

# Office Of The Chief Investment Officer Of The Regents

**Investing for the Long Term** 

### Opportunities in a low growth environment

Collaborate with our stakeholders to set realistic expectations

Manage products differently based on their risk and return objectives

Complete asset and risk allocation for all products

Add value through passive and active management

Aggressively reduce costs in a low-return environment

Benefit from our competitive advantages

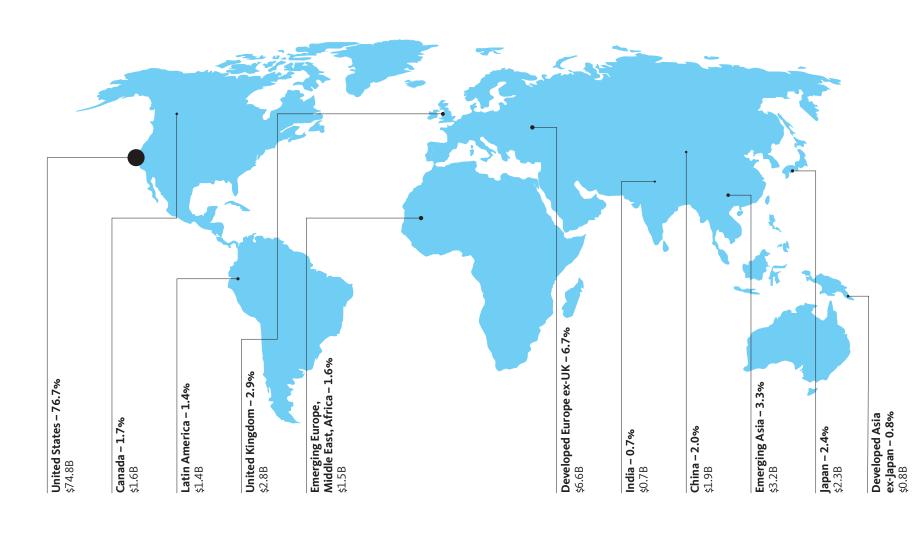
Size. Scale. Patience. The UC.

### \$97.6 Billion

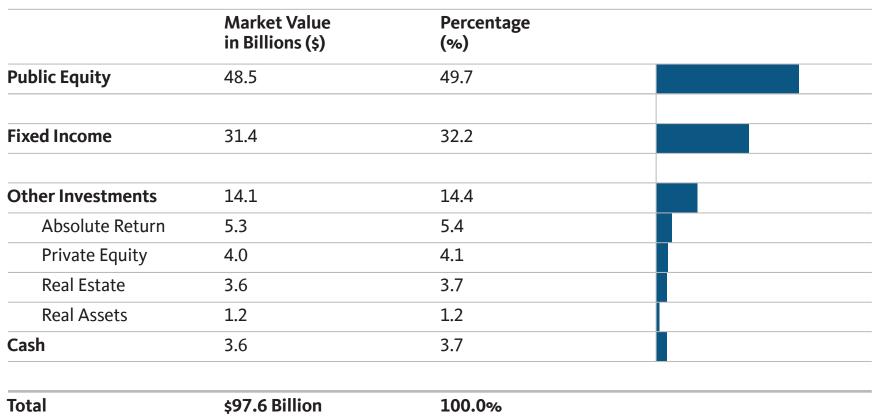
	Market Value in Billions (\$) as of June 30, 2016
Endowment	\$9.1
Pension	\$54.1
Retirement Savings	\$20.2
Total Return	\$8.9
Short Term	\$5.3
Total	\$97.6B

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### Our Products Where We Invest



## How We Invest \$97.6 Billion



### **Products**

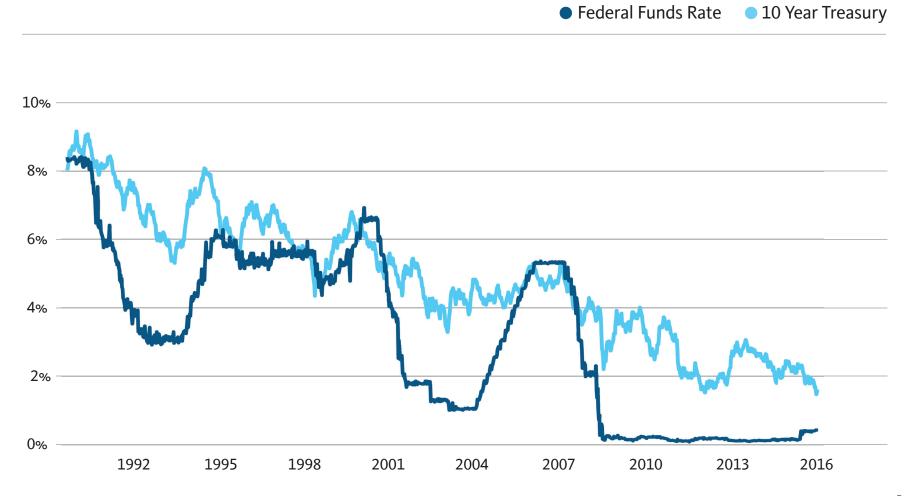
**UC Endowment** 

**UC Pension** 

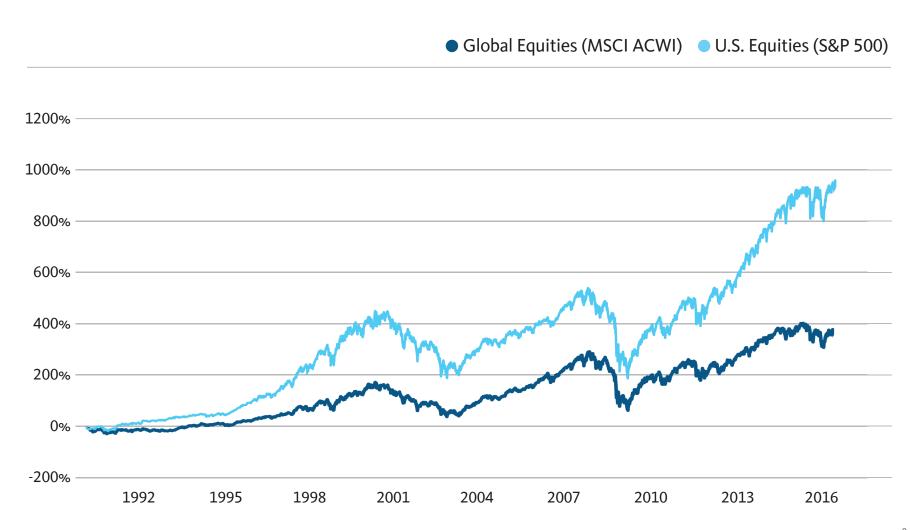
**UC Retirement Savings** 

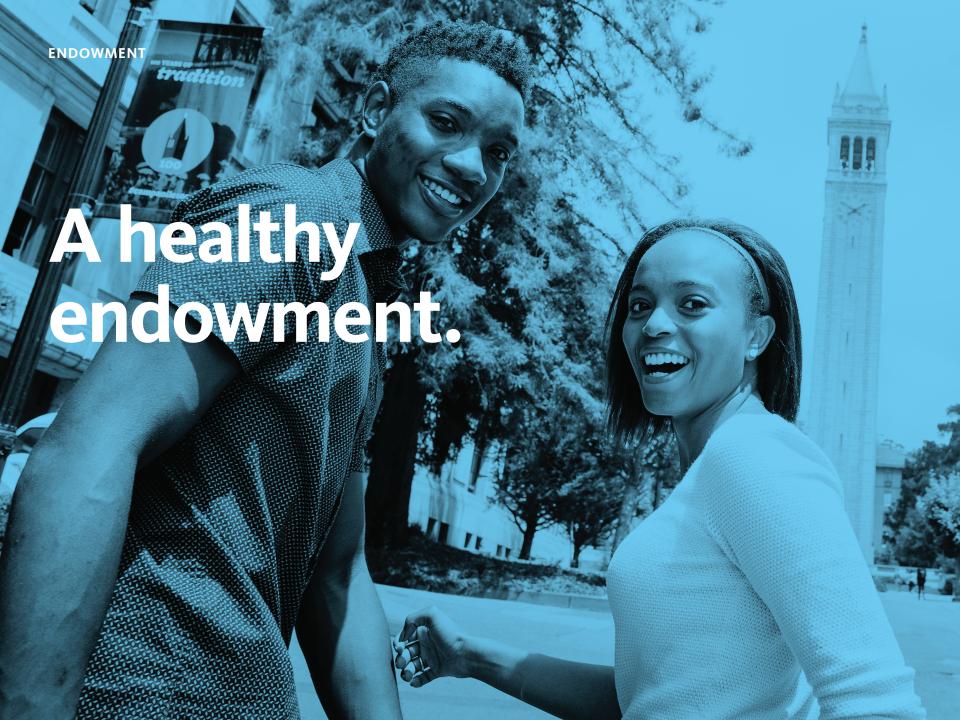
**UC Working Capital** 

### Will U.S. Rates Fall Below Zero?



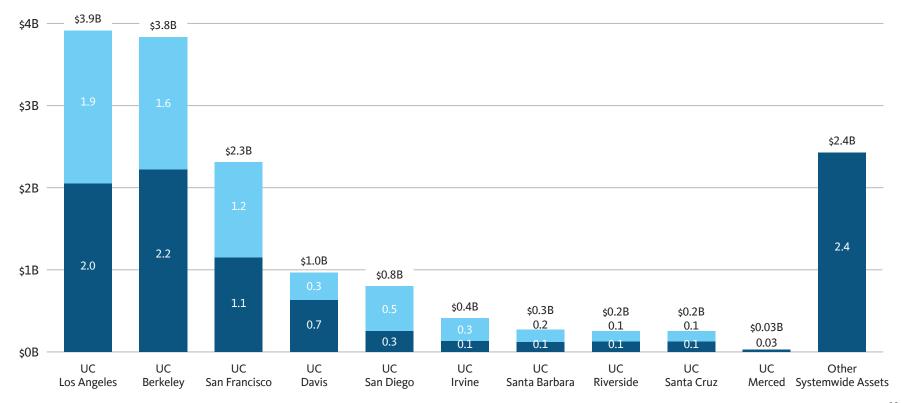
### **How Much Further Can Equities Go?**



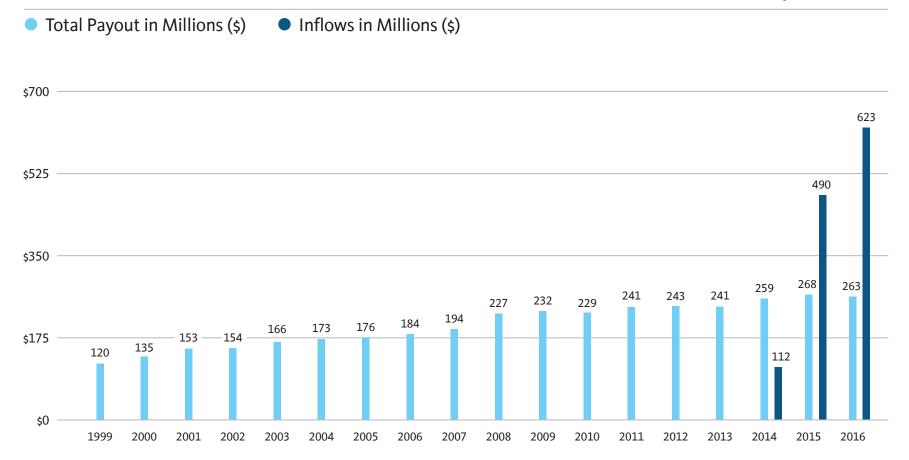


### **UC Endowment and Campus Foundations** \$15.4 Billion

Regents Endowment AssetsFoundation Assets



## UC Endowment \$1.2 Billion of New Inflows



## **Endowment** 2015/2016

	Market Value in Billions (\$)
June 30, 2015	\$8.9B
Market Gains	(\$0.2B)
Value Added	(\$0.1B)
Net Cash Flow	\$0.5B
June 30, 2016	\$9.1B

## **Endowment**Asset Allocation

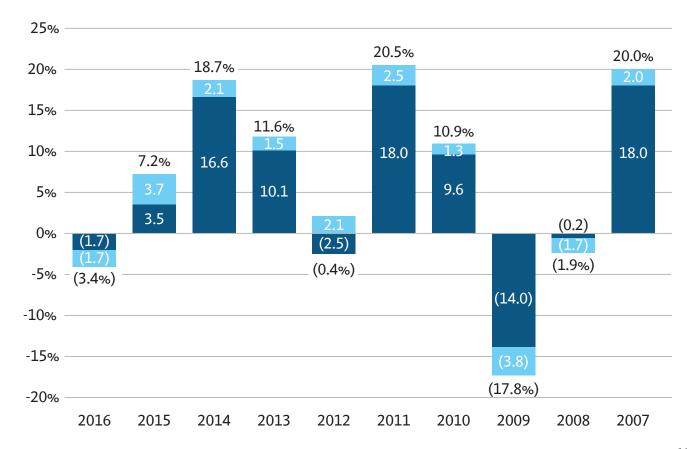
	Market Value in Billions (\$)	Portfolio Weight (%)	Policy Weight (%)	Overweight / (Underweight)
Public Equity	4.2	46.3	43.2	3.1
Fixed Income	0.8	9.0	13.0	(4.0)
Other Investments	3.5	37.8	43.8	(6.0)
Absolute Return	1.7	18.2	24.5	(6.3)
Private Equity	1.1	11.7	9.4	2.3
Real Estate	0.5	5.9	7.0	(1.1)
Real Assets	0.2	2.0	2.9	(0.9)
Cash	0.6	6.9	0.0	6.9
Endowment	\$9.1 Billion	100.0%	100.0%	

### **Endowment**

#### **Net Returns**

Value Added

Benchmark



As of June 30

## **Endowment**Investing for the Long Term

Total Dollar Value Added

\$1.6B

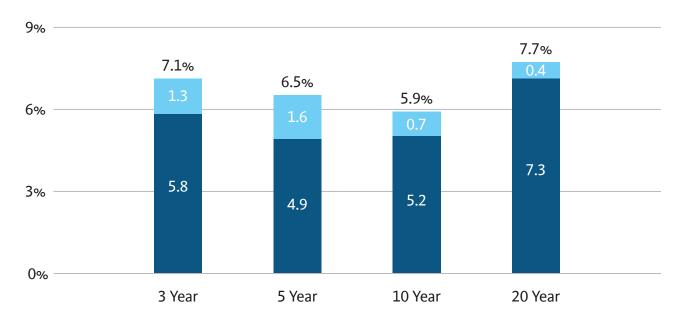
\$2.3B

\$3.9B

#### **Net Returns**

- Value Added
- Benchmark

12% —





### **Pension Retirees**

### \$54.1 Billion in Assets

Average Monthly Benefit	\$3,388	Active Members	123,768
Average Service Credit at Retirement	21 yrs	Retired Members	67,321
Average Age	71 yrs	Active to Retiree Ratio	2 Active : 1 Retiree
Average Age at Retirement	60 yrs		

## **Pension** 2015/2016

	Market Value in Billions (\$)
June 30, 2015	\$55.0B
Market Gains	(\$0.5B)
Value Added	(\$0.6B)
Net Cash Flow	\$0.2B
June 30, 2016	\$54.1B

## **Pension**Asset Allocation

	Market Value in Billions (\$)	Portfolio Weight (%)	Policy Weight (%)	Overweight / (Underweight)	
Public Equity	29.5	54.5	54.9	(0.4)	
Fixed Income	12.6	23.3	22.3	1.0	
Other Investments	9.4	17.4	22.8	(5.4)	
Absolute Return	2.6	4.8	6.2	(1.4)	
Private Equity	2.7	5.0	8.0	(3.0)	
Real Estate	3.1	5.7	5.5	0.2	
Real Assets	1.0	1.8	3.1	(1.3)	
Cash	2.6	4.8	0.0	4.8	
Pension	\$54.1 Billion	100.0%	100.0%		

## **Pension**Asset Allocation

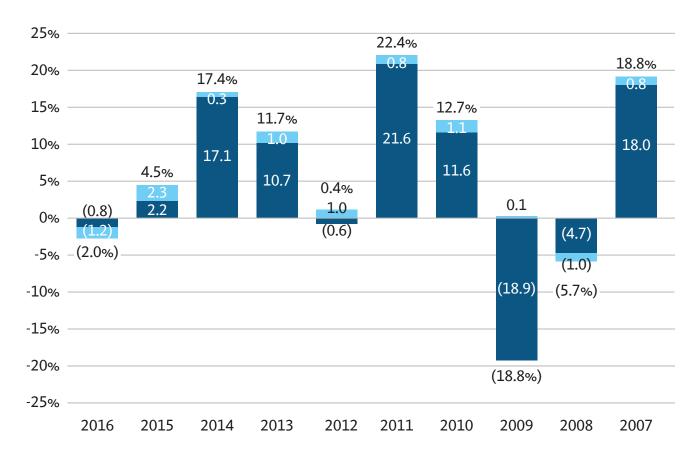
Where we are as of Ju	ıne 30, 2016		Where we are headed
	Market Value in Billions (\$)	Portfolio Weight (%)	Policy Weight (%)
Public Equity	29.5	54.5	50.0
Fixed Income	12.6	23.3	20.0
Other Investments	9.4	17.4	30.0
Absolute Return	2.6	4.8	10.0
Private Equity	2.7	5.0	10.0
Real Estate	3.1	5.7	7.0
Real Assets	1.0	1.8	3.0
Cash	2.6	4.8	0.0
Pension	\$54.1 Billion	100.0%	100.0%

### **Pension**

#### **Net Returns**

Value Added

Benchmark



As of June 30

## **Pension**Investing for the Long Term

Total Dollar Value Added

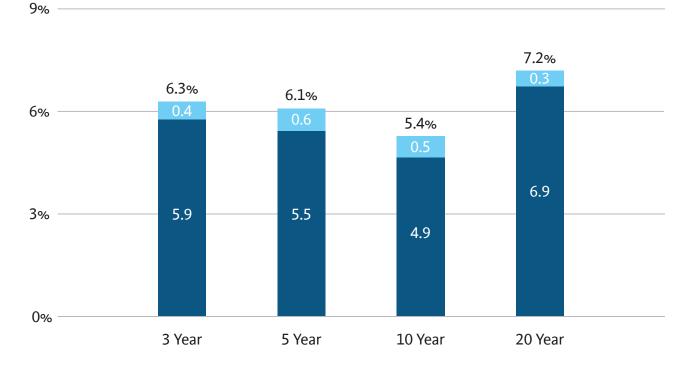
\$9.0B

\$13.9B

\$23.0B

#### **Net Returns**

- Value Added
- Benchmark

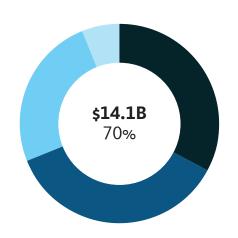


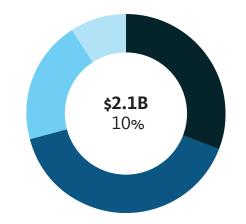
## **UC Retirement Savings Program** 2nd largest public DC plan

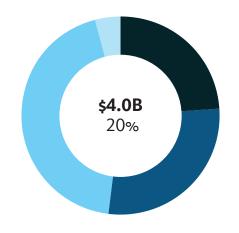
Plan	Participants
Largest 403(b) plan in the U.S.	~300,000 participants
2nd largest public DC plan	Average Age: 41
Target Date Fund: \$5.5B	Savings Rate: 9.3%
15 Core Options: \$13.5B	Median Account Balance: \$28,841
Brokerage Window: \$1.2B	80% income replacement ratio: 60%

## UC Retirement Savings Program Largest 403(b) plan in the U.S.

#### Market Value in Billions (\$)







33%
36%
25%
6%

Participants: 130,897

457(b)	
• Public Equity: \$0.7B	31%
• Asset Allocation: \$0.8B	40%
Fixed Income: \$0.4B	20%
Brokerage Link: \$0.2B	9%

Defined Contribution	
• Public Equity: \$1.0B	24%
<ul><li>Asset Allocation: \$1.1B</li></ul>	28%
<ul><li>Fixed Income: \$1.8B</li></ul>	44%
<ul><li>Brokerage Link: \$0.1B</li></ul>	4%

Participants: 30,557 Participants: 272,720

### \$20.2 Billion Saved by 300,000 UC Participants

87% of assets in 6 investment choices

	As of June 30, 2016
Target Date Fund Series 11 funds ranging from Pathway Income to Pathway 2060	\$5.5B
UC Savings Fund A short duration bond portfolio	\$4.2B
UC Global Fund A 100% equity fund of 85% U.S. and 15% International stocks	\$4.1B
UC Balanced Growth Fund A fund with an equity and fixed income blend	\$1.5B
UC Bond Fund A diversified core fixed income fund	\$1.2B
Brokerage Window A platform allowing participants to choose their own funds	\$1.2B

### **UC Retirement Savings Program Evolution**

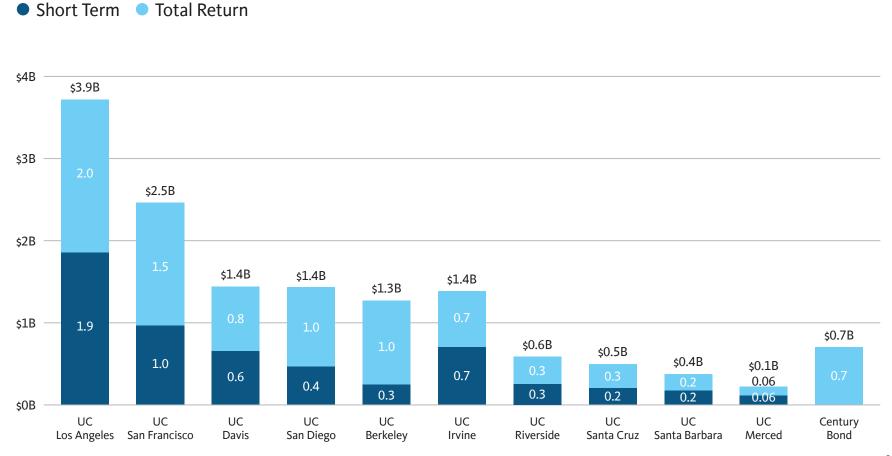
2012	Reduced costs Implemented institutional share class mutual funds
2013	Streamlined investment fund choices  Moved from 215 to 85 funds
2014	Target Date Fund becomes default Replaced Savings Fund as default
2015	Further streamlined investment choices and changed Glidepath Moved from 85 to 16 funds and changed risk approach of Target Date Fund
2016	Strategic review of Program

### **Strategic Review of Program**

	As of June 30, 2016
Target Date Fund Series 11 funds ranging from Pathway Income to Pathway 2060	\$5.5B
UC Savings Fund A short duration bond portfolio	\$4.2B
UC Global Fund A 100% equity fund of 85% U.S. and 15% International stocks	\$4.1B
UC Balanced Growth Fund A fund with an equity and fixed income blend	\$1.5B
UC Bond Fund A diversified core fixed income fund	\$1.2B
Brokerage Window A platform allowing participants to choose their own funds	\$1.2B



### **UC Working Capital** \$14.2 Billion



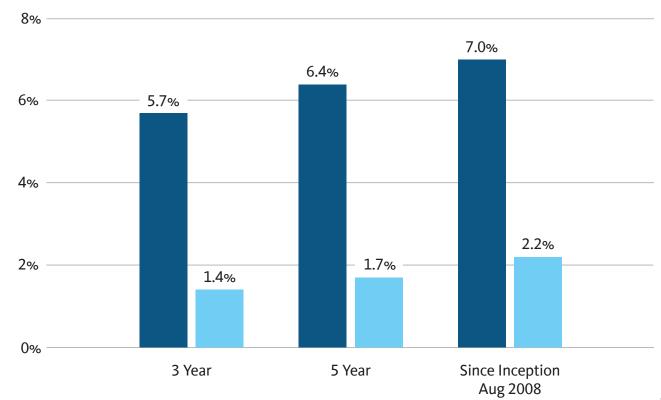
## Working Capital 2015/2016

			Market Value in Billions (\$)
	Total Return	Short Term	Total Working Capital
June 30, 2015	\$7.4B	\$6.8B	\$14.2B
Market Gains	\$0.2B	\$0.0B	\$0.2B
Value Added	(\$0.1B)	\$0.1B	\$0.0B
Net Cash Flow	\$1.4B	(\$1.6B)	(\$0.2B)
June 30, 2016	\$8.9B	\$5.3B	\$14.2B

## **Total Return versus Short Term**Investing for the Long Term

#### **Net Returns**

- Total Return
- Short Term



## Total Return 2015/2016

	Market Value in Billions (\$)
June 30, 2015	\$7.4B
Market Gains	\$0.2B
Value Added	(\$0.1B)
Net Cash Flow	\$1.4B
June 30, 2016	\$8.9B

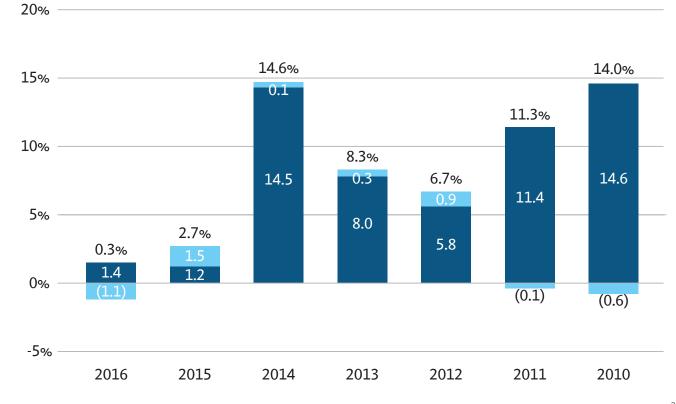
## **Total Return**Asset Allocation

	Market Value in Billions (\$)	Portfolio Weight (%)	Policy Weight (%)	Overweight / (Underweight)
Public Equity	3.1	35.2	35.0	0.2
Fixed Income	4.5	50.9	50.0	0.9
Absolute Return	1.0	11.8	15.0	(3.2)
Cash	0.2	2.1	0.0	2.1
Total Return	\$8.9 Billion	100.0%	100.0%	

### **Total Return**

#### **Net Returns**

- Value Added
- Benchmark



## **Total Return**Investing for the Long Term

Total Dollar Value Added

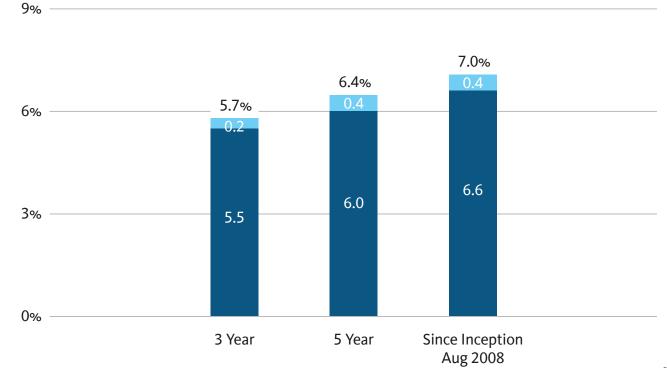
\$1.2B

\$1.8B

\$2.2B

#### **Net Returns**

- Value Added
- Benchmark



### **Short Term Investment Policy**

Preservation of capital

Three year duration limit

Streamline policy

# **Short Term** 2015/2016

	Market Value in Billions (\$)
June 30, 2015	\$6.8B
Market Gains	\$0.0B
Value Added	\$0.1B
Net Cash Flow	(\$1.6B)
June 30, 2016	\$5.3B

### **Short Term**

### **Asset Allocation**

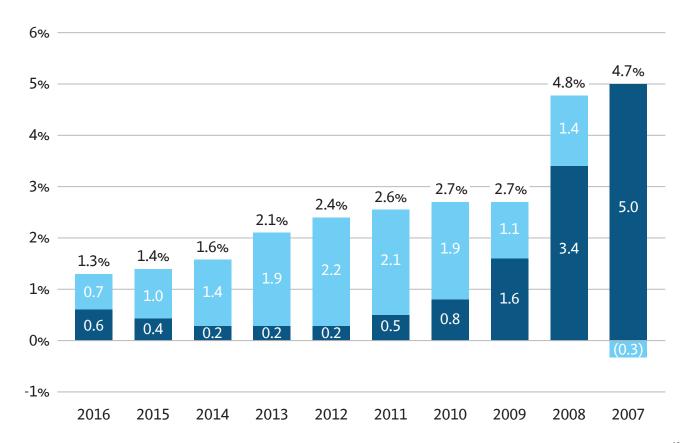
As of June 30, 2016

	Market Value in Billions (\$)	Portfolio Weight (%)	
Corporates	2.3	42.7	
Commercial Paper	1.7	32.9	
Governments	1.2	23.2	
Cash	0.1	1.2	
Short Term	\$5.3 Billion	100.0%	

### **Short Term**

#### **Net Returns**

- Value Added
- Benchmark



As of June 30

# **Short Term**Investing for the Long Term

5%

Total Dollar Value Added

\$0.3B

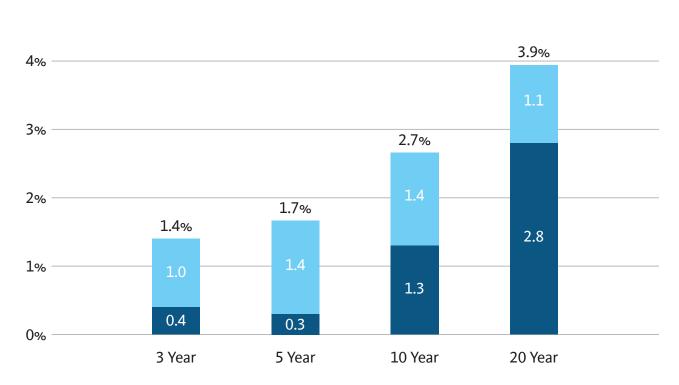
\$0.6B

\$2.1B

#### **Net Returns**

Value Added

Benchmark



As of June 30, 2016

### Opportunities in a low growth environment

Collaborate with our stakeholders to set realistic expectations

Manage products differently based on their risk and return objectives

Complete asset and risk allocation for all products

Add value through passive and active management

Aggressively reduce costs in a low-return environment

Benefit from our competitive advantages

Size. Scale. Patience. The UC.

### **University of California**

Sustainable Investing

**Breakthrough Energy Coalition** 

Cash and Liquidity Management

Fiat Lux

**UC Ventures Program** 





# **Endowment** Policy

Asset Class	Benchmark	June 30, 2016 Target	July 1, 2016 Target
Total Public Equity		43.2%	42.5%
U.S. Equity	Russell 3000 Tobacco Free Index	16.1%	21.0%
Developed Equity	MSCI World ex-U.S. (net dividends) Tobacco Free	10.4%	14.0%
Emerging Market Equity	MSCI Emerging Market (net dividends)	6.3%	7.5%
Global Equity	MSCI All Country World Index (net dividends)	10.4%	0.0%
otal Fixed Income		13.0%	12.5%
U.S. Core Fixed Income	Barclays U.S. Aggregate Bond Index	5.2%	5.0%
High Yield Debt	Merrill Lynch High Yield Cash Pay Index	2.6%	2.5%
Emerging Market Debt	JP Morgan Emerging Markets Bond Index Global Diversified	2.6%	2.5%
TIPS	Barclays U.S. TIPS	2.6%	2.5%
otal Other Investments		43.8%	45.0%
Absolute Return	HFRX Absolute Return Index (Prior to February 2016 blended weighted composite)	24.5%	23.0%
Private Equity	Actual Private Equity Returns	9.4%	11.5%
Real Estate	NCREIF Funds Index-Open End Diversified Core Equity Index	7.0%	7.5%
Real Assets	Actual Real Assets Portfolio Returns	2.9%	3.0%
		100.0%	100.0%

# **Pension** Policy

Asset Class	Benchmark	June 30, 2016 Target	July 1, 2016 Target	Policy Weight (%)
Total Public Equity	MSCI All Country World Index IMI Tobacco Free (net divdends)	54.9%	52.3%	50.0%
U.S. Equity	Russell 3000 Tobacco Free Index	24.1%	27.9%	25.0%
Developed Equity	MSCI World ex-U.S. (net dividends) Tobacco Free	15.0%	18.9%	20.0%
Emerging Market Equity	MSCI Emerging Market (net dividends)	7.0%	5.5%	5.0%
Opportunistic Equity	MSCI All Country World Index (net dividends)	8.8%	_	_
Total Fixed Income		22.3%	21.5%	20.0%
U.S. Core Fixed Income	Barclays U.S. Aggregate Bond Index	12.4%	13.4%	13.0%
High Yield Debt	Merrill Lynch High Yield Cash Pay Index	2.6%	2.9%	2.5%
Emerging Market Debt	JP Morgan Emerging Markets Bond Index Global Diversified	2.6%	2.4%	2.5%
TIPS	Barclays U.S. TIPS	4.7%	2.8%	2.0%
Total Other Investments		22.8%	23.5%	30.0%
Private Equity	Actual Private Equity Returns	8.0%	7.5%	10.0%
Absolute Return	HFRI Fund of Funds Index effective July 2016. Prior was a combination of weighting of HFRX Absolute Return and HFRX Absolute Return Market Directional since 2009	6.2%	7.3%	10.0%
Real Estate	NCREIF Funds Index-Open End Diversified Core Equity Index	5.5%	6.3%	7.0%
Real Assets	Actual Real Assets Returns	3.1%	2.4%	3.0%
Cash		0.0%	2.7%	0.0%
 Гotal		100.0%	100.0%	100.0%

## **Total Return** Policy

Asset Class	Benchmark	June 30, 2015 Target	July 1, 2015 Target	June 30, 2016 Target
Total Equity	MSCI All Country World Index IMI Tobacco Free	50.0%	40.0%	35.0%
U.S. Equity		15.0%		
Non-U.S Equity		7.5%		
Emerging Market Equity		7.5%		
Global Equity		10.0%		
Real Estate – Public		10.0%		
Total Income	Barclays U.S. Aggregate Bond Index	29.5%	47.5%	50.0%
Core		19.5%		
High Yield		5.0%		
Emerging Market Debt		5.0%		
Absolute Return	HFRX Market Directional Index	10.0%	12.5%	15.0%
Cross Asset Class		10.5%		
 Total		100.0%	100.0%	100.0%

## **Short Term** Policy

Asset Class	Benchmark	June 30, 2016 Target
Cash	U.S. 30-Day Treasury Bills	34.0%
Short Term Fixed income	Income Return on a Constant Maturity Two-Year U.S. Treasury Note	66.0%
Total		100.0%

