SOUTH CAROLINA RETIREMENT SYSTEM

INVESTMENT COMMISSION

ANNUAL INVESTMENT PLAN

FISCAL YEAR 2018-2019

as adopted by the Retirement System Investment Commission
on April 12, 2018; effective on July 1, 2018

TABLE OF CONTENTS

SECTION 1: OVERVIEW AND PURPOSE

Overview

The Commission maintains a Statement of Investment Objectives and Policies ("SIOP"), which provides the objectives, policies, and guidelines for investing the assets of the South Carolina Retirement Systems (the "Portfolio"). The SIOP provides the framework by which the RSIC, at the direction of the Chief Investment Officer ("CIO"), drafts a proposed Annual Investment Plan ("AIP"). South Carolina law requires the CIO to submit the proposed AIP to the Commission no later than April 1st of each year, and the Commission must adopt a final AIP no later than May 1st of each year for the following fiscal year which begins on July 1. The Commission may amend the AIP during the fiscal year as it deems appropriate.

Purpose

Each year in the AIP, the CIO establishes the goals and initiatives that will guide the work and focus of the investment program for the subsequent fiscal year. These plans take into account the broad market outlook, the outlook for each individual asset class, and Portfolio-level objectives, as stated in the SIOP. The relevant portion of the SIOP may constitute parts of the AIP pursuant to Section 9-16-50(B). The Commission adopts the SIOP, in its entirety, into the AIP, in accordance with Section 9-16-50(B) and to satisfy compliance with the requirements of Section 9-16-330(B).

SECTION 2: STRATEGIC INITIATIVES

Each year Staff undertakes initiatives approved by the Investment Commission within the AIP with the goal of improving its investment, operational, and governance capabilities that will lead to more efficient and effective implementation of investment strategies and positively contribute to the financial health of the South Carolina Retirement System trust funds. These initiatives are interconnected and are often multi-year or ongoing in nature, requiring collaboration across the organization. Several of the initiatives outlined herein are designed to help the Portfolio adapt to a multi-year period of forecasted lower returns with heightened volatility.

1. In addition to the asset class initiatives described below, the Investment Team will focus on the following key initiatives in support of the Commission's goals and objectives as expressed in the SIOP.

   a. Challenging beliefs – Since the fall of 2015, the Investment Team has periodically engaged in a process of challenging its investment beliefs. This process is designed to encourage rigorous debate over an array of important topics that relate to the investment program. Investment staff members are expected to present the most compelling arguments possible on one side of an issue, regardless of their actual belief. This process will continue for the foreseeable future and, as it unfolds, the Investment Team expects to develop and present additional portfolio recommendations reflecting these beliefs.

   b. Implementation of the long-term asset allocation approved in February 2018 – In February 2018, the Commission adopted a new long-term target asset allocation. The Investment Team will develop and execute a plan for implementing this target asset allocation.

   c. Comprehensive review of implementation cost – The Investment Team, in conjunction with other RSIC units, will continue to examine the mix of structural and variable costs throughout the Portfolio and pursue opportunities like the co-investment initiative to improve the cost alignment of the investment program. Other elements of the review will include:

      i. Active/Enhanced/Passive Framework – The Investment Team will continue to strengthen its quantitative framework for assessing the ideal use of active, enhanced, and passive strategies. The goal is to improve the cost-effectiveness of the investment program, when evaluated over a market cycle (five to seven years). Further work in this area will seek to understand the factors that contribute to the persistence of managers' ability to generate excess returns.

ii. Pursuing opportunities to consolidate assets with high-conviction managers and to improve the cost of the investment program. In this effort, the Investment Team will continue to perform rigorous due diligence, including a robust assessment of value creation and return attribution.

d. Building out Investment Risk function – During the fiscal year, the Investment Team will focus on the development of new risk tools and reports for use by both the Investment team and the Commission.

e. Tactical Asset Allocation ("TAA") and Rebalancing – The Investment Team will continue to strengthen its TAA capabilities by enhancing the principles and decision-making framework for these functions. The Team will also evaluate potential changes to its rebalancing discipline.

f. Currency hedging evaluation – The Investment Team will assess the operational and portfolio impacts of hedging all or a portion of foreign currency risk.

g. Review of investment process – The Investment Team will conduct a comprehensive review of its procedures for evaluating potential investments.

2. The Operations Team will focus on the following key initiatives in order to provide the operational infrastructure to maintain the appropriate administrative, accounting, and data management services to support the investment, risk management, and reporting functions of the RSIC:

   a. Assess the current state of the performance reporting ecosystem, evaluating RSIC's current initiatives and available systems to ensure the organization's reporting and analytics needs continue to be met.

   b. Evaluate existing procedures and explore additional automation related to the recently acquired fully web-based version of our fixed income portfolio accounting.

   c. Continue to enhance the information technology infrastructure to support RSIC's business needs.

   d. Research and implement a Contact Management Solution to better capture investment manager contacts and RSIC ongoing due-diligence efforts.

3. The Legal Team will focus on the following key initiatives in order to assist the Investment Team in achieving its objectives, while maintaining a focus on identifying and minimizing legal risk to RSIC:

   a. Evaluate the existing contracting process in order to improve efficiency and minimize risk.

   b. Assess additional implementation options and legal structures to enhance RSIC's ability to achieve investment objectives in a prudent and cost-efficient manner.

SECTION 3: ASSET CLASS INITIATIVES

Public Market Initiatives:

- Passive index menu – Explore the utility of having a multi-asset class passive (index) solutions provider.

- Inter- and intra-asset class rebalancing opportunities – Evaluate the merits of different rebalancing disciplines. This work will include analysis of changing the frequency and thresholds for rebalancing, as well as weighing the costs of these rebalancing protocols for different asset classes.
- Cultivate debate among managers with differing views – Create opportunities for external investment managers to share differing views with regard to regions, sectors, and asset classes, in order to help inform RSIC tactical asset allocation decisions.

Private Market Initiatives:

- Co-investment initiative – Following up on conclusions reached in a challenging convictions review, continue to evaluate the use of an external service provider to assist Staff in sourcing and/or underwriting co-investment opportunities, with the goal of implementing the program during FY 18-19.
- In order to broaden the experience of certain team members, identify opportunities where members of the private markets team can perform due diligence in multiple asset classes, as well as participate in other projects.

Equity

The equity asset classes are the Portfolio's investments that reflect an ownership of a business, and includes global public equity and private equity. The long-term target allocation to equity is 51% of the Portfolio, a 4% increase over FY 17-18. Equities performed well in 2017 across the U.S., developed international and emerging markets.

Global Public Equity

The long-term target allocation for global public equity is 35%, an increase of 2% over FY 17-18. The current global public equity implementation includes strategies that invest globally and those that focus on a specific region or thematic group (for example, the U.S. or emerging markets). Current implementation features a combination of passive, enhanced, and active mandates.

Key Initiatives:

- Implement a plan for transitioning towards the new sub-asset class targets for U.S. equity, developed market equity (non-U.S.), and emerging market equity specified in the long-term asset allocation.
- Incorporate enhancements to the passive/enhanced/active tools while researching strategies that improve the existing implementation.
- Research and invest in a small cap emerging markets manager.
- Re-underwrite existing active strategies and develop bench managers across small cap and emerging markets.

Equity Options Strategies

Equity options strategies have a 7% allocation, an increase of 2% from FY 17-18. This exposure is implemented through a combination of enhanced and active strategies. Enhanced strategies typically focus on systematic improvements to the index construction. Active strategies typically utilize quantitative or fundamental analysis to minimize equity drawdown risk, capture the volatility risk premium, and improve the management of cash collateral.

Key Initiatives: Develop and implement a plan for increasing this allocation. Explore the efficacy of equity options strategies in international markets.

Private Equity

The RSIC does not have a static target weight for private equity. Rather, the target allocation is determined to be equal to the actual weight in the portfolio. In the absence of a fixed target, RSIC looks to allocate to private equity by seeking long-term relationships with the best-in-class managers expected to generate superior net of fees returns over time. Thus, the actual private equity allocation may vary over time, based on both the availability of attractive investment opportunities and the prevailing market conditions.

Key Initiatives: Continue to refine the quantitative approach in order to enhance understanding of the sources of value creation by managers.

Real Assets

The real assets allocation includes both the Portfolio's real estate and infrastructure investments. These assets have a tendency to benefit from a rising inflation environment. The long-term target allocation for the real assets allocation is 12% of the Portfolio, an increase of 2% over the prior fiscal year.

Real Estate

The RSIC does not have a static target weight for private real estate. Rather, as with private equity, the target allocation for real estate is determined to be equal to the actual weight in the portfolio. The actual real estate allocation is expected to continue to increase over time by 1% (a 2% increase to private strategies offset in part by a 1% reduction to REITs).

The real estate portfolio is divided into three main categories -- public, private core, and private non-core (which covers both value-add and opportunistic strategies) -- and encompasses both debt and equity real estate. The private core component has materially increased in size since the beginning of FY 15-16, but the portfolio continues to have a relatively heavy weighting to private non-core real estate, particularly opportunistic strategies.

The Investment Team will continue to strive to improve the balance between core and non-core strategies. A balanced core/non-core portfolio will be achieved over time through a continued emphasis on investments in core and core-plus strategies, with select, but limited, investments in non-core, value-add, and opportunistic strategies.

Key Initiatives: Begin to implement a plan to transition the portfolio to its new public and private market targets. Continue to pursue the objective of achieving a more balanced portfolio by identifying compelling equity and debt investments in core and core plus strategies.

Infrastructure

The long-term target allocation for infrastructure is 3%, an increase of 1% over the prior year. This remains a nascent asset class for the Portfolio, with one dedicated infrastructure investment, a listed infrastructure mandate. Similar to real estate, the infrastructure allocation will, over time, consist of three components: public, private core infrastructure, and private non-core infrastructure.

Key Initiatives: Begin the build-out of the private infrastructure portions of the allocation.

Opportunistic

The opportunistic asset classes include global asset allocation, the subset of hedge funds that are not a part of the portable alpha implementation ("opportunistic hedge funds"), a component that can consider an array of other opportunistic and risk parity investments, and the portable alpha program. Under the new long-term asset allocation approved by the Commission, the FY 18-19 target allocation steps down from 12% to 8% (exclusive of portable alpha). Effective July 1, 2016, *the components of the opportunistic allocation (exclusive of portable alpha) were transitioned from a fixed policy target to a floating target reflecting the component's actual weight in the portfolio.*

Global Tactical Asset Allocation

The long-term target allocation for global tactical asset allocation ("GTAA") is 7%, representing a decrease of 1% compared to the Commission's prior long-term target allocation. The current GTAA portfolio was reconstructed during FY 17-18 removing risk parity and other idiosyncratic strategies.

Key Initiatives: Monitor GTAA strategies closely, in order to help inform RSIC internal implementation of internal tactical asset allocation.

Opportunistic Hedge Funds (non-PA)

The long-term target allocation for opportunistic hedge funds (hedge funds that have higher factor or beta exposures to traditional betas) will be eliminated in FY 18-19, as the culmination of a multi-year reduction.

Key Initiatives: Complete the wind-down of the opportunistic hedge funds and accelerate liquidity when available.

Other Opportunistic Strategies / Risk Parity

The target allocation for other opportunistic strategies is 1%, a decrease of 2% from the prior year. The objective of this component is to identify investments that, while they may not fit into other asset classes, still offer compelling opportunities for the Portfolio. These investments may offer either high returns, diversifying returns, or both. Examples of potential investments include, but are not limited to, commodities, CTAs, TIPS, and insurance strategies. This allocation also includes risk parity investments.

Key Initiatives: Explore insurance-related structures and continue to identify other compelling opportunities for inclusion in this new allocation.

Portable Alpha

The long-term expected allocation for portable alpha is 10%. Portable alpha is comprised of certain synthetic exposures (including equity and fixed income) and alpha strategies. The alpha strategies are expected to generate uncorrelated alpha while minimizing embedded market beta over time.

Key Initiatives: Evaluate additional lower-cost alternative beta strategies for potential inclusion in the alpha strategies portion of the portfolio. Continually monitor and recommend changes as appropriate to the alpha and beta portfolio.

Credit

The credit allocation consists of a group of asset classes that derive a significant share of their expected return from credit risk, as opposed to core fixed income, which derives return from interest rate duration and investment grade debt securities. Among the asset classes included in the credit allocation are high yield bonds and bank loans (mixed credit), emerging market debt, and private debt. The target allocation for the credit allocation is 15%, a decrease of 3% from the prior year.

High Yield Bonds and Bank Loans (Mixed Credit)

The long-term target allocation for this sub-asset class allocation is 4%, a decrease of 2% from the prior year. The Policy Benchmark for mixed credit incorporates equal amounts of high yield and bank loans. The mixed credit exposure is entirely actively managed. As the private debt allocation progresses toward its target weight, the mixed credit portfolio will decline toward its target weight.

Key Initiatives: Design and implement a plan for transitioning to the new long-term target allocation. Continue to monitor return versus risk trade-off between public and private credit, and the portfolio mix between secured and unsecured credit based on forecasted returns and market fundamentals.

Emerging Market Debt

The long-term target allocation for emerging market debt is 4%, a decrease of 1% from the prior year. The Policy Benchmark for emerging market debt is an even blend of USD-denominated and local market debt securities. The portfolio uses a combination of active and passive strategies.

Key Initiatives: Develop a plan for reducing exposure. Monitor and adjust the exposures between local market and USD-denominated debt securities.

Private Debt

The RSIC does not have a static target weight for private equity. Rather, the target allocation is determined to be equal to the actual weight in the portfolio. The Investment Team remains constructive on private debt due to the secular shift in the regulatory landscape for banks. Global banking regulations continue to curtail the aggregate lending activities of the banking sector, thereby creating opportunity for non-bank lenders. This creates meaningful opportunities for institutional investors to capture attractive returns. Staff will continue to focus on larger allocations to its highest conviction managers, with an emphasis on structures that capture lower fees and increase customization.

Key Initiatives: Develop a public and private credit dashboard to monitor changes in the credit markets and identify the most attractive opportunities. While senior lending strategies will remain a priority, develop strategy to maintain the flexibility to take advantage of credit market turbulence with distressed and special situations investments. Monitor regulatory changes and the potential impact on the future attractiveness of private debt strategies.

Rate Sensitive

The rate sensitive asset classes consist of the Portfolio's core fixed income, cash and short duration fixed income investments. The long-term target allocation for rate sensitive investments is 14% of the Portfolio, an increase of 1% over the temporary target in place during the concluding portion of FY 17-18, and a 2% increase over the Commission's prior long-term target allocation.

Core Bonds

The long-term target allocation for core bonds is 13%, an increase of 3% compared to last year. The core bonds allocation will include three main categories:

- nominal investment grade securities across several sectors, including sovereign, government-related (agency), corporate, and asset-backed securities (target allocation of 6%);
- Treasuries (target allocation of 5%); and
- TIPS (target allocation of 2%).

Key Initiatives: Implement a plan for transitioning to the new long-term target allocation. Continue to manage the balance between physical and synthetic exposure in the asset class while exploring opportunities for maximizing the return and/or diversification benefits that this asset class can provide.

Cash and Short Duration Fixed Income

The long-term target allocation for cash and short duration is 1%. This new target represents a decrease of 2% from the temporarily elevated allocation used during the second half of FY 17-18 to better manage the large outflows relating to the end of the TERI program, and a decrease of 1% compared to the Commission's prior long-term target allocation. This allocation includes both short duration and cash portfolios. The short duration portfolios encompass a range of strategies, including very conservative strategies as well as strategies that seek to generate higher returns. The short duration portfolios currently include a combination of internally managed and actively managed strategies.

Key Initiatives: Exposures will continue to be managed with a special emphasis on providing for the Plan's liquidity needs. While this need for liquidity is the primary objective, it is balanced to a limited extent with a desire to generate returns that exceed those of the benchmark.

Securities Lending

Even though it is not an asset class, the Investment Team pays specific attention to matters of securities lending. RSIC continues to employ very conservative investment guidelines within the program.

Key Initiatives:

- Work with the existing securities lending agent to improve reporting.
- Evaluate the impact of rising interest rates on the securities lending program.
- Consider different approaches to improve securities lending program income while maintaining the program's conservative investment guidelines.

ASSET ALLOCATION - TARGETS, RANGES AND BENCHMARKS FOR FY 2018-19 (Effective July 1, 2018)

Asset Class	Target Allocation	Target Ranges	Policy Benchmark	Secondary Benchmark
Rate Sensitive	**14**	**4-24**		
Cash and Short Duration	1	0-7	ICE BofA Merrill Lynch 3-Month T-Bills	
Core Bonds	13	6-20	Weighted Average of Underlying sub-asset class targets in Policy Portfolio	
Nominal Investment Grade Bonds	*6*		*Bloomberg Barclays Capital U.S. Aggregate Bond Index*	
Treasuries	*5*			
TIPS	*2*		*Bloomberg Barclays US Treasury Inflation Notes TR Index Value Unhedged USD*	
Credit	**15**	**10-20**		
High Yield Bonds / Bank Loans[1]	4	0-8	50% S&P LSTA Leveraged Loan Index / 50% Bloomberg Barclays Capital U.S. Corporate High Yield 2% Issuer Capped Index	
Private Debt[1,5]	7	3-11	S&P LSTA Leveraged Loan Index + 150 BPs on a 3-month lag	
Emerging Market Debt	4	2-6	50% JP Morgan EMBI Global Diversified (USD) / 50% JP Morgan GBI-EM Global Diversified (Local)	
Equities	**51**	**31-59**		
Global Public Equity[1,2]	42	22-50	Weighted Average of Underlying Regional Sub-asset Class Targets[1] in policy portfolio	MSCI All Country World Index IMI Net Total Return
US Equity [2]	*18*		*MSCI US IMI Net TR USD*	
Developed Market Equity (Non-U.S.) [2]	*11*		*MSCI WORLD EX US IMI Net TR USD*	
Emerging Market Equity [2]	*6*		*MSCI Emerging IMI Net TR USD*	
Equity Options	*7*	*5-9*	*50% CBOE S&P 500 Putwrite / 50% CBOE S&P 500 Buywrite*	
Private Equity[1,5]	9	5-13	80% Russell 3000 Index / 20% MSCI EAFE Index plus 300 BPs, on a 3 month lag	Cambridge Associates Peer Vintage Year
Real Assets	**12**	**7-17**		
Real Estate	9	5-13	Weighted Average of Underlying sub-asset class targets in Policy Portfolio	
Private Real Estate [1,5]	*8*		*NCREIF ODCE Net Index + 100 basis Points*	
Public Real Estate (REITs) [1]	*1*		*FTSE NAREIT Equity REITs Index*	
Infrastructure	3	1-5	Weighted Average of Underlying sub-asset class targets in Policy Portfolio	
Public Infrastructure [1]	*1*		*Dow Jones Brookfield Global Infrastructure Index*	
Private infrastructure [1,5]	*2*		*Dow Jones Brookfield Global Infrastructure Index*	
Opportunistic	**18**			
Global Tactical Asset Allocation	7	3-11	Total System Policy Benchmark ex-Private Markets and Portable Alpha[3]	
Other Opportunistic and Risk Parity	1	0-3	Total System Policy Benchmark ex-Private Markets and Portable Alpha[3]	
Portable Alpha Hedge Funds[4]	10	0-12	ICE BofA Merrill Lynch 3-Month T-Bills + 250BPS	50% HFRI Macro Index / 50% HFRI FoF Conservative

[1]The target weights to Private Equity, Private Debt, Real Estate, and Private Infrastructure will be equal to their actual flow adjusted weights, reported by the custodial bank, as of the prior month end. In the case of Private Equity, the use of the actual flow adjusted weight will affect the target allocation to Global Public Equity (excluding Equity Options). For example, in FY 18-19, the combined target weight of both of these asset classes shall equal 44% of the Plan. For Private Debt, the use of the actual flow adjusted weight will affect the target allocation to HY Bonds and Bank Loans, such that the combined target weight of both asset classes in FY 18-19 shall equal 11% of the Plan. For private market Real Estate, the use of the actual flow adjusted weight will affect the target allocation to public market Real Estate (REITs), such that the combined target weight of both asset classes in FY 18-19 shall equal 9% of the Plan. For Private Market Infrastructure, the use of the actual flow adjusted weight will affect the target allocation to public infrastructure, such that the combined target weight of both asset classes in FY 18-19 shall equal 3% of the Plan.

[2]Global Public Equity (excluding equity options) target portfolio's floating target is comprised of weighted regional underlying sub-asset class componets: 51.4% MSCI US IMI Index for U.S. Equity, 31.4% MSCI World ex-US IMI Index for Developed Market Equity (non-U.S.), and 17.1% MSCI Emerging Markets IMI Index for Emerging Market Equity

[3]Floating Targets between public and private markets do not apply to Opportunistic Benchmark. Weights are fixed at long term policy targets.

[4]Portable Alpha Hedge Funds are included in the Opportunistic target allocation and the Policy benchmark, and reported as gross exposure used as collateral supporting the Overlay program and nets to zero when calculating the total Plan

[5]Staff and Consultant will notify the Commission if Private Markets assets exceed 25 percent of total assets.