

**South Carolina Retirement System Investment Commission
Meeting Minutes**

**December 7, 2017 9:30 a.m.
Capitol Center
1201 Main Street, 15th Floor
Columbia, South Carolina 29201
Meeting Location: Presentation Center**

Commissioners Present:

Dr. Rebecca Gunnlaugsson, Chair
Dr. Ronald Wilder, Vice Chair
Ms. Peggy Boykin, PEBA Executive Director
Mr. Allen Gillespie
Mr. Edward Giobbe (Via Telephone)
Mr. Reynolds Williams
Mr. William H. Hancock
Bill Condon, Esq.

I. CALL TO ORDER AND CONSENT AGENDA

Chair Rebecca Gunnlaugsson 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. Dr. Ronald Wilder seconded the motion, which was approved unanimously.

The Chair referred to the draft minutes from the Commission’s August and September meetings as presented and asked whether there was a motion to approve the minutes. Dr. Wilder made a motion to approve both sets of minutes as presented. Mr. Gillespie seconded the motion, which passed unanimously.

The Chair then introduced two new members of the Commission: Mr. William H. Hancock and Mr. Bill Condon. Mr. Hancock, who was appointed by the South Carolina State Treasurer, is a certified public accountant (“CPA”) and a partner at the Brittingham Group, a tax and accounting firm. He also served as a Commissioner for the East Richland County Public Service District. Mr. Hancock graduated from the Citadel with business administration and accounting degrees. He then went on to the Darla Moore School of Business at the University of South Carolina and graduated with a masters of taxation.

The Chair also introduced Mr. Condon who was appointed by the Governor of South Carolina. Mr. Condon is a CPA and an attorney with over 33 years of financial experience and 11 years of legal experience. Mr. Condon serves as Managing Counsel for Litigation at South Carolina Department of Revenue. Mr. Condon received his bachelor of science in accounting from

Clemson University and a masters in arts and public policy and a juris doctorate from Regent University.

Mr. Edward Giobbe joined the meeting by telephone at 9:36 a.m.

Mr. Reynolds Williams arrived to the meeting at 9:53 a.m.

II. MEKETA ASSET ALLOCATION DISCUSSION

Mr. Frank Benham, Managing Principal and Director of Research for Meketa, began his presentation by introducing Meketa team members, Mr. Peter Woolley, Managing Principal and Co-Chief Executive Officer, and Mr. Aaron Lally, Vice President, who will be assisting in the presentation of educational information on TIPS, Long-Term Treasuries and Infrastructure. First Mr. Benham began by discussing Treasury Inflation Protected Securities (“TIPS”). Inflation-linked bonds are bonds, which are usually issued by the government, that offer a guaranteed return over inflation. Mr. Benham outlined the history of TIPS and explained that TIPS have more volatility risk than core bonds and have low correlation to equities due to the sensitivity to inflation. He explained that over time what matters more is not actual inflation, but the expectation of inflation.

Mr. Benham explained efficiency of using TIPS in a portfolio and stated that using TIPS is not an area where active managers can add a lot of value. Thus, he noted that most TIPS investors choose to take a passive option, low cost exposure to TIPS. Lastly Mr. Benham summarized that TIPS, which offer an inflation hedge against unexpected inflation, are different than the bond exposure in the Portfolio. TIPS produce different return patterns than stocks and bonds, which offers a diversification benefit and can improve the long-term risk/reward profile of the Plan.

Next, Mr. Woolley began the second educational topic of long-term treasuries, which he noted is a common type of investment used in RSIC’s peers’ portfolios. He outlined the four major benefits of investing in long-term treasuries: the value retention during equity declines, the value of long-term treasuries as a portfolio volatility dampener, the income produced by long-term treasuries, and the liquidity of these instruments.

Mr. Woolley described the history of long-term treasuries retaining value in equity declines, including the dot-com bubble bust in 2001 and 2002 and the global financial crisis in 2008. During both those time periods Treasuries not only retained value but provided strong returns. Thus, he explained that during the most severe bear markets long-term treasuries are generally the most reliable and strongest hedge. Mr. Woolley added that long-term treasuries in recent periods have experienced negative correlation to equities. From an asset allocation diversification perspective, long-term treasuries demonstrate a low to negative correlation better than other asset classes. Although the correlations change over time, Mr. Woolley stated that low correlations help build more efficient portfolios. He explained that long-term

treasuries offset equity risk and that adding an allocation to long-term treasuries would have the effect of reducing the Portfolio's standard deviation, which is one measure of portfolio risk.

A discussion ensued regarding thirty-year treasuries and trying to keep the long-term exposure. Mr. Bill Condon stated that long-term treasuries look like a great hedge from a volatility and a return perspective and asked about investment in long-term treasuries in the current, low rate environment. Mr. Woolley stated that in a financial crisis, long-term treasuries could be traded to pay out benefit payments, as long-term treasuries are very liquid and stable. Concerns about investing in long-term treasuries were discussed, including inflation risks. If inflation rises above 2 percent, it is more advantageous for the Plan to own TIPS rather than long-term treasury bonds. Other concerns noted included low yields and a continued low rate environment. Rates have a lot of room to rise implying potential downside for bond values. To summarize, if interest rates rise, long-term treasuries are more sensitive and can lose more value than an intermediate treasury position. Mr. Woolley then discussed historical events where rate rose.

Ms. Peggy Boykin asked if Meketa had taken into consideration the current rate environment going forward, including the rising national debt and the potential for tax policy change in preparing the presentations, to which Mr. Woolley replied that they did look at a number of different scenarios.

Next, Mr. Aaron Lally, of Meketa, presented educational information regarding infrastructure investments. Currently the Plan has a long term target to Infrastructure of 3 percent, and 2 percent of that exposure is with the Deutsche Bank Global listed infrastructure strategy. He defined infrastructure funds as purchased or leased physical assets or businesses that provide some sort of essential service to a community. He stated that there are four main components to infrastructure: utilities, transportation, communications and social. The benefits of having infrastructure within the Portfolio are that there are high barriers to entry, long-term contracts, stable revenue and income, limited economic cyclicalities, and inflation linkage. Mr. Lally also reviewed some of the key risks of infrastructure investing.

Mr. Lally then explained the three types of infrastructure: public, core private and non-core private infrastructure, and further discussed the types of funds as open-ended versus closed-end. He stated that Meketa favors infrastructure investments in core private and non-core private. Next, he provided details regarding infrastructure funds' contract terms, and the asset class' limited competition and limited regulatory protections in place. Some key risks to infrastructure investments are their illiquid nature and the potential for changing regulations in the industry. He stated that Meketa would like to see paring down the Portfolio's exposure of liquid infrastructure and moving more into the private infrastructure side.

Break was taken from 11:00 a.m. to 11:10 a.m.

Mr. Benham was introduced to discuss Meketa's Asset Allocation Review. He explained that the Staff and Meketa had collaborated and shared extensive information to help Meketa develop recommendations regarding asset allocation. He reviewed the Plan's long term objectives, including: maintaining the stability of benefit payments and meeting obligations for growth; meeting or exceeding actuarial assumed rate of 7.25 percent; and improving the funded status and maintain purchasing power. He described some of the risks that the Plan will have to take on to try to achieve a 7.25 percent return, including: volatility and endpoint uncertainty; year-to-year fluctuations in asset values and contribution levels; risk of short term loss; and permanent capital impairment.

He then discussed Mean Variance Optimization ("MVO"), which he explained is a starting point for determining asset allocation. MVO mathematically determines an efficient frontier of policy portfolios with the highest risk-adjusted returns. Mr. Benham described how combining uncorrelated assets produces an efficient frontier and different combinations of assets will lie along this efficient frontier. He stated that by combining assets that are not highly correlated with each other, the Fund can produce a higher return for a given level of risk than it could by investing in perfectly correlated assets.

Next Mr. Benham discussed asset allocation policy options. Meketa provided a comparison of the Plan's current policy compared to a large variety of other policy options. Among the options were allocations including only public market exposure; increased allocations to conservative asset classes; allocations with and without the portable alpha program; and increased allocation to Treasuries and TIPS as well as emerging market equities. He stated that across the board, the policies included a lower allocation to cash.

Mr. Benham explained the differences between several policy options and the effect that selecting conservative or aggressive options would have on the chance of achieving a 7.25 percent expected return. Following the information about asset allocation methodology, Mr. Benham described some proposed changes to the Plan recommended by Meketa. The first recommendation was a reduction in the allocation to cash because it has the lowest expected return and will be the biggest drag on returns over the long term. He stated that Staff was very open to reducing the dedicated allocation to cash, while recognizing the need to have cash necessary to pay benefit payments and capital calls. The second recommendation Mr. Benham suggested was adding a dedicated allocation to Treasuries. He noted that historically Treasuries have been the most reliable hedge against periods of stress in the stock market. The third recommendation suggested was adding a dedicated allocation to TIPS, as a safe asset that can provide a modest hedge against inflation. Mr. Benham stated that the fourth recommendation would be to increase allocation to emerging market equities. He explained that emerging market equities have had a good year but prices remain low compared to US markets. The fifth recommendation that he introduced was reallocating within the real assets allocation. Mr. Benham suggested decreasing the allocation to 2 percent for infrastructure and shifting the focus from public infrastructure to private infrastructure investing. Additionally, he

noted that Meketa believes rebalancing the real estate portfolio to have at least half of the allocation invested in core real estate is favorable. Mr. Benham stated that proposed changes to the real assets allocation could be implemented gradually by Staff with the help of Albourne.

The final theme Mr. Benham discussed was the portable alpha portfolio, which he noted would continue in the February 2018 Commission meeting. He outlined the mechanics of the portable alpha portfolio. He stated that an example of the benefit of the portable alpha portfolio is that it allows the Plan additional equity exposure plus hedge fund returns, thereby potentially enhancing the return of the overall Portfolio. He noted risks inherent in the strategy and explained that Meketa would be working with Staff to understand the portable alpha portfolio and be in a better position to discuss the way the portfolio has been implemented.

Mr. Berg then added that he supports having Meketa perform a review of the quality of the implementation of the portable alpha portfolio. He stated that he would like Meketa to focus on three factors that are important and critical for the Commission to consider: (1) within the hedge fund portfolios, are they low market beta-type strategies or do we have work to do and should we reconsider this; (2) how we compose the beta portfolio so that we are asking less from a liquidity perspective, and thus mitigating liquidity risk, of the Plan; and (3) making an assessment of that liquidity risk. The Commission and Mr. Berg discussed some of the benefits and risks of the way in which the portable alpha portfolio is implemented and the rationale for including the strategy in the Portfolio.

Turning back to the recommendations provided by Meketa, Mr. Benham explained that the last suggestion in Meketa's presentation is to move risk parity strategies to the other opportunistic allocation and to set an upper limit for the allocation.

Mr. Benham provided extensive information about analyses performed by Meketa on the current asset allocation as well as several options presented as proposed asset allocation policy options ("Policy Options"). A lengthy discussion ensued regarding risk analysis of the current and proposed policy asset allocations. During the discussion, Commissioners asked questions and Meketa provided information about the impact to the current and proposed policy allocations under a substantial list of historical market events. The discussion included information about liquidity analyses, changes in inflation, increasing interest rates and the impact of benefit payments contemplated by the termination of the TERI program. The proposed policies were discussed under several stress tests and the projected impacts to the policies were compared and explained.

Mr. Benham summarized that Meketa is not recommending a specific policy allocation to be selected, but indicated that three of the proposed Policy Options, with expected returns between 7.5 percent and 7.75 percent, were the most advantageous of the options presented. In response to questions from Dr. Wilder, Mr. Benham explained that the inflation assumption Meketa set is 2.5 percent over a twenty-year period.

Break for lunch from 12:55 p.m. to 1:21 p.m.

The Chair confirmed that the goal is to approve an asset allocation by May and asked the Commissioners to think about information that would be helpful to aid in narrowing down the proposed policy allocations. Ms. Boykin asked that Meketa provide updates to the Policy Options, with the revised capital market's assumption from January at the next meeting. Ms. Boykin requested that Meketa provide more specificity to the Plan by incorporating information from the Plan's actuary. She also stated that the Commission should consider projected cash flow needs and be thoughtful regarding the implementation timeline for a changed asset allocation. It was decided that the Commissioners have one-on-one sessions over the telephone with Meketa to discuss the various asset allocation ideas prior to the next meeting. Dr. Wilder suggested additional thought be given to the use of leverage, and requested that Meketa dedicate some time analyzing the use of leverage and its effect on the Plan. The Chair thanked Meketa for their time and hard work.

III. CHAIR'S REPORT

The Chair stated that the Commission's proposed 2018 meeting schedule was before the Commissioners for their approval. Mr. Gillespie moved that the Commission approve the 2018 meeting schedule as presented. Dr. Wilder seconded the motion, which passed unanimously.

IV. AUDIT AND ENTERPRISE RISK MANAGEMENT COMMITTEE REPORT

Mr. Michael Hitchcock, CEO, introduced Mr. Brad Gainey, the new Director of Enterprise Risk Management and Compliance. Mr. Gainey was formerly the Vice President Senior Internal Audit Manager at South State Bank where he was responsible for the execution of all audit plan methodology. He also worked for Elliot Davis prior to State South Bank. He obtained both his Bachelor of Science and Master of Accounting from the Darla Moore School of Business at the University of South Carolina.

Mr. Gillespie began the Committee update by thanking Mr. Andrew Chernick and Mr. John Page for their hard work to help keep the audit plan on pace and moving forward. He stated that the Committee received a compliance report, noting no exceptions during the last quarter. The Committee also received a report on the Agreed Upon Procedures by the State Auditor's Office related to agency expenditures, which included no findings. CliftonLarsonAllen also provided a report on the Agreed Upon Procedures on valuation and due diligence, which had also resulted in no findings. Mr. Gillespie remarked that the Committee received a presentation on the Global Investment Performance Standards ("GIPS") application to public pension funds and approved an engagement, in cooperation with the State Auditor's Office, to retain a firm to complete the GIPS verification/certification for the RSIC.

Mr. Gillespie stated that the Committee discussed the upcoming Fiduciary Audit. Also, the Committee received a preliminary roadmap for the Audit and Enterprise Risk Management objectives from Mr. Gainey. Finally, the Committee approved the 2018 Committee meeting dates, which will be posted on the RSIC website.

V. CEO'S REPORT

The Chair recognized Mr. Hitchcock who noted he had nothing material to report at this time.

VI. CIO's REPORT

The Chair recognized Mr. Geoff Berg, Chief Investment Officer, for his report. Mr. Berg began by noting that he and Mr. Steve Marino, Director, had created a capital markets update. The update addressed a number of topics, including the following: (1) the U.S. economy's continuing strength, notwithstanding certain metrics suggesting that the economy appears to be in the later stage of the business cycle; (2) the remarkably broad-based economic growth being experienced globally; (3) low risks of recession in the U.S. over the next six to twelve months; (4) whether the extended period of low levels of inflation in the U.S. will continue, given the emergence of certain inflationary pressures; (5) the 'rich' valuation of virtually all risk assets; (6) the continuing high level of investor optimism; (7) the imminent changes in monetary policy, as the Federal Reserve Bank and European Central Bank look to unwind the stimulus packages of the last several years; and (8) a concluding, cautionary note that forward looking returns should be expected to be lower.

Mr. Berg informed the Commissioners that he had asked Mr. James Wingo, Senior Officer, to lead an internal team (Quantitative Solutions Group). He explained that Mr. Wingo's group will lead the development of a risk management framework and related tools, and will work with the private markets team to continue to advance the value creation analysis for investment underwriting. Additionally, he stated that he had created a risk management steering committee that will be evaluating the agency's needs as they relate to both risk reporting and risk management. The risk management steering committee will also assess the tools currently available to RSIC and whether different or additional tools may be needed. Mr. Berg concluded his portion of the presentation by stating that Staff will be focusing on liquidity risk as well as creating a benchmark for risk, and noted his intent to introduce these approaches to the Commission as they are developed.

Mr. Berg introduced Mr. David King, Reporting Officer, to present the Plan's third quarter investment performance update, as well as a brief update for October 2017. Mr. King stated that as of September 30, 2017, the Plan stood at \$31 billion, with a return of 3.84 percent versus the policy benchmark of 3.29 percent. It was noted that the Plan paid out \$203 million in net benefit payments, but that investment performance added \$1.1 billion to the net asset base. Mr. King noted that in July, the Plan received a net cash inflow into the trust fund of approximately \$20 million due to the increase in contributions that went into effect in July 2017, and stated that this inflow would normally be spread out through the year.

Mr. King pointed out that the Plan is currently at its highest market value since inception and that, since inception, \$5.5 billion had been added to the Plan, while the Plan had paid out \$11.5 billion in net benefit payments. He then reviewed peer rankings, noting that since the RSIC began tracking the Plan's rolling 12 month percentile ranking in June 2016, the ranking had made progress towards the median, while for the current fiscal year to date, the Plan's ranking was closer to the 25th percentile.

Mr. King reviewed asset class performance, pointing out that all classes through the fiscal year were positive, led by public equity, which returned 5.44 percent versus its benchmark of 5.32 percent.

He noted that through the end of October 2018, the Plan's fiscal year-to-date performance increased to 5.23 percent versus a policy benchmark of 4.36 percent. Mr. King indicated that during that four month period, the Plan added \$1.5 billion in investment performance while paying out \$341 million in net benefits. After a brief discussion, Mr. Berg and Mr. King concluded their performance report.

VII. EXECUTIVE SESSION

Mr. Gillespie made a motion 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 receive legal advice pursuant to Code 30-4-70(a)(2) related to litigation filed by American Timberlands Fund II, LP; and to receive legal advice pursuant to S.C. Code Section 30-4-70(a)(2). Dr. Wilder seconded the motion, which passed unanimously.

Executive Session from 2:13 p.m. until 4:36 p.m.

VIII. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Upon return to open session at 4:36 p.m., Mr. Williams made a motion that the Commission (1) adopt the recommendation of the CIO and the Internal Investment Committee as set forth in the Summary Terms Chart on Page 1 of the Due Diligence Report dated November 13, 2017 relating to Owl Rock Capital and discussed in Executive Session; (2) authorize an investment up to \$200 million; (3) approve a waiver of the three day review period; (4) authorize the CEO or his designee to negotiate and execute any necessary documents to implement the Investment as approved by the Commission upon documented approval for legal sufficiency by RSIC Legal; and (5) authorize the CEO and/or the CIO or their designees to thereafter authorize the custodian of funds to transfer such funds as are necessary to meet the Retirement System trust funds' obligations with respect to the Investment. Mr. Hancock seconded the motion, and the motion passed unanimously. Mr. Condon abstained from the vote.

IX. ADJOURNMENT

There being no further business, upon a motion made by Mr. Williams and seconded by Mr. Gillespie, the Commission voted unanimously to adjourn. The meeting adjourned at 4:41 p.m.

[Staff Note: In compliance with S.C. Code Ann. Section 30-4-80, public notice of and the agenda for this meeting were 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., at 5:07 p.m. on December 4, 2017.]