

**ALASKA RETIREMENT MANAGEMENT BOARD  
FINANCIAL REPORT**

As of September 30, 2019

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

	Beginning Invested Assets	Investment Income <sup>(1)</sup>	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income <sup>(2)</sup>
<b><u>Public Employees' Retirement System (PERS)</u></b>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	\$ 9,465,719,458	\$ 108,133,757	\$ 20,060,971	\$ 9,593,914,186	1.35%	1.14%
Retirement Health Care Trust	7,807,287,545	86,770,399	(66,431,311)	7,827,626,633	0.26%	1.12%
Total Defined Benefit Plans	<u>17,273,007,003</u>	<u>194,904,156</u>	<u>(46,370,340)</u>	<u>17,421,540,819</u>	0.86%	1.13%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	1,218,753,974	7,860,991	23,051,386	1,249,666,351	2.54%	0.64%
Health Reimbursement Arrangement	419,023,779	4,719,604	9,529,808	433,273,191	3.40%	1.11%
Retiree Medical Plan	117,399,406	1,328,991	3,794,743	122,523,140	4.36%	1.11%
<u>Defined Benefit Occupational Death and Disability:</u>						
Public Employees	24,859,446	280,760	671,644	25,811,850	3.83%	1.11%
Police and Firefighters	11,367,334	128,191	253,502	11,749,027	3.36%	1.12%
Total Defined Contribution Plans	<u>1,791,403,939</u>	<u>14,318,537</u>	<u>37,301,083</u>	<u>1,843,023,559</u>	2.88%	0.79%
<b>Total PERS</b>	<b><u>19,064,410,942</u></b>	<b><u>209,222,693</u></b>	<b><u>(9,069,257)</u></b>	<b><u>19,264,564,378</u></b>	1.05%	1.10%
<b><u>Teachers' Retirement System (TRS)</u></b>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	5,505,314,103	63,533,195	28,125,930	5,596,973,228	1.66%	1.15%
Retirement Health Care Trust	2,940,744,859	32,690,398	(25,609,668)	2,947,825,589	0.24%	1.12%
Total Defined Benefit Plans	<u>8,446,058,962</u>	<u>96,223,593</u>	<u>2,516,262</u>	<u>8,544,798,817</u>	1.17%	1.14%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	516,072,656	3,038,179	2,854,164	521,964,999	1.14%	0.59%
Health Reimbursement Arrangement	124,841,136	1,406,913	1,970,106	128,218,155	2.71%	1.12%
Retiree Medical Plan	41,730,124	468,527	536,922	42,735,573	2.41%	1.12%
Defined Benefit Occupational Death and Disability	4,293,954	48,173	44,217	4,386,344	2.15%	1.12%
Total Defined Contribution Plans	<u>686,937,870</u>	<u>4,961,792</u>	<u>5,405,409</u>	<u>697,305,071</u>	1.51%	0.72%
<b>Total TRS</b>	<b><u>9,132,996,832</u></b>	<b><u>101,185,385</u></b>	<b><u>7,921,671</u></b>	<b><u>9,242,103,888</u></b>	1.19%	1.11%
<b><u>Judicial Retirement System (JRS)</u></b>						
Defined Benefit Plan Retirement Trust	183,941,036	2,135,903	3,837,880	189,914,819	3.25%	1.15%
Defined Benefit Retirement Health Care Trust	33,156,612	369,468	(97,228)	33,428,852	0.82%	1.12%
<b>Total JRS</b>	<b><u>217,097,648</u></b>	<b><u>2,505,371</u></b>	<b><u>3,740,652</u></b>	<b><u>223,343,671</u></b>	2.88%	1.14%
<b><u>National Guard/Naval Militia Retirement System (MRS)</u></b>						
Defined Benefit Plan Retirement Trust	40,994,203	440,277	407,522	41,842,002	2.07%	1.07%
<b><u>Other Participant Directed Plans</u></b>						
Supplemental Annuity Plan	4,111,631,106	38,827,002	(22,225,864)	4,128,232,244	0.40%	0.95%
Deferred Compensation Plan	983,593,517	10,078,006	(5,470,589)	988,200,934	0.47%	1.03%
<b>Total All Funds</b>	<b><u>33,550,724,248</u></b>	<b><u>362,258,734</u></b>	<b><u>(24,695,865)</u></b>	<b><u>33,888,287,117</u></b>		
Total Non-Participant Directed	26,720,672,995	302,454,556	(22,904,962)	27,000,222,589	1.05%	1.13%
Total Participant Directed	6,830,051,253	59,804,178	(1,790,903)	6,888,064,528	0.85%	0.88%
<b>Total All Funds</b>	<b><u>\$ 33,550,724,248</u></b>	<b><u>\$ 362,258,734</u></b>	<b><u>\$ (24,695,865)</u></b>	<b><u>\$ 33,888,287,117</u></b>	<b>1.01%</b>	<b>1.08%</b>

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 September 30, 2019**

	Beginning Invested Assets	Investment Income (1)	Net Contributions (Withdrawals)	Ending Invested Assets	% Change in Invested Assets	% Change due to Investment Income (2)
<b><u>Public Employees' Retirement System (PERS)</u></b>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	\$ 9,534,718,738	\$ 105,096,049	\$ (45,900,601)	\$ 9,593,914,186	0.62%	1.10%
Retirement Health Care Trust	7,752,148,933	86,802,508	(11,324,808)	7,827,626,633	0.97%	1.12%
Total Defined Benefit Plans	<u>17,286,867,671</u>	<u>191,898,557</u>	<u>(57,225,409)</u>	<u>17,421,540,819</u>	0.78%	1.11%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	1,223,126,247	17,921,756	8,618,348	1,249,666,351	2.17%	1.46%
Health Reimbursement Arrangement	425,108,442	4,720,930	3,443,819	433,273,191	1.92%	1.11%
Retiree Medical Plan	119,794,295	1,327,636	1,401,209	122,523,140	2.28%	1.10%
<u>Defined Benefit Occupational Death and Disability:</u>						
Public Employees	25,303,342	280,740	227,768	25,811,850	2.01%	1.10%
Police and Firefighters	11,556,442	128,319	64,266	11,749,027	1.67%	1.11%
Total Defined Contribution Plans	<u>1,804,888,768</u>	<u>24,379,381</u>	<u>13,755,410</u>	<u>1,843,023,559</u>	2.11%	1.35%
<b>Total PERS</b>	<b><u>19,091,756,439</u></b>	<b><u>216,277,938</u></b>	<b><u>(43,469,999)</u></b>	<b><u>19,264,564,378</u></b>	0.91%	1.13%
<b><u>Teachers' Retirement System (TRS)</u></b>						
<u>Defined Benefit Plans:</u>						
Retirement Trust	5,574,988,801	60,807,203	(38,822,776)	5,596,973,228	0.39%	1.09%
Retirement Health Care Trust	2,920,616,742	32,700,459	(5,491,612)	2,947,825,589	0.93%	1.12%
Total Defined Benefit Plans	<u>8,495,605,543</u>	<u>93,507,662</u>	<u>(44,314,388)</u>	<u>8,544,798,817</u>	0.58%	1.10%
<u>Defined Contribution Plans:</u>						
Participant Directed Retirement	513,410,046	7,674,988	879,965	521,964,999	1.67%	1.49%
Health Reimbursement Arrangement	126,423,725	1,404,755	389,675	128,218,155	1.42%	1.11%
Retiree Medical Plan	42,115,922	468,557	151,094	42,735,573	1.47%	1.11%
Defined Benefit Occupational Death and Disability	4,328,746	48,186	9,412	4,386,344	1.33%	1.11%
Total Defined Contribution Plans	<u>686,278,439</u>	<u>9,596,486</u>	<u>1,430,146</u>	<u>697,305,071</u>	1.61%	1.40%
<b>Total TRS</b>	<b><u>9,181,883,982</u></b>	<b><u>103,104,148</u></b>	<b><u>(42,884,242)</u></b>	<b><u>9,242,103,888</u></b>	0.66%	1.13%
<b><u>Judicial Retirement System (JRS)</u></b>						
Defined Benefit Plan Retirement Trust	187,649,670	2,038,018	227,131	189,914,819	1.21%	1.09%
Defined Benefit Retirement Health Care Trust	33,068,011	369,502	(8,661)	33,428,852	1.09%	1.12%
<b>Total JRS</b>	<b><u>220,717,681</u></b>	<b><u>2,407,520</u></b>	<b><u>218,470</u></b>	<b><u>223,343,671</u></b>	1.19%	1.09%
<b><u>National Guard/Naval Militia Retirement System (MRS)</u></b>						
Defined Benefit Plan Retirement Trust	41,617,927	369,638	(145,563)	41,842,002	0.54%	0.89%
<b><u>Other Participant Directed Plans</u></b>						
Supplemental Annuity Plan	4,100,080,416	40,451,569	(12,299,741)	4,128,232,244	0.69%	0.99%
Deferred Compensation Plan	979,502,725	10,635,562	(1,937,353)	988,200,934	0.89%	1.09%
<b>Total All Funds</b>	<b><u>33,615,559,170</u></b>	<b><u>373,246,375</u></b>	<b><u>(100,518,428)</u></b>	<b><u>33,888,287,117</u></b>		
Total Non-Participant Directed	26,799,439,736	296,562,500	(95,779,647)	27,000,222,589	0.75%	1.11%
Total Participant Directed	6,816,119,434	76,683,875	(4,738,781)	6,888,064,528	1.06%	1.13%
<b>Total All Funds</b>	<b><u>\$ 33,615,559,170</u></b>	<b><u>\$ 373,246,375</u></b>	<b><u>\$ (100,518,428)</u></b>	<b><u>\$ 33,888,287,117</u></b>	<b>0.81%</b>	<b>1.11%</b>

Notes:

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

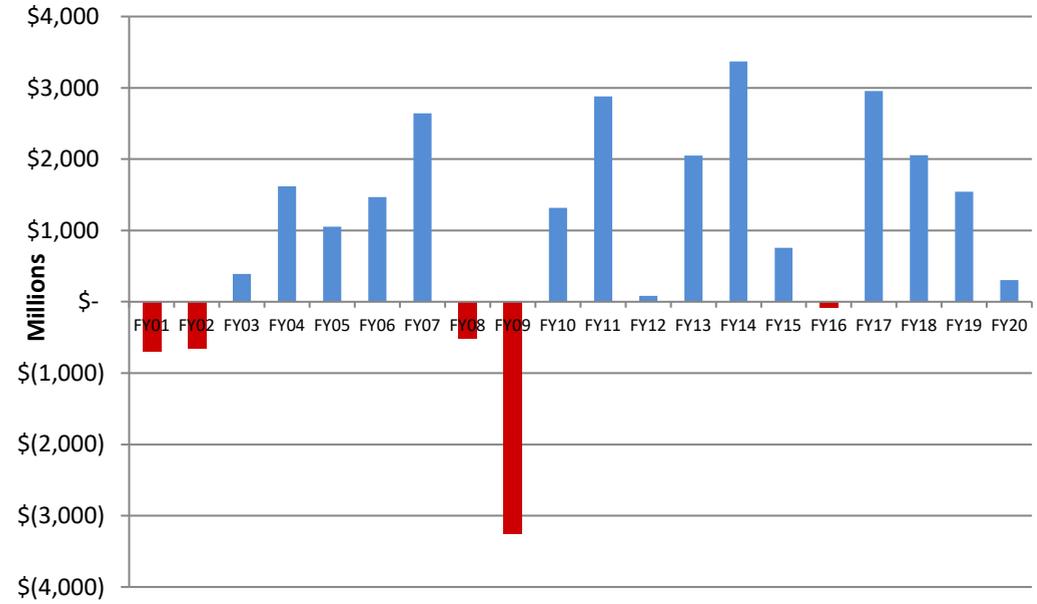
(2) Income divided by beginning assets plus half of net contributions/(withdrawals). Actual returns are calculated by Callan and Associates and can be found at: <http://www.revenue.state.ak.us/treasury/programs/programs/other/armb/investmentresults.aspx>

## Total Non Participant Directed Assets As of September 30, 2019

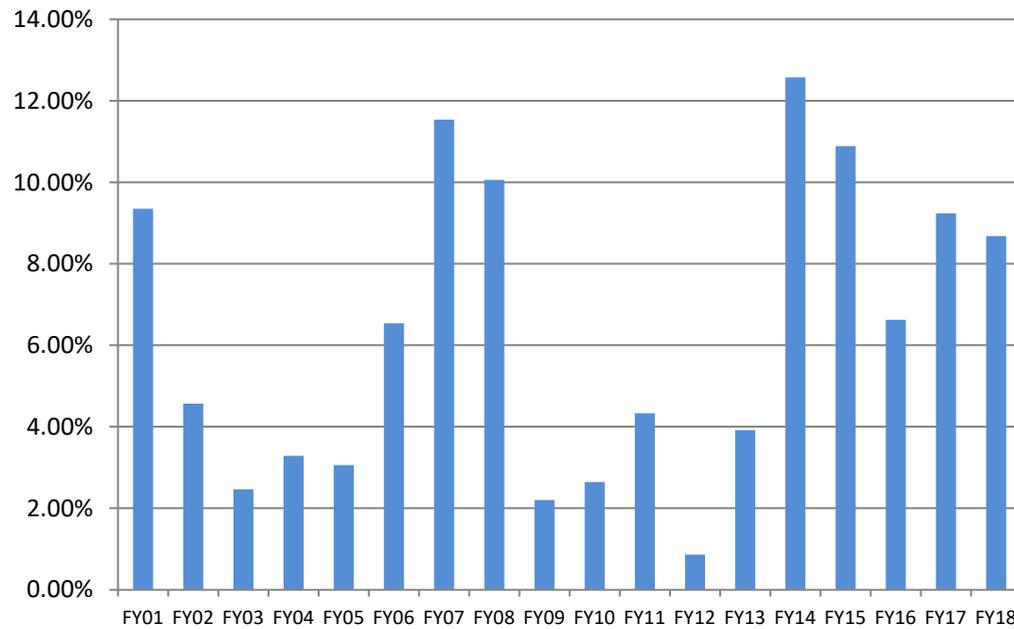
### Total Assets History



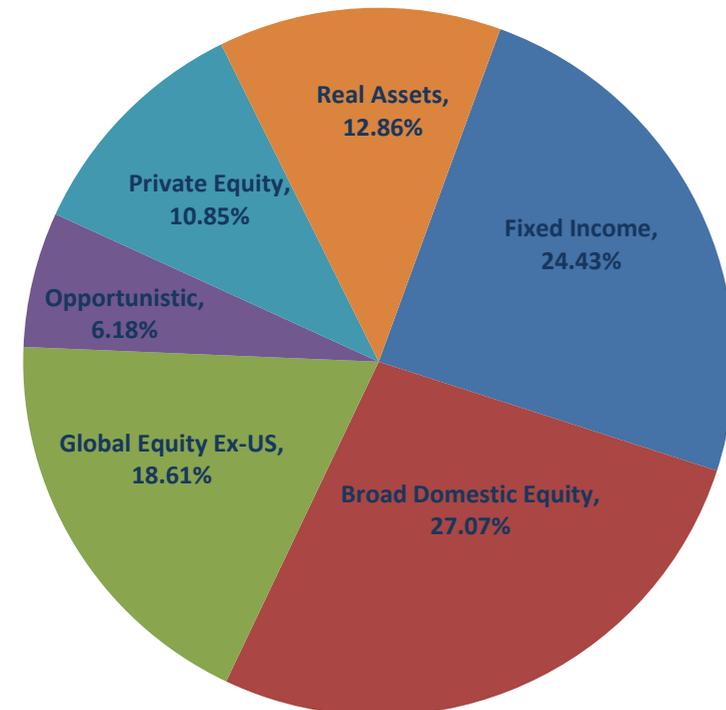
### Income by Fiscal Year



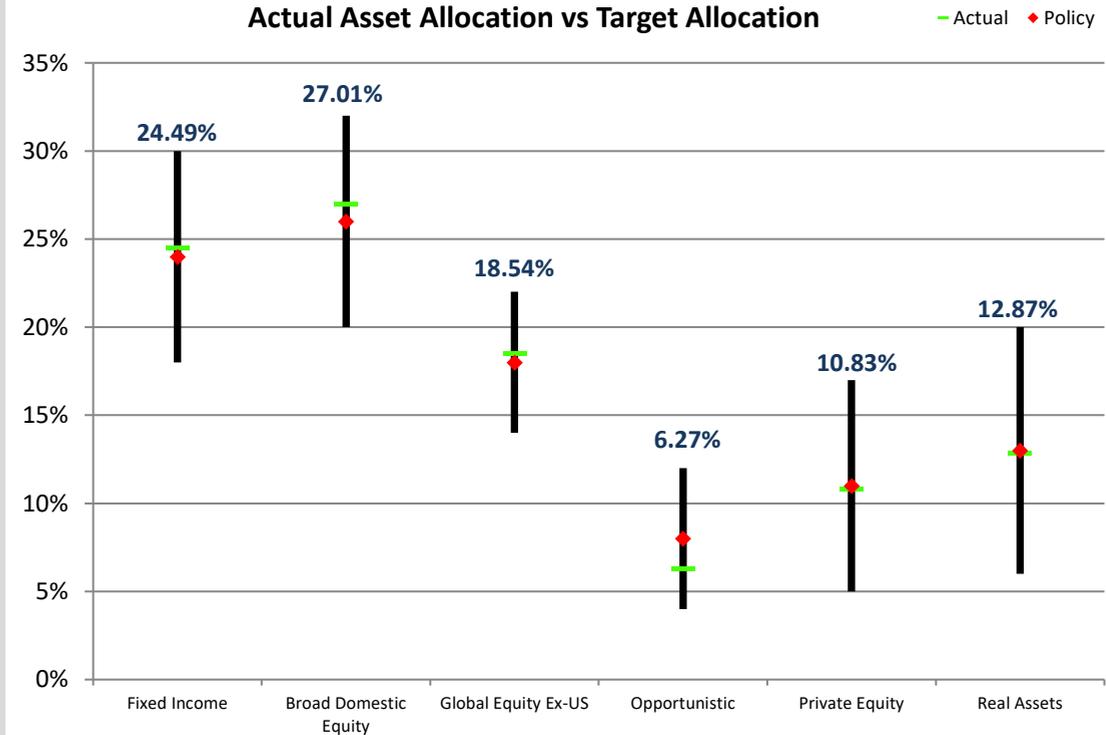
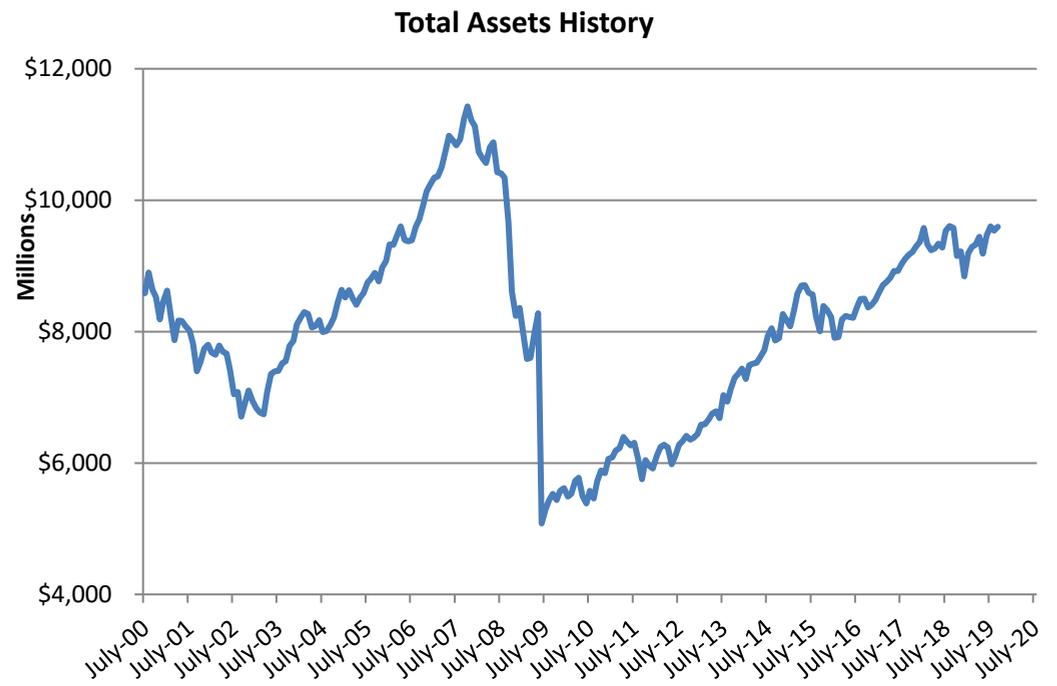
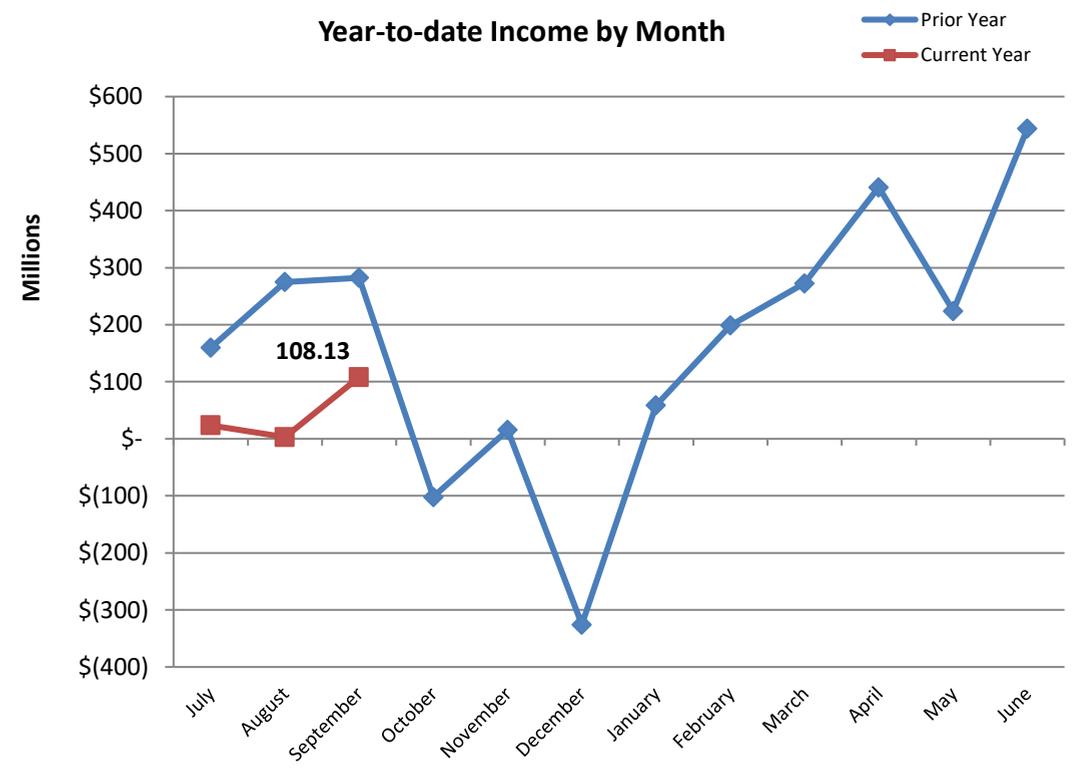
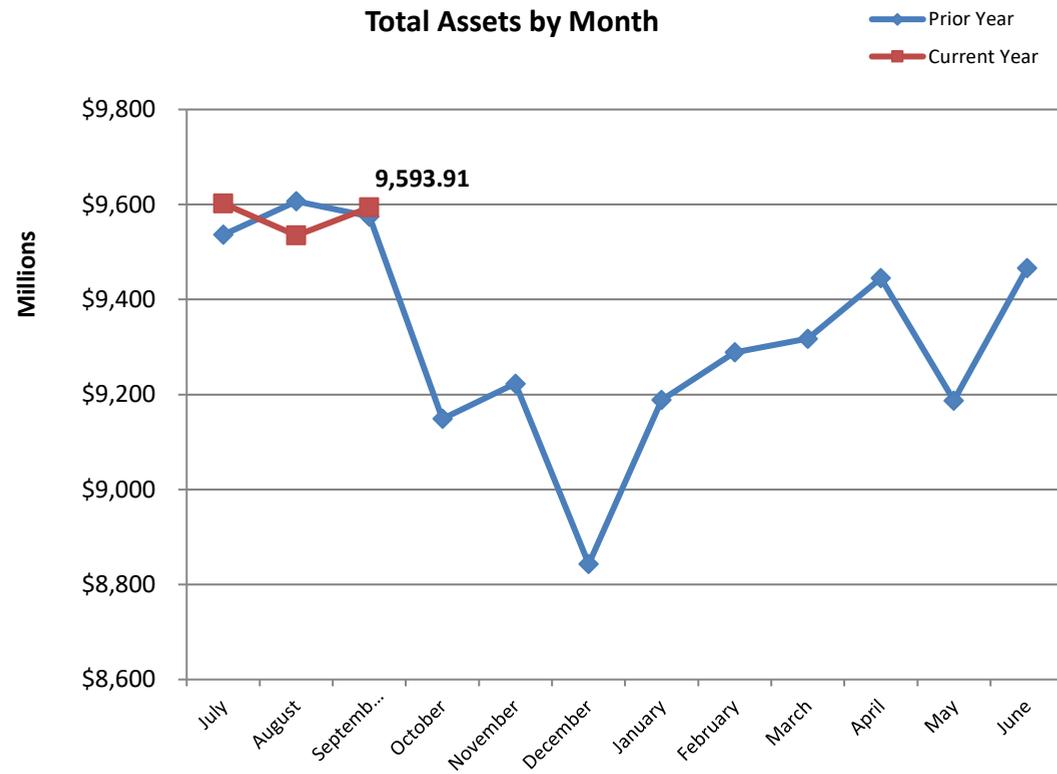
### 5-year Annualized Returns as of Fiscal Year End



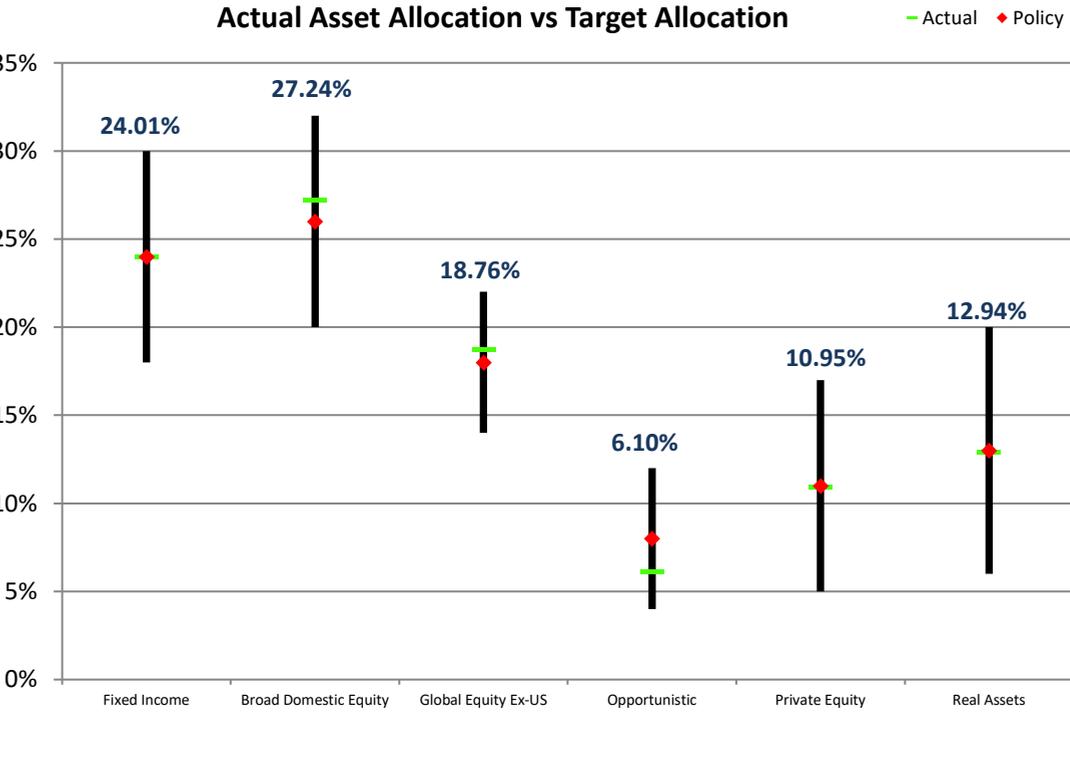
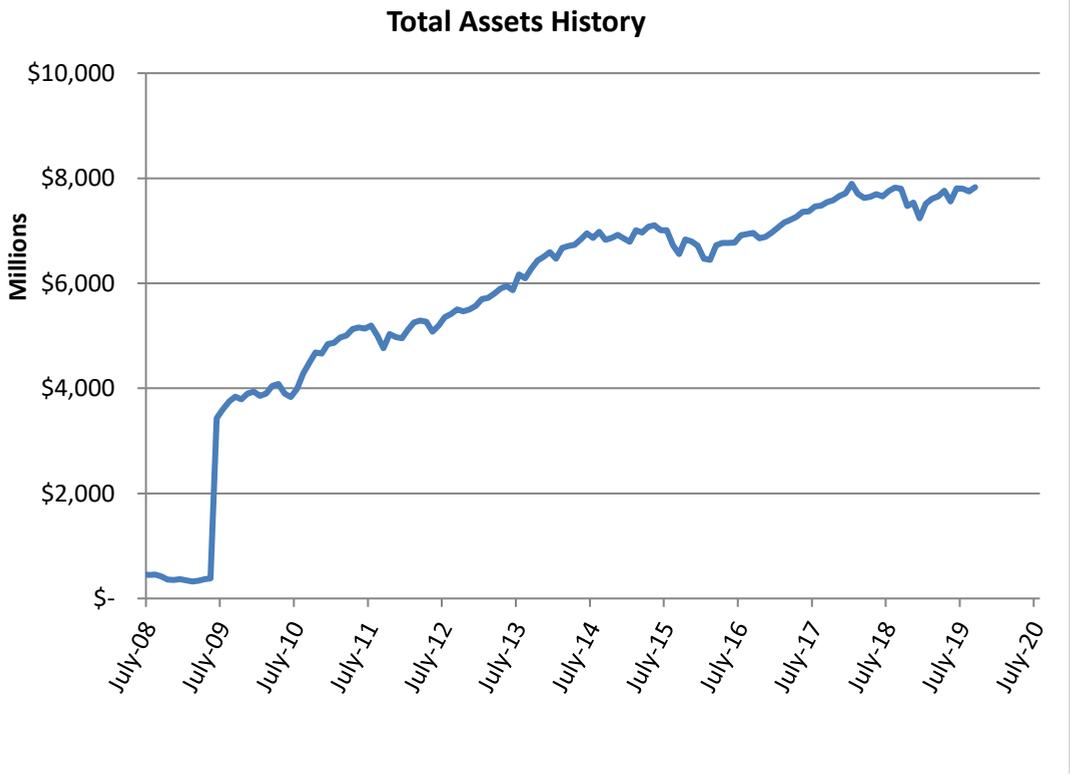
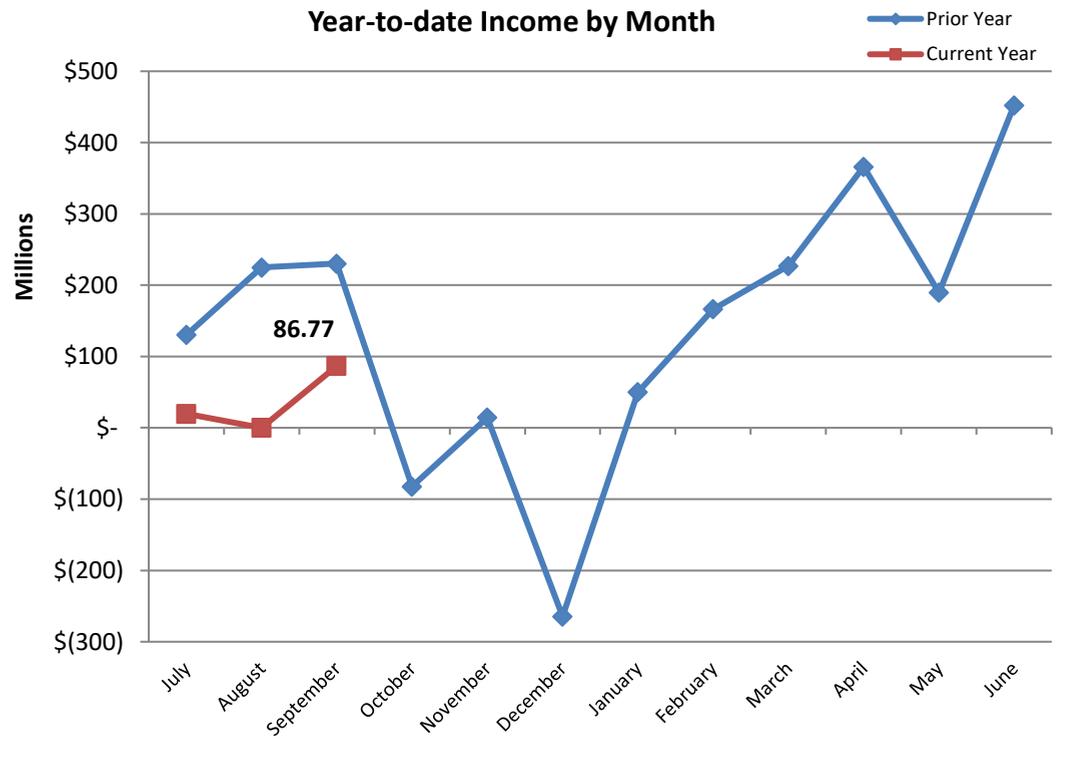
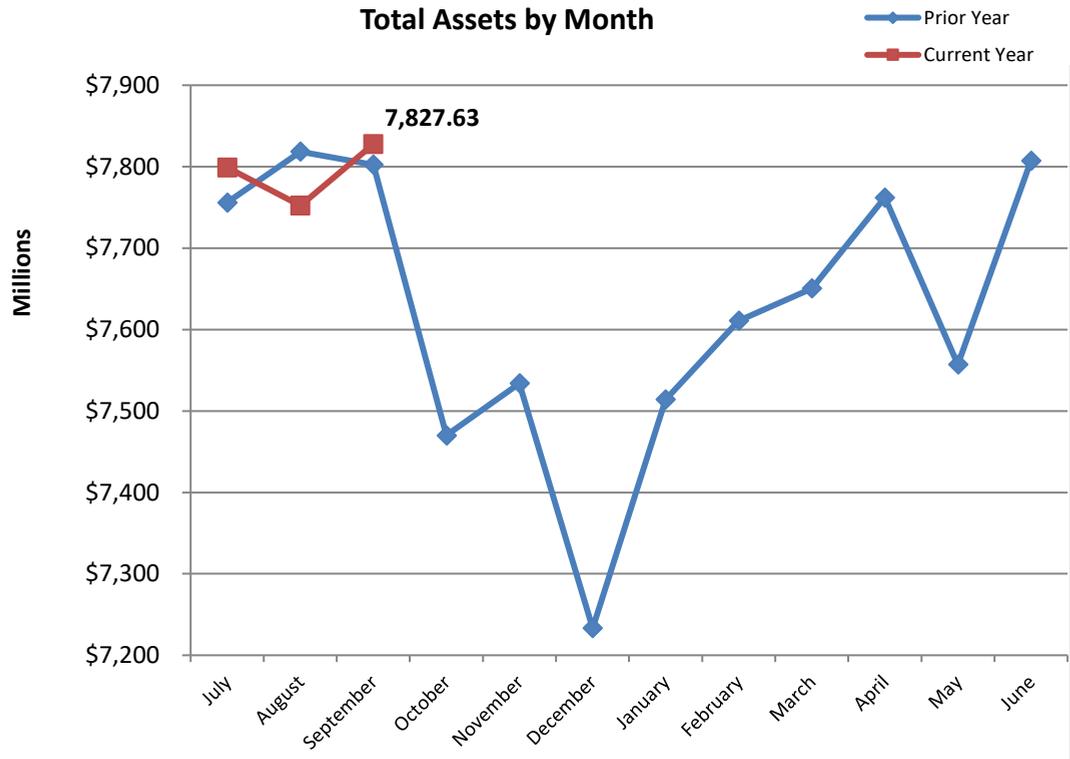
### Actual Asset Allocation



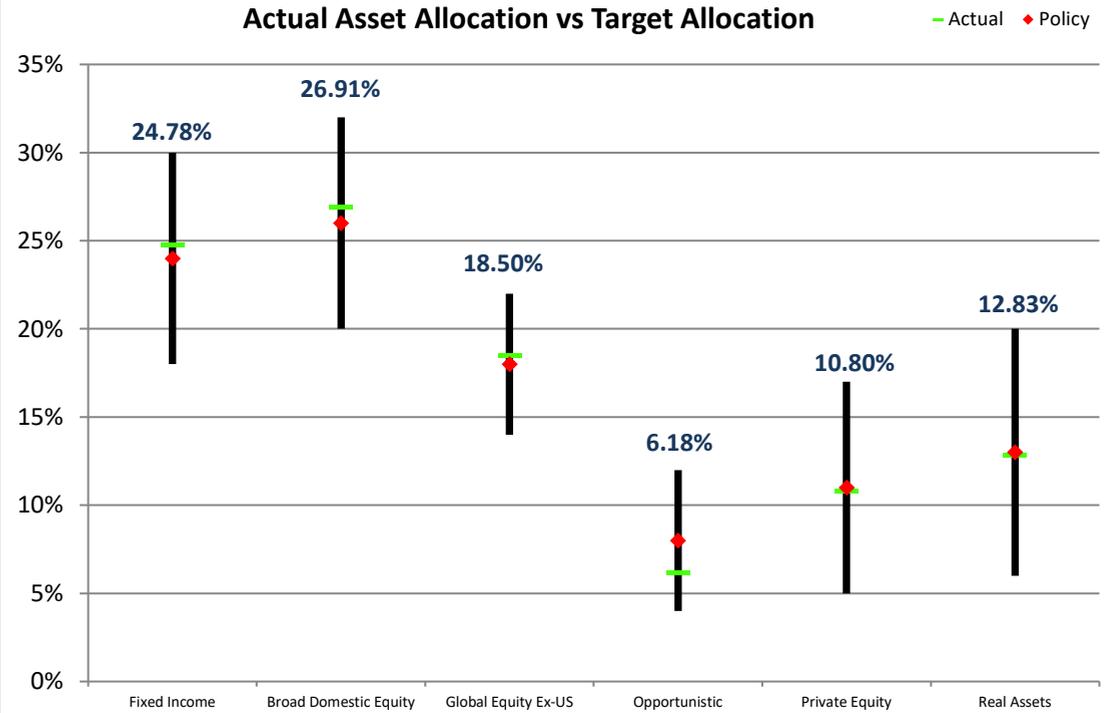
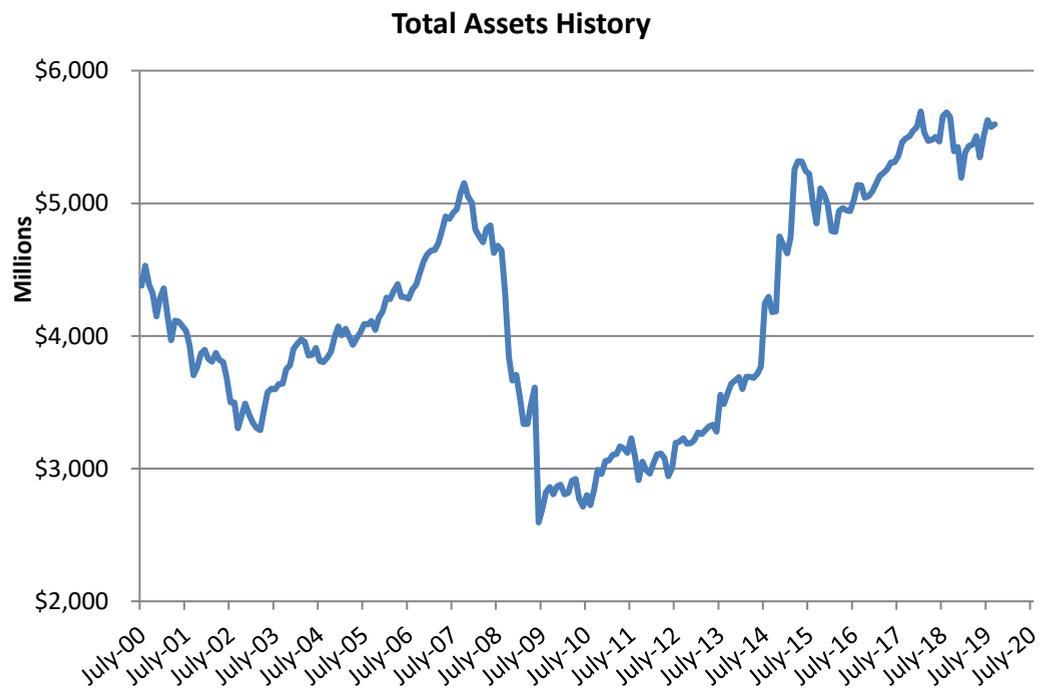
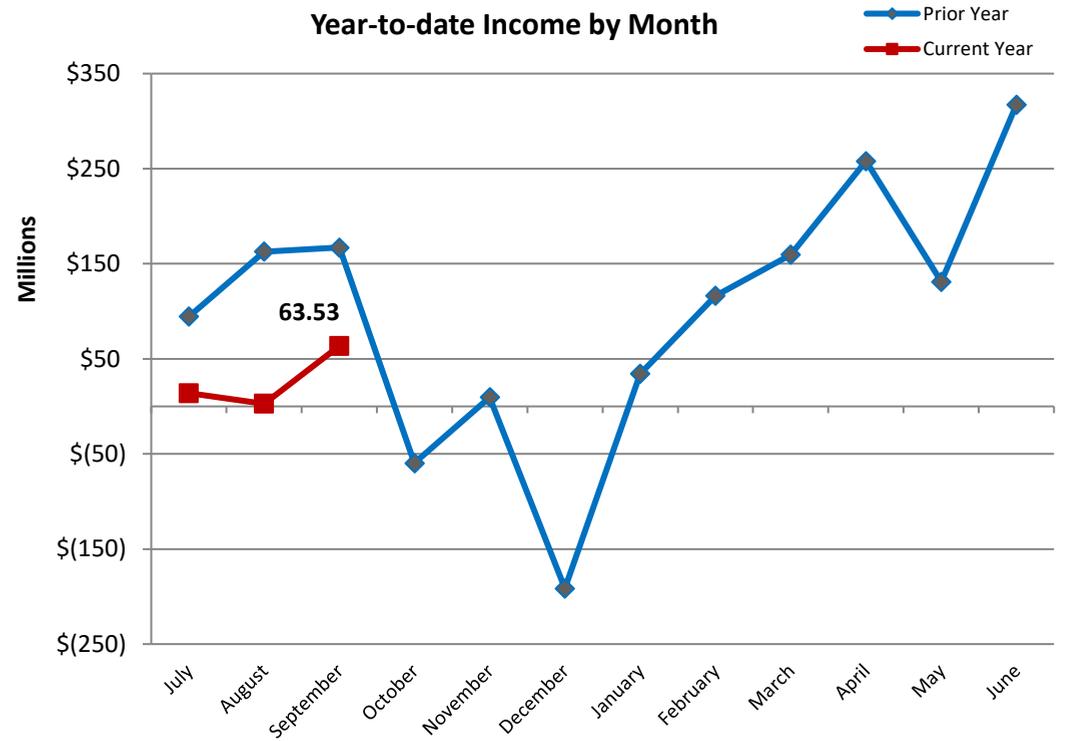
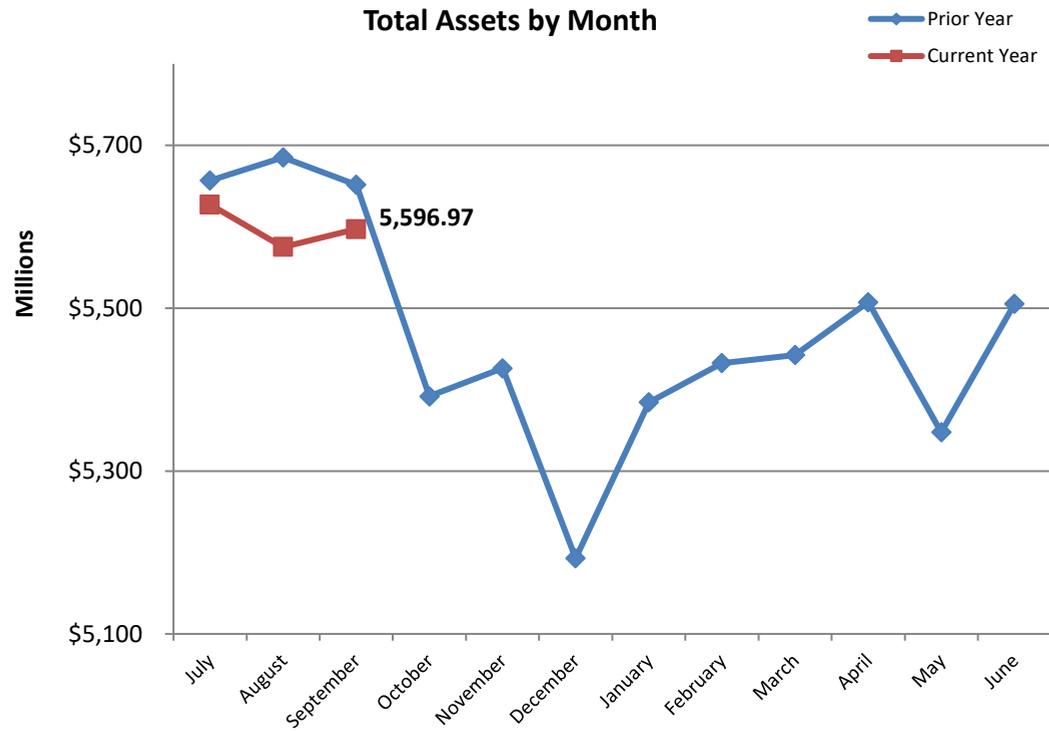
## Public Employees' Retirement Pension Trust Fund Fiscal Year-to-Date through September 30, 2019



## Public Employees' Retirement Health Care Trust Fund Fiscal Year-to-Date through September 30, 2019

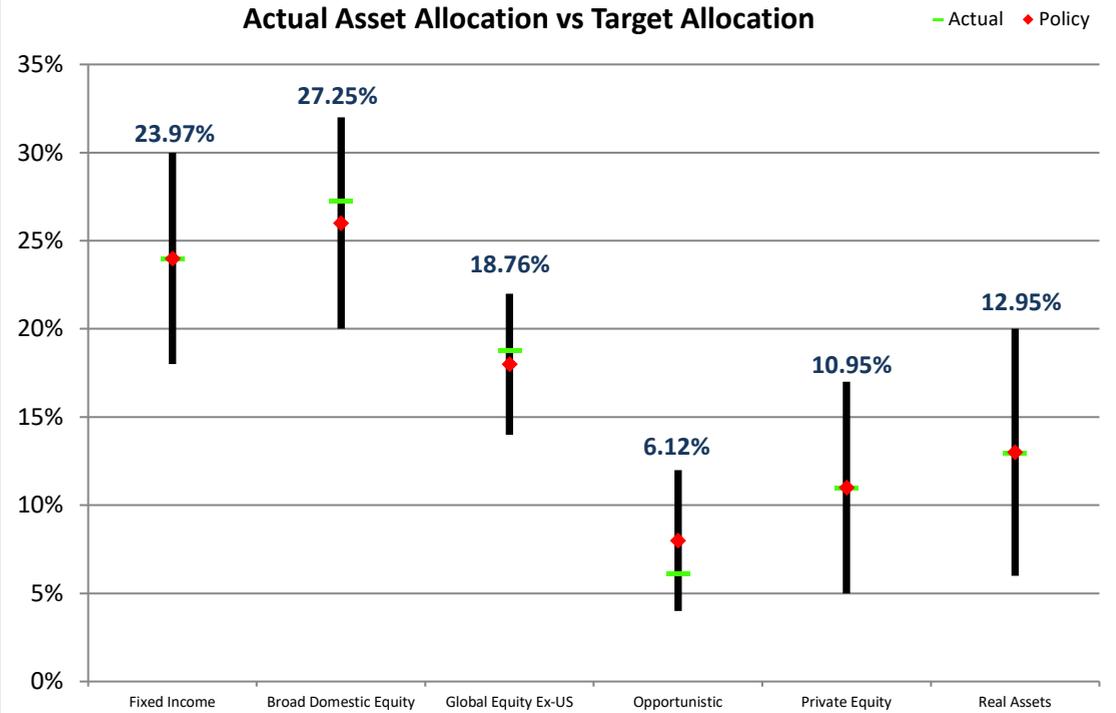
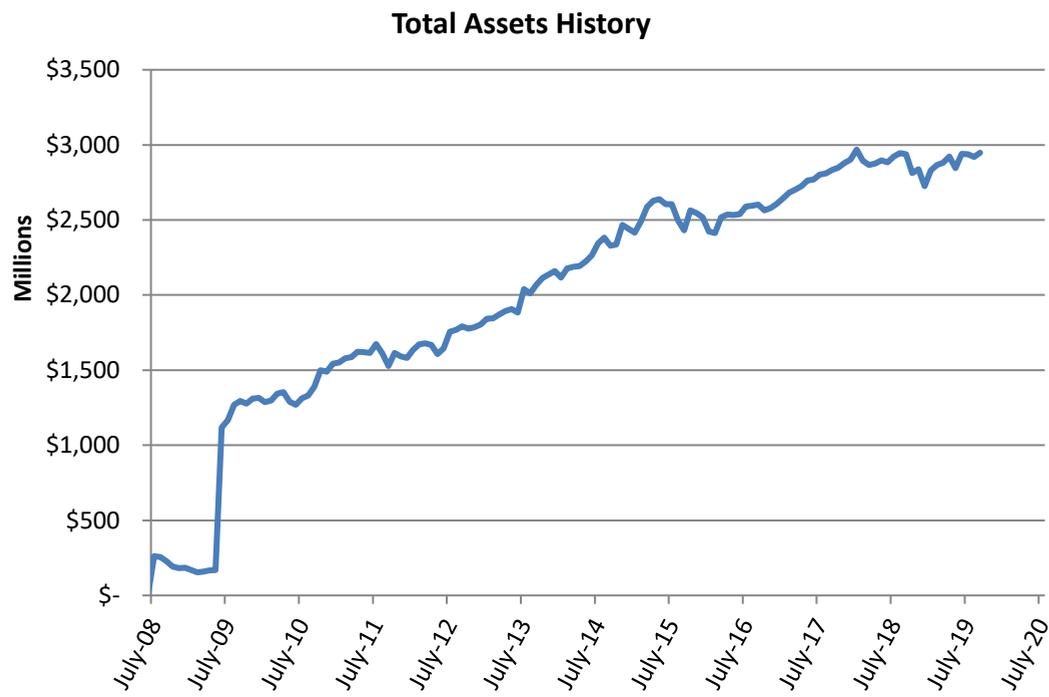
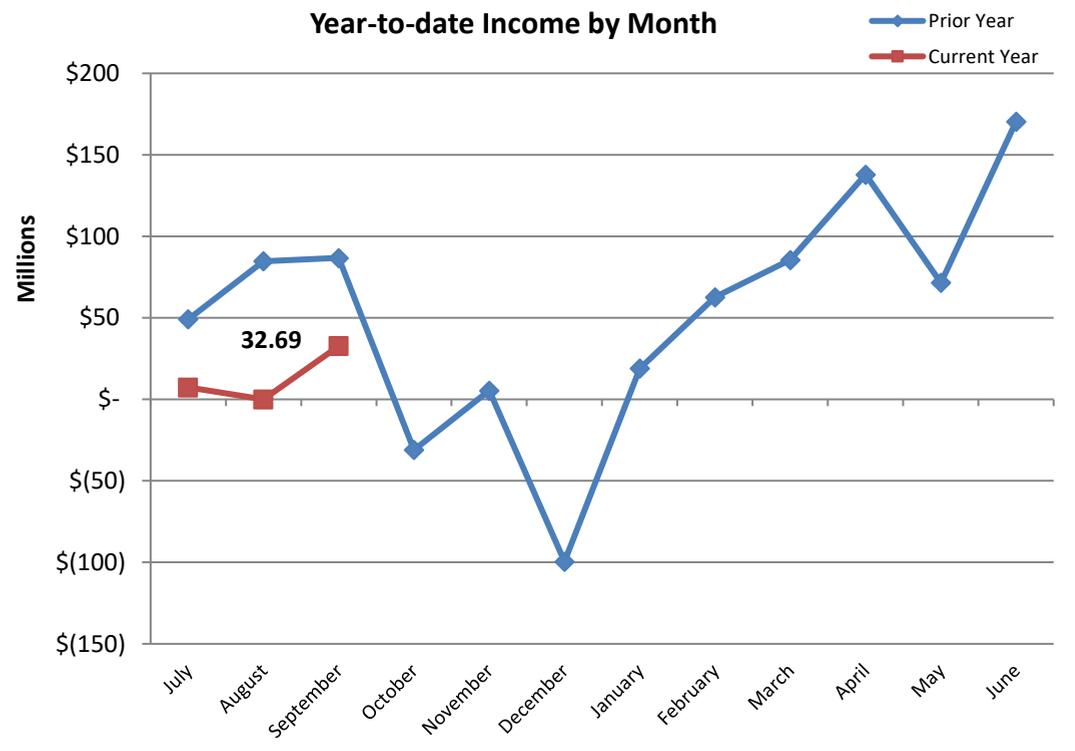
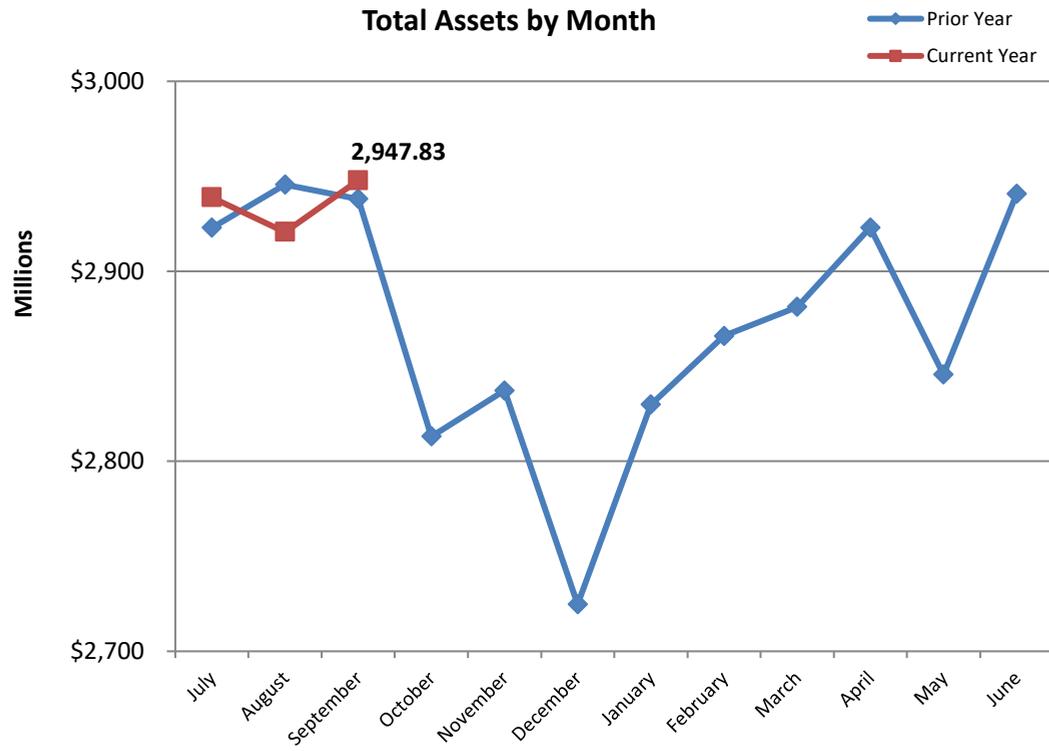


## Teachers' Retirement Pension Trust Fund Fiscal Year-to-Date through September 30, 2019

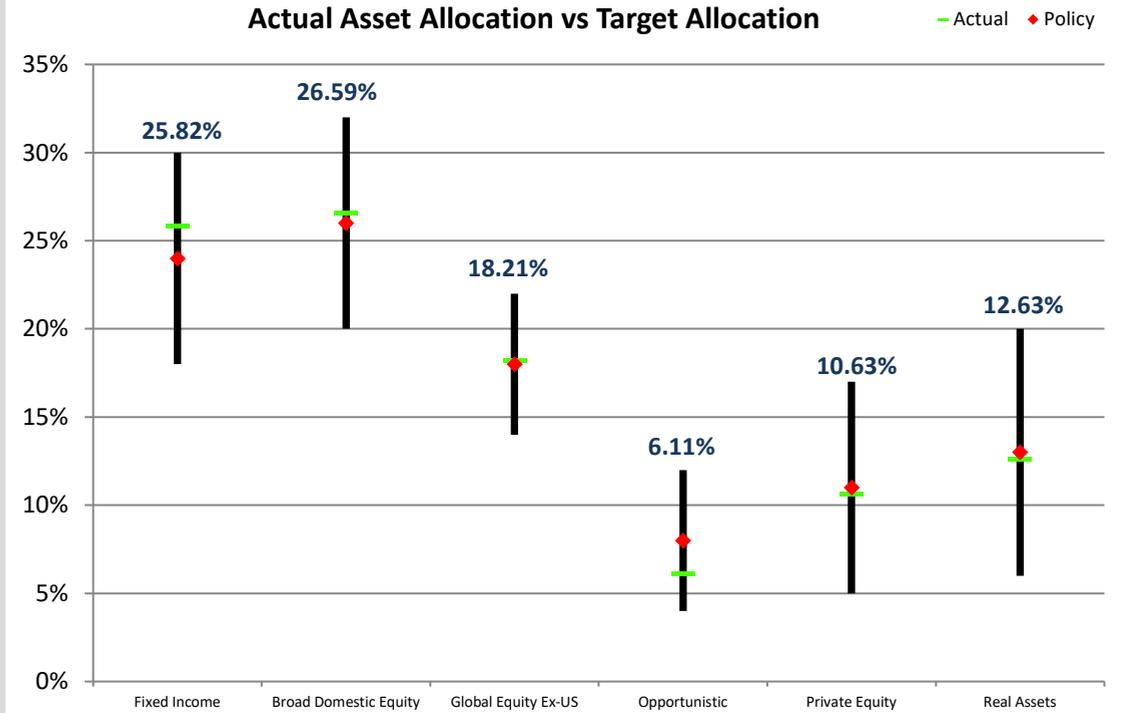
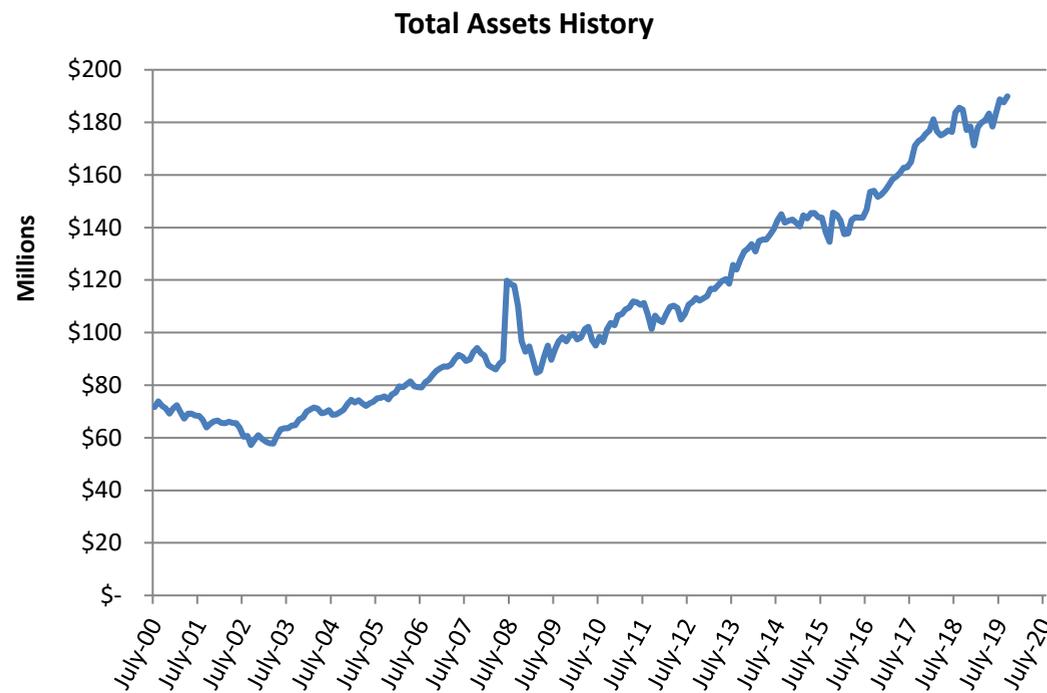
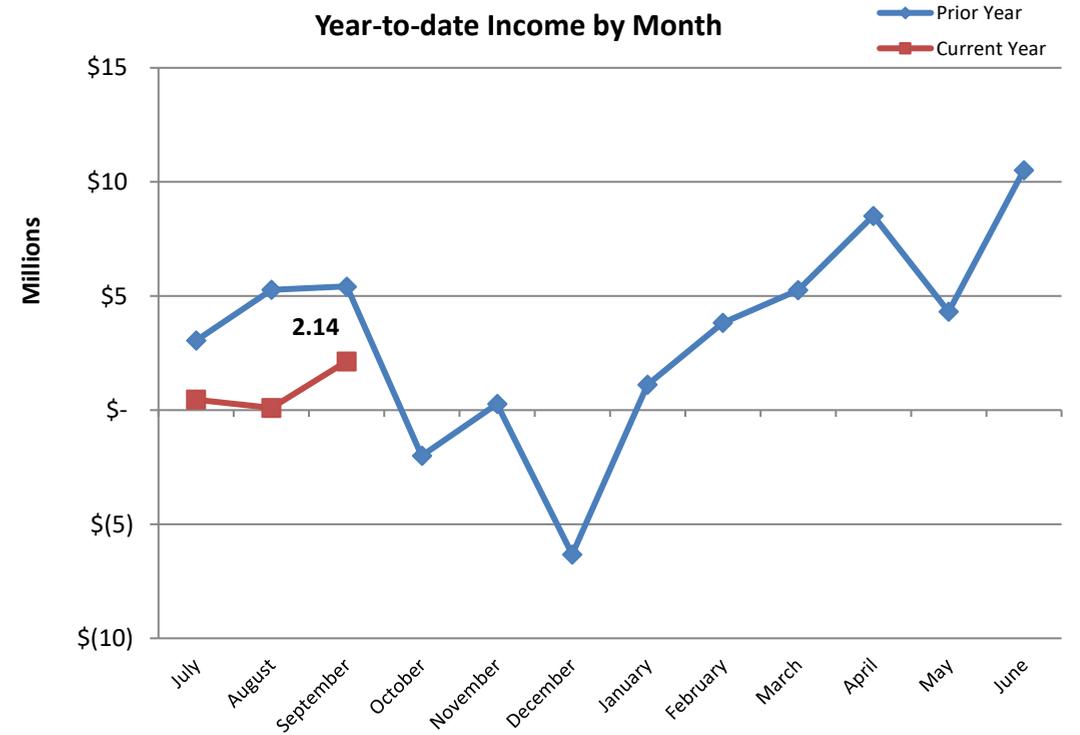
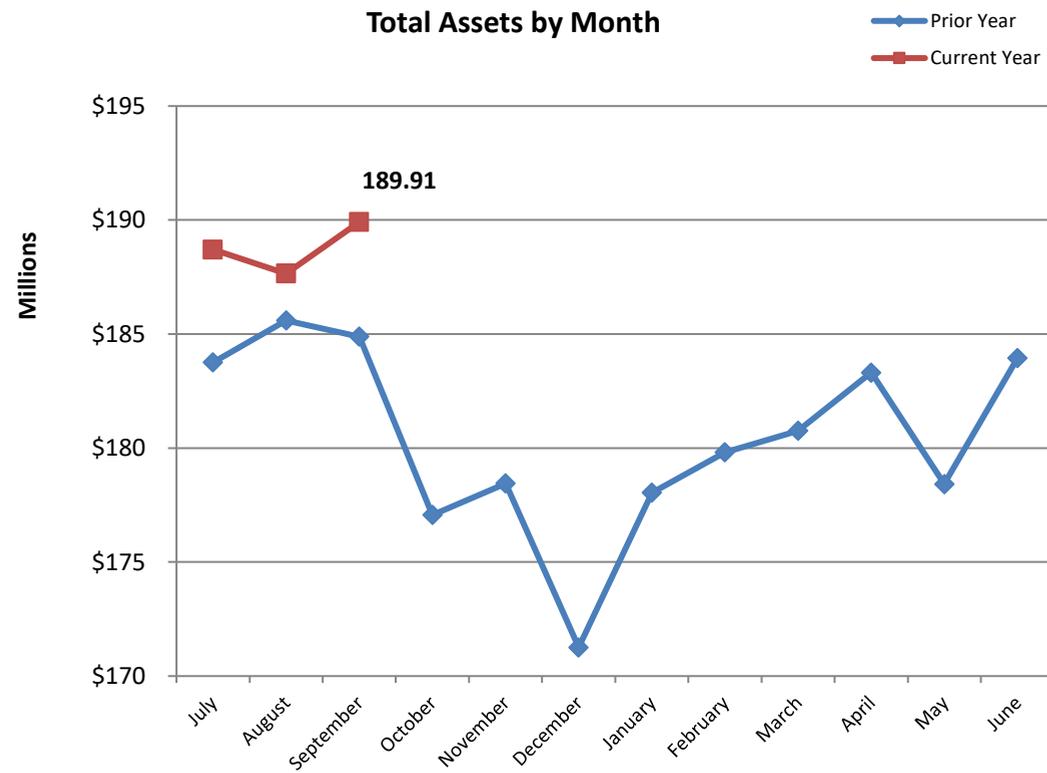


## Teachers' Retirement Health Care Trust Fund

### Fiscal Year-to-Date through September 30, 2019

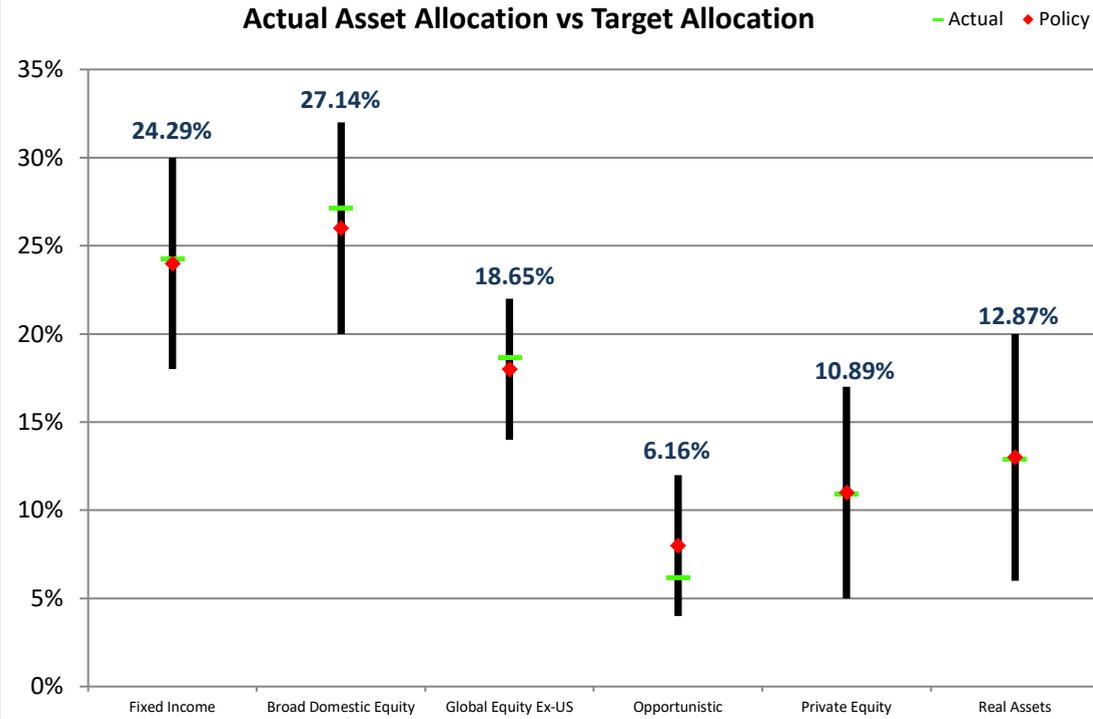
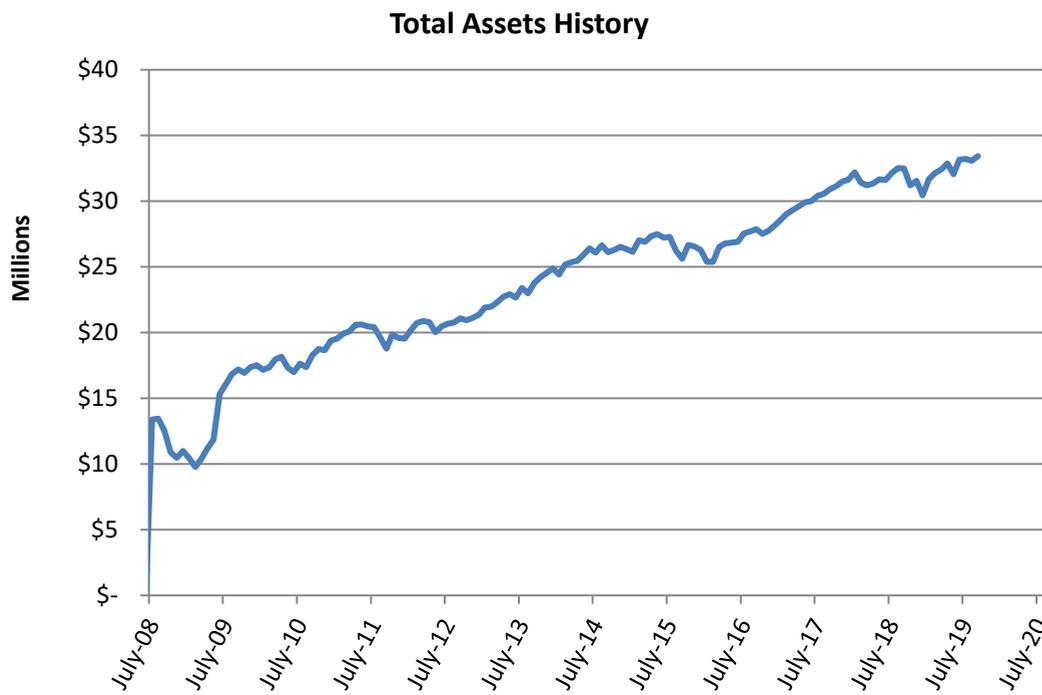
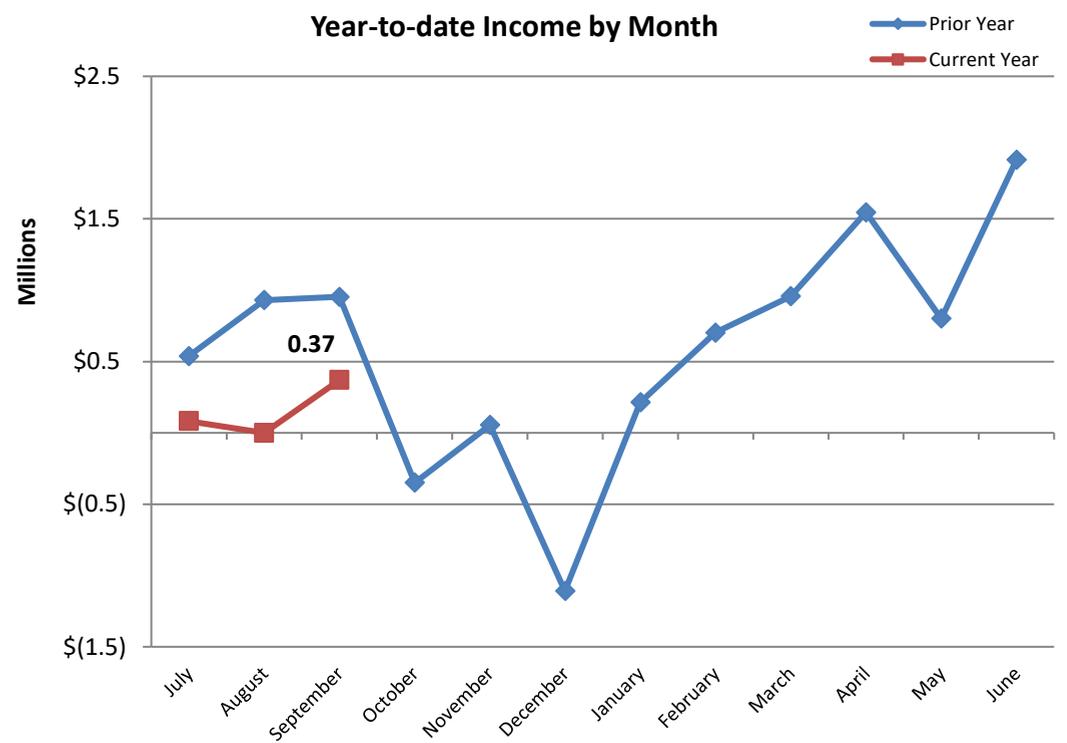
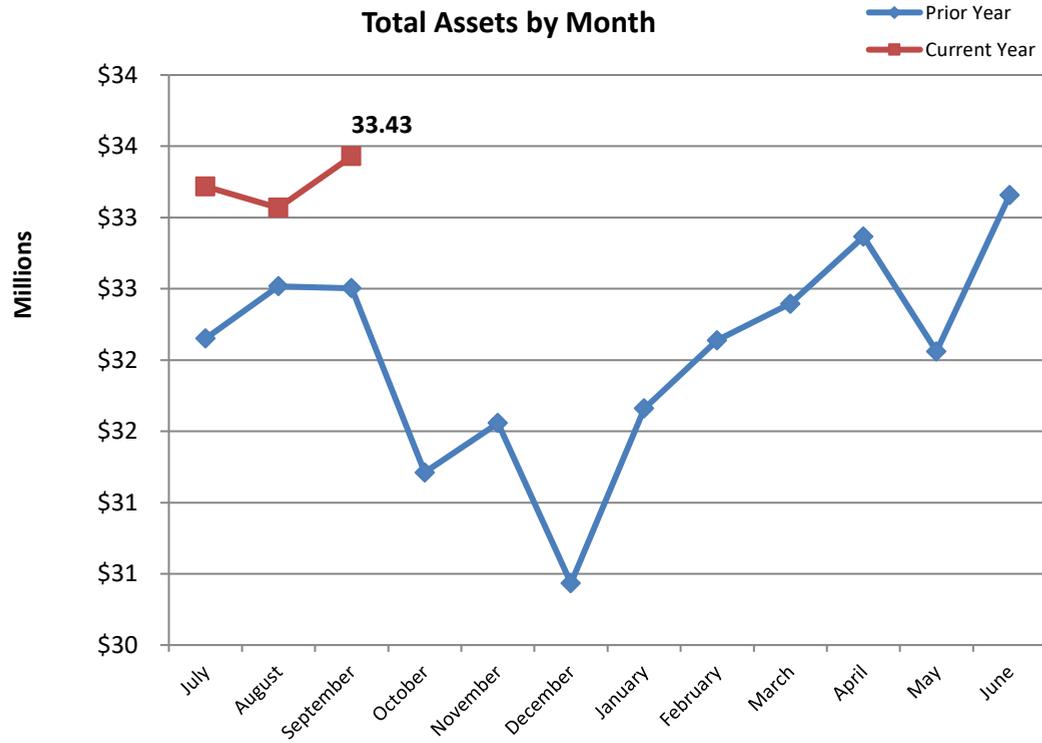


## Judicial Retirement Pension Trust Fund Fiscal Year-to-Date through September 30, 2019

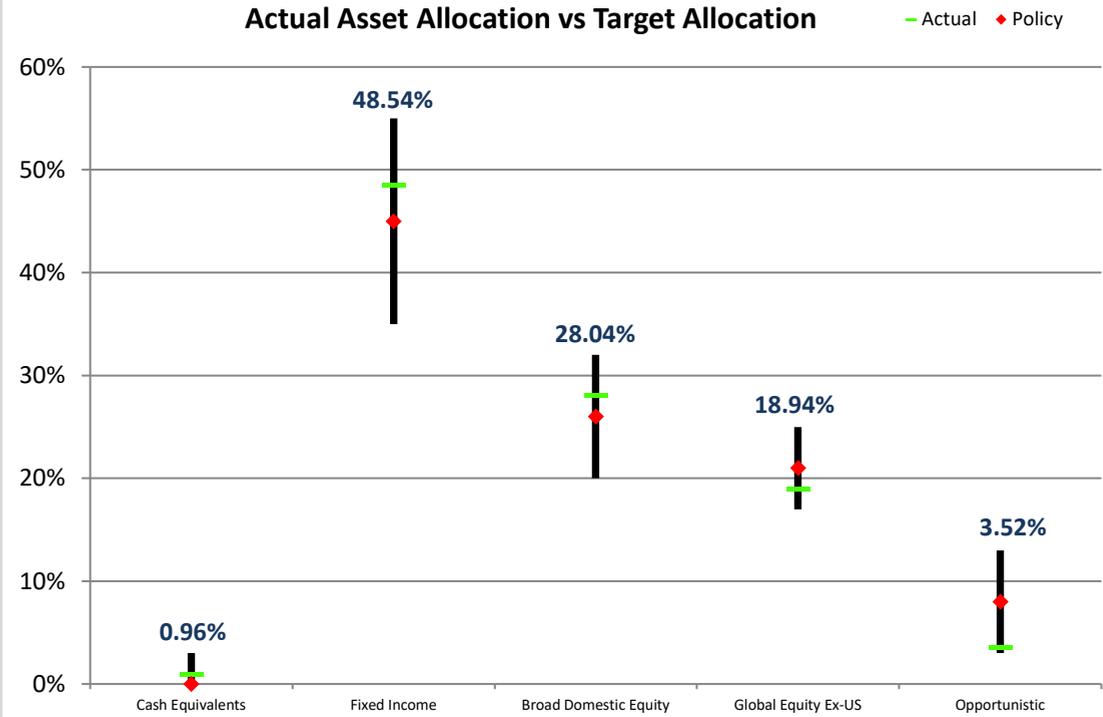
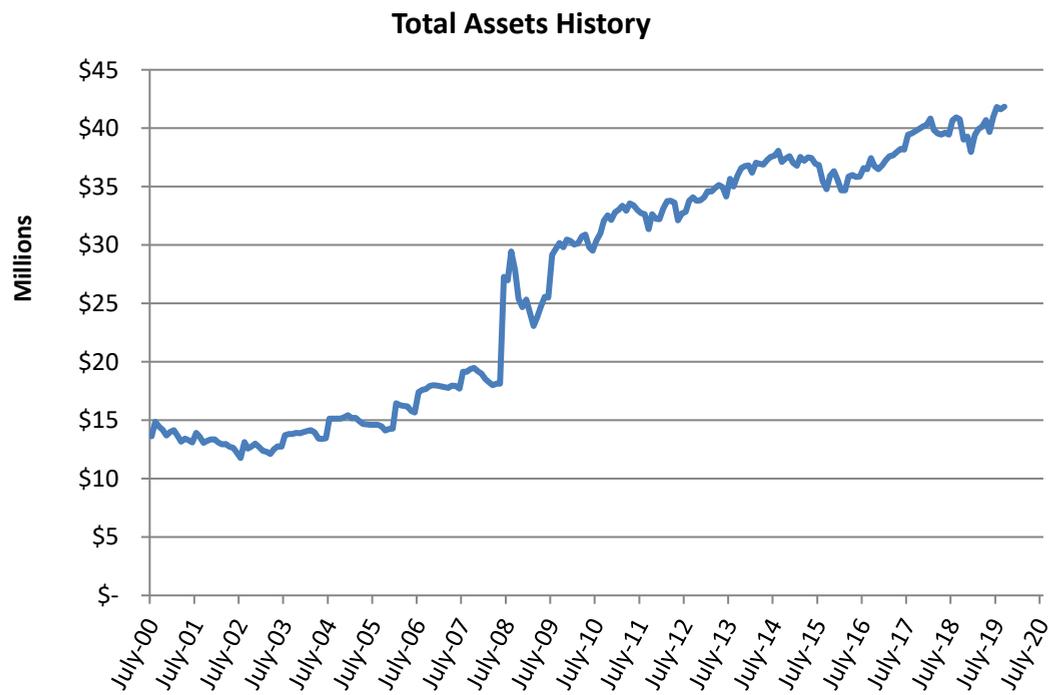
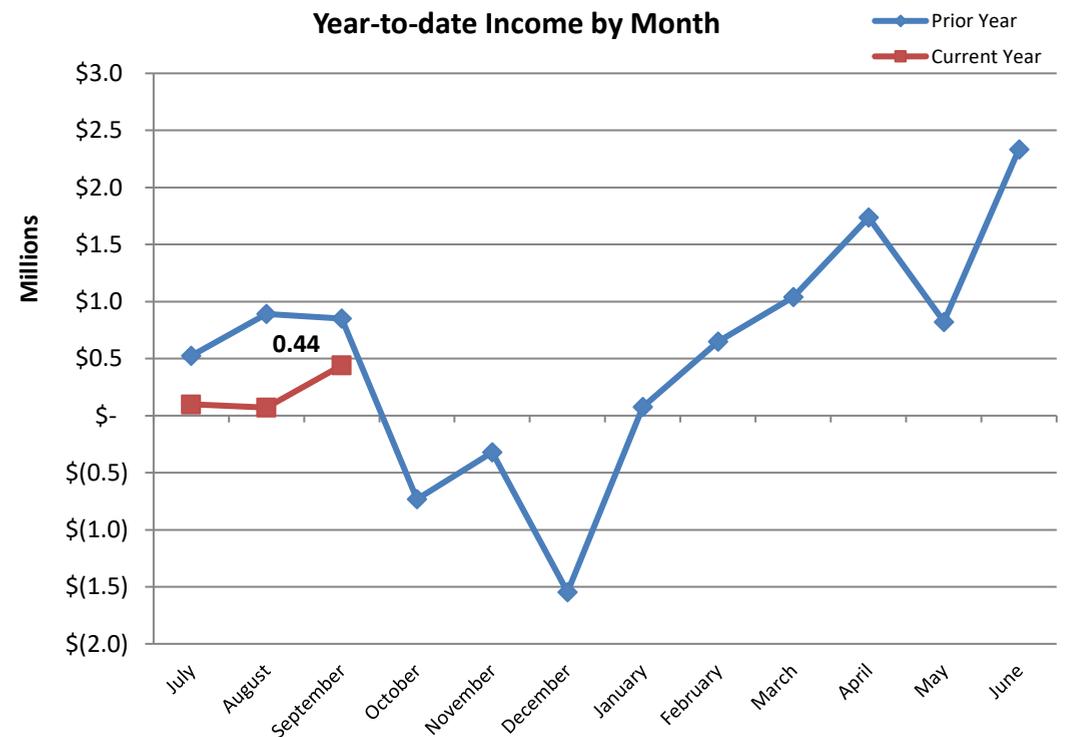
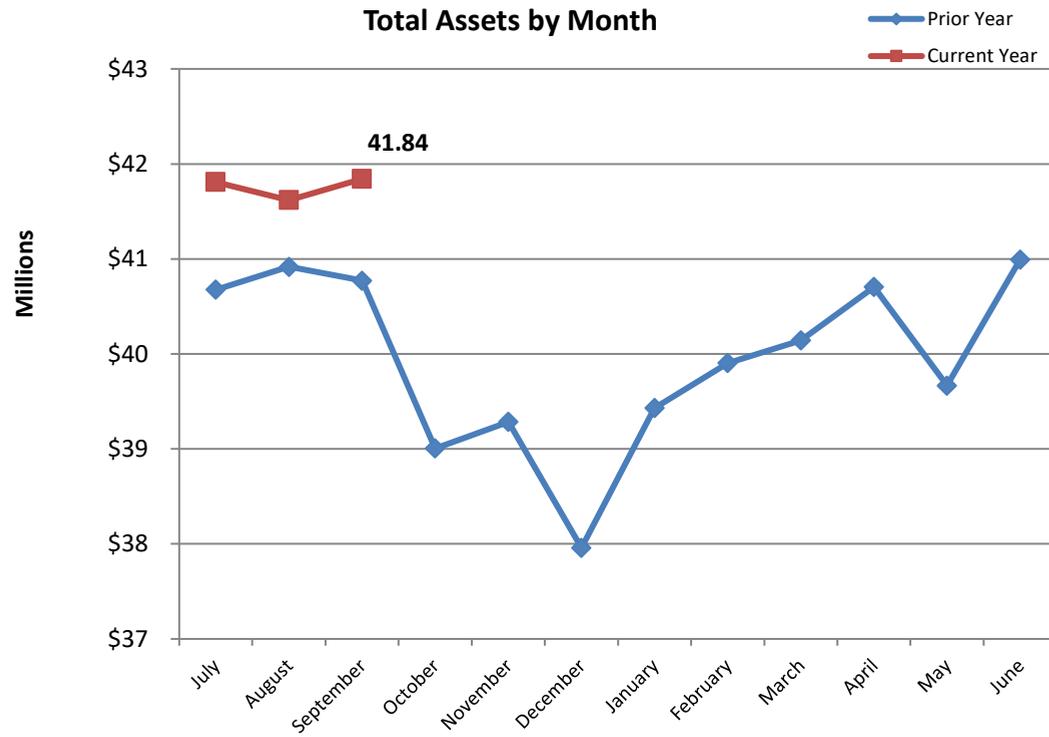


## Judicial Retirement Health Care Trust Fund

### Fiscal Year-to-Date through September 30, 2019



## Military Retirement Trust Fund Fiscal Year-to-Date through September 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 September 30, 2019**

	<b>Beginning Invested Assets</b>	<b>Investment Income</b>	<b>Net Contributions and (Withdrawals)</b>	<b>Ending Invested Assets</b>	<b>% increase (decrease)</b>	<b>% Change due to Investment Income</b>
<b>Cash</b>						
Short-Term Fixed Income Pool	\$ 270,453,663	\$ 497,987	\$ 69,521,697	\$ 340,473,347	25.89%	0.16%
Securities Lending Income Pool	49,955	150,959	(50,036)	150,878	202.03%	605.36%
<b>Total Cash</b>	<b>270,503,618</b>	<b>648,946</b>	<b>69,471,661</b>	<b>340,624,225</b>	<b>25.92%</b>	<b>0.21%</b>
<b>Fixed Income</b>						
Alternative Fixed Income						
Crestline Investors, Inc.	555,275,801	3,408,011	12,687,637	571,371,449	2.90%	0.61%
Prisma Capital Partners	412,983,513	688,397	-	413,671,910	0.17%	0.17%
Crestline Specialty Fund	29,394,303	925,580	-	30,319,883	3.15%	3.15%
Crestline Specialty Lending Fund II	24,907,083	671,090	3,822,224	29,400,397	18.04%	2.50%
Total Alternative Fixed Income	<b>1,022,560,700</b>	<b>5,693,078</b>	<b>16,509,861</b>	<b>1,044,763,639</b>	<b>2.17%</b>	<b>0.55%</b>
Opportunistic Fixed Income						
Fidelity Inst. Asset Mgmt. High Yield CMBS	185,203,453	608,716	15,000,000	200,812,169	8.43%	0.32%
Fidelity Institutional Asset Management	357,558,044	965,332	-	358,523,376	0.27%	0.27%
MacKay Shields, LLC	5,914,793	275,345	(149,374)	6,040,764	2.13%	4.71%
Mondrian Investment Partners	69,152	(30,273)	(2,394)	36,485	-47.24%	-44.55%
Total Opportunistic Fixed Income	<b>548,745,442</b>	<b>1,819,120</b>	<b>14,848,232</b>	<b>565,412,794</b>	<b>3.04%</b>	<b>0.33%</b>
US Aggregate Bond Index						
Blackrock US Debt Index Non-Lending Fund	13,577,519	(73,253)	-	13,504,266	-0.54%	-0.54%
ARMB US Treasury Pool						
ARMB US Treasury Fixed Income	2,121,770,086	(9,160,966)	(70,000,000)	2,042,609,120	-3.73%	-0.44%
ARMB Barclays Agg Bond Fund						
ARMB Barclays Agg Bond Fund	2,605,713,377	(16,654,407)	-	2,589,058,970	-0.64%	-0.64%
<b>Total Fixed Income</b>	<b>6,312,367,124</b>	<b>(18,376,428)</b>	<b>(38,641,907)</b>	<b>6,255,348,789</b>	<b>-0.90%</b>	<b>-0.29%</b>
<b>Domestic Equities</b>						
<b>Small Cap</b>						
Passively Managed						
ARMB Futures Small Cap	7,163	12	(7,181)	(6)	-100.08%	0.34%
ARMB S&P 600	550,352,189	18,484,533	899	568,837,621	3.36%	3.36%
SSgA Russell 2000 Growth	5,681	1,556	(755)	6,482	14.10%	29.34%
SSgA Russell 2000 Value	7,378	339	(602)	7,115	-3.56%	4.79%
Total Passive	<b>550,372,411</b>	<b>18,486,440</b>	<b>(7,639)</b>	<b>568,851,212</b>	<b>3.36%</b>	<b>3.36%</b>

**Alaska Retirement Management Board**  
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<b>Actively Managed</b>						
DePrince, Race & Zollo Inc.- Micro Cap	-	587	(587)	-	-	100.00%
Lord Abbett & Co.- Micro Cap	-	95,851	(30)	95,821	100.00%	100.00%
Transition Account	179,374	6,842	-	186,216	3.81%	3.81%
Zebra Capital Management	18	264	(282)	-	-100.00%	100.00%
<b>Total Active</b>	<b>179,392</b>	<b>103,544</b>	<b>(899)</b>	<b>282,037</b>	<b>57.22%</b>	<b>57.86%</b>
<b>Total Small Cap</b>	<b>550,551,803</b>	<b>18,589,984</b>	<b>(8,538)</b>	<b>569,133,249</b>	<b>3.38%</b>	<b>3.38%</b>
<b>Large Cap</b>						
<b>Passively Managed</b>						
ARMB Futures Large Cap	7,243	12	(7,245)	10	-99.86%	0.33%
ARMB S&P 900	4,616,622,752	90,039,882	5,556	4,706,668,190	1.95%	1.95%
ARMB Russell 1000 Value	(5,213)	631	4,586	4	-100.08%	21.61%
ARMB Russell Top 200	(5,225)	(203)	5,530	102	-101.95%	-8.25%
<b>Total Passive</b>	<b>4,616,619,557</b>	<b>90,040,322</b>	<b>8,427</b>	<b>4,706,668,306</b>	<b>1.95%</b>	<b>1.95%</b>
<b>Actively Managed</b>						
Allianz Global Investors	9,828	-	(9,828)	-	-100.00%	-
ARMB Equity Yield	5,319	726	(727)	5,318	-0.02%	14.65%
ARMB Large Cap Multi-Factor	104,385,300	1,629,848	-	106,015,148	1.56%	1.56%
ARMB S&P 500 Equal Weight	(4,881)	236	(236)	(4,881)	-	-4.72%
ARMB Scientific Beta	1,881,346,542	46,458,704	56,920	1,927,862,166	2.47%	2.47%
Barrow, Hanley, Mewhinney & Strauss	16,893	11,795	(28,688)	-	-100.00%	462.73%
Lazard Freres	(2,973)	58	(68)	(2,983)	-0.34%	-1.93%
Portable Alpha	(142,591)	8,702	(9,437)	(143,326)	-0.52%	-5.91%
Transition Account	375	-	(352)	23	-93.87%	-
<b>Total Active</b>	<b>1,985,613,812</b>	<b>48,110,069</b>	<b>7,584</b>	<b>2,033,731,465</b>	<b>2.42%</b>	<b>2.42%</b>
<b>Total Large Cap</b>	<b>6,602,233,369</b>	<b>138,150,391</b>	<b>16,011</b>	<b>6,740,399,771</b>	<b>2.09%</b>	<b>2.09%</b>
<b>Total Domestic Equity</b>	<b>7,152,785,172</b>	<b>156,740,375</b>	<b>7,473</b>	<b>7,309,533,020</b>	<b>2.19%</b>	<b>2.19%</b>
<b>Global Equities Ex US</b>						
<b>Small Cap</b>						
Mondrian Investment Partners	134,020,257	2,480,616	-	136,500,873	1.85%	1.85%
Schroder Investment Management	128,674,464	3,104,718	363,030	132,142,212	2.69%	2.41%
<b>Total Small Cap</b>	<b>262,694,721</b>	<b>5,585,334</b>	<b>363,030</b>	<b>268,643,085</b>	<b>2.26%</b>	<b>2.12%</b>

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<b>Large Cap</b>						
Allianz Global Investors	129,879	(1,159)	-	128,720	-0.89%	-0.89%
Arrow Street Capital	374,858,254	10,695,432	-	385,553,686	2.85%	2.85%
Baillie Gifford Overseas Limited	329,699,040	3,020,624	-	332,719,664	0.92%	0.92%
Blackrock ACWI Ex-US IMI	321,329,392	8,256,948	-	329,586,340	2.57%	2.57%
Brandes Investment Partners	697,559,302	38,279,192	-	735,838,494	5.49%	5.49%
Cap Guardian Trust Co	390,769,054	5,053,364	-	395,822,418	1.29%	1.29%
Lazard Freres	325,305,697	8,370,450	-	333,676,147	2.57%	2.57%
Legal & General	193,007,608	5,771,398	-	198,779,006	2.99%	2.99%
McKinley Capital Management	285,351,571	(53,812)	-	285,297,759	-0.02%	-0.02%
SSgA MSCI World Ex-US IMI Index Fund	968,675,920	26,783,981	48,390	995,508,291	2.77%	2.76%
State Street Global Advisors	3,312,449	(4,575)	(1,030,418)	2,277,456	-31.25%	-0.16%
<b>Total Large Cap</b>	<b>3,889,998,166</b>	<b>106,171,843</b>	<b>(982,028)</b>	<b>3,995,187,981</b>	<b>2.70%</b>	<b>2.73%</b>
<b>Emerging Markets Equity</b>						
MSCI Emerging Markets Index Fund	305,700,828	5,769,903	19,699	311,490,430	1.89%	1.89%
DePrince, Race, and Zollo Emerging Markets	268,765,775	10,042,755	-	278,808,530	3.74%	3.74%
Sands Group	-	(1,500)	1,500	-	-	-200.00%
Lazard Asset Management	228,835,979	10,902,778	(70,000,000)	169,738,757	-25.83%	5.62%
<b>Total Emerging Markets</b>	<b>803,302,582</b>	<b>26,713,936</b>	<b>(69,978,801)</b>	<b>760,037,717</b>	<b>-5.39%</b>	<b>3.48%</b>
<b>Total Global Equities</b>	<b>4,955,995,469</b>	<b>138,471,113</b>	<b>(70,597,799)</b>	<b>5,023,868,783</b>	<b>1.37%</b>	<b>2.81%</b>
<b>Opportunistic</b>						
<b>Alternative Equity Strategy</b>						
Alternative Equity Strategies Transition Account	-	-	-	-	-	-
Analytic Buy Write Account	(205,632)	2	171,426	(34,204)	-83.37%	0.00%
ARMB STOXX Minimum Variance	18,399	105	(28,881)	(10,377)	-156.40%	2.65%
SSgA Managed Volatility-Russell 1000	1,560	-	(1,560)	-	-100.00%	-
McKinley Global Health Care	250,214,681	(5,757,559)	-	244,457,122	-2.30%	-2.30%
<b>Total Alternative Equity Strategy</b>	<b>250,029,008</b>	<b>(5,757,452)</b>	<b>140,985</b>	<b>244,412,541</b>	<b>-2.25%</b>	<b>-2.30%</b>
<b>Alternative Beta</b>						
JPM Systemic Alpha	172,442,008	(122,212)	-	172,319,796	-0.07%	-0.07%
Man Group Alternative Risk Premia	331,121,191	5,687,194	-	336,808,385	1.72%	1.72%
Zebra Global Equity Advantage Fund	1,990,959	-	-	1,990,959	-	-
Zebra Global Equity Fund	3,903,353	-	-	3,903,353	-	-
<b>Total Alternative Beta</b>	<b>509,457,511</b>	<b>5,564,982</b>	<b>-</b>	<b>515,022,493</b>	<b>1.09%</b>	<b>1.09%</b>
<b>Other Opportunities</b>						
Project Pearl	10,006,309	-	-	10,006,309	-	-
Schroders Insurance Linked Securities	84,526,725	664,778	220,624	85,412,127	1.05%	0.79%
<b>Total Other Opportunities</b>	<b>94,533,034</b>	<b>664,778</b>	<b>220,624</b>	<b>95,418,436</b>	<b>0.94%</b>	<b>0.70%</b>

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**Tactical Allocation Strategies**

Fidelity Signals	406,888,590	4,457,964	-	411,346,554	1.10%	1.10%
PineBridge	398,423,937	4,878,751	1,500	403,304,188	1.22%	1.22%
<b>Total Tactical Allocation Strategies</b>	<b>805,312,527</b>	<b>9,336,715</b>	<b>1,500</b>	<b>814,650,742</b>	<b>1.16%</b>	<b>1.16%</b>
<b>Total Opportunistic</b>	<b>1,659,332,080</b>	<b>9,809,023</b>	<b>363,109</b>	<b>1,669,504,212</b>	<b>0.61%</b>	<b>0.59%</b>

**Private Equity**

Abbott Capital	1,129,892,075	2,087,384	(4,815,788)	1,127,163,671	-0.24%	0.19%
Advent International GPE Fund VIII-B	26,562,390	-	-	26,562,390	-	-
Angelo, Gordon & Co.	3,930	-	-	3,930	-	-
Dyal Capital Partners III	28,670,010	-	-	28,670,010	-	-
Dyal Capital Partners IV	666,594	144,327	(4,914)	806,007	20.91%	21.73%
Glendon Opportunities	42,248,573	-	-	42,248,573	-	-
KKR Lending Partners II	33,392,476	-	(354,619)	33,037,857	-1.06%	-
Lexington Capital Partners VIII	37,082,257	-	(651,319)	36,430,938	-1.76%	-
Lexington Partners VII	18,759,506	-	(442,689)	18,316,817	-2.36%	-
Merit Capital Partners	11,730,057	-	-	11,730,057	-	-
NB SOF III	27,308,129	637,285	(597,586)	27,347,828	0.15%	2.36%
NB SOF IV	16,335,845	881,632	2,093,410	19,310,887	18.21%	5.07%
New Mountain Partners IV	20,308,352	-	(2,153,149)	18,155,203	-10.60%	-
New Mountain Partners V	22,512,956	-	-	22,512,956	-	-
NGP XI	44,407,578	-	-	44,407,578	-	-
NGP XII	12,334,939	-	-	12,334,939	-	-
Onex Partnership III	9,479,276	-	(69,674)	9,409,602	-0.74%	-
Pathway Capital Management LLC	1,273,979,770	5,233,715	(1,663,321)	1,277,550,164	0.28%	0.41%
Resolute Fund III	20,485,699	-	-	20,485,699	-	-
Resolute Fund IV	12,827,109	-	-	12,827,109	-	-
Summit Partners GE IX	32,836,306	-	1,940,000	34,776,306	5.91%	-
Warburg Pincus Global Growth Fund	2,119,873	-	-	2,119,873	-	-
Warburg Pincus X	14,999,115	-	(2,360,250)	12,638,865	-15.74%	-
Warburg Pincus XI	25,916,837	-	(536,670)	25,380,167	-2.07%	-
Warburg Pincus XII	65,896,294	-	(1,059,500)	64,836,794	-1.61%	-
<b>Total Private Equity</b>	<b>2,930,755,946</b>	<b>8,984,343</b>	<b>(10,676,069)</b>	<b>2,929,064,220</b>	<b>-0.06%</b>	<b>0.31%</b>

**Real Assets**

**Farmland**

Hancock Agricultural Investment Group	269,792,674	474,134	(500,000)	269,766,808	-0.01%	0.18%
UBS Agrivest, LLC	589,671,813	-	160,351	589,832,164	0.03%	-
<b>Total Farmland</b>	<b>859,464,487</b>	<b>474,134</b>	<b>(339,649)</b>	<b>859,598,972</b>	<b>0.02%</b>	<b>0.06%</b>

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**Timber**

Hancock Natural Resource Group	99,365,884	899,141	(375,000)	99,890,025	0.53%	0.91%
Timberland Invt Resource LLC	270,489,323	-	-	270,489,323	-	-
<b>Total Timber</b>	<u>369,855,207</u>	<u>899,141</u>	<u>(375,000)</u>	<u>370,379,348</u>	0.14%	0.24%

**Energy**

EIG Energy Fund XIV-A	10,056,609	(1)	-	10,056,608	0.00%	0.00%
EIG Energy Fund XV	22,227,014	147,625	(2,501,200)	19,873,439	-10.59%	0.70%
EIG Energy Fund XVI	57,119,104	(1,489,574)	(1,231,921)	54,397,609	-4.76%	-2.64%
<b>Total Energy</b>	<u>89,402,727</u>	<u>(1,341,950)</u>	<u>(3,733,121)</u>	<u>84,327,656</u>	-5.68%	-1.53%

**REIT**

REIT Transition Account	302	-	-	302	-	-
ARMB REIT	98,878,277	1,851,574	-	100,729,851	1.87%	1.87%
<b>Total REIT</b>	<u>98,878,579</u>	<u>1,851,574</u>	<u>-</u>	<u>100,730,153</u>	1.87%	1.87%

**Master Limited Partnerships**

Advisory Research MLP	(119,182)	24,635	94,583	36	-100.03%	-34.27%
Tortoise Capital Advisors	15,298	3	(15,301)	-	-100.00%	0.04%
<b>Total Master Limited Partnerships</b>	<u>(103,884)</u>	<u>24,638</u>	<u>79,282</u>	<u>36</u>	-100.03%	-38.35%

**Infrastructure Private**

IFM Global Infrastructure Fund-Private	480,543,961	(2,323,999)	-	478,219,962	-0.48%	-0.48%
JP Morgan Infrastructure Fund-Private	123,137,328	-	-	123,137,328	-	-
<b>Total Infrastructure Private</b>	<u>603,681,289</u>	<u>(2,323,999)</u>	<u>-</u>	<u>601,357,290</u>	-0.38%	-0.38%

**Infrastructure Public**

Brookfield Investment Mgmt.-Public	13,988	780	(3,381)	11,387	-18.59%	6.34%
Lazard Asset Mgmt.-Public	61,626	(46)	(720)	60,860	-1.24%	-0.08%
<b>Total Infrastructure Public</b>	<u>75,614</u>	<u>734</u>	<u>(4,101)</u>	<u>72,247</u>	-4.45%	1.00%

**Real Estate**

<b>Core Commingled Accounts</b>						
BlackRock US Core Property Fund	216,262,342	-	-	216,262,342	-	-
JP Morgan	259,079,936	700,855	-	259,780,791	0.27%	0.27%
UBS Trumbull Property Fund	58,450,042	-	-	58,450,042	-	-
<b>Total Core Commingled</b>	<u>533,792,320</u>	<u>700,855</u>	<u>-</u>	<u>534,493,175</u>	0.13%	0.13%
<b>Core Separate Accounts</b>						
LaSalle Investment Management	121,988,764	-	(208,452)	121,780,312	-0.17%	-
Sentinel Separate Account	172,711,495	-	(508,268)	172,203,227	-0.29%	-
UBS Realty	532,358,393	1	(1,647,343)	530,711,051	-0.31%	0.00%
<b>Total Core Separate</b>	<u>827,058,652</u>	<u>1</u>	<u>(2,364,063)</u>	<u>824,694,590</u>	-0.29%	0.00%

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Non-Core Commingled Accounts							
Almanac Realty Securities V	1,140,721	-	(650,511)	490,210	-57.03%	-	
Almanac Realty Securities VII	39,227,818	-	(17,546,167)	21,681,651	-44.73%	-	
Almanac Realty Securities VIII	2,052,089	-	276,751	2,328,840	13.49%	-	
Clarion Ventures 4	32,178,142	-	-	32,178,142	-	-	
Colony Investors VIII, L.P.	1,373,562	-	-	1,373,562	-	-	
Coventry	241,737	-	-	241,737	-	-	
ING Clarion Development Ventures III	2,627,104	-	-	2,627,104	-	-	
KKR Real Estate Partners Americas II	11,214,981	-	-	11,214,981	-	-	
KKR Real Estate Partners Americas L.P.	15,137,681	-	-	15,137,681	-	-	
Silverpeak Legacy Pension Partners II, L.P.	2,864,884	-	-	2,864,884	-	-	
Silverpeak Legacy Pension Partners III, L.P.	3,903,889	-	-	3,903,889	-	-	
Tishman Speyer Real Estate Venture VI	23,059,802	-	(21,049,536)	2,010,266	-91.28%	-	
Tishman Speyer Real Estate Venture VII	572,926	-	-	572,926	-	-	
Total Non-Core Commingled	135,595,336	-	(38,969,463)	96,625,873	-28.74%	-	
<b>Total Real Estate</b>	1,496,446,308	700,856	(41,333,526)	1,455,813,638	-2.72%	0.05%	
<b>Total Real Assets</b>	3,517,700,327	285,128	(45,706,115)	3,472,279,340	-1.29%	0.01%	
<b>Total Assets</b>	<u>\$ 26,799,439,736</u>	<u>\$ 296,562,500</u>	<u>\$ (95,779,647)</u>	<u>\$ 27,000,222,589</u>	0.75%	1.11%	

**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**  
**September 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>
<b>Participant Options</b>							
T. Rowe Price							
Stable Value Fund	\$ 399,454,120	\$ 821,182	\$ (1,894,278)	\$ 14,282,646	\$ 412,663,670	3.31%	0.20%
Small Cap Stock Fund	196,186,644	1,750,560	(540,268)	2,942,261	200,339,197	2.12%	0.89%
Alaska Balanced Trust	1,129,963,129	5,945,381	(5,851,705)	(8,213,113)	1,121,843,692	-0.72%	0.53%
Long Term Balanced Fund	675,729,146	7,445,939	(664,360)	(3,087,587)	679,423,138	0.55%	1.10%
AK Target Date 2010 Trust	9,987,514	72,307	(40,116)	12,062	10,031,767	0.44%	0.72%
AK Target Date 2015 Trust	81,950,485	716,715	(474,383)	(786,752)	81,406,065	-0.66%	0.88%
AK Target Date 2020 Trust	95,382,875	1,018,774	(403,661)	(375,795)	95,622,193	0.25%	1.07%
AK Target Date 2025 Trust	84,454,436	1,056,630	258,382	1,076,156	86,845,604	2.83%	1.24%
AK Target Date 2030 Trust	66,146,766	948,550	5,665	673,747	67,774,728	2.46%	1.43%
AK Target Date 2035 Trust	60,851,089	965,940	113,836	221,141	62,152,006	2.14%	1.58%
AK Target Date 2040 Trust	62,053,692	1,061,989	177,663	(215,762)	63,077,582	1.65%	1.71%
AK Target Date 2045 Trust	70,008,129	1,261,292	257,838	31,243	71,558,502	2.21%	1.80%
AK Target Date 2050 Trust	79,250,081	1,434,152	228,628	(62,247)	80,850,614	2.02%	1.81%
AK Target Date 2055 Trust	72,118,116	1,291,700	803,685	(108,551)	74,104,950	2.75%	1.78%
AK Target Date 2060 Trust	4,189,071	75,476	(23,173)	(59,153)	4,182,221	-0.16%	1.82%
Total Investments with T. Rowe Price	<u>3,087,725,293</u>	<u>25,866,587</u>	<u>(8,046,247)</u>	<u>6,330,296</u>	<u>3,111,875,929</u>		
State Street Global Advisors							
Money Market	51,583,662	84,232	(1,212,326)	772,752	51,228,320	-0.69%	0.16%
S&P 500 Stock Index Fund Series A	458,599,743	8,571,417	(1,681,907)	(28,238,569)	437,250,684	-4.66%	1.93%
Russell 3000 Index	90,072,363	1,553,107	(31,471)	20,779,522	112,373,521	24.76%	1.55%
US Real Estate Investment Trust Index	-	-	4	(4)	-	0.00%	0.00%
World Equity Ex-US Index	70,242,767	1,817,971	(48,697)	2,110,840	74,122,881	5.52%	2.55%
US Treasury Inflation Protected Securities Index	-	1	22	(23)	-	0.00%	-200.00%
Total Investments with SSgA	<u>670,498,535</u>	<u>12,026,728</u>	<u>(2,974,375)</u>	<u>(4,575,482)</u>	<u>674,975,406</u>		
BlackRock							
Passive U.S. Bond Index Fund	141,389,946	(745,687)	(516,939)	10,690,890	150,818,210	6.67%	-0.51%
Strategic Completion Fund	78,754,638	408,549	(132,521)	(15,848,040)	63,182,626	-19.77%	0.58%
Total Investments with BlackRock	<u>220,144,584</u>	<u>(337,138)</u>	<u>(649,460)</u>	<u>(5,157,150)</u>	<u>214,000,836</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	58,084,725	1,791,442	(250,855)	(3,739,843)	55,885,469	-3.79%	3.19%
Northern Trust							
Environmental, Social, and Governance Fund	63,627,279	1,103,950	(378,804)	7,142,179	71,494,604	12.36%	1.65%
<b>Total All Funds</b>	<u>\$ 4,100,080,416</u>	<u>\$ 40,451,569</u>	<u>\$ (12,299,741)</u>	<u>\$ -</u>	<u>\$ 4,128,232,244</u>	0.69%	0.99%

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**  
**September 30, 2019**  
**\$ (Thousands)**

<u>Invested Assets (at fair value)</u>	<u>July</u>	<u>August</u>	<u>September</u>
Investments with T. Rowe Price			
Stable Value Fund	\$ 390,930	\$ 399,454	\$ 412,664
Small Cap Stock Fund	200,646	196,187	200,339
Alaska Balanced Trust	1,136,113	1,129,963	1,121,844
Long Term Balanced Fund	684,783	675,729	679,423
AK Target Date 2010 Trust	10,189	9,988	10,032
AK Target Date 2015 Trust	83,190	81,950	81,406
AK Target Date 2020 Trust	97,905	95,383	95,622
AK Target Date 2025 Trust	84,647	84,454	86,846
AK Target Date 2030 Trust	66,366	66,147	67,775
AK Target Date 2035 Trust	61,813	60,851	62,152
AK Target Date 2040 Trust	62,429	62,054	63,078
AK Target Date 2045 Trust	70,965	70,008	71,559
AK Target Date 2050 Trust	80,073	79,250	80,851
AK Target Date 2055 Trust	72,253	72,118	74,105
AK Target Date 2060 Trust	4,171	4,189	4,182
State Street Global Advisors			
Money Market	48,583	51,584	51,228
S&P 500 Stock Index Fund Series A	485,856	458,600	437,251
Russell 3000 Index	77,118	90,072	112,374
US Real Estate Investment Trust Index	39,340	-	-
World Equity Ex-US Index	70,168	70,243	74,123
US Treasury Inflation Protected Securities Index	48,876	-	-
Investments with BlackRock			
Passive U.S. Bond Index Fund	126,578	141,390	150,818
Strategic Completion Fund	-	78,755	63,183
Investments with Brandes/Baillie Gifford			
AK International Equity Fund	62,924	58,085	55,885
Investments with Northern Trust			
Environmental, Social, and Governance Fund	60,303	63,627	71,495
<b>Total Invested Assets</b>	<b>\$ 4,126,219</b>	<b>\$ 4,100,080</b>	<b>\$ 4,128,232</b>
<b>Change in Invested Assets</b>			
Beginning Assets	\$ 4,111,631	\$ 4,126,219	\$ 4,100,080
Investment Earnings	20,000	(21,625)	40,452
Net Contributions (Withdrawals)	(5,413)	(4,514)	(12,300)
<b>Ending Invested Assets</b>	<b>\$ 4,126,219</b>	<b>\$ 4,100,080</b>	<b>\$ 4,128,232</b>

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

	<u>Beginning Invested Assets</u>	<u>Investment Income</u>	<u>Net Contributions (Withdrawals)</u>	<u>Transfers In (Out)</u>	<u>Ending Invested Assets</u>	<u>% Change in Invested Assets</u>	<u>% Change due to Investment Income (1)</u>
<b>Participant Options</b>							
T. Rowe Price							
Stable Value Fund	\$ 185,942,415	\$ 379,514	\$ (1,492,801)	\$ 3,462,717	\$ 188,291,845	1.26%	0.20%
Small Cap Stock Fund	116,510,165	1,058,171	(317,803)	505,967	117,756,500	1.07%	0.91%
Alaska Balanced Trust	31,031,046	162,246	73,384	(417,704)	30,848,972	-0.59%	0.53%
Long Term Balanced Fund	84,760,484	938,405	(177,462)	(465,121)	85,056,306	0.35%	1.11%
AK Target Date 2010 Trust	3,837,513	27,878	(8,716)	13,553	3,870,228	0.85%	0.73%
AK Target Date 2015 Trust	9,349,103	81,881	5,275	(20,206)	9,416,053	0.72%	0.88%
AK Target Date 2020 Trust	24,501,079	263,599	17,963	(44,177)	24,738,464	0.97%	1.08%
AK Target Date 2025 Trust	20,599,407	259,634	126,738	101,418	21,087,197	2.37%	1.25%
AK Target Date 2030 Trust	12,866,170	184,703	103,934	50,727	13,205,534	2.64%	1.43%
AK Target Date 2035 Trust	8,031,624	127,783	81,192	(53,716)	8,186,883	1.93%	1.59%
AK Target Date 2040 Trust	8,999,680	154,113	90,862	(22,127)	9,222,528	2.48%	1.71%
AK Target Date 2045 Trust	6,496,164	116,966	82,768	(43,784)	6,652,114	2.40%	1.80%
AK Target Date 2050 Trust	4,725,850	86,051	69,503	(1,383)	4,880,021	3.26%	1.81%
AK Target Date 2055 Trust	4,487,470	81,668	53,043	(210,592)	4,411,589	-1.69%	1.85%
AK Target Date 2060 Trust	844,681	15,032	12,165	21,126	893,004	5.72%	1.75%
Total Investments with T. Rowe Price	<u>522,982,851</u>	<u>3,937,644</u>	<u>(1,279,955)</u>	<u>2,876,698</u>	<u>528,517,238</u>		
State Street Global Advisors							
Money Market	16,189,819	26,406	(151,101)	218,253	16,283,377	0.58%	0.16%
Russell 3000 Index	48,283,587	839,864	199,859	(613,939)	48,709,371	0.88%	1.75%
US Real Estate Investment Trust Index	-	-	2	(2)	-	0.00%	0.00%
World Equity Ex-US Index	22,072,944	573,591	117,957	516,877	23,281,369	5.47%	2.56%
US Treasury Inflation Protected Securities Index	-	-	10	(10)	-	0.00%	0.00%
Total Investments with SSgA	<u>86,546,350</u>	<u>1,439,861</u>	<u>166,727</u>	<u>121,179</u>	<u>88,274,117</u>		
BlackRock							
S&P 500 Index Fund	215,581,308	4,058,023	(792,566)	(2,853,985)	215,992,780	0.19%	1.90%
Strategic Completion Fund	30,240,710	159,346	57,834	(4,452,575)	26,005,315	-14.01%	0.57%
Passive U.S. Bond Index Fund	67,831,723	(361,838)	(95,507)	3,283,389	70,657,767	4.17%	-0.52%
Total Investments with BlackRock	<u>313,653,741</u>	<u>3,855,531</u>	<u>(830,239)</u>	<u>(4,023,171)</u>	<u>312,655,862</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	31,724,924	977,426	1,336	(950,590)	31,753,096	0.09%	3.13%
Northern Trust							
Environmental, Social, and Governance Fund	24,594,859	425,100	4,778	1,975,884	27,000,621	9.78%	1.66%
<b>Total All Funds</b>	<u>\$ 979,502,725</u>	<u>\$ 10,635,562</u>	<u>\$ (1,937,353)</u>	<u>\$ -</u>	<u>\$ 988,200,934</u>	0.89%	1.09%

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**  
**September 30, 2019**  
**\$ (Thousands)**

<b><u>Invested Assets</u></b> (at fair value)	<b><u>July</u></b>	<b><u>August</u></b>	<b><u>September</u></b>
Investments with T. Rowe Price			
Stable Value Fund	\$ 183,474	\$ 185,942	\$ 188,292
Small Cap Stock Fund	120,406	116,510	117,756
Alaska Balanced Trust	31,506	31,031	30,849
Long Term Balanced Fund	86,198	84,760	85,056
AK Target Date 2010 Trust	3,977	3,838	3,870
AK Target Date 2015 Trust	9,411	9,349	9,416
AK Target Date 2020 Trust	24,801	24,501	24,738
AK Target Date 2025 Trust	20,841	20,599	21,087
AK Target Date 2030 Trust	13,580	12,866	13,206
AK Target Date 2035 Trust	7,893	8,032	8,187
AK Target Date 2040 Trust	8,985	9,000	9,223
AK Target Date 2045 Trust	6,557	6,496	6,652
AK Target Date 2050 Trust	4,762	4,726	4,880
AK Target Date 2055 Trust	4,539	4,487	4,412
AK Target Date 2060 Trust	892	845	893
State Street Global Advisors			
Money Market	15,439	16,190	16,283
Russell 3000 Index	49,810	48,284	48,709
US Real Estate Investment Trust Index	14,386	-	-
World Equity Ex-US Index	21,943	22,073	23,281
US Treasury Inflation Protected Securities Index	19,161	-	-
Investments with BlackRock			
S&P 500 Index Fund	221,137	215,581	215,993
Strategic Completion Fund	-	30,241	26,005
Passive U.S. Bond Index Fund	62,456	67,832	70,658
Investments with Brandes/Baillie Gifford			
AK International Equity Fund	33,579	31,725	31,753
Investments with Northern Trust			
Environmental, Social, and Governance Fund	24,052	24,595	27,001
<b>Total Invested Assets</b>	<b>\$ 989,787</b>	<b>\$ 979,503</b>	<b>\$ 988,201</b>
<b><u>Change in Invested Assets</u></b>			
Beginning Assets	\$ 983,594	\$ 989,787	\$ 979,503
Investment Earnings	7,422	(7,979)	10,636
Net Contributions (Withdrawals)	(1,228)	(2,305)	(1,937)
<b>Ending Invested Assets</b>	<b>\$ 989,787</b>	<b>\$ 979,503</b>	<b>\$ 988,201</b>

**Defined Contribution Retirement - Participant Directed PERS**  
**Schedule of Investment Income and Changes in Invested Assets**  
**for the Month Ended**  
**September 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>
<b>Participant Options</b>							
T. Rowe Price							
Stable Value Fund	\$ 53,404,860	\$ 114,067	\$ 140,615	\$ 6,374,414	\$ 60,033,956	12.41%	0.20%
Small Cap Stock Fund	84,037,065	756,793	330,639	415,383	85,539,880	1.79%	0.90%
Alaska Balanced Trust	22,056,678	113,007	80,249	(4,401,384)	17,848,550	-19.08%	0.57%
Long Term Balanced Fund	15,571,313	172,161	71,196	207,460	16,022,130	2.90%	1.10%
AK Target Date 2010 Trust	2,406,897	17,497	(2,604)	(111)	2,421,679	0.61%	0.73%
AK Target Date 2015 Trust	12,474,923	109,714	(215,847)	(21,720)	12,347,070	-1.02%	0.89%
AK Target Date 2020 Trust	35,921,730	385,789	33,070	(7,145)	36,333,444	1.15%	1.07%
AK Target Date 2025 Trust	58,277,691	736,732	258,144	(185,020)	59,087,547	1.39%	1.26%
AK Target Date 2030 Trust	61,231,143	879,171	536,325	(36,977)	62,609,662	2.25%	1.43%
AK Target Date 2035 Trust	74,146,518	1,177,811	465,473	(95,501)	75,694,301	2.09%	1.58%
AK Target Date 2040 Trust	87,468,805	1,503,843	783,922	(411,713)	89,344,857	2.14%	1.72%
AK Target Date 2045 Trust	112,618,008	2,030,162	1,122,898	228,938	116,000,006	3.00%	1.79%
AK Target Date 2050 Trust	133,855,381	2,426,204	1,129,320	(36,926)	137,373,979	2.63%	1.81%
AK Target Date 2055 Trust	123,184,638	2,233,784	2,423,137	(614,489)	127,227,070	3.28%	1.80%
AK Target Date 2060 Trust	1,436,231	26,908	26,207	13,102	1,502,448	4.61%	1.85%
Total Investments with T. Rowe Price	<u>878,091,881</u>	<u>12,683,643</u>	<u>7,182,744</u>	<u>1,428,311</u>	<u>899,386,579</u>		
State Street Global Advisors							
Money Market	12,168,734	19,816	(772)	10,921	12,198,699	0.25%	0.16%
S&P 500 Stock Index Fund Series A	93,824,762	1,746,888	405,770	(25,983,668)	69,993,752	-25.40%	2.16%
Russell 3000 Index	29,668,994	491,831	147,457	24,087,093	54,395,375	83.34%	1.18%
US Real Estate Investment Trust Index	-	-	-	-	-	0.00%	0.00%
World Equity Ex-US Index	61,641,883	1,602,971	298,323	3,102,997	66,646,174	8.12%	2.53%
US Treasury Inflation Protected Securities Index	-	-	-	-	-	0.00%	0.00%
Total Investments with SSgA	<u>197,304,373</u>	<u>3,861,506</u>	<u>850,778</u>	<u>1,217,343</u>	<u>203,234,000</u>		
BlackRock							
Passive U.S. Bond Index Fund	58,391,676	(302,597)	182,438	6,775,490	65,047,007	11.40%	-0.49%
Strategic Completion Fund	30,059,978	152,671	84,512	(11,112,943)	19,184,218	-36.18%	0.62%
Total Investments with BlackRock	<u>88,451,654</u>	<u>(149,926)</u>	<u>266,950</u>	<u>(4,337,453)</u>	<u>84,231,225</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	35,904,492	1,110,153	196,336	(4,379,520)	32,831,461	-8.56%	3.28%
Northern Trust							
Environmental, Social, and Governance Fund	23,373,847	416,380	121,540	6,071,319	29,983,086	28.28%	1.57%
<b>Total All Funds</b>	<u>\$ 1,223,126,247</u>	<u>\$ 17,921,756</u>	<u>\$ 8,618,348</u>	<u>\$ -</u>	<u>\$ 1,249,666,351</u>	2.17%	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, 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**  
**September 30, 2019**  
**\$ (Thousands)**

<u>Invested Assets (at fair value)</u>	<u>July</u>	<u>August</u>	<u>September</u>
Investments with T. Rowe Price			
Stable Value Fund	\$ 49,550	\$ 53,405	\$ 60,034
Small Cap Stock Fund	85,588	84,037	85,540
Alaska Balanced Trust	25,259	22,057	17,849
Long Term Balanced Fund	15,570	15,571	16,022
AK Target Date 2010 Trust	2,364	2,407	2,422
AK Target Date 2015 Trust	12,447	12,475	12,347
AK Target Date 2020 Trust	36,313	35,922	36,333
AK Target Date 2025 Trust	58,997	58,278	59,088
AK Target Date 2030 Trust	61,669	61,231	62,610
AK Target Date 2035 Trust	74,455	74,147	75,694
AK Target Date 2040 Trust	88,249	87,469	89,345
AK Target Date 2045 Trust	113,710	112,618	116,000
AK Target Date 2050 Trust	135,192	133,855	137,374
AK Target Date 2055 Trust	123,545	123,185	127,227
AK Target Date 2060 Trust	1,437	1,436	1,502
State Street Global Advisors			
Money Market	11,355	12,169	12,199
S&P 500 Stock Index Fund Series A	112,815	93,825	69,994
Russell 3000 Index	13,165	29,669	54,395
US Real Estate Investment Trust Index	17,236	-	-
World Equity Ex-US Index	60,410	61,642	66,646
US Treasury Inflation Protected Securities Index	20,051	-	-
Investments with BlackRock			
Passive U.S. Bond Index Fund	52,746	58,392	65,047
Strategic Completion Fund	-	30,060	19,184
Investments with Brandes/Baillie Gifford			
AK International Equity Fund	39,804	35,904	32,831
Investments with Northern Trust			
Environmental, Social, and Governance Fund	19,449	23,374	29,983
<b>Total Invested Assets</b>	<b>\$ 1,231,376</b>	<b>\$ 1,223,126</b>	<b>\$ 1,249,666</b>
<b>Change in Invested Assets</b>			
Beginning Assets	\$ 1,218,754	\$ 1,231,376	\$ 1,223,126
Investment Earnings	5,513	(15,573)	17,922
Net Contributions (Withdrawals)	7,110	7,323	8,618
<b>Ending Invested Assets</b>	<b>\$ 1,231,376</b>	<b>\$ 1,223,126</b>	<b>\$ 1,249,666</b>

**Defined Contribution Retirement - Participant Directed TRS**  
**Schedule of Investment Income and Changes in Invested Assets**  
**for the Month Ended**  
**September 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>
<b>Participant Options</b>							
T. Rowe Price							
Stable Value Fund	\$ 22,070,463	\$ 46,884	\$ (4,212)	\$ 2,358,793	\$ 24,471,928	10.88%	0.20%
Small Cap Stock Fund	35,588,789	322,394	(21,376)	186,687	36,076,494	1.37%	0.90%
Alaska Balanced Trust	9,201,590	46,462	5,273	(2,106,653)	7,146,672	-22.33%	0.57%
Long Term Balanced Fund	6,477,901	71,166	2,851	96,539	6,648,457	2.63%	1.09%
AK Target Date 2010 Trust	858,683	6,235	3,116	-	868,034	1.09%	0.72%
AK Target Date 2015 Trust	3,701,730	32,302	(62,829)	-	3,671,203	-0.82%	0.88%
AK Target Date 2020 Trust	10,367,524	110,947	(48,286)	-	10,430,185	0.60%	1.07%
AK Target Date 2025 Trust	19,120,705	240,494	84,606	(15,344)	19,430,461	1.62%	1.26%
AK Target Date 2030 Trust	22,832,102	326,135	160,634	9	23,318,880	2.13%	1.42%
AK Target Date 2035 Trust	33,605,226	531,433	173,133	(45,857)	34,263,935	1.96%	1.58%
AK Target Date 2040 Trust	36,243,645	619,456	195,541	8,139	37,066,781	2.27%	1.70%
AK Target Date 2045 Trust	54,086,210	976,757	166,849	(58,368)	55,171,448	2.01%	1.80%
AK Target Date 2050 Trust	76,296,754	1,378,598	146,010	302	77,821,664	2.00%	1.81%
AK Target Date 2055 Trust	41,667,710	752,192	120,150	(10,754)	42,529,298	2.07%	1.80%
AK Target Date 2060 Trust	521,035	9,387	1,040	49	531,511	2.01%	1.80%
Total Investments with T. Rowe Price	<u>372,640,067</u>	<u>5,470,842</u>	<u>922,500</u>	<u>413,542</u>	<u>379,446,951</u>		
State Street Global Advisors							
Money Market	3,340,117	5,441	16,484	(10,487)	3,351,555	0.34%	0.16%
S&P 500 Stock Index Fund Series A	37,388,980	699,926	(7,571)	(12,020,239)	26,061,096	-30.30%	2.23%
Russell 3000 Index	11,580,651	187,032	(41,132)	11,570,973	23,297,524	101.18%	1.08%
US Real Estate Investment Trust Index	-	-	3,828	(3,828)	-	0.00%	0.00%
World Equity Ex-US Index	27,650,441	718,794	(6,991)	1,583,421	29,945,665	8.30%	2.53%
US Treasury Inflation Protected Securities Index	-	-	25,311	(25,311)	-	0.00%	0.00%
Total Investments with SSgA	<u>79,960,189</u>	<u>1,611,193</u>	<u>(10,071)</u>	<u>1,094,529</u>	<u>82,655,840</u>		
BlackRock							
Passive U.S. Bond Index Fund	23,516,584	(121,991)	(26,385)	2,517,717	25,885,925	10.08%	-0.49%
Strategic Completion Fund	11,843,948	60,589	1,422	(4,643,987)	7,261,972	-38.69%	0.64%
Total Investments with BlackRock	<u>35,360,532</u>	<u>(61,402)</u>	<u>(24,963)</u>	<u>(2,126,270)</u>	<u>33,147,897</u>		
Brandes/Baillie Gifford (2)							
AK International Equity Fund	15,543,606	480,080	(1,268.00)	(2,025,270)	13,997,148	-9.95%	3.30%
Northern Trust							
Environmental, Social, and Governance Fund	9,905,652	174,275	(6,233.00)	2,643,469	12,717,163	28.38%	1.55%
<b>Total All Funds</b>	<u>\$ 513,410,046</u>	<u>\$ 7,674,988</u>	<u>\$ 879,965</u>	<u>\$ -</u>	<u>\$ 521,964,999</u>	1.67%	1.49%

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**  
**September 30, 2019**  
**\$ (Thousands)**

<u>Invested Assets (at fair value)</u>	<u>July</u>	<u>August</u>	<u>September</u>
Investments with T. Rowe Price			
Stable Value Fund	\$ 20,540	\$ 22,070	\$ 24,472
Small Cap Stock Fund	36,368	35,589	36,076
Alaska Balanced Trust	10,692	9,202	7,147
Long Term Balanced Fund	6,574	6,478	6,648
AK Target Date 2010 Trust	860	859	868
AK Target Date 2015 Trust	3,718	3,702	3,671
AK Target Date 2020 Trust	10,625	10,368	10,430
AK Target Date 2025 Trust	19,684	19,121	19,430
AK Target Date 2030 Trust	23,081	22,832	23,319
AK Target Date 2035 Trust	34,192	33,605	34,264
AK Target Date 2040 Trust	37,136	36,244	37,067
AK Target Date 2045 Trust	55,300	54,086	55,171
AK Target Date 2050 Trust	77,799	76,297	77,822
AK Target Date 2055 Trust	42,579	41,668	42,529
AK Target Date 2060 Trust	524	521	532
State Street Global Advisors			
Money Market	3,144	3,340	3,352
S&P 500 Stock Index Fund Series A	45,559	37,389	26,061
Russell 3000 Index	4,569	11,581	23,298
US Real Estate Investment Trust Index	7,072	-	-
World Equity Ex-US Index	27,203	27,650	29,946
US Treasury Inflation Protected Securities Index	7,449	-	-
Investments with BlackRock			
Passive U.S. Bond Index Fund	21,451	23,517	25,886
Strategic Completion Fund	-	11,844	7,262
Investments with Brandes/Baillie Gifford			
AK International Equity Fund	17,368	15,544	13,997
Investments with Northern Trust			
Environmental, Social, and Governance Fund	8,276	9,906	12,717
<b>Total Invested Assets</b>	<b>\$ 521,761</b>	<b>\$ 513,410</b>	<b>\$ 521,965</b>
<b>Change in Invested Assets</b>			
Beginning Assets	\$ 516,073	\$ 521,761	\$ 513,410
Investment Earnings	2,269	(6,905)	7,675
Net Contributions (Withdrawals)	3,420	(1,446)	880
<b>Ending Invested Assets</b>	<b>\$ 521,761</b>	<b>\$ 513,410</b>	<b>\$ 521,965</b>