



Capital Cities

INSTITUTIONAL INVESTING MADE PERSONAL

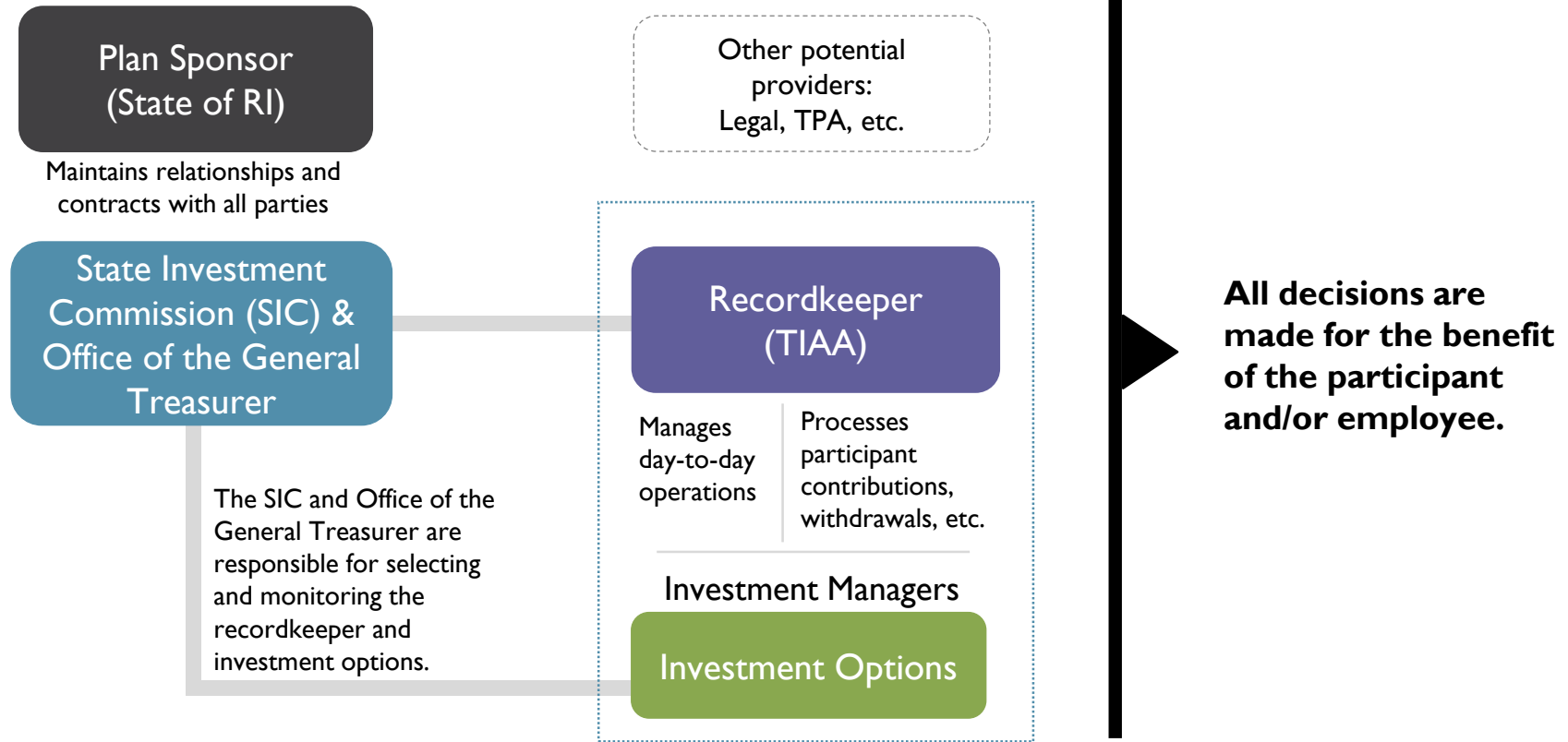
Rhode Island State Investment Commission 457(b) Plan Project

January 24, 2018



TIAA 457(b) Plan

Plan Framework



The Rhode Island State Investment Commission (SIC) should consider transitioning to primarily non-proprietary TIAA funds within the 457(b) TIAA Plan to ensure key roles are clearly delineated. This open architecture approach leads to transparency and objective fiduciary oversight.

457(b) Plan Project

Summary of Findings and Recommendations

A comprehensive, independent investment review of the TIAA products within the 457(b) Plan has been completed. Capital Cities recommends retaining the TIAA Traditional product, while replacing the TIAA-CREF International Equity Index and TIAA-CREF Social Choice Equity Funds (as discussed in the presentation).

Socially Responsible Equity

TIAA-CREF Social Choice Equity

→

Recommended Investment Option

Vanguard FTSE Social Index

International Equity

TIAA-CREF International Equity Index

→

Recommended Investment Option

Schwab International Index

Capital Preservation

TIAA Traditional

→

Recommended Investment Option

TIAA Traditional

TIAA Analysis Summary

Retaining TIAA vs. Utilizing Non-Proprietary Funds

Retaining TIAA Funds

- + No participant disruption
- + The TIAA Funds exhibit favorable qualitative and quantitative characteristics
- + TIAA Traditional offers strong performance, minimum crediting rate of between 1.00%-3.00% (1.00% currently), and the ability for participants to easily annuitize their assets
- Combination of recordkeeping, advice and investments from single provider can lead to complex governance requirements and fiduciary challenges

Transitioning to Non-Proprietary Funds

- + No impact to recordkeeping/administrative fees
- + Segregation of recordkeeping, advice and investment offerings improves Plan governance and makes the Plan more transparent
- Participant communication and transition required
- TIAA Traditional imposes a discontinuance provision of 60 monthly installments

TIAA Funds' Analysis



457(b) Plan

Asset Distribution as of December 15, 2017

Investment Option	Style	Market Value	% of Plan Assets	# of Participants
Domestic Equity				
Vanguard Institutional Index	Passive Large Cap Index	\$9,230,651	27.1%	394
Vanguard Mid Cap Index	Passive Mid Cap Equity	\$5,013,415	14.7%	327
Vanguard Small Cap Index	Passive Small Cap Index	\$3,005,884	8.8%	241
International Equity				
TIAA-CREF International Equity Index	Passive Developed International Eq	\$124,503	0.4%	4
American Funds Europacific Growth	Active International Equity	\$1,694,075	5.0%	209
Specialty				
TIAA-CREF Social Choice Equity	Domestic SRI All Cap Equity	\$104,461	0.3%	7
Target Date Funds				
Vanguard Target Ret 2060 Trust I	Target Date Fund	\$0	0.0%	0
Vanguard Target Ret 2055 Trust I	Target Date Fund	\$0	0.0%	0
Vanguard Target Ret 2050 Trust I	Target Date Fund	\$56,175	0.2%	7
Vanguard Target Ret 2045 Trust I	Target Date Fund	\$13,070	0.0%	3
Vanguard Target Ret 2040 Trust I	Target Date Fund	\$2,331	0.0%	3
Vanguard Target Ret 2035 Trust I	Target Date Fund	\$7,502	0.0%	3
Vanguard Target Ret 2030 Trust I	Target Date Fund	\$450,170	1.3%	30
Vanguard Target Ret 2025 Trust I	Target Date Fund	\$44,816	0.1%	5
Vanguard Target Ret 2020 Trust I	Target Date Fund	\$479,473	1.4%	10
Vanguard Target Ret 2015 Trust I	Target Date Fund	\$0	0.0%	0
Vanguard Target Ret Income Trust I	Target Date Fund	\$114,297	0.3%	4
Fixed Income				
PIMCO Total Return	Core Plus Bond	\$507,665	1.5%	94
Vanguard Total Bond Market Index	Passive Core Bond Index	\$10,259	0.0%	1
American Century Inflation-Adj. Bond	Real Return	\$557,785	1.6%	158
Capital Preservation				
TIAA Traditional	Guaranteed	\$2,965,743	8.7%	483
VALIC Fixed 1.5%	Guaranteed	\$86,377	0.3%	37
VALIC Fixed 3%	Guaranteed	\$9,645,530	28.3%	434
		\$34,114,182	100.0%	670

457(b) Plan's Investment Menu

Investment Menu Overview

Investment Menu				
Risk Spectrum	Tier I. Lifestyle Options	Tier II. Core Options	Tier III. Specialty Options	Tier IV. Self-Directed Brokerage Account
Conservative	Vanguard Target Retire Income Trust I	TIAA Traditional	American Century Inf-Adjusted Bond	SDBA Full Brokerage Window
	Vanguard Target Retire 2015 Trust I	Vanguard Total Bond Market Index	PIMCO Total Return	
	Vanguard Target Retire 2020 Trust I	Vanguard Institutional Index	TIAA-CREF Social Choice Equity	
	Vanguard Target Retire 2025 Trust I	TIAA-CREF International Equity Index	American Funds EuroPacific Growth	
	Vanguard Target Retire 2030 Trust I	Vanguard Mid Cap Index		
	Vanguard Target Retire 2035 Trust I	Vanguard Small-Cap Index		
	Vanguard Target Retire 2040 Trust I			
	Vanguard Target Retire 2045 Trust I			
	Vanguard Target Retire 2050 Trust I			
	Vanguard Target Retire 2055 Trust I			
	Vanguard Target Retire 2060 Trust I			
Aggressive	Vanguard Target Retire 2065 Trust I			

Tier III: Additional/Specialty Options

Additional/Specialty Options' Review

Style:	Investment Option:	% of Plan Assets
Core Plus Bond	PIMCO Total Return	1.5%
Domestic SRI All Cap Equity	TIAA-CREF Social Choice Equity	0.3%
Emerging Markets Equity	Vanguard Emerging Mkts Stock Index	5.0%

Recommendation:

- Retain a Socially Responsible Investment (SRI) and map assets to the Vanguard FTSE Social Index (see pages 9-11 for further details).

Tier III: Additional/Specialty Funds

Socially Responsible Analysis

- Capital Cities surveyed SRI funds.
- Similar to TIAA-CREF Social Choice Equity, Vanguard FTSE Social Index meets Rhode Island's low-cost objective and provides participants the ability to reflect a SRI bias within their portfolios (see *following pages for further details*).

	Name of Firm	Fund	Elimination Notes
1	Parnassus	Core Equity Investor	Price (.87% Management Fee); People (Key PM Risk)
2	Vanguard	FTSE Social Index Inv	
3	TIAA-CREF	Social Choice Eq	
4	Ave Maria	Rising Dividend Fund	Price (.93% Expense Ratio); Performance (Score 10/40)
5	Calvert	US Large Cap Core Rspnb Idx A	Price (1.32% Expense Ratio); Philosophy/Process (Passive)
6	Domini	Impact Equity Investor	Performance (Score 0/40); Price (.80% Expense Ratio)
7	GuideStone	Funds Equity Index Investor	Price (.98% Expense Ratio)
8	Pax	Large Cap Fund Individual Investor	Price (.96% Expense Ratio); Product (Short Track Record)
9	Sentinel	Sustainable Core Opp I	Product (\$390mm in Strategy); Price (1% Expense Ratio)
10	Fidelity	U.S. Sustainability Index	Product: Low Assets, Short Track Record
11	Steward	Large Cap Enhanced Index Indv	Product (\$371.4mm in Strategy); Price (1% Expense Ratio)
12	Dreyfus	Sustainable US Equity A	Product (\$316.9mm in Strategy); Price (1% Expense Ratio)
13	American Century	Sustainable Equity Inv	Product (\$221.1mm in Strategy), Short Track Record; Price (1% Expense Ratio)
14	Walden	Equity	Product (\$187mm in Strategy), \$100,000 minimum; Price (1% Expense Ratio)
15	Pax	ESG Beta Dividend Fund Indl Inv	Product (\$137.7mm in Strategy); Price (.90% Expense Ratio)
16	Gabelli	ESG AAA	Product (\$67mm in Strategy); Price (1.25% Expense Ratio)
17	RhumbLine Advisors	MSCI USA ESG Select Index Strategy	Product: No Assets, No Track Record
18	BlackRock	Impact US Equity Investor A	Product (\$35.5mm in Strategy, Short Track Record); Price (1.56% Expense Ratio)
19	Epiphany	FFV A	Product (\$26.3mm in Strategy); Price (1.5% Expense Ratio)
20	John Hancock	ESG Large Cap Core A	Product (\$18.6mm in Strategy); Price (1.13% Expense Ratio)
21	JPMorgan	Intrepid Sustainable Equity A	Product (\$18.1mm in Strategy); Price (1.05% Expense Ratio)
22	TCW	New America Premier Equities N	Product (\$12.8mm in Strategy, Short Track Record); Price (1.04% Expense Ratio)
23	Glenmede	Responsible ESG US Equity	Product (\$11mm in Strategy, Short Track Record); Price (1% Expense Ratio)

Legend:
Semi-Finalist
Finalist

Tier III: Additional/Specialty Funds

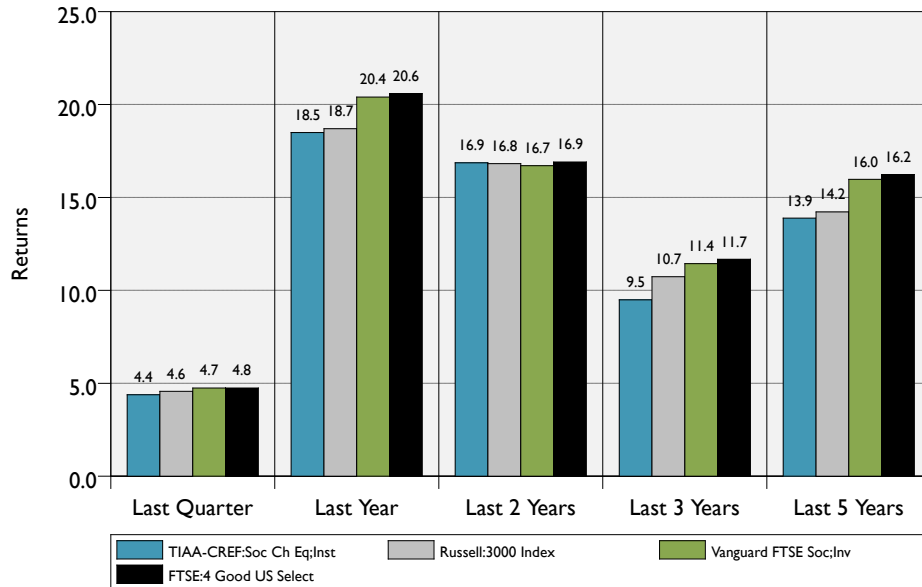
Socially Responsible Analysis

Organization	TIAA	Vanguard
Product Name	Social Choice Equity Fund	Vanguard FTSE Social Index
Product Inception Date	July 1, 1999	January 14, 2003
Ownership Structure	TIAA is a stock U.S. life insurance company organized under New York law that operates without profit in accordance with the terms of its charter. All outstanding stock of TIAA is held by the TIAA Board of Overseers.	Vanguard is owned by the Vanguard family of mutual funds, which is owned by their shareholders (investor owned).
Firm Information	TIAA purchased Nuveen in 2014. In January 2017, TIAA announced that Nuveen would become the umbrella brand for its asset management and investment groups that oversee TIAA mutual funds. The combined organization manages approximately \$948b in assets.	Located in Valley Forge, Pennsylvania; Founded in 1975 with over \$4.2 trillion in assets under management.
Investment Philosophy	The strategy focuses on identifying companies with positive ESG portfolios rather than excluding bad ones. In doing so, TIAA believes that they can build a diversified portfolio that tracks the risk/return metrics of the Russell 3000 Index while only investing in socially responsible companies.	The fund seeks to track a benchmark of large- and mid-capitalization stocks that have been screened for certain social, human rights, and environmental criteria.
Stock Selection	The Social Investment Team at MSCI ranks the constituents of the MSCI Investible Market Index according to the social criteria set out by TIAA's Social and Community Investing Unit. Starting with approximately 2,600 stocks, the screens pass around 1,200. these screens do a good job of identifying firms with attractive ESG profiles. The Quantitative team at TIAA then optimizes a well-diversified portfolio from the passed stocks that aims to mimic the risk profile of the Russell 3000 Index. The strategy will have active positions versus the benchmark as the screens will eliminate top holdings if they do not possess a strong ESG profile.	The fund seeks to mimic the portfolio characteristics and performance of the FTSE4Good US Select Index. The FTSE USA Index is the standard benchmark that serves as the universe to be screened for SRI factors. FTSE contracts with independent third-party researchers to analyze and rate each company in the standard benchmark. FTSE will exclude securities based on the following areas: human rights, labor standards, environment, anti-corruption principles, and military weapons. The result is a market weighted index of companies that do not violate the SRI criteria set out by FTSE.
# of holdings	700-1000	428
Turnover	16%	11%
Benchmark Awareness	The Fund seeks to possess the risk profile of the Russell 3000 Index but in a socially responsible way. This means that the Fund will not have large deviations in sector weightings but will exclude constituents that don't meet EGS requirements.	Vanguard utilizes full replication for the fund. This means that they will proportionally own all of the constituents of the index.
Wtd. Average Market Cap	\$86.7 billion	\$166 billion
Key Professionals	Amy O'Brien (Head of Social Investing), Philip Campagna (PM), Lei Liao (PM)	Vanguard Equity Index Group: Gerard O'Reilly and William Coleman
Assets In Product	\$2.7 billion	\$3.2 billion
Vehicle/Ticker	TISCX	VFTSX
Fees	0.19%	0.22%

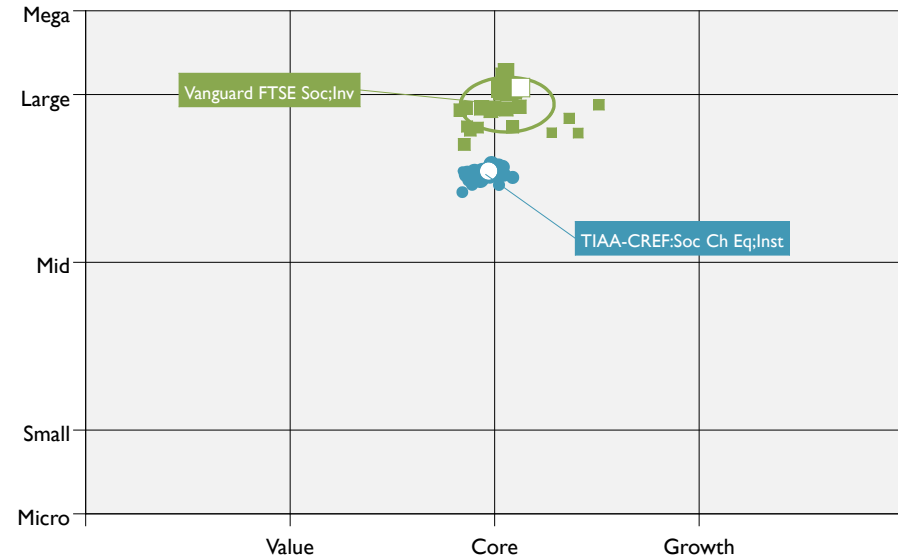
Tier III: Additional/Specialty Funds

Socially Responsible Analysis

Returns for Various Periods
Current Quarter Ending September 30, 2017



Domestic Equity Style Map
for 7 Years Ended September 30, 2017



Tier II: Core Options

Core Options' Review

	Basic Building Block:	Investment Option:	Asset Class Coverage:
Fixed Income	Capital Preservation	TIAA Traditional	✓
	Core Bond	Vanguard Total Bond Market Index	✓
Equity	Large Cap Equity	Vanguard Institutional Index	✓
	International Equity	TIAA-CREF International Equity Index	✓
	Small/Mid Cap Equity	Vanguard Mid Cap Index	✓
		Vanguard Small-Cap Index	

Recommendations:

- Replace the TIAA-CREF International Equity Index Fund and map assets to Schwab International Index (see page 13 for further details).
- Retain the TIAA Traditional as the Capital Preservation option for the Plan (see pages 14-15 for further details).

Tier II: Core Options

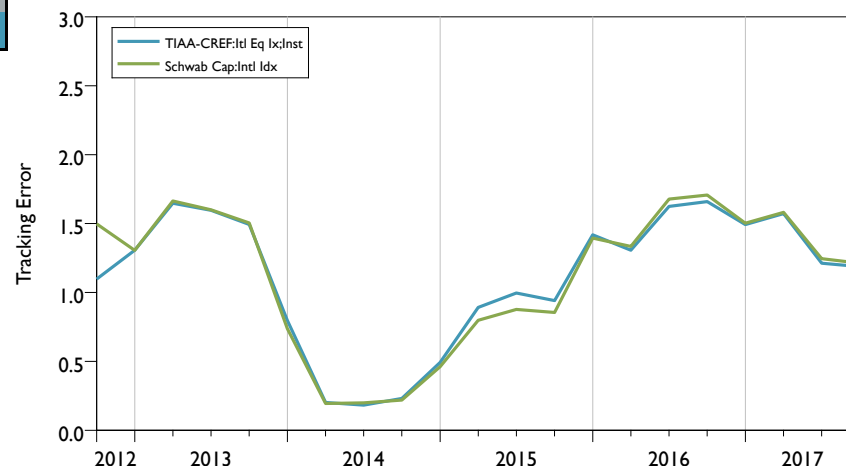
Passive International Equity Analysis

- Schwab International Index is an appropriate alternative to the TIAA-CREF International Equity Index Fund.
- Both Funds have demonstrated the ability to successfully track the portfolio characteristics and performance of the MSCI EAFE Index, providing participants with exposure to Developed International Equity stocks.
- The Funds also exhibit low fees relative to other passive International Equity options.

Passive International Equity			Notes
1	BlackRock International Index I	MSCI EAFE NR USD	Price (0.12%)
2	BlackRock Total Intl ex US Idx I	MSCI ACWI ex-US NR USD	Price (0.16%)
3	Deutsche EAFE Equity Index Institutional	MSCI EAFE NR USD	Price (0.33%)
4	Nationwide International Index R6	MSCI EAFE NR USD	Price (0.31%)
5	Principal International Eq Index Instl	MSCI EAFE NR USD	Price (0.35%)
6	Schwab International Index	MSCI EAFE NR USD	Price (0.06%)
7	TIAA-CREF International Eq Idx Instl	MSCI EAFE NR USD	Price (0.06%)
8	Vanguard Developed Markets Index Instl	FTSE Dvlp ex US All Cap(US RIC)NR USD	Price (0.06%)
9	Vanguard FTSE All-World ex-US Idx Admiral	FTSE AW Ex US (US RIC) NR USD	Price (0.11%)
10	Vanguard Total Intl Stock Index Admiral	FTSE Global All Cap ex US (USA) NR USD	Price (0.11%)

Legend:
Semi-Finalist
Finalist

Rolling 4 Quarter Tracking Error Relative To MSCI:EAFE for 5 Years Ended September 30, 2017



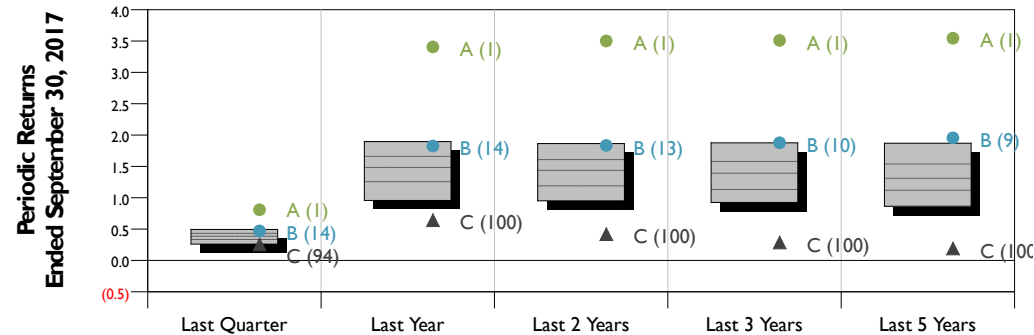
Tier II: Core Options

Capital Preservation Analysis

- Capital Cities surveyed the Capital Preservation options offered on the TIAA recordkeeping platform.
- Capital Cities recommends retaining TIAA Traditional given the product's strong performance, minimum crediting rate of between 1.00%-3.00% (1.00% currently), and the ability for participants to easily annuitize their assets.
- Eliminating TIAA Traditional also poses operational considerations, including a 60-month discontinuance provision.
- On the other hand, T. Rowe Price Stable Value offers crediting rate and fee transparency with diversified wrap exposure, as opposed to TIAA Traditional which is backed by the General Account and is based on TIAA's claims-paying ability.*

Stable Value Funds	Expense	Elimination Notes
1 Columbia Trust Stable Government Fund	0.47%	Product (Government)
2 Columbia Trust Stable Income Fund I-0	0.40%	Performance
3 Federated Capital Preservation Fund	0.46%	Performance
4 Galliard Retirement Income Fund	0.66%	Price
5 Goldman Sachs Stable Value Collective Trust	0.59%	Price
6 Invesco Stable Value Trust Fund	0.62%	Discontinuance Provision (Lesser of BV or MV or 24-Month Put); Price
7 MetLife SV Solutions Fund	0.47%	Discontinuance Provision (Lesser of BV or MV or MetLife GIC)
8 MetLife Stable Value Fund	0.62%	Discontinuance Provision (Lesser of BV or MV or MetLife GIC); Price
9 Morley Stable Value	0.55%	Performance; Price
10 New York Life Anchor Account	0.47%	Performance
11 Putnam Stable Value	0.34% or 0.42%	Product (Currently 34% Exposure to Traditional GIC)
12 T. Rowe Price Stable Value Common Trust	0.49%	
13 TIAA Traditional	Spread-based	
14 Wells Fargo Stable Return	0.82%	Price

Legend:
Semi-Finalist
Finalist



Median	0.39	1.49	1.44	1.39	1.31
TIAA Traditional RCP*	0.81	3.41	3.50	3.51	3.54
T. Rowe Price Stable Value Tr CI A	0.47	1.82	1.83	1.88	1.95
Citi:3 Mo T-Bill	0.26	0.64	0.42	0.29	0.19

*TIAA Traditional RCP performance varies based on vintage. RI 457(b) performance inception is as of October 2017 with a 1-year crediting rate of 3.50% (restated annually, March 1).

**T. Rowe Price Stable Value Common Trust Fund is subject to T. Rowe Price's approval.

Note: Stable Value peer group is utilized for comparison purposes.

Tier II: Core Options

Capital Preservation Analysis

Organization	TIAA	T. Rowe Price
Product Name	TIAA Traditional	T. Rowe Price Stable Value Common Trust Class A
Product Inception Date	1918	1988
Ownership Structure	TIAA is a stock U.S. life insurance company organized under New York law that operates without profit in accordance with the terms of its charter. All outstanding stock of TIAA is held by the TIAA Board of Overseers.	T. Rowe Price Associates, Inc. is a wholly-owned Subsidiary of T. Rowe Price Group, Inc. (NYSE: TROW)
Firm Information	TIAA is a Fortune 100 diversified financial services organization that includes a retirement plan business serving institutions in the academic, research, medical, cultural and government fields; a retail financial services business serving individuals; and a global asset management business serving individual and institutional investors and advisors.	T. Rowe Price was founded in 1937 and is headquartered in Baltimore, Maryland. The company has been managing institutional portfolios since 1951 and currently has greater than \$810b in assets under management. TRP manages \$22.4b in Stable Value.
Investment Philosophy	The TIAA Traditional Annuity is a guaranteed annuity account backed by the claims-paying ability of TIAA. It guarantees participant's principal and a contractually specified minimum interest rate, plus it offers the opportunity for additional amounts in excess of this guaranteed rate. These additional amounts are declared on a year-by-year basis by the TIAA Board of Trustees.	The Fund seeks maximum current income while maintaining stability of principal.
Investment Process	The TIAA General Account invests in a broadly diversified portfolio that incorporates a number of steps. First is a determination of the appropriate asset profile and allocation in relation to General Account liabilities. Next, allocation decisions within broader asset class categories and sectors are made in consideration of prevailing market conditions and perceived opportunities, with primary input from TIAA's investment management teams. Finally, selection of individual securities, with the objective of realizing superior risk-adjusted returns within each market sector or security type, is carried out by portfolio management teams with support from centralized teams of in-house research analysts.	The Fund will invest primarily in Guaranteed Investment Contracts (GICs), Bank Investment Contracts (BICs), Synthetic Investment Contracts (SICs), and Separate Account Contracts (SACs). GICs, BICs, SICs, and SACs are types of investment contracts that are designed to provide principal stability and a competitive yield. Portfolio construction--Unwrapped Reserves: 5-10%; SICs/SACs: 30-50% Short-Term Bond, 30-50% Intermediate-Term Bond and 5-15% Core Bond; and, 0-5% GICs.
Manager Diversification	All assets are managed by TIAA.	All assets are managed by TRP.
Primary Collateral Account	TIAA's General Account supports TIAA Traditional's guarantees. Based on TIAA's claims-paying ability.	11 wrap providers
Key Professionals	The collateral portfolios supporting TIAA's insurance obligations are managed by large teams within both the global private markets and global public markets groups. These teams are headed by Heather Davis and Lisa Black, respectively. They have extensive teams of portfolio managers, research analysts and traders who have roles and responsibilities related to the various portfolios. Nicholas Liolis is Senior Managing Director and Chief Investment Officer for the TIAA General Account. The TIAA General Account is the separate account supporting TIAA Traditional guarantees.	Robert Madore, Antonio Luna and Benjamin Gugliotta
Financial Strength	As of December 31, 2016, the TIAA General Account has Net Capital and Surplus of \$35.6 billion and Financial Strength Ratings of: Aa1, AA+, A++, and AAA.	Market to Book Value: 101.3%
Crediting Rate Declared	March 1st	Quarterly
Discontinuance Provision	Paid in 60 monthly installments without any surrender charge. 90 day advanced notice required from institution.	12-Month Put
Vehicle	Group Annuity Contract	Collective Investment Trust
Expense	Spread-based--Explicit Fee: 0.00%	0.49%