

NOTE: These minutes were approved and executed at the October 23, 2015 Independent Investment Committee meeting.

**Independent Investment Committee Meeting
September 18, 2015**

Public Minutes

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

Committee Members: Harold Janeway, *Chair*; David Jensen; Maureen Kelliher; and Patrick O'Donnell. Hersh Sosnoff, *absent*.

Staff: George Lagos, *Executive Director*; Larry Johansen, *Director of Investments*; Greg Richard, *Investment Officer*; and Shari Crawford, *Junior Investment Officer*.

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

Mr. Janeway called the meeting to order at 9:01 a.m.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell, the Committee unanimously approved the public minutes of the August 21, 2015 Investment Committee meeting, with one minor correction.

Mr. Johansen reviewed investment returns through recent periods, referring to the NEPC Marketable Investments performance flash report for periods ending August 31, 2015. He discussed the returns of various managers and asset classes over multiple time periods. He commented on recent market volatility and current market events. The Committee discussed the recent Federal Open Market Committee (FOMC) meeting and the actions of the U.S. Federal Reserve Bank ("the Fed") to leave the federal funds rate unchanged at its September meeting. The Committee also discussed the potential impact to the economy and to market environments when and if the Fed does raise interest rates in the near future. The Committee agreed that the January meeting should be devoted to a discussion of a variety of differing Capital Market Assumptions.

The Committee discussed the presentation made by fixed income manager Income Research + Management ("IR+M") at the August meeting. On a motion by Mr. O'Donnell, seconded by Mr. Jensen, the

Committee voted unanimously to renew the investment management agreement with IR+M through October 2017.

Mr. Johansen reviewed the Work Plan and updated the Committee on several initiatives. Referring to their memo dated September 14, 2015, Mr. Johansen stated NHRS's discretionary real estate manager, The Townsend Group, recently notified the NHRS of their request seeking approval from the Committee regarding an investment opportunity in H/2 Special Opportunities Fund III ("Fund III"). Fund III, which is a re-up to Fund II, may invest up to 25% in structured mortgage-backed securities which requires prior approval by the Committee per the Real Estate Investment Guidelines dated April 2012.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell, the Committee unanimously agreed to approve The Townsend Group's request to invest in H/2 Special Opportunities Fund III on behalf of the NHRS.

The Committee discussed the status of the System's relationship with Arden Asset Management LLC ("Arden"), GP of the fund-of-funds absolute return strategy which NHRS terminated in December 2012. The Committee agreed to continue the liquidation process of the fund in lieu of accepting an opportunity to sell the assets at a significant discount.

Mr. Roland Reynolds, Managing Director of Industry Ventures presented a brief introduction of himself and an overview of his firm and its venture capital fund, Industry Ventures Partnership Holdings IV, L.P. ("IVPH IV"). He referred to the "Industry Ventures Partnership Holdings IV, L.P." presentation dated September 18, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Reynolds reviewed the track record of all of the firm's prior funds dating back to the early 2000s. He reviewed the System's historical performance in its three prior Industry Ventures fund commitments. He discussed the two types of fund strategies and the varying investment structures of each, highlighting the advantages of having exposure through one firm to investments in companies in all stages of life. Mr. Reynolds also highlighted the firm's information advantage, stating that given their investment model and existing relationships within the industry, Industry Ventures' access to information is above average in comparison to its peers.

Responding to questions from the Committee, Mr. Reynolds commented upon the differences in investment strategy between its Partnership Holdings sleeve and its Secondary Funds sleeve. He discussed the environment of the various investment structures that Industry Ventures

uses to construct their portfolios, including primary commitments, secondary commitments, and direct commitments. He described recent changes of the firm's targeted investment spaces in recent time periods and stated that the flexible nature of their strategy allows for modifications in construction as needed. Mr. Reynolds also discussed the firm's exit strategies, comparing M&As to IPOs.

In response to questions from the Committee, Mr. Reynolds reviewed the opportunity to invest in the firm's next fund, IVPH IV. He stated the target size for the fund is \$200 million, the majority of which are expected to be re-ups. He stated the goals with regard to IVPH IV include a hybrid construction of early and mid-stage companies; diversification across the portfolio; and a shortened J-curve.

Mr. Chris Hentemann, Managing Partner and Chief Investment Officer; Mr. Alex Cha, Head of Portfolio Management and Trading; and Ms. Tami Witham, Senior Relationship Manager of 400 Capital presented a brief introduction of themselves and an overview of their firm and its structured credit fund, 400 Capital Credit Opportunities Fund, LP ("400 COF"). They referred to the "400 Capital Firm Strategy and Overview" presentation dated August 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Hentemann explained that the firm's primary interest and focus is within the commercial and consumer credit sector and elaborated on the firm's current attraction to the RMBS sector in particular. Mr. Hentemann provided the rationale for the 400 COF structure and provided several examples of unique investment opportunities that would not be accessible without this structure.

Responding to questions from the Committee, Mr. Hentemann described the firm's views on various opportunities within the most recent market cycle and provided his thoughts on the conservatorship of mortgage firms Fannie Mae and Freddie Mac and its influence within the asset class over recent years. He also commented upon changes within market environments since the firm's inception in 2009.

In response to questions from the Committee, Mr. Cha reviewed the fund's multisector approach and its process of actively rotating assets across the various structured credit sectors. He stated that the firm is continually reviewing each sector to ensure that the portfolio is structured accordingly and in line with both their top-down and bottom-up investment strategy. Mr. Cha discussed the firm's views on hedging, stating that the firm does employ hedging strategies to mitigate macroeconomic risks.

Mr. Chip Kaye, Co-Chief Executive Officer and Mr. Jim Wilson, Managing Director of Fundraising and Investor Relations, of Warburg Pincus presented a brief introduction of themselves and an overview of their firm and its global multi-sector fund, Warburg Pincus Private Equity Fund XII, LP (“Fund XII”). They referred to the “Warburg Pincus Fund XII” presentation dated September 18, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Kaye reviewed the firm’s key qualities that contribute to its investment strategy, including a focus on growth, deep industry expertise, and a significant history of experience investing outside of the U.S. He stated that Warburg Pincus was a pioneer in the Emerging Markets private equity space and noted their successes in China and India, commenting that these two markets were two of the best performing geographies for the firm over the past 20 years. Mr. Wilson provided a general overview of investment performance highlights of prior Warburg Pincus funds and specifically focused on performance highlights of the firm’s most recent fund, Warburg Pincus XI.

Responding to questions from the Committee, Mr. Kaye described the firm’s thesis-driven growth strategy and investment approach, stating the firm’s goal of developing durable, sustainable businesses of scale only within those industries in which the firm has a specialized focus. He also elaborated further on the firm’s global presence, highlighting the firm’s 30 year investment history in Europe in addition to its two decades of experience investing in Asia. He stated that despite a strong global presence, there is no geographic allocation pressure to any specific market.

In response to questions from the Committee, Mr. Kaye discussed the current market environment in China, opining that recent events reflect the transformation that is occurring within the country’s economy. He stated that the widespread cautious opinion that many investors have with regard to China create more opportunities for those investors who have more tolerance to the country’s current market environment.

The Committee discussed the Industry Ventures Partnership Holdings presentation and the opportunity to invest in Industry Ventures Partnership Holdings IV, L.P. On a motion by Ms. Kelliher, seconded by Mr. Jensen, the Committee unanimously agreed to commit \$20 million to Industry Ventures Partnership Holdings IV, L.P., subject to contract and legal review. Mr. Johansen confirmed that NHRS has been offered a seat on the Advisory Board.

The Committee discussed the 400 Capital presentation and the opportunity to invest in 400 Capital Credit Opportunities Fund, LP. The Committee will continue the discussion of 400 Capital at a future meeting.

The Committee discussed the Warburg Pincus presentation and the opportunity to invest in Warburg Pincus Fund XII. On a motion by Mr. O'Donnell, seconded by Mr. Jensen, the Committee unanimously agreed to commit \$75 million to Warburg Pincus Fund XII, subject to contract and legal review.

On a motion by Mr. O'Donnell, seconded by Ms. Kelliher, the meeting adjourned at 12:17 p.m.