Office of the Chief Investment Officer

TO MEMBERS OF THE INVESTMENTS COMMITTEE:

DISCUSSION ITEM

For Meeting of January 21, 2020

UPDATE ON ASSET CLASSES AND INVESTMENT PRODUCTS

EXECUTIVE SUMMARY

The Office of the Chief Investment Officer (CIO) managed \$126.6 billion in assets as of September 30, 2019. The Office of the CIO will provide an in-depth review of all asset classes and investment products. The UC Entity assets are comprised of the Endowment (\$13.3 billion), Pension (\$69.7 billion), Working Capital (\$15 billion, including Total Return Investment Pool with \$9 billion and Short Term Investment Pool with \$6 billion), Retirement Savings Program (\$25 8 billion), Fiat Lux Insurance (\$1.1 billion), and Blue & Gold Pool (\$1.7 billion).

BACKGROUND

Public Equity

The Office of the Chief Investment Officer (CIO) will review the \$58.8 billion public equity portfolios, including an in-depth review of the Office of the CIO's investment process and performance across the Pension, Endowment, and Working Capital Pools.

Fixed Income

The Office of the CIO will review the \$38.2 billion fixed income portfolios, including an indepth review of investment process and performance across the Pension, Endowment, and Working Capital Pools.

Absolute Return

The Office of the CIO will review the \$8.6 billion absolute return portfolios, including an indepth review of investment process and performance across the Pension, Endowment, and Working Capital Pools.

Private Equity

The Office of the CIO will review of the \$6.2 billion private equity portfolios, including an indepth review of investment process and performance across the Pension, Endowment, and

Working Capital Pools.

Real Assets

The Office of the CIO will review the \$2.2 billion real assets portfolios, including an in-depth review of investment process and performance across the Pension, Endowment, and Working Capital Pools.

Real Estate

The Office of the CIO will review the \$5.4 billion real estate portfolios, including an in-depth review of investment process and performance across the Pension, Endowment, and Working Capital Pools.

GENERAL ENDOWMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING SEPTEMBER 30, 2019

As of September 30, 2019, the Office of the Chief Investment Officer (CIO) managed \$13.3 billion in the General Endowment Pool (GEP), which decreased by \$100 million since the end of June 30, 2019. The GEP gained 6.6 percent for prior 12 months outperforming its benchmark by 3.6 percent.

GEP Performance as of September 30, 2019 is shown in the table below:

As of September 30, 2019	Va	Iarket due in lions (\$)	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year
Endowment	\$	13,276	0.3	6.6	9.2	6.9	8.4	6.6	9.0
Policy Benchmark			0.1	3.0	7.6	5.7	6.8	5.7	8.4
Value A dded			0.2	3.6	1.6	1.2	1.6	0.9	0.6
Public Equity	\$	4,396	0.5	2.4	10.6	6.8	8.9	5.2	8.4
GEP Public Equity BM			(0.2)	0.6	9.7	6.7	8.6	5.8	9.4
Value A dded			0.7	1.8	0.9	0.1	0.3	(0.6)	(1.0)
Fixed Income (Liquidity)	\$	1,380	1.4	7.9	3.7	3.5	4.7	6.0	7.2
Policy Benchmark			2.3	10.3	2.5	3.0	3.6	5.3	6.2
Value A dded			(0.9)	(2.4)	1.2	0.5	1.1	0.7	1.0
Core	\$	825	1.9	8.2	2.5	2.6	3.6	5.3	6.6
Opportunistic	\$	555	0.9	7.5	5.1	4.8	6.8	-	-
Other Investments									
Private Equity	\$	1,941	(0.1)	26.0	21.6	20.1	18.9	14.9	20.3
Private Equity Benchmark			1.7	4.5	14.6	15.9	16.8	9.4	13.4
Value A dded			(1.8)	21.5	7.0	4.2	2.1	5.5	6.9
Absolute Return	\$	3,010	0.6	6.1	5.6	4.0	5.7	-	-
Absolute Return Policy Benchmark			(1.1)	0.0	2.1	(0.2)	0.6	-	-
Value A dded			1.7	6.1	3.5	4.2	5.1	-	-
Real Estate (Real Assets)	\$	942	(0.8)	6.1	8.9	9.9	9.1	-	-
NCREIF ODCE			0.8	5.5	6.6	8.9	8.6	-	-
Value A dded			(1.6)	0.6	2.3	1.0	0.5	-	-
Real Assets (Non-Real Estate)	\$	609	(1.5)	4.7	4.7	(2.5)	-	-	-
Cash	\$	998	(1.4)	1.4	1.5	1.4	1.8	-	-

UNIVERSITY OF CALIFORNIA RETIREMENT PLAN INVESTMENT REVIEW FOR PERIODS ENDING SEPTEMBER 30, 2019

The Office of the Chief Investment Officer (CIO) managed \$69.7 billion for the University of California Retirement Plan (UCRP) as of September 30, 2019, which decreased by \$300 million since the end of June 2019.

The portfolio gained 3.7 percent over the past year outperforming its benchmark by 0.3 percent.

UCRP Performance as of September 30, 2019 is shown in the table below:

As of September 30, 2019	Va	larket lue in ions (\$)	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year
Pension	\$	69,676	0.3	3.7	8.0	6.2	8.1	6.0	8.5
Policy Benchmark			0.4	3.4	7.8	5.8	7.5	5.4	8.1
Value Added			(0.1)	0.3	0.2	0.4	0.6	0.6	0.4
Public Equity	\$	34,304	(0.1)	1.1	10.3	7.2	9.2	5.1	8.2
UCRP Public Equity BM			(0.2)	0.6	9.6	6.6	8.7	5.8	9.4
Value Added			0.1	0.5	0.7	0.6	0.50	(0.7)	(1.2)
Fixed Income (Liquidity)	\$	15,638	1.7	8.7	3.7	3.8	4.8	6.1	7.4
Core	\$	9,704	1.9	9.3	3.3	3.5	4.1	5.6	7.1
Barclays U.S. Aggregate Bond Index			2.3	10.3	2.9	3.4	3.7	5.5	6.3
Value Added			(0.4)	(1.0)	0.4	0.1	0.4	0.1	0.8
High Yield	\$	2,345	1.2	5.7	5.7	5.3	8.0	-	-
Merrill Lynch High Yield Cash Pay Index			1.2	6.3	6.1	5.4	7.8	-	-
Value Added			0.0	(0.6)	(0.4)	(0.1)	0.2	-	-
Emerging Market Debt	\$	1,747	1.3	11.3	4.4	4.7	5.6	-	-
JP Morgan Emerging Markets Bond Index			1.5	11.6	4.6	5.7	6.6	-	-
Value Added			(0.2)	(0.3)	(0.2)	(1.0)	(1.0)	-	-
TIPS	\$	1,842	1.3	7.0	2.6	2.6	3.7	-	-
Barclays U.S. TIPS			1.3	7.1	2.2	2.4	3.5	-	-
Value Added			0.0	(0.1)	0.4	0.2	0.2	-	-
Other Investments									
Private Equity	\$	4,143	(0.7)	10.6	14.8	11.9	14.0	12.0	18.2
Private Equity Benchmark			1.7	4.5	13.7	11.2	13.7	8.2	12.5
Value Added			(2.4)	6.1	1.1	0.7	0.3	3.8	5.7
Absolute Return	\$	4,317	0.5	5.7	5.5	3.9	5.7	-	-
Custom Absolute Return Benchmark			(1.1)	0.0	3.1	0.7	1.0	-	-
Value Added			1.6	5.7	2.4	3.2	4.7	-	-
Real Estate	\$	4,164	(1.6)	6.1	7.2	9.5	9.1	-	-
NCREIF ODCE Index (lagged 3 months)			0.8	5.5	6.6	8.9	8.5	-	-
Value Added			(2.4)	0.6	0.6	0.6	0.6	-	-
Real Assets	\$	1,562	(0.9)	3.2	6.0	(1.9)	-	-	-
Cash	\$	5,547	0.7	2.8	1.9	1.6	2.8	-	

WORKING CAPITAL INVESTMENT REVIEW FOR PERIODS ENDING SEPTEMBER 30, 2019

The Office of the Chief Investment Officer (CIO) managed \$9 billion in the Total Return Investment Pool (TRIP), which decreased by \$153 million since the end of June 2019. TRIP gained 5.5 percent over the past 12 months, underperforming the benchmark by 0.3 percent. The Short Term Investment Pool (STIP) held \$6 billion as of September 30, 2019, an increase of \$436 million since September 2019. STIP gained 2.4 percent over the last year.

Working Capital Performance as of September 30, 2019 is shown in the table below:

As of September 30, 2019	Market Value in Millions (\$)		Fiscal YTD	1 Year	3 Year	5 Year	10 Year	
Total Return	\$	9,012	1.2	5.5	5.7	4.8	6.8	
Policy Benchmark			1.3	5.8	5.2	4.4	6.4	
Value Added			(0.1)	(0.3)	0.5	0.4	0.4	
Growth	\$	2,965	0.1	1.7	10.4	-	-	
MSCI All Country World Index Tobacco Free			(0.2)	0.6	9.6	-	-	
Value Added			0.3	1.1	0.8	-		
Public Growth	\$	2,868	0.1	1.3	10.0	6.8	9.5	
Private Growth	\$	97	(0.5)	17.7	23.1	-	-	
Income	\$	4,506	2.0	9.7	3.7	3.9	5.2	
Barclays U.S. Aggregate Bond Index			2.3	10.3	2.9	3.4	3.7	
Value Added			(0.3)	(0.6)	0.8	0.5	1.5	
Public Income	\$	4,119	2.2	10.0	3.5	3.9	5.2	
Private Income	\$	387	0.2	7.2	5.7	-	-	
Absolute Return	\$	1,224	1.2	0.1	0.9	0.5	-	
Absolute Return Policy Benchmark			1.1	1.2	1.7	1.7	-	
Value Added			0.1	(1.1)	(0.8)	(1.2)	-	
Cash	\$	317	0.6	2.4	1.9	1.6	-	

As of September 30, 2019	Val	arket ue in ons (\$)	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year
Short Term	\$	6,004	0.6	2.4	1.9	1.6	1.9	3.2	3.8
Policy Benchmark			0.5	2.4	1.7	1.2	0.8	2.1	2.9
Value Added			0.1	0.0	0.2	0.4	1.1	1.1	0.9

Attachment: Update on Investments Products