NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE

MEETING MINUTES FOR MAY 22, 2019

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Wednesday, May 22, 2019, 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, Greg Patterson, and Loris Colclough.

Members Absent: David Hartzell

Members Attending via Telephone: Lentz Brewer and Mike Mebane.

Staff: Brett Hall, Frank Lester, Craig Demko, Ronald Funderburk, Sam Hayes, Brian Bolcar, Casey High, Gail Kadash, Deana Moore-Solomon, Kathy O'Neill, Matthew Krimm, Troy March, Neal Motaparthy, Tinh Phan, Loren de Mey, Christopher Morris, Meryl Murtagh, Anne Roof, Ty Powers, Laura Rowe, Jeff Smith, Rhonda Smith, Joe Farley, Hussein Sharafi, Greg Taylor, Tom Causey, Nicholas Langley and Chris Ward.

Others in Attendance: Greg Williams (Wellington)

AGENDA ITEM – OPENING REMARKS

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

The Chair confirmed a quorum was met, then 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 mentioned that the minutes would be approved at the end of the meeting.

AGENDA ITEM - PERFORMANCE UPDATE

The Chair recognized Jeff Smith, the interim Co-CIO and Director of Fixed Income, and Chris Morris, the interim Co-CIO and Chief Risk and Operating Officer, to present the Performance update. Mr. Smith provided a brief update on the cost efficiencies initiative underway in the Investment Management Division (IMD). He noted the initiative has increased from \$96 million to an approximate annual savings of \$98 million over the past quarter.

Treasurer asked what the 4-year run rate would be. Mr. Morris mentioned it would be right around \$300 million.

Mr. Mebane asked how lowering the fees affects returns. Mr. Morris answered that all returns are net of fees, so all else constant, lowering fees should increase net of fees returns, not considering the opportunity costs associated with the investment actions taken to lower fees.

Mr. Smith then provided an update on the US economic environment for the 1st quarter of 2019 with a brief mention of the current quarter changes. Some of these changes mentioned include: 1) equities rallied back from the worst quarterly decline in a decade that occurred in Q4; 2) pausing on fed policy; 3) rates moved lower, 4) credit spreads tightened. He also noted that trade tensions have escalated again, and that Fed futures now expect 0% chance of hike.

Mr. Mebane questioned if the low rates are good or bad thing for us. Mr. Smith answered that it depends on what part of the portfolio you look at and the time horizon over which you are measuring.

Mr. Morris presented an update on assets under management, as of March 31, 2019. He stated the total AUM was \$130 billion, close to our peak which occurred in June 2018. Additionally, the market value is up about \$6 billion in Q1 as equities rallied back from the fall in Q4.

Mr. Patterson asked if we had continued that upward trend since end of March. Mr. Morris answered in the affirmative.

Mr. Morris reviewed current NCRS asset allocation and stated an underweight to growth reduced in Q1 as equities rallied. The underweight to growth is 4.6%. There is an overweight to Rates & Liquidity of roughly 3.6%, mostly in Cash (short term portfolio). Mr. Morris discussed the other asset class relative weightings.

Mr. Aneralla inquired about the trigger point to put more in Growth? Mr. Morris replied where markets are, we are comfortable with our current allocations. If we had a pullback, we may rebalance. The Treasurer commented that we have made investments. Based on the liquidity needs of the plan and the increasing distributions, we need to stop and think about margin of safety. All charts are important, but at the end of the day we are in the check delivery business. We need to be diligent and make sure there is a high margin of safety in any investment we do.

Mr. Morris discussed the history of NCRS asset allocation. The underweight to public equity at bottom of Great Financial Crises was roughly 10%. Much larger than our current 3% underweight. The Treasurer stated that back then, we had to sell assets in the alternative asset classes based on statute % allocation caps.

Mr. Morris continued to the Total Net Portfolio Returns vs. Benchmarks slide, discussing the periodic performance. He noted that we are beating benchmarks in all periods except the prior quarter. We have only exceeded 7% actuarial rate of return on the 3 and 10-year periods.

Mr. Morris moved onto the Growth of a Dollar Charts. We continue to outperform the Long-Term Policy benchmark, remarking that for 5 years alternatives significantly added value, and for 10 years alternatives detracted value as write downs from GFC pull down alternatives at the start of the period. We expect to look better once that period rolls off.

Mr. Morris moved on to the Contribution to Total Plan Return chart. He discussed the dollar amount each asset class contributed to the earnings of the plan for the prior 1-year period. He mentioned that alternatives & IG Fixed Income contributed the most. Private Equity was highest performing asset class but given its relatively small allocation, the contribution was lower.

Mr. Morris next walked the committee through the Return Attribution charts, noting the portfolio created a value add of 0.91% versus the implementation benchmark, for the 1-year period. The outperformance

was due to selection effect. The allocation effect was negative. We were underweight to Public Equity and overweight to IG Fixed, which drove the negative allocation effect. There was a similar theme for the 3 and 5-year horizons.

Mr. Morris presented the Net of Fees Risk Metrics slide, showing values over rolling periods. He discussed the rolling tracking error, which has continued to trend very low. He also discussed the rolling volatility and the continued low value for that, which is consistent with suppressed market volatility.

The next topic was universe comparison. Mr. Morris mentioned that our portfolio is more conservatively positioned relative to the peer universe, so during bull markets we will underperform peers, and during declining markets we should outperform. This is reflected across a few of the time periods shown. The risk is much lower than peers, typically bottom quartile. The plan typically ranks high on the Sharpe ratio given our low volatility.

The Treasurer also reported there is likely a correlation between the funded status of the peers and where they rank on a return to risk standpoint.

Mr. Morris moved on to the Liquidity slides. He discussed the structural liquidity slide, stating that we target to have >70% of AUM in level 1 liquid assets. He mentioned that currently nearly 73% of AUM is in level 1 liquid assets, and therefore there are no concerns of structural liquidity. The next slide was the Liquidity Profile – funding. Mr. Morris reported the plan is on track to pay \$2.7 billion in net benefit payments for a 12-month period. Additionally, we expect this to increase in the future and need to ensure we maintain enough liquid assets to fund the benefit payments.

Next, Mr. Morris discussed the Alternatives liquidity profile, mentioning that we contributed \$3.3 billion to Alternatives, but received \$4.2 billion back. We continue to be cash flow positive with a net inflow of nearly \$1 billion for the prior 12 months. Also, we do not expect the distributions from alternatives to slowdown much in 2019.

Mr. Smith discussed Asset Class Performance. Private Equity and Non-Core Real Estate were the standouts for the 1 year. He mentioned that it was interesting that the Growth assets and Rates & Liquidity had similar returns for the year. Over longer periods we would expect and have seen Growth assets outperform Rates & Liquidity.

Mr. Smith next discussed the Calendar Year Asset Class Return chart, which highlights the benefits of diversification.

The next discussion was concerning new and incremental investments, and uncalled commitments. Currently the uncalled commitments sit at \$7.3 billion, which has decreased by nearly \$100 million since the last IAC meeting. We finalized a new investment with Landmark in March of this year.

Mr. Smith moved along to Asset Allocation History. He stated there has been no material change from recent years. Mr. Smith next reviewed the Top 20 Investment Managers slide. Nearly 50% of assets are managed internally.

Mr. Aneralla inquired as to what type of managers are Landmark? Craig Demko answered that they typically employ a secondary approach.

Mr. Mebane asked how the top 20 managers has changed over the last few years. Mr. Morris replied that the list would look very similar, except for internal. Most of the assets that have come in are from Blackrock and Piedmont. Landmark would be a recent add given our more recent investments. Grosvenor fell off as we have been winding down our funds of funds.

AGENDA ITEMS - INVESTMENT POLICY STATEMENT REVIEW

Jeff Smith and Chris Morris walked the group through the Investment Policy Statement (IPS). They discussed the return and risk objectives and constraints and corresponding metrics, and statutory guidelines. They mentioned that IMD does not have any recommended updates or changes to the IPS currently.

The Treasurer commented that we are actively managing the risk across many asset classes in the portfolio. Jeff Smith and the internal Fixed Income team are doing this daily in the IG Fixed Income portfolio as they evaluate interest rates and credit risk of issuers.

Mr. Morris explained that the asset categories were created to bucket investments by their "role in the portfolio". He discussed each of the categories' role.

Mr. Patterson asked if the 2% rebalance guideline allocation applies to all asset classes? Mr. Morris replied this is meant for public markets given we have control over the ability to rebalance these asset classes. Mr. Morris mentioned that we have less control over the private markets given that the majority of these are much less liquid and cash flows are controlled by the manager.

Mr. Patterson also inquired how are we measuring volatility on Private Equity and Real Estate? Mr. Morris answered that it is difficult to measure volatility in private markets due to smoothing of valuations and infrequent valuations. We attempt to map each private position within our portfolios to public markets to estimate a different view of volatility.

Mr. Mebane asked about how the statutes impact our rebalancing criteria. Mr. Morris and Mr. Smith answered that the statutes create the hard rules, but within those we have internal policy targets and ranges.

Mr. Aneralla asked if the market falls a lot, do you meet immediately, or is there a long wait before you meet and discuss the next actions? Mr. Morris answered that we have continuous conversations as events occur. If our allocations fall outside of certain ranges, IPS requires a conversation and documentation of what was done.

The Treasurer commented that given we are invested across many asset classes, there is the possibility that one asset class will get an indication of emerging risks that may impact another asset class. Therefore, we have cross asset class conversations.

Mr. Aneralla inquired as to who is monitoring IMD to ensure IMD is maintaining compliance with policies. Mr. Morris and Mr. Smith discussed the numerous audits that are done to ensure compliance with controls. They also discussed segregation of duties.

The Treasurer stated that we have a number of auditors in the building every day and that we welcome auditors in our department.

AGENDA ITEMS - PRIVATE EQUITY

The Chair introduced Craig Demko, the Director of Private Equity, who began the presentation by discussing allocations and the statutory maximums.

Neal Motaparthy next discussed performance of the portfolio as broken out by broad vintage buckets. He mentioned that Private Equity has been accretive to the plan for vintages from 2010 to present.

Mr. Demko next mentioned that Private Equity has outperformed Public Equity for 2010 vintages and on, as shown by the PME metric and there was discussion on how the PME is calculated. Previous vintages did not outperform public markets in aggregate. A large detractor of that underperformance was due to the forced liquidations after the GFC.

Mr. Motaparthy reported on portfolio composition. We are below target in Buyout and Special Situations, and we are over target in Growth and Venture.

Mr. Demko commented that the over allocation to Growth and Venture is due to outperformance. This allocation will come down as portfolio companies are liquidated.

Mr. Aneralla inquired as to how many managers we have? Mr. Demko answered there are roughly 60.

Mr. Demko next discussed industry and geographic allocations, mentioning that there are no concerns with these. He mentioned that we have a low allocation to China, less than 3%.

Brian Bolcar conducted a discussion of year by year cash flows. He stated that we have been cash flow positive for nearly all years since 2011, and IMD expects this to continue and accelerate.

Mr. Demko reported that Private Equity has roughly \$2.4 billion of unfunded, of which \$500 million likely will not be called.

Mr. Bolcar next discussed our Landmark relationship that allows us to do co-investment deals. He mentioned the beneficial fee structure that is in place with this arrangement.

Mr. Bolcar discussed the various ways the department sources and interacts with Landmark to execute co-investments. He also discussed the various deal tranches that are currently in place with Landmark.

The Treasurer stated that we have nearly \$1 billion in commitments to these structures across the Alternatives book. This arrangement allows us to take advantage of investors that are forced sellers. This structure allows us to invest in Private Equity and know what is in the book. Pensions across the country will need to liquidate assets to fund liabilities in the future.

Mr. Demko mentioned the ability to see these secondary deals assists with understanding the valuation of our existing investments if we already hold something that is being offered.

Mr. Demko discussed market trends and buyout activity. We expect exit volumes to increase assuming steady Public Equity markets. There may be some pullback in deal volume if Public Equity markets become volatile. European buyout multiples have shot up in 2018.

AGENDA ITEMS - POLICY UPDATE

The Chair introduced Meryl Murtagh, Assistant General Counsel for the Investment Division, to discuss the annual policy update which is driven by the IAC charter. Ms. Murtagh mentioned that we are required to provide an annual update on policies and seek feedback from the IAC on these policies, and next provided an overview of the policy review process. The IAC Code of Ethics policy was passed out for execution and certification. Ms. Murtagh discussed how the department is streamlining the numerous ethics policies that are in existence and mentioned that the divisions are looking to review, consolidate, and simplify. There will be 2 tiers of ethics policies: one for all staff, the other for senior staff and IMD. Ms. Murtagh stated that we aim to have these finalized by end of fiscal year.

Ms. Murtagh reported that the IAC code of ethics should stay the same. The IMD code of ethics will remain in place as well.

Ms. Murtagh next discussed the Indemnification Policy and how we are looking to clarify the policy to more efficiently streamline negotiations. There was also a discussion on the divestment policies and effort to consolidate them.

AGENDA ITEMS – APPROVAL OF MINUTES

The Chair asked for approval of the minutes of the quarterly meeting held February 20, 2019. Loris Colclough moved to approve the minutes, Greg Patterson seconded the motion, and the committee approved.

AGENDA ITEMS - IAC MEMBER Q&A

IAC Members were provided with the opportunity to pose questions to the Treasurer and IMD staff. No questions were posed.

AGENDA ITEM - PUBLIC COMMENT

No public comments were made.

ADJOURNMENT

The Treasurer asked Jeff Smith to discuss the recent retirement in his division. Mr. Smith discussed Beth Harrison and her 40 years of service. Mr. Smith commented on how Beth added significant value over the years and how she will be missed greatly in IMD.

Rhonda introduced Hussein Sharafi as a new analyst in the Public Equity group. Joe Farley introduced himself. Joe is a Risk Analyst with IMD who started in November 2018.

Sam Hayes introduced Anne Roof as his new Executive Assistant.

The Treasurer gave closing remarks. We continue to focus on what is right, getting it right, and keeping it right. Numerous local governments have had to reduce staff to be able to contribute to their pension and health care plans. We are doing what we can to minimize these from occurring. We are focusing on preserving, strengthening, and continuing these plans.

The meeting was adjourned at approximately 11:18 a.m., without objection.

DALE R. FOLWELL, CPA

NORTH CAROLINA STATE TREASURER AND CHAIR