NOTE: These minutes were approved and executed at the March 20, 2020 Independent Investment Committee meeting.

Independent Investment Committee Meeting February 21, 2020

Public Minutes

New Hampshire Retirement System 54 Regional Drive Concord, NH 03301

Committee Members: Maureen Kelliher, Chair; Christine Clinton; Daniel LaPlante; Tim Lesko; Michael McMahon; and Keith Quinton.

NHRS Trustees: Dr. Richard Gustafson.

Staff: George Lagos, Executive Director; Larry Johansen, Director of Investments; Gerard Murphy, Director of Finance; Greg Richard, Senior Investment Officer; Shana Biletch, Junior Investment Officer, and Ashley Lloyd, Junior Investment Officer.

NEPC: Kevin Leonard, *Partner and Senior Consultant*; and Sean Gill, *Partner and Director of Private Markets Research*.

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

Mr. Johansen opened with an introduction of the newest member of the Independent Investment Committee, Mr. Michael McMahon. Mr. McMahon introduced himself to the Committee and each member of the Committee offered a brief overview of his or her professional background.

On a motion by Mr. Quinton, seconded by Mr. Lesko, the Committee unanimously approved the public minutes of the January 24, 2020 Investment Committee meeting, as presented.

Mr. Johansen reviewed the Work Plan and updated the Committee on several initiatives. He explained that the Committee would observe three presentations from managers pertaining to their capital markets assumptions, adding that the Committee will use that information to discuss and recommend an assumed rate of return to the Board of Trustees at the April Investment Committee meeting.

Mr. Johansen referred to the "Commission Sharing Agreements" presentation and discussed NHRS investment managers' use of commission sharing agreements and the value of research purchased

through these agreements. The Committee agreed to monitor the use of commission sharing agreements on an annual basis in February.

Mr. Ian Leverich, Managing Director; of AbelNoser Solutions ("AbelNoser") provided a brief introduction of himself, his firm, and the services AbelNoser provides to the System. He referred to the "New Hampshire Retirement System Transaction Cost Analysis" presentation for calendar year 2019. A lengthy discussion with the Committee followed.

Mr. Leverich opened with an overview of the services AbelNoser provides the System and a history of the firm's relationship with NHRS. He reviewed trading cost analysis for periods through December 31, 2019, noting the System's active U.S. equity managers, active non-U.S. equity managers, and passive U.S. equity manager achieved favorable trading costs over the year. Responding to questions from the Committee, Mr. Leverich discussed trends within trading cost analysis and the impacts of MiFID II on trading costs.

Mr. Michael Hood, Managing Director and Research Analyst; and Mr. John O'Shea, Managing Director and Client Advisor; of J.P. Morgan provided a brief introduction of themselves and their firm. They referred to the "2020 Long-term Capital Market Assumptions" presentation. A lengthy discussion with the Committee followed.

Mr. Hood opened with a brief overview of the firm's capital market assumption analysis process, noting the state of the economy and valuations are two key pieces of information used when creating assumptions. He reviewed assumptions relative to previous years, noting that current assumptions are lower relative to the level of risk assumed in portfolio allocations, adding that global growth is expected to slow over the longer-term. Mr. Hood discussed the impact of projected lower interest rates, inflation and volatility on equity valuations. Mr. O'Shea reviewed J.P. Morgan's capital market assumptions based on the NHRS portfolio allocation and discussed the firm's expectations for the System, noting a geometric return assumption of 6.3% for the intermediate-term and 6.8% for the long-term. He highlighted the NHRS expected return assumptions versus the universe and reviewed the liquidity profile of the System versus its peers.

Mr. Stephen Smith, Managing Director and Head of Institutional Solutions; and Ms. Carter Reynolds, Managing Director and Client Advisor; of Neuberger Berman provided a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System Asset Class Assumptions" presentation dated February 2020. A lengthy discussion with the Committee followed.

Mr. Smith opened with a review of Neuberger Berman's intermediate and longer-term capital market assumptions and discussed the firm's assumptions by asset class, noting returns are expected to decline relative to historical returns. He discussed the firm's expected return for NHRS based on the System's asset allocation, noting an intermediate-term geometric return of 4.8% and long-term geometric return assumption of 5.9%.

Mr. Jess Gaspar, Director of Research for Multi-Asset Solutions; and Ms. Liz Smith, Senior Managing Director of Public Funds; of AllianceBernstein ("AB") provided a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System Capital Market Assumption Presentation" dated February 21, 2020. A lengthy discussion with the Committee followed.

Mr. Gaspar provided an overview of the current market environment, noting current low interest rates have depressed AB's expectations for intermediate and longer-term capital market assumptions. He discussed the factors AB reviews when formulating capital market assumptions and provided the firm's 10-year forecasts for developed global markets, noting the return outlook is below the average return for all asset classes. Based on these assumptions, AB forecasts a NHRS intermediate-term assumed geometric return of 5.9% and a long-term geometric return of 6.3%.

On a motion by Mr. Quinton, seconded by Mr. LaPlante, the meeting adjourned at 11:37 a.m.