NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE

MEETING MINUTES FOR AUGUST 17, 2017

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Thursday, August 17, 2017, in the Dogwood Conference Room of the Longleaf Building, 3200 Atlantic Avenue, Raleigh, North Carolina.

Members Present: The following members were present: State Treasurer Dale R. Folwell (Chair), John Aneralla, David Hartzell, Greg Patterson, Lentz Brewer and Mike Mebane (Telephone).

Members Absent: Steve Jones

Staff: The following staff members were present: Renee Bezaire, Kim Baker, Brian Bolcar, Mary Laurie Cece, Angela Cooper, Tarik Dalton, Craig Demko, Ronald Funderburk, Brett Hall, Karen Hammond-Smith, Casey High, Sean Incremona, Taylor Jackson, Gail Kadash, Kathy Kornak, Matt Krimm, Fran Lawrence, John Leraas, Troy March, Christopher McCracken, Deana Moore-Solomon, Chris Morris, Neal Motaparthy, Meryl Murtagh, Michael Nichols, Tinh Phan, Ty Powers, Laura Rowe, Norman Schiszler, Jeff Smith, Rhonda Smith, Tessa Tanis, Greg Taylor, Steve Toole, Madelaine Wang, Chris Ward, and Paula Woodhouse.

Others in Attendance: Gregory Williams (Wellington Capital Management)

AGENDA ITEM – OPENING REMARKS

The meeting was called to order at approximately 9:00 a.m., the Chair, Treasurer Folwell began the meeting by leading the Pledge of Allegiance.

The Chair asked the Members present to declare any conflicts of interest and, there being none declared, the meeting commenced.

AGENDA ITEM -- APPROVAL OF MINUTES

The Chair then asked for approval of the minutes of the quarterly meeting held March 29, 2017. Mr. Aneralla moved to approve the minutes, and Mr. Patterson seconded. The minutes were approved as written. A quorum of Members was present, and the meeting, having been duly convened, was ready to proceed with business.

AGENDA ITEM - INTRODUCTION OF NEW MEMBERS

The Chair introduced new IAC Members Lentz Brewer and Greg Patterson. Treasurer Folwell thanked both new members for their participation.

AGENDA ITEM - RESOLUTION FOR OUTGOING MEMBERS

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The Chair read resolutions to honor the service of outgoing IAC Members Courtney Tuttle and Neal Triplett. The Chair moved to approve the resolutions for outgoing members and Mr. Hartzell seconded. The resolutions were approved.

AGENDA ITEM - IAC CODE OF ETHICS

The Chair recognized Mary Laurie Cece to speak regarding completion of the Investment Advisory Committee Code of Ethics. Ms. Cece pointed out a few corrections made to the Code of Ethics. She stated that each of the IAC members needs to read and acknowledge compliance with the Code of Ethics when they begin service on the IAC and then at least annually thereafter they have to sign an acknowledgement that they are in compliance with the code.

AGENDA ITEM -PERFORMANCE UPDATE

The Chair recognized Jeff Smith and Chris Morris, Interim Chief Investment Officers. Mr. Smith indicated in his opening remarks that due to time constraints he would move quickly through the slides. Mr. Smith provided an update on the Cost-Efficiencies initiative. He stated the goal of the initiative is to obtain \$100 million of incremental cost-efficiencies for the NCRS investment program, consistent with fiduciary requirements and the NCRS investment objectives. The \$100 million goal would be measured on a cumulative basis over a four-year timeframe. He stated that progress to date has been made by completing renegotiations of management and vendor fees, restructuring, and manager terminations. Mr. Smith stated that there are still investment manager renegotiations and/or restructuring in process. The approximate total amount of annual savings to date is \$62.6 million, of which \$52.4 million which has been fully executed, and \$10.2 million is in process.

Mr. Smith then provided an update on the US economic environment for the past quarter. He noted that it was a period of mixed signals with slow growth, but steady economic expansion. He indicated that weak quarter one GDP was reported and consumer spending has decelerated. He advised that oil markets are weaker. Consumer confidence continues to be strong and the US is experiencing the lowest reported unemployment rates in fifteen years. Relative to the US, Europe's recovery has been less robust. Having said that, it does seem to be picking up steam. Mr. Smith then provided an update on the markets. Most major equity markets were positive for the quarter, on the backs of solid earnings, improving economies and continued support from central banks. International and Emerging Markets outperformed domestic markets, US stocks moved steadily higher, shaking off political uncertainty on the policy and geopolitical front. Market volatility reached record lows and large cap outpaced small and mid-cap stocks and growth outperformed value. Health Care, Industrials and Financials were the strongest performers and energy was the weakest on price declines of oil. Mr. Smith then turned the floor to Chris Morris.

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Mr. Morris presented an update on current assets under management as of June 30, 2017. He noted that the Department has north of \$123 billion in assets under management. Mr. Morris stated that the Retirement Systems experienced its highest quarter peak with total assets exceeding \$94 billion. He then walked thru asset allocation, market value and target allocation. Mr. Hartzell asked what was driving the pension cash increase. Chris Morris responded mostly distributions. The distributions are mainly from terminations of equity managers, as well as distributions from private asset classes. Mr. Hartzell inquired about the strategy/plan to reinvest. Chris Morris advised it was under consideration. Treasurer Folwell responded that he is working on a review of the asset allocation. Mr. Hartzell asked if the asset allocation study done previously would be part of the Treasurer's strategy. Treasurer stated he had the following concerns:

- 1. Last fiscal year NCRS paid billions of dollars out of the plan, net of contributions;
- 2. The plan has current uncalled capital of approximately \$10 billion dollars. Treasurer gave an example of a situation that came up with a Timber portfolio in 2016 whereby an additional \$260 million commitment was not anticipated; and
- 3. Public equity was slightly overweight target at the beginning of the year, the decision was made to build value by getting out of under-performing managers, as well as moderately de-risk the portfolio.

Mr. Morris then provided an update on the total net portfolio return versus the benchmarks. The Implementation Benchmark is used to compare how the portfolio has performed against our Strategic Asset Allocation. Each asset class gets assigned their own benchmark and the benchmarks are weighted based on policy weights and rolled up to create the Implementation Benchmark. The Long-Term Policy Benchmark is designed to represent a passive low-cost asset allocation approach with roughly the same projected volatility. The Long-Term Policy Benchmark attempts to compare what could be considered a low-cost, passive approach to investing. Treasurer Folwell asked Mr. Morris if given the choice between either the Long-Term Policy benchmark or the Implementation benchmark, which he would use. Mr. Morris explained why he believes that both serve a useful purpose. This is the first year that a 20 Year total portfolio return is available. Prior to July 1997, the Long Term Investment Fund was not marked to market. The Plan returned 6.7% over the 20 Year span, beating both benchmarks at 6.4% and 6.1% respectively, but underperforming the actuarial rate of return during that time period.

Mr. Morris explained that the growth of a dollar charts show if you invest a dollar at the beginning of the period, what the value of that dollar is throughout the timeline. Since July 1997, the portfolio has exceeded the Long-Term Policy Benchmark (roughly \$3.65 vs \$3.24). Most of that excess outperformance can be attributed to the last 4 years. The charts on slide 11 also include the NCRS Alternatives portfolio on a 5 and 10 year timeline. NCRS Alternatives includes Core Real Estate, Inflation Sensitive — Private Natural Resources, Inflation Sensitive — Real Assets and Other, Multi-Strategy Investments, Non-Core Real Estate, Opportunistic Fixed Income, Private Equity, Equity Hedge Strategies and closed-end Public Natural Resource funds.

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** ITEM NOT ON THE AGENDA - Discussion regarding timber **

Mr. Hartzell inquired about the timber holdings in the portfolio. Ron Funderburk provided historical and current information regarding the fund strategy.

Ronald Funderburk provided details on the Timber portfolio managed by Campbell. The Campbell Timber Fund is a separate account with timberlands valued at approximately \$680mm. The account had \$260mm of debt scheduled to mature in 2016. It was possible to sell some of the assets in order to meet the debt obligation, but it was determined that this was not the best time to sell. It was determined that the best course of action was to pay down debt and provide flexibility with regards to asset dispositions. This restructuring allowed the manager to right size the portfolio versus selling large parcels of land at a wrong point in time or at a discount to intrinsic value. The team is proactively working with Campbell to ensure the management of the assets reflect the goal of the investment mandate.

Mr. Funderburk added, the investment was made in 2006 by the real estate team, but reclassified to inflation sensitive as an inherited legacy manager in 2010.

Mr. Morris walked the committee through the return attribution charts. The difference between Portfolio Return and Policy Return (Implementation Benchmark) is the Value Add/Subtract. Over the 1 year ending June 30, 2017 the Value Add was 1.37%. This number can be further broken down between two components, Allocation Effect and Selection Effect. The Allocation Effect shows how the over/underweights of the allocation policy targets affected excess returns throughout the time period. The Selection Effect is the difference of the Value Add & Allocation Effect and is essentially how well each asset class performed compared to their benchmark. The breakdown between the two components was an Allocation Effect of -0.16% and a Selection Effect of 1.52%. This shows that the asset classes outperformed their benchmarks by a significant amount. The drivers of this outperformance can be found in the Selection Effect chart on page The strongest Selection Effect drivers were Inflation Sensitive (63bps), Public Equity (36bps), and Non-Core Real Estate (25bps). The underperformance of the Allocation Effect is further broken down on page 12 as well. The leading detractor of Allocation Effect was Cash at -8bps. Mr. Morris touched on the 3 and 5 year Return Attribution charts and stated that the story was similar to the 1 year chart where we had good outperformance mainly driven by a strong Selection Effect.

Mr. Morris described the chart on page 15, NCRS Gross of Fees Return and Risk as of June 30, 2017. This chart compares NCRS with Peer Universe: 18 Public Funds that have assets greater than \$20 Billion. NCRS is below median return for the 3, 5, and 15 year numbers and significantly above the median for the 10 and 20 year. This is in line with what we have seen in the past and is mainly driven by our higher allocation to Fixed Income than our peers. With regards to our Risk Profile, we are at or below the bottom quartile (lowest risk). The data that was shown was gross of fees with the exception of certain incentive payments which have been deducted from NAV.

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Mr. Morris walked through the NCRS Liquidity Profile on page 18. This chart shows various liquidity levels at any given point in time. Level 1 Liquidity = T+3; Level 2 = T+3 to 12 Months; Level 3 = 12 to 24 Months; Level 4 = Greater than 24 Months. Our level 1 liquidity target is greater than 70%, as of June 30, 2017 our level 1 liquidity was 73%.

Mr. Smith walked through the asset class net of fees performance. He noted that there had been no new or incremental investment commitments since the March 29, 2017 IAC meeting. Mr. Hartzell noted that there were also no new or incremental commitments at the previous quarter and questioned if we were missing out on new funds from high conviction managers, and if so how does that impact any preferential fees that we may have specifically in relation to Private Equity managers. Craig Demko responded stating that it is unique with every manager. For a large fund that is raising higher amounts of capital, we should not have an issue getting into their next fund. However, a smaller fund that is oversubscribed and has a line to get into tend to be loyal to their partners in the most recent funds. If we were to miss out on a fund with an oversubscribed manager, we could run the risk of being left out of future funds by that same manager.

Mr. Smith closed out the performance review section of the meeting by touching on the total plan's unfunded commitments. There is around \$9.7 billion in unfunded commitments across the asset classes. The unfunded commitment amounts are broken down by asset class on page 20.

AGENDA ITEM – PRIVATE EQUITY ASSET CLASS REVIEW

The Chair introduced the Private Equity team to discuss updates to the asset class. Craig Demko reported that as of June 30, 2017, Private Equity and Multi-Strat comprised 7.00% of the Total NCRS Plan. The legislative cap for Private Equity and Multi-Strat is 8.75%. Private Equity represents 5.13% of the total portfolio, which is below the Policy Target of 6%. Mr. Demko then introduced Brian Bolcar to walk thru portfolio performance.

Brian Bolcar went over the performance of the Private Equity Portfolio, inception to date the Portfolio has an IRR of 7.79%. He went further to break the portfolio out by vintage year. Of the 146 total funds in the portfolio, 98 have a vintage year of 1988-2009. The remaining 48 funds have a vintage year of 2010 to present day. The earlier vintage subset has an IRR of 7.09%, while the 2010 to present subset has a vintage of 12.94%. The earlier subset is heavily impacted by roughly \$4 Billion in commitments from 2006-2008 that took the full brunt of the recession. The Private Equity Portfolio's overall return profile is still right at the public markets with a Public Market Equivalency of 1.00x. Mr. Bolcar stated that going forward, the team expects a 200-500 basis point outperformance of private equity over the public equity markets mainly due to the active management of private equity.

Mr. Demko explained the composition of the Private Equity Portfolio. There are primarily three different strategies Buyout, Growth/Venture Capital, and Special Situations. Each strategy has its own Policy Range and target. Buyout makes up almost half of the portfolio at 47.3% and is within

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our Policy Range of 35%-65%. Growth/Venture Capital is the next largest piece at 34.1%. This strategy is over the policy range of 30%. Special Situations makes up the remaining 18.6% of the portfolio, within its range of 15%-45%. Mr. Demko went on to explain that the team was comfortable with the overweighting to Growth/Venture Capital. The overweighting is due to strong performance, driven by a strong group of Venture Capital investments that have yet to be realized.

Taylor Jackson went over the Sectoral and Geographical composition of the Private Equity Portfolio. The team's main focus is in high conviction general partners rather than managing to a sectoral or geographical target, however this information is still monitored. Information Technology (24.0%), Health Care (20.7%), and Consumer Discretionary (20.1%) make up the largest sectoral portion of the portfolio. North America (76.9%) and Europe (14.3%) make up the largest geographical portion of the portfolio.

Neal Motaparthy reviewed the private equity cash flow detail by calendar year. Mr. Motaparthy noted that distributions have out-paced contributions in 5 out of the last 6 calendar years. Recent distributions out of Fund of Fund strategies have picked up due to the maturity of these funds and the fact that the team has generally de-emphasized these strategies within the portfolio.

Mr. Demko transitioned from the portfolio to ongoing market trends. There is a downward trend in Private Equity backed exit activity throughout North America and Europe in both dollars and valuation. Given the market strength, we would have expected to see more exits. Breaking down market exits by type, corporate activity remains low, secondary buyouts are even weaker, and the IPO market is sluggish.

The team brought the presentation to a close with their initiatives. *Valuation Analysis*: the team is working with Burgiss to develop a custom report that will enhance systematic valuation monitoring. *Secondary/Portfolio Rationalization*: this is part of a broader plan initiative aimed at reducing complexity within the portfolio. *Forward Calendar*: total portfolio asset allocation discussions are ongoing. *Consultant Review*: this is part of a broader plan initiative, all consultants are being reviewed and changes may be forthcoming.

AGENDA ITEMS – IAC MEMBER Q&A

IAC Members were provided with the opportunity to pose questions to the Treasurer and IMD staff. Mr. Hartzell asked whether there will be IAC participation in selection of the Chief Investment Officer. The Treasurer responded that he is comfortable with his announcement that Christopher Morris and Jeff Smith will act as interim CIO's, more to come. Greg Patterson requested a copy of the Investment Policy Statement, Chris Morris agreed to provide.

AGENDA ITEM -- PUBLIC COMMENT

No public comments were made.

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ADJOURNMENT

Treasurer Folwell made closing remarks and thanked everyone for their attendance and input. Mr. Patterson moved to close the meeting, seconded by Mr. Aneralla. The meeting was adjourned at approximately 11 a.m., without objection.

DALE R. FOLWELL, ČPA

NORTH CAROLINA STATE TREASURER AND CHAIR