



The Public Employees' Retirement System of New Jersey

**GASB 68 Report
as of June 30, 2022**

Produced by Cheiron

May 2023

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THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2022 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, 2022. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2022 and the Total Pension Liability (TPL) as of the valuation date, July 1, 2021, updated to June 30, 2022. As a result of the Experience Study covering the period July 1, 2018 – June 30, 2021, the underlying demographic and economic assumptions were updated. This report also reflects three changes to the plan provisions, only one of which had an impact on the TPL. Chapter 226, P.L. 2021 reopened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for all prosecutors. We are not aware of any other significant events that are measurable at this time between the valuation date and the measurement date, so the update procedures only include the addition of service cost and interest cost offset by actual benefit payments, and adjustments to reflect the changes in assumptions and plan provisions as described.

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	6/30/2022	6/30/2021
<u>State</u>		
Net Pension Liability	\$ 22,386,831,046	\$ 21,629,497,485
Deferred Outflows	(935,244,310)	(569,828,808)
Deferred Inflows	<u>1,756,752,930</u>	<u>3,820,494,887</u>
Net Impact on Statement of Net Position	\$ 23,208,339,666	\$ 24,880,163,564
Total Pension Expense/(Income)	\$ 181,746,466	\$ 46,255,456
Pension Expense/(Income) (% of Payroll)	3.97%	1.00%
<u>Local Employers</u>		
Net Pension Liability	\$ 15,219,184,920	\$ 11,972,782,878
Deferred Outflows	(780,298,901)	(248,531,007)
Deferred Inflows	<u>2,355,830,828</u>	<u>7,422,916,600</u>
Net Impact on Statement of Net Position	\$ 16,794,716,847	\$ 19,147,168,471
Total Pension Expense/(Income)	\$ (1,032,778,934)	\$ (1,599,674,464)
Pension Expense/(Income) (% of Payroll)	-14.01%	-21.83%
<u>Total</u>		
Net Pension Liability	\$ 37,606,015,966	\$ 33,602,280,363
Deferred Outflows	(1,715,543,211)	(818,359,815)
Deferred Inflows	<u>4,112,583,758</u>	<u>11,243,411,487</u>
Net Impact on Statement of Net Position	\$ 40,003,056,513	\$ 44,027,332,035
Total Pension Expense/(Income)	\$ (851,032,468)	\$ (1,553,419,008)
Pension Expense/(Income) (% of Payroll)	-7.12%	(12.98%)

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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.

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, 2022 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, 2021 valuation date and financial information as of the June 30, 2022 measurement date.

This report reflects three changes to the plan provisions. Chapter 226, P.L. 2021 reopened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for all prosecutors. This plan change increased the Net Pension Liability, which is immediately recognized in the pension expense. Additionally, Chapter 498, P.L. 2021 permitted PERS retirees to return to employment in the NJ State Legislature after retirement under certain circumstances and Chapter 418, P.L. 2021 clarified the PERS eligibility for members of the New Jersey Maritime Pilot and Docking Pilot Commission. Chapter 498, P.L. 2021 and Chapter 418, P.L. 2021 did not impact the Net Pension Liability for this report due to the current demographic assumptions and covered population.

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, 2022 and is described in Section III of the report.

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SECTION II – CERTIFICATION

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.

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.



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Principal Consulting Actuary



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Principal Consulting Actuary

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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, 2021 and June 30, 2022. As discussed with the DPB, the projection of cash flows used to determine the discount rate as of June 30, 2022 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 37 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, except for FYE 2022 when the impact of the recent demographic assumption changes is phased-in, 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, 2023 with respect to the actuarially determined contribution for the fiscal year ending June 30, 2023 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 0.28% and 0.49% 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, 2021, the FNP includes receivable contributions of \$1,207,896,120 (\$1,117,134,996 for appropriations, \$53,981,229 for NCGIPF, \$17,058,889 for Chapter 19 and \$19,721,006 for Early Retirement Incentive (ERI)).
- 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 ERI).

In the event the Plan's fiduciary net position was no longer sufficient to make future benefit payments, municipal bond rates of 2.16% as of June 30, 2021 and 3.54% as of June 30, 2022 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, 2022, 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, 2022 is equal to the long-term rate of return of **7.00%**. Similarly, the GASB discount rate as of June 30, 2021 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.

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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

We understand the State and Local employers have elected to use the 2022 measurement date for their 2023 reporting date. As a result, the schedules in this section will be used by the State and Local employers for their 2023 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 5.04 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.

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	\$ 360,978,966	\$ 117,890,809
Changes in assumptions	33,451,592	1,638,862,121
Net differences between projected and actual earnings on pension plan investments	540,813,752	0
Total	<u>\$ 935,244,310</u>	<u>\$ 1,756,752,930</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
2023	\$ (750,903,471)	
2024	(276,553,822)	
2025	(19,431,411)	
2026	227,145,936	
2027	(1,765,852)	
Thereafter	\$ 0	

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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	\$ 108,922,618	\$ 96,054,291
Changes in assumptions	46,757,851	2,259,776,537
Net differences between projected and actual earnings on pension plan investments	624,618,432	0
Total	<u>\$ 780,298,901</u>	<u>\$ 2,355,830,828</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
	2023 \$ (1,294,523,233)	
	2024 (659,516,114)	
	2025 (321,633,159)	
	2026 701,681,878	
	2027 (1,541,299)	
	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	\$ 469,901,584	\$ 213,945,100
Changes in assumptions	80,209,443	3,898,638,658
Net differences between projected and actual earnings on pension plan investments	1,165,432,184	0
Total	<u>\$ 1,715,543,211</u>	<u>\$ 4,112,583,758</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
	2023 \$ (2,045,426,704)	
	2024 (936,069,936)	
	2025 (341,064,570)	
	2026 928,827,814	
	2027 (3,307,151)	
	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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (110,013,251)	\$ (21,828,026)	\$ (21,828,026)	\$ (21,828,026)	\$ (21,828,026)	\$ (21,828,026)	\$ (21,828,026)	\$ (873,121)	\$ 0
2021	4.13	132,483,518	32,078,334	32,078,334	32,078,334	32,078,334	4,170,182	0	0	0
2020	3.16	381,209,791	120,636,009	120,636,009	120,636,009	19,301,764	0	0	0	0
2019	2.21	(5,111,379)	(2,312,840)	(2,312,840)	(485,699)	0	0	0	0	0
2018	1.63	(69,616,642)	(42,709,597)	(26,907,045)	0	0	0	0	0	0
2017	0.48	11,996,497	11,996,497	0	0	0	0	0	0	0
Total		\$ 340,948,534	\$ 97,860,377	\$ 101,666,432	\$ 130,400,618	\$ 29,552,072	\$ (17,657,844)	\$ (873,121)	\$ 0	\$ 0

Recognition of changes in assumptions

From Measurement Year Ending	Remaining Recognition Period	Remaining Deferred (Inflows) and Outflows*	Recognition Year							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (112,484,301)	\$ (22,318,314)	\$ (22,318,314)	\$ (22,318,314)	\$ (22,318,314)	\$ (22,318,314)	\$ (892,731)	\$ 0	\$ 0
2021	4.13	44,139,002	10,687,410	10,687,410	10,687,410	10,687,410	1,389,362	0	0	0
2020	3.16	(1,424,972,304)	(450,940,603)	(450,940,603)	(450,940,603)	(72,150,495)	0	0	0	0
2019	2.21	(564,833,554)	(255,580,794)	(255,580,794)	(53,671,966)	0	0	0	0	0
2018	1.63	(686,700,045)	(421,288,372)	(265,411,673)	0	0	0	0	0	0
2017	0.48	(389,009,824)	(389,009,824)	0	0	0	0	0	0	0
Total		\$ (3,133,861,026)	\$ (1,528,450,497)	\$ (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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.00	\$ 1,328,663,668	\$ 265,732,734	\$ 265,732,734	\$ 265,732,734	\$ 265,732,734	\$ 265,732,732	\$ 0	\$ 0	\$ 0
2021	4.00	(923,739,278)	(230,934,820)	(230,934,820)	(230,934,820)	(230,934,818)	0	0	0	0
2020	3.00	223,473,355	74,491,118	74,491,118	74,491,119	0	0	0	0	0
2019	2.00	43,410,079	21,705,040	21,705,039	0	0	0	0	0	0
2018	1.00	(23,395,295)	(23,395,295)	0	0	0	0	0	0	0
Total		\$ 648,412,529	\$ 107,598,777	\$ 130,994,071	\$ 109,289,033	\$ 34,797,916	\$ 265,732,732	\$ 0	\$ 0	\$ 0

Grand Total		\$ (2,144,499,963)	\$ (1,322,991,343)	\$ (750,903,471)	\$ (276,553,822)	\$ (19,431,411)	\$ 227,145,936	\$ (1,765,852)	\$ 0	\$ 0
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* 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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (56,207,429)	\$ (11,152,268)	\$ (11,152,268)	\$ (11,152,268)	\$ (11,152,268)	\$ (11,152,268)	\$ (11,152,268)	\$ (446,089)	\$ 0
2021	4.13	(49,064,735)	(11,880,081)	(11,880,081)	(11,880,081)	(11,880,081)	(1,544,411)	0	0	0
2020	3.16	108,653,196	34,383,923	34,383,923	34,383,923	5,501,427	0	0	0	0
2019	2.21	63,292,471	28,639,126	28,639,126	28,639,126	6,014,219	0	0	0	0
2018	1.63	(35,742,218)	(21,927,742)	(13,814,476)	0	0	0	0	0	0
2017	0.48	14,888,878	14,888,878	0	0	0	0	0	0	0
Total		\$ 45,820,163	\$ 32,951,836	\$ 26,176,224	\$ 17,365,793	\$ (17,530,922)	\$ (12,696,679)	\$ (446,089)	\$ 0	\$ 0

Recognition of changes in assumptions

From Measurement Year Ending	Remaining Recognition Period	Remaining Deferred (Inflows) and Outflows*	Recognition Year							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (137,996,645)	\$ (27,380,287)	\$ (27,380,287)	\$ (27,380,287)	\$ (27,380,287)	\$ (27,380,287)	\$ (27,380,287)	\$ (1,095,210)	\$ 0
2021	4.13	61,696,462	14,938,611	14,938,611	14,938,611	14,938,611	1,942,018	0	0	0
2020	3.16	(1,950,212,298)	(617,155,790)	(617,155,790)	(617,155,790)	(98,744,928)	0	0	0	0
2019	2.21	(827,996,191)	(374,658,911)	(374,658,911)	(78,678,369)	0	0	0	0	0
2018	1.63	(938,586,057)	(575,819,666)	(362,766,391)	0	0	0	0	0	0
2017	0.48	(500,635,932)	(500,635,932)	0	0	0	0	0	0	0
Total		\$ (4,293,730,661)	\$ (2,080,711,975)	\$ (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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.00	\$ 3,699,084,126	\$ 739,816,825	\$ 739,816,825	\$ 739,816,825	\$ 739,816,825	\$ 739,816,826	\$ 0	\$ 0	\$ 0
2021	4.00	(3,730,929,829)	(932,732,457)	(932,732,457)	(932,732,457)	(932,732,458)	0	0	0	0
2020	3.00	672,928,680	224,309,560	224,309,560	224,309,560	0	0	0	0	0
2019	2.00	29,858,764	14,929,381	14,929,383	0	0	0	0	0	0
2018	1.00	(92,536,784)	(92,536,784)	0	0	0	0	0	0	0
Total		\$ 578,404,957	\$ (46,213,475)	\$ 46,323,311	\$ 31,393,928	\$ (192,915,633)	\$ 739,816,826	\$ 0	\$ 0	\$ 0

Grand Total		\$ (3,669,505,541)	\$ (2,093,973,614)	\$ (1,294,523,233)	\$ (659,516,114)	\$ (321,633,159)	\$ 701,681,878	\$ (1,541,299)	\$ 0	\$ 0
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* As of the beginning of the measurement year

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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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (166,220,680)	\$ (32,980,294)	\$ (32,980,294)	\$ (32,980,294)	\$ (32,980,294)	\$ (32,980,294)	\$ (32,980,294)	\$ (1,319,210)	\$ 0
2021	4.13	83,418,783	20,198,253	20,198,253	20,198,253	20,198,253	2,625,771	0	0	0
2020	3.16	489,862,987	155,019,932	155,019,932	155,019,932	24,803,191	0	0	0	0
2019	2.21	58,181,092	26,326,286	26,326,286	5,528,520	0	0	0	0	0
2018	1.63	(105,358,860)	(64,637,339)	(40,721,521)	0	0	0	0	0	0
2017	0.48	26,885,375	26,885,375	0	0	0	0	0	0	0
Total		\$ 386,768,697	\$ 130,812,213	\$ 127,842,656	\$ 147,766,411	\$ 12,021,150	\$ (30,354,523)	\$ (1,319,210)	\$ 0	\$ 0
Recognition of changes in assumptions										
From Measurement Year Ending	Remaining Recognition Period	Remaining Deferred (Inflows) and Outflows*	Recognition Year							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.04	\$ (250,480,946)	\$ (49,698,601)	\$ (49,698,601)	\$ (49,698,601)	\$ (49,698,601)	\$ (49,698,601)	\$ (49,698,601)	\$ (1,987,941)	\$ 0
2021	4.13	105,835,464	25,626,021	25,626,021	25,626,021	25,626,021	3,331,380	0	0	0
2020	3.16	(3,375,184,602)	(1,068,096,393)	(1,068,096,393)	(1,068,096,393)	(170,895,423)	0	0	0	0
2019	2.21	(1,392,829,745)	(630,239,705)	(630,239,705)	(132,350,335)	0	0	0	0	0
2018	1.63	(1,625,286,102)	(997,108,038)	(628,178,064)	0	0	0	0	0	0
2017	0.48	(889,645,756)	(889,645,756)	0	0	0	0	0	0	0
Total		\$ (7,427,591,687)	\$ (3,609,162,472)	\$ (2,350,586,742)	\$ (1,224,519,308)	\$ (194,968,003)	\$ (46,367,221)	\$ (1,987,941)	\$ 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							
			2022	2023	2024	2025	2026	2027	Thereafter	
2022	5.00	\$ 5,027,747,794	\$ 1,005,549,559	\$ 1,005,549,559	\$ 1,005,549,559	\$ 1,005,549,559	\$ 1,005,549,558	\$ 0	\$ 0	\$ 0
2021	4.00	(4,654,669,107)	(1,163,667,277)	(1,163,667,277)	(1,163,667,277)	(1,163,667,276)	0	0	0	0
2020	3.00	896,402,035	298,800,678	298,800,678	298,800,679	0	0	0	0	0
2019	2.00	73,268,843	36,634,421	36,634,422	0	0	0	0	0	0
2018	1.00	(115,932,079)	(115,932,079)	0	0	0	0	0	0	0
Total		\$ 1,226,817,486	\$ 61,385,302	\$ 177,317,382	\$ 140,682,961	\$ (158,117,717)	\$ 1,005,549,558	\$ 0	\$ 0	\$ 0
Grand Total		\$ (5,814,005,504)	\$ (3,416,964,957)	\$ (2,045,426,704)	\$ (936,069,936)	\$ (341,064,570)	\$ 928,827,814	\$ (3,307,151)	\$ 0	\$ 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

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	2022	2021
Change in Net Pension Liability	\$ 757,333,561	\$ (594,470,040)
Change in Deferred Outflows	(365,415,502)	637,411,981
Change in Deferred Inflows	(2,063,741,957)	(1,303,018,204)
Employer Contributions*	<u>1,853,355,532</u>	<u>1,306,192,295</u>
Subtotal	\$ 181,531,634	\$ 46,116,032
Employer Contribution - delayed enrollments**	214,832	139,424
Employer Contribution - delayed appropriations**	0	0
Employer Contribution - retroactive**	0	0
Employer Contribution - additional**	<u>0</u>	<u>0</u>
Total Pension Expense/(Income)	\$ 181,746,466	\$ 46,255,456
Total Pension Expense/(Income) as % of Payroll	3.97%	1.00%
Operating Expenses		
Service cost	\$ 438,055,831	\$ 442,011,429
Employee contributions	(354,378,152)	(346,264,728)
Administrative expenses	<u>5,600,482</u>	<u>4,265,664</u>
Total	\$ 89,278,161	\$ 100,012,365
Financing Expenses		
Interest cost	\$ 1,987,977,705	\$ 1,943,414,332
Expected return on assets	<u>(575,142,798)</u>	<u>(404,767,415)</u>
Total	\$ 1,412,834,907	\$ 1,538,646,917
Changes		
Benefit changes	\$ 2,624,741	\$ 8,488,231
Recognition of assumption changes	(1,528,450,497)	(1,556,785,979)
Recognition of liability gains and losses	97,860,377	178,112,911
Recognition of investment gains and losses	<u>107,598,777</u>	<u>(222,218,989)</u>
Total	\$ (1,320,366,602)	\$ (1,592,403,826)
Total Pension Expense/(Income)	\$ 181,746,466	\$ 46,255,456

* 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	2022	2021
Change in Net Pension Liability	\$ 3,246,402,042	\$ (4,462,833,548)
Change in Deferred Outflows	(531,767,894)	1,134,829,195
Change in Deferred Inflows	(5,067,085,772)	537,190,268
Employer Contributions*	<u>1,309,702,391</u>	<u>1,184,196,137</u>
Subtotal	\$ (1,042,749,233)	\$ (1,606,617,948)
Employer Contribution - delayed enrollments**	769,882	600,674
Employer Contribution - delayed appropriations**	3,147,089	2,411,251
Employer Contribution - retroactive**	5,977,713	3,838,039
Employer Contribution - additional**	<u>75,615</u>	<u>93,520</u>
Total Pension Expense/(Income)	\$ (1,032,778,934)	\$ (1,599,674,464)
Total Pension Expense/(Income) as % of Payroll	-14.01%	-21.83%
Operating Expenses		
Service cost	\$ 694,024,318	\$ 692,825,511
Employee contributions	(578,777,150)	(563,674,866)
Administrative expenses	<u>12,429,731</u>	<u>9,854,513</u>
Total	\$ 127,676,899	\$ 139,005,158
Financing Expenses		
Interest cost	\$ 2,783,542,580	\$ 2,722,623,035
Expected return on assets	<u>(1,858,101,227)</u>	<u>(1,485,350,091)</u>
Total	\$ 925,441,353	\$ 1,237,272,944
Changes		
Benefit changes	\$ 8,076,428	\$ 0
Recognition of assumption changes	(2,080,711,975)	(2,066,657,260)
Recognition of liability gains and losses	32,951,836	76,288,314
Recognition of investment gains and losses	<u>(46,213,475)</u>	<u>(985,583,620)</u>
Total	\$ (2,085,897,186)	\$ (2,975,952,566)
Total Pension Expense/(Income)	\$ (1,032,778,934)	\$ (1,599,674,464)

* Includes appropriations 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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SECTION IV – COLLECTIVE EMPLOYER REPORTING AMOUNTS

Table IV-3C Calculation of Collective Pension Expense Total		
Measurement Year Ending	2022	2021
Change in Net Pension Liability	\$ 4,003,735,603	\$ (5,057,303,588)
Change in Deferred Outflows	(897,183,396)	1,772,241,176
Change in Deferred Inflows	(7,130,827,729)	(765,827,936)
Employer Contributions*	<u>3,163,057,923</u>	<u>2,490,388,432</u>
Subtotal	\$ (861,217,599)	\$ (1,560,501,916)
Employer Contribution - delayed enrollments**	984,714	740,098
Employer Contribution - delayed appropriations**	3,147,089	2,411,251
Employer Contribution - retroactive**	5,977,713	3,838,039
Employer Contribution - additional**	<u>75,615</u>	<u>93,520</u>
Total Pension Expense/(Income)	\$ (851,032,468)	\$ (1,553,419,008)
Total Pension Expense/(Income) as % of Payroll	-7.12%	-12.98%
Operating Expenses		
Service cost	\$ 1,132,080,149	\$ 1,134,836,940
Employee contributions	(933,155,302)	(909,939,594)
Administrative expenses	<u>18,030,213</u>	<u>14,120,177</u>
Total	\$ 216,955,060	\$ 239,017,523
Financing Expenses		
Interest cost	\$ 4,771,520,285	\$ 4,666,037,367
Expected return on assets	<u>(2,433,244,025)</u>	<u>(1,890,117,506)</u>
Total	\$ 2,338,276,260	\$ 2,775,919,861
Changes		
Benefit changes	\$ 10,701,169	\$ 8,488,231
Recognition of assumption changes	(3,609,162,472)	(3,623,443,239)
Recognition of liability gains and losses	130,812,213	254,401,225
Recognition of investment gains and losses	<u>61,385,302</u>	<u>(1,207,802,609)</u>
Total	\$ (3,406,263,788)	\$ (4,568,356,392)
Total Pension Expense/(Income)	\$ (851,032,468)	\$ (1,553,419,008)

* 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, 2021			July 1, 2020		
	State	Local	Total	State	Local	Total
Contributing Actives	65,555	138,672	204,227	67,774	142,757	210,531
Non-Contributing Actives	9,253	26,422	35,675	9,331	26,914	36,245
Deferred Beneficiaries	183	876	1,059	0	0	0
Terminated Vested	186	537	723	213	664	877
Inactive Receiving Benefits*	61,535	125,837	187,372	60,783	123,992	184,775
Total	136,712	292,344	429,056	138,101	294,327	432,428
Annual Compensation for Contributing Actives	\$ 4,578,674,071	\$ 7,369,908,268	\$ 11,948,582,339	\$ 4,637,529,278	\$ 7,328,393,274	\$ 11,965,922,552
Annual Retirement Allowances for Those Receiving Benefits	\$ 1,776,844,453	\$ 2,414,370,737	\$ 4,191,215,190	\$ 1,726,418,877	\$ 2,328,399,284	\$ 4,054,818,161

* 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, 2021: 7.00% per annum, compounded annually.• June 30, 2022: 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.

9. 401(a)(17) Pay Limit \$290,000 in 2021 increasing 2.75% per annum, compounded annually.

10. Social Security Wage Base \$142,800 in 2021 increasing 3.25% per annum, compounded annually.

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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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.

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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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.

THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
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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 & 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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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 Annuity Savings Fund.

Inactive participants receiving benefits according to the 2020 data but omitted from the 2021 data are assumed to have died without a beneficiary.

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 assumptions used in this report 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.

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, 2021 and the financial information as of June 30, 2022. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2022 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.

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**21. Changes in
Assumptions since
the Last Valuation**

The assumed rates of termination, retirement, disability, salary increases, and family composition assumptions were updated based on the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022.

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 active members reported in the census data with a salary use the Unit Credit Cost Method.

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. 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.

The Board of Trustees adopted a three-year phase-in of the Local employers' contribution increase due to the assumption changes from the July 1, 2014 – June 30, 2018 Experience Study, first effective in the July 1, 2019 valuation and the associated FYE 2021 contribution. The impact will be fully phased-in by the FYE 2023 contribution.

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.

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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.

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.

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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

Non-contributing active members reported with a salary are valued using the Unit Credit Cost Method. Liabilities were previously determined using the reported Accumulated Deductions with interest (Annuity Savings Fund or ASF), adjusted to include interest through the valuation date.

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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.

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- 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.

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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

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Compensation at the date of death payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent 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.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

14. Changes in Plan Provisions since the Last Valuation

Chapter 226, P.L. 2021 reopened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for prosecutors. Chapter 498, P.L. 2021 permitted PERS retirees to return to employment in the NJ State Legislature after retirement under certain circumstances. Chapter 418, P.L. 2021 clarified the PERS eligibility for members of the New Jersey Maritime Pilot and Docking Pilot Commission.

**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, 2022

	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	\$ 31,279,439	\$ 809,455	\$ 1,591,212	\$ 61,337	\$ 1,272,913	\$ 231,858	\$ 4,905,834	\$ 19,458	\$ 2,120,669	\$ 32,441,591
2	32,441,591	769,199	1,623,675	59,286	1,295,991	234,510	5,061,709	20,092	2,196,527	33,538,978
3	33,538,978	730,827	1,638,456	57,067	1,320,166	236,671	5,211,139	20,700	2,267,677	34,558,003
4	34,558,003	693,414	1,650,602	54,773	1,342,691	238,615	5,353,963	21,281	2,333,499	35,496,353
5	35,496,353	656,629	1,660,676	52,395	1,354,606	241,005	5,492,132	21,844	2,393,634	36,341,322
6	36,341,322	626,719	1,665,776	49,981	1,368,377	243,109	5,623,699	22,383	2,447,589	37,096,791
7	37,096,791	597,366	1,673,430	47,473	1,386,922	245,498	5,745,842	22,882	2,495,779	37,774,534
8	37,774,534	568,031	1,679,297	44,969	1,404,861	250,163	5,859,829	23,345	2,538,832	38,377,512
9	38,377,512	538,817	1,682,948	42,462	1,421,629	252,668	5,967,420	23,780	2,576,725	38,901,561
10	38,901,561	509,876	1,678,789	39,920	1,416,270	255,197	6,067,341	24,184	2,608,787	39,318,875
11	39,318,875	481,483	1,674,295	37,338	1,410,455	257,752	6,156,394	24,542	2,633,756	39,633,019
12	39,633,019	453,908	1,669,138	34,784	1,403,288	260,332	6,230,421	24,835	2,652,011	39,851,224
13	39,851,224	427,562	1,660,849	17,676	1,396,977	262,938	6,287,661	25,058	2,663,731	39,968,240
14	39,968,240	402,518	1,655,145	15,344	1,391,981	265,570	6,327,555	25,207	2,669,484	40,015,519
15	40,015,519	378,828	1,649,423	13,244	1,387,529	268,229	6,349,843	25,284	2,671,025	40,008,670
16	40,008,670	356,634	1,644,090	11,438	1,383,597	270,914	6,354,126	25,286	2,669,479	39,965,410
17	39,965,410	335,865	1,639,063	9,860	1,380,676	273,626	6,340,865	25,218	2,666,069	39,904,487
18	39,904,487	316,570	1,634,822	8,459	1,378,004	276,365	6,309,433	25,078	2,662,132	39,846,329
19	39,846,329	298,627	1,631,337	7,214	1,375,966	279,131	6,261,492	24,872	2,659,040	39,811,281
20	39,811,281	281,324	1,628,473	6,123	1,374,444	281,925	6,201,151	24,616	2,658,045	39,815,849
21	39,815,849	263,583	1,625,136	5,152	1,372,866	284,747	6,134,898	24,336	2,660,003	39,868,102
22	39,868,102	245,190	1,621,656	4,310	1,370,536	287,598	6,064,263	24,037	2,665,415	39,974,506
23	39,974,506	226,069	1,617,838	3,576	1,367,583	290,476	5,990,579	23,727	2,674,681	40,140,423
24	40,140,423	206,325	1,613,367	2,933	1,363,596	293,384	5,914,391	23,408	2,688,147	40,370,375
25	40,370,375	186,523	1,608,545	2,378	1,358,757	296,320	5,832,543	23,066	2,706,267	40,673,556
26	40,673,556	166,672	1,733,415	1,909	1,353,637	0	5,747,101	22,710	2,722,693	40,882,071
27	40,882,071	146,605	1,727,675	1,516	1,347,775	0	5,659,222	22,344	2,739,373	41,163,448
28	41,163,448	126,339	1,721,344	1,188	1,340,956	0	5,570,036	21,974	2,761,161	41,522,425
29	41,522,425	106,418	1,715,631	919	1,333,216	0	5,478,089	21,595	2,756,190	40,687,116
30	40,687,116	88,239	1,710,910	703	1,324,959	0	5,375,772	21,177	2,691,245	39,506,222
31	39,506,222	72,618	1,707,016	532	1,317,299	0	5,258,833	20,702	2,611,326	38,315,478
32	38,315,478	59,336	1,702,929	397	1,310,288	0	5,022,317	19,734	2,535,337	37,257,215
33	37,257,215	48,050	1,700,000	293	1,303,808	0	4,880,760	19,166	2,465,455	36,246,132
34	36,246,132	38,525	1,697,475	214	1,297,901	0	4,728,997	18,558	2,399,322	35,299,482
35	35,299,482	30,559	1,695,916	154	1,292,557	0	4,568,938	17,919	2,338,072	34,433,450
36	34,433,450	23,949	1,694,971	108	1,288,672	0	4,401,757	17,253	2,280,176	33,508,169
37	33,508,169	18,580	1,694,277	74	1,285,097	0	4,228,593	16,564	2,204,240	31,683,506
38	31,683,506	14,273	1,693,004	49	1,281,824	0	4,050,828	15,857	2,081,417	29,848,489
39	29,848,489	10,828	1,691,176	31	1,278,645	0	3,870,490	15,142	1,958,849	28,057,041
40	28,057,041	8,130	1,689,046	18	1,275,515	0	3,688,273	14,419	1,839,485	26,318,518
41	26,318,518	6,032	1,686,014	10	1,272,483	0	3,505,464	13,695	1,723,888	24,638,893
42	24,638,893	4,426	1,683,588	5	1,269,451	0	3,323,196	12,974	1,612,425	23,022,923
43	23,022,923	3,183	1,681,161	2	1,266,419	0	3,142,791	12,261	1,505,381	21,474,204
44	21,474,204	2,258	1,678,734	1	1,263,387	0	2,964,909	11,558	1,402,979	19,995,696
45	19,995,696	1,570	1,676,307	0	1,260,355	0	2,790,334	10,869	1,305,397	18,589,655
46	18,589,655	1,068	1,673,880	0	1,257,323	0	2,619,365	10,195	1,212,775	17,257,918
47	17,257,918	704	1,671,453	0	1,254,291	0	2,452,445	9,538	1,125,226	16,001,997
48	16,001,997	447	1,669,026	0	1,251,259	0	2,289,786	8,899	1,042,846	14,823,192
49	14,823,192	268	1,666,600	0	1,248,227	0	2,131,569	8,278	965,717	13,722,570
50	13,722,570	150	1,664,173	0	1,245,195	0	1,977,949	7,676	893,907	12,701,053
51	12,701,053	77	1,661,746	0	1,242,163	0	1,829,091	7,093	827,473	11,759,414
52	11,759,414	36	1,659,319	0	1,239,131	0	1,685,203	6,531	766,461	10,898,210
53	10,898,210	17	1,656,892	0	1,236,099	0	1,546,509	5,989	710,901	10,117,766
54	10,117,766	6	1,654,465	0	1,233,067	0	1,413,307	5,469	660,805	9,418,078
55	9,418,078	1	1,652,038	0	1,230,035	0	1,285,805	4,972	616,164	8,798,900
56	8,798,900	0	1,649,611	0	1,227,003	0	1,164,189	4,498	576,955	8,259,754
57	8,259,754	0	1,647,184	0	1,223,971	0	1,048,671	4,049	543,137	7,799,891
58	7,799,891	0	1,644,757	0	1,220,939	0	939,441	3,624	514,650	7,418,310
59	7,418,310	0	1,642,330	0	1,217,907	0	836,660	3,224	491,240	7,113,769
60	7,113,769	0	1,640,000	0	1,215,000	0	740,463	2,850	473,354	6,884,802

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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, 2022

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	\$ 6,884,802	\$ 0	\$ 14,709	\$ 0	\$ 23,339	\$ 0	\$ 650,952	\$ 2,503	\$ 460,347	\$ 6,729,742
62	6,729,742	0	13,428	0	21,673	0	568,198	2,182	452,279	6,646,743
63	6,646,743	0	12,166	0	20,003	0	492,219	1,887	449,023	6,633,830
64	6,633,830	0	10,931	0	18,338	0	422,972	1,619	450,441	6,688,950
65	6,688,950	0	9,736	0	16,686	0	360,365	1,377	456,394	6,810,023
66	6,810,023	0	8,589	0	15,061	0	304,241	1,161	466,741	6,995,013
67	6,995,013	0	7,501	0	13,476	0	254,387	969	481,349	7,241,983
68	7,241,983	0	6,481	0	11,943	0	210,527	800	500,091	7,549,171
69	7,549,171	0	5,535	0	10,478	0	172,340	653	522,856	7,915,047
70	7,915,047	0	4,669	0	9,094	0	139,459	527	549,550	8,338,374
71	8,338,374	0	3,887	0	7,802	0	111,478	421	580,101	8,818,266
72	8,818,266	0	3,191	0	6,612	0	87,964	331	614,462	9,354,236
73	9,354,236	0	2,581	0	5,531	0	68,463	257	652,614	9,946,243
74	9,946,243	0	2,054	0	4,564	0	52,517	197	694,571	10,594,718
75	10,594,718	0	1,607	0	3,712	0	39,672	148	740,378	11,300,595
76	11,300,595	0	1,233	0	2,973	0	29,488	110	790,116	12,065,320
77	12,065,320	0	928	0	2,343	0	21,550	80	843,900	12,890,860
78	12,890,860	0	683	0	1,816	0	15,475	57	901,880	13,779,706
79	13,779,706	0	492	0	1,381	0	10,912	40	964,243	14,734,870
80	14,734,870	0	346	0	1,031	0	7,553	28	1,031,209	15,759,875
81	15,759,875	0	237	0	754	0	5,132	19	1,103,035	16,858,750
82	16,858,750	0	158	0	541	0	3,423	13	1,180,009	18,036,023
83	18,036,023	0	103	0	379	0	2,243	8	1,262,454	19,296,708
84	19,296,708	0	66	0	260	0	1,447	5	1,350,726	20,646,307
85	20,646,307	0	41	0	174	0	920	3	1,445,214	22,090,813
86	22,090,813	0	24	0	114	0	579	2	1,546,340	23,636,710
87	23,636,710	0	14	0	73	0	363	1	1,654,559	25,290,992
88	25,290,992	0	8	0	46	0	227	1	1,770,363	27,061,181
89	27,061,181	0	5	0	28	0	144	1	1,894,278	28,955,348
90	28,955,348	0	3	0	17	0	92	0	2,026,872	30,982,147
91	30,982,147	0	2	0	10	0	60	0	2,168,748	33,150,847
92	33,150,847	0	1	0	6	0	40	0	2,320,558	35,471,372
93	35,471,372	0	1	0	4	0	27	0	2,482,995	37,954,345
94	37,954,345	0	0	0	2	0	19	0	2,656,804	40,611,132
95	40,611,132	0	0	0	1	0	13	0	2,842,779	43,453,900
96	43,453,900	0	0	0	1	0	9	0	3,041,773	46,495,665
97	46,495,665	0	0	0	1	0	6	0	3,254,696	49,750,355
98	49,750,355	0	0	0	0	0	4	0	3,482,525	53,232,876
99	53,232,876	0	0	0	0	0	3	0	3,726,301	56,959,175
100	56,959,175	0	0	0	0	0	2	0	3,987,142	60,946,316
101	60,946,316	0	0	0	0	0	1	0	4,266,242	65,212,557
102	65,212,557	0	0	0	0	0	1	0	4,564,879	69,777,435
103	69,777,435	0	0	0	0	0	1	0	4,884,420	74,661,855
104	74,661,855	0	0	0	0	0	0	0	5,226,330	79,888,185
105	79,888,185	0	0	0	0	0	0	0	5,592,173	85,480,357
106	85,480,357	0	0	0	0	0	0	0	5,983,625	91,463,982
107	91,463,982	0	0	0	0	0	0	0	6,402,479	97,866,461
108	97,866,461	0	0	0	0	0	0	0	6,850,652	104,717,113
109	104,717,113	0	0	0	0	0	0	0	7,330,198	112,047,311
110	112,047,311	0	0	0	0	0	0	0	7,843,312	119,890,623
111	119,890,623	0	0	0	0	0	0	0	8,392,344	128,282,967
112	128,282,967	0	0	0	0	0	0	0	8,979,808	137,262,775
113	137,262,775	0	0	0	0	0	0	0	9,608,394	146,871,169
114	146,871,169	0	0	0	0	0	0	0	10,280,982	157,152,151
115	157,152,151	0	0	0	0	0	0	0	11,000,651	168,152,801

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2022 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

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

Projections Commence June 30, 2022

* 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%) ⁿ [(a) - .5]	(g) = (e) / (1+3.54%) ⁿ [(a) - .5]	(h) = (c) / (1+7.00%) ⁿ [(a) - .5]
1	\$ 31,279,439	\$ 4,905,834	\$ 4,905,834	\$ 0	\$ 4,742,648	\$ 0	\$ 4,742,648
2	32,441,591	5,061,709	5,061,709	0	4,573,214	0	4,573,214
3	33,538,978	5,211,139	5,211,139	0	4,400,208	0	4,400,208
4	34,558,003	5,353,963	5,353,963	0	4,225,053	0	4,225,053
5	35,496,353	5,492,132	5,492,132	0	4,050,550	0	4,050,550
6	36,341,322	5,623,699	5,623,699	0	3,876,246	0	3,876,246
7	37,096,791	5,745,842	5,745,842	0	3,701,341	0	3,701,341
8	37,774,534	5,859,829	5,859,829	0	3,527,822	0	3,527,822
9	38,377,512	5,967,420	5,967,420	0	3,357,566	0	3,357,566
10	38,901,561	6,067,341	6,067,341	0	3,190,454	0	3,190,454
11	39,318,875	6,156,394	6,156,394	0	3,025,497	0	3,025,497
12	39,633,019	6,230,421	6,230,421	0	2,861,567	0	2,861,567
13	39,851,224	6,287,661	6,287,661	0	2,698,932	0	2,698,932
14	39,968,240	6,327,555	6,327,555	0	2,538,370	0	2,538,370
15	40,015,519	6,349,843	6,349,843	0	2,380,665	0	2,380,665
16	40,008,670	6,354,126	6,354,126	0	2,226,421	0	2,226,421
17	39,965,410	6,340,865	6,340,865	0	2,076,425	0	2,076,425
18	39,904,487	6,309,433	6,309,433	0	1,930,964	0	1,930,964
19	39,846,329	6,261,492	6,261,492	0	1,790,927	0	1,790,927
20	39,811,281	6,201,151	6,201,151	0	1,657,634	0	1,657,634
21	39,815,849	6,134,898	6,134,898	0	1,532,639	0	1,532,639
22	39,868,102	6,064,263	6,064,263	0	1,415,881	0	1,415,881
23	39,974,506	5,990,579	5,990,579	0	1,307,175	0	1,307,175
24	40,140,423	5,914,391	5,914,391	0	1,206,122	0	1,206,122
25	40,370,375	5,832,543	5,832,543	0	1,111,618	0	1,111,618
26	40,673,556	5,747,101	5,747,101	0	1,023,676	0	1,023,676
27	40,882,071	5,659,222	5,659,222	0	942,077	0	942,077
28	41,163,448	5,570,036	5,570,036	0	866,571	0	866,571
29	41,522,425	5,478,089	5,478,089	0	796,510	0	796,510
30	40,687,116	5,375,772	5,375,772	0	730,499	0	730,499
31	39,506,222	5,258,833	5,258,833	0	667,858	0	667,858
32	38,315,478	5,022,317	5,022,317	0	596,094	0	596,094
33	37,257,215	4,880,760	4,880,760	0	541,396	0	541,396
34	36,246,132	4,728,997	4,728,997	0	490,244	0	490,244
35	35,299,482	4,568,938	4,568,938	0	442,665	0	442,665
36	34,433,450	4,401,757	4,401,757	0	398,568	0	398,568
37	33,508,169	4,228,593	4,228,593	0	357,839	0	357,839
38	31,683,506	4,050,828	4,050,828	0	320,370	0	320,370
39	29,848,489	3,870,490	3,870,490	0	286,082	0	286,082
40	28,057,041	3,688,273	3,688,273	0	254,779	0	254,779
41	26,318,518	3,505,464	3,505,464	0	226,309	0	226,309
42	24,638,893	3,323,196	3,323,196	0	200,507	0	200,507
43	23,022,923	3,142,791	3,142,791	0	177,217	0	177,217
44	21,474,204	2,964,909	2,964,909	0	156,249	0	156,249
45	19,995,696	2,790,334	2,790,334	0	137,429	0	137,429
46	18,589,655	2,619,365	2,619,365	0	120,569	0	120,569
47	17,257,918	2,452,445	2,452,445	0	105,500	0	105,500
48	16,001,997	2,289,786	2,289,786	0	92,059	0	92,059
49	14,823,192	2,131,569	2,131,569	0	80,091	0	80,091
50	13,722,570	1,977,949	1,977,949	0	69,457	0	69,457
51	12,701,053	1,829,091	1,829,091	0	60,028	0	60,028
52	11,759,414	1,685,203	1,685,203	0	51,688	0	51,688
53	10,898,210	1,546,509	1,546,509	0	44,331	0	44,331
54	10,117,766	1,413,307	1,413,307	0	37,862	0	37,862
55	9,418,078	1,285,805	1,285,805	0	32,193	0	32,193
56	8,798,900	1,164,189	1,164,189	0	27,241	0	27,241
57	8,259,754	1,048,671	1,048,671	0	22,933	0	22,933
58	7,799,891	939,441	939,441	0	19,200	0	19,200
59	7,418,310	836,660	836,660	0	15,981	0	15,981
60	7,113,769	740,463	740,463	0	13,218	0	13,218

**THE PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEW JERSEY
GASB 68 REPORTING FOR JUNE 30, 2022 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

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

Projections Commence June 30, 2022

* 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+3.54%) ^[(a) - .5]	(h) = (c) / (1+7.00%) ^[(a) - .5]
61	\$ 6,884,802	\$ 650,952	\$ 650,952	\$ 0	\$ 10,860	\$ 0	\$ 10,860
62	6,729,742	568,198	568,198	0	8,859	0	8,859
63	6,646,743	492,219	492,219	0	7,173	0	7,173
64	6,633,830	422,972	422,972	0	5,760	0	5,760
65	6,688,950	360,365	360,365	0	4,587	0	4,587
66	6,810,023	304,241	304,241	0	3,619	0	3,619
67	6,995,013	254,387	254,387	0	2,828	0	2,828
68	7,241,983	210,527	210,527	0	2,187	0	2,187
69	7,549,171	172,340	172,340	0	1,673	0	1,673
70	7,915,047	139,459	139,459	0	1,266	0	1,266
71	8,338,374	111,478	111,478	0	945	0	945
72	8,818,266	87,964	87,964	0	697	0	697
73	9,354,236	68,463	68,463	0	507	0	507
74	9,946,243	52,517	52,517	0	364	0	364
75	10,594,718	39,672	39,672	0	257	0	257
76	11,300,595	29,488	29,488	0	178	0	178
77	12,065,320	21,550	21,550	0	122	0	122
78	12,890,860	15,475	15,475	0	82	0	82
79	13,779,706	10,912	10,912	0	54	0	54
80	14,734,870	7,553	7,553	0	35	0	35
81	15,759,875	5,132	5,132	0	22	0	22
82	16,858,750	3,423	3,423	0	14	0	14
83	18,036,023	2,243	2,243	0	8	0	8
84	19,296,708	1,447	1,447	0	5	0	5
85	20,646,307	920	920	0	3	0	3
86	22,090,813	579	579	0	2	0	2
87	23,636,710	363	363	0	1	0	1
88	25,290,992	227	227	0	1	0	1
89	27,061,181	144	144	0	0	0	0
90	28,955,348	92	92	0	0	0	0
91	30,982,147	60	60	0	0	0	0
92	33,150,847	40	40	0	0	0	0
93	35,471,372	27	27	0	0	0	0
94	37,954,345	19	19	0	0	0	0
95	40,611,132	13	13	0	0	0	0
96	43,453,900	9	9	0	0	0	0
97	46,495,665	6	6	0	0	0	0
98	49,750,355	4	4	0	0	0	0
99	53,232,876	3	3	0	0	0	0
100	56,959,175	2	2	0	0	0	0
101	60,946,316	1	1	0	0	0	0
102	65,212,557	1	1	0	0	0	0
103	69,777,435	1	1	0	0	0	0
104	74,661,855	0	0	0	0	0	0
105	79,888,185	0	0	0	0	0	0
106	85,480,357	0	0	0	0	0	0
107	91,463,982	0	0	0	0	0	0
108	97,866,461	0	0	0	0	0	0
109	104,717,113	0	0	0	0	0	0
110	112,047,311	0	0	0	0	0	0
111	119,890,623	0	0	0	0	0	0
112	128,282,967	0	0	0	0	0	0
113	137,262,775	0	0	0	0	0	0
114	146,871,169	0	0	0	0	0	0
115	157,152,151	0	0	0	0	0	0
					\$ 79,863,337	\$ 0	\$ 79,863,337

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.