

INVESTMENT PERFORMANCE

SUMMARY

OFFICE OF THE TREASURER & CASH MANAGEMENT POLICY BOARD

Month Ending June 30, 2020

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

CALENDAR YEAR INDEX PERFORMANCE

	2013	2014	2015	2016	2017	2018	2019	5yr	10yr	1Q2020	2Q2020	YTD
Reserve Custom Index	0.12%	1.10%	0.86%	1.15%	1.00%	1.88%	6.62%	3.34%	2.33%	4.20%	1.82%	6.10%
Endowment Custom Index	14.46%	5.43%	-0.07%	5.71%	14.52%	-5.07%	20.01%	6.14%	7.73%	-11.82%	12.61%	-0.70%
3-Month Treasury Bill	0.05%	0.03%	0.03%	0.27%	0.84%	1.86%	2.26%	1.15%	0.61%	0.39%	0.14%	0.52%
6-Month Treasury Bill	0.10%	0.06%	0.10%	0.40%	0.88%	1.91%	2.38%	1.26%	0.68%	0.42%	0.26%	0.68%
BAML 1-3 Yr Govt/Credit A+	0.55%	0.72%	0.66%	1.06%	0.70%	1.65%	3.83%	2.02%	1.55%	2.22%	0.69%	2.93%
BAML 1-5 Yr Govt/Credit A+	0.10%	1.42%	1.07%	1.30%	1.02%	1.50%	4.62%	2.51%	2.10%	2.97%	1.03%	4.03%
BAML 5-10 Yr Govt/Credit A+	-3.82%	6.61%	1.95%	1.95%	2.98%	0.59%	9.04%	4.87%	4.54%	5.82%	2.78%	8.77%
BBrg Barclays US Aggregate	-2.02%	5.97%	0.55%	2.65%	3.54%	0.01%	8.72%	4.30%	3.82%	3.15%	2.90%	6.13%
BC Municipal Bond	-2.55%	9.05%	3.30%	0.25%	5.45%	1.28%	7.54%	3.93%	4.22%	-0.63%	2.72%	2.08%
BC US Corp High Yield	7.44%	2.45%	-4.47%	17.13%	7.50%	-2.08%	14.32%	4.79%	6.68%	-12.69%	10.18%	-3.80%
BC Long Treasuries	-12.66%	25.07%	-1.21%	1.33%	8.53%	-1.84%	14.83%	9.26%	7.74%	20.90%	0.25%	21.20%
BC US Long Credit	-6.62%	16.39%	-4.56%	10.22%	12.21%	-6.76%	23.36%	8.51%	7.77%	-4.65%	11.08%	5.92%
MSCI World Index	26.68%	4.94%	-0.87%	7.51%	22.40%	-8.71%	27.67%	6.90%	9.95%	-21.05%	19.36%	-5.77%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One



TOTAL FUND PERFORMANCE DETAIL - NET OF FEES

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Delaware Total Consolidation	3,849,034,640	100.00	0.25	1.63	4.44	6.17	5.71	4.09	3.29	2.94	1.84	2.37	Jan-05
Delaware Total Consolidation ex. CARES	2,994,161,017	77.79	0.32	1.92	4.74	6.47	5.86	4.19	3.36	3.00	1.87	2.38	Jan-05
Total Liquidity & Reserve	2,922,567,178	75.93	0.27	1.62	4.99	6.60	5.92	4.15	--	--	--	3.71	Nov-16
Total Liquidity	910,739,015	23.66	0.08	0.83	1.30	2.53	2.71	2.22	1.90	1.68	1.09	1.85	Jan-05
PFM Asset Management	456,492,365	11.86	0.06	0.68	1.28	2.51	2.64	2.22	1.93	1.73	--	1.38	Jun-13
Wilmington Liquidity	454,246,650	11.80	0.10	0.98	1.32	2.54	2.77	2.20	1.82	1.63	1.08	4.14	Jan-85
Total Reserve	2,011,828,163	52.27	0.35	1.86	6.02	7.73	7.34	4.93	3.74	3.45	2.30	2.80	Jan-05
Reserve Custom Index			<u>0.38</u>	<u>1.82</u>	<u>6.10</u>	<u>7.78</u>	<u>7.48</u>	<u>4.91</u>	<u>3.67</u>	<u>3.34</u>	<u>2.33</u>	<u>2.99</u>	Jan-05
Over/Under			-0.03	0.04	-0.08	-0.05	-0.14	0.02	0.07	0.11	-0.03	-0.19	
JPM Intermediate	477,223,108	12.40	0.19	1.34	3.20	4.47	4.40	3.02	2.30	2.29	--	1.89	Jun-13
J.P. Morgan Custom Index			0.13	0.69	2.93	4.18	4.18	2.84	2.13	2.11	1.72	1.77	Jun-13
Blackrock Financial Mangement	486,370,073	12.64	0.21	1.57	4.09	5.48	5.29	--	--	--	--	4.77	Mar-18
Blackrock Custom Index			0.21	1.03	4.03	5.35	5.25	3.50	2.62	2.51	1.91	4.66	Mar-18
Chandler Asset Management	526,857,829	13.69	0.66	3.40	8.29	10.48	9.76	6.47	4.86	4.40	--	3.37	Jun-13
Lazard Financial Management	521,377,153	13.55	0.33	1.08	8.34	10.31	9.81	--	--	--	--	8.55	Mar-18
Chandler/Lazard Custom Index			0.60	2.78	8.77	10.84	10.30	6.67	4.97	4.38	2.84	8.79	Mar-18
Total Endowment	71,593,839	1.86	2.41	14.53	-3.43	2.35	4.40	5.07	6.86	--	--	5.21	Aug-15
Endowment Custom Index			<u>1.84</u>	<u>12.61</u>	<u>-0.70</u>	<u>5.73</u>	<u>6.53</u>	<u>6.50</u>	<u>7.48</u>	<u>6.14</u>	<u>7.73</u>	<u>5.95</u>	Aug-15
Over/Under			0.57	1.92	-2.73	-3.38	-2.13	-1.43	-0.62			-0.74	
SEI Funds	25,440,594	0.66	2.58	14.95	-1.15	5.31	5.82	6.18	8.01	--	--	6.58	Aug-15
MSIFT Global Strategist	6	0.00	2.09	13.61	-6.26	-1.08	2.45	3.59	5.65	--	--	3.98	Aug-15
JP Morgan Diversified	5	0.00	2.53	14.96	-3.06	2.60	4.60	5.42	7.33	--	--	5.47	Aug-15
Cash Account	46,153,234	1.20	0.01	0.01	0.34	1.27	1.60	1.41	1.14	--	--	0.96	Aug-15
CAREs	854,873,623	22.21	0.01	0.03	--	--	--	--	--	--	--	0.03	Apr-20
FTSE T-Bill 1 Month TR			<u>0.01</u>	<u>0.02</u>	<u>0.40</u>	<u>1.37</u>	<u>1.82</u>	<u>1.64</u>	<u>1.33</u>	<u>1.09</u>	<u>0.57</u>	<u>0.02</u>	Apr-20
Over/Under			0.00	0.01								0.01	
PFM CAREs	427,436,714	11.11	0.01	0.03	--	--	--	--	--	--	--	0.03	Apr-20
Wilmington CAREs	427,436,909	11.11	0.01	0.03	--	--	--	--	--	--	--	0.03	Apr-20
FTSE T-Bill 1 Month TR			0.01	0.02	0.40	1.37	1.82	1.64	1.33	1.09	0.57	0.02	Apr-20

Notes: Net of Fees. Results for periods longer than one year are annualized.

Performance history through 12/2015 is from BNY Mellon. NEPC Performance start date is January 2016. Fiscal Year end is June 30.

Reserve Custom Index consists of 25% ICE BofA 1-5 Yrs AAA-A US Corp & Govt TR / 25% ICE BofA 1-3 Yrs AAA-A US Corp & Govt / 50% ICE BofA US Gov/Credit 5-10 Yrs A Rated and Above, as of 4/1/2018. Prior to this, the index comprised 75% ICE BofA 1-5 Yrs AAA-A US Corp & Govt TR / 25% ICE BofA 6 Months US T-Bills TR.

Endowment Custom Index consists of 60% MSCI World Index/40% BBgBarc US Aggregate.

BlackRock Custom Index consists of 100% ICE BofA 1-5 Yrs AAA-A US Corp & Govt TR.

J.P. Morgan Custom Index consists of 100% ICE BofA 1-3 Yrs AAA-A US Corp & Govt.

Chandler/Lazard Custom Index consists of ICE BofA US Gov/Credit 5-10 Yrs A Rated and Above.



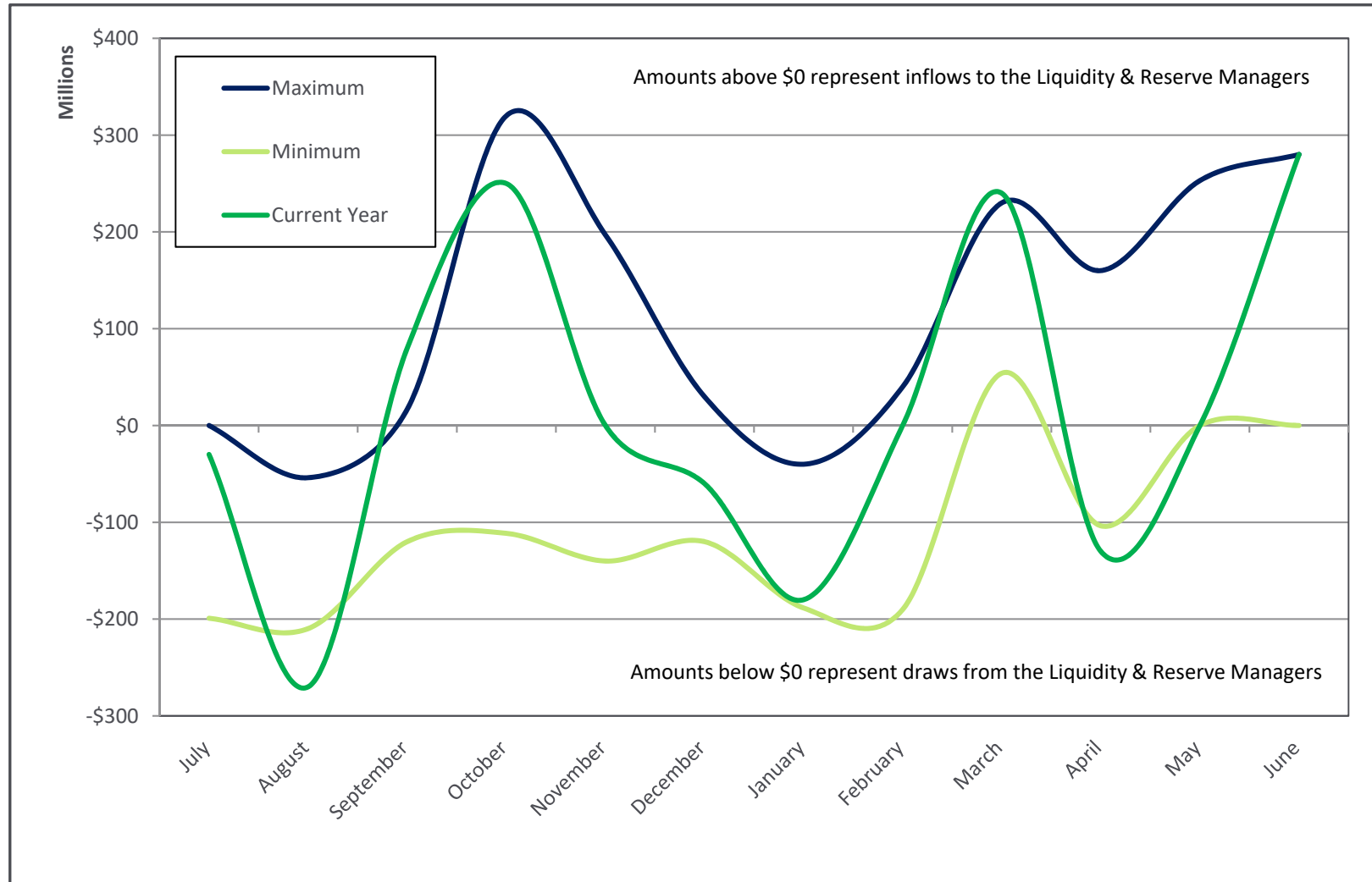
YIELD AND DURATION POSITIONING

Liquidity Portfolio Yield and Duration Analysis							
Portfolio					Benchmark		
	<u>Portfolio Value</u>	<u>% of Assets</u>	<u>Yield</u>	<u>Duration</u>		<u>Yield</u>	<u>Duration</u>
PFM \$	456,492,365	15.6%	0.51%	0.43	6-Month Treasury Bill	0.17%	0.48
Wilmington Trust \$	454,246,650	15.5%	0.41%	0.90	6-Month Treasury Bill	0.17%	0.48
Total Liquidity \$	910,739,015	31.2%	0.46%	0.66	6-Month Treasury Bill	0.17%	0.48
Reserve Portfolio Yield and Duration Analysis							
Portfolio					Benchmark		
	<u>Portfolio Value</u>	<u>% of Assets</u>	<u>Yield</u>	<u>Duration</u>		<u>Yield</u>	<u>Duration</u>
JP Morgan \$	477,223,108	16.3%	0.34%	1.69	BAML 1-3 Yr Govt/Credit A+	0.28%	1.89
BlackRock \$	486,370,073	16.6%	0.47%	2.45	BAML 1-5 Yr Govt/Credit A+	0.34%	2.66
Chandler \$	526,857,829	18.0%	0.89%	6.12	BAML 5-10 Yr Govt/Credit A+	0.83%	6.57
Lazard \$	521,377,153	17.8%	0.56%	6.13	BAML 5-10 Yr Govt/Credit A+	0.83%	6.57
Total Reserve \$	2,011,828,163	68.8%	0.57%	4.18	Custom Reserve Benchmark	0.57%	4.42
Total Liquidity & Reserve Portfolio Yield and Duration Analysis							
Portfolio					Benchmark		
	<u>Portfolio Value</u>	<u>% of Assets</u>	<u>Yield</u>	<u>Duration</u>		<u>Yield</u>	<u>Duration</u>
Total Liquidity & Reserve \$	2,922,567,178	100.0%	0.54%	3.09	Weighted Average	0.47%	3.44

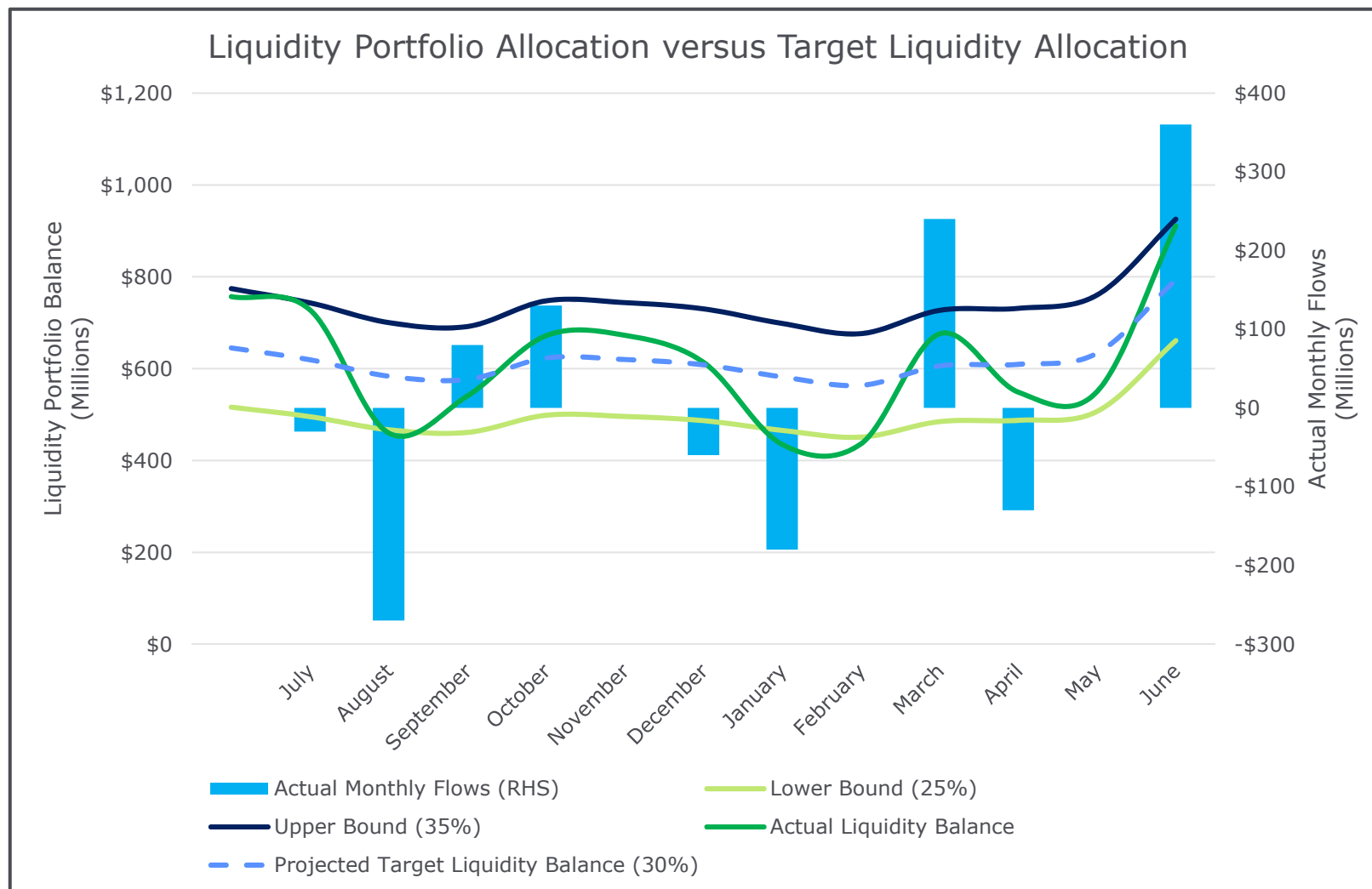
As of June 1, 2020, the target allocation between Liquidity and Reserve Portfolios was adjusted to 70%/30%. The previous target allocation was 75%/25%.



CASH FLOWS – FISCAL YEAR 2020



LIQUIDITY BALANCE – FISCAL YEAR 2020



As of June 1, 2020, the target allocation between Liquidity and Reserve Portfolios was adjusted to 70%/30%. The previous target allocation was 75%/25%.



MONTH ENDED JUNE 30, 2020

Change in Market Value Month Ending June 30, 2020										
	Beginning Market Value	Contributions	Withdrawals	Fees	Income	Unrealized Gain (Loss)	Realized Gain (Loss)	Amortization / Accretion	Ending Market Value	
Liquidity Managers										
PFM Asset Management	\$ 276,240,696	\$ 180,000,000	\$ -	\$ -	\$ 528,454	\$ (152,108)	\$ 3,393	\$ (128,069)	\$ 456,492,365	
Wilmington Liquidity	\$ 273,841,857	\$ 180,000,000	\$ -	\$ -	\$ 402,350	\$ 92,976	\$ 935	\$ (91,469)	\$ 454,246,650	
Total Liquidity Managers	\$ 550,082,553	\$ 360,000,000	\$ -	\$ -	\$ 930,804	\$ (59,132)	\$ 4,328	\$ (219,538)	\$ 910,739,015	
Reserve Managers										
BlackRock Financial Management	\$ 505,328,223	\$ -	\$ (20,000,000)	\$ -	\$ 786,742	\$ (1,200,719)	\$ 1,586,540	\$ (130,713)	\$ 486,370,073	
Chandler Asset Management	\$ 543,318,512	\$ -	\$ (20,000,000)	\$ -	\$ 989,625	\$ 685,852	\$ 1,871,978	\$ (8,138)	\$ 526,857,829	
JPM Intermediate	\$ 496,304,880	\$ -	\$ (20,000,000)	\$ -	\$ 731,285	\$ (742,712)	\$ 985,023	\$ (55,369)	\$ 477,223,108	
Lazard Asset Management	\$ 539,643,086	\$ -	\$ (20,000,000)	\$ -	\$ 942,966	\$ (6,669,215)	\$ 7,402,802	\$ 57,514	\$ 521,377,153	
Total Reserve Managers	\$ 2,084,594,701	\$ -	\$ (80,000,000)	\$ -	\$ 3,450,618	\$ (7,926,795)	\$ 11,846,343	\$ (136,705)	\$ 2,011,828,163	
Total Liquidity & Reserve Managers	\$ 2,634,677,254	\$ 360,000,000	\$ (80,000,000)	\$ -	\$ 4,381,422	\$ (7,985,927)	\$ 11,850,671	\$ (356,242)	\$ 2,922,567,178	
Land & Water Endowment										
SEI Funds	\$ 25,330,356	\$ -	\$ (536,000)	\$ -	\$ 19,622	\$ 477,865	\$ 148,751	\$ -	\$ 25,440,594	
MSIFT Global Strategist	\$ 22,369,849	\$ -	\$ (22,833,413)	\$ -	\$ 464	\$ 1,182,873	\$ (719,767)	\$ -	\$ 6	
JP Morgan Diversified	\$ 23,795,087	\$ -	\$ (24,390,945)	\$ -	\$ 5	\$ 2,189,344	\$ (1,593,485)	\$ -	\$ 5	
Cash Account	\$ 426	\$ 47,760,358	\$ (1,608,000)	\$ -	\$ 449	\$ -	\$ -	\$ -	\$ 46,153,234	
Total Land & Water Endowment	\$ 71,495,718	\$ 47,760,358	\$ (49,368,358)	\$ -	\$ 20,540	\$ 3,850,081	\$ (2,164,500)	\$ -	\$ 71,593,839	
CARES										
PFM CARES	\$ 463,696,601	\$ -	\$ (36,294,844)	\$ -	\$ 34,957	\$ -	\$ -	\$ -	\$ 427,436,714	
Wilmington CARES	\$ 463,696,796	\$ -	\$ (36,294,844)	\$ -	\$ 34,957	\$ -	\$ -	\$ -	\$ 427,436,909	
Total CARES	\$ 927,393,397	\$ -	\$ (72,589,688)	\$ -	\$ 69,914	\$ -	\$ -	\$ -	\$ 854,873,623	
Total	\$ 3,633,566,369	\$ 407,760,358	\$ (201,958,046)	\$ -	\$ 4,471,876	\$ (4,135,846)	\$ 9,686,171	\$ (356,242)	\$ 3,849,034,640	

Footnotes:

Values provided by Northern Trust and are reconciled to the audited custodian reports.

Income is a product of income received during the month plus accrued income.

Numbers may not add due to rounding.



FISCAL YEAR TO DATE

	Change in Market Value Fiscal Year-to-Date Through June 30, 2020									
	Beginning Market Value	Contributions	Withdrawals	Fees	Income	Unrealized Gain (Loss)	Realized Gain (Loss)	Amortization / Accretion	Ending Market Value	
Liquidity Managers										
PFM Asset Management	\$ 379,459,861	\$ 489,999,900	\$ (420,000,200)	\$ (255,514)	\$ 6,155,547	\$ 661,062	\$ 593,346	\$ (121,638)	\$ 456,492,365	
Wilmington Liquidity	\$ 377,298,107	\$ 490,000,000	\$ (420,000,000)	\$ (263,926)	\$ 5,319,713	\$ 474,531	\$ 708,435	\$ 709,788	\$ 454,246,650	
Total Liquidity Managers	\$ 756,757,968	\$ 979,999,900	\$ (840,000,200)	\$ (519,440)	\$ 11,475,260	\$ 1,135,594	\$ 1,301,782	\$ 588,151	\$ 910,739,015	
Reserve Managers										
BlackRock Financial Management	\$ 450,402,164	\$ 30,000,000	\$ (20,000,000)	\$ (314,987)	\$ 10,367,775	\$ 8,970,568	\$ 7,512,568	\$ (568,016)	\$ 486,370,073	
Chandler Asset Management	\$ 465,725,064	\$ 30,000,000	\$ (20,000,000)	\$ (311,087)	\$ 12,190,831	\$ 32,633,505	\$ 5,689,540	\$ 929,978	\$ 526,857,829	
JPM Intermediate	\$ 446,232,523	\$ 30,000,000	\$ (20,000,000)	\$ (351,775)	\$ 9,772,269	\$ 6,285,379	\$ 5,526,188	\$ (241,476)	\$ 477,223,108	
Lazard Asset Management	\$ 461,513,160	\$ 30,000,000	\$ (20,000,000)	\$ (519,147)	\$ 11,784,213	\$ 26,076,247	\$ 12,536,152	\$ (13,472)	\$ 521,377,153	
Total Reserve Managers	\$ 1,823,872,911	\$ 120,000,000	\$ (80,000,000)	\$ (1,496,996)	\$ 44,115,088	\$ 73,965,700	\$ 31,264,448	\$ 107,013	\$ 2,011,828,163	
Total Liquidity & Reserve Managers	\$ 2,580,630,879	\$ 1,099,999,900	\$ (920,000,200)	\$ (2,016,436)	\$ 55,590,348	\$ 75,101,293	\$ 32,566,230	\$ 695,164	\$ 2,922,567,178	
Land & Water Endowment										
SEI Funds	\$ 24,666,596	\$ 26,436	\$ (554,000)	\$ (87,088)	\$ 638,725	\$ 197,792	\$ 552,133	\$ -	\$ 25,440,594	
MSIFT Global Strategist	\$ 23,080,612	\$ 26,436	\$ (22,851,413)	\$ -	\$ 50,671	\$ 42,146	\$ (348,446)	\$ -	\$ 6	
JP Morgan Diversified	\$ 23,772,475	\$ 26,527	\$ (24,409,445)	\$ -	\$ 369,184	\$ 156,623	\$ 84,640	\$ -	\$ 5	
Cash Account	\$ 413	\$ 47,809,120	\$ (1,656,762)	\$ -	\$ 462	\$ -	\$ -	\$ -	\$ 46,153,234	
Total Land & Water Endowment	\$ 71,520,096	\$ 47,888,519	\$ (49,471,620)	\$ (87,088)	\$ 1,059,042	\$ 396,561	\$ 288,327	\$ -	\$ 71,593,839	
CARES										
PFM CARES	\$ -	\$ 463,616,666	\$ (36,294,844)	\$ -	\$ 114,892	\$ -	\$ -	\$ -	\$ 427,436,714	
Wilmington CARES	\$ -	\$ 463,616,666	\$ (36,294,844)	\$ -	\$ 110,262	\$ -	\$ 2,862	\$ 1,963	\$ 427,436,909	
Total CARES	\$ -	\$ 927,233,332	\$ (72,589,688)	\$ -	\$ 225,154	\$ -	\$ 2,862	\$ 1,963	\$ 854,873,623	
Total	\$ 2,652,150,975	\$ 2,075,121,751	\$ (1,042,061,508)	\$ (2,103,524)	\$ 56,874,544	\$ 75,497,854	\$ 32,857,419	\$ 697,127	\$ 3,849,034,640	

Footnotes:

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Numbers may not add due to rounding.



Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
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Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

