February 6, 2017

Retirement Board
50 Service Avenue, 2nd Floor
Warwick, RI 02886-1021

Re: Actuarial Valuation for Non-contributing Judges as of June 30, 2016

Dear Members of the Board:

This is the June 30, 2016 actuarial valuation of judges hired before January 1, 1990 who are currently employed or retired from employment by the State of Rhode Island. This report provides disclosure information the State can use to prepare its June 30, 2017 financial statements, as well as the calculation of the Actuarial Determined Contribution for fiscal year beginning July 1, 2016 assuming the State begins to advance fund the benefits.

Financing Objectives

Currently, Judges who do not participate in the Judicial Retirement Benefits Trust (JRB) whose benefits are financed by annual contributions equal to the annual benefit payment of current retirees, also known as pay-as-you-go.

For the purpose of this valuation, the expected rate of return on pension plan investments is 2.85%; the municipal bond rate is 2.85% (based on the weekly rate closest to but not later than the measurement date of the “state & local bonds” rate from Federal Reserve statistical release (H.15)). Based on the pay-as-you-go nature of the financing for these benefits, we have used the 2.85% discount rate for all liabilities.

This report also develops the contribution requirement assuming the State begins to advance fund the benefits. This measurement is based on a higher discount rate of 7.50%.

Progress Towards Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan’s funded status. There has been minimal advanced funding for this closed group of seven Judges (two of which are now retired), so the funded ratio based on the 2.85% discount rate as of June 30, 2016 is 2.59%. As of June 30, 2016, the market value of assets is $533,525 and the actuarial accrued liability is $20,571,178, resulting in an unfunded actuarial accrued liability of $20,037,653. The following table presents the State’s expected pay-as-you-go cost over the next twenty years.
If the State were to advance fund the benefits over a period of 20 years beginning in fiscal year 2017, then the actuarial determined contribution as a level dollar amount would be equal to $1,241,000. Details of this calculation can be found in Exhibit 1 at the end of this letter. Based on this contribution policy, if all actuarial assumptions are met (including the assumption of the plan earning 7.50% on the actuarial valuation of assets), it is expected that:

1. The employer contribution for fiscal years 2017 and beyond will remain level as a dollar amount,
2. The unfunded actuarial accrued liability will be fully amortized by 2036, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

**Benefit provisions**

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2016. The benefit provisions are summarized in Appendix B in the June 30, 2016 actuarial valuation of the JRBT dated January 31, 2017.

**Assumptions and methods**

The assumptions used in this valuation, with the exception of the 2.85% discount rate, are the same as those summarized in Appendix A in the June 30, 2016 actuarial valuation of the JRBT dated January 31, 2017. We believe the assumptions are internally consistent and are reasonable.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.
Data

Data for the five active members and two retirees as of June 30, 2016 for this valuation was by the Staff at the Employees Retirement System of Rhode Island. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the data from the JRBT valuation.

Certification

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Joseph P. Newton, FSA, MAAA, EA
Senior Consultant

Paul T. Wood, ASA, MAAA, FCA
Consultant
Exhibit 1

Rhode Island Judicial Retirement Benefits
Pay-as-you-go Actives and Retirees

<table>
<thead>
<tr>
<th>Year Ending June 30</th>
<th>Pay-as-you-go Cost</th>
<th>Contribution from State</th>
<th>Net Payment to/from trust</th>
<th>Trust Balance (EOY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>890,854</td>
<td>1,240,501</td>
<td>349,647</td>
<td>938,841</td>
</tr>
<tr>
<td>2018</td>
<td>1,376,987</td>
<td>1,240,501</td>
<td>(136,486)</td>
<td>872,038</td>
</tr>
<tr>
<td>2019</td>
<td>1,365,392</td>
<td>1,240,501</td>
<td>(124,891)</td>
<td>812,211</td>
</tr>
<tr>
<td>2020</td>
<td>1,352,798</td>
<td>1,240,501</td>
<td>(112,297)</td>
<td>760,915</td>
</tr>
<tr>
<td>2021</td>
<td>1,339,350</td>
<td>1,240,501</td>
<td>(98,849)</td>
<td>719,674</td>
</tr>
<tr>
<td>2022</td>
<td>1,324,639</td>
<td>1,240,501</td>
<td>(84,138)</td>
<td>690,546</td>
</tr>
<tr>
<td>2023</td>
<td>1,307,437</td>
<td>1,240,501</td>
<td>(66,936)</td>
<td>765,295</td>
</tr>
<tr>
<td>2024</td>
<td>1,292,798</td>
<td>1,240,501</td>
<td>(51,299)</td>
<td>760,915</td>
</tr>
<tr>
<td>2025</td>
<td>1,277,349</td>
<td>1,240,501</td>
<td>(47,401)</td>
<td>765,295</td>
</tr>
<tr>
<td>2026</td>
<td>1,262,696</td>
<td>1,240,501</td>
<td>(43,802)</td>
<td>760,915</td>
</tr>
<tr>
<td>2027</td>
<td>1,247,350</td>
<td>1,240,501</td>
<td>(40,549)</td>
<td>760,915</td>
</tr>
</tbody>
</table>

If the State contributes a level dollar amount of $1.24 million beginning in fiscal year ending 2017 for the next 20 years, realizes an annual rate of return on the contributions of 7.50%, and life expectancy is consistent with the most recent actuarial valuation for the Judicial Benefits Trust, the liability for the pay-as-you-go retirement benefits for the Judges hired before January 1, 1990 will be advance funded.

Rate of Return on Assets: 7.50%
Period to Pre-Fund (1st Pmt. In FY 2017): 20
Initial Asset Value: 533,525
Total Present Value as of July 1, 2016: 13,645,465
Annual Payment - FYE 2017 and Beyond: 1,240,501