

## Office of the Chief Investment Officer

### TO MEMBERS OF THE INVESTMENTS SUBCOMMITTEE:

#### DISCUSSION ITEM

*For Meeting of September 12, 2017*

### UPDATE ON INVESTMENT PRODUCTS

#### EXECUTIVE SUMMARY

The Office of the Chief Investment Officer managed \$109.8 billion in assets as of June 30, 2017. The UC Entity assets are comprised of the Endowment (\$10.8 billion), Pension (\$61.6 billion), Working Capital (\$14.2 billion = Total Return Investment Pool \$8.9 billion and Short Term Investment Pool \$5.3 billion), Retirement Savings Program (\$22.3 billion), and Fiat Lux (\$0.9 billion). Performance of the Endowment, Pension, and Working Capital portfolios as of June 30, 2017 is provided below and further details are included in the respective product attachments.

#### GENERAL ENDOWMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING JUNE 30, 2017

As of June 30, 2017, the Office of the Chief Investment Officer (CIO) managed \$10.8 billion in the General Endowment Pool, which increased by \$1.7 billion this fiscal year, including market gains of roughly \$1.2 billion, value added of \$221 million, and net inflows of \$286 million.

**GEP Performance as of June 30, 2017 is shown in the table below:**

As of June 30, 2017	Market Value in Millions (\$)	3 Months	6 Months	1 Year	3 Year	5 Year	10 Year	20 Year
<b>Endowment</b>	\$ 10,752	3.2	7.2	14.8	5.5	9.4	5.3	7.3
Policy Benchmark		3.1	7.1	12.2	4.6	8.0	4.8	6.8
Value Added		0.1	0.2	2.6	0.9	1.4	0.5	0.5
<b>Public Equity</b>	4,670	4.8	12.1	23.8	5.3	11.1	4.2	6.2
GEP Public Equity BM		4.3	11.8	20.0	4.9	10.6	4.2	5.9
Value Added		0.5	0.3	3.8	0.4	0.5	0.0	0.3
U.S. Equity	1,982	0.8	5.2	17.0	5.4	12.4	6.0	6.5
Russell 3000 Tobacco Free Index		3.0	8.8	18.5	8.9	14.6	7.1	7.4
Value Added		-2.2	-3.6	-1.5	-3.5	-2.2	-1.1	-0.9
Non-U.S. Equity	1,762	8.0	16.7	35.4	2.6	9.4	1.9	-
MSCI World ex-U.S. Tobacco Free		5.7	12.8	19.8	0.6	8.1	0.9	-
Value Added		2.3	3.9	15.6	2.0	1.3	1.0	-

As of June 30, 2017	Market Value in Millions (\$)	3 Months	6 Months	1 Year	3 Year	5 Year	10 Year	20 Year
Emerging Market Equity	926	7.7	21.4	23.6	3.4	5.3	2.6	-
MSCI Emerging Market		6.3	18.4	23.7	1.1	4.0	1.9	-
Value Added		1.4	3.0	-0.1	2.3	1.3	0.7	-
<b>Fixed Income</b>	1,131	1.4	3.2	3.2	2.3	3.2	5.5	6.3
Policy Benchmark		1.2	2.4	2.0	2.6	3.1	5.6	6.4
Value Added		0.2	0.8	1.2	-0.3	0.1	-0.1	-0.1
Government	373	1.4	2.1	-1.2	1.5	2.2	4.1	5.6
Barclays U.S. Government Bond Index		1.2	1.8	-2.2	1.8	1.8	4.3	5.7
Value Added		0.2	0.3	-1.0	-0.3	0.4	-0.2	-0.1
High Yield	356	2.5	5.0	10.3	4.2	6.9	7.3	-
Merrill Lynch High Yield Cash Pay Index		2.2	4.9	12.8	4.5	6.9	7.5	-
Value Added		0.3	0.1	-2.5	-0.3	0.0	-0.2	-
Emerging Market Debt	160	1.7	5.7	4.0	-	-	-	-
JP Morgan Emerging Markets Bond Index		2.2	6.2	6.0	-	-	-	-
Value Added		-0.5	-0.5	-2.0	-	-	-	-
TIPS	242	-0.3	1.0	0.1	0.9	0.4	4.6	-
Barclays U.S. TIPS		-0.4	0.9	-0.6	0.6	0.3	4.3	-
Value Added		0.1	0.1	0.7	0.3	0.1	0.3	-
<b>Other Investments</b>								
Private Equity	1,234	6.5	10.1	21.1	19.3	19.6	12.6	18.1
Absolute Return	1,932	0.2	1.4	4.8	2.1	5.9	3.6	-
Custom Absolute Return Benchmark		0.7	1.4	1.9	-1.9	1.3	1.9	-
Value Added		-0.5	0.0	2.9	4.0	4.6	1.7	-
Real Estate	486	3.8	1.9	8.6	12.3	12.3	1.6	-
NCREIF ODCE Index		1.5	3.5	7.4	10.9	11.0	2.3	-
Value Added		2.3	-1.6	1.2	1.4	1.3	-0.7	-
Real Assets	203	0.9	2.0	6.5	-5.1	-0.1	-	-
Cash	1,096	0.3	0.7	1.1	1.2	1.4	-	-

**UNIVERSITY OF CALIFORNIA RETIREMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING JUNE 30, 2017**

The Office of the CIO managed \$61.6 billion for the University of California Retirement Plan (UCRP) as of June 30, 2017, which increased \$7.5 billion this fiscal year to date with market gains of \$6.8 billion, value added of \$980 million, and net outflows of \$249 million.

**UCRP Performance as of June 30, 2017 is shown in the table below:**

As of June 30, 2017	Market Value in Millions (\$)	3 Months	6 Months	1 Year	3 Year	5 Year	10 Year	20 Year
<b>Pension</b>	\$61,615	3.6	8.4	14.4	5.4	9.0	5.0	6.7
Policy Benchmark		3.1	7.7	12.5	4.5	8.1	4.4	6.4
Value Added		0.5	0.7	1.9	0.9	0.9	0.6	0.3

As of June 30, 2017	Market Value in Millions (\$)	3 Months	6 Months	1 Year	3 Year	5 Year	10 Year	20 Year
<b>Public Equity</b>	34,690	4.9	12.2	22.5	6.1	11.6	4.4	6.0
UCRP Public Equity BM		4.2	11.2	19.1	4.9	10.8	4.3	6.2
Value Added		0.7	1.0	3.4	1.2	0.8	0.1	-0.2
U.S. Equity	17,698	3.7	11.0	21.1	8.4	14.3	6.9	6.9
Russell 3000 Tobacco Free Index		3.0	8.8	18.5	8.9	14.6	7.1	7.4
Value Added		0.7	2.2	2.6	-0.5	-0.3	-0.2	-0.5
Non-U.S. Equity	11,686	7.1	15.4	31.4	3.6	10.1	2.1	-
MSCI World ex-U.S. Tobacco Free		5.7	12.8	19.8	0.6	8.1	0.9	-
Value Added		1.4	2.6	11.6	3.0	2.0	1.2	-
Emerging Market Equity	5,306	8.9	19.9	17.9	0.7	3.7	1.8	-
MSCI Emerging Market		6.3	18.4	23.7	1.1	4.0	1.9	-
Value Added		2.6	1.5	-5.8	-0.4	-0.3	-0.1	-
<b>Fixed Income</b>	13,364	1.5	3.1	2.9	2.8	3.0	5.4	6.5
Policy Benchmark		1.4	2.9	2.0	2.8	2.6	5.3	6.2
Value Added		0.1	0.2	0.9	0.0	0.4	0.1	0.3
Core	8,149	1.7	2.7	1.3	2.8	2.9	4.9	6.2
Barclays U.S. Aggregate Bond Index		1.4	2.3	-0.3	2.5	2.2	4.7	5.8
Value Added		0.3	0.4	1.6	0.3	0.7	0.2	0.4
High Yield	2,064	2.2	4.6	11.0	4.4	7.1	7.4	-
Merrill Lynch High Yield Cash Pay Index		2.2	4.9	12.8	4.5	6.9	7.5	-
Value Added		0.0	-0.3	-1.8	-0.1	0.2	-0.1	-
Emerging Market Debt	1,461	2.2	6.0	5.1	3.5	3.9	6.3	-
JP Morgan Emerging Markets Bond Index		2.2	6.2	6.0	5.4	5.7	7.4	-
Value Added		0.0	-0.2	-0.9	-1.9	-1.8	-1.1	-
TIPS	1,690	-0.4	1.1	-0.1	0.8	0.5	4.6	-
Barclays U.S. TIPS		-0.4	0.9	-0.6	0.6	0.3	4.3	-
Value Added		0.0	0.2	0.5	0.2	0.2	0.3	-
<b>Other Investments</b>								
Private Equity	2,800	5.3	9.4	14.0	11.0	13.2	9.2	15.9
Absolute Return	3,018	0.2	1.4	4.8	2.1	5.9	3.6	-
Custom Absolute Return Benchmark		0.7	3.1	6.4	-0.4	2.2	2.4	-
Value Added		-0.5	-1.7	-1.6	2.5	3.7	1.2	-
Real Estate	3,101	3.4	5.6	7.7	12.4	12.1	1.0	-
NCREIF ODCE Index		1.5	3.5	7.4	10.9	11.0	0.9	-
Value Added		1.9	2.1	0.3	1.5	1.1	0.1	-
Real Assets	855	1.1	3.1	8.6	-4.7	0.1	-	-
Cash	3,787	0.3	0.6	1.0	1.3	2.1	-	-

**WORKING CAPITAL INVESTMENT REVIEW FOR PERIODS ENDING  
JUNE 30, 2017**

The Office of the CIO managed \$8.9 billion in the Total Return Investment Pool (TRIP), which was flat this fiscal year, as a result of market gains and value added of roughly \$600 million, offsetting outflows of \$577 million. TRIP gained 7.7 percent for the past fiscal year, surpassing the benchmark by 1.2 percent as of June 30, 2017. The Short Term Investment Pool (STIP) held \$5.3 billion as of June 30, 2017, gaining 1.3 percent over the last twelve months and outperforming its benchmark by 0.6 percent.

**Working Capital Performance as of June 30, 2017 is shown in the table below:**

<b>As of June 30, 2017</b>	<b>Market Value (\$ Millions)</b>	<b>3 Months</b>	<b>6 Months</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>7 Year</b>
<b>TRIP</b>	\$ 8,948	2.3	5.5	7.7	3.5	6.6	7.3
Policy Benchmark		2.3	5.2	6.5	3.0	6.2	6.9
Value Added		0.0	0.3	1.2	0.5	0.4	0.4
<b>Growth</b>	3,266	4.7	11.7	19.1	4.9	11.9	11.4
MSCI All Country World Index		4.2	11.2	19.1	7.9	12.8	9.7
Value Added		0.5	0.5	0.0	-3.0	-0.9	1.7
Public Growth	3,176	4.5	11.5	17.6	4.9	11.9	11.4
Private Growth	90	12.9	16.6	29.0	-	-	-
<b>Income</b>	4,267	1.7	2.8	2.1	2.8	3.6	5.0
Barclays U.S. Aggregate Bond Index		1.4	2.3	-0.3	2.5	2.2	3.2
Value Added		0.3	0.5	2.4	0.3	1.4	1.8
Public Income	3,840	1.7	2.8	1.6	2.9	3.6	5.0
Private Income	427	1.4	2.7	5.8			
<b>Other Investments</b>							
Absolute Return	1,306	-1.1	-0.2	3.3	0.5	-	-
HFRX Absolute Return		0.7	1.4	1.9	1.6	-	-
Value Added		-1.8	-1.6	1.4	-1.1	-	-
Cash	109	0.6	0.9	1.4	0.7	-	-

<b>As of June 30, 2017</b>	<b>Market Value (\$ Millions)</b>	<b>3 Months</b>	<b>6 Months</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>	<b>20 Year</b>
STIP	\$ 5,280	0.3	0.7	1.3	1.3	1.5	2.4	3.7
Policy Benchmark		0.2	0.4	0.7	0.5	0.4	0.8	2.5
Value Added		0.1	0.3	0.6	0.8	1.1	1.6	1.2

**ATTACHMENTS:**

The attached Product Reports for periods ending June 30, 2017 are submitted for discussion. They include:

**Attachment 1: Endowment Investment Review for Period Ending June 30, 2017**

**Attachment 2: Pension Investment Review for Periods Ending June 30, 2017**

**Attachment 3: Retirement Savings Investment Review for Period Ending June 30, 2017**

**Attachment 4: Working Capital Investment Review for Periods Ending June 30, 2017**