Plan Review State of Rhode Island

Optimizing plan effectiveness to drive better outcomes

Delivered by: Matt DiCroce

As of March 31, 2017







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Plan Data Summary - All Plans

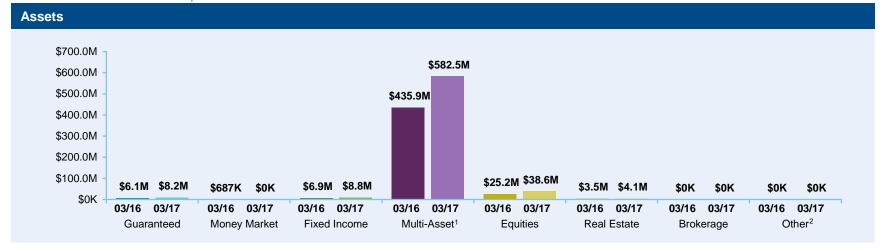
BUILT TO PERFORM.

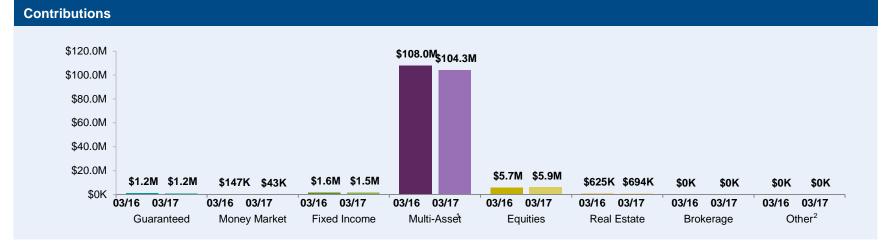
Assets & contributions by asset class year-over-year

\$642,262,614

\$113,566,402

Total assets Total contributions







Plan Data Summary – 401(a) Defined Contribution Plan

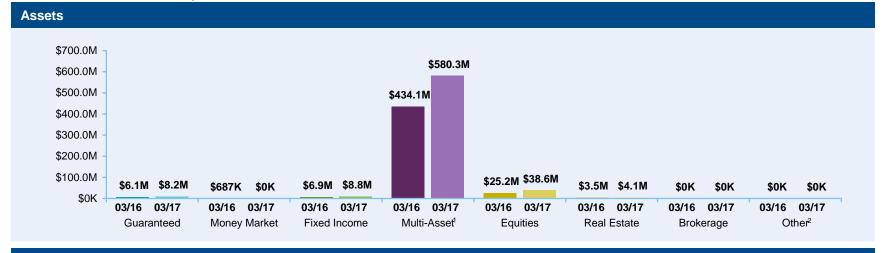
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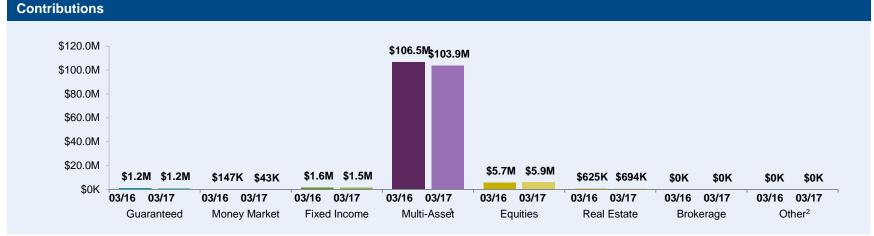
Plan assets & contributions by asset class year-over-year

\$639,997,394

\$113,177,895







	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
Total		\$113,177,895		\$639,997,394	
GUARANTEED					
TIAA Stable Value	1,159	\$1,166,333	1.03%	\$8,155,725	1.27%
Guaranteed Total		\$1,166,333	1.03%	\$8,155,725	1.27%
MONEY MARKET					
Vanguard Prime Money Mkt Inv	0	\$43,487	0.04%	\$0	0.00%
Money Market Total		\$43,487	0.04%	\$0	0.00%
FIXED INCOME					
PIMCO Real Return Inst Class	1,072	\$788,787	0.70%	\$4,474,661	0.70%
Vanguard Ttl Bd Mkt Idx Adm	1,065	\$716,368	0.63%	\$4,350,828	0.68%
Fixed Income Total		\$1,505,155	1.33%	\$8,825,490	1.38%
MULTI-ASSET					
Vanguard Tgt Ret 2010 Trust II	0	\$404,381	0.36%	\$0	0.00%
Vanguard Tgt Ret 2015 Trust II	0	\$2,107,923	1.86%	\$0	0.00%
Vanguard Tgt Ret 2020 Trust II	0	\$4,172,285	3.69%	\$0	0.00%
Vanguard Tgt Ret 2025 Trust II	0	\$5,085,330	4.49%	\$0	0.00%
Vanguard Tgt Ret 2030 Trust II	0	\$5,558,100	4.91%	\$0	0.00%

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
Vanguard Tgt Ret 2035 Trust II	0	\$6,820,652	6.03%	\$0	0.00%
Vanguard Tgt Ret 2040 Trust II	0	\$5,633,836	4.98%	\$0	0.00%
Vanguard Tgt Ret 2045 Trust II	0	\$4,277,028	3.78%	\$0	0.00%
Vanguard Tgt Ret 2050 Trust II	0	\$2,632,495	2.33%	\$0	0.00%
Vanguard Tgt Ret 2055 Trust II	0	\$1,100,606	0.97%	\$0	0.00%
Vanguard Tgt Ret 2060 Trust II	0	\$72,879	0.06%	\$0	0.00%
Vanguard Tgt Ret Inc Trust II	0	\$106,349	0.09%	\$0	0.00%
Vanguard Tgt Rtmt 2010 Tr I	727	\$618,456	0.55%	\$8,126,515	1.27%
Vanguard Tgt Rtmt 2015 Tr I	2,635	\$3,392,500	3.00%	\$37,048,392	5.79%

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
Vanguard Tgt Rtmt 2020 Tr I	5,139	\$6,921,818	6.12%	\$77,186,794	12.06%
Vanguard Tgt Rtmt 2025 Tr I	5,938	\$8,626,165	7.62%	\$89,089,052	13.92%
Vanguard Tgt Rtmt 2030 Tr I	5,721	\$9,545,701	8.43%	\$93,125,961	14.55%
Vanguard Tgt Rtmt 2035 Tr I	5,110	\$11,935,220	10.55%	\$96,044,919	15.01%
Vanguard Tgt Rtmt 2040 Tr I	4,021	\$9,587,802	8.47%	\$76,436,421	11.94%
Vanguard Tgt Rtmt 2045 Tr I	3,610	\$7,400,324	6.54%	\$56,663,875	8.85%
Vanguard Tgt Rtmt 2050 Tr I	2,987	\$4,865,246	4.30%	\$32,335,201	5.05%
Vanguard Tgt Rtmt 2055 Tr I	1,900	\$2,516,013	2.22%	\$10,790,063	1.69%
Vanguard Tgt Rtmt 2060 Tr I	282	\$298,962	0.26%	\$942,990	0.15%

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
Vanguard Tgt Rtmt Income Tr I	256	\$208,008	0.18%	\$2,485,374	0.39%
Multi-Asset Total		\$103,888,078	91.79%	\$580,275,556	90.67%
EQUITIES					
TIAA-CREF Intl Eq Idx-Inst	1,138	\$626,481	0.55%	\$3,790,465	0.59%
TIAA-CREF Social Ch Eq-Inst	233	\$126,496	0.11%	\$787,694	0.12%
Vanguard Emr Mkts Stk Idx Adm	1,268	\$510,170	0.45%	\$3,108,232	0.49%
Vanguard Inst Idx Inst	2,064	\$2,401,920	2.12%	\$16,873,413	2.64%
Vanguard Mid-Cap Idx Adm	0	\$478,208	0.42%	\$0	0.00%
Vanguard Mid-Cap Idx Inst	1,741	\$576,171	0.51%	\$7,054,719	1.10%
Vanguard Small-Cap Idx Adm	0	\$1,152,344	1.02%	\$0	0.00%
Vanguard Small-Cap Idx Inst	1,718	\$9,298	0.01%	\$6,992,055	1.09%
Equities Total		\$5,881,088	5.20%	\$38,606,579	6.03%

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
REAL ESTATE					
TIAA Real Estate	1,395	\$693,755	0.61%	\$4,134,044	0.65%
Real Estate Total		\$693,755	0.61%	\$4,134,044	0.65%

Member Engagement

Focus on outcomes-based education and advice



A Look Back

Communication & Education Highlights: Q1 2017



Q1 2017 Locations, Outreach, and 1:1s

Q1 Locations and Attendees	
City of East Providence	8
Narragansett Housing Authority	3
Town of East Greenwich – Public Schools	27
Town of Johnston	7
Rhode Leagues of Cities and Towns EXPO	315
DMV – Department of Motor Vehicles	7
Treasurer's Office, Warwick	15
Union Presidents Council Meeting	27
Q2 to Date Locations and Attendees	
City of Newport	11
Town of East Greenwich – Public Schools	5
Town of East Greenwich – Wellness Fair	26
Retiree Presentations – Treasurer's Office, Warwick	23

Workshops & 1:1s

Year	Attendees
2013	1785
2014	402
2015	718
2016	1295
Q1 2017	409

TIAA-CREF Financial Essentials Seminars

TIAA-CREF's comprehensive, financial education program is designed to help every employee address their financial needs.

- Focus on education for individuals financial wellbeing is defined by them
- Offer material relevant to where they are in life/career
- Give them the confidence to help take control of their financial future

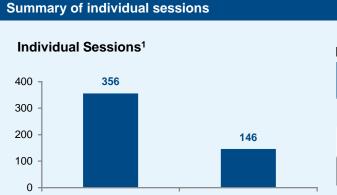
Webinars

Interactive webinars keep you up-to-date on topics to help you fulfill fiduciary responsibilities, enhance plan administration and engage your employees.

For the most current list go to https://www.tiaacref.org/public/plansponsors/news/webinars/index.html

Overall in-person engagement summary as of 03/31/17



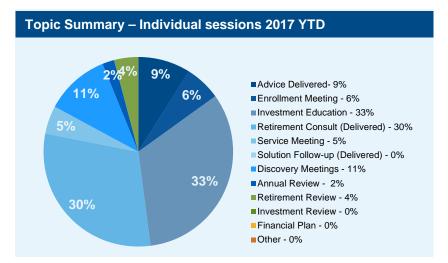


²⁰¹⁶ 2017 (as of 3/31) ¹ Includes sessions with representatives from our Field Consulting Group and our Individual Advisory Services group. Numbers show total sessions held and may include employees who had multiple sessions.

Employees Participating in Sessions in 2017

Gender	Count ²	Average Age	Average Balance³
Female	84	56.3	\$57,457
Male	46	53.2	\$124,886
Overall	131	54.2	\$80,746

² Employees who had multiple sessions are only counted once.



A full spectrum of services to help meet the diverse needs of your employee base

Communication

Education

Advice

Financial planning

Managed account services

Trust services

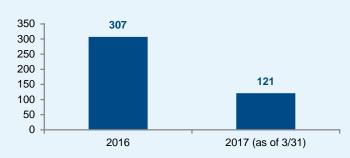
Advisory services are provided by Advice & Planning Services, a division of TIAA-CREF Individual & Institutional Services, LLC, a registered investment adviser. TIAA-CREF Trust Company, FSB provides trust services. TIAA-CREF Trust Company, FSB provides investment management and trust services.

³ Reflects employee's total TIAA balance.

In-person interactions with plan participants as of 03/31/17

Individual Session Breakdown

Individual Sessions¹ (Field Consulting Group)

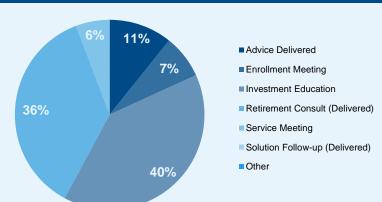


¹ Numbers show total sessions held and may include employees who had multiple sessions.

Employees Participating in Sessions in 2017

Gender	Count ²	Average Age	Average Balance³
Female	75	55.9	\$45,681
Male	40	51.7	\$31,672
Overall	116	53.8	\$40,512

Topic Summary - Individual Sessions 2017 YTD



Results YTD through March 31, 2017*

96% AGREED

Objectivity & Integrity

Employees responding to surveys agreed/strongly agreed that the Consultant put their interests first.

95% AGREED

Overall Client Experience

Composite score, based on employees' responses to 5 attribute questions. Respondents strongly agreed/agreed that the consultant:

- Considers their interests first
- Provided quality advice
- 3. Understood their needs and goals
- 4. Exhibited financial expertise
- Anticipated additional financial issues and brought them to attention

*Source: Customer Insights Corporate Scorecard

These statistics are meant to reflect customer satisfaction with services provided through TIAA Financial Consultants. Results experienced may not be typical of all participants, and are not indicative of future performance or success. Individual results will vary.

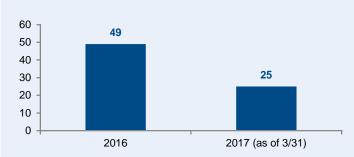
² Employees who had multiple sessions are only counted once.

³ Reflects employee's total TIAA balance.

Individual Advisory Services as of 03/31/17

Financial Planning Session Breakdown

Meetings¹ Held (Individual Advisory Services)

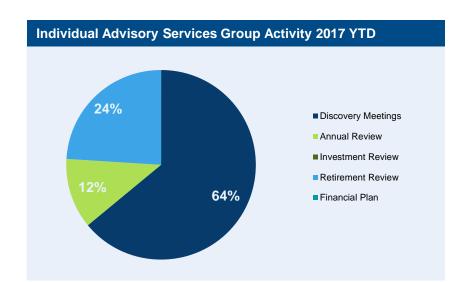


¹ Numbers show total meetings held and may include employees who had multiple meetings.

Employees Participating in Meetings in 2017

Gender	Count ²	Average Age	Average Balance ³
Female	13	60.3	\$124,497
Male	7	62.4	\$644,707
Overall	20	61.4	\$306,570

³ Reflects employee's total TIAA balance.



Executive Financial Planning Service Offerings

- Investment Management & Planning
- Estate and Gift Planning
- Charitable Planning
- Education Planning
- Cash Flow Analysis
- Stock Options Review
- Asset Protection Planning

- Investment Review
- Executive Compensation & Benefits Analysis
- Life Insurance Analysis
- Career Transition Financial Planning
- Mobile capabilities providing direct linkage to advisors

TIAA and its employees do not offer tax or legal advice, or create and prepare legal documents associated with estate plans

² Employees who had multiple meetings are only counted once.

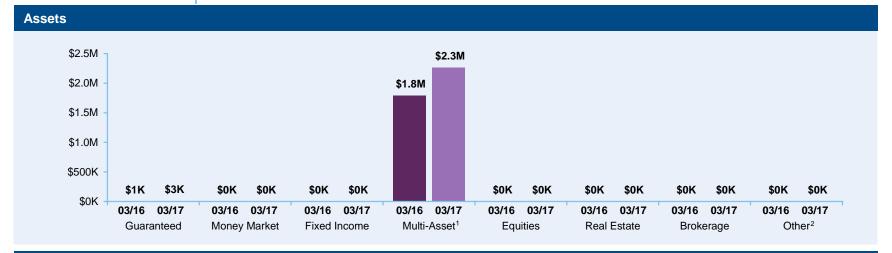


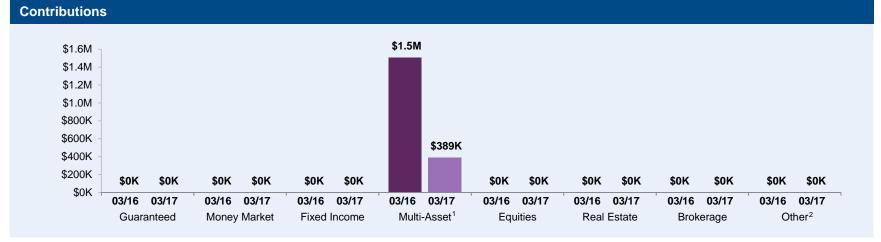
Plan Data Summary – FICA Alternative Retirement Income Security Program

BUILT TO PERFORM.

Plan assets & contributions by asset class year-over-year

\$2,265,221 Total plan assets \$388,506 Total contributions





	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
Total		\$388,506		\$2,265,221	
GUARANTEED					
TIAA Stable Value	4	\$0	0.00%	\$3,386	0.15%
Guaranteed Total		\$0	0.00%	\$3,386	0.15%
MULTI-ASSET					
Vanguard Tgt Ret 2010 Trust II	0	\$2,203	0.57%	\$0	0.00%
Vanguard Tgt Ret 2015 Trust II	0	\$1,891	0.49%	\$0	0.00%
Vanguard Tgt Ret 2020 Trust II	0	\$9,071	2.33%	\$0	0.00%
Vanguard Tgt Ret 2025 Trust II	0	\$8,649	2.23%	\$0	0.00%
Vanguard Tgt Ret 2030 Trust II	0	\$13,367	3.44%	\$0	0.00%
Vanguard Tgt Ret 2035 Trust II	0	\$5,867	1.51%	\$0	0.00%
Vanguard Tgt Ret 2040 Trust II	0	\$8,932	2.30%	\$0	0.00%
Vanguard Tgt Ret 2045 Trust II	0	\$9,126	2.35%	\$0	0.00%

PROGRAM

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
Vanguard Tgt Ret 2050 Trust II	0	\$12,229	3.15%	\$0	0.00%
Vanguard Tgt Ret 2055 Trust II	0	\$19,893	5.12%	\$0	0.00%
Vanguard Tgt Ret 2060 Trust II	0	\$109,379	28.15%	\$0	0.00%
Vanguard Tgt Rtmt 2010 Tr I	11	\$3,570	0.92%	\$12,239	0.54%
Vanguard Tgt Rtmt 2015 Tr I	9	\$1,371	0.35%	\$8,869	0.39%
Vanguard Tgt Rtmt 2020 Tr I	31	\$12,116	3.12%	\$1,264,438	55.82%
Vanguard Tgt Rtmt 2025 Tr I	59	\$20,630	5.31%	\$81,224	3.59%
Vanguard Tgt Rtmt 2030 Tr I	65	\$14,878	3.83%	\$105,640	4.66%
Vanguard Tgt Rtmt 2035 Tr I	44	\$13,889	3.58%	\$69,100	3.05%

PROGRAM

	Total number of participants invested	Contribution amount	Contribution percentage of total	Asset amount	Asset percentage of total
MULTI-ASSET (Continued)					
Vanguard Tgt Rtmt 2040 Tr I	35	\$8,990	2.31%	\$43,179	1.91%
Vanguard Tgt Rtmt 2045 Tr I	40	\$12,898	3.32%	\$64,201	2.83%
Vanguard Tgt Rtmt 2050 Tr I	71	\$12,237	3.15%	\$80,936	3.57%
Vanguard Tgt Rtmt 2055 Tr I	280	\$26,228	6.75%	\$173,047	7.64%
Vanguard Tgt Rtmt 2060 Tr I	799	\$61,091	15.72%	\$358,809	15.84%
Vanguard Tgt Rtmt Income Tr I	1	\$0	0.00%	\$153	0.01%
Multi-Asset Total		\$388,506	100.00%	\$2,261,835	99.85%

Investment Solutions

Provide participants with relevant choices and lifetime income options



(TIAA	2	201	7 YTI	D F	er	fo	ma	anc	e S	Sun	nm	ary	/							
TIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Rec	ent Retu	irns		Annı	ualized T	otal Ret	turns as o	of 3/31/	2017		Since	Incep.
As of 3/31/17	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date
TIAA Stable Value****	Current c	rediting ra	ate = 2.00					0.17	0.49	0.49	1.92		1.90						1.88	3/31/2012
FIXED INCOME Intermediate-Term Bond																				
Vanquard Total Bond Market Index Adm	VBTLX	4 17	177,875,.20	0.06	0.06	2	0.00	(0.06)	0.91	0.91	0.43	78	2.60	40	2.27	63	4.23	48	4.23	11/12/01
BBgBarc US Agg Bond TR USD	VDILA	7.17	177,075,.20	0.00	0.00	_	0.00	(0.05)	0.82	0.82	0.44	70	2.68	70	2.34	03	4.27	10	4.23	11/12/01
Intermediate-Term Bond Median				0.83	0.70			(0.03)	1.02	1.02	1.53		2.47		2.55		4.27			
Intermediate-Term Bond Number of Funds				1017	1017			(0,00)	7,02	7.02	7.00	984	2,	937	2.00	892	.,_,	793		
Inflation-Linked Bond																				
PIMCO Real Return InstI	PRRIX	9.33		0.58	0.45	24	0.00	0.17	1.87	1.87	2.77	21	1.74	19	1.02	10	4.53	3		01/29/97
BBgBarc US Treasury US TIPS TR USD								(0.05)	1.26	1.26	1.48		2.03		0.97		4.24			
Inflation-Protected Bond Median				0.83	0.65			0.00	1.21	1.21	1.62		1.25		0.39		3.58			
Inflation-Protected Bond Number of Funds				238	238							237		216		187		145		
Equity																				
Large Cap Blend	1/11/11/2	44.00	000 540 44								47.40		40.04		10.0=			- 10		07/04/00
Vanguard Institutional Index I	VINIX	16.33	222,543.11	0.04	0.04	2	0.00	0.11	6.05	6.05	17.13	33	10.34	6	13.27	10	7.51	19	9.65	07/31/90
S&P 500 TR USD	TICOV	44.00	0.544.07	0.10	0.10	,	0.00	0.12	6.07	6.07	17.17	20	10.37	F.4	13.30	47	7.51	20		07/04/00
TIAA-CREF Social Choice Eq InstI Russell 3000 TR USD	TISCX	11.33	2,544.36	0.19	0.19	6	0.00	(0.06)	5.09 5.74	5.09	17.32	29	8.36 9.76	54	12.23 13.18	47	7.16 <i>7.54</i>	32		07/01/99
Large Blend Median				1.06	0.95			0.07 0.07	5.72	5.74 5.72	18.07 16.26		9.76 8.50		13.18		6.70			
Large Blend Number of Funds				1448	1448			0.07	5.72	5.72	10.20	1384	0.50	1324	12.11	1248	0.70	1095		
Mid Cap Blend				1440	1440							1304		1324		1240		1073		
Vanguard Mid Cap Index I	VMCIX	18.92	83,594.77	0.07	0.07	2	0.00	0.02	6.19	6.19	16.73	58	8.69	20	12.89	24	7.85	31	9.88	05/21/98
Spliced Mid Cap Index *								0.02	6.20	6.20	16.80		8.73		12.93		7.86			
CRSP US Mid Cap TR USD								0.02	6.20	6.20	16.80		8.73		13.04		7.80			
Mid-Cap Blend Median				1.15	1.05			(0.37)	3.99	3.99	17.49		6.99		11.93		6.95			
Mid-Cap Blend Number of Funds				453	453							428		397		373		314		
																				44/40/00
Small Cap Blend Vanguard Small Cap Index Adm	Vemav	1 00	74 067 01	0.00	0.00	1	0 00	(U 3 I)	27/	27/	21 51	56	7 //1	22	12 00	25	0 20	16	0.10	
Vanguard Small Cap Index Adm	VSMAX	1.00	74,867.91	0.08	0.08	1	0.00	(0.24)	3.74	3.74	21.51	56	7.41 7.20	33	12.89	25	8.20 g 13	16	9.10	11/13/00
Vanguard Small Cap Index Adm Spliced Small Cap Index ***	VSMAX	1.00	74,867.91	0.08	0.08	1	0.00	(0.24)	3.74	3.74	21.47	56	7.39	33	12.87	25	8.13	16	9.10	11/13/00
Vanguard Small Cap Index Adm	VSMAX	1.00	74,867.91	0.08 1.33	0.08 1.20	1	0.00	(,				56		33		25		16	9.10	11/13/00

4 TIAA	2	2017	YTI) P	er	foi	ma	anc	ce S	Sun	nm	ary	/							
TIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Red	cent Retu	irns		Annı	ualized To	otal Ret	urns as	of 3/31/	2017		Since	Incep.
As of 3/31/17	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date
Foreign Large Blend																				
TIAA-CREF International Eq Idx InstI	TCIEX	11.67	9,280.95	0.06	0.06	1	0.00	3.12	7.79	7.79	12.18	32	0.63	45	5.97	24	1.20	36		10/01/02
MSCI EAFE NR USD								2.75	7.25	7.25	11.67		0.50		5.83		1.05			
Foreign Large Blend Median				1.26	1.06			3.05	7.75	7.75	10.81		0.48		5.20		0.82			
Foreign Large Blend Number of Funds				751	751							717		638		607		460		
Diversified Emerging Markets																				
Vanguard Emerging Mkts Stock ldx Adm	VEMAX	8.67	70,376.49	0.14	0.14	1	0.00	2.26	10.84	10.84	17.57	44	1.91	31	0.87	56	2.70	42	5.24	06/23/06
Spliced Emerging Markets Index ***								2.26	10.10	10.10	16.72		1.81		0.89		2.76			
FTSE EMs AC China A Inclusion NR USD								1.80	10.09	10.09	16.68		2.49		1.53		3.23			
FTSE Emerging NR USD								1.98	10.19	10.19	17.54		2.20		1.18		3.09			
MSCI EM NR USD								2.52	11.45	11.45	17.22		1.18		0.81		2.72			
Diversified Emerging Mkts Median				1.74	1.42			3.12	12.05	12.05	16.89		1.08		1.28		2.33			
Diversified Emerging Mkts Number of Funds				820	820							787		659		506		258		
Miscellaneous Sector																				
TIAA Real Estate Account	VA	1.67	24,638.18	0.89	0.89		0.24	0.29	1.13	1.13	4.42		8.06		8.58		3.09			10/02/95
Lifecycle																				
Vanguard Target Retirement Income Trust I				0.07	0.07		0.00	0.33	2.48	2.48	5.43		3.87		4.69				5.01	06/22/07
Vanguard Target Retirement Income Composite								0.33	2.41	2.41	5.51		3.98		4.78					
Retirement Income Median				1.13	0.78			0.24	2.60	2.60	6.00		3.03		4.00		3.77			
Retirement Income Number of Funds				181	181							175		151		136		87		
Vanguard Target Retirement 2010 Trust I				0.07	0.07		0.00	0.35	2.51	2.51	5.61		3.95		5.38				4.59	06/22/07
Vanguard Target Retirement 2010 Composite								0.31	2.45	2.45	5.72		4.09		5.49					
Target Date 2000-2010 Median				1.03	0.71			0.38	3.13	3.13	7.35		3.81		5.40		4.12			
Target Date 2000-2010 Number of Funds				121	121							113		101		87		66		
Vanguard Target Retirement 2015 Trust I				0.07	0.07		0.00	0.51	3.41	3.41	7.79		4.68		6.56				4.84	06/28/07
Vanguard Target Retirement 2015 Composite								0.46	3.31	3.31	7.87		4.79		6.65					
Target Date 2011-2015 Median				1.02	0.75			0.40	3.38	3.38	8.09		3.92		5.87		4.51			
Target Date 2011-2015 Number of Funds				146	146							137		112		94		50		
Vanguard Target Retirement 2020 Trust I				0.07	0.07		0.00	0.64	4.13	4.13	9.51		5.27		7.45				5.01	06/22/07
Vanguard Target Retirement 2020 Trust I Vanguard Target Retirement 2020 Composite				0.07	0.07		0.00	0.64 <i>0.57</i>	4.13 4.00	4.13 4.00	9.519.57		5.27 5.38		7.45 <i>7.57</i>				5.01	06/22/07
				0.07 <i>1.07</i>	0.07 0.82		0.00										4.05		5.01	06/22/07

4 TIAA	2	2017	YTI) P	er'	foi	rma	anc	e S	Sun	nm	ary	/							
TIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)			(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
		Mgr.	AUM	Gross	Net	Net	Rev	Red	cent Retu	irns		Annı	ualized T	otal Ret	turns as	of 3/31/	2017		Since	Incep.
As of 3/31/17	Ticker	Tenure	\$ Millions	ER	ER	%-ile	Share	1mo.	3mo.	YTD	1 Year	%-ile	3 Year	%-ile	5 Year	%-ile	10 Year	%-ile	Incep.	Date
Vanguard Target Retirement 2025 Trust I				0.07	0.07		0.00	0.73	4.63	4.63	10.77		5.58		8.05				4.96	06/28/07
Vanguard Target Retirement 2025 Composite								0.65	4.51	4.51	10.83		5.68		8.17					
Target Date 2021-2025 Median				1.08	0.80			0.56	4.38	4.38	10.18		4.51		6.91		4.76			
Target Date 2021-2025 Number of Funds				221	221							205		177		146		61		
Vanguard Target Retirement 2030 Trust I				0.07	0.07		0.00	0.84	5.12	5.12	11.95		5.82		8.61				4.95	06/28/07
Vanguard Target Retirement 2030 Composite								0.74	4.96	5.12	12.01		5.93		8.74					
Target Date 2026-2030 Median				1.12	0.86			0.65	4.86	4.86	11.59		4.84		7.48		4.28			
Target Date 2026-2030 Number of Funds				252	252							235		207		181		111		
Vanguard Target Retirement 2035 Trust I				0.07	0.07		0.00	0.91	5.58	5.58	13.15		6.05		9.16				5.07	06/28/07
Vanguard Target Retirement 2035 Composite								0.82	5.42	5.42	13.20		6.18		9.30					
Target Date 2031-2035 Median				1.12	0.82			0.75	5.29	5.29	12.77		5.25		8.00		4.90			
Target Date 2031-2035 Number of Funds				221	221							205		177		146		61		
Vanguard Target Retirement 2040 Trust I				0.07	0.07		0.00	1.02	6.04	6.04	14.36		6.24		9.54				5.31	06/28/07
Vanguard Target Retirement 2040 Composite								0.90	5.88	5.88	14.39		6.41		9.70					
Target Date 2036-2040 Median				1.16	0.89			0.81	5.64	5.64	13.55		5.37		8.32		4.54			
Target Date 2036-2040 Number of Funds				252	252							235		207		181		111		
Vanguard Target Retirement 2045 Trust I				0.07	0.07		0.00	1.04	6.22	6.22	14.75		6.34		9.60				5.31	06/28/07
Vanguard Target Retirement 2045 Composite								0.93	6.04	6.04	14.76		6.51		9.77					
Target Date 2041-2045 Median				1.18	0.83			0.88	5.86	5.86	13.99		5.54		8.63		4.93			
Target Date 2041-2045 Number of Funds				221	221							205		177		145		57		
Vanguard Target Retirement 2050 Trust I				0.07	0.07		0.00	1.05	6.20	6.20	14.76		6.32		9.62				5.37	02/29/08
Vanguard Target Retirement 2050 Composite								0.93	6.04	6.04	14.76		6.51		9.77					
Target Date 2046-2050 Median				1.27	0.90			0.85	5.88	5.88	14.14		5.61		8.73		4.50			
Target Date 2046-2050 Number of Funds				245	245							228		200		173		48		
Vanguard Target Retirement 2055 Trust I				0.07	0.07		0.00	1.04	6.20	6.20	14.76		6.28						10.00	10/05/10
Vanguard Target Retirement 2055 Composite								0.93	6.04	6.04	14.76		6.51							
Target Date 2051-2055 Median				1.35	0.83			0.91	6.00	6.00	14.26		5.62							
Target Date 2051-2055 Number of Funds				219	219							203		164						
Vanguard Target Retirement 2060 Trust I				0.07	0.07		0.00	1.07	6.24	6.24	14.78		6.30						9.69	03/01/12
Vanguard Target Retirement 2060 Composite								0.94	6.04	6.04	14.76		6.51							
Target Date 2060+ Median				2.80	0.81			0.88	6.13	6.13	14.45		4.84							
Target Date 2060+ Number of Funds				168	168							137		10						

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TIAA (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)		(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(S)
		Mgr.	AIIM	Gross	Net	Net	Rev	Re	cent Retu	ırns		Ann	ualized T	otal Ret	urns as o	of 3/31/2	2017		Since	Incep.
		-																		
As of 3/31/17	Ticker	-	\$ Millions																	

Source: Morningstar & TIAA-CREF

Morningstar Analyst Assigned Benchmark"

Data for 1-month and YTD return as of 3/31/2017. All other data as of 3/31/2017.

VA = Variable Annuity

Since Incep. = Since Inception Date

Incep. Date = Inception Date

Vanguard Index Information from available at http://www.vanguard.com

- * = S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter
- ** = Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter
- *** = Spliced Emerging Markets Index through January 9, 2013; FTSE Emerging Markets Index through August 23, 2006; the MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; FTSE Emerging Markets All Cap China A Transition Index through September 18, 2016; and FTSE Emerging Markets All Cap China A Inclusion Index thereafter.

Note: Rankings shown for returns are calculated by Morningstar. Rankings for expense ratio, Sharpe ratio and standard deviation are calculated by TIAA-CREF and may differ based on calculation methods

Fee Disclosures: 1 The net expense ratio reflects total annual fund operating expenses excluding interest expense. Ifinterest expense was included, returns would have been lower.

2 Accumulations in mutual funds not managed by TIAA-CREF may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.

^{**** =} The TIAA Stable Value Inception Date represents the date that the plan's TIAA Stable Value record was initiated on TIAA-CREF's recordkeeping system which may be earlier than the date of first deposit to the contract.

[&]quot;Since Inception" performance is calculated from this date.

^{***** =} For definitions please visit www.tiaa-cref.org/public/assetmanagement

Disclosures



· %-ile --> Percentile Ranking in Morningstar Category.

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For the variable annuity accounts, we estimate expenses for the plan year based on projected expense and asset levels. Differences between estimated and actual expenses are adjusted quarterly and reflected in current investment results. Historically, the adjusting payments have resulted in both upward and downward adjustments.

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Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

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Disclosures



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Disclosures



Prospectus Gross Expense Ratio

The percentage of fund assets used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Often referred to as the Annual Operating Expense, the Prospectus Gross Expense Ratio is collected annually from a fund's prospectus.

Prospectus Net Expense Ratio

The percentage of fund assets, net of reimbursements, used to pay for operating expenses and management fees, including 12b-1 fees, administrative fees, and all other asset-based costs incurred by the fund, except brokerage costs. Fund expenses are reflected in the fund's NAV. Sales charges are not included in the expense ratio.

- --The expense ratio for fund of funds is the aggregate expense ratio as defined as the sum of the wrap or sponsor fees plus the estimated weighted average of the underlying fund fees.
- --Net reimbursements, the Prospectus Net Expense Ratio is collected annually from a fund's prospectus.
- --TIAA-CREF, unless noted, does not charge additional fees for record keeping a fund. 12b-1, revenue share and admin fees are all included in the Prospectus fees.
- -- Prospectus Net Expense Ratio % ile rank is the percentile rank for the fund. The better the expense ratio (lower) the lower the ranking out of 100.

TIAA-CREF reported performance may differ from Morningstar source returns for the same option over the same time period. We would expect an occasional one to two basis point difference. Morningstar Direct calculates returns by one share owned by a hypothetical investor over the requested time period. So the return for one year is calculated using the same formula as one month. TIAA-CREF calculates returns by \$1,000 owned by hypothetical investor for one month then links returns for requested time period. Both set of returns include dividends and capital gains.

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 Outcome AssessmentSM report calculations.
- The plan-level retirement income replacement ratio is determined by calculating the average retirement income replacement ratio of all participants in the plan analysis. All actively contributing participants are included in the analysis, unless the participant has annual compensation of less than \$5,000, has contributed less than \$300 in the previous 12-month period, has a current balance less than \$100, or is less than 18 or greater than 81 years of age.

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