RETIREMENT SYSTEM INVESTMENT COMMISSION

Commission Meeting Agenda

Thursday, December 12, 2019 9:30 a.m.

RSIC Presentation Center

I. Call to Order and Consent Agenda
   A. Adoption of Proposed Agenda
   B. Approval of September Minutes

II. Chair's Report

III. Committee Reports

IV. CEO's Report
   A. Agency Business Plan

V. CIO's Report
   A. Quarterly Investment Performance Update
   B. AIP Progress Update

VI. Consultant Report
   A. Active Management Presentation

VII. SIOP and AIP Presentation

VIII. Delegated Investment Report

IX. Executive Session – Discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320; to discuss personnel matters related to CEO performance and compensation pursuant to S. C. Code Section 30-4-70(a)(1); and receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2).

X. Potential Action Resulting from Executive Session

XI. Adjournment

NOTICE OF PUBLIC MEETING

This notice is given to meet the requirements of the S.C. Freedom of Information Act and the Americans with Disabilities Act. Furthermore, this facility is accessible to individuals with disabilities, and special accommodations will be provided if requested in advance.

South Carolina Retirement System Investment Commission
Meeting Minutes

September 12, 2019 9:30 a.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Presentation Center

Commissioners Present:
Dr. Ronald Wilder, Chair
Dr. Rebecca Gunnlaugsson, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director
Mr. Allen Gillespie
Mr. Edward Giobbe
Mr. Reynolds Williams (via telephone)
Mr. William H. Hancock
Mr. William J. Condon, Jr.

I. CALL TO ORDER AND CONSENT AGENDA

Chair Dr. Ronald Wilder called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 9:30 a.m. Mr. Allen Gillespie made a motion to approve the proposed agenda as presented. Mr. William J. Condon, Jr. seconded the motion, which was approved unanimously.

Mr. William Hancock made a motion to approve the minutes from the June 13, 2019 Commission meeting. Mr. Gillespie seconded the motion, which passed unanimously. Mr. Condon abstained from the vote due to his absence from the June meeting.

II. CHAIR'S REPORT

The Chair noted the hard work of the Chief Investment Officer, Chief Executive Officer, Staff, and Meketa over the past year in working to develop a more defined strategic direction for the Commission. After brief comments, he concluded his report.

III. AUDIT & ENTERPRISE RISK MANAGEMENT COMMITTEE REPORT

Mr. Hancock presented the report of the Audit & Enterprise Risk Management Committee as written and noted that it had been made available to the Commissioners for review prior to the meeting. After a brief discussion, he concluded his report.

IV. CEO'S REPORT

The Chair recognized Mr. Michael Hitchcock, CEO, for the CEO's Report. Mr. Hitchcock presented the proposed Fiscal Year 2021 South Carolina Retirement System Investment Commission ("RSIC") Budget Request ("Budget") for Commission review and approval. He reminded the Commission that the Commission had requested reductions in its authorized amounts over the previous few years. The 2021 Budget request was for the same amount as the 2020 budget. Mr. Hitchcock explained that the prior year budget decreases were due to savings in operations expenses and decreases RSIC negotiated in other expenses, and not a reduction in personal services. The Commission then had a brief discussion regarding retention and recruitment of employees. There being no further discussion, Mr. Condon made a motion to authorize the CEO to submit a proposed FY 2021 detail budget substantially similar to the draft budget presented for inclusion in the Governor's annual budget. Mr. Gillespie seconded the motion, which passed unanimously.

V. CIO'S REPORT

The Chair introduced Mr. Geoff Berg, Chief Investment Officer, for his report. Mr. Berg began by giving an overview of the Plan's performance for the fiscal year ended June 30, 2019. He stated that there were several things that worked well, such as (i) the overweight to public equity, which was a positive contributor to returns from December to June; (ii) recent vintage private market investments; (iii) strong performance from the lower-risk private debt investments; and (iv) real estate. Mr. Berg recognized Senior Real Estate Officer, Mr. Eric Rovelli, for his continued good work. Mr. Berg noted several detractors from performance during the fiscal year, including some legacy private equity and private debt investments; being underweight to fixed income from December to June; equity options; and portable alpha. Mr. Berg noted that, although he believes strongly in portable alpha, it had not added value over the last year. Another area of concern noted by Mr. Berg was active management. Although the trust funds' active managers had generally strong performance in the second half of the year, he noted that this did not make up for their poor performance in the first half of the year.

A lengthy discussion ensued regarding the current interest rate and return environment and its implications for Plan performance and funding. Mr. Berg then turned the discussion over to Senior Reporting Officer, Mr. David King, to provide the investment performance update through June 30, 2019. Mr. King noted that during the fiscal year, the Plan had a return of 5.84 percent, versus the policy benchmark return of 6.50 percent. He noted that the Plan's three and ten year rolling returns were above the 7.25 percent target, at 8.48 percent and 8.33 percent, respectively.

Mr. King stated that during the fiscal year, the Plan had paid $1.1 billion to beneficiaries in net benefits. and had earned $1.7 billion in investment performance, which had increased Plan assets by $674 million. Mr. King stated that the Plan's market value at June 30, 2019 was approximately $32 billion, the Trust's highest fiscal year end market value since January 2008. He noted that the Plan had increased its assets by $6.4 billion since its inception in 2005, while paying out $13.5 billion in net benefits.

Mr. King then turned to a review of the Portfolio's exposure versus the policy benchmarks. He indicated that the global public equity portfolio ended the fiscal year at target, while the Plan had a sizeable underweight to core fixed income, which was offset by an overweight in Treasuries. He stated that all asset classes were within the allowable ranges outlined in the Statement of Investment Objectives and Policies (the "SIOP").

Mr. King reviewed individual asset class performance. He reported that real assets had performed very well for the year, with infrastructure and REITS returning 12.7 percent and 11.2 percent respectively. He also noted strong performance from emerging market debt and core fixed income, with returns of 10.8 percent and 7.9 percent, respectively.

Mr. King explained that the 'other opportunistic' asset class was the highest outperforming asset class during the fiscal year, followed by equity options, REITS, and public infrastructure. He identified portable alpha hedge funds, private debt, and mixed credit as the most significant underperformers in terms of excess returns. There being no questions from the Commission, this concluded Mr. King's report.

Next, Mr. Berg presented a review of the Annual Investment Plan ("AIP") initiatives. He explained that the AIP included 34 different goal/initiatives, 28 of which were from the investment team. Of that subset, Mr. Berg noted that 16 were "single year" initiatives and 12 were multi-year, or "ongoing" initiatives. There were also other initiatives relating to Reporting, IT, and RSIC Legal. Mr. Berg reviewed the progress towards completing these initiatives. He reported that over 90 percent of the investment team's current year initiatives were completed, including: (a) an analysis of the use of equity options in international markets; (b) currency hedging; (c) the development of a way to track key differentials in private debt and credit; and (d) re-underwriting existing active equity strategies. After a brief review of other ongoing initiatives and a brief discussion by the Commission, he concluded the AIP update.

DELEGATED INVESTMENT REPORT

Mr. Berg noted that two delegated investments had closed since the last Commission meeting:

a private equity investment with Great Hill Partners VII, which closed on June 26, 2019 in the amount of $52.5 million: and private credit investment with KKR BDC (Strategic Credit Opportunities Partners, LLC) in the amount of $125 million, which closed on June 25, 2019.

VI. MEKETA PRESENTATION

Mr. Hitchcock introduced Mr. Peter Woolley, co-CEO of Meketa Investment Group, Inc. ("Meketa"). Mr. Hitchcock stated that he was very pleased with the relationship with

Meketa and the direction it is heading. He stated that he believes that RSIC is the going to be able to expand its use of the full capacities of Meketa. He then asked Mr. Woolley to provide an educational presentation on collapsing interest rates.

Mr. Woolley began his presentation by stating that in recent weeks the Treasury yield curve has provided grim signals regarding future economic prospects for the U.S. Specifically, the U.S. Ten-Year Treasury yield fell below two percent for the first time in almost three years, reaching close to historic lows. Additionally, the yield curve "inverted" from the perspective of the 10-year and two-year yields, adding to the earlier inversion seen at the 10-year versus three-month yields. He stated that U.S. yields cannot be evaluated in isolation, however, due to the highly interconnected developed world. He noted that U.S. Treasury yields currently offer the highest yields for government bonds across the developed world. He stated that an environment with Treasury yields at or near all-time lows and equity prices (in the U.S.) at or near all-time peaks is not conducive to future high expected returns. He further stated that current economic expectations of low growth across the world (especially the developed world) should also create headwinds for equity returns. While forecasts are pessimistic, market performance has been strong in 2019, with double-digit returns, or close to, in most major equity and credit markets and positive fixed income performance. A discussion between Commissioners ensued on this topic and its effect on the Plan.

VII. PORTFOLIO FRAMEWORK

The Chair recognized Mr. Berg for the portfolio framework discussion. He emphasized that approval of the portfolio framework was not being sought at this meeting, noting that the goal was to obtain the Commissioners' consensus and incorporate that into a draft SIOP which would be presented at a later meeting. Mr. Berg then noted that broad agreement had been reached on the following topics at the prior meeting: (a) the benefit of a reporting framework tied to investment decisions; (b) the establishment of a reference portfolio with a 70/30 equity/bonds mix; (c) a reduction in complexity by establishing a five asset class Policy Benchmark; (d) classifying portable alpha as an implementation decision; and (e) a focus on long-term evaluation periods for investment decision-making.

Mr. Condon inquired about the reference portfolio discussion, due to his absence from the June meeting, and Mr. Berg explained that the Commission had engaged in an extensive discussion of this topic at the prior meeting. Mr. Berg gave a brief overview of the previous reference portfolio discussion, and noted that Staff was targeting a portfolio that would achieve the assumed rate of return over time, while not taking on too much additional risk, as additional risk would lead to a higher probability of a bad outcome. A bad outcome was defined as needing to raise contribution rates.

Mr. Berg stated that the three remaining points for discussion were: benchmarking for private market asset classes; performance reporting; and policy documentation through the SIOP and AIP. He then turned to the following points to guide the discussion:

- Why simplify the Policy Benchmark?
  The current policy benchmark ensured a complex portfolio, as it contained 21 underlying benchmarks. The proposed path, utilizing a five asset class Policy Benchmark, would establish a simpler "home base". It was also noted that a large bond allocation would improve liquidity and therefore the ability to exploit market opportunities.

- What question do we want a benchmark to help us answer?
  Mr. Berg used private equity as an example to illustrate this larger topic. He posed the question, "Did our private equity do for us what we hoped it would do?" He noted that the current private equity benchmark (public equity plus 300 basis points) only indicates how the portfolio performed versus public equity. It does not provide the Commission with any information on the quality of implementation of the private equity portfolio. If, however, the Commission shifted to a private equity universe benchmark, Mr. Berg explained that the Commission would be in a position to analyze whether private equity improved the Policy Benchmark return and gain insight into how RSIC performed against a "generic" private equity portfolio.

Mr. Berg then walked the Commissioners through an example to demonstrate the potential benefits of using a private equity universe benchmark rather than a public equity plus 300 basis points benchmark. He noted that using a private equity universe benchmark would enable the Commission to answer two important questions:

(i)Asset Allocation - Did the decision to include private equity in the Policy Benchmark improve its performance?

(ii)Manager Selection – How did the Portfolio perform relative to this generic universe of private equity?

After a lengthy discussion of private equity benchmarking, both long and short term, the Commission came to a consensus that over a longer term, comparing the choice to include private equity in the Policy Benchmark versus public equity was valuable, and over short-term horizons, it would be more valuable to answer how RSIC's private equity implementation compared against other private equity portfolios.

Next, Mr. Berg turned the discussion over to Mr. Frank Benham from Meketa to discuss Meketa's recommended benchmarks for the simplified portfolio framework. Mr. Benham explained that RSIC Staff and Meketa had been working to provide an improved framework for evaluating the success of the investment program. He noted that over the last two Commission meetings, the structure discussed had been based on the following four benchmarks/portfolios:

•The *Reference Portfolio*, a two-asset portfolio set by the Commission, which would serve as an overall risk guide. Mr. Benham noted that at the June meeting, Meketa recommended that the Commission adopt the 70 percent global equity and 30 percent U.S. Treasury benchmark as the Reference Portfolio.

•*Policy Benchmark* - Mr. Benham explained that the Commission would continue to set policy targets and ranges, and the Policy Benchmark would be determined by these targets. He expressed Meketa's opinion that comparing the Policy Benchmark to the Reference Portfolio would be a useful tool to evaluate the value from diversification.

•An *Implementation Benchmark* would be determined by the actual weights of different asset classes in the Portfolio. Mr. Benham explained that comparing the Implementation Benchmark to the Policy Benchmark would be a useful tool to evaluate the success of Staff's tactical decisions, as well as style or 'misfit' differences, and recommended that the Policy Benchmark and the Implementation Benchmark use the same indices, but with different weights.

•The *Actual Portfolio* – Mr. Benham noted that comparing the actual portfolio returns to the Implementation Benchmark would be a useful tool to evaluate the success of active management.

Mr. Benham then turned to a discussion of the five asset classes which it had been the Commission's consensus to incorporate in the Policy Benchmark. Mr. Benham reviewed the Commission's current benchmarks and presented Meketa's recommended Policy Benchmark constituents for the Commission's consideration.

- Bonds - Current benchmark: multiple benchmarks. Meketa recommendation: Bloomberg Barclays Aggregate.
- Private Debt - Current benchmark: S&P LSTA Leveraged Loan Index plus 150 basis points on a three-month lag. Meketa recommendation: no change.
- Global Equity - Current benchmark: multiple benchmarks. Meketa recommendation: MSCI ACWI IMI (All Country World Index – Investable Market Index).
- Private Equity - Current benchmark: 80 percent Russell 3000 Index and 20 percent MSCI EAFE Index plus 300 basis points on a three month lag. Meketa recommendation: Burgiss Private Equity composite.
- Real Assets - Current benchmark: two benchmarks. Meketa recommendation: NCREIF ODCE Net.

Mr. Benham concluded his presentation and introduced Mr. Aaron Lally from Meketa to present a deeper discussion of private markets benchmarking. Mr. Lally reviewed what other plans' benchmarking of private equity, private debt, private real estate, private infrastructure and hedge funds, and evaluated which data providers had the most complete and comprehensive dataset for peer universe benchmarks. He explained that Meketa had compared RSIC's benchmarks to those used by peer plans and highlighted the pros and cons of the two common approaches to benchmarking (public market index plus a spread and fund universe benchmarks). Mr. Lally noted that both approaches presented certain tradeoffs and concluded by reiterating that there was no industry standard for private market benchmarking. This concluded Mr. Lally's presentation.

Break was taken from 12:42 p.m. to 1:13 p.m.

The Chair recognized Mr. Berg for an update on the status of performance reporting. He stated that the goals were to streamline the performance reporting package and provide a new decision-based performance report for the quarter ending September 2019. He stated that full risk reporting capabilities were not yet established, but the risk system implementation was underway.

Mr. Berg noted that there would be substantial changes to the AIP and SIOP as Staff worked to embed the principles of the portfolio simplification framework into these documents, and outlined the anticipated timeline for distributing the AIP and SIOP.

The Chair and Mr. Hitchcock inquired whether the Commissioners were comfortable with Meketa's benchmark proposals and the performance reporting framework. An extensive discussion ensued regarding the proposed benchmarks. Certain concerns were expressed regarding the benchmarking of private equity, and Mr. Condon requested that the rationale for Staff's recommendations relating to the portfolio simplification framework be included in the draft documents. At the conclusion of the discussion, the Commissioners expressed general support for utilizing the five benchmarks proposed for the Policy Benchmark. Mr. Hitchcock noted that Staff would work to incorporate the Commissioners' feedback into the draft SIOP and AIP document for the Commission's review. This concluded the discussion.

VIII. STRATEGIC CALENDAR DISCUSSION

The Chair introduced Mr. Hitchcock to discuss the Strategic Calendar proposal. Mr. Hitchcock noted that he and Staff had developed a proposed Strategic Calendar which would establish strategic discussion items for each regular meeting on an annual basis. The schedule was developed to maximize the availability of the quarterly performance data. He added that a yearly calendar would provide clarity for both annual topics and non-annual topics, stating it would give everyone the ability to have visibility into the agenda for future meetings and ensure that strategic items were being covered. Most importantly, he stressed it would aid in instilling a longer-term focus on investment performance and on asset allocation decisions.

Mr. Hitchcock then provided the Commissioners with a sample of the Strategic Calendar and outlined what topics would be covered in each meeting, including an asset class deep dive at each meeting, strategic investment topic presentations by third party experts, and ongoing AIP progress reports, in addition to other specific topics at each meeting. Dr. Gunnlaugsson moved that the Commission adopt the Strategic Calendar as proposed and presented at Pages 158 to 162 in the red numbered document and authorized Staff to finalize the Calendar by making any technical revisions or formatting edits consistent with the action taken by the Commission. , Mr. Hancock seconded the motion, which was passed unanimously.

IX. EXECUTIVE SESSION

Dr. Gunnlaugsson moved that the Commission recede into Executive Session to discuss investment matters pursuant to S.C. Code Sections 9-16-80 and 9-16-320; to discuss personnel matters pursuant to S.C. Code Section 30-4-70(a)(1); and receive legal advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2). Mr. Gillespie seconded the motion, which passed unanimously.

X. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Upon completion of executive session, Mr. Condon moved to adopt the recommendation of the CIO as set forth in the Memo and presentation on TA Realty as discussed in executive session; (ii) authorize an additional commitment of up to $300 million to TA Realty-SC LP; (iii) authorize the CEO or his designee to negotiate and execute any necessary documents to implement the investment as approved by the Commission (1) upon documented approval for legal sufficiency by RSIC Legal and (2) upon expiration of the three business day review period as approved by the Commission on May 1, 2014 (or as the review period may be amended or superseded by the Commission); and (iv) authorize the CEO and/or the CIO or their designee(s) to thereafter authorize the custodian of funds to transfer such funds as are necessary to meet the Retirement System Trust Fund's obligations with respect to the Investment. Dr. Gunnlaugsson seconded the motion, which passed unanimously.

XI. ADJOURNMENT

There being no further business, Mr. Gillespie moved to adjourn the meeting. Mr. Giobbe seconded the motion, which passed unanimously, and the meeting adjourned at 4:15 p.m.

[Staff Note: In compliance with S.C. Code Section 30-4-0, public notice of and the agenda for this meeting was delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., 5:03 p.m. p.m. on September 9, 2019]

FY2020-2021 Business Plan

Introduction

Guided by our Beliefs and Core Values, the Executive Leadership team collaboratively developed a Business Plan that captures strategic goals related to back and middle office functions to guide the organization toward better execution of fundamental investment goals and achieving the overall Purpose of RSIC. The four strategic goals related to back and middle office functions will be the focus for the FY 2020-2021 Business Plan.

Our Purpose

To earn an investment return, that when combined with contributions, fulfills the promise of benefit payments to our current and future retirees and their beneficiaries.

Our Beliefs

Belief 1: We believe that asset allocation is the main driver of an investment portfolio's risk, return, and cost.

Belief 2: We believe that investors must be rewarded for incurring additional risk, cost, and complexity.

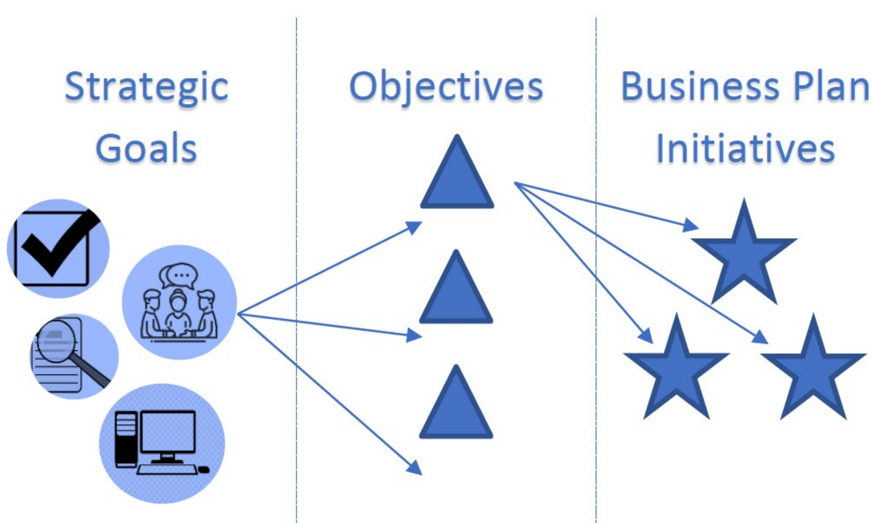
Belief 3: We believe that we are long-term investors which requires us to instill discipline and patience into our investment decision making and assessment process.

Belief 4: We believe that achieving our investment objective requires an organization with strong governance, that maintains core values, and employs talented professionals. In order to do this, RSIC must:

1. establish a governance structure with clear lines of authority and means to assess the quality of decision making and resulting performance;
2. recruit and retain a talented investment and operational staff consistent with our **Core Values** of:
    a. **Humility,**
    b. **Intellectual Curiosity, and**
    c. **Team Player.**
3. achieve a deep understanding of value creation through the investment process;
4. emphasize risk awareness and focus on mitigating investment and enterprise risk; and
5. provide the foundation, infrastructure, and systems necessary to meet the investment objective and mitigate risk.

Each strategic goal contains individual objectives and business plan initiatives, which are captured in our FY2020-2021 Business Plan. In conformity with RSIC practice, we will continue to look for ways to improve processes and align with current best practices. As such, this business plan is subject to continuous enhancement and improvement.

The graphic below reflects the flow from strategic goals to business plan initiatives.



TALENT MANAGEMENT

Goal: Recruit, train and retain a high performing and diverse work force.

Objective: Complete and begin implementation of succession planning across the agency
Business Plan Initiatives
Work with CEO to identify key positions and complete plan with approval
Initiate necessary training and development recommendations for successful performance within identified roles
Objective: Initiate plan to retain critical personnel
Identify key personnel that are critical for organization to retain
Identify important factors that are pertinent to retention of key personnel
Develop and formalize long-term plan for individual employees based on importance factors
Objective: Continue initiatives to improve workplace diversity and inclusiveness
Develop plan to expand diversity and inclusion within the workplace
Create and implement inclusion policy
Continue to work with Carolina Clusters Pathway initiative via HR head and maintain board seat
Objective: Implementation of HR system for HR metrics related to talent management
Obtain system that provides HR metrics that are pertinent to retaining talent and providing performance metrics of workforce
Objective: Continue recruitment initiative to attract top talent
Continue attending various career fairs
Attend campus information sessions with colleges interested in creating partnerships with the organization
Visit college clubs, particularly those focused on finance and investments
Recruit outside of the central area in order to reach additional talent
Objective: Increase structured and/or enhanced training and education opportunities
Revamp the assimilation plan for new employees
Record and maintain records of training or education needed for employee to progress within career
Objective: Continue making improvements to the Employee Performance Management System
Ensure a system in which employees feel they are measured fairly by providing managers with a mandatory training on how to properly rate employees
Objective: Update and maintain HR policies to meet needs of evolving workforce and requirements of employment law
Research and implement policies that promote a welcoming and supportive workplace

INCREASED INDEPENDENT REASSURANCE

Goal: Strengthen independent reassurance and internal controls in RSIC's investment and back office areas.

Objective: Build-out the internal audit co-sourcing program
Business Plan Initiatives
Develop relationship with independent audit and consulting firm through co-sourcing in order to maximize internal audit capabilities
Update Internal Audit Charter and Audit and Enterprise Risk Management Committee Charter to reflect updated internal audit co-sourcing model
Train selected RSIC staff on internal audit methodology to assist in facilitation of relationship
Objective: Build-out the Enterprise Risk Management (ERM) Function
Train and develop selected RSIC staff on ERM to allow them to apply and implement best practices for organization
Perform a functional analysis and assessment of ERM to be used internally
Finalize the strategic vision and key priorities for ERM with selected co-source audit firm including: • Risk framework/risk owners • Dashboard for reporting • Risk appetite for key risks
Perform ERM training for RSIC staff and Audit and Enterprise Risk Management Committee members
Objective: Increase independent validation of reported financial data and procedures
Continue build-out of Agreed Upon Procedures regarding areas tested
Incorporate an independent fee validation check into annual fee collection and review process
Continue engagement for GIPS verification
Continue engagement for CEM fee benchmarking

ENHANCED REPORTING TRANSPARENCY

Goal: Develop performance reporting framework that (i) easily allows Commission and investment staff to quantify the impact of investment decisions on Portfolio performance and (ii) provides visualization of Plan data for insight into Plan performance.

Objective: Development and implementation of new Portfolio Reporting Framework that provides attribution of the investment decision process
Business Plan Initiatives
Facilitate collaboration between CEO, CIO and the Reporting Team to develop the reporting framework
Document procedures around new reporting framework production
Explore software solutions/vendors to streamline defined process and enhanced reporting capabilities
Develop process to store Aggregate Plan data in a single source for reporting
Objective: Development of data visualizations and implementation of Microsoft Power BI as the business intelligence engine
Evaluate current reporting output to identify potential visualization reporting
Collaborate with the Investment Team to identify opportunities for value-added visualizations
Define and build data stores

PROMOTE IT INFRASTRUCTURE AND INFORMATION SECURITY

Goal: Continue to create and maintain technology solutions to meet the needs of the business in order to achieve the investment goals and objectives as well as addressing ongoing information security risk.

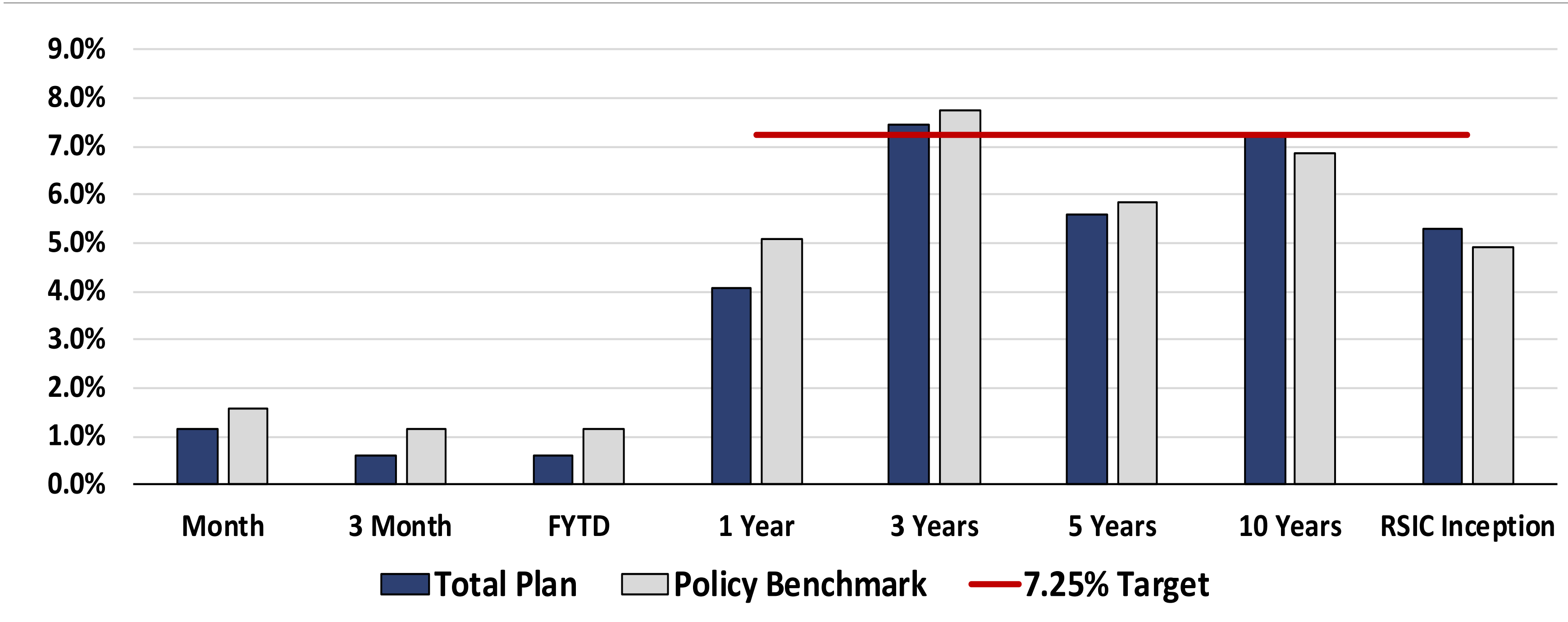
Objective: Improve investment process efficiency through technology solutions
Business Plan Initiatives
Implement investment lifecycle system to increase automation and validation of investment processes, increase cross-department transparency, and reduce data duplication
Consolidate document management for ease of access and workflow buildout
Objective: Ensure availability of data while increasing resiliency of underlying infrastructure
Utilize cloud-based services to increase availability and security of infrastructure
Migrate current disaster recovery environment to alternative solution to ensure continuity of business
Present use case and business justification for implementing data warehousing solution
Objective: Advance Information Security program
Further limit agency risk by tailoring information security training initiatives and increasing awareness to the sensitivity of investment data, contracts, and intellectual property
Enhance technical security controls to reduce risk and loss of sensitive data

RETIREMENT SYSTEM INVESTMENT COMMISSION

Performance Update

Data as of September 30th 2019.

Portfolio Framework - Current Policy Benchmark



Historic Plan Performance As of 09/30/19	Market Value (In Millions)	Month	3 Month	FYTD	1 Year	Annualized 3 Years	5 Years	10 Years	RSIC Inception
Total Plan	**$32,189**	**1.17%**	**0.61%**	**0.61%**	**4.05%**	**7.46%**	**5.60%**	**7.25%**	**5.28%**
Policy Benchmark		1.57%	1.15%	1.15%	5.10%	7.74%	5.86%	6.88%	4.92%
Excess Return		-0.40%	-0.54%	-0.54%	-1.05%	-0.27%	-0.26%	0.37%	0.37%
Net Benefit Payments (In Millions)		($27)	$14	$14	($609)	($3,031)	($5,165)	($10,090)	($13,452)

Portfolio Framework - Current Policy Benchmark

Asset Class / Benchmark returns as of 09/30/19	Plan Weight	3 Month	YTD	FYTD	Annualized 1 Year	Annualized 3 Years	Annualized 5 Years
Total Plan	100.0%	0.61%	11.46%	0.61%	4.05%	7.46%	5.60%
Policy Benchmark		*1.15%*	*11.62%*	*1.15%*	*5.10%*	*7.74%*	*5.86%*
Global Public Equity	37.5%	-0.54%	15.47%	-0.54%	0.05%	9.12%	6.21%
Global Public Equity Blend		*-0.44%*	*15.19%*	*-0.44%*	*0.37%*	*9.22%*	*6.42%*
Equity Options	6.8%	1.05%	9.87%	1.05%	-0.92%	6.38%	n/a
Blended Equity Options BM		*0.56%*	*9.77%*	*0.56%*	*-2.35%*	*6.46%*	n/a
Private Equity	7.3%	1.80%	5.95%	1.80%	5.84%	12.52%	10.08%
Private Equity Blend		*4.91%*	*3.55%*	*4.91%*	*10.41%*	*16.08%*	*11.61%*
GTAA	7.4%	-0.37%	12.88%	-0.37%	2.38%	4.29%	3.34%
GTAA Benchmark Blend		*0.58%*	*13.17%*	*0.58%*	*3.96%*	*5.86%*	*4.72%*
Other Opportunistic	1.5%	1.95%	7.49%	1.95%	5.88%	n/a	n/a
GTAA Benchmark Blend		*0.58%*	*13.17%*	*0.58%*	*3.96%*	n/a	n/a
Core Fixed Income	6.3%	2.19%	8.13%	2.19%	9.94%	3.13%	3.35%
Barclays US Aggregate Bond Index		*2.27%*	*8.52%*	*2.27%*	*10.30%*	*2.92%*	*3.38%*
TIPS	1.9%	1.32%	7.56%	1.32%	7.19%	n/a	n/a
Barclays US Treasury Inflations Notes		*1.35%*	*7.58%*	*1.35%*	*7.13%*	n/a	n/a
Cash and Short Duration (Net)	4.1%	0.61%	2.35%	0.61%	2.97%	1.58%	1.26%
ICE BofA Merrill Lynch 3-Month T-Bill		*0.56%*	*1.81%*	*0.56%*	*2.39%*	*1.54%*	*0.98%*
Mixed Credit	4.2%	0.65%	6.00%	0.65%	3.36%	5.21%	3.36%
Mixed Credit Blend		*1.16%*	*9.09%*	*1.16%*	*4.73%*	*5.30%*	*4.92%*
Private Debt	6.8%	1.04%	4.42%	1.04%	3.76%	5.75%	4.51%
S&P/LSTA Leveraged Loan + 150 Bps on a 3-month lag		*2.08%*	*3.21%*	*2.08%*	*5.47%*	*6.74%*	*5.18%*
Emerging Markets Debt	3.9%	-0.71%	9.16%	-0.71%	9.31%	3.37%	3.40%
Emerging Markets Debt Blend		*0.37%*	*10.43%*	*0.37%*	*10.90%*	*3.89%*	*3.19%*
Private Real Estate	7.7%	2.09%	4.37%	2.09%	6.70%	8.89%	11.02%
Private Real Estate Custom Benchmark		*1.34%*	*3.91%*	*1.34%*	*5.64%*	*7.77%*	*10.17%*
Public Real Estate	1.5%	8.51%	29.44%	8.51%	20.19%	8.53%	n/a
FTSE NAREIT Equity REITs Index		*7.80%*	*26.96%*	*7.80%*	*18.42%*	*7.36%*	n/a
Public Infrastructure	2.5%	2.67%	24.06%	2.67%	16.45%	7.36%	n/a
Private Infrastructure	0.4%	-3.73%	-0.86%	-3.73%	8.31%	n/a	n/a
Dow Jones Brookfield Global Infrastructure Net Index		*2.53%*	*23.78%*	*2.53%*	*16.51%*	*7.76%*	n/a
PA Hedge Fund Excess Return (Net LIBOR)	9.5%	0.43%	0.43%	0.43%	-0.23%	3.22%	3.26%
Portable Alpha HF Blend		*0.62%*	*1.87%*	*0.62%*	*2.50%*	*1.03%*	*1.08%*
PA Collateral Excess Return (Net LIBOR)	15.3%	0.29%	0.62%	0.29%	0.23%	1.56%	n/a
Portable Alpha Benchmark		*0.42%*	*1.10%*	*0.42%*	*1.42%*	*0.62%*	n/a

Portfolio Framework - Current Policy Benchmark

Performance Breakdown: Executive Summary

as of September 30, 2019

Reference Benchmark	
FYTD	0.59%
YTD	13.84%
1 Year	3.69%
3 Year	7.56%

Policy Benchmark	
FYTD	1.15%
YTD	11.62%
1 Year	5.10%
3 Year	7.74%

Implementation Benchmark	
FYTD	0.74%
YTD	12.38%
1 Year	4.45%
3 Year	7.21%

Actual Portfolio	
FYTD	0.61%
YTD	11.46%
1 Year	4.05%
3 Year	7.46%

Value From Diversification	
FYTD	0.56%
YTD	-2.22%
1 Year	1.41%
3 Year	0.18%

Quality of Portfolio Structure	
FYTD	-0.40%
YTD	0.77%
1 Year	-0.65%
3 Year	-0.53%

Quality of Manager Selection	
FYTD	-0.13%
YTD	-0.92%
1 Year	-0.41%
3 Year	0.25%

Value VS Reference Benchmark	
FYTD	0.02%
YTD	-2.38%
1 Year	0.36%
3 Year	-0.09%

Value vs Policy Benchmark	
FYTD	-0.54%
YTD	-0.16%
1 Year	-1.05%
3 Year	-0.27%

Performance Breakdown: Executive Summary

as of September 30, 2019

Reference Portfolio	
FYTD	*0.59%*
YTD	*13.84%*
1-Year	*3.69%*

5-asset Portfolio	
FYTD	*1.13%*
YTD	*11.11%*
1-Year	*5.46%*

Implementation	
FYTD	*0.74%*
YTD	*12.38%*
1-Year	*4.45%*

Actual	
FYTD	*0.61%*
YTD	*11.46%*
1-Year	*4.05%*

Value From Diversification	
FYTD	0.54%
YTD	-2.72%
1-Year	1.77%

Quality of Portfolio Structure	
FYTD	-0.38%
YTD	1.27%
1-Year	-1.00%

Quality of Manager Selection	
FYTD	-0.13%
YTD	-0.92%
1-Year	-0.41%

Actual VS Reference	
FYTD	0.02%
YTD	-2.38%
1-Year	0.36%

Actual vs Policy	
FYTD	-0.52%
YTD	0.34%
1-Year	-1.41%

RSIC Quality of Portfolio Structure (vs. Simplified Policy)

Quality of Portfolio Structure	Q4 18	Q1 19	Q2 19	Q3 19	FYTD	1Y
Public Equity	-20	2	-8	-10	-10	-36
Bonds + Cash	-80	51	2	-29	-29	-56
Private Equity	-16	10	-4	-6	-6	-15
Private Credit	-8	7	-2	-1	-1	-4
Real Assets	-46	75	8	14	14	52
GTAA	n/a	n/a	n/a	n/a	n/a	n/a
PA HF Excess Return	-30	15	6	-6	-6	-16

Impacts expressed as basis points at Plan Level. Excludes interaction and other minor performance impacts.

Q3 2019 Observations

- **Bonds + Cash:** Core Bonds outperformed both Mixed Credit and EM Debt (simplified Policy uses Core benchmark for all Bonds).
- **Real Assets:** REITs had significant positive performance (+7.8% for the quarter) as higher-yielding assets with stable long term cash flows show strength.
- **Public Equity:** Overweight to Emerging Markets hurt performance (EM underperformed ACWI by 5%) during the quarter. Value rally in September offset weakness in July/August.

RSIC Quality of Manager Selection

Manager Selection	Q4 18	Q1 19	Q2 19	Q3 19	FYTD	1Y
Public Equity	42	-21	3	4	4	27
Bonds + Cash	5	-3	0	-6	-6	-4
Private Equity	-27	8	-12	-15	-15	-47
Private Credit	-16	34	-20	-7	-7	-9
Real Assets	3	-7	1	8	8	5
GTAA	-13	18	-12	-6	-6	-12
PA HF Excess Return	23	-32	-16	10	10	-19

Impacts expressed as basis points at Plan Level. Excludes interaction and other minor performance impacts

Q3 19 Observations

- **GTAA:** Underperformance due primarily to overweight to Emerging Markets Debt, which struggled in August after election results in Argentina.
- **Portable Alpha:** Outperformed the benchmark (offsetting negative portfolio structure impact).
- **Private Equity:** Returns below Cambridge Private Equity universe benchmark – recent investments outperformed older vintage year funds.

Portfolio Asset Allocation

Plan Exposures (9/30) vs. Current Policy Targets

Asset Class Group	Policy	Actual	vs. Policy
Public Equity	43.7%	43.9%	0.2%
Private Equity	7.3%	7.3%	0.0%
Bonds + Cash	22.2%	20.9%	-1.3%
Private Credit	6.8%	6.8%	0.0%
Real Assets	12.0%	12.2%	0.2%
GTAA	8.0%	8.9%	0.9%
Portable Alpha	10.0%	9.5%	-0.5%

Equity Detail	Variance
US Equity	0.8%
Developed Int'l Equity	-0.9%
Emerging Markets Equity	0.5%
Equity Options Strategy	-0.2%
Total	**0.2%**

Core Bonds Detail	Variance
Core Bonds	-4.8%
High Yield / Bank Loans	0.0%
Emerging Markets Debt	-0.1%
Cash & Short Duration (Net)	3.5%
Total	**-1.3%**

Real Assets Detail	Variance
Real Estate (Private)	0.0%
Real Estate (Public)	0.2%
Private Infrastructure	0.0%
Public Infrastructure	0.0%
Total	**0.2%**

Changes In Plan Exposures: June to September

Asset Class Group	Policy	6/30/2019	9/30/2019	Qtr. Change
Public Equity	43.7%	44.3%	43.9%	-0.4%
Private Equity	7.3%	7.1%	7.3%	0.2%
Bonds + Cash	22.2%	21.1%	20.9%	-0.3%
Private Credit	6.8%	6.3%	6.8%	0.5%
Real Assets	12.0%	11.8%	12.2%	0.3%
GTAA	8.0%	9.3%	8.9%	-0.4%
Portable Alpha	10.0%	9.7%	9.5%	-0.2%

Equity Detail	Variance Qtr. Change
US Equity	0.1%
Developed Int'l Equity	0.1%
Emerging Markets Equity	-0.2%
Equity Options Strategy	-0.2%
Total	**-0.2%**

Core Bonds Detail	Variance Qtr. Change
Core Bonds	1.0%
High Yield / Bank Loans	0.5%
Emerging Markets Debt	0.6%
Cash & Short Duration (Net)	-1.8%
Total	**0.2%**

Real Assets Detail	Variance Qtr. Change
Real Estate (Private)	0.0%
Real Estate (Public)	0.3%
Private Infrastructure	0.0%
Public Infrastructure	0.0%
Total	**0.3%**

Key Observations: Public Equity Detail

Equity Detail	Variance
US Equity	0.8%
Developed Int'l Equity	-0.9%
Emerging Markets Equity	0.5%
Equity Options Strategy	-0.2%
Total	**0.2%**

- Overweight US/EM vs. Developed Non-US
  - Healthier economy (US)
  - Compelling valuations (EM)
  - Idiosyncratic event risks (Europe)
- Underweight Equity Options
  - Very low compensation in option premiums
  - Further reduced since 9/30
  - Preference to hold S&P 500 exposure in a low vol environment
- Opportunities within Emerging Markets
  - Modest overweight to China A market and Emerging Market Small Caps (contrarian)
- Modest factor tilts to Value and Quality in US and EM
  - Value factor “cheapness” approaching extreme levels

Key Observations: Bond Portfolio Detail

- Considerable underweight to Core Bonds vs. Short Duration (since Q1)
  - Shift to much lower yield environment early in 2019
  - Hurt performance in Q2/Q3
  - Genesis of trade was yield curve inversion (3m yield > 10y yield)

- Overweight Structured Credit vs. Bank Loans & High Yield
  - Significant yield pick-up and seniority vs. traditional syndicated corporate credit, which appears prudent given declining credit fundamentals

Core Bonds Detail	Variance
Core Bonds	-4.8%
High Yield / Bank Loans	0.0%
Emerging Markets Debt	-0.1%
Cash & Short Duration (Net)	3.5%
Total	**-1.3%**

Portfolio Risk Framework

Risk Estimates [1]

as of September 30, 2019

	Reference Portfolio	Policy Benchmark [3]	Implementation	Actual [4]
Expected Volatility [2]	***7.10%***	***7.38%***	***7.61%***	***7.94%***

	Asset Allocation	Portfolio Structure	Manager Selection
Tracking Error	***1.41%***	***0.41%***	***TBD***

1. Figures represent stylized estimates based on a 0.97 decay
2. Risk figures provided are ex-ante, our best estimate of future risk based on current positioning
3. Private benchmarks proxied with daily public alternatives
4. Actual position level risk sourced from BNYM, and will be subject to a 6-8 week lag due to data requirements

South Carolina Retirement System Investment Commission

Preliminary Performance

September 30, 2019

Total Retirement System

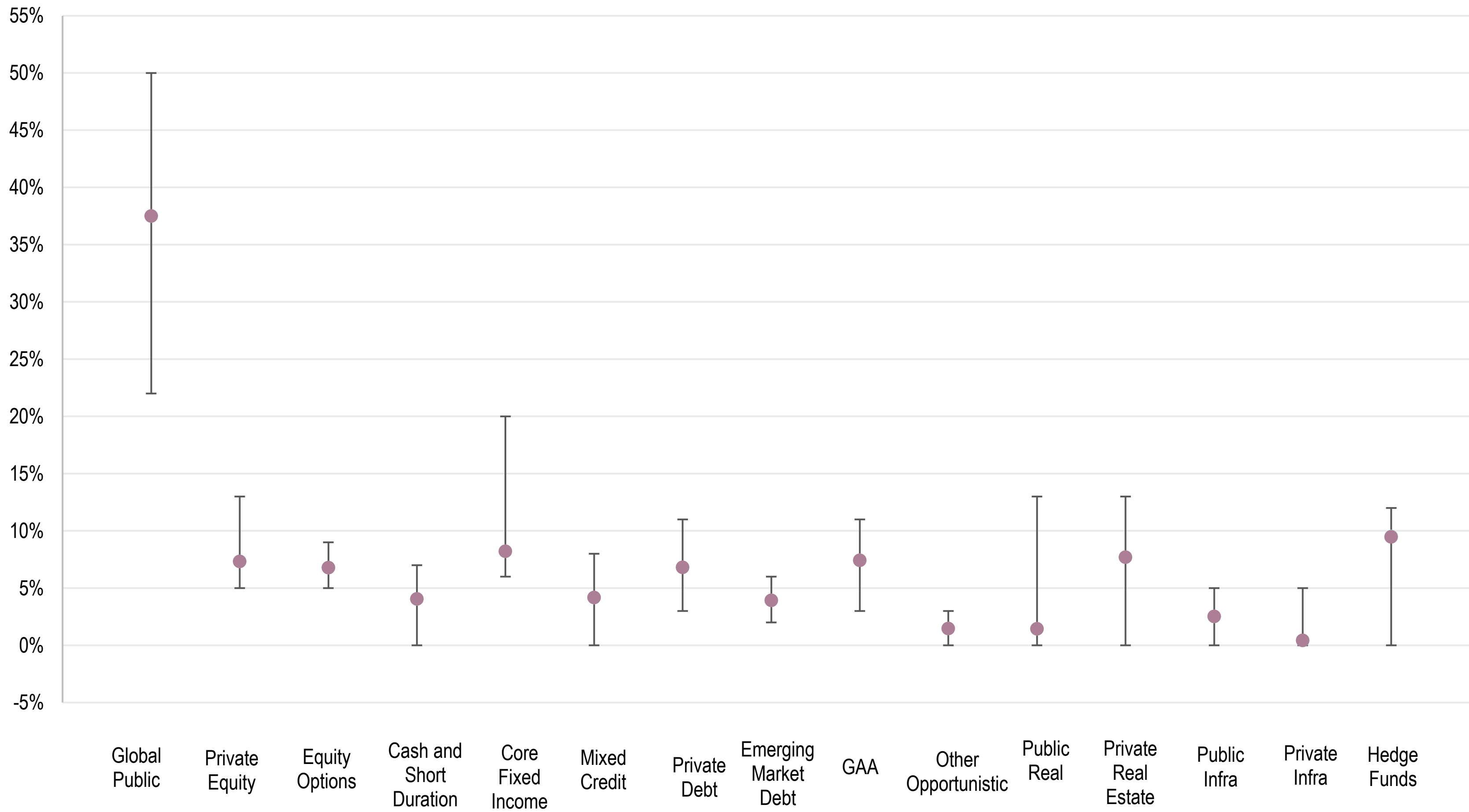
As of September 30, 2019

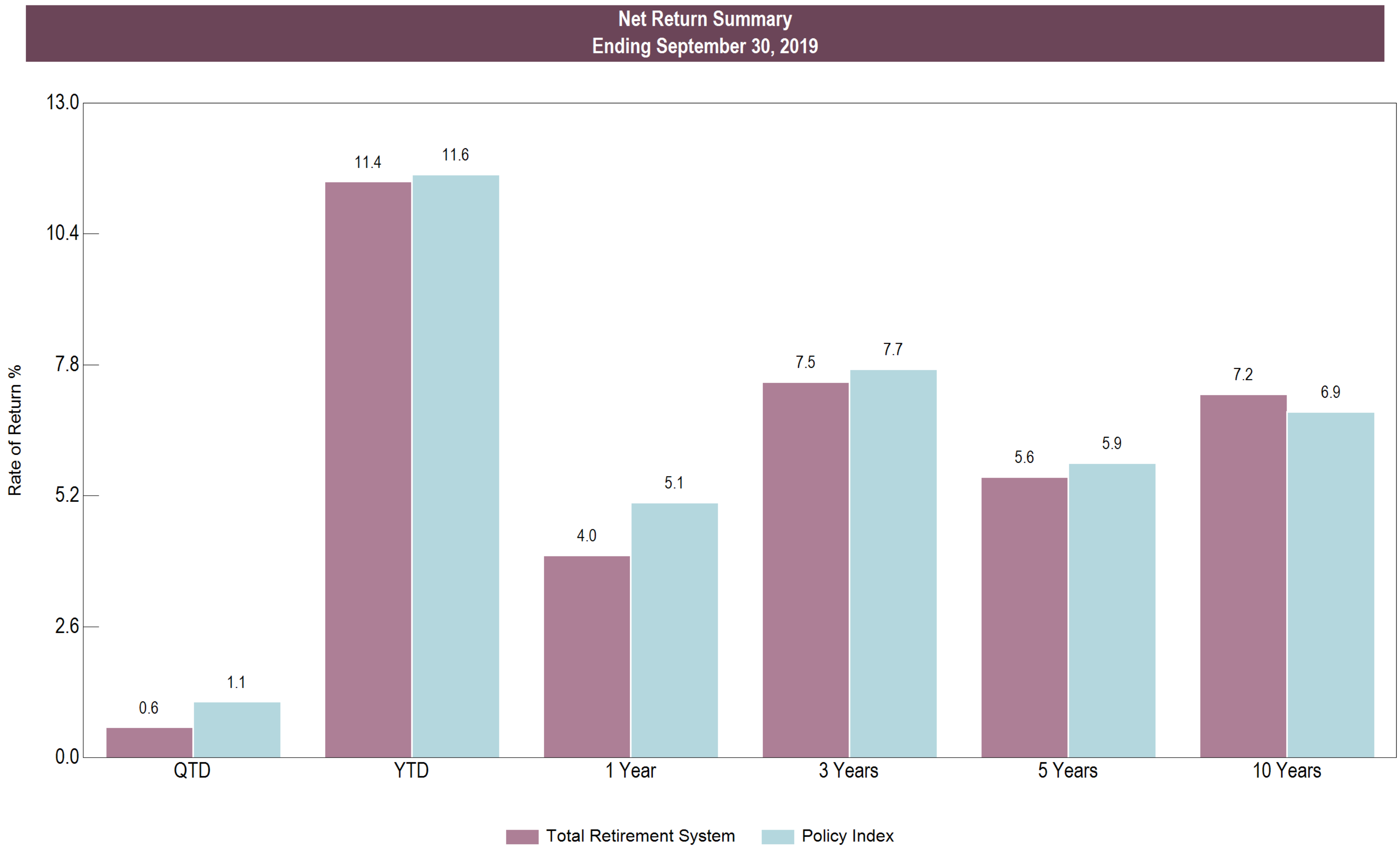
Allocation vs. Targets and Policy

	MV at 9/30/2019	Overlay Exposures	Net Position	% of Total System	% of Total System (Net)	FY 20 Policy Targets	Allowable Ranges	SIOP Compliance?
Total System	**32,188,778,125**	**-**	**32,188,778,125**	**100%**	**100%**	**110%**	**-**	**-**
Equity	**13,584,649,088**	**3,048,894,979**	**16,633,544,067**	**42%**	**52%**	**51%**	**31-59%**	**Yes**
Global Public Equity	9,374,939,731	2,705,430,653	12,080,370,384	29%	38%	37%	22-50%	Yes
Private Equity	2,362,912,148	-	2,362,912,148	7%	7%	7%	5-13%	Yes
Equity Options	1,846,797,209	343,464,326	2,190,261,535	6%	7%	7%	5-9%	Yes
Conservative Fixed Income	**3,948,661,589**	**6,226,679**	**3,954,888,267**	**12%**	**12%**	**14%**	**4-24%**	**Yes**
Cash and Short Duration	3,165,066,769	(1,858,773,458)	1,306,293,311	10%	4%	1%	0-7%	Yes
Core Fixed Income	783,594,820	1,865,000,137	2,648,594,957	2%	8%	13%	6-20%	Yes
Diversified Credit	**4,813,897,543**	**-**	**4,813,897,543**	**15%**	**15%**	**15%**	**10-20%**	**Yes**
Mixed Credit	1,351,282,031	-	1,351,282,031	4%	4%	4%	0-8%	Yes
Private Debt	2,196,232,137	-	2,196,232,137	7%	7%	7%	3-11%	Yes
Emerging Market Debt	1,266,383,376	-	1,266,383,376	4%	4%	4%	2-6%	Yes
Opportunistic	**2,872,334,264**	**-**	**2,872,334,264**	**9%**	**9%**	**8%**		
GAA	2,395,580,750		2,395,580,750	7%	7%	7%	3-11%	Yes
Other Opportunistic	476,753,514	-	476,753,514	1%	1%	1%	0-3%	Yes
Real Assets	**3,914,113,983**	**-**	**3,914,113,983**	**12%**	**12%**	**12%**	**7-17%**	**Yes**
Public Real Estate	467,874,913	-	467,874,913	1%	1%	1%	0-13%	Yes
Private Real Estate	2,485,802,275	-	2,485,802,275	8%	8%	8%	0-13%	Yes
Public Infrastructure	818,834,725	-	818,834,725	3%	3%	3%	0-5%	Yes
Private Infrastructure	141,602,070	-	141,602,070	0%	0%	0%	0-5%	Yes
Hedge Funds PA	3,055,121,658	(3,055,121,658)	-	9%	0%	10%	0-12%	**Yes**

Includes cash in the Russell Overlay separate account.
Percentages may not sum to 100% due to rounding.

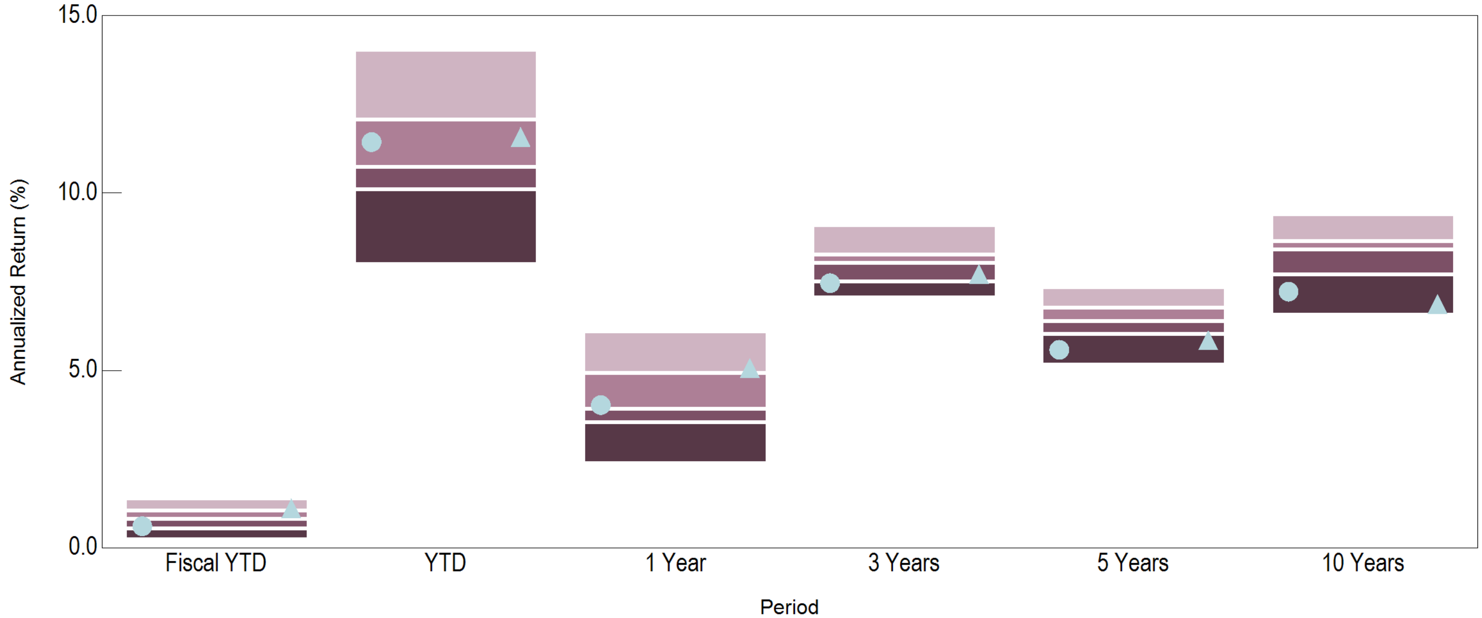
Actual vs. Policy Ranges:
(Including Overlay)





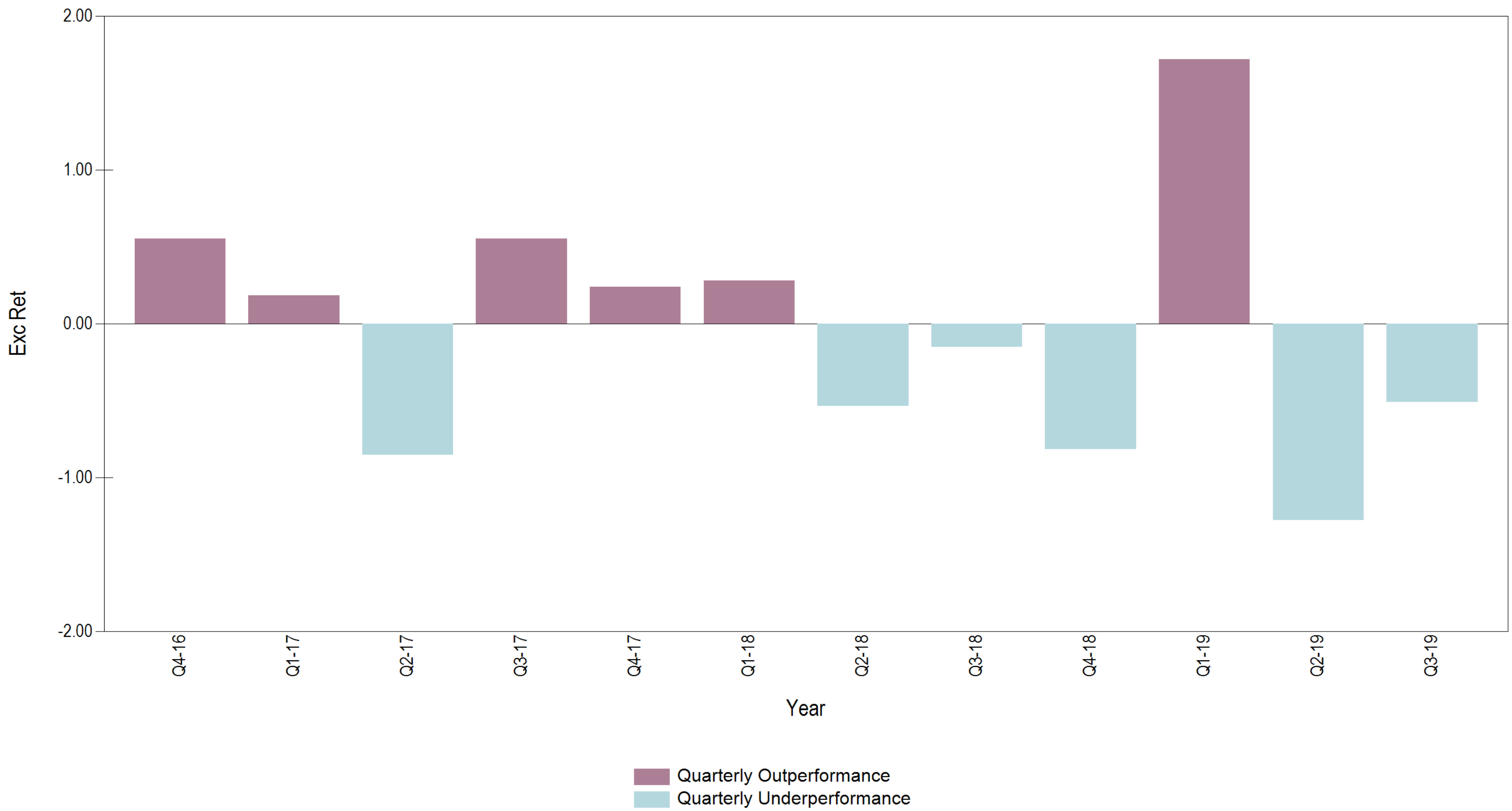
Returns for periods greater than one year are annualized.

InvMetrics Public DB > $5B Net Return Comparison
Ending September 30, 2019



	Return (Rank)											
5th Percentile	1.4		14.0		6.1		9.1		7.3		9.4	
25th Percentile	1.1		12.1		4.9		8.3		6.8		8.7	
Median	0.8		10.8		3.9		8.0		6.4		8.4	
75th Percentile	0.6		10.1		3.5		7.5		6.0		7.7	
95th Percentile	0.2		8.0		2.4		7.1		5.2		6.6	
# of Portfolios	24		24		24		24		23		21	
Total Retirement System	0.6	(68)	11.4	(37)	4.0	(47)	7.5	(76)	5.6	(86)	7.2	(88)
Policy Index	1.1	(24)	11.6	(34)	5.1	(22)	7.7	(71)	5.9	(83)	6.9	(92)

Quarterly Excess Performance vs. Policy Benchmark



Total Retirement System

As of September 30, 2019

Net Asset Class Performance Summary

	Market Value ($)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Retirement System	**32,188,778,125**	**100.0**	**0.6**	**11.4**	**4.0**	**7.5**	**5.6**	**7.2**	**6.3**	**Jul-94**
Policy Index			*1.1*	*11.6*	*5.1*	*7.7*	*5.9*	*6.9*	*5.8*	*Jul-94*
Global Public Equity	**9,374,939,731**	**29.1**	**-1.1**	**14.4**	**-1.1**	**8.5**	**6.1**	**8.5**	**4.4**	**Jun-99**
FY '19 Global Public Equities Custom Benchmark			*-0.4*	*15.2*	*0.4*	*9.2*	*6.4*	*8.2*	*5.0*	*Jun-99*
Private Equity	**2,362,912,148**	**7.3**	**1.8**	**6.0**	**5.9**	**12.4**	**10.0**	**12.5**	**7.8**	**Apr-07**
80% Russell 3000/20% MSCI EAFE + 300 bps on a 3-month lag			*4.9*	*3.5*	*10.4*	*16.1*	*11.6*	*16.1*	*14.5*	*Apr-07*
Equity Options	**1,846,797,209**	**5.7**	**1.3**	**10.2**	**0.0**	**6.7**	**--**	**--**	**6.9**	**Jul-16**
FY '19 CBOE 50/50 Put/Buy			*0.6*	*9.8*	*-2.3*	*6.5*	*5.6*	*7.3*	*6.5*	*Jul-16*
Short Duration	**1,110,988,020**	**3.5**	**0.8**	**3.4**	**4.0**	**2.2**	**2.0**	**--**	**1.9**	**Mar-10**
BBgBarc US Govt/Credit 1-3 Yr. TR			*0.7*	*3.4*	*4.6*	*1.8*	*1.6*	*1.5*	*1.4*	*Mar-10*
Cash and Overlay	**2,054,078,749**	**6.4**	**0.5**	**1.5**	**2.1**	**1.0**	**0.4**	**0.2**	**1.1**	**Oct-05**
ICE BofAML 91 Days T-Bills TR			*0.6*	*1.8*	*2.4*	*1.5*	*1.0*	*0.5*	*1.3*	*Oct-05*
Core Fixed Income	**783,594,820**	**2.4**	**2.5**	**8.7**	**9.9**	**3.6**	**3.8**	**4.1**	**6.1**	**Jul-94**
BBgBarc US Aggregate TR			*2.3*	*8.5*	*10.3*	*2.9*	*3.4*	*3.7*	*5.5*	*Jul-94*
Mixed Credit	**1,351,282,031**	**4.2**	**0.6**	**6.0**	**3.3**	**5.2**	**3.4**	**6.1**	**6.0**	**May-08**
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index			*1.2*	*9.1*	*4.7*	*5.3*	*4.9*	*5.9*	*6.0*	*May-08*
Private Debt	**2,196,232,137**	**6.8**	**1.0**	**4.4**	**3.8**	**5.7**	**4.5**	**8.1**	**6.9**	**Jun-08**
S&P LSTA Leveraged Loan Index + 150 bps on a 3-month lag			*2.1*	*3.2*	*5.5*	*6.7*	*5.2*	*7.7*	*5.2*	*Jun-08*
Emerging Market Debt	**1,266,383,376**	**3.9**	**-0.7**	**9.2**	**9.3**	**3.4**	**3.4**	**4.4**	**5.2**	**Jul-09**
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified			*0.4*	*10.4*	*10.9*	*3.9*	*3.2*	*4.7*	*5.5*	*Jul-09*
GAA	**2,395,580,750**	**7.4**	**-0.4**	**12.9**	**2.4**	**3.8**	**3.0**	**6.2**	**4.8**	**Aug-07**
Total System Policy Benchmark ex-Private Markets			*0.6*	*13.2*	*3.9*	*5.9*	*4.7*	*5.5*	*4.4*	*Aug-07*
Other Opportunistic	**476,753,514**	**1.5**	**1.9**	**7.5**	**5.9**	**--**	**--**	**--**	**8.1**	**Jul-17**
Total System Policy Benchmark ex-Private Markets			*0.6*	*13.2*	*3.9*	*5.9*	*4.7*	*5.5*	*5.2*	*Jul-17*
Hedge Funds Portable Alpha	**3,055,121,658**	**9.5**	**1.0**	**2.3**	**2.4**	**5.1**	**4.6**	**7.7**	**7.9**	**Jul-07**
ICE BAML 3 Month T-Bill + 250 BPS SC Custom			*1.2*	*3.7*	*4.9*	*2.9*	*1.9*	*1.1*	*1.4*	*Jul-07*
Public Real Estate	**467,874,913**	**1.5**	**8.5**	**29.4**	**20.2**	**8.5**	**--**	**--**	**7.5**	**Jul-16**
FTSE NAREIT Equity REIT			*7.8*	*27.0*	*18.4*	*7.4*	*10.3*	*13.0*	*6.3*	*Jul-16*
Private Real Estate	**2,485,802,275**	**7.7**	**2.1**	**4.4**	**6.7**	**8.9**	**11.1**	**10.5**	**7.2**	**Jul-08**
NCREIF ODCE Net + 100 BPS SC Custom			*1.3*	*3.9*	*5.6*	*7.7*	*10.2*	*10.5*	*5.9*	*Jul-08*
Public Infrastructure	**818,834,725**	**2.5**	**2.7**	**24.1**	**16.5**	**7.4**	**--**	**--**	**7.3**	**Jun-16**
DJ Brookfield Global Infrastructure			*2.5*	*23.8*	*16.5*	*7.8*	*5.2*	*10.9*	*9.3*	*Jun-16*
Private Infrastructure	**141,602,070**	**0.4**	**-3.7**	**-0.8**	**8.3**	**--**	**--**	**--**	**5.9**	**Jul-18**
DJ Brookfield Global Infrastructure			*2.5*	*23.8*	*16.5*	*7.8*	*5.2*	*10.9*	*12.2*	*Jul-18*

Statistics Summary
5 Years Ending September 30, 2019

	Anlzd Return	Anlzd Standard Deviation	Information Ratio	Beta	Sharpe Ratio	Tracking Error
Total Retirement System	5.6%	5.9%	-0.2	1.0	0.8	1.2%
Policy Index	5.9%	5.7%	--	1.0	0.9	0.0%
Global Public Equity	6.1%	11.6%	-0.3	1.0	0.4	1.2%
FY '19 Global Public Equities Custom Benchmark	6.4%	11.8%	--	1.0	0.5	0.0%
Private Equity	10.0%	3.7%	-0.1	0.0	2.4	11.7%
80% Russell 3000/20% MSCI EAFE + 300 bps on a 3-month lag	11.6%	11.6%	--	1.0	0.9	0.0%
Short Duration	2.0%	0.6%	0.9	0.6	1.7	0.5%
BBgBarc US Govt/Credit 1-3 Yr. TR	1.6%	0.9%	--	1.0	0.7	0.0%
Cash and Overlay	0.4%	0.3%	-3.5	1.1	-1.8	0.2%
ICE BofAML 91 Days T-Bills TR	1.0%	0.3%	--	1.0	0.0	0.0%
Core Fixed Income	3.8%	3.0%	0.6	0.9	0.9	0.7%
BBgBarc US Aggregate TR	3.4%	3.1%	--	1.0	0.8	0.0%
Mixed Credit	3.4%	3.2%	-0.9	0.8	0.7	1.7%
50% S&P LSTA Leveraged Loan Index/50% Barclays High Yield Index	4.9%	3.3%	--	1.0	1.2	0.0%
Private Debt	4.5%	2.8%	-0.2	0.3	1.2	3.5%
S&P LSTA Leveraged Loan Index + 150 bps on a 3-month lag	5.2%	3.0%	--	1.0	1.4	0.0%
Emerging Market Debt	3.4%	8.4%	0.2	1.1	0.3	1.5%
50% JP Morgan EMBI Global Diversified (USD)/50% JP Morgan EMBI Global Diversified	3.2%	7.8%	--	1.0	0.3	0.0%
GAA	3.0%	8.1%	-0.6	1.1	0.3	3.0%
Total System Policy Benchmark ex-Private Markets	4.7%	6.9%	--	1.0	0.5	0.0%
Hedge Funds Portable Alpha	4.6%	4.2%	0.6	-0.8	0.9	4.3%
ICE BAML 3 Month T-Bill + 250 BPS SC Custom	1.9%	0.5%	--	1.0	1.8	0.0%
Private Real Estate	11.1%	2.4%	0.2	0.1	4.2	4.5%
NCREIF ODCE Net + 100 BPS SC Custom	10.2%	4.0%	--	1.0	2.3	0.0%

Return calculations are rounded to the nearest tenth of percent and may differ slightly from BNYM reported returns.

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RETIREMENT SYSTEM
INVESTMENT COMMISSION

Annual Investment Plan Progress Report

Geoff Berg, CIO
Robert Feinstein, Managing Director
Steve Marino, Managing Director
Bryan Moore, Managing Director

Summary Update

- New RSIC priorities
  - Implement portfolio reporting framework (cross-functional)
  - Continue to drive improvements to Private Markets returns
    - Co-investment platform
    - Secondaries
    - Improve sourcing
    - Adapt process to leverage specialty consultant
  - Risk reporting
- Current AIP initiatives
  - Update attached

APPENDIX
Current AIP Progress Report
(As of 9/30/19)

Summary Update

- AIP included 34 different goals/initiatives
  - 28 from the investment team
    - 16 of these are "single-year" initiatives
    - 12 are multi-year, or "ongoing" initiatives
  - Non-investment team initiatives relate to Reporting, IT, and Legal initiatives

- Progress from prior meeting noted in yellow

Current-Year Initiatives - Investments

- Over 90% of current-year initiatives completed

INITIATIVE	Single or Multi-Yr	STATUS
A. INVESTMENT TEAM - CURRENT YEAR INITIATIVES		
Implement Policy Asset Allocation	Single	COMPLETED
TIPS: create implementation plan for exposure	Single	COMPLETED
EM small cap manager search	Single	COMPLETED
Passive Index Menu	Single	COMPLETED
Evaluate insurance-linked strategies	Single	COMPLETED
Evaluate impact of rising rates on Securities Lending	Single	COMPLETED
Work with Securities Lending agent to improve reporting	Single	COMPLETED
Co-investment platform - design & implementation	Single	COMPLETED
Develop strategy to exploit credit market turbulence	Single	COMPLETED
Active/Enhanced/Passive Framework	Single	COMPLETED
Evaluate additional alt beta strategies	Single	COMPLETED
Use of Equity Options in international markets	Single	COMPLETED
Currency hedging - evaluate options (w/Meketa)	Single	COMPLETED
PD and Credit: Develop way to track key differentials	Single	COMPLETED
Re-underwrite existing active equity strategies	Single	COMPLETED
Rebalancing options (cost/benefit analysis)	Single	VERY EARLY

Multi-Year and Ongoing Initiatives - Investments

- We completed three ongoing initiatives and have made progress on the remaining nine

INITIATIVE	Single or Multi-Yr	STATUS
B. INVESTMENT TEAM - MULTI-YEAR INITIATIVES		
Challenging beliefs (continue)	Multi	ONGOING
Mixed Credit: monitor secured vs. unsecured mix	Multi	COMPLETED
Build-out of Investment Risk function	Multi	ONGOING
Fee and expense review - structural vs. variable	Multi	ONGOING
Manager debates (GAA)	Multi	COMPLETED
Enhance Private Markets quantitative underwriting	Multi	ONGOING
Infrastructure: build out private portfolio	Multi	ONGOING
Personnel - Opportunities for cross-asset class work	Multi	ONGOING
Non-PA HFs: complete wind-down	Multi	COMPLETED
Asset consolidation w/high conviction mgrs; improve cost	Multi	ONGOING
TAA and Rebalancing - strengthen capabilities	Multi	ONGOING
Review of investment process	Multi	NEARING COMPLETION

Non-Investment Initiatives

- Progress has been made on non-investment initiatives, most of which are multi-year

INITIATIVE	Single or Multi-Yr	STATUS
C. NON-INVESTMENT TEAM AIP INITIATIVES		
Ops - Explore improvements to FI portfolio accounting	Single	COMPLETED
Ops - Assess performance reporting ecosystem needs	Multi	NEARING COMPLETION
Ops - Enhance IT infrastructure to support RSIC business needs	Multi	ONGOING
Ops - Research, implement CMS solution	Multi	ONGOING
Legal - Evaluate contracting/closing process	Multi	ONGOING
Legal - Assess different ownership structures	Multi	ONGOING

South Carolina Retirement System Investment Commission

Manager Alpha, Persistence, and Risk Budgeting
December 2019

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Agenda

- Searching for Manager Alpha: A Consultant's Perspective
- Persistence in Manager Returns
- Active Risk Budgeting

Do Active Managers Add Value?

- Manager alpha is a zero sum game.
- Active management fees and trading costs can be a high hurdle.
- Someone is going to outperform.
- The odds for outperforming may depend on where you look.
- The amount of value that can be added definitely depends on where you look.

Where Do Managers Add Value?[1]

Manager "Alpha": 1976 to 2019[2]

Asset Class	Median Outperformance (Annualized)	Inception
US Core Bonds	18 bp	Jan. 1976
US High Yield Bonds	5 bp	Sep. 1986
US Large Cap	-40 bp	Jan. 1979
US Small Cap	49 bp	Jan. 1979
Foreign Large Cap	-11 bp	Jan. 2001
Emerging Markets[3]	24 bp	Jan. 1999

- In most public market asset classes, the median manager's "alpha" is close to zero before fees.
- The asset classes with highest median outperformance were US Small Cap, and Emerging Markets. Conversely, US Large Cap showed the highest underperformance at the median level.

[1] Throughout this document the source for manager performance data is Morningstar, and performance is presented gross of fees.
[2] This table represents manager returns over one year minus the benchmark return for the period where data is available.
[3] Because of the relatively frequent fluctuation in the definition of the emerging market set (since countries may enter and exit the emerging market space depending on the state of their economies), market definition and the updated algorithm could be to blame for the differing values.

Accounting For Fees Makes Active Outperformance More Challenging

Median Fund Fee

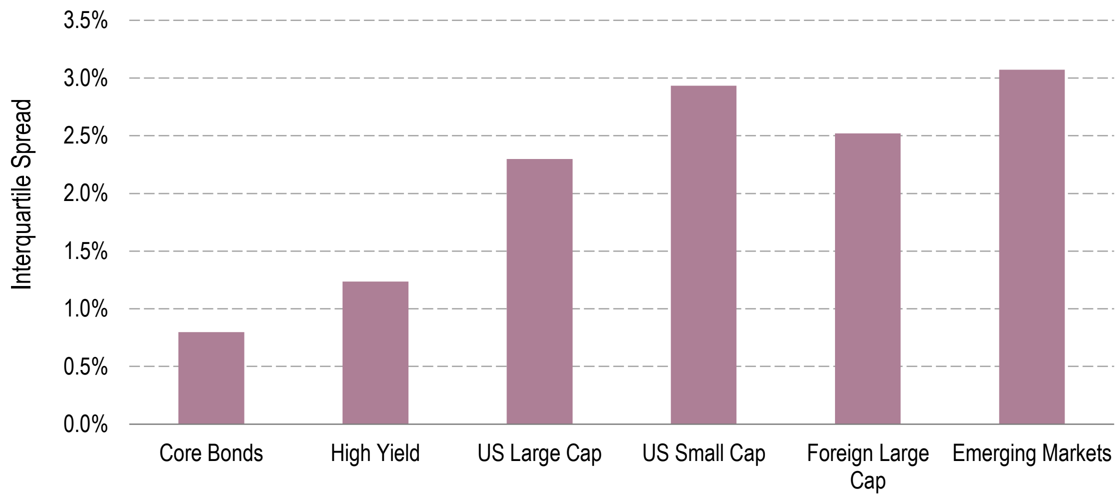
Asset Class	Median Fee on $100mm[1]	Median Fee for RSIC
US Core Bonds	28 bp	22 bp
US High Yield Bonds	50 bp	35 bp
US Large Cap	55 bp	N/A
US Small Cap	89 bp	56 bp
Foreign Large Cap	65 bp	52 bp
Emerging Markets	90 bp	70 bp

- Fees are a necessary part of evaluating the value of investing in an active manager.
- When comparing the median performance to the median fee for each asset class, the gross performance of the median manager has not justified the historical median fee.
  - However, depending on the situation and size of the mandate, an investor can often negotiate lower fees (see the RSIC fees, for example).

[1] Source: eVestment Alliance, as of June 30, 2019.

Dispersion of Active Management Performance

Interquartile Spreads[1]

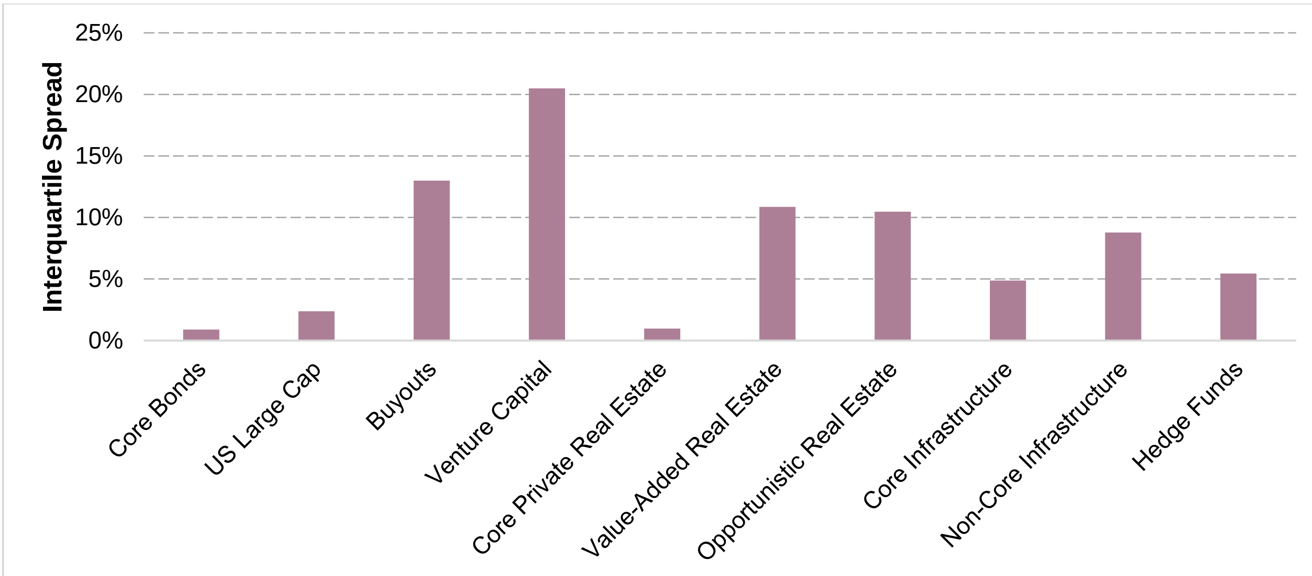


- Interquartile spreads provide a good indicator of how much value a "skilled" (or lucky) manager can add relative to an "unskilled" (or unlucky) manager.
  - The spread can also be interpreted as how much potential value lies in selecting superior active managers within each asset class.
- As expected, more volatile asset classes (e.g., equities) tend to have higher spreads than less volatile asset class (e.g., fixed income).

[1] Since inception through September 2019. Based on median interquartile spread per asset class and considering all available history.

Dispersion of Active Management Performance - Alternatives

Interquartile Spreads[1]

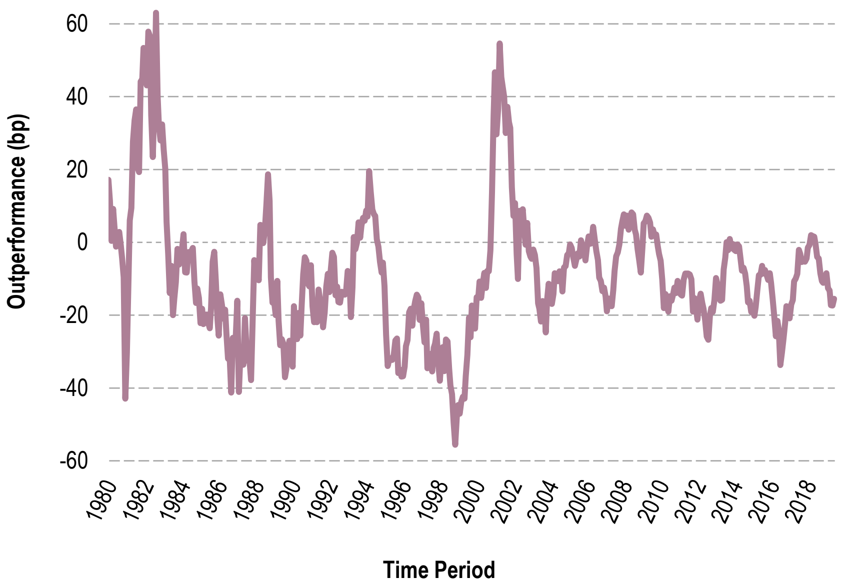


- Alternative asset classes such as private equity, non-core real estate, and hedge funds show considerably higher performance dispersion, as measured by interquartile spreads.
- It is worth noting that private market manager databases are often smaller, and with more limited history, than public markets counterparts.
  - Private equity funds also tend to have more concentrated portfolios.

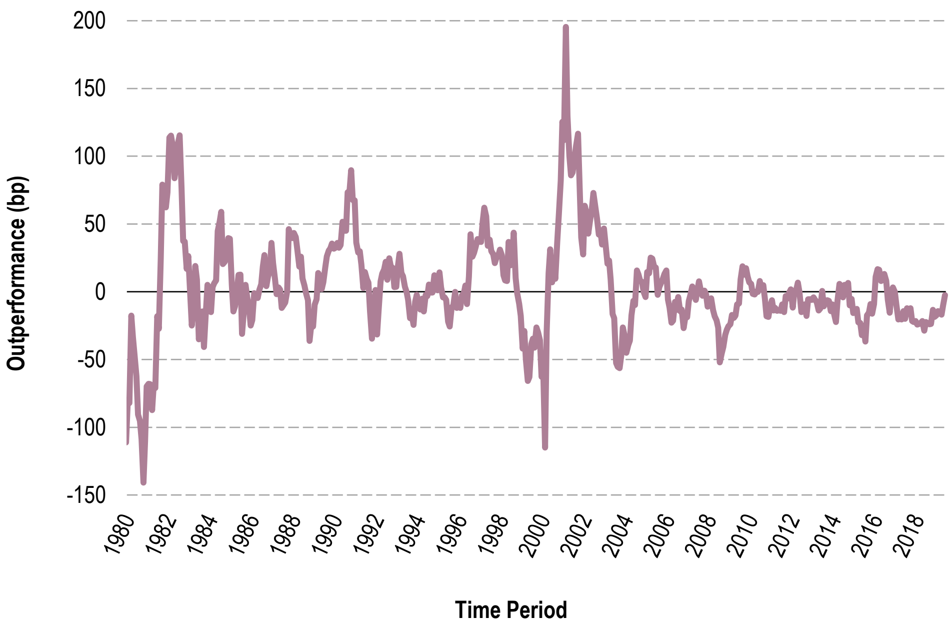
[1] Source: eVestment Alliance for Core Bonds, and US Large Cap; Cambridge Associates for Buyouts, Venture Capital, non-Core Real Estate, and Infrastructure; NCREIF ODCE for Core Real Estate; HFR for Hedge Funds. Cambridge Associates data is as of December 31, 2018, eVestment and HFR as of June 30, 2019, and NCREIF ODCE as of March 31, 2019.

Cyclicality of Manager Outperformance[1]

Domestic Large Cap



Domestic Small Cap



- All public market asset classes show significant cyclicality in manager outperformance.
- Recently, managers seem to be closer to the benchmark and the size of the changes in cyclicality has decreased for large cap and small cap.

1 Reflects rolling median one-year performance minus the respective benchmark performance over that same period.

Have the Markets Become More "Efficient"?

Interquartile Spreads From Benchmark Inception to 2000 and From 2001 - 2019[1]

Asset Class	Avg IQ Spread (%) Pre-2001	Avg IQ Spread (%) 2001-2019	Difference (%)[2]
Core Bonds	2.67	2.02	-0.65
High Yield	4.06	3.51	-0.55
US Large Cap	8.81	6.27	-2.54
US Small Cap	12.37	8.47	-3.90
Foreign Large Cap	10.82	5.86	-4.96
Emerging Markets	8.42	6.54	-1.88

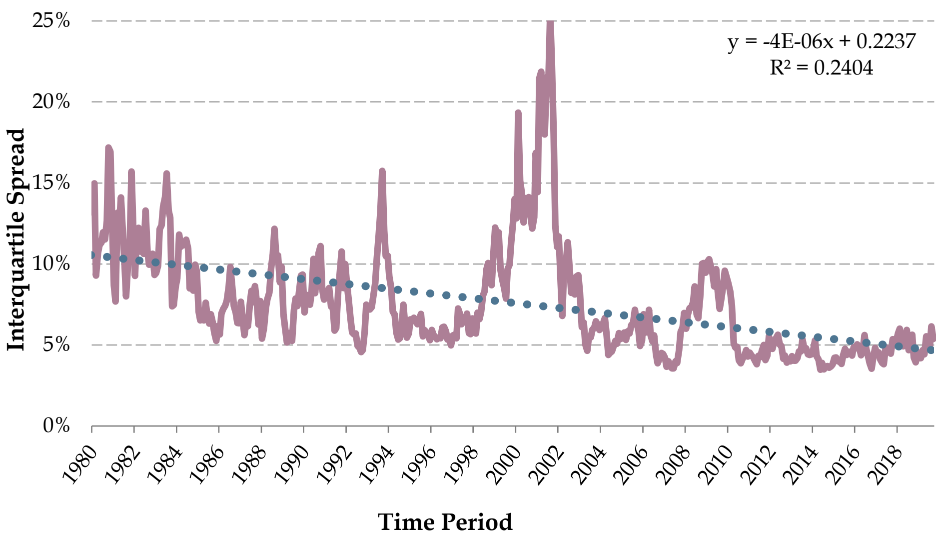
- Narrowing interquartile spreads can be interpreted as a sign that markets are becoming more efficient, as the additive value from top ranked active managers declines relative to peers.
- As time passes, successful investment strategies become more widely known. As more managers adopt and execute these strategies, their informational advantages decreases, reducing their potential success.

[1] 2001 was chosen as cutoff given the likely impact of the internet and Reg FD. On August 15, 2000, the SEC adopted Regulation FD (Fair Disclosure) to address the selective disclosure of information by publicly traded companies and other issuers. Regulation FD provides that when an issuer discloses material nonpublic information to certain individuals or entities—generally, securities market professionals, such as stock analysts, or holders of the issuer's securities who may well trade on the basis of the information—the issuer must make public disclosure of that information.

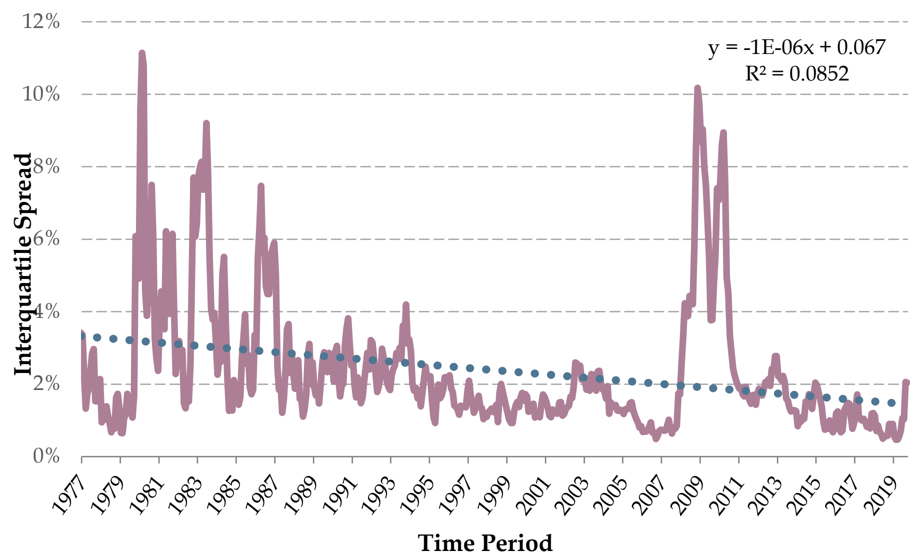
[2] All measurements are statistically significant on a 95% confidence level.

Interquartile Spreads Through Time

Domestic Large Cap



Core Bonds



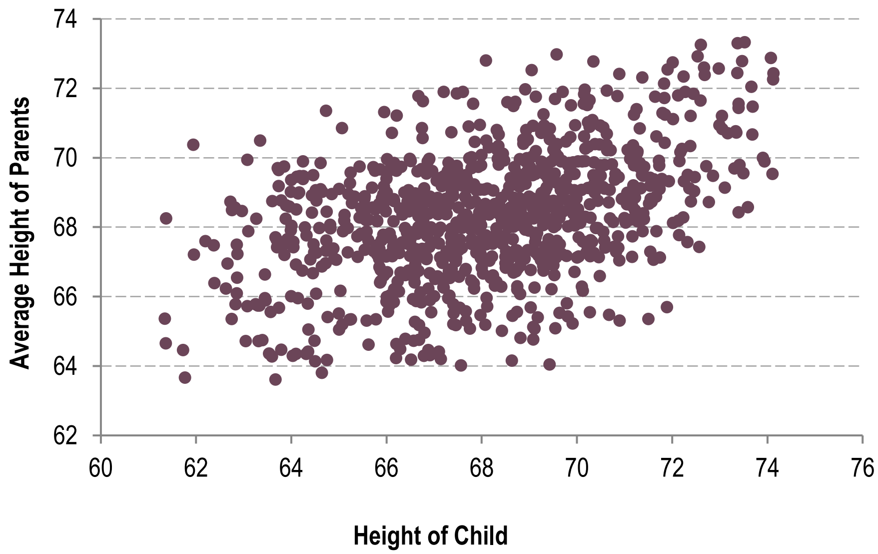
- Interquartile spreads for Domestic Large Cap and Core Bonds have shown a decreasing tendency through time.
- As previously discussed, narrowing interquartile spreads reflect a limited ability of top ranked managers to add value over their lower ranked peers.

How does Past Performance "Measure Up"?

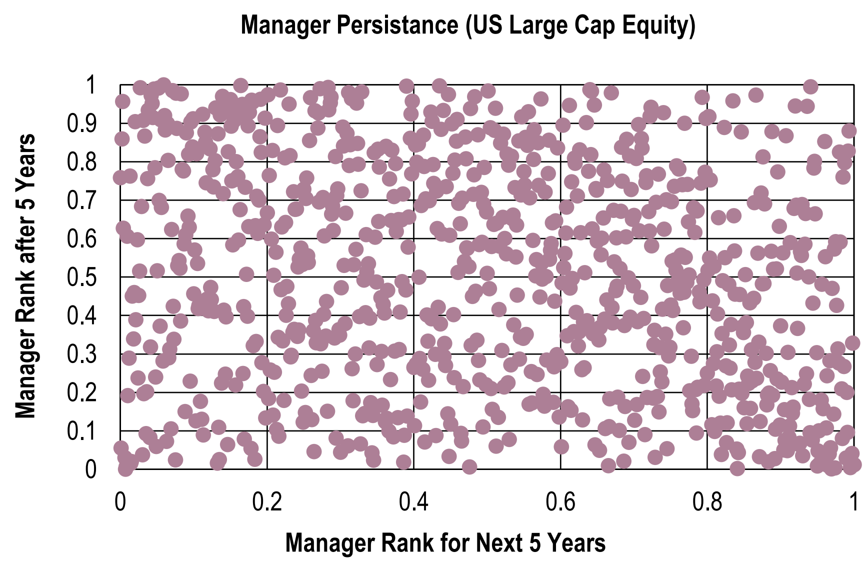
- Is past performance a good predictor of future returns for a manager?
- For example, will top quartile managers continue to produce top quartile returns?
- Alternatively, will bottom quartile managers continue to produce bottom quartile returns?

Manager Persistence?

Example of Positive Correlation



Manager Persistence



- The pictures above are "scatter plots" that can be used to infer how one set of data affects another.
- The graph on the right compares the manager rank for the previous five years versus the manager rank over the subsequent five years for the Domestic Large Cap sector[1].
- There does not seem to be any correlation between peer ranking from one 5-year period to the next, signaling that past performance does not imply future performance.

[1] Data has not been adjusted for risk, style, or macroeconomic factors.

Manager Persistence: All Asset Classes Show a Similar Story[1]

Average Rank of Top and Bottom Decile Funds After Five Years

Asset Class	Avg Rank of Top Decile after 5 Years	Avg Rank of Bottom Decile after 5 Years
Core Bonds	63rd	33rd
High Yield	37th	31st
Large Cap	33rd	54th
Small Cap	45th	60th
Foreign Large Cap	51st	31st
Emerging Markets	55th	51st

- If there is persistence among actively managed funds, then the average rank for top decile funds after five years should stay closer to its decile.
- However, for all public market asset classes, neither the top nor the bottom decile stayed in the respective decile after five years.

[1] Distribution removes managers with less than five years of history.

The Effect of Young Funds (less than five years old) on Persistence

Asset Class	% of Firms in Top Decile Less Than 5 Years Old	% of Firms in Bottom Decile Less Than 5 Years Old	% of Firms Less Than 5 Years Old
US Core Bonds	18%	25%	12%
US High Yield Bonds	26%	27%	19%
US Large Cap	18%	21%	13%
US Small Cap	12%	24%	15%
Foreign Large Cap	21%	14%	20%
Emerging Markets	33%	57%	32%

- For all asset classes, a significant amount of funds in the top and bottom deciles are under five years old.
- This makes intuitive sense, as young funds generally have lower assets under management, allowing them to be more flexible in their strategies, and have more opportunity to “differentiate” themselves from their peers, resulting in both good and bad relative performance.

Manager Persistence in Alternatives – Literature Review

- Might there be persistence in alternative asset classes such as hedge funds and private equity?
- Academic research on persistence in alternatives is not nearly as robust as it is for traditional asset classes.
  - This is due to some of the well-known challenges of the asset classes: shorter track records, smaller manager universes, and less reliable/less available return and peer group data.
- A couple of studies[1] have indicated the possibility of persistence, but for most investors, the jury is still out on this topic.
  - This is why a sophisticated due diligence effort can add value.
  - It makes sense to continue to evaluate managers based on more factors than just prior fund performance.

[1] Boyson (2008) found that for hedge funds "performance persistence is strong among small, young funds." Brown, Chan, Ju, Meldrum, and True (2010) found that for private equity "current fund performance and risk profile are good indicators of future performance and risk profile over the long-run," implying the existence of performance persistence in the asset class.

Past Performance Does Not Guarantee Future Results

- Past ranking was not a predictor of future ranking for any public market asset class.
  - In the case of Alternatives, academic research shows mixed results regarding performance persistence in asset classes such as private equity and hedge funds.
- Possible reasons for this include:
  - Past alpha was just luck, not skill?
  - Best managers moved to competing funds?
  - Becoming over-cautious/trying not to get fired?
  - Asset bloat?
  - Style benefits that dissipate?
  - Anomalous periods in the market that distort performance records?

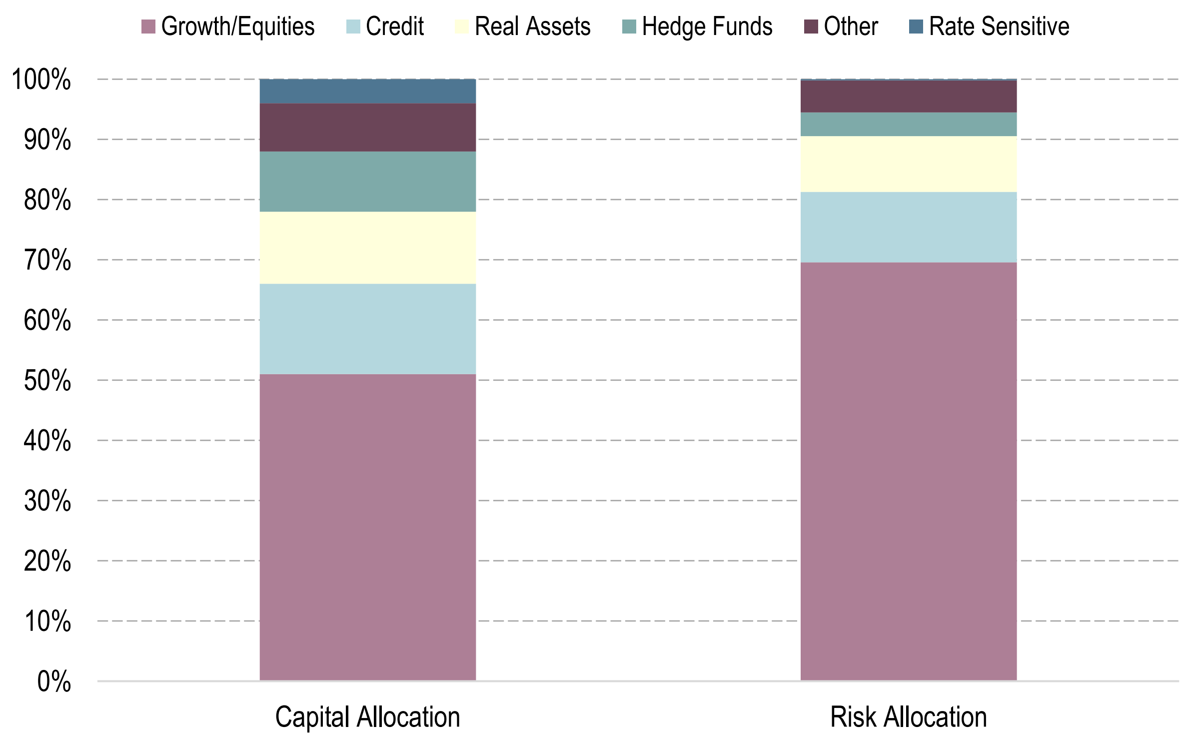
Lessons From Our Analysis

- The median active manager will – generally – not add value (after fees).
- If you are going to beat the market, you need to select managers that, on average, are better than average.
  - That is, you must pick managers that are better than the majority of their peers.
- How much value they can add varies by asset class.
  - There is greater dispersion of manager returns for more volatile asset classes, such as small cap stocks and emerging market equities.
  - The gap between out- and under-performers is even larger for illiquid strategies such as hedge funds and private equity.
- Finding top managers is not easy.
  - Past performance is an unreliable indicator for public markets managers.
  - There is some evidence for persistence among private market managers (e.g., from one fund to the next).

Background

- Risk budgeting is the process of calculating and monitoring how risk is distributed in a portfolio.
  - Contrary to the more common approach of capital budgeting, risk budgeting refers to the practice of allocating risk.

Capital vs. Risk Allocation for South Carolina's Current Policy[1]

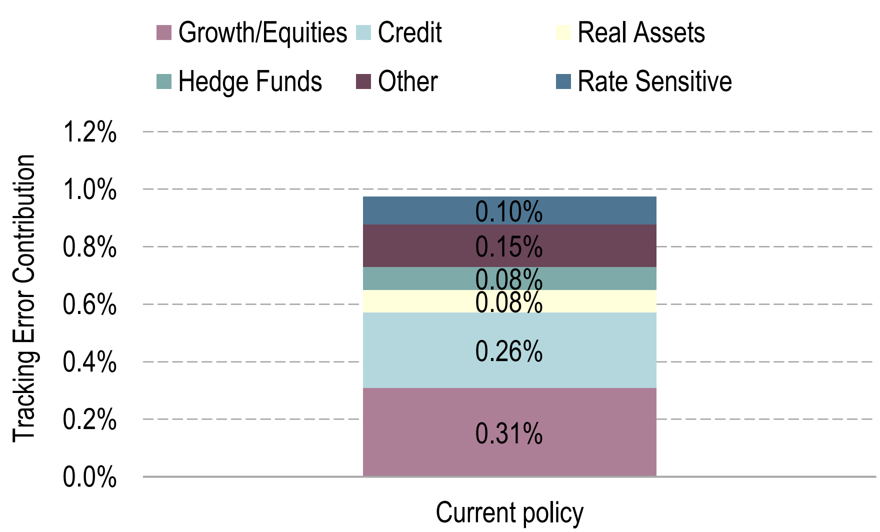


[1] Based on Meketa Investment Group 2019 Asset Study.

Active Risk

- In general, risk budgeting approaches use standard deviation as the measure of absolute risk, and tracking error, or active risk[1], as the measure of relative risk[2].
- It is common for sophisticated investors to measure the amount of active risk that individual managers take relative to their respective benchmarks.
- Active risk can also be calculated for an asset class or at the total System level.
- It is important to have appropriate benchmarks in place for this exercise to be of value.

Plan Tracking Error Contribution based on Asset Allocation[3]



[1] Active risk and tracking error are often used interchangeably.
[2] See Meketa's Risk Budgeting White Paper for additional information.
[3] Measures tracking error relative to a composite of peer public pension funds.

From Measuring to Managing

- Developing a formal risk budget effectively means setting a target (or tolerance amount) for how different you are willing to be from your benchmarks.
- Implementing a risk budget provides a risk-based framework for managing the expected excess returns of active strategies[1].
  - Put differently, it reflects how much leeway you are willing to give staff and your managers in order for them to outperform.
- In order to set a "budget" for how much active risk you are willing to take on, you must be able to estimate it.
  - Estimating the future amount of active risk includes projecting 1) the amount of active risk being taken on by individual managers, and 2) how much each of this is related to the other.

[1] Similar to the notion of taking investment risks to achieve returns, investors that take active risk (e.g., through active managers) are expected to be compensated in the form of excess returns.

Peer Activity[1]

Type of Risk Budget / Plan	Risk Budget (Range, in Basis Points)
Global Equity Active Risk Budget	
CalPERS	0 – 50 bps.
Colorado PERA	0 – 225 bps.
Ohio PERS	0 – 100 bps. US Equity, 0 – 300 bps. Non-US Equity
Total Public Assets Risk Budget	
Texas Teachers	100 – 300 bps.
Missouri Public School	300 – 500 bps.
Total Fund Risk Budget	
State of Wisconsin IB	120 bps. +/- 60 bps.
Virginia Retirement	100 – 300 bps.

- Active risk budget programs can be implemented at different levels.
  - They can be manager specific, asset class specific, or total plan focused.
- Of the top thirty US public pensions, seven currently have explicit active risk budgets.
- Implementation varies, both in terms of the portion of the plan that implements a budget, and the size of the active risk budget.

[1] Source: CalSTRS. Reflects policy-level risk budgets.

Case Study: The Implementation Experience of a Meketa Client

- A large public pension plan client of Meketa recently implemented an active risk budgeting framework at the total plan level.
- The goal of the program is to have a better grasp of how their total fund moves with the market, by systematically tracking the performance of all investments relative to their benchmarks.
- This particular framework is built as an *active risk measuring* program, since there is no explicit risk budget.
- Staff tracks both monthly and daily manager and strategy risk and return data.
  - Team utilizes both internal and external risk models and tools, including MSCI BarraOne.
- The program formally started with the creation of a Risk Manager position in the fall of 2018.
  - The first version of the program took approximately three months to implement.
- Lessons learned:
  - The implementation of an active risk-measuring program is a constantly evolving process.
  - The program has helped staff develop a very granular understanding of their investment process.
  - An active risk program provides detail and visibility of all sources of risk and return in the portfolio, and allows for aggregation and evaluation at the asset class, and even total plan level.

Summary

- Active risk budgeting programs are growing in adoption within large public pension funds.
- Implementing an active risk budgeting program requires several important decisions, including:
  - Define the portion of the plan to implement the program (e.g., total plan vs. asset class specific)
  - Benchmark selection/confirmation
  - Active risk level selection
  - Building a framework for measuring & monitoring active risk
  - Enforcing guidelines
- These frameworks can provide increased visibility into the sources of risk and returns generated from active management across the plan, contributing to a more robust risk management process.
- We recommend that Staff continue to build out their risk management function so they can better monitor active risk.
  - Staff can then create risk reports to share with the Commission.

Appendix - Active Risk Budgeting Implementation

- Selecting Where to Implement an Active Risk Budget
  - Total Plan Level
  - Total Public Assets
  - Asset Class level only (e.g., Public Equities)
- Benchmark Selection
  - All cap benchmark (e.g., Russell 3000) vs. combinations of sub-sets (e.g., Russell 1000/S&P 500 + Russell 2000)
  - Hedged or unhedged benchmarks for international exposures

Appendix - Active Risk Budgeting Implementation (continued)

- Active Risk Level Selection
  - Selecting an active risk budget implies deciding how “different” an investor is willing to have the portfolio be from the benchmark, in order to pursue excess returns.
  - Asset classes deemed more “efficient” should receive lower active risk budgets and hence, higher passive implementation.

Expected Annual Relative Performance based on Active Risk[1]

Active Risk Level/ Percentile (%)	95th (%)	75th (%)	Expected (%)	25th (%)	5th (%)
0.5	-0.8	-0.3	0.0	0.3	0.8
1.0	-1.6	-0.7	0.0	0.7	1.7
1.5	-2.4	-1.0	0.0	1.0	2.5
2.0	-3.3	-1.4	0.0	1.3	3.3
2.5	-4.1	-1.7	0.0	1.7	4.2

- From this stylized example we can observe that, the higher the tracking error, the higher the potential for outperformance, but also the higher potential for underperformance in any given year[2].

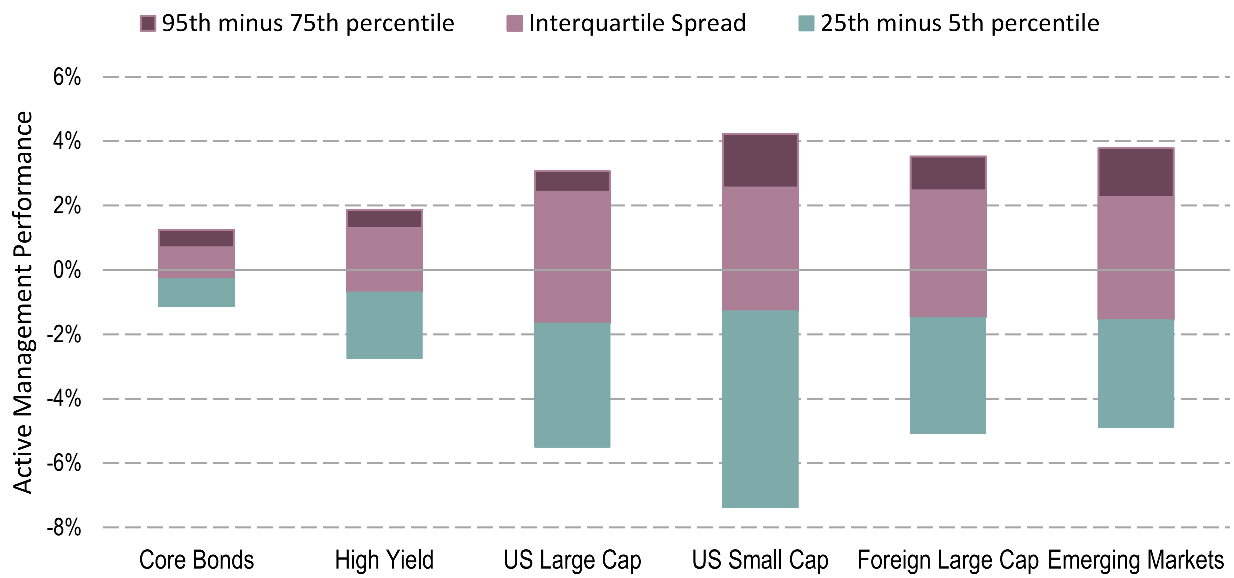
[1] Source: Meketa Investment Group. Active risk level (left column) is the expected tracking error of an active strategy. The expected relative performance per percentile assumes a normal distribution of relative returns per level of active risk/tracking error.

[2] Holding all else equal, that is, making no assumptions of manager selection skill.

Appendix - Active Risk Budgeting Implementation (Continued)

- Additional Considerations (technical)
  - Lookback window, or interval measurement for active risk
  - Active risk covariance estimates
  - Data quality and availability, especially for private markets.
  - Length of track record for active management strategies
- Monitoring and Enforcement

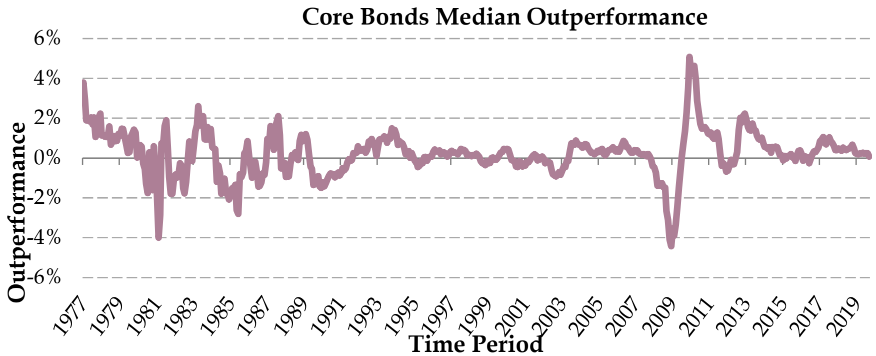
Appendix - Distribution of Active Management Performance[1]

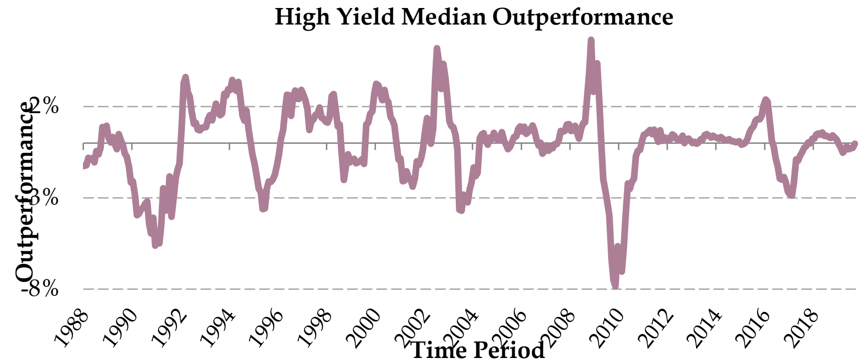


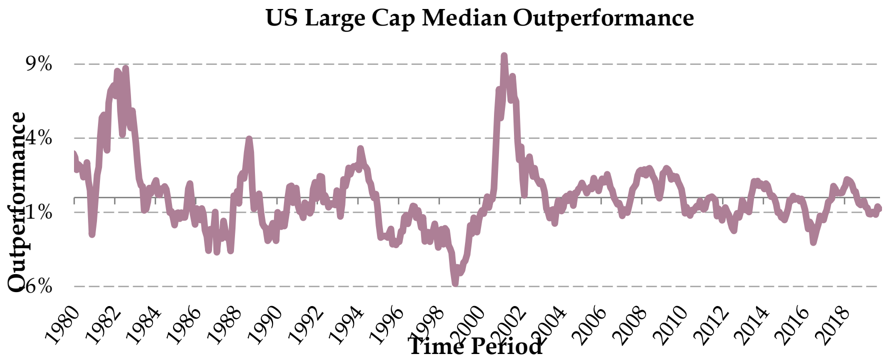
- While Interquartile Spreads are good sign of dispersion of active management performance, we see a relatively large negative skew towards the lower percentiles when looking at the broad distribution.

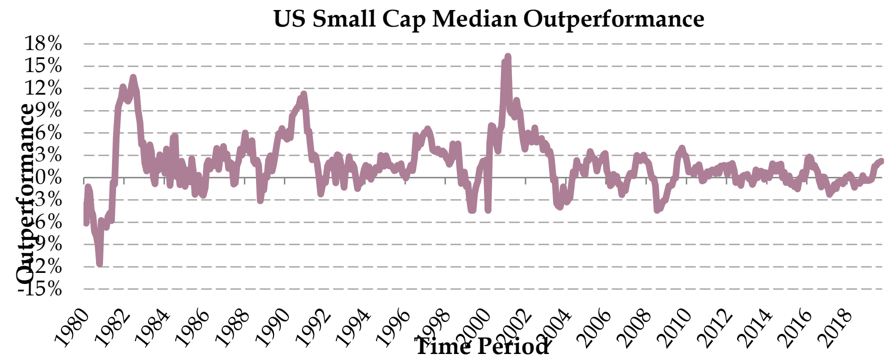
[1] Since inception through September 2019. Based on median interquartile spread per asset class and considering all available history.

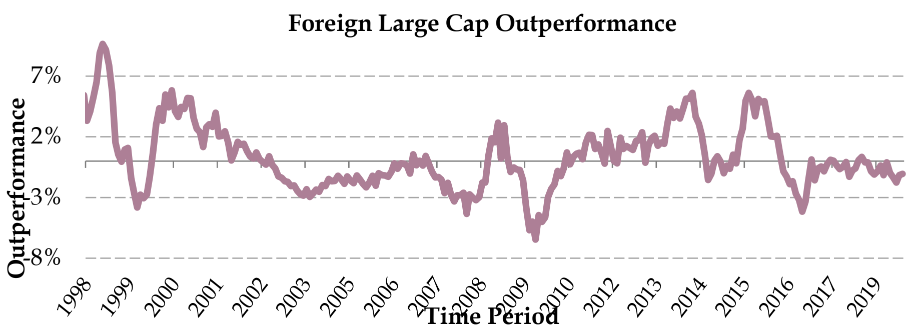
Appendix – Manager Outperformance per Asset Class

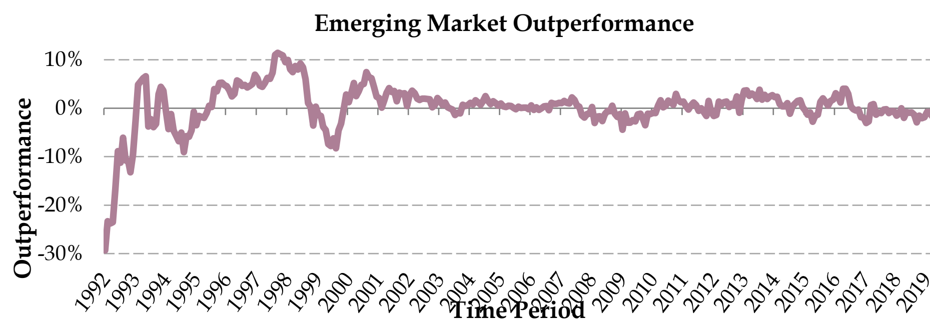












RETIREMENT SYSTEM
INVESTMENT COMMISSION

Consolidated Annual Investment Plan and Statement of Investment Objectives and Policies

Michael Hitchcock, CEO

Basis for Consolidation

- AIP and SIOP are both required by State law.
- RSIC has traditionally maintained them as two separate documents
- Requirements for the SIOP and AIP overlap.
- State law specifically provides that portions of the SIOP may constitute requirements of the AIP.
- Proposed document consolidates the two in order to ensure consistency and agreement.
- Includes a requirement that the portions of the document intended constitute each part will be reviewed according to State law.
- Intended that consolidation will instill a sense of permanence into longer term strategic decisions like asset allocation.

- PURPOSE: RSIC's purpose is to earn an investment return, that when combined with contributions, fulfills the promise of benefit payments to our current and future retirees and their beneficiaries.

- INVESTMENT OBJECTIVE: RSIC's primary investment objective is to design an investment program that produces a long-term rate of return that when added to contributions, funds current and future benefit payments.

- BELIEFS: Aligned to meeting our fiduciary duty and long-term investment objective.

Roles and Responsibilities

- Amends certain role descriptions to align with existing lines of authority and accountability.
- Emphasizes the importance of risk management with a more detailed description of the Internal Audit and ERM/Compliance functions.
- Adds a description of the Executive Team and IIC to highlight their increased management role.

Asset Allocation

- Directly links the purpose of Strategic Asset Allocation to meeting RSIC's primary investment objective of making the plan work.
- Emphasizes the risk management benefits of employing a long-term perspective to asset allocation.
- Provides perspective on the need to simplify the policy portfolio.
- Limits ALM study and asset allocation review to every five years to aid in instilling a long-term perspective.

Portfolio Benchmarks

- Traces the Commission's process and deliberation on the:
  - Reference Portfolio Benchmark
  - Policy Portfolio Benchmark
  - Implementation Portfolio Benchmark
- Provides the role of each benchmark in the assessment of the value of additional risk and complexity in the portfolio.
- Grounds the selection of the Reference and Policy Portfolios in the needs and risks of our plan.
- Sets the asset class return benchmarks for the Policy Portfolio Benchmark and how the Implementation Portfolio Benchmark will be determined.
- Establishes ranges for asset and sub-asset classes.

Portfolio Performance Framework

- Requires the creation of a Portfolio Performance Framework that compares the relative performance and risk of the portfolio benchmarks and the actual portfolio.
- The relative comparisons judge the value of three investment decisions:
  - *Diversification* – Policy Portfolio Benchmark vs. Reference Portfolio Benchmark
  - *Portfolio Structure* – Implementation Portfolio Benchmark vs. Policy Portfolio Benchmark
  - *Implementation* – Actual Portfolio vs. Implementation Portfolio Benchmark
- Provides timeframes over which to judge expected relative positive performance.

Strategic Initiatives

- Major ongoing staff projects that have a more significant impact to the portfolio, asset class, or investment strategy than typical decisions.
- Changes to these initiatives will be included in the AIP and progress will be reviewed at Commission meetings.
- Current initiatives:
  - Asset Allocation Implementation
  - Portfolio Reporting Framework
  - Comprehensive Review of Implementation Cost
  - Secondaries Market
  - Risk Management
  - Co-investment Program

Investment Policies

- Organizes existing investment policies into cohesive categories.
- Updates certain policies to correspond with and implement new SIOP/AIP strategic direction.
- Establishes Portable Alpha and GTAA as implementation decisions and sets benchmarks.
- Provides that Baselines will be established for each asset class and reviewed with the Commission.
- Clearly defines items that must be reviewed at each Commission meeting to comply with Section 9-16-320.

Securities Litigation Policy

- Primary focus of changes is on when and how RSIC takes an active role in securities litigation.
- Sets a $5 million loss threshold for US actions before considering taking a lead plaintiff role. CEO approves outside counsel.
- Sets a $1 million threshold for foreign claims that require actively opting-in.
- Delegates lead plaintiff decision to Executive Team and requires unanimous vote to become lead plaintiff.
- Delegates opt-in decisions on foreign claims to CEO based on CLO's recommendation.
- CEO has authority to direct litigation and settlement.

Next Steps

- Solicit additional Commissioner input in the interim period prior to the March Commission meeting.
- Develop a consensus document that seeks to incorporate any additional proposed changes.
- Vote on consensus document at March Commission meeting.
- Include a transition period to implement any desired portfolio changes to reflect the new policy allocation.
- Establish a transition period that allows targets for underweight private market asset classes to continue to float.

SOUTH CAROLINA RETIREMENT SYSTEM INVESTMENT COMMISSION

CONSOLIDATED ANNUAL INVESTMENT PLAN AND STATEMENT OF INVESTMENT OBJECTIVES AND POLICIES

As amended and adopted on ______________________, 2020

Role of this Document

State law requires the Retirement System Investment Commission ("RSIC") to adopt a Statement of Investment Objective and Policies ("SIOP") and to review it annually and to either amend it or reaffirm it. The SIOP establishes investment and performance objectives, policies and guidelines, roles, responsibilities, and delegation of authority for the management of plan assets. State law also requires RSIC's Chief Investment Officer ("CIO") to develop an Annual Investment Plan ("AIP") which must be presented to and adopted by RSIC's board ("the Commission") prior to May 1st of each year. Pursuant to state law, relevant portions of the SIOP may constitute parts of the AIP.

In order to ensure consistency and agreement between the SIOP and AIP, the Commission has consolidated the requirements of both into one document which it will review annually prior to May 1st. As part of the annual review, the Commission will amend or reaffirm those portions of this document intended to meet the requirements of the SIOP and the Commission will consider the CIO's recommendation of any necessary changes to those portions of this document intended to meet the requirements of the AIP. In order to assist the Commission and the CIO in meeting their respective annual requirements, the Chief Executive Officer ("CEO") will provide a guide that designates those portions of this document that are required by the SIOP and those that are required by the AIP.

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I. STRATEGIC PURPOSE, INVESMENT OBJECTIVE, AND BELIEFS

A. Purpose

The goal of the State's five defined benefit plans is to provide a lifetime of benefits in retirement to those who have dedicated a career of public service to the State and its political subdivisions. The funding to secure this promise of benefits comes from two sources - contributions made by the employee and employer and the investment return earned on the assets of the five plans. The General Assembly has provided the Retirement System Investment Commission with the sole authority to invest and manage the assets of the five plans. Thus, RISC's purpose is to earn an investment return, that when combined with contributions, fulfills the promise of benefit payments to our current and future retirees and their beneficiaries.

B. Investment Objective

RSIC's primary investment objective is to design an investment program that produces a long-term rate of return that when added to contributions, funds current and future benefit payments. In order to achieve this objective, RSIC must design an asset allocation and manage the investment portfolio in a manner that provides sufficient liquidity to fund benefit payments to current retirees while also growing the plan in order to meet the obligation to future beneficiaries. RSIC's investment objective is achieved by earning the investment return necessary to make our plan work and as a result investment decisions should be guided by the particular design, structure, and risk factors of the plan.

A guiding factor is achieving the General Assembly's funded status expectation set out in the 2017 Pension Reform Bill. The 2017 Pension Reform Bill requires that the UAAL amortization period for SCRS and PORS to be reduced by one year each fiscal year until each plan reaches a twenty-year amortization period. As of the 2018 Actuarial Valuation, the amortization period for SCRS was twenty-two years which was ahead of the 2017 Pension Reform Bill's requirement of twenty-nine years. As for PORS, the amortization period was twenty-years which was ahead of the Pension Reform Bill's requirement of twenty-nine years.

Another guiding factor is that the General Assembly has set 7.25 percent as the assumed annual rate of return necessary, when combined with contributions, to provide benefit payments to current retirees and to meet the funded status goals for the plan. Given the historically low interest rate environment, RSIC recognizes that achieving this goal requires taking on more investment risk than would otherwise be required if interest were at averages levels. As a result, the investment portfolio will experience market volatility which impacts the probability of the investment return exceeding 7.25 percent every year. However, RSIC strives to construct an investment portfolio that will meet or exceed this rate of return over time at a prudent level of market risk. The objective is to maximize the probability that the plan will meet the General Assembly's funded status goals and minimize the probability that the plan will require additional contributions above those already required by statute. RSIC believes that these objectives can be accomplished as demonstrated by the stochastic analysis of our funded status expectations for the South Carolina Retirement System (SCRS) set out in Table A below and a similar analysis of our contribution rate expectations set out in Table B below.

TABLE A

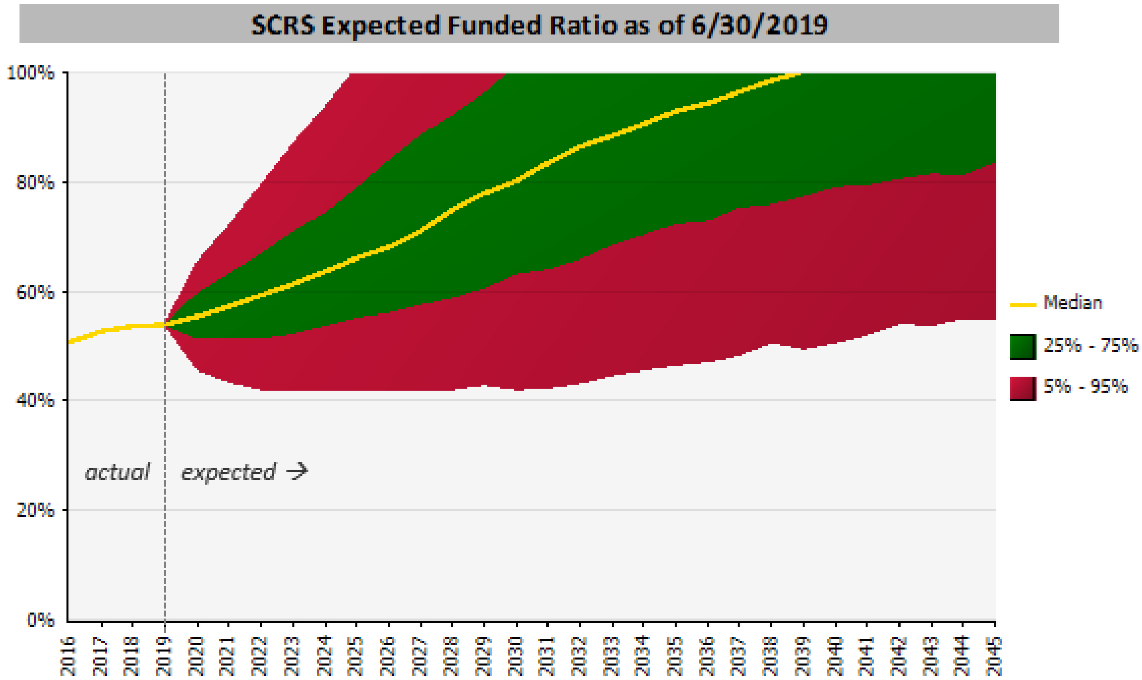


Table A tracks the actual, as well as, expected funded status of SCRS since 2016, the year prior to the passage of the 2017 Pension Reform Bill. SCRS is used as the example because its assets comprise the greatest percentage of the total assets of the five plans. The reason for the stochastic approach to the expected funded status is to compensate for market volatility which recognizes a range of probable outcomes. As can be seen in this table, the base case scenario is that SCRS reaches fully funded status by 2039, well within the funded status goals set by the reform bill. Even if the plan were to experience the 95th percentile scenario, the funded status of the plan is expected to improve over the thirty-year time frame represented.

TABLE B

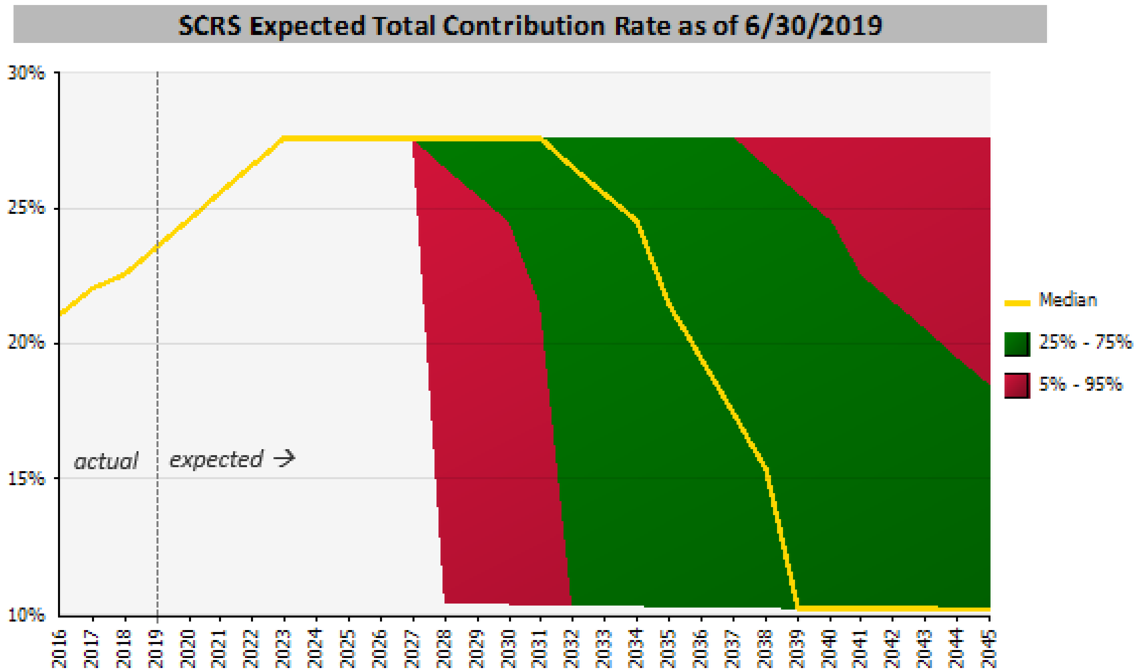


Table B tracks the actual, as well as, expected total employer and employee contribution rates for SCRS since 2016. This table also employs a stochastic approach to the expected combined contribution rate to more accurately demonstrate a range of probable outcomes due to market volatility. As indicated in this table, the base case scenario shows contribution rates increasing to the level required by the 2017 Pension Reform Bill and then beginning to decline in 2032 reaching the normal cost of 10 percent by 2039. Even if the plan were to experience the 95th percentile scenario, contribution rates would not decrease from the level required by the reform bill, but rates would not be expected to increase above this level.

C. Beliefs

As fiduciaries, the Commission and staff of RSIC are charged with exercising their roles and responsibilities to the plan and its beneficiaries with the highest duty of care that the law recognizes. In order to ensure consistency in approach to decision making that is commensurate with this fiduciary duty and focused on achieving the investment objective, RSIC has adopted a set of core beliefs to ensure that the organization is guided by a unifying set of principles.

Belief 1 – We believe that asset allocation is the main driver of an investment portfolio's risk, return, and cost.

Belief 2 – We believe that investors must be rewarded for incurring additional risk, cost, and complexity.

Belief 3 – We believe that we are long-term investors which requires us to instill discipline and patience into our investment decision making and assessment process.

Belief 4 – We believe that achieving our investment objective requires an organization with strong governance, that maintains core values, and employs talented professionals. In order to do this, RSIC must:

1. establish a governance structure with clear lines of authority and means to assess the quality of decision making and resulting performance;
2. recruit and retain a talented investment and operational staff consistent with our Core Values of:
    a. Humility,
    b. Intellectual Curiosity, and
    c. Team Player.
3. achieve a deep understanding of value creation through the investment process;
4. emphasize risk awareness and focus on mitigating investment and enterprise risk; and
5. provide the foundation, infrastructure, and systems necessary to meet the investment objective and mitigate risk.

II. ROLES AND RESPONSIBILITIES

1. In 2005, the Retirement System Investment Commission ("RSIC") was established by South Carolina law to invest and manage the assets of the Retirement System's five defined benefit plans. RSIC invests and manages the assets of all five plans in one group trust ("the Plan" or "the Trust"). RSIC is governed by an eight-member Commission. The Commission's primary purpose is to set the strategic direction for an investment program that earns an investment return, when combined with contributions, fulfills the promise of benefit payments to our current and future retirees and their beneficiaries. This includes setting a long-term asset allocation that meets the Commission's investment objective, oversight of the implementation of the portfolio and business affairs of the agency, approving certain investments, ensuring legal and ethical integrity, and maintaining accountability. The Commission also adopts a series of governance policies that define the roles and responsibilities of Commissioners and staff and provide general guidance for the operation of RSIC as an agency. (https://www.rsic.sc.gov/_documents/2017.07.14%20Governance%20Policy%20Manual.pdf).

2. The Commission employs a Chief Executive Officer ("CEO"), who serves as the primary figure of accountability for RSIC. The CEO serves as the chief administrative officer of RSIC as an agency and is charged with the affirmative duty to carry out the mission, policies, and directives of the Commission. The CEO is delegated all the Commission's authority necessary, reasonable, and prudent to carry out the operations and management of RSIC as an agency and to implement the Commission's decisions and directives. The CEO also serves as the chief risk officer for the organization. The CEO is charged with employing a Chief Investment Officer ("CIO") and all other agency staff who serve at the will of the CEO.

3. The CIO manages RSIC's investment functions subject to the oversight of the CEO. RSIC primarily invests plan assets by allocating capital to external investment managers who implement specific investment strategies in order to provide the exposures necessary to meet the requirements of the Commission's strategic asset allocation. The Commission has implemented an Investment Authority Delegation Policy which provides the CIO with the final authority to invest with external investment managers subject to the limits of the policy. The CIO approves investments which fall within the parameters of the delegation policy and decides whether investments that do not fall within the delegation policy are presented to the Commission for its approval. The CIO is also granted certain authority to manage the implementation and exposure of the portfolio. The CIO through the management of the investment staff also oversees investment risk management, investment manager oversight, and other related activities.

4. The Executive Team is currently comprised of the CEO, CIO, Chief Operating Officer ("COO"), and Chief Legal Officer ("CLO") and serves as RSIC's primary management committee and aids the CEO in making organizational strategic and operational decisions.

5. The Internal Investment Committee ("IIC") is a six-member committee of senior staff appointed by the CEO and is chaired by the CIO. The IIC's responsibilities are provided by the IIC Charter but the IIC is primarily responsible for serving as the committee that vets and recommends new investments to the CIO for approval or recommendation to the Commission.

6. The Commission engages a general investment consultant ("Consultant"), who reports to the Commission and assists and advises the Commission on asset allocation, asset/liability study, performance reporting, benchmarking/peer group comparisons, and general investment education and advice. RSIC Staff may rely on the Consultant for data resources, external analyst inputs, and access to educational materials. The CEO also retains a specialty consultant to serve as an extension of RSIC Staff in Private Equity, Private Debt, Real Estate, Infrastructure, and Hedge Funds ("Alternative Investments Consultant").

7. The Internal Audit function is governed by the Commission's Audit and Enterprise Risk Management Committee and is primarily provided through an external service provider. The purpose of the Internal Audit function is to provide independent, objective assurance and recommendations designed to add value and improve RSIC operations. It assists the entity in accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

8. The Enterprise Risk Management and Compliance ("ERM and Compliance") function reports to the CEO and serves as the primary staff to aid the CEO in fulfilling the role of chief risk officer. The ERM and Compliance function coordinates with the Executive Team and other staff on the assessment of, and provides oversight related to the identification and evaluation of, major strategic, operational, regulatory, informational, and external risks inherent in the business of RSIC. ERM and Compliance is also responsible for overseeing the process for monitoring compliance with RSIC policies and applicable laws.

9. The Public Employee Benefit Authority ("PEBA") is a separate agency that administers a comprehensive program of retirement benefits, performing fiduciary duties as stewards of the contributions and disbursements for the Retirement System. PEBA has the responsibility of producing GAAP basis financial statements for the Retirement System and maintains a general ledger to support that process. The financial statements that are produced by PEBA contain information regarding the investments made by the Commission and as such contain the official accounting records for the Retirement System. The financial statements are presented in accordance with GAAP and comply with the Governmental Accounting Standards Board standards. The financial statements are audited annually by an independent audit firm hired by the State Auditor's Office.

10. RSIC and the PEBA serve as co-trustees of the Retirement System's assets. PEBA is the custodian of the Retirement System's assets and RSIC is responsible for the Retirement System's custodial banking arrangement.

11. Subject to the approval of the State Fiscal Accountability Authority, PEBA designates the Retirement System's Actuary. The Commission is a third-party beneficiary of the contract with the Retirement System's Actuary, with full rights to all actuarial valuations prepared by the actuary.

12. The South Carolina General Assembly has the authority to control budget and staffing for RSIC and to set the actuarial assumed rate of return for the Portfolio. Starting in 2021, and every four years thereafter, in consultation with the Commission and the Retirement System's Actuary, PEBA will propose an assumed annual rate of return to the General Assembly that will take effect at the

beginning of the 2021-2022 fiscal year unless the General Assembly acts to amend or reject the recommendation. The General Assembly also conducts periodic legislative oversight hearings of RSIC.

III. ASSET ALLOCATION

A. Purpose

The Commission's primary responsibility is to establish an investment program that is designed to meet the Commission's investment objective. The most significant action the Commission takes in fulfilling this responsibility is by setting the long-term asset allocation. The Commission designs a portfolio that includes a mix of assets that it believes, over time, will likely generate a return that makes the plan work. The target, or Policy Portfolio is established with a long-term perspective and therefore is less sensitive to current market conditions.

The Commission recognizes employing a long-term perspective has certain risk management benefits. Most notably, this discourages the temptation to react to short-term market trends, which can lead an investor to chase returns in asset classes that have become expensive due to recent appreciation. The Commission believes that adherence to this long-term perspective will produce its greatest benefits during periods of adverse market conditions, during which time the Policy Portfolio will serve as a stabilizing force for the investment program.

State law also requires the Commission to diversify the assets of the investment portfolio and to consider: (i) general economic conditions; (ii) the possible effect of inflation or deflation; (iii) the role that each investment or course of action plays within the overall Portfolio; (iv) the needs for liquidity, regularity of income, and preservation or appreciation of capital; and (v) the adequacy of funding for the Plan based on reasonable actuarial factors.

B. Background

The Commission undertook a review of the Policy Portfolio in early 2019. At the time the Commission began this process, the Policy Portfolio was comprised of seventeen separate asset classes with twenty-one different benchmarks. Many of the asset classes had small target weights – several with less than three percent. Both the CIO and the Invest Consultant expressed concern that the Policy Portfolio was over-diversified, requiring a high level of complexity without a clear improvement in risk or return. The Commission found this to be inconsistent with its investment belief that investors must be rewarded for incurring additional risk, cost and complexity. The Commission also determined that the Policy Portfolio established the wrong balance between its role as setting the strategic direction of the investment program and investment staff's role in implementing the portfolio. As a result, the Commission determined that a more consolidated Policy Portfolio was in order which valued simplicity and required complexity in the portfolio to prove its value.

C. Reference Portfolio Benchmark

The Commission determined that inherent in assessing the value of complexity and risk in the portfolio was to develop a framework by which the value would be readily discernable. The Commission decided that it would begin the development of this framework by setting a Reference Portfolio Benchmark. The Reference Portfolio Benchmark would be a simple two asset class portfolio comprised of stocks and bonds that closely represented the expected volatility of the Policy Portfolio based on the Investment Consultant's long-term capital market expectations. At its April 2019 meeting, the Commission reached consensus that a two-asset class portfolio comprised of 70 percent Global Public Equities (*ACWI IMI Net*) and 30 percent Bonds (*Bloomberg Barclays Aggregate*) best represented the volatility of the existing Policy Portfolio. The Commission also determined that this reference portfolio best represented the market risk required to achieve a long-term return that met the Commission's investment objective. Inherent in this consideration was that the return was likely to exceed the assumed rate of return and avoid risks particular to the plan including not meeting the General Assembly's funded status objectives and avoiding a significant probability of requiring additional contribution increases.

D. Policy Portfolio Benchmark

The Commission then began establishing a Policy Portfolio that would not be limited to two asset classes but would also consolidate the seventeen asset class portfolio into a more simplified allocation by which to judge the value of additional complexity in the actual portfolio. The Commission considered the transition to a more simplified Policy Portfolio at its April and June 2019 meetings and reached consensus on the transition to the simplified target allocation in Table C below.

Table C

Legacy Asset Allocation	
Nominal IG Bonds	6
Treasuries	5
TIPS	2
Mixed Credit	4
EM Debt	4
Private Debt	7
US Equity	18
Developed Int'l Equity	11
EM Equity	6
Equity Options	7
Private Equity	9
Real Estate (Public)	1
Real Estate (Private)	8
Infrastructure (Public)	1
Infrastructure (Private)	2
PA Hedge Funds	10
GTAA	7
Other Opportunistic	1

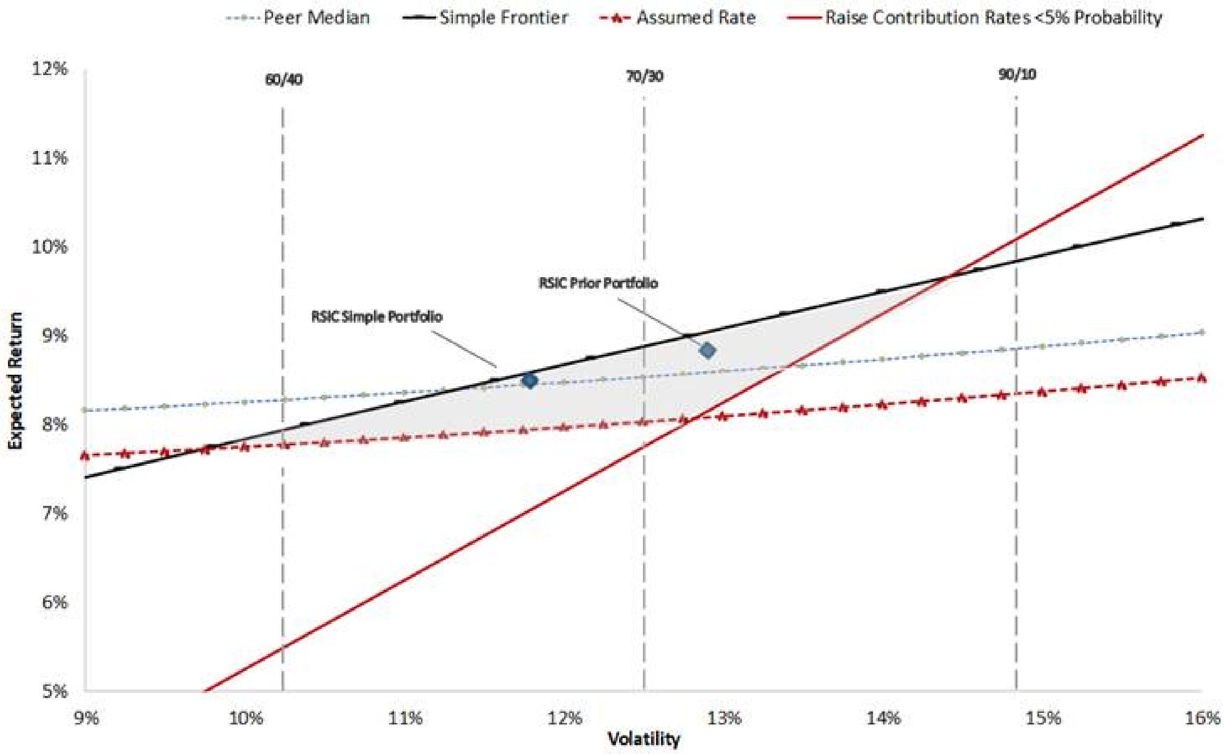
Current Asset Allocation	
Bonds	26
Private Debt	7
Global Equity	46
Private Equity	9
Real Assets	12

The Commission also analyzed whether the Policy Portfolio would meet the Commission's long-term investment objective in that it would likely exceed the assumed rate of return and avoid risks particular to the plan including not meeting the General Assembly's funded status objectives and avoiding a significant probability of requiring additional contribution increases. This analysis was based on the Investment Consultant's 2019 long-term annualized return and volatility expectations. As demonstrated in Table D below the Policy Portfolio is projected to:

1. exceed the assumed rate of return,
2. compare favorably to the simple frontier,

3. compare favorably to the risk of the Reference Portfolio; and
4. experience a less than 5 percent probability of requiring additional contributions in the next five years (other plan risks were also contemplated but would also be avoided because these risks would either fall along the same line or to the right of the risk line represented on the table).

Table D



The Commission believes that this change in approach shifts the paradigm to one which values simplicity and holds a more complex portfolio accountable for improving risk-adjusted returns. A crucial component to ensure this accountability is having the appropriate benchmarks for the Policy Portfolio. The Commission was guided by the CFA Institute's recommendations that benchmarks are (i) specified in advance, (ii) appropriate, (iii) measurable, (iv) unambiguous, (v) reflective of investment options, (vi) owned, and (vii) investable. At its September 2019 meeting, the Commission reached consensus on the benchmarks in Table E for the Policy Portfolio.

Table E

Asset Class	Benchmark
Public Equity	*MSCI ACWI IMI Net*
Bonds	*Bloomberg Barclays Aggregate*
Private Equity	*Burgiss Private Equity*[1]
Private Debt	*S&P LSTA +150 bps*[1]
Real Assets	*NCREIF ODCE Net*

[1] *The Private Equity and Private Debt portfolios and benchmarks will be reported on a 3-month lag*

E. Implementation Portfolio Benchmark

The Commission recognizes the investment staff may add value by structuring the portfolio in a manner that deviates from the Policy Portfolio target weights or may also pursue a strategy that causes the composition of an asset class to differ from the policy benchmark. As a result, the Commission provides the CIO and the investment staff with the discretion to structure the portfolio within the asset class and sub-asset class ranges in Table F. In order to measure the risk and return impact of these portfolio structure decisions, the Commission employs an Implementation Benchmark Portfolio that aggregates the underlying benchmarks of each asset class and sub-asset class strategy according to their actual weights. Providing this discretion while establishing a structure that measures the value of these decisions also sets the right balance of accountability for Commission decisions and those of the investment staff.

Table F

Asset Class	Target	Range	
Public Equity	46%	30%	60%
Domestic	Index	Index +/- 6%	
Developed Non-US	Index	Index +/- 6%	
Emerging Market	Index	Index +/- 4%	
Equity Options	0%	0%	7%
Bonds	26%	15%	35%
Core Bonds (IG)	26%	10%	35%
Inflation-linked (IG)	0%	0%	5%
Mixed Credit (non-IG)	0%	0%	8%
EM Debt	0%	0%	6%
Private Equity	9%	5%	13%
Private Debt	7%	3%	11%
Real Assets	12%	6%	18%
Real Estate	9%	5%	13%
Infrastructure	3%	0%	5%
Net Cash/Short Duration	0%	0%	7%

F. Manager Selection

The Commission also recognizes that the CIO and investment staff may add additional value through manager selection. In September 2017, the Commission through the adoption of the Investment Delegation Policy delegated investment manager selection decisions to the CIO and investment staff within clearly defined limits and exceptions. The Investment Authority Delegation Policy is set out in Section VI.

G. Performance Reporting

Essential to the Commission's oversight function is performance reporting that makes clear the value of three major investment decisions: diversification, portfolio structure, and implementation. The Commission charges staff with developing a Portfolio Reporting Framework that easily allows the

Commission to judge the value of the three investment decisions by comparing the relative performance between the different benchmark portfolios:

1. *Diversification (Policy Portfolio Benchmark vs. Reference Portfolio Benchmark):* The comparison of the Policy and Reference portfolios reveals the value from diversification beyond a simple two-asset portfolio. The benefit of designing these portfolios with the same level of expected volatility is that the performance differential is an indication of the impact of diversification, rather than being a function of an expected risk differential. The Commission should expect to see the value of diversification in this comparison over rolling five periods.

2. *Portfolio Structure (Implementation Portfolio Benchmark vs. Policy Portfolio Benchmark):* This comparison supports an assessment of the quality of the portfolio structure. It reveals the performance impact of the decisions to structure the portfolio differently than the Policy Benchmark. These impacts can be broken down into those resulting from the *weights* of asset classes and those resulting from the *composition* of asset classes. The Commission should see the positive performance impact of implementation benchmark decisions over rolling three-year periods. The reporting framework also include risk reports to highlight whether and how changes in portfolio structure alter the risk characteristics of the portfolio.

3. *Implementation (Actual Portfolio vs. Implementation Portfolio Benchmark):* This comparison aids in the evaluation of the quality of implementation, a key component of which is the impact of manager selection. The Commission should expect to see differential individual manager performance as compared to the implementation benchmark over short periods of time, but the Commission should expect in aggregate to see consistent value added through manager selection. Providing this additional comparison between the Actual Portfolio and the Implementation Benchmarks also disaggregates the performance gained through portfolio structure and that gained through manager selection. As a result, the Commission may evaluate the quality of each of these portfolio decisions when previously the actual portfolio was simply compared to an individual policy benchmark that combined both portfolio structure and manager selection decisions. This additional look through provides the Commission with an enhanced ability to effectively exercise oversight over investment staff decisions.

H. Asset Allocation Review

The Commission will conduct an ALM Study and asset allocation review every five years. The Commission will continue to receive long-term capital market expectations from the investment consultant annually and assess the impact to the expected return and volatility of the Reference and Portfolio Benchmark Portfolios. However, consistent with its beliefs and long-term approach to asset allocation, the Commission will limit interim asset allocation changes to those the Commission determines are absolutely critical to meeting its long-term investment objective and are commensurate with its risk tolerance.

IV. STRATEGIC INITIATIVES

The Strategic Initiatives described in this Section are major ongoing staff projects contemplated to last up to three years and are likely to have a more significant impact to the portfolio, asset class, or an investment strategy than typical decisions. The CIO will include changes to these initiatives as part of the annual AIP proposal and will provide a quarterly update on progress towards these initiatives at regular Commission meetings.

1. Asset Allocation Implementation – The CIO and investment staff will determine the portfolio adjustments that are required in response to the Policy Portfolio changes described in Section III and will develop a transition plan to implement the necessary adjustments.

2. Portfolio Reporting Framework – The performance reporting team will prioritize the development and implementation of the Portfolio Reporting Framework required by Section III and will work with the Quantitative Solutions Group to incorporate risk reporting into the framework.

3. Comprehensive Review of Implementation Cost – Staff will continue to examine the mix of structural and variable costs throughout the Portfolio and pursue opportunities (such as the co-investment initiative outlined below) to improve the cost alignment of the investment program.

4. Secondaries Market – The Commission understands that the thoughtful use of secondaries opportunities can improve returns for a private markets portfolio. The Investment Team will design and execute a plan to incorporate the secondaries market into the investment strategy for private markets asset classes.

5. Risk Management – The Quantitative Solutions Group will continue to improve risk monitoring at the Portfolio, asset class, and manager levels. The team will place special emphasis on improving the quality of risk reporting at these levels.

6. Co-Investment Program – The Private Markets team will explore the expansion of the Co-Investment Program beyond Private Equity into the other private market asset classes, determine whether an additional partner or platform is needed for any proposed expansion, and implement any approved expansion plan.

V. INVESTMENT POLICIES

A. General

1. IIC and Investment Approval Process - State law provides that the AIP is to be implemented by the Commission through the CIO. The RSIC employs a team of investment professionals that support the CIO in carrying out investment management duties and responsibilities. One key component of this infrastructure is the IIC. The IIC assists the CIO by reviewing and providing recommendations to the CIO regarding proposed investments. The IIC also routinely monitors the Portfolio's investment performance and reviews relevant policies and procedures as part of its oversight function. The Commission adopted an Investment Authority Delegation Policy which grants the CIO the ability to approve those investments which fall within the parameters of this policy, subject to the oversight of the CEO. Other investments are presented to the Commission for its approval.

2. Due Diligence – The Investment Team maintains investment due diligence policies to provide consistency and oversight to the investment process. The Initial Due Diligence Policy outlines the key tenets of the RSIC's decision-making process in hiring investment managers. The Ongoing Due Diligence Policy outlines the process and criteria used to evaluate the retention/termination of external investment managers. Both due diligence policies are tested annually by either an Agreed Upon Procedures review by an independent auditor or by the Director of Enterprise Risk Management & Compliance. The results of this review are provided to the Audit and Enterprise Risk Management Committee.

3. Counterparty Risk Management – The Quantitative Solutions Group monitors two sources of potential counterparty risk: (1) the overlay program and (2) the System's master custodial bank. While the risk arising from the overlay program is actively monitored by its external manager, as an added layer of oversight, the Quantitative Solutions Group is responsible for reviewing and reporting on the external manager's prudent management of these counterparty risks.

4. Investment Strategies, Objectives, and Performance Standards:

    i. In accordance with State law, the AIP addresses the Commission's investment strategies, as well as its investment objectives and performance standards. The investment staff maintains a "Baseline" document designed to establish a clear, shared understanding of the rationale, goals, and characteristics for each asset class. In general, the annual plan for an asset class will often involve measures designed to improve its alignment with its Baseline. The following items are detailed in the Baseline document:

        a. Rationale and purpose of the asset class in the broader Portfolio;

        b. Target steady-state asset class exposures (including sub-strategies, geographies, or other relevant factors);

c. The target return, characteristics (income vs. appreciation), and expected active vs. passive implementation breakdown; and

d. An estimate of normal cost to implement the portfolio, and an estimate of the flex cost which may be incurred when market conditions present compelling opportunities.

ii. Baselines also address the following broader issues:

a. The role private investments play in the portfolio;

b. The mix of private vs. public market investments; and

c. How the portfolio is likely to change over time.

iii. The Baseline document is updated at least annually, and all RSIC employees are encouraged to present suggested revisions to any Baseline. Proposed changes to the Baseline documents are presented to the IIC for review and to the CIO for approval. In addition to addressing the investment objectives and performance standards for each asset class, the Baseline also serves as a guide to workflow and portfolio management decisions. Investment decisions are reviewed against the Baseline for portfolio fit.

iv. As part of the individual asset class in-depth examination at each Commission meeting, the investment staff will also provide a review of the particular asset class Baseline, progress towards attaining the Baseline, and any material deviations from the Baseline.

v. The Commission will be informed promptly of any material change to a Baseline at the next Commission meeting following the change.

5. <u>Allowable Investments and Limitations:</u>

i. With certain limitations discussed below, State law provides that RSIC may invest “in any kind of property or type of investment consistent with” Title 9, Chapter 16 of the S.C. Code and Section 9-1-1310. These investments include, but are not limited to, futures, forward contracts, swaps, and options, equities, bonds, loans, 144(A)’s, exchange traded funds, American Depository Receipts, real property, and real estate investment trusts. These investments may be listed, exchange traded, or over the counter, negotiated contracts or investments.

ii. In addition to the instruments outlined above, for every asset class, a variety of investment structures may be utilized depending on the nature of a particular investment. In accordance with the terms of the investment limitations outlined in this policy, these structures may include, but are not limited to, mutual funds, limited partnerships, limited liability companies, strategic partnerships, trusts, commingled vehicles, fund-of-funds, and separately managed accounts in which assets may be held by either the Retirement System’s master custodial bank or an external custodian who is selected and monitored by the external manager or general partner.

iii. Any investment structure and the underlying instruments must be of a type generally expected to obtain exposure to an asset or sub-asset class contained in Table F, Section III.

iv. State law imposes certain limited restrictions on the investment of the Portfolio. The managers of the Portfolio’s accounts **other than** index funds, commingled funds, limited partnerships, derivative instruments or the like are required to assist the Commission in meeting its obligations under S.C. Code Ann. §9-16-55, which sets forth limitations on investment in certain types of companies that are engaged in active business operations in Sudan. See Section IX for additional information.

v. The Commission has also established a policy prohibiting an investment in any security or obligation issued by a company or a corporation that is a known sponsor of terrorist organizations or of a company domiciled in a country that is a recognized sponsor of terrorism or terrorist organizations as based on reports from the Office of Terrorism and Financial Intelligence of the Department of Treasury and the Country Reports on Terrorism by the Office of the Coordinator for Counterterrorism of the U.S. Department of State.

6. Internal Management and Overlay Program – Currently, the investment staff actively manages certain Cash and Short Duration accounts, and performs distribution management (management and disposition of in-kind distributions received from external investment managers or third parties). In addition, the CIO has discretion to use synthetic instruments, derivatives, equity baskets, and exchange traded funds in order to implement the asset allocation or otherwise manage the portfolio in accordance with the ranges established by the Commission. The Overlay program functions as a means by which the CIO and Investment Staff manage exposures and manage risk in an efficient manner using synthetic instruments, exchange-traded-funds/notes, equity or fixed income baskets, options, futures, swaps, and forward currency contracts.

7. Portable Alpha – The Commission provides the CIO with the discretion to use Portable Alpha Strategies not to exceed 12 percent of total plan assets. The use of Portable Alpha is an implementation decision that is reflected in the Implementation Policy Portfolio Benchmark. The benchmark for Portable Alpha Strategies is *HRFI Conservative Fund of Funds less LIBOR*.

8. GTAA - The Commission provides the CIO with the discretion to use Global Tactical Asset Allocation Strategies not to exceed 11 percent of total plan assets. The benchmark for GTAA strategies is the proportional weight of Global Public Equity and Bonds in the Policy Portfolio Benchmark.

9. Alternative Investments – The Commission has established guidelines applicable to its alternative investments, which include Hedge Funds and Private Markets Assets:

i. The Commission's initial commitment to a fund will not exceed 25 percent of the committed capital of that fund, unless the Commission specifically waives or suspends this restriction (a) in order to take advantage of a new firm or product that has not yet built an asset base or (b) in the case of a fund that has been created specifically for RSIC (e.g., a single LP fund);

ii. Unless otherwise approved by the Commission, no more than 15 percent of an alternative asset investment allocation may be invested with a single manager, general partner, or single fund, with the exception of Funds of One and Strategic Partnerships;

iii. Staff will notify the Commission if the collective exposure of Private Equity, Debt, Real Assets exceeds 25 percent of total plan assets; and

iv. Hedge funds may not exceed 20 percent of total plan assets.

10. Equity investments not to exceed 70 percent – State law provides that the AIP must also include the minimum and maximum allocations to equity investments on an ongoing basis, not to exceed 70 percent. The allowable ranges for equity investments are set forth in Table F, Section III. While State law does not stipulate whether the limitation of 70 percent is based on cost or market value, the Commission manages this limitation on a market value basis. Therefore, if the allocation to equity investments exceeds 70 percent of the total market value of the Portfolio, the CIO is required to rebalance the Portfolio.

11. Managing Cost – In accordance with State law, the AIP addresses methods for managing the costs of RSIC's investment activities. RSIC strives to earn the highest risk-adjusted return on a net of fees basis and recognizes that cost is an important variable to consider. The Investment Team actively engages in an array of strategies to reduce the cost of the Portfolio, including the following:

i. Increasing the initial investment size;

ii. Seeking aggregation discounts from firms with which we have multiple investment strategies;

iii. Utilizing co-investments in private markets;

iv. Quantifying and monitoring the effectiveness of active implementation across public market asset classes; and

v. Requesting reductions to, or elimination of, management fees, as appropriate.

12. Risk:

i. All investments carry some degree of risk. The focus of the RSIC risk function is managing and monitoring these risks to ensure that the Portfolio's risks are appropriate and that the overall level of risk taken is consistent with meeting the Commission's investment objective. Key risk initiatives are:

a. Incorporating the Plan's liability structure into the investment decision process; and

b. Developing and refining tools to facilitate the incorporation of System liabilities into portfolio management.

ii. RSIC Staff monitors risk levels both in absolute terms, but also in relation to the Reference Policy benchmark established by the Commission's asset allocation. This is accomplished using a mix of proprietary and third-party systems and tools.

iii. At the Portfolio level, Staff will:

a. Maintain the Portfolio's asset allocation within the limits established by this policy;

b. Employ an appropriate level of diversification and adhere to the limits within this policy or as contracted with the manager;

c. Adhere to policies and procedures established by the Commission; and

d. Maintain adequate liquidity for benefit payments and capital calls.

iv. Staff provides the Commission with risk reporting as part of the Portfolio Performance Framework to ensure that risk remains within acceptable levels and to judge the value of portfolio structure and manager selection decisions on a risk adjusted basis.

13. Manager Monitoring Guidelines - RSIC Staff maintains an Ongoing Due Diligence Policy that outlines the manager monitoring requirements in detail. In summary, the Investment Team is required to perform periodic reviews of each active manager. These reviews contribute to the decision to either retain or terminate that manager. These reviews involve both quantitative and qualitative assessments in order to ensure that any decision is made fairly and consistently, and to avoid untimely or undisciplined decisions that may adversely impact returns. Additionally, the Investment Team reviews audited financial statements, compliance certifications, and investment fees on an annual basis. Compliance with the Ongoing Due Diligence Policy is reviewed annually through an Agreed Upon Procedures audit performed by an independent auditor.

14. Proxy Voting - Managers of separate accounts are authorized and directed to vote all proxies, or to direct the Physical Custodian to vote proxies, in keeping with the manager's duties under federal and state law to act in the best interest of the Plan and to maximize shareholder value, and generally to exercise any of the powers of an owner with respect to the assets under the manager's control, subject at all times to the absolute right of the Commission to direct the voting of proxies upon written notification to the manager. Those separate account managers which vote proxies must provide a written annual summary to RSIC summarizing proxy votes cast during the previous year. The report shall also detail any changes to the manager's proxy voting practices and note any instance in which proxies were not voted in accordance with the best interests of the Plan.

B. Compliance

1. Placement Agent Policy – State law prohibits RSIC from making an investment where a placement agent receives compensation in connection with RSIC's investment. The Commission has a Placement Agent Policy is set out in Section VIII.

2. Investment Manager Sourcing and Conflict Disclosure Policy – In order to enhance transparency and avoid even the appearance of impropriety, before an investment recommendation is made to the Commission or CIO, any Commissioner or RSIC staff member involved in the sourcing or due diligence of a new investment completes a Sourcing and Conflict Disclosure Form. The CEO and CIO must complete a Sourcing and Conflict Disclosure form for each investment.

3. Annual Certification and Ongoing Testing of Guideline Compliance – The Ongoing Due Diligence Policy requires each manager to annually certify its compliance with the contractually

specified guidelines. These certifications are reviewed by RSIC's Compliance function, as well as the Investment Team, and are subject to an annual audit. There is also ongoing testing of guideline compliance for those public markets mandates which are governed by an Investment Management Agreement and custodied with the master custodial bank.

C. Governance and Oversight

1. Performance Standards and Reporting - As noted above, State law requires that the AIP address the Commission's performance standards. The performance standards and benchmarks are described in Section III. In addition, the Commission receives monthly performance reports from the custody bank and quarterly performance reports prepared by RSIC's performance reporting staff and the general investment consultant. The performance reporting prepared by RSIC performance reporting staff must incorporate the Portfolio Performance Framework required in Section III.

2. Diversification – State law requires that the AIP address the topic of diversification, including sectors, issues and other allocations of assets that provide diversification in accordance with prudent investment standards. The Commission provides the CIO with parameters regarding its diversification objectives through the asset allocation, asset and sub-asset allocation ranges, and performance standards set out in Section III. The Portfolio Reporting Framework required in Section III also provides the Commission the ability to oversee the implementation of the long-term portfolio strategy, as well as the actual implementation of the Commission's diversification directives.

3. Procedures regarding consultant, managers, service providers selections and terminations

   i. Selection - State law requires that the AIP include procedures and policies for selecting, monitoring, compensating, and terminating investment consultants, equity investment managers, and other necessary professional service providers. Investment managers are primarily selected by the CIO, subject to the oversight of the CEO, pursuant to the Investment Authority Delegation Policy through an investment process that also complies with the Investment and Operational Due Diligence Polices. The CIO recommends to the Commission for its approval the selection of any manager of an investment that exceeds the limits of or falls into one of the exceptions to the investment delegation policy. Any investment recommended to the Commission for its approval must also comply with the Investment and Operational Due Diligence Policies. All other service provides are selected pursuant to the Commission's Service Provider Selection Policy which is included in the Commission's Governance Policies (https://www.rsic.sc.gov/_documents/2017.07.14%20Governance%20Policy%20Manual.pdf).

   ii. Compensation, Fees and Expenses – Service providers, including consultants and investment managers, will be compensated commensurate with the services provided and industry practices. The Commission will pursue cost savings through structural efficiencies and will strive for fee reductions through negotiations. Investment management fees are evaluated utilizing several metrics or tests. First, fees are examined relative to industry/peer standards. Second, when it reviews potential new mandates or restructurings of existing allocations, the investment staff assesses fees based on the cost relative to other implementation options. For example, in global public equities, the fees charged by active managers (as well as their expected performance and risk) are compared to other methods of obtaining similar market exposure, while in the private markets, fees (as well as expected performance and risk) are compared to public market implementation alternatives. Lastly, to the extent practicable, fees will also be evaluated based on an assessment of the manager's ability to generate excess returns. Investment Staff gathers actual fees and provides annual public disclosure of all fees paid to external managers. The Commission receives an annual report on the cost of its investment program from an independent expert, and may also call upon its investment consultants for assistance in analyzing and addressing issues relating to investment fees. Operating expenses applicable to internal investment operations and the general business of the RSIC are managed by the CEO within the parameters of the annual budget approved by the General Assembly.

iii. Term and Termination -The Commission or the CIO, as applicable, may terminate an investment manager whenever the Commission or CIO determines that its objectives can more efficiently or effectively be met by the selection of another manager or under a different management mandate. The Commission and CIO retain the right to terminate a manager with or without cause and at any time. It should be noted that termination rights may not apply to certain types of investment structures (e.g., typical private markets funds). Circumstances which suggest an immediate review and a possible termination include, but are not limited to, the following:

a. Manager changes strategy or investment style;

b. Critical elements of the investment process have deteriorated;

c. Transaction costs are unreasonable;

d. Management fees are higher than similarly styled managers for similarly sized portfolios;

e. Manager is unable to meet the performance expectations within the risk tolerance specified;

f. Material organizational or personnel changes;

g. Manager is not complying with the applicable provisions of the Commission's SIOP; and

h. Manager is not complying with the applicable provisions of the Commission's AIP.

4. Delegation of Authority to CIO - State law requires that the AIP and SIOP contain a detailed description of the delegation of final authority to invest made by the Commission. The

Commission has delegated its final authority to invest to the CIO, subject to the oversight of the CEO, generally in the following amounts:

i. not to exceed 75 bps of plan value per investment for illiquid structures; and

ii. not to exceed 200 bps of plan value per investment for liquid structures.

The Commission's full Investment Authority Delegation Policy is set out in Section VI.

5. Policies and Procedures to Adapt Portfolio to Market Contingencies - State law requires that the AIP include policies and procedures providing flexibility in responding to market contingencies. The ranges included with the Commission's asset and sub-asset class allocation ranges established in Section III provide the CIO with extensive flexibility to adapt the portfolio to market conditions. Similarly, the Commission's Investment Authority Delegation Policy provides the CIO the ability to adapt the Portfolio to changes in market conditions. To the extent that the CIO deems the scope of the authority delegated to the CIO insufficient, the CIO with the approval of CEO may take action deemed necessary to protect the Portfolio in an extreme market environment. The CIO will promptly inform the Commission of any such actions.

6. Portfolio Rebalancing - The Commission delegates to the CIO or his designee the authority to execute manager and/or securities transactions to implement rebalancing, manage liquidity, or to otherwise manage exposures within the allowable ranges. As part of this delegation, the Commission expects the CIO to articulate, implement and provide reporting to the Commission regarding the Portfolio's rebalancing and exposure management activities as requested. A high-level summary of the rebalancing and exposure management guidelines include:

i. The asset allocation is reviewed on an ongoing (typically weekly) basis by Staff and the CIO to ensure that the Portfolio is within its allocation ranges and to identify appropriate actions necessary to maintain compliance and to provide for the Plan's liquidity needs.

ii. The goal of the rebalancing and exposure management activities is to implement the investment strategy at a reasonable cost within the targets and ranges established by the Commission, recognizing that constant rebalancing to the exact target may not be economically justifiable. The following guidelines are used:

a. Rebalancing is currently performed monthly unless a case has been made ***not*** to rebalance. Potential rebalancing activity is flagged for consideration based upon exposure reporting that is updated by RSIC's performance reporting staff. Rebalancing the portfolio incurs costs (trading commissions, bid-ask spread, and market impact) which are taken into consideration when rebalancing the Portfolio;

b. When an asset class reaches its minimum or maximum allocation, Staff will initiate rebalancing transactions to keep allocations within the approved ranges. Otherwise, Staff must seek Commission approval to remain outside the range; and

c. Concentration risk with respect to significant reliance on any single external manager is reviewed regularly by Staff. Mitigation of performance, operational, headline/reputational, or other fiduciary risks is typically achieved by maintaining a diversified allocation approach both within and across asset classes.

iii. RSIC Staff must balance the risks noted above with the economic benefits associated with a streamlined approach that uses fewer, larger allocations. Additional analyses of the costs and benefits of passive vs. active market exposure are an important input in these decisions.

D. Investment Manager Guidelines

1. General - In keeping with the responsibilities assigned to the CIO by State law and the Commission's Governance Policies, the Commission authorizes the CIO and his designees to develop and revise investment management guidelines for each internally and externally managed investment manager. In making this delegation, the Commission acknowledges that discretion in implementing the investment strategy, within the parameters of all applicable guidelines, will typically be granted to the Commission's investment managers. This discretion is usually limited to the selection of securities and the timing of transactions within the portion of the Portfolio allocated to each manager.

2. Funds of One - A Fund of One is an investment structure in which there is typically a majority investor in a specific vehicle or fund. The Commission or CIO as applicable may elect to use a Fund of One structure when the structure will have lower costs, customized exposure advantages, and/or other beneficial considerations. The CIO is responsible for the day-to-day investment responsibilities with respect to Funds of One, including providing affirmative or negative consent for underlying investments, as required.

3. Pooled or Commingled Funds:

i. Commingled investment vehicles can often provide lower costs and better diversification than can be obtained with a separately managed account pursuing the same investment objectives. However, commingled investment funds cannot customize investment policies and guidelines to the specific needs of individual clients. Recognizing these trade-offs, the Commission or the CIO, as applicable, may accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled vehicles, and exempt commingled investment vehicles from the requirements and guidelines of this policy if:

a. The investment practices of the commingled vehicle are consistent with the spirit of this policy and are not significantly different in letter; and

b. The benefits of using a commingled vehicle rather than a separate account are material.

ii. The Commission or CIO, as applicable, may structure a portfolio as a separate account that allows for the advantages of commingled vehicles, but with RSIC as the only investor. With international assets, commingled vehicles save the Commission from having to provide additional resources for currency and foreign custody issues as the manager will assume responsibility for these functions.

iii. If an investment mandate is structured through a commingled vehicle, the investment policies of that vehicle will be the legal governing policies of the investment of assets allocated to that vehicle.

4. Strategic Partnerships - The Commission may elect to establish Strategic Partnerships with certain asset managers who are believed to possess specific expertise, knowledge, and capabilities for a limited or broad range of investment strategies. The performance of each Strategic Partnership will be reviewed by the Commission periodically, with a more comprehensive review occurring approximately every 3 to 5 years. The investment approval and evaluation process within the Strategic Partnership is similar to that followed for other investments, however, in addition to passing RSIC's internal process, the investment must also be approved by the investment committee of the strategic partnership.

5. Trade Execution - For all accounts, the Commission expects the purchase and sale of its securities to be conducted in a manner designed to receive the best combination of price and execution. The Commission may evaluate policies that provide for the most efficient and effective trading process. The compliance with investment guidelines must be monitored by the investment managers on an ongoing basis and be based on then-current market values. Securities that, if purchased, would constitute a compliance violation may not be purchased. In the event of a compliance violation, the manager will be expected to promptly notify investment staff. If for some the manager does not believe that it is prudent to immediately bring the account back into compliance, the manager will be expected to present a justification as well as a proposal for bringing the account composition back into compliance.

E. Compliance with Section 9-16-320 of South Carolina Code:

1. S.C. Code Section 9-16-320 requires the Commission to meet at least once each fiscal quarter for the purpose of reviewing the performance of investments, assessing compliance with the annual investment plan, and determining whether to amend the plan.

2. The Commission has adopted a strategic calendar that sets a meeting schedule of five meetings per year with a least one meeting every fiscal quarter. The strategic calendar also contains standing agenda items for each meeting to ensure compliance with this Section to include:

i. Quarterly Investment Performance Review – at each meeting the Commission receives a report and presentation on the quarterly, fiscal year to date, one, five, and ten-year plan investment performance. The quarterly performance reports and presentations are based on the Portfolio Performance Reporting Framework described in Section III and are designed to provide the Commission with the ability to judge the absolute value of performance as well as the relative performance between the benchmark portfolios and actual portfolio's performance. The Commission also receives risk reports to judge the absolute and relative risk of the of these portfolios.

ii. AIP Compliance Review – At each meeting the Commission receives reports detailing compliance with the Annual Investment Plan to include:

a. A review of the asset class exposures and sub-asset class components of the portfolio to ensure compliance with the allowable ranges contained in Section III, Table F, and to ensure adequate diversification of the portfolio and that the portfolio is not concentrated in any one industry sector, market sector, or issuer;

b. A review of the progress towards the Strategic Initiatives in Section IV;

c. Any significant market contingencies and review of any responsive action that resulted in a decision not to rebalance the portfolio pursuant to Section V.C.6 or any action taken to protect the Portfolio which fell outside the allowable ranges in Section III, Table F;

d. Action resulting in significant cost savings to the portfolio;

e. Any material deviation from the general operational and investment policies, and

f. As part of an in-depth review of one of the Policy Portfolio asset classes at each meeting, a review of the asset class baseline and progress towards meeting the baseline.

iii. The Commissions retains the authority to amend any portion of relating to the AIP requirements at any meeting and is required to consider amendments proposed by the CIO at its April meeting. However, if the Commission does not act to amend the AIP at any other meeting, it should be presumed that it determined not to amend the plan.

F. General Provisions Related to Alternative Investments

1. South Carolina law, the Employee Retirement Income Security Act of 1974 ("ERISA"), and the Uniform Management of Public Employee Retirement Systems Act of 1997 ("UMPERSA") each have similar or compatible, but not identical, definitions and responsibilities of fiduciaries with respect to managing and investing assets of retirement systems. For clarity and consistency, it is prudent for the Commission to declare standards for interpretation of certain terms used in these sources.

2. As relating to the use of alternative investment strategies, the "Plan Assets" of the Retirement System include the System's ownership interest in the following entities (e.g., a share or a unit), but do not include the underlying assets owned by the entity itself:

i. a registered investment company;

ii. a registered security that is widely held and freely transferable;

iii. an entity in which "benefit plan investors" hold less than 25% of the equity interest as defined and determined by ERISA §3(42);

iv. an "operating company" engaged in the production or sale of a product or service other than the investment of capital;

v. a "real estate operating company" or REOC (which actively manages and develops real estate consistent with U.S. Department of Labor ERISA regulations);

vi. a "venture capital operating company" or VCOC (which actively manages "venture capital investments" consistent with U.S. Department of Labor ERISA regulations); or

vii. a private investment partnership or offshore investment corporation the offering memorandum of which allows for the entity to take both long and short positions, use leverage and derivatives, and invest in many markets.

3. Whenever RSIC invests in an entity that does not hold Retirement System's assets, the decision to invest in the entity will be subject, inter alia, to the South Carolina fiduciary rules and ethics standards provided by state law, but the transactions engaged in by the entity generally will not be subject to the same rules.

4. RSIC will at times need to interpret statutes while implementing and administering the investment program. Whenever the South Carolina statutes are substantively similar to provisions of ERISA or UMPERSA, and to the extent practicable and consistent with South Carolina law and other principles of general application relating to public pension plans, RSIC intends to use (1) pertinent provisions of ERISA; (2) interpretive rules and regulations of the U.S. Department of Labor relating to ERISA; and (3) the Reporter's official comments to UMPERSA for guidance.

VI. Investment Authority Delegation Policy

A. Pursuant to Section 9-16-330(B) of the 1976 Code, the Commission delegates to the CIO the final authority to invest subject to the oversight of the CEO and the requirements and limitations of this policy. The size of any one investment made pursuant to this policy is limited to the percentage of total plan assets that applies to the particular asset class to which the investment pertains as provided in Section C of this policy and subject to any other limitation the Commission may place on this authority at any given time. The value of total plan assets to which the percentage limitations apply must be the estimated total value of plan assets included in the most recent quarterly investment performance report prepared pursuant to Section 9-16-90(A). For purposes of this policy, a co-investment is considered a separate and distinct investment from an investment in a commingled fund, fund of one structure, or an amount committed to a separately managed account and is separately subject to the limitations and requirements of this policy. Individual investments made in a separately managed account or a fund of one structure are not considered separate investments for purposes of this policy and are subject in aggregate to the limitations and requirements of this policy regardless of whether some degree of discretion is retained by staff regarding individual investments to be included in the applicable account.

B. The investment process for any investment made pursuant to this policy must be substantially similar to the investment process employed prior to the adoption of this policy, but for the requirement that the Commission approve the investment prior to closing the investment and must adhere to RSIC's Due Diligence Guidelines and Policies. Notwithstanding the authority granted by this policy, an investment must be presented to the Commission for its approval if it meets any of the following criteria:
   1. The investment is the initial investment in a new asset class;
   2. The majority of the underlying assets comprising the investment have not been previously included in the investment portfolio;
   3. The strategy to be employed by the investment manager is not substantially similar to an investment that has been previously subject to the Commission's investment due diligence process; or
   4. The investment strategy, other than in publicly traded assets, has important direct connections to South Carolina residents, state policymakers, or South Carolina focused businesses, and/or a majority of the assets of the investments would be principally located in South Carolina.

C. The amount of delegation for new investments approved pursuant to this policy shall not exceed 5% of the total value of Plan assets between regularly scheduled Commission meetings. The size of an individual investment made pursuant this policy is subject to the following limitations provided for the asset class applicable to the investment:
   1. Public Markets - 2% of the total value of plan assets, unless it is reasonable to believe that due to the particulars of the investment strategy that liquidating the investment would ordinarily require longer than ninety days and, in such case, the limit is 1% of the total value of plan assets, for:
      i. Global Public Equity,
      ii. Equity Options,
      iii. Portable Alpha,
      iv. Global Asset Allocation,

v. Mixed Credit,
vi. Emerging Market Debt,
vii. Other Opportunistic Strategies,
viii. Core Fixed Income, and
ix. Cash and Short Duration.

2. Publicly-Traded Real Estate - 1% of the total value of plan assets.
3. Private Markets - 75 bps of the total value of plan assets for:
   i. Private Equity,
   ii. Private Debt,
   iii. Private Real Estate,
   iv. Infrastructure, and
   v. Opportunistic Hedge Funds.
4. For purposes of this policy, the asset classes indicated in this section are as they are described in the Annual Investment Plan.

D. Pursuant to Section 9-16-330(B)(2), the closing documentation of any investment made pursuant to this policy must include the CEO's certification that the investment conforms to the amount and extent of delegation provided by this policy.

E. The Commission must be informed of a proposed investment to be made pursuant to this policy no less than three days before the closing of the investment and must be provided with all applicable documentation and reports produced or relied upon by staff when making the investment recommendation including, but not limited to:
   1. investment due diligence report,
   2. operational due diligence report,
   3. key terms sheet,
   4. memorandum and/or reports from the general or specialty consultant,
   5. Internal Investment Committee action summary,
   6. Completeness check certification, and
   7. Final draft versions of pertinent legal documents, including the Investment contract, limited partnership agreement, and/or other applicable closing documents.

F. An investment made pursuant to this policy must be reviewed with the Commission at the next regularly scheduled Commission meeting.

G. The CIO must provide the Commission with an updated proposed investment pipeline on a monthly basis.

H. The delegation of the final authority to invest pursuant to this section includes the authority to terminate an investment manager if the investment was made pursuant to this policy or the amount of capital committed to the manager by the Commission would fall within the applicable limits provided in Section C. The CIO must approve any termination of a manager made pursuant to this policy, subject to the oversight of the CEO. The CIO must provide a memorandum to the Commission summarizing his justification for terminating the manager within three days of terminating the manager. The CIO must provide a review of the termination to the Commission at the next Commission meeting.

I. The Commission will review this policy annually to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties or operations of the Commission or its Committee generally, or as otherwise deemed appropriate by the Commission.

J. No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.

K. This policy was adopted by the Commission on September 28, 2017, subject to final approval by the Chair of the incorporation of certain amendments into the policy. The Chair issued final approval of the policy on October 23, 2017.

VII. SECURITIES LITIGATION POLICY (“POLICY”)

A. **Purpose and General Principles**

a. The purpose of this Policy is to set forth the South Carolina Retirement System Investment Commission’s[1] guidelines with respect to securities litigation. Interests in securities litigation matters will be managed as assets of the South Carolina Retirement Systems Group Trust (the “Trust”) with the goal of enhancing the long-term value of the Trust.

b. The Commission acknowledges that it has a fiduciary duty to take reasonable actions to pursue and collect on legal claims held as an asset of the Trust. The Commission also recognizes that most, if not all, of the securities litigation claims in which the Trust may have an interest will be pursued by law firms from the class action bar regardless of whether RSIC takes an active role in the litigation.

c. This Policy outlines the Commission’s procedures for monitoring the Trust’s portfolio for potentially actionable losses, protecting the Trust’s interests in litigation related to portfolio losses, and maximizing recoveries attainable by the Trust from such actionable losses.

d. This policy consists of four sections: 1) a section relating to asset recovery as passive class members in U.S.-based securities actions; 2) a section for litigation of securities listed on domestic exchanges where RSIC deems active participation is warranted; 3) a section for litigation of securities listed on foreign exchanges; and 4) a section related to the monitoring process for both foreign and domestic claims in which the Trust takes an active role.

B. **Part One: Securities Litigation Policy for Filing Proofs of Claim (“Passive Participation”)**

a. Under U.S. federal law, securities class action lawsuits function as “opt-out” cases. This means that the Trust does not need to participate as a named party in order to recover its *pro rata* share of a class action recovery so long as the certified class claims include the losses incurred by the Trust. This type of participation is called Passive Participation. When notified of a class action settlement in which the Trust has suffered a loss, RSIC need only submit a timely and valid proof of claim in order to be included in any recovery.

b. The Trust’s custodial bank, The Bank of New York Mellon (“BNY Mellon”), is responsible for completing and filing all proofs of claim, including the necessary supporting documents and information in every securities class action pending in the U.S. in which the Trust has a direct interest (i.e., for Trust assets that are custodied at BNY Mellon (“In-Bank Assets”)). BNY Mellon is not responsible for filing proofs of claim for, or otherwise reporting on the management of, securities class action litigation for assets that are not custodied at BNY Mellon (“Out-of-Bank Assets”).

[1] “Commission” refers to the commission of seven members responsible for managing the South Carolina Retirement System Investment Commission, as specified in S.C. Code of Laws Ann. Section 9-16-315.

“South Carolina Retirement System Investment Commission” or “RSIC” refers to the agency established by South Carolina law for the purpose of investing and managing all assets held in trust for the participants and beneficiaries of the state’s five separate defined benefit plans.

c. BNY Mellon's claims filing responsibilities are set forth in more detail in the Service Level Description, dated July 21, 2019, between the Trust by and through RSIC and BNY Mellon (the "SLD"). The SLD outlines the process for: (i) identifying and reviewing all class action recoveries (whether by settlement or trial); (ii) providing timely notice of each settlement recovery to RSIC and the Commission; (ii) filing complete and accurate proofs of claim forms in a timely fashion on behalf of the Trust; (iv) providing quarterly reports outlining all claims filed on behalf of the Trust during the quarter; and (v) providing quarterly reports identifying all securities litigation proceeds recovered by the Trust directly or on its behalf. In the event of a claim involving securities that are not identified by a specific security identifier (e.g., CUSIP, ISIN, SEDOL, etc.), BNY Mellon will use commercially reasonable efforts to identify impacted securities recorded in BNY Mellon's records relating to the security named in the documentation received. In the event that BNY Mellon is unable to file a claim on the Trust's behalf (e.g., involving anti-trust claims), BNY Mellon, or in some cases a third party, will forward the relevant claim information to RSIC, and RSIC will utilize the services of third-party claims filing services that specialize in analyzing and filing such claims.

C. **Part Two: Securities Litigation Policy for Securities Listed on a Domestic Exchange**

a. While the Commission has a fiduciary obligation to take reasonable action to collect on legal claims held by the Trust, the Trust, acting by RSIC, may need to engage in active participation ("Active Participation") on occasion. This type of participation involves serving as lead plaintiff in cases in the domestic exchange context. Active Participation in domestic securities class actions must be balanced with the Commission and RSIC's primary obligation to maximize the investment returns of the Trust. This determination must also be weighed against the additional costs and burden on staff that may result by becoming lead plaintiff in a securities litigation case as well as the recognition that the Trust's position as a lead plaintiff will not, in and of itself, entitle the Trust to any greater recovery.

b. **Authority to Seek Lead Plaintiff Designation:** Due to the time-sensitive nature of electing to seek a lead plaintiff designation and the Chief Executive Officer's ("CEO") statutory designation as the chief administrative officer of RSIC, the Commission, through this Policy, has delegated to the Executive Leadership Team the authority to elect to seek a lead plaintiff designation where appropriate, reasonable, and prudent to protect the interests of the Trust.

c. **Decision-Making Guidance for Active Participation:** The Executive Leadership Team will generally consider seeking lead plaintiff status ("Active Participation") in a domestic class action when: (i) the Trust's projected losses exceed $5 million U.S. Dollars (the "Loss Threshold"); or (ii) when the loss is substantial but less than the Loss Threshold and there are significant special factors justifying the Trust's involvement. The determination of special factors will be made in the discretion of the Executive Leadership Team.

d. **Monitoring Procedures:** In addition to the reporting provided by BNY Mellon for class action litigation involving In-Bank Assets, the Trust may retain three or more securities litigation monitoring law firms (the "Firms") to advise RSIC via periodic reporting of recently-filed class actions in which the Trust has sustained losses and which appear to have merit. The Firms will generally be engaged for up to five years, with the option to terminate earlier or renew for additional periods. Each of the Firms will provide reporting on at least a quarterly basis outlining all recently filed claims in which the Trust has sustained losses. Additionally, the Firms will submit written memos to RSIC on certain cases, including any cases exceeding the Loss Threshold, regarding the alleged facts of the case, the estimated losses, the Firm's view on the merits of the allegations, and a recommendation as to whether RSIC should seek a lead plaintiff position in the matter. RSIC Legal will perform an initial review of all reports and memos received from the Firms. Any reports or memos indicating a loss that exceeds the Loss Threshold will be forwarded to the CLO for further review. The CLO will review the reports and will follow up with the Firms that have provided the memorandum to get additional insight and information about potential claims exceeding the Loss Threshold ("Reviewable Claims") and will make additional inquiries or conduct additional research as needed.

e. After review by the CLO, the CLO will confer with the Executive Leadership Team regarding the merits of Reviewable Claims, including the projected losses incurred by the Trust, the specifics of the related investment(s), available staff resources, and the recommendations of the Firms regarding whether the Trust should seek a lead plaintiff position. Any decision to seek a lead plaintiff designation for a claim exceeding the Loss Threshold or based on special circumstances must be made by a unanimous vote of the Executive Leadership Team. The Executive Leadership Team will notify the Chair and Vice-Chair of the Commission about any decision to seek a lead plaintiff position and will update the Commission via reporting to the Commission's secure portal.

f. **Selection of Outside Counsel for Securities Litigation** If the Executive Leadership Team determines that it is prudent to hire one of the Firms or other legal counsel to represent the Trust in a securities litigation action to protect the assets of the Trust, all selection of counsel and retainer agreements shall be negotiated, executed, and monitored by the CEO with assistance from the CLO. The CEO may engage one of the Firms hired to monitor the Trust's portfolio, or the CEO may seek to engage other counsel after consultation with the CLO and notice and consultation with the Office of the South Carolina Attorney General, as required by S.C. Code Ann. Section 9-16-315(I). When RSIC first engages the Firms, RSIC will pre-negotiate a proposed engagement agreement for potential litigation, which must be approved by the CEO.

D. **Part Three: Securities Litigation for Securities Listed on a Foreign Exchange**

a. Due to the 2010 Supreme Court case, *Morrison v. National Australia Bank Ltd.*,[2] investors no longer have the protections of U.S. securities laws for securities that were purchased on a non-U.S. exchange. Unlike the U.S. class action process, foreign securities actions generally require investors to join as a named-plaintiff or "opt-in" at the commencement of the case in order to be entitled to a share of any recovery. This "opt-in" process requires affirmative decisions early in the process to join the lawsuit in order to participate in any recovery. In many cases, investors may be required to make these decisions before a foreign action is even filed.

[2] *Morrison v. National Australia Bank Ltd.,* 561 U.S. 247 (2010).

b. **Decision-Making Guidance for Active Management:** Because there is rarely an option for passive participation in foreign securities actions, the review for participation in these actions differs from those explained in Part Two of this Policy. The CLO will review notices of potential claims in foreign securities actions and will review recommendation memos received from the Firms or other sources in those cases where the loss threshold exceeds $1 million (the "Foreign Loss Threshold"). In foreign jurisdictions, various groups, including non-law firm litigation funding organizations, may act as a funding source for the litigation and work with a certain legal team to initiate litigation. In some cases, the group that first files a lawsuit may become a founding group ("Founding Group"). Founding Groups may impose differing terms and conditions in order to participate in a lawsuit. The CLO will review all available factors relating to participating in foreign actions for claims exceeding the Foreign Loss Threshold, including but not limited to: (i) the amount of the loss; (ii) the potential litigation fees; (iii) the litigation funding requirements; (iv) whether more than one litigation funding group is proposing participation; (v) the risk of adverse costs; (vi) the legal merits of the case; (vii) the contractual requirements for joining and/or bringing a claim; and (viii) the potential cost of staff's time. . After reviewing the above factors and the documentation required to elect to participate in the applicable foreign jurisdiction, the CLO will make a recommendation to the CEO on whether to participate, and if applicable, which Founding Group to elect based on the most suitable contract terms available for the Trust. The CEO, after reviewing the CLO's recommendation, will elect (A) whether or not to pursue participation in foreign litigation that exceeds the Foreign Loss Threshold; and (B) which funding group to select based on the terms and legal requirements of each. The CLO, working with the Firm(s), as applicable, will negotiate the required documentation and retain the right to change a recommendation to participate if suitable contract terms cannot be negotiated with the Founding Group.

E. **Part Four: Litigation Monitoring for Active Participation in Domestic and Foreign Litigation**

a. The CEO, acting via the CLO, will monitor any pending domestic or foreign cases in which RSIC is actively participating. The CLO will request quarterly written status updates from any Firms representing RSIC in Active Participation cases. The CLO will actively participate in discussions with the Firms regarding any participation by RSIC Staff or document production needs. The CEO and CLO will be actively involved in settlement discussions for any domestic litigation action. The CLO will submit periodic updates to the CEO and the Commission regarding such cases. In accordance with the CEO's statutory authority as chief administrative officer of the Commission, the CEO retains the ultimate authority related to the direction of any class action litigation and/or settlement pursuant to this Policy. The CEO may consult the Commission on any matter related to the initiation of or conduct of any lawsuit pursuant to this Policy. The CEO shall have full authority to approve a proposed settlement of any litigation. In addition, the CEO shall have full authority to execute all contracts, legal documents, settlements, certifications, and authorizations required to pursue litigation authorized by the Executive Leadership Team.

F. The Commission shall review this policy at least once every three (3) years to ensure that it remains relevant and appropriate.

VIII. Placement Agent Policy

A. Purpose. It is the intent of this Policy to comply with S.C. Code Ann. §9-16-100, which prohibits compensation being paid to a Placement Agent (as defined below) as a result of an investment by the Retirement System (as defined below).

B. Definitions. For purposes of this Policy, the following capitalized terms will have the defined meaning set forth below:

- **a.** Pursuant to §9-16-100(B), a "Placement Agent" means any individual directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of an external manager or an investment fund managed by an external manager and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker, or other intermediary in connection with making an investment with or investing in a fund managed by the external investment manager.
- **b.** "Placement Agent Policy Compliance Letter" means that letter which will be requested from prospective external investment management firms in accordance with the terms of this Policy.
- **c.** "Policy" means this Placement Agent Policy.
- **d.** "Retirement System" means the South Carolina Retirement Systems Group Trust.
- **e.** "RSIC" means the South Carolina Retirement System Investment Commission.

C. Procedure

- **a.** RSIC staff will inform prospective external investment management firms ("Investment Managers") as to the RSIC's Placement Agency Policy and statutory requirements as soon as practicable after RSIC staff begins the due diligence review of any potential investment. The RSIC staff member leading the due diligence review for the investment is responsible for sending written notice (paper, fax or email) to the Investment Manager requesting a Placement Agent Policy Compliance Letter. If a copy of this Policy has not already been provided to the Investment Manager, then this Policy will be made available to the Investment Manager prior to or at the time notice is given to the Investment Manager.
- **b.** The Placement Agent Policy Compliance Letter must be included in the RSIC investment Due Diligence Report packet.
- **c.** Investments will not be voted on by the Commission, Internal Investment Committee, or otherwise approved pursuant to RSIC policies, prior to receipt of the completed Placement Agent Policy Compliance Letter and confirmation from RSIC compliance staff that the letter is sufficient per Section G below.
- **d.** The following entities must complete the Placement Agent Policy Compliance Letter as outlined below:
  - **i.** Investment Managers that have a direct contractual investment management relationship with the RSIC or with an investment vehicle in which the RSIC is invested.
  - **ii.** Investment Managers that have an indirect contractual investment management relationship with the RSIC through an investment vehicle that invests in funds or other pooled investment vehicles or other assets.

D. Placement Agent Policy Compliance Letter. The Investment Manager will provide disclosure in the form of a letter addressing all requirements specified below:

- **a.** Certification that, in compliance with §9-16-100, no Placement Agent (as defined by State law) received, or will receive, compensation in connection with the RSIC making an investment with or investing in a fund managed by the Investment Manager.
- **b.** Representation that the Investment Manager has reviewed the applicable law and has not relied on the counsel or advice of RSIC or any employee, representative, agent or officer of RSIC regarding the interpretation and application of the applicable law.
- **c.** Representation that all information contained in the Placement Agent Policy Compliance Letter is true, correct and complete in all material respects.

E. Open Records Law. RSIC may be required to disclose information in the Placement Agent Policy Compliance Letter under the South Carolina Freedom of Information Act.

F. Investments with Separate Account Investment Management Agreements ("IMAs"). If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will, to the fullest extent possible, seek the option, in its sole discretion and without liability to the Investment Manager or any third party, to terminate the IMA and to pursue all remedies that may otherwise be available to the RSIC without incurring any penalty under any agreement to which it is a party.

G. Investments in commingled investment structures (LPAs, LLCs, Trusts, etc.). The RSIC will endeavor to have provisions incorporated into the transaction documents for commingled investment structures which would permit the RSIC to take those actions described in the next sentence. If, after closing, the RSIC determines that the Placement Agent Policy Compliance Letter contains a material inaccuracy or omission, the RSIC will seek to obtain the option, in its sole discretion and without liability to the commingled investment structure, the General Partner or equivalent management entity, any other investor in the structure or third party, to cease making further capital contributions and/or direct payments to the investment and to pursue all remedies that may otherwise be available to the RSIC without being deemed to be a defaulting Limited Partner under the transaction documents and without incurring any other penalty under any agreement to which it is a party.

H. Review. RSIC's compliance staff will review Placement Agent Policy Compliance Letters and will determine whether each letter is sufficient. Any questions regarding the sufficiency of the letter will be referred to the RSIC legal department and will be reported to the CIO and applicable RSIC Staff.

I. Staff Contact. RSIC staff will provide notice about the prohibition in the state law to any party that contacts RSIC staff regarding a potential investment and appears to be acting in the role of a Placement Agent.

J. Obligation to Update. It is the Investment Manager's obligation to promptly inform RSIC staff of any material changes to a prior-filed Placement Agent Policy Compliance Letter, and to submit an updated Placement Agent Policy Compliance Letter where warranted prior to the RSIC's closing on an investment.

K. Review and History

- **a.** The Commission will review this policy at least every three years to ensure that it remains relevant and appropriate, or when there has been an amendment to state law relevant to any section of this policy, or a Commission approved change in the responsibilities, duties, or operations of the Commission or its committees generally, or as otherwise deemed appropriate by the Commission.
- **b.** No provision of this policy shall apply to the extent that it is in conflict with any provision of the Code of Laws of South Carolina, 1976, as amended. In the event of such conflict, the applicable Code provision shall apply in all respects.
- **c.** This policy was initially adopted on September 20, 2012.
- **d.** This policy was amended on June 22, 2017 and will take effect on July 1, 2017.

IX. SUDAN DIVESTMENT POLICY

A. Background. The State of South Carolina has enacted a Sudan divestment law, codified at S.C. Code Ann. §9-16-55 ("Act"). The uncodified preamble to the Act notes that "[d]ivestment is a course of last resort that should be used sparingly and under extraordinary circumstances," but states that "the genocide occurring in the Sudan is reprehensible and abhorrent," warranting this type of legislative response. The Act, which applies solely to the South Carolina Retirement Systems Group Trust ("Group Trust") managed by the South Carolina Retirement System Investment Commission ("Commission" as the governing body, "RSIC" as the agency), sets forth various criteria that are to be considered by the Commission in making the determinations required by the Act.

B. Purpose. The purpose of this Sudan Divestment Policy ("Policy") is to document the manner in which the Act is administered. The Commission has the exclusive authority to invest and manage the assets of the Group Trust pursuant to S.C. Code Ann. §9-16-20. The Commission also has the fiduciary duty to manage the assets of the Group Trust solely in the interests of the retirement systems, participants, and beneficiaries. The Commission must discharge these responsibilities in a manner consistent with all applicable statutes, regulations, and policies, including the Act.

C. Definitions. The Act utilizes the following defined terms:

- **a.** "Active Business Operations" means a Company engaged in Business Operations that provide revenue to the Government of Sudan or a Company engaged in Oil-Related Activities.
- **b.** "Business Operations" means maintaining, selling, or leasing equipment, facilities, personnel, or any other apparatus of business or commerce in Sudan, including the ownership or possession of real or personal property located in Sudan.
- **c.** "Company" means a sole proprietorship, organization, association, corporation, partnership, venture, or other entity, its subsidiary or affiliate that exists for profit-making purposes or to otherwise secure economic advantage. "Company" also means a Company owned or controlled, either directly or indirectly, by the Government of Sudan, that is established or organized under the laws of or has its principal place of business in the Sudan.
- **d.** "Government of Sudan" means the Government of Sudan or its instrumentalities as further defined in the Darfur Peace and Accountability Act of 2006.
- **e.** "Investment" means the purchase, ownership, or control of stock of a Company, association, or corporation, the capital stock of a mutual water Company or corporation, bonds issued by the government or a political subdivision of Sudan, corporate bonds, or other debt instruments issued by a Company.
- **f.** "Military Equipment" means weapons, arms, or military defense supplies.
- **g.** "Oil-Related Activities" means, but is not limited to, the export of oil, extracting or producing oil, exploration for oil, or the construction or maintenance of a pipeline, refinery, or other oil field infrastructure.
- **h.** "Public Employee Retirement Funds" means those assets as defined in §9-16-10(1).
- **i.** "Scrutinized Companies" means any of the following:

i. The Company is engaged in Active Business Operations in Sudan; and
ii. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
iii. The Company has demonstrated complicity in the Darfur genocide.
iv. The Company is not engaged in Oil-Related Activities and lacks significant Business Operations in the eastern, southern, and western regions of Sudan; and
v. The Company is engaged in Oil-Related Activities or energy or power-related operations, or contracts with another Company with Business Operations in the oil, energy, and power sectors of Sudan, and the Company has failed to take Substantial Action related to the Government of Sudan because of the Darfur genocide; or
vi. The Company has demonstrated complicity in the Darfur genocide.
vii. The Company supplies Military Equipment within the borders of Sudan.[3]

j. "State" means the State of South Carolina.
k. "Substantial Action" means a boycott of the Government of Sudan, curtailing business in Sudan until that time described in Section I of this Policy, selling Company assets, equipment, or real and personal property located in Sudan, or undertaking significant humanitarian efforts in the eastern, southern, or western regions of Sudan.
l. "Sudan" means the Republic of the Sudan, a territory under the administration or control of the Government of Sudan, including, but not limited to, the Darfur region, or an individual, Company, or public agency located in Khartoum, northern Sudan, or the Nile River Valley that supports the Republic of the Sudan.

D. Identification of Companies

a. Identifying Scrutinized Companies. RSIC Staff ("Staff") has engaged the services of a specialized research firm ("Advisor") to (i) identify companies doing business in Sudan, as defined in the Act, and (ii) provide Staff with a list of such Scrutinized Companies ("Scrutinized Companies List").
b. Updates to Scrutinized Companies List. Staff shall ensure that the Scrutinized Companies List is updated on or about January 1 and July 1 of each year.

E. Engagement

a. Determining Scrutinized Status. For each Company identified by the Advisor pursuant to Section D of this Policy, RSIC (either via Staff or the Advisor) shall send a written notice informing the Company that it may become subject to divestment by RSIC. The notice

[3] If a Company provides equipment within the borders of Sudan that may be readily used for military purposes, including but not limited to, radar systems and military-grade transport vehicles, there is a strong presumption against investing in the Company unless that Company implements safeguards to prevent the use of that equipment for military purposes.

shall offer the Company the opportunity to clarify its Sudan-related activities within 90 days in order to avoid qualifying for potential divestment.

b. Compliance. If, following RSIC's notification (either via Staff or the Advisor) to a Company pursuant to Section E. a. of this Policy, that Company ceases the activities that caused the Company to be added to the Scrutinized Companies List, as determined by the Advisor, the Company shall be removed from the Scrutinized Companies List, and the provisions of this Section E shall cease to apply to the Company unless it resumes the activities that caused the Company to be added to the Scrutinized Companies List.

F. Determinations to be made by the Chief Investment Officer

a. Delegation to the Chief Investment Officer. The Commission has delegated authority to the Chief Investment Officer ("CIO") to, in consultation with RSIC's Chief Executive Officer, make the determinations required under the Act and to take actions necessary to implement this Policy.

b. General. If, following RSIC's engagement with a Company pursuant to Section E. a. of this Policy, the Company continues to be a Scrutinized Company, Staff will present the CIO with detailed information gathered from the Advisor, affected investment managers, and others regarding the Company, its Business Operations, the Group Trust's holdings, and any other information required by the Act and this Policy. The CIO will make determinations as to (i) whether Staff should sell, redeem, divest, or withdraw the Group Trust's interests in the Company, and (ii) the timing of any such sale, redemption, divestment, or withdrawal. The CIO will also make the determinations described in Section I of this Policy.

G. Prohibition. RSIC shall not use Public Employee Retirement Funds to acquire new Investments in Companies on the Scrutinized Companies List, except as provided in this Policy.

H. Permissible Investments under the Act

a. The Act does not apply to the following types of Investments:

i. Investments in a Company that is primarily engaged in supplying goods or services intended to relieve human suffering in Sudan;

ii. Investments in a Company that promotes health, education, journalistic, or religious activities in or welfare in the western, eastern, or southern regions of Sudan;

iii. Investments in a United States Company that is authorized by the federal government to have Business Operations in Sudan; and

iv. Investments that constitute indirect beneficial ownership through index funds, commingled funds, limited partnerships, derivative instruments, or the like.

b. In developing the Scrutinized Companies List, the Advisor shall determine, in good faith and with due professional care, whether any of the foregoing exemptions and exclusions set forth in the Act apply.

I. Determinations required to be made by the CIO pursuant to §9-16-55(D)(1). The Act states that nothing in the Act "requires the [C]ommission to take action as described in [the Act] unless the

[C]ommission determines, in good faith, that the action described in [the Act] is consistent with the fiduciary responsibilities of the [C]ommission as described in [Title 9, Chapter 16 of the Code] and there are appropriated funds of the State to absorb the expenses of the [C]ommission to implement this [Act]." §9-16-55(D)(1). Accordingly, whenever the CIO is asked to consider taking action under the terms of the Act or this Policy, Staff will assist the CIO in making the determinations required to be made as described in this Section.

J. Reporting. Staff shall, following the close of RSIC's fiscal year, prepare a formal report to the Commission regarding actions taken pursuant to the Act. RSIC shall also publish the report. The report shall include all of the following information with respect to the previous fiscal year:

- **a.** The Scrutinized Companies List;
- **b.** A list of all Companies added to or removed from the Scrutinized Companies List;
- **c.** A summary of correspondence with Companies engaged by RSIC under the Act;
- **d.** A list of all Companies that RSIC will continue to engage concerning their Business Operations in Sudan;
- **e.** A summary of all Investments sold, redeemed, divested, or withdrawn under the Act; and
- **f.** A list of all Investments that were retained by RSIC pursuant to a determination by the CIO as set forth in Section I.

K. Expiration. The restrictions in the Act shall apply only until:

- **a.** The Government of Sudan halts the genocide in Darfur for twelve months as determined by both the Department of State and the Congress of the United States; or
- **b.** The United States revokes its current sanctions against Sudan.

L. Indemnification. The Act provides that present and former board members, officers, and employees of the State Fiscal Accountability Authority, present, future, and former directors, officers, and employees of the South Carolina Public Employee Benefit Authority, the Commission, and contract investment managers retained by the Commission must be indemnified from the general fund of the State and held harmless by the State from all claims, demands, suits, actions, damages, judgments, costs, charges, and expenses, including court costs and attorney's fees, and against all liability, losses, and damages of any nature whatsoever that these present, future, or former board members, officers, employees, or contract investment managers shall or may at any time sustain by reason of any decision to restrict, reduce, or eliminate Investments pursuant to the Act.

X. LONG-TERM ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS

(NOTE: This section will be updated with 2020 Capital Market Expectations prior to the March 2020 Commission meeting. Current 2019 Capital Market Expectations can be found in the February 2019 Combined Commission Meeting Materials at https://www.rsic.sc.gov/_documents/2019.02.21%20Combined%20Commission%20Materials.pdf).

Delegated Investments (September 12, 2019 to December 11, 2019)

Asset Class	Investment	Investment Amount	Closing Date
Private Equity	Horsely Bridge XIII Venture, L.P.	$50 M	September 27, 2019
Private Credit	KKR BDC JV (Strategic Credit Opportunities Partners, LLC) – Phase 2	$75 M	September 30, 2019
Private Equity	KPS Special Situations Fund V	Up to $75 M	October 9, 2019
Private Equity	KPS Special Situations Mid-Cap Fund	Up to $20 M	October 9, 2019
Private Credit	GoldenTree Loan Management II	$75 M	October 18, 2019
Private Equity	Brighton Park Capital Fund I	Up to $75 M	December 11, 2019