



# UNIVERSITY OF CALIFORNIA

Office of the Chief Investment Officer

## UC Retirement Savings Program

Investment Performance and Program Review  
as of June 30, 2018

**Growing Portfolios** Building Partnerships

**UC Investments**



# Plan and People





# UC Retirement Savings Program at a Glance

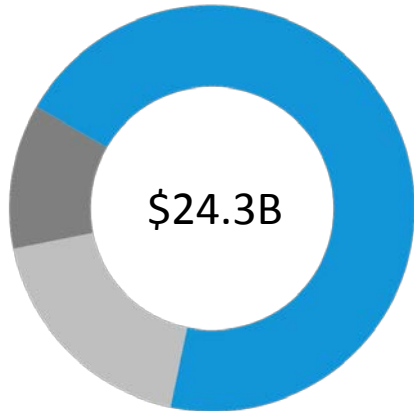
## UC Retirement Savings Program

Deliver the best in class DC plan focused on participant outcomes through superior performance and cost management

### UC Retirement Savings Program Facts

- ▶ **Established in 1967**
- ▶ **Over 315,000 Participants**
- ▶ **\$24.3 billion in assets**
- ▶ **3 Plans: 403(b), 457(b), DC Plan**
- ▶ **2<sup>nd</sup> largest public DC plan in the US**
- ▶ **Largest 403(b) plan in the US**
- ▶ **Target Date Fund (Pathway) default since 2014**
- ▶ **\$9.0 billion in Target Date Funds**

### \$24.3 billion across 3 plans

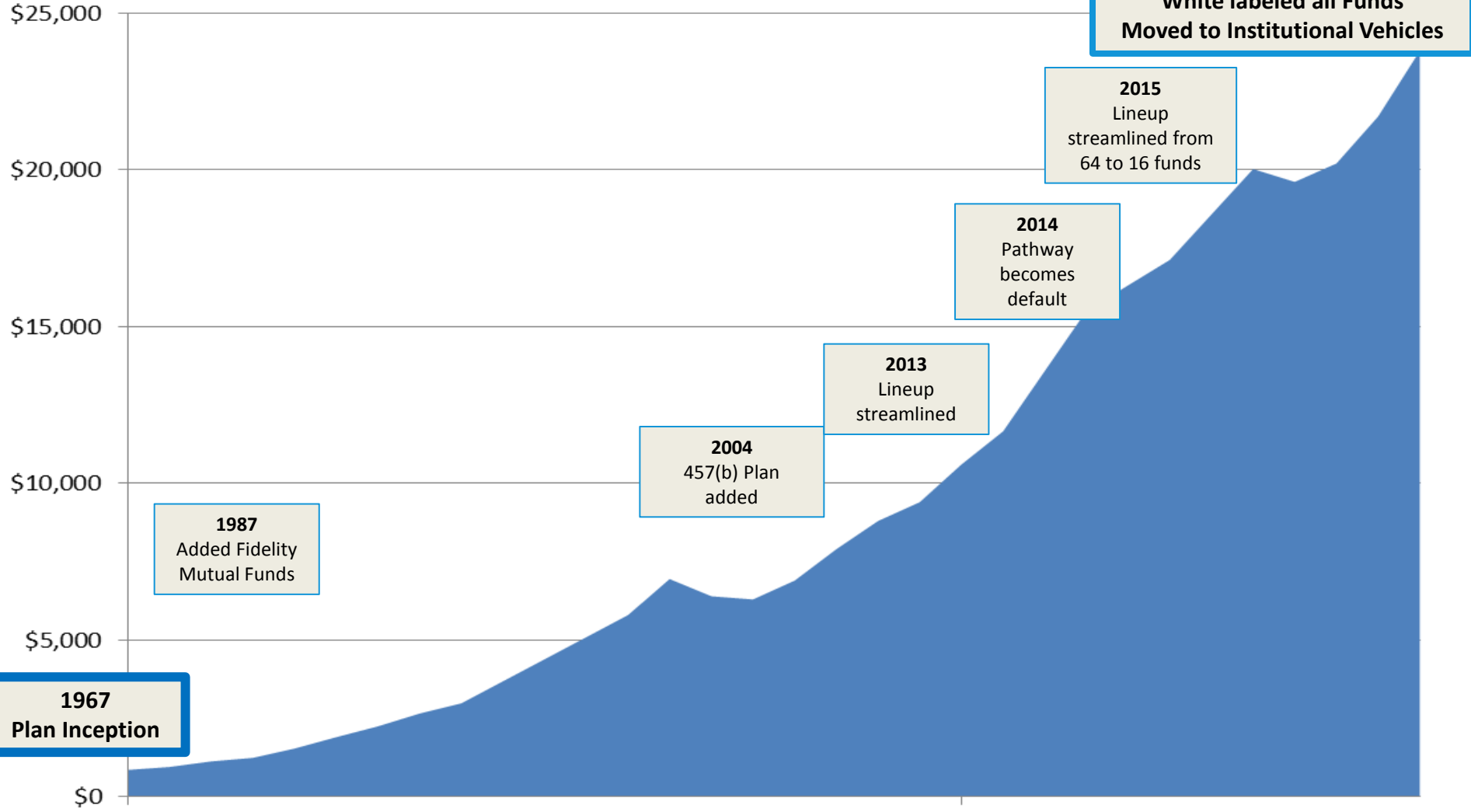


- Tax Deferred 403(b) Plan: \$17.0B 70%
- 457(b) Deferred Compensation Plan: \$2.8B 11%
- Defined Contribution Plan: \$4.5B 19%



# UC Retirement Savings Program Evolution

## UCRSP Assets and Evolution 1967-2018





# Investment Options at a Glance

## TARGET DATE FUNDS - \$9.0 billion UC Pathway Funds

UC Pathway Income Fund	UC Pathway Fund 2030	UC Pathway Fund 2050
UC Pathway Fund 2015	UC Pathway Fund 2035	UC Pathway Fund 2055
UC Pathway Fund 2020	UC Pathway Fund 2040	UC Pathway Fund 2060
UC Pathway Fund 2025	UC Pathway Fund 2045	

## CORE FUNDS - \$13.7 billion Bond and Stock Investments

Bond Investments	Domestic Stock	Foreign Stock
<i>Short-Term</i>	<i>Large Cap</i>	<i>Developed Markets</i>
UC Savings Fund	UC Domestic Equity Index Fund	UC International Equity Index Fund
	UC Growth Company Fund	UC Diversified International Fund
<i>Intermediate-Term</i>		
UC Bond Fund	<i>Small Cap</i>	<i>Emerging Markets</i>
	UC Domestic Small Cap Equity Fund	UC Emerging Markets Equity Fund
<i>Inflation-Protected</i>		
UC Short Term TIPS Fund		Specialty Stock
UC TIPS Fund		UC Real Estate Fund
		UC Social Equity Fund

## BROKERAGE WINDOW - \$1.6 billion Fidelity BROKERAGELINK®



# Core Lineup Assets - Details

## CORE FUNDS - \$13,664

### Bond and Stock Investments

#### **Bond Investments - \$5,418**

##### *Short-Term*

UC Savings Fund - \$4,003

##### *Intermediate-Term*

UC Bond Fund - \$1,156

##### *Inflation-Protected*

UC Short Term TIPS Fund - \$40

UC TIPS Fund - \$219

#### **Domestic Stock - \$6,299**

##### *Large Cap*

UC Domestic Equity Index Fund - \$4,843

UC Growth Company Fund - \$937

##### *Small Cap*

UC Domestic Small Cap Equity Fund - \$519

#### **Foreign/Global Stock - \$1,364**

##### *Developed Markets*

UC International Equity Index Fund - \$1,005

UC Diversified International Fund - \$141

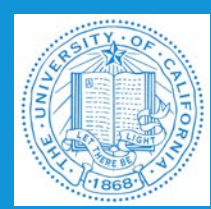
##### *Emerging Markets*

UC Emerging Markets Equity Fund - \$218

#### **Specialty Stock - \$583**

UC Real Estate Fund - \$210

UC Social Equity Fund - \$373



# Defined Contribution Team

**Head of Defined  
Contribution**



**Marco Merz, CFA**

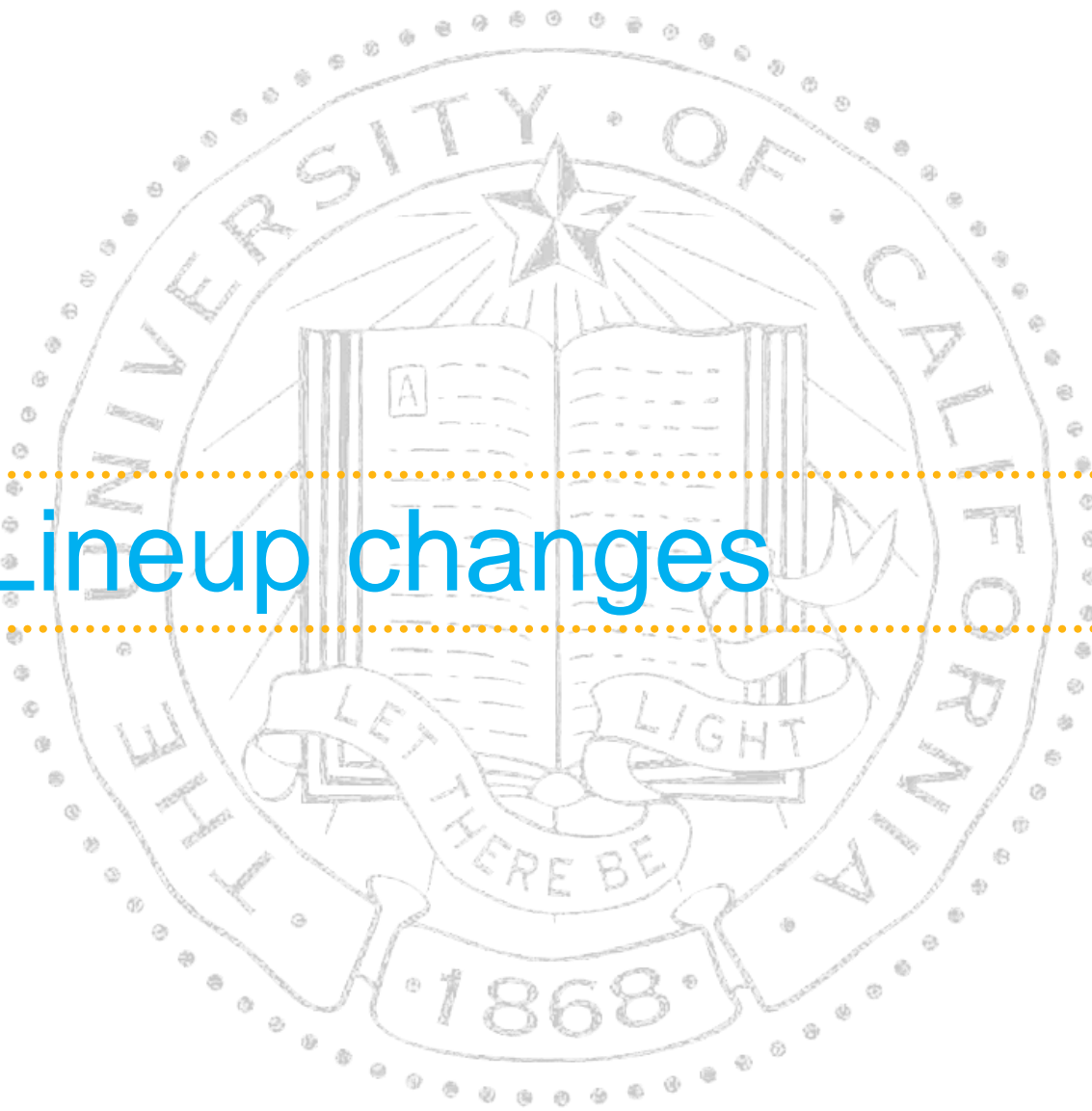
- Joined University of California in 2016
- 10 year career at BlackRock
- Most recently Senior Strategist for Defined Contribution
- Focus on Target Date Fund & Core lineup implementation
- Frequent speaker at DC Industry conferences including P&I, II and IMCA

**Chief Operating Officer**



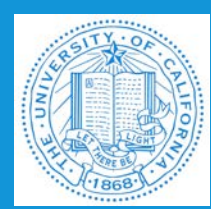
**Arthur Guimaraes, CPA, CBV**

- Joined University of California in 2014
- Led UC glide path review and fund rationalization in 2015
- 10 year career in pension management in the US and Canada
- Most recently, Vice President, Alberta Investment Management Co.
- Previously, senior member of Group Savings & Retirement team at Manulife



2017 Lineup changes



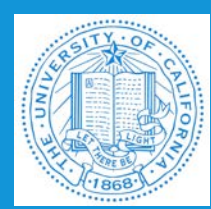


# 2017 lineup changes

	Overview of Changes	Implementation Date
I.	Eliminated Calvert Fund – moved assets to Vanguard Social Fund	2/28/2017
II.	Repackaged Fidelity and DFA funds to institutional funds	10/02/2017
III.	Renamed 3 Vanguard funds to easier naming convention	10/02/2017
IV.	Eliminated the UC Balanced Growth and UC Global funds	10/02/2017
V.	Implemented 3rd party manager for Pathway	12/31/2017

## Lineup changes highlights:

- Transitioned \$7.9 billion into new funds (35% of UCRSP plan assets);
- Completed a multi-stage communication campaign that reached over 300,000 participants;
- Reduced fees by over \$6 million annually;
- Reduced operational complexity and risk;
- Allow participants to better understand their risk exposure; and
- Implement an easy to understand and consistent naming convention for all funds.



# Plan Design Enhancements

Top 30 Investment Consultants suggest enhancements in 2018  
that we incorporated in this fiscal year

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**Review Target Date Fund**

Reviewed Pathway and hired 3rd party via RFP

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**Evaluate Investment Fees**

Completed fee analysis and reduced fees by over \$6 million annually by moving to institutional fund vehicles

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**Evaluate How Plan Costs Are Paid**

Updated approach to management fees

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**Evaluate Administrative Fees**

Moved to flat per participant fee in line with consultant recommendations

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**Simplify Core Lineup**

White labeled 3 funds for a more intuitive naming convention and eliminated 2 redundant investments



# Optimal Investment Structure

UC Lineup now follows industry best practice

**A** Active    **P** Passive    **H** Hybrid

### Tier 1: Default Option

### Tier 2: Core Lineup

**UC**

Custom Target Date Fund **H**

Capital Preservation: 1 Fund **A**

Fixed Income: 1 Fund **A**

Equity: 8 Funds **A A A P P P P P**

Inflation Protection: 2 Funds **P P**

**Optimal**

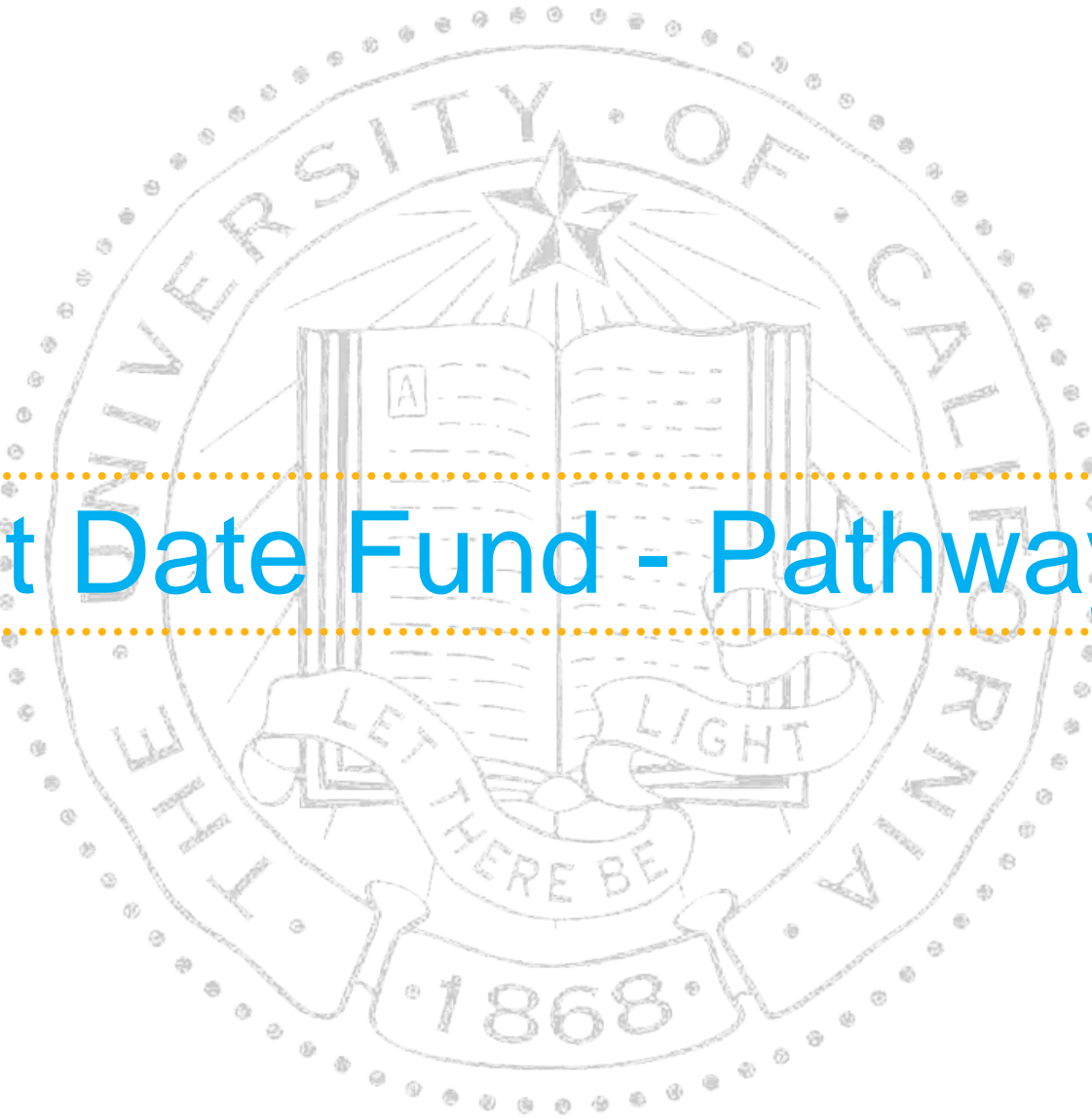
Custom Target Date Fund **H**

Capital Preservation: 1 Fund **A**

Fixed Income: 2 Funds **A P**

Equity: 6 Funds **A A A P P P**

Inflation Protection: 1 Fund **P**

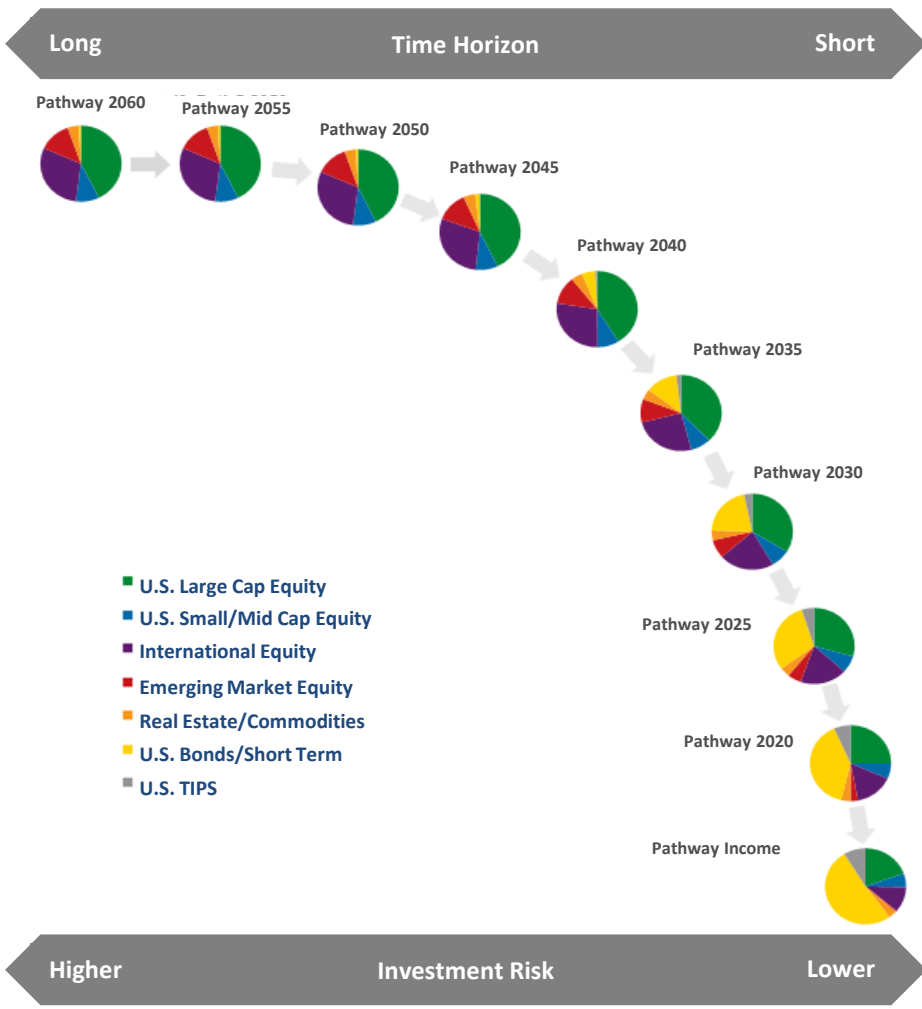


# Target Date Fund - Pathway



# Pathway – Our Target Date Fund

*Designed to support participants' spending throughout retirement*



## Pathway Key Features

- An **equity landing point of 30%** with static allocations at and through retirement
- **Focus on diversification** with **broad asset class** exposures
- Utilizes a **strategic glidepath** to help mitigate the risks associated with market timing

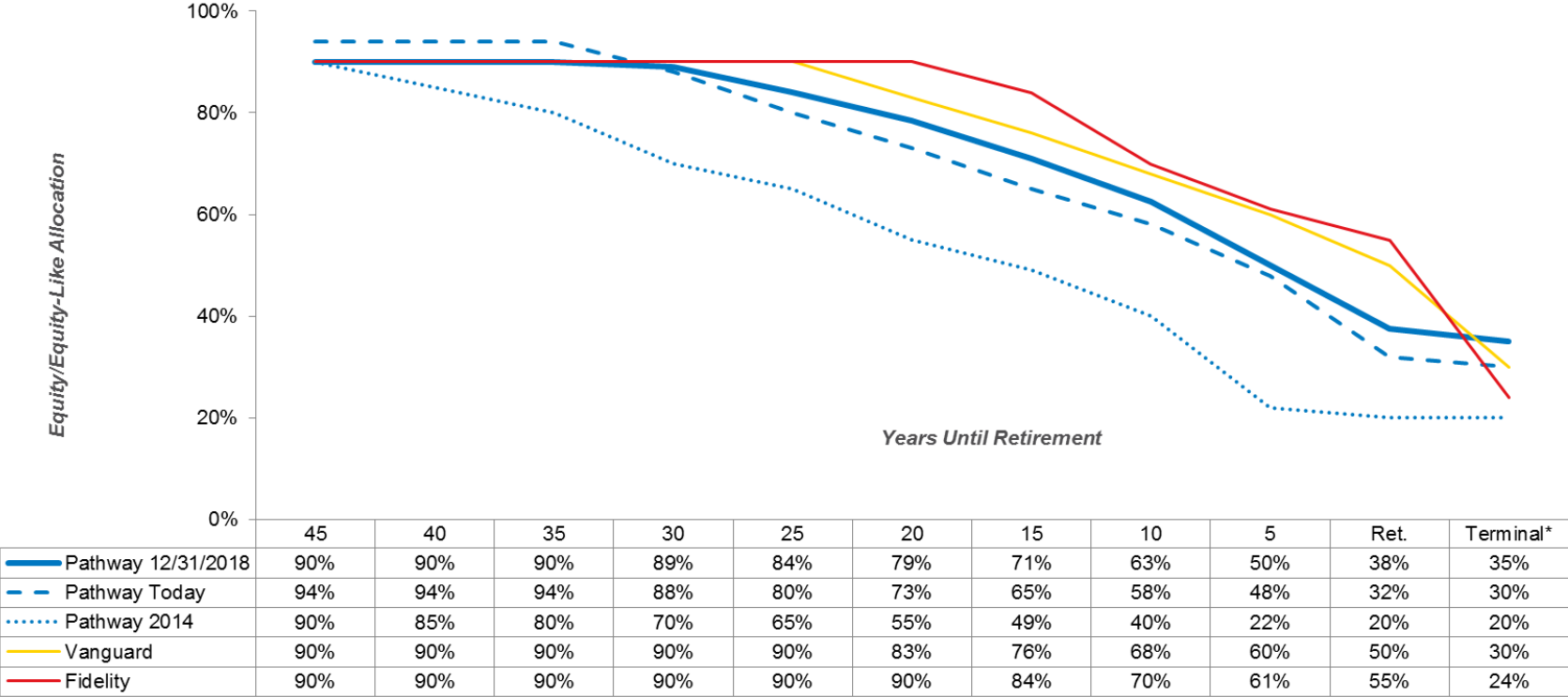
## Key Benefits for Participants

- Constructed to **navigate the major sources of uncertainty** participants face
- Seeks to reduce volatility in an effort to keep participants **saving and investing across market cycles**
- **Continuous research** to anticipate, assess and adapt ahead of evolving conditions to help meet participant needs **now and in the future**



# Pathway Glidepath

## Pathway GlidePath Evolution vs. TDF providers





# Pathway Performance – Quarter and 1 Year

## Q2 2018 performance relative to policy benchmarks

Net of fee returns (%)											
	Pathway Income	Pathway 2015	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060
Fund Return	0.57	0.58	0.54	0.54	0.58	0.66	0.75	0.84	0.90	0.92	0.92
Policy Benchmark Return	0.65	0.65	0.59	0.60	0.64	0.72	0.80	0.89	0.94	0.97	0.97
Value Added	<b>-0.08</b>	<b>-0.07</b>	<b>-0.05</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.05</b>	<b>-0.05</b>	<b>-0.04</b>	<b>-0.05</b>	<b>-0.05</b>

## One year performance relative to policy benchmarks

Net of fee returns (%) - 6/30/2017-6/30/2018											
	Pathway Income	Pathway 2015	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060
Fund Return	4.27	4.25	5.31	5.96	6.84	7.70	8.57	9.49	10.29	10.62	10.62
Policy Benchmark Return	4.31	4.34	5.45	6.18	7.11	8.00	8.93	9.90	10.74	11.03	11.03
Value Added	<b>-0.04</b>	<b>-0.09</b>	<b>-0.14</b>	<b>-0.22</b>	<b>-0.27</b>	<b>-0.30</b>	<b>-0.36</b>	<b>-0.41</b>	<b>-0.45</b>	<b>-0.41</b>	<b>-0.41</b>



# Pathway Performance – 3 Year and 5 Year

## 3 year performance relative to policy benchmarks

### Net of fee returns (%)

	Pathway Income	Pathway 2015	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060
Fund Return	3.97	4.03	5.37	5.77	6.31	6.79	7.28	7.77	8.22	8.45	8.45
Policy Benchmark Return	3.77	3.85	5.21	5.66	6.20	6.70	7.21	7.72	8.18	8.35	8.35
Value Added	<b>0.20</b>	<b>0.18</b>	<b>0.16</b>	<b>0.11</b>	<b>0.11</b>	<b>0.09</b>	<b>0.07</b>	<b>0.05</b>	<b>0.04</b>	<b>0.10</b>	<b>0.10</b>

## 5 year performance relative to policy benchmarks

### Net of fee returns (%)

	Pathway Income	Pathway 2015	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060
Fund Return	3.19	3.57	5.08	5.63	6.24	6.81	7.38	7.95	8.47	8.81	9.01
Policy Benchmark Return	2.89	3.31	4.86	5.48	6.10	6.69	7.29	7.88	8.41	8.72	8.93
Value Added	<b>0.30</b>	<b>0.26</b>	<b>0.22</b>	<b>0.15</b>	<b>0.14</b>	<b>0.12</b>	<b>0.09</b>	<b>0.07</b>	<b>0.06</b>	<b>0.09</b>	<b>0.08</b>





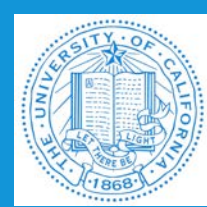
# Detailed Performance





# Core Lineup Performance - Details

US Large Equity	Market Value (\$M)	% of Program	Annualized Total Return (%)				
			3 Months	One Year	Three Year	Five Year	Ten Year
UC Domestic Equity Index Fund	\$4,843	19.97%	4.07	15.39	11.76	13.44	10.31
Russell 3000 TF Index			3.89	14.78	11.58	13.29	10.23
<i>Value Added</i>			<i>0.18</i>	<i>0.61</i>	<i>0.18</i>	<i>0.15</i>	<i>0.08</i>
UC Social Index Fund	\$373	1.54%	4.03	15.57	11.90	14.21	10.85
Spliced Social Index			4.06	15.65	12.00	14.36	10.96
<i>Value Added</i>			<i>-0.03</i>	<i>-0.08</i>	<i>-0.10</i>	<i>-0.15</i>	<i>-0.11</i>
<b>US Small/Mid Cap Equity</b>							
UC Domestic Small Cap Index Fund	\$519	2.14%	6.21	16.52	10.49	12.43	11.30
CRSP Small Cap Index			6.20	16.47	10.43	12.39	11.20
<i>Value Added</i>			<i>0.01</i>	<i>0.05</i>	<i>0.06</i>	<i>0.04</i>	<i>0.10</i>
<b>Global/World ex-US Equity</b>							
UC International Equity Index Fund	\$1,005	4.14%	-0.49	7.98	5.29	6.59	2.96
MSCI World ex-US IMI TF Index			-0.72	7.82	5.06	6.33	2.61
<i>Value Added</i>			<i>0.23</i>	<i>0.16</i>	<i>0.23</i>	<i>0.26</i>	<i>0.35</i>



# Core Lineup Performance - Details

Capital Preservation	Market Value (\$M)	% of Program	Annualized Total Return (%)				
			3 Months	One Year	Three Year	Five Year	Ten Year
UC Savings Fund	\$4,003	16.51%	0.37	1.46	1.34	1.22	1.68
Two-Year U.S. Treasury Notes Income Return			0.59	1.80	1.18	0.87	0.79
<i>Value Added</i>			<i>-0.22</i>	<i>-0.34</i>	<i>0.16</i>	<i>0.35</i>	<i>0.89</i>
<b>Inflation Sensitive</b>							
UC Short Term TIPS Fund	\$40	0.17%	0.55	2.01	1.23	0.85	
Barclays 1-3 Year U.S. TIPS Index			0.45	1.51	0.94		
<i>Value Added</i>			<i>0.10</i>	<i>0.50</i>	<i>0.29</i>	<i>0.85</i>	<i>-</i>
UC TIPS Fund	\$219	0.90%	0.80	2.37	2.20	2.02	3.43
Barclays US TIPS Index			0.77	2.11	1.93	1.68	3.03
<i>Value Added</i>			<i>0.03</i>	<i>0.26</i>	<i>0.27</i>	<i>0.34</i>	<i>0.40</i>
<b>Diversified Fixed Income</b>							
UC Bond Fund	\$1,156	4.77%	-0.20	-0.24	2.07	2.57	4.24
Barclays Aggregate Fixed Income Benchmark			-0.16	-0.40	1.72	2.27	3.72
<i>Value Added</i>			<i>-0.04</i>	<i>0.16</i>	<i>0.35</i>	<i>0.30</i>	<i>0.52</i>
<b>New Large Equity</b>							
UC Growth Company Fund	\$937	3.86%	5.88	28.56	18.13	19.65	13.47
Russell 3000 Growth			5.87	22.47	14.63	16.14	11.78
<i>Value Added</i>			<i>0.01</i>	<i>6.09</i>	<i>3.50</i>	<i>3.51</i>	<i>1.69</i>
<b>World ex-US Equity</b>							
UC Diversified Intl. Fund	\$141	0.58%	-0.94	6.28	4.20	7.33	3.14
MSCI EAFE			-1.24	6.87	5.05	6.59	2.98
<i>Value Added</i>			<i>0.30</i>	<i>-0.59</i>	<i>-0.85</i>	<i>0.74</i>	<i>0.16</i>
UC Emerging Markets Fund	\$218	0.90%	-8.55	5.46	5.54	4.82	3.02
MSCI Emerging Markets Index			-7.96	8.20	5.60	5.01	2.26
<i>Value Added</i>			<i>-0.59</i>	<i>-2.74</i>	<i>-0.06</i>	<i>-0.19</i>	<i>0.76</i>
<b>Real Estate</b>							
UC Real Estate Fund	\$210	0.87%	8.79	2.28	7.54	7.93	8.03
REIT Spliced Index			8.91	2.48	7.68	8.03	8.01
<i>Value Added</i>			<i>-0.12</i>	<i>-0.20</i>	<i>-0.14</i>	<i>-0.10</i>	<i>0.02</i>



# Target Date Funds Performance - Details

Target Date Funds	Market Value (\$M)	% of Program	Annualized Total Return (%)				
			3 Months	One Year	Three Year	Five Year	Ten Year
UC Pathway Income Fund	\$1,024	4.22%	0.57	4.27	3.97	3.19	3.76
Policy Benchmark			0.65	4.31	3.77	2.89	3.09
<i>Value Added</i>			<i>-0.08</i>	<i>-0.04</i>	<i>0.20</i>	<i>0.30</i>	<i>0.67</i>
UC Pathway Fund 2015	\$743	3.07%	0.58	4.25	4.03	3.57	
Policy Benchmark			0.65	4.34	3.85	3.31	-
<i>Value Added</i>			<i>-0.07</i>	<i>-0.09</i>	<i>0.18</i>	<i>0.26</i>	<i>-</i>
UC Pathway Fund 2020	\$1,502	6.19%	0.54	5.31	5.37	5.08	4.54
Policy Benchmark			0.59	5.45	5.21	4.86	4.12
<i>Value Added</i>			<i>-0.05</i>	<i>-0.14</i>	<i>0.16</i>	<i>0.22</i>	<i>0.42</i>
UC Pathway Fund 2025	\$1,398	5.77%	0.54	5.96	5.77	5.63	
Policy Benchmark			0.60	6.18	5.66	5.48	-
<i>Value Added</i>			<i>-0.06</i>	<i>-0.22</i>	<i>0.11</i>	<i>0.15</i>	<i>-</i>
UC Pathway Fund 2030	\$1,315	5.42%	0.58	6.84	6.31	6.24	4.90
Policy Benchmark			0.64	7.11	6.20	6.10	4.54
<i>Value Added</i>			<i>-0.06</i>	<i>-0.27</i>	<i>0.11</i>	<i>0.14</i>	<i>0.36</i>
UC Pathway Fund 2035	\$923	3.81%	0.66	7.70	6.79	6.81	
Policy Benchmark			0.72	8.00	6.70	6.69	-
<i>Value Added</i>			<i>-0.06</i>	<i>-0.30</i>	<i>0.09</i>	<i>0.12</i>	<i>-</i>



# Target Date Funds Performance - Details

Target Date Funds	Market Value (\$M)	% of Program	Annualized Total Return (%)				
			3 Months	One Year	Three Year	Five Year	Ten Year
UC Pathway Fund 2040	\$791	3.26%	0.75	8.57	7.28	7.38	5.47
Policy Benchmark			0.80	8.93	7.21	7.29	5.14
<i>Value Added</i>			<i>-0.05</i>	<i>-0.36</i>	<i>0.07</i>	<i>0.09</i>	<i>0.33</i>
UC Pathway Fund 2045	\$524	2.16%	0.84	9.49	7.77	7.95	
Policy Benchmark			0.89	9.90	7.72	7.88	-
<i>Value Added</i>			<i>-0.05</i>	<i>-0.41</i>	<i>0.05</i>	<i>0.07</i>	<i>-</i>
UC Pathway Fund 2050	\$392	1.61%	0.90	10.29	8.22	8.47	6.05
Policy Benchmark			0.94	10.74	8.18	8.41	5.78
<i>Value Added</i>			<i>-0.04</i>	<i>-0.45</i>	<i>0.04</i>	<i>0.06</i>	<i>0.27</i>
UC Pathway Fund 2055	\$176	0.73%	0.92	10.62	8.45	8.81	
Policy Benchmark			0.97	11.03	8.35	8.72	-
<i>Value Added</i>			<i>-0.05</i>	<i>-0.41</i>	<i>0.10</i>	<i>0.09</i>	<i>-</i>
UC Pathway Fund 2060	\$213	0.88%	0.92	10.62	8.45	9.01	
Policy Benchmark			0.97	11.03	8.35	8.93	-
<i>Value Added</i>			<i>-0.05</i>	<i>-0.41</i>	<i>0.10</i>	<i>0.08</i>	<i>-</i>