

The Judicial Retirement System of New Jersey

Information Required Under
Governmental Accounting Standards Board
Statement No. 68 as of June 30, 2014



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November 20, 2015

State House Commission
The Judicial Retirement System
of New Jersey
Trenton, New Jersey 08625

Members of the Commission:

This valuation provides information for the Judicial Retirement System of New Jersey (JRS) in accordance with the Governmental Accounting Standards Board (GASB) Statement No. 68. This Statement is an amendment of Statements No. 27, Accounting for Pensions by State and Local Government Employers effective for the fiscal year ending June 30, 2015.

I 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 JRS in accordance with the requirements of GASB Statement No. 68 as of June 30, 2015. Information necessary to comply with the reporting requirements of GASB Statement No. 67 was provided in a separate Actuarial Report, which is available on the Division of Pensions and Benefits web site. Please refer to that separate Actuarial Report for supplementary information documentation and support for the actuarial analysis and information presented herein.

The State House Commission, staff of the Division of Pensions and Benefits and its auditors may use this report for the review of the operation of the Plan. The report may also be used in the preparation of the audited financial statements of the State of New Jersey. Use of this report for any other purpose or by anyone other than the State House Commission, staff of the Division of Pensions and Benefits or its auditors 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. No one may make any representations or warranties based on any statements or conclusions contained in this report without Buck Consultants' prior written consent.

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 State House Commission and Benefits regarding Plan provisions, Plan participants, Plan assets 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 Plan 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. I am available to answer questions and supply any additional information.

Buck Consultants, LLC

A handwritten signature in black ink that reads "Aaron Shapiro".

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

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Section I – GASB 68 Information

Plan Description

Plan Administration

The State of New Jersey Division of Pensions and Benefits administers the Judicial Retirement System of New Jersey (Plan), a single-employer defined benefit pension plan that provides pensions for the Chief Justice and associate justices of the Supreme Court, judges of the Superior Court and tax courts of the State of New Jersey.

The general responsibility for the proper operation of the Plan is vested in the State House Commission (Commission).

The Commission shall consist of the Governor, the State Treasurer, and the Director of the Division of Budget and Accounting or their designees, or the persons upon whom shall devolve by law the powers, duties and emoluments of said offices respectively, for the time being, and two members of the Senate appointed by the President thereof and two members of the General Assembly appointed by the Speaker thereof, no more than one of either group of two being of the same political party or their alternates. Each alternate for an appointed member shall also be a member of the Senate or General Assembly appointed by the President or Speaker, as appropriate, and shall have full voting powers when required to attend commission meetings.

Chapter 78, P.L. 2011 provides that when the “target funded ratio” for the Plan is achieved, the Commission will have the discretionary authority to modify the member contribution rate, formula for calculation of final compensation, fraction used to calculate the retirement allowance, age at which a member may be eligible and the benefits for service or early retirement and benefits provided for disability benefit. The Commission will not have the authority to change the number of years required for vesting. The Commission will have the authority to reactivate the cost of living adjustment and set the duration and extent of the activation. The Commission must give priority consideration to the reactivation of the cost of living adjustment. No decision of the State House Commission shall be implemented if the direct or indirect result of the decision will be that the System’s funded ratio falls below the target funded ratio in any valuation period during the 30 years following the implementation of the decision. The Plan “target funded ratio” is defined as the ratio of the actuarial value of assets over the actuarially determined accrued liabilities expressed as a percentage that will be 75% in State fiscal year 2012, and increased annually by equal increments in each of the subsequent seven fiscal years, until the ratio reaches 80% at which it is to remain for all subsequent fiscal years. The Plan has not attained the required “target funded ratio” and thus the pension committee has not been established.

As required under Chapter 140, P.L. 1973, experience studies are performed once in every three year period. The valuation was prepared using demographic assumptions recommended on the basis of the July 1, 2008 – June 30, 2011 Experience Study and approved by the State House Commission. The valuation reflects economic assumptions which were recommended by the Treasurer, which include a rate of investment return of 7.90% per annum and assumed future salary increases of 2.50% per annum through fiscal year ending 2021 and 3.50% per annum for fiscal years ending 2022 and thereafter. These assumptions will remain in effect for valuation purposes until such time the State House Commission or the Treasurer recommends revised assumptions.

Measurement Date

The net pension liability for fiscal year ending June 30, 2015 is determined at a measurement date of June 30, 2014. The total pension liability as of June 30, 2014 was determined by rolling forward the Plan’s total pension liability as of July 1, 2013 to June 30, 2014. The plan fiduciary net position is the market value of plan assets as of June 30, 2014.

Data for Valuation

In preparing the actuarial valuation as of June 30, 2013, the actuary has relied on data and assets provided by the Division of Pensions and Benefits. While not verifying the data at their source, the actuary has performed tests for consistency and reasonableness.

The following is a summary of Plan participants and the development of the average expected remaining service lives of active and inactive members as of June 30, 2013:

	<u>Number</u>	<u>Expected Remaining Years of Service</u>
Inactive Plan members or beneficiaries currently receiving	549	0.00
Inactive Plan members entitled to but not yet receiving	4	0.00
Active Plan members	<u>409</u>	<u>3,694.49</u>
Total	<u><u>962</u></u>	<u><u>3,694.49</u></u>

Average expected remaining service lives of active and inactive members as of June 30, 2013: 3.84 years

Benefits Provided

Please see Section III of the report for a summary of Plan provisions.

Contributions

The Board establishes contributions based on an actuarially determined contribution recommended by an independent actuary and a contribution for the Non-Contributory Group Insurance Premium Fund (NCGIPF). The actuarially determined contribution is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance a portion of any unfunded accrued liability. For the year ended June 30, 2014, the State contributed \$15,874,681 to the plan.

Net Pension Liability

a. The components of the net pension liability at June 30, 2013, were as follows:

	<u>NCGIPF</u>	<u>Pension</u>	<u>Total</u>
Total pension liability	\$ 14,048,772	\$836,935,783	\$ 850,984,555
Plan fiduciary net position	<u>0</u>	<u>225,830,817</u>	<u>225,830,817</u>
Plan net pension liability	\$ 14,048,772	\$611,104,966	\$ 625,153,738

b. The components of the net pension liability at June 30, 2014, were as follows:

	<u>NCGIPF</u>	<u>Pension</u>	<u>Total</u>
Total pension liability	\$ 15,084,401	\$885,659,359	\$ 900,743,760
Plan fiduciary net position	<u>0</u>	<u>231,483,835</u>	<u>231,483,835</u>
Plan net pension liability	\$ 15,084,401	\$654,175,524	\$ 669,259,925

c. Sensitivity to Discount Rate: The following presents the net pension liability calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate.

<u>June 30, 2013</u>		
<u>1% Decrease (3.88%)</u>	<u>Current (4.88%)</u>	<u>1% Increase (5.88%)</u>
\$ 719,853,005	\$ 625,153,738	\$ 544,864,672
<u>June 30, 2014</u>		
<u>1% Decrease (3.58%)</u>	<u>Current (4.58%)</u>	<u>1% Increase (5.58%)</u>
\$ 769,235,285	\$ 669,259,925	\$ 584,383,046

Pension Expense as of June 30, 2014

Service cost	\$ 30,628,662 ¹
Interest cost	41,826,802 ¹
Expected return on assets	(16,109,710)
Current period effect of benefit changes	0
Current period difference between expected and actual experience	0
Current period effect of changes in assumptions	7,007,245
Current period difference between projected and actual investment earnings	(3,667,665)
Member contributions	(5,096,577)
Administrative expenses	162,372
Current period recognition of prior years' deferred outflows of resources	0
Current period recognition of prior years' deferred inflows of resources	<u>0</u>
Total	\$ 54,751,129

1. The Service Cost and Interest Cost components have been revised from the amounts previously reported for the fiscal year ending June 30, 2014 GASB 67 actuary's report to reallocate interest accrued on the Service Cost of \$1,494,679 to the Interest Cost component.

The pension expense for the fiscal year ending June 30, 2014 is based on the June 30, 2013 valuation.

The effect of the change in assumptions is recognized over the average expected remaining service lives of active and inactive members as of June 30, 2013 (3.84 years).

The difference between projected and actual investment earnings is recognized over 5 years.

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2014, the State has a pension expense of \$54,751,129. At June 30, 2014, the State has deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflow of Resources	Deferred Inflow of Resources
Changes in assumptions	\$ 19,900,576	\$ 0
Difference between projected and actual investment earnings	<u>0</u>	<u>(14,670,661)</u>
Total	\$ 19,900,576	\$ (14,670,661)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the State's pension expense as follows:

Fiscal Year ending June 30	
2015	\$ 3,339,580
2016	3,339,580
2017	2,218,421
2018	(3,667,666)
2019	0
Thereafter	0

Actuarial Assumptions

The total pension liability as of June 30, 2014 was determined by rolling forward the plan's total pension liability as of July 1, 2013 to June 30, 2014 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 and are consistent with the assumptions used for the July 1, 2013 actuarial valuation.

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, 2014 are summarized in the following table. The capital market assumptions are per Buck's investment consulting practice for 2014.

Asset Class	Index	Target Allocation*	Long-Term Expected Real Rate of Return
Cash	Citigroup 90-Day T-Bills	6.00%	0.80%
Core Bonds	Barclays Gov/Cred	1.00%	2.49%
Intermediate-Term Bonds	Barclays Intermediate Gov/Cred	11.20%	2.26%
Mortgages	Barclays Mortgage	2.50%	2.17%
High Yield Bonds	Barclays High Yield	5.50%	4.82%
Inflation-Indexed Bonds	ML Index	2.50%	3.51%
Broad US Equities	Wilshire 5000/Russell 3000	25.90%	8.22%
Developed Foreign Equities	MSCI EAFE	12.70%	8.12%
Emerging Market Equities	MSCI Emerging Markets	6.50%	9.91%
Private Equity	Cambridge Associates	8.25%	13.02%
Hedge Funds/Absolute Return	HFRI Fund of Funds	12.25%	4.92%
Real Estate (Property)	NCREIF/TBI Property	3.20%	5.80%
Commodities	DJ UBS	2.50%	5.35%
Assumed Inflation – Mean			3.01%
Assumed Inflation – Standard Deviation			2.72%
Portfolio Arithmetic Mean Return			9.54%
Portfolio Standard Derivation			11.17%
Long-Term Expected Rate of Return selected by State Treasurer			7.90%

*Based on target asset allocation for 2014.

Discount rate

The discount rates used to measure the total pension liability were 4.88% as of June 30, 2013 and 4.58% as of June 30, 2014. As discussed with the Division of Pensions and Benefits and in accordance with Paragraph 42 of the GASB Statement No. 67, the projection of cash flows used to determine the discount rate assumed that the State will contribute 15.70% of the actuarially determined contribution and 100% of its NCGIPF contribution. The 15.70% State contribution percentage is the average percentage of the State's annual actual contribution paid over the annual actuarially determined contribution during the most recent five-year period. 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 until fiscal year 2021. Municipal bond rates of 4.63% as of June 30, 2013 and 4.29% as of June 30, 2014 were used in the development of the blended GASB discount rate after that point. As selected by the State Treasurer, the rates are based on the Bond Buyer Go 20-Bond Municipal Bond Index. Based on the long-term rate of return of 7.90% and the municipal bond rates of 4.63% and 4.29%, the blended GASB discount rates are 4.88% as of June 30, 2013 and 4.58% as of June 30, 2014. The assumed discount rate has been determined 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 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.

Should contributions to the Plan be different from those outlined above, the results 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 future date and thus changing the discount rate used to determine the Plan's Total Pension Liability.

Actuarial Cost Method

Entry Age Normal – Level Percentage of Pay

Asset Valuation Method

Invested assets are reported at fair value.

Section II – Actuarial Assumptions and Methods

Investment Rate of Return: 7.90% per annum, compounded annually.

COLA: No future COLA is assumed.

Salary Increases: Salaries are assumed to increase by 2.50% per year through fiscal year ending 2021 and 3.50% per year for fiscal years ending 2022 and thereafter.

Separations From Service: Representative mortality and disability rates are as follows:

<u>Age</u>	<u>Lives per Thousand</u>		
	<u>Male</u>	<u>Death*</u> <u>Female</u>	<u>Disability</u>
30	0.38	0.22	0.22
35	0.44	0.35	0.26
40	0.77	0.55	0.33
45	1.08	0.85	0.64
50	1.51	1.33	1.14
55	2.14	2.02	1.97
60	3.62	3.48	3.26
65	6.75	6.66	4.73

* RP-2000 Combined Healthy Male and RP-2000 Combined Healthy Female Mortality Tables (set back 5 years for males and 3 years for females) projected on a generational basis from the base year of 2012 using Projection Scale AA. The above rates are unadjusted for Projection Scale AA.

Retirement: It was assumed that the probability of retirement at age 65 for those judges who have 12 or more years of judicial service at age 65 is at 25% per year. In addition, retirement for members who have attained age 60 with 20 years of judicial service or attained age 65 with 15 years judicial service is at 30% at age 60, 25% at age 65 and 20% for all other ages between ages 60 and 70. At age 70, all remaining active members are assumed to retire.

Deaths After Retirement: RP-2000 Combined Healthy Mortality Tables (set back 5 years for males and 3 years for females) for service retirement and beneficiaries of former members projected on a generational basis from the base year of 2012 using Projection Scale AA. The RP-2000 Disability Mortality Tables (set forward 2 years for males and females) are used to value disabled retirees. Representative values of the annual rates of mortality unadjusted for Projection Scale AA are as follows:

Lives Per Thousand

**Retired Members &
Beneficiaries of
Deceased Members**

Disabled Members

<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
55	2.14	2.02	38.03	18.65
60	3.62	3.48	44.98	24.08
65	6.75	6.66	54.45	31.32
70	12.74	12.16	69.41	42.85
75	22.21	20.66	92.15	59.54
80	37.83	34.11	121.88	82.30
85	64.37	56.29	155.23	114.51
90	110.76	96.34	216.61	159.92

Marriage: Husbands are assumed to be 3 years older than wives. Among the active population, 90% of participants are assumed married. No children are assumed. Neither the percentage married nor the number of children assumption is individually explicit but are considered reasonable as a single combined assumption.

Valuation Method:

Funding Calculations: Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. 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.

Asset Valuation Method: A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.

Section III – Summary of Plan Provisions

New Jersey Statutes, Title 43, Chapter 6A.

Eligibility for Membership

Chief Justice and associate justices of the Supreme Court, judges of the Superior Court and tax courts of the State of New Jersey.

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 of service as a public employee in the State of New Jersey. Any service, for which member did not receive annual salary of at least \$500, shall be excluded.
Final Salary	Annual salary received by the member at the time of retirement or other termination of service. (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 of all amounts deducted from the compensation of a member or contributed by him or on his behalf.
Retirement Allowance	Pension derived from contributions of the State plus the annuity derived from employee contributions.

2. Benefits

Service Retirement	(A) Mandatory retirement at age 70. Voluntary retirement prior to age 70 as follows: (a) Age 70 and 10 years of judicial service; (b) Age 65 and 15 years of judicial service; or (c) Age 60 and 20 years of judicial service. Benefit is an annual retirement allowance equal to 75% of final salary.
	(B) Age 65 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate of public service; or Age 60 while serving as a judge, 5 consecutive years of judicial service and 20 years in the aggregate of public service. Benefit is an annual retirement allowance equal to 50% of final salary.

(C) Age 60 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate of public service. Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year in excess of 25 years.

(D) Age 60 while serving as a judge. Benefit is an annual retirement allowance equal to 2% of final salary for each year of judicial service up to 25 years plus 1% for each year in excess of 25 years.

Early Retirement Prior to age 60 while serving as a judge, 5 consecutive years of judicial service and 25 or more years in the aggregate of public service. Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year of public service in excess of 25 years, actuarially reduced for commencement prior to age 60.

Vested Termination Termination of service prior to age 60, with 5 consecutive years of judicial service and 10 years in the aggregate of public service. Benefit is a refund of accumulated deductions, or a deferred life annuity beginning at age 60 equal to 2% of final salary for each year of public service up to 25 years, plus 1% for service in excess of 25 years.

Death Benefits

Before Retirement Death of an active member of the plan. Benefit is equal to:

- (a) Lump sum payment equal to 1-1/2 times final salary, plus
- (b) Spousal life annuity of 25% of final salary payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child (children). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child (children). If there is no surviving spouse (or dependent children), 20% or 30% of final salary to one or two dependent parents.

After Retirement Death of a retired member of the plan. Benefit is equal to:

- (a) Lump sum of 25% of final salary for a member retired under normal or early retirement. If a member were receiving a disability benefit, a lump sum 1-1/2 times final salary if death occurred before the member attained age 60 and 1/4 times final salary if death occurred after age 60, plus
- (b) Spousal life annuity of 25% of final salary payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child (children). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child (children).

Disability Retirement	Physically or otherwise incapacitated for the full and efficient service to State in his judicial capacity and such incapacity is likely to be permanent. Benefit is an annual retirement allowance of 75% of final salary.
Member Contributions	<p>Any member enrolled prior to January 1, 1996 contributes 3% of the difference between current salary and salary for that position on January 18, 1982. Members enrolled on and after January 1, 1996 contribute 3% of their full salary.</p> <p>Chapter 78, P.L. 2011 increased Member Contributions by 9% of salary phased-in over a period of seven years beginning October 2011. (The additional 9% of salary will be fully phased-in in July 2017.)</p> <p>(a) For members enrolled prior to January 1, 1996:</p> <ul style="list-style-type: none"> i. Member Contributions of 9% (phased-in over a period of seven years beginning October 2011) of the salary for that position on January 18, 1982. ii. Member Contributions increase from 3% to 12% (phased-in over a period of seven years beginning October 2011) of the difference between current salary and salary for that position on January 18, 1982. <p>(b) For members enrolled on or after January 1, 1996, Member Contributions increase from 3% to 12% of full salary phased-in over a period of seven years beginning October 2011.</p>