The special meeting of the Retirement Board was called to order at 8:05 a.m.

In attendance were:

Members: Joseph Pellegrino, Chairman
Kevin Coyner
Mark Kordick
Peter Mynarski
Mike Wacek

Staff: Atiya Jones, Retirement Administrator
Mary Pepe, Director Human Resources
Natalia Yemets, Assistant to the Treasurer

Boomershine: Greg Stump
Neuberger Berman: Edward Berman
Michael Savinelli
Stephen Polito

BET: Andy Duus
Leslie Moriarty
Jill Oberlander
Leslie L. Tarkington
Tony Turner
David Weisbrod

RTM: Miriam Kreuzer
Dan Ozizmir

Retirement System Actuarial and Funding Policy Review

Presentation by Boomershine Consulting (8:08 am)
Gregory Stump, Partner

Background

Mr. Stump presented an analogy of college funding as an overview of pension funding. The annual Actuarial Valuation Report is produced to analyze the current pension components (i.e. investment performance, salary, retiree longevity, terminations and deaths) that determine the funding ratio and Town’s annual contribution. There is an inverse relationship with the funding ratio and contribution level. The July 1, 2017 valuation produced a funded ratio of 77.3%.
**History of Funding and Contributions**

There was a brief discussion of the funding process and the historical contributions. Mr. Wacek noted that investment performance is the major source of risk for the pension plan. The shortfall in investment performance over the past decade is the main reason for the current unfunded liability. The Board should always consider options to de-risk the plan. Mr. Coyner stated that proper funding, even during good performance years, is a key element along with investment performance. The funding ratio would be higher today if there were not years with zero contributions. Mr. Mynarski reminded the Board of the significant historical changes implemented to improve the pension plan. For example, the Board voted to change from aggregate method to entry age actuarial cost method and 15-year amortization.

**Current Status and Policy**

Mr. Pellegrino reminded the Board this discussion is not intended to set policy. However, the presentation will be used as a tool to review contribution strategies, valuation assumptions and methods. Mr. Stump stated a key element to reduce unfunded liability is amortization. Currently, the plan is using a 15-year rolling amortization.

**Actuarial Assumptions**

Mr. Stump reviewed the process and goal to align assumptions with expected experience. This annual procedure minimizes gains and losses, decreases cost volatility and maintains consistent annual contribution levels. The economic and demographic assumptions are projections. The current assumptions are inflation: 2.25%, retiree contractual Cost-of-Living Adjustments (COLAs): 2.15%, salary increases: 2.50% per year, plus merit increases that vary by service, and investment return: 6.75%.

**Asset Allocation Strategy**

Mr. Polito presented a long-term historical performance review of the S&P 500 (1928-2018), stocks and bonds (1978-2018). The S&P 500 had the greatest increase and the steepest dive. Therefore, the blended approach produces the most return with minimum risk.

There was a brief discussion of the 2018 Capital Market Assumptions (CMA). The Board reviewed the CMA intermediate term of 5 to 7 years with inflation of 2%. The Board also reviewed the CMA long-term with inflation of 2.25%. The Town of Greenwich Retirement System uses long-term assumptions for strategic target allocation.

**Future Outlook**

Mr. Stump discussed funding projections; modeling current baseline versus closed amortization. There was interactive analysis with various returns. The Board will evaluate the goals for unfunded liability and funding ratio. Also, the Board will evaluate contribution projections.
**Peer Comparison**

Mr. Stump compared Greenwich to other municipalities located in southern Connecticut. The plans return assumptions vary from 6.125% to 7.5%. The funding ratios range from 77% to 98%. If the Board would like to increase the funding ratio or change the return assumption, incremental changes should be assessed for best results.

**Stochastic Analysis**

Mr. Wacek presented his risk analysis of Mr. Stump’s projected valuations from July 2018 to July 2022, reminding the group that those projections assume that investments will earn exactly 6.75% per year with no variation. In his risk analysis he introduced variation in investment returns using a lognormal distribution with standard deviations ranging from 10% to 13%. He showed charts depicting the probable maximum annual contribution and unfunded liability, as well as the probable minimum market value of assets and funding ratio, all at the 90% probability level. He highlighted the probable maximum annual contribution by 2022, which ranged from $29 million to $32 million, depending on risk level, and which is well above Mr. Stump’s projected contribution of $18.6 million using the assumption of no variation. Mr. Wacek said the point of the exercise was to make it clear that there is not insignificant risk (10%) that the Town could face an annual contribution requirement in the $30 million range, and that had a bearing on the investment policy the Board should consider.

**ADJOURNMENT**

A motion to adjourn was made by Mr. Coyner, seconded by Mr. Mynarski, and carried unanimously at 11:35 a.m.

Respectfully Submitted,

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Atiya Jones, Secretary to the Board

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Joseph Pellegrino, Chairman