March 30, 2021

The Ad Hoc Committee on Actuarial Economic Assumptions for the Maryland State Retirement and Pension System convened, via video/audio conference call beginning at 1:02 p.m.

The Committee members present included:

Eric Brotman, Chairman, Presiding

Thomas Brandt, Vice Chairman

Michael Barry

David Brinkley

Linda Herman

Douglas Prouty

Michael Stafford, Jr.

Agency Staff members attending included: R. Dean Kenderdine, Executive Director/Board Secretary

Melody Countess Angie Jenkins David Rongione
Anne Gawthrop Andrew Palmer Janet Sirkis

Michael Golden Ken Reott Scott Bolander (live stream)

Assistant Attorneys General present included: Rachel Cohen and Kathleen Wherthey

Other attendees included: Trustees Ken Haines, Rick Norman, Jim Daly; Public Advisor Anne Shelton; Brad Armstrong, Brian Murphy, Jeff Tebeau and Amy Williams from GRS; and Frank Benham from Meketa

Call Meeting to Order and Charge to Committee Mr. Brotman, Chair of the Committee called the meeting to order and announced that Trustee Brandt would be Chairing for the duration of the meeting.

Mr. Brotman read the charge to the Committee as established by the Board of Trustees. The Committee was charged with examining the System's current actuarial economic assumption for the System's Investment Rate of Return and possibly make recommendations to the Board as to whether changes in the rate or its components should be implemented, and if implemented, where that assumption should be set. The Committee may make more than one recommendation and that the Committee should consider alternative Investment Rate of Return assumptions within a range of acceptable rates provided by the System's actuary based upon statistics from the set of investment consultants that the actuary monitors.

Presentation by Gabriel Roeder Smith & Company on the Assumed Rate of Investment Return The Committee was provided a copy of a presentation presented by Gabriel Roeder Smith & Company (GRS), which provided information on the assumed rate of investment return that would provide guidance with making a recommendation to the Board of Trustees for economic assumptions to be used for the June 30, 2021 actuarial valuation determining funding requirements for FYE 2023 and beyond.

Brad Armstrong from GRS reported that each economic assumption is set based on price inflation and an amount in excess of price inflation. He referenced the following table that summarizes the primary economic assumptions developed in the 2014-2018 experience study that were used in the actuarial valuation as of June 30, 2020.

|                   | Current Assumption |
|-------------------|--------------------|
| Price Inflation   | 2.60%              |
| Real Return       | 4.80%              |
| Investment Return | 7.40%              |

#### March 30, 2021

| Payroll Growth | 3.10% |
|----------------|-------|

Mr. Stafford regarding the payroll growth of 3.10%, asked if that was total payroll or a per employee median percentage.

Mr. Murphy responded that it is across the board increase.

Ms. Stafford asked if the numbers factor in the employee salary growth of the investment division.

Mr. Murphy responded that the investment division staff are such a small proportion of total state payroll that it will likely not impact the averages.

Mr. Murphy commented that the current assumption for payroll is the total covered payroll of everyone in the System and that last year it was about 5%, but in previous years it was not as high.

Mr. Kenderdine further commented that the payroll is the entirety of all active members of the State.

Ms. Williams presented information according to a survey conducted by the National Association of State Retirement Administrators (NASRA), that the median return assumptions for plans in the NASRA database was 7.25% as of February. MSRPS assumption is 7.40%, somewhat above the median. Ms. Williams pointed out that it does not adjust for the asset allocation or other plan specifics.

Mr. Tebeau presented information regarding the importance of the next 10 years for the System, noting that while MSRPS is a long term investor, it is expected that within the next 10 years, 42% of benefit payments are expected to be paid out, representing 70% of the current value of assets.

Mr. Stafford, regarding the price inflation assumption of 2.6% asked if that was the general CPI or is there a reason why we should consider it more granular.

Ms. Williams responded that it was a general CPI.

Mr. Stafford asked if last year capital market assumptions were below or over the actual assumed rate of return.

Mr. Murphy commented that Meketa indicated that the median expected 10-year return for this policy is 6.29% and the median expected 20-year return is 7.03% with standard deviation of 12.9%.

Mr. Stafford asked if Meketa's assumptions were greater.

Mr. Murphy responded that Meketa's assumptions suggested that the 7.4% can be uptdated.

Mr. Palmer commented that they are currently in the position for a General Consultant search with responses that are current. He would be able to provide

March 30, 2021

that chart to the Committee and that it would show that Meketa's assumptions were within the range of other consultants.

Mr. Stafford asked that Meketa to clarify that the current assumption was 7.64% and decreased to 7.03% over last year.

Mr. Benham responded yes, that is correct.

Presentation by Meketa Group on the Development of Capital Market Assumptions The Committee was provided a copy of a presentation presented by Meketa Group, which provided information on the 2021 capital market expectations and benchmark review.

Frank Benham from Meketa reported that the meeting materials for this meeting were a summary of their annual capital market assumption changes and had been presented to the Investment Committee at the February meeting. He reported that the capital market assumptions are set in January and that changes are driven by many factors, including interest rates, credit spreads and equity prices. Mr. Benham reported that in 2020, yields went down, credit spreads tightened and prices for most risk assets went up causing their expected returns to decline for almost every asset class. As a result, the 20-year return expectation for the MSPS portfolio declined from 7.64% to 7.03%.

Mr. Stafford asked if there was a strong consensus that 3% or even 4% inflation point over next two quarters.

Mr. Benham responded that Meketa uses projections from IMF for the 5-year over 5-year.

Mr. Murphy further responded that the Federal Reserve recently changed its practice of targeting 2% inflation to 2% average inflation over time, allowing for higher inflation periods to offset the impact of lower inflation periods.

Mr. Benham responded that a conversation happens every year at the Board's May Investment and Board meetings, when you look at how much you want to risk in the portfolio with the asset allocation.

Mr. Palmer further responded that looking at a 10-year table with all of our asset classes, only one is over 7%. It will be hard to get to 7.4% unless everything is in equity.

Presentation by
Chief Investment
Officer on
Economic
Outlook for
Inflation and
Real Returns

The Committee was provided a copy of a presentation presented by Andrew Palmer, Chief Investment Officer regarding inflation assumptions. Mr. Palmer commented that it is interesting that Meketa's long term inflation assumptions had fallen when market-based expectations of future inflation have recently risen. He commented that even with the recent rise, long-term market-based expectation of future inflation remain low.

Mr. Stafford asked about the Social Security Administration lowering real return forecast and why that action should inform the work of the committee.

March 30, 2021

Mr. Palmer responded that he will research what drives the forecast, but that usually the Social Security trust fund earns interest credit on balance held at the Treasury in the form of excess Social Security taxes collected relative to disbursements.

Mr. Murphy further responded that Social Security "invests" in special issued treasury securities only available to them.

Mr. Palmer turned the conversation to real yields and noted that those are the more important areas of focus for the System since realized inflation impacted both assets and liabilities in the same direction. He noted that real yields have been falling and were no negative as the Federal Reserve works to keep interest rates lower than nominal GDP. The System's 4.8% real return assumption includes an element of real yields as the risk-free building block. If real yields are expected to remain law, the 4.8% real return is more challenging.

#### Discussion

Mr. Kenderdine reported that, in the past, it has taken approximately three meetings to conclude and determine recommendations to present to the Board of Trustees. Mr. Kenderdine commented that the amortization period should be discussed at the next meeting to recommend to the Joint Committee, with part being that greater authority be given to the Board and pulled out of statute.

Mr. Murphy commented that he feels the Board needs more authority than it has now.

Mr. Stafford asked what the general topic of amortization is.

Mr. Armstrong responded the amortization of the unfunded liability of the System.

Mr. Kenderdine commented that it would not be news to the legislature that the Board would be bringing a request to them regarding authority.

Ms. Herman asked for the following information from the following individuals to be provided to the Committee at the next meeting:

- Alpha projections for asset classes from Mr. Palmer;
- 10 and 20-year assumptions for individual assets and the total plan from Meketa:
- Projections showing what an increase in contributions would be for a 25basis point change from GRS
- If GRS factors in fees paid and fees are down, show the fee schedule for GRS to factor in, from Mr. Palmer.
- Frank Benham's opinion on alpha assumptions.

Mr. Kenderdine reported that another experience study would need to be conducted in 2022. However, if we are looking at significant retirements in the next two years what impact would that have, especially with the Teachers' Pension System being two-thirds of our System. Mr. Kenderdine asked GRS to speak on that subject at the next meeting.

March 30, 2021

Mr. Stafford asked for background information on the history of the amortization policy of the unfunded liability to be provided to the Committee.

Mr. Brandt asked to the extent we have a role in actuarial inflation assumptions, he asked for clarification on that subject.

Adjournment

There being no further business before the Committee, on a motion made by Mr. Stafford and seconded by Mr. Prouty, the meeting adjourned at 3:01 p.m.

Respectfully submitted,

R. Dean Kenderdine Secretary to the Board