

## 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-CREF 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-CREF.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-CREF consultant if you need additional information or if you have any questions.*

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## 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 3/31/2012

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/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. 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)
<b>CREF Accounts</b>																									
CREF Bond Market Account	Barclays Aggregate Bond Index	2.62	3.37	3.58	2.64	1.28	0.98	0.53	-0.23	-0.25	0.95	0.91	0.96	0.95	0.95	0.97	0.53	-0.37	-0.32	0.95	0.92	0.97	0.95	0.95	0.97
CREF Equity Index Account	Russell 3000 Index	18.99	19.77	16.41	1.39	0.03	0.15	-0.36	-0.37	-0.38	1.00	1.00	1.00	1.00	1.00	1.00	-0.36	-0.38	-0.39	1.00	1.00	1.00	1.00	1.00	1.00
CREF Global Equities Account	MSCI World Index	19.03	21.56	17.54	1.09	-0.08	0.15	-0.20	0.33	-0.28	1.04	1.04	1.03	0.99	0.99	0.99	-0.20	0.37	-0.23	1.04	1.04	1.03	0.99	0.99	0.99
CREF Growth Account	Russell 1000 Growth Index	16.99	19.75	16.88	1.41	0.20	0.10	-1.56	-0.17	-0.78	1.03	1.02	1.02	1.00	1.00	0.99	-1.56	-0.15	-0.74	1.03	1.02	1.02	1.00	1.00	0.99
CREF Inflation-Linked Bond Account	Barclays TIPS Index	4.81	7.45	6.95	1.70	0.80	0.75	-0.14	-0.42	-0.53	0.96	0.99	1.01	0.99	0.99	0.99	-0.14	-0.43	-0.51	0.96	0.99	1.01	0.99	0.99	0.99
CREF Money Market Account	N/A	0.03	0.53	0.52	-3.50	0.22	-0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CREF Social Choice Account	SCA Composite Index	10.23	12.27	10.02	1.63	0.19	0.32	0.32	-0.04	0.00	0.99	0.99	0.99	0.99	0.99	0.99	0.32	-0.06	-0.02	0.99	0.99	0.99	0.99	0.99	0.99
CREF Stock Account	CREF Composite Index	18.37	20.80	17.02	1.22	-0.01	0.17	-0.53	-0.04	-0.25	1.02	1.01	1.01	1.00	1.00	1.00	-0.52	-0.02	-0.23	1.02	1.01	1.01	1.00	1.00	1.00
<b>TIAA Accounts</b>																									
TIAA Separate Account VA-1	Russell 3000 Index	16.98	19.75	16.40	1.37	0.02	0.14	-0.68	-0.60	-0.58	1.00	1.00	1.00	1.00	1.00	1.00	-0.68	-0.61	-0.58	1.00	1.00	1.00	1.00	1.00	1.00
TIAA Real Estate Account	N/A	6.39	6.91	5.33	0.21	-0.47	0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Retirement Share Class Funds</b>																									
Bond Fund	Barclays Aggregate Bond Index	2.74	3.47	NA	2.49	1.29	NA	0.39	-0.19	NA	0.96	0.93	NA	0.89	0.93	NA	0.38	-0.30	NA	0.96	0.94	NA	0.89	0.94	NA
Bond Plus Fund	Barclays Aggregate Bond Index	2.90	3.67	NA	3.05	1.17	NA	3.16	0.10	NA	0.83	0.85	NA	0.60	0.70	NA	3.15	-0.18	NA	0.83	0.88	NA	0.60	0.71	NA
Equity Index Fund	Russell 3000 Index	18.98	19.75	NA	1.40	0.04	NA	-0.29	-0.26	NA	1.00	1.00	NA	1.00	1.00	NA	-0.29	-0.26	NA	1.00	1.00	NA	1.00	1.00	NA
Growth & Income Fund	S&P 500 Index	16.29	18.28	NA	1.35	0.20	NA	-1.01	2.75	NA	1.00	0.95	NA	0.99	0.98	NA	-1.01	2.70	NA	1.00	0.95	NA	0.99	0.98	NA
High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	9.10	11.65	NA	2.13	0.55	NA	-1.51	0.70	NA	1.07	0.94	NA	0.98	0.97	NA	-1.50	0.63	NA	1.07	0.94	NA	0.98	0.97	NA
Inflation-Linked Bond Fund	Barclays TIPS Index	4.80	7.49	NA	1.67	0.78	NA	-0.24	-0.59	NA	0.96	1.00	NA	0.99	0.99	NA	-0.24	-0.59	NA	0.96	1.00	NA	0.99	0.99	NA
International Equity Fund	MSCI EAFE Index	24.02	25.46	NA	0.79	-0.22	NA	0.66	-0.26	NA	1.10	1.07	NA	0.91	0.93	NA	0.67	-0.18	NA	1.10	1.07	NA	0.91	0.93	NA
International Equity Index Fund	MSCI EAFE Index	21.35	23.29	NA	0.79	-0.20	NA	-0.36	0.01	NA	1.01	1.01	NA	0.98	0.98	NA	-0.36	0.02	NA	1.01	1.01	NA	0.98	0.98	NA
Large-Cap Growth Fund	Russell 1000 Growth Index	17.41	20.16	NA	1.30	0.17	NA	-2.94	-0.51	NA	1.04	1.03	NA	0.98	0.98	NA	-2.93	-0.47	NA	1.04	1.03	NA	0.98	0.98	NA
Large-Cap Growth Index Fund	Russell 1000 Growth Index	16.45	19.29	NA	1.51	0.19	NA	-0.26	-0.33	NA	1.00	1.00	NA	1.00	1.00	NA	-0.26	-0.33	NA	1.00	1.00	NA	1.00	1.00	NA
Large-Cap Value Fund	Russell 1000 Value Index	19.77	21.82	NA	1.18	-0.09	NA	-2.08	0.21	NA	1.14	1.06	NA	0.98	0.98	NA	-2.06	0.28	NA	1.14	1.06	NA	0.98	0.98	NA
Large-Cap Value Index Fund	Russell 1000 Value Index	17.11	20.18	NA	1.31	-0.11	NA	-0.25	-0.27	NA	1.00	1.00	NA	1.00	1.00	NA	-0.25	-0.28	NA	1.00	1.00	NA	1.00	1.00	NA
Lifecycle 2010 Fund	2010 Fund Composite Index	9.42	11.44	NA	1.61	0.19	NA	-0.82	-0.40	NA	1.08	1.05	NA	0.99	0.99	NA	-0.81	-0.34	NA	1.08	1.05	NA	0.99	0.99	NA
Lifecycle 2015 Fund	2015 Fund Composite Index	10.92	13.04	NA	1.51	0.14	NA	-0.90	-0.29	NA	1.08	1.05	NA	0.99	0.99	NA	-0.90	-0.24	NA	1.08	1.05	NA	0.99	0.99	NA
Lifecycle 2020 Fund	2020 Fund Composite Index	12.34	14.62	NA	1.43	0.08	NA	-0.86	-0.28	NA	1.07	1.05	NA	0.99	0.99	NA	-0.86	-0.23	NA	1.07	1.05	NA	0.99	0.99	NA
Lifecycle 2025 Fund	2025 Fund Composite Index	13.85	16.24	NA	1.36	0.04	NA	-0.93	-0.26	NA	1.07	1.05	NA	1.00	0.99	NA	-0.93	-0.21	NA	1.07	1.04	NA	1.00	0.99	NA
Lifecycle 2030 Fund	2030 Fund Composite Index	15.34	17.83	NA	1.31	0.00	NA	-0.99	-0.25	NA	1.06	1.04	NA	0.99	0.99	NA	-0.98	-0.21	NA	1.06	1.04	NA	0.99	0.99	NA
Lifecycle 2035 Fund	2035 Fund Composite Index	16.70	19.07	NA	1.25	0.00	NA	-0.97	-0.25	NA	1.06	1.04	NA	0.99	0.99	NA	-0.96	-0.21	NA	1.06	1.04	NA	0.99	0.99	NA
Lifecycle 2040 Fund	2040 Fund Composite Index	16.84	19.12	NA	1.25	0.00	NA	-0.97	-0.21	NA	1.06	1.04	NA	0.99	0.99	NA	-0.96	-0.17	NA	1.06	1.04	NA	0.99	0.99	NA
Lifecycle 2045 Fund	2045 Fund Composite Index	16.79	NA	NA	1.24	NA	NA	-1.07	NA	NA	1.05	NA	NA	0.99	NA	NA	-1.06	NA	NA	1.05	NA	NA	0.99	NA	NA
Lifecycle 2050 Fund	2050 Fund Composite Index	16.75	NA	NA	1.25	NA	NA	-0.94	NA	NA	1.05	NA	NA	0.99	NA	NA	-0.94	NA	NA	1.05	NA	NA	0.99	NA	NA
Lifecycle Retirement Income Fund	Retirement Income Fund Composite Index	7.49	NA	NA	1.75	NA	NA	-0.77	NA	NA	1.06	NA	NA	0.99	NA	NA	-0.77	NA	NA	1.06	NA	NA	0.99	NA	NA
Managed Allocation Fund	Managed Allocation Composite Index	11.34	13.45	NA	1.51	0.11	NA	-0.56	-0.97	NA	1.09	1.08	NA	0.99	0.99	NA	-0.55	-0.88	NA	1.09	1.08	NA	0.99	0.99	NA
Mid-Cap Growth Fund	Russell Midcap Growth Index	20.30	23.35	NA	1.42	0.16	NA	-0.51	0.47	NA	1.02	1.00	NA	0.98	0.98	NA	-0.51	0.47	NA	1.02	1.00	NA	0.98	0.98	NA
Mid-Cap Value Fund	Russell Midcap Value Index	19.35	22.20	NA	1.33	0.02	NA	-1.60	0.25	NA	0.96	0.94	NA	0.98	0.98	NA	-1.61	0.19	NA	0.96	0.94	NA	0.98	0.98	NA
Money Market Fund	N/A	0.02	0.53	NA	-4.74	0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	26.03	33.00	NA	1.62	-0.06	NA	0.51	0.76	NA	0.99	0.96	NA	0.99	1.00	NA	0.51	0.72	NA	0.99	0.96	NA	0.99	1.00	NA
S&P 500 Index Fund	S&P 500 Index	18.19	19.03	NA	1.41	0.03	NA	-0.32	-0.29	NA	1.00	1.00	NA	1.00	1.00	NA	-0.32	-0.29	NA	1.00	1.00	NA	1.00	1.00	NA
Short-Term Bond Fund	Barclays Short (1-5 Yr) Govt Credit Index	1.77	2.10	NA	2.46	1.31	NA	0.36	-0.13	NA	1.04	0.87	NA	0.91	0.82	NA	0.37	-0.37	NA	1.04	0.90	NA	0.91	0.82	NA
Small-Cap Blend Index Fund	Russell 2000 Index	22.54	24.62	NA	1.17	0.03	NA	-0.32	-0.21	NA	1.00	1.00	NA	1.00	1.00	NA	-0.32	-0.21	NA	1.00	1.00	NA	1.00	1.00	NA
Small-Cap Equity Fund	Russell 2000 Index	22.54	24.43	NA	1.20	0.01	NA	0.23	-0.70	NA	1.00	0.99	NA	1.00	0.99	NA	0.23	-0.72	NA	1.00	0.99	NA	1.00	0.99	NA
Social Choice Equity Fund	Russell 3000 Index	16.90	19.69	NA	1.39	0.05	NA	-0.28	-0.09	NA	0.99	0.99	NA	0.99	0.99	NA	-0.28	-0.10	NA	0.99	0.99	NA	0.99	0.99	NA

# 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 3/31/2012

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/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. 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)
<b>Institutional Share Class Funds</b>																									
Bond Fund	Barclays Aggregate Bond Index	2.75	3.48	3.66	2.58	1.37	1.05	0.63	0.06	-0.06	0.96	0.93	0.98	0.88	0.93	0.96	0.63	-0.04	-0.10	0.96	0.94	0.99	0.88	0.93	0.97
Bond Plus Fund	Barclays Aggregate Bond Index	2.95	3.72	NA	3.10	1.22	NA	3.28	0.26	NA	0.85	0.87	NA	0.61	0.71	NA	3.27	-0.01	NA	0.85	0.89	NA	0.61	0.72	NA
Enhanced Intl Equity Index Fund	MSCI EAFE Index	21.17	NA	NA	0.81	NA	NA	0.09	NA	NA	1.01	NA	NA	0.98	NA	NA	0.09	NA	NA	1.01	NA	NA	0.98	NA	NA
Enhanced Large-Cap Growth Index Fund	Russell 1000 Growth Index	16.49	NA	NA	1.53	NA	NA	0.21	NA	NA	1.00	NA	NA	0.99	NA	NA	0.21	NA	NA	1.00	NA	NA	0.99	NA	NA
Enhanced Large-Cap Value Index Fund	Russell 1000 Value Index	17.19	NA	NA	1.28	NA	NA	-0.53	NA	NA	1.00	NA	NA	1.00	NA	NA	-0.53	NA	NA	1.00	NA	NA	1.00	NA	NA
Equity Index Fund	Russell 3000 Index	17.02	19.78	16.42	1.42	0.05	0.17	-0.03	0.02	-0.02	1.00	1.00	1.00	1.00	1.00	1.00	-0.03	0.01	-0.03	1.00	1.00	1.00	1.00	1.00	1.00
Growth & Income Fund	S&P 500 Index	18.24	18.22	15.44	1.38	0.22	0.25	-0.64	3.04	1.66	0.99	0.94	0.95	0.99	0.98	0.98	-0.64	2.97	1.58	0.99	0.94	0.95	0.99	0.98	0.98
High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	9.11	11.66	NA	2.16	0.58	NA	-1.24	0.95	NA	1.07	0.94	NA	0.98	0.97	NA	-1.23	0.88	NA	1.07	0.94	NA	0.98	0.97	NA
Inflation-Linked Bond Fund	Barclays TIPS Index	4.80	7.44	NA	1.73	0.82	NA	0.02	-0.29	NA	0.96	0.99	NA	0.99	0.99	NA	0.02	-0.30	NA	0.96	0.99	NA	0.99	0.99	NA
International Equity Fund	MSCI EAFE Index	24.01	25.46	20.41	0.80	-0.21	0.21	0.93	-0.02	0.26	1.10	1.07	1.06	0.91	0.93	0.94	0.94	0.07	0.37	1.10	1.07	1.06	0.91	0.93	0.94
International Equity Index Fund	MSCI EAFE Index	21.35	23.31	NA	0.80	-0.19	NA	-0.12	0.25	NA	1.01	1.01	NA	0.98	0.98	NA	-0.12	0.26	NA	1.01	1.01	NA	0.98	0.98	NA
Large-Cap Growth Fund	Russell 1000 Growth Index	17.39	20.14	NA	1.32	0.19	NA	-2.64	-0.26	NA	1.04	1.03	NA	0.98	0.98	NA	-2.64	-0.22	NA	1.04	1.03	NA	0.98	0.98	NA
Large-Cap Growth Index Fund	Russell 1000 Growth Index	16.46	19.30	NA	1.52	0.20	NA	-0.01	-0.08	NA	1.00	1.00	NA	1.00	1.00	NA	-0.01	-0.08	NA	1.00	1.00	NA	1.00	1.00	NA
Large-Cap Value Fund	Russell 1000 Value Index	19.77	21.86	NA	1.19	-0.08	NA	-1.84	0.45	NA	1.14	1.07	NA	0.98	0.98	NA	-1.83	0.52	NA	1.14	1.07	NA	0.98	0.98	NA
Large-Cap Value Index Fund	Russell 1000 Value Index	17.09	20.19	NA	1.32	-0.10	NA	0.00	-0.02	NA	1.00	1.00	NA	1.00	1.00	NA	0.00	-0.03	NA	1.00	1.00	NA	1.00	1.00	NA
Lifecycle 2010 Fund	2010 Fund Composite Index	9.42	11.46	NA	1.64	0.22	NA	-0.56	-0.14	NA	1.08	1.05	NA	0.99	0.99	NA	-0.55	-0.08	NA	1.08	1.05	NA	0.99	0.99	NA
Lifecycle 2015 Fund	2015 Fund Composite Index	10.86	13.01	NA	1.54	0.16	NA	-0.60	-0.05	NA	1.08	1.05	NA	0.99	0.99	NA	-0.59	0.00	NA	1.08	1.05	NA	0.99	0.99	NA
Lifecycle 2020 Fund	2020 Fund Composite Index	12.35	14.63	NA	1.46	0.10	NA	-0.60	-0.02	NA	1.07	1.05	NA	0.99	0.99	NA	-0.59	0.03	NA	1.07	1.05	NA	0.99	0.99	NA
Lifecycle 2025 Fund	2025 Fund Composite Index	13.89	16.26	NA	1.38	0.06	NA	-0.72	0.00	NA	1.07	1.05	NA	0.99	0.99	NA	-0.72	0.05	NA	1.07	1.05	NA	0.99	0.99	NA
Lifecycle 2030 Fund	2030 Fund Composite Index	15.33	17.82	NA	1.32	0.02	NA	-0.76	-0.01	NA	1.06	1.04	NA	1.00	0.99	NA	-0.76	0.04	NA	1.06	1.04	NA	1.00	0.99	NA
Lifecycle 2035 Fund	2035 Fund Composite Index	16.74	19.07	NA	1.27	0.01	NA	-0.76	-0.01	NA	1.06	1.04	NA	0.99	0.99	NA	-0.76	0.04	NA	1.06	1.04	NA	0.99	0.99	NA
Lifecycle 2040 Fund	2040 Fund Composite Index	16.81	19.12	NA	1.27	0.02	NA	-0.69	0.07	NA	1.06	1.04	NA	0.99	0.99	NA	-0.68	0.11	NA	1.06	1.04	NA	0.99	0.99	NA
Lifecycle 2045 Fund	2045 Fund Composite Index	16.78	NA	NA	1.26	NA	NA	-0.79	NA	NA	1.05	NA	NA	0.99	NA	NA	-0.78	NA	NA	1.05	NA	NA	0.99	NA	NA
Lifecycle 2050 Fund	2050 Fund Composite Index	16.82	NA	NA	1.26	NA	NA	-0.76	NA	NA	1.06	NA	NA	0.99	NA	NA	-0.76	NA	NA	1.06	NA	NA	0.99	NA	NA
Lifecycle Retirement Income Fund	Retirement Income Fund Composite Index	7.57	NA	NA	1.77	NA	NA	-0.65	NA	NA	1.08	NA	NA	0.99	NA	NA	-0.65	NA	NA	1.08	NA	NA	0.99	NA	NA
Managed Allocation Fund	Managed Allocation Composite Index	11.43	13.50	NA	1.53	0.13	NA	-0.42	-0.74	NA	1.09	1.08	NA	0.99	0.99	NA	-0.42	-0.65	NA	1.09	1.08	NA	0.99	0.99	NA
Mid-Cap Growth Fund	Russell Midcap Growth Index	20.31	23.37	NA	1.44	0.17	NA	-0.26	0.72	NA	1.02	1.00	NA	0.99	0.98	NA	-0.26	0.73	NA	1.02	1.00	NA	0.99	0.98	NA
Mid-Cap Value Fund	Russell Midcap Value Index	19.38	22.21	NA	1.35	0.03	NA	-1.38	0.50	NA	0.96	0.94	NA	0.98	0.98	NA	-1.38	0.43	NA	0.96	0.94	NA	0.98	0.98	NA
Money Market Fund	N/A	0.04	0.55	0.53	0.46	0.64	0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	25.99	33.02	NA	1.64	-0.05	NA	0.80	0.96	NA	0.99	0.96	NA	0.99	1.00	NA	0.80	0.92	NA	0.99	0.96	NA	0.99	1.00	NA
S&P 500 Index Fund	S&P 500 Index	16.22	19.04	NA	1.43	0.04	NA	-0.10	-0.05	NA	1.00	1.00	NA	1.00	1.00	NA	-0.10	-0.05	NA	1.00	1.00	NA	1.00	1.00	NA
Short-Term Bond Fund	Barclays Short (1-5 Yr) Govt Credit Index	1.77	2.09	NA	2.61	1.44	NA	0.64	0.15	NA	1.03	0.86	NA	0.91	0.82	NA	0.64	-0.11	NA	1.03	0.89	NA	0.90	0.82	NA
Small-Cap Blend Index Fund	Russell 2000 Index	22.53	24.61	NA	1.18	0.04	NA	-0.03	0.03	NA	1.00	1.00	NA	1.00	1.00	NA	-0.03	0.03	NA	1.00	1.00	NA	1.00	1.00	NA
Small-Cap Equity Fund	Russell 2000 Index	22.59	24.49	NA	1.21	0.02	NA	0.43	-0.47	NA	1.00	0.99	NA	1.00	0.99	NA	0.43	-0.48	NA	1.00	0.99	NA	1.00	0.99	NA
Social Choice Equity Fund	Russell 3000 Index	16.90	19.64	16.35	1.41	0.06	0.18	0.00	0.16	0.23	0.99	0.99	0.99	0.99	0.99	0.99	0.00	0.14	0.20	0.99	0.99	0.99	0.99	0.99	0.99
Tax-Exempt Bond Fund	Barclays 10 Year Municipal Bond Index	5.11	5.68	NA	1.44	0.74	NA	-0.43	-1.00	NA	1.03	1.01	NA	0.97	0.96	NA	-0.42	-0.98	NA	1.03	1.01	NA	0.97	0.96	NA
<b>Retail Share Class Funds</b>																									
Bond Fund	Barclays Aggregate Bond Index	2.72	3.46	NA	2.52	1.33	NA	0.46	-0.07	NA	0.95	0.93	NA	0.89	0.94	NA	0.45	-0.17	NA	0.95	0.94	NA	0.89	0.94	NA
Bond Plus Fund	Barclays Aggregate Bond Index	2.94	3.69	NA	3.02	1.18	NA	3.07	0.13	NA	0.85	0.86	NA	0.61	0.71	NA	3.06	-0.14	NA	0.85	0.88	NA	0.61	0.72	NA
Equity Index Fund	Russell 3000 Index	16.99	19.77	NA	1.40	0.04	NA	-0.25	-0.19	NA	1.00	1.00	NA	1.00	1.00	NA	-0.25	-0.19	NA	1.00	1.00	NA	1.00	1.00	NA
Growth & Income Fund	S&P 500 Index	18.27	18.23	NA	1.36	0.20	NA	-0.94	2.79	NA	1.00	0.94	NA	0.99	0.98	NA	-0.94	2.73	NA	1.00	0.94	NA	0.99	0.98	NA
High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	9.08	11.62	NA	2.15	0.56	NA	-1.39	0.81	NA	1.06	0.94	NA	0.98	0.98	NA	-1.38	0.74	NA	1.06	0.94	NA	0.98	0.98	NA
Inflation-Linked Bond Fund	Barclays TIPS Index	4.76	7.45	NA	1.70	0.80	NA	-0.12	-0.44	NA	0.95	0.99	NA	0.99	0.99	NA	-0.13	-0.45	NA	0.95	0.99	NA	0.99	0.99	NA
International Equity Fund	MSCI EAFE Index	24.10	25.48	NA	0.79	-0.22	NA	0.61	-0.23	NA	1.10	1.07	NA	0.91	0.93	NA	0.62	-0.15	NA	1.10	1.07	NA	0.91	0.93	NA
Large-Cap Growth Fund	Russell 1000 Growth Index	17.35	20.13	NA	1.30	0.17	NA	-2.87	-0.49	NA	1.04	1.03	NA	0.98	0.98	NA	-2.87	-0.45	NA	1.04	1.03	NA	0.98	0.98	NA
Large-Cap Value Fund	Russell 1000 Value Index	19.76	21.84	NA	1.18	-0.09	NA	-2.07	0.26	NA	1.14	1.07	NA	0.98	0.98	NA	-2.05	0.33	NA	1.14	1.07	NA	0.98	0.98	NA
Lifecycle Retirement Income Fund	Retirement Income Fund Composite Index	7.54	NA	NA	1.76	NA	NA	-0.75	NA	NA	1.07	NA	NA	0.99	NA	NA	-0.74	NA	NA	1.07	NA	NA	0.99	NA	NA
Managed Allocation Fund	Managed Allocation Composite Index	11.40	13.47	NA	1.51	0.12	NA	-0.57	-0.85	NA	1.09	1.08	NA	0.99	0.99	NA	-0.56	-0.76	NA	1.09	1.08	NA	0.99	0.99	NA
Mid-Cap Growth Fund	Russell Midcap Growth Index	20.29	23.36</																						

## 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 3/31/2012

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/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. 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)
<b>LIFE Funds</b>																									
Bond Fund	Barclays Aggregate Bond Index	2.75	3.43	NA	2.64	1.21	NA	0.79	-0.34	NA	0.96	0.90	NA	0.88	0.90	NA	0.79	-0.50	NA	0.96	0.91	NA	0.88	0.90	NA
Growth & Income Fund	S&P 500 Index	18.39	18.33	15.52	1.38	0.22	0.26	-0.63	3.17	1.74	1.00	0.95	0.96	0.99	0.98	0.98	-0.63	3.12	1.67	1.00	0.95	0.96	0.99	0.98	0.98
Growth Equity Fund	Russell 1000 Growth Index	17.57	20.17	17.08	1.32	0.20	0.11	-2.67	-0.01	-0.56	1.05	1.03	1.03	0.98	0.98	0.98	-2.66	0.04	-0.50	1.05	1.03	1.03	0.98	0.98	0.98
International Equity Fund	MSCI EAFE Index	24.20	25.69	20.57	0.79	-0.22	0.20	0.69	-0.21	0.20	1.10	1.08	1.07	0.91	0.93	0.94	0.70	-0.12	0.32	1.10	1.08	1.07	0.91	0.93	0.94
Large-Cap Value Fund	Russell 1000 Value Index	19.90	21.96	NA	1.18	-0.08	NA	-2.11	0.43	NA	1.15	1.07	NA	0.98	0.97	NA	-2.09	0.51	NA	1.15	1.07	NA	0.98	0.98	NA
Money Market Fund	N/A	0.05	0.55	NA	0.79	0.67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	28.20	33.06	NA	1.63	-0.04	NA	0.74	1.26	NA	0.99	0.97	NA	0.99	0.99	NA	0.74	1.22	NA	0.99	0.97	NA	0.99	0.99	NA
Small-Cap Equity Fund	Russell 2000 Index	22.63	24.50	NA	1.21	0.03	NA	0.47	-0.24	NA	1.00	0.99	NA	1.00	0.99	NA	0.47	-0.25	NA	1.00	0.99	NA	1.00	0.99	NA
Social Choice Equity Fund	Russell 3000 Index	16.95	19.73	16.39	1.41	0.06	0.19	-0.02	0.22	0.28	0.99	0.99	0.99	0.99	0.99	0.99	-0.02	0.21	0.27	0.99	0.99	0.99	0.99	0.99	0.99
Stock Index Fund	Russell 3000 Index	17.00	19.75	16.39	1.41	0.06	0.18	-0.07	0.03	0.02	1.00	1.00	1.00	1.00	1.00	1.00	-0.07	0.03	0.01	1.00	1.00	1.00	1.00	1.00	1.00

### 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

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

Alpha, Beta, R-squared cannot be calculated for Accounts/Funds that do not have a stated benchmark, such as the CREF Money Market Account and the TIAA Real Estate Separate Account.

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