



Memorandum

To: Rhode Island State Investment Commission

From: Capital Cities, L.L.C.

Date: October 10, 2019

Re: Invesco Stable Value Onsite Meeting

Capital Cities conducted an onsite meeting with the Invesco Stable Value Team, on October 4, 2019, in Louisville, Kentucky. Members from the state of Rhode Island also participated, including Chris Civittolo, Director of 529 Savings, Grants and Scholarship Programs, at the meeting and Alec Stais, Chief Investment Officer, via phone. The Invesco Stable Value Portfolio serves as the CollegeBound Program's capital preservation option. The Stable Value Portfolio is offered as an Individual Portfolio within CollegeBound 529 (Advisor Plan) and CollegeBound Saver (Direct Plan). As an Individual Portfolio, the Stable Value Portfolio represents \$396.3 million (or 7.7% of Plan assets) in CollegeBound 529 and \$15.1 million (or 5.5% of Plan assets) in CollegeBound Saver, as of September 30, 2019. Additionally, the Stable Value Portfolio serves as one of the underlying components of CollegeBound 529's Age-Based and Target Risk Portfolios, representing \$670.0 million in assets. In total, the CollegeBound Program has nearly \$1.1 billion in the Invesco Stable Value Portfolio.

Capital Cities met with the Invesco Stable Value Team's key professionals, during the onsite visit. Our due diligence confirmed that the Invesco Stable Value Portfolio continues to be good fit for the capital preservation option for the CollegeBound Program, given the Strategy's favorable portfolio characteristics and diversified approach. Additionally, Invesco's continued efforts with wrap contract negotiations allow the Stable Value Portfolio to remain competitive through expense reductions.

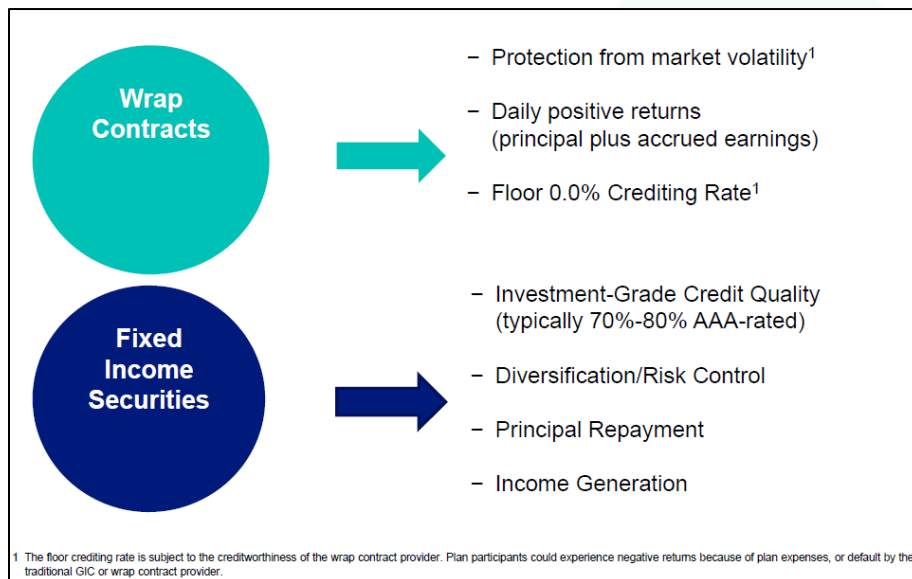
A summary of the onsite meeting and findings can be found in the subsequent pages.

Stable Value Primer:

Stable Value is a low-risk investment option, with a capital preservation focus. Stable Value Portfolios are exclusively offered in participant-directed plans, including defined contribution and 529 plans. Stable Value Portfolios are designed to achieve the following objectives:

- Preservation of principal and accumulated earnings
- Daily liquidity for participant-directed withdrawals and transfers
- Crediting rates that move in the direction of prevailing rates

In order to meet these objectives, Invesco combines wrap contracts (primarily issued by insurance companies) and fixed income securities, as described in the following graphic.



In the case of the CollegeBound Program, the resulting Stable Value Portfolio continues to exhibit favorable portfolio characteristics (as of August 31, 2019), while achieving the capital preservation objective:

- Six Wrap Contracts
- Crediting Rate: 2.32% (Direct Share Class RI), 1.81% (Advisor Share Class A)
- Duration: 3.06 years
- Average Quality: Aa1/AA+
- Market-to-Book Ratio: 101.98%

Stable Value Team Overview:

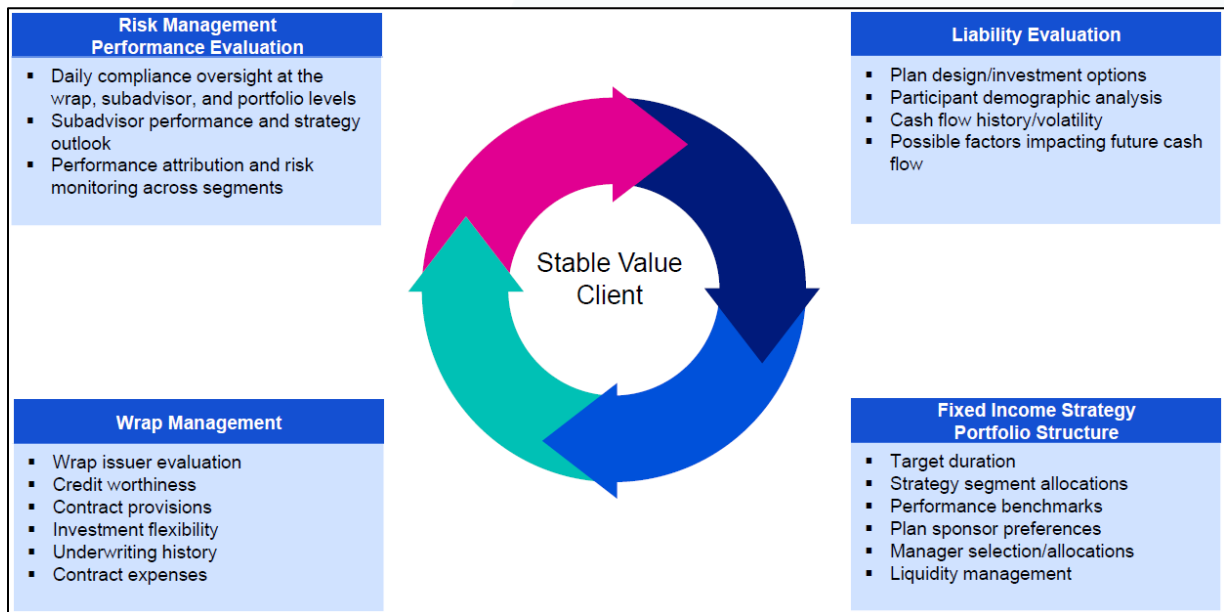
Invesco benefits from the deep experience and depth of the Stable Value team, including the following key distinctions:

- Established—1985 in Louisville, Kentucky
- Focus—Thirty-year history of managing capital preservation options
- Leadership—Senior management team together since 1999
- Experience—Seasoned professionals across Stable Value Team
- Offering—Comprehensive Stable Value management and reporting services

Invesco has \$369.0 billion in Fixed Income assets, with 233 investment professionals. Within Invesco's Fixed Income division, the firm manages \$59.2 billion in Stable Value assets, making the team one of the largest Stable Value providers in the industry. The team has 97 professionals averaging 18 years of experience. There is a six-person Executive Management Team for the Stable Value Fund and 29 people in the Louisville office servicing the strategy. There have been no significant changes in personnel since the last onsite meeting in 2018. Invesco continues to invest in human capital as the strategy grows, including the recent addition of two individuals to the distribution side of the business and one individual on the external manager research team. Invesco's robust and experienced Stable Value team is well-equipped to continue to serve the state of Rhode Island.

Invesco Stable Value Investment Process and Portfolio Construction:

Invesco approaches Stable Value investing with four key elements: liability evaluation, underlying fixed income strategy/portfolio structure, wrap management, and risk management/performance evaluation:



All the Stable Value strategies are designed specifically for each client with plan specific demographics and cash flow history/volatility being the key considerations when constructing and managing each individual strategy. This is done by taking a building block approach to portfolio construction and allocating assets to/from each segment as cash flows occur within the strategy. The building block approach to portfolio construction also allows Invesco to diversify the underlying investment managers and asset classes, helping to mitigate any style concentrations or business risks. The CollegeBound Program's Stable Value portfolio construction is highlighted below.

Strategy	Cash Buffer		Short Duration		Intermediate		Core
Target	1% - 5%		45%		30%		20%
Managers / Subadvisors	STIF	2.3%	Invesco	47.2%	Jennison Voya	15.2% 15.1%	Invesco 20.2%

Capital Cities believes this multi-manager, building block approach continues to position the Invesco Stable Value Portfolio well relative to peers in terms of diversification, risk and transparency.

Fixed Income Process and Philosophy:

Invesco's Fixed Income process combines top-down macro and bottom-up security selection. This blended process is implemented by Invesco's Investment Strategy Team that formulates the outlook, which is continuously refined through weekly meetings. A different topic is covered each week; Macro, Sector, Relative Value, and Asset Allocation. A risk budget of "high, medium, or low" is set based on the Investment Strategy team's meetings. This budget then drives the asset allocation and security selection that the portfolio managers implement for individual portfolio mandates.

	Purpose	Agenda	Attendees
Week 1	Macro	<ul style="list-style-type: none"> Review and debate Macro Team growth, inflation & policy views Examine macro themes Assess risks & catalysts for change Form initial beta positioning views 	<ul style="list-style-type: none"> IST members Macro Team
Week 2	Sector	<ul style="list-style-type: none"> Credit sector teams confirm/refute macro economy views Examine key credit themes Assess risks & catalysts for change Ratify beta positioning views 	<ul style="list-style-type: none"> IST members Credit research leaders Credit analysts as needed
Week 3	Relative Value	<ul style="list-style-type: none"> Credit teams integrate macro backdrop into assessments of sector fundamentals, technicals, and valuations Identify relative value across sectors Confirm macro and credit themes 	<ul style="list-style-type: none"> IST members Credit sector research and portfolio management
Week 4	Asset Allocation	<ul style="list-style-type: none"> Determine overall risk environment & appetite Review prior month model portfolio performance attribution Determine current model portfolio positioning across and rates, currency & credit sectors 	<ul style="list-style-type: none"> IST members Macro Team

Wrap Management Update:

Invesco continues to differentiate their strategy through their wrap management by diversifying providers and lowering fees. Invesco has a multi-team approach to issuer selection, involving portfolio management, contract management, and client service. Wrap capacity keeps expanding in the marketplace, allowing Invesco to further negotiate fees. The table below highlights the CollegeBound Stable Value Portfolio's diversified wrap approach, along with the recent expense reductions. In particular, the successful fee negotiations, over the last year, reduced the CollegeBound Stable Value Portfolio's overall expense by approximately one basis point.

Wrap Issuers	8/31/19 Allocation %	Fee as of 9/30/2017	Fee as of 9/30/2018	Fee as of 9/30/2019	Notes
AGL	12%	0.21%	0.20%	0.17%	Decreased to 0.18% 12/1/18, and 0.17% 9/1/19
Nationwide	12%	N/A	0.19%	0.18%	Decreased to 0.18% 12/1/18
Prudential	21%	0.20%	0.18%	0.18%	Under Review
RGA	21%	0.21%	0.18%	0.18%	Under Review
State Street	12%	0.23%	0.20%	0.18%	Decreasing to 0.16% of 12/1/19
Voya	20%	0.18%	0.18%	0.18%	Decreasing to 0.16% on 10/1/19

External Manager & Compliance Review:

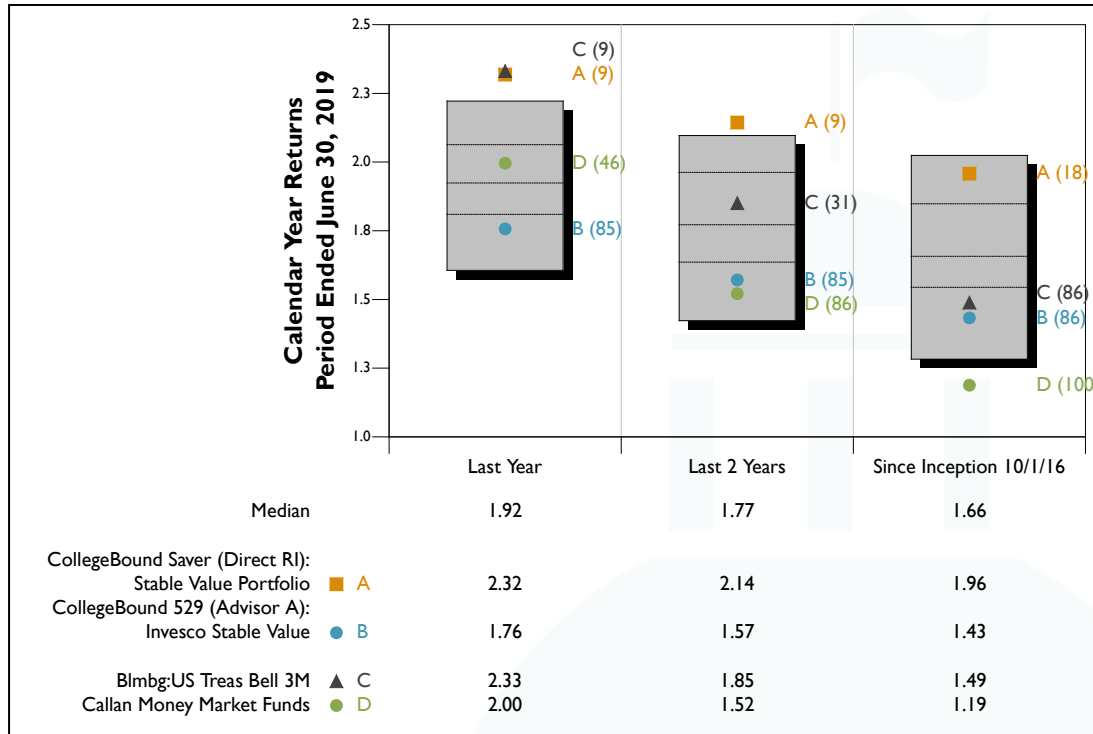
Invesco was one of the first Stable Value providers, in 1991, to utilize a multi-manager approach, in which external subadvisors are incorporated into their Stable Value portfolios. The utilization of external managers, as in the case of Jennison and Voya in the CollegeBound Stable Value Portfolio, is designed to produce more consistent returns than could be achieved by a single manager. This is accomplished by pairing subadvisors with unique approaches that complement one another.

Invesco employs designated Stable Value portfolio managers and compliance officers to monitor external subadvisors that are used in their client portfolios. Invesco has a robust qualitative and quantitative process for screening and monitoring external managers. Invesco monitors subadvisors on a daily, monthly, quarterly, and annual basis, with each time period getting progressively more in-depth on a quantitative and qualitative basis. Additionally, onsite due diligence meetings occur at least annually.

The external manager review goes hand-in-hand with the firm's compliance monitoring. Capital Cities favorably views Invesco's compliance procedures, particularly in ensuring investment guidelines are being properly met. Invesco utilizes BlackRock's Aladdin software to assist with ongoing monitoring of external managers. The internally managed Invesco funds have pre-trade and post-trade compliance, which is all logged within Aladdin. Sub-advised strategies have daily post-trade compliance that is run nightly. Any compliance breaches are reviewed by the compliance team and assigned to Stable Value Portfolio Managers to address. It is important to note that while resolution is reached through collaboration with the Portfolio Managers, only the Compliance Officer can resolve a case, providing a system of checks and balances. This process follows industry best practices by providing transparency and thorough documentation.

Performance:

The Stable Value Portfolio has exhibited strong performance relative to peers (please note that the Stable Value peer group in the chart below includes defined contribution plans). Performance has also been competitive for the capital preservation space.



While the CollegeBound Stable Value Portfolio’s overall performance has remained competitive, Capital Cities will continue monitoring the underlying components. In particular, the Jennison Intermediate Strategy, which represents 15% of the overall portfolio, has experienced a one percentage point (gross of fees) underperformance relative to its custom benchmark over the last one-year time period (ended August 31, 2019). This underperformance has negatively impacted the total Portfolio’s relative performance.

Jennison has a bottom-up focus, with very active yield curve positioning, which provides prudent diversification to the overall Stable Value Portfolio’s construction. In particular, Jennison complements the Voya Intermediate Strategy which takes a top-down macro approach with little active duration positioning. Jennison’s positioning has been out of favor due to the inversion seen at the front end of the yield curve. Additionally, an underweight position to credit has detracted, as credit has performed well over the last one-year time period. Short-term relative underperformance appears within expectation, given the strategy and yield curve positioning in the current rate environment. Nonetheless, Capital Cities will continue monitoring the Strategy’s performance and report any material findings to the Rhode Island State Investment Commission.