The City of New York

OFFICE OF THE ACTUARY

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SHERRY S. CHAN
CHIEF ACTUARY

MEMORANDUM

To: Board of Trustees
New York City Fire Pension Fund

From: Sherry S. Chan
Chief Actuary

Subj: Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)

Date: July 19, 2021

In accordance with the Administrative Code of the City of New York (ACCNY) and appropriate actuarial practice, the Actuary is to periodically review the actuarial assumptions and methods used in determining employer contributions.

In a memo dated January 14, 2021, the Actuary presented a set of proposed changes to the actuarial assumptions and methods (Original 2021 A&M) for use beginning with the Final June 30, 2019 Actuarial Valuation of the New York City Fire Pension Fund (FIRE) to determine the Final FY2021 Employer Contributions. The Original 2021 A&M proposed a package of changes to the assumptions and methods detailed in Section XI of the FIRE Fiscal Year 2020 Valuation Report (https://www1.nyc.gov/site/actuary/reports/reports.page).

The Original 2021 A&M contained certain changes, such as a lower inflation assumption. Under the building block methodology, lowering the inflation assumption resulted in, among other things such as lower general wage increase and cost-of-living assumptions, a lower Actuarial Interest Rate (AIR). A change in the AIR requires approval from the State legislature and this change to the AIR has not, to date, been enacted.

Additionally, since the proposed Original 2021 A&M was introduced, uncertainty related to inflation assumptions due to recent economic conditions have unfolded, as indicated by the

Chair of the Federal Reserve at its most recent Federal Open Market Committee meeting in June, that supports, especially considering the State legislature's failure to enact consistent changes to the AIR, a short-term continuation and subsequent reevaluation of the 2.5% inflation assumption.

As a result, the Actuary is now proposing a new set of changes to the actuarial assumptions and methods (Revised 2021 A&M), which incorporate aspects of the Original 2021 A&M as updated herein. This revised set of changes has been designed to provide for responsible financing of FIRE while being reasonably consistent with the concepts of intergenerational equity. The changes reflect the best judgment of the Actuary regarding the appropriate financing of FIRE and shall be adopted by the Board of Trustees. The appendix attached to this memorandum contains a draft Resolution to adopt the proposed Revised 2021 A&M.

Note that the changes outlined in this memorandum are being presented as a package and are only proposed by the Actuary assuming all changes are adopted together.

Actuarial Assumption Changes

Actuarial assumption changes included in the Revised 2021 A&M are:

- Updating post-retirement mortality assumptions for both non-pensioners and pensioners to reflect the latest improvement scale released by the Society of Actuaries (MP-2020). The details of this scale can be found on the Society of Actuaries website: https://www.soa.org/resources/experience-studies/2020/mortality-improvement-scale-mp-2020/. Existing assumptions only applied improvement scales to pensioners. Applying improvement scales to non-pensioners, as well as pensioners, is consistent with industry norms and promotes funding consistency between active and retired members.

- Revising the assumption of loans Tier 1 and 2 members are expected to take at retirement from the maximum allowable loan to 25% of member contribution balances. This change is based on recent and expected future experience and more closely reflects actual practice of such members.

Actuarial Method Changes

Since the Actuarial Value of Assets (AVA) was restarted in FY2012, favorable investment performance has created a large difference between the AVA and the Market Value of Assets (MVA). Therefore, in combination with the other changes described in this memorandum, the

Actuary proposes to restart the AVA by setting it equal to the MVA as of June 30, 2019. Note that significant asset gains subsequent to this date have been incurred and this restart, while more closely aligning the AVA with the MVA, does not include these more recent gains. Such an approach is prudent to avoid a large discrepancy between the AVA and the MVA while maintaining a cushion to account for potential future market value volatility.

In addition, the recognition of future asset performance will be changed from the current six-year period, from 15% for the first four years and 20% for the last two years, to a five-year period at 20% per year. A five-year smoothing period, based on a level recognition each year, is consistent with industry practice.

Financial Impact – Summary

The financial impact as a result of these changes will be presented in the Revised Final FY2021 Employer Contribution letter for FIRE.

Contribution Timing

For the purposes of this memorandum, it is assumed that the changes in the Present Value of future employer contributions and annual employer contributions would be reflected for the first time in the Revised Final June 30, 2019 actuarial valuations of FIRE. In accordance with the One Year Lag Methodology used to determine employer contributions, the change would first be reflected in Fiscal Year 2021 in the Revised Final Employer Contribution.

Statement of Actuarial Opinion

I, Sherry S. Chan, am the Chief Actuary for, and independent of, the New York City Retirement Systems and Pension Funds. I am a Fellow of the Society of Actuaries, an Enrolled Actuary under the Employee Retirement Income and Security Act of 1974, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the results contained herein have been prepared in accordance with generally accepted actuarial principles and procedures and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Please contact me with any questions.

SSC/eh

Att.

cc: Mr. Craig Chu – New York City Office of the Actuary
Mr. Patrick Dunn – New York City Fire Pension Fund
Mr. Michael Samet – New York City Office of the Actuary
Keith Snow, Esq. – New York City Office of the Actuary
Ms. Lei Tian – New York City Fire Pension Fund
Mr. Gregory Zelikovsky – New York City Office of the Actuary

Appendix

NEW YORK CITY FIRE PENSION FUND

DRAFT RESOLUTION

PROPOSED CHANGES IN
ACTUARIAL ASSUMPTIONS AND METHODS

The following Resolution is presented to the Board of Trustees of the New York City Fire Pension Fund (FIRE) for consideration and adoption:

WHEREAS, The Actuary, based on a review of actuarial experience of the five actuarially-funded New York City Retirement Systems and Pension Funds has proposed changes in certain actuarial assumptions and methods as presented in a Memorandum dated July 19, 2021; and

WHEREAS, The Actuary's proposed changes shall be adopted by the FIRE Board; and

WHEREAS, The Board has reviewed the Actuary's proposed changes in actuarial assumptions and methods; now therefore, be it

RESOLVED, That the Board accepts the Actuary's July 19, 2021 Memorandum and supports the proposed changes in actuarial assumptions and methods; and be it further

RESOLVED, That the Board adopts those proposed changes in actuarial assumptions and methods.

Respectfully Submitted:

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Patrick Dunn
Executive Director