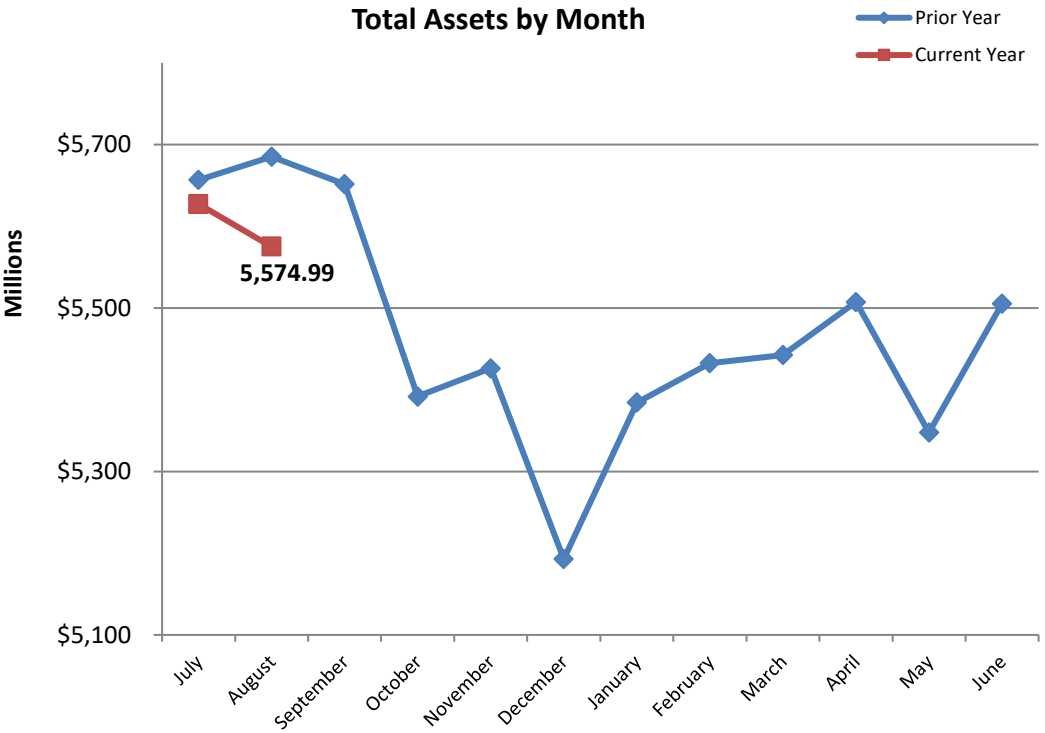
Total Assets History



Actual Asset Allocation vs Target Allocation



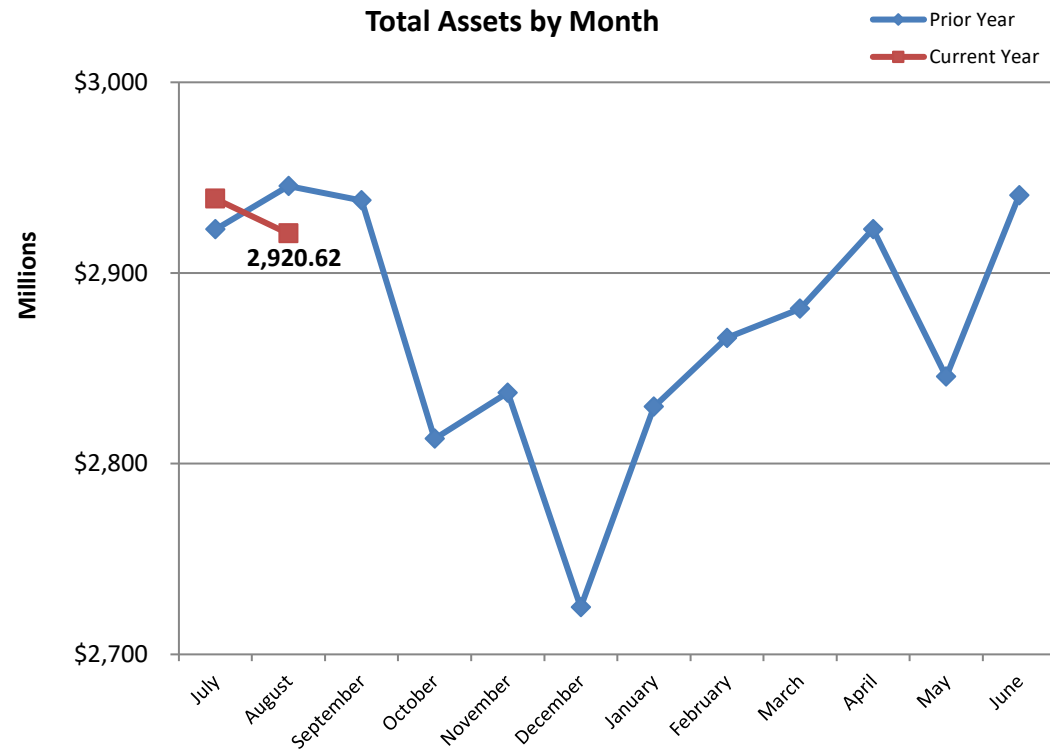
Teachers' Retirement Pension Trust Fund Fiscal Year-to-Date through August 30, 2019



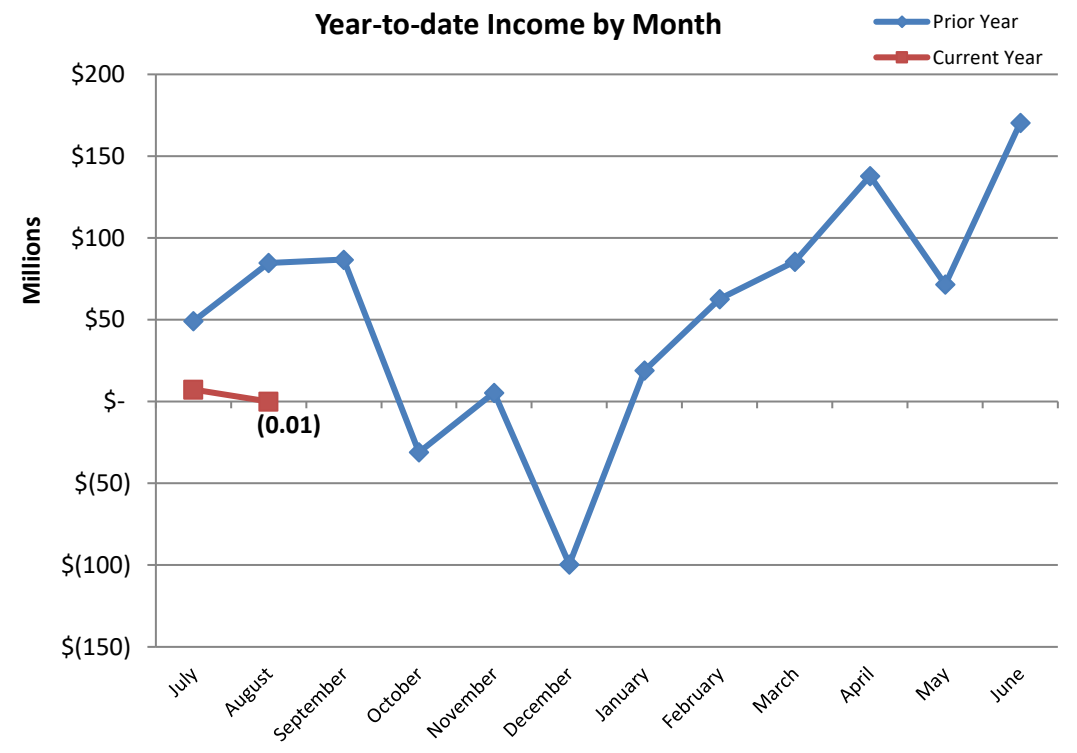
Teachers' Retirement Health Care Trust Fund

Fiscal Year-to-Date through August 30, 2019

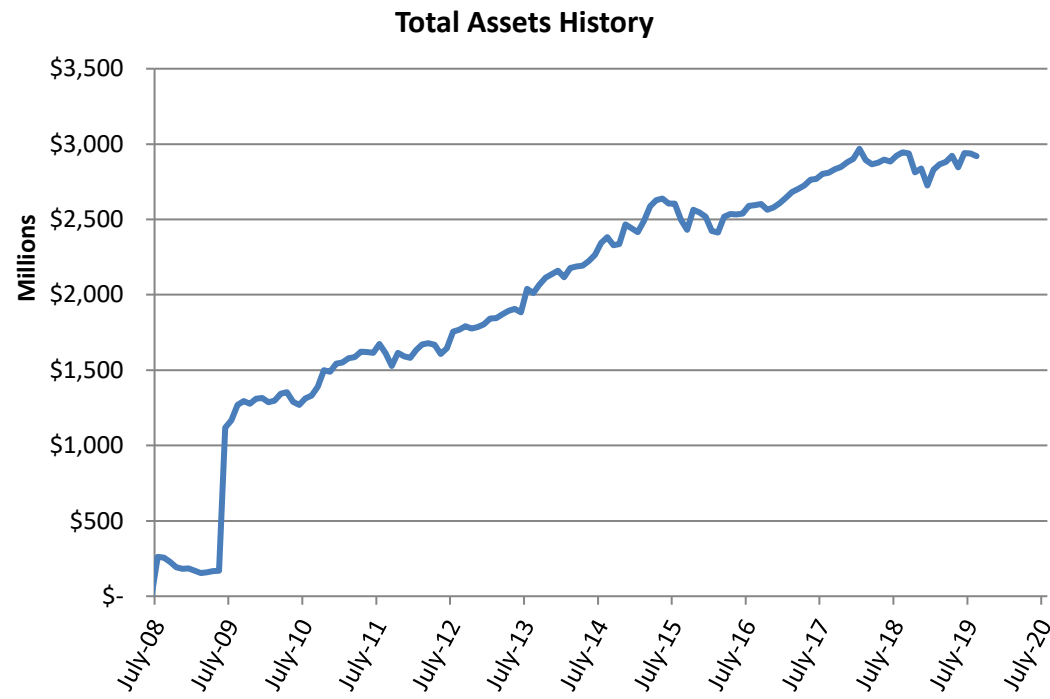
Total Assets by Month



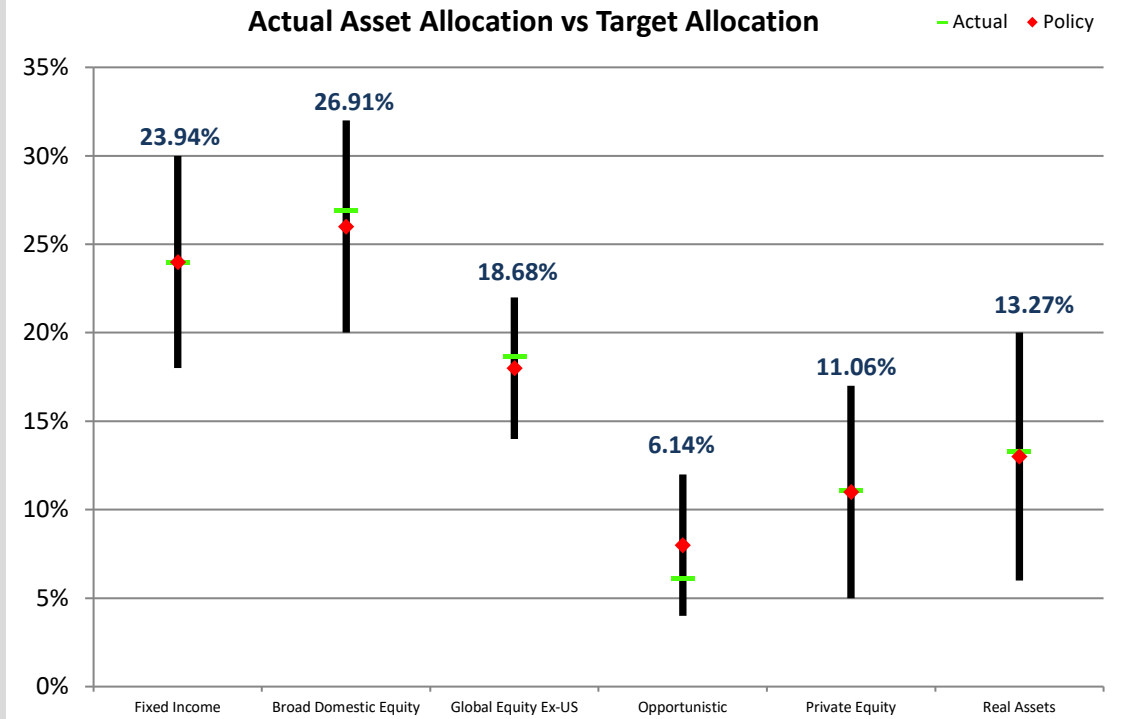
Year-to-date Income by Month



Total Assets History

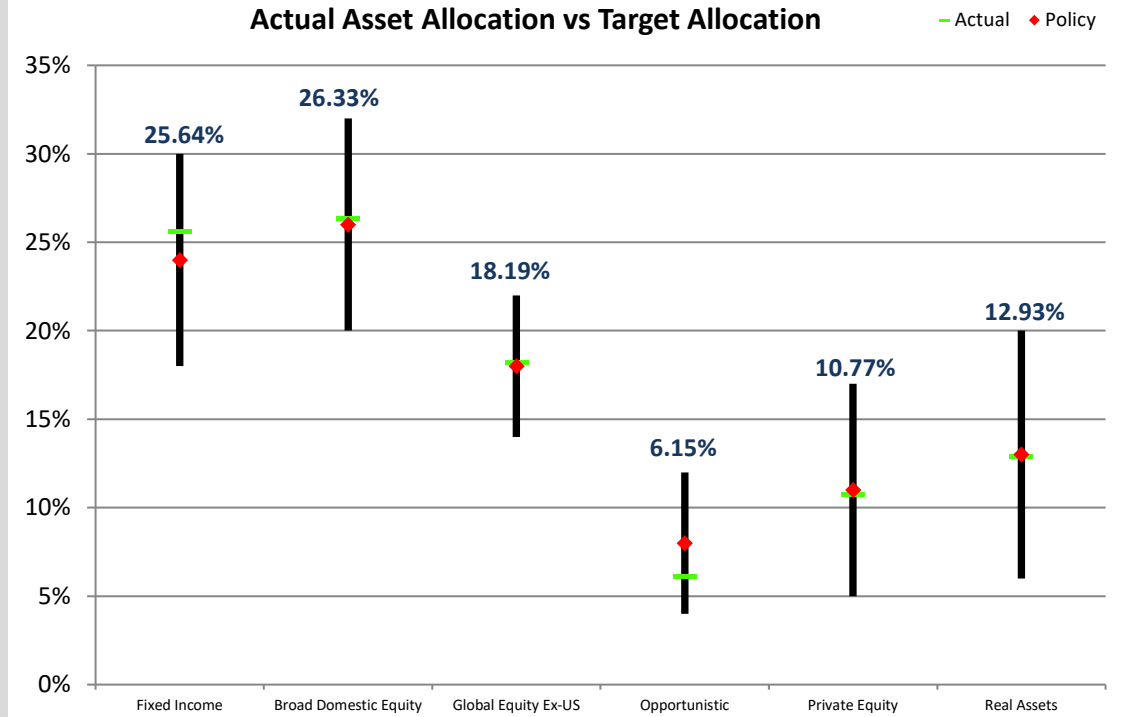
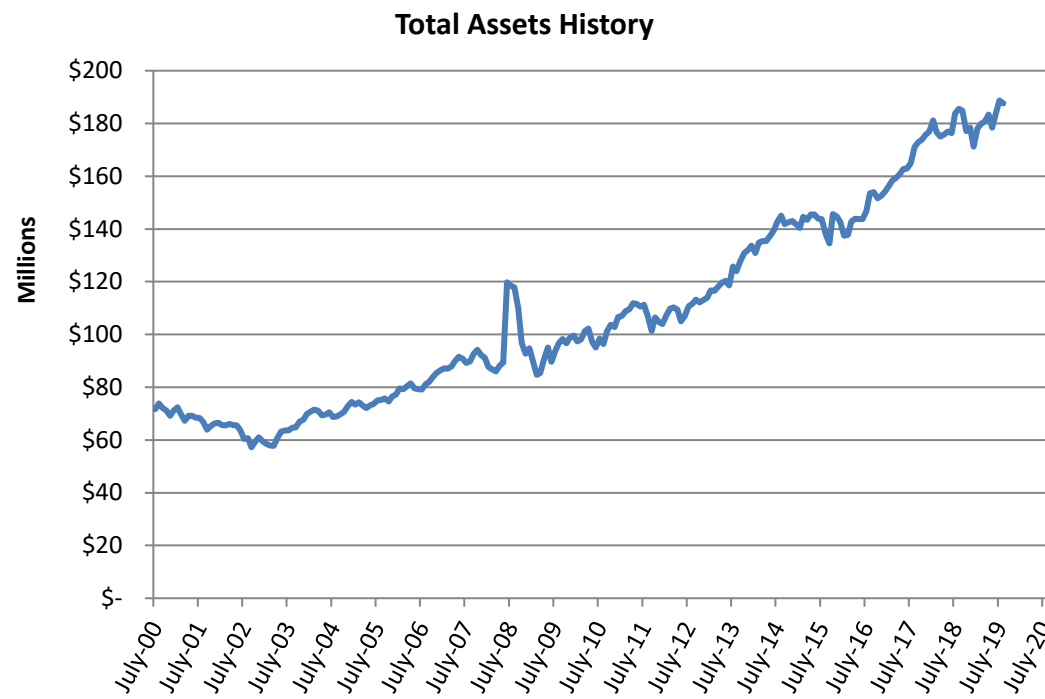
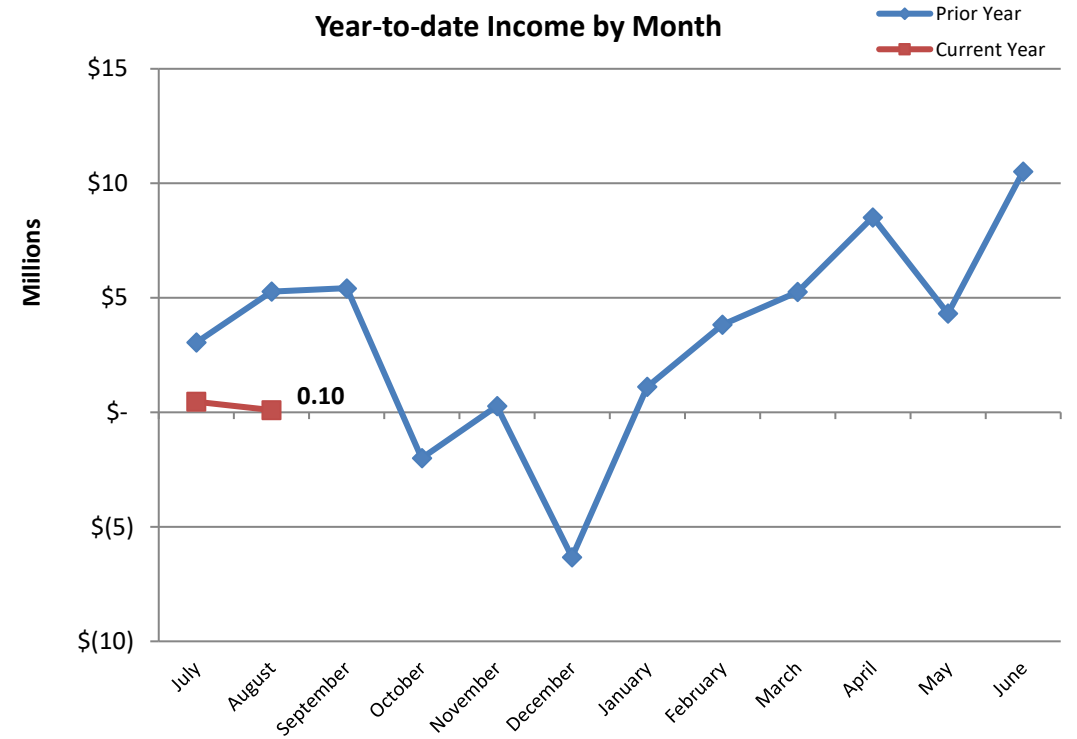
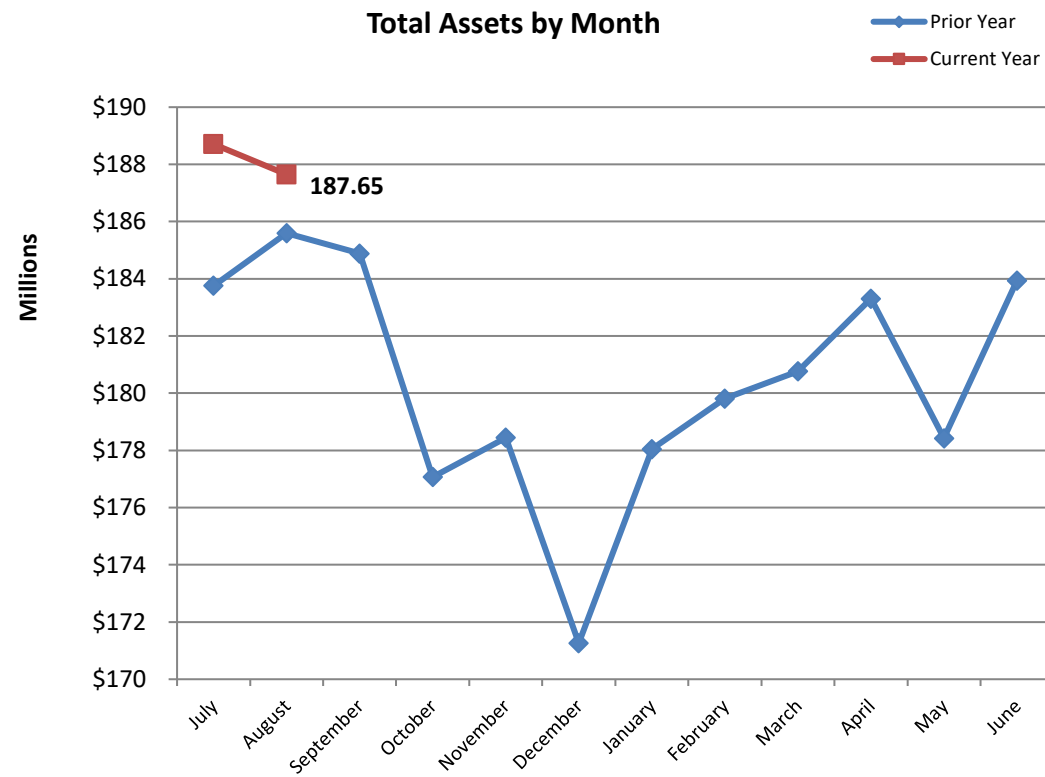


Actual Asset Allocation vs Target Allocation



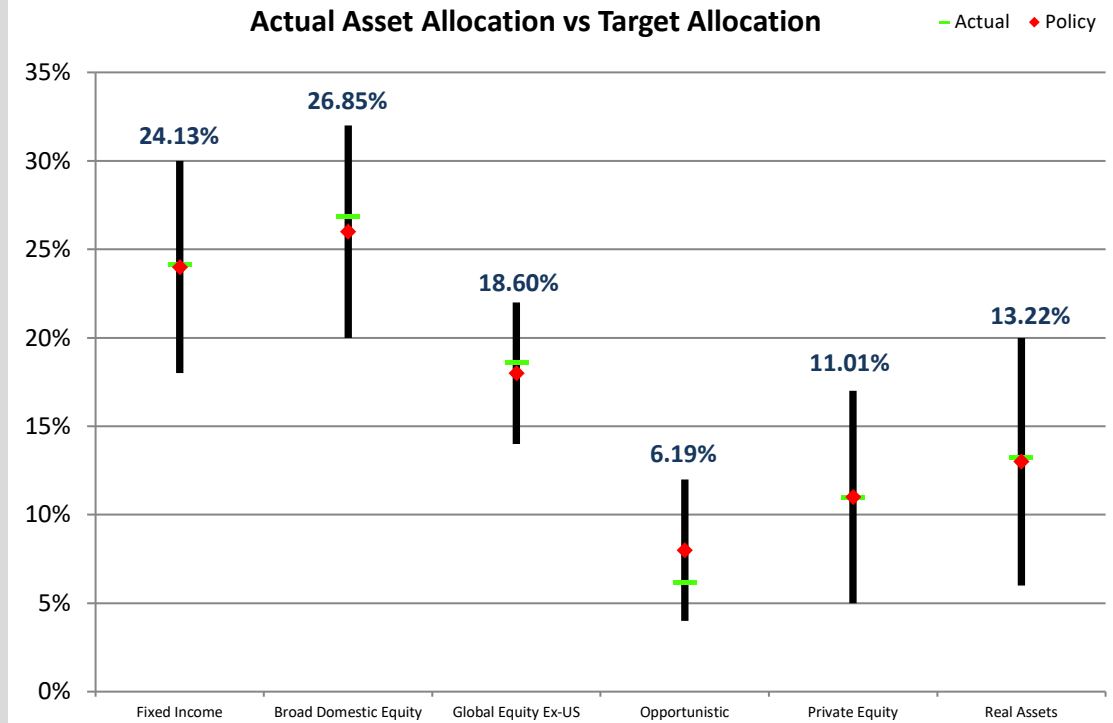
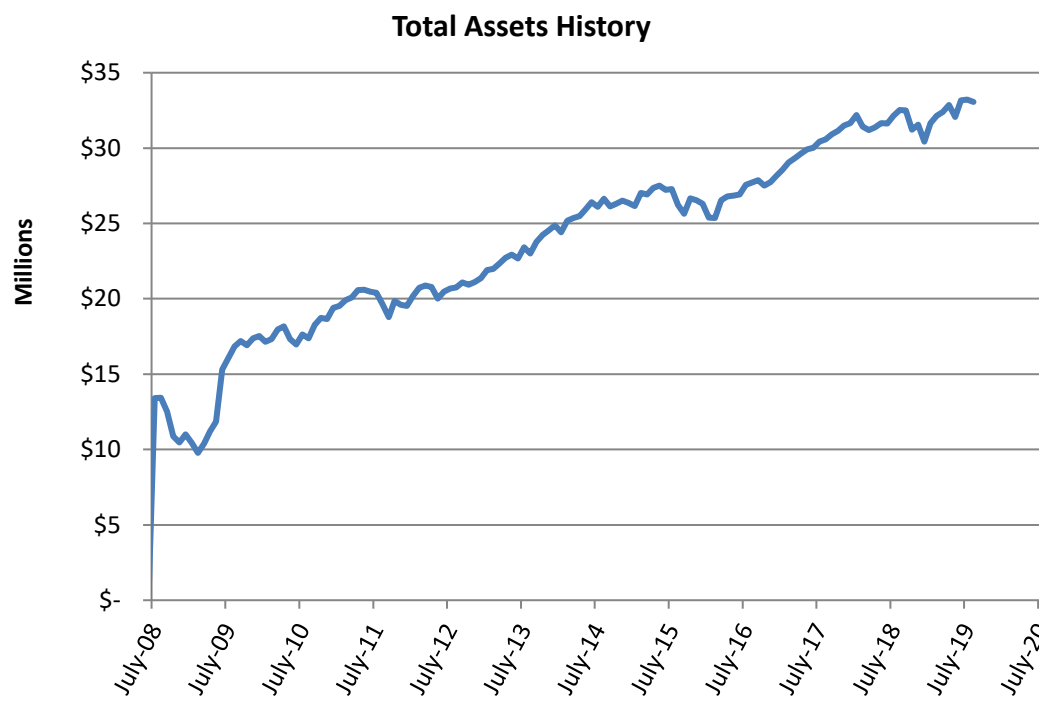
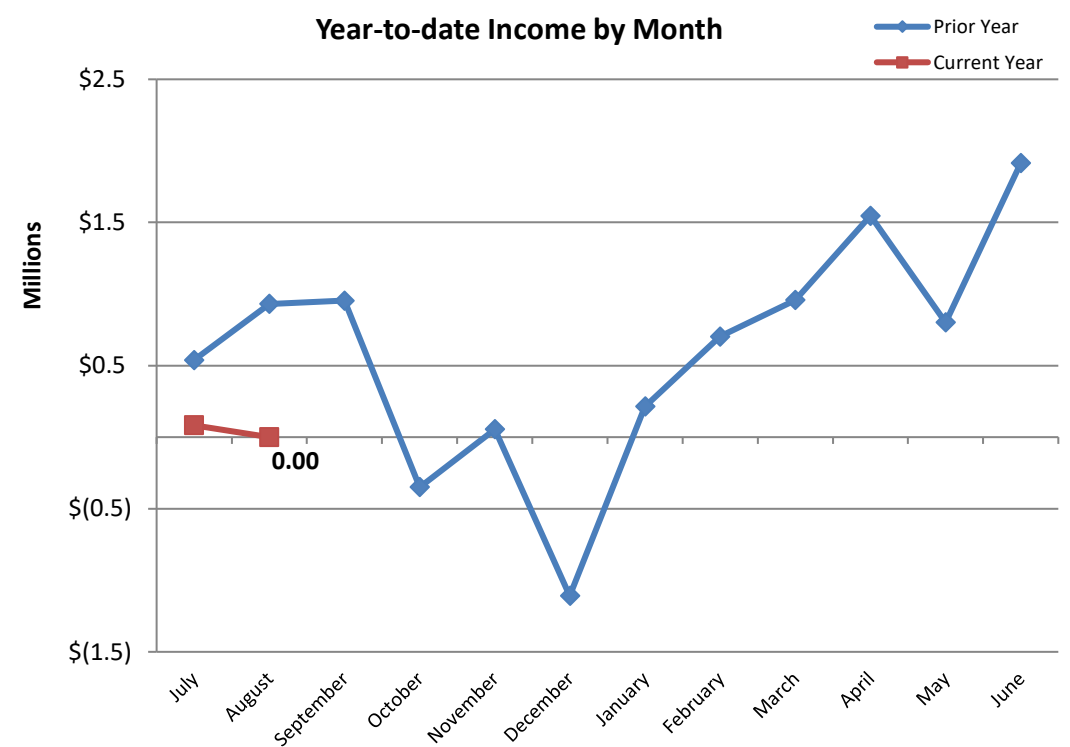
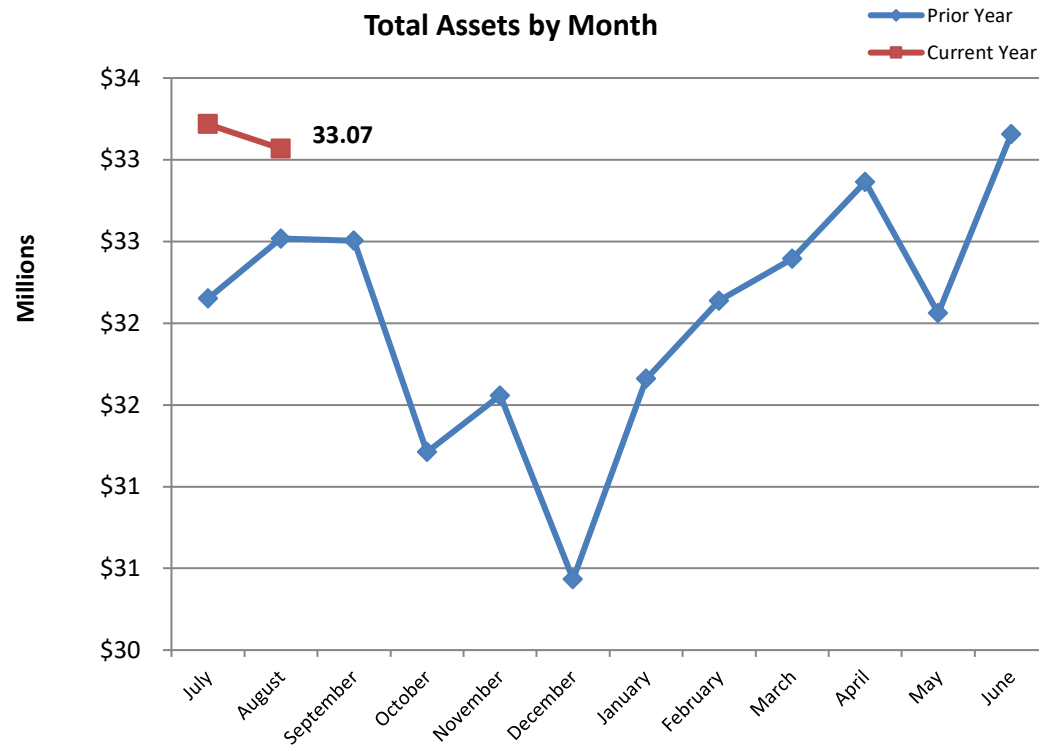
Judicial Retirement Pension Trust Fund

Fiscal Year-to-Date through August 30, 2019



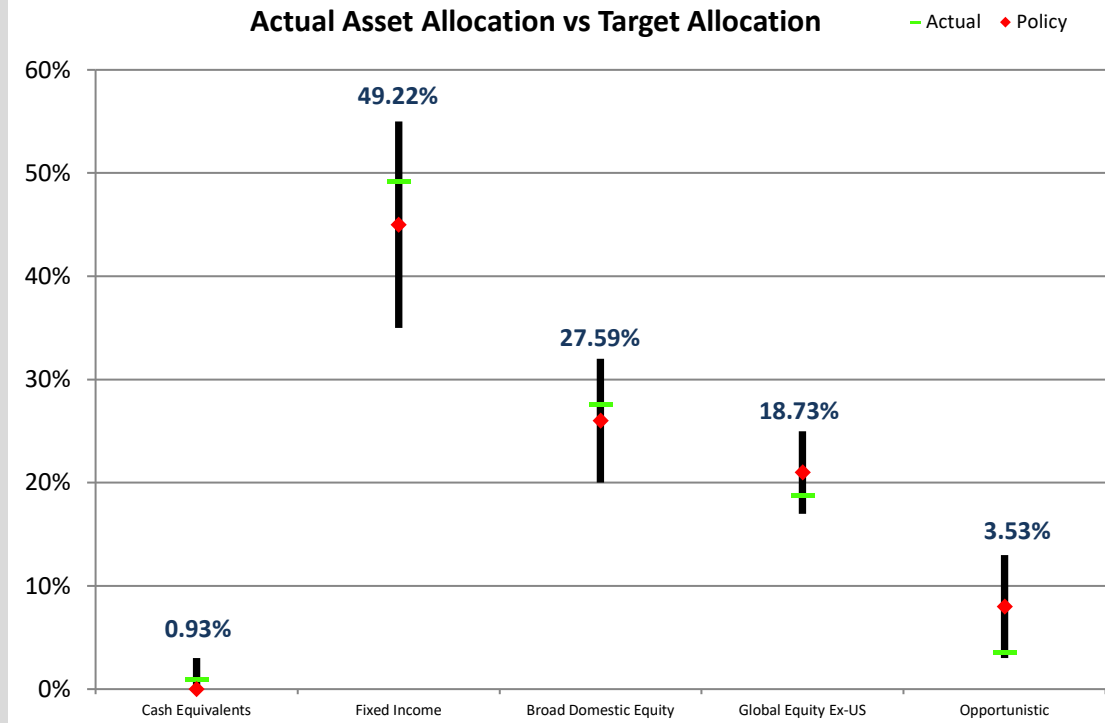
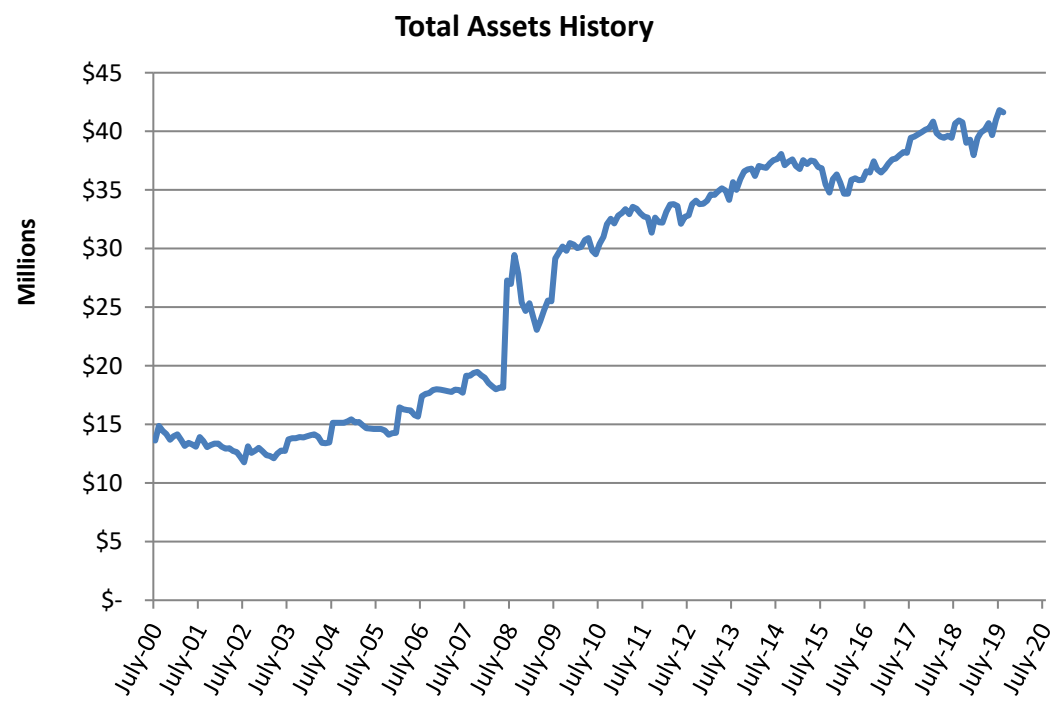
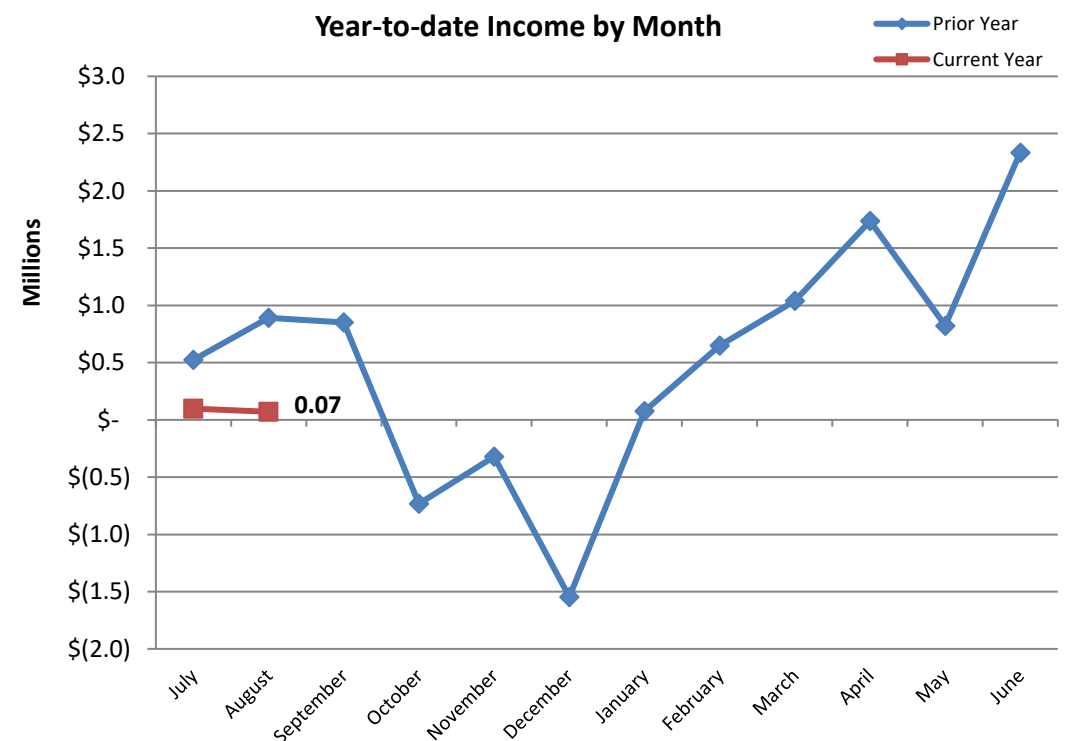
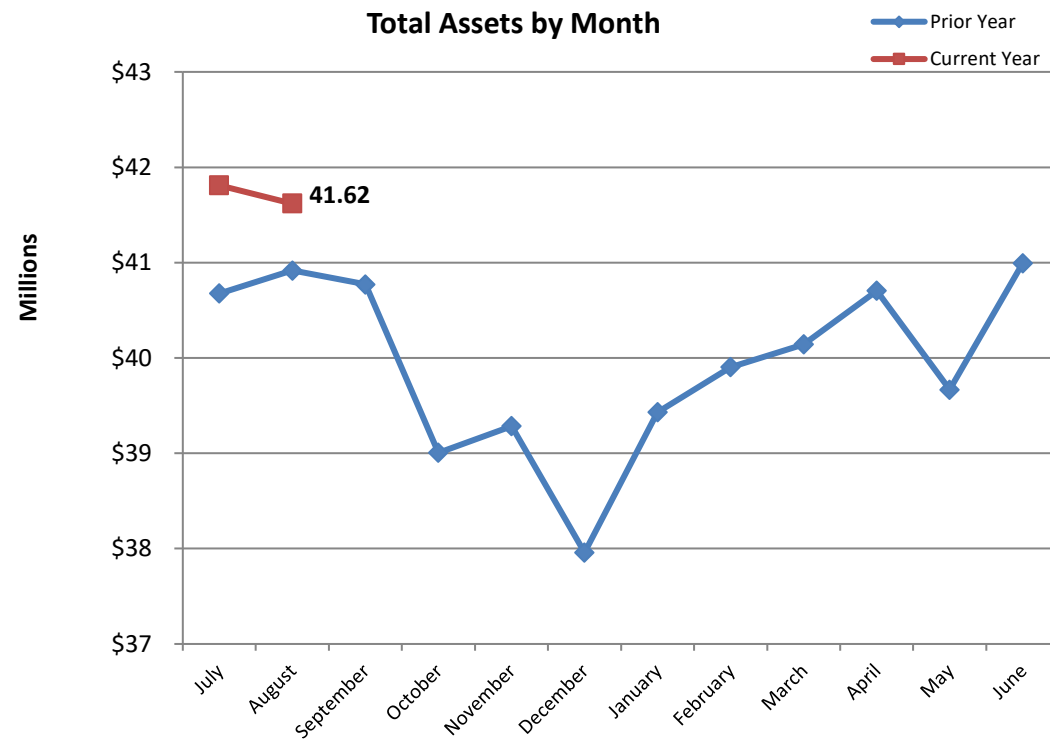
Judicial Retirement Health Care Trust Fund

Fiscal Year-to-Date through August 30, 2019



Military Retirement Trust Fund

Fiscal Year-to-Date through August 30, 2019



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 August 30, 2019

	Beginning Invested Assets	Investment Income	Net Contributions and (Withdrawals)	Ending Invested Assets	% increase (decrease)	% Change due to Investment Income
Cash						
Short-Term Fixed Income Pool	\$ 238,740,422	\$ 576,059	\$ 31,137,182	\$ 270,453,663	13.28%	0.23%
Securities Lending Income Pool	157,209	56,784	(164,038)	49,955	-68.22%	75.52%
Total Cash	<u>238,897,631</u>	<u>632,843</u>	<u>30,973,144</u>	<u>270,503,618</u>	13.23%	0.25%
Fixed Income						
Alternative Fixed Income						
Crestline Investors, Inc.	562,687,062	380,531	(7,791,792)	555,275,801	-1.32%	0.07%
Prisma Capital Partners	440,867,916	5,115,597	(33,000,000)	412,983,513	-6.32%	1.21%
Crestline Specialty Fund	29,394,303	-	-	29,394,303	-	-
Crestline Specialty Lending Fund II	24,907,083	-	-	24,907,083	-	-
Total Alternative Fixed Income	<u>1,057,856,364</u>	<u>5,496,128</u>	<u>(40,791,792)</u>	<u>1,022,560,700</u>	-3.34%	0.53%
Opportunistic Fixed Income						
Fidelity Inst. Asset Mgmt. High Yield CMBS	167,760,117	2,443,336	15,000,000	185,203,453	10.40%	1.39%
Fidelity Institutional Asset Management	352,201,024	5,172,413	184,607	357,558,044	1.52%	1.47%
MacKay Shields, LLC	5,679,522	235,271	-	5,914,793	4.14%	4.14%
Mondrian Investment Partners	473,568	9,106	(413,522)	69,152	-85.40%	3.41%
Western Asset Management	(1,310)	1,310	-	-	100.00%	100.00%
Total Opportunistic Fixed Income	<u>526,112,921</u>	<u>7,861,436</u>	<u>14,771,085</u>	<u>548,745,442</u>	4.30%	1.47%
US Aggregate Bond Index						
Blackrock US Debt Index Non-Lending Fund	13,232,770	343,321	1,428	13,577,519	2.61%	2.59%
ARMB US Treasury Pool						
ARMB US Treasury Fixed Income	4,705,528,390	71,143,158	(2,654,901,462)	2,121,770,086	-54.91%	2.11%
ARMB Barclays Agg Bond Fund						
ARMB Barclays Agg Bond Fund	-	23,250,568	2,582,462,809	2,605,713,377	100.00%	1.80%
Total Fixed Income	<u>6,302,730,445</u>	<u>108,094,611</u>	<u>(98,457,932)</u>	<u>6,312,367,124</u>	0.15%	1.73%
Domestic Equities						
Small Cap						
Passively Managed						
ARMB Futures Small Cap	4,012,987	7,151	(4,012,975)	7,163	-99.82%	0.36%
ARMB S&P 600	559,901,201	(25,907,426)	16,358,414	550,352,189	-1.71%	-4.56%
SSgA Russell 2000 Growth	6,633	183	(1,135)	5,681	-14.35%	3.02%
SSgA Russell 2000 Value	8,235	406	(1,263)	7,378	-10.41%	5.34%
Total Passive	<u>563,929,056</u>	<u>(25,899,686)</u>	<u>12,343,041</u>	<u>550,372,411</u>	-2.40%	-4.54%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended August 30, 2019

Actively Managed						
DePrince, Race & Zollo Inc.- Micro Cap	877,016	41	(877,057)	-	-100.00%	0.01%
Lord Abbett & Co.- Micro Cap	(176,323)	17,396	158,927	-	-100.00%	17.96%
Transition Account	187,330	(3,186)	(4,770)	179,374	-4.25%	-1.72%
Zebra Capital Management	15,355,795	(11,260)	(15,344,517)	18	-100.00%	-0.15%
Total Active	16,243,818	2,991	(16,067,417)	179,392	-98.90%	0.04%
Total Small Cap	580,172,874	(25,896,695)	(3,724,376)	550,551,803	-5.11%	-4.48%
Large Cap						
Passively Managed						
ARMB Futures Large Cap	4,048,737	7,214	(4,048,708)	7,243	-99.82%	0.36%
ARMB S&P 900	4,199,946,503	(70,028,078)	486,704,327	4,616,622,752	9.92%	-1.58%
ARMB Russell 1000 Value	1,020,353	(91,033)	(934,533)	(5,213)	-100.51%	-16.46%
ARMB Russell Top 200	37,411	(246)	(42,390)	(5,225)	-113.97%	-1.52%
Total Passive	4,205,053,004	(70,112,143)	481,678,696	4,616,619,557	9.79%	-1.58%
Actively Managed						
Allianz Global Investors	9,836	(8)	-	9,828	-0.08%	-0.08%
ARMB Equity Yield	118,475	(21,888)	(91,268)	5,319	-95.51%	-30.05%
ARMB Large Cap Multi-Factor	106,473,421	(2,088,121)	-	104,385,300	-1.96%	-1.96%
ARMB S&P 500 Equal Weight	228,179	(33,363)	(199,697)	(4,881)	-102.14%	-26.00%
ARMB Scientific Beta	1,454,421,660	(15,355,948)	442,280,830	1,881,346,542	29.35%	-0.92%
Barrow, Hanley, Mewhinney & Strauss	16,907	(14)	-	16,893	-0.08%	-0.08%
Lazard Freres	(134,954)	-	131,981	(2,973)	97.80%	-
Portable Alpha	352,095,913	(13,311,024)	(338,927,480)	(142,591)	-100.04%	-7.29%
Transition Account	296,091	(59,514)	(236,202)	375	-99.87%	-33.44%
Total Active	1,913,525,528	(30,869,880)	102,958,164	1,985,613,812	3.77%	-1.57%
Total Large Cap	6,118,578,532	(100,982,023)	584,636,860	6,602,233,369	7.90%	-1.58%
Total Domestic Equity	6,698,751,406	(126,878,718)	580,912,484	7,152,785,172	6.78%	-1.82%
Global Equities Ex US						
Small Cap						
Mondrian Investment Partners	164,090,499	(5,070,242)	(25,000,000)	134,020,257	-18.33%	-3.34%
Schroder Investment Management	161,224,409	(7,549,945)	(25,000,000)	128,674,464	-20.19%	-5.08%
Total Small Cap	325,314,908	(12,620,187)	(50,000,000)	262,694,721	-19.25%	-4.20%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended August 30, 2019

Large Cap

Allianz Global Investors	131,022	(1,143)	-	129,879	-0.87%	-0.87%
Arrow Street Capital	385,842,721	(11,420,686)	436,219	374,858,254	-2.85%	-2.96%
Baillie Gifford Overseas Limited	390,352,290	(11,044,992)	(49,608,258)	329,699,040	-15.54%	-3.02%
Blackrock ACWI Ex-US IMI	331,377,430	(10,175,125)	127,087	321,329,392	-3.03%	-3.07%
Brandes Investment Partners	723,735,702	(26,176,400)	-	697,559,302	-3.62%	-3.62%
Cap Guardian Trust Co	496,755,285	(6,557,733)	(99,428,498)	390,769,054	-21.34%	-1.47%
Lazard Freres	335,450,255	(10,234,202)	89,644	325,305,697	-3.02%	-3.05%
Legal & General	196,846,296	(3,838,688)	-	193,007,608	-1.95%	-1.95%
McKinley Capital Management	346,334,251	(10,982,680)	(50,000,000)	285,351,571	-17.61%	-3.42%
SSgA MSCI World Ex-US IMI Index Fund	992,875,532	(24,199,612)	-	968,675,920	-2.44%	-2.44%
State Street Global Advisors	3,309,176	3,273	-	3,312,449	0.10%	0.10%
Total Large Cap	4,203,009,960	(114,627,988)	(198,383,806)	3,889,998,166	-7.45%	-2.79%

Emerging Markets Equity

MSCI Emerging Markets Index Fund	321,373,764	(15,672,936)	-	305,700,828	-4.88%	-4.88%
DePrince, Race, and Zollo Emerging Markets	287,725,493	(18,959,718)	-	268,765,775	-6.59%	-6.59%
Sands Group	-	(3,000)	3,000	-	-	-100.00%
Lazard Asset Management	243,717,337	(14,881,358)	-	228,835,979	-6.11%	-6.11%
Total Emerging Markets	852,816,594	(49,517,012)	3,000	803,302,582	-5.81%	-5.81%
Total Global Equities	5,381,141,462	(176,765,187)	(248,380,806)	4,955,995,469	-7.90%	-3.36%

Opportunistic

Alternative Equity Strategy

Alternative Equity Strategies Transition Account	-	-	-	-	-	-
Analytic Buy Write Account	244,002	26,781	(476,415)	(205,632)	-184.27%	462.18%
ARMB STOXX Minimum Variance	94,470,268	373,641	(94,825,510)	18,399	-99.98%	0.79%
SSgA Managed Volatility-Russell 1000	1,560	-	-	1,560	-	-
McKinley Global Health Care	257,403,611	(7,188,930)	-	250,214,681	-2.79%	-2.79%
Total Alternative Equity Strategy	352,119,441	(6,788,508)	(95,301,925)	250,029,008	-28.99%	-2.23%

Alternative Beta

JPM Systemic Alpha	169,508,905	2,933,103	-	172,442,008	1.73%	1.73%
Man Group Alternative Risk Premia	329,324,251	1,796,940	-	331,121,191	0.55%	0.55%
Zebra Global Equity Advantage Fund	38,047,678	1,771,505	(37,828,224)	1,990,959	-94.77%	9.26%
Zebra Global Equity Fund	76,604,629	1,462,426	(74,163,702)	3,903,353	-94.90%	3.70%
Total Alternative Beta	613,485,463	7,963,974	(111,991,926)	509,457,511	-16.96%	1.43%

Other Opportunities

Project Pearl	10,290,795	(284,486)	-	10,006,309	-2.76%	-2.76%
Schroders Insurance Linked Securities	83,359,670	1,167,055	-	84,526,725	1.40%	1.40%
Total Other Opportunities	93,650,465	882,569	-	94,533,034	0.94%	0.94%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended August 30, 2019

Tactical Allocation Strategies						
Fidelity Signals	407,454,875	(724,846)	158,561	406,888,590	-0.14%	-0.18%
PineBridge	408,158,264	(9,853,660)	119,333	398,423,937	-2.38%	-2.41%
Total Tactical Allocation Strategies	<u>815,613,139</u>	<u>(10,578,506)</u>	<u>277,894</u>	<u>805,312,527</u>	-1.26%	-1.30%
Total Opportunistic	<u>1,874,868,508</u>	<u>(8,520,471)</u>	<u>(207,015,957)</u>	<u>1,659,332,080</u>	-11.50%	-0.48%
Private Equity						
Abbott Capital	1,088,706,136	53,685,392	(12,499,453)	1,129,892,075	3.78%	4.96%
Advent International GPE Fund VIII-B	25,078,173	1,484,217	-	26,562,390	5.92%	5.92%
Angelo, Gordon & Co.	3,653	277	-	3,930	7.58%	7.58%
Dyal Capital Partners III	28,270,010	-	400,000	28,670,010	1.41%	-
Dyal Capital Partners IV	1,221,370	-	(554,776)	666,594	-45.42%	-
Glendon Opportunities	41,212,363	1,036,210	-	42,248,573	2.51%	2.51%
KKR Lending Partners II	33,392,476	-	-	33,392,476	-	-
Lexington Capital Partners VIII	36,221,514	1,111,850	(251,107)	37,082,257	2.38%	3.08%
Lexington Partners VII	18,551,187	761,680	(553,361)	18,759,506	1.12%	4.17%
Merit Capital Partners	13,858,612	524,227	(2,652,782)	11,730,057	-15.36%	4.18%
NB SOF III	27,308,129	-	-	27,308,129	-	-
NB SOF IV	16,335,845	-	-	16,335,845	-	-
New Mountain Partners IV	16,164,856	4,143,496	-	20,308,352	25.63%	25.63%
New Mountain Partners V	22,029,022	483,934	-	22,512,956	2.20%	2.20%
NGP XI	48,063,096	(2,169,558)	(1,485,960)	44,407,578	-7.61%	-4.58%
NGP XII	12,524,422	(189,483)	-	12,334,939	-1.51%	-1.51%
Onex Partnership III	9,476,684	2,592	-	9,479,276	0.03%	0.03%
Pathway Capital Management LLC	1,225,992,735	59,286,083	(11,299,048)	1,273,979,770	3.91%	4.86%
Resolute Fund III	20,376,116	644,387	(534,804)	20,485,699	0.54%	3.20%
Resolute Fund IV	12,113,997	797,697	(84,585)	12,827,109	5.89%	6.61%
Summit Partners GE IX	34,243,525	3,544,346	(4,951,565)	32,836,306	-4.11%	11.16%
Warburg Pincus Global Growth Fund	2,291,329	(171,456)	-	2,119,873	-7.48%	-7.48%
Warburg Pincus X	11,393,877	4,242,018	(636,780)	14,999,115	31.64%	38.30%
Warburg Pincus XI	25,886,997	539,840	(510,000)	25,916,837	0.12%	2.11%
Warburg Pincus XII	59,824,450	2,737,344	3,334,500	65,896,294	10.15%	4.45%
Total Private Equity	<u>2,830,540,574</u>	<u>132,495,093</u>	<u>(32,279,721)</u>	<u>2,930,755,946</u>	3.54%	4.71%
Real Assets						
Farmland						
Hancock Agricultural Investment Group	269,792,674	-	-	269,792,674	-	-
UBS Agrivest, LLC	586,634,062	3,037,751	-	589,671,813	0.52%	0.52%
Total Farmland	<u>856,426,736</u>	<u>3,037,751</u>	<u>-</u>	<u>859,464,487</u>	0.35%	0.35%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended August 30, 2019

Timber

Hancock Natural Resource Group	99,365,884	-	-	99,365,884	-	-
Timberland Invt Resource LLC	263,570,883	6,918,440	-	270,489,323	2.62%	2.62%
Total Timber	<u>362,936,767</u>	<u>6,918,440</u>	<u>-</u>	<u>369,855,207</u>	1.91%	1.91%

Energy

EIG Energy Fund XIV-A	10,084,894	(28,285)	-	10,056,609	-0.28%	-0.28%
EIG Energy Fund XV	22,115,598	111,416	-	22,227,014	0.50%	0.50%
EIG Energy Fund XVI	56,692,264	426,840	-	57,119,104	0.75%	0.75%
Total Energy	<u>88,892,756</u>	<u>509,971</u>	<u>-</u>	<u>89,402,727</u>	0.57%	0.57%

REIT

REIT Transition Account	20,994	9,832	(30,524)	302	-98.56%	171.53%
ARMB REIT	94,957,512	3,920,765	-	98,878,277	4.13%	4.13%
Total REIT	<u>94,978,506</u>	<u>3,930,597</u>	<u>(30,524)</u>	<u>98,878,579</u>	4.11%	4.14%

Master Limited Partnerships

Advisory Research MLP	81,155,887	(3,930,454)	(77,344,615)	(119,182)	-100.15%	-9.25%
Tortoise Capital Advisors	69,513,201	(338,738)	(69,159,165)	15,298	-99.98%	-0.97%
Total Master Limited Partnerships	<u>150,669,088</u>	<u>(4,269,192)</u>	<u>(146,503,780)</u>	<u>(103,884)</u>	-100.07%	-5.51%

Infrastructure Private

IFM Global Infrastructure Fund-Private	480,543,961	-	-	480,543,961	-	-
JP Morgan Infrastructure Fund-Private	120,492,718	2,644,610	-	123,137,328	2.19%	2.19%
Total Infrastructure Private	<u>601,036,679</u>	<u>2,644,610</u>	<u>-</u>	<u>603,681,289</u>	0.44%	0.44%

Infrastructure Public

Brookfield Investment Mgmt.-Public	155,567	14,473	(156,052)	13,988	-91.01%	18.66%
Lazard Asset Mgmt.-Public	576,929	40,064	(555,367)	61,626	-89.32%	13.39%
Total Infrastructure Public	<u>732,496</u>	<u>54,537</u>	<u>(711,419)</u>	<u>75,614</u>	-89.68%	14.47%

Real Estate

Core Commingled Accounts						
BlackRock US Core Property Fund	218,425,000	(2,162,658)	-	216,262,342	-0.99%	-0.99%
JP Morgan	259,374,787	(294,851)	-	259,079,936	-0.11%	-0.11%
UBS Trumbull Property Fund	58,450,042	-	-	58,450,042	-	-
Total Core Commingled	<u>536,249,829</u>	<u>(2,457,509)</u>	<u>-</u>	<u>533,792,320</u>	-0.46%	-0.46%
Core Separate Accounts						
LaSalle Investment Management	127,361,092	(4,989,174)	(383,154)	121,988,764	-4.22%	-3.92%
Sentinel Separate Account	170,967,551	2,344,800	(600,856)	172,711,495	1.02%	1.37%
UBS Realty	533,000,415	757,416	(1,399,438)	532,358,393	-0.12%	0.14%
Total Core Separate	<u>831,329,058</u>	<u>(1,886,958)</u>	<u>(2,383,448)</u>	<u>827,058,652</u>	-0.51%	-0.23%

Alaska Retirement Management Board
All Non-Participant Directed Plans by Manager
Schedule of Investment Income and Changes in Invested Assets
For the Month Ended August 30, 2019

Non-Core Commingled Accounts						
Almanac Realty Securities V	1,087,610	53,111	-	1,140,721	4.88%	4.88%
Almanac Realty Securities VII	38,055,623	537,551	634,644	39,227,818	3.08%	1.40%
Almanac Realty Securities VIII	2,167,723	(115,634)	-	2,052,089	-5.33%	-5.33%
Clarion Ventures 4	31,764,485	413,657	-	32,178,142	1.30%	1.30%
Colony Investors VIII, L.P.	1,483,767	(110,205)	-	1,373,562	-7.43%	-7.43%
Coventry	241,737	-	-	241,737	-	-
ING Clarion Development Ventures III	2,342,966	284,138	-	2,627,104	12.13%	12.13%
KKR Real Estate Partners Americas II	9,484,773	254,822	1,475,386	11,214,981	18.24%	2.49%
KKR Real Estate Partners Americas L.P.	15,017,907	-	119,774	15,137,681	0.80%	-
Silverpeak Legacy Pension Partners II, L.P.	3,244,233	(379,349)	-	2,864,884	-11.69%	-11.69%
Silverpeak Legacy Pension Partners III, L.P.	4,260,286	8,073	(364,470)	3,903,889	-8.37%	0.20%
Tishman Speyer Real Estate Venture VI	22,336,658	723,144	-	23,059,802	3.24%	3.24%
Tishman Speyer Real Estate Venture VII	547,147	25,779	-	572,926	4.71%	4.71%
Total Non-Core Commingled	132,034,915	1,695,087	1,865,334	135,595,336	2.70%	1.27%
Total Real Estate	1,499,613,802	(2,649,380)	(518,114)	1,496,446,308	-0.21%	-0.18%
Total Real Assets	3,655,286,830	10,177,334	(147,763,837)	3,517,700,327	-3.76%	0.28%
Total Assets	<u>\$ 26,982,216,856</u>	<u>\$ (60,764,495)</u>	<u>\$ (122,012,625)</u>	<u>\$ 26,799,439,736</u>	-0.68%	-0.23%

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
August 30, 2019

	<u>Beginning Invested</u> <u>Assets</u>	<u>Investment Income</u>	<u>Net Contributions</u> <u>(Withdrawals)</u>	<u>Transfers In (Out)</u>	<u>Ending Invested</u> <u>Assets</u>	<u>% Change in</u> <u>Invested</u> <u>Assets</u>	<u>% Change due</u> <u>to Investment</u> <u>Income (1)</u>
Participant Options							
T. Rowe Price							
Stable Value Fund	\$ 390,930,201	\$ 846,333	\$ (2,641,187)	\$ 10,318,773	\$ 399,454,120	2.18%	0.21%
Small Cap Stock Fund	200,645,672	(4,624,999)	134,994	30,977	196,186,644	-2.22%	-2.30%
Alaska Balanced Trust	1,136,112,979	3,709,272	(2,858,913)	(7,000,209)	1,129,963,129	-0.54%	0.33%
Long Term Balanced Fund	684,783,426	(4,478,924)	(662,033)	(3,913,323)	675,729,146	-1.32%	-0.66%
AK Target Date 2010 Trust	10,189,474	(17,149)	(24,106)	(160,705)	9,987,514	-1.98%	-0.17%
AK Target Date 2015 Trust	83,190,480	(313,024)	(372,600)	(554,371)	81,950,485	-1.49%	-0.38%
AK Target Date 2020 Trust	97,904,858	(649,888)	(210,794)	(1,661,301)	95,382,875	-2.58%	-0.67%
AK Target Date 2025 Trust	84,647,115	(781,062)	239,752	348,631	84,454,436	-0.23%	-0.92%
AK Target Date 2030 Trust	66,366,262	(787,987)	327,363	241,128	66,146,766	-0.33%	-1.18%
AK Target Date 2035 Trust	61,812,870	(886,940)	314,017	(388,858)	60,851,089	-1.56%	-1.44%
AK Target Date 2040 Trust	62,428,867	(1,012,896)	189,929	447,792	62,053,692	-0.60%	-1.61%
AK Target Date 2045 Trust	70,964,927	(1,268,482)	525,097	(213,413)	70,008,129	-1.35%	-1.78%
AK Target Date 2050 Trust	80,072,925	(1,426,924)	719,707	(115,627)	79,250,081	-1.03%	-1.78%
AK Target Date 2055 Trust	72,253,155	(1,285,507)	1,395,894	(245,426)	72,118,116	-0.19%	-1.77%
AK Target Date 2060 Trust	4,170,948	(71,478)	11,450	78,151	4,189,071	0.43%	-1.70%
Total Investments with T. Rowe Price	<u>3,106,474,159</u>	<u>(13,049,655)</u>	<u>(2,911,430)</u>	<u>(2,787,781)</u>	<u>3,087,725,293</u>		
State Street Global Advisors							
Money Market	48,582,569	85,973	(380,638)	3,295,758	51,583,662	6.18%	0.17%
S&P 500 Stock Index Fund Series A	485,855,577	(8,009,516)	(1,152,870)	(18,093,448)	458,599,743	-5.61%	-1.68%
Russell 3000 Index	77,117,808	(1,357,881)	131,138	14,181,298	90,072,363	16.80%	-1.61%
US Real Estate Investment Trust Index	39,340,341	467,888	10,185	(39,818,414)	-	-100.00%	2.41%
World Equity Ex-US Index	70,168,361	(1,893,505)	34,715	1,933,196	70,242,767	0.11%	-2.66%
US Treasury Inflation Protected Securities Index	48,875,692	663,319	100,226	(49,639,237)	-	-100.00%	2.75%
Total Investments with SSgA	<u>769,940,348</u>	<u>(10,043,722)</u>	<u>(1,257,244)</u>	<u>(88,140,847)</u>	<u>670,498,535</u>		
BlackRock							
Passive U.S. Bond Index Fund	126,577,517	3,326,706	(139,866)	11,625,589	141,389,946	11.70%	2.51%
Strategic Completion Fund	-	618,589	(192,619)	78,328,668	78,754,638	0.00%	1.58%
Total Investments with BlackRock	<u>126,577,517</u>	<u>3,945,295</u>	<u>(332,485)</u>	<u>89,954,257</u>	<u>220,144,584</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	62,923,992	(1,857,415)	(65,768)	(2,916,084)	58,084,725	-7.69%	-3.02%
Northern Trust							
Environmental, Social, and Governance Fund	60,302,988	(619,543)	53,379	3,890,455	63,627,279	5.51%	-0.99%
Total All Funds	<u>\$ 4,126,219,004</u>	<u>\$ (21,625,040)</u>	<u>\$ (4,513,548)</u>	<u>\$ -</u>	<u>\$ 4,100,080,416</u>	-0.63%	-0.52%

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 Baillie Gifford International Equity Fund.

Supplemental Annuity Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
August 30, 2019
\$ (Thousands)

<u>Invested Assets</u> (at fair value)	<u>July</u>	<u>August</u>
Investments with T. Rowe Price		
Stable Value Fund	\$ 390,930	\$ 399,454
Small Cap Stock Fund	200,646	196,187
Alaska Balanced Trust	1,136,113	1,129,963
Long Term Balanced Fund	684,783	675,729
AK Target Date 2010 Trust	10,189	9,988
AK Target Date 2015 Trust	83,190	81,950
AK Target Date 2020 Trust	97,905	95,383
AK Target Date 2025 Trust	84,647	84,454
AK Target Date 2030 Trust	66,366	66,147
AK Target Date 2035 Trust	61,813	60,851
AK Target Date 2040 Trust	62,429	62,054
AK Target Date 2045 Trust	70,965	70,008
AK Target Date 2050 Trust	80,073	79,250
AK Target Date 2055 Trust	72,253	72,118
AK Target Date 2060 Trust	4,171	4,189
State Street Global Advisors		
Money Market	48,583	51,584
S&P 500 Stock Index Fund Series A	485,856	458,600
Russell 3000 Index	77,118	90,072
US Real Estate Investment Trust Index	39,340	-
World Equity Ex-US Index	70,168	70,243
US Treasury Inflation Protected Securities Index	48,876	-
Investments with BlackRock		
Passive U.S. Bond Index Fund	126,578	141,390
Strategic Completion Fund	-	78,755
Investments with Brandes/Baillie Gifford		
AK International Equity Fund	62,924	58,085
Investments with Northern Trust		
Environmental, Social, and Governance Fund	60,303	63,627
Total Invested Assets	\$ 4,126,219	\$ 4,100,080
<u>Change in Invested Assets</u>		
Beginning Assets	\$ 4,111,631	\$ 4,126,219
Investment Earnings	20,000	(21,625)
Net Contributions (Withdrawals)	(5,413)	(4,514)
Ending Invested Assets	\$ 4,126,219	\$ 4,100,080

Deferred Compensation Plan
Schedule of Invested Assets and Changes in Invested Assets
for the Month Ended
August 30, 2019

	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							
Stable Value Fund	\$ 183,473,949	\$ 396,358	\$ (891,431)	\$ 2,963,539	\$ 185,942,415	1.35%	0.21%
Small Cap Stock Fund	120,406,018	(2,790,614)	(289,559)	(815,680)	116,510,165	-3.24%	-2.33%
Alaska Balanced Trust	31,506,467	100,023	18,158	(593,602)	31,031,046	-1.51%	0.32%
Long Term Balanced Fund	86,198,463	(561,687)	(530,231)	(346,061)	84,760,484	-1.67%	-0.65%
AK Target Date 2010 Trust	3,977,278	(6,797)	(114,168)	(18,800)	3,837,513	-3.51%	-0.17%
AK Target Date 2015 Trust	9,410,531	(34,623)	(5,512)	(21,293)	9,349,103	-0.65%	-0.37%
AK Target Date 2020 Trust	24,800,931	(160,294)	51,395	(190,953)	24,501,079	-1.21%	-0.65%
AK Target Date 2025 Trust	20,841,391	(192,480)	47,506	(97,010)	20,599,407	-1.16%	-0.92%
AK Target Date 2030 Trust	13,579,945	(168,564)	81,250	(626,461)	12,866,170	-5.26%	-1.27%
AK Target Date 2035 Trust	7,893,144	(108,802)	43,253	204,029	8,031,624	1.75%	-1.36%
AK Target Date 2040 Trust	8,985,183	(143,090)	59,963	97,624	8,999,680	0.16%	-1.58%
AK Target Date 2045 Trust	6,557,097	(116,450)	62,294	(6,777)	6,496,164	-0.93%	-1.77%
AK Target Date 2050 Trust	4,761,559	(84,042)	38,121	10,212	4,725,850	-0.75%	-1.76%
AK Target Date 2055 Trust	4,538,951	(80,470)	37,853	(8,864)	4,487,470	-1.13%	-1.77%
AK Target Date 2060 Trust	892,341	(16,166)	11,726	(43,220)	844,681	-5.34%	-1.84%
Total Investments with T. Rowe Price	<u>527,823,248</u>	<u>(3,967,698)</u>	<u>(1,379,382)</u>	<u>506,683</u>	<u>522,982,851</u>		
State Street Global Advisors							
Money Market	15,438,834	27,008	(117,296)	841,273	16,189,819	4.86%	0.17%
Russell 3000 Index	49,810,033	(1,009,846)	(67,980)	(448,620)	48,283,587	-3.06%	-2.04%
US Real Estate Investment Trust Index	14,385,968	171,913	(10,148)	(14,547,733)	-	-100.00%	2.42%
World Equity Ex-US Index	21,943,220	(593,119)	52,832	670,011	22,072,944	0.59%	-2.66%
US Treasury Inflation Protected Securities Index	19,160,622	258,555	(7,537)	(19,411,640)	-	-100.00%	2.74%
Total Investments with SSgA	<u>120,738,677</u>	<u>(1,145,489)</u>	<u>(150,129)</u>	<u>(32,896,709)</u>	<u>86,546,350</u>		
BlackRock							
S&P 500 Index Fund	221,136,784	(3,519,926)	(358,692)	(1,676,858)	215,581,308	-2.51%	-1.60%
Strategic Completion Fund	-	238,240	(174,189)	30,176,659	30,240,710	0.00%	1.59%
Passive U.S. Bond Index Fund	62,455,925	1,638,339	(192,573)	3,930,032	67,831,723	8.61%	2.55%
Total Investments with BlackRock	<u>283,592,709</u>	<u>(1,643,347)</u>	<u>(725,454)</u>	<u>32,429,833</u>	<u>313,653,741</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	33,579,445	(973,601)	(29,697)	(851,223)	31,724,924	-5.52%	-2.94%
Northern Trust							
Environmental, Social, and Governance Fund	24,052,497	(248,928)	(20,126)	811,416	24,594,859	2.25%	-1.02%
Total All Funds	<u>\$ 989,786,576</u>	<u>\$ (7,979,063)</u>	<u>\$ (2,304,788)</u>	<u>\$ -</u>	<u>\$ 979,502,725</u>	-1.04%	-0.81%

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 Baillie Gifford International Equity Fund.

Deferred Compensation Plan
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
August 30, 2019
\$ (Thousands)

<u>Invested Assets</u> (at fair value)	<u>July</u>	<u>August</u>
Investments with T. Rowe Price		
Stable Value Fund	\$ 183,474	\$ 185,942
Small Cap Stock Fund	120,406	116,510
Alaska Balanced Trust	31,506	31,031
Long Term Balanced Fund	86,198	84,760
AK Target Date 2010 Trust	3,977	3,838
AK Target Date 2015 Trust	9,411	9,349
AK Target Date 2020 Trust	24,801	24,501
AK Target Date 2025 Trust	20,841	20,599
AK Target Date 2030 Trust	13,580	12,866
AK Target Date 2035 Trust	7,893	8,032
AK Target Date 2040 Trust	8,985	9,000
AK Target Date 2045 Trust	6,557	6,496
AK Target Date 2050 Trust	4,762	4,726
AK Target Date 2055 Trust	4,539	4,487
AK Target Date 2060 Trust	892	845
State Street Global Advisors		
Money Market	15,439	16,190
Russell 3000 Index	49,810	48,284
US Real Estate Investment Trust Index	14,386	-
World Equity Ex-US Index	21,943	22,073
US Treasury Inflation Protected Securities Index	19,161	-
Investments with BlackRock		
S&P 500 Index Fund	221,137	215,581
Strategic Completion Fund	-	30,241
Passive U.S. Bond Index Fund	62,456	67,832
Investments with Brandes/Baillie Gifford		
AK International Equity Fund	33,579	31,725
Investments with Northern Trust		
Environmental, Social, and Governance Fund	24,052	24,595
Total Invested Assets	\$ 989,787	\$ 979,503
<u>Change in Invested Assets</u>		
Beginning Assets	\$ 983,594	\$ 989,787
Investment Earnings	7,422	(7,979)
Net Contributions (Withdrawals)	(1,228)	(2,305)
Ending Invested Assets	\$ 989,787	\$ 979,503

Defined Contribution Retirement - Participant Directed PERS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
August 30, 2019

	<u>Beginning Invested</u>		<u>Net Contributions</u>		<u>Ending Invested</u>	<u>% Change in</u>	<u>% Change due</u>
	<u>Assets</u>	<u>Investment Income</u>	<u>(Withdrawals)</u>	<u>Transfers In (Out)</u>	<u>Assets</u>	<u>Invested</u>	<u>to Investment</u>
						<u>Assets</u>	<u>Income (1)</u>
Participant Options							
T. Rowe Price							
Stable Value Fund	\$ 49,550,085	\$ 109,121	\$ (302,354)	\$ 4,048,008	\$ 53,404,860	7.78%	0.21%
Small Cap Stock Fund	85,587,688	(1,981,197)	102,059	328,515	84,037,065	-1.81%	-2.31%
Alaska Balanced Trust	25,258,959	61,968	43,596	(3,307,845)	22,056,678	-12.68%	0.26%
Long Term Balanced Fund	15,569,737	(100,146)	16,358	85,364	15,571,313	0.01%	-0.64%
AK Target Date 2010 Trust	2,363,583	(3,505)	10,563	36,256	2,406,897	1.83%	-0.15%
AK Target Date 2015 Trust	12,447,125	(45,164)	70,482	2,480	12,474,923	0.22%	-0.36%
AK Target Date 2020 Trust	36,312,512	(239,037)	(32,532)	(119,213)	35,921,730	-1.08%	-0.66%
AK Target Date 2025 Trust	58,997,398	(550,256)	110,188	(279,639)	58,277,691	-1.22%	-0.93%
AK Target Date 2030 Trust	61,669,339	(740,924)	444,121	(141,393)	61,231,143	-0.71%	-1.20%
AK Target Date 2035 Trust	74,455,295	(1,063,398)	795,226	(40,605)	74,146,518	-0.41%	-1.42%
AK Target Date 2040 Trust	88,249,338	(1,438,404)	657,337	534	87,468,805	-0.88%	-1.62%
AK Target Date 2045 Trust	113,709,640	(2,031,355)	1,090,912	(151,189)	112,618,008	-0.96%	-1.78%
AK Target Date 2050 Trust	135,191,506	(2,412,721)	1,398,500	(321,904)	133,855,381	-0.99%	-1.78%
AK Target Date 2055 Trust	123,545,492	(2,205,107)	2,303,879	(459,626)	123,184,638	-0.29%	-1.77%
AK Target Date 2060 Trust	1,437,113	(25,762)	26,287	(1,407)	1,436,231	-0.06%	-1.78%
Total Investments with T. Rowe Price	<u>884,344,810</u>	<u>(12,665,887)</u>	<u>6,734,622</u>	<u>(321,664)</u>	<u>878,091,881</u>		
State Street Global Advisors							
Money Market	11,354,946	20,709	57,195	735,884	12,168,734	7.17%	0.18%
S&P 500 Stock Index Fund Series A	112,814,575	(2,056,831)	374,359	(17,307,341)	93,824,762	-16.83%	-1.97%
Russell 3000 Index	13,164,766	(22,777)	54,001	16,473,004	29,668,994	125.37%	-0.11%
US Real Estate Investment Trust Index	17,236,469	210,417	35,221	(17,482,107)	-	-100.00%	2.47%
World Equity Ex-US Index	60,410,226	(1,610,408)	138,261	2,703,804	61,641,883	2.04%	-2.60%
US Treasury Inflation Protected Securities Index	20,051,335	272,361	(4,166)	(20,319,530)	-	-100.00%	2.75%
Total Investments with SSgA	<u>235,032,317</u>	<u>(3,186,529)</u>	<u>654,871</u>	<u>(35,196,286)</u>	<u>197,304,373</u>		
BlackRock							
Passive U.S. Bond Index Fund	52,745,959	1,385,288	(25,324)	4,285,753	58,391,676	10.70%	2.52%
Strategic Completion Fund	-	239,069	(147,871)	29,968,780	30,059,978	0.00%	1.60%
Total Investments with BlackRock	<u>52,745,959</u>	<u>1,624,357</u>	<u>(173,195)</u>	<u>34,254,533</u>	<u>88,451,654</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	39,804,207	(1,199,692)	125,304	(2,825,327)	35,904,492	-9.80%	-3.12%
Northern Trust							
Environmental, Social, and Governance Fund	19,449,176	(145,634)	(18,439)	4,088,744	23,373,847	20.18%	-0.68%
Total All Funds	<u>\$ 1,231,376,469</u>	<u>\$ (15,573,385)</u>	<u>\$ 7,323,163</u>	<u>\$ -</u>	<u>\$ 1,223,126,247</u>	-0.67%	-1.26%

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 Baillie Gifford International Equity Fund.

Defined Contribution Retirement - Participant Directed PERS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
August 30, 2019
\$ (Thousands)

<u>Invested Assets (at fair value)</u>	<u>July</u>	<u>August</u>
Investments with T. Rowe Price		
Stable Value Fund	\$ 49,550	\$ 53,405
Small Cap Stock Fund	85,588	84,037
Alaska Balanced Trust	25,259	22,057
Long Term Balanced Fund	15,570	15,571
AK Target Date 2010 Trust	2,364	2,407
AK Target Date 2015 Trust	12,447	12,475
AK Target Date 2020 Trust	36,313	35,922
AK Target Date 2025 Trust	58,997	58,278
AK Target Date 2030 Trust	61,669	61,231
AK Target Date 2035 Trust	74,455	74,147
AK Target Date 2040 Trust	88,249	87,469
AK Target Date 2045 Trust	113,710	112,618
AK Target Date 2050 Trust	135,192	133,855
AK Target Date 2055 Trust	123,545	123,185
AK Target Date 2060 Trust	1,437	1,436
State Street Global Advisors		
Money Market	11,355	12,169
S&P 500 Stock Index Fund Series A	112,815	93,825
Russell 3000 Index	13,165	29,669
US Real Estate Investment Trust Index	17,236	-
World Equity Ex-US Index	60,410	61,642
US Treasury Inflation Protected Securities Index	20,051	-
Investments with BlackRock		
Passive U.S. Bond Index Fund	52,746	58,392
Strategic Completion Fund	-	30,060
Investments with Brandes/Baillie Gifford		
AK International Equity Fund	39,804	35,904
Investments with Northern Trust		
Environmental, Social, and Governance Fund	19,449	23,374
Total Invested Assets	\$ 1,231,376	\$ 1,223,126
<u>Change in Invested Assets</u>		
Beginning Assets	\$ 1,218,754	\$ 1,231,376
Investment Earnings	5,513	(15,573)
Net Contributions (Withdrawals)	7,110	7,323
Ending Invested Assets	\$ 1,231,376	\$ 1,223,126

Defined Contribution Retirement - Participant Directed TRS
Schedule of Investment Income and Changes in Invested Assets
for the Month Ended
August 30, 2019

	<u>Beginning Invested</u>		<u>Net Contributions</u>		<u>Ending Invested</u>	<u>% Change in</u>	<u>% Change due</u>
	<u>Assets</u>	<u>Investment Income</u>	<u>(Withdrawals)</u>	<u>Transfers In (Out)</u>	<u>Assets</u>	<u>Invested</u>	<u>to Investment</u>
						<u>Assets</u>	<u>Income (1)</u>
Participant Options							
T. Rowe Price							
Stable Value Fund	\$ 20,539,591	\$ 45,221	\$ (47,982)	\$ 1,533,633	\$ 22,070,463	7.45%	0.21%
Small Cap Stock Fund	36,368,144	(841,383)	(104,849)	166,877	35,588,789	-2.14%	-2.31%
Alaska Balanced Trust	10,691,660	25,456	(16,393)	(1,499,133)	9,201,590	-13.94%	0.26%
Long Term Balanced Fund	6,573,869	(43,348)	(7,138)	(45,482)	6,477,901	-1.46%	-0.66%
AK Target Date 2010 Trust	860,101	(1,348)	(70)	-	858,683	-0.16%	-0.16%
AK Target Date 2015 Trust	3,718,328	(13,575)	(3,023)	-	3,701,730	-0.45%	-0.37%
AK Target Date 2020 Trust	10,624,738	(69,853)	(187,361)	-	10,367,524	-2.42%	-0.66%
AK Target Date 2025 Trust	19,683,860	(188,155)	(157,420)	(217,580)	19,120,705	-2.86%	-0.97%
AK Target Date 2030 Trust	23,080,542	(276,839)	30,399	(2,000)	22,832,102	-1.08%	-1.20%
AK Target Date 2035 Trust	34,191,739	(492,398)	21,664	(115,779)	33,605,226	-1.72%	-1.44%
AK Target Date 2040 Trust	37,135,898	(610,345)	(163,859)	(118,049)	36,243,645	-2.40%	-1.65%
AK Target Date 2045 Trust	55,300,041	(988,706)	(169,577)	(55,548)	54,086,210	-2.19%	-1.79%
AK Target Date 2050 Trust	77,799,149	(1,391,469)	(110,926)	-	76,296,754	-1.93%	-1.79%
AK Target Date 2055 Trust	42,579,221	(763,203)	(141,901)	(6,407)	41,667,710	-2.14%	-1.80%
AK Target Date 2060 Trust	523,925	(9,346)	50	6,406	521,035	-0.55%	-1.77%
Total Investments with T. Rowe Price	<u>379,670,806</u>	<u>(5,619,291)</u>	<u>(1,058,386)</u>	<u>(353,062)</u>	<u>372,640,067</u>		
State Street Global Advisors							
Money Market	3,143,746	5,664	(4,278)	194,985	3,340,117	6.25%	0.17%
S&P 500 Stock Index Fund Series A	45,559,091	(837,705)	(152,221)	(7,180,185)	37,388,980	-17.93%	-2.00%
Russell 3000 Index	4,568,513	12,595	(31,106)	7,030,649	11,580,651	153.49%	0.16%
US Real Estate Investment Trust Index	7,072,199	86,609	(2,022)	(7,156,786)	-	-100.00%	2.48%
World Equity Ex-US Index	27,202,719	(725,308)	(35,147)	1,208,177	27,650,441	1.65%	-2.61%
US Treasury Inflation Protected Securities Index	7,448,758	101,016	(4,323)	(7,545,451)	-	-100.00%	2.75%
Total Investments with SSgA	<u>94,995,026</u>	<u>(1,357,129)</u>	<u>(229,097)</u>	<u>(13,448,611)</u>	<u>79,960,189</u>		
BlackRock							
Passive U.S. Bond Index Fund	21,450,748	561,711	(47,663)	1,551,788	23,516,584	9.63%	2.53%
Strategic Completion Fund	-	93,794	(28,557)	11,778,711	11,843,948	0.00%	1.60%
Total Investments with BlackRock	<u>21,450,748</u>	<u>655,505</u>	<u>(76,220)</u>	<u>13,330,499</u>	<u>35,360,532</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	17,368,154	(522,467)	(73,529.00)	(1,228,552)	15,543,606	-10.51%	-3.13%
Northern Trust							
Environmental, Social, and Governance Fund	8,276,248	(62,047)	(8,275.00)	1,699,726	9,905,652	19.69%	-0.68%
Total All Funds	<u>\$ 521,760,982</u>	<u>\$ (6,905,429)</u>	<u>\$ (1,445,507)</u>	<u>\$ -</u>	<u>\$ 513,410,046</u>	-1.60%	-1.33%

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 Baillie Gifford International Equity Fund.

Defined Contribution Retirement - Participant Directed TRS
Schedule of Invested Assets with
Schedule of Investment Income and Changes in Invested Assets
By Month Through the Month Ended
August 30, 2019
\$ (Thousands)

<u>Invested Assets</u> (at fair value)	<u>July</u>	<u>August</u>
Investments with T. Rowe Price		
Stable Value Fund	\$ 20,540	\$ 22,070
Small Cap Stock Fund	36,368	35,589
Alaska Balanced Trust	10,692	9,202
Long Term Balanced Fund	6,574	6,478
AK Target Date 2010 Trust	860	859
AK Target Date 2015 Trust	3,718	3,702
AK Target Date 2020 Trust	10,625	10,368
AK Target Date 2025 Trust	19,684	19,121
AK Target Date 2030 Trust	23,081	22,832
AK Target Date 2035 Trust	34,192	33,605
AK Target Date 2040 Trust	37,136	36,244
AK Target Date 2045 Trust	55,300	54,086
AK Target Date 2050 Trust	77,799	76,297
AK Target Date 2055 Trust	42,579	41,668
AK Target Date 2060 Trust	524	521
State Street Global Advisors		
Money Market	3,144	3,340
S&P 500 Stock Index Fund Series A	45,559	37,389
Russell 3000 Index	4,569	11,581
US Real Estate Investment Trust Index	7,072	-
World Equity Ex-US Index	27,203	27,650
US Treasury Inflation Protected Securities Index	7,449	-
Investments with BlackRock		
Passive U.S. Bond Index Fund	21,451	23,517
Strategic Completion Fund	-	11,844
Investments with Brandes/Baillie Gifford		
AK International Equity Fund	17,368	15,544
Investments with Northern Trust		
Environmental, Social, and Governance Fund	8,276	9,906
Total Invested Assets	\$ 521,761	\$ 513,410
<u>Change in Invested Assets</u>		
Beginning Assets	\$ 516,073	\$ 521,761
Investment Earnings	2,269	(6,905)
Net Contributions (Withdrawals)	3,420	(1,446)
Ending Invested Assets	\$ 521,761	\$ 513,410