

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND
ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 2006

July 11, 2007

Retirement Board
40 Fountain Street, First Floor
Providence, RI 02903-1854

Dear Members of the Board:

Subject: Actuarial Valuation of ERSRI as of June 30, 2006

This is the June 30, 2006 actuarial valuation of the Employees' Retirement System of Rhode Island (ERSRI), which covers state employees and teachers. This report describes the current actuarial condition of ERSRI, determines recommended employer contribution rates, and analyzes changes in these contribution rates. Valuations are prepared annually, as of June 30, the last day of the ERSRI plan year. Not covered in this report are the Municipal Employees' Retirement System, the State Police Retirement Benefits Trust, the Judicial Retirement Benefits Trust, and the Teachers Survivors Plan, even though assets for ERSRI and these other programs are commingled for investment purposes.

Under Rhode Island General Laws, the employer contribution rates for state employees and for teachers are certified annually by the State of Rhode Island Retirement Board. These rates are determined actuarially, based on the plan provisions in effect as of the valuation date, the actuarial assumptions adopted by the Board, and the methodology set forth in the statutes. The Board's current policy is that the contribution rates determined by a given actuarial valuation become effective two years after the valuation date. For example, the rates determined by this June 30, 2006 actuarial valuation will be applicable for the year beginning July 1, 2008 and ending June 30, 2009.

Financing objectives

The actuarial cost method and the amortization periods are set by statute. Contribution rates and liabilities are computed using the Entry Age actuarial cost method. The employer contribution rate is the sum of two pieces: the employer normal cost rate and the amortization rate. The normal cost rate is determined as a percent of pay. The employer normal cost is the difference between this and the member contribution rate. The amortization rate is determined as a level percent of pay. It is the amount required to amortize the unfunded actuarial accrued liability over a closed period (30 years as of June 30, 1999). The amortization rate is adjusted

for the two-year deferral in contribution rates. Separate employer contribution rates are determined for state employees and for teachers.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2006. No material changes in the benefit provisions were made since the preceding valuation. The benefit provisions are summarized in Appendix B.

Progress toward 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. In the absence of benefit improvements, it should increase over time, until it reaches 100%. For the state employees, the funded ratio is 54.6% (decreased from 56.3% last year), while for teachers the ratio is 52.7% (decreased from 55.4% last year).

For the June 30, 2006 valuation, the employer contribution rate increased for state employees, from 20.77% to 21.13%, and for teachers, from 22.01% to 25.03%. For state employees, the change was principally due to the recognition of deferred asset losses from prior valuations. For teachers, the change was principally due to the changes in actuarial assumptions adopted by the Board in June of 2007, and due to the recognition of deferred asset losses.

An analysis of the changes in the employer contribution rates appears on Table 10A. An analysis of the changes in the unfunded actuarial accrued liability appears on Table 10C.

Assumptions and methods

The actuarial assumptions were changed as a result of the experience study approved by the Board on June 13, 2007. Significant changes were made to the mortality rates for teachers. Smaller changes were made to the salary increase, termination, retirement, and disability rates for both state employees and teachers. Also, the payroll growth assumption was increased. More detail on changes adopted as a result of the experience study is on page 8 in the discussion section of this report. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

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, calculated contribution rates and funding periods.

The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 25.

Data

The System's staff supplied data for retired, active and inactive members as of June 30, 2006. 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 prior year's data. The System's staff also supplied asset data as of June 30, 2006.

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. Both are Members of the Society of Actuaries and Members of the American Academy of Actuaries, they both meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Sincerely,
Gabriel, Roeder, Smith & Company



Joseph P. Newton, FSA, MAAA
Consultant



J. Christian Conradi, ASA, MAAA
Senior Consultant

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Executive Summary (State Employees)

| Item | Valuation Date: | | |
|--|--------------------------|---------------------------|-----------------|
| | June 30, 2006 | | June 30, 2005 |
| | After Assumption Changes | Before Assumption Changes | |
| Membership | | | |
| • Number of: | | | |
| - Active members | 12,817 | 12,817 | 12,789 |
| - Retirees and beneficiaries | 10,041 | 10,041 | 9,893 |
| - Inactive members | <u>2,424</u> | <u>2,424</u> | <u>2,343</u> |
| - Total | 25,282 | 25,282 | 25,025 |
| • Payroll supplied by ERSRI | \$ 611,698,223 | \$ 611,698,223 | \$575,746,603 |
| Contribution rates | | | |
| • Member | 8.75% | 8.75% | 8.75% |
| • Employer | 21.13% | 21.19% | 20.77% |
| Assets | | | |
| • Market value | \$2,409,378,699 | \$2,409,378,699 | \$2,218,892,001 |
| • Actuarial value | 2,256,979,077 | 2,256,979,077 | 2,163,391,323 |
| • Return on market value | 11.6% | 11.6% | 11.4% |
| • Return on actuarial value | 7.4% | 7.4% | 1.8% |
| • Employer contribution | \$ 91,254,063 | \$ 91,254,063 | \$66,087,984 |
| • Ratio of actuarial value to market value | 93.7% | 93.7% | 97.5% |
| Actuarial Information | | | |
| • Employer normal cost % | 1.61% | 1.43% | 1.44% |
| • Unamortized actuarial accrued liability (UAAL) | \$1,874,178,524 | \$1,812,121,928 | \$1,680,127,552 |
| • Amortization rate | 19.52% | 19.76% | 19.33% |
| • Funding period | 23 years | 23 years | 24 years |
| • GASB funded ratio | 54.6% | 55.5% | 56.3% |
| Projected employer contribution | | | |
| • Fiscal year ending June 30, | 2009 | 2009 | 2008 |
| • Projected payroll (millions) | \$ 701.0 | \$ 693.8 | \$ 652.8 |
| • Projected employer contribution (millions) | 148.1 | 147.0 | 135.6 |

Executive Summary (Teachers)

| Item | Valuation Date: | | |
|--|--------------------------|---------------------------|-----------------|
| | June 30, 2006 | | June 30, 2005 |
| | After Assumption Changes | Before Assumption Changes | |
| Membership | | | |
| • Number of: | | | |
| - Active members | 14,343 | 14,343 | 14,469 |
| - Retirees and beneficiaries | 8,873 | 8,873 | 8,565 |
| - Inactive members | <u>2,165</u> | <u>2,165</u> | <u>2,015</u> |
| - Total | 25,381 | 25,381 | 25,049 |
| • Payroll supplied by ERSRI | \$ 859,367,272 | \$ 859,367,272 | \$840,372,663 |
| Contribution rates | | | |
| • Member | 9.50% | 9.50% | 9.50% |
| • Employer | 25.03% | 22.70% | 22.01% |
| • State share | 10.17% | 9.24% | 8.97% |
| • Local employer share | 14.86% | 13.46% | 13.04% |
| Assets | | | |
| • Market value | \$3,623,938,636 | \$3,623,938,636 | \$3,364,100,154 |
| • Actuarial value | 3,394,086,565 | 3,394,086,565 | 3,280,977,321 |
| • Return on market value | 11.6% | 11.6% | 11.4% |
| • Return on actuarial value | 7.4% | 7.4% | 1.8% |
| • Employer contribution (state & local) | \$ 138,332,998 | \$ 138,332,998 | \$121,853,338 |
| • Ratio of actuarial value to market value | 93.7% | 93.7% | 97.5% |
| Actuarial Information | | | |
| • Employer normal cost % | 2.32% | 1.56% | 1.57% |
| • Unamortized actuarial accrued liability (UAAL) | \$3,050,607,101 | \$2,757,993,538 | \$2,638,178,890 |
| • Amortization percentage | 22.71% | 21.14% | 20.44% |
| • Funding period | 23 years | 23 years | 24 years |
| • GASB funded ratio | 52.7% | 55.2% | 55.4% |
| Projected employer contribution | | | |
| • Fiscal year ending June 30, | 2009 | 2009 | 2008 |
| • Projected payroll (millions) | \$ 994.4 | \$ 988.0 | \$ 966.7 |
| • Projected employer contribution (millions) | 248.9 | 224.3 | 212.8 |
| • State share (millions) | 101.1 | 91.3 | 86.7 |
| • Local employer share (millions) | 147.8 | 133.0 | 126.1 |

Contribution Rates

The employer contribution rates for ERSRI are determined actuarially. Separate rates are determined for State Employees and for Teachers. The rates determined in this valuation become effective two years after the valuation date, i.e., as of July 1, 2008.

The rate consists of two pieces: the normal cost rate and the amortization rate. The normal cost rate is the Entry Age Normal cost as a percent of pay. The amortization rate is the unfunded actuarial liability amortized over 23 years as a level percent of pay.

For the Teachers, the State of Rhode Island pays 40% of the rate, adjusted so that the State pays the entire amortization charge for the 1990/91 and 1991/92 deferrals, and the town or city employing the teacher pays the balance.

| | <u>Local</u> | <u>State</u> | <u>Total</u> |
|--|---------------|--------------|---------------|
| Amortization for FY 91 and 92 deferrals | 0.00% | 0.26% | 0.26% |
| Normal cost and all other amortizations | <u>14.86%</u> | <u>9.91%</u> | <u>24.77%</u> |
| Total | 14.86% | 10.17% | 25.03% |

Five towns or cities—Burrillville, East Greenwich, Little Compton, New Shoreham, and North Smithfield—did not participate in the 1990 early retirement window for teachers, and an adjusted contribution rate is charged for these:

| | <u>Local</u> | <u>State</u> | <u>Total</u> |
|--|---------------|--------------|---------------|
| Amortization for FY 91 and 92 deferrals | 0.00% | 0.26% | 0.26% |
| Normal cost and all other amortizations | <u>14.21%</u> | <u>9.48%</u> | <u>23.69%</u> |
| Total | 14.21% | 9.74% | 23.95% |

Under RIGL 36-10-2(g), if the State's actuarially determined contribution for state employees or for teachers for a fiscal year will be less than in the preceding fiscal year, the Governor is required to include an appropriation equal to 20% of the reduction to ERSRI. This requirement will not impact fiscal years FY 2007, FY 2008 or FY 2009, because the state's contribution increases in each of these fiscal years.

Financial Data and Experience

Assets for ERSRI are held in trust and are commingled with those of several other plans and programs for investment purposes. The State Treasurer is responsible for setting the asset allocation policy and for investing the funds. The ERSRI assets are then allocated by the system's staff among State Employees, Teachers, and the Teachers' Survivor Benefits Plan.

Table 5 shows the net plan assets for ERSRI in total, and it shows the breakdown between State Employees, Teachers and the Teachers' Survivor Benefit Plan. Table 6 shows a reconciliation of the assets for State Employees and Teachers between the previous valuation and this valuation. Table 8 shows the distribution of investments by category—74% of assets are held in equities—and Table 9 shows a historical summary of the return rates. As can be seen, the net market value rate of return was 11.6% for the year ended June 30, 2006, and the return on an actuarial asset value basis was 7.4%.

The average annual return based on the market value of assets over the last ten years (July 1, 1996 – June 30, 2006) was 7.45%. This is less than the current 8.25% annual investment return assumption.

The average annual return based on the actuarial value of assets over the same period was 7.16%.

The System's staff provided all of the financial information used in this report.

Member Data

The ERSRI staff supplied member data as of June 30, 2006. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Information provided for active members includes: name, an identification number, sex, a code indicating whether the member was active or inactive, a code indicating employee type (state employee or teacher), date of birth, service, salary, date of last contribution, and accumulated member contributions without interest. For retired members, data includes: name, an identification number, sex, date of birth, date of retirement, amount of benefit, the amount of adjustment after age 62 for anyone electing the Social Security option, a code indicating the option elected and the type of retiree (service retiree, disabled retiree, beneficiary), and if applicable, the joint pensioner's date of birth and sex.

Tables 11A and 11B show the number of members by category (active, inactive, retired, etc.). Table 12 shows a historical summary of active member statistics, and Tables 13A and 13B show the distribution of active members by age and service.

The total payroll shown on the statistical tables is the amount that was supplied by ERSRI. For the cost calculations, the pays were adjusted in accordance with the actuarial assumptions to reflect one year's salary increase.

Benefit Provisions

Appendix B includes a summary of the benefit provisions for ERSRI. There were no material changes in the benefit provisions since the preceding valuation.

There are no ancillary benefits—e.g., cost of living benefits—that are currently provided by a source independent of ERSRI but that might be deemed an ERSRI liability if continued beyond the availability of funding by the current funding source.

Actuarial Methods and Assumptions

Appendix A includes a summary of the actuarial assumptions and methods used in this valuation. Costs are determined using the Entry Age Normal actuarial cost method. This method was adopted effective June 30, 1999.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown on Tables 7A and 7B.

Discussion of the Experience Study

Between the June 30, 2005 actuarial valuation and this report, the Retirement Board asked GRS to analyze the assumptions and methods used in the ERSRI actuarial valuation. The experience study was performed for the period June 30, 2000 to June 30, 2006. The study examined the assumptions used for expected investment rate, inflation rate, retirement, mortality, termination, disability, salary increases, payroll growth, and other miscellaneous assumptions.

Significant changes were made to the mortality assumptions for teachers. Less material changes were made to the termination, retirement, payroll growth, and salary increase assumptions. The disability and retirement tables were adjusted to more closely reflect the plan experience.

All of the changes recommended by GRS were adopted by the Board on June 13, 2007. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

GASB 25 and Funding Progress

Accounting requirements for ERSRI are set by Governmental Accounting Standards Board Statement No. 25 (GASB 25). Table 3 shows a historical summary of the funded ratios and other information for ERSRI. Table 4 shows other information needed in connection with disclosure under GASB 25.

GASB 25 requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed. The ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the UAAL. This amortization payment must be computed using a funding period no greater than 30 years. Further, the amortization payment included in the ARC may be computed as a level amount, or it may be computed as an amount that increases with payroll. However, if payments are computed on a level-percent of payroll approach, the payroll growth assumption may not anticipate future membership growth.

For ERSRI, the calculated contribution rates from Tables 1A and 1B are the ARCs for State Employees and Teachers, respectively. The amortization period was established as 30 years as of June 30, 1999, and there are 23 years remaining as of June 30, 2006. The period and amortization method comply with the requirements of GASB 25. The payroll growth rate used in the amortization calculations does not include any allowance for membership growth.

Development of Contribution Rate (State Employees)

| | June 30, 2006 | | June 30, 2005 |
|--|--------------------------------|---------------------------------|---------------|
| | After Assumption Changes | Before Assumption Changes | |
| | (1) | (2) | |
| 1. Compensation | | | |
| (a) Supplied by ERSRI | \$ 611,698,223 | \$611,698,223 | \$575,746,603 |
| (b) Adjusted for one-year's pay increase | 644,980,127 | 644,580,985 | 606,474,789 |
| 2. Actuarial accrued liability | 4,131,157,601 | 4,069,101,005 | 3,843,518,875 |
| 3. Actuarial value of assets | 2,256,979,077 | 2,256,979,077 | 2,163,391,323 |
| 4. Unfunded actuarial accrued liability (UAAL) (2 - 3) | 1,874,178,524 | 1,812,121,928 | 1,680,127,552 |
| 5. Remaining amortization period at valuation date | 23 | 23 | 24 |
| 6. Contribution effective for fiscal year ending: | June 30, 2009 | June 30, 2009 | June 30, 2008 |
| 7. Payroll projected for two-year delay | 700,968,433 | 693,831,001 | 652,813,253 |
| 8. Amortization of UAAL | 136,858,112 | 137,123,403 | 126,177,371 |
| 9. Normal cost | | | |
| (a) Total normal cost rate | 10.36% | 10.18% | 10.19% |
| (b) Employee contribution rate | 8.75% | 8.75% | 8.75% |
| (c) Employer normal cost rate (a - b) | 1.61% | 1.43% | 1.44% |
| 10. Employer contribution rate as percent of payroll | | | |
| (a) Employer normal cost rate | 1.61% | 1.43% | 1.44% |
| (b) Amortization payments (8 / 7) | 19.52% | 19.76% | 19.33% |
| (c) Total (a + b) | 21.13% | 21.19% | 20.77% |
| 11. Estimated employer contribution amount (7 * 10(c)) | \$ 148,114,630 | \$147,022,789 | \$135,589,313 |

Development of Contribution Rate (Teachers)

| | June 30, 2006 | | June 30, 2005 |
|--|--------------------------------|---------------------------------|---------------|
| | After Assumption Changes | Before Assumption Changes | |
| | (1) | (2) | |
| 1. Compensation | | | |
| (a) Supplied by ERSRI | \$ 859,367,272 | \$859,367,272 | \$840,372,663 |
| (b) Adjusted for one-year's pay increase | 914,985,746 | 917,876,104 | 898,051,154 |
| 2. Actuarial accrued liability | 6,444,693,666 | 6,152,080,103 | 5,919,156,211 |
| 3. Actuarial value of assets | 3,394,086,565 | 3,394,086,565 | 3,280,977,321 |
| 4. Unfunded actuarial accrued liability (UAAL) (2 - 3) | 3,050,607,101 | 2,757,993,538 | 2,638,178,890 |
| 5. Remaining amortization period at valuation date | 23 | 23 | 24 |
| 6. Contribution effective for fiscal year ending: | June 30, 2009 | June 30, 2009 | June 30, 2008 |
| 7. Payroll projected for two-year delay | 994,412,228 | 988,007,575 | 966,667,875 |
| 8. Amortization of UAAL | 225,794,167 | 208,902,829 | 197,566,891 |
| 9. Normal cost | | | |
| (a) Total normal cost rate | 11.82% | 11.06% | 11.07% |
| (b) Employee contribution rate | 9.50% | 9.50% | 9.50% |
| (c) Employer normal cost rate (a - b) | 2.32% | 1.56% | 1.57% |
| 10. Employer contribution rate as percent of payroll | | | |
| (a) Employer normal cost rate | 2.32% | 1.56% | 1.57% |
| (b) Amortization payments (8 / 7) | 22.71% | 21.14% | 20.44% |
| (c) Total (a + b) | 25.03% | 22.70% | 22.01% |
| 11. Estimated employer contribution amount (7 * 10(c)) | \$ 248,901,381 | \$224,277,720 | \$212,763,599 |

Actuarial Present Value of Future Benefits (State Employees)

| | June 30, 2006 | | June 30, 2005 |
|---|--------------------------------|---------------------------------|------------------------|
| | After Assumption Changes | Before Assumption Changes | |
| | (1) | (2) | |
| 1. Active members | | | |
| a. Service retirement benefits | \$ 2,307,939,313 | \$2,169,294,121 | \$2,061,988,395 |
| b. Deferred termination benefits | 58,695,880 | 90,369,371 | 88,079,496 |
| c. Refunds | 19,623,562 | 15,204,660 | 13,883,243 |
| d. Pre-retirement death benefits | 57,132,981 | 100,603,497 | 94,871,821 |
| e. Disability retirement benefits | 71,956,486 | 73,486,992 | 69,086,584 |
| f. Total | <u>\$ 2,515,348,222</u> | <u>\$2,448,958,641</u> | <u>\$2,327,909,539</u> |
| 2. Retired members | | | |
| a. Service retirements | \$ 1,819,296,915 | \$1,819,296,915 | \$1,696,766,802 |
| b. Disability retirements | 115,352,910 | 115,352,910 | 107,519,907 |
| c. Beneficiaries | 130,527,229 | 130,527,229 | 131,934,681 |
| d. Post-retirement death benefit | 14,976,000 | 14,976,000 | 14,758,000 |
| e. Total | <u>\$ 2,080,153,054</u> | <u>\$2,080,153,054</u> | <u>\$1,950,979,390</u> |
| 3. Inactive members | \$ 63,662,440 | \$63,662,440 | \$58,565,506 |
| 4. Total actuarial present value of future benefits | \$ 4,659,163,716 | \$4,592,774,135 | \$4,337,454,435 |
| 5. Determination of actuarial accrued liability | | | |
| a. Total actuarial present value of future benefits | \$ 4,659,163,716 | \$4,592,774,135 | \$4,337,454,435 |
| b. Less present value of future normal costs | <u>(528,006,115)</u> | <u>(523,673,130)</u> | <u>(493,935,560)</u> |
| c. Actuarial accrued liability (a + b) | <u>\$ 4,131,157,601</u> | <u>\$4,069,101,005</u> | <u>\$3,843,518,875</u> |

Actuarial Present Value of Future Benefits (Teachers)

| | June 30, 2006 | | June 30, 2005 |
|---|--------------------------------|---------------------------------|------------------------|
| | After Assumption Changes | Before Assumption Changes | |
| | (1) | (2) | |
| 1. Active members | | | |
| a. Service retirement benefits | \$ 3,405,340,932 | \$3,066,468,275 | \$3,075,814,508 |
| b. Deferred termination benefits | 81,660,549 | 158,256,633 | 152,734,147 |
| c. Refunds | 23,402,659 | 17,745,649 | 18,338,853 |
| d. Pre-retirement death benefits | 43,941,757 | 80,864,950 | 78,592,422 |
| e. Disability retirement benefits | 51,031,928 | 50,239,483 | 48,236,846 |
| f. Total | <u>\$ 3,605,377,825</u> | <u>\$3,373,574,990</u> | <u>\$3,373,716,776</u> |
| 2. Retired members | | | |
| a. Service retirements | \$ 3,703,024,694 | \$3,575,215,033 | \$3,320,510,557 |
| b. Disability retirements | 58,978,230 | 58,828,744 | 58,030,163 |
| c. Beneficiaries | 78,284,361 | 76,123,513 | 79,948,603 |
| d. Post-retirement death benefit | 10,047,000 | 10,772,000 | 10,343,000 |
| e. Total | <u>\$ 3,850,334,285</u> | <u>\$3,720,939,290</u> | <u>\$3,468,832,323</u> |
| 3. Inactive members | \$ 56,850,283 | \$56,850,283 | \$51,452,289 |
| 4. Total actuarial present value of future benefits | \$ 7,512,562,393 | \$7,151,364,563 | \$6,894,001,388 |
| 5. Determination of actuarial accrued liability | | | |
| a. Total actuarial present value of future benefits | \$ 7,512,562,393 | \$7,151,364,563 | \$6,894,001,388 |
| b. Less present value of future normal costs | <u>(1,067,868,727)</u> | <u>(999,284,460)</u> | <u>(974,845,177)</u> |
| c. Actuarial accrued liability (a + b) | <u>\$ 6,444,693,666</u> | <u>\$6,152,080,103</u> | <u>\$5,919,156,211</u> |

**Schedule of Funding Progress
(As required by GASB #25)**

| Valuation Date | Actuarial Value of Assets (AVA) | Actuarial Accrued Liability | Unfunded Actuarial Accrued Liability (UAAL) (3)-(2) | Funded Ratio (2)/(3) | Annual Covered Payroll | UAAL as % of Payroll (4)/(6) |
|----------------------------|---------------------------------|-----------------------------|--|-------------------------|------------------------|------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| State Employees | | | | | | |
| June 30, 2000 | 2,345,319,663 | 2,874,905,547 | 529,585,884 | 81.6% | 517,632,152 | 102.3% |
| June 30, 2001 | 2,406,278,029 | 3,089,247,738 | 682,969,709 | 77.9% | 539,015,218 | 126.7% |
| June 30, 2002 | 2,353,855,871 | 3,284,126,961 | 930,271,090 | 71.7% | 586,888,745 | 158.5% |
| June 30, 2003 | 2,267,673,016 | 3,461,708,161 | 1,194,035,145 | 65.5% | 606,102,182 | 197.0% |
| June 30, 2003 ¹ | 2,267,673,016 | 3,517,352,031 | 1,249,679,015 | 64.5% | 606,102,182 | 206.2% |
| June 30, 2004 | 2,202,900,345 | 3,694,787,818 | 1,491,887,473 | 59.6% | 606,087,585 | 246.2% |
| June 30, 2005 | 2,163,391,323 | 3,843,518,875 | 1,680,127,552 | 56.3% | 606,474,789 | 277.0% |
| June 30, 2006 | 2,256,979,077 | 4,131,157,601 | 1,874,178,524 | 54.6% | 644,980,127 | 290.6% |
| Teachers | | | | | | |
| June 30, 2000 | 3,514,399,312 | 4,359,881,262 | 845,481,950 | 80.6% | 703,201,056 | 120.2% |
| June 30, 2001 | 3,619,863,426 | 4,679,288,010 | 1,059,424,584 | 77.4% | 748,460,527 | 141.5% |
| June 30, 2002 | 3,553,823,995 | 4,857,003,061 | 1,303,179,066 | 73.2% | 792,015,577 | 164.5% |
| June 30, 2003 | 3,427,685,554 | 5,284,933,149 | 1,857,247,595 | 64.9% | 834,642,391 | 222.5% |
| June 30, 2003 ¹ | 3,427,685,554 | 5,341,627,416 | 1,913,941,862 | 64.2% | 834,642,391 | 229.3% |
| June 30, 2004 | 3,340,527,073 | 5,634,195,435 | 2,293,668,362 | 59.3% | 866,532,598 | 264.7% |
| June 30, 2005 | 3,280,977,321 | 5,919,156,211 | 2,638,178,890 | 55.4% | 898,051,154 | 293.8% |
| June 30, 2006 | 3,394,086,565 | 6,444,693,666 | 3,050,607,101 | 52.7% | 914,985,746 | 333.4% |

¹Restated June 30, 2003 actuarial value after adopting the amendment of Article 7, Substitute A

**Notes to Required Supplementary Information
 (as required by GASB #25)**

| Item (1) | State Employees (2) | Teachers (3) |
|--|--------------------------|--------------------------|
| Valuation date | June 30, 2006 | June 30, 2006 |
| Actuarial cost method | Entry Age Normal | Entry Age Normal |
| Amortization method | Level percentage, closed | Level percentage, closed |
| Remaining amortization period | 23 years | 23 years |
| Asset valuation method | 5-Yr Smoothed Market | 5-Yr Smoothed Market |
| Actuarial assumptions: | | |
| Investment rate of return * | 8.25% | 8.25% |
| Projected salary increase * | 4.50% to 9.00% | 4.50% to 13.25% |
| * Includes inflation at: | 3.00% | 3.00% |
| Cost of living adjustment - Schedule A | 3.00% | 3.00% |
| Cost of living adjustment - Schedule B | 2.50% | 2.50% |

Plan Net Assets
(Assets at Market or Fair Value)

| Item (1) | June 30, 2006 (2) | June 30, 2005 (3) |
|---|-------------------------|------------------------|
| A. Total ERSRI assets | | |
| 1. Cash and cash equivalents | \$ 20,712,778 | \$3,995,714 |
| 2. Receivables: | | |
| a. Transfers receivable | \$ 234,326 | \$1,255,196 |
| b. Member and employer contributions | 12,271,741 | 20,114,762 |
| c. Due from state for teachers | 12,567,666 | 11,201,737 |
| d. Net investment income and other | 1,819,001 | 3,793,681 |
| e. Total receivables | <u>\$ 26,892,734</u> | <u>\$36,365,376</u> |
| 3. Investments | | |
| a. Short-term investment fund | \$ 18,198,822 | \$15,684,243 |
| b. Pooled trust | 6,166,733,865 | 5,710,023,956 |
| c. Plan specific investments | 20,485,512 | 15,984,408 |
| d. Invested securities lending collateral | 1,195,023,630 | 865,728,536 |
| e. Total | <u>\$ 7,400,441,829</u> | <u>\$6,607,421,143</u> |
| 4. Total property and equipment | \$ 9,878,640 | \$11,580,054 |
| 5. Total assets | \$ 7,457,925,981 | \$6,659,362,287 |
| 6. Liabilities | | |
| a. Transfers payable | \$ 53,295 | \$ 337,571 |
| b. Accounts and vouchers payable | 5,727,831 | 5,459,215 |
| c. Securities lending liability | 1,195,023,630 | 865,728,536 |
| d. Total liabilities | <u>\$ 1,200,804,756</u> | <u>\$871,525,322</u> |
| 7. Total market value of assets available for benefits (Item 5 - Item 6) | \$ 6,257,121,225 | \$5,787,836,965 |
| B. Breakdown | | |
| 1. State employees | \$ 2,409,378,699 | \$2,218,892,001 |
| 2. Teachers | 3,623,938,636 | 3,364,100,154 |
| 3. Teachers' survivors benefits | 223,803,890 | 204,844,810 |
| 4. Total | <u>\$ 6,257,121,225</u> | <u>\$5,787,836,965</u> |

Reconciliation of Plan Net Assets

| Item (1) | Year Ending June 30, 2006 | |
|--|---------------------------|------------------|
| | State Employees (2) | Teachers (3) |
| 1. Market value of assets at beginning of year | \$ 2,218,892,001 | \$ 3,364,100,154 |
| Current year prior period adjustments | 0 | 0 |
| Adjusted market value of assets at BOY | \$ 2,218,892,001 | \$ 3,364,100,154 |
| 2. Contributions | | |
| a. Members | \$ 53,800,410 | \$ 80,190,420 |
| b. State | 91,254,063 | 54,537,733 |
| c. Local employers | 0 | 83,795,265 |
| d. Reimbursement of Supplemental Pensions | 185,370 | 913,864 |
| e. Service purchases | 4,121,579 | 3,819,324 |
| f. Total | \$ 149,361,422 | \$ 223,256,606 |
| 3. Investment earnings, net of investment and administrative expenses | \$ 255,297,565 | \$ 383,992,506 |
| 4. Expenditures for the year | | |
| a. Benefit payments | \$ (155,391,042) | \$ (261,833,205) |
| b. Cost-of-living adjustments | (43,637,615) | (62,937,188) |
| c. Death benefits | (1,809,855) | (776,517) |
| d. Social security supplements | (8,665,910) | (18,221,194) |
| e. Supplemental pensions | (171,669) | (913,864) |
| f. Refunds | (4,496,198) | (2,728,662) |
| g. Total expenditures | \$ (214,172,289) | \$ (347,410,630) |
| 5. Transfers and other adjustments | \$ 0 | \$ 0 |
| 6. Market value of assets at end of year | \$ 2,409,378,699 | \$ 3,623,938,636 |

Development of Actuarial Value of Assets (State Employees)

| | <u>Year Ending</u> <u>June 30, 2006</u> | | |
|--|--|-------------------------|------------------------|
| 1. Market value of assets at beginning of year | \$ 2,218,892,001 | | |
| 2. Net new investments | | | |
| a. Contributions | \$ 149,361,422 | | |
| b. Benefits paid | (209,676,091) | | |
| c. Refunds | (4,496,198) | | |
| d. Subtotal | <u>(64,810,867)</u> | | |
| 3. Market value of assets at end of year | \$ 2,409,378,699 | | |
| 4. Net earnings (3-1-2) (includes misc revenues) | \$ 255,297,565 | | |
| 5. Assumed investment return rate | 8.25% | | |
| 6. Expected return | \$ 180,385,142 | | |
| 7. Excess return (4-6) | \$ 74,912,423 | | |
| 8. Excess return on assets as of 06/30/2006: | | | |
| | | | |
| <u>Period End</u> | <u>Excess Return</u> | <u>Percent Deferred</u> | <u>Deferred Amount</u> |
| (1) | (2) | (3) | (4) |
| June 30, 2002 | \$ (333,597,038) | 0% | \$ 0 |
| June 30, 2003 | (100,676,641) | 20% | (20,135,328) |
| June 30, 2004 | 185,260,900 | 40% | 74,104,360 |
| June 30, 2005 | 64,167,753 | 60% | 38,500,652 |
| June 30, 2006 | 74,912,423 | 80% | <u>59,929,938</u> |
| | | | \$ 152,399,622 |
| 9. Actuarial value of assets as of June 30, 2006 (Item 3 - Item 8) | \$ 2,256,979,077 | | |
| 10. Ratio of actuarial value to market value | | | 93.7% |

Development of Actuarial Value of Assets (Teachers)

| | <u>Year Ending June 30, 2006</u> | | |
|--|--------------------------------------|-------------------------|------------------------|
| 1. Market value of assets at beginning of year | \$ 3,364,100,154 | | |
| 2. Net new investments | | | |
| a. Contributions | \$ 223,256,606 | | |
| b. Benefits paid | (344,681,968) | | |
| c. Refunds | <u>(2,728,662)</u> | | |
| d. Subtotal | (124,154,024) | | |
| 3. Market value of assets at end of year | \$ 3,623,938,636 | | |
| 4. Net earnings (3-1-2) (includes misc revenues) | \$ 383,992,506 | | |
| 5. Assumed investment return rate | 8.25% | | |
| 6. Expected return | \$ 272,416,909 | | |
| 7. Excess return (4-6) | \$ 111,575,597 | | |
| 8. Expected return on assets as of 06/30/2006: | | | |
| | | | |
| <u>Period End</u> | <u>Excess Return</u> | <u>Percent Deferred</u> | <u>Deferred Amount</u> |
| (1) | (2) | (3) | (4) |
| June 30, 2002 | \$ (514,349,794) | 0% | \$ 0 |
| June 30, 2003 | (151,517,413) | 20% | (30,303,483) |
| June 30, 2004 | 281,094,838 | 40% | 112,437,935 |
| June 30, 2005 | 97,428,568 | 60% | 58,457,141 |
| June 30, 2006 | 111,575,597 | 80% | <u>89,260,478</u> |
| | | | \$ 229,852,071 |
| 9. Actuarial value of assets as of June 30, 2006 (Item 3 - Item 8) | \$ 3,394,086,565 | | |
| 10. Ratio of actuarial value to market value | 93.7% | | |

**Distribution of Assets at Market Value
 (Percentage of Total Investments)**

| Item (1) | June 30, 2006 (2) | June 30, 2005 (3) |
|-------------------------------------|----------------------|----------------------|
| Cash & cash equivalents | 2.3% | 3.5% |
| U.S. government & agency securities | 14.5% | 14.3% |
| Corporate bonds & notes | 8.7% | 8.8% |
| Foreign bonds | 0.5% | 0.7% |
| U.S. equity securities | 40.8% | 44.8% |
| Foreign equity securities | 22.7% | 21.6% |
| Real estate, venture capital, other | 10.5% | 6.4% |
| Total investments | 100.0% | 100.0% |

History of Investment Return Rates

| Year Ending June 30 of | Market | Actuarial |
|---------------------------|---------|-----------|
| (1) | (2) | (3) |
| 1995 | 17.0% | 10.2% |
| 1996 | 13.7% | 13.7% |
| 1997 | 19.1% | 19.1% |
| 1998 | 16.1% | 16.5% |
| 1999 | 10.1% | 14.7% |
| 2000 | 9.1% | 8.8% |
| 2001 | (11.0%) | 4.9% |
| 2002 | (8.4%) | 0.9% |
| 2003 | 2.6% | (0.8%) |
| 2004 | 18.7% | 0.4% |
| 2005 | 11.4% | 1.8% |
| 2006 | 11.6% | 7.4% |
| Average Returns: | | |
| Last 5 Years | 6.78% | 1.91% |
| Last 10 Years | 7.45% | 7.16% |

Analysis of Change in Employer Cost

| Basis (1) | State Employees (2) | Teachers (3) |
|---|---------------------------|-----------------|
| 1. Employer contribution rates from prior valuation | 20.77% | 22.01% |
| 2. Impact of changes, gains and losses | | |
| a. Non-salary liability experience (gain)/loss | 0.19% | 0.34% |
| b. Salary (gain)/loss | 0.56% | (0.25%) |
| c. Total payroll growth (gain)/loss | (0.54%) | 0.36% |
| d. Investment experience (gain)/loss | 0.21% | 0.24% |
| e. Changes in assumptions | (0.06%) | 2.33% |
| f. Changes in plan provisions | 0.00% | 0.00% |
| g. Total | 0.36% | 3.02% |
| 3. Employer contribution rates from current valuation | 21.13% | 25.03% |

History of Employer Contribution Rates

| Valuation Date as of June 30, (1) | Fiscal Year Ending June 30, (2) | Employer Contribution Rate (3) |
|---|---------------------------------------|-----------------------------------|
| <i>State Employees</i> | | |
| 1998 | 2001 | 7.99% |
| 1999 | 2002 | 5.59% |
| 2000 | 2003 | 7.68% |
| 2001 | 2004 | 9.60% |
| 2002 | 2005 | 11.51% |
| 2003 | 2006 | 14.84% |
| 2004 | 2007 | 18.40% |
| 2005 | 2008 | 20.77% |
| 2006 | 2009 | 21.13% |
| <i>Teachers</i> | | |
| 1998 | 2001 | 12.01% |
| 1999 | 2002 | 9.95% |
| 2000 | 2003 | 11.97% |
| 2001 | 2004 | 13.72% |
| 2002 | 2005 | 14.84% |
| 2003 | 2006 | 16.47% |
| 2004 | 2007 | 19.64% |
| 2005 | 2008 | 22.01% |
| 2006 | 2009 | 25.03% |

Analysis of Change in UAAL

| Basis (1) | State Employees (2) | Teachers (3) |
|--|---------------------------|-----------------|
| 1. UAAL as of June 30, 2005 | \$ 1,680 | \$ 2,638 |
| 2. Impact of changes, gains and losses | | |
| a. Interest at 8.25% for one year | 139 | 218 |
| b. Expected amortization payments | (85) | (140) |
| c. Investment experience (gain)/loss | 17 | 28 |
| d. Salary (gain)/loss | 44 | (29) |
| e. Non-salary liability experience (gain)/loss | 17 | 43 |
| f. Changes in assumptions | 62 | 293 |
| g. Changes in plan provisions | 0 | 0 |
| i. Total | \$ 194 | \$ 413 |
| 3. UAAL as of June 30, 2006 | \$ 1,874 | \$ 3,051 |

Note: All dollar amounts are shown in millions.

Membership Data (State Employees)

| | June 30, 2006 (1) | June 30, 2005 (2) | June 30, 2004 (3) |
|------------------------------------|----------------------|----------------------|----------------------|
| 1. Active members | | | |
| a. Number | 12,817 | 12,789 | 12,957 |
| b. Number vested | 7,677 | 7,997 | 8,519 |
| c. Total payroll supplied by ERSRI | \$ 611,698,223 | \$575,746,603 | \$575,574,300 |
| d. Average salary | 47,726 | 45,019 | 44,422 |
| e. Average age | 47.9 | 47.8 | 47.6 |
| f. Average service | 14.4 | 14.5 | 14.6 |
| 2. Inactive members | | | |
| a. Number | 2,424 | 2,343 | 2,158 |
| 3. Service retirees | | | |
| a. Number | 8,265 | 8,120 | 7,956 |
| b. Total annual benefits | \$ 185,902,200 | \$173,107,820 | \$158,434,050 |
| c. Average annual benefit | 22,493 | 21,319 | 19,914 |
| d. Average age | 72.7 | 72.7 | 73.0 |
| 4. Disabled retirees | | | |
| a. Number | 690 | 675 | 646 |
| b. Total annual benefits | \$ 11,207,178 | \$10,442,049 | \$9,555,557 |
| c. Average annual benefit | 16,242 | 15,470 | 14,792 |
| d. Average age | 62.5 | 62.4 | 62.1 |
| 5. Beneficiaries and spouses | | | |
| a. Number | 1,086 | 1,098 | 1,072 |
| b. Total annual benefits | \$ 15,212,187 | \$14,950,539 | \$14,057,050 |
| c. Average annual benefit | 14,008 | 13,616 | 13,113 |
| d. Average age | 76.3 | 75.6 | 75.4 |

Membership Data (Teachers)

| | June 30, 2006 | June 30, 2005 | June 30, 2004 |
|------------------------------------|----------------|---------------|---------------|
| | (1) | (2) | (3) |
| 1. Active members | | | |
| a. Number | 14,343 | 14,469 | 14,556 |
| b. Number vested | 7,121 | 7,166 | 7,001 |
| c. Total payroll supplied by ERSRI | \$ 859,367,272 | \$840,372,663 | \$810,064,092 |
| d. Average salary | 59,915 | 58,081 | 55,652 |
| e. Average age | 44.3 | 44.1 | 43.7 |
| f. Average service | 12.2 | 12.1 | 12.0 |
| 2. Inactive members | | | |
| a. Number | 2,165 | 2,015 | 1,836 |
| 3. Service retirees | | | |
| a. Number | 8,244 | 7,916 | 7,570 |
| b. Total annual benefits | \$ 331,004,050 | \$307,367,790 | \$285,039,410 |
| c. Average annual benefit | 40,151 | 38,829 | 37,654 |
| d. Average age | 67.4 | 67.2 | 67.1 |
| 4. Disabled retirees | | | |
| a. Number | 242 | 245 | 232 |
| b. Total annual benefits | \$ 5,973,869 | \$5,857,336 | \$5,374,861 |
| c. Average annual benefit | 24,685 | 23,907 | 23,168 |
| d. Average age | 63.6 | 63.3 | 63.2 |
| 5. Beneficiaries and spouses | | | |
| a. Number | 387 | 404 | 377 |
| b. Total annual benefits | \$ 7,637,146 | \$7,750,294 | \$6,965,801 |
| c. Average annual benefit | 19,734 | 19,184 | 18,477 |
| d. Average age | 71.0 | 69.6 | 70.0 |

Historical Summary of Active Member Data

| Valuation as of June 30, | Active Members | | Covered Payroll | | Average Salary | | Average Age | Average Service |
|-----------------------------|----------------|---------------------|--------------------------|---------------------|----------------|---------------------|----------------|--------------------|
| | Number | Percent Increase | Amount in \$ Millions | Percent Increase | \$ Amount | Percent Increase | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| <i>State Employees</i> | | | | | | | | |
| 1996 | 12,976 | -4.2% | \$453 | 0.4% | 34,900 | 4.8% | 45.5 | 13.7 |
| 1997 | 12,865 | (0.9%) | 426 | (6.0%) | 33,103 | (5.1%) | 45.7 | 14.0 |
| 1998 | 13,105 | 1.9% | 458 | 7.6% | 34,963 | 5.6% | 46.4 | 14.4 |
| 1999 | 13,369 | 2.0% | 476 | 3.9% | 35,606 | 1.8% | 46.4 | 14.4 |
| 2000 | 13,305 | (0.5%) | 499 | 4.8% | 37,510 | 5.3% | 46.7 | 14.4 |
| 2001 | 13,594 | 2.2% | 521 | 4.4% | 38,321 | 2.2% | 46.9 | 14.5 |
| 2002 | 13,795 | 1.5% | 563 | 8.1% | 40,812 | 6.5% | 47.4 | 14.3 |
| 2003 | 13,281 | (3.7%) | 576 | 2.3% | 43,364 | 6.3% | 47.8 | 14.8 |
| 2004 | 12,957 | (2.4%) | 576 | (0.1%) | 44,422 | 2.4% | 47.6 | 14.6 |
| 2005 | 12,789 | (1.3%) | 576 | 0.0% | 45,019 | 1.3% | 47.8 | 14.5 |
| 2006 | 12,817 | 0.2% | 612 | 6.2% | 47,726 | 6.0% | 47.9 | 14.4 |
| <i>Teachers</i> | | | | | | | | |
| 1996 | 12,391 | 2.6% | \$544 | 9.6% | 43,900 | 6.8% | 44.9 | 15.5 |
| 1997 | 12,681 | 2.3% | 573 | 5.4% | 45,193 | 2.9% | 45.1 | 15.1 |
| 1998 | 12,883 | 1.6% | 598 | 4.4% | 46,453 | 2.8% | 45.0 | 14.9 |
| 1999 | 13,282 | 3.1% | 633 | 5.7% | 47,642 | 2.6% | 45.0 | 14.6 |
| 2000 | 13,607 | 2.4% | 659 | 4.0% | 48,402 | 1.6% | 44.7 | 14.0 |
| 2001 | 14,092 | 3.6% | 697 | 5.9% | 49,491 | 2.3% | 44.4 | 13.3 |
| 2002 | 14,710 | 4.4% | 735 | 5.4% | 49,986 | 1.0% | 44.4 | 12.5 |
| 2003 | 14,410 | (2.0%) | 782 | 6.3% | 54,248 | 8.5% | 44.2 | 12.7 |
| 2004 | 14,556 | 1.0% | 810 | 3.6% | 55,652 | 2.6% | 43.7 | 12.0 |
| 2005 | 14,469 | (0.6%) | 840 | 3.7% | 58,081 | 4.4% | 44.1 | 12.1 |
| 2006 | 14,343 | (0.9%) | 859 | 2.3% | 59,915 | 3.2% | 44.3 | 12.2 |

**Distribution of Active Members by Age and by Years of Service (State Employees)
 As of 06/30/2006**

| Attained Age | Years of Credited Service | | | | | | | | | | | | Total Count & Avg. Comp. | |
|--------------|---------------------------|----------------------|----------------------|----------------------|----------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------|--------------------------|--------------------|
| | 0 Count & Avg. Comp. | 1 Count & Avg. Comp. | 2 Count & Avg. Comp. | 3 Count & Avg. Comp. | 4 Count & Avg. Comp. | 5-9 Count & Avg. Comp. | 10-14 Count & Avg. Comp. | 15-19 Count & Avg. Comp. | 20-24 Count & Avg. Comp. | 25-29 Count & Avg. Comp. | 30-34 Count & Avg. Comp. | 35 & Over Count & Avg. Comp. | | |
| Under 25 | 38 \$28,602 | 34 \$29,703 | 12 \$31,856 | 5 \$24,787 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 89 \$29,247 |
| 25-29 | 61 \$38,580 | 73 \$35,465 | 51 \$37,667 | 42 \$36,627 | 35 \$34,696 | 91 \$37,949 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 353 \$37,024 |
| 30-34 | 462 \$38,081 | 95 \$37,026 | 57 \$36,081 | 46 \$38,348 | 66 \$41,578 | 318 \$42,429 | 25 \$40,567 | 1 \$35,654 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 1,070 \$39,456 |
| 35-39 | 43 \$38,418 | 355 \$33,717 | 221 \$38,410 | 118 \$43,292 | 90 \$40,929 | 418 \$43,356 | 213 \$49,038 | 216 \$45,665 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 1,674 \$41,417 |
| 40-44 | 46 \$35,950 | 40 \$37,575 | 48 \$37,793 | 46 \$44,799 | 57 \$41,072 | 329 \$45,512 | 256 \$49,961 | 551 \$49,234 | 157 \$47,400 | 9 \$49,246 | 0 \$0 | 0 \$0 | 0 \$0 | 1,539 \$46,881 |
| 45-49 | 63 \$34,004 | 58 \$38,766 | 47 \$35,120 | 47 \$43,842 | 62 \$42,312 | 378 \$45,800 | 270 \$50,723 | 517 \$51,145 | 428 \$55,690 | 286 \$50,695 | 10 \$52,177 | 0 \$0 | 0 \$0 | 2,166 \$49,414 |
| 50-54 | 59 \$38,305 | 39 \$39,234 | 43 \$38,691 | 41 \$46,091 | 62 \$37,985 | 318 \$42,868 | 258 \$49,140 | 444 \$52,280 | 306 \$56,146 | 489 \$57,244 | 257 \$54,332 | 5 \$53,257 | 5 \$51,109 | 2,321 \$51,109 |
| 55-59 | 36 \$42,552 | 36 \$45,243 | 29 \$37,142 | 29 \$48,691 | 27 \$45,367 | 211 \$44,826 | 224 \$48,604 | 355 \$48,741 | 271 \$55,501 | 347 \$57,465 | 297 \$63,801 | 63 \$57,674 | 63 \$53,032 | 1,925 \$53,032 |
| 60-64 | 14 \$45,472 | 16 \$47,271 | 10 \$47,273 | 8 \$40,988 | 23 \$41,324 | 115 \$42,971 | 119 \$48,214 | 255 \$48,625 | 194 \$51,122 | 182 \$57,038 | 101 \$59,850 | 65 \$59,644 | 65 \$51,218 | 1,102 \$51,218 |
| 65 & Over | 4 \$65,382 | 3 \$24,745 | 5 \$50,669 | 5 \$78,503 | 6 \$29,885 | 43 \$43,566 | 58 \$43,936 | 146 \$44,297 | 118 \$48,252 | 92 \$52,367 | 62 \$51,539 | 36 \$66,208 | 36 \$48,686 | 578 \$48,686 |
| Total | 826 \$37,738 | 749 \$35,817 | 523 \$37,821 | 387 \$43,096 | 428 \$40,459 | 2,221 \$43,791 | 1,423 \$49,048 | 2,485 \$49,437 | 1,474 \$53,671 | 1,405 \$55,568 | 727 \$58,699 | 169 \$60,119 | 169 \$47,725 | 12,817 \$47,725 |

Distribution of Active Members by Age and by Years of Service (Teachers)
As of 06/30/2006

| Attained Age | Years of Credited Service | | | | | | | | | | | | Total Count & Avg. Comp. | |
|-----------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------|--------------------|
| | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 & Over | | |
| | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | Count & Avg. Comp. | | |
| Under 25 | 12 \$44,987 | 24 \$33,618 | 16 \$37,187 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 52 \$37,340 |
| 25-29 | 13 \$56,414 | 88 \$35,437 | 80 \$39,943 | 128 \$40,921 | 170 \$43,678 | 303 \$48,448 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 782 \$43,977 |
| 30-34 | 120 \$50,310 | 405 \$36,519 | 379 \$42,254 | 67 \$44,643 | 151 \$46,981 | 1,008 \$53,277 | 142 \$66,219 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 2,272 \$48,430 |
| 35-39 | 10 \$51,454 | 36 \$43,793 | 78 \$40,251 | 458 \$44,199 | 278 \$49,352 | 938 \$56,592 | 690 \$65,489 | 135 \$68,551 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 2,623 \$55,936 |
| 40-44 | 7 \$44,847 | 43 \$39,057 | 31 \$41,413 | 43 \$46,839 | 81 \$47,654 | 500 \$58,242 | 405 \$66,853 | 514 \$68,145 | 55 \$70,095 | 0 \$0 | 0 \$0 | 0 \$0 | 0 \$0 | 1,679 \$62,078 |
| 45-49 | 12 \$41,437 | 35 \$40,160 | 26 \$46,012 | 43 \$50,387 | 70 \$48,929 | 467 \$58,267 | 323 \$66,614 | 408 \$68,051 | 234 \$69,995 | 67 \$71,506 | 0 \$0 | 0 \$0 | 0 \$0 | 1,685 \$63,117 |
| 50-54 | 7 \$65,824 | 36 \$47,222 | 20 \$41,707 | 26 \$48,497 | 54 \$50,664 | 397 \$60,187 | 419 \$66,742 | 482 \$68,647 | 257 \$69,547 | 449 \$70,559 | 172 \$71,996 | 0 \$0 | 0 \$0 | 2,319 \$66,355 |
| 55-59 | 7 \$70,801 | 20 \$63,668 | 10 \$51,886 | 20 \$50,453 | 20 \$58,133 | 253 \$61,600 | 271 \$67,815 | 447 \$68,235 | 238 \$69,706 | 261 \$71,335 | 403 \$72,036 | 104 \$74,465 | 104 \$74,465 | 2,054 \$68,601 |
| 60-64 | 1 \$65,707 | 4 \$47,964 | 5 \$46,664 | 7 \$64,042 | 13 \$67,676 | 85 \$65,037 | 94 \$68,729 | 157 \$69,168 | 114 \$68,615 | 92 \$71,709 | 69 \$72,793 | 61 \$73,884 | 61 \$73,884 | 702 \$69,254 |
| 65 & Over | 0 \$0 | 0 \$0 | 0 \$0 | 1 \$24,902 | 4 \$68,200 | 16 \$64,034 | 26 \$69,637 | 42 \$68,528 | 28 \$70,536 | 23 \$71,397 | 12 \$73,411 | 23 \$77,992 | 23 \$77,992 | 175 \$70,302 |
| Total | 189 \$51,102 | 691 \$38,411 | 645 \$41,877 | 793 \$44,636 | 841 \$48,247 | 3,967 \$56,423 | 2,370 \$66,581 | 2,185 \$68,363 | 926 \$69,649 | 892 \$70,997 | 656 \$72,130 | 188 \$74,708 | 188 \$74,708 | 14,343 \$59,916 |

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal (EAN) actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate, and (ii) a rate that will amortize the unfunded actuarial accrued liability (UAAL).

1. First, the actuarial present value of future benefits is determined by discounting the projected benefits for each member back to the valuation date using the assumed investment return rate as the discount rate. For active members, the projected benefits are based on the member's age, service, sex and compensation, and based on the actuarial assumptions. The calculations take into account the probability of the member's death, disability, or termination of employment prior to becoming eligible for a retirement benefit, as well as the possibility of the member will remain in service and receive a service retirement benefit. Future salary increases are anticipated. The present value of the expected benefits payable to all active members is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits. Liabilities for future members are not included.
2. The employer contributions required to support the benefits are determined as a level percentage of salary, and consist of a normal contribution and an amortization contribution.
3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each new member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. The normal cost rate is determined using the plan provisions applicable to members becoming participants after June 30, 2005, i.e., the provisions for Schedule B members.
4. The employer normal cost rate is equal to (i) the normal cost rate, minus (ii) the member contribution rate.
5. The actuarial accrued liability is equal to the present value of all benefits less the present value of future normal costs. The unfunded actuarial accrued liability

(UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. The UAAL is being amortized over the remainder of a closed 30-year period from June 30, 1999. The employer contribution rate determined by this valuation will not be effective until two years after the valuation date. The determination of the contribution rate reflects this deferral. The unfunded actuarial accrued liability (UAAL) and covered payroll are projected forward for two years, and we then determine the amortization charge required to amortize the UAAL over the remaining amortization period from that point. In projecting the UAAL, we increase the UAAL for interest at the assumed rate and we decrease it for the amortization payments. The amortization payments for these two years are determined by subtracting the current employer normal cost from the known contribution rates for these years, based on the two prior actuarial valuations. Contributions are assumed to be made monthly throughout the year.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a five-year phase-in of actual investment return in excess of (less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of administrative and investment expenses.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 8.25% per year, compounded annually, composed of an assumed 3.00% inflation rate and a 5.25% net real rate of return. This rate represents the assumed return, net of all investment and administrative expenses.

2. Salary increase rate: The sum of (i) a 4.50% wage inflation assumption (composed of a 3.00% price inflation assumption and a 1.50% additional general increase), and (ii) a service-related component as shown below:

| Salary Increase Rates | | | | |
|-----------------------|---------------------------|----------------|---------------------------|----------------|
| Service | State Employees | | Teachers | |
| | Service-Related Component | Total Increase | Service-Related Component | Total Increase |
| (1) | (2) | (3) | (4) | (5) |
| 0 | 4.50% | 9.00% | 8.75% | 13.25% |
| 1 | 4.00% | 8.50% | 7.50% | 12.00% |
| 2 | 3.50% | 8.00% | 6.25% | 10.75% |
| 3 | 3.00% | 7.50% | 5.75% | 10.25% |
| 4 | 2.75% | 7.25% | 5.25% | 9.75% |
| 5 | 2.50% | 7.00% | 4.50% | 9.00% |
| 6 | 2.00% | 6.50% | 4.00% | 8.50% |
| 7 | 1.50% | 6.00% | 3.50% | 8.00% |
| 8 | 1.25% | 5.75% | 3.00% | 7.50% |
| 9 | 1.00% | 5.50% | 2.00% | 6.50% |
| 10 | 0.75% | 5.25% | 1.25% | 5.75% |
| 11 | 0.50% | 5.00% | 1.00% | 5.50% |
| 12 | 0.50% | 5.00% | 0.50% | 5.00% |
| 13 | 0.25% | 4.75% | 0.25% | 4.75% |
| 14 | 0.25% | 4.75% | 0.00% | 4.50% |
| 15 or more | 0.00% | 4.50% | 0.00% | 4.50% |

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

3. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 4.25% per year. This increase rate is solely due to the effect of wage inflation on salaries, with no allowance for future membership growth.

4. Post-retirement Benefit Increase: For members with at least 10 years of contributory service as of June 30, 2005 (i.e., Schedule A members) and for all members receiving a disability benefit, the post-retirement benefit increases are equal to 3.00% by statute. They are not a function of the actual increases in the cost of living. For members with less than 10 years of contributory service as of June 30, 2005, i.e., Schedule B members, members receive a compound increase each year equal to the increase in the CPI, but limited to 3.00%. This limit lowers the expected increases granted in each year below the inflation assumption of 3.00%. The assumed average increase received for this group of employees is 2.50%.

B. Demographic Assumptions

1. Post-termination mortality rates (non-disabled)
 - a. Male state employees: Based on the 1994 Group Annuity Mortality Tables for males set forward one year.
 - b. Female state employees: Based on the 1994 Group Annuity Mortality Tables for females.
 - c. GRS table based on male teacher experience
 - d. 95% of rates in a GRS table based on female teacher experience.

Sample rates are shown below:

| Number of Deaths per 100 | | | | |
|--------------------------|-----------------|---------|----------|---------|
| Age | State Employees | | Teachers | |
| | Males | Females | Males | Females |
| 50 | 0.29 | 0.14 | 0.28 | 0.15 |
| 55 | 0.49 | 0.23 | 0.48 | 0.36 |
| 60 | 0.90 | 0.44 | 0.45 | 0.45 |
| 65 | 1.62 | 0.86 | 0.57 | 0.41 |
| 70 | 2.60 | 1.37 | 1.50 | 0.85 |
| 75 | 4.09 | 2.27 | 2.49 | 1.35 |
| 80 | 6.86 | 3.94 | 4.93 | 3.01 |

2. Post-retirement mortality (disabled lives): One set of rates is used for both state employees and teachers

- a. Males: 65% of the PBGC Table Va for disabled males eligible for Social Security disability benefits
- b. Females: 100% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

Sample rates are shown below:

| Number of Deaths per 100 | | |
|--------------------------|-------|---------|
| Age | Males | Females |
| 25 | 3.14 | 2.63 |
| 30 | 2.35 | 2.37 |
| 35 | 1.81 | 2.14 |
| 40 | 1.83 | 2.09 |
| 45 | 2.09 | 2.24 |
| 50 | 2.49 | 2.57 |
| 55 | 3.13 | 2.95 |
| 60 | 3.92 | 3.31 |
| 65 | 4.41 | 3.70 |
| 70 | 4.80 | 4.11 |
| 75 | 5.47 | 4.92 |
| 80 | 7.33 | 7.46 |

3. Pre-retirement mortality: 65% of the post-termination mortality rates.
 Sample rates are shown below:

| Number of Deaths per 100 | | | | |
|--------------------------|-----------------|---------|----------|---------|
| Age | State Employees | | Teachers | |
| | Males | Females | Males | Females |
| 25 | 0.05 | 0.02 | 0.05 | 0.02 |
| 30 | 0.05 | 0.02 | 0.06 | 0.02 |
| 35 | 0.06 | 0.03 | 0.06 | 0.03 |
| 40 | 0.08 | 0.05 | 0.07 | 0.05 |
| 45 | 0.11 | 0.06 | 0.11 | 0.06 |
| 50 | 0.19 | 0.09 | 0.18 | 0.09 |
| 55 | 0.32 | 0.15 | 0.31 | 0.23 |
| 60 | 0.58 | 0.29 | 0.29 | 0.29 |
| 65 | 1.06 | 0.56 | 0.37 | 0.27 |
| 70 | 1.69 | 0.89 | 0.97 | 0.55 |

4. Disability rates: Sample rates are shown below. Ordinary disability rates are not applied to members eligible for retirement.

| Age | Number of Disabilities per 1,000 | | | | | | | |
|-----|----------------------------------|------------------------|------------------------|--------------------------|-------------------------|---------------------------|---------------------------|-----------------------------|
| | State Ordinary Males | State Accidental Males | State Ordinary Females | State Accidental Females | Teachers Ordinary Males | Teachers Accidental Males | Teachers Ordinary Females | Teachers Accidental Females |
| 25 | 0.32 | 0.20 | 0.45 | 0.09 | 0.15 | 0.08 | 0.16 | 0.04 |
| 30 | 0.39 | 0.25 | 0.55 | 0.11 | 0.18 | 0.10 | 0.20 | 0.04 |
| 35 | 0.53 | 0.34 | 0.75 | 0.15 | 0.24 | 0.13 | 0.27 | 0.06 |
| 40 | 0.77 | 0.50 | 1.10 | 0.22 | 0.36 | 0.19 | 0.40 | 0.09 |
| 45 | 1.26 | 0.81 | 1.80 | 0.36 | 0.59 | 0.32 | 0.66 | 0.14 |
| 50 | 2.14 | 1.37 | 3.05 | 0.61 | 0.99 | 0.54 | 1.12 | 0.24 |
| 55 | 3.54 | 2.27 | 5.05 | 1.01 | 1.65 | 0.89 | 1.85 | 0.40 |
| 60 | 4.94 | 3.17 | 7.05 | 1.41 | 2.30 | 1.24 | 2.58 | 0.56 |
| 65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

5. Termination rates (for causes other than death, disability, or retirement) are a function of the member's sex and service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

| Service | State Employees | | Teachers | |
|---------|-----------------|---------|----------|---------|
| | Males | Females | Males | Females |
| 0 | 0.2400 | 0.1200 | 0.1700 | 0.1300 |
| 1 | 0.0882 | 0.1000 | 0.0900 | 0.0759 |
| 2 | 0.0761 | 0.0778 | 0.0562 | 0.0656 |
| 3 | 0.0656 | 0.0682 | 0.0455 | 0.0566 |
| 4 | 0.0565 | 0.0599 | 0.0364 | 0.0486 |
| 5 | 0.0487 | 0.0526 | 0.0289 | 0.0418 |
| 6 | 0.0421 | 0.0463 | 0.0229 | 0.0359 |
| 7 | 0.0366 | 0.0409 | 0.0181 | 0.0309 |
| 8 | 0.0321 | 0.0363 | 0.0145 | 0.0267 |
| 9 | 0.0285 | 0.0325 | 0.0120 | 0.0233 |
| 10 | 0.0257 | 0.0293 | 0.0104 | 0.0205 |
| 11 | 0.0235 | 0.0267 | 0.0095 | 0.0183 |
| 12 | 0.0219 | 0.0246 | 0.0094 | 0.0165 |
| 13 | 0.0208 | 0.0228 | 0.0094 | 0.0152 |
| 14 | 0.0199 | 0.0214 | 0.0094 | 0.0142 |
| 15 | 0.0194 | 0.0202 | 0.0094 | 0.0134 |
| 16 | 0.0189 | 0.0191 | 0.0094 | 0.0128 |
| 17 | 0.0185 | 0.0181 | 0.0094 | 0.0122 |
| 18 | 0.0179 | 0.0170 | 0.0094 | 0.0116 |
| 19 | 0.0172 | 0.0158 | 0.0094 | 0.0109 |
| 20 | 0.0162 | 0.0144 | 0.0094 | 0.0101 |
| 21 | 0.0147 | 0.0128 | 0.0094 | 0.0090 |
| 22 | 0.0127 | 0.0107 | 0.0094 | 0.0075 |
| 23 | 0.0101 | 0.0082 | 0.0094 | 0.0056 |
| 24 | 0.0068 | 0.0051 | 0.0094 | 0.0033 |

6. Retirement rates (unreduced):

Separate male and female rates, based on schedule, age and service. For members who reach 28 years of service before age 60, service-based rates are used. For members who reach age 60 before reaching 28 years of service, age-based rates are used instead. Legislators have the same rates as state employees shown below except 100% are assumed to retire at age 62 and completion of 10 years of service if still active. The following tables show the probabilities of retirement.

| State Employees Excluding Corrections – Schedule A Members | | | | | | | |
|--|-----------|-------------|-----------|-----------------|-----------|-------------|-----------|
| Males | | | | Females | | | |
| Service (00/28) | | Age (60/10) | | Service (00/28) | | Age (60/10) | |
| Service | Ret. Rate | Age | Ret. Rate | Service | Ret. Rate | Age | Ret. Rate |
| 28 | 17.5% | 60 | 10.0% | 28 | 20.0% | 60 | 15.0% |
| 29 | 13.0% | 61 | 5.0% | 29 | 15.0% | 61 | 10.0% |
| 30 | 13.0% | 62 | 17.5% | 30 | 15.0% | 62 | 20.0% |
| 31 | 13.0% | 63 | 15.0% | 31 | 15.0% | 63 | 15.0% |
| 32 | 13.0% | 64 | 15.0% | 32 | 15.0% | 64 | 15.0% |
| 33 | 17.5% | 65 | 20.0% | 33 | 15.0% | 65 | 20.0% |
| 34 | 17.5% | 66 | 17.5% | 34 | 15.0% | 66 | 25.0% |
| 35 | 40.0% | 67 | 17.5% | 35 | 40.0% | 67 | 20.0% |
| 36 | 35.0% | 68 | 17.5% | 36 | 30.0% | 68 | 20.0% |
| 37 | 35.0% | 69 | 17.5% | 37 | 30.0% | 69 | 20.0% |
| 38 | 35.0% | 70 | 17.5% | 38 | 30.0% | 70 | 20.0% |
| 39 | 35.0% | 71 | 17.5% | 39 | 30.0% | 71 | 20.0% |
| 40 | 100.0% | 72 | 17.5% | 40 | 100.0% | 72 | 20.0% |
| | | 73 | 17.5% | | | 73 | 20.0% |
| | | 74 | 17.5% | | | 74 | 20.0% |
| | | 75 | 100.0% | | | 75 | 100.0% |

Schedule B members: 60% of members are assumed to retire when first eligible, either at age 59 with 29 years of service, or at age 65 with 10 years of service. The rates in the table above are applied after first eligibility.

6. Retirement rates (continued):

| Teachers – Schedule A Members | | | | | | | |
|-------------------------------|-----------|-------------|-----------|-----------------|-----------|-------------|-----------|
| Males | | | | Females | | | |
| Service (00/28) | | Age (60/10) | | Service (00/28) | | Age (60/10) | |
| Service | Ret. Rate | Age | Ret. Rate | Service | Ret. Rate | Age | Ret. Rate |
| 28 | 25.0% | 60 | 20.0% | 28 | 20.0% | 60 | 20.0% |
| 29 | 15.0% | 61 | 15.0% | 29 | 15.0% | 61 | 15.0% |
| 30 | 20.0% | 62 | 30.0% | 30 | 20.0% | 62 | 25.0% |
| 31 | 20.0% | 63 | 25.0% | 31 | 20.0% | 63 | 20.0% |
| 32 | 30.0% | 64 | 10.0% | 32 | 30.0% | 64 | 20.0% |
| 33 | 30.0% | 65 | 25.0% | 33 | 30.0% | 65 | 35.0% |
| 34 | 40.0% | 66 | 25.0% | 34 | 35.0% | 66 | 25.0% |
| 35 | 55.0% | 67 | 25.0% | 35 | 50.0% | 67 | 25.0% |
| 36 | 40.0% | 68 | 25.0% | 36 | 40.0% | 68 | 25.0% |
| 37 | 40.0% | 69 | 25.0% | 37 | 40.0% | 69 | 25.0% |
| 38 | 40.0% | 70 | 25.0% | 38 | 40.0% | 70 | 25.0% |
| 39 | 40.0% | 71 | 25.0% | 39 | 40.0% | 71 | 25.0% |
| 40 | 100.0% | 72 | 25.0% | 40 | 100.0% | 72 | 25.0% |
| | | 73 | 25.0% | | | 73 | 25.0% |
| | | 74 | 25.0% | | | 74 | 25.0% |
| | | 75 | 100.0% | | | 75 | 100.0% |

Schedule B members: 75% of members who reach age 59 with 29 years of service before age 65 are assumed to retire when first eligible, at age 59 with 29 years of service. 75% of other members are expected to retire when first eligible, at age 65 with 10 years of service. The rates in the table above are applied after first eligibility.

6. Retirement rates (continued):

For correctional officers: A set of unisex rates, indexed by service, as shown below. All members still active are assumed to retire at age 65 with 10 years of service.

| Corrections | |
|-------------|-----------|
| Service | Ret. Rate |
| 20 | 5.0% |
| 21 | 5.0% |
| 22 | 5.0% |
| 23 | 5.0% |
| 24 | 5.0% |
| 25 | 5.0% |
| 26 | 5.0% |
| 27 | 5.0% |
| 28 | 5.0% |
| 29 | 5.0% |
| 30 | 13.0% |
| 31 | 13.0% |
| 32 | 13.0% |
| 33 | 20.0% |
| 34 | 20.0% |
| 35 | 35.0% |
| 36 | 25.0% |
| 37 | 25.0% |
| 38 | 25.0% |
| 39 | 25.0% |
| 40 | 100.0% |

7. Reduced retirement for Schedule B members (state employees and teachers, males and females). Rates based on age as shown below:

| Age | Ret. Rate |
|-----|-----------|
| 55 | 0% |
| 56 | 0% |
| 57 | 0% |
| 58 | 0% |
| 59 | 1% |
| 60 | 2% |
| 61 | 2% |
| 62 | 2% |
| 63 | 3% |
| 64 | 4% |

C. Other Assumptions

1. Percent married: 85% of employees are assumed to be married.
2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.
3. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.
4. Percent electing deferred termination benefit: Vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
5. Recovery from disability: None assumed.
6. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.
7. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at the first age at which unreduced benefits are available.

8. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
9. Inactive members: Liabilities for inactive members are approximated as a multiple of their member contribution account balances. For nonvested inactive members, the multiple is 1.0. For vested inactive members, the multiple is 8.0 for members with 25 or more years of service, 3.0 for vested inactive members age 45 or older with less than 25 years of service, and 1.0 for other vested inactive members younger than age 45.
10. Decrement timing: For all state employees, decrements are assumed to occur at the middle of the year. For teachers the retirement and termination decrements are assumed to occur at the beginning of the year, while death and disability are assumed to occur at the middle of the year.

D. Participant Data

Participant data was supplied on electronic files. There are separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active members included birthdate, sex, service, salary and employee contribution account balance. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Salary supplied for the current year was based on the earnings for the fiscal year preceding the valuation date. However, for members with less than one year of service, the current rate of salary was used. This salary was adjusted by the salary increase rate for one year.

Assumptions were made to correct for missing, bad, or inconsistent data. These had no material impact on the results presented.

Summary of Benefit Provisions

1. Effective Date and Authority: The Employees' Retirement System of Rhode Island (ERSRI) became effective on July 1, 1936 for state employees and on July 1, 1949 for teachers. Benefits for state employees are described in Rhode Island General Laws, Title 36, Chapter 36-10, and benefits for teachers are described in Rhode Island General Laws, Title 16, Chapter 16-16.
2. Plan Year: A twelve-month period ending June 30th.
3. Administration: ERSRI is administered by the State of Rhode Island Retirement Board. However, the State Treasurer is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
4. Type of Plan: ERSRI is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for state employees and for teachers. For Governmental Accounting Standards Board purposes, it is a cost-sharing multiple employer plan.
5. Eligibility: Most Rhode Island state employees and certified public school teachers participate in ERSRI. Certain employees of the Airport Corporation, the Economic Development Corporation, and the Narragansett Bay Commission participate in the plan as though they were state employees. State police officers, state judges, and teachers and administrators in the public colleges and universities are covered by their own separate systems, and are therefore excluded. Certain elected state officials are excluded unless they make an election to join ERSRI. Superintendents, principals, business agents and other administrators participate as teachers. Non-certified public school employees, such as teacher's aides, janitors, secretaries, and bus drivers, cannot participate in ERSRI, although they may be covered by the Municipal Employees Retirement System (MERS) or a separate plan maintained by the town or city. Eligible employees become members at their date of employment.

6. Employee Contributions: State employees generally contribute 8.75% of their salary per year, although members of the General Assembly who elect to participate contribute 30.00% of salary per year. Teachers contribute 9.50% per year. The state “picks up” the members’ contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h). At their option, the city or town employing a teacher may also pick up their members’ contributions.
7. Salary: Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.
8. Employer Contributions: For state employees, the state contributes an actuarially determined percentage of the member's salary. For teachers, the state contributes 40% of the employer contribution rate and the city, town or other local employer contributes the remaining 60%. (This basic 40-60 split is further adjusted, since the state bears the cost of repaying certain amounts taken from the trust in the early 1990's.) Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.

In fiscal years beginning after June 30, 2005, if the State’s contribution on behalf of state employees decreases, the State shall appropriate an additional amount to the retirement trust. Such amount shall be equal to 20% of any decrease in expected contributions.
9. Service: Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods, such as time spent teaching at a public school in another state, by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.
10. Final Average Compensation (FAC): The average of the member's highest three consecutive annual salaries. Monthly benefits are based on one-twelfth of this amount.

11. Retirement

a. Eligibility:

- All members with 10 or more years of contributory service as of June 30, 2005 are eligible for retirement on or after age 60 if they have credit for 10 years of service, or at any age if they have credit for 28 years of service.
- Members with less than 10 years of contributory service as of June 30, 2005 are eligible for retirement on or after age 65 if they have credit for 10 years of service, or on or after age 59 if they have credit for 29 years of service. In addition, a member who attains age 55 with at least 20 years of service credit may retire with an actuarially reduced retirement benefit. The reduction is based on the difference between 65 and the member's age at retirement.
- Correctional officers are also eligible for retirement if they have reached age 50 and have credit for 20 years of service. Certain nurses (RNs employed by MHRH) are eligible to retire at age 50 with 25 years of service. Members of the General Assembly who elect to participate are eligible for retirement if they have reached age 55 and have credit for 8 years of service, or at any age if they have credit for 20 years of service.

b. Monthly Benefit: For most state employees and for all teachers, the retirement benefit is a percentage of the member's monthly FAC. This percentage is a function of the member's service, determined using the following schedules:

- For members with at least 10 years of contributory service as of June 30, 2005:

| For Service In: | Years | Benefit Percentage Earned |
|-------------------------------|---------|---------------------------|
| The first 10 years of service | 1 – 10 | 1.7% per year |
| The next 10 years of service | 11 – 20 | 1.9% per year |
| The next 14 years of service | 21 – 34 | 3.0% per year |
| The next 1 year of service | 35 | 2.0% per year |

The maximum benefit is 80% of FAC.

- For members with less than 10 years of contributory service as of June 30, 2005:

| For Service In: | Years | Benefit Percentage Earned |
|-------------------------------|---------|---------------------------|
| The first 10 years of service | 1 – 10 | 1.6% per year |
| The next 10 years of service | 11 – 20 | 1.8% per year |
| The next 5 years of service | 21 – 25 | 2.0% per year |
| The next 5 years of service | 26 – 30 | 2.25% per year |
| The next 14 years of service | 31 – 37 | 2.50% per year |
| The next 1 year of service | 38 | 2.25% per year |

The maximum benefit is 75% of FAC.

- MHRH nurses receive a benefit determined under the appropriate formula above.
- Correctional Officers receive a benefit computed under a different formula:

| For Service In: | Years | Benefit Percentage Earned |
|-------------------------------|--------|---------------------------|
| The first 30 years of service | 1 – 30 | 2.0% per year |
| The next 1 year of service | 31 | 6.0% per year |
| The next 1 year of service | 32 | 5.0% per year |
| The next 1 year of service | 33 | 4.0% per year |
| The next 1 year of service | 34 | 3.0% per year |
| The next 14 years of service | 35 | 2.0% per year |

The maximum benefit for correctional officers is 80% of FAC.

- Members of the General Assembly who elect to participate receive \$50 per month for each year of service, up to a maximum benefit of \$1,000 per month, i.e., a maximum of 20 years of service.
- c. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see Item 16 below.

- d. **Death benefit:** After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than \$4,000.

12. Disability Retirement

- a. **Eligibility:** A member is eligible provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.
- b. **Ordinary Disability Benefit:** The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.
- c. **Occupational Disability Benefit:** An annual annuity equal to two-thirds of salary at the time of disability.
- d. **Payment Form:** The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

- a. **Eligibility:** A member with at least ten years of service (eight years for members of the general Assembly) is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.

- b. **Monthly Benefit:** The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence when the member has met the requirements for a retirement benefit.
- c. **Payment Form:** The same as for Retirement above.
- d. **Death Benefit before retirement:** A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in item 15.
- e. **Death Benefit after Retirement:** The same as for Retirement above.

14. Withdrawal (Refund) Benefit

- a. **Eligibility:** All members leaving covered employment with less than ten years of service are eligible. Optionally, vested members (those with ten or more years of service) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.
- b. **Benefit:** The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

- a. **Eligibility:** Death must have occurred while an active or an inactive, non-retired member.
- b. **Basic Benefit:** Upon the death of a nonvested member, or upon the death of an inactive, vested member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 6% per year from the date at which the member would have been eligible had he or she remained in service.

- c. Lump-sum Benefit: \$800 per year of service, with a maximum benefit of \$16,000 and a minimum of \$4,000. This benefit is only available to active members.
 - d. Accidental Duty-related Death Benefit: If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member's spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to 50% of the member's salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.
16. Optional Forms of Payment: In addition to a life annuity, ERSRI offers members these optional forms of payment on an actuarially equivalent basis:
- a. Option 1 (Joint and 100% Survivor) - A life annuity payable while either the participant or his beneficiary is alive.
 - b. Option 2 (Joint and 50% Survivor) - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.
 - c. Social Security Option – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member's death. This option is only available for members with at least 10 years of contributory service as of June 30, 2005.

Actuarial equivalence is based on tables adopted by the Employees' Retirement Board.

17. Post-retirement Benefit Increase:

- a. For members with at least 10 years of contributory service as of June 30, 2005, and for all members receiving a disability retirement benefit: Members receive a 3.00% compound increase in their retirement benefit each year, beginning in January of the year in which the member reaches the third anniversary of retirement. This increase is not a function of actual increases in the cost of living.

- b. For members with less than 10 years of contributory service as of June 30, 2005 (other than disability retirements): Members receive a compound increase in their retirement benefit each year equal to the increase in the CPI, effective on each anniversary date beginning on the third anniversary of retirement. This increase is limited to 3.00%.