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

MINUTES OF MEETING
May 20, 2015

Time and Location: The Investment Advisory Committee ("IAC") met on Thursday, May 20, 2015, in the Dawson Conference Room of the Albemarle Building, 325 North Salisbury Street, Raleigh, North Carolina.

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

Members Absent: Steve Jones

Staff: The following staff members were present: Craig Demko, Ronald Funderburk II, Alison Garcia, Kathy Hahn, Brett Hall, Arlene Jones-McCalla, Kathy Kornak, Fran Lawrence, Troy March, Deana Moore-Solomon, Chris Morris, Tinh Phan, Norman Schiszler, Kevin SigRist, Jeff Smith, Rhonda M. Smith, Blake Thomas, Tim Viezer, and Chris Ward.

Others in Attendance: Jim Baker, Hazel Bradford, Kristen Doyle, Jim Fortis, Gaynor Fries, Michael McCormick, Peter Miller, and Liz Smith.

AGENDA ITEM – OPENING REMARKS

The meeting was called to order at approximately 10:00 a.m. The Chair, Treasurer Cowell, announced Mr. Aneralla and Ms. Tuttle were attending by teleconference and that apologies for absence had been received from Mr. Jones.

AGENDA ITEM – APPROVAL OF MINUTES

The Chair asked for approval of the minutes of the March 5, 2015 meeting. Mr. Mebane moved to approve the minutes and Mr. Hartzell 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").

❖ ***INVESTMENT MANAGEMENT DIVISION INITIATIVES***

Mr. SigRist mentioned that the Investment Management Division (the "Division") had been going through the following initiatives for approximately two years:

May 2014 Asset Allocation Transition Plan – Mr. SigRist highlighted the May 2014 gap to Investment Policy Statement target figures and the areas NCRS was overweight: Public Equity at $2.4 billion, Investment Grade Fixed Income at $3 billion and Non-Core Real Estate at $1.5 billion. If NCRS moved to the Policy targets, there would be a total of $6.9 billion to move. The areas where NCRS was underweight were Private Equity, Opportunistic Fixed Income, Core Real Estate, Inflation Sensitive and

Cash & Multi-Strategy. Rebalances were contemplated in Public Equity Long to Long/Short for $2.7 billion and Multi-Strategy at $1 billion. Annualized commitments were included in the Work Plan.

Progress on May 2014 Transition Plan - Mr. SigRist highlighted the overweights and changes from the May 2014 Policy target gap to the position as at May 13, 2015. The gap amounts had reduced from $6.9 billion to $4.338 billion, with Public Equity increasing from $2.4 billion to $2.856 billion, Investment Grade Fixed Income decreasing significantly from $3 billion to $420 million, and Non-Core Real Estate decreasing to $1.062 billion from $1.5 billion (which is where they thought they would be).

NCRS Net Cash Flows Through May 13, 2015 – Mr. SigRist presented a chart to the IAC and gave an overview of key points: benefits had been paid at almost $2.4 billion; Multi-Strategy had not moved; Inflation Sensitive added net cash of $1.2 billion; and Opportunistic Fixed Income had grown by $660 million. NCRS had been very actively making commitments in Non-Core Real Estate and the cash coming back is outstanding. Private Equity is also seeing money coming back, with contributions ahead of distributions this year.

Asset Allocation Transition Considerations – Mr. SigRist commented that in the area of overweights, Non-Core Real Estate was projected to have a $1.5-$1.7 billion gap in 2016. It was earlier in the cycle and had atrophied quicker than thought, so had a risk of undershooting. Private Equity is underweight and also has a risk of undershooting. Planning was over the next 5 years and so, as all areas have to add to 100%, the Division needs to monitor where the overweights and underweights occur.

NCRS Asset Allocation as of May 13, 2015 – Mr. SigRist presented an outline of the asset valuation in the main areas of Growth, Inflation Sensitive & Diversifiers, Multi-Strategy, and Rates & Liquidity, with Inflation Sensitive being the most significant underweight. If Non-Core Real Estate is declining closer to zero, NCRS would have to consider where to take it, with possibilities in Value Add or Opportunistic Investments. Mr. SigRist stressed that, at some point in the next 5 years, we are likely to see the top of the cycle and NCRS needs to plan for that.

Mr. Mebane asked how often asset liability studies take place, and when the next study would happen. Mr. SigRist replied that such studies used to be undertaken every 3-5 years. Ms. Doyle added that every 3 years is more customary now. Mr. SigRist confirmed that the last study happened around 2 years ago, so it would be another year or so before the next study would take place.

Mr. Triplett commented that NCRS needs to be steady about the commitment pace and that it is unlikely NCRS will ever be at target – always over or under. Mr. SigRist mentioned that the process of staging portfolios has been discussed before, particularly in the area of Inflation Sensitive. Mr. Funderburk added that he had spoken with eight managers to discuss options and that, particularly in the area of Real Estate, it might be more advantageous over time to separate. Mr. SigRist confirmed that the Division is staying on top of this and do not feel it is a cause for concern at this point. Mr. Mebane noted that is seems the Division is being very conservative and it seems we are defaulting to liquidity.

Investment Projects and Priorities – Mr. SigRist gave an overview of the Division's projects and priorities. They have created a committee to support corporate governance initiatives, evaluating ESG strategies and expanding efforts to implement diversity engagements and divestment policies. Mr. SigRist added that federal laws regulated the process for Iran divestment. Turning to ancillary (non-Retirement Systems) investors with the Department of State Treasurer, Mr. Mebane asked how large the ancillary funds were. Mr. SigRist confirmed around $140 billion.

Other initiatives mentioned by Mr. SigRist included: evaluating fund of funds; evaluating low conviction funds/managers; researching and implementing strategic co-investments programs and/or secondary programs (Mr. SigRist noted that NCRS had been doing co-investments with individual managers); reviewing small and emerging manager programs (Mr. SigRist confirmed NCRS was not ready to announce a small and emerging manager private equity program, but was getting close); procuring a Public Equity consultant (six firms had been interviewed for this role); and, as mentioned earlier, evaluating liquid "staging portfolios" for Core Real Estate and Inflation Sensitive.

Operations and Risk Management Priorities – Mr. SigRist outlined some of the priorities in this area. Mr. SigRist discussed creating new "Assistant Director" roles and filling several vacant positions, including the position of Director of Multi-Strategy. Mr. SigRist also added that a new Chief Operating Officer position was being advertised. Mr. Hartzell asked about the expected timescale for that position and Mr. SigRist explained that the position would be advertised for 30 days and then the process would start from there, so it would be several months before that person was in place.

Mr. SigRist announced the Division has hired Ernst & Young to help them prepare for the upcoming audit and streamlining and developing new IMD procedures. The Division is also implementing a total fund risk system and will give the IAC a demo early next year to show the system capabilities. The Division is working to institute a structured third-party review of fees and incentive payments, which was a sub-project with Ernst & Young. Ernst & Young are looking at best practices and designing a process to utilize our data. This review would be rolled out over the next two months.

Other DST Initiatives to Support – Mr. SigRist noted that the General Assembly was in its long session. He commented that Division staff have been working on a bill that would build a venture capital program for the Escheat Fund, but there was not much else in the way of legislative activity for the Division at this point. Finally, Mr. SigRist noted that for the State's Supplemental Retirement Plans, the Department was re-evaluating the roles of the Investment Management Division and the Plans' external consultant . It was recommended that the Division take a more central role in the plan.

❖ ***NCRS PERFORMANCE REVIEW***

Mr. SigRist presented a performance review to the IAC.

Total Net Portfolio Return vs Benchmarks – Mr. SigRist noted that the portfolio's performance over the last year had done well against the three benchmarks, at 5.9%. Over one year, Private Equity added 14 basis points vs the benchmark, largely driven by biotech within venture that is extremely strong. Special Situations is seeing a J Curve. Non-Core Real Estate is very strong and a headline contributor at almost 50 basis points. IG Fixed Income is on the negative side with a short duration relative to the benchmark, so had moved against us. Inflation Sensitive added 31 basis points, but Commodities were down 21 basis points for the year, which dragged it down. Inflation and Real Assets outperformed significantly. Core Real Estate continues to be a work in progress. Some funds are doing well and some are lagging. The team is looking at this to consider the best way forward.

Mr. SigRist asked if the IAC had any questions and Mr. Hartzell requested an overview of the new commitments since the March meeting. In response, Mr. SigRist discussed the IAC the relevant slide in detail. In Public Equity, a reallocation of $3 billion had been made to Piedmont Advisors, a local firm in Durham, NC. Piedmont is receiving a fee to train NCDST staff in immersion on how to implement an equity index fund in-house. This would be a 2-3 year process requiring a software purchase, and moving monies in-house. Mr. Mebane asked whether the motivation for this initiative was related to performance or fees and Mr. SigRist replied that while the performance aspect would remain essentially unchanged and costs would slightly be reduced, it is more a case of acquiring control and cultivating a strategic relationship with Piedmont. Mr. Hartzell asked whether a lot of our peers had done this and Mr. SigRist confirmed that larger plans tend to do this in-house. In the Private Equity asset class, Innovation Fund II was noted as being targeted to be two-thirds co-investments and one-third funds. In the Inflation Sensitive asset class, it was commented that Strategic Partners Fund Solutions was an affiliate of Blackstone, and Intervale Capital was noted as being an energy services add-on.

AGENDA ITEM – INVESTMENT BENCHMARKING DISCUSSION

Mr. SigRist introduced Ms. Doyle and Mr. McCormick from Aon Hewitt to discuss the area of benchmarking. Ms. Doyle thanked the IAC for having them back again from the March meeting to do a deeper dive into some areas. A memo had previously been circulated to the IAC concerning the open issues, but Ms. Doyle confirmed she was happy to take questions or go in a different direction of discussion, if the IAC preferred.

Project Overview - Ms. Doyle outlined the plan to analyze the NCRS Total Plan benchmark and assist the IAC to understand its current construction as well as historical composition. The purpose of this was to determine how should the IAC be measuring the success of the Plan and whether the current use of private equity was appropriate for the Plan. The analysis included reviewing the performance reporting provided to the IAC, evaluating peer group usage and potential for identifying a standard universe, and providing insight on peer handling of international currency exposure in their non-US equity and non-US fixed income portfolios.

Benchmark Review – Ms. Doyle presented a slide to highlight how the NCRS benchmark has changed over time from the period of 1960 to 2010. She noted that as new asset classes become available to be invested in, the total fund benchmark should reflect that allocation.

NCRS Benchmark Restatement (Implementation Benchmark) – In the middle of last year, NCRS got closer to policy allocations which are now static and set going forward. In July of 2014, NCRS Staff restated the Legacy Benchmark and created the Implementation Benchmark with the intention of aligning the historical policy exposures more consistently with the current policy structure. The restatement methodology included Burgiss Group data for both Private Equity and Non-Core Real Estate. Mr. SigRist commented on the previous recommendation to move away from Dynamic Weighting. The new Implementation Benchmark largely follows allocation. Benchmarks are used for each component asset class and it is believed they are solid and best practice. Mr. Triplett asked if this benchmark was set back into history and Ms. Doyle confirmed it was.

Mr. Hartzell asked for clarification on how, with new asset classes, benchmarks could be set back. He also asked how far the Burgiss goes back. Mr. McCormick answered that it goes back to the 1980s. We are using the best, most robust benchmarks.

NCRS Benchmark Restatement (Long Term Policy Benchmark) – Mr. McCormick outlined that, in July 2014, the NCRS Staff also created the Long-Term Policy Benchmark with the intention of replicating the projected volatility of the investment program utilizing broad traditional asset classes. The purpose was to assess whether NCRS is being compensated for the risk by broadening out and continuing with this Long Term Policy Benchmark.

NCRS Benchmark Restatement (Legacy Benchmark vs Implementation Benchmark) – The Legacy Benchmark and Implementation Benchmark are both intended to represent the actual exposures of the investment program over time. Legacy is the most representative of the Plan's asset allocation exposures over time. The most meaningful difference between the benchmarks is the Implementation Benchmark's higher relative weight to international equities. Mr. McCormick stressed that one of the concerns in the previous meeting had been whether NCRS can use the implementation benchmark to monitor performance of the plan. Referring to the chart provided, Mr. McCormick explained that the green line was the relative performance of US Equities. It used to be at 90% US, now it is around a 50-50 split. US equities are strong relative to international equities. The Fund was deliberately overweight in US in the 1990s so the benchmark should reflect that. While Aon Hewitt is generally comfortable with the Implementation Benchmark, the recommendation is to break out.

Mr. Triplett asked whether the benchmarks should be adjusted annually. Ms. Doyle responded that the recommendation goes back to the time when NCRS moved from the US bias. Mr. SigRist confirmed that the recommendation is to reflect the policy, leaving out the decision to have a home country bias.

Benchmark Review – Mr. McCormick gave the IAC an overview of the underlying benchmarks utilized within the Total Fund Benchmark. Public markets + premium and NCREIF ODCE + premium are often used for Private Equity and Non-Core Real Estate, respectively, but Aon Hewitt is comfortable with including Burgiss in Total Fund Benchmark and peer benchmarks. Mr. McCormick confirmed that, although Aon Hewitt generally has a preference for static policy weights over dynamic weighting, they are comfortable with all of the benchmarks utilized within the Total Fund Benchmark. No changes were recommended.

The Chair asked whether Aon Hewitt saw a consistent premium in the benchmark, and Mr. McCormick confirmed that divergence used to be 400-600 basis points but it is now down to around 300 basis points for Private Equity. Mr. Triplett asked about the Long-Term Benchmark and the role of public vs private. Mr. SigRist replied that they may do a review of public vs private to ensure risk levels, etc. Mr. McCormick added they were using Burgiss, which was slightly different to others, but NCDST is slightly ahead of the curve. Mr. Hartzell asked about long-term index values and Mr. SigRist replied that he did not know, but could research and find out for the IAC.

Mr. McCormick added that Aon Hewitt generally prefers HFRI as the broad opportunistic set, but does not believe NCRS needs to make a change – using HFRX is fine. Mr. Triplett clarified that HFRI is investible right now and Mr. SigRist confirmed it was.

NCRS Benchmark Findings – Mr. McCormick stated that the NCRS asset allocation has evolved over time, and therefore the NCRS Total Fund benchmark has evolved over time as additional diversifying asset classes have been added, leading to the Implementation Benchmark. NCRS is in line with what our peers do. There was a recommendation to include a policy weight to US and non-US equity during historical periods, prior to the Legacy benchmark's usage of the MSCI ACWI IMI. Ms. Doyle added she hoped there is clarity on the performance benchmark number.

Measuring the Success of an Institutional Investment in the Program – Measuring the success is more difficult than measuring the benchmark itself. First step is undergoing an Asset Liability Study; the second step is to ensure the asset allocation is set to implementing previously established return-seeking/risk-reducing split, improving cost savings (reward) and/or lowering risk. Cash flow, fund status, liability path, etc. all have to be taken into account. Ms. Doyle commented that Aon Hewitt does scenario (e.g. bear market, high inflation market) analyses.

Setting Asset Allocation – Key Qualitative Factors – Ms. Doyle presented to the IAC that the key drivers for setting asset location are Governance, Time Horizon, and Portfolio Size. Governance that is more strategic in nature tends to be subjected to more public scrutiny. More flexible governance lends itself to more skilled investment staff with discretion, expert oversight, and the ability to allocate to a broader range of asset strategies. Shorter time horizons lend themselves to large cash outflows and greater risk of the plan closing while longer time horizons offer the ability to tolerate illiquidity. Lastly, larger portfolios provide more access to skilled managers, offer the ability to diversity, allows for better negotiation on fees versus smaller portfolios. After reviewing some of the asset liability work done for the plan, Ms. Doyle felt there was a good risk level for the overall program.

Evaluation of Asset Allocation Decisions and Investment Performance – Ms. Doyle outlined the three ways to evaluate asset allocation decisions and investment performance, which include Investment Objective (evaluating the performance relative to the actuarial assumed rate of return, which is currently 7.25%), Peers (analyzing the risk adjusted performance metrics relative to peers, recognizing that each plan has unique circumstances that drive long-term asset allocation differences), and a Global Opportunity Set (comparing the performance relative to the World Market Opportunity Set or choosing to invest in a subset). Ms. Doyle added it was important not to let the tail wag the dog.

Absolute Nominal Target Rate of Return – Ms. Doyle highlighted that, while the NCRS is significantly outperforming target in the 5-year period, there is more of a gap in the 10- and 15-year returns due to the NCRS's conservative approach. Mr. Mebane asked whether the 7.25% shown as target was an arbitrary number and Ms. Doyle responded that actuaries help to set that rate, using 30+ year return – a very long term measure. Mr. Mebane asked how long it would be before that rate changes and the Chair responded that it was over-funded and had been lowered from 7.5% to 7.25%. Mr. SigRist added that actuaries do a review of the Target Rate of Return, but should be taking into consideration the wage growth was not as high as promised. The Chair added for every 0.25% that the rate is lowered, approximately $300 million in additional contributions is required. Mr. Triplett asked whether this rate was different in corporate plans and Ms. Doyle responded that in corporate plans, the rate was much lower and penalties are involved if the corporate plans do not meet that rate. Mr. McCormick added that the corporate side is discounted and that you can fully fund your liabilities today due to very low rates.

NCRS Results Relative to Peers – Mr. McCormick showed that results had been lower over the 3- and 5- year periods, but were very close over the 10-year period. NCRS is different in that it takes much less risk than its peers.

World Market Opportunity Set – Mr. McCormick showed a chart demonstrating the difference between investing a dollar in the NCRS vs the World Market Opportunity Set since 1997, which would be a return of $3.12 vs $2.94 respectively. Mr. SigRist noted that global bonds were lacking, but the Division can review it and provide some research to the IAC if requested.

Performance Attribution (Total Fund Attribution) – Mr. McCormick presented information regarding the relative performance within the investment program in alternative chart formats (Chart #1, Total Fund Performance). Having a total fund attribution will allow the reader to draw quick conclusions about performance and be able to ask better questions of staff, as well as allowing a deeper analysis into the relative performance of an asset class. Mr. Mebane commented that based on the attribution chart, the percentage of underweight and overweight looks small. In looking at the figures in the chart, there is a better sense of the specifics that were off policy.

Private Equity Usage – Mr. McCormick presented an overview showing that academic research suggested that private equity outperforms the public equity market. Aon Hewitt believes that private equity is a form of equity investing which allows for a higher likelihood of alpha than traditional equity. As private equity requires significant time and resources, Aon Hewitt recommends clients consider whether they have an allocation of sufficient size to overcome the semi-fixed costs of oversight. The size of our portfolio is at the point where it is large enough to move the needle to efficiently oversee a diversified private equity portfolio.

Peer Usage – Mr. McCormick commented that the NCRS utilizes peer usage for processes. It is difficult to maintain effort and the energy may not be worth the value-add. We need to make sure there is meaningful overlap within the peer universe world. CEM has great data. Aon Hewitt believes it will be very difficult to use a consistent grouping of peers for all analysis and, as long as the peer universe is appropriate and robust, having the same samples on a consistent basis is not necessarily important.

International Currency Exposure – NCRS's exposure in investments other than the US dollar has struggled as the dollar has strengthened. There are two reasons to hedge currency: the duration is short; and on a tactical basis. Currency impacts can be meaningful over short periods; they tend to wash out over long periods of time. Aon Hewitt commented that none of their clients hedge currency exposure within their international equity portfolios on a strategic basis. Mr. Triplett asked whether most of their clients monitor exposure or whether they ignore and leave it. Ms. Doyle acknowledged that currency risk is part of a plan and it is increasing as we see global increases.

Ms. Doyle concluded the presentation and asked if the IAC had any further questions. The Chair thanked Ms. Doyle and Mr. McCormick for their presentation and for all the work they have done. She suspended discussion and adjourned the meeting for lunch.

The IAC then reconvened at 12:45 p.m. The Chair asked the Members present to declare any conflicts of interest. There being no conflicts of interest declared, the meeting re-commenced. Mr. Aneralla was not present for the afternoon session.

AGENDA ITEM – OPPORTUNISTIC FIXED INCOME

Mr. Funderburk introduced Kathy Hahn and Sandra Vitols to the IAC and proceeded to give an overview of this area. Ms. Hahn noted that Opportunistic Fixed Income was performing well since inception, outperforming the benchmark by 729 basis points, with 20% of the portfolio in drawdown vehicles. The benchmark is 100% liquid and is up 8.4% over the one year period. Ms. Hahn added that NCRS had 18 managers of 26 funds in the credit portfolio.

Portfolio Characteristics - Ms. Vitols stated that in the strategy allocation, 67% is in public exposure, with the remaining private credit markets of Special Situations, Distressed Credit and Traditional Corporate Credit making up 33%. The geographic allocation was international, although 69% was in North America. The Capital Structure allocation number crept up over 3 years and is of concern at 28.6% - in 2010, it was at 22%. NCRS is reorganizing equities generally and Ms. Vitols noted there was a shift to going long on equity. Mr. Hartzell asked how managers distributed are across the funds. Ms. Hahn responded that some closed-end funds are in multiple vintages and that managers have diversified portfolios. Mr. Funderburk added that $400 million is allocated to high-performing managers – 32% with a multi-strategy focus and 18% in a fund of funds allocation. The largest exposure to managers is with PAAMCO.

Mr. Mebane asked about the areas of Distressed Credit and Special Situations and Ms. Vitols replied that the managers perform direct lending to private US companies. Mr. Mebane asked whether NCRS held the note and it was clarified that we do not actually hold the note; the loan origination is performed by the third-party investment manager. Mr. Funderburk noted that in the area of Distressed Credit, managers can, and have, rotated capital in Europe. Mr. Triplett asked whether NCRS was involved in anything with China and Mr. Funderburk confirmed it was not; NCRS is more focused on capital preservation and investing in developed countries with established creditor rights rather than investing in emerging markets.

Annual Portfolio Review – Ms. Vitols noted that a specialist consultant reviews the portfolios every year, and the findings are that it is a well-performing portfolio with high quality managers and well-diversified. The portfolio could benefit from increased exposure to Credit Multi-Strategy & Global Distressed, European Distressed, Relative Value Structured Credit, and Emerging Market Debt exposure. Ms. Vitols invited the IAC's thoughts on this area.

Forward Looking Opportunity Set – Mr. Funderburk noted the need to be more thoughtful on deploying funds in this type of less favorable environment. Mr. Mebane asked about CLOs (collateralized loan obligations) and Ms. Vitols responded that the opportunities, in terms of what you are being paid for the risk, have changed but with CLOs, the value and defaults have held up really well. Mr. Hartzell inquired about the Special Situations segment, asking whether, as residential and commercial loans are seeing less restrictive underwriting, the team also was seeing that in direct lending. Mr. Funderburk replied it is a manager-by-manager opportunity. Mr. Hartzell asked whether there were managers shared on the real estate side of the portfolio; Mr. Funderburk confirmed that there were and offered as an example, Blackstone, a Manager on the real estate portfolio. NCRS leveraged that relationship for an opportunity to allocate to non-performing loans.

Mr. SigRist added that with the CLOs, there were some blowups during the financial crisis and there was substantial growth in CLOs at this point in the cycle. With some early CLO opportunities, Managers had generated 16-20% return net since 2011 and the downside risk was very minimal. Mr. Mebane asked whether we were buying CLOs in the secondary market. Mr. Funderburk commented that credit spreads have tightened and the only way they are working today is through leverage. NCRS is cautious. There are managers that are generating 10-12% returns. Ms. Vitols added that this class experiences low defaults and that yield increases of 10-12% are due to consolidation.

Mr. Hartzell asked whether equity pieces are also shrinking. Mr. SigRist responded that we would be worried about them getting bigger. Mr. Mebane asked whether we had good relationships with managers and can communicate well with them and Ms. Vitols confirmed that was the case. There are low default rates right now, so where managers are managing the collateral and holding the equity tranches, we have to be mindful about getting wiped out.

Strategic Considerations for Discussion – Mr. Funderburk presented three areas for feedback from the IAC: Manager Profile, Long Term Mandate, and Where NCRS is in the credit/business cycle. First, in terms of the manager profile, Mr. Funderburk raised the question of how we can maximize the benefits from our relatively large scale of investment. Mr. Hartzell asked what percentage of the portfolio is in fund of funds; Mr. Funderburk confirmed it was 18%. He also pointed out that PAAMCO had created a fund of funds specifically for us that had turned out to be the best performing line up in

PAAMCO's portfolio. Ms. Hahn added that over the 3-year period, it had an 11.65% performance. Mr. Funderburk continued that they were negotiating with them on their fee structure and saving money. NCRS has $1 billion with PAAMCO currently and PAAMCO's total AUM is around $12 billion.

Mr. Mebane offered that he thought the IMD had worked well with managers and if PAAMCO is working out so well, it seemed counterintuitive to go to smaller firms? Mr. SigRist noted that we are generally less able to negotiate fees with larger firms and it is often difficult to get a seat at the table with the larger funds. He asked whether we should migrate to smaller managers to save fees. Mr. Triplett commented that he generally believes smaller is better. However, credit has been maxed and it may not be the same position now. It might be better to focus on negotiating fees with bigger firms, rather than working to find good small firms because there is no guarantee you will do better with small teams. Mr. Hartzell asked what would be classified as "small" from an AUM position.

Ms. Vitols commented on the value of emerging or niche players in the market. Mr. Mebane asked how we would get in on that trend and how much overhead and staff would be required to maintain it without hitting a bump in the road.

Long Term Mandate – Mr. Funderburk wanted to get a sense for the IAC's appetite for risk in trying to balance between opportunistic and all-weather strategies. Some managers have underwhelmed us and the team was interested to hear from the IAC on risk opinions. Mr. Triplett responded that he would be very cautious in this credit environment as there is a lot of risk for little return. Good long-short credit managers are an interesting space, but they are hard to find. Brazil and China have some opportunities now, but have a whole different risk profile associated with them. Mr. Triplett's advice would be to use core managers you feel will be good, using NCRS's size to your benefit by negotiating fees and talking about future opportunities with them.

Credit/Business Cycle - Mr. Mebane asked where NCRS was in the cycle related to this subject. Mr. SigRist commented that we have the ability to be long-short which is helping too. Mr. Mebane added that our economy is weakening and we should not feel the need to push it now. Shorts have not been working so well over the last 2 years.

In closing, the Chair added her thanks to the Opportunistic Fixed Income team.

AGENDA ITEM – PUBLIC EQUITY PORTFOLIO REVIEW

Mr. Viezer introduced his team of Arlene Jones-McCalla, Rhonda Smith and Norman Schiszler to speak to the subject of Public Equity for the IAC.

Public Equity Net Performance – Ms. Smith commented that in the Domestic Portfolio, there are 11 Managers, 14 active strategies and 2 passive strategies. 70% of the Domestic Large Cap is passive and only 30% is active. The primary driver of recent Domestic equity underperformance was a wind-down of a Large Cap core strategy – detracting 44 basis points. They have been able to redeploy and reposition within the Domestic equity portfolio. Mr. Mebane asked who handled the wind-down. Mr. Viezer replied that NCRS uses transition management services. Ms. Jones-McCalla added that in the non-US portfolio, European currency had dropped 20% and the utilities and energy sector was performing poorly, prompting concerns over global growth. NCRS managers did well during this environment because their exposures were underweight to energy and utilities. The currency effect has been positive against Canada. Manager selection was positive with 60% of the managers outperforming. The Global portfolio is 7% of the total equity portfolio and its returns have been exceptional.

Overview of Year – Mr. Viezer outlined some of the accomplishments of the Public Equity team over the past year, including the creation of a corporate governance committee and that Matthew Leatherman and Meryl Murtagh had been hired as corporate governance analysts. The Public Equity team has renegotiated 12 IMAs (investment management agreements) to modernize the agreements, and were also able to save almost $1 million annually on fees. Mr. Schiszler, previously an analyst, was hired as Portfolio Manager. The Public Equity division is in the process of conducting a search for a consultant for the long-only equity area.

Hedged Public Equity Phased Deployment – this was a 2-year roll out. Phase I focused on constructing a liquid 'staging portfolio' in order to quickly implement and rebalance the new strategic asset allocation; $1.5 billion has been allocated here. The staging portfolio would allow NCDST to trade liquidity for lower hedge fund manager fees and allow for opportunistic funding of hedge fund strategies. Phase II will construct a managed account platform and populate it with hedge fund managers in 3 tranches – this will top up with another $0.5 billion. Phase III will investigate other strategies for the staging portfolio and consider adding emerging hedged public equity managers.

What Will a Managed Account Look Like? - Mr. Viezer presented a chart of the managed account structure. Mr. Viezer commented that in this structure, a typical hedge fund's services would be unbundled to allow for more control by NCRS. Mr. Schiszler mentioned that, due to staffing limitations, they planned to hire a platform provider to manage those unbundled services. The team has narrowed the managed account provider search down to 2 firms and AF Advisors - a consultant from the Netherlands - was assisting in the search. Hedge fund managers would be utilized only to trade assets of the managed account. Ms. Jones-McCalla reported that single member LLCs (with names beginning with the phrase "Old North State Hedged Equity") would be the legal structure for the managed accounts. NCRS would hold the underlying assets. The team consulted the Treasurer's strategic plan to ensure alignment with those objectives. The benefits of this managed account structure include: transparency, control of the assets, investor-friendly investment terms, increased manager accountability, and cost efficiency.

Mr. Mebane asked what the platform provider would do. Mr. Viezer responded their duties would be to oversee the structure, hire service providers and assume a fiduciary role in the process. The platform provider would also negotiate commercial terms, process information and produce risk reports. Mr. Mebane asked whether the allocation would be all passive and Mr. Viezer responded that in the expected future state, $300 million of the $2 billion would be in a passive staging portfolio, but the rest will be active managers. Mr. Triplett asked whether the funds would operate in siloes. Mr. Viezer responded that each hedge fund manager would be in a separate managed account. Outside the managed account platform, some hedged public equity managers might be employed through the use of commingled vehicles.

Mr. Hartzell asked when this will take effect; Mr. SigRist responded that the team was in the process of finalizing a services agreement. Mr. Hartzell asked what the criteria was to shortlist firms. Mr. Viezer responded that the broad categories included the provider's company, platform services provided, manager onboarding process, risk management, operations, legal services, and fees. The platform provider will report due diligence, provide IMA negotiation support, and help with certification analysis, operations, management fees, etc.

Mr. SigRist discussed the development of managed account platforms in the industry. Managed account platforms started out with banks that set up accounts and marketed out to high net worth platforms. This has evolved over time; today, some institutional investors have gone to managed account providers and asked them to work for them more directly. Managed account providers can be responsible for administration or can provide more of a fiduciary role. Mr. SigRist said that it was important to get this dialed in right, then consider future options. Mr. Mebane stated he understood the benefits of transparency and control, but what will the managed account platform cost? Mr. Viezer responded that through operational savings, it will pay for itself.. Total net annual savings on the $2.0 billion portfolio was projected to be 28 basis points or $5.6 million (22 basis points or $4.4 million of negotiated management fee savings, $844,000 of performance fee savings, and operating fee savings net of the provider's fees equal to $400,000 per year).

Mr. Triplett asked if the managed account was scalable. Mr. Mebane asked whether it would also work with Opportunistic Fixed Income. Mr. Funderburk responded yes and stated they have been working with public equity over this year. He also noted that they are also collaborating across all of the asset teams. Mr. Triplett questioned whether "adverse selection" might be a risk for managed accounts. Mr. Viezer noted that NCRS surveyed Albourne's top pick managers and found that 75% of open, highly rated firms were willing to accept managed accounts. Mr. Triplett acknowledged that he used managed accounts.

Finishing Work Started – Mr. Schiszler outlined to the IAC the Public Equity team's objectives for 2016, highlighting in particular improving the current portfolio structure and investigating emerging hedge fund managers.

Active-Passive Allocations Over Time – Ms. Smith presented a chart to the IAC showing the Active-Passive exposure over 10 years. The split was fairly equal in the early years. Ms. Jones-McCalla added that the Non-US Equity Portfolio uses four passive strategies which were consolidated into one strategy.

Trade-Off Between Fees and Active Risk - Mr. Viezer presented a chart to demonstrate to the IAC the level of manager skill needed at different levels of fees to achieve different probabilities of investor success in beating a benchmark.

Preferences for Total Equity – Mr. Viezer commented that cycles are a natural process in equity investments. He presented an outline question to the IAC on preferences for Total Equity. Mr. Triplett commented it was very difficult to find managers to add value in the US. Mr. Viezer estimated that there is a 54% chance of beating the benchmark on the US side.

Mr. SigRist added that, if one of our Domestic Large Cap managers needed to be terminated, there has to be a compelling reason to replace them with another active manager. They would be monitoring over time and needed flexibility to deliver on long-short.

Is the US Equity Market Overvalued? - Mr. Viezer presented a chart to the IAC showing the Buffett Indicator, which gives some impression of public equity valuation.

Mr. Viezer asked if the IAC had any further questions or thoughts they would like to share. None were offered, at which time the Chair thanked Mr. Viezer and the team for their input to the meeting.

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 September 16, 2015. The Chair thanked everyone for their attendance and input. Mr. Triplett motioned to close the meeting, and Mr. Mebane seconded. The meeting was adjourned at approximately 2:40 p.m.

APPROVED BY: Janet Cowell

JANET COWELL
STATE TREASURER AND CHAIR