NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE MEETING MINUTES FOR May 20, 2020

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Wednesday, May 20, 2020, at 9:00 a.m. via conference call and WebEx.

Members Present: State Treasurer Dale R. Folwell (Chair), John Aneralla, Loris Colclough, Lentz Brewer, Michael Mebane, Greg Patterson. Staff Present: Ben Garner, Brett Hall, Chris Farr, Ronald Funderburk, Fran Lawrence, Casey High, Gail Kadash, Kathy O'Neill, Matthew Krimm, Loren de Mey, Craig Demko, Christopher Morris, Linda Nelson, Michael Nichols, Carlene Hughes, Deana Moore-Solomon, Anne Roof, Laura Rowe, Ty Powers, Troy March, Tinh Phan, Jeff Smith, Rhonda Smith, Joe Farley, Greg Taylor, Jack Wilson, Meryl Murtagh, Nicholas Langley, Chris Ward, Thomas Causey, Sam Watts, Joan Fontes, Brian Bolcar, Brian Jackson

Others in Attendance: Joseph Zidle, G. Scott Kreft, Hazel Bradford, Lauren Albanese, Anne DarConte, Brian Kahley, and Jim Galvin.

AGENDA ITEM - OPENING REMARKS

The meeting was called to order at approximately 9:00 a.m. Meeting etiquette information, and WebEx/Conference line use was shared.

The Treasurer confirmed that 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

Mr. Colclough moved, Mr. Patterson seconded, and there was a member roll call to approve the minutes. The minutes were approved.

The Treasurer stated that the IAC resolution on the agenda for this meeting will be postponed until we are able to present it in person.

AGENDA ITEM – PERFORMANCE UPDATE

The Chair recognized Jeff Smith, the interim Co-CIO and Director of Fixed Income, and Christopher 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 \$282 million of savings since January of 2017 and the initiative is on pace to reach \$347 million by December 2020.

Mr. Smith then provided an update on the U.S. economic environment for the 1st quarter of 2020 with a brief mention of the current quarter changes, focusing on the significant economic and market impacts from COVID. He also discussed the unprecedented monetary and fiscal stimulus response. He discussed how the internal fixed income team was able to take advantage of the market dislocation and buy high quality credit at very low prices.

Mr. Morris presented an update on Assets Under Management (AUM), as of March 31, 2020. He stated the total AUM was \$130.1 billion. Mr. Morris mentioned that we are pleased with business continuation during COVID and our ability to be fully operational via telecommuting.

Mr. Morris reviewed the asset allocation as of March 31, 2020, as well as the current asset allocation. He discussed the over and under weights 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, with the more recent periods being largely driven by our conservative allocation as equity markets fell substantially during the 1st quarter.

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 onto 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, noting the gains in IG Fixed Income nearly offset the losses in public equity.

Mr. Morris next walked the committee through the Return Attribution charts, noting the portfolio created a value add of 3.0% versus the implementation benchmark, for the 1-year period. The allocation effect added 1.7%, while the selection effect added 1.4%. Over the 3 and 5-year horizons, there was positive value add, largely driven by selection effect.

Mr. Morris presented the Net of Fees Risk Metrics slide, showing values over rolling periods, highlighting the spike in volatility and tracking error as a result of the 1^{st} quarter's moves. He also discussed the upside /downside capture metric and a drawdown graph, showing the significant downside protection of the portfolio relative to the benchmark and broad domestic equities over the last quarter.

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 discussed the new Valuation Lag slide that details the value and % of the portfolio that has various lags in receipt of valuation and ultimately how that lag rolls into performance periods.

Next, Mr. Morris discussed the Alternatives liquidity profile, mentioning that we were cash flow positive at nearly \$1.2 billion for the prior 12 months.

Mr. Smith reported on Asset Class Performance and spoke to 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. There was discussion on how the department was able to reallocate monies back into equities as the markets were close to the bottom, and then subsequently pull the monies out after equities rallied, capturing sizable gains on the reallocation. There was also discussion on the increased commitments to a few Opportunistic Fixed Income deals in an effort to capture dislocations in the non-investment grade credit space.

Mr. Smith moved along to Asset Allocation History and the Top 20 Investment Managers slide, mentioning that 53% of assets are managed internally.

AGENDA ITEM – ASSET CLASS MARKET UPDATES

Mr. Smith opened the floor to the Asset Class directors to give a quick update on their respective portfolios.

Rhonda Smith discussed the Public Equity asset class, mentioning that "There was nowhere to hide" for Public Equity in the 1st quarter. Ms. Smith reported that equities were down nearly 33% from peak in February, to the lowest point on March 23rd, recovering slightly thereafter to end the quarter down nearly 20%.

Ms. Smith also noted that North Carolina's total equity portfolio has a modest growth bias that we will continue to monitor. Ms. Smith also discussed the fiscal and monetary efforts to revive the economy.

Ms. Smith reported that the equity performance year to date is down 9%, with small cap stocks largely underperforming large cap stocks.

Craig Demko gave an update on Private Equity. Mr. Demko mentioned that Private Equity general partners were playing defense before the magnitude of pandemic was clear, by working with the management teams and banks to secure and draw down lines of credit to ensure the companies had ample liquidity. He noted that the consumer discretionary space and energy space are receiving bulk of attention. Mr. Demko estimated that private equity is 10% down in 1st quarter, with those valuations flowing into the second quarter given the lag. He forecasts that the contribution and distribution cash flows will be much like the 2009 crisis and are expected to be down substantially from prior years.

Mr. Demko also stated there is now an opportunity of buying good companies with bad balance sheets that may have been over-levered.

Ronald Funderburk briefly discussed the Opportunistic Fixed Income asset class. He discussed the stress in the high yield markets and the portfolio's relatively secure capital structure positioning.

Mr. Funderburk also reported that multiple managers activated their dislocation sleeves in March to take advantage of opportunities that presented themselves due to the pandemic.

He also discussed the Inflation Sensitive portfolio. He discussed the significant fall in oil prices, noting that many of our energy managers have held sizable hedges against oil price falls. He discussed the significant volatility in WTI crude oil prices, which went negative at one point. Managers are nervous about energy going forward. Timber has held strong. Lumber prices fell but have rebounded.

The Treasurer thanked the team and introduced Joseph Zidle.

AGENDA ITEM – Blackstone Macro Update

Joseph Zidle, Blackstone's Chief Investment Strategist and Managing Director, Private Wealth Solutions, joined the meeting to give a global macro environment update. He provided an overview of the global economic and capital market impacts that transpired as a result of the COVID 19 pandemic, along with an overview of the unprecedented fiscal and monetary stimulus that was enacted.

Mr. Zidle discussed the significant jump in unemployment and forecasted that a sizable percentage of the layoffs would become permanent if bankruptcies increase. He anticipates it will be years before GDP recovers to Q4 2019 levels. He noted that the US personal savings rate in March had reached the highest level since 1981, which is not necessarily a positive driver for an economy driven largely by consumption. He also hit on the volatility and liquidity concerns in credit markets and how the Federal Reserve programs helped. He also discussed how corporate stock buybacks were the main driver of EPS growth over the last decade, rather than net income growth, as the denominator decreases rather than the numerator increasing. He also hit on the trend of declining capital expenditures by businesses.

Mr. Zidle discussed the large amount of US dollar denominated debt that is outstanding within Emerging Markets, and the dollar strength relative to the local emerging market currencies, which makes servicing the debt more expensive.

Mr. Zidle discussed the global trade environment, focusing on China's increased share of global trade, especially in the commodity space. He also contrasted the total R&D spending of the US and China over the last 16 years.

Mr. Zidle discussed mortgage financing and the long-term fundamentals for the housing market.

Mr. Zidle opened the floor for questions.

Mr. Patterson thanked Mr. Zidle for his presentation.

Mr. Aneralla asked about where to reach for returns without opening too much risk. Mr. Zidle responded that Blackstone are long term buyers. We have commitments that are undeployed. We viewed COVID as playing out in 3 phases. Phase 1 was sharp dislocation we saw in March. Lawmakers jumped in with incredible size and speed of aid. Blackstone was able to capitalize on opportunities of over-levered high-quality companies. Phase 2 we are seeing marginal companies coming to market needing rescue financing. We are sitting this phase out due to low quality of companies or due to their individual market concerns. Phase 3, stronger companies reenter market and need capital. Bifurcation that will separate average companies from stronger ones. On a long-term horizon, we are open for business (7-10 years).

Mr. Mebane asks Mr. Zidle to expand on risk between China/US relationship and how it will affect GDP. Mr. Zidle reiterated that these are his views and not Blackstone's. One thing US did to make the situation worse was starting a trade war. Took a bad recession and piled on tariffs to all imported goods, compounded problems. If there is a silver lining, it is US has potential to be a very powerful manufacturer. Currently 17% of China's workforce is in manufacturing, 10% of US is. We can reallocate the economy and adapt to become a very powerful manufacturer if we re-shore manufacturing. Global cooperation is good, the walls around nationalism will end up hurting more people but beginning in 2016 people around the world started voting that the benefits of globalization hadn't been delivered to them.

The Treasurer thanks Mr. Zidle for his time and closes with praise of Blackstone. The Treasurer posed the following - On an hourly basis, people are making more on unemployment than being employed. What are your thoughts on how this will affect shortage of labor moving forward?

Mr. Zidle answered that he believed this will be a problem. The unemployment insurance benefit well exceeds current wages for many. Pay will have to raise to match the unemployment benefit. The workforce participation rate continues to drop. He doesn't expect it to contribute to overall inflation to the economy. Companies will have to work with less employees.

Mr. Zidle ends his presentation and turns the floor over to Troy March.

AGENDA ITEM - Real Estate Asset Class Review

Troy March began the presentation by advising the IAC members that he was promoted to Director of Real Estate since the last meeting. He thanked the Treasurer and the Investment Directors for putting their trust in him.

Mr. March stated that the Real Estate portfolio is really two distinct asset classes, Core and Non-Core, each with their own role and objectives for the overall pension plan. Core's objective is to create durable income, stable returns, and act as an inflation hedge. We accomplish this through investing in high-quality well-located assets with the intention of holding them long term in low fee separate accounts. This reduces churn which reduces costs and increases yield over the long run. The objective of Non-Core is growth or absolute return. We invest with managers that have a proven track record of providing high, risk-adjusted returns from value-add redevelopment and ground up construction. Diversified portfolio construction, risk mitigation strategies and strategic exit optionality are a few of the things we find in common among our High-Conviction, Non-Core managers.

Mr. March reported that presently, real estate makes up approximately 8.75% of the total plan. Over the last 6 years we have been steadily rotating our portfolio more towards a core bias and today we are approximately 65% core real estate.

Mr. March discussed Real Estate performance at year end 2019 and through the end of the first quarter of 2020. This difference in performance is 100% due to Real Estate Investment Trusts ("REIT"). REIT's are an important part of our portfolio construction. Mr. March mentioned that from early 2018 to February 2020, REITs went on a tear and were up significantly over private real estate and general equities during that time. Having both REIT's and private real estate improves yield and reduces volatility over longer time periods.

Mr. March noted that the benchmark relative excess returns in the Core portfolio are due in large part to us rotating out of open-end, commingled, core funds and curating a portfolio of separate accounts with our high conviction managers. This has allowed us to obtain high quality assets and hold the assets long term. These separate accounts help us reduce management fees and lower expenses overall due to reduction in churn of the assets.

Mr. March presented that our Non-Core portfolio continues to perform well on an absolute and relative basis. Unlike in the Core portfolio, the outperformance is shrinking not growing. As the Non-Core portfolio ages, we have a growing percentage exposure to legacy Investments with groups not considered High Conviction. As our Non-Core portfolio shrinks, it is also aging such that the average hold period

lengthens, and we will therefore have a higher percentage exposure to these legacy and tail positions going forward.

Mr. March next spoke about unfunded commitments and pacing projection. The last time Real Estate presented, in February 2019, our unfunded commitments were \$2.2 billion. Presently we have approximately \$1.3 billion of unfunded commitments, of which approximately over \$600 million are reserves that likely will never be called.

Mr. March moves on to discuss the five main property types: Office, Retail, Residential, Industrial and Lodging.

Mr. March presented that we are significantly underweight Industrial in both Core and Non-Core. This is unfortunate as Industrial has been the best performing asset class for several years now. The industrial demand has consistently outpaced supply over the last 7 years. The growth of e-commerce will continue this trend for at least several more years. Presently global e-commerce penetration is 16%. The pandemic will accelerate the e-commerce penetration trend line upwards considerably near term as consumers quickly have been forced to get even more accustomed to ordering things online. Industrial, particularly infill industrial, will remain one of, if not the best real estate sector for at least the next five years.

Mr. March next mentioned that we are overweight multi-family and like our positioning there. People need a place to live. Overall there is a housing shortage, certainly pockets of oversupply here and there but in general a shortage. Occupancy nationally was 96% at end of the first quarter. Rates will soften near term and likely decline in some markets, but occupancy will remain high, in our portfolio at least.

Mr. March presented that we are modestly overweight Office in our Core portfolio and materially underweight in our Non-Core portfolio. He would prefer to be underweight in both, due to the CAPEX reasons previously mentioned. There is a lot of uncertainty right now but long term he believes the fate of office will depend on the health of our economy not changes to usage patterns.

Mr. March reported that we are underweight retail in both Core and Non-Core real estate. Mr. March mentioned that he would prefer even less exposure. Only 20% of our retail are malls and those are generally high-quality malls. The rest is grocery anchored and necessity-based retail, which is less offensive.

The Treasurer thanked Troy March for the Real Estate presentation.

AGENDA ITEMS - IAC MEMBER Q&A

IAC Members were provided with the opportunity to pose questions to the Treasurer and IMD staff.

Mike Mebane welcomed the Treasurer back and told him that he is appreciative that the Treasurer can return to work and is healthy.

Mr. Aneralla reiterated Mr. Mebane's sentiment and said that he looks forward to seeing everyone again.

AGENDA ITEM - PUBLIC COMMENT

No one signed up for public comments.

ADJOURNMENT

The Treasurer mentioned his appreciation for the Staff, to be in the top 12th percentile during this pandemic is fantastic. The Treasurer mentioned that all communities throughout the state are having their own issues during this pandemic.

Mr. Patterson motioned to adjourn. Mr. Colclough seconded the motion.

The Treasurer had one final question, are we up fiscal year to date? Mr. Morris responded, yes, currently about 1.5%.

The Treasurer confirmed that we have a motion and a second. Ben Garner calls role to adjourn.

Mr. Aneralla, Mr. Brewer, Mr. Mebane all agreed to adjourn.

The Treasurer officially adjourns meeting.

DALE R. FOLWELL, CPA

NORTH CAROLINA STATE TREASURER AND CHAIR