

The Public Employees' Retirement System of New Jersey

**GASB 68 Report
as of June 30, 2023**

Produced by Cheiron

February 2024

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**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2023 MEASUREMENT DATE**

SECTION I – BOARD SUMMARY

The purpose of this report is to provide accounting and financial disclosure information under Governmental Accounting Standards Board Statement 68 for the Public Employees' Retirement System of New Jersey (PERS, Plan or System). This information includes:

- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Collective Annual Pension Expense.

Highlights

The reporting date for the PERS is June 30, 2023. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2023 and the Total Pension Liability (TPL) as of the valuation date, July 1, 2022, updated to June 30, 2023. We are not aware of any significant events between the valuation date and the measurement date that are measurable at this time, so the update procedures only include the addition of service cost and interest cost offset by actual benefit payments.

Additional information about the TPL can be found in the GASB 67 report. This report contains the GASB 68 collective employer reporting amounts. The individual employer reporting amounts can be found in the GASB 67-68 Employer Schedules provided separately in excel format.

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SECTION I – BOARD SUMMARY

The following table provides a summary of the key results during this reporting period for the System in Total, as well as broken out for the State portion and the Local Employers portion.

| Table I-1 Summary of Collective Results | | |
|--|----------------------|----------------------|
| Measurement Date | 6/30/2023 | 6/30/2022 |
| <u>State</u> | | |
| Net Pension Liability | \$ 22,458,047,553 | \$ 22,386,831,046 |
| Deferred Outflows | (864,211,026) | (935,244,310) |
| Deferred Inflows | <u>711,453,635</u> | <u>1,756,752,930</u> |
| Net Impact on Statement of Net Position | \$ 22,305,290,162 | \$ 23,208,339,666 |
| Total Pension Expense/(Income) | \$ 958,106,783 | \$ 181,746,466 |
| Pension Expense/(Income) (% of Payroll) | 20.54% | 3.97% |
| <u>Local Employers</u> | | |
| Net Pension Liability | \$ 14,606,489,066 | \$ 15,219,184,920 |
| Deferred Outflows | (237,010,897) | (780,298,901) |
| Deferred Inflows | <u>937,022,624</u> | <u>2,355,830,828</u> |
| Net Impact on Statement of Net Position | \$ 15,306,500,793 | \$ 16,794,716,847 |
| Total Pension Expense/(Income) | \$ (79,181,803) | \$ (1,032,778,934) |
| Pension Expense/(Income) (% of Payroll) | (1.04%) | (14.01%) |
| <u>Total</u> | | |
| Net Pension Liability | \$ 37,064,536,619 | \$ 37,606,015,966 |
| Deferred Outflows | (1,101,221,923) | (1,715,543,211) |
| Deferred Inflows | <u>1,648,476,259</u> | <u>4,112,583,758</u> |
| Net Impact on Statement of Net Position | \$ 37,611,790,955 | \$ 40,003,056,513 |
| Total Pension Expense/(Income) | \$ 878,924,980 | \$ (851,032,468) |
| Pension Expense/(Income) (% of Payroll) | 7.17% | (7.12%) |

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SECTION II – CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 68 for the Public Employees' Retirement System of New Jersey (PERS). This report is for the use of PERS, the Division of Pensions and Benefits (DPB) and their auditors in preparing financial reports in accordance with applicable law and accounting requirements. This report is not appropriate for other purposes, including the measurement of funding requirements for PERS and estimating the price to settle PERS's obligations.

In preparing our report, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

For purposes of this report, the calculation of the Total Pension Liability and the projection of the Plan's contributions and projected benefit payments as of June 30, 2023 was based on the recommended demographic assumptions of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022.

This report was prepared using census data as of the July 1, 2022 valuation date and financial information as of the June 30, 2023 measurement date.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the actuarially determined contributions is 7.00% per annum.

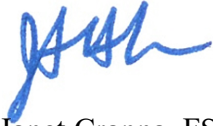
In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum. The discount rate used to measure the Total Pension Liability is 7.00% as of June 30, 2023 and is described in Section III of the report.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

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SECTION II – CERTIFICATION

This report was prepared for PERS for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.



Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary



Jake Libauskas, FSA, FCA, MAAA, EA
Consulting Actuary

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.00% as of June 30, 2022 and June 30, 2023. As discussed with the DPB, the projection of cash flows used to determine the discount rate as of June 30, 2023 assumed:

- In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum.
- In accordance with Paragraph 41 of GASB Statement No. 67, the projection of the Plan's contributions and benefit payments are based on the same assumptions used to determine the expected contributions for the System. The demographic assumptions are based on the recommendations of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the actuarially determined contributions is 7.00% per annum.

- It is assumed that the Local employers will contribute 100% of their actuarially determined contribution and 100% of their Non-Contributory Group Insurance Premium Fund (NCGIPF) contribution. It is assumed that the State will contribute 100% of their actuarially determined contribution and NCGIPF contribution. The 100% contribution rate is the total State contribution rate expected to be paid in fiscal year ending June 30, 2024 with respect to the actuarially determined contribution for the fiscal year ending June 30, 2024 for all State administered retirement systems.
- Consistent with Chapter 83, P.L. 2016, it is assumed that the State will make pension contributions in equal amounts at the end of each quarter.
- In accordance with Chapter 98, P. L. 2017, PERS receives 21.02% of the proceeds of the Lottery Enterprise for a period of 30 years. Revenues received from lottery proceeds are assumed to be contributed to the System on a monthly basis.
- It is assumed that Local employers' contributions, including the NCGIPF contributions, are expected to be received on April 1st, 21 months after the associated valuation date.
- The State NCGIPF contributions are assumed to be paid monthly.
- Annual administrative expenses are assumed to be 0.29% and 0.50% of expected pension benefit payments for State and Local employers, respectively.

The Fiduciary Net Position (FNP) includes Local employers' contributions receivable as reported in the financial statements provided to us by the DPB. In determining the discount rate in Appendix D, the FNP at the beginning of each year does not reflect receivable contributions as those amounts are not available at the beginning of the year to pay benefits. The receivable contributions for the current year and prior year are shown below:

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SECTION III – DETERMINATION OF DISCOUNT RATE

- For FYE June 30, 2022, the FNP includes receivable contributions of \$1,288,683,017 (\$1,206,444,085 for appropriations, \$54,603,937 for NCGIPF, \$10,055,321 for Chapter 19 and \$17,579,674 for Early Retirement Incentive (ERI)).
- For FYE June 30, 2023, the FNP includes receivable contributions of \$1,354,892,653 (\$1,280,103,723 for appropriations, \$56,423,536 for NCGIPF, \$2,910,385 for Chapter 19 and \$15,455,009 for ERI).

In the event the Plan's fiduciary net position was no longer sufficient to make future benefit payments, municipal bond rates of 3.54% as of June 30, 2022 and 3.65% as of June 30, 2023 would be used to develop the blended GASB discount rate. As selected by the State Treasurer, the rates are based on the Bond Buyer GO 20-Bond Municipal Bond Index.

As of June 30, 2023, based on the assumptions above, the pension Plan's fiduciary net position is expected to be sufficient to make all projected future benefit payments for current Plan members; therefore, the GASB discount rate as of June 30, 2023 is equal to the long-term rate of return of 7.00%. Similarly, the GASB discount rate as of June 30, 2022 was equal to the long-term rate of return of 7.00%. The assumed discount rates have been determined in accordance with the method prescribed by GASB Statement No. 67. See Appendix D for the determination of the discount rate.

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

Consistent with previous reporting, the schedules in this section will be used by the State and Local employers for their 2024 reporting.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of the System. As of the measurement date, this recognition period was 5.08 years.

The following tables summarize the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years and thereafter.

| Table IV-1A | | |
|---|--------------------------------------|-------------------------------------|
| Schedule of Collective Deferred Inflows and Outflows of Resources | | |
| State | | |
| | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Differences between expected and actual experience | \$ 497,941,105 | \$ 66,842,898 |
| Changes in assumptions | 22,764,182 | 644,610,737 |
| Net differences between projected and actual earnings on pension plan investments | 343,505,739 | 0 |
| Total | <u>\$ 864,211,026</u> | <u>\$ 711,453,635</u> |
| Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows: | | |
| Measurement year ended June 30: | | |
| | 2024 \$ (222,133,170) | |
| | 2025 34,989,241 | |
| | 2026 281,566,588 | |
| | 2027 52,654,802 | |
| | 2028 5,679,930 | |
| | Thereafter \$ 0 | |

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

| Table IV-1B | | |
|---|--------------------------------------|-------------------------------------|
| Schedule of Collective Deferred Inflows and Outflows of Resources | | |
| Local Employers | | |
| | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Differences between expected and actual experience | \$ 138,489,232 | \$ 59,207,466 |
| Changes in assumptions | 31,819,240 | 877,815,158 |
| Net differences between projected and actual earnings on pension plan investments | 66,702,425 | 0 |
| Total | <u>\$ 237,010,897</u> | <u>\$ 937,022,624</u> |
| Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows: | | |
| Measurement year ended June 30: | | |
| 2024 | \$ (764,720,743) | |
| 2025 | (426,837,788) | |
| 2026 | 596,477,249 | |
| 2027 | (106,745,928) | |
| 2028 | 1,815,483 | |
| Thereafter | \$ 0 | |

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

| Table IV-1C | | |
|---|--------------------------------------|-------------------------------------|
| Schedule of Collective Deferred Inflows and Outflows of Resources | | |
| Total | | |
| | Deferred Outflows of Resources | Deferred Inflows of Resources |
| Differences between expected and actual experience | \$ 636,430,337 | \$ 126,050,364 |
| Changes in assumptions | 54,583,422 | 1,522,425,895 |
| Net differences between projected and actual earnings on pension plan investments | 410,208,164 | 0 |
| Total | <u>\$ 1,101,221,923</u> | <u>\$ 1,648,476,259</u> |
| Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows: | | |
| Measurement year ended June 30: | | |
| 2024 | \$ (986,853,913) | |
| 2025 | (391,848,547) | |
| 2026 | 878,043,837 | |
| 2027 | (54,091,126) | |
| 2028 | 7,495,413 | |
| Thereafter | \$ 0 | |

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

**Table IV-2A
Detailed Schedule of Collective Deferred Inflows and Outflows of Resources
State**

Recognition of differences between expected and actual experience

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|-----------------------|-----------------------|-----------------------|----------------------|----------------------|---------------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.08 | \$ 360,675,620 | \$ 70,999,138 | \$ 70,999,138 | \$ 70,999,138 | \$ 70,999,138 | \$ 70,999,138 | \$ 5,679,930 | \$ 0 |
| 2022 | 4.04 | (88,185,225) | (21,828,026) | (21,828,026) | (21,828,026) | (21,828,026) | (873,121) | 0 | 0 |
| 2021 | 3.13 | 100,405,184 | 32,078,334 | 32,078,334 | 32,078,334 | 4,170,182 | 0 | 0 | 0 |
| 2020 | 2.16 | 260,573,782 | 120,636,009 | 120,636,009 | 19,301,764 | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | (2,798,539) | (2,312,840) | (485,699) | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (26,907,045) | (26,907,045) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ 603,763,777 | \$ 172,665,570 | \$ 201,399,756 | \$ 100,551,210 | \$ 53,341,294 | \$ 70,126,017 | \$ 5,679,930 | \$ 0 |

Recognition of changes in assumptions

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|-------------------------|-------------------------|------------------------|------------------------|---------------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.08 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| 2022 | 4.04 | (90,165,987) | (22,318,314) | (22,318,314) | (22,318,314) | (22,318,314) | (892,731) | 0 | 0 |
| 2021 | 3.13 | 33,451,592 | 10,687,410 | 10,687,410 | 10,687,410 | 1,389,362 | 0 | 0 | 0 |
| 2020 | 2.16 | (974,031,701) | (450,940,603) | (450,940,603) | (72,150,495) | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | (309,252,760) | (255,580,794) | (53,671,966) | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (265,411,673) | (265,411,673) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ (1,605,410,529) | \$ (983,563,974) | \$ (516,243,473) | \$ (83,781,399) | \$ (20,928,952) | \$ (892,731) | \$ 0 | \$ 0 |

Recognition of net differences between projected and actual earnings on pension plan investments

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|-----------------------|----------------------|----------------------|-----------------------|------------------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.00 | \$ (82,892,428) | \$ (16,578,486) | \$ (16,578,486) | \$ (16,578,486) | \$ (16,578,486) | \$ (16,578,484) | \$ 0 | \$ 0 |
| 2022 | 4.00 | 1,062,930,934 | 265,732,734 | 265,732,734 | 265,732,734 | 265,732,732 | 0 | 0 | 0 |
| 2021 | 3.00 | (692,804,458) | (230,934,820) | (230,934,820) | (230,934,818) | 0 | 0 | 0 | 0 |
| 2020 | 2.00 | 148,982,237 | 74,491,118 | 74,491,119 | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1.00 | 21,705,039 | 21,705,039 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ 457,921,324 | \$ 114,415,585 | \$ 92,710,547 | \$ 18,219,430 | \$ 249,154,246 | \$ (16,578,484) | \$ 0 | \$ 0 |

| | | | | | | | | | |
|--------------------|--|-------------------------|-------------------------|-------------------------|----------------------|-----------------------|----------------------|---------------------|-------------|
| Grand Total | | \$ (543,725,428) | \$ (696,482,819) | \$ (222,133,170) | \$ 34,989,241 | \$ 281,566,588 | \$ 52,654,802 | \$ 5,679,930 | \$ 0 |
|--------------------|--|-------------------------|-------------------------|-------------------------|----------------------|-----------------------|----------------------|---------------------|-------------|

* As of the beginning of the measurement year

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

**Table IV-2B
Detailed Schedule of Collective Deferred Inflows and Outflows of Resources
Local Employers**

Recognition of differences between expected and actual experience

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|----------------------|----------------------|---------------------|---------------------|----------------------|---------------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.08 | \$ 115,283,208 | \$ 22,693,545 | \$ 22,693,545 | \$ 22,693,545 | \$ 22,693,545 | \$ 22,693,545 | \$ 1,815,483 | \$ 0 |
| 2022 | 4.04 | (45,055,161) | (11,152,268) | (11,152,268) | (11,152,268) | (11,152,268) | (446,089) | 0 | 0 |
| 2021 | 3.13 | (37,184,654) | (11,880,081) | (11,880,081) | (11,880,081) | (1,544,411) | 0 | 0 | 0 |
| 2020 | 2.16 | 74,269,273 | 34,383,923 | 34,383,923 | 5,501,427 | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | 34,653,345 | 28,639,126 | 6,014,219 | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (13,814,476) | (13,814,476) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ 128,151,535 | \$ 48,869,769 | \$ 40,059,338 | \$ 5,162,623 | \$ 9,996,866 | \$ 22,247,456 | \$ 1,815,483 | \$ 0 |

Recognition of changes in assumptions

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|---------------------------|-------------------------|-------------------------|------------------------|-----------------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.08 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| 2022 | 4.04 | (110,616,358) | (27,380,287) | (27,380,287) | (27,380,287) | (27,380,287) | (1,095,210) | 0 | 0 |
| 2021 | 3.13 | 46,757,851 | 14,938,611 | 14,938,611 | 14,938,611 | 1,942,018 | 0 | 0 | 0 |
| 2020 | 2.16 | (1,333,056,508) | (617,155,790) | (617,155,790) | (98,744,928) | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | (453,337,280) | (374,658,911) | (78,678,369) | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (362,766,391) | (362,766,391) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ (2,213,018,686) | \$ (1,367,022,768) | \$ (708,275,835) | \$ (111,186,604) | \$ (25,438,269) | \$ (1,095,210) | \$ 0 | \$ 0 |

Recognition of net differences between projected and actual earnings on pension plan investments

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | |
|------------------------------|------------------------------|--|------------------------|------------------------|-------------------------|-----------------------|-------------------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter |
| 2023 | 5.00 | \$ (639,490,870) | \$ (127,898,174) | \$ (127,898,174) | \$ (127,898,174) | \$ (127,898,174) | \$ (127,898,174) | \$ 0 | \$ 0 |
| 2022 | 4.00 | 2,959,267,301 | 739,816,825 | 739,816,825 | 739,816,825 | 739,816,826 | 0 | 0 | 0 |
| 2021 | 3.00 | (2,798,197,372) | (932,732,457) | (932,732,457) | (932,732,458) | 0 | 0 | 0 | 0 |
| 2020 | 2.00 | 448,619,120 | 224,309,560 | 224,309,560 | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1.00 | 14,929,383 | 14,929,383 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ (14,872,438) | \$ (81,574,863) | \$ (96,504,246) | \$ (320,813,807) | \$ 611,918,652 | \$ (127,898,174) | \$ 0 | \$ 0 |

| | | | | | | | | | |
|--------------------|--|---------------------------|---------------------------|-------------------------|-------------------------|-----------------------|-------------------------|---------------------|-------------|
| Grand Total | | \$ (2,099,739,589) | \$ (1,399,727,862) | \$ (764,720,743) | \$ (426,837,788) | \$ 596,477,249 | \$ (106,745,928) | \$ 1,815,483 | \$ 0 |
|--------------------|--|---------------------------|---------------------------|-------------------------|-------------------------|-----------------------|-------------------------|---------------------|-------------|

* As of the beginning of the measurement year

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

**Table IV-2C
Detailed Schedule of Collective Deferred Inflows and Outflows of Resources
Total**

Recognition of differences between expected and actual experience

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | | |
|------------------------------|------------------------------|--|-----------------------|-----------------------|-----------------------|----------------------|----------------------|---------------------|--------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter | |
| 2023 | 5.08 | \$ 475,958,828 | \$ 93,692,683 | \$ 93,692,683 | \$ 93,692,683 | \$ 93,692,683 | \$ 93,692,683 | \$ 93,692,683 | \$ 7,495,413 | \$ 0 |
| 2022 | 4.04 | (133,240,386) | (32,980,294) | (32,980,294) | (32,980,294) | (32,980,294) | (32,980,294) | (1,319,210) | 0 | 0 |
| 2021 | 3.13 | 63,220,530 | 20,198,253 | 20,198,253 | 20,198,253 | 2,625,771 | 0 | 0 | 0 | 0 |
| 2020 | 2.16 | 334,843,055 | 155,019,932 | 155,019,932 | 24,803,191 | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | 31,854,806 | 26,326,286 | 5,528,520 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (40,721,521) | (40,721,521) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ 731,915,312 | \$ 221,535,339 | \$ 241,459,094 | \$ 105,713,833 | \$ 63,338,160 | \$ 92,373,473 | \$ 7,495,413 | \$ 0 | \$ 0 |

Recognition of changes in assumptions

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | | |
|------------------------------|------------------------------|--|---------------------------|---------------------------|-------------------------|------------------------|-----------------------|-------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter | |
| 2023 | 5.08 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| 2022 | 4.04 | (200,782,345) | (49,698,601) | (49,698,601) | (49,698,601) | (49,698,601) | (49,698,601) | (1,987,941) | 0 | 0 |
| 2021 | 3.13 | 80,209,443 | 25,626,021 | 25,626,021 | 25,626,021 | 3,331,380 | 0 | 0 | 0 | 0 |
| 2020 | 2.16 | (2,307,088,209) | (1,068,096,393) | (1,068,096,393) | (170,895,423) | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1.21 | (762,590,040) | (630,239,705) | (132,350,335) | 0 | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0.63 | (628,178,064) | (628,178,064) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ (3,818,429,215) | \$ (2,350,586,742) | \$ (1,224,519,308) | \$ (194,968,003) | \$ (46,367,221) | \$ (1,987,941) | \$ 0 | \$ 0 | \$ 0 |

Recognition of net differences between projected and actual earnings on pension plan investments

| From Measurement Year Ending | Remaining Recognition Period | Remaining Deferred (Inflows) and Outflows* | Recognition Year | | | | | | | |
|------------------------------|------------------------------|--|----------------------|-----------------------|-------------------------|-----------------------|-------------------------|------------------|-------------|-------------|
| | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Thereafter | |
| 2023 | 5.00 | \$ (722,383,298) | \$ (144,476,660) | \$ (144,476,660) | \$ (144,476,660) | \$ (144,476,660) | \$ (144,476,660) | \$ (144,476,658) | \$ 0 | \$ 0 |
| 2022 | 4.00 | 4,022,198,235 | 1,005,549,559 | 1,005,549,559 | 1,005,549,559 | 1,005,549,558 | 0 | 0 | 0 | 0 |
| 2021 | 3.00 | (3,491,001,830) | (1,163,667,277) | (1,163,667,277) | (1,163,667,276) | 0 | 0 | 0 | 0 | 0 |
| 2020 | 2.00 | 597,601,357 | 298,800,678 | 298,800,679 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2019 | 1.00 | 36,634,422 | 36,634,422 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | \$ 443,048,886 | \$ 32,840,722 | \$ (3,793,699) | \$ (302,594,377) | \$ 861,072,898 | \$ (144,476,658) | \$ 0 | \$ 0 | \$ 0 |

| | | | | | | | | | | |
|--------------------|--|---------------------------|---------------------------|-------------------------|-------------------------|-----------------------|------------------------|---------------------|-------------|-------------|
| Grand Total | | \$ (2,643,465,017) | \$ (2,096,210,681) | \$ (986,853,913) | \$ (391,848,547) | \$ 878,043,837 | \$ (54,091,126) | \$ 7,495,413 | \$ 0 | \$ 0 |
|--------------------|--|---------------------------|---------------------------|-------------------------|-------------------------|-----------------------|------------------------|---------------------|-------------|-------------|

* As of the beginning of the measurement year

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

The annual pension expense recognized by the State and Local employers can be calculated two different ways. First, it is the change in the amounts reported on the Statement of Net Position that relate to PERS and are not attributable to employer contributions. That is, it is the change in NPL plus the changes in deferred outflows and inflows plus employer contributions.

Alternatively, annual pension expense can be calculated by its individual components. While GASB does not require or suggest the organization of the individual components shown in the table below, we believe it helps to understand the level and volatility of pension expense.

First, there are components referred to as operating expenses. These are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating PERS for the year.

Second, there are the financing expenses: the interest on the Total Pension Liability less the expected return on assets.

The final category is changes. This category will drive most of the volatility in pension expense from year to year. It includes any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.

The following table shows the development of pension expense for the State and Local employers through both of these methodologies.

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

| Table IV-3A Calculation of Collective Pension Expense State | | |
|---|-----------------------|-----------------------|
| Measurement Year Ending | 2023 | 2022 |
| Change in Net Pension Liability | \$ 71,216,507 | \$ 757,333,561 |
| Change in Deferred Outflows | 71,033,284 | (365,415,502) |
| Change in Deferred Inflows | (1,045,299,295) | (2,063,741,957) |
| Employer Contributions* | <u>1,860,915,639</u> | <u>1,853,355,532</u> |
| Subtotal | \$ 957,866,135 | \$ 181,531,634 |
| Employer Contribution - delayed enrollments** | 240,648 | 214,832 |
| Employer Contribution - delayed appropriations** | 0 | 0 |
| Employer Contribution - retroactive** | 0 | 0 |
| Employer Contribution - additional** | <u>0</u> | <u>0</u> |
| Total Pension Expense/(Income) | \$ 958,106,783 | \$ 181,746,466 |
| Total Pension Expense/(Income) as % of Payroll | 20.54% | 3.97% |
| Operating Expenses | | |
| Service cost | \$ 468,862,341 | \$ 438,055,831 |
| Employee contributions | (357,335,214) | (354,378,152) |
| Administrative expenses | <u>5,911,110</u> | <u>5,600,482</u> |
| Total | \$ 117,438,237 | \$ 89,278,161 |
| Financing Expenses | | |
| Interest cost | \$ 2,001,175,018 | \$ 1,987,977,705 |
| Expected return on assets | <u>(464,023,653)</u> | <u>(575,142,798)</u> |
| Total | \$ 1,537,151,365 | \$ 1,412,834,907 |
| Changes | | |
| Benefit changes | \$ 0 | \$ 2,624,741 |
| Recognition of assumption changes | (983,563,974) | (1,528,450,497) |
| Recognition of liability gains and losses | 172,665,570 | 97,860,377 |
| Recognition of investment gains and losses | <u>114,415,585</u> | <u>107,598,777</u> |
| Total | \$ (696,482,819) | \$ (1,320,366,602) |
| Total Pension Expense/(Income) | \$ 958,106,783 | \$ 181,746,466 |

* Includes appropriations and lottery revenue

** Pension expense related to specific liabilities of individual employers

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

| Table IV-3B Calculation of Collective Pension Expense Local Employers | | |
|--|------------------------|---------------------------|
| Measurement Year Ending | 2023 | 2022 |
| Change in Net Pension Liability | \$ (612,695,854) | \$ 3,246,402,042 |
| Change in Deferred Outflows | 543,288,004 | (531,767,894) |
| Change in Deferred Inflows | (1,418,808,204) | (5,067,085,772) |
| Employer Contributions* | <u>1,397,893,295</u> | <u>1,309,702,391</u> |
| Subtotal | \$ (90,322,759) | \$ (1,042,749,233) |
| Employer Contribution - delayed enrollments** | 746,888 | 769,882 |
| Employer Contribution - delayed appropriations** | 3,050,065 | 3,147,089 |
| Employer Contribution - retroactive** | 7,305,219 | 5,977,713 |
| Employer Contribution - additional** | <u>38,784</u> | <u>75,615</u> |
| Total Pension Expense/(Income) | \$ (79,181,803) | \$ (1,032,778,934) |
| Total Pension Expense/(Income) as % of Payroll | -1.04% | -14.01% |
| Operating Expenses | | |
| Service cost | \$ 749,639,969 | \$ 694,024,318 |
| Employee contributions | (604,584,027) | (578,777,150) |
| Administrative expenses | <u>13,229,478</u> | <u>12,429,731</u> |
| Total | \$ 158,285,420 | \$ 127,676,899 |
| Financing Expenses | | |
| Interest cost | \$ 2,830,993,676 | \$ 2,783,542,580 |
| Expected return on assets | <u>(1,668,733,037)</u> | <u>(1,858,101,227)</u> |
| Total | \$ 1,162,260,639 | \$ 925,441,353 |
| Changes | | |
| Benefit changes | \$ 0 | \$ 8,076,428 |
| Recognition of assumption changes | (1,367,022,768) | (2,080,711,975) |
| Recognition of liability gains and losses | 48,869,769 | 32,951,836 |
| Recognition of investment gains and losses | <u>(81,574,863)</u> | <u>(46,213,475)</u> |
| Total | \$ (1,399,727,862) | \$ (2,085,897,186) |
| Total Pension Expense/(Income) | \$ (79,181,803) | \$ (1,032,778,934) |

* Includes appropriations and State contributions made on behalf of Local employers

** Pension expense related to specific liabilities of individual employers

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

| Table IV-3C Calculation of Collective Pension Expense Total | | |
|--|---------------------------|---------------------------|
| Measurement Year Ending | 2023 | 2022 |
| Change in Net Pension Liability | \$ (541,479,347) | \$ 4,003,735,603 |
| Change in Deferred Outflows | 614,321,288 | (897,183,396) |
| Change in Deferred Inflows | (2,464,107,499) | (7,130,827,729) |
| Employer Contributions* | <u>3,258,808,934</u> | <u>3,163,057,923</u> |
| Subtotal | \$ 867,543,376 | \$ (861,217,599) |
| Employer Contribution - delayed enrollments** | 987,536 | 984,714 |
| Employer Contribution - delayed appropriations** | 3,050,065 | 3,147,089 |
| Employer Contribution - retroactive** | 7,305,219 | 5,977,713 |
| Employer Contribution - additional** | <u>38,784</u> | <u>75,615</u> |
| Total Pension Expense/(Income) | \$ 878,924,980 | \$ (851,032,468) |
| Total Pension Expense/(Income) as % of Payroll | 7.17% | -7.12% |
| Operating Expenses | | |
| Service cost | \$ 1,218,502,310 | \$ 1,132,080,149 |
| Employee contributions | (961,919,241) | (933,155,302) |
| Administrative expenses | <u>19,140,588</u> | <u>18,030,213</u> |
| Total | \$ 275,723,657 | \$ 216,955,060 |
| Financing Expenses | | |
| Interest cost | \$ 4,832,168,694 | \$ 4,771,520,285 |
| Expected return on assets | <u>(2,132,756,690)</u> | <u>(2,433,244,025)</u> |
| Total | \$ 2,699,412,004 | \$ 2,338,276,260 |
| Changes | | |
| Benefit changes | \$ 0 | \$ 10,701,169 |
| Recognition of assumption changes | (2,350,586,742) | (3,609,162,472) |
| Recognition of liability gains and losses | 221,535,339 | 130,812,213 |
| Recognition of investment gains and losses | <u>32,840,722</u> | <u>61,385,302</u> |
| Total | \$ (2,096,210,681) | \$ (3,406,263,788) |
| Total Pension Expense/(Income) | \$ 878,924,980 | \$ (851,032,468) |

* Includes State and Local employer appropriations, lottery revenue and State contributions made on behalf of Local employers

** Pension expense related to specific liabilities of individual employers

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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APPENDIX A – MEMBERSHIP INFORMATION

| | Plan Membership | | | | | |
|---|------------------|--------------------|-------------------|------------------|--------------------|-------------------|
| | July 1, 2022 | | | July 1, 2021 | | |
| | State | Local Employers | Total | State | Local Employers | Total |
| Contributing Actives | 64,357 | 139,073 | 203,430 | 65,555 | 138,672 | 204,227 |
| Non-Contributing Actives | 9,786 | 27,935 | 37,721 | 9,253 | 26,422 | 35,675 |
| Deferred Beneficiaries | 11 | 67 | 78 | 183 | 876 | 1,059 |
| Terminated Vested | 147 | 433 | 580 | 186 | 537 | 723 |
| Inactive Receiving Benefits* | <u>62,842</u> | <u>128,199</u> | <u>191,041</u> | <u>61,535</u> | <u>125,837</u> | <u>187,372</u> |
| Total | 137,143 | 295,707 | 432,850 | 136,712 | 292,344 | 429,056 |
| Annual Compensation for Contributing Actives | \$ 4,664,968,264 | \$ 7,591,465,466 | \$ 12,256,433,730 | \$ 4,578,674,071 | \$ 7,369,908,268 | \$ 11,948,582,339 |
| Annual Retirement Allowances for Those Receiving Benefits | \$ 1,857,631,695 | \$ 2,517,340,724 | \$ 4,374,972,419 | \$ 1,776,844,453 | \$ 2,414,370,737 | \$ 4,191,215,190 |

* QDRO recipients are excluded from the counts for both years.

THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

- | | |
|--|---|
| 1. Investment Rate of Return for determining Actuarially Determined Contributions | 7.00% per annum, compounded annually. |
| 2. Long-Term Expected Rate of Return | 7.00% per annum, compounded annually. |
| 3. Interest Crediting Rate on Accumulated Deductions | 7.00% per annum, compounded annually. Interest credits are assumed to end upon termination. |
| 4. GASB 67 Effective Discount Rate | <ul style="list-style-type: none">• June 30, 2022: 7.00% per annum, compounded annually.• June 30, 2023: 7.00% per annum, compounded annually. |
| 5. Price Inflation | <ul style="list-style-type: none">• 2.75% per annum, compounded annually. |
| 6. Wage Inflation | <ul style="list-style-type: none">• 3.25% per annum, compounded annually. |
| 7. Cost-of-Living Adjustments (COLAs) | No future COLAs are assumed. Previously granted COLAs are included in the data. |

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Salary Increases

Salaries are assumed to increase as follows:

| Years of Service | Rates |
|------------------|-------|
| 0 | 6.55% |
| 1 | 6.55 |
| 2 | 6.35 |
| 3 | 6.15 |
| 4 | 5.95 |
| 5 | 5.75 |
| 6 | 5.55 |
| 7 | 5.35 |
| 8 | 5.15 |
| 9 | 4.95 |
| 10 | 4.75 |
| 11 | 4.55 |
| 12 | 4.35 |
| 13 | 4.15 |
| 14 | 3.95 |
| 15 | 3.75 |
| 16 | 3.55 |
| 17 | 3.45 |
| 18 | 3.35 |
| 19 | 3.25 |
| 20 | 3.15 |
| 21 | 3.05 |
| 22 | 2.95 |
| 23-27 | 2.85 |
| 28+ | 2.75 |

Salary increases are assumed to occur on July 1.

Non-contributing members reported with a salary are assumed to have no future salary increase.

9. 401(a)(17) Pay Limit \$305,000 in 2022 increasing 2.75% per annum, compounded annually.

10. Social Security Wage Base \$147,000 in 2022 increasing 3.25% per annum, compounded annually.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

11. Termination

Termination rates are shown separately for members electing a refund of contributions and members electing a deferred annuity.

Termination rates for members electing a refund of contributions are as follows:

| Termination Rates for Members Electing a Refund | | | | |
|--|-------------------------------|--------------------------|-------------------------------|--------------------------|
| Service | State | | Local Employers' | |
| | Less than 31 Years Old | 31 Years or Older | Less than 31 Years Old | 31 Years or Older |
| 0 | 21.00% | 11.00% | 19.00% | 11.50% |
| 1 | 21.00 | 11.00 | 19.00 | 11.50 |
| 2 | 11.50 | 7.50 | 15.50 | 8.50 |
| 3 | 9.50 | 6.50 | 14.00 | 7.50 |
| 4 | 9.00 | 5.50 | 11.50 | 6.50 |
| 5 | 8.00 | 5.50 | 10.50 | 6.00 |
| 6 | 7.00 | 5.00 | 8.50 | 5.50 |
| 7 | 7.00 | 4.50 | 8.00 | 5.00 |
| 8 | 7.00 | 4.00 | 7.50 | 4.50 |
| 9 | 7.00 | 3.50 | 6.50 | 4.00 |
| 10 | 1.70 | 1.70 | 1.70 | 1.70 |
| 11 | 1.50 | 1.50 | 1.50 | 1.50 |
| 12 | 1.10 | 1.10 | 1.40 | 1.40 |
| 13 | 1.10 | 1.10 | 1.20 | 1.20 |
| 14 | 0.70 | 0.70 | 1.10 | 1.10 |
| 15 | 0.60 | 0.60 | 0.90 | 0.90 |
| 16 | 0.60 | 0.60 | 0.80 | 0.80 |
| 17 | 0.60 | 0.60 | 0.70 | 0.70 |
| 18 | 0.50 | 0.50 | 0.60 | 0.60 |
| 19 | 0.50 | 0.50 | 0.60 | 0.60 |
| 20 | 0.50 | 0.50 | 0.50 | 0.50 |
| 21 | 0.50 | 0.50 | 0.50 | 0.50 |
| 22 | 0.40 | 0.40 | 0.50 | 0.50 |
| 23 | 0.40 | 0.40 | 0.40 | 0.40 |
| 24-29 | 0.30 | 0.30 | 0.30 | 0.30 |

No termination is assumed after attainment of retirement eligibility.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Termination rates for members electing a deferred annuity are as follows:

| Termination Rates for Members Electing a Deferred Annuity | | |
|--|--------------|------------------------|
| Service | State | Local Employers |
| < 10 | N/A | N/A |
| 10 | 1.60% | 1.80% |
| 11 | 1.60 | 1.80 |
| 12 | 1.20 | 1.70 |
| 13 | 1.20 | 1.60 |
| 14 | 1.00 | 1.50 |
| 15 | 0.90 | 1.40 |
| 16 | 0.90 | 1.30 |
| 17 | 0.80 | 1.20 |
| 18 | 0.80 | 1.10 |
| 19 | 0.80 | 1.00 |
| 20 | 0.80 | 1.00 |
| 21 | 0.70 | 0.90 |
| 22 | 0.50 | 0.80 |
| 23 | 0.50 | 0.80 |
| 24 | 0.40 | 0.70 |

No termination is assumed after attainment of retirement eligibility.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Disability

Ordinary disability rates are as follows:

| Ordinary Disability Rates | | | | | |
|---------------------------|--------|--------------------|-----|--------|--------------------|
| Age | State | Local Employers | Age | State | Local Employers |
| 25 | 0.100% | 0.200% | 50 | 0.335% | 0.335% |
| 26 | 0.110 | 0.200 | 51 | 0.350 | 0.350 |
| 27 | 0.120 | 0.200 | 52 | 0.365 | 0.365 |
| 28 | 0.130 | 0.200 | 53 | 0.380 | 0.380 |
| 29 | 0.140 | 0.200 | 54 | 0.395 | 0.395 |
| 30 | 0.150 | 0.205 | 55 | 0.410 | 0.405 |
| 31 | 0.160 | 0.210 | 56 | 0.425 | 0.415 |
| 32 | 0.170 | 0.215 | 57 | 0.440 | 0.425 |
| 33 | 0.180 | 0.220 | 58 | 0.455 | 0.435 |
| 34 | 0.190 | 0.225 | 59 | 0.470 | 0.445 |
| 35 | 0.205 | 0.225 | 60 | 0.485 | 0.455 |
| 36 | 0.220 | 0.225 | 61 | 0.500 | 0.465 |
| 37 | 0.220 | 0.225 | 62 | 0.515 | 0.475 |
| 38 | 0.220 | 0.225 | 63 | 0.530 | 0.485 |
| 39 | 0.220 | 0.225 | 64 | 0.545 | 0.495 |
| 40 | 0.230 | 0.235 | 65 | 0.560 | 0.505 |
| 41 | 0.240 | 0.245 | 66 | 0.575 | 0.515 |
| 42 | 0.250 | 0.255 | 67 | 0.590 | 0.525 |
| 43 | 0.260 | 0.265 | 68 | 0.605 | 0.535 |
| 44 | 0.270 | 0.275 | 69 | 0.620 | 0.545 |
| 45 | 0.280 | 0.275 | 70 | 0.630 | 0.560 |
| 46 | 0.290 | 0.275 | 71 | 0.640 | 0.575 |
| 47 | 0.300 | 0.290 | 72 | 0.650 | 0.590 |
| 48 | 0.310 | 0.305 | 73 | 0.660 | 0.605 |
| 49 | 0.320 | 0.320 | 74 | 0.670 | 0.620 |

Accidental disability rates are assumed to be 0.02% for all State members and 0.03% for all Local employers' members.

Ordinary disability rates apply upon attainment of 10 years of service and continue through the ultimate retirement age.

Members are assumed to receive the greater of the applicable disability benefit or the early or service retirement benefit, depending on eligibility.

Tier 4 and Tier 5 members are not eligible for the Ordinary or Accidental Disability benefits, but the disability rates still apply. Such members terminating under the disability decrement are assumed to separate from service and elect a Deferred Retirement benefit.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

13. Mortality

Pre-Retirement Mortality (Non-Annuitants): The Pub-2010 General Below-Median Income Employee mortality table [*PubG-2010(B) Employee*] as published by the Society of Actuaries with an 82.2% adjustment for males and 101.4% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

All pre-retirement deaths are assumed to be ordinary deaths.

Healthy Retirees and Beneficiaries (Healthy Annuitants): The Pub-2010 General Below-Median Income Healthy Retiree mortality table [*PubG-2010(B) Healthy Retiree*] as published by the Society of Actuaries with a 91.4% adjustment for males and 99.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Disabled Retirees (Disabled Annuitants): The Pub-2010 Non-Safety Disabled Retiree mortality table [*PubNS-2010 Disabled Retiree*] as published by the Society of Actuaries with a 127.7% adjustment for males and 117.2% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

14. Retirement

Retirement rates for State Tier 1-4 members are as follows:

| State Tiers 1-4 Retirement Rates | | | |
|----------------------------------|----------------------------------|------------------------|--------------------------------|
| Age | Less Than 25 Years of Service | 25 Years of Service | 26 or More Years of Service |
| < 49 | N/A | 3.50% | 2.00% |
| 49 | N/A | 3.50 | 2.00 |
| 50 | N/A | 3.50 | 3.50 |
| 51 | N/A | 3.50 | 3.50 |
| 52 | N/A | 6.00 | 4.25 |
| 53 | N/A | 6.00 | 5.50 |
| 54 | N/A | 7.00 | 6.75 |
| 55 | N/A | 17.50 | 18.00 |
| 56 | N/A | 17.50 | 15.00 |
| 57 | N/A | 17.50 | 14.00 |
| 58 | N/A | 20.00 | 14.00 |
| 59 | N/A | 20.00 | 14.00 |
| 60 | 5.00 | 20.00 | 17.00 |
| 61 | 5.00 | 30.00 | 17.00 |
| 62 | 8.00 | 36.50 | 27.00 |
| 63 | 8.00 | 36.50 | 24.00 |
| 64 | 8.00 | 36.50 | 21.00 |
| 65 | 12.00 | 44.00 | 25.00 |
| 66 | 17.00 | 55.00 | 30.00 |
| 67 | 16.00 | 50.00 | 26.00 |
| 68 | 15.00 | 47.00 | 23.00 |
| 69 | 15.00 | 47.00 | 23.00 |
| 70 | 15.00 | 47.00 | 26.00 |
| 71 | 15.00 | 47.00 | 23.00 |
| 72 | 15.00 | 47.00 | 21.00 |
| 73 | 15.00 | 47.00 | 21.00 |
| 74 | 15.00 | 47.00 | 21.00 |
| 75 | 100.00 | 100.00 | 100.00 |

Rates apply upon retirement eligibility by tier.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Retirement rates for Local employers' Tier 1-4 members are as follows:

| Local Employers' Tiers 1-4 Retirement Rates | | | |
|--|--|--------------------------------|--|
| Age | Less Than 25 Years of Service | 25 Years of Service | 26 or More Years of Service |
| < 49 | N/A | 3.00% | 2.25% |
| 49 | N/A | 3.00 | 3.00 |
| 50 | N/A | 3.50 | 3.50 |
| 51 | N/A | 4.25 | 3.75 |
| 52 | N/A | 4.75 | 3.75 |
| 53 | N/A | 7.00 | 5.00 |
| 54 | N/A | 7.00 | 6.00 |
| 55 | N/A | 15.00 | 15.00 |
| 56 | N/A | 17.00 | 13.00 |
| 57 | N/A | 18.00 | 12.00 |
| 58 | N/A | 18.00 | 12.00 |
| 59 | N/A | 18.00 | 12.00 |
| 60 | 4.50 | 18.00 | 14.00 |
| 61 | 4.50 | 18.00 | 14.00 |
| 62 | 7.50 | 34.00 | 25.00 |
| 63 | 7.50 | 34.00 | 22.00 |
| 64 | 7.50 | 34.00 | 20.00 |
| 65 | 11.00 | 35.00 | 20.00 |
| 66 | 15.00 | 43.00 | 26.00 |
| 67 | 14.00 | 40.00 | 26.00 |
| 68 | 13.00 | 40.00 | 22.00 |
| 69 | 13.00 | 37.00 | 22.00 |
| 70 | 13.00 | 37.00 | 24.00 |
| 71 | 13.00 | 37.00 | 24.00 |
| 72 | 13.00 | 37.00 | 20.00 |
| 73 | 13.00 | 37.00 | 20.00 |
| 74 | 13.00 | 37.00 | 20.00 |
| 75 | 100.00 | 100.00 | 100.00 |

Rates apply upon retirement eligibility by tier.

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Retirement rates for State Tier 5 members are as follows:

| State Tier 5 Retirement Rates | | | | | |
|-------------------------------|----------------------------------|------------------------|------------------------------|------------------------|--------------------------------|
| Age | Less Than 25 Years of Service | 25 Years of Service | 26 to 29 Years of Service | 30 Years of Service | 31 or More Years of Service |
| < 49 | N/A | N/A | N/A | 3.50% | 2.00% |
| 49 | N/A | N/A | N/A | 3.50 | 2.00 |
| 50 | N/A | N/A | N/A | 3.50 | 3.50 |
| 51 | N/A | N/A | N/A | 3.50 | 3.50 |
| 52 | N/A | N/A | N/A | 6.00 | 4.25 |
| 53 | N/A | N/A | N/A | 6.00 | 5.50 |
| 54 | N/A | N/A | N/A | 7.00 | 6.75 |
| 55 | N/A | N/A | N/A | 17.50 | 18.00 |
| 56 | N/A | N/A | N/A | 17.50 | 15.00 |
| 57 | N/A | N/A | N/A | 17.50 | 14.00 |
| 58 | N/A | N/A | N/A | 20.00 | 14.00 |
| 59 | N/A | N/A | N/A | 20.00 | 14.00 |
| 60 | N/A | N/A | N/A | 20.00 | 17.00 |
| 61 | N/A | N/A | N/A | 30.00 | 17.00 |
| 62 | N/A | N/A | N/A | 36.50 | 27.00 |
| 63 | N/A | N/A | N/A | 36.50 | 24.00 |
| 64 | N/A | N/A | N/A | 36.50 | 21.00 |
| 65 | 12.00 | 44.00 | 44.00 | 44.00 | 25.00 |
| 66 | 17.00 | 55.00 | 30.00 | 30.00 | 30.00 |
| 67 | 16.00 | 50.00 | 26.00 | 26.00 | 26.00 |
| 68 | 15.00 | 47.00 | 23.00 | 23.00 | 23.00 |
| 69 | 15.00 | 47.00 | 23.00 | 23.00 | 23.00 |
| 70 | 15.00 | 47.00 | 26.00 | 26.00 | 26.00 |
| 71 | 15.00 | 47.00 | 23.00 | 23.00 | 23.00 |
| 72 | 15.00 | 47.00 | 21.00 | 21.00 | 21.00 |
| 73 | 15.00 | 47.00 | 21.00 | 21.00 | 21.00 |
| 74 | 15.00 | 47.00 | 21.00 | 21.00 | 21.00 |
| 75 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Retirement rates for Local employers' Tier 5 members are as follows:

| Local Employers' Tier 5 Retirement Rates | | | | | |
|--|----------------------------------|------------------------|------------------------------|------------------------|--------------------------------|
| Age | Less Than 25 Years of Service | 25 Years of Service | 26 to 29 Years of Service | 30 Years of Service | 31 or More Years of Service |
| < 49 | N/A | N/A | N/A | 3.00% | 2.25% |
| 49 | N/A | N/A | N/A | 3.00 | 3.00 |
| 50 | N/A | N/A | N/A | 3.50 | 3.50 |
| 51 | N/A | N/A | N/A | 4.25 | 3.75 |
| 52 | N/A | N/A | N/A | 4.75 | 3.75 |
| 53 | N/A | N/A | N/A | 7.00 | 5.00 |
| 54 | N/A | N/A | N/A | 7.00 | 6.00 |
| 55 | N/A | N/A | N/A | 15.00 | 15.00 |
| 56 | N/A | N/A | N/A | 17.00 | 13.00 |
| 57 | N/A | N/A | N/A | 18.00 | 12.00 |
| 58 | N/A | N/A | N/A | 18.00 | 12.00 |
| 59 | N/A | N/A | N/A | 18.00 | 12.00 |
| 60 | N/A | N/A | N/A | 18.00 | 14.00 |
| 61 | N/A | N/A | N/A | 18.00 | 14.00 |
| 62 | N/A | N/A | N/A | 34.00 | 25.00 |
| 63 | N/A | N/A | N/A | 34.00 | 22.00 |
| 64 | N/A | N/A | N/A | 34.00 | 20.00 |
| 65 | 11.00 | 35.00 | 35.00 | 35.00 | 20.00 |
| 66 | 15.00 | 43.00 | 26.00 | 26.00 | 26.00 |
| 67 | 14.00 | 40.00 | 26.00 | 26.00 | 26.00 |
| 68 | 13.00 | 40.00 | 22.00 | 22.00 | 22.00 |
| 69 | 13.00 | 37.00 | 22.00 | 22.00 | 22.00 |
| 70 | 13.00 | 37.00 | 24.00 | 24.00 | 24.00 |
| 71 | 13.00 | 37.00 | 24.00 | 24.00 | 24.00 |
| 72 | 13.00 | 37.00 | 20.00 | 20.00 | 20.00 |
| 73 | 13.00 | 37.00 | 20.00 | 20.00 | 20.00 |
| 74 | 13.00 | 37.00 | 20.00 | 20.00 | 20.00 |
| 75 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Retirement rates for members of Prosecutors Part (Chapter 366, P.L. 2001 and Chapter 226, P.L. 2021) are as follows:

- Members with less than 25 years of service: 6.0% for all ages,
- Members with 25 years of service: 40.0% for all ages,
- Members with 26 or more years of service: 20.0% for all ages.

Rates apply upon retirement eligibility. 100% retirement is assumed at age 70.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Retirement rates for members of WCJ Part (Chapter 140, P.L. 2021) are as follows:

| Age | Less than 15 Years of WCJ Part Service | 15-19 Years of WCJ Part Service | 20 or more Years of WCJ Part Service |
|------------|---|--|---|
| <60 | 0.0% | 0.0% | 0.0% |
| 60 | 2.0 | 2.0 | 20.0 |
| 61 | 2.0 | 2.0 | 20.0 |
| 62 | 2.0 | 2.0 | 20.0 |
| 63 | 2.0 | 2.0 | 20.0 |
| 64 | 2.0 | 2.0 | 20.0 |
| 65 | 5.0 | 40.0 | 30.0 |
| 66 | 2.0 | 40.0 | 20.0 |
| 67 | 2.0 | 40.0 | 20.0 |
| 68 | 2.0 | 40.0 | 20.0 |
| 69 | 2.0 | 40.0 | 20.0 |
| 70 | 100.0 | 100.0 | 100.0 |

15. Family Composition Assumptions

For members not currently in receipt, 50% of members are assumed married to spouses of the opposite sex. Males are assumed to be two years older than females.

For purposes of the optional form of payment death benefit for members currently in receipt, beneficiary status is based on the beneficiary allowance reported. If no beneficiary date of birth is provided, the beneficiary is assumed to be the member's spouse of the opposite sex with males assumed to be two years older than females.

No additional dependent children or parents are assumed.

16. Form of Payment

Current active members are assumed to elect the Maximum Option.

17. Non-Contributory Group Insurance Form of Payment

All benefits are assumed to be paid as lump sums.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

18. Data

Non-contributing members reported without a salary are included in the valuation with a liability based on the reported Accumulated Deductions with interest (Annuity Savings Fund or ASF), adjusted to include interest through the valuation date.

Per discussions with DPB, the statuses for active records in Locations 4 – 7 (General Assembly and Senate) are based on changes in service instead of the contribution code.

For current beneficiaries with incomplete information, reasonable assumptions were made based on information available in prior years.

Deferred beneficiaries were reported separately from other non-contributing members for the first time in 2021. The benefit is based on the reported Accumulated Deductions with interest (Annuity Savings Fund or ASF).

Inactive participants receiving benefits according to the 2021 data but omitted from the 2022 data are assumed to have died without a beneficiary.

For retirees who earned benefits under both a State and Local employer, their total benefit is assigned to the location with the highest salary prior to retirement.

Tier 4 and 5 members on long-term disability appeared on the active data for the first time in 2019. The number of members on long-term disability is immaterial for valuation purposes. Therefore, we valued these members as regular contributing and non-contributing members while we gain clarity on what happens with these members.

19. Rationale for Assumptions

The demographic and economic assumptions used in this report, except for the investment return assumption, reflect the results of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022.

The investment return assumption was recommended by the State Treasurer. We find the investment return assumption to be reasonable based on the System's current asset allocation and the capital market outlook of the New Jersey Division of Investment.

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

20. Projection Basis This report includes projections of future assets, benefit payments and contributions for the purpose of determining the GASB 67 discount rate.

The projections are based on the census data as of July 1, 2022 and the financial information as of June 30, 2023. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2023 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2023 unless otherwise indicated. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

21. Changes in Assumptions since the Last Valuation None.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

The actuarial methods used for determining State and Local employer contributions are described below.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method. Non-contributing members reported with a salary use the Projected Unit Credit Cost Method without any future projected salary increases.

The actuarial liability is calculated as the actuarial present value of the projected benefits linearly allocated to periods prior to the valuation year based on service (WCJ Part Service for members in the WCJ Part). Refunds are valued as the reported Accumulated Deductions with interest as of the valuation date. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30-year period.
- Beginning with the July 1, 2019 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over a closed 30-year period (i.e., for each subsequent actuarial valuation the amortization period shall decrease by one year).
- Beginning with the July 1, 2029 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20-year amortization period.

Certain portions of the normal cost and unfunded actuarial liabilities attributable to Local employers are payable by the State and/or over different periods in accordance with the NJ State Statutes.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the actuarially determined contribution, any existing unfunded accrued liability may not be fully amortized in the future.

The non-contributory group life insurance benefit is funded separately through a term cost.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

2. Asset Valuation Method

For the purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contributions.

The actuarial value of assets is adjusted to reflect actual contributions, benefit payments and administrative expenses, and an assumed rate of return on the previous year's assets and current year's cash flow at the prior year's actuarial valuation interest rate, with a further adjustment to reflect 20% of the difference between the resulting value and the actual market value of Plan assets.

3. Contributions

Chapter 83, P.L. 2016 requires the State to make pension contributions on a quarterly basis: at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30. As such, contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, with the exception of the FYE 2022 contribution. For FYE 2022 only, we assumed that the entire contribution was made in a single payment on July 1, 2021 based on information provided by the DPB.

Local employers' contributions are expected to be paid on April 1st, 21 months after the associated valuation date.

Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act, allows the PERS to receive 21.02% of the proceeds of the Lottery Enterprise, based upon their members' past or present employment in schools and institutions in the State for a term of 30 years. Revenues from Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act, are assumed to be contributed to the trust on a monthly basis. The State's pension contribution is reduced by the product of the allocable percentage for the PERS, the adjustment percentage, and the special asset value.

Contributions payable in the fiscal year starting on the valuation date are included in the actuarial value of assets as receivable contributions, discounted by the applicable valuation interest rate.

Legislation has provided for additional benefits and/or funding requirements which are included in this valuation and are described as follows.

Early Retirement Incentive Programs

Local employers which elected to participate in various early retirement incentive programs authorized by NJ Statute make contributions to cover the cost of these programs over amortization periods elected by the employer to the extent permitted by NJ Statute.

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Chapter 133, P.L. 2001

Chapter 133, P.L. 2001 increased the accrual rate from 1/60 to 1/55. In addition, it lowered the age required for a veteran benefit equal to 1/55 of highest 12-month Compensation for each Year of Service from 60 to 55.

Chapter 133, P.L. 2001 also established the Benefit Enhancement Fund (BEF) to fund the additional annual employer normal contribution due to the Statute's increased benefits. (Chapter 353, P.L. 2001 extended this coverage to this Statute's additional annual employer normal contribution.) If the assets in the BEF are insufficient to cover the normal contribution for the increased benefits for a valuation period, the State will pay such amount for both the State and Local employers.

Chapter 259, P.L. 2001

Chapter 259, P.L. 2001 established the Workers' Compensation Judges Part of the System with special retirement benefits for Workers' Compensation Judges. See Appendix C for details.

In accordance with the provisions of Chapter 259, P.L. 2001, the additional contributions for these special retirement benefits will be funded by transfers from the Second Injury Fund.

Chapter 366, P.L. 2001

Chapter 366, P.L. 2001 established the Prosecutors Part of the System with special retirement benefits for Prosecutors. See Appendix C for details.

Chapter 366, P.L. 2001 also requires the State be liable for any increase in pension costs to a County that results from the enrollment of Prosecutors in the Prosecutors Part. Any increase in the unfunded actuarial liability arising from the benefits established for the Prosecutors Part are to be amortized over a closed 30-year period.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Chapter 19, P.L. 2009

Chapter 19, P.L. 2009 provided that the State Treasurer will reduce for Local employers the normal and accrued liability contributions to 50 percent of the amount certified for fiscal year 2009. The remaining 50% of the contribution (unfunded liability) will be paid by the Local employers in level annual payments over a period of 15 years with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets. The legislation also provided that a Local employer may pay 100 percent of the contribution for the fiscal year 2009. Such an employer will be credited with the full payment and any such amounts will not be included in their unfunded liability. In addition, certain Local employers who were eligible to defer 50% of their fiscal year 2009 pension contributions but instead paid 100% of the fiscal year 2009 pension contributions were permitted to defer 50% of their 2010 fiscal year pension contributions. The unfunded liability will be paid by these Local employers over a period of 15 years with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets.

Chapter 140, P.L. 2021

Chapter 140, P.L. 2021 reopened the Worker's Compensation Judges (WCJ) Part of PERS and transferred WCJs from the Defined Contribution Retirement Program (DCRP) and the regular part of PERS into the WCJ Part of PERS.

The corresponding increase in the unfunded actuarial liability is amortized over a closed 20-year period. The additional unfunded actuarial liability contribution and the increased normal cost will be paid by transfers from the Second Injury Fund (SIF).

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes in Methods since the Last Valuation

The actuarial liability for retirees who earned benefits under both a State and Local employer is assigned to the location with the highest salary prior to retirement upon direction from the DPB. Previously, the actuarial liability for these retirees was split between State and Local employers based on the benefit reported in the valuation data for each location.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the PERS used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 43, Chapter 15A, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern.

1. Eligibility for Membership

Employees of the State or any county, municipality, school district, or public agency employed on a regular basis in a position covered by Social Security and not required to be a member of any other State or local government retirement system. Certain exceptions apply.

- a) Class B (or Tier 1) Member: Any member hired prior to July 1, 2007.
- b) Class D (or Tier 2) Member: Any member hired on or after July 1, 2007 and before November 2, 2008.
- c) Class E (or Tier 3) Member: Any member hired after November 1, 2008 and before May 22, 2010.
- d) Class F (or Tier 4) Member: Any member hired after May 21, 2010 and before June 28, 2011.
- e) Class G (or Tier 5) Member: Any member hired on or after June 28, 2011.

The hiring, rehiring, retention, and benefits of certain public employees during the COVID-19 Public Health Emergency was modified under Executive Order No. 103 of 2020, as extended.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Years of Service

A year of service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability. Tier 4 and Tier 5 Members must be scheduled to work at least 35 hours per week for the State or 32 hours per week for a Local employer. Tier 3, 4 and 5 Members must have an annual salary of \$7,500 (indexed for inflation) and other members must have an annual salary of \$1,500.

4. Compensation

Base salary upon which contributions by a Member to the Annuity Savings Fund were based. Chapter 113, P.L. 1997 provides that Compensation cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code. Chapter 103, P.L. 2007 provides that for a Tier 2, 3, 4 or 5 Member, Compensation cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contribution Act.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

5. Final Compensation

The average annual compensation upon which contributions by a Member are made for the three consecutive years of service immediately preceding retirement, or the highest three fiscal years of service, if greater. Chapter 1, P. L. 2010 provides that for a Tier 4 or Tier 5 Member, Final Compensation is the average annual compensation upon which contributions by a Member are made for the five consecutive years of service immediately preceding retirement, or the highest five fiscal years of service, if greater.

6. Final Year Compensation

The compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of service.

7. Accumulated Deductions

The sum of all amounts deducted from the compensation of a Member or contributed by the Member or on the Member's behalf without interest.

8. Interest Credits on Accumulated Deductions

Members receive interest credits while contributing and for the first two years of inactivity. The rate depends on the type of benefit. Prior to July 1, 2018, members received interest credits for the entire period of inactivity until retirement or death.

9. Member Contributions

Each Member contributes a percentage of Compensation. Effective October 1, 2011, Chapter 78, P.L. 2011 set the member contribution rate at 6.5% and increased it by 1/7th of 1% each July thereafter until it attained an ultimate rate of 7.5% on July 1, 2018.

For members who are eligible to retire under the Prosecutors Part as provided by Chapter 366, P.L. 2001, Chapter 78, P.L. 2011 set the member contribution rate at 10.0%, effective October 1, 2011.

10. Benefits

- a) **Service Retirement**: For a Tier 1 or Tier 2 Member, age 60. For a Tier 3 or Tier 4 Member, age 62. For a Tier 5 Member, age 65.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

- (1) For a Tier 1, 2 or 3 Member, 1/55 of Final Compensation for each Year of Service.
- (2) For a Tier 4 or 5 Member, 1/60 of Final Compensation for each Year of Service.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

- b) **Early Retirement:** Prior to eligibility for Service Retirement. For a Tier 1, 2, 3 or 4 Member, 25 Years of Service. For a Tier 5 Member, 30 Years of Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

- (1) For a Tier 1 Member, the Service Retirement benefit reduced by $\frac{1}{4}$ of one percent for each month the retirement date precedes age 55.
- (2) For a Tier 2 Member, the Service Retirement benefit reduced by $\frac{1}{12}$ of one percent for each month the retirement date precedes age 60 through age 55 and by $\frac{1}{4}$ of one percent for each month the retirement date precedes age 55.
- (3) For a Tier 3 or 4 Member, the Service Retirement benefit reduced by $\frac{1}{12}$ of one percent for each month the retirement date precedes age 62 through age 55 and by $\frac{1}{4}$ of one percent for each month the retirement date precedes age 55.
- (4) For a Tier 5 Member, the Service Retirement benefit reduced by $\frac{1}{4}$ of one percent for each month the retirement date precedes age 65.

- c) **Veteran Retirement:** Age 55 with 25 Years of Service or Age 60 with 20 Years of Service for a qualified military veteran who retires directly from active service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the greater of:

- (1) 54.5% of highest 12-month Compensation, or
- (2) For a member who is at least age 55 with 35 Years of Service, $\frac{1}{55}$ of highest 12-month Compensation for each Year of Service.

Veterans may receive a Service Retirement benefit if greater.

- d) **Deferred Retirement:** Termination of service prior to eligibility for Service Retirement with 10 Years of Service.

Benefit is either:

- (1) A refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum; or
- (2) A deferred life annuity, commencing at age 60 for a Tier 1 or Tier 2 Member, age 62 for a Tier 3 or Tier 4 Member or age 65 for a Tier 5 Member, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the Service Retirement benefit based on Final Compensation and Years of Service at date of termination.

For Members who die during the deferral period, the benefit is a return of Accumulated Deductions with credited interest.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

- e) **Non-Vested Termination:** Termination of service prior to eligibility for Service Retirement and less than 10 Years of Service.

Benefit is a refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum.

f) **Death Benefits**

- (1) **Ordinary Death Before Retirement:** Death of an active contributing Member. Benefit is equal to:

- a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insurance benefit, plus
- b. Accumulated Deductions with credited interest.

- (2) **Accidental Death Before Retirement:** Death of an active Member resulting from injuries received from an accident during performance of duty and not a result of willful negligence. Benefit is equal to:

- a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insurance benefit, plus
- b. Spouse life annuity of 50% of Final Year Compensation payable until spouse's death or remarriage. If there is no surviving spouse or upon death or remarriage, a total of 20% (35%, 50%) of Final Year Compensation payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent child(ren), 25% (40%) of Final Year Compensation to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of Accumulated Deductions with credited interest.

- (3) **Death After Retirement:** Death of a retired Member. Benefit is equal to:

- a. Lump sum payment equal to 3/16 of Final Year Compensation for a Member retired under Service, Early, Veteran or Deferred Retirement with 10 Years of Service. For a Member receiving a Disability benefit, lump sum payment of 150% of Final Year Compensation if death occurs prior to age 60 and 3/16 of Final Compensation if death occurs after age 60. This benefit is also known as the non-contributory group life insurance benefit, plus
- b. Any survivor benefit due under the Member's optional form of payment election. Previously granted COLAs also apply to life annuities.

Members are also eligible for a voluntary, employee-paid life insurance policy, known as the contributory group life insurance policy. This benefit is not paid through the System and is not considered for valuation purposes.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

g) **Disability Retirement**

- (1) **Ordinary Disability Retirement**: 10 years of service and totally and permanently incapacitated from the performance of normal or assigned duties. Only available to Tier 1, 2 and 3 Members.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

- a. 1.64% of Final Compensation for each Year of Service; or
- b. 43.6% of Final Compensation.

- (2) **Accidental Disability Retirement**: Total and permanent incapacitation as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties. Under certain conditions for law enforcement officers or emergency medical technicians, regular or assigned duties may include the World Trade Center (WTC) rescue, recovery, or cleanup operations between September 11, 2001 and October 11, 2001. For such members who participated in the WTC rescue, recovery, or cleanup operations, the total and permanent disability may occur after retirement on a service retirement or an ordinary disability retirement. Only available to Tier 1, 2 and 3 Members.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 72.7% of Compensation at the date of injury.

The pension portion of the benefit will be offset for any periodic Workers' Compensation benefits.

Tier 4 and Tier 5 Members are eligible for long-term disability coverage. This benefit is not paid through the System and is not considered for valuation purposes. Both Member and employer contributions to the System continue while on long-term disability, with the policy covering the Member portion. The long-term disability benefit equals 60% of Final Year Compensation and may be offset for other periodic benefits, such as Workers' Compensation, short-term disability or Social Security. The long-term disability benefit may continue through the earlier of age 70 or commencement of a retirement benefit under the System.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

11. **Benefits for Special Employee Groups**

Certain members qualify for enrollment into special employee groups. Such members receive the greater of the special benefits described below or the regular PERS benefit described above. For benefit types not explicitly mentioned, the regular PERS benefit applies.

a) **Law Enforcement Officers (LEOs):**

Members employed in eligible job titles as well as individuals who do not meet the age or medical requirements for entry into the Police and Firemen's Retirement System (PFRS).

(1) **Service and Special Retirement**

Mandatory retirement at age 65. Veterans with less than 20 Years of Service at age 65 must retire upon attainment of 20 Years of Service or age 70, whichever is earlier. Voluntary retirement prior to those ages.

a. **Service Retirement:** Age 55 after 20 Years of LEO Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of Final Compensation for each Year of LEO Service up to 25 years plus 1% of Final Compensation for each Year of LEO Service over 25 years.

The Member is also eligible for a regular PERS benefit based on any non-LEO service.

b. **Special Retirement:** 25 Years of LEO Service.

Benefit is the Service Retirement benefit plus 5% of Final Compensation with a maximum of 70% of Final Compensation.

(2) **Ordinary Disability Retirement:** 5 Years of LEO Service.

Benefit is the regular PERS Ordinary Disability benefit.

(3) **Death Benefits:**

Benefit is the regular PERS Death benefit except, upon Accidental Disability Retirement, the minimum lump sum payment is \$5,000.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

b) **Legislative Retirement System (LRS):**

Members of the State Legislature. Chapter 92, P.L. 2007 closed LRS to new members enrolled on or after July 1, 2007.

(1) **Special Legislative Retirement:** Age 60.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 3% of Final Compensation for each Year of Legislative Service with a maximum of two-thirds of Final Compensation.

The Member is also eligible for a regular PERS benefit based on any non-legislative service.

(2) **Deferred Retirement:** Termination of service prior to eligibility for Service or Special Legislative Retirement with 8 Years of Legislative Service.

Benefit is either:

- a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or
- b. A deferred life annuity, commencing at age 60, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the Service or Special Legislative Retirement benefit based on Final Compensation and Years of Service at date of termination.

c) **Prosecutors Part (Chapter 366, P.L. 2001 and Chapter 226, P.L. 2021):**

Covers prosecutors as well as members employed in certain other related job titles. Chapter 1, P.L. 2010 closed the Prosecutors Part to new members enrolled on or after May 22, 2010.

Chapter 226, P.L. 2021 reopened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for prosecutors.

(1) **Service and Special Retirement**

Mandatory retirement at age 70. Voluntary retirement prior to that age.

In addition to the benefits described below, the member is eligible for a regular PERS benefit based on any non-Prosecutors Part service.

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

- a. Service Retirement: For a Prosecutors Part Member enrolled as of January 7, 2002, age 55 or 20 Years of Prosecutors Part Service. For a Prosecutors Part Member enrolled after January 7, 2002, age 55.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the greater of:

- i. 2% of Final Year Compensation for each Year of Prosecutors Part Service up to 30 years plus 1% of Final Year Compensation for each Year of Prosecutors Part Service over 30 years.
- ii. 50% of Final Year Compensation for Prosecutors Part Members with 20 or more Years of Prosecutors Part Service.
- iii. 1/60 of Final Year Compensation for each Year of Prosecutors Part Service.

- b. Special Retirement: 25 Years of Prosecutors Part Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 65% of Final Year Compensation plus 1% of Final Year Compensation for each Year of Prosecutors Part Service in excess of 25 years with a maximum of 70% of Final Compensation.

- (2) Deferred Retirement: Termination of service prior to eligibility for Service or Special Retirement with 10 Years of Prosecutors Part Service.

Benefit is either:

- a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or
- b. A deferred life annuity, commencing at age 55, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of Final Year Compensation for each Year of Prosecutors Part Service.

- (3) Death Benefits:

Benefit is the regular PERS Death benefit except, upon Service, Special or Deferred Prosecutors Part Retirement with 10 Years of Prosecutors Part Service, the lump sum payment equals 50% of Final Year Compensation.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

d) **Workers Compensation Judges Part (WCJ) (Chapter 259, P.L. 2001 and Chapter 140, P.L. 2021):**

Members employed in an eligible job title by the Division of Workers' Compensation. Chapter 92, P.L. 2007 closed the Workers Compensation Judges Part to new members enrolled on or after July 1, 2007.

Chapter 140, P.L. 2021 reopened the Worker's Compensation Judges (WCJ) Part of PERS and transferred WCJs from the Defined Contribution Retirement Program (DCRP) and the regular part of PERS into the WCJ Part of PERS.

(1) Service Retirement:

Mandatory retirement age 70. Voluntary retirement prior to that age.

- a. Age 70 and 10 Years of WCJ Service; or
Age 65 and 15 Years of WCJ Service; or
Age 60 and 20 Years of WCJ Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 75% of contractual Compensation at the date of retirement.

- b. Age 65, 5 consecutive Years of WCJ Service and 15 Years of Aggregate PERS Service; or
Age 60, 5 consecutive Years of WCJ Service and 20 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 50% of contractual Compensation at the date of retirement.

- c. Age 60, 5 consecutive Years of WCJ Service and 15 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

d. Age 60.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of WCJ Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

- (2) Early Retirement: Prior to eligibility for Service Retirement and 5 consecutive Years of WCJ Service and 25 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years, actuarially reduced for commencement prior to age 60.

- (3) Deferred Retirement: Termination of service prior to eligibility for Service Retirement with 5 consecutive Years of WCJ Service and 10 Years of Aggregate PERS Service.

Benefit is either:

- a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or
- b. A deferred life annuity, commencing at age 60, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

- (4) Death Benefits

- a. Before Retirement: Death of an active WCJ Member. Benefit is equal to:
 - i. Lump sum equal to 150% of contractual Compensation at the date of death, plus
 - ii. Spousal life annuity of 25% of contractual Compensation at the date of death payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child(ren). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of contractual Compensation at the date of death payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent

APPENDIX C – SUMMARY OF PLAN PROVISIONS

child(ren), 20% (30%) of contractual Compensation at the date of death to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of Accumulated Deductions with interest.

- b. After Retirement: Death of a retired WCJ Member. Benefit is equal to:
- i. Lump sum equal to 25% of contractual Compensation at the date of death for a Member retired under Service or Early WCJ Retirement with 10 Years of Aggregate PERS Service. For a Member receiving a Disability benefit, lump sum payment of 150% of contractual Compensation at the date of death if death occurs prior to age 60 and 25% of contractual Compensation at the date of death if death occurs after age 60, plus
 - ii. Any survivor benefit due under the Member's optional form of payment election. Previously granted COLAs also apply to life annuities.

12. Optional Forms of Payment

The member may elect the following forms of payment.

- a) Maximum Option: Single life annuity with a return of the balance of the Accumulated Deductions with credited interest.
- b) Option 1: Single life annuity with a return of the balance of the initial reserve.
- c) Option 2: 100% joint and survivor annuity.
- d) Option 3: 50% joint and survivor annuity.
- e) Option 4: Other percentage joint and survivor annuity.
- f) Option A: 100% pop-up joint and survivor annuity.
- g) Option B: 75% pop-up joint and survivor annuity.
- h) Option C: 50% pop-up joint and survivor annuity.
- i) Option D: 25% pop-up joint and survivor annuity.

13. Cost-of-Living Adjustments

Also known as Pension Adjustments. Provided annually to retirees and survivors after 24 months of retirement prior to July 1, 2011. Chapter 78, P.L. 2011 eliminated future adjustments effective July 1, 2011. Adjustments may be reinstated in the future subject to certain conditions outlined in Chapter 78, P.L. 2011.

14. Changes in Plan Provisions since the Last Valuation

None.

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 1 - Projection of the Pension Plan's Fiduciary Net Position
(In Thousands)
Projections Commence June 30, 2023

| Year | Projected Beginning Fiduciary Net Position | Projected Member Contributions | Projected State Contributions | Projected State-paid Local Contributions | Projected Local Employer Contributions | Projected Lottery Contributions | Projected Benefit Payments | Projected Administrative Expenses | Projected Investment Earnings | Projected Ending Fiduciary Net Position |
|------|--|--------------------------------|-------------------------------|--|--|---------------------------------|----------------------------|-----------------------------------|-------------------------------|---|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) = (a) + (b) + (c) + (d) + (e) + (f) - (g) - (h) + (i) |
| 1 | \$ 33,476,760 | \$ 839,910 | \$ 1,663,891 | \$ 61,436 | \$ 1,347,320 | \$ 234,510 | \$ 5,082,690 | \$ 20,630 | \$ 2,272,654 | \$ 34,793,161 |
| 2 | 34,793,161 | 806,662 | 1,674,372 | 59,353 | 1,335,483 | 236,671 | 5,231,746 | 21,252 | 2,358,603 | 36,011,307 |
| 3 | 36,011,307 | 774,393 | 1,683,918 | 57,203 | 1,345,155 | 238,615 | 5,375,285 | 21,850 | 2,438,232 | 37,151,688 |
| 4 | 37,151,688 | 742,454 | 1,690,991 | 54,899 | 1,344,450 | 241,005 | 5,513,839 | 22,427 | 2,512,372 | 38,201,594 |
| 5 | 38,201,594 | 710,731 | 1,695,494 | 52,479 | 1,350,742 | 243,109 | 5,645,708 | 22,979 | 2,580,457 | 39,165,918 |
| 6 | 39,165,918 | 679,502 | 1,698,206 | 49,951 | 1,356,149 | 245,498 | 5,769,276 | 23,496 | 2,642,800 | 40,045,252 |
| 7 | 40,045,252 | 648,337 | 1,699,201 | 47,410 | 1,360,983 | 250,163 | 5,884,915 | 23,976 | 2,699,494 | 40,841,949 |
| 8 | 40,841,949 | 617,377 | 1,697,973 | 44,875 | 1,365,361 | 252,668 | 5,994,743 | 24,429 | 2,750,471 | 41,551,503 |
| 9 | 41,551,503 | 586,699 | 1,692,822 | 42,325 | 1,358,354 | 255,197 | 6,092,258 | 24,829 | 2,795,489 | 42,165,301 |
| 10 | 42,165,301 | 556,415 | 1,687,244 | 39,781 | 1,351,035 | 257,752 | 6,184,090 | 25,206 | 2,833,998 | 42,682,230 |
| 11 | 42,682,230 | 526,844 | 1,681,345 | 37,256 | 1,342,221 | 260,332 | 6,263,345 | 25,528 | 2,866,153 | 43,107,508 |
| 12 | 43,107,508 | 498,454 | 1,671,616 | 34,726 | 1,334,126 | 262,938 | 6,326,326 | 25,778 | 2,891,989 | 43,433,063 |
| 13 | 43,433,063 | 471,312 | 1,665,031 | 32,196 | 1,327,320 | 265,570 | 6,371,917 | 25,955 | 2,912,018 | 43,692,683 |
| 14 | 43,692,683 | 445,460 | 1,658,579 | 29,666 | 1,321,228 | 268,229 | 6,400,125 | 26,057 | 2,928,099 | 43,920,262 |
| 15 | 43,902,262 | 420,988 | 1,652,358 | 27,136 | 1,315,905 | 270,914 | 6,411,285 | 26,087 | 2,941,339 | 44,078,744 |
| 16 | 44,078,744 | 397,874 | 1,646,573 | 24,606 | 1,311,445 | 273,626 | 6,405,425 | 26,048 | 2,952,930 | 44,240,465 |
| 17 | 44,240,465 | 376,220 | 1,641,476 | 22,076 | 1,307,684 | 276,365 | 6,381,380 | 25,935 | 2,964,200 | 44,408,410 |
| 18 | 44,408,410 | 355,902 | 1,637,250 | 19,546 | 1,304,538 | 279,131 | 6,341,321 | 25,757 | 2,976,543 | 44,602,744 |
| 19 | 44,602,744 | 336,312 | 1,633,864 | 17,016 | 1,302,002 | 281,925 | 6,288,359 | 25,526 | 2,991,240 | 44,841,124 |
| 20 | 44,841,124 | 316,303 | 1,630,357 | 14,486 | 1,299,757 | 284,747 | 6,229,945 | 25,272 | 3,009,200 | 45,132,195 |
| 21 | 45,132,195 | 295,796 | 1,626,933 | 11,956 | 1,297,110 | 287,598 | 6,166,745 | 24,998 | 3,030,995 | 45,483,927 |
| 22 | 45,483,927 | 274,622 | 1,623,007 | 9,426 | 1,293,888 | 290,476 | 6,100,325 | 24,711 | 3,057,105 | 45,902,260 |
| 23 | 45,902,260 | 252,941 | 1,618,516 | 6,896 | 1,289,729 | 293,384 | 6,030,536 | 24,411 | 3,087,948 | 46,393,427 |
| 24 | 46,393,427 | 230,651 | 1,613,471 | 4,366 | 1,284,612 | 296,320 | 5,959,118 | 24,104 | 3,123,897 | 46,962,163 |
| 25 | 46,962,163 | 207,547 | 1,737,709 | 1,836 | 1,278,479 | 2,505 | 5,888,796 | 23,805 | 3,158,242 | 47,434,045 |
| 26 | 47,434,045 | 184,669 | 1,731,016 | 2,034 | 1,270,946 | 0 | 5,813,134 | 23,484 | 3,192,784 | 47,978,877 |
| 27 | 47,978,877 | 162,453 | 788,087 | 1,612 | 1,262,742 | 0 | 5,730,363 | 23,133 | 3,208,461 | 47,648,737 |
| 28 | 47,648,737 | 140,848 | 142,501 | 1,289 | 1,254,237 | 0 | 5,642,593 | 22,763 | 3,170,774 | 46,693,030 |
| 29 | 46,693,030 | 119,315 | 105,735 | 1,022 | 1,245,030 | 0 | 5,553,070 | 22,390 | 3,105,107 | 45,693,779 |
| 30 | 45,693,779 | 98,684 | 95,447 | 805 | 1,234,697 | 0 | 5,459,374 | 22,002 | 3,037,233 | 44,679,269 |
| 31 | 44,679,269 | 81,188 | 86,103 | 623 | 1,223,690 | 0 | 5,347,754 | 21,543 | 2,969,032 | 43,670,609 |
| 32 | 43,670,609 | 66,371 | 77,975 | 478 | 862,340 | 0 | 5,129,138 | 20,630 | 2,899,085 | 42,427,090 |
| 33 | 42,427,090 | 53,785 | 70,933 | 364 | 164,893 | 0 | 4,990,562 | 20,064 | 2,804,305 | 40,510,745 |
| 34 | 40,510,745 | 43,189 | 64,638 | 275 | 118,935 | 0 | 4,841,514 | 19,457 | 2,673,990 | 38,550,802 |
| 35 | 38,550,802 | 34,299 | 59,250 | 205 | 108,506 | 0 | 4,683,048 | 18,813 | 2,541,638 | 36,592,839 |
| 36 | 36,592,839 | 26,953 | 54,565 | 151 | 100,622 | 0 | 4,516,590 | 18,137 | 2,409,815 | 34,650,219 |
| 37 | 34,650,219 | 20,978 | 50,526 | 110 | 93,547 | 0 | 4,343,400 | 17,434 | 2,279,377 | 32,733,924 |
| 38 | 32,733,924 | 16,138 | 47,093 | 79 | 87,147 | 0 | 4,165,775 | 16,714 | 2,151,002 | 30,852,894 |
| 39 | 30,852,894 | 12,268 | 44,182 | 56 | 81,342 | 0 | 3,984,911 | 15,981 | 2,025,265 | 29,015,114 |
| 40 | 29,015,114 | 9,218 | 41,724 | 39 | 76,088 | 0 | 3,801,539 | 15,239 | 1,902,691 | 27,228,096 |
| 41 | 27,228,096 | 6,875 | 39,636 | 27 | 71,366 | 0 | 3,617,103 | 14,494 | 1,783,750 | 25,498,153 |
| 42 | 25,498,153 | 5,042 | 37,868 | 19 | 67,146 | 0 | 3,432,916 | 13,749 | 1,668,831 | 23,830,394 |
| 43 | 23,830,394 | 3,656 | 36,325 | 13 | 63,326 | 0 | 3,249,685 | 13,008 | 1,558,260 | 22,229,282 |
| 44 | 22,229,282 | 2,602 | 34,968 | 9 | 59,890 | 0 | 3,068,790 | 12,278 | 1,452,297 | 20,697,980 |
| 45 | 20,697,980 | 1,827 | 33,740 | 7 | 56,775 | 0 | 2,890,588 | 11,558 | 1,351,146 | 19,239,327 |
| 46 | 19,239,327 | 1,256 | 32,618 | 5 | 53,948 | 0 | 2,715,693 | 10,853 | 1,254,980 | 17,855,588 |
| 47 | 17,855,588 | 842 | 31,557 | 3 | 51,363 | 0 | 2,544,498 | 10,163 | 1,163,942 | 16,548,633 |
| 48 | 16,548,633 | 542 | 30,527 | 2 | 48,984 | 0 | 2,377,404 | 9,491 | 1,078,144 | 15,319,938 |
| 49 | 15,319,938 | 331 | 29,502 | 2 | 46,774 | 0 | 2,214,615 | 8,837 | 997,682 | 14,170,778 |
| 50 | 14,170,778 | 194 | 28,468 | 1 | 44,706 | 0 | 2,056,296 | 8,201 | 922,638 | 13,102,288 |
| 51 | 13,102,288 | 101 | 27,422 | 1 | 42,750 | 0 | 1,902,810 | 7,585 | 853,076 | 12,115,243 |
| 52 | 12,115,243 | 50 | 26,342 | 0 | 40,882 | 0 | 1,754,277 | 6,990 | 789,045 | 11,210,296 |
| 53 | 11,210,296 | 24 | 25,227 | 0 | 39,093 | 0 | 1,611,015 | 6,416 | 730,581 | 10,387,791 |
| 54 | 10,387,791 | 9 | 24,071 | 0 | 37,358 | 0 | 1,473,342 | 5,864 | 677,693 | 9,647,716 |
| 55 | 9,647,716 | 2 | 22,874 | 0 | 35,653 | 0 | 1,341,503 | 5,337 | 630,374 | 8,989,779 |
| 56 | 8,989,779 | 0 | 21,640 | 0 | 33,963 | 0 | 1,215,700 | 4,833 | 588,595 | 8,413,443 |
| 57 | 8,413,443 | 0 | 20,373 | 0 | 32,277 | 0 | 1,096,153 | 4,355 | 552,310 | 7,917,895 |
| 58 | 7,917,895 | 0 | 19,081 | 0 | 30,584 | 0 | 983,063 | 3,903 | 521,457 | 7,502,051 |
| 59 | 7,502,051 | 0 | 17,768 | 0 | 28,874 | 0 | 876,593 | 3,477 | 495,953 | 7,164,576 |
| 60 | 7,164,576 | 0 | 16,446 | 0 | 27,145 | 0 | 776,879 | 3,079 | 475,701 | 6,903,910 |

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2023 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 1 - Projection of the Pension Plan's Fiduciary Net Position
(In Thousands)
Projections Commence June 30, 2023

| Year | Projected Beginning Fiduciary Net Position | Projected Member Contributions | Projected State Contributions | Projected State-paid Local Contributions | Projected Local Employer Contributions | Projected Lottery Contributions | Projected Benefit Payments | Projected Administrative Expenses | Projected Investment Earnings | Projected Ending Fiduciary Net Position |
|------|--|--------------------------------|-------------------------------|--|--|---------------------------------|----------------------------|-----------------------------------|-------------------------------|---|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) = (a) + (b) + (c) + (d) + (e) + (f) - (g) - (h) + (i) |
| 61 | \$ 6,903,910 | \$ 0 | \$ 15,121 | \$ 0 | \$ 25,396 | \$ 0 | \$ 684,016 | \$ 2,708 | \$ 460,588 | \$ 6,718,291 |
| 62 | 6,718,291 | 0 | 13,807 | 0 | 23,628 | 0 | 598,070 | 2,365 | 450,490 | 6,605,780 |
| 63 | 6,605,780 | 0 | 12,511 | 0 | 21,850 | 0 | 519,058 | 2,050 | 445,270 | 6,564,302 |
| 64 | 6,564,302 | 0 | 11,245 | 0 | 20,068 | 0 | 446,938 | 1,763 | 444,785 | 6,591,700 |
| 65 | 6,591,700 | 0 | 10,018 | 0 | 18,296 | 0 | 381,611 | 1,503 | 448,888 | 6,685,788 |
| 66 | 6,685,788 | 0 | 8,842 | 0 | 16,547 | 0 | 322,931 | 1,270 | 457,432 | 6,844,407 |
| 67 | 6,844,407 | 0 | 7,726 | 0 | 14,835 | 0 | 270,688 | 1,063 | 470,273 | 7,065,491 |
| 68 | 7,065,491 | 0 | 6,679 | 0 | 13,176 | 0 | 224,612 | 880 | 487,277 | 7,347,131 |
| 69 | 7,347,131 | 0 | 5,707 | 0 | 11,585 | 0 | 184,388 | 721 | 508,321 | 7,687,635 |
| 70 | 7,687,635 | 0 | 4,816 | 0 | 10,078 | 0 | 149,654 | 584 | 533,300 | 8,085,592 |
| 71 | 8,085,592 | 0 | 4,011 | 0 | 8,668 | 0 | 120,008 | 467 | 562,130 | 8,539,925 |
| 72 | 8,539,925 | 0 | 3,294 | 0 | 7,365 | 0 | 95,015 | 369 | 594,750 | 9,049,949 |
| 73 | 9,049,949 | 0 | 2,665 | 0 | 6,178 | 0 | 74,220 | 288 | 631,129 | 9,615,413 |
| 74 | 9,615,413 | 0 | 2,122 | 0 | 5,113 | 0 | 57,155 | 221 | 671,264 | 10,236,535 |
| 75 | 10,236,535 | 0 | 1,661 | 0 | 4,171 | 0 | 43,357 | 167 | 715,187 | 10,914,029 |
| 76 | 10,914,029 | 0 | 1,276 | 0 | 3,353 | 0 | 32,374 | 125 | 762,964 | 11,649,124 |
| 77 | 11,649,124 | 0 | 961 | 0 | 2,652 | 0 | 23,775 | 91 | 814,695 | 12,443,566 |
| 78 | 12,443,566 | 0 | 709 | 0 | 2,063 | 0 | 17,161 | 66 | 870,516 | 13,299,628 |
| 79 | 13,299,628 | 0 | 511 | 0 | 1,577 | 0 | 12,167 | 47 | 930,598 | 14,220,101 |
| 80 | 14,220,101 | 0 | 361 | 0 | 1,183 | 0 | 8,469 | 32 | 995,147 | 15,208,290 |
| 81 | 15,208,290 | 0 | 249 | 0 | 870 | 0 | 5,786 | 22 | 1,064,404 | 16,268,003 |
| 82 | 16,268,003 | 0 | 167 | 0 | 627 | 0 | 3,880 | 15 | 1,138,643 | 17,403,544 |
| 83 | 17,403,544 | 0 | 110 | 0 | 442 | 0 | 2,555 | 10 | 1,218,171 | 18,619,703 |
| 84 | 18,619,703 | 0 | 70 | 0 | 305 | 0 | 1,653 | 6 | 1,303,330 | 19,921,748 |
| 85 | 19,921,748 | 0 | 44 | 0 | 206 | 0 | 1,052 | 4 | 1,394,491 | 21,315,432 |
| 86 | 21,315,432 | 0 | 27 | 0 | 135 | 0 | 661 | 3 | 1,492,061 | 22,806,991 |
| 87 | 22,806,991 | 0 | 16 | 0 | 87 | 0 | 411 | 2 | 1,596,477 | 24,403,159 |
| 88 | 24,403,159 | 0 | 9 | 0 | 55 | 0 | 254 | 1 | 1,708,214 | 26,111,182 |
| 89 | 26,111,182 | 0 | 5 | 0 | 34 | 0 | 157 | 1 | 1,827,778 | 27,938,842 |
| 90 | 27,938,842 | 0 | 3 | 0 | 20 | 0 | 97 | 0 | 1,955,716 | 29,894,484 |
| 91 | 29,894,484 | 0 | 2 | 0 | 12 | 0 | 61 | 0 | 2,092,612 | 31,987,048 |
| 92 | 31,987,048 | 0 | 1 | 0 | 7 | 0 | 39 | 0 | 2,239,092 | 34,226,109 |
| 93 | 34,226,109 | 0 | 1 | 0 | 4 | 0 | 25 | 0 | 2,395,827 | 36,621,916 |
| 94 | 36,621,916 | 0 | 0 | 0 | 2 | 0 | 16 | 0 | 2,563,534 | 39,185,435 |
| 95 | 39,185,435 | 0 | 0 | 0 | 1 | 0 | 11 | 0 | 2,742,980 | 41,928,406 |
| 96 | 41,928,406 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 2,934,988 | 44,863,388 |
| 97 | 44,863,388 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 3,140,437 | 48,003,821 |
| 98 | 48,003,821 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3,360,267 | 51,364,086 |
| 99 | 51,364,086 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3,595,486 | 54,959,570 |
| 100 | 54,959,570 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3,847,170 | 58,806,739 |
| 101 | 58,806,739 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4,116,472 | 62,923,210 |
| 102 | 62,923,210 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4,404,625 | 67,327,834 |
| 103 | 67,327,834 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,712,948 | 72,040,782 |
| 104 | 72,040,782 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,042,855 | 77,083,637 |
| 105 | 77,083,637 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,395,855 | 82,479,491 |
| 106 | 82,479,491 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,773,564 | 88,253,055 |
| 107 | 88,253,055 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,177,714 | 94,430,769 |
| 108 | 94,430,769 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,610,154 | 101,040,923 |
| 109 | 101,040,923 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,072,865 | 108,113,788 |
| 110 | 108,113,788 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,567,965 | 115,681,753 |
| 111 | 115,681,753 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,097,723 | 123,779,476 |
| 112 | 123,779,476 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,664,563 | 132,444,039 |
| 113 | 132,444,039 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,271,083 | 141,715,122 |
| 114 | 141,715,122 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,920,059 | 151,635,180 |
| 115 | 151,635,180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,614,463 | 162,249,643 |

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2023 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 2 - Actuarial Present Values of Projected Benefit Payments
(In Thousands)

Projections Commence June 30, 2023

* From Table 1 - Projection of the Pension Plan's Fiduciary Net Position, column (a)

** From Table 1 - Projection of the Pension Plan's Fiduciary Net Position, column (g)

| Year | Projected Beginning Fiduciary Net Position* | Projected Benefit Payments for current Plan participants** | "Funded" Portion of Benefit Payments | "Unfunded" Portion of Benefit Payments | Present Value of "Funded" Benefit Payments | Present Value of "Unfunded" Benefit Payments | Present Value of Benefit Payments Using the Single Discount Rate |
|------|---|--|--------------------------------------|--|--|--|--|
| (a) | (b) | (c) | (d) = (c) if (b) >= (c) | (e) = (c) - (d) | (f) = (d) / (1+7.00%)^(a) - .5] | (g) = (e) / (1+3.65%)^(a) - .5] | (h) = (c) / (1+7.00%)^(a) - .5] |
| 1 | \$ 33,476,760 | \$ 5,082,690 | \$ 5,082,690 | \$ 0 | \$ 4,913,622 | \$ 0 | \$ 4,913,622 |
| 2 | 34,793,161 | 5,231,746 | 5,231,746 | 0 | 4,726,841 | 0 | 4,726,841 |
| 3 | 36,011,307 | 5,375,285 | 5,375,285 | 0 | 4,538,810 | 0 | 4,538,810 |
| 4 | 37,151,688 | 5,513,839 | 5,513,839 | 0 | 4,351,218 | 0 | 4,351,218 |
| 5 | 38,201,594 | 5,645,708 | 5,645,708 | 0 | 4,163,815 | 0 | 4,163,815 |
| 6 | 39,165,918 | 5,769,276 | 5,769,276 | 0 | 3,976,587 | 0 | 3,976,587 |
| 7 | 40,045,252 | 5,884,915 | 5,884,915 | 0 | 3,790,929 | 0 | 3,790,929 |
| 8 | 40,841,949 | 5,994,743 | 5,994,743 | 0 | 3,609,045 | 0 | 3,609,045 |
| 9 | 41,551,503 | 6,092,258 | 6,092,258 | 0 | 3,427,806 | 0 | 3,427,806 |
| 10 | 42,165,301 | 6,184,090 | 6,184,090 | 0 | 3,251,845 | 0 | 3,251,845 |
| 11 | 42,682,230 | 6,263,345 | 6,263,345 | 0 | 3,078,057 | 0 | 3,078,057 |
| 12 | 43,107,508 | 6,326,326 | 6,326,326 | 0 | 2,905,615 | 0 | 2,905,615 |
| 13 | 43,433,063 | 6,371,917 | 6,371,917 | 0 | 2,735,098 | 0 | 2,735,098 |
| 14 | 43,692,683 | 6,400,125 | 6,400,125 | 0 | 2,567,482 | 0 | 2,567,482 |
| 15 | 43,902,262 | 6,411,285 | 6,411,285 | 0 | 2,403,700 | 0 | 2,403,700 |
| 16 | 44,078,744 | 6,405,425 | 6,405,425 | 0 | 2,244,395 | 0 | 2,244,395 |
| 17 | 44,240,465 | 6,381,380 | 6,381,380 | 0 | 2,089,692 | 0 | 2,089,692 |
| 18 | 44,408,410 | 6,341,321 | 6,341,321 | 0 | 1,940,723 | 0 | 1,940,723 |
| 19 | 44,602,744 | 6,288,359 | 6,288,359 | 0 | 1,798,612 | 0 | 1,798,612 |
| 20 | 44,841,124 | 6,229,945 | 6,229,945 | 0 | 1,665,331 | 0 | 1,665,331 |
| 21 | 45,132,195 | 6,166,745 | 6,166,745 | 0 | 1,540,595 | 0 | 1,540,595 |
| 22 | 45,483,927 | 6,100,325 | 6,100,325 | 0 | 1,424,301 | 0 | 1,424,301 |
| 23 | 45,902,260 | 6,030,536 | 6,030,536 | 0 | 1,315,894 | 0 | 1,315,894 |
| 24 | 46,393,427 | 5,959,118 | 5,959,118 | 0 | 1,215,243 | 0 | 1,215,243 |
| 25 | 46,962,163 | 5,888,796 | 5,888,796 | 0 | 1,122,339 | 0 | 1,122,339 |
| 26 | 47,434,045 | 5,813,134 | 5,813,134 | 0 | 1,035,438 | 0 | 1,035,438 |
| 27 | 47,978,877 | 5,730,363 | 5,730,363 | 0 | 953,920 | 0 | 953,920 |
| 28 | 47,648,737 | 5,642,593 | 5,642,593 | 0 | 877,859 | 0 | 877,859 |
| 29 | 46,693,030 | 5,553,070 | 5,553,070 | 0 | 807,413 | 0 | 807,413 |
| 30 | 45,693,779 | 5,459,374 | 5,459,374 | 0 | 741,859 | 0 | 741,859 |
| 31 | 44,679,269 | 5,347,754 | 5,347,754 | 0 | 679,151 | 0 | 679,151 |
| 32 | 43,670,609 | 5,129,138 | 5,129,138 | 0 | 608,773 | 0 | 608,773 |
| 33 | 42,427,090 | 4,990,562 | 4,990,562 | 0 | 553,575 | 0 | 553,575 |
| 34 | 40,510,745 | 4,841,514 | 4,841,514 | 0 | 501,909 | 0 | 501,909 |
| 35 | 38,550,802 | 4,683,048 | 4,683,048 | 0 | 453,720 | 0 | 453,720 |
| 36 | 36,592,839 | 4,516,590 | 4,516,590 | 0 | 408,965 | 0 | 408,965 |
| 37 | 34,650,219 | 4,343,400 | 4,343,400 | 0 | 367,555 | 0 | 367,555 |
| 38 | 32,733,924 | 4,165,775 | 4,165,775 | 0 | 329,461 | 0 | 329,461 |
| 39 | 30,852,894 | 3,984,911 | 3,984,911 | 0 | 294,539 | 0 | 294,539 |
| 40 | 29,015,114 | 3,801,539 | 3,801,539 | 0 | 262,603 | 0 | 262,603 |
| 41 | 27,228,096 | 3,617,103 | 3,617,103 | 0 | 233,517 | 0 | 233,517 |
| 42 | 25,498,153 | 3,432,916 | 3,432,916 | 0 | 207,127 | 0 | 207,127 |
| 43 | 23,830,394 | 3,249,685 | 3,249,685 | 0 | 183,244 | 0 | 183,244 |
| 44 | 22,229,282 | 3,068,790 | 3,068,790 | 0 | 161,723 | 0 | 161,723 |
| 45 | 20,697,980 | 2,890,588 | 2,890,588 | 0 | 142,367 | 0 | 142,367 |
| 46 | 19,239,327 | 2,715,693 | 2,715,693 | 0 | 125,003 | 0 | 125,003 |
| 47 | 17,855,588 | 2,544,498 | 2,544,498 | 0 | 109,460 | 0 | 109,460 |
| 48 | 16,548,633 | 2,377,404 | 2,377,404 | 0 | 95,581 | 0 | 95,581 |
| 49 | 15,319,938 | 2,214,615 | 2,214,615 | 0 | 83,212 | 0 | 83,212 |
| 50 | 14,170,778 | 2,056,296 | 2,056,296 | 0 | 72,209 | 0 | 72,209 |
| 51 | 13,102,288 | 1,902,810 | 1,902,810 | 0 | 62,447 | 0 | 62,447 |
| 52 | 12,115,243 | 1,754,277 | 1,754,277 | 0 | 53,806 | 0 | 53,806 |
| 53 | 11,210,296 | 1,611,015 | 1,611,015 | 0 | 46,180 | 0 | 46,180 |
| 54 | 10,387,791 | 1,473,342 | 1,473,342 | 0 | 39,470 | 0 | 39,470 |
| 55 | 9,647,716 | 1,341,503 | 1,341,503 | 0 | 33,587 | 0 | 33,587 |
| 56 | 8,989,779 | 1,215,700 | 1,215,700 | 0 | 28,446 | 0 | 28,446 |
| 57 | 8,413,443 | 1,096,153 | 1,096,153 | 0 | 23,971 | 0 | 23,971 |
| 58 | 7,917,895 | 983,063 | 983,063 | 0 | 20,092 | 0 | 20,092 |
| 59 | 7,502,051 | 876,593 | 876,593 | 0 | 16,744 | 0 | 16,744 |
| 60 | 7,164,576 | 776,879 | 776,879 | 0 | 13,868 | 0 | 13,868 |

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2023 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 2 - Actuarial Present Values of Projected Benefit Payments

(In Thousands)

Projections Commence June 30, 2023

* From Table 1 - Projection of the Pension Plan's Fiduciary Net Position, column (a)

** From Table 1 - Projection of the Pension Plan's Fiduciary Net Position, column (g)

| Year | Projected Beginning Fiduciary Net Position* | Projected Benefit Payments for current Plan participants** | "Funded" Portion of Benefit Payments | "Unfunded" Portion of Benefit Payments | Present Value of "Funded" Benefit Payments | Present Value of "Unfunded" Benefit Payments | Present Value of Benefit Payments Using the Single Discount Rate |
|------|---|--|--------------------------------------|--|---|--|--|
| (a) | (b) | (c) | (d) = (c) if (b) >= (c) | (e) = (c) - (d) | (f) = (d) / (1+7.00%) ^[(a) - .5] | (g) = (e) / (1+3.65%) ^[(a) - .5] | (h) = (c) / (1+7.00%) ^[(a) - .5] |
| 61 | \$ 6,903,910 | \$ 684,016 | \$ 684,016 | \$ 0 | \$ 11,412 | \$ 0 | \$ 11,412 |
| 62 | 6,718,291 | 598,070 | 598,070 | 0 | 9,325 | 0 | 9,325 |
| 63 | 6,605,780 | 519,058 | 519,058 | 0 | 7,564 | 0 | 7,564 |
| 64 | 6,564,302 | 446,938 | 446,938 | 0 | 6,087 | 0 | 6,087 |
| 65 | 6,591,700 | 381,611 | 381,611 | 0 | 4,857 | 0 | 4,857 |
| 66 | 6,685,788 | 322,931 | 322,931 | 0 | 3,841 | 0 | 3,841 |
| 67 | 6,844,407 | 270,688 | 270,688 | 0 | 3,009 | 0 | 3,009 |
| 68 | 7,065,491 | 224,612 | 224,612 | 0 | 2,334 | 0 | 2,334 |
| 69 | 7,347,131 | 184,388 | 184,388 | 0 | 1,790 | 0 | 1,790 |
| 70 | 7,687,635 | 149,654 | 149,654 | 0 | 1,358 | 0 | 1,358 |
| 71 | 8,085,592 | 120,008 | 120,008 | 0 | 1,018 | 0 | 1,018 |
| 72 | 8,539,925 | 95,015 | 95,015 | 0 | 753 | 0 | 753 |
| 73 | 9,049,949 | 74,220 | 74,220 | 0 | 550 | 0 | 550 |
| 74 | 9,615,413 | 57,155 | 57,155 | 0 | 396 | 0 | 396 |
| 75 | 10,236,535 | 43,357 | 43,357 | 0 | 281 | 0 | 281 |
| 76 | 10,914,029 | 32,374 | 32,374 | 0 | 196 | 0 | 196 |
| 77 | 11,649,124 | 23,775 | 23,775 | 0 | 134 | 0 | 134 |
| 78 | 12,443,566 | 17,161 | 17,161 | 0 | 91 | 0 | 91 |
| 79 | 13,299,628 | 12,167 | 12,167 | 0 | 60 | 0 | 60 |
| 80 | 14,220,101 | 8,469 | 8,469 | 0 | 39 | 0 | 39 |
| 81 | 15,208,290 | 5,786 | 5,786 | 0 | 25 | 0 | 25 |
| 82 | 16,268,003 | 3,880 | 3,880 | 0 | 16 | 0 | 16 |
| 83 | 17,403,544 | 2,555 | 2,555 | 0 | 10 | 0 | 10 |
| 84 | 18,619,703 | 1,653 | 1,653 | 0 | 6 | 0 | 6 |
| 85 | 19,921,748 | 1,052 | 1,052 | 0 | 3 | 0 | 3 |
| 86 | 21,315,432 | 661 | 661 | 0 | 2 | 0 | 2 |
| 87 | 22,806,991 | 411 | 411 | 0 | 1 | 0 | 1 |
| 88 | 24,403,159 | 254 | 254 | 0 | 1 | 0 | 1 |
| 89 | 26,111,182 | 157 | 157 | 0 | 0 | 0 | 0 |
| 90 | 27,938,842 | 97 | 97 | 0 | 0 | 0 | 0 |
| 91 | 29,894,484 | 61 | 61 | 0 | 0 | 0 | 0 |
| 92 | 31,987,048 | 39 | 39 | 0 | 0 | 0 | 0 |
| 93 | 34,226,109 | 25 | 25 | 0 | 0 | 0 | 0 |
| 94 | 36,621,916 | 16 | 16 | 0 | 0 | 0 | 0 |
| 95 | 39,185,435 | 11 | 11 | 0 | 0 | 0 | 0 |
| 96 | 41,928,406 | 7 | 7 | 0 | 0 | 0 | 0 |
| 97 | 44,863,388 | 5 | 5 | 0 | 0 | 0 | 0 |
| 98 | 48,003,821 | 3 | 3 | 0 | 0 | 0 | 0 |
| 99 | 51,364,086 | 2 | 2 | 0 | 0 | 0 | 0 |
| 100 | 54,959,570 | 1 | 1 | 0 | 0 | 0 | 0 |
| 101 | 58,806,739 | 1 | 1 | 0 | 0 | 0 | 0 |
| 102 | 62,923,210 | 1 | 1 | 0 | 0 | 0 | 0 |
| 103 | 67,327,834 | 0 | 0 | 0 | 0 | 0 | 0 |
| 104 | 72,040,782 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 77,083,637 | 0 | 0 | 0 | 0 | 0 | 0 |
| 106 | 82,479,491 | 0 | 0 | 0 | 0 | 0 | 0 |
| 107 | 88,253,055 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108 | 94,430,769 | 0 | 0 | 0 | 0 | 0 | 0 |
| 109 | 101,040,923 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 108,113,788 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 | 115,681,753 | 0 | 0 | 0 | 0 | 0 | 0 |
| 112 | 123,779,476 | 0 | 0 | 0 | 0 | 0 | 0 |
| 113 | 132,444,039 | 0 | 0 | 0 | 0 | 0 | 0 |
| 114 | 141,715,122 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 151,635,180 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | \$ 81,481,547 | \$ 0 | \$ 81,481,547 |

APPENDIX E – GLOSSARY OF TERMS

1. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

2. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

3. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

4. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

5. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.

6. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.

APPENDIX E – GLOSSARY OF TERMS

7. Net Pension Liability

The liability of employers and nonemployer contributing entities for employees for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

8. Plan Fiduciary Net Position

The fair or market value of assets.

9. Reporting Date

The last day of the plan or employer's fiscal year.

10. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 68. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

11. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 68. The Total Pension Liability is the actuarial liability calculated under the entry age actuarial cost method. This measurement generally is not appropriate for estimating the cost to settle the Plan's liabilities.