

Instructions

Volatility in the market continues to concern investors worldwide. Investors are paying more attention to the relationship between the potential for loss and the potential for reward and are asking "What are the chances that a given investment will incur a loss or fail to achieve a particular return?" Investment risk, whether absolute or relative, is multifaceted. It can be the result of a security's or asset's exposure to a wide range of factors, including changes in interest rates, a specific economic sector, capitalization size and style, the possibility of a credit default, and many others. The job of investment managers and executives is to figure out which risks are worth bearing ("good" risk) and which they choose to avoid ("bad" risk). In addition, investment managers may choose to hedge risks, thereby giving up some fraction of expected return for protection against some amount of loss. To make these decisions, TIAA has over the years developed procedures and a strong team of risk-minded investment managers and Risk Management professionals. They work together to assess, measure, and manage risks. In fact, in addition to seeking sources of return, their main job is to manage risk. It is an integral part of our investment process.

This report offers a variety of measures of risk and relative returns. Please note that each account/fund is subject to unique risk factors which can be found in the prospectus. In an effort to help you understand specific measurements of risk and how they perform each quarter, this quarterly report summarizes *3, 5 and 10 year information on:*

Annualized Standard Deviation
Sharpe Ratio
Annualized Alpha
Beta
R-square
Risk Adjusted Annualized Alpha
Risk adjusted Beta
Risk adjusted R-square

The report is available the 10th business day of each month following the end of the quarter. The report will be posted on the TIAA.org web site under "Quarterly Risk Metrics." If you are a plan administrator and plan to utilize this information for internally-generated reports of investment funds offered by your institution, please make certain that the following guidelines are adhered to in order to ensure proper legal and regulatory disclosures are provided to your institution's employees. Disclosures are an increasing focus of securities regulators (including SEC and FINRA) so we feel this protects both you and your participants while providing useful and current information.

- 1. The disclosure section cannot be changed in any way and must be provided with the report.*
- 2. The disclosure section should precede the performance presentation, or otherwise be prominently presented.*

Thank you for your cooperation in adhering to these guidelines. Please work with your TIAA consultant if you need additional information or if you have any questions.

CREF Accounts, TIAA Real Estate Account and TIAA-CREF Funds - All Share Classes
Standard Deviation, Sharpe Ratio, Alpha, Beta and R-Squared
For the period ending 9/30/2018

All statistics were calculated using net of fees monthly returns. The alpha, beta, r-squared and the risk-adjusted versions of these statistics were calculated using our Funds' official benchmarks.

Fund ID	BMK ID	Fund/Account	Benchmark	(1)			(2)			(3)			(4)			(5)			(6)			(7)			(8)		
				3 yr. Ann. Std Dev	5 yr. Ann. Std Dev	10 yr. Ann. Std Dev	3 yr. Sharpe Ratio	5 yr. Sharpe Ratio	10 yr. Sharpe Ratio	3 yr. Ann. Alpha	5 yr. Ann. Alpha	10 yr. Ann. Alpha	3 yr. Beta	5 yr. Beta	10 yr. Beta	3 yr. R-Squared	5 yr. R-Squared	10 yr. R-Squared	3 yr. Ann. Alpha (Risk Adj)	5 yr. Ann. Alpha (Risk Adj)	10 yr. Ann. Alpha (Risk Adj)	3 yr. Beta (Risk Adj)	5 yr. Beta (Risk Adj)	10 yr. Beta (Risk Adj)	3 yr. R-Squared (Risk Adj)	5 yr. R-Squared (Risk Adj)	10 yr. R-Squared (Risk Adj)
Retail Share Class Funds																											
15969	17364	Bond Fund	Barclays Aggregate Bond Index	2.62	2.64	3.17	0.40	0.78	1.17	0.60	0.49	0.47	0.96	0.95	0.94	0.95	0.94	0.92	0.56	0.47	0.45	0.96	0.95	0.94	0.95	0.95	0.93
18251	17364	Bond Index Fund	Barclays Aggregate Bond Index	2.76	2.82	NA	0.00	0.42	NA	-0.55	-0.56	NA	1.04	1.04	NA	0.99	0.99	NA	-0.52	-0.54	NA	1.04	1.04	NA	0.99	0.99	NA
15974	17364	Bond Plus Fund	Barclays Aggregate Bond Index	2.56	2.59	3.20	0.53	0.86	1.31	0.99	0.77	1.18	0.89	0.90	0.88	0.86	0.87	0.78	0.90	0.72	1.13	0.90	0.90	0.88	0.87	0.88	0.79
21537	17378	Emerging Markets Debt Fund	JP Morgan EMBI Global Diversified Index	6.94	NA	NA	0.93	NA	NA	-0.01	NA	NA	1.20	NA	NA	0.93	NA	NA	0.15	NA	NA	1.20	NA	NA	0.93	NA	NA
18674	15615	Emerging Markets Equity Fund	MSCI Emerging Markets Index	14.56	14.45	NA	0.63	0.07	NA	-1.62	-1.82	NA	0.96	0.94	NA	0.89	0.91	NA	-1.67	-1.85	NA	0.96	0.94	NA	0.89	0.91	NA
18678	15615	Emerging Markets Equity Index Fund	MSCI Emerging Markets Index	14.09	14.54	NA	0.76	0.17	NA	-0.50	-0.54	NA	0.98	0.99	NA	0.99	0.99	NA	-0.52	-0.55	NA	0.98	0.99	NA	0.99	0.99	NA
15992	8060	Equity Index Fund	Russell 3000 Index	9.30	9.67	14.87	1.71	1.31	0.76	-0.31	-0.33	-0.28	1.00	1.00	1.00	1.00	1.00	1.00	-0.31	-0.33	-0.28	1.00	1.00	1.00	1.00	1.00	1.00
15985	8065	Growth & Income Fund	S&P 500 Index	9.51	10.15	14.18	1.71	1.30	0.83	-0.39	-0.62	0.45	1.01	1.03	0.97	0.95	0.95	0.97	-0.37	-0.60	0.44	1.01	1.03	0.97	0.95	0.95	0.97
15951	17377	High-Yield Fund	ICE BofA ML BB-B Cash Pay Issuer Constrained Index	4.85	4.96	8.49	1.32	0.91	0.94	-0.69	-0.77	0.10	1.08	1.08	0.96	0.95	0.97	0.97	-0.61	-0.72	0.09	1.08	1.08	0.96	0.95	0.97	0.97
8161	22352	Inflation-Linked Bond Fund	Barclays TIPS 1-10 Year Index	2.36	3.32	5.69	0.12	0.04	0.41	-0.57	-0.51	-0.52	1.00	1.00	0.99	0.98	0.99	0.99	-0.58	-0.51	-0.52	1.00	1.00	0.99	0.99	0.99	0.99
15986	8067	International Equity Fund	MSCI EAFE Index	12.42	12.64	19.62	0.55	0.25	0.25	-1.93	-0.86	-0.30	1.07	1.07	1.08	0.87	0.87	0.92	-1.88	-0.83	-0.28	1.07	1.07	1.08	0.87	0.87	0.92
20052	19231	International Opportunities Fund	MSCI All Country World Index ex-USA	10.42	10.86	NA	0.98	0.48	NA	2.57	2.15	NA	0.83	0.86	NA	0.76	0.79	NA	2.44	2.09	NA	0.83	0.86	NA	0.76	0.79	NA
15958	8055	Large-Cap Growth Fund	Russell 1000 Growth Index	11.17	11.52	15.46	1.71	1.39	0.88	-1.32	-0.96	-0.86	1.05	1.07	1.04	0.91	0.92	0.96	-1.27	-0.93	-0.84	1.05	1.07	1.04	0.91	0.92	0.96
8123	8054	Large-Cap Value Fund	Russell 1000 Value Index	10.61	10.66	16.53	1.12	0.80	0.56	-2.14	-2.33	-0.63	1.11	1.09	1.06	0.96	0.96	0.97	-2.06	-2.29	-0.60	1.11	1.09	1.06	0.96	0.96	0.97
17316	17804	Lifecycle Retirement Income Fund	Retirement Income Fund Composite Index	4.11	4.37	6.89	1.48	1.12	0.88	-0.17	-0.35	-0.31	1.06	1.07	1.06	0.97	0.97	0.99	-0.13	-0.31	-0.29	1.06	1.07	1.06	0.97	0.97	0.99
19333	19291	Lifestyle Aggressive Growth Fund	Lifestyle Aggressive Composite Benchmark	9.41	9.92	NA	1.42	0.96	NA	-0.89	-0.80	NA	1.01	1.02	NA	0.97	0.97	NA	-0.88	-0.79	NA	1.01	1.02	NA	0.97	0.97	NA
19418	19386	Lifestyle Conservative Fund	Lifestyle Conservative Composite Benchmark	4.12	4.35	NA	1.44	1.12	NA	-0.27	-0.42	NA	1.07	1.09	NA	0.96	0.97	NA	-0.22	-0.38	NA	1.07	1.09	NA	0.96	0.97	NA
19374	19340	Lifestyle Growth Fund	Lifestyle Growth Composite Benchmark	7.67	8.09	NA	1.43	1.00	NA	-0.73	-0.72	NA	1.03	1.04	NA	0.97	0.97	NA	-0.71	-0.70	NA	1.03	1.04	NA	0.97	0.97	NA
19284	19246	Lifestyle Income Fund	Lifestyle Income Composite Benchmark	2.41	2.55	NA	1.37	1.18	NA	0.09	-0.17	NA	1.07	1.10	NA	0.94	0.95	NA	0.14	-0.12	NA	1.07	1.10	NA	0.94	0.95	NA
19460	19382	Lifestyle Moderate Fund	Lifestyle Moderate Composite Benchmark	5.96	6.29	NA	1.44	1.06	NA	-0.57	-0.62	NA	1.06	1.07	NA	0.97	0.97	NA	-0.52	-0.58	NA	1.06	1.07	NA	0.97	0.97	NA
15982	15073	Managed Allocation Fund	Managed Allocation Composite Index	5.89	6.24	9.97	1.48	1.09	0.76	-0.37	-0.44	-0.39	1.05	1.07	1.07	0.97	0.97	0.99	-0.34	-0.41	-0.37	1.05	1.07	1.07	0.97	0.97	0.99
8126	8062	Mid-Cap Growth Fund	Russell Midcap Growth Index	10.76	11.38	17.16	1.26	0.88	0.68	-2.28	-2.69	-1.42	1.02	1.04	1.01	0.95	0.95	0.98	-2.26	-2.67	-1.42	1.02	1.04	1.01	0.95	0.95	0.98
8129	8064	Mid-Cap Value Fund	Russell Midcap Value Index	9.64	9.79	16.31	1.07	0.88	0.59	-1.33	-1.30	-0.58	0.97	0.98	0.94	0.96	0.96	0.98	-1.35	-1.31	-0.61	0.97	0.98	0.94	0.96	0.96	0.98
15979		Money Market Fund	N/A	0.16	0.14	0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8157	15091	Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	11.61	12.38	24.18	0.64	0.74	0.30	-0.22	0.43	0.45	0.94	0.97	0.97	0.97	0.97	0.99	-0.26	0.41	0.44	0.94	0.97	0.97	0.97	0.97	0.99
15966	21135	Short-Term Bond Fund	Barclays Short (1-3 Yr) Govt Credit Index	0.85	0.72	1.37	0.57	0.81	1.45	0.61	0.37	0.36	0.78	0.86	0.89	0.79	0.76	0.85	0.44	0.30	0.32	0.81	0.87	0.90	0.80	0.77	0.85
21817	20380	Short-Term Bond Index Fund	Bloomberg Barclays US (1-3 Yr) Govt Credit Index	0.80	NA	NA	-0.72	NA	NA	-0.54	NA	NA	1.06	NA	NA	0.96	NA	NA	-0.49	NA	NA	1.05	NA	NA	0.96	NA	NA
8132	8056	Quant Small-Cap Equity Fund	Russell 2000 Index	13.36	13.06	19.06	1.14	0.83	0.58	-1.07	0.73	0.39	1.01	0.96	0.98	0.97	0.97	0.99	-1.07	0.71	0.38	1.01	0.96	0.98	0.97	0.97	0.99
19817	17364	Social Choice Bond Fund	Barclays Aggregate Bond Index	2.48	2.73	NA	0.36	0.92	NA	0.47	0.84	NA	0.92	1.00	NA	0.98	0.97	NA	0.41	0.83	NA	0.92	1.00	NA	0.98	0.97	NA
15982	8164	Social Choice Equity Fund	Russell 3000 Index	9.32	9.69	14.97	1.67	1.19	0.72	-0.57	-1.29	-0.88	1.00	1.00	1.00	0.99	0.99	0.99	-0.58	-1.29	-0.88	1.00	1.00	1.00	0.99	0.99	0.99
21833	8067	Social Choice International Equity Fund	MSCI EAFE Index	10.24	NA	NA	0.80	NA	NA	0.39	NA	NA	0.93	NA	NA	0.96	NA	NA	0.33	NA	NA	0.93	NA	NA	0.96	NA	NA
21825	8060	Social Choice Low Carbon Equity Fund	Russell 3000 Index	9.27	NA	NA	1.66	NA	NA	-0.55	NA	NA	0.99	NA	NA	0.98	NA	NA	-0.56	NA	NA	0.99	NA	NA	0.98	NA	NA
15972	17372	5-15 Year Laddered Tax-Exempt Bond Fund	Barclays 10 Year Municipal Bond Index	3.27	3.03	4.19	0.21	0.59	0.83	-0.34	-0.63	-0.77	0.84	0.86	0.94	0.98	0.96	0.95	-0.47	-0.70	-0.79	0.84	0.86	0.94	0.98	0.96	0.95

CREF Accounts, TIAA Real Estate Account and TIAA-CREF Funds - All Share Classes
Standard Deviation, Sharpe Ratio, Alpha, Beta and R-Squared
For the period ending 9/30/2018

All statistics were calculated using net of fees monthly returns. The alpha, beta, r-squared and the risk-adjusted versions of these statistics were calculated using our Funds' official benchmarks.

Fund	BMK		(1)			(2)			(3)			(4)			(5)			(6)			(7)			(8)					
ID	ID	Fund/Account	Benchmark	3 yr. Ann. Std Dev	5 yr. Ann. Std Dev	10 yr. Ann. Std Dev	3 yr. Sharpe Ratio	5 yr. Sharpe Ratio	10 yr. Sharpe Ratio	3 yr. Ann. Alpha	5 yr. Ann. Alpha	10 yr. Ann. Alpha	3 yr. Beta	5 yr. Beta	10 yr. Beta	3 yr. R-Squared	5 yr. R-Squared	10 yr. R-Squared	3 yr. Alpha (Risk Adj)	5 yr. Alpha (Risk Adj)	10 yr. Alpha (Risk Adj)	3 yr. Beta (Risk Adj)	5 yr. Beta (Risk Adj)	10 yr. Beta (Risk Adj)	3 yr. R-Squared (Risk Adj)	5 yr. R-Squared (Risk Adj)	10 yr. R-Squared (Risk Adj)		
		LIFE Funds																											
15093	17364	Bond Fund	Barclays Aggregate Bond Index	2.60	2.60	3.11	0.50	0.84	1.21	0.86	0.65	0.61	0.93	0.93	0.92	0.91	0.93	0.91	0.81	0.61	0.57	0.94	0.93	0.92	0.91	0.93	0.91		
8019	8065	Growth & Income Fund	S&P 500 Index	9.53	10.16	14.25	1.73	1.32	0.85	-0.24	-0.44	0.72	1.01	1.04	0.98	0.95	0.95	0.97	-0.22	-0.42	0.71	1.01	1.04	0.98	0.95	0.95	0.97		
8018	8168	Growth Equity Fund	Russell 1000 Growth Index	11.19	11.52	15.52	1.74	1.43	0.91	-1.09	-0.59	-0.42	1.05	1.07	1.05	0.91	0.92	0.96	-1.03	-0.56	-0.41	1.05	1.07	1.05	0.91	0.92	0.96		
8020	8067	International Equity Fund	MSCI EAFE Index	12.53	12.73	19.76	0.59	0.29	0.26	-1.49	-0.39	-0.08	1.08	1.08	1.09	0.86	0.87	0.92	-1.43	-0.35	-0.05	1.08	1.08	1.09	0.86	0.87	0.92		
8120	8054	Large-Cap Value Fund	Russell 1000 Value Index	10.57	10.63	16.57	1.14	0.82	0.58	-1.89	-2.10	-0.42	1.11	1.08	1.07	0.96	0.96	0.97	-1.81	-2.06	-0.40	1.11	1.08	1.07	0.96	0.96	0.97		
15095		Money Market Fund	N/A	0.16	0.16	0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
8154	15091	Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	11.73	12.48	24.23	0.65	0.76	0.31	-0.11	0.61	0.81	0.95	0.98	0.97	0.97	0.97	0.99	-0.15	0.60	0.80	0.95	0.98	0.97	0.97	0.97	0.99		
8121	8056	Small-Cap Equity Fund	Russell 2000 Index	13.42	13.11	19.09	1.14	0.85	0.59	-0.97	0.87	0.65	1.01	0.96	0.98	0.98	0.97	0.99	-0.97	0.84	0.65	1.01	0.96	0.98	0.98	0.97	0.99		
8021	8164	Social Choice Equity Fund	Russell 3000 Index	9.30	9.69	15.00	1.70	1.20	0.73	-0.30	-1.14	-0.70	0.99	1.00	1.00	0.99	0.99	0.99	-0.31	-1.14	-0.70	0.99	1.00	1.00	0.99	0.99	0.99		
8015	8060	Stock Index Fund	Russell 3000 Index	9.29	9.64	14.86	1.74	1.34	0.78	-0.06	-0.06	-0.02	1.00	1.00	1.00	1.00	1.00	1.00	-0.06	-0.06	-0.02	1.00	1.00	1.00	1.00	1.00	1.00		
20862	20829	Balanced Fund	Life Balance Composite Benchmark	5.03	NA	NA	1.50	NA	NA	-0.52	NA	NA	1.07	NA	NA	0.97	NA	NA	-0.47	NA	NA	1.07	NA	NA	0.97	NA	NA		

Definitions:

- (1) Annualized Standard Deviation: Measures an investment's past volatility, based on a sample. The higher the standard deviation, the higher the volatility. It is not a measure of performance and should be considered relative to an investment's annual returns. Please note that past standard deviation is not a predictor of future volatility or risk.
- (2) Sharpe Ratio: A risk-adjusted measure calculated using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe ratio the better the funds historical risk adjusted performance. It uses the annualized standard deviation and the 3 month T-Bill for the risk free return.
- (3) Annualized Alpha: A coefficient which measures risk-adjusted performance, factoring in the risk due to the specific security, rather than the overall market. A high value for alpha implies that the stock or mutual fund has performed better than would have been expected given its beta (volatility). The difference between the fair and actually expected rates of return on a stock is called the stock's alpha.
- (4) Beta: A measure of the magnitude of a portfolio's past share-price fluctuations in relations to the ups and downs of the overall market (or appropriate market index). The market (or index) is assigned a beta of 1.00, so a portfolio with a beta of 1.20 would have seen its share price rise or fall by 12% when the overall market rose or fell by 10%.
- (5) R-Squared: A measure of how much of a portfolio's performance can be explained by the returns from the overall market (or benchmark index). If a portfolio's total return precisely matched that of the overall market or benchmark, its R-squared would be 1.00. If a portfolio's return bore no relationship to the market's returns, its R-square would be 0.
- (6) Annualized Alpha (risk adj): The alpha (risk-adjusted) subtract the risk-free return (3 month T-Bill) from the returns of both the fund and benchmark. Otherwise, the formulas are the same as in (3).
- (7) Beta (risk adj): The beta (risk-adjusted) subtract the risk-free return (3 month T-Bill) from the returns of both the fund and benchmark. Otherwise, the formulas are the same as in (4).
- (8) R-Square (risk adj): The R-squared (risk-adjusted) subtract the risk-free return (3 month T-Bill) from the returns of both the fund and benchmark. Otherwise, the formulas are the same as in (5).

Disclosure**CREF Bond Market account**

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on March 1, 1990. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Equity Index Account

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on April 29, 1994. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Global Equities

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on May 1, 1992. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Growth Account

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on April 29, 1994. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Inflation-Linked Bond Account

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on May 1, 1997. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Money Market

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on April 1, 1998. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Social Choice Account

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on March 1, 1990. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

CREF Stock Account

Risk statistics that require a 3, 5 or 10-year performance history are calculated using the Account's Class R1 share class for periods prior to the Account's Class R3 inception date. The Account's Class R1 began operations on July 31, 1952. Neither the performance nor the risk statistics for these periods have been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance and risk statistic values of Class R3 for these periods would have been higher.

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy or sell securities, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients.

The ratios provided here do not replace performance data, but are supplemental data intended to help investors analyze performance.

Performance data for each product showing the standardized 1, 5, 10-year and since inception returns can be found here: <http://www.tiaa.org/performance/retirement/index.html>.

All statistics were calculated using 2-digit net of fees monthly returns.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or log on to www.tiaa.org for product and fund prospectuses that contain this and other information. Please read the prospectuses carefully before investing.

The performance data quoted represents past performance and is no guarantee of future results. Your returns and the principal value of your investments will fluctuate so that your shares [accumulation units], when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted above. For performance current to the most recent month-end, visit the TIAA Website at www.tiaa.org, or call 877 518-9161.

You could lose money by investing in the TIAA-CREF Money Market Fund. Although the Fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Fund's sponsor has no legal obligation to provide support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

You could lose money by investing in the CREF Money Market Account. Because the accumulation unit value of the Account will fluctuate, the value of your investment may increase or decrease. An investment in the Account is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Account's sponsor has no legal obligation to provide support to the Account, and you should not expect that the sponsor will provide financial support to the Account at any time.

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

Annuity account options are available through contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals, and offer a variety of income options, including lifetime income. Payments from the variable annuity accounts [and mutual funds] are not guaranteed and will rise or fall based on investment performance.

Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC, Members FINRA and SIPC, distributes securities products.

Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), New York, NY.

©2017 Teachers Insurance and Annuity Association of America, New York, NY 10017

265092