NOTE: These minutes were approved and executed at the July 24, 2015 Independent Investment Committee meeting.

Independent Investment Committee Meeting June 19, 2015

Public Minutes

New Hampshire Retirement System 54 Regional Drive Concord, NH 03301

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

NHRS Trustees: Dean Crombie and Dr. Richard Gustafson.

Staff: Larry Johansen, Director of Investments; Jack Dianis, Director of Finance; Scott Needham, Investment Officer; 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 9:00 a.m.

On a motion by Mr. Sosnoff, seconded by Mr. Jensen, the Committee unanimously approved the public minutes of the May 29, 2015 Investment Committee meeting.

Mr. Johansen reviewed investment returns through recent periods, referring to the NEPC Marketable Investments performance flash report for periods ending May 31, 2015. He discussed the returns of various managers and asset classes over multiple time periods.

Mr. Johansen noted that at the June Board meeting, he presented an overview of each asset class within the NHRS portfolio and that at the July Board meeting he will present a summary of the real estate program and at the January 2016 Board meeting he will present a summary of the private debt/equity program. He noted that these time frames align with the fiscal year-end real estate presentation by Townsend to the Committee in June and the annual calendar year-end private debt/equity program presentation by NEPC to the Committee in December. He concluded by outlining the process that the Committee will go through to review and make an actuarial assumed rate of return

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recommendation to the Board in early 2016 and noted that the process will include the review of asset class capital market assumptions from several investment firms and NEPC.

The Committee discussed the presentations made by equity managers Aberdeen Asset Management ("Aberdeen"); GMO; and Wellington Management ("Wellington") at the May meeting. Mr. Leonard summarized the NEPC recommendation memos.

The Committee discussed Aberdeen's strategy; recent underperformance of returns; and the volatility of returns. On a motion by Mr. Jensen, seconded by Ms. Kelliher, the Committee voted unanimously to extend the investment management relationship with Aberdeen through June 2017.

On a motion by Ms. Kelliher, seconded by Mr. Sosnoff, the Committee voted unanimously to extend the investment management relationship with GMO through June 2017.

On a motion by Mr. Sosnoff, seconded by Ms. Kelliher, the Committee voted unanimously to extend the investment management relationship with Wellington for the emerging markets mandate through June 2017.

Mr. Johansen provided an overview of the Work Plan and updated the Committee on several initiatives including the agenda for the July Committee meeting which will include presentations from Wellington on active versus passive investing; from Manulife on the global low/negative interest rate environment; and from Neuberger Berman on emerging markets with an emphasis on China.

Mr. Anthony Frammartino, Principal; Mr. Prashant Tewari, Principal; and Mr. Tony Pietro, Assistant Portfolio Manager, of The Townsend Group ("Townsend") provided a brief introduction of themselves and their firm, an update on the Fiscal Year 2015 Investment Plan, and presented the Fiscal Year 2016 Investment Plan for the Committee's consideration. They referred to the "New Hampshire Retirement System" presentation dated June 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Frammartino explained the role of Mr. Tewari within Townsend. Mr. Tewari noted that in an inflationary environment real estate is expected to perform better relative to fixed income and in a deflationary environment real estate is expected to perform better relative to equities. Mr. Frammartino explained the various structural options available to access credit opportunities in emerging markets. Mr. Tewari and Mr. Frammartino

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provided detail on investment opportunities within the logistics sector in Japan.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell, the Committee unanimously approved Townsend's Fiscal Year 2016 Investment Plan.

Mr. Stephen Smith, Managing Director and Portfolio Manager; and Ms. Nedra Hadley, Senior Relationship Manager of Brandywine Global Investment Management ("Brandywine") presented a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System – Global Opportunistic Fixed Income" presentation dated June 19, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Smith stated that increased regulation such as Dodd-Frank has led to unintended consequences such as a significant decrease in liquidity within the bond market. He noted that although the Great Financial Crisis (GFC) caused a severe loss of wealth, he believes that as the U.S. economy continues to improve, consumer spending will increase accordingly as opposed to savings.

Mr. Matthew Eagan, Vice President and Portfolio Manager; and Mr. Michael Finocchi, Client Portfolio Manager of Loomis Sayles ("Loomis") presented a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System" presentation dated June 19, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Eagan noted the recent uptick in volatility within the Treasury and currency markets and confirmed that the strategy in which NHRS invests does not hedge currency. He stated that Loomis focuses on the real Fed Funds Rate which is adjusted for inflation and provided the firm's forecast over the next couple of years. He explained that the current overweight to cash position within the portfolio is designed to mitigate risk and to preserve capital in order to take advantage of buying opportunities as they arise. Mr. Eagan stated that decreased liquidity in the bond market is a positive for the strategy as the portfolio maintains an appropriate amount of liquid assets to deploy when needed.

Mr. Alex Wolf, Emerging Markets Economist; and Mr. John Grybauskas, Head of Relationship Management of Standard Life Investments ("SLI") presented a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System – Emerging Markets Outlook" presentation dated June 19, 2015. A lengthy discussion with the Committee followed.

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In response to questions from the Committee, Mr. Wolf opined that the current measurement of global GDP does not fully capture productivity related to technology. He confirmed that slower GDP growth in China can partially be attributed to the crackdown in corruption. Mr. Wolf stated that the SLI portfolio in which NHRS invests has minimal direct exposure to China.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell the meeting adjourned at 1:02 p.m.