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PRIVATE AND CONFIDENTIAL

March 25, 2010

Honorable Steven M. Costantino Chair, House Finance Committee RI House of Representatives 306 State House Providence, RI 02903

Re: Cost Analysis of Proposed Changes to COLA for current non-grandfathered members

Dear Mr. Costantino:

As you requested, and as authorized by the Retirement Board of the Employees' Retirement System of Rhode Island (ERSRI), enclosed are the results of the cost analyses of the proposed changes to future cost of living increases (COLAs) for current non-grandfathered members of ERSRI. The enclosed exhibits provide the expected change in liability, normal cost, and contribution rate as a result of changing certain aspects in the way the COLA is determined. This analysis was performed on ERSRI, which covers State Employees and Teachers.

Analysis

The results of our analyses are shown in the enclosed exhibits. The first set of exhibits show the cost impact for the State Employees (Exhibits labeled "S"), the second set present the same information for the Teachers (Exhibits T). We were asked to examine the impact of applying a combination of the following changes in determining the COLA:

- 1. Modifying the commencement date of the COLA from the third anniversary of retirement to the later of the member's third anniversary of retirement and the month following their 65th birthday.
- 2. Changing the application of the COLA from a compound basis to a simple basis. This means that instead of applying the COLA percentage to the member's current retirement benefit, the member would receive an annual COLA increase equal to the percentage increase multiplied by their initial retirement benefit.
- 3. Limiting the COLA to the first \$12,000 of annual retirement income. This means that, if the retiree's pension benefit is greater than \$1,000/month, the annual COLA increase would be based on the first \$1,000 and any benefit amount in excess of \$1,000 would not receive an increase. Additionally, it was assumed the limit itself would be annually indexed to increase in the same manner as COLAs are calculated for Schedule B members (CPI for the year, not greater than 3.0%).

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In addition to an eligible retirement income limit of \$12,000, we also determined the cost impact using alternative scenarios that utilized COLA income limits of \$25,000 and \$50,000, which were also assumed to have a similar index with inflation.

The combination of these three types of proposed plan changes results in the 16 different cost scenarios that you requested. We have organized the presentation of these scenarios so you may readily understand the sensitivity of the plan's liability and cost to the different proposed changes. For additional ease of review, we have enclosed a Summary for both State Employees and Teachers that summarizes the four main variations. For illustration purposes, please note that Scenario 1 is the current benefit provisions and, therefore, agrees with the first column labeled "Baseline."

This study also assumes the proposed plan change would only apply to non-grandfathered members of ERSRI, which are all members who were not currently disabled or eligible to retire as of the date of passage of the new law.

For purposes of this analysis we have modeled each proposal as though the contribution rate for FY 2010 would be adjusted to reflect the proposal. We do not expect there to be a material difference in the future cost savings from those shown if the actual effective date of the change does not become effective until 2011. However, the contribution rates may differ if there is a change in the membership group impacted by the proposal. Readers should also keep in mind that any savings for Teachers is shared between the State (40%) and the municipal employers (60%).

Data and Assumptions

To prepare these analyses, we used member and financial data supplied by ERSRI as of June 30, 2008. The data for State Employees was then further adjusted to reflect the known "Article 4" retirements that had occurred as of September 30, 2008.

Our analysis also assumes that none of the State Employee positions vacated due to the Article 4 retirements will be filled. To the extent that some of these positions are filled, the contribution as a percentage of payroll will remain relatively unchanged; however, we would expect the dollar amount of the contribution to be slightly larger (i.e. a slightly larger than expected payroll).

Other General Comments

This letter is intended to describe the financial and actuarial effect of the proposed plan changes on State Employees and Teacher members of ERSRI only.

It is imperative to note that since there is a two-year lag between the actuarial valuation and the date the contributions set by the valuation become effective, and the actuarial valuation utilizes an asset smoothing method, the contribution rates shown herein do not reflect the investment losses that have occurred since June 30, 2008. Therefore, contribution rates for FY 2012 and later will almost certainly increase from current levels as these investment losses are realized.

Our calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate significantly from our projections, depending on actual plan experience.

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Since we are not attorneys, we cannot provide legal advice and/or opinion. Therefore, nothing in this letter should be construed as providing legal or tax advice. It may be prudent to consult with the ERSRI plan counsel regarding the proposed changes before enacting any such changes. Finally, no statement in this letter is intended to be interpreted as a recommendation in favor of the changes studied herein or in opposition to them.

We certify that the undersigned are members of the American Academy of Actuaries and that we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. If you have any questions, or require any additional or clarifying information, please do not hesitate to contact either one of the undersigned.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Mark R. Randall

Mark R. Randall Executive Vice President

Mistian Comoli

J. Christian Conradi Senior Consultant

Enclosures

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Exhibit S: Summary

Employees' Retirement System of Rhode Island - State Employees Based on the June 30, 2008 Actuarial Valuation Scenarios with No Dollar Limit

| | | Baseline | Scenario 1 | Scenario 5 | Scenario 9 | Scenario 13 | |
|------|--------------------------------------|-----------------|-----------------|----------------|-----------------|----------------|--|
| | | | | Later of 3rd | | Later of 3rd | |
| | | | | Anniversary or | | Anniversary or | |
| | | 3rd Anniversary | 3rd Anniversary | Age 65 | 3rd Anniversary | Age 65 | |
| | | Compounded | Compounded | Compounded | | | |
| | | COLA | COLA | COLA | Simple COLA | Simple COLA | |
| | | No Limit | No Limit | No Limit | No Limit | No Limit | |
| | | | | | | | |
| 1.a. | Contribution rate for FY 2010 | 21.64% | 21.64% | 20.96% | 21.22% | 20.67% | |
| 1.b. | Change | | 0.00% | -0.68% | -0.42% | -0.97% | |
| | | | | | | | |
| 2.a. | Projected FY 2010 payroll | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | |
| 2.b. | Projected contribution | 127.8 | 127.8 | 123.8 | 125.3 | 122.0 | |
| 2.c. | Change | | - | (4.0) | (2.5) | (5.7) | |
| | | | | | | | |
| 3.a. | Normal cost percentage | 9.62% | 9.62% | 9.45% | 9.45% | 9.31% | |
| 3.b. | Change | | 0.00% | -0.17% | -0.17% | -0.31% | |
| | | | | | | | |
| 4.a. | Unfunded actuarial accrued liability | \$ 1,671.5 | \$ 1,671.5 | \$ 1,630.8 | \$ 1,651.4 | \$ 1,618.3 | |
| 4.b. | Change | | - | (40.7) | (20.1) | (53.2) | |
| | | | | | | | |
| 5. | Funded ratio | 61.8% | 61.8% | 62.3% | 62.1% | 62.5% | |
| | | | | | | | |

\$ in millions

Exhibit S: 1-8

Employees' Retirement System of Rhode Island - State Employees Based on the June 30, 2008 Actuarial Valuation Compound COLA

| | | Baseline | Scenario 1 | Scenario 2 | Scenario 3 | Scenario4 | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |
|------|--------------------------------------|-------------|------------|----------------|----------------|----------------|------------|------------------|------------------|----------------|
| 3rd | | | | | | | | | | |
| | | Anniversary | | 3rd Ann | iversary | | L | ater of 3rd Anni | versary or Age 6 | 55 |
| | | Compounded | | | | | | | | |
| | | COLA | | 1 | | Compoun | ded COLA | | | |
| | | | | Limit to first | Limit to first | Limit to first | | Limit to first | Limit to first | Limit to first |
| | Item | No Limit | No Limit | 50K | 25K | 12K | No Limit | 50K | 25K | 12K |
| | | | | | | | | | | |
| 1.a. | Contribution rate for FY 2010 | 21.64% | 21.64% | 21.55% | 21.29% | 20.98% | 20.96% | 20.89% | 20.65% | 20.37% |
| 1.b. | Change | | 0.00% | -0.09% | -0.35% | -0.66% | -0.68% | -0.75% | -0.99% | -1.27% |
| | | | | | | | | | | |
| 2.a. | Projected FY 2010 payroll | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 |
| 2.b. | Projected contribution | 127.8 | 127.8 | 127.2 | 125.7 | 123.9 | 123.8 | 123.3 | 121.9 | 120.3 |
| 2.c. | Change | | - | (0.5) | (2.1) | (3.9) | (4.0) | (4.5) | (5.9) | (7.5) |
| | | | | | | | | | | |
| 3.a. | Normal cost percentage | 9.62% | 9.62% | 9.53% | 9.27% | 8.97% | 9.45% | 9.37% | 9.13% | 8.86% |
| 3.b. | Change | | 0.00% | -0.09% | -0.35% | -0.65% | -0.17% | -0.25% | -0.49% | -0.76% |
| | | | | | | | | | | |
| 4.a. | Unfunded actuarial accrued liability | \$ 1,671.5 | \$ 1,671.5 | \$ 1,671.5 | \$ 1,671.3 | \$ 1,670.7 | \$ 1,630.8 | \$ 1,631.1 | \$ 1,631.2 | \$ 1,630.5 |
| 4.b. | Change | | - | (0.0) | (0.3) | (0.9) | (40.7) | (40.5) | (40.3) | (41.0) |
| | | | | | | | | | | |
| 5. | Funded ratio | 61.8% | 61.8% | 61.8% | 61.8% | 61.8% | 62.3% | 62.3% | 62.3% | 62.4% |
| | | | | | | | | | | |

\$ in millions

Exhibit S: 9-16

Employees' Retirement System of Rhode Island - State Employees Based on the June 30, 2008 Actuarial Valuation Simple COLA

| | | Baseline | Scenario 9 | Scenario 10 | Scenario 11 | Scenario 12 | Scenario 13 | Scenario 14 | Scenario 15 | Scenario 16 | | |
|----------------------|--------------------------------------|------------|------------|----------------|----------------|----------------|-------------|----------------|------------------|----------------|--|--|
| 3rd A nnivers arv | | | | 3rd Apr | in or or | | | | | | | |
| | | Compounded | | Ju All | liversary | | | | versary of Age (| 55 | | |
| | | COLA | | Simula COLA | | | | | | | | |
| | | COLA | | Limit to first | Limit to first | Limit to first | | Limit to first | Limit to first | Limit to first | | |
| | Item | No Limit | No Limit | 50K | 25K | 12K | No Limit | 50K | 25K | 12K | | |
| | | | | | | | | | | | | |
| 1.a. | Contribution rate for FY 2010 | 21.64% | 21.22% | 21.15% | 20.94% | 20.68% | 20.67% | 20.61% | 20.41% | 20.18% | | |
| 1.b. | Change | | -0.42% | -0.49% | -0.70% | -0.96% | -0.97% | -1.03% | -1.23% | -1.46% | | |
| 2.a. | Projected FY 2010 payroll | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | \$ 590.5 | | |
| 2.b. | Projected contribution | 127.8 | 125.3 | 124.9 | 123.6 | 122.1 | 122.0 | 121.7 | 120.5 | 119.2 | | |
| 2.c. | Change | | (2.5) | (2.9) | (4.1) | (5.7) | (5.7) | (6.1) | (7.3) | (8.6) | | |
| 3.a. | Normal cost percentage | 9.62% | 9.45% | 9.38% | 9.17% | 8.92% | 9.31% | 9.25% | 9.05% | 8.83% | | |
| 3.b. | Change | | -0.17% | -0.24% | -0.45% | -0.70% | -0.31% | -0.37% | -0.57% | -0.79% | | |
| 4.a. | Unfunded actuarial accrued liability | \$ 1.671.5 | \$ 1.651.4 | \$ 1.651.4 | \$ 1.651.3 | \$ 1.650.8 | \$ 1.618.3 | \$ 1.618.5 | \$ 1.618.7 | \$ 1.618.1 | | |
| 4.b. | Change | ¢ 1,0710 | (20.1) | (20.1) | (20.3) | (20.8) | (53.2) | (53.0) | (52.9) | (53.4) | | |
| 5. | Funded ratio | 61.8% | 62.1% | 62.1% | 62.1% | 62.1% | 62.5% | 62.5% | 62.5% | 62.5% | | |

\$ in millions

Exhibit T: Summary

Employees' Retirement System of Rhode Island - Teachers Based on the June 30, 2008 Actuarial Valuation Scenarios with No Dollar Limit

| | | Baseline | Scenario 1 | Scenario 5 | Scenario 9 | Scenario 13 | |
|------|--------------------------------------|-----------------|-----------------|----------------|-----------------|----------------|--|
| | | | | Later of 3rd | | Later of 3rd | |
| | | | | Anniversary or | | Anniversary or | |
| | | 3rd Anniversary | 3rd Anniversary | Age 65 | 3rd Anniversary | Age 65 | |
| | | Compounded | Compounded | Compounded | | | |
| | | COLA | COLA | COLA | Simple COLA | Simple COLA | |
| | | No Limit | No Limit | No Limit | No Limit | No Limit | |
| | | | | | | | |
| 1.a. | Contribution rate for FY 2010 | 20.07% | 20.07% | 19.58% | 19.58% | 19.19% | |
| 1.b. | Change | | 0.00% | -0.49% | -0.49% | -0.88% | |
| | | | | | | | |
| 2.a. | Projected FY 2010 payroll | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | |
| 2.b. | Projected contribution | 206.3 | 206.3 | 201.2 | 201.3 | 197.3 | |
| 2.c. | Change | | - | (5.1) | (5.0) | (9.0) | |
| | | | | | | | |
| 3.a. | Normal cost percentage | 10.53% | 10.53% | 10.47% | 10.32% | 10.28% | |
| 3.b. | Change | | 0.00% | -0.06% | -0.21% | -0.25% | |
| | | | | | | | |
| 4.a. | Unfunded actuarial accrued liability | \$ 2,660.5 | \$ 2,660.5 | \$ 2,599.8 | \$ 2,621.6 | \$ 2,572.8 | |
| 4.b. | Change | | - | (60.7) | (38.9) | (87.7) | |
| | | | | | | | |
| 5. | Funded ratio | 60.3% | 60.3% | 60.9% | 60.7% | 61.1% | |
| | | | | | | | |

\$ in millions

Exhibit T: 1-8

Employees' Retirement System of Rhode Island - Teachers Based on the June 30, 2008 Actuarial Valuation Compound COLA

| | | Baseline | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 | |
|--------------------|--------------------------------------|--------------------|------------|----------------|----------------|----------------|------------------------------------|----------------|----------------|----------------|--|
| 3rd Anniversary | | 3rd Anniversary | | | | L | Later of 3rd Anniversary or Age 65 | | | | |
| | | Compounded COLA | | | | Compoun | led COLA | | | | |
| | | | | Limit to first | Limit to first | Limit to first | | Limit to first | Limit to first | Limit to first | |
| | Item | No Limit | No Limit | 50K | 25K | 12 K | No Limit | 50K | 25K | 12K | |
| 1.a. | Contribution rate for FY 2010 | 20.07% | 20.07% | 19.76% | 19.23% | 18.84% | 19.58% | 19.29% | 18.78% | 18.39% | |
| 1.b. | Change | | 0.00% | -0.31% | -0.84% | -1.23% | -0.49% | -0.78% | -1.29% | -1.68% | |
| 2.a. | Projected FY 2010 payroll | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | \$ 1,027.8 | |
| 2.b. | Projected contribution | 206.3 | 206.3 | 203.1 | 197.7 | 193.6 | 201.2 | 198.3 | 193.0 | 189.1 | |
| 2.c. | Change | | - | (3.2) | (8.6) | (12.7) | (5.1) | (8.0) | (13.3) | (17.2) | |
| 3.a. | Normal cost percentage | 10.53% | 10.53% | 10.27% | 9.85% | 9.51% | 10.47% | 10.22% | 9.80% | 9.47% | |
| 3.b. | Change | | 0.00% | -0.26% | -0.68% | -1.02% | -0.06% | -0.31% | -0.73% | -1.06% | |
| 4.a. | Unfunded actuarial accrued liability | \$ 2,660.5 | \$ 2,660.5 | \$ 2,654.0 | \$ 2,638.8 | \$ 2,630.5 | \$ 2,599.8 | \$ 2,595.4 | \$ 2,582.4 | \$ 2,574.5 | |
| 4.b. | Change | | - | (6.5) | (21.7) | (30.0) | (60.7) | (65.1) | (78.1) | (86.0) | |
| 5. | Funded ratio | 60.3% | 60.3% | 60.4% | 60.5% | 60.6% | 60.9% | 60.9% | 61.0% | 61.1% | |

\$ in millions

Exhibit T: 9-16

Employees' Retirement System of Rhode Island - Teachers Based on the June 30, 2008 Actuarial Valuation Simple COLA

| | | Baseline | Scenario 9 | Scenario 10 | Scenario 11 | Scenario 12 | Scenario 13 | Scenario 14 | Scenario 15 | Scenario 16 | | |
|--------------------|--------------------------------------|--------------------|---------------------|----------------|---------------------|-------------|------------------------------------|---------------------|--------------------|--------------------|--|--|
| 3rd Anniversary | | | | 3rd Ann | iversary | | Later of 3rd Anniversary or Age 65 | | | | | |
| | | Compounded | | | | | | | | | | |
| | | COLA | | Limit to first | Limit to first | Simple | COLA | Limit to first | Limit to first | Limit to finat | | |
| | Item | No Limit | No Limit | 50K | 25K | 12K | No Limit | 50K | 25K | 12K | | |
| | | | | | | | | | | | | |
| 1.a. | Contribution rate for FY 2010 | 20.07% | 19.58% | 19.35% | 18.91% | 18.57% | 19.19% | 18.97% | 18.55% | 18.22% | | |
| 1.b. | Change | | -0.49% | -0.72% | -1.16% | -1.50% | -0.88% | -1.10% | -1.52% | -1.85% | | |
| 29 | Projected FY 2010 payroll | \$ 1027.8 | \$ 1.027.8 | \$ 1027.8 | \$ 1027.8 | \$ 1,027.8 | \$ 1027.8 | \$ 1027.8 | \$ 1,027.8 | \$ 1.027.8 | | |
| 2.b. | Projected contribution | ¢ 1,027.0 206.3 | ¢ 1,027.3 | 198.9 | ¢ 1,027.0 | ¢ 1,027.0 | 197.3 | ¢ 1,027.0 | ¢ 1,027.0 190.6 | ¢ 1,027.0 187.2 | | |
| 2.c. | Change | | (5.0) | (7.4) | (11.9) | (15.4) | (9.0) | (11.3) | (15.7) | (19.1) | | |
| | | | | | | | | | | | | |
| 3.a. | Normal cost percentage | 10.53% | 10.32% | 10.12% | 9.77% | 9.48% | 10.28% | 10.08% | 9.73% | 9.45% | | |
| 3.b. | Change | | -0.21% | -0.41% | -0.76% | -1.05% | -0.25% | -0.45% | -0.80% | -1.08% | | |
| 4 a | Unfunded actuarial accrued liability | \$ 26605 | \$ 26216 | \$ 26171 | \$ 2604.9 | \$ 2 597 5 | \$ 2 572 8 | \$ 25697 | \$ 2 559 3 | \$ 25524 | | |
| 4.b. | Change | φ 2,000.5 | ¢ 2,021.0 (38.9) | (43.4) | ¢ 2,004.9 (55.6) | (63.0) | (87.7) | ¢ 2,50).7 (90.8) | (101.2) | (108.1) | | |
| | | | (50.5) | | (35.6) | (35.0) | | (30.0) | (101.2) | (10011) | | |
| 5. | Funded ratio | 60.3% | 60.7% | 60.7% | 60.8% | 60.9% | 61.1% | 61.2% | 61.2% | 61.3% | | |

\$ in millions