

NOTE: These minutes were approved and executed at the October 20, 2017 Independent Investment Committee meeting.

**Independent Investment Committee Meeting
September 29, 2017**

Public Minutes

**New Hampshire Retirement System
54 Regional Drive
Concord, NH 03301**

Committee Members: Maureen Kelliher, *Chair*; David Jensen; Patrick O'Donnell; and Keith Quinton.

NHRS Trustees: Dr. Richard Gustafson and Germano Martins.

Staff: George Lagos, *Executive Director*; Larry Johansen, *Director of Investments*; Heather Fritzky, *Director of Finance*; Greg Richard, *Senior Investment Officer*; Shari Crawford, *Junior Investment Officer*; and Ashley Lloyd, *Junior Investment Officer*.

NEPC: Kevin Leonard, *Partner and Senior Consultant*; and Sean Gill, *Partner*.

Ms. Kelliher called the meeting to order at 9:00 a.m.

On a motion by Mr. O'Donnell, seconded by Mr. Jensen, the Committee unanimously approved the public minutes of the July 21, 2017 Investment Committee meeting, as presented.

Mr. Johansen reviewed the Work Plan and updated the Committee on several initiatives. He informed the Committee that NHRS Investment Staff and NEPC continue to monitor the merger between legacy firms Standard Life Investments and Aberdeen Asset Management, which closed in mid-August. He advised that the new firm is now known as Aberdeen Standard Investments ("Aberdeen Standard"). Mr. Johansen also commented upon the acquisition of the System's discretionary real estate manager, The Townsend Group ("Townsend"), by global professional services firm Aon. He reminded the Committee that Townsend will present at its December Committee meeting, at which the topic will be commented upon further by Townsend.

Mr. Johansen solicited and welcomed comments from the Committee pertaining to the first draft of the Committee's Fiscal Year 2017 Comprehensive Annual Investment Report ("CAIR") transmittal letter. A brief discussion of suggestions occurred and Mr. Johansen confirmed

that a revised draft would be presented at the October Committee meeting.

Mr. Johansen reviewed investment returns through recent time periods, referring to the NEPC Marketable Investments performance flash report for periods ending August 31, 2017. He discussed the returns of various managers and asset classes over multiple time periods. He also advised that full Fiscal Year 2017 performance is nearing finalization.

Mr. Johansen provided a brief overview of the day's agenda, advising that two general partners with which the System currently has investment relationships, The Carlyle Group ("Carlyle") and CarVal Investors ("CarVal"), will each present opportunities to invest in their respective subsequent fund offerings. Mr. Johansen reminded the Committee that a strategic partnership was entered into with Carlyle in 2014, and that as part of that partnership, the Committee made a prior commitment to Carlyle Asia Partners IV. He also reminded the Committee of their commitment in January 2015 to CarVal's predecessor fund, CarVal Credit Value Fund III ("CVF III"). He advised that any commitments made in conjunction with the opportunities presented would constitute re-up's. Mr. Johansen communicated to the Committee that the third and final presentation for the day would be that of long-time fixed income manager Income Research + Management ("IR+M") in conjunction with the two-year contract renewal process.

Mr. Xiang-Dong (X.D.) Yang, Managing Director; and Ms. Jessica Brennan, Managing Director; of Carlyle presented a brief introduction of themselves and an overview of their firm and its growth fund, Carlyle Asia Partners V, L.P. ("CAP V"). They referred to the "New Hampshire Retirement System" presentation dated September 29, 2017. A lengthy discussion with the Committee followed.

Mr. Yang provided an overview and history of Carlyle's Asia platform, Carlyle Asia Partners ("Carlyle Asia"). He stated that Carlyle Asia employs 53 investment professionals across 8 locations in Asia and Australia. He added that Carlyle Asia also employs several operations professionals, former corporate executives with a wealth of experience across various industries and countries that assist with sourcing, due diligence, and deal management.

Responding to questions from the Committee, Mr. Yang offered a review of Carlyle Asia's track record, noting that even its weakest fund is on track to deliver a healthy equity multiple. In conjunction with its strong track record, Mr. Yang discussed Carlyle Asia's talents with respect to risk management, commenting on the platform's modest loss ratio over the long-term. An overview of Carlyle Asia's investment process was provided. Further, the planned implementation of the investment process

within CAP V was reviewed, with Mr. Yang explaining the attraction to those sectors and countries better positioned for growth. He explained that Chinese exposure will likely account for a significant portion of CAP V's composition, given Carlyle Asia's 18 years of experience investing in the country. He acknowledged the level of macroeconomic noise surrounding China, sources of Chinese economic data, and its geopolitical relations. He addressed how each of these topics may impact investment strategy in CAP V. He and Ms. Brennan closed their presentation reviewing CAP V's terms, adding that currently, investor interest exceeds the fund's target of \$5 billion.

Mr. Lucas Detor, Managing Principal; and Ms. Kerry Fauver, Managing Director; of CarVal presented a brief introduction of themselves and an overview of their firm and its distressed lending fund, CarVal Investors Credit Value Fund IV, LP ("CVF IV"). They referred to the "New Hampshire Retirement System" presentation dated September 29, 2017. A lengthy discussion with the Committee followed.

Addressing questions from the Committee, Mr. Detor facilitated the discussion surrounding three themes which will influence the investments selected for inclusion within CVF IV: re-regulation of large U.S. banking institutions as influenced by Dodd-Frank; the structure and more specifically, the deleveraging of the European banking system; and an evolving liquid market structure. He reviewed CarVal's four investment strategies, including Corporate Securities, Loan Portfolios, Liquidations, and Structured Credit, and reviewed the presence of these strategies within each of the firm's predecessor funds. Further, Mr. Detor offered his expectations with regard to exposures to each of these strategies within CVF IV, commenting on a healthy appetite within the market for structured credit assets and the opposite for liquidations, given that current global default rates are low. Like CVF III, Loan Portfolios are also expected to make up a large portion of CVF IV's total portfolio.

Responding to further inquiries from the Committee, Mr. Detor explained CarVal's approach to risk management, stating that only those opportunities that meet the firm's absolute value criteria will be considered for investment. He advised that predictions are absent from the investment process, relying solely upon weighing and measuring the value of an investment opportunity's assets. The presentation concluded with a discussion regarding diverging global central bank policies and potential impacts of such in various developed areas of the world.

Mr. Jack Sommers, Managing Principal and Co-Founder; Mr. Matt Drasser, Client Portfolio Manager; and Mr. Jim Gubitosi, Principal and Senior Portfolio Manager; of IR+M provided a brief introduction of themselves and their firm. They referred to the "New Hampshire

Retirement System” presentation dated September 29, 2017. A lengthy discussion with the Committee followed.

Mr. Sommers opened the discussion by thanking the Committee for their continued relationship with IR+M, noting that the date of the Committee meeting marked the 30th anniversary of NHRS’ initial investment with IR+M. He provided a brief overview of the ways in which the firm and investment environment have changed over the past 30 years, adding that while the headcount at the firm has grown dramatically, IR+M continues to operate as a tight-knit firm with the same values and investment principles it started with over 30 years ago. Mr. Gubitosi reviewed IR+M’s investment strategy, noting that the firm remains duration-neutral with an emphasis on bottom-up, high quality security selection and explained that the opportunistic approach to security selection minimizes risk while adding value.

Responding to questions from the Committee, Mr. Drasser noted outperformance for periods ending August 31, 2017 for each of the Government/Credit and Short Duration portfolios, noting that favorable returns were largely driven by security selection. Mr. Gubitosi discussed performance attribution, characteristics and positioning for both portfolios as they relate to the current market environment, adding that both portfolios share the same investment management teams which results in similar investment themes and performance across portfolios.

In response to questions from the Committee, Mr. Sommers offered his views on the upcoming balance sheet reductions by the U.S. Federal Reserve Bank and the expected impact on the U.S. bond market. Mr. Gubitosi noted that the team will be adding liquidity to both portfolios to provide the ability to capitalize on favorable investment opportunities created by U.S Federal Reserve Bank activity and closed by providing the Committee with his thoughts on the impact exchange traded funds have had on bond market liquidity.

The Committee discussed the presentation made by Carlyle and the opportunity to invest in CAP V. On a motion by Mr. Jensen, seconded by Mr. Quinton, the Committee unanimously agreed to commit \$50 million to Carlyle Asia Partners V, subject to contract and legal review. Mr. Johansen stated that NHRS is in discussions with Carlyle regarding a seat on the CAP V Advisory Board.

The Committee discussed the presentation made by CarVal and the opportunity to invest in CVF IV. On a motion by Mr. O’Donnell, seconded by Mr. Jensen, the Committee agreed to commit \$50 million to CarVal Credit Value Fund IV, subject to contract and legal review.

The vote was conducted by roll call:

Aye: Mr. Jensen, Ms. Kelliher, and Mr. O'Donnell.

Nay: Mr. Quinton.

Motion passed.

Mr. Johansen stated that NHRS is in discussions with CarVal regarding a seat on the CVF IV's Advisory Board.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell, the meeting adjourned at 11:25 a.m.