

Updated with performance through 8/31/19

Action Items and Executive Summary

Discussions about whether alternative assets may be appropriate for the Long-Term Pool within the Operating Fund, considering the liability and spending analyses previously described.

We would then be in a position to prepare scenario analyses on various potential asset allocations for the Long-Term Pool, and get input from System and campus stakeholders on whether the Long-Term Pool could tolerate greater volatility, active risk and/or illiquidity than has historically been undertaken, in pursuit of higher returns (and higher payouts).

ACTION ITEMS

In the table following this summary, we set forth Operating Fund performance estimates through September 19 along with the following rebalancing recommendations:

- Recommendations from NSHE Staff: Reallocate \$75.0 million from the Short-Term Pool to the Long-Term Pool
- Recommendations from Cambridge Associates:
 - o \$25.0 million addition to Vanguard Institutional Index
 - \$25.0 million addition to Vanguard Developed Markets Index (bringing the Global ex U.S. Equity allocation modestly closer to target based on compelling relative valuations versus U.S. Equities)
 - o \$15.0 million addition to Vanguard Inflation-Protected Securities
 - o \$10.0 million addition to PIMCO Total Return

EXECUTIVE SUMMARY

Operating Fund Performance and Asset Allocation as of August 31, 2019

The Operating Fund posted a return of 5.1% in fiscal year 2019, slightly above the Policy Index return of 5.0%. U.S. Equity led FY performance on an absolute basis with a 10.4% return, while the Global ex U.S. Equity allocation had the highest relative performance of 70 bps over the MSCI EAFE Index.

For the calendar year through August 31, 2019, the Operating Fund posted a return of 8.6%, slightly above the Policy Index return of 8.5%. U.S. Equity led CY performance on an absolute basis with a 18.4% return, while the Global ex U.S. Equity allocation had the highest relative performance of 160 bps over the MSCI EAFE Index. On a trailing ten-year basis, the Operating Fund has generated an annualized return of 5.0%, performing in line with the Policy Index; since inception, the Operating Fund has returned 4.9% annualized, outperforming the Policy Index by 40 bps.

As of August 31, 2019, adjusted for estimated returns through September 18, 2019, the Long-Term Pool had a slight overweight to Total Equities (including Opportunistic) and Long-Term Bonds while TIPS had an offsetting underweight allocation.



Rebalancing Recommendations

Estimated as of September 19, 2019

	Allocation as of Aug 31, 2019		Sep 1, 2019 - Sep 19, 2019	Estimated Allocation as of Sep 19, 2019		Recommendations (C A)		Pro Forma Allocation		Current Targets	Allowable Range
	Assets (\$ mm)	(%) Allocation	Est Perf (%)	Assets (\$ mm)	(%) Allocation	(\$ mm)	(%)	Assets (\$ mm)	(%) Allocation	(%)	(%)
U.S. Equity											
Vanguard Institutional Index	\$179.9	38.4%	2.9%	\$185.1	38.8%	+\$25.0	5.2%	\$210.1	38.1%		
Total U.S. Equity	\$179.9	38.4%	2.9%	\$185.1	38.8%	\$25.0	5.2%	\$210.1	38.1%	40.0%	33%-50%
Global ex U.S. Equity											
Vanguard Developed Markets Index	112.1	23.9	4.1	116.6	24.5	+\$25.0	5.2	141.6	25.7		
Total Global ex U.S. Equity	\$112.1	23.9%	4.1%	\$116.6	24.5%	\$25.0	5.2%	\$141.6	25.7%	27.0%	17%-30%
Marketable Alternatives											
Och-Ziff Overseas Farallon Capital	0.1 2.6	0.0 0.5	2.9 2.9	0.1 2.6	0.0 0.6			0.1 2.6	0.0 0.5		
Total Marketable Alternatives	\$2.7	0.6%	2.9%	\$2.8	0.6%			\$2.8	0.5%	0.0%	
Opportunistic											
PIMCO All Asset All Authority	20.8	4.4	0.5	20.9	4.4			20.9	3.8		
Total Opportunistic	\$20.8	4.4%	0.5%	\$20.9	4.4%			\$20.9	3.8%	0.0%	0%-10%
TOTAL EQUITIES (incl. Opportunistic)	\$315.4	67.4%	3.1%	\$325.3	68.3%	\$50.0	10.5%	\$375.3	68.1%	67.0%	50%-80%
TIPS											
Vanguard Inflation-Protected Securities	89.8	19.2	-1.6	88.4	18.5	\$15.0	3.1	103.4	18.7		
Total TIPS	\$89.8	19.2%	-1.6%	\$88.4	18.5%	\$15.0	3.1%	\$103.4	18.7%	20.0%	8%-25%
Long Term Bonds											
PIMCO Total Return Wells Capital Montgomery	37.7 25.1	8.1 5.4	-0.0 -0.0	37.7 25.1	7.9 5.3	\$10.0	2.1	47.7 25.1	8.6 4.6		
Total Long Term Bonds	\$62.8	13.4%	-0.0%	\$62.8	13.2%	\$10.0	2.1%	\$72.8	13.2%	13.0%	8%-25%
TOTAL LONG-TERM POOL	\$468.0	100.0%	1.8%	\$476.5	100.0%	\$75.0		\$551.5	100.0%	100.0%	
Intermediate Term Bonds						Recomme (NSHE					
WellsCap Short Duration	95.1		-0.0	95.1				95.1			
Total Intermediate Term Bonds	\$95.1		-0.0%	\$95.1				\$95.1			
Short Term Bonds and Cash											
Short Term Bonds and Cash *	287.3			263.7		-\$75.0		188.7			
Total Short Term Bonds and Cash	\$287.3			\$263.7		-\$75.0		\$188.7			
TOTAL ASSETS	\$850.4		1.0%	\$835.2				\$835.2			

Note: Market values as of 09/19/2019 are estimated using manager preliminary or mutual fund returns or (if highlighted in peach) index proxies.

Actual client-specific returns may ultimately differ from managers' fund-level preliminary estimates. Cash accounts assume a 0% return for the period.

^{*} Estimated Allocation to Short Term Bonds and Cash was provided by System Staff as of 9/16/19. State Street as of 8/31/19.

Updated with performance

through 8/31

AUGUST 31, 2019

Long-Term Pool Performance by Composite

Returns (%)	INCEPTION DATE	MARKET VALUE AS OF AUG 2019	FISCAL YEAR TO DATE JUN	CALENDAR YEAR TO DATE	CUMULATIVE TRAILING 1 YEAR	ANNUALIZED TRAILING 3 YEARS	ANNUALIZED TRAILING 10 YEARS	ANNUALIZED SINCE INCEPTION
Total Long-Term Pool*	6/30/1996	\$468,041,267	-0.3	12.7	2.8	7.6	8.0	6.6
Long-Term Pool Benchmark ¹	6/30/1996		-0.3	12.9	2.8	7.6	7.7	5.7
Value Add			0.0	-0.2	0.0	0.0	0.3	0.9
U.S. Equity	6/30/2000	\$179,910,177	-0.2	18.4	2.9	12.8	13.5	6.0
S&P 500 Index	6/30/2000		-0.2	18.3	2.9	12.7	13.4	5.8
Value Add			0.0	0.1	0.0	0.1	0.0	0.3
Global ex U.S. Equity	6/30/2000	\$112,055,813	-4.0	11.2	-3.7	5.8	5.0	3.3
MSCI EAFE Index (N)	6/30/2000		-3.8	9.7	-3.3	5.9	5.0	3.1
Value Add			-0.1	1.6	-0.5	-0.1	0.0	0.2
Marketable Alternatives*	6/30/2000	\$2,684,986	-0.5	0.0	-4.0	1.7	3.3	5.6
HFRI Fund of Funds Diversified Index	6/30/2000		0.0	6.0	1.2	3.5	3.0	3.2
Value Add			-0.5	-6.0	-5.2	-1.8	0.3	2.4
Blend: BofA ML T-Bill + 6%	6/30/2000		1.3	5.6	8.4	7.5	6.5	7.7
Value Add			-1.9	-5.5	-12.4	-5.8	-3.2	-2.0
Opportunistic	12/11/2013	\$20,768,959	-2.9	2.7	1.5	2.8	9252	1.0
Opportunistic Custom Benchmark ¹	11/30/2013		0.3	9.4	4.2	5.3	722	4.3
Value Add			-3.2	-6.6	-2.7	-2.5	1,777	-3.3
TIPS	6/30/2000	\$89,790,548	2.6	8.8	7.3	2.7	3.6	5.4
BBG Barc US TIPS Index	6/30/2000		2.7	9.1	7.5	2.9	3.8	5.4
Value Add			-0.2	-0.3	-0.2	-0.1	-0.2	-0.1
Long-Term Bonds	6/30/1996	\$62,830,784	2.8	9.0	9.8	3.4	4.4	6.1
BBG Barc Aggregate Bond Index	6/30/1996		2.8	9.1	10.2	3.1	3.9	5.3
Value Add			-0.1	-0.1	-0.3	0.4	0.5	0.8

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Performance

Returns (%)	INCEPTION DATE	MARKET VALUE AS OF AUG 2019	FISCAL YEAR TO DATE JUN	CALENDAR YEAR TO DATE	CUMULATIVE TRAILING 1 YEAR	ANNUALIZED TRAILING 3 YEARS	ANNUALIZED TRAILING 10 YEARS	ANNUALIZED SINCE INCEPTION
Total Operating Fund*	6/30/1996	\$850,434,473	0.0	8.6	2.9	5.2	5.0	4.9
Policy Index ¹	6/30/1996		0.0	8.5	3.0	5.2	5.0	4.5

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Value Add			0.0	-0.2	0.0	0.0	0.3	0.9
Operating Liquidity Pools*	6/30/1996	\$382,393,206	0.5	2.0	2.8	1.4	0.8	2.8
Intermediate-Term Bonds	6/30/1996	\$95,059,814	0.7	3.3	4.3	1.7	2.3	4.1
BofA ML 1-3 Yr Treasury Bond Index	6/30/1996		0.7	3.1	4.4	1.6	1.2	3.3
Value Add			0.1	0.2	-0.1	0.1	1.1	0.8
Short-Term Bonds and Cash*4	6/30/1996	\$287,333,392	0.3	1.4	2.0	1.2	0.4	2.3
BofA ML 91-Day Treasury Bills	6/30/1996		0.4	1.6	2.4	1.5	0.5	2.3
Value Add			-0.1	-0.2	-0.3	-0.3	-0.1	0.0