The Prison Officers' Pension Fund of New Jersey

Information Required Under Governmental Accounting Standards Board No. 67 as of June 30, 2015

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March 11, 2016

Division of Pensions and Benefits
Department of the Treasury
Prison Officers'
Pension Fund of New Jersey
Trenton, New Jersey

Office of the Division:

This valuation provides information concerning the Prison Officers' Pension Fund of New Jersey in accordance with the Governmental Accounting Standards Board (GASB) Statement No. 67. This Statement is an amendment of Statements No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans, and No. 50, Pension Disclosures, effective for plan fiscal years ending June 30, 2014 and later.

We certify that the information contained in this Actuarial Report has been prepared in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information fairly presents the actuarial position of the Prison Officers' Pension Fund of New Jersey in accordance with the requirements of GASB Statement No. 67 as of June 30, 2015.

The Division of Pensions and benefits may use this report for the review of the operation of the plan and as a source of information for the State financial statements. The report may also be used in the preparation of the plan's audited financial statements.

Use of this report for any other purpose or by anyone other than the staff of the Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In preparing the actuarial results, we have relied upon information provided by the Division of Pensions and Benefits regarding plan provisions, plan participants, plan assets, contribution rates and other matters used in the actuarial valuation. Although we did not audit the data, we reviewed the data for reasonableness and consistency with the prior year's information. The accuracy of the results presented herein is dependent on the accuracy of the data.

In my opinion, the actuarial assumptions used are appropriate for purposes of the valuation and are reasonably related to the experience of the System and to reasonable long-term expectations.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice and I am available to answer questions about it.

Buck Consultants, LLC

Aaron Shapiro

Aaron Shapiro, FSA, EA, MAAA
Principal, Consulting Actuary

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Section I – GASB 67 Information

Notes to the Financial Statements for the Year Ended June 30, 2015

Summary of Significant Accounting Policies

Method used to value investments. Investments are reported at fair value.

Actuarial cost method: Entry Age Normal – Level Percentage of Pay

Plan Description

Plan administration. The State of New Jersey Division of Pensions and Benefits administers the Prison Officers' Pension Fund of New Jersey (Plan), a single-employer defined benefit pension plan that provides pensions for Employees of State penal institutions employed prior to January 1, 1960 who did not transfer to the Police & Firemen's Retirement System in accordance with Chapter 205 of Public Law 1989. The plan was closed to new employees as of January 1960.

Management of the Plan is vested in the Division of Pensions and Benefits in the Department of the Treasury (Division).

Plan membership. Plan membership consists of the following:

	June 30, 2013	June 30, 2014
Inactive members or beneficiaries currently receiving	121	110
Inactive members entitled to but not yet receiving	0	0
Active members	0	0
	121	110

Benefits provided. Please see Section III of the report for a summary of plan provisions.

Contributions. The Division establishes contributions based on an actuarially determined contribution recommended by an independent actuary. Since the plan is closed to new employees, the actuarially determined contribution is an amount to finance any unfunded accrued liability. The unfunded accrued liability (the difference between the present value of benefits and the valuation assets) was determined as of July 1, 1988 and was amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments were adjusted to reflect any experience gains or losses that occurred during the previous plan year. All gains and losses were amortized over the remaining original amortization period. (Without any guidance, the actuary assumed that any unfunded accrued liability that develops after the July 1, 2001 valuation will be amortized over 1 year.) For the year ended June 30, 2015, the State contributed $0 to the plan.

Cost-of-living increases are granted to retired members and their eligible survivors in accordance with the Pension Adjustment Act. The additional liability due to the pension adjustment is paid by the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. Chapter 78, P.L. 2011 suspended the cost of living adjustments for current and future retirees and beneficiaries until reactivated as permitted by law.

Investments

Rate of return. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The annual money-weighted rate of return on Plan investments, net of Plan investment expense (as provided by the Division of Pensions and Benefits) is as follows:

June 30, 2014	June 30, 2015
0.09%	0.09%

Receivables

N/A.

Net Pension Liability

The components of the net pension liability were as follows:

		June 30, 2014		June 30, 2015
Total pension liability	$	8,405,586	$	7,226,313
System fiduciary net position		(7,383,201)		(6,704,568)
Commonwealth's net position	$	1,022,385	$	521,745
System fiduciary net position as a percentage of the total pension liability		87.84%		92.78%

Actuarial assumptions

The total pension liability as of fiscal year ending June 30 was determined by rolling forward the plan's total pension liability as of fiscal year beginning July 1 of the previous calendar year to the end fiscal year using the following actuarial assumptions, applied to all periods included in the measurement. All other methods and assumptions used to determine the total pension liability are set forth in Section II.

The actuarial cost method used to develop the total pension liability is the Entry Age Normal Cost - Level Percent of Pay method, as required by GASB Statement No. 67.

Long-Term Expected Rate of Return

The arithmetic mean return on the portfolio was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2015 are summarized in the following table. The capital market assumptions are per Buck's investment consulting practice for 2015.

Asset Class	Index	Target Allocation*	Long-Term Expected Real Rate of Return
Cash	Citigroup 90-Day T-Bills	100.00%	1.04%
Assumed Inflation – Mean			3.04%
Assumed Inflation – Standard Deviation			2.59%
Portfolio Arithmetic Mean Return			4.08%
Portfolio Standard Derivation			2.76%
Long-Term Expected Rate of Return: - **Selected by the State for funding purposes** - **Selected by the State for accounting purposes as of June 30, 2015**			**5.00%** **3.80%**

*Based on target asset allocation for 2015.

The Tables presented in pages 6 and 7 illustrate the projections and calculations used to determine the discount rate as required by paragraphs 40−45 of this Statement as of June 30, 2015. The discount rate is the single rate that reflects (1) the long-term expected rate of return on Plan investments that are expected to be used to finance the payment of benefits, to the extent that the Plan's fiduciary net position is projected to be sufficient to make projected benefit payments and Plan assets are expected to be invested using a strategy to achieve that return, and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another scale), to the extent that the conditions for use of the long-term expected rate of return are not met.

Discount rate. The discount rates used to measure the total pension liability were 4.29% as of June 30, 2014 and 3.80% as of June 30, 2015. The projection of cash flows used to determine the discount rate assumed that contributions will continue to follow the current funding policy to contribute the actuarially determined contribution. In addition, effective with the fiscal year ending June 30, 2015, the State prescribed the use of an expected long-term rate of return of 3.80% in the projection of cash flows in lieu of the 5.00% rate used for funding. Based on these assumptions, the pension Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability in accordance with the method prescribed by GASB Statement No. 67. We believe this assumption is reasonable for the purposes of the measurements required by the Statement.

The projections of the Fiduciary Net Plan Position are based on contributions to the plan in accordance with the State's current funding policy. Should contributions to the Plan be different from those based on the State's current funding policy, the results shown in Tables 1 and 2 would reflect the new contribution policy and may result in the Fiduciary Net Plan Position not being sufficient to cover the Plan's benefit payments at some other future date and thus changing the discount rate used to determine the Plan's Total Pension Liability.

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability, calculated using the discount rate of 3.80%, as well as what the State's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.80%) or 1-percentage-point higher (4.80%) than the current rate:

	1% Decrease (2.80%)	Current Discount Rate (3.80%)	1% Increase (4.80%)
Net Pension Liability	$ 880,826	$ 521,745	$ 196,015

Schedules of Required Supplementary Information

Schedule of Changes in the State's Net Pension Liability and Related Ratios

Changes in Net Pension Liability	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
	Increase (Decrease)		
Balances as of June 30, 2014	$ 8,405,586	$ 7,383,201	$ 1,022,385
Changes for the year:			
Service cost	0		0
Interest on total pension liability	331,362		331,362
Effect of plan changes	0		0
Effect of economic/demographic (gains) or losses	(296,620)		(296,620)
Effect of assumptions changes or inputs	163,490		163,490
Benefit payments	(1,377,505)	(1,377,505)	0
Administrative expenses		(5,843)	5,843
Member contributions		0	0
Net investment income		6,355	(6,355)
Employer contributions		698,360	(698,360)
Balances as of June 30, 2015	$ 7,226,313	$ 6,704,568	$ 521,745

Plan fiduciary net position as a percentage of the total pension liability	92.78%
Covered-employee payroll	N/A
Net pension liability as a percentage of covered-employee payroll	N/A

Notes to Schedule:

Benefit changes. None.

Changes of assumptions. The discount rate changed from 4.29% as of June 30, 2014 to 3.80% as of June 30, 2015. The discount rates as of June 30, 2014 and June 30, 2015 were prescribed by the State.

Schedule of State Contributions

	2014	2015
Actuarially determined contribution	$ 0	$ 0
Contributions related to the actuarially determined contribution[1]	0	0
Contribution deficiency (excess)	$ 0	$ 0

1. Excludes $793,174 and $698,360 paid from the Pension Adjustment Fund for cost-of-living adjustment amounts paid during the fiscal years ending June 30, 2014 and June 30, 2015, respectively.

Notes to Schedule

Valuation date: Actuarially determined contributions are calculated as of the July 1 preceding the fiscal year in which contributions are made. That is, the contribution calculated as of July 1, 2014 will be made during the fiscal year ended June 30, 2016.

The methods and assumptions used to determine the actuarially determined contributions to the plan are set forth in Section II.

Schedule of Investment Returns

	2014	2015
Annual money-weighted rate of return, net of investment expenses	0.09%	0.09%

Table 1

Projection of Fiduciary Net Position

(000's omitted)

Fiscal Year Ending June 30	Beginning Fiduciary Net Plan Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Projected Investment Earnings	Ending Fiduciary Net Plan Position
2015	$ 7,383	$ 0	$ 698	$ 1,378	$ 6	$ 6	$ 6,703
2016	6,703	0	567	1,242	5	242	6,265
2017	6,265	0	503	1,101	5	227	5,889
2018	5,889	0	443	969	4	214	5,573
2019	5,573	0	387	847	4	203	5,312
2020	5,312	0	336	734	3	194	5,105
2021	5,105	0	289	633	3	188	4,946
2022	4,946	0	247	542	2	182	4,831
2023	4,831	0	210	461	2	179	4,757
2024	4,757	0	177	390	2	177	4,719
2025	4,719	0	148	328	1	176	4,714
2026	4,714	0	123	274	1	176	4,738
2027	4,738	0	102	228	1	178	4,789
2028	4,789	0	84	189	1	180	4,863
2029	4,863	0	69	156	1	183	4,958
2030	4,958	0	56	129	1	187	5,071
2031	5,071	0	46	106	0	192	5,203
2032	5,203	0	37	87	0	197	5,350
2033	5,350	0	30	71	0	203	5,512
2034	5,512	0	25	58	0	209	5,688
2035	5,688	0	20	48	0	216	5,876
2036	5,876	0	16	39	0	223	6,076
2037	6,076	0	13	32	0	231	6,288
2038	6,288	0	11	26	0	239	6,512
2039	6,512	0	9	22	0	247	6,746
2040	6,746	0	7	18	0	256	6,991
2041	6,991	0	6	15	0	265	7,247
2042	7,247	0	5	12	0	275	7,515
2043	7,515	0	4	10	0	285	7,794
2044	7,794	0	3	8	0	296	8,085
2045	8,085	0	2	6	0	307	8,388
2046	8,388	0	2	5	0	319	8,704
2047	8,704	0	2	4	0	331	9,033
2048	9,033	0	1	3	0	343	9,374
2049	9,374	0	1	2	0	356	9,729
2050	9,729	0	1	2	0	370	10,098
2051	10,098	0	1	1	0	384	10,482
2052	10,482	0	0	1	0	398	10,879
2053	10,879	0	0	1	0	413	11,291
2054	11,291	0	0	1	0	429	11,719

Table 2

Actuarial Present Values of Projected Benefit Payments
(000's omitted)

			Benefit Payments		Present Value of Benefit Payments		
Fiscal Year Ending June 30	Beginning Fiduciary Net Plan Position	Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 3.80%	Unfunded Portion at 3.80%	Using Single Discount Rate of 3.80%
2015	$ 7,383	$ 1,378	$ 1,378	$ 0	$ 1,352	$ 0	$ 1,352
2016	6,703	1,242	1,242	0	1,174	0	1,174
2017	6,265	1,101	1,101	0	1,003	0	1,003
2018	5,889	969	969	0	850	0	850
2019	5,573	847	847	0	716	0	716
2020	5,312	734	734	0	598	0	598
2021	5,105	633	633	0	497	0	497
2022	4,946	542	542	0	410	0	410
2023	4,831	461	461	0	336	0	336
2024	4,757	390	390	0	274	0	274
2025	4,719	328	328	0	222	0	222
2026	4,714	274	274	0	179	0	179
2027	4,738	228	228	0	143	0	143
2028	4,789	189	189	0	114	0	114
2029	4,863	156	156	0	91	0	91
2030	4,958	129	129	0	72	0	72
2031	5,071	106	106	0	57	0	57
2032	5,203	87	87	0	45	0	45
2033	5,350	71	71	0	36	0	36
2034	5,512	58	58	0	28	0	28
2035	5,688	48	48	0	22	0	22
2036	5,876	39	39	0	18	0	18
2037	6,076	32	32	0	14	0	14
2038	6,288	26	26	0	11	0	11
2039	6,512	22	22	0	9	0	9
2040	6,746	18	18	0	7	0	7
2041	6,991	15	15	0	5	0	5
2042	7,247	12	12	0	4	0	4
2043	7,515	10	10	0	3	0	3
2044	7,794	8	8	0	3	0	3
2045	8,085	6	6	0	2	0	2
2046	8,388	5	5	0	2	0	2
2047	8,704	4	4	0	1	0	1
2048	9,033	3	3	0	1	0	1
2049	9,374	2	2	0	1	0	1
2050	9,729	2	2	0	1	0	1
2051	10,098	1	1	0	0	0	0
2052	10,482	1	1	0	0	0	0
2053	10,879	1	1	0	0	0	0
2054	11,291	1	1	0	0	0	0

Section II – Actuarial Assumptions and Methods

A. Actuarial Assumptions

Investment Rate of Return	3.80% per annum, compounded annually.
Salary Increases	Not applicable
Mortality	RP-2000 Combined Healthy Mortality Tables for service retirements and beneficiaries projected on a generational basis from the base year of 2012 using Projection Scale AA. Special mortality tables are used for the period after disability retirement with no provisions made for mortality improvement after the valuation date for disability retirements.
Withdrawal	Not applicable
Disability	Not applicable
Loading for expenses	None
Retirement Age	Not applicable
Asset valuation method	Market value.
Form of payment	Life annuity for termination and retirement; lump sum for death. To the extent optional forms of payment are elected and conversions are determined under an actuarial basis which differs from the basis used in the valuation, gains or losses will occur. These gains or losses will be recognized through the routine application of the actuarial cost method.
Married participants	It is assumed that 100% of all participants in the plan are married. Males are assumed to be 3 years older than their spouses.

B. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Actuarial Cost Method.

The actuarial accrued liability is calculated as the actuarial present value of the projected benefits allocated to periods prior to the valuation year. The unfunded actuarial accrued liability is the actuarial accrued liability on the valuation date less the actuarial value of assets.

The unfunded accrued liability (the difference between the present value of benefits and the valuation assets) was determined as of July 1, 1988 and was amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments were adjusted to reflect any experience gains or losses that occurred during the previous plan year. All gains and losses were amortized over the remaining original amortization period. (Without any guidance, the actuary assumed that any unfunded accrued liability that develops after the July 1, 2001 valuation will be amortized over 1 year.)

Cost-of-living increases are granted to retired members and their eligible survivors in accordance with the Pension Adjustment Act. The additional liability due to the pension adjustment is paid by the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. Chapter 78, P.L. 2011 suspended the cost of living adjustments for current and future retirees and beneficiaries until reactivated as permitted by law.

Section III – Summary of Plan Provisions

New Jersey Statutes, Title 43, Chapter 7

Eligibility for Membership

Employees of State penal institutions, employed prior to January 1, 1960 who did not transfer to the Police & Firemen's Retirement System in accordance with Chapter 205 of Public Law 1989. The System no longer accepts new members.

1. Definitions

Plan Year	The 12-month period beginning on July 1 and ending on June 30.
Service	A year is credited for each year an employee is a member of the retirement system.
Average Final Compensation (AFC)	Average annual compensation (or base salary) for 3 years of Service immediately preceding retirement. (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.)
Accumulated Deductions	The sum (without interest) of all required amounts deducted from the compensation of a member or contributed by him or on his behalf.

2. Benefits

Service Retirements

25 years of service, or age 55 and 20 years of service. The benefit is a life annuity equal to the greater of (A), (B), and (C) below:

(A) 2% of AFC up to 30 years of service plus 1% for each year in excess of 30 and prior to age 65;

(B) 50% of final pay; and

(C) For a member with 25 years of service, 2% of AFC up to 30 years of service plus 1% for each year in excess of 30.

Vested Retirements

Eligible upon termination of employment. Benefits are summarized as follows:

Termination with 10 or more years of service: Benefit is a deferred life annuity equal to 2% of AFC for service up to 30 years plus 1% for service over 30 years.

Termination with less than 10 years of service: Refund of accumulated deductions.

Ordinary Disability Retirement	Permanent and total disability for causes other than as a direct result of a traumatic event occurring during the performance of regular or assigned duties. Benefit is an immediate life annuity equal to 1/2 of AFC.
Accidental Disability Retirement	Permanent and total disabled as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of AFC.
Death Benefits	Death of member of system. Spouse must be married to member prior to retirement, or at least five years before member's death. Benefit is an annuity equal to 25% of member's AFC plus an additional 15% (25%) for one (two or more) surviving dependent child (children). If there is no spouse or if the spouse dies or remarries, 20% (35%, 50%) of AFC to one (two, three or more) surviving child (children). If there is no surviving spouse or children, 25% (40%) of AFC to one (two) dependent parent(s). The provision for a survivor annuity payable to dependent parents does not apply in the death of a retired member of the system. Minimum benefits: Minimum spousal annuity is $1,600 per annum. If no other benefit is payable prior to retirement, the member's beneficiary shall receive the accumulated deductibles.
Cost-Of-Living Increases	Cost-of-living increases are granted to retired members and their eligible survivors in accordance with the Pension Adjustment Act. Chapter 78, P.L. 2011 suspended the cost of living adjustments for current and future retirees and beneficiaries until reactivated as permitted by law.

3. Employee Contributions — Each member contributes 6% of compensation.