RETIREMENT SYSTEM
INVESTMENT COMMISSION

Senate Finance Committee
Retirement Systems Subcommittee

Retirement System Investment Commission
Michael Hitchcock, CEO

RSIC has improved investment performance while paying less to manage more.

Short Term Performance Improvement

- FY19 vs. FY13:
  - FY19 plan return was 5.84% which was equivalent to the median pension fund return net of fees for funds of similar size.
  - As compared to FY13 when the return was 2.2% behind the median (12.35% median return vs. 10.15% actual return) with RSIC in the 89th percentile for funds of similar size.

- FY13 is used as a comparison because it was the high water mark for investment management fees as a percentage of assets under management and in actual dollars.

**Universe data provided by consultant. FY 2019 universe is Investorforce public plans > $5billion. FY 2013 Universe is TUCS public plans >$5billion*

Improved Investment Performance

Long Term Performance Improvement

Period	FY19	FY18	FY17
3 year	8.48%	6.31%	4.23%
5 year	5.26%	7.07%	7.50%
10 year	8.33%	5.40%	4.34%

Fiscal Year	Plan Return
FY19	5.84%
FY18	7.82%
FY17	11.88%

Performance Improvement - Contributing Factors

- Investment performance has improved as a result of:
  - Adding equity exposure;
  - Dramatically improving our portfolio's liquidity framework, enabling us to go from holding 5% to 1% cash;
  - Attacking the structural cost of the portfolio;
  - De-risking our Real Estate and Private Credit portfolios; and
  - Raising the bar quantitatively for our private markets managers.

Risk Reference

- Important to consider the additional investment risk, and resulting increase in volatility, necessary to achieve better returns.
- Our portfolio is invested in several different asset classes but comparing its volatility to a simple two asset class portfolio is a useful risk barometer:

Fiscal Year	Global Stocks	US Bonds
2015	58%	42%
2016	64%	36%
2017	65%	35%
2018	65%	35%
2019	70%	30%

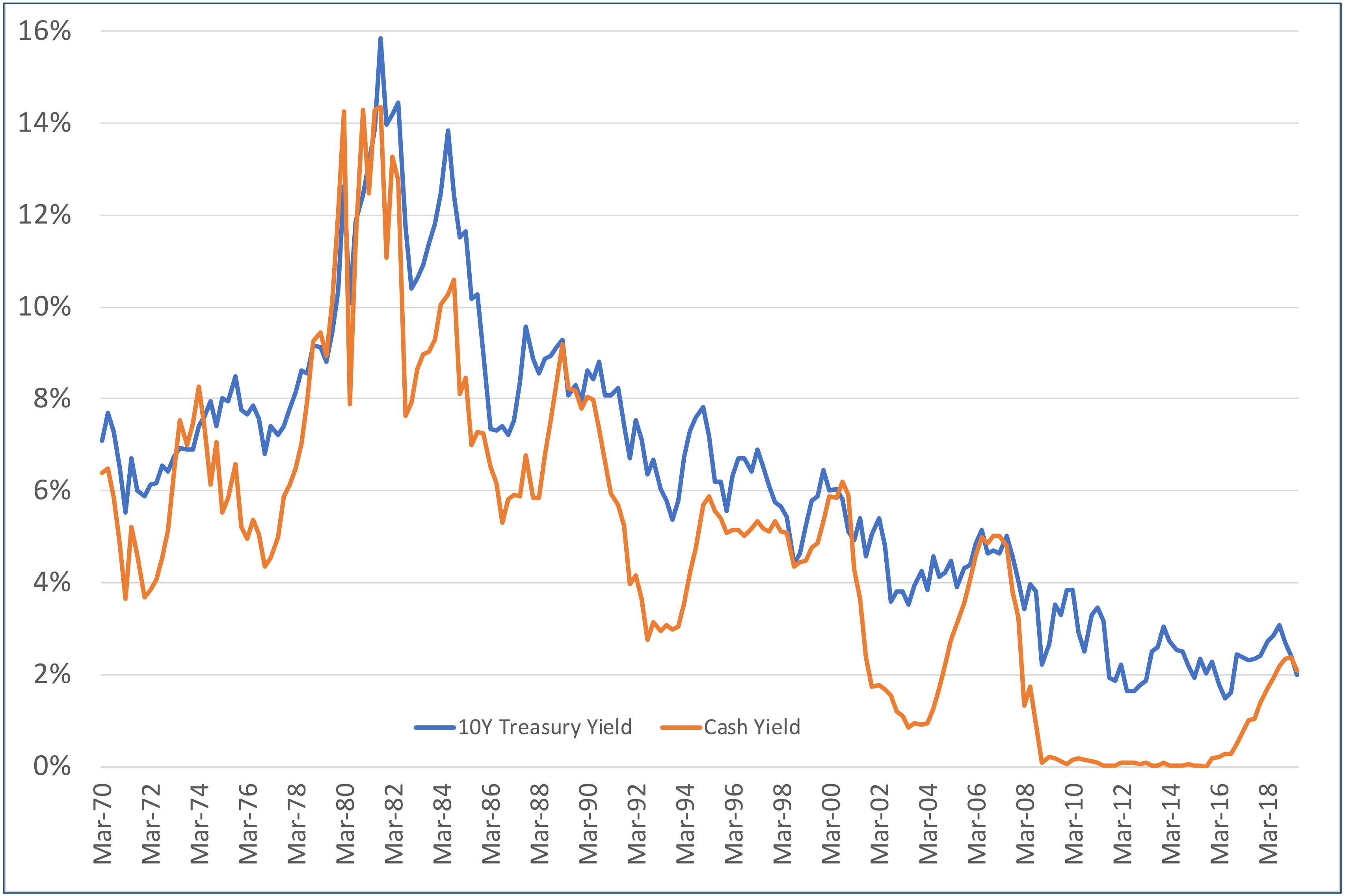
Need for Additional Risk

- Taking additional risk is necessary because of the historic and sustained low interest rate environment.
- US 10-year Treasury Yield:

Year	Yield
1969	6.67%
1979	9.43%
1989	8.49%
1999	5.65%
2009	3.26%
2019	1.81%

- Globally there is $16-17 Trillion in debt, primarily government, yielding negative interest rates.

Cash and Bond Yields Since 1970



Cash vs. Risk Assets

- Returns on risk assets are typically 2-4% better than cash.
- Forward returns are typically influenced by changes in cash yields:

	Historical Returns	
	Actual (40Y)	Excess vs. Cash
Aggressive	9.13%	3.29%
Moderate	9.00%	3.16%
Conservative	8.80%	2.96%
10Y Treasury	7.48%	1.64%
Cash	5.84%	

- Cash rates are currently well below historical average (1.9% vs. 5.8%):
  - Low global growth rates
  - Inflation below Fed target
- Near term returns likely to be subdued.
- Expecting higher volatility for several years.

Portfolio Impact

- Prudently taking on additional risk has enhanced our return.
- Adding risk has been necessary for us and for all pension plans to achieve necessary returns.
- We must remain mindful that additional risk provides an opportunity to achieve higher returns, but the corresponding volatility also increases the probability of negative outcomes for the plan.
- We are likely to the point with our portfolio where increasing risk will not have a beneficial impact on return.

Paying Less to Manage More

- Investment fee savings is a top priority.
- The **goal** of our investment fee savings efforts is not to save on fees at the expense of return, but rather to:
  - Find ways to save on investment fees that are beneficial to returns; or
  - Find ways to save on investment fees that allow us to achieve the same return with less risk.

Types of Investment Fees

3 Types of Investment Costs	
Management Fees	Structural cost of managing the portfolio.
Performance Fees	Percentage of return shared with managers when they exceed a set performance threshold.
Fund Expenses	Audit, legal, accounting, etc.

- RSIC is a leader in investment fee transparency.
- Many institutions only report Management Fees which may represent less than half of their total fees.
- RSIC reports all three types of fees.

Fee Savings Comparison

- FY19:
  - Management Fee – .58% or $187 million
  - Total Fees – .96% or $310 million
  - Total Assets – $32 billion

- FY13:
  - Management Fee – .75% or $198 million
  - Total Fees – 1.59% or $415 million
  - Total Assets – $26.8 billion

- Reduction in just the Management Fee percentage results in over **$50 million of fee savings** when the FY13 percentage is applied to FY19 total assets.

- RSIC is paying less in fees to manage a portfolio that has $5.2 billion more in assets versus FY13.

Fee Savings Efforts

- Fee savings have resulted from several initiatives including:
  - a greater use of inexpensive passive management;
  - a greatly reduced percentage of hedge funds;
  - allocating to inexpensive strategies that seek to replicate the returns of more expensive asset classes;
  - a concentrated effort to negotiate fee reductions with current managers;
  - exploiting unique opportunities to invest in expensive asset classes for no fee; and
  - the Co-Investment Program.

Co-Investment Program

- **Co-Investment Program Launched in FY19:**
  - Partnered with Grosvenor Capital Management to build a private equity co-investment program.
  - Co-investments allow RSIC to invest alongside private equity funds at no management fee and no performance fee or a greatly reduced management and performance fee.
  - This directly improves investment performance because it allows RSIC to keep all or a much greater percentage of the gross return.
  - Once fully implemented, **cost savings is estimated at $40-$50 million per year or $400-$500 million over 10 years**.
  - The co-investment savings combined with RSIC's other fee reduction initiatives should result in more than **$100 million in annual fees savings**.

Retirement System Bottom Line

The General Assembly's commitment to additional funding and better than expected investment returns have greatly improved the fiscal health of the retirement system.

Improved Fiscal Health

- The Retirement System is ahead of the unfunded liability amortization schedule mandated by the 2017 Pension Reform Bill.

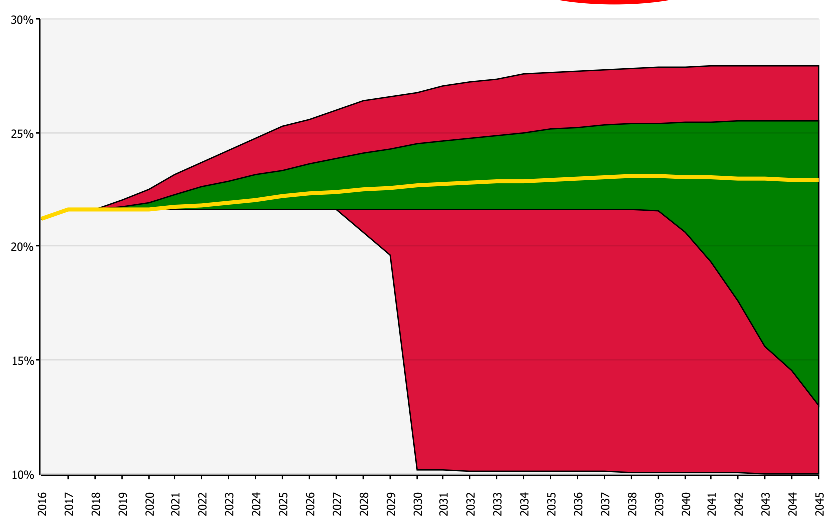
Unfunded Liability Amortization Period		
Plan	FY 18	Pension Reform Requirement
SCRS	*22 years*	*29 years*
PORS	*20 years*	*29 years*

Total Contribution Rates: Then and Now

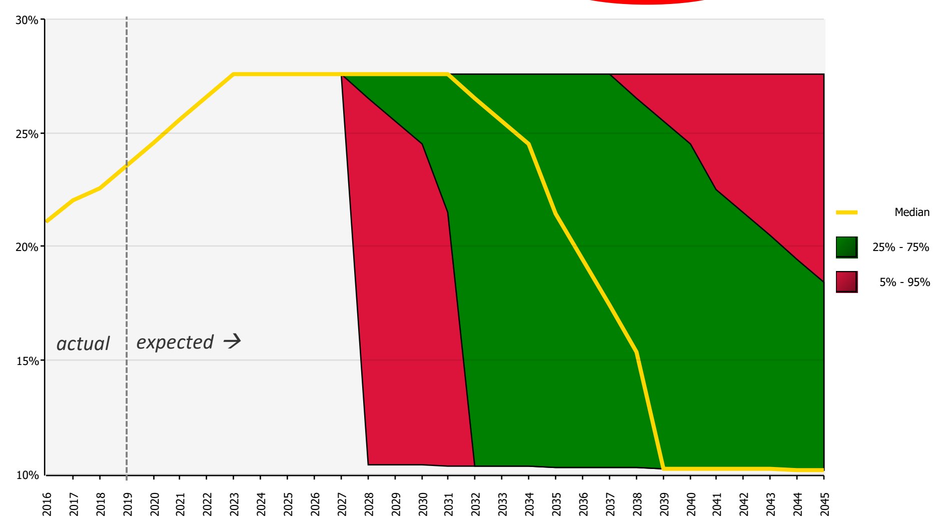
- Plan legislation passed in 2017 made a significant commitment to a more conservative funding policy.

- Rather than remaining at ~22%-25% for the next 30 years, the total Plan contribution rate will gradually increase to 27.56% over the next several years and is expected to decline after approximately 10 years once funding targets are achieved.

SCRS Expected Total Contribution Rate as of 6/30/2016



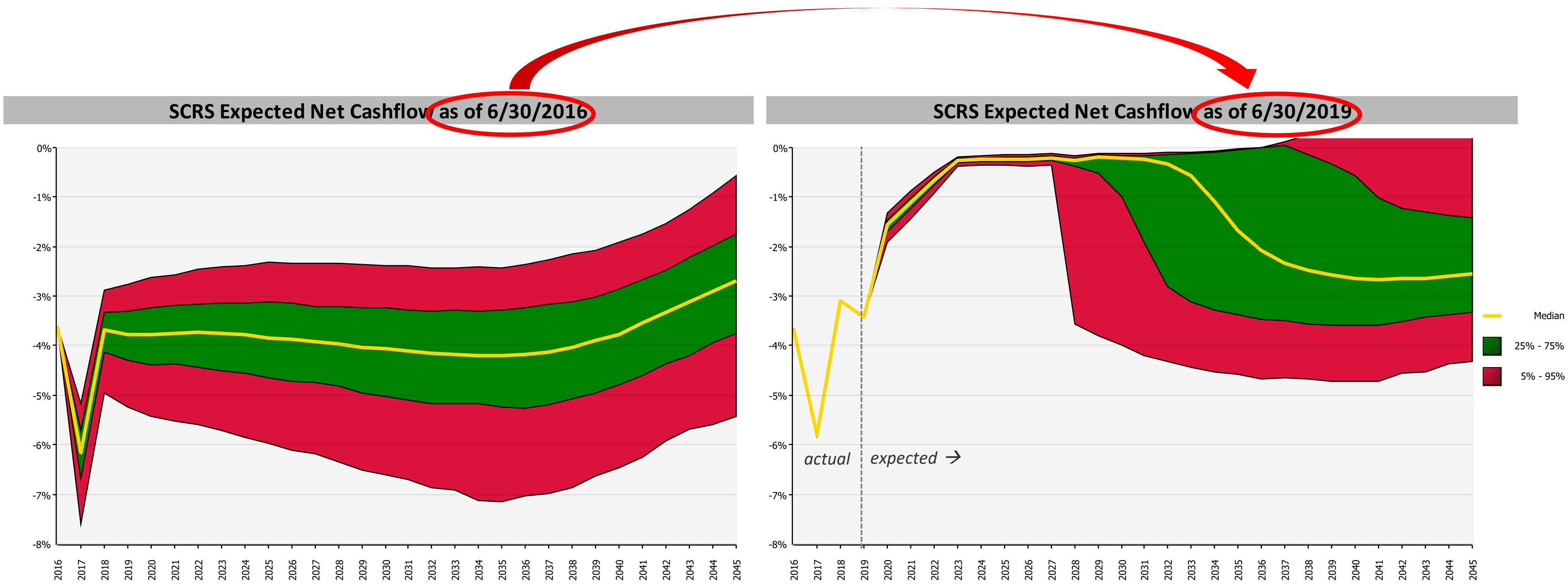
SCRS Expected Total Contribution Rate as of 6/30/2019



**RSIC projections based on GRS actuarial assumptions and AON capital market assumptions (2016) and Meketa capital market assumption (2019)*

Net Cashflow: Then and Now

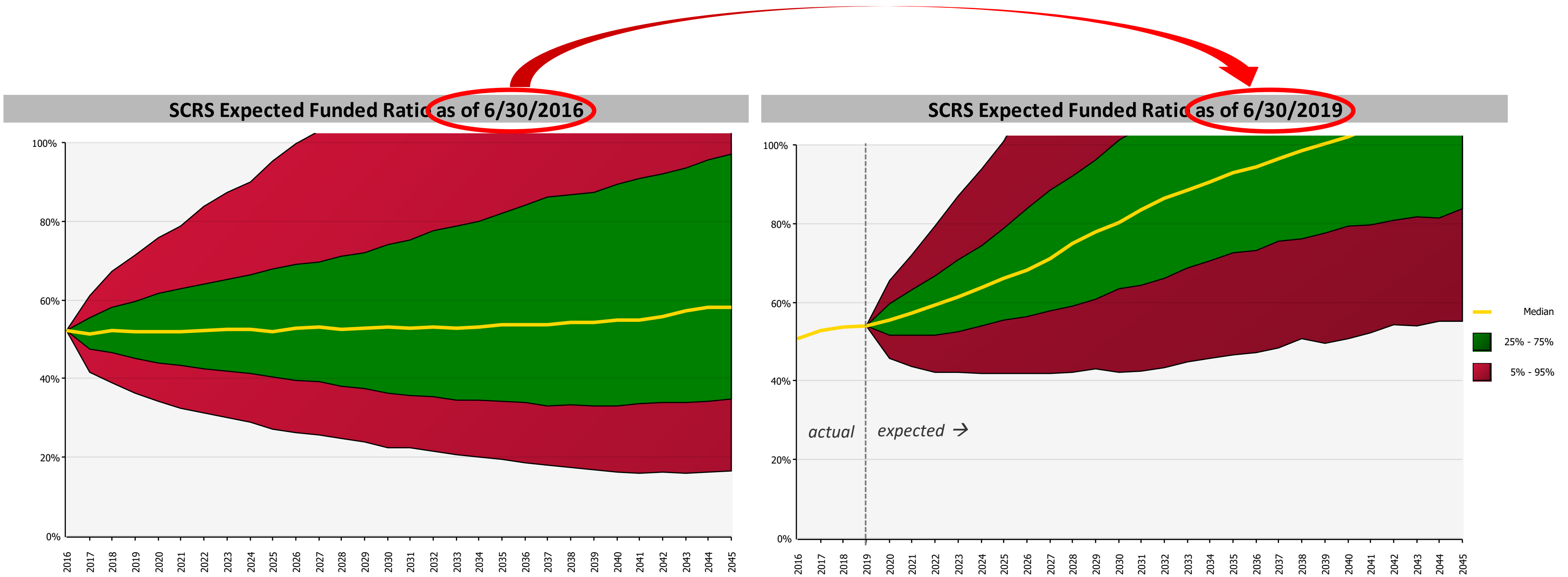
- The more conservative funding policy drastically changed SCRS' cashflow profile.
- Rather than remaining between -3% to -4% annually for the next 30 years, the total Plan net cash outflows are expected to gradually decrease to -0.20% annually over the next several years, supporting asset growth.



**RSIC projections based on GRS actuarial assumptions and AON capital market assumptions (2016) and Meketa capital market assumption (2019)*

Plan Funded Ratio: Then and Now

- The improved net cashflow significantly increases the likelihood of achieving Plan funded ratio targets.
- Rather than remaining between 40% and 80% funded for the next 30 years, SCRS is expected to gradually increase its funded ratio to 100% over the next 10 to 30 years.



**RSIC projections based on GRS actuarial assumptions and AON capital market assumptions (2016) and Meketa capital market assumption (2019)*

Basis for Improved Projections

- The Plan legislation passed in 2017 drastically improved the cashflow profile of SCRS. This reduces Plan risk and supports asset growth.

- RSIC's investments have generated a compound, annualized return of 8.48% over the past 3 fiscal years. This return significantly exceeded our projections.

- Because SCRS' cashflow needs are gradually decreasing, these higher returns made a larger impact on Plan outcomes because they were generated early in the forecast period (when cash outflows were higher).

CONTRIBUTIONS + INVESTMENT RETURNS = BENEFIT PAYMENTS

- The variables of the pension fund equation are pretty simple.
- Prior to 2017, we placed emphasis on the variable we can least control – investment returns.
- The additional contributions have shifted reliance back to the part of the equation we can control and have steadied the course towards achieving fully funded status.
- Stay the course on funding policy and continue to build on the positive momentum.

Disclosures

- Returns are provided by BNY Mellon and are time-weighted, total return calculations. Net of fee performance is calculated and presented after the deduction of fees and expenses. Periods greater than one year are annualized. Past performance is no guarantee of future results. Asset class benchmarks and policy weights are reviewed annually by the Commission's consultant and adopted by the Commission and have changed over time.
- This report was compiled by the staff of the South Carolina Retirement System Investment Commission and has not been reviewed, approved or verified by the external investment managers. No information contained herein should be used to calculate returns or compare multiple funds, including private equity funds.
- Effective October 1, 2005, the State Retirement System Preservation and Investment Reform Act ("Act 153") established the Commission and devolved fiduciary responsibility for investment and management of the assets of the South Carolina Retirement Systems upon RSIC.
- Allocation / exposure percentages might not add up to totals due to rounding.