State Police Retirement System of New Jersey

GASB 68 Report as of June 30, 2022

Produced by Cheiron

May 2023

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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 State Police Retirement System of New Jersey (SPRS, Plan or System). This information includes:

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

Highlights

The reporting date for SPRS 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 through June 30, 2021, the underlying demographic and economic assumptions were updated. To see a detailed comparison of the changes refer to the Draft Experience Study. 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 included the addition of service cost and interest cost offset by actual benefit payments and an adjustment to reflect the changes in assumptions. Additional information about the TPL can be found in the GASB 67 report.

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

Table I-1
Summary of Results

Measurement Date		June 30, 2022		June 30, 2021
Net Pension Liability	$	2,275,074,428	$	1,923,890,807
Deferred Outflows		(303,433,489)		(204,814,338)
Deferred Inflows		882,284,551		1,507,587,151
Net Impact on Statement of Net Position	$	2,853,925,490	$	3,226,663,620
Pension Expense/(Income)	$	(166,572,620)	$	(165,371,889)
Pension Expense/(Income) (% of Payroll)		-50.17%		(55.45%)

SECTION II – CERTIFICATION

The purpose of this report is to provide accounting and financial reporting information under GASB 68 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 Division of Pensions and Benefits. 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 benefit payments as of June 30, 2022 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, 2021 valuation date and financial information as of the June 30, 2022 measurement date.

This report reflects two changes to the plan provisions. Chapter 399, P.L. 2021 permits members to purchase service credit earned from public employment in another state or with the United States Government. Chapter 428, P.L. 2021 limits to 90 days the period during which members can be kept past their mandatory retirement during a public health emergency or state of emergency. These legislations did not impact the Total 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.

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 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	Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary	Principal Consulting Actuary

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 Division of Pensions and Benefits, 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 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, 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.
- The NCGIPF contributions are assumed to be paid monthly.
- Annual administrative expenses are assumed to be 0.29% 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 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.

SECTION IV – EMPLOYER REPORTING AMOUNTS

We understand the State has elected to use the 2022 measurement date for its 2023 reporting date. As a result, the schedules in this section will be used by the State for its 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 5.94 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-1
Schedule of Deferred Inflows and Outflows of Resources

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 76,451,991	$ 6,178,383
Changes in assumptions	140,271,715	876,106,168
Net differences between projected and actual earnings on pension plan investments	86,709,783	0
Total	**$ 303,433,489**	**$ 882,284,551**

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Measurement year ended June 30:	
2023	(243,350,182)
2024	(156,164,692)
2025	(165,728,051)
2026	(23,193,327)
2027	9,585,190
Thereafter	$ 0

SECTION IV – EMPLOYER REPORTING AMOUNTS

Table IV-2
Detailed Schedule of Deferred Inflows and Outflows of Resources

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	5.94	$ 85,334,516	$ 14,366,080	$ 14,366,080	$ 14,366,080	$ 14,366,080	$ 14,366,080	$ 13,504,116	$ 0
2021	4.49	3,131,524	697,444	697,444	697,444	697,444	341,748	0	0
2020	3.58	4,231,441	1,181,966	1,181,966	1,181,966	685,543	0	0	0
2019	2.53	(5,274,549)	(2,084,803)	(2,084,803)	(1,104,943)	0	0	0	0
2018	1.90	(6,309,344)	(3,320,707)	(2,988,637)	0	0	0	0	0
2017	0.67	2,810,776	2,810,776	0	0	0	0	0	0
Total		$ 83,924,364	$ 13,650,756	$ 11,172,050	$ 15,140,547	$ 15,749,067	$ 14,707,828	$ 13,504,116	$ 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	5.94	$ (24,764,266)	$ (4,169,068)	$ (4,169,068)	$ (4,169,068)	$ (4,169,068)	$ (4,169,068)	$ (3,918,926)	$ 0
2021	4.49	(907,348,104)	(202,081,983)	(202,081,983)	(202,081,983)	(202,081,983)	(99,020,172)	0	0
2020	3.58	194,640,597	54,368,882	54,368,882	54,368,882	31,533,951	0	0	0
2019	2.53	(152,720,226)	(60,363,726)	(60,363,726)	(31,992,774)	0	0	0	0
2018	1.90	(122,208,736)	(64,320,387)	(57,888,349)	0	0	0	0	0
2017	0.67	(82,476,226)	(82,476,226)	0	0	0	0	0	0
Total		$ (1,094,876,961)	$ (359,042,508)	$ (270,134,244)	$ (183,874,943)	$ (174,717,100)	$ (103,189,240)	$ (3,918,926)	$ 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	$ 326,440,429	$ 65,288,086	$ 65,288,086	$ 65,288,086	$ 65,288,086	$ 65,288,085	$ 0	$ 0
2021	4.00	(288,192,422)	(72,048,106)	(72,048,106)	(72,048,106)	(72,048,104)	0	0	0
2020	3.00	57,989,176	19,329,726	19,329,726	19,329,724	0	0	0	0
2019	2.00	6,084,614	3,042,308	3,042,306	0	0	0	0	0
2018	1.00	(7,131,334)	(7,131,334)	0	0	0	0	0	0
Total		$ 95,190,463	$ 8,480,680	$ 15,612,012	$ 12,569,704	$ (6,760,018)	$ 65,288,085	$ 0	$ 0
Grand Total		**$ (915,762,134)**	**$ (336,911,072)**	**$ (243,350,182)**	**$ (156,164,692)**	**$ (165,728,051)**	**$ (23,193,327)**	**$ 9,585,190**	**$ 0**

** As of the beginning of the measurement year*

SECTION IV – EMPLOYER REPORTING AMOUNTS

The annual pension expense recognized by the State can be calculated two different ways. First, it is the change in the amounts reported on the Statement of Net Position that relate to SPRS 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 following table, 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 SPRS 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 through both of these methodologies.

SECTION IV – EMPLOYER REPORTING AMOUNTS

Table IV-3
Calculation of Pension Expense

Measurement Year Ending	2022	2021
Change in Net Pension Liability	$ 351,183,621	$ (1,393,482,198)
Change in Deferred Outflows	(98,619,151)	203,646,881
Change in Deferred Inflows	(625,302,600)	883,250,603
Employer Contributions	206,165,510	141,212,825
Pension Expense/(Income)	**$ (166,572,620)**	**$ (165,371,889)**
Pension Expense/(Income) as % of Payroll	**-50.17%**	**-55.45%**
Operating Expenses		
Service cost	$ 72,160,698	$ 106,016,397
Employee contributions	(27,081,021)	(27,268,772)
Administrative expenses	701,981	494,765
Total	$ 45,781,658	$ 79,242,390
Financing Expenses		
Interest cost	$ 280,610,597	$ 251,694,211
Expected return on assets	(156,053,803)	(117,364,327)
Total	$ 124,556,794	$ 134,329,884
Changes		
Benefit changes	$ 0	$ 0
Recognition of assumption changes	(359,042,508)	(303,643,648)
Recognition of liability gains and losses	13,650,756	(1,489,911)
Recognition of investment gains and losses	8,480,680	(73,810,604)
Total	$ (336,911,072)	$ (378,944,163)
Pension Expense/(Income)	**$ (166,572,620)**	**$ (165,371,889)**

APPENDIX A – MEMBERSHIP INFORMATION

Plan Membership		
	July 1, 2021	**July 1, 2020**
Contributing Actives	2,957	2,762
Non-Contributing Actives	61	57
Terminated Vested	0	0
Inactive Receiving Benefits*	3,544	3,479
Total	6,562	6,298
Annual Compensation for Contributing Actives	$ 332,022,798	$ 298,254,514
Annual Retirement Allowances for Those Receiving Benefits	$ 238,690,959	$ 231,316,330

* QDRO recipients are excluded from the counts

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, 2021: 7.00% per annum, compounded annually.
   - June 30, 2022: 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** — $290,000 in 2021 increasing 2.75% per annum, compounded annually.

9. **Social Security Wage Base** — $142,800 in 2021 increasing 3.25% per annum, compounded annually.

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 10 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.

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.

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 2020 data but omitted from the 2021 data are assumed to have died without a beneficiary.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

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.

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, 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.

18. Changes in Assumptions Since Last Valuation

Ordinary disability rates, salary increase rates, and the assumed age difference between male and female spouses were updated based on the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 22, 2022.

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.

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 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.

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, 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.

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.

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 workday 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) <u>Service and Special Retirement:</u>

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

(1) <u>Service Retirement</u>: 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) <u>Special Retirement</u>: 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 10 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 10 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.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

(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:

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.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

(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. 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.

11. Forms of Payment

No optional forms of payment available.

12. Changes in Plan Provisions Since Last Valuation

Chapter 399, P.L. 2021 permits members to purchase service credit earned from public employment in another state or with the United States Government.

Chapter 428, P.L. 2021 limits to 90 days the period during which members can be kept past their mandatory retirement during a public health emergency or state of emergency.

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 (a)	Projected Member Contributions (b)	Projected Employer Contributions (c)	Projected Benefit Payments (d)	Projected Administrative Expenses (e)	Projected Investment Earnings (f)	Projected Ending Fiduciary Net Position (g) = (a) + (b) + (c) - (d) - (e) + (f)
1	$ 1,947,336	$ 25,628	$ 207,598	$ 252,860	$ 713	$ 133,866	$ 2,060,854
2	2,060,854	25,465	219,570	261,864	738	141,807	2,185,094
3	2,185,094	25,373	222,638	269,935	761	150,303	2,312,712
4	2,312,712	25,491	225,799	276,116	778	159,110	2,446,218
5	2,446,218	25,030	229,617	286,752	808	168,173	2,581,479
6	2,581,479	24,401	231,370	297,960	839	177,279	2,715,730
7	2,715,730	23,907	232,487	307,828	867	186,350	2,849,779
8	2,849,779	23,191	234,019	319,054	899	195,362	2,982,397
9	2,982,397	21,930	234,708	334,099	941	204,102	3,108,097
10	3,108,097	20,666	231,620	348,204	981	212,292	3,223,490
11	3,223,490	19,770	228,622	358,626	1,010	219,902	3,332,149
12	3,332,149	18,843	227,060	368,618	1,038	227,093	3,435,489
13	3,435,489	17,834	225,461	378,397	1,066	233,914	3,533,234
14	3,533,234	17,170	223,676	384,749	1,084	240,469	3,628,716
15	3,628,716	16,729	223,166	388,902	1,095	246,983	3,725,598
16	3,725,598	16,159	223,480	393,629	1,108	253,591	3,824,091
17	3,824,091	15,211	223,418	401,170	1,129	260,193	3,920,612
18	3,920,612	13,747	221,919	412,235	1,160	266,479	4,009,363
19	4,009,363	12,356	218,525	422,154	1,188	272,215	4,089,117
20	4,089,117	10,931	215,336	431,756	1,215	277,336	4,159,749
21	4,159,749	9,602	211,995	440,390	1,239	281,852	4,221,569
22	4,221,569	7,954	208,747	451,152	1,270	285,668	4,271,517
23	4,271,517	6,202	204,152	462,100	1,300	288,608	4,307,078
24	4,307,078	4,610	198,964	471,273	1,326	290,593	4,328,646
25	4,328,646	2,923	194,003	480,801	1,353	291,589	4,335,007
26	4,335,007	1,582	188,378	486,422	1,369	291,650	4,328,826
27	4,328,826	882	183,926	485,926	1,367	291,096	4,317,437
28	4,317,437	433	181,773	482,779	1,357	290,338	4,305,845
29	4,305,845	203	180,482	477,231	1,341	289,678	4,297,635
30	4,297,635	85	179,913	470,254	1,321	289,327	4,295,386
31	4,295,386	14	179,700	462,475	1,298	289,431	4,300,759
32	4,300,759	0	179,630	453,802	1,273	290,106	4,315,420
33	4,315,420	0	22,665	444,650	1,246	287,387	4,179,576
34	4,179,576	0	9,811	435,173	1,219	277,873	4,030,868
35	4,030,868	0	9,277	425,392	1,191	267,788	3,881,350
36	3,881,350	0	9,274	415,336	1,162	257,669	3,731,795
37	3,731,795	0	9,280	405,039	1,132	247,556	3,582,460
38	3,582,460	0	9,273	394,541	1,102	237,465	3,433,555
39	3,433,555	0	9,255	383,882	1,072	227,410	3,285,266
40	3,285,266	0	9,225	373,096	1,041	217,401	3,137,755
41	3,137,755	0	9,185	362,214	1,010	207,450	2,991,166
42	2,991,166	0	9,136	351,258	979	197,565	2,845,630
43	2,845,630	0	9,081	340,242	947	187,756	2,701,278
44	2,701,278	0	9,022	329,169	916	178,032	2,558,248
45	2,558,248	0	8,961	318,037	884	168,402	2,416,689
46	2,416,689	0	8,898	306,836	852	158,878	2,276,777
47	2,276,777	0	8,833	295,550	820	149,472	2,138,710
48	2,138,710	0	8,761	284,161	788	140,198	2,002,721
49	2,002,721	0	8,682	272,652	755	131,073	1,869,069
50	1,869,069	0	8,593	261,014	722	122,117	1,738,043

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 (a)	Projected Member Contributions (b)	Projected Employer Contributions (c)	Projected Benefit Payments (d)	Projected Administrative Expenses (e)	Projected Investment Earnings (f)	Projected Ending Fiduciary Net Position (g) = (a) + (b) + (c) - (d) - (e) + (f)
51	1,738,043	0	8,491	249,238	689	113,348	1,609,955
52	1,609,955	0	8,374	237,330	655	104,789	1,485,134
53	1,485,134	0	8,239	225,298	621	96,462	1,363,916
54	1,363,916	0	8,083	213,163	587	88,391	1,246,641
55	1,246,641	0	7,906	200,950	552	80,597	1,133,642
56	1,133,642	0	7,704	188,689	518	73,104	1,025,243
57	1,025,243	0	7,477	176,417	483	65,932	921,752
58	921,752	0	7,225	164,171	449	59,102	823,459
59	823,459	0	6,947	151,995	415	52,632	730,629
60	730,629	0	6,648	139,934	381	46,540	643,501
61	643,501	0	6,327	128,040	348	40,841	562,281
62	562,281	0	5,989	116,370	316	35,547	487,130
63	487,130	0	5,636	104,985	284	30,667	418,164
64	418,164	0	5,271	93,952	254	26,208	355,437
65	355,437	0	4,896	83,341	225	22,171	298,939
66	298,939	0	4,513	73,219	197	18,552	248,589
67	248,589	0	4,123	63,655	170	15,345	204,232
68	204,232	0	3,732	54,714	146	12,535	165,639
69	165,639	0	3,346	46,457	123	10,105	132,510
70	132,510	0	2,968	38,930	103	8,033	104,479
71	104,479	0	2,603	32,167	85	6,292	81,123
72	81,123	0	2,254	26,184	69	4,852	61,976
73	61,976	0	1,923	20,978	55	3,680	46,547
74	46,547	0	1,615	16,527	43	2,743	34,336
75	34,336	0	1,334	12,791	33	2,008	24,853
76	24,853	0	1,081	9,716	25	1,441	17,635
77	17,635	0	860	7,236	18	1,014	12,255
78	12,255	0	670	5,278	13	699	8,332
79	8,332	0	510	3,766	9	471	5,537
80	5,537	0	379	2,627	6	310	3,593
81	3,593	0	275	1,788	4	199	2,275
82	2,275	0	194	1,187	3	125	1,405
83	1,405	0	133	768	2	76	845
84	845	0	88	483	1	45	495
85	495	0	57	295	1	26	282
86	282	0	35	175	0	15	157
87	157	0	21	101	0	8	85
88	85	0	12	56	0	4	45
89	45	0	7	31	0	2	23
90	23	0	4	16	0	1	12
91	12	0	2	8	0	1	6
92	6	0	1	4	0	0	3
93	3	0	1	2	0	0	1
94	1	0	0	1	0	0	0
95	0	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

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 (d)

Year (a)	Projected Beginning Fiduciary Net Position* (b)	Projected Benefit Payments for current Plan participants** (c)	"Funded" Portion of Benefit Payments (d) = (c) if (b) >= (c)	"Unfunded" Portion of Benefit Payments (e) = (c) - (d)	Present Value of "Funded" Benefit Payments (f) = (d) / (1+7.00%)^[(a) - .5]	Present Value of "Unfunded" Benefit Payments (g) = (e) / (1+3.54%)^[(a) - .5]	Present Value of Benefit Payments Using the Single Discount Rate (h) = (c) / (1+7.00%)^[(a) - .5]
1	$ 1,947,336	$ 252,860	$ 252,860	$ 0	$ 244,449	$ 0	$ 244,449
2	2,060,854	261,864	261,864	0	236,592	0	236,592
3	2,185,094	269,935	269,935	0	227,929	0	227,929
4	2,312,712	276,116	276,116	0	217,896	0	217,896
5	2,446,218	286,752	286,752	0	211,485	0	211,485
6	2,581,479	297,960	297,960	0	205,375	0	205,375
7	2,715,730	307,828	307,828	0	198,296	0	198,296
8	2,849,779	319,054	319,054	0	192,082	0	192,082
9	2,982,397	334,099	334,099	0	187,980	0	187,980
10	3,108,097	348,204	348,204	0	183,100	0	183,100
11	3,223,490	358,626	358,626	0	176,243	0	176,243
12	3,332,149	368,618	368,618	0	169,302	0	169,302
13	3,435,489	378,397	378,397	0	162,424	0	162,424
14	3,533,234	384,749	384,749	0	154,346	0	154,346
15	3,628,716	388,902	388,902	0	145,806	0	145,806
16	3,725,598	393,629	393,629	0	137,924	0	137,924
17	3,824,091	401,170	401,170	0	131,370	0	131,370
18	3,920,612	412,235	412,235	0	126,162	0	126,162
19	4,009,363	422,154	422,154	0	120,745	0	120,745
20	4,089,117	431,756	431,756	0	115,413	0	115,413
21	4,159,749	440,390	440,390	0	110,019	0	110,019
22	4,221,569	451,152	451,152	0	105,335	0	105,335
23	4,271,517	462,100	462,100	0	100,833	0	100,833
24	4,307,078	471,273	471,273	0	96,107	0	96,107
25	4,328,646	480,801	480,801	0	91,635	0	91,635
26	4,335,007	486,422	486,422	0	86,642	0	86,642
27	4,328,826	485,926	485,926	0	80,891	0	80,891
28	4,317,437	482,779	482,779	0	75,109	0	75,109
29	4,305,845	477,231	477,231	0	69,389	0	69,389
30	4,297,635	470,254	470,254	0	63,901	0	63,901
31	4,295,386	462,475	462,475	0	58,733	0	58,733
32	4,300,759	453,802	453,802	0	53,861	0	53,861
33	4,315,376	444,650	444,650	0	49,323	0	49,323
34	4,179,574	435,173	435,173	0	45,113	0	45,113
35	4,030,867	425,392	425,392	0	41,214	0	41,214
36	3,881,350	415,336	415,336	0	37,608	0	37,608
37	3,731,795	405,039	405,039	0	34,276	0	34,276
38	3,582,460	394,541	394,541	0	31,203	0	31,203
39	3,433,555	383,882	383,882	0	28,374	0	28,374
40	3,285,266	373,096	373,096	0	25,773	0	25,773
41	3,137,755	362,214	362,214	0	23,384	0	23,384
42	2,991,166	351,258	351,258	0	21,193	0	21,193
43	2,845,630	340,242	340,242	0	19,186	0	19,186
44	2,701,278	329,169	329,169	0	17,347	0	17,347
45	2,558,248	318,037	318,037	0	15,664	0	15,664
46	2,416,689	306,836	306,836	0	14,124	0	14,124
47	2,276,777	295,550	295,550	0	12,714	0	12,714
48	2,138,710	284,161	284,161	0	11,424	0	11,424
49	2,002,721	272,652	272,652	0	10,245	0	10,245
50	1,869,069	261,014	261,014	0	9,166	0	9,166

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 (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+3.54%)^[(a) - .5]	(h) = (c) / (1+7.00%)^[(a) - .5]
51	1,738,043	249,238	249,238	0	8,180	0	8,180
52	1,609,955	237,330	237,330	0	7,279	0	7,279
53	1,485,134	225,298	225,298	0	6,458	0	6,458
54	1,363,916	213,163	213,163	0	5,711	0	5,711
55	1,246,641	200,950	200,950	0	5,031	0	5,031
56	1,133,642	188,689	188,689	0	4,415	0	4,415
57	1,025,243	176,417	176,417	0	3,858	0	3,858
58	921,752	164,171	164,171	0	3,355	0	3,355
59	823,459	151,995	151,995	0	2,903	0	2,903
60	730,629	139,934	139,934	0	2,498	0	2,498
61	643,501	128,040	128,040	0	2,136	0	2,136
62	562,281	116,370	116,370	0	1,814	0	1,814
63	487,130	104,985	104,985	0	1,530	0	1,530
64	418,164	93,952	93,952	0	1,279	0	1,279
65	355,437	83,341	83,341	0	1,061	0	1,061
66	298,939	73,219	73,219	0	871	0	871
67	248,589	63,655	63,655	0	708	0	708
68	204,232	54,714	54,714	0	568	0	568
69	165,639	46,457	46,457	0	451	0	451
70	132,510	38,930	38,930	0	353	0	353
71	104,479	32,167	32,167	0	273	0	273
72	81,123	26,184	26,184	0	208	0	208
73	61,976	20,978	20,978	0	155	0	155
74	46,547	16,527	16,527	0	114	0	114
75	34,336	12,791	12,791	0	83	0	83
76	24,853	9,716	9,716	0	59	0	59
77	17,635	7,236	7,236	0	41	0	41
78	12,255	5,278	5,278	0	28	0	28
79	8,332	3,766	3,766	0	19	0	19
80	5,537	2,627	2,627	0	12	0	12
81	3,593	1,788	1,788	0	8	0	8
82	2,275	1,187	1,187	0	5	0	5
83	1,405	768	768	0	3	0	3
84	845	483	483	0	2	0	2
85	495	295	295	0	1	0	1
86	282	175	175	0	1	0	1
87	157	101	101	0	0	0	0
88	85	56	56	0	0	0	0
89	45	31	31	0	0	0	0
90	23	16	16	0	0	0	0
91	12	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	0	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
					$ 5,046,177 +	$ 0 =	$ 5,046,177

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.