NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE MEETING MINUTES FOR August 21, 2019

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Wednesday, August 21, 2019, at 11:00 a.m. in the Dogwood Conference Room of the Longleaf Building, 3200 Atlantic Avenue, Raleigh, North Carolina.

Members Present: State Treasurer Dale R. Folwell (Chair), David Hartzell, Greg Patterson, and Loris Colclough.

Members Attending via Telephone: Lentz Brewer and Mike Mebane.

Staff Present: Ben Garner, Brett Hall, Frank Lester, Ronald Funderburk, Renee Guerin, Joan Fontes, Sam Hayes, Debra Thomas, Chris Farr, Fran Lawrence, Casey High, Gail Kadash, Kathy O'Neill, Matthew Krimm, Troy March, Tinh Phan, Loren de Mey, Craig Demko, Christopher Morris, Linda Nelson, Sam Watts, Anne Roof, Ty Powers, Jeff Smith, Rhonda Smith, Joe Farley, Hussein Sharafi, Greg Taylor, Jack Wilson, Nicholas Langley and Chris Ward.

Others in Attendance: Brian Kahley (Franklin Templeton), Michael Marino (Wellington), Isaac Bacar, Judy Andrew, Cathy William, Dixie Newsome, and Linda Gunter.

AGENDA ITEM – OPENING REMARKS

The meeting was called to order at approximately 11:00 a.m. and the Vice Chair began the meeting by leading the Pledge of Allegiance.

The Vice 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 minutes were approved.

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 realized \$198 million of savings since January of 2017 and is on pace to reach \$343 million by December 2020.

Mr. Smith then provided an update on the US economic environment for the 2nd quarter of 2019 with a brief mention of the current quarter changes. The discussion points included: 1) positive performance in equities as trade tensions eased; 2) Pause on fed tightening; 3) strong performance in bonds as rates moved substantially lower; and 4) the amount of negative yielding debt globally.

There was a discussion on what might happen should the Federal Reserve decide to cut rates 75bps further and the inversion between the 10-year yield and the Federal Funds rate. The thought is that the

market is already pricing in rate cuts near that size, which is one of the reasons why there is an inversion between the 10-year yield and the Federal Funds rate. It was also mentioned that we have historically low rates at the present time.

Mr. Morris presented an update on assets under management, as of June 30, 2019. He stated the total AUM was \$134 billion, an all-time high. Additionally, the market value is up about \$4 billion in the 2^{nd} quarter.

Mr. Morris reviewed the asset allocation as of June 30th, as well as the current asset allocation. He discussed the over and underweights for both periods as well as the risk reduction effort and how that impacted the over and underweight allocations. The risk reduction effort moved approximately \$7.5 billion from the public equity portfolio and into the cash portfolio.

Questions were asked about how the \$7.5 billion value was determined, how long the risk reduction effort would be in place, and if there are specific triggers that would result in the movement of money back into the public equity portfolio. This created further discussion with comments from Mr. Morris, Mr. Smith, and the Treasurer, mentioning that risk minimization is very important at this point in time given the current state of markets and the global economies, the risk reduction effort is not planned to be a long term shift in allocation, and there are no specific triggers to automatically move monies back into equity. It was also mentioned that we are not simply looking to de-risk but are also looking to take advantage of any market dislocations should they arise, where we can capture value with a good margin of safety.

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, showing how the plan continues to outperform the Long-Term Policy benchmark, citing 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. However, this detraction in value over the 10-year period from alternatives is starting to unwind as those early years post GFC fall of the horizon.

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 Public Equity & 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 0.47% versus the implementation benchmark, for the 1-year period. The outperformance was due to selection effect. The allocation effect was negative due to the underweight to public equity and overweight to IG Fixed. There was a similar theme for the 3 and 5-year horizons.

There was a discussion on the prior forced selling of some of the plan's investment in Alternatives post GFC. The discussion mentioned that those forced sales were not driven by portfolio management decisions but rather interpretation of statute constraints. Those sales negatively impacted the returns of the portfolio. The Treasurer and Mr. Morris mentioned that since those forced sales, we have clarified statute and would no longer be a forced seller due to a breach of allocation caps. The Treasurer

mentioned how we have set up structures to take advantage of others that are forced to sell alternative investments, and this should add value going forward.

Mr. Morris presented the Net of Fees Risk Metrics slide, showing values over rolling periods. He discussed the rolling metrics noting that they are starting to tick up as overall market volatility increases.

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 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.

Mr. Morris moved on to the Liquidity slides. He discussed the structural liquidity slide, stating that we target to have greater than 70% of AUM in level 1 liquid assets. He mentioned that currently 73% of AUM is in level 1 liquid assets, and therefore there are no concerns of structural liquidity. Mr. Morris reported the plan is on track to pay \$2.7 billion in net benefit payments for a 12-month period.

Next, Mr. Morris discussed the Alternatives liquidity profile, mentioning that we contributed \$3.0 billion to Alternatives, and received \$4.0 billion in distributions for the last 12 months. 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 near future.

Mr. Smith reported on Asset Class Performance. Private Equity, Non-Core Real Estate, and IG Fixed income were the standouts for the one (1) year.

Mr. Smith also spoke about 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 \$6.6 billion, which has decreased by nearly \$500 million since the last IAC meeting.

Ron Funderburk discussed the existing relationship with EIG and the new investment that was completed in May, hitting on the opportunities within the energy lending space. There were questions on how the strategy should perform in favorable energy markets. Ron mentioned that favorable to us as a lender would be when the borrower has a difficult time obtaining funds as we can lend at higher rates. If oil prices bounce, we have equity like features in our lending arrangements that may participate in this upside. The Treasurer stated that this may provide bond like risk with equity like returns.

Mr. Smith moved along to Asset Allocation History. He stated there has been no material change from recent years, through June 30th. Mr. Smith next reviewed the Top 20 Investment Managers slide. Nearly 50% of assets are managed internally. So, that is not a significant change from last meeting.

AGENDA ITEM – PUBLIC EQUITY ASSET CLASS REVIEW

Rhonda Smith, Director of Public Equity introduced the members of the Equity Team.

Ms. Smith gave an overview of the public equity performance as of June 30. She mentioned the portfolio has outperformed benchmarks for all periods. She also noted that U.S. equities have outperformed International for every time period shown.

She mentioned that the allocations within Public Equity have changed since June 30th as a result of the risk reduction activities in July.

Mr. Sharafi walked the group through the current positioning of the public equity portfolio. He outlined the total asset trends, number of mandates, asset allocation, and active / passive split. The domestic allocation has come down as a result of the risk reduction effort.

Mr. Taylor discussed the risk reduction exercise and how that impacted the equity book, noting that \$7.5 billion came out of equity. He discussed which accounts had a reduction in assets to fund the removal.

Mr. Taylor also discussed how the liquidation was implemented internally.

Ms. Smith mentioned that the \$7.5 billion value was determined after evaluating their existing manager line up and allocation structure to see the magnitude of risk that could be reduced without drastically impacting their strategy in public equity and without inadvertently impacting how the proceeds would be absorbed within fixed income following the liquidation.

Ms. Smith also discussed the diversification in the portfolio, both from a geographic and manager perspective.

Mr. Taylor reported on the current positioning between active and passive for both the US and International sleeves. He indicated the team has higher conviction in active management within the International space.

Mr. Sharafi mentioned that the trend in historical tracking error in the domestic space aligns with the increased passive allocation. The tracking error has come down substantially, as would be expected based on the portfolio's passive/active split. He also discussed the up and down-market capture within the US and international portfolios. As you have more and more passive portfolios, your market capture ratios get closer to 1.

The Treasurer mentioned that we have been looking at implementing international passive internal, but at this point determined that the fee savings may likely not be enough to offset the operational costs and complexities involved with managing internally.

Mr. High discussed the portfolio's active strategies and how diversified they appear along a market risk spectrum as well as where within the cycle that each active manager should outperform.

Mr. Taylor further discussed the diversification, mentioning that cap weighted benchmarks are becoming very concentrated in the top names, noting that the top 10 names of the Russell 1000 make up nearly 21% of the index, heavily weighted toward Technology. This concentration may lead to unintended risks. To alleviate this, we have been looking at smart beta and alternative weighted index strategies.

Mr. Taylor spoke about some of the pros and cons of pure cap weighted passive, smart beta, and full active strategies, and how the team continues to evaluate what is the optimal mix of these strategies.

Mr. High provided an update on the Internal Index Management program, hitting on AUM in each of the strategies. He also discussed which passive portfolios had a reduction in assets due to the risk reduction activity.

Mr. High reported on the 1-year performance, showing the relative return to the benchmark. The objective is to fully replicate the return of the index with very little tracking error. This has been accomplished as shown in the corresponding illustration(s).

Mr. High also discussed the annual Russell Index Reconstitution that occurs at the end of June. He mentioned the operational and trading complexities associated with changes to the index on that day. He highlighted the number of shares and companies traded in the open market and the internal transfers between index portfolio. He also pointed out the low cost of transacting.

The Treasurer thanked the team for successfully implementing this internal passive program and discussed the benefits of information sharing across the asset classes.

Ms. Smith discussed that the team will be looking at rebalancing within the equity portfolio to address any unintended misallocations within the portfolio, active vs passive exposure, continue to evaluate diversification, and expand internal capabilities.

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

The Treasurer opened the meeting to public comments. One public comment was made.

The individual commented on the current asset allocation of NCRS, asking why assets were moved out of public equity, both this year and in 2017, if the plan was investing for the long term? A brief discussion commenced around why some of those decisions were made.

ADJOURNMENT

The Treasurer gave further closing remarks.

The meeting was adjourned at approximately 1:02 p.m., without objection.

DALE R. FOLWELL, CPA

NORTH CAROLINA STATE TREASURER AND CHAIR