



State Police Retirement System of New Jersey

GASB 67 Report as of June 30, 2024

Produced by Cheiron

March 2025

TABLE OF CONTENTS

<i>Section</i>		<i>Page</i>
Section I	Board Summary	1
Section II	Certification	2
Section III	Determination of Discount Rate	4
Section IV	Projection of Total Pension Liability	5
Section V	Note Disclosures	6
Section VI	Required Supplementary Information.....	7
 <i>Appendices</i>		
Appendix A	Membership Information	10
Appendix B	Actuarial Assumptions and Methods	11
Appendix C	Summary of Plan Provisions.....	18
Appendix D	Determination of Discount Rate	23
Appendix E	Glossary of Terms.....	27

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 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 67 for the State Police Retirement System of New Jersey (SPRS, Plan or System). This information includes:

- Projection of the Total Pension Liability from the valuation date to the measurement date,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate, and
- Changes in the Net Pension Liability.

Highlights

The reporting date for SPRS is June 30, 2024. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2024 and the Total Pension Liability as of the valuation date, July 1, 2023, updated to June 30, 2024. We are not aware of any significant events between the valuation date and the measurement date that are measurable at this time, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

The following table provides a summary of the key results during this reporting period.

Table I-1 Summary of Results		
Measurement Date	June 30, 2024	June 30, 2023
Total Pension Liability	\$ 4,534,779,153	\$ 4,373,113,800
Plan Fiduciary Net Position	<u>2,318,994,486</u>	<u>2,108,653,735</u>
Net Pension Liability	\$ 2,215,784,667	\$ 2,264,460,065

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION II – CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 67 for the State Police Retirement System of New Jersey (SPRS). This report is for the use of SPRS, 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 SPRS and estimating the price to settle SPRS's obligations.

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

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

For purposes of this report, the calculation of the Total Pension Liability and the projection of the Plan's contributions and benefit payments as of June 30, 2024 were 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 22, 2022.

This report was prepared using census data as of the July 1, 2023 valuation date and financial information as of the June 30, 2024 measurement date.

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

In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum. The discount rate used to measure the Total Pension Liability is 7.00% as of June 30, 2024 and is described in Section III of the report.

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

STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE

SECTION II – CERTIFICATION

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


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


Justin Runkel, ASA, MAAA, EA
Consulting Actuary

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION III – DETERMINATION OF DISCOUNT RATE

The discount rate used to measure the Total Pension Liability was 7.00% as of June 30, 2023 and June 30, 2024. As discussed with the Division of Pensions and Benefits, the projection of cash flows used to determine the discount rate as of June 30, 2024 assumed:

- In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum.
- In accordance with Paragraph 41 of GASB Statement No. 67, the projection of the Plan's contributions and benefit payments are based on the same assumptions used to determine the expected contributions for the System. The demographic assumptions are based on the recommendations of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 22, 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 State will contribute 100% of the actuarially determined contribution and Non-Contributory Group Insurance Premium Fund (NCGIPF) contribution. The 100% contribution rate is the total State contribution rate expected to be paid in fiscal year ending June 30, 2025 with respect to the actuarially determined contribution for the fiscal year ending June 30, 2025 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.
- The NCGIPF contributions are assumed to be paid monthly.
- Annual administrative expenses are assumed to be 0.62% of expected pension benefit payments.

In the event the Plan's fiduciary net position was no longer sufficient to make future benefit payments, municipal bond rates of 3.65% as of June 30, 2023 and 3.93% as of June 30, 2024 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, 2024, 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, 2024 is equal to the long-term rate of return of 7.00%. Similarly, the GASB discount rate as of June 30, 2023 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.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION IV – PROJECTION OF TOTAL PENSION LIABILITY

The Total Pension Liability (TPL) at the end of the measurement year, June 30, 2024, is measured as of a valuation date of July 1, 2023 and projected to June 30, 2024. The TPL and service cost were calculated using the Entry Age Normal Cost Method as prescribed by GASB 67. All TPL amounts shown in Table IV-1 include liabilities attributable to the NCGIPF. In addition, net employer transfer contributions and net member transfer contributions with accumulated interest have been added to the June 30, 2024 TPL.

There were no significant events during the projection period of which we are aware. Because the TPL shown in the prior report was measured as of July 1, 2022 and projected to June 30, 2023, it will not match the amounts measured as of July 1, 2023 that are shown in this exhibit.

The following table shows the projection of the TPL at discount rates equal to the rate used for disclosure and plus and minus one percent from the rate used for disclosure.

Table IV-1			
Projection of Total Pension Liability from Valuation to Measurement Date			
Discount Rate	6.00%	7.00%	8.00%
Total Pension Liability, 7/1/2023			
Actives	\$ 1,628,809,570	\$ 1,393,660,340	\$ 1,203,583,273
Deferred Vested	0	0	0
Retirees	3,308,610,665	3,004,972,868	2,749,016,038
Total	\$ 4,937,420,235	\$ 4,398,633,208	\$ 3,952,599,311
Service Cost	114,750,535	90,446,028	71,917,995
Benefit Payments	(260,365,181)	(260,365,181)	(260,365,181)
Net Transfer Contributions - Employer	449,404	449,404	449,404
Net Transfer Contributions - Member	312,585	312,585	312,585
Interest	295,455,593	305,303,109	311,777,025
Total Pension Liability, 6/30/2024	\$ 5,088,023,171	\$ 4,534,779,153	\$ 4,076,691,139

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION V – NOTE DISCLOSURES

The following table shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of System assets), and the Net Pension Liability during the Measurement Year.

Table V-1 Change in Net Pension Liability			
	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/2023	\$ 4,373,113,800	\$ 2,108,653,735	\$ 2,264,460,065
Changes for the year:			
Service cost	90,446,028		90,446,028
Interest	303,516,750		303,516,750
Changes of benefits	0		0
Differences between expected and actual experience	27,305,767		27,305,767
Changes of assumptions	0		0
Contributions - employer		220,357,798	(220,357,798)
Contributions - member		31,192,573	(31,192,573)
Net transfers from other systems - employer	449,404	449,404	0
Net transfers from other systems - member	312,585	312,585	0
Net investment income		220,016,992	(220,016,992)
Benefit payments	(260,365,181)	(260,365,181)	0
Administrative expense		(1,623,420)	1,623,420
Net changes	<u>161,665,353</u>	<u>210,340,751</u>	<u>(48,675,398)</u>
Balances at 6/30/2024	<u>\$ 4,534,779,153</u>	<u>\$ 2,318,994,486</u>	<u>\$ 2,215,784,667</u>

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The following table shows the sensitivity of the NPL to the discount rate.

Table V-2 Sensitivity of Net Pension Liability to Changes in Discount Rate			
	1% Decrease	Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Total Pension Liability	\$ 5,088,023,171	\$ 4,534,779,153	\$ 4,076,691,139
Plan Fiduciary Net Position	<u>2,318,994,486</u>	<u>2,318,994,486</u>	<u>2,318,994,486</u>
Net Pension Liability	<u>\$ 2,769,028,685</u>	<u>\$ 2,215,784,667</u>	<u>\$ 1,757,696,653</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	45.6%	51.1%	56.9%

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION VI – REQUIRED SUPPLEMENTARY INFORMATION

The following schedule shows the changes in NPL and related ratios required by GASB for the current and prior years.

Table VI-1		
Schedule of Changes in Net Pension Liability and Related Ratios		
	FYE 2024	FYE 2023
<u>Total Pension Liability</u>		
Service cost	\$ 90,446,028	\$ 85,593,034
Interest (includes interest on service cost)	303,516,750	292,841,117
Changes of benefit terms	0	0
Differences between expected and actual experience	27,305,767	25,672,722
Changes of assumptions	0	0
Net transfers from other systems - employer	449,404	0
Net transfers from other systems - member	312,585	364,489
Benefit payments, including refunds of member contributions	<u>(260,365,181)</u>	<u>(253,767,797)</u>
Net change in total pension liability	\$ 161,665,353	\$ 150,703,565
Total pension liability - beginning	<u>4,373,113,800</u>	<u>4,222,410,235</u>
Total pension liability - ending	<u>\$ 4,534,779,153</u>	<u>\$ 4,373,113,800</u>
<u>Plan fiduciary net position</u>		
Contributions - employer	\$ 220,357,798	\$ 206,428,454
Contributions - member	31,192,573	30,727,554
Net transfers from other systems - employer	449,404	0
Net transfers from other systems - member	312,585	364,489
Net investment income	220,016,992	178,426,880
Benefit payments, including refunds of member contributions	(260,365,181)	(253,767,797)
Administrative expense	<u>(1,623,420)</u>	<u>(861,652)</u>
Net change in plan fiduciary net position	\$ 210,340,751	\$ 161,317,928
Plan fiduciary net position - beginning	<u>2,108,653,735</u>	<u>1,947,335,807</u>
Plan fiduciary net position - ending	<u>\$ 2,318,994,486</u>	<u>\$ 2,108,653,735</u>
Net pension liability - ending	<u>\$ 2,215,784,667</u>	<u>\$ 2,264,460,065</u>
Plan fiduciary net position as a percentage of the total pension liability	51.14%	48.22%
Covered payroll	\$ 366,982,156	\$ 345,191,396
Net pension liability as a percentage of covered payroll	603.79%	656.00%

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION VI – REQUIRED SUPPLEMENTARY INFORMATION

Because an Actuarially Determined Contribution (ADC) is calculated, the following schedule is required. An ADC is a contribution amount determined in accordance with Actuarial Standards of Practice. Amounts shown for the ADC and actual contributions in the table below include the Non-Contributory Group Insurance Premium Fund costs.

Table VI-2 Schedule of Employer Contributions		
	FYE 2024	FYE 2023
Actuarially Determined Contribution	\$ 220,358,248	\$ 206,428,186
Contributions in Relation to the Actuarially Determined Contribution	<u>220,357,798</u>	<u>206,428,454</u>
Contribution Deficiency/(Excess)	\$ 450	\$ (268)
Covered Payroll	\$ 366,982,156	\$ 345,191,396
Contributions as a Percentage of Covered Payroll	60.05%	59.80%

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

SECTION VI – REQUIRED SUPPLEMENTARY INFORMATION

The following summarizes key methods and assumptions used to determine the Actuarially Determined Contribution for FYE 2024.

Valuation Date:	July 1, 2022
Timing:	Actuarial determined contributions are calculated as of the July 1 preceding the fiscal year in which contributions are made.
Actuarial cost method:	Projected Unit Credit
Amortization method:	Level dollar
Remaining amortization period:	27 years
Asset valuation method:	5-year smoothing of difference between market value and expected actuarial value
Investment rate of return:	7.00%
Salary increases:	Service-based rates decreasing from 6.75% for 0-11 years of service, to 3.75% for 12-25 years of service, and 2.75% for 26 years of service or greater
Mortality:	<p><i>Pre-Retirement:</i> The Pub-2010 Public Safety Above-Median Income Employee mortality table [<i>PubS-2010(A) Employee</i>] as published by the Society of Actuaries (SOA), unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA’s Scale MP-2021. 35% of the deaths are assumed to be accidental.</p> <p><i>Healthy Retirees (Healthy Annuitants):</i> The Pub-2010 Public Safety Above-Median Income Healthy Retiree mortality table [<i>PubS-2010(A) Healthy Retiree</i>] as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA’s Scale MP-2021.</p> <p><i>Beneficiaries (Contingent Annuitants):</i> The Pub-2010 General Above-Median Income Healthy Retiree mortality table [<i>PubG-2010(A) Healthy Retiree</i>] as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA’s Scale MP-2021.</p> <p><i>Disabled Retirees (Disabled Annuitants):</i> The Pub-2010 Public Safety Disabled Retiree mortality table [<i>PubS-2010 Disabled Retiree</i>] as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA’s Scale MP-2021.</p>

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX A – MEMBERSHIP INFORMATION

Plan Membership		
	July 1, 2023	July 1, 2022
Contributing Actives	3,147	2,994
Non-Contributing Actives	71	65
Terminated Vested	0	0
Inactive Receiving Benefits*	<u>3,671</u>	<u>3,612</u>
Total	6,889	6,671
Annual Compensation for Contributing Actives	\$ 366,982,156	\$ 345,191,396
Annual Retirement Allowances for Those Receiving Benefits	\$ 255,683,589	\$ 247,559,564

* QDRO recipients are excluded from the counts

STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
 GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE

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. **GASB 67 Effective Discount Rate**
 - June 30, 2023: 7.00% per annum, compounded annually.
 - June 30, 2024: 7.00% per annum, compounded annually.
4. **Price Inflation** 2.75% per annum, compounded annually.
5. **Wage Inflation** 3.25% per annum, compounded annually.
6. **Cost-of-Living Adjustments (COLAs)** No future COLAs are assumed. Previously granted COLAs are included in the data.

7. **Salary Increases** Salaries are assumed to increase annually as follows:

Service	Rates
0-11	6.75%
12-25	3.75
26+	2.75

Salaries increases are assumed to occur on January 1

8. **401(a)(17) Pay Limit** \$330,000 in 2023 increasing 2.75% per annum, compounded annually.
9. **Social Security Wage Base** \$160,200 in 2023 increasing 3.25% per annum, compounded annually.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

10. Termination

Termination rates are as follows:

Service	Rates
0	0.450%
1	0.450
2	0.450
3	0.450
4	0.300
5	0.225
6	0.200
7	0.175
8	0.150
9	0.125
10	0.100
11	0.075
12	0.075
13	0.075
14	0.075
15	0.075
16	0.075
17	0.075
18	0.075
19	0.075
20	0.000

No termination is assumed after attainment of retirement eligibility.

All members with ten or more years of service at termination are assumed to elect a deferred retirement benefit.

11. Disability

Representative disability rates are as follows:

Age	Ordinary Disability	Accidental Disability
20	0.009%	0.015%
25	0.015	0.025
30	0.032	0.053
35	0.116	0.194
40	0.125	0.208
45	0.128	0.214
50	0.132	0.220
54	0.177	0.295

No ordinary disability is assumed prior to attainment of ordinary disability retirement eligibility at four years of service or after attainment of special retirement eligibility at 25 years of service.

STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Accidental disability rates apply at all ages until the mandatory retirement age of 55.

Members retiring under the ordinary disability decrement with 20 or more years of service are assumed to receive the involuntary disability retirement benefit.

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

12. Mortality

Pre-Retirement (Non-Annuitant): The Pub-2010 Public Safety Above-Median Income Employee mortality table [*PubS-2010(A) Employee*] as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

35% of the deaths are assumed to be accidental.

For purposes of pre-retirement accidental death benefits based on Adjusted Final Compensation, the benefit is assumed to increase at 3.75% per year, consistent with the assumed salary increases for members with 12 to 25 years of service.

Healthy Retirees (Healthy Annuitants): The Pub-2010 Public Safety Above-Median Income Healthy Retiree mortality table [*PubS-2010(A) Healthy Retiree*] as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Beneficiaries (Contingent Annuitants): The Pub-2010 General Above-Median Income Healthy Retiree mortality table [*PubG-2010(A) Healthy Retiree*] as published by the Society of Actuaries, unadjusted, 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 Public Safety Disabled Retiree mortality table [*PubS-2010 Disabled Retiree*] as published by the Society of Actuaries, unadjusted, and with future improvement from a base year of 2010 on a generational basis using SOA's Scale MP-2021.

STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

13. Retirement

For those with 24 years of service or less: 0.50%

For those with 25 years of service:

Age	Rates
48 or younger	25.00%
49-54	50.00

For those with 26 or more years of service: 35.00%

Mandatory retirement at age 55.

14. Family Composition Assumptions

For members not currently in receipt, 83.3% 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 post-retirement 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.

For current dependents receiving a pre-retirement accidental death benefit, those under age 24 are assumed to receive a benefit until age 24 while those over age 24 are assumed to receive a benefit for the remainder of their lifetime.

For current dependents receiving a benefit other than a pre-retirement accidental death benefit, those under age 18 are assumed to receive a benefit until age 18 while those over age 18 are assumed to receive a benefit for the remainder of their lifetime.

15. Data

Information provided by the prior actuary was relied upon for the purposes of setting the status of and valuing non-contributing active records.

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

Inactives receiving benefits according to the 2022 data but omitted from the 2023 data are assumed to have died without a beneficiary.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

The maintenance amount reported in the 2023 active data has been unchanged since 2021. For the 2023 valuation data, we increased the reported maintenance amount by 11.2% in accordance with the contract between the State and State Troopers Fraternal Associations covering Fiscal Years 2020-2023.

16. 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 22, 2022. The investment return assumption was recommended by the State Treasurer. We find the investment return assumption to be reasonable based on the System’s current asset allocation and the capital market outlook of the New Jersey Division of Investment.

The combined effect of the assumptions in aggregate is expected to have no significant bias.

17. 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, 2023 and the financial information as of June 30, 2024. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2024 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2024 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.

18. Changes in Assumptions since Last Valuation

None.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

The actuarial methods used for determining State contributions are described as follows.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected 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. 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.

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.

2. Asset Valuation Method

For the purpose 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 return on the previous year's assets and the 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.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

3. State Contribution Payable Dates

Chapter 83, P.L. 2016 requires the State to make the required pension contributions on a quarterly basis in each fiscal year according to the following schedule: 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.

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 Last Valuation

None.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the SPRS used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 53, Chapter 5A, 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 of Membership

All members of the former State Police and Benevolent Fund and full-time commissioned officers, non-commissioned officers or troopers of the Division of State Police. Membership is a condition of employment.

- a) Tier 1 Member: Any member hired on or before May 21, 2010.
- b) Tier 2 Member: Any member hired after May 21, 2010.

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. Service Credit

Service rendered while a member as described above. Chapter 399, P.L. 2021 permits members to purchase service credit earned from public employment in another state or with the United States Government.

4. Credited Service

A year is credited for each year of service as an officer or trooper in the State Police.

5. Compensation

Base salary in accordance with established salary policies of the state for all employees in the same position. Compensation does not include individual salary adjustments granted primarily in anticipation of the retirement or for temporary or extracurricular duties beyond the regular work day or shift. Effective June 30, 1996, Chapter 113, P. L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code. Chapter 1, P. L. 2010 provides that for members hired on or after May 22, 2010, the amount of compensation used for employer and member contributions and benefits under the System cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contributions Act.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

6. Final Compensation

Average compensation received by the member in the last 12 months of credited service preceding retirement or death. Such term includes the value of the member's maintenance allowance for the same period. Chapter 1, P. L. 2010 provides that for members hired on or after May 22, 2010, Final Compensation means the average annual compensation for service for which contributions are made during any three fiscal years of membership providing the largest possible benefit to the member or the member's beneficiary.

7. Aggregate Contributions

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf.

8. Member Contributions

Each member contributes 9.0% of base salary. For contribution purposes, compensation does not include overtime, bonuses, maintenance or any adjustments before retirement.

9. Adjusted Final Compensation

For purposes of the pre-retirement accidental death benefit, the amount of compensation or compensation as adjusted, as the case may be, increased by the same percentage increase which is applied in any adjustments of the compensation schedule of active members after the member's death and before the date on which the deceased member of the retirement system would have accrued 25 years of service under an assumption of continuous service, at which time that amount will become fixed. Adjustments to compensation or adjusted compensation shall take effect at the same time as any adjustments in the compensation schedule of active members.

10. Benefits

a) Service and Special Retirement:

Mandatory retirement at age 55. Voluntary retirement prior to age 55.

- (1) Service Retirement: 20 years of service credit, or members as of August 29, 1985 who would not have 20 years of service credit at age 55.

Benefit is an annual retirement allowance equal to 50% of final compensation.

- (2) Special Retirement: 25 years of service credit.

Benefit is an annual retirement allowance equal to 65% of final compensation, plus 1% for each year of service credit in excess of 25 years, to a maximum of 70% of final compensation.

- (3) Members as of August 29, 1985 who would have 20 years of service credit but not 25 years at age 55.

Benefit is an annual retirement allowance equal to 50% of final compensation, plus 3% for each year of service credit in excess of 20 years.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

b) **Deferred Retirement:**

Termination of service prior to age 55 with ten years of service credit.

Benefit is either a refund of aggregate contributions, or a deferred life annuity beginning at age 55 equal to 2% of final compensation for each year of service credit up to 25 years.

For members who die during the deferral period, the benefit is a return of aggregate contributions.

c) **Non-Vested Termination:**

Termination of service prior to age 55 and less than ten years of service credit.

Benefit is a return of aggregate contributions.

d) **Death Benefits**

(1) **Ordinary Death Before Retirement:** Death of an active member of the plan. Benefit is equal to:

- a) Lump sum payment equal to 350% of final compensation, also known as the noncontributory group life insurance benefit, plus
- b) Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, 50% of final compensation payable to surviving children in equal shares. If there is no surviving spouse or dependent child(ren), 25% (40%) of final 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 contributions.

(2) **Accidental Death Before Retirement:** Death of an active member of the plan resulting during performance of duties. Benefit is equal to:

- a) Lump sum payment equal to 350% of final compensation, also known as the noncontributory group life insurance benefit, plus
- b) Spousal life annuity of 70% of final compensation or adjusted final compensation (if appropriate) payable until spouse's death. If there is no surviving spouse, or upon death of the surviving spouse, 70% of final compensation or adjusted final compensation (if appropriate) payable to surviving children in equal shares. If there is no surviving spouse or dependent children, 25% (40%) of final compensation or adjusted final compensation (if appropriate) to one (two) dependent parents. If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of accumulated contributions.

(3) **Death After Retirement:** Death of a retired member of the plan. Accidental death benefits in certain circumstances are provided to surviving spouses and children of SPRS retirees who participated in the World Trade Center rescue, recovery or cleanup operations and died prior to July 8, 2019. Benefit is equal to:

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

- a) Lump sum payment equal to 50% of final compensation for a member retired under service, special or deferred retirement. For a member receiving a disability benefit, lump sum payment of 350% of final compensation if death occurs prior to age 55 and 50% of final compensation if death occurs after age 55. This benefit is also known as the noncontributory group life insurance benefit, plus
- b) Spousal life annuity of 50% of final 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 compensation payable to one (two, three or more) dependent child(ren). Previously granted COLAs also apply.

e) Disability Retirement

- (1) Ordinary Disability Retirement: Four years of service credit and mentally or physically incapacitated for the performance of his usual duty and of any other available duty in the Division of State Police and such incapacity is likely to be permanent.

Benefit is an immediate life annuity equal to the greater of:

- a) 40% of final compensation, or
- b) 1.5% of final compensation for each year of service credit.

- (2) Involuntary Ordinary Disability Retirement: Ordinary Disability Retirement applied for by the employer.

Benefit is an immediate life annuity equal to:

- a) For members with 20 years of service credit but less than 25 years, 50% of final compensation plus 3% of final compensation for each year of service credit in excess of 20 years, to a maximum of 65% of final compensation.
- b) For all other members, the Ordinary Disability benefit.

- (3) Accidental Disability Retirement: Totally and permanently disabled as a direct result of a traumatic event occurring during and as a result of his regular or assigned duties and such member is mentally or physically incapacitated for the performance of his usual duties in the Division of State Police. A member may also be eligible if the member becomes totally and permanently disabled because of a preexisting and asymptomatic condition that is later rendered symptomatic 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, regular or assigned duties may include the World Trade Center (WTC) rescue, recovery, or cleanup operations between September 11, 2001 and October 11, 2011. 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.

Benefit is an immediate life annuity equal to 2/3 of annual rate of compensation, including the maintenance allowance, at the time of the traumatic event or retirement, whichever is greater.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

11. Forms of Payment

No optional forms of payment available.

12. Changes in Plan Provisions since Last Valuation

None.

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 1 - Projection of the Pension Plan's Fiduciary Net Position
(In Thousands)

Projections Commence June 30, 2024

Year	Projected Beginning Fiduciary Net Position	Projected Member Contributions	Projected Employer Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a) + (b) + (c) - (d) - (e) + (f)
1	\$ 2,318,994	\$ 27,912	\$ 231,428	\$ 272,406	\$ 1,679	\$ 159,876	\$ 2,464,125
2	2,464,125	28,182	232,724	278,764	1,718	169,859	2,614,408
3	2,614,408	27,905	235,229	289,307	1,782	180,071	2,766,524
4	2,766,524	27,510	236,002	300,321	1,850	190,345	2,918,209
5	2,918,209	27,206	236,504	310,500	1,912	200,615	3,070,122
6	3,070,122	26,672	237,412	322,064	1,983	210,855	3,221,013
7	3,221,013	25,642	237,585	337,128	2,076	220,866	3,365,903
8	3,365,903	24,614	234,999	351,378	2,164	230,414	3,502,387
9	3,502,387	23,939	232,505	362,160	2,230	239,508	3,633,949
10	3,633,949	23,210	231,390	372,672	2,295	248,301	3,761,883
11	3,761,883	22,401	230,223	382,611	2,356	256,856	3,886,395
12	3,886,395	21,876	229,058	389,320	2,397	265,292	4,010,905
13	4,010,905	21,532	229,170	394,030	2,425	273,837	4,138,990
14	4,138,990	21,083	230,081	399,214	2,457	282,633	4,271,117
15	4,271,117	20,270	230,720	407,104	2,505	291,599	4,404,097
16	4,404,097	18,937	230,047	418,534	2,575	300,450	4,532,421
17	4,532,421	17,657	227,513	428,985	2,640	308,962	4,654,928
18	4,654,928	16,378	225,190	439,067	2,701	317,086	4,771,814
19	4,771,814	15,006	222,864	449,492	2,766	324,801	4,882,227
20	4,882,227	13,385	219,992	461,549	2,840	331,984	4,983,199
21	4,983,199	11,541	216,069	474,684	2,921	338,433	5,071,638
22	5,071,638	9,815	211,219	486,283	2,992	344,039	5,147,436
23	5,147,436	7,666	206,542	501,245	3,085	348,633	5,205,947
24	5,205,947	5,277	199,842	517,336	3,184	351,917	5,242,464
25	5,242,464	3,244	191,916	529,662	3,260	353,773	5,258,474
26	5,258,474	1,766	185,011	536,212	3,300	354,439	5,260,178
27	5,260,178	988	180,114	535,952	3,297	354,415	5,256,445
28	5,256,445	495	177,718	532,616	3,275	354,192	5,252,958
29	5,252,958	195	176,280	527,060	3,240	354,094	5,253,228
30	5,253,228	52	91,256	519,606	3,192	352,167	5,173,905
31	5,173,905	6	15,320	510,848	3,136	344,952	5,020,198
32	5,020,198	0	11,914	501,350	3,076	334,434	4,862,120
33	4,862,120	0	11,809	491,480	3,014	323,709	4,703,144
34	4,703,144	0	11,845	481,323	2,950	312,934	4,543,651
35	4,543,651	0	11,868	470,914	2,884	302,132	4,383,852
36	4,383,852	0	11,872	460,294	2,818	291,314	4,223,927
37	4,223,927	0	11,863	449,504	2,750	280,493	4,064,030
38	4,064,030	0	11,846	438,583	2,681	269,679	3,904,290
39	3,904,290	0	11,824	427,563	2,612	258,878	3,744,817
40	3,744,817	0	11,805	416,467	2,543	248,100	3,585,711
41	3,585,711	0	11,789	405,307	2,473	237,349	3,427,069
42	3,427,069	0	11,780	394,082	2,402	226,633	3,268,997
43	3,268,997	0	11,778	382,784	2,331	215,960	3,111,619
44	3,111,619	0	11,782	371,396	2,260	205,338	2,955,083
45	2,955,083	0	11,789	359,897	2,188	194,780	2,799,568
46	2,799,568	0	11,798	348,264	2,115	184,298	2,645,286
47	2,645,286	0	11,805	336,473	2,040	173,907	2,492,485
48	2,492,485	0	11,804	324,504	1,965	163,626	2,341,446
49	2,341,446	0	11,790	312,344	1,889	153,475	2,192,478
50	2,192,478	0	11,759	299,987	1,812	143,474	2,045,912

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

Table 1 - Projection of the Pension Plan's Fiduciary Net Position
(In Thousands)

Projections Commence June 30, 2024

Year	Projected Beginning Fiduciary Net Position	Projected Member Contributions	Projected Employer Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position
	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a) + (b) + (c) - (d) - (e) + (f)
51	2,045,912	0	11,705	287,437	1,733	133,648	1,902,095
52	1,902,095	0	11,628	274,704	1,654	124,020	1,761,385
53	1,761,385	0	11,525	261,806	1,573	114,614	1,624,145
54	1,624,145	0	11,395	248,764	1,492	105,455	1,490,739
55	1,490,739	0	11,239	235,603	1,411	96,568	1,361,532
56	1,361,532	0	11,053	222,344	1,328	87,977	1,236,889
57	1,236,889	0	10,836	209,012	1,246	79,707	1,117,173
58	1,117,173	0	10,583	195,631	1,164	71,782	1,002,744
59	1,002,744	0	10,290	182,228	1,081	64,226	893,951
60	893,951	0	9,953	168,840	999	57,064	791,128
61	791,128	0	9,571	155,510	918	50,315	694,586
62	694,586	0	9,138	142,289	838	44,001	604,598
63	604,598	0	8,658	129,244	759	38,138	521,392
64	521,392	0	8,135	116,448	682	32,739	445,136
65	445,136	0	7,568	103,980	607	27,814	375,931
66	375,931	0	6,966	91,929	535	23,367	313,800
67	313,800	0	6,332	80,384	466	19,396	258,678
68	258,678	0	5,675	69,443	402	15,894	210,402
69	210,402	0	5,007	59,201	341	12,847	168,714
70	168,714	0	4,340	49,749	286	10,234	133,253
71	133,253	0	3,693	41,164	236	8,027	103,572
72	103,572	0	3,081	33,505	192	6,194	79,150
73	79,150	0	2,519	26,799	153	4,697	59,415
74	59,415	0	2,016	21,043	120	3,498	43,766
75	43,766	0	1,579	16,203	92	2,556	31,605
76	31,605	0	1,208	12,221	70	1,830	22,352
77	22,352	0	902	9,019	51	1,283	15,465
78	15,465	0	656	6,505	37	879	10,459
79	10,459	0	465	4,581	26	589	6,906
80	6,906	0	321	3,146	18	385	4,449
81	4,449	0	215	2,104	12	246	2,793
82	2,793	0	140	1,370	8	153	1,708
83	1,708	0	88	867	5	92	1,017
84	1,017	0	54	533	3	55	589
85	589	0	32	318	2	31	332
86	332	0	18	185	1	17	182
87	182	0	10	104	1	10	98
88	98	0	6	57	0	5	51
89	51	0	3	30	0	3	26
90	26	0	2	16	0	1	13
91	13	0	1	8	0	1	6
92	6	0	0	4	0	0	3
93	3	0	0	2	0	0	1
94	1	0	0	1	0	0	1
95	1	0	0	0	0	0	0
96	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

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

Projections Commence June 30, 2024

* 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 (d)

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+3.93%)^[(a) - .5]	(h) = (c) / (1+7.00%)^[(a) - .5]
1	\$ 2,318,994	\$ 272,406	\$ 272,406	\$ 0	\$ 263,345	\$ 0	\$ 263,345
2	2,464,125	278,764	278,764	0	251,861	0	251,861
3	2,614,408	289,307	289,307	0	244,287	0	244,287
4	2,766,524	300,321	300,321	0	236,997	0	236,997
5	2,918,209	310,500	310,500	0	228,999	0	228,999
6	3,070,122	322,064	322,064	0	221,989	0	221,989
7	3,221,013	337,128	337,128	0	217,170	0	217,170
8	3,365,903	351,378	351,378	0	211,542	0	211,542
9	3,502,387	362,160	362,160	0	203,769	0	203,769
10	3,633,949	372,672	372,672	0	195,966	0	195,966
11	3,761,883	382,611	382,611	0	188,031	0	188,031
12	3,886,395	389,320	389,320	0	178,811	0	178,811
13	4,010,905	394,030	394,030	0	169,134	0	169,134
14	4,138,990	399,214	399,214	0	160,149	0	160,149
15	4,271,117	407,104	407,104	0	152,630	0	152,630
16	4,404,097	418,534	418,534	0	146,650	0	146,650
17	4,532,421	428,985	428,985	0	140,479	0	140,479
18	4,654,928	439,067	439,067	0	134,374	0	134,374
19	4,771,814	449,492	449,492	0	128,565	0	128,565
20	4,882,227	461,549	461,549	0	123,377	0	123,377
21	4,983,199	474,684	474,684	0	118,587	0	118,587
22	5,071,638	486,283	486,283	0	113,537	0	113,537
23	5,147,436	501,245	501,245	0	109,374	0	109,374
24	5,205,947	517,336	517,336	0	105,500	0	105,500
25	5,242,464	529,662	529,662	0	100,948	0	100,948
26	5,258,474	536,212	536,212	0	95,510	0	95,510
27	5,260,178	535,952	535,952	0	89,219	0	89,219
28	5,256,445	532,616	532,616	0	82,863	0	82,863
29	5,252,958	527,060	527,060	0	76,634	0	76,634
30	5,253,228	519,606	519,606	0	70,608	0	70,608
31	5,173,905	510,848	510,848	0	64,876	0	64,876
32	5,020,198	501,350	501,350	0	59,505	0	59,505
33	4,862,120	491,480	491,480	0	54,517	0	54,517
34	4,703,144	481,323	481,323	0	49,898	0	49,898
35	4,543,651	470,914	470,914	0	45,625	0	45,625
36	4,383,852	460,294	460,294	0	41,678	0	41,678
37	4,223,927	449,504	449,504	0	38,039	0	38,039
38	4,064,030	438,583	438,583	0	34,686	0	34,686
39	3,904,290	427,563	427,563	0	31,603	0	31,603
40	3,744,817	416,467	416,467	0	28,769	0	28,769
41	3,585,711	405,307	405,307	0	26,166	0	26,166
42	3,427,069	394,082	394,082	0	23,777	0	23,777
43	3,268,997	382,784	382,784	0	21,585	0	21,585
44	3,111,619	371,396	371,396	0	19,572	0	19,572
45	2,955,083	359,897	359,897	0	17,726	0	17,726
46	2,799,568	348,264	348,264	0	16,030	0	16,030
47	2,645,286	336,473	336,473	0	14,475	0	14,475
48	2,492,485	324,504	324,504	0	13,046	0	13,046
49	2,341,446	312,344	312,344	0	11,736	0	11,736
50	2,192,478	299,987	299,987	0	10,534	0	10,534

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX D – DETERMINATION OF DISCOUNT RATE

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

Projections Commence June 30, 2024

* 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 (d)

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+3.93%)^[(a) - .5]	(h) = (c) / (1+7.00%)^[(a) - .5]
51	2,045,912	287,437	287,437	0	9,433	0	9,433
52	1,902,095	274,704	274,704	0	8,426	0	8,426
53	1,761,385	261,806	261,806	0	7,505	0	7,505
54	1,624,145	248,764	248,764	0	6,664	0	6,664
55	1,490,739	235,603	235,603	0	5,899	0	5,899
56	1,361,532	222,344	222,344	0	5,203	0	5,203
57	1,236,889	209,012	209,012	0	4,571	0	4,571
58	1,117,173	195,631	195,631	0	3,998	0	3,998
59	1,002,744	182,228	182,228	0	3,481	0	3,481
60	893,951	168,840	168,840	0	3,014	0	3,014
61	791,128	155,510	155,510	0	2,594	0	2,594
62	694,586	142,289	142,289	0	2,219	0	2,219
63	604,598	129,244	129,244	0	1,883	0	1,883
64	521,392	116,448	116,448	0	1,586	0	1,586
65	445,136	103,980	103,980	0	1,323	0	1,323
66	375,931	91,929	91,929	0	1,093	0	1,093
67	313,800	80,384	80,384	0	894	0	894
68	258,678	69,443	69,443	0	721	0	721
69	210,402	59,201	59,201	0	575	0	575
70	168,714	49,749	49,749	0	451	0	451
71	133,253	41,164	41,164	0	349	0	349
72	103,572	33,505	33,505	0	266	0	266
73	79,150	26,799	26,799	0	199	0	199
74	59,415	21,043	21,043	0	146	0	146
75	43,766	16,203	16,203	0	105	0	105
76	31,605	12,221	12,221	0	74	0	74
77	22,352	9,019	9,019	0	51	0	51
78	15,465	6,505	6,505	0	34	0	34
79	10,459	4,581	4,581	0	23	0	23
80	6,906	3,146	3,146	0	15	0	15
81	4,449	2,104	2,104	0	9	0	9
82	2,793	1,370	1,370	0	6	0	6
83	1,708	867	867	0	3	0	3
84	1,017	533	533	0	2	0	2
85	589	318	318	0	1	0	1
86	332	185	185	0	1	0	1
87	182	104	104	0	0	0	0
88	98	57	57	0	0	0	0
89	51	30	30	0	0	0	0
90	26	16	16	0	0	0	0
91	13	8	8	0	0	0	0
92	6	4	4	0	0	0	0
93	3	2	2	0	0	0	0
94	1	1	1	0	0	0	0
95	1	0	0	0	0	0	0
96	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0
					\$ 5,457,563	\$ 0	\$ 5,457,563

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. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 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.

4. 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.

5. 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.

6. Plan Fiduciary Net Position

The fair or market value of assets.

7. Reporting Date

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

**STATE POLICE RETIREMENT SYSTEM OF NEW JERSEY
GASB 67 REPORTING FOR JUNE 30, 2024 MEASUREMENT DATE**

APPENDIX E – GLOSSARY OF TERMS

8. 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 67. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

9. 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 67. 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.