

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER
INVESTMENT MANAGEMENT DIVISION
INVESTMENT ADVISORY COMMITTEE**

MINUTES OF MEETING

April 19, 2016

Time and Location: The Investment Advisory Committee (“IAC” or the “Committee” met on Tuesday, April 19, 2016, in the Dogwood Conference Room of the Longleaf Building, 3200 Atlantic Avenue, Raleigh, North Carolina.

Members Present: The following members were present: State Treasurer Janet Cowell (Chair), John Aneralla (by teleconference), Mike Mebane, Neal Triplett (Vice-Chair), and Steve Jones (by teleconference).

Members Absent: Courtney Tuttle and David Hartzell.

Staff: The following staff members were present: Patrice Alexander, Renee Bezaire, Kim Baker, Kristen Bierline, Brian Bolcar, Mary Laurie Cece, Robert Curran, Craig Demko, Ronald Funderburk II, Alison Garcia, Kathy Hahn, Brett Hall, Karen Hammond-Smith, Ryan Hill, Sean Incremona, Taylor Jackson, Schorr Johnson, Arlene Jones-McCalla, Gail Kadash, Kathy Kornak, Matt Krimm, Fran Lawrence, John Leraas, Deana Moore-Solomon, Chris Morris, Neal Motaparthi, Tinh Phan, Norman Schiszler, Kevin SigRist, Jeff Smith, Anthony Solari, Tessa Tanis, Greg Taylor, Blake Thomas, Steve Toole, Sondra Vitols, Chris Ward, Sam Watts, Zhexing Zhang.

Others in Attendance: Amy McDuffee (Aon Hewitt), Flint Benson, Kai Peterson (Buck Consulting), Liz Smith.

AGENDA ITEM – OPENING REMARKS

The meeting was called to order at approximately 10:00 a.m. Treasurer Cowell took the opportunity to thank all of the board members for their service to the Investment Advisory Committee and hoped that they will continue to serve the board through the end of the year. Kevin SigRist echoed the Chair’s sentiments, citing the need for continuity and several projects that remain for the remainder of the year. Blake Thomas, Deputy General Counsel, highlighted the rules regarding Committee tenure. Under state law, Committee members continue to serve until they resign or are replaced. Historically, Investment Advisory Committee board members have continued to serve under the new administration until the new Treasurer appoints a new board member(s) for their seats, should he opt to do so. Typically board members in seats that are earmarked for TSERS/LGERS Board representation (i.e. Mike Mebane and John Aneralla’s current seat) will remain on the Investment Advisory Committee until the Treasurer has appointed a new IAC member from the persons appointed by the Governor to the TSERS/LGERS Board.

AGENDA ITEM – APPROVAL OF MINUTES

The Chair asked for approval of the minutes of the November 18, 2015 quarterly meeting and the January 8, 2016 special meeting. Mr. Mebane moved to approve the minutes and Mr. Triplett seconded. The minutes were approved as written.

AGENDA ITEM – INITIATIVES AND PERFORMANCE UPDATE

The Chair then recognized Mr. SigRist, Chief Investment Officer, to provide an overview of initiatives, as well as an update on the performance of the investments for the North Carolina Retirement Systems (“NCRS”).

❖ **LEGISLATIVE AGENDA**

Mr. SigRist highlighted that the legislative initiatives for the short session were divided into two categories: Policy Changes and Administrative Changes.

Policy Changes – Mr. SigRist outlined a proposed set of policy changes to existing statutes, as listed in the meeting memorandum. Among these changes, he specifically noted adding flexibility around asset allocation based on the findings from the Asset Liability Study and addressing operational flexibility, including the ability to create positions within the Investment Management Division. There was some discussion around whether would be any push back against these proposed changes from the General Assembly.

Administrative Changes – Mr. SigRist outlined a proposed set of administrative changes to existing statutes, as listed in the meeting memorandum. One primary goal of these changes was to clean up inconsistencies in the State Treasurer’s statute. The current statute was developed over time in a piecemeal fashion, and it has not always been updated comprehensively over time as the Treasurer’s duties and markets have changed. Specific examples of the proposed bill’s administrative corrections include:

- Expanding the fiduciary duties of the Treasurer to include all funds invested with the Treasurer, not just the Retirement Systems;
- Leveling the playing field between asset classes as to what types of investments may be internally managed and what may be externally managed;
- Clarifying the Inflation Protection Portfolio’s statute to make clear that it includes investments in real assets regardless whether the intent of staff was to protect against inflation or maximize risk-adjusted returns;
- Requiring IAC consultation for portfolio guidelines and codification of policies; and
- Allowing the investment strategy to differ between different Retirement Systems, based on their potentially different circumstances.

On the second point above, Mr. SigRist commented that the choice between internal management and external management should be an investment decision where cost, alignment, and resourcing are taken into account.

Mr. Mebane asked whether there has been any discussion about increasing the bandwidth of asset allocation for individual asset classes. Mr. SigRist confirmed that that will be discussed during the Asset Liability Study discussion.

❖ **NCRS PERFORMANCE REVIEW**

Mr. SigRist presented the Performance Review to the IAC.

Economic Environment—The economy has not changed much since the November meeting and January check-in. There is lots of volatility in the market. Inflation is low but rising slightly due to the impact of oil prices and the strength of the dollar. The markets continue to price inflation at 1.5 to 1.7%,

which is still a low level of inflation pressure. Globally, Europe is in a similar situation, but slower growth. They are trying to stimulate demand but there is not much demand or growth. Emerging markets in Brazil and China are 3 to 5% below their potential growth.

Assets—The Department had approximately \$100B of total assets under management. The cash program is up a bit due to the amounts in the rainy day fund. Staff were working to transition into external management approximately \$2B in dollars from other non-pension funds and state and local government entities. As of the meeting date, the Retirement Systems were overweight in Public Equity due to the 7% rise in the markets in March and the 1-2% rise in April. Private Equity was near target, largely due to strong returns of 9% over the last year. Investment-Grade Fixed Income was pretty much on target; the March/February drawdown of approximately \$680M worked well for the Systems. The Department rebalanced \$500M into equities in February.

Total Net Portfolio Return vs Benchmarks—Mr. SigRist noted that equity markets were driving the majority of returns. Inflation and Opportunistic Fixed Income are the weak side of the ledger, offset by Private Equity and Real Estate. Compared to the long-term policy benchmark, which avoids operationally intensive benchmarks, NCRS has performed better.

NCRS Net Return Attribution—The portfolio return was better than the investment policy return by 63 basis points for the year ending 2/29/16. Manager and/or security selection account for positive 74 basis points; however, that gain was reduced by a negative allocation effect of 11 basis points. On average for the year, the Fund was overweight in Public Equity or Non-Core Real Estate and underweight in Opportunistic Fixed Income, Private Equity, and Core Real Estate. Mr. SigRist also noted the following:

- Public Equity added 22 basis points based on their section of managers or investments.
- Core Real Estate is experiencing a J-curve effect.

Jeff Smith explained that investment grade fixed income is underperforming by 15 basis points. A significant factor in Investment Grade Fixed Income performance was driven by durational positioning. While the short term investments continue to outperform, the core investments performed relatively poorly. Staff are looking at narrowing the duration gap to minimize the tracking error that comes from the uncertainty of rates.

Comparison to Peers—Compared to peers that manage more than \$1B assets, the Retirement Systems' returns are better than the median, and the Retirement Systems' risk is lower. Sharpe ratio measurements put NCRS in the top quartile on an adjusted risk basis. Mr. Triplett commended the staff on performance that continues to be above the median performance while maintaining low risk.

Public Equity's net performance beat the benchmark at the one year mark; however, the domestic portfolio underperformed the benchmark fairly significantly. The domestic part of the portfolio is currently 73% indexed; there is no view to replace large-cap active performance unless there is a compelling reason to do so. The Public Equity external consultant (Callan) will complete its structural review of the entire asset class in the fall. Non-US and Global portfolios performed well against their benchmarks. Mr. SigRist pointed out the effect of funding \$2.5B in the portfolio's public equity hedge component. The funds are with BlackRock in an 0.4 beta passive staging portfolio. NCRS anticipated that it would be funding up equity hedge funds over a period of time, but staff were concerned about the market. NCRS preserved approximately \$168M by funding the passive staging portfolio in anticipation of hiring and funding hedge funds in the future. Mr. SigRist commented that this was a good testament to the team, including the internal staff investment committee, thinking through the pipeline of investments, recognizing the

uncertainty of when due diligence will be complete, and in the meantime taking raw market risk off the table.

The performance of Opportunistic Fixed Income will be discussed later this afternoon. The summary is that we have done well against its benchmarks. The asset class was down about 5%; the benchmark was down 12%. Staff were disappointed with the performance of the NCRS hedged fixed income portfolio, which is a credit-oriented fixed income portfolio. Staff have exited some of those investment vehicles, finding that the hedging was less effective than it should have been. Managers took on more equity risk than they should have. The managers had strength of conviction in their positions, and they may ultimately recover and come back. These managers were in line with how the broader high-yield market performed, which was against NCRS expectations. Treasurer Cowell asked whether there was a list of the exits from this asset class. Mr. SigRist indicated that there was not; typically we provide the new and interim commitments but would be happy to provide a list of exits.

New and Incremental Investment Commitments—Mr. SigRist walked through the list of new and incremental commitments since the November meeting. Mr. SigRist then transitioned to the discussion of the Asset Liability Study.

AGENDA ITEM – NCRS ASSET LIABILITY STUDY

Mr. SigRist introduced Mr. Kai Peterson with Buck Consultants who performed the Asset Liability Study. The format of the asset liability study discussion was that Mr. SigRist would provide an overview of the goals, context and general modeling of the project, then Mr. Peterson would walk through the analytics and assumptions.

Overview of Project Goals—Mr. SigRist emphasized that the asset liability studies are fundamentally about structuring investments in order to pay benefits to plan beneficiaries over the long term. The goal is to keep the long-term contribution rates at a reasonable level while avoiding excessive volatility in the contribution rate. If we take too little risk, the long-term cost of the program increases with little contribution rate volatility. If we take too much risk, the hope is that the overall cost of the program will be lower, but the contribution rates will be volatile and there is a higher chance that the rates will not be sustainable. The purpose of the project is to illustrate the impact of portfolios that are customized to perform under various market scenarios.

Asset Liability Study Modeling—With the 2016 Study update, the baseline asset allocation assumptions were updated, three scenario-based asset allocation models were created, then Buck Consulting applied their asset liability modeling to TSERS to produce various cost and performance projections focusing on the 10-year numbers based on the January Special Meetings to determine the impact on different types of investment policies in the different asset allocation scenarios. The staff developed model portfolios to run the asset liability study against. The role of the asset classes did not change, and there are three big types of roles within the portfolio: return-seeking (growth), risk-reducing, and inflation sensitive.

Baseline Asset Allocation Assumptions: The key assumption is equity returns, which impacts the equity-oriented asset classes. The team adjusted Buck's base GEMS model assumptions to come up with a reasonable set of assumptions with which the staff was comfortable, as reflected in the table on Slide 6 of presentation (page 63 of the materials). Mr. SigRist also highlighted the appendix on slides 16 through 18 that fully detailed the requested assumption adjustments to the model, as well as a comparison of the

assumptions across the 10-year and 30-year horizons. Mr. SigRist then walked through a comparison between the 2014 and 2016 Asset Liability Study projected returns under the current policy.

Scenario-based Asset Allocation Models: Staff created several scenario-based model portfolios:

- Steady Growth and Inflation, which would function better than the current asset allocation if there is steady growth and inflation over a longer period of time;
- Low Growth and Inflation, which performs better if inflation is low and economic growth is tepid;
- High Growth and Inflation, which performs better when growth and inflation are rising more than expected; and
- a Blended Model that blends the three models via a weighted average of 50% steady growth and inflation, 25% low growth and inflation, and 25% high growth and inflation.

Mr. SigRist then walked through how the assets were allocated within the various models (Slide 10), how the allocations would comply with current statute (Slide 11), and how our current asset allocation policy compares to other peer plans (Slide 12).

Mr. SigRist then opened the floor, and there was discussion within the Committee on the following matters:

- Whether the improved financial outcomes that the modeling illustrates were material enough to support moving assets and requesting statutory changes to the asset allocation caps;
- If the Committee supported the changes, should the requested flexibility be centered around the individual asset classes, or should the cap just be in the aggregate;
- Given the variance amongst the high and low quartiles across the various model environments, how much weight should be given to those considerations; and
- Should there be a static (so-called “set and forget”) policy, or should the policy be more dynamic in that it changes over time.

The Committee began to discuss various approaches and any additional information that may help to inform the decision, e.g. illiquidity, currencies, and time horizons.

Mr. SigRist turned the floor over to Kai Peterson with Buck Consulting to walk through an analysis of the preliminary results of the asset liability study.

TSERS Asset Liability Study—Mr. Peterson began his presentation with an overview of the project purpose and goals of developing strategies and tactics that will: reasonably ensure earning the actuarially assumed rate of investment return within a desired level of likelihood; maintain levels of diversification suitable for the Retirement System’s size and investment opportunity; develop and employ suitable risk management measures to limit exposures to market downturns; and provide the necessary liquidity to meet benefit obligations as they come due. Mr. Peterson provided a general description of the Retirement System and noted that although it is healthy (95% funded), currently TSERS is in a negative cash flow situation. Mr. Peterson then explained the TSERS Board’s recently adopted Employer Contribution Rate Stabilization Policy and how it factored into the capital market (key) assumptions.

The IAC then broke for lunch and reconvened at 12:45 p.m.

Mr. Peterson walked through the asset allocation policy alternatives, their costs, and returns. To summarize the results, Mr. SigRist pointed out that the state of the world determines which portfolio works

best. If the expectation is low equity performance and low costs, the low growth and inflation portfolio works best. In a high equity scenario, steady growth or inflation or high growth and inflation portfolios perform better. In the middle, the steady growth and inflation portfolio works best. The blended scenario model tends to show up in the top three for most of these; it is a fairly well-functioning model in a broad set of circumstances.

Discussion continued throughout and following Mr. Peterson's presentation. The takeaways from the discussion included:

- The IAC would need to consider asset liability modeling for LGERS at the next meeting.
- There was some comfort within the IAC for seeking additional flexibility in the asset allocation limits through legislative changes.
- The Asset Liability Model was helpful in showing benefit of additional flexibility to the portfolio.

AGENDA ITEM – OPPORTUNISTIC FIXED INCOME

Ronald Funderburk introduced Ryan Hill as the new portfolio manager in credit and inflation. He also recognized Kathy Hahn, John Leraas, and Zhexing Zhang, the other members of his team. Mr. Funderburk began his overview of the portfolio's performance with a summary of the market environment: The 10-year Treasury yield is going down, there is currently a spike in the cost of credit relative to the 10-year Treasury yield, and there has been a near term increase in the Treasury term but it is flattening out. The portfolio consistently outperforms its benchmark because the team is choosing the right benchmark and the allocation of the portfolio is underweight in strategies that are performing badly. For the calendar year (2015), the portfolio was down 2%, but the benchmark is down 7%. Our bias has been towards being high in the capital structure, protecting the downside, and seeking to create opportunity on the upside. That has remained unchanged since the team's presentation last year.

Portfolio Characteristics – Ryan Hill walked through the portfolio characteristics. The portfolio is still a little underweight (5.9%) relative to target (7%) despite being less underweight than this time last year (5.7%). There are four underlying strategies in the portfolio: hedge fund allocation, distressed credit, special situations, and traditional corporate credit. The portfolio, primarily concentrated in North America, is largely allocated to hedge funds, with the capital structure being allocated to senior. Special situations and distressed credit were the outperformers of the portfolio; traditional corporate credit and hedge funds did not perform as strongly.

Annual Portfolio Review – Mr. Funderburk provided a review of the portfolio. It did not perform as well as the team had envisioned, but it performed better than high-yield. The underperformance in the credit strategy was due in significant part to lack of liquidity in the marketplace (banks were no longer lending) and counterparty risk from limited partners who give their managers a shorter fuse and want to access liquidity on a quarterly basis. Moving forward, we may want to review those situations and consider changing the capital structure of the portfolio. The takeaways from the current cycle are that the portfolio could benefit from additional diversification and exposure in credit multi-strategy, global and European distressed, and structured credit. In addition, the portfolio could use structural enhancements in long-biased strategies, closed end vehicle, and separate account and opportunistic mandates.

Forward Looking Opportunity Set – Mr. Funderburk commented that moving forward, US whole loans and the European credit are looking less attractive; long-biased strategies, increasing closed-end portfolios, separate accounts, and opportunistic mandates are looking more attractive.

Strategic Considerations for Discussion – Mr. Funderburk presented two areas for feedback from the IAC. First, what is the optimal structure for the portfolio? Second, where are we in the credit cycle (i.e. what is our risk tolerance in the current environment)? Mr. Mebane began the discussion by inquiring whether we were shifting some of the long-short hedge into special situations. Mr. Funderburk answered that we were, but often time limits the Retirement Systems' ability to deploy capital with reliable managers. Mr. Triplett asked whether the team had considered putting money in ETFs for safekeeping. Mr. Hill indicated that they were working on putting a separate managed account in place to allow the manager to deploy capital in a high yield or leveraged loan with the intent of being opportunistic rather than deploying capital as quickly as possible. Treasurer Cowell asked whether the team had looked at emerging managers. Mr. Funderburk confirmed that they generally use their relationship with PAAMCO to assess emerging managers in the space. Mr. SigRist also commented that the team can leverage the managed account platform to gain exposure to emerging managers without the fund-of-fund fees that would be associated with doing so through PAAMCO. Lastly, Mr. Triplett commented that with regards to the credit cycle, we are still pretty early in the default cycle. Combining that with liquidity would be setting up for a tail event in the credit market. Mr. SigRist commented that the team is routinely told that they have very low exposure to emerging market debt and asked whether there were any thoughts on that. Mr. Triplett replied that if you are going to take that exposure, he would rather take it through equities rather than through debt.

Treasurer Cowell asked a member of the Committee to make a motion to enter a closed session, pursuant to G.S. 143-318.11(a)(1) and (a)(6), for periodic staff evaluation. The Chair's proposed motion noted that for purposes of subdivision (a)(1) of G.S. 143-318.11, the session involved personnel file information that is made confidential by G.S. 126-22. The Chair's proposed motion noted that for purposes of subdivision (a)(6) of G.S. 143-318.11, the session would involve evaluation of the performance of present public officers or employees. Mr. Triplett moved for the committee to enter the closed session, Mr. Mebane seconded the motion, and it was unanimously approved.

AGENDA ITEM – EXECUTIVE SESSION ON CIO EVALUATION (CLOSED)

AGENDA ITEM – IAC MEMBER Q&A

There were no further questions raised by the IAC Members.

AGENDA ITEM – PUBLIC COMMENT

There were no public comments.

ADJOURNMENT

It was noted that the next IAC meeting was scheduled for July. Ms. Cowell thanked everyone for their attendance and input. Mr. Mebane motioned to close the meeting and, seconded by Mr. Triplett. The meeting was adjourned at approximately 4:00 p.m.

APPROVED BY:

JANET COWELL
STATE TREASURER AND CHAIR