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Office of the Chief Investment Officer

TO MEMBERS OF THE INVESTMENTS SUBCOMMITTEE:

DISCUSSION ITEM

For Meeting of May 16, 2017

UPDATE ON INVESTMENT PRODUCTS

EXECUTIVE SUMMARY

The Office of the CIO managed $107.2 billion in assets as of March 31, 2017, including the Endowment ($10.4 billion), Pension ($59.7 billion), Working Capital ($14.5 billion = Total Return Investment Pool $8.9 billion and Short Term Investment Pool $5.6 billion), Retirement Savings Program ($21.7 billion), and Fiat Lux ($0.9 Billion). Performance of the Endowment, Pension, and Working Capital portfolios as of March 31, 2017 is provided below and further details are included in the respective product attachments.

GENERAL ENDOWMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING MARCH 31, 2017

As of March 31, 2017, the Office of the Chief Investment Officer managed $10.4 billion in the General Endowment Pool (GEP), which increased by $1.29 billion this fiscal year to date (nine months), including market gains of roughly $820 million, value added of $210 million, and net inflows of $244 million.

GEP Performance as of March 31, 2017 is shown in the table below:

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	10 Year	20 Year
Endowment	**$ 10,383**	**3.9**	**11.2**	**12.7**	**6.2**	**8.3**	**5.5**	**7.8**
Policy Benchmark		3.9	8.8	10.5	4.8	6.9	5.0	7.3
Value Added		0.0	2.4	2.2	1.4	1.4	0.5	0.5
Public Equity	4,647	7.0	18.2	17.4	5.3	8.8	4.5	6.8
GEP Public Equity BM		7.0	14.9	16.1	5.1	8.4	4.5	6.6
Value Added		0.0	3.3	1.3	0.2	0.4	0.0	0.2
U.S. Equity	2,108	4.3	16.0	17.9	6.7	11.4	6.6	7.2
Russell 3000 Tobacco Free Index		5.6	15.1	18.0	9.6	13.1	7.4	8.1
Value Added		(1.3)	0.9	(0.1)	(2.9)	(1.7)	(0.8)	(0.9)
Non-U.S. Equity	1,724	8.0	25.3	15.9	1.2	6.1	1.8	-
MSCI World ex-U.S. Tobacco Free		6.7	13.4	12.1	0.2	5.3	1.0	-
Value Added		1.3	11.9	3.8	1.0	0.8	0.8	-
Emerging Market Equity	815	12.7	14.7	14.9	3.3	2.1	3.3	-
MSCI Emerging Market		11.4	16.4	17.2	1.2	0.8	2.7	-
Value Added		1.3	(1.7)	(2.3)	2.1	1.3	0.6	-

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	10 Year	20 Year
Fixed Income	1,113	1.8	1.9	4.3	2.8	3.3	5.2	6.6
Policy Benchmark		0.7	0.2	3.6	3.1	3.2	5.3	6.6
Value Added		1.1	1.7	0.7	(0.3)	0.1	(0.1)	0.0
Core	368	0.8	(2.5)	(0.8)	1.6	2.1	3.8	5.9
Barclays U.S. Government Bond Index		0.7	(3.3)	(1.2)	2.1	2.0	4.1	5.9
Value Added		0.1	0.8	0.4	(0.5)	0.1	(0.3)	0.0
High Yield	353	2.5	7.6	11.3	4.1	6.8	7.0	-
Merrill Lynch High Yield Cash Pay Index		2.7	10.4	16.7	4.6	6.8	7.3	-
Value Added		(0.2)	(2.8)	(5.4)	(0.5)	0.0	(0.3)	-
Emerging Market Debt	149	3.9	2.3	4.5	-	-	-	-
JP Morgan Emerging Markets Bond Index		3.9	3.7	8.9	-	-	-	-
Value Added		0.0	(1.4)	(4.4)	-	-	-	-
TIPS	243	1.3	0.5	2.1	2.3	1.1	4.6	-
Barclays U.S. TIPS		1.3	(0.2)	1.5	2.0	1.0	4.2	-
Value Added		0.0	0.7	0.6	0.3	0.1	0.4	-
Other Investments								
Private Equity	1,170	3.5	13.8	19.3	19.2	19.1	12.8	18.0
Absolute Return	1,919	1.2	4.6	5.1	3.5	5.4	4.0	-
Custom Absolute Return Benchmark		0.7	1.2	1.5	(1.7)	0.7	2.1	-
Value Added		0.5	3.4	3.6	5.2	4.7	1.9	-
Real Estate	505	(1.8)	4.7	10.4	12.0	11.9	2.0	-
NCREIF ODCE Index (lagged 3 months)		1.9	5.7	7.8	11.2	11.2	2.5	-
Value Added		(3.7)	(1.0)	2.6	0.8	0.7	(0.5)	-
Real Assets	215	1.1	5.5	3.5	(3.8)	(0.6)	-	-
Cash	814	0.3	0.8	1.1	1.3	1.4	-	-
GEP Liquidity Benchmark		0.3	0.6	0.9	0.7	0.5	-	-
Value Added		0.0	0.2	0.2	0.6	0.9	-	-

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING MARCH 31, 2017

The Office of the CIO managed $59.7 billion for the University of California Retirement Plan (UCRP) as of March 31, 2017, which increased $5.6 billion this fiscal year to date with market gains of $5 billion, value added of roughly $700 million, and net outflows of $26 million.

UCRP Performance as of March 31, 2017 is shown in the table below:

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	10 Year	20 Year
Pension	$59,724	4.7	10.5	11.9	5.6	7.8	5.1	7.2
Policy Benchmark		4.4	9.1	10.5	4.8	7.0	4.6	6.9
Value Added		0.3	1.4	1.4	0.8	0.8	0.5	0.3
Public Equity	34,123	7.0	16.8	17.9	6.0	9.4	4.6	6.6
MSCI ACWI IMI TF		6.7	14.3	15.6	5.2	8.6	4.6	6.4
Value Added		0.3	2.5	2.3	0.8	0.8	0.0	0.2

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	10 Year	20 Year
U.S. Equity	18,548	7.0	16.8	19.1	8.7	12.7	7.1	7.6
Russell 3000 Tobacco Free Index		5.6	15.1	18.0	9.6	13.1	7.4	8.1
Value Added		1.4	1.7	1.1	(0.9)	(0.4)	(0.3)	(0.5)
Non-U.S. Equity	10,763	7.8	22.7	18.7	2.6	7.0	2.1	-
MSCI World ex-U.S. Tobacco Free		6.7	13.4	12.1	0.2	5.3	1.0	-
Value Added		1.1	9.3	6.6	2.4	1.7	1.1	-
Emerging Market Equity	4,812	10.1	8.3	8.9	0.1	0.3	2.4	-
MSCI Emerging Market		11.4	16.4	17.2	1.2	0.8	2.7	-
Value Added		(1.3)	(8.1)	(8.3)	(1.1)	(0.5)	(0.3)	-
Fixed Income	13,164	1.6	1.4	3.9	3.2	3.2	5.2	6.8
Policy Benchmark		0.8	(0.1)	2.7	3.0	2.7	4.9	6.3
Value Added		0.8	1.5	1.2	0.2	0.5	0.3	0.5
Core	8,016	1.1	(0.3)	1.9	3.0	3.0	4.6	6.5
Barclays U.S. Aggregate Bond Index		0.8	(1.7)	0.4	2.7	2.3	4.4	6.0
Value Added		0.3	1.4	1.5	0.3	0.7	0.2	0.5
High Yield	2,022	2.3	8.6	12.6	4.5	7.0	7.2	-
Merrill Lynch High Yield Cash Pay Index		2.7	10.4	16.7	4.6	6.8	7.3	-
Value Added		(0.4)	(1.8)	(4.1)	(0.1)	0.2	(0.1)	-
Emerging Market Debt	1,430	3.8	2.9	7.1	4.3	3.7	6.1	-
JP Morgan Emerging Markets Bond Index		3.9	3.7	8.9	6.2	5.5	6.9	-
Value Added		(0.1)	(0.8)	(1.8)	(1.9)	(1.8)	(0.8)	-
TIPS	1,696	1.5	0.3	1.9	2.2	1.2	4.5	-
Barclays U.S. TIPS		1.3	(0.2)	1.5	2.0	1.0	4.2	-
Value Added		0.2	0.5	0.4	0.2	0.2	0.3	-
Other Investments								
Private Equity	2,723	3.9	8.3	8.3	10.7	13.0	9.4	15.8
Absolute Return	2,997	1.2	4.6	5.1	3.5	5.4	-	-
Custom Absolute Return Benchmark		2.3	5.6	6.0	(0.3)	1.5	-	-
Value Added		(1.1)	(1.0)	(0.9)	3.8	3.9	-	-
Real Estate	3,018	2.1	4.2	8.0	12.0	12.4	1.2	-
NCREIF ODCE Index (lagged 3 months)		1.9	5.7	7.8	11.2	11.2	1.1	-
Value Added		0.2	(1.5)	0.2	0.8	1.2	0.1	-
Real Assets	934	2.0	7.3	5.5	(3.4)	(0.2)	-	-
Cash	1,834	0.3	0.8	1.0	1.3	2.1	-	-
UCRP Liquidity Benchmark		0.3	0.6	0.9	0.7	0.5	-	-
Value Added		0.0	0.2	0.2	0.6	1.6	-	-

WORKING CAPITAL INVESTMENT REVIEW FOR PERIODS ENDING MARCH 31, 2017

The Office of the CIO managed $8.9 billion in the Total Return Investment Pool (TRIP), which was relatively flat this fiscal year to date, as a result of market gains and value add of $450 million, offsetting the outflows. TRIP gained 3.1 percent the past nine months, surpassing the benchmark by 0.3 percent as of March 31, 2017. The Short Term Investment Pool (STIP) held $5.6 billion as of March 31, 2017, gaining 0.9 percent over the last nine months and outperforming its benchmark by 0.5 percent.

Working Capital Performance as of December 31, 2016 is shown in the table below:

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	7 Year	Since Inception (August 2008)
Total Return	$8,867	3.1	5.2	6.8	4.2	6.2	6.9	7.0
Policy Benchmark		2.8	4.1	5.7	3.6	5.8	6.4	6.4
Value Added		0.3	1.1	1.1	0.6	0.4	0.5	0.6
Growth	3,270	6.7	13.8	14.4	5.1	10.0	9.0	6.7
MSCI ACWI IMI TF		6.7	14.3	15.4	7.7	10.7	4.7	6.1
Value Added		0.0	(0.5)	(1.0)	(2.6)	(0.7)	1.6	0.6
Public Growth	3,186	6.7	13.8	14.4	5.1	10.0	9.0	6.7
Private Growth	84	3.3	14.3	14.3	-	-	-	19.3
Fixed Income	4,226	1.1	0.4	2.6	3.2	3.8	5.2	6.5
Barclays U.S. Aggregate Bond Index		0.8	(1.7)	0.4	2.7	2.3	3.5	4.7
Value Added		0.3	2.1	2.2	0.5	1.5	1.7	1.8
Public Income	3,776	1.1	0.0	2.4	-	-	-	3.2
Private Income	450	1.3	4.4	3.4	-	-	-	2.6
Other Investments								
Absolute Return	1,223	0.9	4.5	4.0	2.2	-	-	2.8
HFRX Absolute Return		0.7	1.2	1.5	1.7	-	-	2.6
Value Added		0.2	3.3	2.5	0.5	-	-	0.2
Cash	148	1.7	3.8	4.4	2.6	-	-	-
TRIP Liquidity Benchmark		0.3	0.6	0.9	0.7	-	-	-
Value Added		1.4	3.2	3.5	1.9	-	-	-

As of March 31, 2017	Market Value in Millions ($)	3 Months	9 Months	1 Year	3 Year	5 Year	10 Year	20 Year
Short Term	$ 5,563	0.3	0.9	1.2	1.3	1.6	2.5	3.7
Policy Benchmark		0.2	0.4	0.6	0.5	0.4	0.9	2.6
Value Added		0.1	0.5	0.6	0.8	1.2	1.6	1.1

ATTACHMENTS:

The attached Product Reports for periods ending March 31, 2017 are submitted for discussion. They include:

Attachment 1: Endowment Investment Review for Periods Ending March 31, 2017
Attachment 2: Pension Investment Review for Periods Ending March 31, 2017
Attachment 3: Retirement Savings Investment Review for Periods Ending March 31, 2017
Attachment 4: Working Capital Investment Review for Periods Ending March 31, 2017