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.

Disclosure

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 877-518-9161or 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

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Annuity account options are available through contracts issued by TIAA or CREF. These contracts are designed for retirement o 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 performanc
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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 6/30/2017

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) 3 yr. Ann. Std Dev	(1) 5 yr. Ann. Std Dev	(1) 10 yr. Ann. Std Dev	(2) 3 yr. Sharpe Ratio	(2) 5 yr. Sharpe Ratio	(2) 10 yr. Sharpe Ratio	(3) 3 yr. Ann. Alpha	(3) 5 yr. Ann. Alpha	(3) 10 yr. Ann. Alpha	(4) 3 yr. Beta	(4) 5 yr. Beta	(4) 10 yr. Beta	(5) 3 yr. R-Squared	(5) 5 yr. R-Squared	(5) 10 yr. R-Squared	(6) 3 yr. Ann. Alpha (Risk Adj)	(6) 5 yr. Ann. Alpha (Risk Adj)	(6) 10 yr. Ann. Alpha (Risk Adj)	(7) 3 yr. Beta (Risk Adj)	(7) 5 yr. Beta (Risk Adj)	(7) 10 yr. Beta (Risk Adj)	(8) 3 yr. R-Squared (Risk Adj)	(8) 5 yr. R-Squared (Risk Adj)	(8) 10 yr. R-Squared (Risk Adj)
		CREF Accounts																									
8093	17364	CREF Bond Market Account	Barclays Aggregate Bond Index	2.83	2.90	3.15	0.77	0.74	1.15	-0.01	0.08	-0.08	0.97	1.00	0.94	0.98	0.98	0.96	-0.01	0.08	-0.12	0.97	1.00	0.94	0.98	0.98	0.96
8001	8060	CREF Equity Index Account	Russell 3000 Index	10.60	9.79	15.71	0.79	1.42	0.40	-0.50	-0.45	-0.40	1.00	1.00	1.00	1.00	1.00	1.00	-0.50	-0.45	-0.41	1.00	1.00	1.00	1.00	1.00	1.00
8003	8075	CREF Global Equities Account	MSCI World Index	10.52	9.88	16.98	0.44	1.09	0.20	-0.31	-0.31	-0.16	0.98	0.99	1.03	0.98	0.98	0.99	-0.31	-0.32	-0.15	0.98	0.99	1.03	0.98	0.98	0.99
8000	8168	CREF Growth Account	Russell 1000 Growth Index	11.70	10.74	15.99	0.87	1.38	0.51	-1.15	-0.99	-0.47	1.05	1.05	1.03	0.98	0.98	0.99	-1.14	-0.98	-0.45	1.05	1.05	1.03	0.98	0.98	0.99
8004	22351	CREF Inflation-Linked Bond Account	Barclays TIPS 1-10 Year Index	3.69	4.42	6.20	-0.06	-0.09	0.52	-0.63	-0.52	-0.48	1.01	1.00	0.99	0.99	0.99	0.99	-0.63	-0.52	-0.48	1.01	1.00	0.99	0.99	0.99	0.99
8095		CREF Money Market Account	N/A	0.02	0.01	0.36	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
8023	8081	CREF Social Choice Account	SCA Composite Index	6.21	5.90	9.68	0.70	1.39	0.50	-0.52	-0.17	-0.13	0.97	0.98	0.99	0.99	0.99	0.99	-0.53	-0.18	-0.14	0.97	0.98	0.99	0.99	0.99	0.99
8002	14517	CREF Stock Account	CREF Composite Index	10.51	9.77	16.43	0.57	1.21	0.28	-0.47	-0.46	-0.35	0.99	1.00	1.01	1.00	1.00	1.00	-0.47	-0.46	-0.34	0.99	1.00	1.01	1.00	1.00	1.00
		TIAA Accounts																									
8024	8060	TIAA Separate Account VA-1	Russell 3000 Index	10.59	9.77	15.69	0.77	1.39	0.38	-0.68	-0.68	-0.64	1.00	1.00	1.00	1.00	1.00	1.00	-0.68	-0.68	-0.65	1.00	1.00	1.00	1.00	1.00	1.00
8022		TIAA Real Estate Account	N/A	1.29	1.37	5.15	5.42	5.90	0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Retirement Share Class Funds																									
15981	17364	Bond Fund	Barclays Aggregate Bond Index	2.87	3.02	3.24	0.92	0.94	1.25	0.44	0.72	0.30	0.97	1.02	0.95	0.95	0.94	0.93	0.43	0.73	0.26	0.96	1.02	0.95	0.95	0.94	0.92
18252	17364	Bond Index Fund	Barclays Aggregate Bond Index	3.08	2.97	NA	0.62	0.56	NA	-0.51	-0.48	NA	1.06	1.04	NA	1.00	1.00	NA	-0.50	-0.47	NA	1.06	1.04	NA	1.00	1.00	NA
15975	17364	Bond Plus Fund	Barclays Aggregate Bond Index	2.84	2.96	3.31	0.96	1.04	1.24	0.69	1.07	0.66	0.90	0.97	0.88	0.85	0.88	0.76	0.68	1.07	0.54	0.90	0.97	0.89	0.85	0.88	0.76
18675	15615	Emerging Markets Equity Fund	MSCI Emerging Markets Index	15.38	14.00	NA	-0.01	0.25	NA	-0.94	-0.03	NA	0.92	0.93	NA	0.92	0.92	NA	-0.95	-0.04	NA	0.92	0.93	NA	0.92	0.92	NA
18679	15615	Emerging Markets Equity Index Fund	MSCI Emerging Markets Index	15.89	14.36	NA	0.05	0.23	NA	-0.14	-0.49	NA	0.99	0.99	NA	0.99	0.99	NA	-0.15	-0.50	NA	0.99	0.99	NA	0.99	0.99	NA
15993	8060	Equity Index Fund	Russell 3000 Index	10.61	9.80	15.70	0.81	1.44	0.41	-0.26	-0.27	-0.25	1.00	1.00	1.00	1.00	1.00	1.00	-0.26	-0.27	-0.25	1.00	1.00	1.00	1.00	1.00	1.00
19213	19201	Global Natural Resources Fund	MSCI AC World Index Commodity Producers Sec. Cap. Index	17.91	15.58	NA	-0.52	-0.24	NA	-3.63	-2.33	NA	0.83	0.87	NA	0.74	0.78	NA	-3.66	-2.35	NA	0.83	0.87	NA	0.74	0.78	NA
15024	8065	Growth & Income Fund	S&P 500 Index	11.02	10.28	14.92	0.77	1.37	0.51	-1.16	-0.93	1.06	1.04	1.05	0.97	0.96	0.95	0.97	-1.15	-0.92	1.05	1.04	1.05	0.96	0.96	0.95	0.97
15952	17377	High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	6.02	5.34	9.02	0.60	1.09	0.72	-1.04	-1.18	0.15	1.08	1.09	0.96	0.97	0.97	0.97	-1.03	-1.17	0.13	1.08	1.09	0.96	0.97	0.97	0.97
15954	22352	Inflation-Linked Bond Fund	Barclays TIPS 1-10 Year Index	3.59	4.34	6.21	-0.10	-0.12	0.50	-0.50	-0.49	-0.54	1.02	0.99	1.00	0.99	0.99	0.99	-0.50	-0.49	-0.54	1.02	0.99	1.00	0.99	0.99	0.99
15026	8067	International Equity Fund	MSCI EAFE Index	13.85	12.71	20.53	0.09	0.78	0.02	0.42	1.44	0.11	1.04	1.00	1.06	0.87	0.85	0.92	0.43	1.44	0.14	1.04	1.00	1.06	0.87	0.85	0.92
8153	8067	International Equity Index Fund	MSCI EAFE Index	11.75	11.42	18.78	0.08	0.74	0.03	0.03	0.19	0.00	0.93	0.96	1.00	0.97	0.97	0.98	0.01	0.19	0.00	0.93	0.96	1.00	0.97	0.97	0.98
20053	19231	International Opportunities Fund	MSCI All Country World Index ex-USA	11.70	NA	NA	0.24	NA	NA	2.31	NA	NA	0.86	NA	NA	0.84	NA	NA	2.28	NA	NA	0.86	NA	NA	0.84	NA	NA
15959	8055	Large-Cap Growth Fund	Russell 1000 Growth Index	12.17	11.51	16.56	0.86	1.35	0.49	-0.92	-0.77	-0.52	1.06	1.09	1.05	0.92	0.91	0.96	-0.91	-0.76	-0.49	1.06	1.09	1.05	0.92	0.91	0.96
8137	8055	Large-Cap Growth Index Fund	Russell 1000 Growth Index	11.03	10.08	15.47	0.96	1.47	0.52	-0.33	-0.32	-0.31	1.00	1.00	1.00	1.00	1.00	1.00	-0.33	-0.32	-0.31	1.00	1.00	1.00	1.00	1.00	1.00
8124	8054	Large-Cap Value Fund	Russell 1000 Value Index	11.87	10.90	17.37	0.51	1.20	0.25	-1.68	-1.68	-0.85	1.10	1.08	1.07	0.96	0.97	0.97	-1.66	-1.67	-0.82	1.10	1.08	1.07	0.96	0.97	0.97
8139	8054	Large-Cap Value Index Fund	Russell 1000 Value Index	10.55	9.88	16.04	0.65	1.36	0.30	-0.30	-0.32	-0.28	1.00	1.00	1.00	1.00	1.00	1.00	-0.30	-0.32	-0.28	1.00	1.00	1.00	1.00	1.00	1.00
16522	17785	Lifecycle 2010 Fund	Lifecycle 2010 Fund Composite Index	5.37	5.19	8.95	0.73	1.30	0.46	-0.27	-0.35	-0.37	1.08	1.08	1.06	0.98	0.98	0.99	-0.25	-0.33	-0.34	1.08	1.08	1.06	0.98	0.98	0.99
16523	17786	Lifecycle 2015 Fund	Lifecycle 2015 Fund Composite Index	5.88	5.68	10.14	0.71	1.30	0.41	-0.28	-0.42	-0.36	1.07	1.08	1.06	0.98	0.98	0.99	-0.27	-0.41	-0.33	1.07	1.08	1.06	0.98	0.98	0.99
16524	17787	Lifecycle 2020 Fund	Lifecycle 2020 Fund Composite Index	6.62	6.36	11.38	0.68	1.29	0.36	-0.27	-0.43	-0.38	1.06	1.07	1.05	0.98	0.98	0.99	-0.26	-0.42	-0.35	1.06	1.07	1.05	0.98	0.98	0.99
16525	17788	Lifecycle 2025 Fund	Lifecycle 2025 Fund Composite Index	7.45	7.11	12.67	0.65	1.28	0.33	-0.35	-0.49	-0.40	1.05	1.06	1.05	0.98	0.98	0.99	-0.34	-0.48	-0.37	1.05	1.06	1.05	0.98	0.98	0.99
16526	17789	Lifecycle 2030 Fund	Lifecycle 2030 Fund Composite Index	8.35	7.91	13.95	0.62	1.25	0.30	-0.44	-0.62	-0.44	1.06	1.07	1.05	0.98	0.98	0.99	-0.43	-0.61	-0.41	1.06	1.07	1.05	0.98	0.98	0.99
16527	17790	Lifecycle 2035 Fund	Lifecycle 2035 Fund Composite Index	9.08	8.61	14.97	0.60	1.23	0.29	-0.39	-0.61	-0.49	1.04	1.05	1.04	0.98	0.98	0.99	-0.39	-0.60	-0.47	1.04	1.05	1.04	0.98	0.98	0.99
16528	17791	Lifecycle 2040 Fund	Lifecycle 2040 Fund Composite Index	9.87	9.25	15.22	0.57	1.20	0.30	-0.44	-0.64	-0.53	1.03	1.04	1.04	0.98	0.98	0.99	-0.43	-0.64	-0.50	1.03	1.04	1.04	0.98	0.98	0.99
17275	17814	Lifecycle 2045 Fund	Lifecycle 2045 Fund Composite Index	9.96	9.28	NA	0.59	1.20	NA	-0.44	-0.62	NA	1.03	1.04	NA	0.98	0.98	NA	-0.43	-0.61	NA	1.03	1.04	NA	0.98	0.98	NA
17295	17807	Lifecycle 2050 Fund	Lifecycle 2050 Fund Composite Index	10.01	9.33	NA	0.59	1.20	NA	-0.49	-0.70	NA	1.03	1.04	NA	0.98	0.98	NA	-0.49	-0.70	NA	1.03	1.04	NA	0.98	0.98	NA
18860	18834	Lifecycle 2055 Fund	Lifecycle 2055 Fund Composite Index	10.04	9.32	NA	0.60	1.21	NA	-0.50	-0.66	NA	1.03	1.04	NA	0.98	0.98	NA	-0.50	-0.66	NA	1.03	1.04	NA	0.98	0.98	NA
17317	17804	Lifecycle Retirement Income Fund	Lifecycle Retirement Income Fund Composite Index	4.95	4.72	NA	0.76	1.29	NA	-0.27	-0.27	NA	1.08	1.09	NA	0.98	0.98	NA	-0.25	-0.26	NA	1.08	1.09	NA	0.98	0.98	NA
18143	18048	Lifecycle Index 2010 Fund	Lifecycle Index 2010 Composite Benchmark	4.92	4.73	NA	0.74	1.32	NA	-0.26	-0.32	NA	0.99	0.99	NA	1.00	1.00	NA	-0.26	-0.32	NA	0.99	0.99	NA	1.00	1.00	NA
18146	18049	Lifecycle Index 2015 Fund	Lifecycle Index 2015 Composite Benchmark	5.41	5.17	NA	0.73	1.34	NA	-0.25	-0.30	NA	0.99	0.99	NA	1.00	1.00	NA	-0.26	-0.30	NA	0.99	0.99	NA	1.00	1.00	NA
18149	18053	Lifecycle Index 2020 Fund	Lifecycle Index 2020 Composite Benchmark	6.12	5.82	NA	0.70	1.34	NA	-0.21	-0.25	NA	0.98	0.99	NA	1.00	1.00	NA	-0.21	-0.25	NA	0.98	0.99	NA	1.00	1.00	NA
18152	18054	Lifecycle Index 2025 Fund	Lifecycle Index 2025 Composite Benchmark	6.89	6.53	NA	0.68	1.32	NA	-0.21	-0.25	NA	0.98	0.99	NA	1.00	1.00	NA	-0.21	-0.25	NA	0.98	0.99	NA	1.00	1.00	NA
18155	18055	Lifecycle Index 2030 Fund	Lifecycle Index 2030 Composite Benchmark	7.66	7.25	NA	0.66	1.32	NA	-0.18	-0.21	NA	0.98	0.98	NA	1.00	1.00	NA	-0.18	-0.21	NA	0.98	0.98	NA	1.00	1.00	NA
18158	18056	Lifecycle Index 2035 Fund	Lifecycle Index 2035 Composite Benchmark	8.49	7.99	NA	0.64	1.30	NA	-0.18	-0.19	NA	0.98	0.98	NA	1.00	1.00	NA	-0.19	-0.19	NA	0.98	0.98	NA	1.00	1.00	NA
18161	18057	Lifecycle Index 2040 Fund	Lifecycle Index 2040 Composite Benchmark	9.31	8.65	NA	0.61	1.26	NA	-0.17	-0.19	NA	0.98	0.98	NA	1.00	1.00	NA	-0.17	-0.20	NA	0.98	0.98	NA	1.00	1.00	NA
18164	18058	Lifecycle Index 2045 Fund	Lifecycle Index 2045 Composite Benchmark	9.41	8.73	NA	0.63	1.26	NA	-0.20	-0.24	NA	0.98	0.99	NA	1.00	1.00	NA	-0.20	-0.24	NA	0.98	0.99	NA	1.00	1.00	NA
18167	18059	Lifecycle Index 2050 Fund	Lifecycle Index 2050 Composite Benchmark	9.43	8.74	NA	0.64	1.27	NA	-0.17	-0.22	NA	0.98	0.99	NA	1.00	1.00	NA	-0.17	-0.22	NA	0.98	0.99	NA	1.00	1.00	NA
18878	18863	Lifecycle Index 2055 Fund	Lifecycle Index 2055 Composite Benchmark	9.49	8.76	NA	0.64	1.28	NA	-0.19	-0.19	NA	0.98	0.99	NA	1.00	1.00	NA	-0.19	-0.19	NA	0.98	0.99	NA	1.00	1.00	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 6/30/2017

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) 3 yr. Ann. Std Dev	(1) 5 yr. Ann. Std Dev	(1) 10 yr. Ann. Std Dev	(2) 3 yr. Sharpe Ratio	(2) 5 yr. Sharpe Ratio	(2) 10 yr. Sharpe Ratio	(3) 3 yr. Ann. Alpha	(3) 5 yr. Ann. Alpha	(3) 10 yr. Ann. Alpha	(4) 3 yr. Beta	(4) 5 yr. Beta	(4) 10 yr. Beta	(5) 3 yr. R-Squared	(5) 5 yr. R-Squared	(5) 10 yr. R-Squared	(6) 3 yr. Ann. Alpha (Risk Adj)	(6) 5 yr. Ann. Alpha (Risk Adj)	(6) 10 yr. Ann. Alpha (Risk Adj)	(7) 3 yr. Beta (Risk Adj)	(7) 5 yr. Beta (Risk Adj)	(7) 10 yr. Beta (Risk Adj)	(8) 3 yr. R-Squared (Risk Adj)	(8) 5 yr. R-Squared (Risk Adj)	(8) 10 yr. R-Squared (Risk Adj)
18170	18060	Lifecycle Index Retirement Income Fund	Lifecycle Index Retirement Income Composite Benchmark	4.50	4.31	NA	0.77	1.29	NA	-0.28	-0.32	NA	0.99	0.99	NA	1.00	1.00	NA	-0.28	-0.32	NA	0.99	0.99	NA	1.00	1.00	NA
19334	19291	Lifestyle Aggressive Growth Fund	Lifestyle Aggressive Composite Benchmark	10.90	10.18	NA	0.55	1.19	NA	-0.45	-0.39	NA	1.02	1.03	NA	0.98	0.97	NA	-0.45	-0.39	NA	1.02	1.03	NA	0.98	0.97	NA
19419	19386	Lifestyle Conservative Fund	Lifestyle Conservative Composite Benchmark	4.85	4.64	NA	0.77	1.35	NA	-0.37	-0.27	NA	1.09	1.10	NA	0.97	0.97	NA	-0.35	-0.25	NA	1.09	1.10	NA	0.97	0.97	NA
19375	19340	Lifestyle Growth Fund	Lifestyle Growth Composite Benchmark	8.92	8.36	NA	0.61	1.24	NA	-0.44	-0.38	NA	1.04	1.05	NA	0.98	0.97	NA	-0.43	-0.37	NA	1.04	1.05	NA	0.98	0.97	NA
19285	19246	Lifestyle Income Fund	Lifestyle Income Composite Benchmark	2.85	2.88	NA	0.93	1.38	NA	-0.23	-0.16	NA	1.11	1.14	NA	0.95	0.96	NA	-0.21	-0.14	NA	1.11	1.14	NA	0.95	0.96	NA
19461	19382	Lifestyle Moderate Fund	Lifestyle Moderate Composite Benchmark	6.96	6.55	NA	0.69	1.30	NA	-0.42	-0.32	NA	1.07	1.08	NA	0.97	0.97	NA	-0.41	-0.31	NA	1.07	1.08	NA	0.97	0.97	NA
15963	15073	Managed Allocation Fund	Managed Allocation Composite Index	6.89	6.48	10.66	0.72	1.32	0.42	-0.24	-0.31	-0.72	1.06	1.07	1.08	0.98	0.98	0.99	-0.23	-0.30	-0.68	1.06	1.07	1.08	0.98	0.98	0.99
8127	8062	Mid-Cap Growth Fund	Russell Midcap Growth Index	12.63	11.83	18.57	0.44	1.00	0.35	-2.33	-2.71	-0.87	1.06	1.06	1.01	0.96	0.96	0.98	-2.32	-2.70	-0.86	1.06	1.06	1.01	0.96	0.96	0.98
8130	8064	Mid-Cap Value Fund	Russell Midcap Value Index	11.18	10.27	17.33	0.50	1.26	0.33	-1.53	-1.53	-0.64	1.00	0.98	0.94	0.97	0.97	0.98	-1.54	-1.53	-0.67	1.00	0.98	0.94	0.97	0.97	0.98
15980		Money Market Fund	N/A	0.04	0.03	0.37	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
8158	15091	Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	14.00	12.73	24.83	0.61	0.70	0.20	0.01	-0.48	0.13	0.98	0.97	0.96	0.98	0.98	0.99	0.01	-0.48	0.11	0.98	0.97	0.96	0.98	0.98	0.99
8135	8065	S&P 500 Index Fund	S&P 500 Index	10.33	9.53	15.17	0.88	1.48	0.42	-0.30	-0.28	-0.29	1.00	1.00	1.00	1.00	1.00	1.00	-0.30	-0.28	-0.29	1.00	1.00	1.00	1.00	1.00	1.00
15967	21135	Short-Term Bond Fund	Barclays Short (1-3 Yr) Govt Credit Index	0.81	1.00	1.67	1.09	1.07	1.24	0.14	0.17	0.13	0.99	1.09	0.88	0.84	0.86	0.83	0.15	0.18	0.02	0.98	1.09	0.90	0.83	0.86	0.82
8147	8056	Small-Cap Blend Index Fund	Russell 2000 Index	15.34	13.83	20.08	0.47	0.98	0.31	0.02	0.01	-0.10	1.00	1.00	1.00	1.00	1.00	1.00	0.02	0.01	-0.10	1.00	1.00	1.00	1.00	1.00	1.00
8133	8056	Small-Cap Equity Fund	Russell 2000 Index	15.11	13.49	19.87	0.55	1.07	0.32	1.30	1.28	0.00	0.97	0.96	0.98	0.98	0.98	0.99	1.30	1.27	-0.01	0.97	0.96	0.98	0.98	0.98	0.99
19818	17364	Social Choice Bond Fund	Barclays Aggregate Bond Index	2.93	NA	NA	1.01	NA	NA	0.69	NA	NA	0.99	NA	NA	0.97	NA	NA	0.68	NA	NA	0.99	NA	NA	0.97	NA	NA
15028	8164	Social Choice Equity Fund	Russell 3000 Index	10.62	9.95	15.70	0.70	1.38	0.40	-1.35	-0.75	-0.41	0.99	1.01	0.99	0.99	0.99	0.99	-1.35	-0.74	-0.41	0.99	1.01	0.99	0.99	0.99	0.99
		Institutional Share Class Funds																									
15955	17364	Bond Fund	Barclays Aggregate Bond Index	2.89	3.03	3.25	1.00	1.03	1.33	0.68	0.98	0.53	0.97	1.03	0.95	0.95	0.94	0.92	0.68	0.98	0.49	0.97	1.02	0.96	0.95	0.94	0.92
18250	17364	Bond Index Fund	Barclays Aggregate Bond Index	3.07	2.98	NA	0.71	0.64	NA	-0.21	-0.23	NA	1.05	1.04	NA	0.99	0.99	NA	-0.20	-0.23	NA	1.05	1.04	NA	0.99	0.99	NA
15984	17364	Bond Plus Fund	Barclays Aggregate Bond Index	2.86	2.98	3.35	1.05	1.12	1.30	0.91	1.29	0.85	0.91	0.98	0.89	0.86	0.88	0.76	0.90	1.29	0.74	0.91	0.98	0.91	0.86	0.88	0.76
18673	15615	Emerging Markets Equity Fund	MSCI Emerging Markets Index	15.33	13.95	NA	0.01	0.27	NA	-0.68	0.25	NA	0.91	0.93	NA	0.92	0.92	NA	-0.70	0.24	NA	0.91	0.93	NA	0.92	0.92	NA
18677	15615	Emerging Markets Equity Index Fund	MSCI Emerging Markets Index	15.86	14.34	NA	0.06	0.24	NA	0.10	-0.25	NA	0.98	0.99	NA	0.99	0.99	NA	0.09	-0.25	NA	0.98	0.99	NA	0.99	0.99	NA
17339	8067	Enhanced Intl Equity Index Fund	MSCI EAFE Index	11.37	11.24	NA	0.11	0.82	NA	0.35	1.11	NA	0.89	0.93	NA	0.95	0.95	NA	0.32	1.11	NA	0.89	0.93	NA	0.95	0.95	NA
17335	8055	Enhanced Large-Cap Growth Index Fund	Russell 1000 Growth Index	11.04	10.21	NA	1.00	1.40	NA	0.16	-0.87	NA	1.00	1.01	NA	0.99	0.99	NA	0.15	-0.87	NA	1.00	1.01	NA	0.99	0.99	NA
17337	8054	Enhanced Large-Cap Value Index Fund	Russell 1000 Value Index	10.68	10.12	NA	0.57	1.26	NA	-1.01	-1.09	NA	1.01	1.02	NA	0.99	0.99	NA	-1.00	-1.09	NA	1.01	1.02	NA	0.99	0.99	NA
15991	8060	Equity Index Fund	Russell 3000 Index	10.62	9.78	15.71	0.84	1.47	0.43	-0.01	0.01	0.00	1.00	1.00	1.00	1.00	1.00	1.00	-0.01	0.01	0.00	1.00	1.00	1.00	1.00	1.00	1.00
19211	19201	Global Natural Resources Fund	MSCI AC World Index Commodity Producers Sec. Cap. Index	17.86	15.55	NA	-0.51	-0.22	NA	-3.41	-2.09	NA	0.83	0.86	NA	0.74	0.78	NA	-3.44	-2.11	NA	0.83	0.86	NA	0.74	0.78	NA
15023	8065	Growth & Income Fund	S&P 500 Index	11.05	10.29	14.89	0.79	1.40	0.53	-0.94	-0.70	1.34	1.04	1.05	0.96	0.96	0.95	0.97	-0.93	-0.69	1.32	1.04	1.05	0.96	0.96	0.95	0.97
15978	17377	High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	6.10	5.41	9.05	0.64	1.13	0.75	-0.87	-1.03	0.38	1.10	1.10	0.96	0.97	0.97	0.97	-0.85	-1.01	0.36	1.10	1.10	0.96	0.97	0.97	0.97
8160	22352	Inflation-Linked Bond Fund	Barclays TIPS 1-10 Year Index	3.59	4.33	6.17	-0.03	-0.06	0.55	-0.24	-0.22	-0.26	1.02	0.99	0.99	0.99	0.99	0.99	-0.24	-0.23	-0.26	1.02	0.99	0.99	0.99	0.99	0.99
15025	8067	International Equity Fund	MSCI EAFE Index	13.84	12.71	20.53	0.11	0.81	0.03	0.65	1.67	0.35	1.04	1.00	1.06	0.87	0.86	0.92	0.66	1.67	0.38	1.04	1.00	1.06	0.87	0.85	0.92
8152	8067	International Equity Index Fund	MSCI EAFE Index	11.75	11.42	18.78	0.10	0.76	0.04	0.29	0.46	0.25	0.93	0.96	1.00	0.97	0.97	0.98	0.27	0.45	0.25	0.93	0.96	1.00	0.97	0.97	0.98
20051	19231	International Opportunities Fund	MSCI All Country World Index ex-USA	11.76	NA	NA	0.26	NA	NA	2.56	NA	NA	0.87	NA	NA	0.84	NA	NA	2.54	NA	NA	0.87	NA	NA	0.84	NA	NA
15957	8055	Large-Cap Growth Fund	Russell 1000 Growth Index	12.18	11.52	16.55	0.89	1.38	0.51	-0.60	-0.49	-0.25	1.06	1.09	1.05	0.92	0.91	0.96	-0.59	-0.48	-0.21	1.06	1.09	1.05	0.92	0.91	0.96
8136	8055	Large-Cap Growth Index Fund	Russell 1000 Growth Index	11.02	10.07	15.47	0.98	1.50	0.54	-0.06	-0.04	-0.05	1.00	1.00	1.00	1.00	1.00	1.00	-0.06	-0.04	-0.06	1.00	1.00	1.00	1.00	1.00	1.00
8122	8054	Large-Cap Value Fund	Russell 1000 Value Index	11.89	10.92	17.40	0.53	1.22	0.27	-1.43	-1.47	-0.61	1.11	1.08	1.07	0.96	0.96	0.97	-1.41	-1.46	-0.58	1.11	1.08	1.07	0.96	0.96	0.97
8138	8054	Large-Cap Value Index Fund	Russell 1000 Value Index	10.52	9.87	16.03	0.68	1.39	0.31	-0.03	-0.05	-0.04	1.00	1.00	1.00	1.00	1.00	1.00	-0.03	-0.05	-0.04	1.00	1.00	1.00	1.00	1.00	1.00
16515	17785	Lifecycle 2010 Fund	Lifecycle 2010 Fund Composite Index	5.38	5.18	8.96	0.77	1.36	0.49	-0.03	-0.08	-0.14	1.08	1.08	1.06	0.98	0.98	0.99	-0.02	-0.07	-0.10	1.08	1.08	1.06	0.98	0.98	0.99
16516	17786	Lifecycle 2015 Fund	Lifecycle 2015 Fund Composite Index	5.84	5.65	10.11	0.76	1.36	0.43	-0.01	-0.14	-0.11	1.06	1.08	1.06	0.98	0.98	0.99	0.01	-0.13	-0.08	1.06	1.08	1.06	0.98	0.98	0.99
16517	17787	Lifecycle 2020 Fund	Lifecycle 2020 Fund Composite Index	6.58	6.33	11.37	0.73	1.34	0.39	0.03	-0.12	-0.12	1.05	1.06	1.05	0.98	0.98	0.99	0.04	-0.11	-0.09	1.05	1.06	1.05	0.98	0.98	0.99
16518	17788	Lifecycle 2025 Fund	Lifecycle 2025 Fund Composite Index	7.45	7.10	12.68	0.69	1.32	0.35	-0.06	-0.22	-0.14	1.05	1.06	1.05	0.98	0.98	0.99	-0.05	-0.21	-0.11	1.05	1.06	1.05	0.98	0.98	0.99
16519	17789	Lifecycle 2030 Fund	Lifecycle 2030 Fund Composite Index	8.32	7.89	13.94	0.65	1.29	0.31	-0.18	-0.35	-0.19	1.05	1.06	1.05	0.98	0.98	0.99	-0.17	-0.34	-0.16	1.05	1.06	1.05	0.98	0.98	0.99
16520	17790	Lifecycle 2035 Fund	Lifecycle 2035 Fund Composite Index	9.13	8.65	15.00	0.62	1.26	0.30	-0.18	-0.42	-0.25	1.05	1.06	1.05	0.98	0.98	0.99	-0.17	-0.41	-0.22	1.05	1.06	1.05	0.98	0.98	0.99
16521	17791	Lifecycle 2040 Fund	Lifecycle 2040 Fund Composite Index	9.92	9.29	15.23	0.60	1.22	0.31	-0.21	-0.44	-0.27	1.04	1.05	1.04	0.98	0.98	0.99	-0.20	-0.43	-0.25	1.04	1.05	1.04	0.98	0.98	0.99
17274	17814	Lifecycle 2045 Fund	Lifecycle 2045 Fund Composite Index	10.00	9.32	NA	0.61	1.22	NA	-0.23	-0.45	NA	1.04	1.05	NA	0.98	0.98	NA	-0.23	-0.45	NA	1.04	1.05	NA	0.98	0.98	NA
17294	17807	Lifecycle 2050 Fund	Lifecycle 2050 Fund Composite Index	9.99	9.32	NA	0.62	1.23	NA	-0.23	-0.43	NA	1.03	1.04	NA	0.98	0.98	NA	-0.22	-0.42	NA	1.03	1.04	NA	0.98	0.98	NA
18861	18834	Lifecycle 2055 Fund	Lifecycle 2055 Fund Composite Index	10.07	9.36	NA	0.62	1.23	NA	-0.29	-0.45	NA	1.04	1.04	NA	0.98	0.98	NA	-0.28	-0.44	NA	1.04	1.04	NA	0.98	0.98	NA
17315	17804	Lifecycle Retirement Income Fund	Lifecycle Retirement Income Fund Composite Index	4.93	4.71	NA	0.81	1.35	NA	-0.02	0.00	NA	1.08	1.08	NA	0.98	0.98	NA	-0.01	0.02	NA	1.08	1.08	NA	0.98	0.98	NA
18142	18048	Lifecycle Index 2010 Fund	Lifecycle Index 2010 Composite Benchmark	4.90	4.70	NA	0.80	1.38	NA	0.02	-0.03	NA	0.98	0.98	NA	1.00	1.00	NA	0.02	-0.04	NA	0.98	0.98	NA	1.00	1.00	NA
18145	18049	Lifecycle Index 2015 Fund	Lifecycle Index 2015 Composite Benchmark	5.38	5.16	NA	0.78	1.39	NA	0.02	-0.03	NA	0.98	0.99	NA	1.00	1.00	NA	0.02	-0.03	NA	0.98	0.99	NA	1.00	1.00	NA
18148	18053	Lifecycle Index 2020 Fund	Lifecycle Index 2020 Composite Benchmark	6.12	5.83	NA	0.75	1.38	NA	0.03	-0.01	NA	0.98	0.99	NA	1.00	1.00	NA	0.03	-0.01	NA	0.98	0.99	NA	1.00	1.00	NA
18151	18054	Lifecycle Index 2025 Fund	Lifecycle Index 2025 Composite Benchmark	6.89	6.52	NA	0.72	1.37	NA	0.06	0.02	NA	0.98	0.98	NA	1.00	1.00	NA	0.05	0.02	NA	0.98	0.98	NA	1.00	1.00	NA
18154	18055	Lifecycle Index 2030 Fund	Lifecycle Index 2030 Composite Benchmark	7.73	7.27	NA	0.69	1.35	NA	0.05	0.00	NA	0.99	0.99	NA	1.00	1.00	NA	0.04	0.00	NA	0.99	0.99	NA	1.00	1.00	NA
18157	18056	Lifecycle Index 2035 Fund	Lifecycle Index 2035 Composite Benchmark	8.49	8.01	NA	0.67	1.33	NA	0.08	0.03	NA	0.98	0.99	NA	1.00	1.00	NA	0.08	0.03	NA	0.98	0.99	NA	1.00	1.00	NA
18160	18057	Lifecycle Index 2040 Fund	Lifecycle Index 2040 Composite Benchmark	9.32	8.66	NA	0.64	1.29	NA	0.06	0.05	NA	0.98	0.99	NA	1.00	1.00	NA	0.06	0.04	NA	0.98	0.99	NA	1.00	1.00	NA
18163	18058	Lifecycle Index 2045 Fund	Lifecycle Index 2045 Composite Benchmark	9.39	8.73	NA	0.66	1.30	NA	0.07	0.02	NA	0.98	0.99	NA	1.00	1.00	NA	0.06	0.02	NA	0.98	0.99	NA	1.00	1.00	NA
18166	18059	Lifecycle Index 2050 Fund	Lifecycle Index 2050 Composite Benchmark	9.43	8.74	NA	0.67	1.30	NA	0.08	0.04	NA	0.98	0.99	NA	1.00	1.00	NA	0.08	0.04	NA	0.98	0.99	NA	1.00	1.00	NA
18879	18863	Lifecycle Index 2055 Fund	Lifecycle Index 2055 Composite Benchmark	9.44	8.73	NA	0.67	1.31	NA	0.09	0.09	NA	0.98	0.98	NA	1.00	1.00	NA	0.08	0.09	NA	0.98	0.98	NA	1.00	1.00	NA
18169	18060	Lifecycle Index Retirement Income Fund	Lifecycle Index Retirement Income Composite Benchmark	4.51	4.30	NA	0.82	1.35	NA	-0.04	-0.06	NA	0.99	0.99	NA	0.99	0.99	NA	-0.04	-0.06	NA	0.99	0.99	NA	0.99	0.99	NA
19332	19291	Lifestyle Aggressive Growth Fund	Lifestyle Aggressive Composite Benchmark	10.89	10.17	NA	0.58	1.22	NA	-0.20	-0.13	NA	1.01	1.03	NA	0.98	0.97	NA	-0.19	-0.13	NA	1.01	1.03	NA	0.98	0.97	NA
19408	19386	Lifestyle Conservative Fund	Lifestyle Conservative Composite Benchmark	4.82	4.63	NA	0.83	1.41	NA	-0.07	0.01	NA	1.08	1.10	NA	0.97	0.97	NA	-0.06	0.02	NA	1.08	1.10	NA	0.97	0.97	NA
19283	19246	Lifestyle Income Fund	Lifestyle Income Composite Benchmark	2.88	2.87	NA	1.01	1.48	NA	-0.02	0.09	NA	1.12	1.14	NA	0.96	0.96	NA	0.01	0.12	NA	1.12	1.14	NA	0.96	0.96	NA
19373	19340	Lifestyle Growth Fund	Lifestyle Growth Composite Benchmark	8.86	8.29	NA	0.65	1.28	NA	-0.12	-0.04	NA	1.03	1.04	NA	0.97	0.97	NA	-0.11	-0.03	NA	1.03	1.04	NA	0.97	0.97	NA
19458	19382	Lifestyle Moderate Fund	Lifestyle Moderate Composite Benchmark	6.97	6.56	NA	0.72	1.34	NA	-0.19	-0.09	NA	1.07	1.08	NA	0.97	0.97	NA	-0.17	-0.08	NA	1.07	1.08	NA	0.97	0.97	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 6/30/2017

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) 3 yr. Ann. Std Dev	(1) 5 yr. Ann. Std Dev	(1) 10 yr. Ann. Std Dev	(2) 3 yr. Sharpe Ratio	(2) 5 yr. Sharpe Ratio	(2) 10 yr. Sharpe Ratio	(3) 3 yr. Ann. Alpha	(3) 5 yr. Ann. Alpha	(3) 10 yr. Ann. Alpha	(4) 3 yr. Beta	(4) 5 yr. Beta	(4) 10 yr. Beta	(5) 3 yr. R-Squared	(5) 5 yr. R-Squared	(5) 10 yr. R-Squared	(6) 3 yr. Ann. Alpha (Risk Adj)	(6) 5 yr. Ann. Alpha (Risk Adj)	(6) 10 yr. Ann. Alpha (Risk Adj)	(7) 3 yr. Beta (Risk Adj)	(7) 5 yr. Beta (Risk Adj)	(7) 10 yr. Beta (Risk Adj)	(8) 3 yr. R-Squared (Risk Adj)	(8) 5 yr. R-Squared (Risk Adj)	(8) 10 yr. R-Squared (Risk Adj)
15961	15073	Managed Allocation Fund	Managed Allocation Composite Index	6.89	6.51	10.70	0.76	1.36	0.45	0.02	-0.07	-0.48	1.06	1.08	1.08	0.98	0.98	0.99	0.03	-0.06	-0.44	1.06	1.08	1.08	0.98	0.98	0.99
8125	8062	Mid-Cap Growth Fund	Russell Midcap Growth Index	12.59	11.80	18.58	0.46	1.03	0.36	-2.04	-2.43	-0.62	1.06	1.06	1.01	0.97	0.96	0.98	-2.03	-2.42	-0.61	1.06	1.06	1.01	0.97	0.96	0.98
8128	8064	Mid-Cap Value Fund	Russell Midcap Value Index	11.18	10.27	17.34	0.52	1.29	0.34	-1.29	-1.28	-0.39	1.00	0.98	0.94	0.97	0.97	0.98	-1.29	-1.28	-0.42	1.00	0.98	0.94	0.97	0.97	0.98
15988		Money Market Fund	N/A	0.06	0.05	0.38	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
8156	15091	Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	13.99	12.71	24.84	0.63	0.73	0.21	0.27	-0.21	0.35	0.98	0.96	0.96	0.98	0.97	0.99	0.27	-0.22	0.33	0.98	0.96	0.96	0.98	0.97	0.99
8134	8065	S&P 500 Index Fund	S&P 500 Index	10.35	9.55	15.18	0.90	1.51	0.44	-0.07	-0.06	-0.04	1.00	1.00	1.00	1.00	1.00	1.00	-0.07	-0.06	-0.05	1.00	1.00	1.00	1.00	1.00	1.00
15965	21135	Short-Term Bond Fund	Barclays Short (1-3 Yr) Govt Credit Index	0.79	1.00	1.67	1.44	1.32	1.39	0.43	0.42	0.38	0.95	1.09	0.88	0.82	0.85	0.83	0.43	0.44	0.26	0.94	1.08	0.90	0.81	0.85	0.81
8146	8056	Small-Cap Blend Index Fund	Russell 2000 Index	15.37	13.86	20.08	0.48	1.00	0.33	0.26	0.24	0.15	1.00	1.00	1.00	1.00	1.00	1.00	0.26	0.24	0.15	1.00	1.00	1.00	1.00	1.00	1.00
8131	8056	Small-Cap Equity Fund	Russell 2000 Index	15.10	13.48	19.90	0.57	1.09	0.33	1.57	1.54	0.24	0.97	0.96	0.98	0.98	0.98	0.99	1.57	1.53	0.22	0.97	0.96	0.98	0.98	0.98	0.99
19816	17364	Social Choice Bond Fund	Barclays Aggregate Bond Index	2.98	NA	NA	1.08	NA	NA	0.89	NA	NA	1.01	NA	NA	0.97	NA	NA	0.89	NA	NA	1.01	NA	NA	0.97	NA	NA
15027	8164	Social Choice Equity Fund	Russell 3000 Index	10.61	9.94	15.67	0.72	1.41	0.42	-1.10	-0.48	-0.15	0.99	1.01	0.99	0.99	0.99	0.99	-1.10	-0.48	-0.15	0.99	1.01	0.99	0.99	0.99	0.99
15971	17372	Tax-Exempt Bond Fund	Barclays 10 Year Municipal Bond Index	3.42	3.68	4.79	0.70	0.57	0.75	-0.51	-0.81	-0.89	0.88	0.90	0.98	0.97	0.96	0.96	-0.53	-0.83	-0.90	0.88	0.90	0.98	0.97	0.96	0.96
		Retail Share Class Funds																									
15969	17364	Bond Fund	Barclays Aggregate Bond Index	2.87	3.03	3.24	0.91	0.92	1.25	0.42	0.66	0.31	0.97	1.02	0.95	0.95	0.93	0.92	0.41	0.67	0.27	0.96	1.02	0.95	0.95	0.93	0.92
18251	17364	Bond Index Fund	Barclays Aggregate Bond Index	3.07	2.99	NA	0.59	0.52	NA	-0.57	-0.58	NA	1.05	1.04	NA	1.00	1.00	NA	-0.56	-0.57	NA	1.05	1.04	NA	1.00	1.00	NA
15974	17364	Bond Plus Fund	Barclays Aggregate Bond Index	2.85	2.98	3.34	0.94	1.01	1.23	0.63	0.98	0.61	0.91	0.98	0.89	0.86	0.88	0.76	0.61	0.98	0.50	0.91	0.97	0.90	0.86	0.88	0.76
18674	15615	Emerging Markets Equity Fund	MSCI Emerging Markets Index	15.36	13.97	NA	-0.02	0.24	NA	-1.06	-0.15	NA	0.91	0.93	NA	0.91	0.92	NA	-1.08	-0.16	NA	0.91	0.93	NA	0.91	0.92	NA
18678	15615	Emerging Markets Equity Index Fund	MSCI Emerging Markets Index	15.84	14.33	NA	0.03	0.22	NA	-0.32	-0.64	NA	0.98	0.99	NA	0.99	0.99	NA	-0.32	-0.64	NA	0.98	0.99	NA	0.99	0.99	NA
15992	8060	Equity Index Fund	Russell 3000 Index	10.65	9.82	15.72	0.80	1.43	0.41	-0.32	-0.35	-0.25	1.00	1.00	1.00	1.00	1.00	1.00	-0.32	-0.35	-0.25	1.00	1.00	1.00	1.00	1.00	1.00
19212	19201	Global Natural Resources Fund	MSCI AC World Index Commodity Producers Sec. Cap. Index	17.89	15.58	NA	-0.53	-0.25	NA	-3.75	-2.46	NA	0.83	0.86	NA	0.74	0.78	NA	-3.78	-2.48	NA	0.83	0.86	NA	0.74	0.78	NA
15985	8065	Growth & Income Fund	S&P 500 Index	11.05	10.28	14.89	0.76	1.36	0.51	-1.25	-1.00	1.05	1.04	1.05	0.96	0.96	0.95	0.97	-1.24	-0.99	1.04	1.04	1.05	0.96	0.96	0.95	0.97
15951	17377	High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	6.01	5.34	9.01	0.60	1.08	0.73	-1.06	-1.22	0.18	1.08	1.08	0.96	0.97	0.97	0.97	-1.04	-1.21	0.16	1.08	1.08	0.96	0.97	0.97	0.97
8161	22352	Inflation-Linked Bond Fund	Barclays TIPS 1-10 Year Index	3.56	4.31	6.17	-0.11	-0.14	0.50	-0.53	-0.54	-0.50	1.01	0.99	0.99	0.99	0.99	0.99	-0.53	-0.54	-0.50	1.01	0.99	0.99	0.99	0.99	0.99
15986	8067	International Equity Fund	MSCI EAFE Index	13.76	12.66	20.52	0.09	0.78	0.02	0.39	1.38	0.07	1.03	1.00	1.06	0.87	0.85	0.92	0.39	1.38	0.10	1.03	1.00	1.06	0.87	0.85	0.92
20052	19231	International Opportunities Fund	MSCI All Country World Index ex-USA	11.76	NA	NA	0.22	NA	NA	2.15	NA	NA	0.87	NA	NA	0.84	NA	NA	2.12	NA	NA	0.87	NA	NA	0.84	NA	NA
15958	8055	Large-Cap Growth Fund	Russell 1000 Growth Index	12.21	11.55	16.55	0.86	1.34	0.49	-0.97	-0.89	-0.55	1.06	1.09	1.05	0.92	0.91	0.96	-0.96	-0.88	-0.51	1.06	1.09	1.05	0.92	0.91	0.96
8123	8054	Large-Cap Value Fund	Russell 1000 Value Index	11.88	10.90	17.38	0.50	1.19	0.25	-1.76	-1.77	-0.88	1.11	1.08	1.07	0.96	0.96	0.97	-1.74	-1.75	-0.85	1.11	1.08	1.07	0.96	0.96	0.97
17316	17804	Lifecycle Retirement Income Fund	Retirement Income Fund Composite Index	4.91	4.70	NA	0.76	1.30	NA	-0.25	-0.24	NA	1.08	1.08	NA	0.98	0.98	NA	-0.23	-0.22	NA	1.08	1.08	NA	0.98	0.98	NA
19333	19291	Lifestyle Aggressive Growth Fund	Lifestyle Aggressive Composite Benchmark	10.88	10.17	NA	0.55	1.19	NA	-0.51	-0.45	NA	1.01	1.03	NA	0.98	0.97	NA	-0.51	-0.44	NA	1.01	1.03	NA	0.98	0.97	NA
19418	19386	Lifestyle Conservative Fund	Lifestyle Conservative Composite Benchmark	4.81	4.62	NA	0.77	1.35	NA	-0.33	-0.25	NA	1.08	1.10	NA	0.97	0.97	NA	-0.31	-0.23	NA	1.08	1.10	NA	0.97	0.97	NA
19374	19340	Lifestyle Growth Fund	Lifestyle Growth Composite Benchmark	8.90	8.34	NA	0.61	1.23	NA	-0.45	-0.41	NA	1.04	1.05	NA	0.98	0.97	NA	-0.44	-0.40	NA	1.04	1.05	NA	0.98	0.97	NA
19284	19246	Lifestyle Income Fund	Lifestyle Income Composite Benchmark	2.83	2.85	NA	0.93	1.38	NA	-0.24	-0.16	NA	1.11	1.13	NA	0.96	0.96	NA	-0.22	-0.13	NA	1.10	1.13	NA	0.96	0.96	NA
19460	19382	Lifestyle Moderate Fund	Lifestyle Moderate Composite Benchmark	6.96	6.54	NA	0.69	1.30	NA	-0.42	-0.31	NA	1.07	1.08	NA	0.97	0.97	NA	-0.40	-0.30	NA	1.07	1.08	NA	0.97	0.97	NA
15962	15073	Managed Allocation Fund	Managed Allocation Composite Index	6.88	6.48	10.67	0.72	1.32	0.43	-0.23	-0.28	-0.66	1.06	1.07	1.08	0.98	0.98	0.99	-0.22	-0.27	-0.62	1.06	1.07	1.08	0.98	0.98	0.99
8126	8062	Mid-Cap Growth Fund	Russell Midcap Growth Index	12.62	11.83	18.58	0.43	0.99	0.35	-2.39	-2.79	-0.90	1.06	1.06	1.01	0.96	0.96	0.98	-2.38	-2.78	-0.89	1.06	1.06	1.01	0.96	0.96	0.98
8129	8064	Mid-Cap Value Fund	Russell Midcap Value Index	11.19	10.27	17.34	0.49	1.25	0.33	-1.58	-1.59	-0.64	1.00	0.98	0.94	0.97	0.97	0.98	-1.58	-1.59	-0.67	1.00	0.98	0.94	0.97	0.97	0.98
15979		Money Market Fund	N/A	0.03	0.02	0.38	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	14.02	12.74	24.84	0.60	0.70	0.19	-0.06	-0.56	0.09	0.98	0.97	0.96	0.98	0.97	0.99	-0.07	-0.56	0.08	0.98	0.97	0.96	0.98	0.97	0.99
15966	21135	Short-Term Bond Fund	Barclays Short (1-3 Yr) Govt Credit Index	0.80	0.99	1.65	1.03	1.02	1.26	0.14	0.14	0.14	0.94	1.06	0.87	0.76	0.83	0.84	0.13	0.15	0.03	0.92	1.05	0.89	0.76	0.83	0.83
8132	8056	Small-Cap Equity Fund	Russell 2000 Index	15.06	13.45	19.89	0.55	1.07	0.31	1.25	1.22	-0.06	0.97	0.96	0.98	0.98	0.98	0.99	1.24	1.21	-0.07	0.97	0.96	0.98	0.98	0.98	0.99
19817	17364	Social Choice Bond Fund	Barclays Aggregate Bond Index	2.88	NA	NA	1.01	NA	NA	0.66	NA	NA	0.98	NA	NA	0.97	NA	NA	0.66	NA	NA	0.98	NA	NA	0.97	NA	NA
15982	8164	Social Choice Equity Fund	Russell 3000 Index	10.63	9.94	15.70	0.69	1.38	0.40	-1.36	-0.76	-0.39	1.00	1.01	0.99	0.99	0.99	0.99	-1.36	-0.76	-0.39	1.00	1.01	0.99	0.99	0.99	0.99
15972	17372	Tax-Exempt Bond Fund	Barclays 10 Year Municipal Bond Index	3.38	3.66	4.77	0.62	0.49	0.70	-0.77	-1.09	-1.07	0.87	0.90	0.97	0.97	0.96	0.96	-0.80	-1.10	-1.09	0.87	0.90	0.97	0.97	0.96	0.96
		Premier Share Class Funds																									
18246	17364	Bond Fund	Barclays Aggregate Bond Index	2.83	3.00	NA	0.97	0.98	NA	0.58	0.84	NA	0.95	1.01	NA	0.95	0.93	NA	0.58	0.84	NA	0.95	1.01	NA	0.95	0.93	NA
18253	17364	Bond Index Fund	Barclays Aggregate Bond Index	3.07	2.98	NA	0.65	0.58	NA	-0.40	-0.40	NA	1.05	1.04	NA	0.99	0.99	NA	-0.39	-0.39	NA	1.05	1.04	NA	0.99	0.99	NA
18248	17364	Bond Plus Fund	Barclays Aggregate Bond Index	2.89	3.01	NA	0.98	1.05	NA	0.74	1.12	NA	0.92	0.99	NA	0.86	0.88	NA	0.73	1.12	NA	0.92	0.99	NA	0.86	0.88	NA
18676	15615	Emerging Markets Equity Fund	MSCI Emerging Markets Index	15.36	13.98	NA	0.00	0.26	NA	-0.82	0.08	NA	0.92	0.93	NA	0.92	0.92	NA	-0.83	0.07	NA	0.92	0.93	NA	0.92	0.92	NA
18680	15615	Emerging Markets Equity Index Fund	MSCI Emerging Markets Index	15.94	14.41	NA	0.05	0.23	NA	-0.06	-0.41	NA	0.99	0.99	NA	0.99	0.99	NA	-0.06	-0.41	NA	0.99	0.99	NA	0.99	0.99	NA
18241	8060	Equity Index Fund	Russell 3000 Index	10.63	9.80	NA	0.82	1.45	NA	-0.18	-0.18	NA	1.00	1.00	NA	1.00	1.00	NA	-0.18	-0.18	NA	1.00	1.00	NA	1.00	1.00	NA
19214	19201	Global Natural Resources Fund	MSCI AC World Index Commodity Producers Sec. Cap. Index	17.91	15.59	NA	-0.51	-0.23	NA	-3.46	-2.20	NA	0.84	0.87	NA	0.74	0.78	NA	-3.49	-2.22	NA	0.84	0.87	NA	0.74	0.78	NA
18233	8065	Growth & Income Fund	S&P 500 Index	11.08	10.30	NA	0.78	1.38	NA	-1.12	-0.85	NA	1.05	1.05	NA	0.96	0.95	NA	-1.11	-0.84	NA	1.05	1.05	NA	0.96	0.95	NA
18247	17377	High-Yield Fund	BofA ML BB-B Cash Pay Issuer Constrained Index	6.05	5.38	NA	0.62	1.10	NA	-0.97	-1.15	NA	1.09	1.09	NA	0.97	0.97	NA	-0.95	-1.14	NA	1.09	1.09	NA	0.97	0.97	NA
18242	22352	Inflation-Linked Bond Fund	Barclays TIPS 1-10 Year Index	3.60	4.35	NA	-0.07	-0.10	NA	-0.40	-0.38	NA	1.02	1.00	NA	0.99	0.99	NA	-0.39	-0.38	NA	1.02	1.00	NA	0.99	0.99	NA
18235	8067	International Equity Fund	MSCI EAFE Index	13.84	12.71	NA	0.10	0.79	NA	0.52	1.52	NA	1.04	1.00	NA	0.87	0.85	NA	0.53	1.52	NA	1.04	1.00	NA	0.87	0.85	NA
18240	8067	International Equity Index Fund	MSCI EAFE Index	11.73	11.40	NA	0.09	0.75	NA	0.12	0.31	NA	0.93	0.96	NA	0.97	0.97	NA	0.11	0.31	NA	0.93	0.96	NA	0.97	0.97	NA
20054	19231	International Opportunities Fund	MSCI All Country World Index ex-USA	11.74	NA	NA	0.25	NA	NA	2.40	NA	NA	0.87	NA	NA	0.84	NA	NA	2.37	NA	NA	0.87	NA	NA	0.84	NA	NA
18244	8055	Large-Cap Growth Fund	Russell 1000 Growth Index	12.19	11.53	NA	0.87	1.37	NA	-0.77	-0.65	NA	1.06	1.09	NA	0.92	0.91	NA	-0.76	-0.64	NA	1.06	1.09	NA	0.92	0.91	NA
18236	8054	Large-Cap Value Fund	Russell 1000 Value Index	11.88	10.92	NA	0.52	1.20	NA	-1.58	-1.61	NA	1.11	1.08	NA	0.96	0.96	NA	-1.56	-1.60	NA	1.11	1.08	NA	0.96	0.96	NA
18264	17785	Lifecycle 2010 Fund	Lifecycle 2010 Fund Composite Index	5.38	5.20	NA	0.75	1.32	NA	-0.18	-0.26	NA	1.08	1.09	NA	0.98	0.98	NA	-0.17	-0.25	NA	1.08	1.09	NA	0.98	0.98	NA
18265	17786	Lifecycle 2015 Fund	Lifecycle 2015 Fund Composite Index	5.85	5.63	NA	0.73	1.33	NA	-0.18	-0.26	NA	1.07	1.07	NA	0.98	0.98	NA	-0.16	-0.25	NA	1.07	1.07	NA	0.98	0.98	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 6/30/2017

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) 3 yr. Ann. Std Dev	(1) 5 yr. Ann. Std Dev	(1) 10 yr. Ann. Std Dev	(2) 3 yr. Sharpe Ratio	(2) 5 yr. Sharpe Ratio	(2) 10 yr. Sharpe Ratio	(3) 3 yr. Ann. Alpha	(3) 5 yr. Ann. Alpha	(3) 10 yr. Ann. Alpha	(4) 3 yr. Beta	(4) 5 yr. Beta	(4) 10 yr. Beta	(5) 3 yr. R-Squared	(5) 5 yr. R-Squared	(5) 10 yr. R-Squared	(6) 3 yr. Ann. Alpha (Risk Adj)	(6) 5 yr. Ann. Alpha (Risk Adj)	(6) 10 yr. Ann. Alpha (Risk Adj)	(7) 3 yr. Beta (Risk Adj)	(7) 5 yr. Beta (Risk Adj)	(7) 10 yr. Beta (Risk Adj)	(8) 3 yr. R-Squared (Risk Adj)	(8) 5 yr. R-Squared (Risk Adj)	(8) 10 yr. R-Squared (Risk Adj)
18266	17787	Lifecycle 2020 Fund	Lifecycle 2020 Fund Composite Index	6.62	6.37	NA	0.70	1.31	NA	-0.16	-0.33	NA	1.06	1.07	NA	0.98	0.98	NA	-0.15	-0.32	NA	1.06	1.07	NA	0.98	0.98	NA
18267	17788	Lifecycle 2025 Fund	Lifecycle 2025 Fund Composite Index	7.45	7.12	NA	0.67	1.29	NA	-0.22	-0.40	NA	1.05	1.07	NA	0.98	0.98	NA	-0.21	-0.39	NA	1.05	1.07	NA	0.98	0.98	NA
18268	17789	Lifecycle 2030 Fund	Lifecycle 2030 Fund Composite Index	8.31	7.89	NA	0.64	1.26	NA	-0.30	-0.49	NA	1.05	1.06	NA	0.98	0.98	NA	-0.29	-0.49	NA	1.05	1.06	NA	0.98	0.98	NA
18269	17790	Lifecycle 2035 Fund	Lifecycle 2035 Fund Composite Index	9.12	8.64	NA	0.61	1.24	NA	-0.34	-0.57	NA	1.05	1.06	NA	0.98	0.98	NA	-0.33	-0.56	NA	1.05	1.06	NA	0.98	0.98	NA
18270	17791	Lifecycle 2040 Fund	Lifecycle 2040 Fund Composite Index	9.91	9.26	NA	0.58	1.21	NA	-0.36	-0.55	NA	1.04	1.04	NA	0.98	0.98	NA	-0.35	-0.55	NA	1.04	1.04	NA	0.98	0.98	NA
18271	17814	Lifecycle 2045 Fund	Lifecycle 2045 Fund Composite Index	9.96	9.31	NA	0.60	1.21	NA	-0.34	-0.56	NA	1.03	1.04	NA	0.98	0.98	NA	-0.34	-0.55	NA	1.03	1.04	NA	0.98	0.98	NA
18272	17807	Lifecycle 2050 Fund	Lifecycle 2050 Fund Composite Index	9.98	9.29	NA	0.60	1.22	NA	-0.39	-0.54	NA	1.03	1.04	NA	0.98	0.98	NA	-0.38	-0.53	NA	1.03	1.04	NA	0.98	0.98	NA
18862	18834	Lifecycle 2055 Fund	Lifecycle 2055 Fund Composite Index	10.02	9.35	NA	0.61	1.22	NA	-0.41	-0.59	NA	1.03	1.04	NA	0.98	0.98	NA	-0.41	-0.58	NA	1.03	1.04	NA	0.98	0.98	NA
18273	17804	Lifecycle Retirement Income Fund	Lifecycle Retirement Income Fund Composite Index	4.86	4.66	NA	0.79	1.33	NA	-0.11	-0.08	NA	1.07	1.07	NA	0.98	0.98	NA	-0.09	-0.07	NA	1.07	1.07	NA	0.98	0.98	NA
18144	18048	Lifecycle Index 2010 Fund	Lifecycle Index 2010 Composite Benchmark	4.93	4.72	NA	0.76	1.35	NA	-0.16	-0.19	NA	0.99	0.99	NA	0.99	1.00	NA	-0.16	-0.20	NA	0.99	0.99	NA	0.99	1.00	NA
18147	18049	Lifecycle Index 2015 Fund	Lifecycle Index 2015 Composite Benchmark	5.39	5.17	NA	0.75	1.36	NA	-0.14	-0.20	NA	0.99	0.99	NA	1.00	1.00	NA	-0.14	-0.20	NA	0.99	0.99	NA	1.00	1.00	NA
18150	18053	Lifecycle Index 2020 Fund	Lifecycle Index 2020 Composite Benchmark	6.13	5.83	NA	0.72	1.35	NA	-0.11	-0.15	NA	0.98	0.99	NA	1.00	1.00	NA	-0.12	-0.15	NA	0.98	0.99	NA	1.00	1.00	NA
18153	18054	Lifecycle Index 2025 Fund	Lifecycle Index 2025 Composite Benchmark	6.91	6.54	NA	0.69	1.34	NA	-0.12	-0.16	NA	0.98	0.99	NA	1.00	1.00	NA	-0.12	-0.16	NA	0.98	0.99	NA	1.00	1.00	NA
18156	18055	Lifecycle Index 2030 Fund	Lifecycle Index 2030 Composite Benchmark	7.70	7.26	NA	0.67	1.33	NA	-0.11	-0.13	NA	0.98	0.99	NA	1.00	1.00	NA	-0.12	-0.13	NA	0.98	0.99	NA	1.00	1.00	NA
18159	18056	Lifecycle Index 2035 Fund	Lifecycle Index 2035 Composite Benchmark	8.51	8.01	NA	0.65	1.31	NA	-0.09	-0.11	NA	0.98	0.98	NA	1.00	1.00	NA	-0.09	-0.12	NA	0.98	0.98	NA	1.00	1.00	NA
18162	18057	Lifecycle Index 2040 Fund	Lifecycle Index 2040 Composite Benchmark	9.31	8.66	NA	0.63	1.28	NA	-0.06	-0.09	NA	0.98	0.99	NA	1.00	1.00	NA	-0.07	-0.09	NA	0.98	0.99	NA	1.00	1.00	NA
18165	18058	Lifecycle Index 2045 Fund	Lifecycle Index 2045 Composite Benchmark	9.40	8.71	NA	0.64	1.28	NA	-0.09	-0.11	NA	0.98	0.98	NA	1.00	1.00	NA	-0.09	-0.11	NA	0.98	0.98	NA	1.00	1.00	NA
18168	18059	Lifecycle Index 2050 Fund	Lifecycle Index 2050 Composite Benchmark	9.44	8.73	NA	0.65	1.28	NA	-0.07	-0.10	NA	0.98	0.98	NA	1.00	1.00	NA	-0.07	-0.10	NA	0.98	0.98	NA	1.00	1.00	NA
18880	18863	Lifecycle Index 2055 Fund	Lifecycle Index 2055 Composite Benchmark	9.47	8.75	NA	0.66	1.29	NA	-0.08	-0.10	NA	0.98	0.99	NA	1.00	1.00	NA	-0.08	-0.11	NA	0.98	0.99	NA	1.00	1.00	NA
18171	18060	Lifecycle Index Retirement Income Fund	Lifecycle Index Retirement Income Composite Benchmark	4.51	4.32	NA	0.79	1.31	NA	-0.19	-0.22	NA	0.99	0.99	NA	0.99	1.00	NA	-0.19	-0.23	NA	0.99	0.99	NA	0.99	1.00	NA
19335	19291	Lifestyle Aggressive Growth Fund	Lifestyle Aggressive Composite Benchmark	10.89	10.17	NA	0.56	1.21	NA	-0.33	-0.27	NA	1.01	1.03	NA	0.98	0.97	NA	-0.33	-0.26	NA	1.01	1.03	NA	0.98	0.97	NA
19420	19386	Lifestyle Conservative Fund	Lifestyle Conservative Composite Benchmark	4.81	4.62	NA	0.80	1.38	NA	-0.23	-0.14	NA	1.08	1.10	NA	0.97	0.97	NA	-0.21	-0.13	NA	1.08	1.10	NA	0.97	0.97	NA
19376	19340	Lifestyle Growth Fund	Lifestyle Growth Composite Benchmark	8.93	8.37	NA	0.62	1.25	NA	-0.36	-0.32	NA	1.04	1.05	NA	0.98	0.97	NA	-0.35	-0.31	NA	1.04	1.05	NA	0.98	0.97	NA
19286	19246	Lifestyle Income Fund	Lifestyle Income Composite Benchmark	2.85	2.86	NA	0.97	1.43	NA	-0.12	-0.02	NA	1.11	1.13	NA	0.96	0.96	NA	-0.10	0.00	NA	1.11	1.13	NA	0.96	0.95	NA
19462	19382	Lifestyle Moderate Fund	Lifestyle Moderate Composite Benchmark	6.95	6.55	NA	0.71	1.32	NA	-0.26	-0.20	NA	1.07	1.08	NA	0.97	0.97	NA	-0.25	-0.18	NA	1.07	1.08	NA	0.97	0.97	NA
18237	8062	Mid-Cap Growth Fund	Russell Midcap Growth Index	12.64	11.83	NA	0.45	1.01	NA	-2.23	-2.61	NA	1.06	1.06	NA	0.96	0.96	NA	-2.22	-2.60	NA	1.06	1.06	NA	0.96	0.96	NA
18238	8064	Mid-Cap Value Fund	Russell Midcap Value Index	11.16	10.26	NA	0.51	1.27	NA	-1.43	-1.41	NA	0.99	0.98	NA	0.97	0.97	NA	-1.44	-1.42	NA	0.99	0.98	NA	0.97	0.97	NA
18245		Money Market Fund	N/A	0.05	0.04	NA	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
18239	15091	Real Estate Securities Fund	FTSE NAREIT All Equity REITs Index	13.98	12.72	NA	0.61	0.71	NA	0.12	-0.38	NA	0.98	0.97	NA	0.98	0.98	NA	0.11	-0.38	NA	0.98	0.97	NA	0.98	0.98	NA
18249	21135	Short-Term Bond Fund	Barclays Short (1-3 Yr) Govt Credit Index	0.79	1.00	NA	1.25	1.17	NA	0.28	0.28	NA	0.95	1.08	NA	0.82	0.84	NA	0.28	0.29	NA	0.94	1.08	NA	0.81	0.84	NA
18243	8056	Small-Cap Equity Fund	Russell 2000 Index	15.12	13.51	NA	0.56	1.08	NA	1.39	1.36	NA	0.97	0.96	NA	0.98	0.98	NA	1.39	1.36	NA	0.97	0.96	NA	0.98	0.98	NA
19819	17364	Social Choice Bond Fund	Barclays Aggregate Bond Index	2.97	NA	NA	1.03	NA	NA	0.75	NA	NA	1.01	NA	NA	0.97	NA	NA	0.75	NA	NA	1.01	NA	NA	0.97	NA	NA
18234	8164	Social Choice Equity Fund	Russell 3000 Index	10.59	9.93	NA	0.71	1.39	NA	-1.23	-0.61	NA	0.99	1.01	NA	0.99	0.99	NA	-1.23	-0.61	NA	0.99	1.01	NA	0.99	0.99	NA
		LIFE Funds																									
15093	17364	Bond Fund	Barclays Aggregate Bond Index	2.85	2.97	3.19	0.99	0.96	1.22	0.66	0.76	0.25	0.95	1.00	0.93	0.93	0.93	0.90	0.66	0.76	0.18	0.95	1.00	0.93	0.93	0.93	0.90
8019	8065	Growth & Income Fund	S&P 500 Index	11.07	10.30	14.96	0.78	1.39	0.53	-1.04	-0.76	1.37	1.05	1.05	0.97	0.96	0.95	0.97	-1.03	-0.75	1.36	1.05	1.05	0.97	0.96	0.95	0.97
8018	8168	Growth Equity Fund	Russell 1000 Growth Index	12.24	11.60	16.60	0.89	1.38	0.52	-0.60	-0.48	-0.10	1.07	1.10	1.05	0.92	0.91	0.96	-0.59	-0.47	-0.06	1.07	1.10	1.05	0.92	0.91	0.96
8020	8067	International Equity Fund	MSCI EAFE Index	13.82	12.68	20.67	0.14	0.82	0.03	1.02	1.85	0.29	1.04	1.00	1.06	0.88	0.86	0.92	1.03	1.86	0.32	1.04	1.00	1.06	0.88	0.86	0.92
8120	8054	Large-Cap Value Fund	Russell 1000 Value Index	11.84	10.88	17.45	0.52	1.21	0.26	-1.56	-1.50	-0.69	1.10	1.08	1.07	0.96	0.96	0.97	-1.54	-1.48	-0.65	1.10	1.08	1.07	0.96	0.96	0.97
15095		Money Market Fund	N/A	0.06	0.05	0.39	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	14.15	12.82	24.90	0.61	0.72	0.21	0.03	-0.32	0.47	0.99	0.97	0.97	0.98	0.97	0.99	0.02	-0.32	0.45	0.99	0.97	0.97	0.98	0.97	0.99
8121	8056	Small-Cap Equity Fund	Russell 2000 Index	15.13	13.50	19.91	0.56	1.08	0.33	1.40	1.37	0.27	0.97	0.96	0.98	0.98	0.98	0.99	1.40	1.37	0.26	0.97	0.96	0.98	0.98	0.98	0.99
8021	8164	Social Choice Equity Fund	Russell 3000 Index	10.62	9.94	15.72	0.70	1.39	0.41	-1.31	-0.62	-0.22	0.99	1.01	0.99	0.99	0.99	0.99	-1.31	-0.62	-0.22	0.99	1.01	0.99	0.99	0.98	0.99
8015	8060	Stock Index Fund	Russell 3000 Index	10.61	9.80	15.70	0.83	1.47	0.43	-0.06	-0.06	0.00	1.00	1.00	1.00	1.00	1.00	1.00	-0.06	-0.06	0.00	1.00	1.00	1.00	1.00	1.00	1.00
20862	**20829**	Balanced Fund	Life Balance Composite Benchmark	5.87	NA	NA	0.88	NA	NA	-0.16	NA	NA	1.08	NA	NA	0.98	NA	NA	-0.14	NA	NA	1.08	NA	NA	0.98	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 predicator 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).