



NEW YORK CITY OFFICE OF THE ACTUARY

FISCAL ANALYSIS

PENSION COSTS TO THE NEW YORK CITY RETIREMENT SYSTEMS RESULTING FROM THE WORLD TRADE CENTER ATTACK ON SEPTEMBER 11, 2001 AS OF JUNE 30, 2023

SUMMARY OF ANALYSIS: Following the World Trade Center (WTC) attack on September 11, 2001 (9/11), the New York City Retirement Systems (NYCRS)¹ have experienced a significant increase in the number of accidental disability retirements (ADR) and accidental deaths (AD) amongst NYCRS members who participated in the rescue, recovery, or cleanup operations resulting from the attack.

This fiscal analysis presents the estimated pension costs to the NYCRS attributable to WTC ADRs and WTC ADs as of June 30, 2023.

This analysis is intended for the purpose of procuring federal financial assistance from the Federal Emergency Management Agency (FEMA).

BACKGROUND: The New York City Fire Pension Fund (FIRE) and the New York City Police Pension Fund (POLICE) incurred an actuarial loss as a result of the deaths of 343 FIRE members and 28 POLICE members on 9/11. In 2002, a FEMA grant application was submitted for reimbursement in the amount of \$64.6 million for the cost of this actuarial loss. Subsequently, in 2003, a separate FEMA grant application was submitted for reimbursement in the amount of \$185.8 million for the cost of the Special Accidental Death Benefits (SADB) without future 3.0% Cost-of-Living Adjustments (COLA) paid to eligible beneficiaries for the deaths of these members on 9/11.

¹ New York City Employees' Retirement System (NYCERS)
New York City Teachers' Retirement System (TRS)
New York City Board of Education Retirement System (BERS)
New York City Police Pension Fund (POLICE)
New York City Fire Pension Fund (FIRE)

After 9/11, there has been a significant number of incidences of WTC ADRs and WTC ADs.² ADR and AD benefits are generally greater than service retirement benefits and thus, the increase in the number of ADRs and ADs along with its accelerated payability of benefits generally result in increased liabilities for the respective NYCERS.

FINANCIAL IMPACT – SUMMARY: Based on the census data and the actuarial assumptions and methods described herein, the estimated net financial impact of 9/11 on the NYCERS as of June 30, 2023 is estimated to be \$3,087.6 million after reflecting WTC ADR and AD incidences through June 30, 2023 and the awarding of previous FEMA grant payments. A breakdown of the net financial impact by system is shown in the table below.

System	Net 9/11 Cost as of June 30, 2023 (\$millions)
FIRE	\$1,932.8
POLICE	1,036.1
NYCERS	116.8
TRS	0.7
BERS	<u>1.2</u>
Total	\$3,087.6

CENSUS DATA: The estimates presented herein are based on the census data used in prior actuarial valuations for determining the employer contributions to the NYCERS. Specifically, the results of this fiscal analysis reflect the following population:

- The pensioners and beneficiaries in receipt of a WTC retirement benefit as of June 30, 2019 in conjunction with the 9/11 fiscal analysis published on March 26, 2021.
- New pensioners and beneficiaries in receipt of a WTC retirement benefit subsequent to June 30, 2019 through June 30, 2023.

This valuation data was also supplemented with data from benefit certifications and additional data provided by the NYCERS. A breakdown of the count of the pensioners and

² Since 2001, the New York State legislature has enacted multiple laws to expand eligibility of City WTC benefits, expand the defined WTC Site to Cover additional affected populations, adopt recommendations of the 9/11 Task Force, and extend filing deadlines. See e.g., Chapter 93 of the Laws of 2005, Chapter 445 of the Laws of 2006, Chapter 5 of the Laws of 2007, Chapter 214 of the Laws of 2007, Chapter 495 of the Laws of 2007, Chapter 489 of the Laws of 2008, Chapter 489 of the Laws of 2013, Chapter 472 of the Laws of 2014, Chapter 326 of the Laws of 2016, Chapter 266 of the Laws of 2018, and Chapter 424 of the Laws of 2021.

beneficiaries in receipt of a WTC retirement benefit valued in this fiscal analysis by system is shown in the table below.

System	Count of WTC Pensioners valued in this fiscal analysis
FIRE	3,600
POLICE	1,391
NYCERS	460
TRS	2
BERS	<u>9</u>
Total	5,462

ACTUARIAL ASSUMPTIONS AND METHODS: The results presented herein rely, in part, on the results of prior 9/11 fiscal analyses, where the assumptions used were outlined in those respective fiscal analyses. The additional financial impact of new WTC ADRs and WTC ADs in Fiscal Year 2023 was calculated based on the actuarial assumptions in effect for the NYCERS June 30, 2023 actuarial valuations used to determine Preliminary Fiscal Year 2025 employer contributions. To be consistent with the current law under General Municipal Law 208-f, this analysis reflects only the 3.0% SADB COLA increases that have been enacted effective through July 1, 2023.

The WTC retirement benefits of impacted members were compared to a separate set of projected benefits for these impacted members assuming that 9/11 had never occurred. Under the latter hypothetical scenario, members generally are assumed to have continued active service from their original WTC disability retirement date or death date and their careers were projected forward using the actuarial assumptions in effect.

Under this methodology, the net 9/11 cost as of the valuation date can be summarized as follows:

- (1) Total WTC benefits paid less hypothetical expected benefit payments had 9/11 never occurred, accumulated with interest

Plus

- (2) Present Value of Future Benefits (PVFB) of WTC benefits less PVFB of hypothetical expected benefits had 9/11 never occurred

Less

- (3) Amounts from previously awarded FEMA grants accumulated with interest.

For members or beneficiaries who began receiving a WTC benefit following a post-retirement WTC Reclassification (i.e., retiring first for a non-WTC retirement, then reclassifying later to a WTC retirement), it was assumed that these members still would have retired on their original retirement dates if 9/11 had never occurred. Therefore, instead of projecting hypothetical expected benefit payments for these reclassified members, their WTC benefit amounts were compared to the actual benefit amounts from their original non-WTC retirement beginning from their WTC Reclassification date.

To determine the net 9/11 cost as of June 30, 2023, the net cost determined through June 30, 2022³ was accumulated with interest to June 30, 2023. A subsequent calculation reflecting new WTC ADRs and WTC ADs in Fiscal Year 2023 was performed with a June 30, 2023 valuation date using the methodology disclosed above. Together, these collective costs formed the basis for the net 9/11 cost as of June 30, 2023.

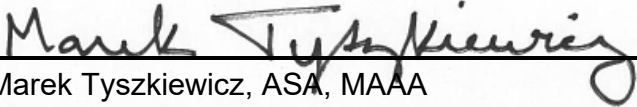
RISK AND UNCERTAINTY: The costs presented in this fiscal analysis depend highly on the accuracy of the data provided, realization of the actuarial assumptions used, certain demographic characteristics of NYCERS, and other risks. If actual experience deviates from actuarial assumptions, the actual costs could differ from those presented herein. Costs are also dependent on the actuarial methods used, and therefore different actuarial methods could produce different results. Quantifying these risks is beyond the scope of this fiscal analysis.

Not measured in this fiscal analysis are the following:

- The impact of the WTC attack on NYCERS members who were not receiving WTC ADR or AD benefits as of June 30, 2023 but may do so at a later date.
- The impact of the WTC attack on Other Postemployment Benefit (OPEB) costs and other non-pension related costs.

³ This net cost determined through June 30, 2022 was published in a prior 9/11 fiscal analysis dated April 4, 2023.

STATEMENT OF ACTUARIAL OPINION: Marek Tyszkiewicz and Anderson Huynh are members of the Society of Actuaries and the American Academy of Actuaries. We are members of NYCERS but do not believe it impairs our objectivity and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of our 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.


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April 11, 2024
Date