NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE MEETING MINUTES FOR NOVEMBER 20, 2019

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Wednesday, November 20, 2019, at 9:00 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), John Aneralla, Greg Patterson.

Members Attending via Telephone: Lentz Brewer.

Members Absent: Loris Colclough, Mike Mebane, David Hartzell

Staff Present: Ben Garner, Brett Hall, Frank Lester, Dan E. Way, Ronald Funderburk, Renee Guerin, Fran Lawrence, Amy Szalaj, Casey High, Gail Kadash, Kathy O'Neill, Matthew Krimm, Loren de Mey, Craig Demko, Christopher Morris, Linda Nelson, Michael Nichols, Anne Roof, Laura Rowe, Ty Powers, Jeff Smith, Rhonda Smith, Joe Farley, Greg Taylor, Jack Wilson, Meryl Murtagh, Nicholas Langley and Chris Ward.

Others in Attendance: Lee Cohen (Wellington), Alan Torrance (CEM)

AGENDA ITEM - OPENING REMARKS

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

The Treasurer 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 \$226 million of savings since January of 2017 and is on pace to reach \$344 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 amongst others 1) continued trade tensions; 2) easing monetary policy; 3) falling bond yields; and 4) equity valuations.

Mr. Morris presented an update on assets under management, as of September 30, 2019. He stated the total AUM was \$136 billion, an all-time high. He noted that the market value is up about \$2 billion in the 3^{rd} quarter.

Mr. Morris reviewed the asset allocation as of September 30th, as well as the current asset allocation. He discussed the over and underweights for both periods.

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 and prior one-year periods. We have only exceeded the 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 alternatives have added value over both the 5- and 10-year horizons.

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.

Mr. Morris next walked the committee through the Return Attribution charts, noting the portfolio created a value add of 0.24% versus the implementation benchmark, for the 1-year period. The outperformance was due to selection effect. The allocation effect was negative due to the overweight to Investment Grade Fixed and Cash. 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 metrics noting that portfolio volatility is starting to tick up as overall market volatility increases. He also discussed a new upside / downside capture metric and a drawdown graph that was provided.

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.

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 the portfolio has greater than 70% of AUM in level 1 liquid assets, and therefore there are no concerns of structural liquidity. Mr. Morris mentioned the portfolio is on track to fund over \$2.5 billion in net benefit payments for calendar year 2019. There was a discussion on the projected increase in gross benefit payments and how that may affect the employer contribution rates.

The Treasurer made mention of a Pew Research study on the ability of public pensions to withstand a stress scenario and how well the North Carolina Retirement System is positioned to withstand a stress scenario.

Next, Mr. Morris discussed the Alternatives liquidity profile, mentioning that we contributed \$2.8 billion to Alternatives, but received \$3.9 billion back for the last 12 months. He mentioned that we do not expect the distributions from alternatives to slow down much in near future.

Mr. Smith reported on Asset Class Performance. He stated that Private Equity, Non-Core Real Estate, Core Real Estate and Investment Grade Fixed income were the standouts for the 1-year period.

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. Craig Demko briefly described a \$200 million increase in a commitment to the Opportunistic sleeve within one of the Landmark vehicles. Ron Funderburk briefly described a \$50 million co-investment that was made with Angelo Gordon. Currently the uncalled commitments sit at \$6.4 billion, which has decreased by nearly \$200 million since the last IAC meeting.

Mr. Smith moved along to Asset Allocation History. He stated the only material change has been an increase in cash. Mr. Smith next reviewed the Top 20 Investment Managers slide, mentioning that nearly 50% of assets are managed internally. That is not a significant change from last meeting.

The Treasurer thanked the team.

Mr. Aneralla asked what will cause us to put more money back into equities to align with our policy, making mention of the \$7.5 billion of exposure that was pulled out of equities in the 3rd quarter. Mr. Smith mentioned that the concerns that have driven this are still present in the markets, but we continue to monitor the markets for more clarity on the risks moving forward.

The Treasurer mentioned that we are facing environments that none of us have ever seen, with interest rates, unemployment, equity levels, and a political environment that we thought we would never see. He mentioned that we continue to monitor the opportunities and risks and will opportunistically invest to take advantage of scenarios that offer upside with a large margin of safety.

AGENDA ITEM - CEM Benchmarking

Mr. Morris introduced Alan Torrance from CEM Benchmarking and briefly explained the objective of the CEM study to measure and then identify areas where we can better manage our costs relative to peers.

Mr. Torrance explained his presentation is a cost analysis which outlines what we are spending and what we are getting for it. He also explained the process for obtaining the data and creating comparable metrics.

He mentioned that the cost analysis is for the 2018 calendar year and the Plan's 5-year return of 4.8% is below the US public fund median of 5.4%. He mentioned that we underperformed our peers because the policy return is less due to the conservative asset allocation. The value added of 70bps exceeded the peer median of 10bps, and he mentioned that we are below our cost benchmark by 10.3 bps. Asset risk of 9.2% was below us public median of 10.5%.

The peer group comparison for NCRS is made up of funds between \$47 billion - \$155 billion in assets under management, with a median of \$79 billion compared to NCRS's \$98 billion. This peer group is comprised of 14 funds.

Mr. Torrance reviewed the next few slides on Policy Return versus peer median. The differences in policy return are caused by the difference in asset mix and benchmarks. He highlighted our peer relative under allocations to Real Estate and Private Equity, as well as our overweight to Fixed Income. These allocations are driving the policy return differences.

The Treasurer asked how the allocation differences would highlight those funds that are swinging for the fences. Mr. Torrance mentioned that the higher allocations to both public and private equity could be indicative of peers taking more risk.

Mr. Torrance discussed the Value-Added slides and mentioned the strong value added was largely driven by our performance in the Real Estate asset class.

Mr. Torrance thanked North Carolina Retirement Systems for being a very transparent fund, mentioning that it can be difficult to compare to other funds because not all the peers' report performance fees. Total investment costs were 35.0 bps for 2018, down from 42.9 bps in 2017.

Mr. Torrance discussed the peer relative cost slides. The total investment cost of the plan beat the benchmark by 10.3bps. This equates to \$100 million worth of savings. This savings was caused by paying less than peers for similar services. NCRS pays 11.3 bps less in external investment manager costs versus peers. The cost for internal investment management and administration costs are lower than peers as well. He went on to discuss the implementation styles and how they added or detracted peer relative costs.

Mr. Aneralla asked what the peer average allocation is to internally managed assets and of those internally managed assets, how much is active and how much is passive. Mr. Torrance pointed him to slide 16 that breaks that out.

Mr. Morris mentioned that we should see a decrease in the basis point costs for internal equity as some of the implementation costs will not be in next years analysis, and the asset base should be higher.

Mr. Torrance and Mr. Morris discussed the oversight, custodial, and other costs.

Mr. Torrance compared our 5-year net valued added versus our excess cost to show if we are giving up returns for paying less. The chart supports that we are paying less but generally adding value.

Mr. Patterson highlighted that NCRS had 20% lower costs than the benchmark.

Mr. Torrance concluded the cost-effectiveness review.

AGENDA ITEM - Investment Grade Fixed Income

Mr. Smith introduced the members of his team.

Mr. Hall discussed the Short Term (STIF) portfolio, hitting on the maturity parameters, asset allocation and the historical annualized cash return of the portfolio. He also discussed the laddering approach used to stagger maturities to provide necessary liquidity while also increasing yield.

Mr. Hall discussed the spike in overnight rates that occurred over the quarter. He mentioned they took advantage of the opportunities as they came. He discussed the large treasury issuance and tax payment as the catalysts that drove the disruption in the repo market.

Mr. Smith discussed the Investment Grade Fixed Income profile, hitting on the absolute and policy relative allocations. He made mention of the strong absolute 1-year returns, but also mentioned that the performance was lower than the benchmark as a result of a lower duration in a declining rate environment.

Mr. Smith discussed the Core Fixed Income portfolio's allocations and analytics.

Mr. Smith discussed the path of Treasury yields over the last year and how rates have shifted downward and twisted substantially over the prior year.

Mr. Hall discussed the historical credit spreads for US Agencies, IG Corporate bonds, and High Yield corporate bonds. He reported that spreads are currently near long term averages, but experienced volatility over the prior year. He discussed the spreads at the sector level relative to ratings as well as our sector allocations within the Corporate bond portfolio.

Mr. Smith mentioned that a substantial amount of work is done within a sector to analyze the individual issuer credit worthiness and bond valuation.

Mr. Aneralla asked about the typical size of an individual bond that we would look to take on. Mr. Smith mentioned that in this environment, it is very difficult to get a large allocation given the substantial demand in the marketplace.

Mr. Smith briefly described the process for new issue transactions.

Mr. Smith mentioned that the investment grade market has increased from \$3.5 trillion to \$5.5 trillion in the last few years, highlighting the substantial amount of debt outstanding. The concern still exists regarding how the plumbing will work when demand for this debt slows.

Mr. Smith discussed the dialing down of FOMC projections over the prior year across most of their metrics. When viewing the Dot Plots, we see a lot of compression in individual projections as well as an overall lowering relative to last years' projections.

Mr. Smith discussed the 1-year return simulation for the portfolio under various rate shift scenarios and the difficulty in projecting what will occur in the future with rates.

AGENDA ITEM – Opportunistic Fixed Income Asset Class Review

Mr. Funderburk and Mr. Powers presented.

Mr. Funderburk presented his team.

Mr. Funderburk discussed their allocations and the differences relative to policy as well as the allocations within the Opportunity Fixed Income portfolio over time.

Mr. Funderburk discussed the historical performance of the portfolio and strong excess return relative to the benchmark, also hitting on the performance of the underlying strategies within the portfolio, mentioning that the special situations strategy was the strongest performer.

Mr. Funderburk discussed the strategy, liquidity, geography, industry sector, and capital structure allocations within the portfolio.

Mr. Powers gave a summary of the overall credit market, mentioning that spreads continue to be tight while issuance continues to expand. There are concerns that underwriting standards have loosened given the demand in the space. He mentioned that we continue to work with our managers to identify opportunities that provide downside protection by being higher on the capital structure or by having tighter covenants.

Mr. Powers discussed the spread difference between CCC and below credit quality and the overall high yield market. There has been a recent diversion where the CCC and below spreads are starting to widen while the overall high yield market remains tight. Found this to be interesting given the risk on environment. This could present an opportunity.

Mr. Powers discussed the loan market and the almost doubling in size of that market while underwriting standards have weakened. Nearly 80% of the loans are covenant lite, with nearly half of them having no covenants. Also seeing increased downgrades vs upgrades from the rating agencies, indicating some cracks in the market.

Mr. Powers discussed flows for IG, HY, and loans. Seeing substantial outflows from ETFs and mutual funds that are in loans, while IG and HY inflows have increased. Have seen substantial increase in new issuance in HY, while loans issuance has decreased. Continue to monitor % of loans that are trading below 90 cents on the dollar. More than 10% of the loans are trading below 90, which may present an opportunity if flows are driving these price decreases rather than credit issues. We want to take advantage of the structurally dislocated loans, rather than the fundamentally dislocated ones.

Mr. Funderburk discussed some of the late cycle investment considerations. He mentioned the intent to remain focused while being opportunistic to take advantage of any structural dislocations. Mr. Funderburk also commented that we are looking forward to building out a dislocation mandate, and that we see high yield bonds and cov lite loans as less attractive currently.

The Treasurer thanked the team.

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.

Mr. Aneralla thanked the team.

The Treasurer gave an overview of a recent trip he took to view a trac of timber that we own in Florida. He mentioned that there has been an increase in the number of mills to process the timber in Florida and that this should be a positive for that trac. The Treasurer also reported that we are working hard on the timber portfolio.

Mr. Funderburk mentioned that we can work out the timber over a long-time horizon and that we are not a forced seller.

The Treasurer discussed a conversation he had with several people at a recent conference. He mentioned he would like to have a number of these individuals present at an upcoming IAC meeting.

AGENDA ITEM - PUBLIC COMMENT

No one signed up for public comments.

ADJOURNMENT

The Treasurer mentioned his appreciation for Senator Hagan and her commitment to service and made a motion to adjourn in her honor.

DALE R. FOLWELL, CPA

NORTH CAROLINA STATE TREASURER AND CHAIR