NOTE: These minutes were approved and executed at the August 21, 2015 Independent Investment Committee meeting.

Independent Investment Committee Meeting July 24, 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: Dr. Richard Gustafson; and Germano Martins.

Staff: George Lagos, Executive Director; 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 9:04 a.m.

On a motion by Mr. Jensen, seconded by Ms. Kelliher, the Committee unanimously approved the public minutes of the June 19, 2015 Investment Committee meeting, as presented.

Mr. Johansen reviewed investment returns through recent periods, referring to the NEPC Total Fund preliminary performance flash report for periods ending June 30, 2015. He discussed the returns of various managers and asset classes over multiple time periods.

Mr. Johansen reviewed the Work Plan and updated the Committee on several initiatives. He noted that the work plan for the 2nd quarter of Fiscal Year 2016 has been added to the Work Plan for the Committee's consideration. He commented that the work plan remains flexible and subject to change as the Committee deems appropriate. Mr. Johansen discussed the agenda for the August Committee meeting, which includes presentations by private debt fund managers Monroe Capital and Gramercy; a presentation by prospective private debt fund manager BlueBay Asset Management; and a presentation by fixed income

NHRS Independent Investment Committee July 24, 2015

manager Income Research + Management in conjunction with their twoyear contract renewal.

On a motion by Mr. Jensen, seconded by Mr. O'Donnell, the Committee unanimously approved the work plan for the second quarter of Fiscal Year 2016 as presented.

The Committee discussed the presentation made by global fixed income manager Brandywine Global Investment Management ("Brandywine") at the June meeting. On a motion by Mr. Sosnoff, seconded by Ms. Kelliher, the Committee voted unanimously to extend the Investment Management Agreement with Brandywine through August 2017.

The Committee discussed the presentation made by multi-sector fixed income manager Loomis Sayles & Company ("Loomis") at the June meeting. On a motion by Mr. Jensen, seconded by Ms. Kelliher, the Committee voted unanimously to extend the Investment Management Agreement with Loomis through August 2017.

Mr. Edward Baldini, Senior Managing Director, Partner, and Associate Director of Investment Strategy and Risk; Ms. Elizabeth O'Hara, Managing Director and Relationship Manager; and Mr. Stefan Haselwandter, Managing Director and Associate Director of the Americas Institutional Group, of Wellington Management ("Wellington") presented a brief introduction of themselves and their firm. They referred to the "The Role of Active Management" presentation dated July 24, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Baldini stressed that active equity manager returns are a function of breadth (how many choices a manager makes); dispersion (the correlation of security returns); and skill, both analytical and implementation. Mr. Baldini commented that while cost is a common and justifiable concern among investors, there is no direct correlation between cost and alpha; it is possible to pay very high fees that result in poor performance or very low fees that result in very successful performance. He noted that other factors such as diversification, oversight, and risk budget can be used to help determine whether managers are set up for success in the area they specialize in and should be taken into consideration when contemplating active versus passive strategies.

Responding to questions from the Committee, Mr. Baldini remarked that certain markets are more inefficient than others, and these markets provide better opportunity for active managers to add alpha. He reiterated his opinion that an active manager's implementation skills are a key component of their potential for success.

Mr. Daniel Janis III, Senior Managing Director and Senior Portfolio Manager and Mr. Mark Flinn, Managing Director of Relationship Management, of Manulife Asset Management ("Manulife") presented a brief introduction of themselves and their firm. They referred to the "Global Interest Rates, Liquidity and Market Volatility" presentation dated July 24, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Janis noted that global central bank quantitative easing policies following the Great Financial Crisis have led to the current low interest rate environment, including negative interest rates in some parts of the world. He commented that with regard to negative interest rates, in today's volatile markets, as the opportunity for return is challenging, the safety net of a slight negative return versus the uncertainly of potentially larger losses in other investment vehicles is becoming more appealing to some risk averse investors. However, Mr. Janis indicated he would not purchase bonds with a negative interest rate for the NHRS portfolio.

Mr. Janis responded to questions from the Committee by noting that the recent increased velocity of foreign exchange rate changes is due to differences in market liquidity; investors moving into and out of positions at the same time; and differing monetary policies across countries/regions. He expressed his opinion that the U.S. interest rate curve will gradually rise and flatten over time. He supported his belief by noting that the Federal Reserve Bank's quantitative easing programs have ended, and that unemployment has decreased to levels associated with a more traditional monetary policy.

Mr. Conrad Saldanha, Portfolio Manager, and Ms. Carter Reynolds, Managing Director, of Neuberger Berman presented a brief introduction of themselves and their firm. They referred to the "Outlook for China" presentation dated July 24, 2015. A lengthy discussion with the Committee followed.

In response to questions from the Committee, Mr. Saldanha noted that although China is the biggest contributor to global GDP growth, the Chinese economy is slowing down. He indicated that China's growth rate has decreased by 50% from 2007 to 2014, and though private consumption remains healthy, industrial production has weakened steadily in the years since the financial crisis.

Responding to questions from the Committee, Mr. Saldanha commented that the number of corruption investigations and the amount of related disciplinary action intensified in 2014, pointing toward movements to rectify corruption within the Chinese government and state-owned-

NHRS Independent Investment Committee July 24, 2015

enterprises, leading to an environment of increased regulatory reforms. He commented that as the Chinese stock market is now the second largest in the world, volatility remains high as their equity markets evolve, influencing Chinese stock exchanges as well as global market indices. He expressed his view that a developing corporate bond market in China, is leading to a reduction in bank loans. He discussed the evolving nature of foreign investor access to the full Chinese stock universe.

The Committee discussed the presentations made by Wellington, Manulife, and Neuberger Berman.

On a motion by Ms. Kelliher, seconded by Mr. Jensen, the meeting adjourned at 12:19 p.m.