



State of Alaska Teachers' Retirement System

Actuarial Valuation Report as of June 30, 2006



Submitted By:
Buck Consultants
1200 Seventeenth Street, Suite 1200
Denver, CO 80202

October 10, 2007

State of Alaska
Alaska Retirement Management Board
Department of Administration
Division of Retirement and Benefits
P.O. Box 110203
Juneau, AK 99811-0203

Dear Members of the Board:

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Teachers' Retirement System has been prepared as of June 30, 2006 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the Plan as of June 30, 2006;
- (2) a review of experience under the Plan for the year ended June 30, 2006;
- (3) a determination of the appropriate contribution rate for all employers in the System which will be applied for the fiscal year ending June 30, 2009; and
- (4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The following schedules that we have prepared are included in this report:

- (1) Summary of actuarial assumptions and methods (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(c))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(i))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided in the financial statements audited by KPMG LLP, to determine a sound value for the System liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. The actuarial assumptions are based on the results of an experience study presented to and adopted by the Board in October 2006. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed and revised during the experience study.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY07 and a fixed 25-year amortization as a level percentage of payroll of the initial unfunded accrued liability and subsequent gains/losses. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of valuation assets to liabilities decreased from 60.9% to 57.3% during the year. This report provides an analysis of the factors that led to the decrease. This report also provides a history of the funding ratio of the System.

A summary of the actuarial assumptions and methods is presented in Section 2.3 of this report. The assumptions, when applied in combination, fairly represent past and anticipated future experience of the System.

Future contribution requirements may differ from those determined in the valuation because of:

- (1) differences between actual experience and anticipated experience based on the assumptions;
- (2) changes in actuarial assumptions or methods;
- (3) changes in statutory provisions; or
- (4) differences between the contribution rates determined by the valuation and those adopted by the Board.

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries, are fully qualified to provide actuarial services to the State of Alaska, and are available to answer questions regarding this report.

We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement Nos. 25 and 43.

Alaska Retirement Management Board
October 10, 2007
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We believe that this report conforms with the requirements of the Alaska statutes, and where applicable, other federal and accounting laws, regulations and rules, as well as generally accepted actuarial principles and practices.

Sincerely,

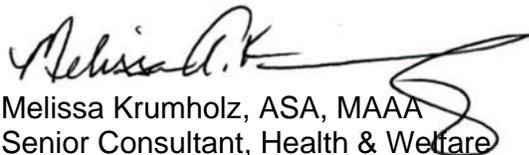


David H. Slisinsky, ASA, EA, MAAA
Principal, Consulting Actuary



Michelle Reding DeLange, FSA, EA, MAAA
Director, Consulting Actuary

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.



Melissa Krumholz, ASA, MAAA
Senior Consultant, Health & Welfare

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Report Highlights

This report has been prepared by Buck Consultants for the State of Alaska Teachers' Retirement System to:

- (1) Present the results of a valuation of the Alaska Teachers' Retirement System as of June 30, 2006;
- (2) Review experience under the plan for the year ended June 30, 2006;
- (3) Determine the appropriate contribution rate for each employer in the System; and
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2006 Fiscal Year, the current annual costs, and reporting and disclosure information.

Section 2 describes the basis of the valuation. It summarizes the plan provisions, provides information relating to the plan participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

Section 3 contains additional exhibits showing historical information on system experience and unfunded liabilities.

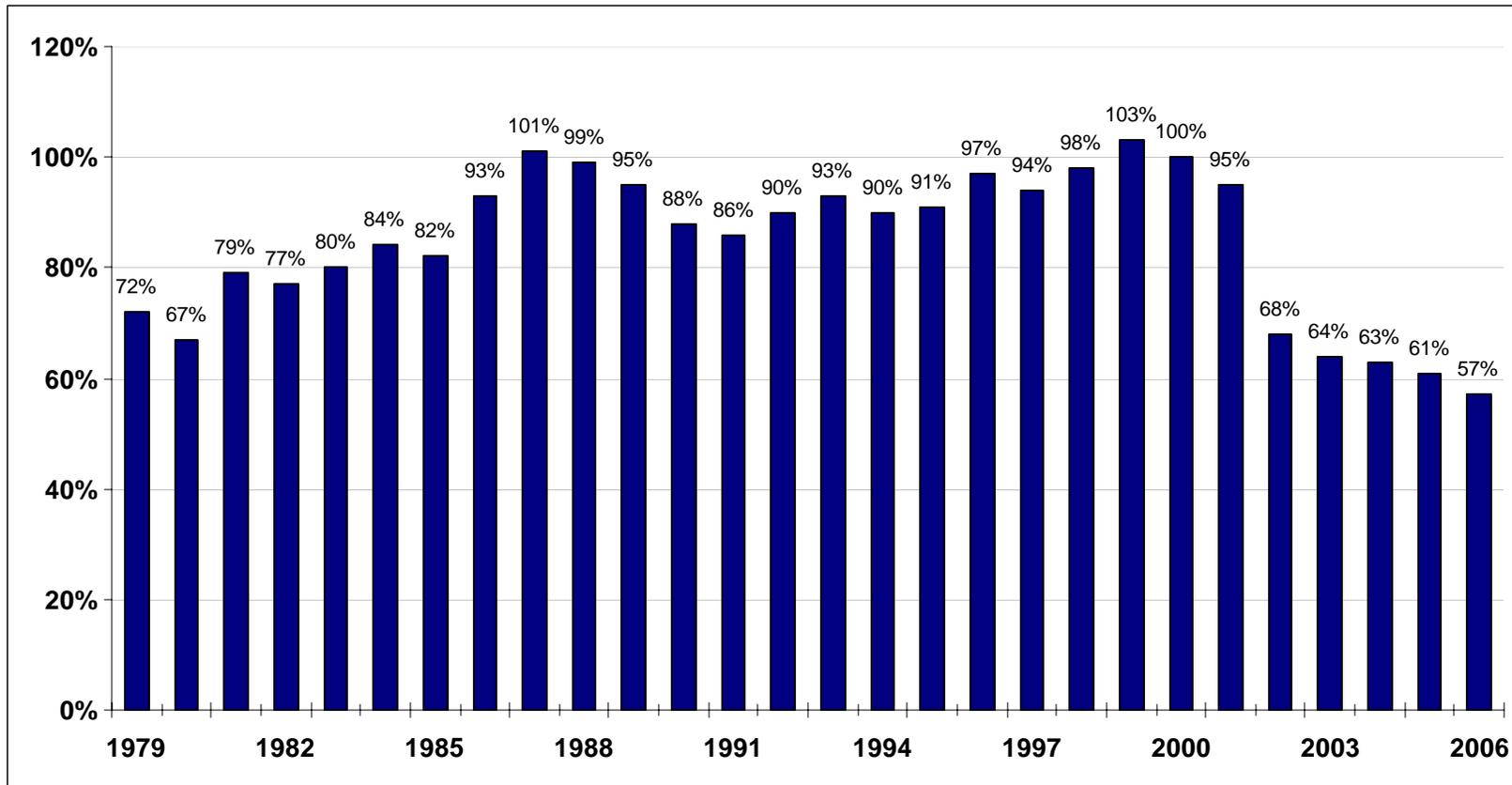
The principal results are as follows:

| Funding Status as of June 30 | 2005 | 2006 |
|---|--------------|--------------|
| (a) Valuation Assets ¹ | \$ 3,958,939 | \$ 4,141,700 |
| (b) Accrued Liability ¹ | \$ 6,498,556 | \$ 7,229,851 |
| (c) Unfunded Accrued Liability ¹ | \$ 2,539,617 | \$ 3,088,151 |
| (d) Funding Ratio based on Valuation Assets, $(a) \div (b)$ | 60.9% | 57.3% |
| (e) Market Value of Assets ¹ | \$ 4,026,995 | \$ 4,299,971 |
| (f) Funding Ratio based on Market Assets, $(e) \div (b)$ | 62.0% | 59.5% |

¹ In thousands.

Report Highlights (continued)

TRS Funding Ratio History
(Based on Valuation Assets)



Report Highlights *(continued)*

| Total Employer Contribution Rates for Fiscal Year: | 2008 | 2009 |
|---|-------------|-------------|
| (a) Employer Normal Cost Rate | 12.56% | 9.37% |
| (b) Past Service Rate | 29.70% | 34.80% |
| (c) Total Employer Contribution Rate <i>(a) + (b)</i> | 42.26% | 44.17% |
| (d) Board Recommended Employer Contribution Rate | 54.03% | 44.17% |

| Employer Contribution Rates for Pension for Fiscal Year: | 2008 | 2009 |
|---|-------------|-------------|
| (a) Employer Normal Cost Rate | 3.96% | 2.96% |
| (b) Past Service Rate | 13.44% | 17.61% |
| (c) Total Employer Contribution Rate <i>(a) + (b)</i> | 17.40% | 20.57% |
| (d) Board Recommended Employer Contribution Rate | 22.73% | 20.57% |

| Employer Contribution Rates for Postemployment Healthcare for Fiscal Year: | 2008 | 2009 |
|---|-------------|-------------|
| (a) Normal Cost Rate | 8.60% | 6.41% |
| (b) Past Service Rate | 16.26% | 17.19% |
| (c) Total Employer Contribution Rate <i>(a) + (b)</i> | 24.86% | 23.60% |
| (d) Board Recommended Employer Contribution Rate | 31.30% | 23.60% |

The rates shown above are for funding purposes which differ from the Annual Required Contribution for GASB No. 43 reporting purposes. Under GASB No. 43, postemployment healthcare liabilities are gross of the retiree drug subsidy and are calculated with a discount rate for a partially funded plan.

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio based on valuation assets as of June 30, 2006 has decreased from 60.9% to 57.3%, a decrease of 3.6%. The total calculated employer contribution rate has increased from 42.26% of payroll for FY08 to 44.17% for FY09, an increase of 1.91%. The reasons for the change in the funded status and calculated contribution rate are explained below.

(1) Retiree Medical Costs and Assumptions

The following table summarizes the monthly premium per benefit recipient since 1977.

| Time Period | Monthly Premium Per Retiree For Health Coverage | Annual Percentage Change | Average Compound Annual Increase Since FY78 |
|-----------------|---|--------------------------|---|
| 2/1/77-1/31/78 | \$ 57.64 | 66% | -- |
| 2/1/78-1/31/79 | 69.10 | 20% | 20% |
| 2/1/79-1/31/80 | 64.70 | -6% | 6% |
| 2/1/80-1/31/81 | 96.34 | 49% | 19% |
| 2/1/81-1/31/82 | 96.34 | 0% | 14% |
| 2/1/82-1/31/83 | 115.61 | 20% | 15% |
| 2/1/83-1/31/84 | 156.07 | 35% | 18% |
| 2/1/84-1/31/85 | 191.85 | 23% | 19% |
| 2/1/85-1/31/86 | 168.25 | -12% | 14% |
| 2/1/86-1/31/87 | 165.00 | -2% | 12% |
| 2/1/87-1/31/88 | 140.25 | -15% | 9% |
| 2/1/88-1/31/89 | 211.22 | 51% | 13% |
| 2/1/89-1/31/90 | 252.83 | 20% | 13% |
| 2/1/90-1/31/91 | 243.98 | -4% | 12% |
| 2/1/91-1/31/92 | 243.98 | 0% | 11% |
| 2/1/92-1/31/93 | 226.90 | -7% | 10% |
| 2/1/93-1/31/94 | 309.72 | 37% | 11% |
| 2/1/94-1/31/95 | 336.05 | 9% | 11% |
| 2/1/95-1/31/96 | 350.50 | 4% | 11% |
| 2/1/96-1/31/97 | 350.50 | 0% | 10% |
| 2/1/97-1/31/98 | 368.00 | 5% | 10% |
| 2/1/98-12/31/98 | 368.00 | 0% | 9% |
| 1/1/99-12/31/99 | 442.00 | 20% | 10% |
| 1/1/00-12/31/00 | 530.00 | 20% | 10% |
| 1/1/01-12/31/01 | 610.00 | 15% | 10% |
| 1/1/02-12/31/02 | 668.00 | 10% | 10% |
| 1/1/03-12/31/03 | 720.00 | 8% | 10% |
| 1/1/04-12/31/04 | 806.00 | 12% | 10% |
| 1/1/05-12/31/05 | 850.00 | 5% | 10% |
| 1/1/06-12/31/06 | 876.00 | 3% | 10% |
| 1/1/07-12/31/07 | 876.00 | 0% | 10% |

As you can see from the above table, the monthly retiree medical premium for the January 1, 2007 to December 31, 2007 time period remained at \$876. Although this represents no change from the previous year's medical premium, our expectation is that medical costs will increase at higher rates in the future. The health cost trend used for this valuation is described in Section 2.3. Over the last 10 years, annual premium rate changes have ranged from no change to up 20%. Also, over the last ten years, the increase in the premium rate has been about 9.1% compounded annually.

Analysis of the Valuation *(continued)*

To help avoid the volatility in the funding and solvency of the System from bringing large health-related gains and losses into the System every year, the health cost trend assumption was being used to determine actuarial liabilities for retiree medical benefits. On June 30, 2002, the assumed total blended premium was reset to the actual total blended premium for FY03.

Effective with the 2004 valuation, the assumptions used to value liabilities for retiree medical benefits were changed. The revised methods and assumptions more accurately measured retiree medical liabilities and incorporated the expected impact on System liabilities of changes in the Medicare program. In particular, changes were made to the following elements in calculating medical liabilities:

- Claims cost methodology and development
- Offset for Medicare
- Aging factors
- Trend rates

An analysis of medical costs was completed based on claims information provided by Aetna and enrollment data provided by the Division of Retirement and Benefits. Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed to project expected future medical and prescription costs. An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Average medical claims were then distributed across the population based on expected increases in medical expenses that occur with age.

For the 2006 valuation, we updated claim cost and Medicare offset analyses using additional claims and enrollment information, and the same methodology as used for the 2005 Experience Analysis. This methodology differs from that used for the 2005 valuation to better reflect Medicare offsets based on eligibility for Medicare Parts A and B. We developed assumptions regarding the number of members with Medicare Part A coverage and associated claims costs. A lower average claims cost was applied to retirees assumed to be covered by both Medicare Part A and B vs. retirees assumed to be covered only by Medicare Part B. The assumed lag used to adjust claims data from a paid to incurred basis was changed from 3 months to 2 months, per our June 30, 2006 lag study for retiree healthcare. The trend assumption varies by year, declining to an ultimate rate equal to inflation (3.5%) plus 1.5%, or 5%, for FY15 and later. We recommend no changes to the healthcare trend assumption set used for 2005. Retired member contribution rate trend assumptions have been updated for the 2006 valuation to better reflect recent and anticipated Board action regarding retiree contribution rates.

Analysis of the Valuation *(continued)*

Since 2004, the funding valuation also reflects the impact of the Medicare Part D subsidy in the projection of the prescription drug benefits. Based on our understanding and interpretation of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA), the prescription drug benefits meet the actuarial equivalence requirements and the plan will qualify to receive the federal Part D subsidy. As noted above, Part D subsidies are not reflected for accounting purposes under GASB No. 43.

These opinions do not constitute full actuarial attestations. A full actuarial attestation of the plan's actuarial equivalence status based on final regulations and guidance will need to be included with a subsidy application to the Centers for Medicare and Medicaid Services, which must be submitted no later than 90 days prior to the start of each plan year to be eligible to receive a subsidy for that plan year.

There were no changes to the methods and assumptions for healthcare since the 2005 Experience Analysis, except for updating the trend rate table for the retiree medical contributions and changing the assumed lag between medical claims incurred and paid dates from 3 months to 2 months.

(2) Investment Experience

The approximate FY06 investment return based on market values was 11.4% compared to the expected investment return of 8.25%. This resulted in a gain of approximately \$124.6 million to the System from investment experience. The asset valuation method recognizes 20 percent of this gain (\$24.9 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY03 investment loss, 20 percent of the FY04 investment gain and 20 percent of the FY05 investment gain were recognized this year. The net result was an investment gain which increased the funding ratio by 0.40% and decreased the contribution rate by 0.36%.

(3) Salary Increase

During the period from June 30, 2005, to June 30, 2006, salary increases for continuing active members were more than anticipated in the valuation assumptions. Higher accrued liabilities caused the funding ratio to decrease by 0.30%. The net effect of higher normal cost was an increase of 0.79% in employer contribution rates.

(4) Demographic Experience

Section 2.2 provides statistics on active and inactive participants. The number of active participants increased 0.56% from 9,656 at June 30, 2005 to 9,710 at June 30, 2006. The average age of active participants increased from 44.76 to 45.02 and average credited service increased from 10.58 to 10.87 years.

The number of retirees and beneficiaries increased 4.06% from 9,020 to 9,386, and their average age increased from 64.42 to 64.83. There was a 3.8% decrease in the number of vested terminated participants from 826 to 795. Their average age decreased from 49.13 to 48.80.

The overall effect of these participant data changes along with the healthcare experience was an actuarial gain to the System, resulting in a decrease in the employer contribution rate of 2.79% of total payroll. The gain/loss by decrement on the accrued liability is shown on the summary page.

Analysis of the Valuation *(continued)*

(5) Contribution Shortfall Compared to Actuarially Calculated Rate

As of June 30, 2005, the actuarially calculated rate was 42.26% for FY08 employer contributions. Since employer contribution rates are determined two years prior to the fiscal year, the June 30, 2003 adopted employer rate of 21.00% was contributed during FY06. The difference between the two rates, 21.00% and 42.26%, created a contribution shortfall to the System. This shortfall increased the contribution rate by 1.21%.

(6) Actuarial Projections

At the Fall 1991 Board Meetings, the TRS Board approved the use of an enhanced actuarial projection system in the valuation report. The same actuarial cost method is used, but the enhanced system projects the associated liabilities 30 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 30 years. Section 1.5, Actuarial Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as TRS. No new plan entrants are anticipated. As you can see in Section 1.5, based on the actuarial assumptions and asset valuation method, contributions are expected to increase steadily until the June 30, 2002 amortization base is paid off.

(7) Changes in Methods from the Prior Valuation

The actuarial cost method was changed from Projected Unit Credit to Entry Age Normal effective with the June 30, 2006 valuation.

(8) Changes in Assumptions from the Prior Valuation

Effective for the June 30, 2006 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary based on the results of an experience analysis performed on the population experience from June 30, 2001 through June 30, 2005. The changes in assumptions were adopted by the Board during the October 2006 Board meeting. Additionally, the trend rate table for the retiree medical contributions was updated and the assumed lag between the medical claims incurred and paid dates was changed from 3 months to 2 months.

Analysis of the Valuation *(continued)*

Summary

The following table summarizes the sources of change in the total employer contribution rate:

| | <u>Pension</u> | <u>Healthcare</u> | <u>Total</u> |
|---|----------------|-------------------|--------------|
| 1. Last year's total employer contribution rate | 17.40% | 24.86% | 42.26% |
| 2. Change due to: | | | |
| a. New assumptions and methods | 2.96% | 0.10% | 3.06% |
| b. Contribution shortfall compared to actuarially calculated rate | (0.41)% | 1.62% | 1.21% |
| c. Investment experience | 0.10% | (0.46)% | (0.36)% |
| d. Salary increases | 0.79% | 0.00% | 0.79% |
| e. Demographic and medical experience | (0.27)% | (2.52)% | (2.79)% |
| 3. Total employer contribution rate this year | 20.57% | 23.60% | 44.17% |

The following table shows the gain/(loss) on total accrued liability (in thousands):

| | <u>Amount</u> |
|--------------------------------|----------------|
| - Retirement Experience | \$ 4,518 |
| - Termination Experience | (3,174) |
| - Mortality Experience | (4,255) |
| - Disability Experience | (909) |
| - Other Demographic Experience | 15,459 |
| - Salary Increases | (23,702) |
| - Medical Experience | <u>130,737</u> |
| - Total | \$ 118,674 |

Section 1

This section sets forth the results of the actuarial valuation.

- Section 1.1(a) Statement of net assets.
- Section 1.1(b) Statement of changes in net assets during FY06 and the investment return for FY06.
- Section 1.1(c) Actuarial value of assets.
- Section 1.2 Actuarial present values.
- Section 1.3 Total employer contribution rate for FY09.
- Section 1.4 Development of actuarial gain or loss for FY06.
- Section 1.5(a) Actuarial Projections – Projections at Calculated Rate.
Based on Total DB and DC Payroll.
- Section 1.5(b) Actuarial Projections – Projections at Current Rate.
Based on Total DB and DC Payroll.
- Section 1.5(c) Actuarial Projections – Effect of Economic Scenarios.
Based on Total DB and DC Payroll.

1.1(a) Statement of Net Assets

| As of June 30, 2006 (in thousands) | Pension | Postemployment Healthcare | Total Market Value |
|---|----------------|--------------------------------------|-------------------------------|
| Cash and Cash Equivalents | \$ 371 | \$ 146 | \$ 517 |
| Domestic Equity Pool | 1,510,424 | 126,536 | 1,636,960 |
| Domestic Fixed Income Pool | 670,088 | 262,959 | 933,047 |
| International Equity Pool | 458,689 | 180,001 | 638,690 |
| Real Estate Pool | 309,002 | 121,260 | 430,262 |
| International Fixed Income Pool | 64,427 | 25,283 | 89,710 |
| Private Equity Pool | 185,654 | 72,855 | 258,509 |
| Emerging Markets Equity Pool | 69,738 | 27,367 | 97,105 |
| Other Investments Pool | 23,327 | 9,154 | 32,481 |
| High Yield Pool | 48,042 | 18,853 | 66,895 |
| Absolute Return Pool | 78,526 | 30,815 | 109,341 |
| Loans and Mortgages (Net of Reserves) | 24 | 9 | 33 |
| Net Accrued Receivables | <u>4,611</u> | <u>1,810</u> | <u>6,421</u> |
| Net Assets | \$ 3,422,923 | \$ 877,048 | \$ 4,299,971 |

1.1(b) Statement of Changes in Net Assets

| Fiscal Year 2006 (in thousands) | Pension | Postemployment Healthcare | Total Market Value |
|--|----------------|--------------------------------------|-------------------------------|
| (1) Net Assets, June 30, 2005 (market value) | \$ 3,239,727 | \$ 787,268 | \$ 4,026,995 |
| (2) Additions: | | | |
| (a) Plan Member Contributions | 41,512 | 16,290 | 57,802 |
| (b) Employer Contributions | 91,902 | 36,065 | 127,967 |
| (c) Interest and Dividend Income | 96,585 | 37,903 | 134,488 |
| (d) Net Appreciation in Fair Value of Investments | 235,464 | 92,402 | 327,866 |
| (e) Other ¹ | <u>10,909</u> | <u>4,281</u> | <u>15,190</u> |
| (f) Total Additions | \$ 476,372 | \$ 186,941 | \$ 663,313 |
| (3) Deductions: | | | |
| (a) Medical Benefits | 0 | 92,462 | 92,462 |
| (b) Retirement Benefits | 281,205 | 0 | 281,205 |
| (c) Refunds of Contributions | 2,752 | 1,080 | 3,832 |
| (d) Investment Expenses | 7,659 | 3,006 | 10,665 |
| (e) Administrative Expenses | <u>1,560</u> | <u>613</u> | <u>2,173</u> |
| (f) Total Deductions | \$ 293,176 | \$ 97,161 | \$ 390,337 |
| (4) Net Assets, June 30, 2006 (market value) | \$ 3,422,923 | \$ 877,048 | \$ 4,299,971 |

Approximate Market Value Investment Return Rate During
FY06 Net of All Expenses

11.4%

¹ Includes the transfer of \$15,175 in from Retiree Health Fund.

1.1(c) Actuarial Value of Assets

The actuarial value of assets was set equal to the market value at June 30, 2002. Future investment gains and losses will be recognized 20% per year over 5 years. In no event may valuation assets be less than 80% or more than 120% of market value as of the current valuation date.

| | In Thousands |
|---|---------------------|
| (1) Deferral of Investment Return for FY06 | |
| (a) Market Value, June 30, 2005 | \$ 4,026,995 |
| (b) Contributions for FY06 | 185,769 |
| - <i>Weighted for timing</i> | 92,885 |
| (c) Benefit Payments for FY06 ¹ | 362,324 |
| - <i>Weighted for timing</i> | 181,162 |
| (d) Investment Return (<i>net of expenses</i>) | 449,531 |
| (e) Expected Return Rate (<i>net of expenses</i>) | 8.25% |
| (f) Expected Return - Weighted for Timing, $[(a. + b. - c.) \times e.]$ | 324,944 |
| (g) Investment Gain/(Loss) for the Year (<i>d. - f.</i>) | 124,587 |
| (h) Deferred Investment Return ² | 158,271 |
| (2) Actuarial Value, June 30, 2006 | |
| (a) Market Value, June 30, 2006 | \$ 4,299,971 |
| (b) 2006 Deferred Investment Return | 158,271 |
| (c) Preliminary Actuarial Value, June 30, 2006 (<i>a. - b.</i>) | 4,141,700 |
| (d) Upper Limit: 120% of Market Value, June 30, 2006 | 5,159,965 |
| (e) Lower Limit: 80% of Market Value, June 30, 2006 | 3,439,977 |
| (f) Actuarial Value, June 30, 2006 (<i>c. limited by d. and e.</i>) | \$ 4,141,700 |
| (g) Ratio of Actuarial Value of Assets to Market Value of Assets | 96.32% |
| (h) Pension Actuarial Value of Assets | 3,296,934 |
| (i) Healthcare Actuarial Value of Assets | 844,766 |

¹ Net of transfer in from Retiree Health Fund.

² The table below shows the development of gain/(loss) to be recognized in the current year.

| Plan Year Ended | Asset Gain/(Loss) | Gain/(Loss) Recognized in Prior Years | Gain/(Loss) Recognized This Year | Gain/(Loss) Deferred to Future Years |
|-----------------|-------------------|---------------------------------------|----------------------------------|--------------------------------------|
| 6/30/2003 | \$ (187,083) | \$ (112,251) | \$ (37,417) | \$ (37,415) |
| 6/30/2004 | \$ 222,993 | \$ 89,198 | \$ 44,599 | \$ 89,196 |
| 6/30/2005 | \$ 11,366 | \$ 2,273 | \$ 2,273 | \$ 6,820 |
| 6/30/2006 | \$ 124,587 | \$ 0 | \$ 24,917 | \$ 99,670 |
| Total | \$ 171,863 | \$ (20,780) | \$ 34,372 | \$ 158,271 |

1.2 Actuarial Present Values

| As of June 30, 2006 (in thousands) | Normal Cost | Accrued Liabilities |
|---|--|------------------------|
| Active Members | | |
| Retirement Benefits | \$ 50,009 | \$ 1,473,058 |
| Termination Benefits | 6,719 | 21,402 |
| Disability Benefits | 1,386 | 17,129 |
| Death Benefits | 313 | 7,682 |
| Return of Contributions | 11,706 | (46,267) |
| Medical and Prescription Drug Benefits | 42,049 | 950,465 |
| Medicare Part D Subsidy | (3,409) | (73,169) |
| Indebtedness | N/A | (46,371) |
| Subtotal | \$ 108,773 | \$ 2,303,929 |
| Inactive Members | | |
| Not Vested | | \$ 37,195 |
| Vested Terminations | - Retirement Benefits | 72,868 |
| | - Medical and Prescription Drug Benefits | 157,074 |
| | - Medicare Part D Subsidy | (9,666) |
| | - Indebtedness | (5,005) |
| Retirees & Beneficiaries | - Retirement Benefits | 3,327,645 |
| | - Medical and Prescription Drug Benefits | 1,482,814 |
| | - Medicare Part D Subsidy | (137,003) |
| Subtotal | | \$ 4,925,922 |
| Total | \$ 108,773 | \$ 7,229,851 |
| Total Pension | \$ 70,133 | \$ 4,859,336 |
| Total Medical, Net of Part D Subsidy | \$ 38,640 | \$ 2,370,515 |

1.2 Actuarial Present Values (continued)

| As of June 30, 2006 (in thousands) | Normal Cost | Accrued Liabilities |
|------------------------------------|-------------------|------------------------|
| By Tier | | |
| Tier 1 | | |
| - Pension | \$ 23,503 | \$ 4,240,289 |
| - Medical, Net of Part D Subsidy | 8,723 | 1,845,735 |
| Tier 2 | | |
| - Pension | 46,630 | 619,047 |
| - Medical, Net of Part D Subsidy | 29,917 | 524,780 |
| Total | \$ 108,773 | \$ 7,229,851 |

1.3 Development of Total Employer Contribution Rate – FY09 (in thousands)

| Normal Cost Rate | Pension | Healthcare | Total |
|--|---------------|---------------|---------------|
| (1) Total Normal Cost | \$ 70,133 | \$ 38,640 | \$ 108,773 |
| (2) Total Salaries | 603,035 | 603,035 | 603,035 |
| (3) Normal Cost Rate, (1) ÷ (2) | 11.63% | 6.41% | 18.04% |
| (4) Average Member Contribution Rate | 8.67% | 0.00% | 8.67% |
| (5) Employer Normal Cost Rate, (3) – (4) | 2.96% | 6.41% | 9.37% |
| Past Service Rate | | | |
| (1) Accrued Liability | \$ 4,859,336 | \$ 2,370,515 | \$ 7,229,851 |
| (2) Valuation Assets | 3,296,934 | 844,766 | 4,141,700 |
| (3) Total Unfunded Liability, (1) – (2) | 1,562,402 | 1,525,749 | 3,088,151 |
| (4) Past Service Cost Amortization Payment* | 106,163 | 103,673 | 209,836 |
| (5) Total Salaries | 603,035 | 603,035 | 603,035 |
| (6) Past Service Rate, (4) ÷ (5) | 17.61% | 17.19% | 34.80% |
| Total Employer Contribution Rate | 20.57% | 23.60% | 44.17% |
| Normal Cost Rate by Tier | | | |
| Tier 1 | 11.95% | 4.43% | 16.38% |
| Tier 2 | 11.48% | 7.36% | 18.84% |

*Amortized on a level percentage of pay basis.

1.3 Development of Total Employer Contribution Rate – FY09 (continued)

Schedule of Past Service Cost Amortizations - Total

| | Amortization Period | | Balances | | Beginning-of-Year Payment |
|----------------------------------|---------------------|------------|--------------|---------------------|------------------------------|
| | Date Created | Years Left | Initial | Outstanding | |
| Initial Unfunded Liability | 6/30/2002 | 21 | \$ 1,722,606 | \$ 1,815,755 | \$ 127,026 |
| FY03 Loss | 6/30/2003 | 22 | 333,376 | 347,761 | 23,639 |
| FY04 Loss | 6/30/2004 | 23 | 164,707 | 169,702 | 11,230 |
| FY05 Loss | 6/30/2005 | 24 | 231,873 | 235,553 | 15,201 |
| Change in Assumptions/Methods | 6/30/2006 | 25 | 562,027 | 562,027 | 35,428 |
| FY06 Gain | 6/30/2006 | 25 | (42,647) | (42,647) | (2,688) |
| Total | | | | \$ 3,088,151 | \$ 209,836 |

The amortization factor for 25 years is 15.864073. The weighted average amortization factor is 14.716974. The amortization method is level percentage of pay.

The equivalent single amortization period is 22 years.

1.4 Development of Actuarial Gain/(Loss) for FY06 (in thousands)

| | Pension | Healthcare | Total |
|--|--------------------|---------------------|---------------------|
| (1) Expected Actuarial Accrued Liability | | | |
| (a) Accrued Liability, June 30, 2005 | \$ 4,334,585 | \$ 2,163,971 | \$ 6,498,556 |
| (b) Normal Cost for FY06 | 71,012 | 48,231 | 119,243 |
| (c) Interest on (a) and (b) at 8.25% | 363,462 | 182,507 | 545,969 |
| (d) Benefit Payments for FY06 ¹ | 270,307 | 88,185 | 358,492 |
| (e) Refund of Contributions for FY06 | 2,752 | 1,080 | 3,832 |
| (f) Interest on (d) and (e) at 8.25% for one-half year | 11,264 | 3,682 | 14,946 |
| (g) Change in Assumptions and Methods | 362,537 | 199,490 | 562,027 |
| (h) Expected Accrued Liability as of June 30, 2006 (a) + (b) + (c) - (d) - (e) - (f) + (g) | 4,847,273 | 2,501,252 | 7,348,525 |
| (2) Actual Accrued Liability, June 30, 2006 | 4,859,336 | 2,370,515 | 7,229,851 |
| (3) Liability Gain/(Loss), (1)(h) - (2) | \$ (12,063) | \$ 130,737 | \$ 118,674 |
| (4) Expected Actuarial Asset Value | | | |
| (a) Actuarial Asset Value, June 30, 2005 | 3,184,976 | 773,963 | 3,958,939 |
| (b) Interest on (a) at 8.25% | 262,761 | 63,852 | 326,613 |
| (c) Employee Contributions for FY06 | 41,512 | 16,290 | 57,802 |
| (d) Employer Contributions for FY06 | 91,902 | 36,065 | 127,967 |
| (e) Interest on (c) and (d) at 8.25% for one-half year | 5,503 | 2,160 | 7,663 |
| (f) Benefit Payments for FY06 | 270,307 | 88,185 | 358,492 |
| (g) Refund of Contributions for FY06 | 2,752 | 1,080 | 3,832 |
| (h) Interest on (f) and (g) at 8.25% for one-half year | 11,264 | 3,682 | 14,946 |
| (i) Expected Actuarial Asset Value, June 30, 2006 (a) + (b) + (c) + (d) + (e) - (f) - (g) - (h) | 3,302,331 | 799,383 | 4,101,714 |
| (5) Actuarial Asset Value, June 30, 2006 | 3,296,934 | 844,766 | 4,141,700 |
| (6) Actuarial Asset Gain/(Loss), (5) - (4)(i) | \$ (5,397) | \$ 45,383 | \$ 39,986 |
| (7) Actuarial Gain/(Loss), (3) + (6) | \$ (17,460) | \$ 176,120 | \$ 158,660 |
| (8) (Shortfall) between Actuarial and Actual Contributions | \$ 39,037 | \$ (155,050) | \$ (116,013) |
| (9) FY06 Gain/(Loss) to be Amortized, (7) + (8) | \$ 21,577 | \$ 21,070 | \$ 42,647 |

¹ Net of transfer of \$15,175 in from Retiree Health Fund.

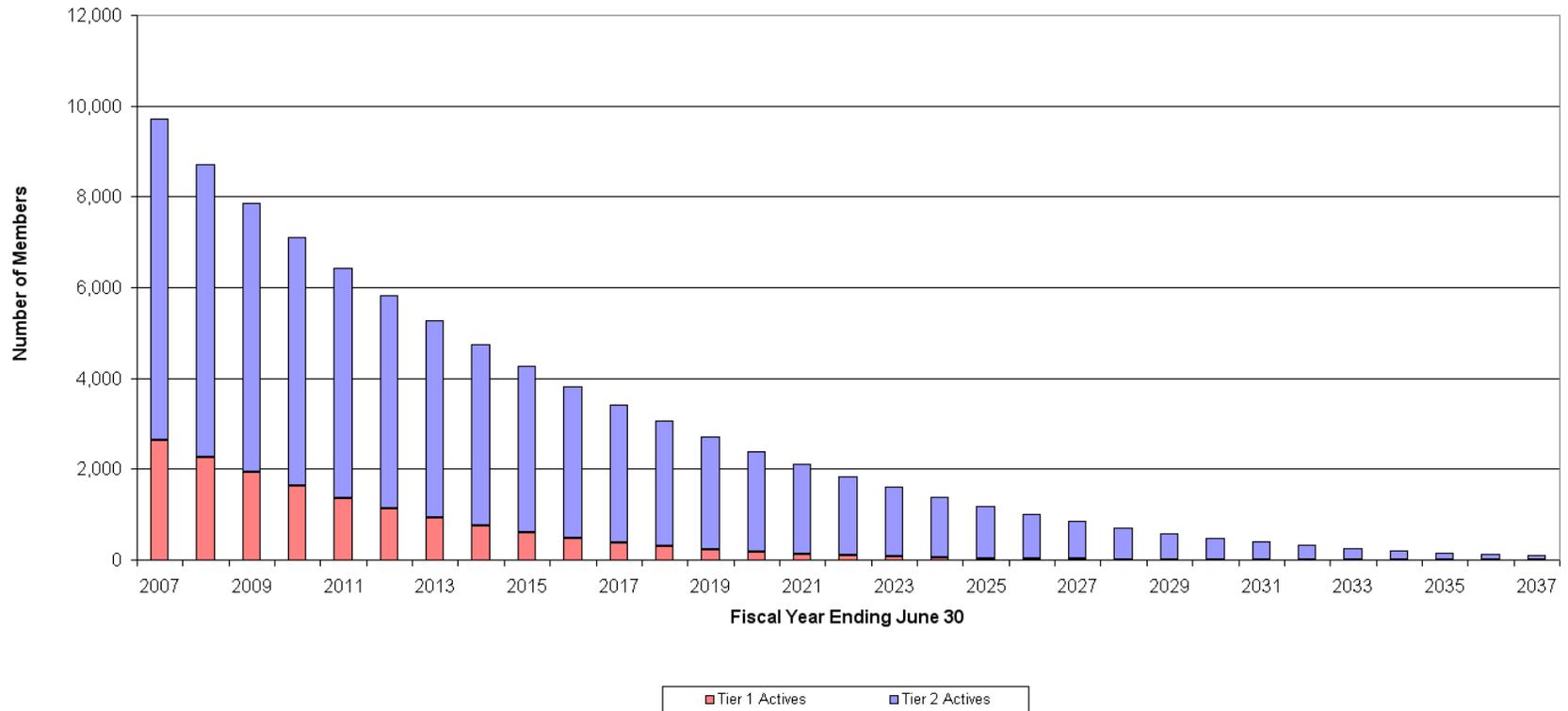
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DC Payroll**

Key Assumptions

- 8.25% investment return in all years.
- Actuarial assumptions and methods as described in Section 2.3.
- The actuarially calculated contribution rate with a two-year lag is adopted each year.
- No new DB Plan entrants into Tiers 1 and 2.

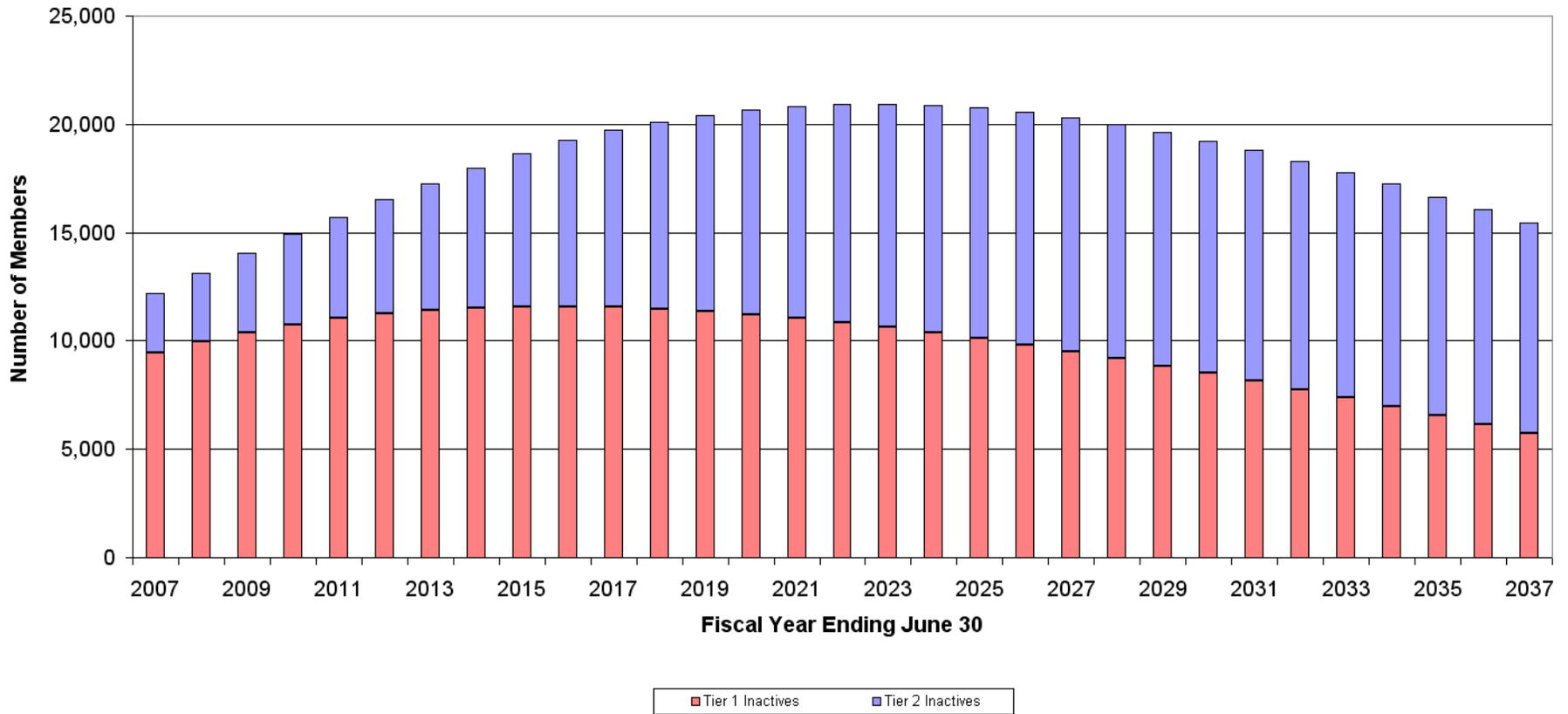
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based Total DB and DC Payroll (continued)**

Projected Active Member Count



**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DC Payroll (continued)**

Projected Inactive Member Count



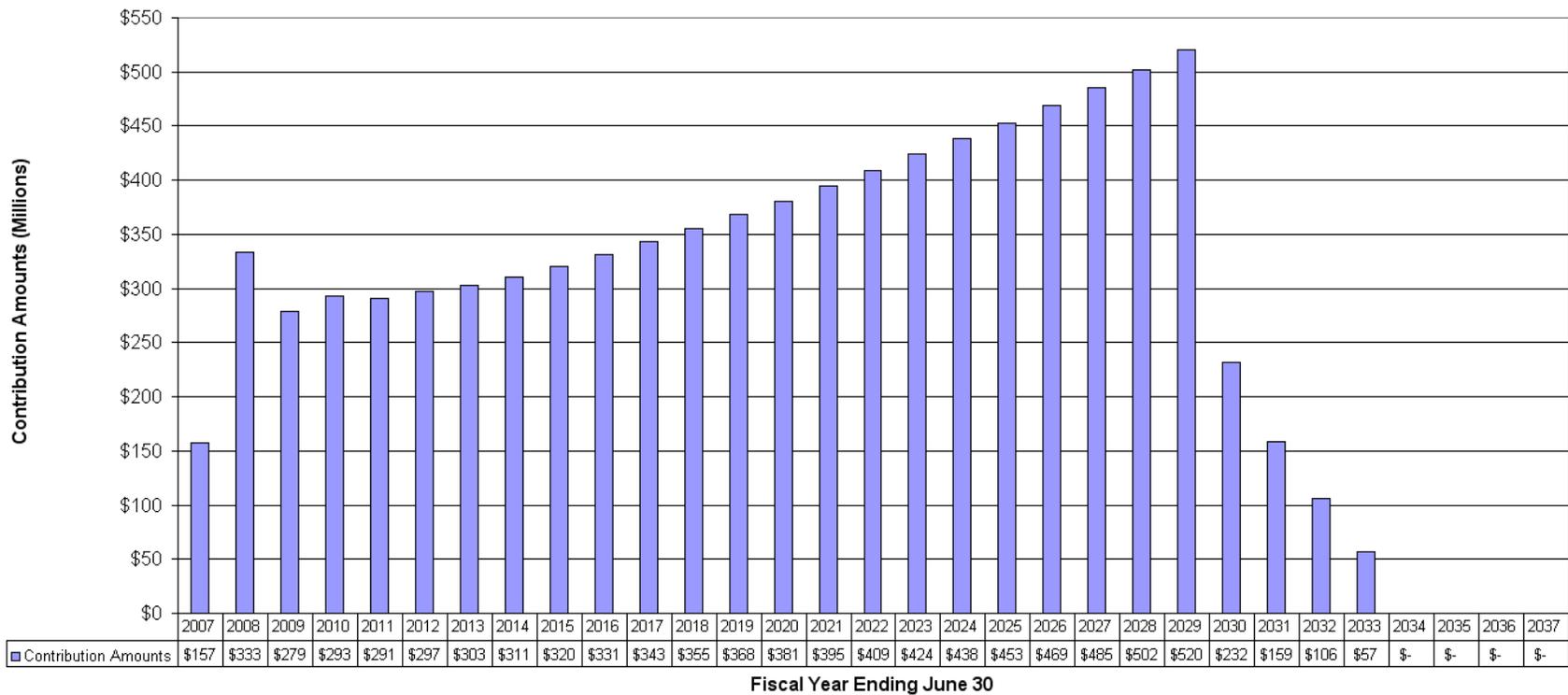
1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DC Payroll

Observations

- Contribution amounts have been shown instead of rates. The actual contribution amount provides a more meaningful illustration of the contributions due.
- Contributions increase until FY2029 before dropping off significantly because the June 30, 2002 unfunded liability amortization base is paid off.
- Contribution amounts decline towards end of the projection period upon completion of 25-year amortizations of recent losses.
- Funding ratios improve through the projection period.

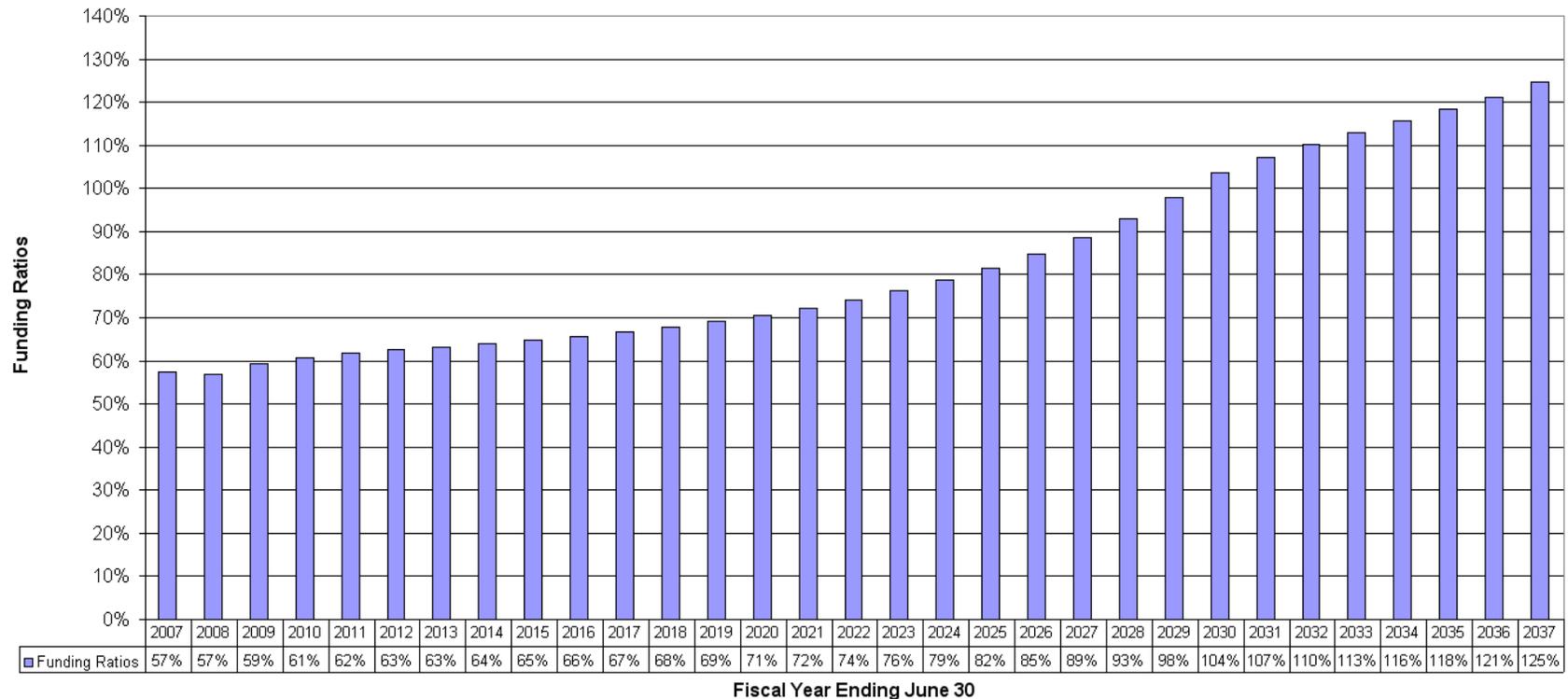
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DC Payroll (continued)**

Projected Contribution Amounts



**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DC Payroll (continued)**

Projected Funding Ratios



1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DC Payroll (continued)

| State of Alaska TRS Financial Projections (in Thousands) | | | | | | | | | | | | | | |
|---|---|----------------------|------------------|----------------------|---|----------------------|----------------------|----------------------|-------------------|---------------------|-----------------|-----------------------------|-------------------------------|------------------------|
| Fiscal Year End | Investment Return 8.25% Valuation Amounts on July 1 (Beginning of Fiscal Year) | | | | Flow Amounts During Following 12 Months | | | | | | | Recognized Asset Gain | Ending Actuarial Assets | |
| | Actuarial Assets | Accrued Liability | Funding Ratio | Surplus (Deficit) | Total Salaries | Employer Ctb Rate | Employer Contribs | Employee Contribs | Total Contribs | Benefit Payments | Net Contribs | | | Investment Earnings |
| 2007 | \$4,141,700 | \$7,229,851 | 57.29% | (\$3,088,151) | \$603,035 | 26.00% | \$156,789 | \$52,283 | \$209,072 | \$464,926 | (\$255,854) | \$344,403 | \$34,373 | \$4,264,622 |
| 2008 | 4,264,622 | 7,503,836 | 56.83% | (3,239,215) | 616,767 | 54.03% | 333,239 | 49,142 | 382,381 | 455,773 | (73,392) | 359,085 | 71,789 | 4,622,104 |
| 2009 | 4,622,104 | 7,778,824 | 59.42% | (3,156,720) | 632,318 | 44.17% | 279,295 | 46,281 | 325,576 | 483,815 | (158,239) | 379,225 | 27,191 | 4,870,281 |
| 2010 | 4,870,281 | 8,039,328 | 60.58% | (3,169,048) | 649,699 | 45.13% | 293,192 | 43,682 | 336,874 | 511,350 | (174,476) | 396,799 | 24,917 | 5,117,522 |
| 2011 | 5,117,522 | 8,284,875 | 61.77% | (3,167,354) | 668,596 | 43.59% | 291,448 | 41,249 | 332,696 | 538,720 | (206,024) | 413,866 | 0 | 5,325,363 |
| 2012 | 5,325,363 | 8,515,644 | 62.54% | (3,190,281) | 688,951 | 43.10% | 296,946 | 38,918 | 335,864 | 565,120 | (229,256) | 430,073 | 0 | 5,526,180 |
| 2013 | 5,526,180 | 8,731,135 | 63.29% | (3,204,955) | 710,733 | 42.59% | 302,673 | 36,625 | 339,298 | 591,613 | (252,315) | 445,708 | 0 | 5,719,573 |
| 2014 | 5,719,573 | 8,930,176 | 64.05% | (3,210,603) | 733,261 | 42.45% | 311,273 | 34,209 | 345,482 | 617,012 | (271,530) | 460,886 | 0 | 5,908,929 |
| 2015 | 5,908,929 | 9,112,440 | 64.84% | (3,203,511) | 757,416 | 42.30% | 320,372 | 31,766 | 352,137 | 638,724 | (286,587) | 475,899 | 0 | 6,098,242 |
| 2016 | 6,098,242 | 9,279,553 | 65.72% | (3,181,311) | 784,124 | 42.20% | 330,867 | 29,475 | 360,341 | 660,445 | (300,104) | 490,971 | 0 | 6,289,109 |
| 2017 | 6,289,109 | 9,430,215 | 66.69% | (3,141,105) | 813,321 | 42.17% | 342,943 | 27,311 | 370,254 | 681,797 | (311,543) | 506,255 | 0 | 6,483,821 |
| 2018 | 6,483,821 | 9,563,165 | 67.80% | (3,079,344) | 844,637 | 42.07% | 355,313 | 25,172 | 380,485 | 701,158 | (320,673) | 521,950 | 0 | 6,685,098 |
| 2019 | 6,685,098 | 9,678,846 | 69.07% | (2,993,748) | 878,302 | 41.90% | 368,016 | 23,103 | 391,119 | 721,437 | (330,318) | 538,165 | 0 | 6,892,945 |
| 2020 | 6,892,945 | 9,774,747 | 70.52% | (2,881,802) | 914,428 | 41.70% | 381,339 | 21,105 | 402,444 | 741,168 | (338,724) | 554,973 | 0 | 7,109,194 |
| 2021 | 7,109,194 | 9,850,380 | 72.17% | (2,741,187) | 952,893 | 41.46% | 395,077 | 19,155 | 414,232 | 760,737 | (346,505) | 572,498 | 0 | 7,335,187 |
| 2022 | 7,335,187 | 9,904,581 | 74.06% | (2,569,394) | 993,973 | 41.17% | 409,223 | 17,306 | 426,530 | 779,859 | (353,329) | 590,867 | 0 | 7,572,725 |
| 2023 | 7,572,725 | 9,935,773 | 76.22% | (2,363,047) | 1,037,497 | 40.87% | 424,005 | 15,528 | 439,533 | 798,303 | (358,770) | 610,244 | 0 | 7,824,200 |
| 2024 | 7,824,200 | 9,942,553 | 78.69% | (2,118,353) | 1,081,583 | 40.52% | 438,223 | 13,813 | 452,035 | 817,167 | (365,132) | 630,733 | 0 | 8,089,801 |
| 2025 | 8,089,801 | 9,923,268 | 81.52% | (1,833,467) | 1,128,187 | 40.14% | 452,856 | 12,190 | 465,046 | 835,146 | (370,100) | 652,445 | 0 | 8,372,146 |
| 2026 | 8,372,146 | 9,876,418 | 84.77% | (1,504,272) | 1,177,436 | 39.82% | 468,870 | 10,693 | 479,563 | 852,322 | (372,759) | 675,631 | 0 | 8,675,018 |
| 2027 | 8,675,018 | 9,800,351 | 88.52% | (1,125,333) | 1,229,176 | 39.49% | 485,362 | 9,265 | 494,626 | 866,943 | (372,317) | 700,635 | 0 | 9,003,337 |
| 2028 | 9,003,337 | 9,697,328 | 92.84% | (693,991) | 1,283,747 | 39.13% | 502,357 | 7,971 | 510,328 | 881,330 | (371,002) | 727,775 | 0 | 9,360,110 |
| 2029 | 9,360,110 | 9,564,878 | 97.86% | (204,768) | 1,340,778 | 38.77% | 519,754 | 6,815 | 526,569 | 893,981 | (367,412) | 757,354 | 0 | 9,750,052 |
| 2030 | 9,750,052 | 9,402,449 | 103.70% | 347,603 | 1,400,588 | 16.57% | 232,030 | 5,791 | 237,820 | 903,220 | (665,400) | 777,476 | 0 | 9,862,128 |
| 2031 | 9,862,128 | 9,211,617 | 107.06% | 650,511 | 1,463,329 | 10.86% | 158,844 | 4,887 | 163,732 | 911,364 | (747,632) | 783,397 | 0 | 9,897,892 |
| 2032 | 9,897,892 | 8,990,511 | 110.09% | 907,382 | 1,529,154 | 6.96% | 106,383 | 4,089 | 110,472 | 914,155 | (803,683) | 784,081 | 0 | 9,878,291 |
| 2033 | 9,878,291 | 8,743,542 | 112.98% | 1,134,748 | 1,598,083 | 3.56% | 56,908 | 3,369 | 60,277 | 914,509 | (854,232) | 780,420 | 0 | 9,804,479 |
| 2034 | 9,804,479 | 8,470,558 | 115.75% | 1,333,921 | 1,670,314 | -2.60% | 0 | 2,746 | 2,746 | 911,863 | (909,117) | 772,112 | 0 | 9,667,474 |
| 2035 | 9,667,474 | 8,172,734 | 118.29% | 1,494,741 | 1,746,085 | -4.64% | 0 | 2,219 | 2,219 | 902,464 | (900,245) | 761,167 | 0 | 9,528,396 |
| 2036 | 9,528,396 | 7,857,967 | 121.26% | 1,670,429 | 1,825,511 | -4.32% | 0 | 1,776 | 1,776 | 889,220 | (887,444) | 750,211 | 0 | 9,391,163 |
| 2037 | 9,391,163 | 7,528,760 | 124.74% | 1,862,403 | 1,908,683 | -4.76% | 0 | 1,403 | 1,403 | 876,473 | (875,070) | 739,390 | 0 | 9,255,482 |

1.5(b) Actuarial Projections – Projections at Current Rate Based on Total DB and DC Payroll

Key Assumptions

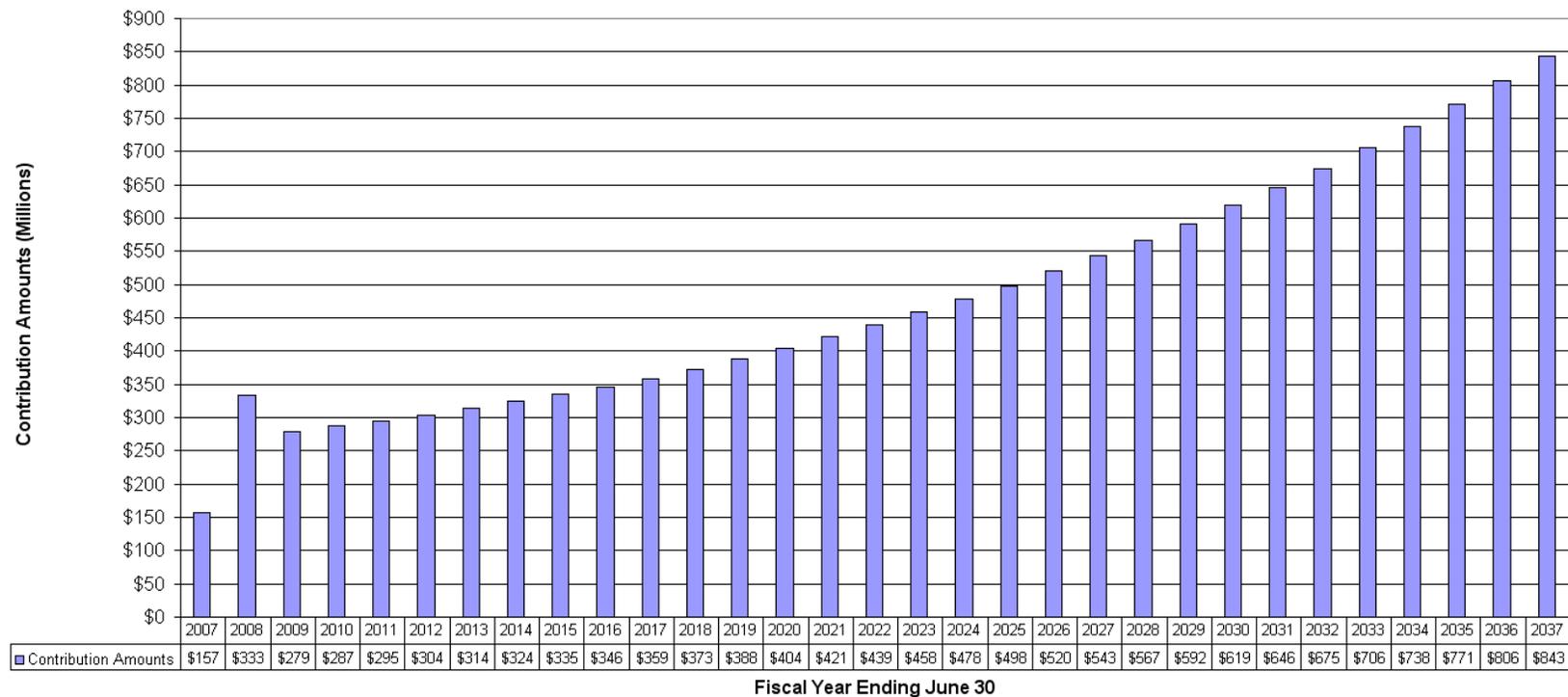
- All assumptions and methods are the same as Section 1.5(a), except adopted contribution rate is maintained at the FY09 level for all future years.

Observations

- Contribution amounts increase through the projection period.
- Funding ratios improve through the projection period.

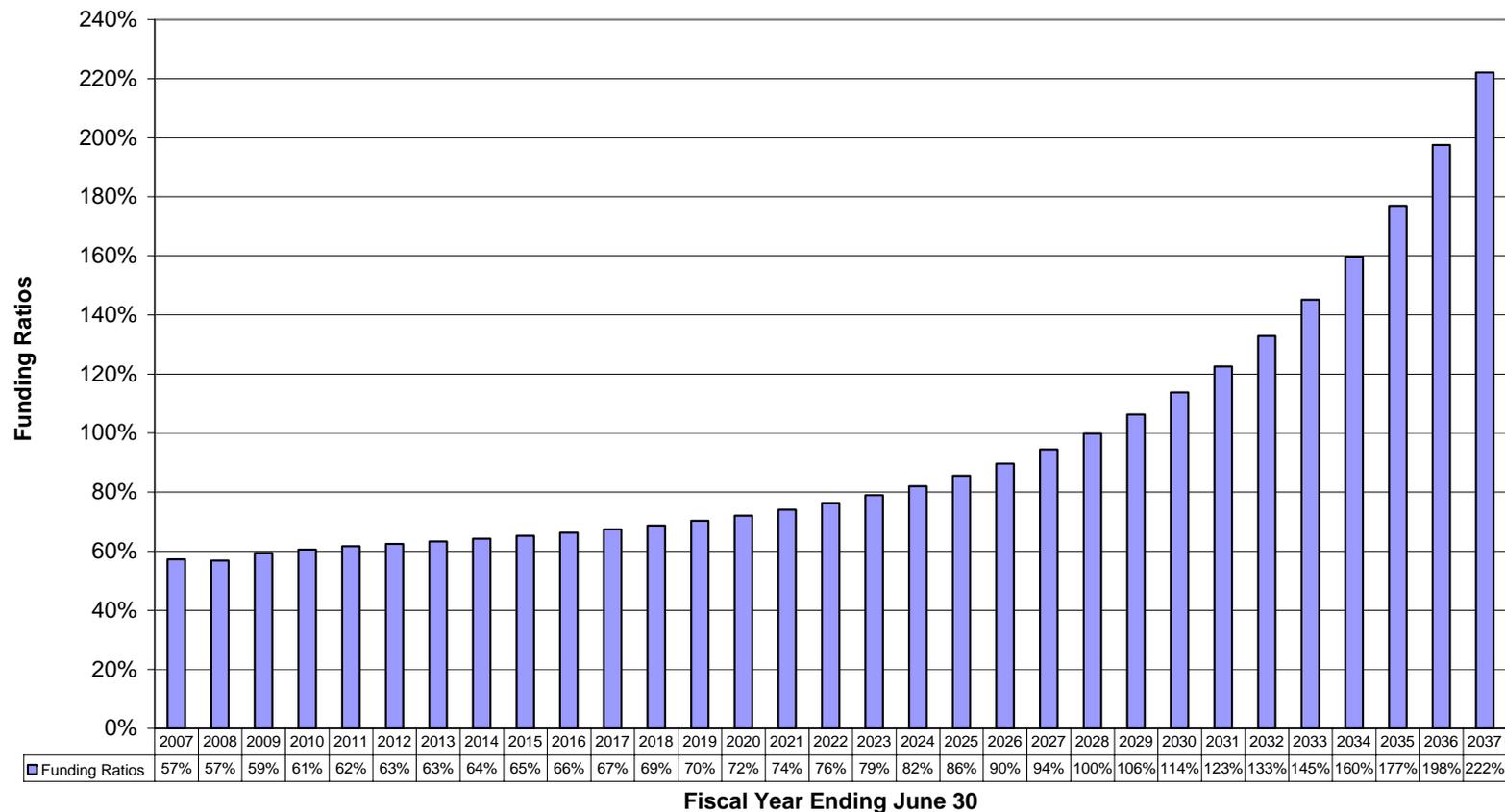
**1.5(b) Actuarial Projections – Projections at Current Rate
Based on Total DB and DC Payroll (continued)**

Contribution Amounts



**1.5(b) Actuarial Projections – Projections at Current Rate
Based on Total DB and DC Payroll (continued)**

Funding Ratio



**1.5(b) Actuarial Projections – Projections at Current Rate
Based on Total DB and DC Payroll (continued)**

**State of Alaska TRS
Financial Projections (in Thousands)**

| Fiscal Year End | Investment Return 8.25% Valuation Amounts on July 1 (Beginning of Fiscal Year) | | | | Flow Amounts During Following 12 Months | | | | | | | | Recognized Asset Gain | Ending Actuarial Assets |
|--------------------|---|----------------------|------------------|----------------------|---|----------------------|----------------------|----------------------|-------------------|---------------------|-----------------|------------------------|-----------------------------|-------------------------------|
| | Actuarial Assets | Accrued Liability | Funding Ratio | Surplus (Deficit) | Total Salaries | Employer Ctb Rate | Employer Contribs | Employee Contribs | Total Contribs | Benefit Payments | Net Contribs | Investment Earnings | | |
| 2007 | \$4,141,700 | \$7,229,851 | 57.29% | (\$3,088,151) | \$603,035 | 26.00% | \$156,789 | \$52,283 | \$209,072 | \$464,926 | (\$255,854) | \$344,403 | \$34,373 | \$4,264,622 |
| 2008 | 4,264,622 | 7,503,836 | 56.83% | (3,239,215) | 616,767 | 54.03% | 333,239 | 49,142 | 382,381 | 455,773 | (73,392) | 359,085 | 71,789 | 4,622,104 |
| 2009 | 4,622,104 | 7,778,824 | 59.42% | (3,156,720) | 632,318 | 44.17% | 279,295 | 46,281 | 325,576 | 483,815 | (158,239) | 379,225 | 27,191 | 4,870,281 |
| 2010 | 4,870,281 | 8,039,328 | 60.58% | (3,169,048) | 649,699 | 44.17% | 286,972 | 43,682 | 330,654 | 511,350 | (180,696) | 396,548 | 24,917 | 5,111,050 |
| 2011 | 5,111,050 | 8,284,875 | 61.69% | (3,173,826) | 668,596 | 44.17% | 295,319 | 41,249 | 336,568 | 538,720 | (202,152) | 413,488 | 0 | 5,322,385 |
| 2012 | 5,322,385 | 8,515,644 | 62.50% | (3,193,259) | 688,951 | 44.17% | 304,310 | 38,918 | 343,227 | 565,120 | (221,893) | 430,125 | 0 | 5,530,618 |
| 2013 | 5,530,618 | 8,731,135 | 63.34% | (3,200,517) | 710,733 | 44.17% | 313,931 | 36,625 | 350,556 | 591,613 | (241,057) | 446,530 | 0 | 5,736,091 |
| 2014 | 5,736,091 | 8,930,176 | 64.23% | (3,194,085) | 733,261 | 44.17% | 323,881 | 34,209 | 358,090 | 617,012 | (258,922) | 462,759 | 0 | 5,939,928 |
| 2015 | 5,939,928 | 9,112,440 | 65.18% | (3,172,512) | 757,416 | 44.17% | 334,551 | 31,766 | 366,316 | 638,724 | (272,408) | 479,030 | 0 | 6,146,550 |
| 2016 | 6,146,550 | 9,279,553 | 66.24% | (3,133,003) | 784,124 | 44.17% | 346,348 | 29,475 | 375,822 | 660,445 | (284,623) | 495,582 | 0 | 6,357,509 |
| 2017 | 6,357,509 | 9,430,215 | 67.42% | (3,072,705) | 813,321 | 44.17% | 359,244 | 27,311 | 386,555 | 681,797 | (295,242) | 512,557 | 0 | 6,574,825 |
| 2018 | 6,574,825 | 9,563,165 | 68.75% | (2,988,341) | 844,637 | 44.17% | 373,076 | 25,172 | 398,249 | 701,158 | (302,909) | 530,176 | 0 | 6,802,091 |
| 2019 | 6,802,091 | 9,678,846 | 70.28% | (2,876,755) | 878,302 | 44.17% | 387,946 | 23,103 | 411,049 | 721,437 | (310,388) | 548,623 | 0 | 7,040,326 |
| 2020 | 7,040,326 | 9,774,747 | 72.03% | (2,734,421) | 914,428 | 44.17% | 403,903 | 21,105 | 425,008 | 741,168 | (316,160) | 568,044 | 0 | 7,292,210 |
| 2021 | 7,292,210 | 9,850,380 | 74.03% | (2,558,171) | 952,893 | 44.17% | 420,893 | 19,155 | 440,048 | 760,737 | (320,689) | 588,641 | 0 | 7,560,161 |
| 2022 | 7,560,161 | 9,904,581 | 76.33% | (2,344,420) | 993,973 | 44.17% | 439,038 | 17,306 | 456,344 | 779,859 | (323,515) | 610,633 | 0 | 7,847,280 |
| 2023 | 7,847,280 | 9,935,773 | 78.98% | (2,088,493) | 1,037,497 | 44.17% | 458,262 | 15,528 | 473,791 | 798,303 | (324,512) | 634,280 | 0 | 8,157,047 |
| 2024 | 8,157,047 | 9,942,553 | 82.04% | (1,785,506) | 1,081,583 | 44.17% | 477,735 | 13,813 | 491,548 | 817,167 | (325,619) | 659,791 | 0 | 8,491,219 |
| 2025 | 8,491,219 | 9,923,268 | 85.57% | (1,432,050) | 1,128,187 | 44.17% | 498,320 | 12,190 | 510,510 | 835,146 | (324,636) | 687,400 | 0 | 8,853,983 |
| 2026 | 8,853,983 | 9,876,418 | 89.65% | (1,022,435) | 1,177,436 | 44.17% | 520,073 | 10,693 | 530,766 | 852,322 | (321,556) | 717,452 | 0 | 9,249,879 |
| 2027 | 9,249,879 | 9,800,351 | 94.38% | (550,471) | 1,229,176 | 44.17% | 542,927 | 9,265 | 552,192 | 866,943 | (314,751) | 750,389 | 0 | 9,685,517 |
| 2028 | 9,685,517 | 9,697,328 | 99.88% | (11,811) | 1,283,747 | 44.17% | 567,031 | 7,971 | 575,002 | 881,330 | (306,328) | 786,670 | 0 | 10,165,858 |
| 2029 | 10,165,858 | 9,564,878 | 106.28% | 600,981 | 1,340,778 | 44.17% | 592,222 | 6,815 | 599,037 | 893,981 | (294,944) | 826,758 | 0 | 10,697,673 |
| 2030 | 10,697,673 | 9,402,449 | 113.78% | 1,295,224 | 1,400,588 | 44.17% | 618,640 | 5,791 | 624,430 | 903,220 | (278,790) | 871,286 | 0 | 11,290,169 |
| 2031 | 11,290,169 | 9,211,617 | 122.56% | 2,078,552 | 1,463,329 | 44.17% | 646,352 | 4,887 | 651,240 | 911,364 | (260,124) | 920,922 | 0 | 11,950,966 |
| 2032 | 11,950,966 | 8,990,511 | 132.93% | 2,960,455 | 1,529,154 | 44.17% | 675,427 | 4,089 | 679,517 | 914,155 | (234,638) | 976,468 | 0 | 12,692,795 |
| 2033 | 12,692,795 | 8,743,542 | 145.17% | 3,949,253 | 1,598,083 | 44.17% | 705,873 | 3,369 | 709,243 | 914,509 | (205,266) | 1,038,856 | 0 | 13,526,385 |
| 2034 | 13,526,385 | 8,470,558 | 159.69% | 5,055,827 | 1,670,314 | 44.17% | 737,778 | 2,746 | 740,524 | 911,863 | (171,339) | 1,108,999 | 0 | 14,464,045 |
| 2035 | 14,464,045 | 8,172,734 | 176.98% | 6,291,312 | 1,746,085 | 44.17% | 771,246 | 2,219 | 773,464 | 902,464 | (129,000) | 1,188,068 | 0 | 15,523,114 |
| 2036 | 15,523,114 | 7,857,967 | 197.55% | 7,665,147 | 1,825,511 | 44.17% | 806,328 | 1,776 | 808,104 | 889,220 | (81,116) | 1,277,377 | 0 | 16,719,375 |
| 2037 | 16,719,375 | 7,528,760 | 222.07% | 9,190,615 | 1,908,683 | 44.17% | 843,065 | 1,403 | 844,468 | 876,473 | (32,005) | 1,378,054 | 0 | 18,065,424 |

1.5(c) Actuarial Projections – Effect of Economic Scenarios Based on Total DB and DC Payroll

Key Assumptions

- All assumptions and methods are the same as Section 1.5(a) except investment returns are assumed as follows:

| | |
|--------------|----------------------------|
| Base Case: | 8.25% for all future years |
| Optimistic: | 9.00% for all future years |
| Pessimistic: | 7.50% for all future years |

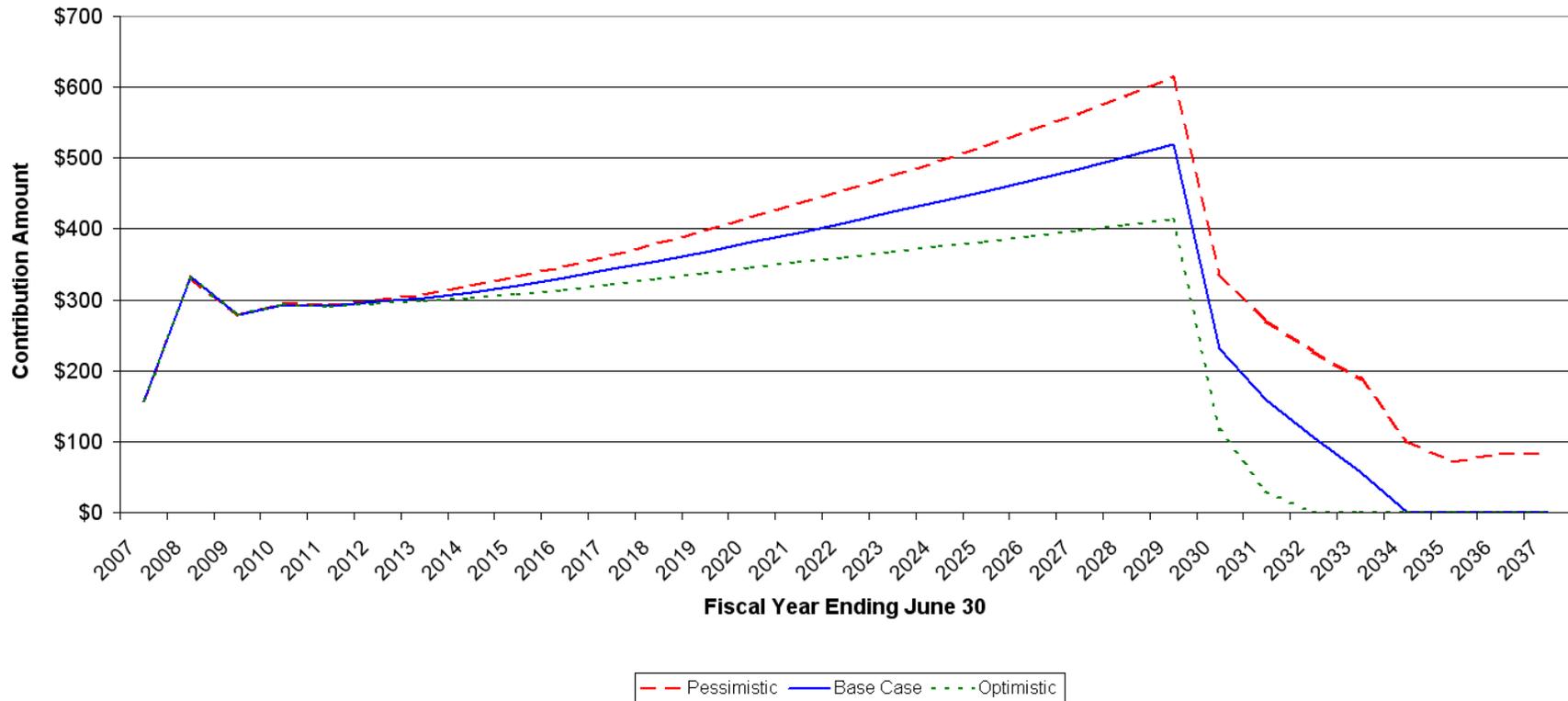
- In all cases, liabilities have been projected using 8.25% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.25% assumed investment return. They do not illustrate the effect of changing the assumed investment return for determining liabilities.

Observations

- As expected, lower investment returns would yield higher contribution requirements and higher investment returns would yield lower contribution requirements.
- In all scenarios, contribution amounts decrease towards end of the projection period upon completion of 25-year amortizations of recent losses.

**1.5(c) Actuarial Projections – Projections at Calculated Rate
Effect of Economic Scenarios
Based on Total DB and DC Payroll (continued)**

Contribution Amounts



Section 2

In this section, the basis of the valuation is presented and described. This information – the provisions of the plan and the census of participants– is the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

A summary of plan provisions is provided in Section 2.1 and participant census information is shown in Section 2.2.

The valuation is based upon the premise that the plan will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund, the number of participants who will retire, die, or terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, which have been adopted to guide the sponsor in funding the plan in a reasonable and acceptable manner, are described in Section 2.3.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions

(1) Effective Date

July 1, 1955, with amendments through June 30, 2006. Chapter 97, 1990 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the TRS before July 1, 1990, are eligible for different benefits than members hired after June 30, 1990.

(2) Administration of Plan

The Commissioner of Administration is responsible for administering the system. The Attorney General represents the system in legal proceedings.

Prior to June 30, 2005, the Teachers' Retirement Board prescribed policies and adopted regulations and performed other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division was responsible for investing TRS funds.

On July 27, 2005, Senate Bill 141, enacted as Chapter 9, 2005 Session laws of Alaska, replaced the Teachers' Retirement Board and the Alaska State Pension Investment Board with the Alaska Retirement Management Board.

(3) Employers Included

Currently, there are 58 employers participating in the TRS, including the State of Alaska, 53 school districts, and four other eligible organizations.

(4) Membership

Membership in the Alaska TRS is mandatory for the following employees:

- certificated full-time and part-time elementary and secondary teachers, certificated school nurses, and certificated employees in positions requiring teaching certificates;
- positions requiring a teaching certificate as a condition of employment in the Department of Education and Early Development and the Department of Labor and Workforce Development;
- University of Alaska full-time and part-time teachers, and full-time administrative employees in positions requiring academic standing if approved by the TRS administrator;
- certain full-time or part-time teachers of Alaska Native language or culture who have elected to be covered under the TRS;
- members on approved sabbatical leave under AS 14.20.310;
- certain State legislators who have elected to be covered under the TRS; and
- a teacher who has filed for worker's compensation benefits due to an on the job assault and who, as a result of the physical injury, is placed on leave without pay.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions *(continued)*

Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by the TRS.

Employees who work half-time in the TRS and Public Employees' Retirement System (PERS) simultaneously are eligible for half-time TRS and PERS credit.

(5) Credited Service

TRS members receive a year of membership credit if they work a minimum of 172 days during the school year (July 1 through June 30 of the following year). Fractional credit is determined based on the number of days worked. Part-time members who work at least 50% of full-time receive membership credit for each day in proportion to full-time service. Credit is granted for all Alaskan public school service.

Members may claim other types of service, including:

- Outside teaching service in out-of-state schools or Alaska private schools (not more than ten years may be claimed);
- Military service (not more than five years of military service or ten years of combined outside and military service may be claimed);
- Alaska Bureau of Indian Affairs (BIA) service;
- Retroactive Alaskan service that was not creditable at the time it occurred, but later became creditable because of legislative change;
- Unused sick leave credit after members retire; and
- Leave of absence without pay.

Except for retroactive Alaska service that occurred before July 1, 1955, and unused sick leave, contributions are required for all claimed service.

Members receiving TRS disability benefits continue to earn TRS credit while disabled.

Members whose survivors are receiving occupational death benefits continue to earn TRS credit while occupational survivor benefits are being paid.

(6) Employer Contributions

TRS employers contribute the amounts required, in addition to employees' contributions, to fund the benefits of the system.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions (continued)

The consolidated rate is a uniform rate for all participating employers (less the value of members' contributions).

The past service rate is a uniform rate for all participating employers to amortize the unfunded past service liability with payments that are a level percentage of pay amount over fixed 25-year periods.

Employer rates cannot be less than the consolidated normal cost rate.

(7) Member Contributions

Mandatory Contributions: Members are required to contribute 8.65% of their base salaries. Members' contributions are deducted from gross salaries before federal income taxes are withheld.

Contributions for Claimed Service: Member contributions are also required for most of the claimed service described in (5) above.

1% Supplemental Contributions: Members who joined the system before July 1, 1982, and elected to participate in the supplemental contributions provision, are required to contribute an additional 1% of their salaries. Supplemental contributions are deducted from gross salaries after federal income taxes are withheld. Under the supplemental provision, an eligible spouse or dependent child will receive a survivor's allowance or spouse's pension if the member dies (see (12) below).

Interest: Members' contributions earn 4.5% interest, compounded annually on June 30.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts, which includes their mandatory contributions, indebtedness payments, and interest earned. Terminated members' accounts may be attached to satisfy claims under Alaska Statute 09.38.065, federal income tax levies, and valid Qualified Domestic Relations Orders.

Reinstatement of Contributions: Refunded accounts and the corresponding TRS service may be reinstated upon reemployment in the TRS prior to July 1, 2010. Accounts attached to satisfy claims under Alaska Statute 09.38.065 or a federal tax levy may be reinstated at any time. Interest accrues on refunds until paid in full or members retire.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions (continued)

(8) Retirement Benefits

Eligibility:

- (a) Members, including deferred vested members, are eligible for normal retirement at age 60¹, or early retirement at age 55, if they have at least:
 - (i) eight years of paid-up membership service;
 - (ii) 15 years of paid-up creditable service, the last five years of which are membership service, and they were first hired under the TRS before July 1, 1975;
 - (iii) five years of paid-up membership service and three years of paid-up Alaska Bureau of Indian Affairs service;
 - (iv) 12 years of combined part-time and full-time paid-up membership service;
 - (v) two years of paid-up membership service if they are vested in the Public Employees' Retirement System (PERS); or
 - (vi) one year of paid-up membership service if they are retired from the PERS.
- (b) Members may retire at any age when they have:
 - (i) 25 years of paid-up creditable service, the last five years of which are membership service;
 - (ii) 20 years of paid-up membership service;
 - (iii) 20 years of combined paid-up membership and Alaska Bureau of Indian Affairs service, the last five years of which are membership service; or
 - (iv) 20 years of combined paid-up part-time and full-time membership service.

Benefit Type: Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements to retire at any age under (b) above. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

¹ Members participating before July 1, 1990, are eligible for normal retirement at age 55 or early retirement at age 50.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions *(continued)*

Members may select joint and survivor options and a last survivor option. Under those options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculation: Retirement benefits are calculated by multiplying the average base salary (ABS) times the total TRS service times the percentage multiplier. The ABS is determined by averaging the salaries earned during the three highest school years. Members must earn at least 115 days of credit in a school year to include it in the ABS calculation. The TRS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers are 2% for the first 20 years and 2.5% for all remaining service. Service before July 1, 1990, is calculated at 2%.

Indebtedness: Members who terminate and refund their TRS contributions are not eligible to retire unless they return to TRS employment and pay back their refunds, plus interest, or accrue additional service which qualifies them for retirement. TRS refunds must be paid in full if the corresponding service is to count toward the minimum service requirements for retirement. Refunded TRS service is included in total service for the purpose of calculating retirement benefits. However, when refunds are not completely paid before retirement, benefits are actuarially reduced for life.

(9) Reemployment of Retired Members

Retirees who return to work in a permanent full-time or part-time TRS position after a Normal Retirement have two options available, the Standard Option or the Waiver Option.

Under the Standard Option, retirement and retiree healthcare benefits are suspended while retired members are reemployed under the TRS. During reemployment, members earn additional TRS service and contributions are withheld from their wages.

If an Alaska school district has established that there is a shortage of teachers in a particular discipline or specialty and has passed a resolution to that effect, a retiree returning to work in a permanent full-time or part-time TRS position with that school district may exercise the Waiver Option. The Waiver Option allows a retiree who retired under a Normal Retirement to reemploy with a TRS employer and continue to receive a retirement benefit by signing a waiver of participation in the TRS. The Waiver Option first became effective July 1, 2005 and applies to reemployment periods after that date. The Waiver Option is no longer available after June 30, 2009.

The Waiver Option is not available to members who retired early or under the Retirement Incentive Program (RIP).

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions (continued)

Members retired under the RIP who return to employment under the TRS, Public Employees' Retirement System (PERS), Judicial Retirement System (JRS) or the University of Alaska's Optional Retirement Plan will:

- (a) forfeit the three years of incentive credits that they received;
- (b) owe the TRS 110% of the benefits that they received under the RIP, which may include costs for health insurance, excluding amounts that they paid to participate; and
- (c) be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

Employers make contributions to the unfunded liability of the plan on behalf of rehired retired members at the rate the employer is making contributions to the unfunded liability of the plan for other members.

(10) Postemployment Healthcare Benefits

When pension benefits begin, major medical benefits are provided by the TRS to (1) all employees first hired before July 1, 1990, and (2) members who have twenty-five years of membership service, are disabled or age sixty or older, regardless of their initial hire dates. Employees first hired after June 30, 1990, may receive major medical benefits prior to age sixty by paying premiums.

(11) Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover or become eligible for normal retirement. To be eligible, members must have at least five years of paid-up membership service.

Disability benefits are equal to 50% of the member's base salary at the time of disability. The benefit is increased by 10% of the base salary for each minor child, up to a maximum of 40%. Members continue to earn TRS service until eligible for normal retirement.

Members are appointed to normal retirement on the first of the month after they become eligible.

(12) Death Benefits

Monthly death benefits may be paid to a spouse or dependent children upon the death of a member. If monthly benefits are not payable under the supplemental contributions provision or occupational and nonoccupational death provisions, the designated beneficiary receives the lump sum benefit described below.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions (continued)

Occupational Death: When an active member dies from occupational causes, a monthly survivor's pension may be paid to the spouse, unless benefits are payable under the supplemental contributions provision (below). The pension equals 40% of the member's base salary on the date of death or disability, if earlier. If there is no spouse, the pension may be paid to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit. The normal benefit is based on the member's average base salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date.

Nonoccupational Death: When a vested member dies from nonoccupational causes, the surviving spouse may elect to receive a monthly 50% joint and survivor benefit or a lump sum benefit, unless benefits are payable under the supplemental contributions provision (below). The monthly benefit is calculated on the member's average base salary and TRS service accrued at the time of death.

Lump Sum Benefit: Upon the death of an active member who has less than one year of service or an inactive member who is not vested, the designated beneficiary receives the member's contribution account, which includes mandatory contributions, indebtedness payments, and interest earned. Any supplemental contributions will also be refunded. If the member has more than one year of TRS service, the beneficiary also receives \$1,000 and \$100 for each year of TRS service, up to a maximum of \$3,000. An additional \$500 may be payable if the member is survived by dependent children.

Supplemental Contributions Provision: Members are eligible for supplemental coverage if they joined the TRS before July 1, 1982, elected to participate in the supplemental provision, and made the required contributions. A survivor's allowance or spouse's pension (below) may be payable if the member made supplemental contributions for at least one year and dies while in membership service or while disabled under the TRS. In addition, the allowance and pension may be payable if the member dies while retired or in deferred vested status if supplemental contributions were made for at least five years.

- (a) Survivor's Allowance: If the member is survived by dependent children, the surviving spouse and dependent children are entitled to a survivor's allowance. The allowance for the spouse is equal to 35% of the member's base salary at the time of death or disability, plus 10% for each dependent child up to a maximum of 40%. The allowance terminates and a spouse's pension becomes payable when there is no longer an eligible dependent child.
- (b) Spouse's Pension: The spouse's pension is equal to 50% of the retirement benefit that the deceased member was receiving or would have received if retired at the time of death. The spouse's pension begins on the first of the month after the member's death or termination of the survivor's allowance.

2.1 Summary of the Alaska Teachers' Retirement System Plan Provisions (continued)

Death After Retirement: If a joint and survivor option was selected at retirement, the eligible spouse receives continuing, lifetime monthly benefits after the member dies. A survivor's allowance or spouse's pension may be payable if the member participated in the supplemental contributions provision. If a joint and survivor option was not selected and benefits are not payable under the supplemental contributions provision, the designated beneficiary receives the member's contribution account, less any benefits already paid and the member's last benefit check.

(13) Post Retirement Pension Adjustments

Post retirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit, including past PRPAs, times:

- (a) 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on TRS disability; or
- (b) 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or under age 60 if the recipient has been receiving benefits for at least eight years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1990, if the CPI increases and the funding ratio is at least 105%.

In a year where an Ad Hoc PRPA is granted, eligible recipients will receive the higher of the two calculations.

(14) Alaska Cost of Living Allowance

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits. The following benefit recipients are eligible:

- (a) members who were first hired under the TRS before July 1, 1990, and their survivors;
- (b) members who were first hired under the TRS after June 30, 1990, and their survivors if they are at least age 65; and
- (c) all disabled members.

Changes in Plan Provisions Since the Prior Valuation

There have been no changes in plan provisions since the prior valuation.

2.2(a) Member Census Information – Total TRS

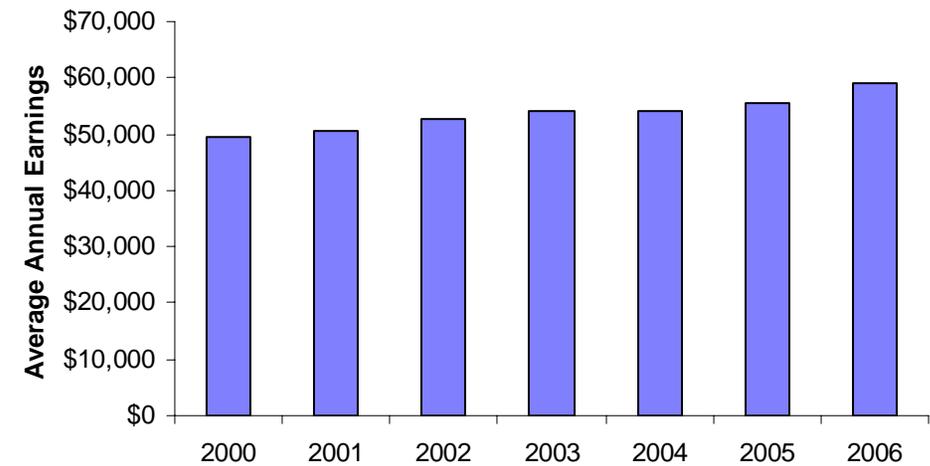
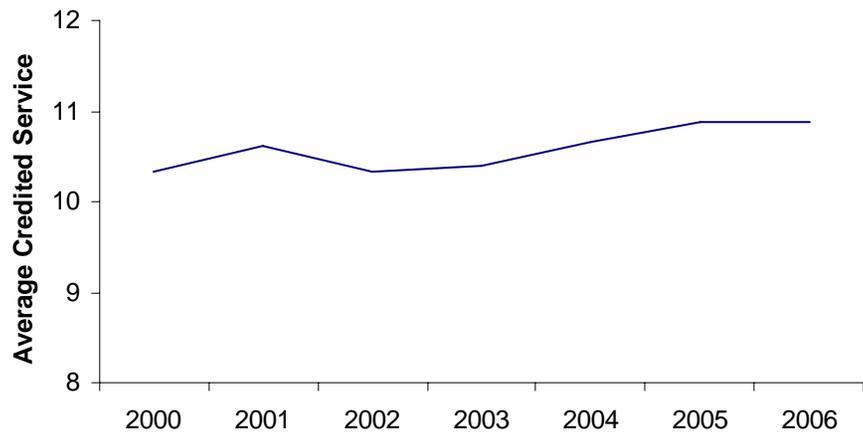
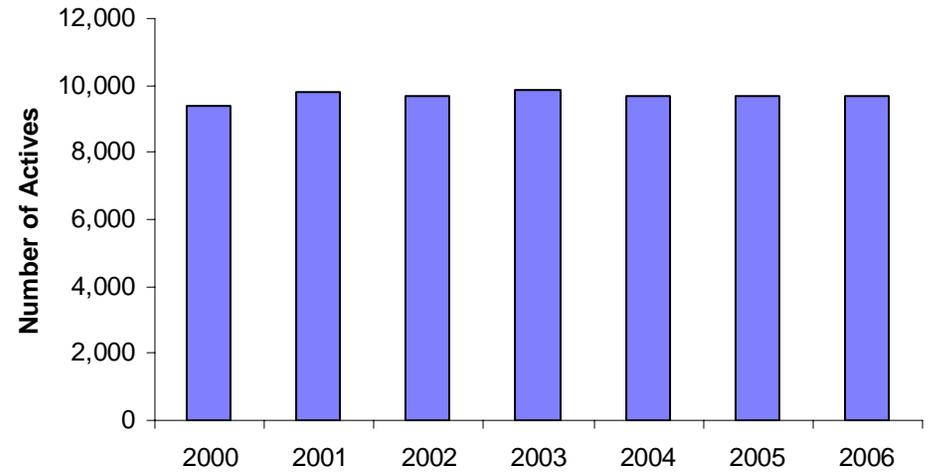
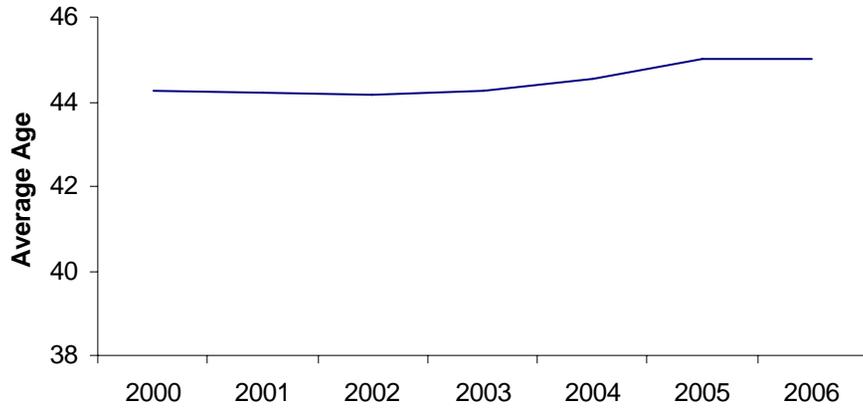
| As of June 30 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|--------------------|-----------|--------------------|-----------|-----------|
| Active Members | | | | | |
| (1) Number | 9,690 | 9,873 | 9,688 | 9,656 | 9,710 |
| (2) Average Age | 44.15 | 44.28 | 44.56 | 44.76 | 45.02 |
| (3) Average Credited Service | 10.33 | 10.39 | 10.65 | 10.58 | 10.87 |
| (4) Average Annual Earnings | \$ 52,535 | \$ 53,948 | \$ 53,925 | \$ 55,493 | \$ 59,156 |
| (5) Number Vested | 5,224 | 5,289 | 5,174 | 5,254 | 5,462 |
| (6) Percent Who Are Vested | 53.9% | 53.6% | 53.4% | 54.4% | 56.3% |
| Retirees and Beneficiaries | | | | | |
| (1) Number | 7,804 | 8,312 | 8,707 | 9,020 | 9,386 |
| (2) Average Age | 63.30 | 63.60 | 63.95 | 64.42 | 64.83 |
| (3) Average Monthly Benefit: | | | | | |
| Base | \$ 1,936 | \$ 1,983 | \$ 1,970 | \$ 1,968 | \$ 1,962 |
| C.O.L.A. | 122 | 125 | 122 | 122 | 122 |
| P.R.P.A. | 474 | 455 | 458 | 457 | 469 |
| Adjustment | 0 | 0 | 0 | 0 | 0 |
| Total | \$ 2,532 | \$ 2,563 | \$ 2,550 | \$ 2,547 | \$ 2,554 |
| Vested Terminations (vested at time of termination, not refunded contributions or commenced benefit) | | | | | |
| (1) Number | 783 | 708 | 724 | 826 | 795 |
| (2) Average Age | 48.97 | 48.57 | 48.83 | 49.13 | 48.80 |
| (3) Average Monthly Benefit | \$ 1,129 | \$ 974 | \$ 993 | \$ 1,072 | \$ 1,051 |
| Non-Vested Terminations (not vested at termination, not refunded contributions) | | | | | |
| (1) Number | 2,447 ¹ | 2,327 | 2,746 ¹ | 2,874 | 3,085 |
| (2) Average Account Balance | \$ 10,964 | \$ 11,916 | \$ 11,710 | \$ 11,684 | \$ 12,057 |

¹ Includes deceased participants with account balances.

2.2(a) Member Census Information – Total TRS (continued)

| As of June 30, 2006 | Tier 1 | Tier 2 | Total |
|-----------------------------------|----------|----------|----------|
| Retirees and Beneficiaries | | | |
| (1) Number | 9,113 | 273 | 9,386 |
| (2) Average Age | 64.92 | 61.94 | 64.83 |
| (3) Average Monthly Benefit: | | | |
| Base | \$ 1,986 | \$ 1,162 | \$ 1,962 |
| C.O.L.A. | 125 | 28 | 122 |
| P.R.P.A. | 482 | 52 | 469 |
| Adjustment | 0 | 0 | 0 |
| Total | \$ 2,593 | \$ 1,242 | \$ 2,554 |

2.2(a) Member Census Information – TRS Active Members at June 30 (continued)



2.2(b) Distribution of Active Members

| Annual Earnings by Age | | | | Annual Earnings by Credited Service | | | |
|------------------------|--------|-----------------------|-------------------------|-------------------------------------|--------|-----------------------|-------------------------|
| Age | Number | Total Annual Earnings | Average Annual Earnings | Years of Service | Number | Total Annual Earnings | Average Annual Earnings |
| 0 – 19 | - | \$ 0 | \$ 0 | 0 | 161 | \$ 6,603,148 | \$ 41,013 |
| 20 – 24 | 109 | 4,273,033 | 39,202 | 1 | 708 | 32,080,985 | 45,312 |
| 25 – 29 | 777 | 34,086,867 | 43,870 | 2 | 568 | 26,959,683 | 47,464 |
| 30 – 34 | 1,090 | 53,569,746 | 49,147 | 3 | 523 | 25,246,539 | 48,273 |
| 35 – 39 | 1,269 | 68,780,478 | 54,201 | 4 | 645 | 32,088,988 | 49,750 |
| 40 – 44 | 1,318 | 77,132,715 | 58,523 | 0 – 4 | 2,605 | 122,979,343 | 47,209 |
| 45 – 49 | 1,613 | 99,676,972 | 61,796 | 5 – 9 | 2,526 | 137,700,146 | 54,513 |
| 50 – 54 | 1,804 | 117,755,786 | 65,275 | 10 – 14 | 1,633 | 101,803,374 | 62,341 |
| 55 – 59 | 1,233 | 82,674,922 | 67,052 | 15 – 19 | 1,496 | 102,534,073 | 68,539 |
| 60 – 64 | 395 | 28,451,201 | 72,028 | 20 – 24 | 857 | 63,055,674 | 73,577 |
| 65 – 69 | 83 | 6,577,309 | 79,245 | 25 – 29 | 432 | 32,994,521 | 76,376 |
| 70 – 74 | 14 | 1,007,197 | 71,943 | 30 – 34 | 124 | 10,020,160 | 80,808 |
| 75+ | 5 | 422,789 | 84,558 | 35 – 39 | 33 | 2,909,763 | 88,175 |
| | | | | 40+ | 4 | 411,961 | 102,990 |
| Total | 9,710 | \$574,409,015 | \$ 59,156 | Total | 9,710 | \$574,409,015 | \$ 59,156 |

Years of Credited Service by Age

| Age | Years of Service | | | | | | | | | |
|---------|------------------|-------|-------|-------|-------|-------|-------|-------|-----|-------|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | Total |
| 0 – 19 | - | - | - | - | - | - | - | - | - | - |
| 20 – 24 | 108 | 1 | - | - | - | - | - | - | - | 109 |
| 25 – 29 | 664 | 113 | - | - | - | - | - | - | - | 777 |
| 30 – 34 | 493 | 545 | 52 | - | - | - | - | - | - | 1,090 |
| 35 – 39 | 350 | 552 | 312 | 55 | - | - | - | - | - | 1,269 |
| 40 – 44 | 269 | 359 | 346 | 312 | 32 | - | - | - | - | 1,318 |
| 45 – 49 | 253 | 354 | 323 | 378 | 253 | 52 | - | - | - | 1,613 |
| 50 – 54 | 240 | 318 | 320 | 414 | 296 | 191 | 25 | - | - | 1,804 |
| 55 – 59 | 155 | 213 | 214 | 262 | 185 | 128 | 62 | 14 | - | 1,233 |
| 60 – 64 | 57 | 54 | 56 | 62 | 76 | 45 | 32 | 12 | 1 | 395 |
| 65 – 69 | 9 | 17 | 10 | 12 | 13 | 11 | 5 | 5 | 1 | 83 |
| 70 – 74 | 6 | - | - | - | - | 5 | - | 2 | 1 | 14 |
| 75+ | 1 | - | - | 1 | 2 | - | - | - | 1 | 5 |
| Total | 2,605 | 2,526 | 1,633 | 1,496 | 857 | 432 | 124 | 33 | 4 | 9,710 |

Total annual earnings are the annualized earnings for the fiscal year ending on the valuation date.

2.2(c) Schedule of Active Member Valuation Data

| Valuation Date | Number | Annual Earnings (000's) | Annual Average Earnings | Percent Increase/ (Decrease) in Average Earnings | Number of Participating Employers |
|----------------|--------|-------------------------|-------------------------|--|-----------------------------------|
| June 30, 2006 | 9,710 | \$ 574,409 ¹ | \$ 59,156 | 6.6% | 58 |
| June 30, 2005 | 9,656 | 535,837 | 55,493 | 2.9% | 58 |
| June 30, 2004 | 9,688 | 522,421 | 53,925 | 0.0% | 58 |
| June 30, 2003 | 9,873 | 532,630 | 53,948 | 2.7% | 57 |
| June 30, 2002 | 9,690 | 509,437 | 52,535 | 3.9% | 57 |
| June 30, 2001 | 9,815 | 496,188 | 50,544 | 1.8% | 60 |
| June 30, 1999 | 9,396 | 466,414 | 49,640 | (2.1)% | 61 |
| June 30, 1998 | 9,262 | 469,433 | 50,684 | (0.4)% | 61 |
| June 30, 1997 | 9,164 | 466,455 | 50,901 | 1.3% | 61 |
| June 30, 1996 | 9,259 | 465,182 | 50,241 | (0.5)% | 61 |

¹ Prior to June 30, 2006, unannualized earnings were used. Starting June 30, 2006, annualized earnings are used.

2.2(d) Statistics on New Benefit Recipients

| During the Year Ending June 30 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|----------|----------|----------|----------|----------|
| Service | | | | | |
| (1) Number | 529 | 548 | 446 | 393 | 425 |
| (2) Average Age at Commencement | 54.80 | 55.13 | 55.09 | 56.43 | 56.52 |
| (3) Average Monthly Benefit | \$ 2,556 | \$ 2,751 | \$ 2,384 | \$ 2,261 | \$ 2,290 |
| Survivor (including surviving spouse and QDROs) | | | | | |
| (1) Number | 50 | 43 | 35 | 46 | 57 |
| (2) Average Age at Commencement | 65.09 | 60.60 | 58.30 | 60.88 | 63.29 |
| (3) Average Monthly Benefit | \$ 1,270 | \$ 1,242 | \$ 1,050 | \$ 1,263 | \$ 1,288 |
| Disability | | | | | |
| (1) Number | 10 | 8 | 10 | 7 | 5 |
| (2) Average Age at Commencement | 48.28 | 47.76 | 49.85 | 53.64 | 44.41 |
| (3) Average Monthly Benefit | \$ 2,800 | \$ 3,635 | \$ 2,887 | \$ 2,627 | \$ 2,855 |
| Total | | | | | |
| (1) Number | 589 | 599 | 491 | 446 | 487 |
| (2) Average Age at Commencement | 55.56 | 55.42 | 55.21 | 56.57 | 57.19 |
| (3) Average Monthly Benefit | \$ 2,451 | \$ 2,654 | \$ 2,299 | \$ 2,164 | \$ 2,179 |

2.2(e) Schedule of Average Benefit Payments – New Benefit Recipients

| | Years of Credited Service | | | | | | |
|---------------------------|---------------------------|----------|----------|----------|----------|----------|----------|
| | 0 - 4 | 5 - 9 | 10 - 14 | 15 - 19 | 20 - 24 | 25 - 29 | 30+ |
| Period 7/1/05 – 6/30/06:* | | | | | | | |
| Average Monthly Benefit | \$ 1,078 | \$ 960 | \$ 1,110 | \$ 1,982 | \$ 2,695 | \$ 3,388 | \$ 4,563 |
| Number of Recipients | 9 | 50 | 63 | 90 | 124 | 68 | 26 |
| Period 7/1/04- 6/30/05:* | | | | | | | |
| Average Monthly Benefit | \$ 1,287 | \$ 1,106 | \$ 1,575 | \$ 2,255 | \$ 2,932 | \$ 3,534 | \$ 4,018 |
| Number of Recipients | 119 | 24 | 33 | 69 | 105 | 31 | 16 |
| Period 7/1/03- 6/30/04: | | | | | | | |
| Average Monthly Benefit | \$ 251 | \$ 896 | \$ 1,243 | \$ 2,044 | \$ 2,782 | \$ 3,640 | \$ 4,860 |
| Number of Recipients | 21 | 51 | 75 | 85 | 178 | 64 | 17 |
| Period 7/1/02- 6/30/03: | | | | | | | |
| Average Monthly Benefit | \$ 236 | \$ 899 | \$ 1,153 | \$ 2,350 | \$ 2,835 | \$ 3,969 | \$ 5,133 |
| Number of Recipients | 16 | 40 | 69 | 91 | 264 | 87 | 32 |
| Period 7/1/01- 6/30/02: | | | | | | | |
| Average Monthly Benefit | \$ 532 | \$ 795 | \$ 1,168 | \$ 1,706 | \$ 2,455 | \$ 3,126 | \$ 3,915 |
| Number of Recipients | 4 | 36 | 62 | 78 | 180 | 137 | 92 |
| Period 7/1/99- 6/30/01: | | | | | | | |
| Average Monthly Benefit | \$ 1,514 | \$ 1,021 | \$ 1,488 | \$ 1,935 | \$ 2,435 | \$ 2,551 | \$ 2,864 |
| Number of Recipients | 2 | 33 | 101 | 237 | 374 | 201 | 109 |
| Period 7/1/98- 6/30/99: | | | | | | | |
| Average Monthly Benefit | \$ 1,230 | \$ 820 | \$ 1,152 | \$ 1,691 | \$ 2,510 | \$ 3,285 | \$ 3,756 |
| Number of Recipients | 23 | 43 | 67 | 81 | 176 | 153 | 55 |
| Period 7/1/97- 6/30/98: | | | | | | | |
| Average Monthly Benefit | \$ 1,051 | \$ 850 | \$ 1,095 | \$ 1,842 | \$ 2,590 | \$ 3,443 | \$ 4,280 |
| Number of Recipients | 26 | 51 | 80 | 105 | 240 | 154 | 57 |
| Period 7/1/96- 6/30/97: | | | | | | | |
| Average Monthly Benefit | \$ 996 | \$ 828 | \$ 1,042 | \$ 1,692 | \$ 2,493 | \$ 3,353 | \$ 3,812 |
| Number of Recipients | 19 | 42 | 71 | 77 | 151 | 153 | 52 |

*Does not include beneficiaries.

“Average Monthly Benefit” includes postretirement pension adjustments and cost-of-living increases.

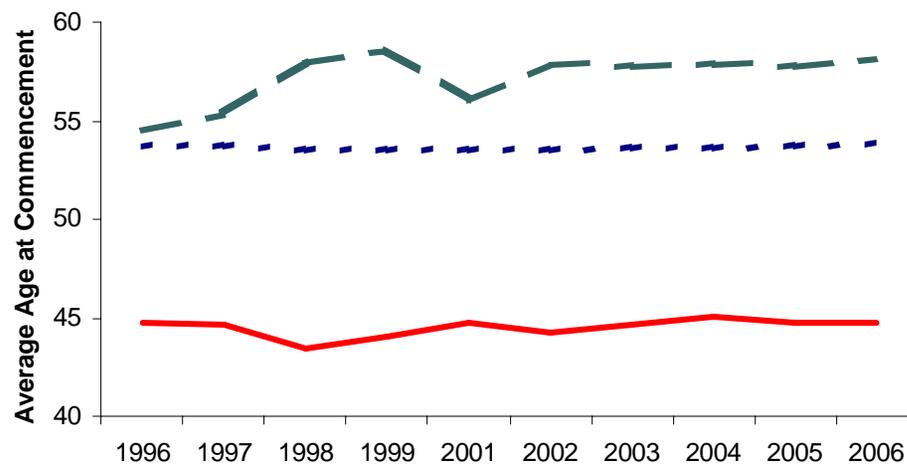
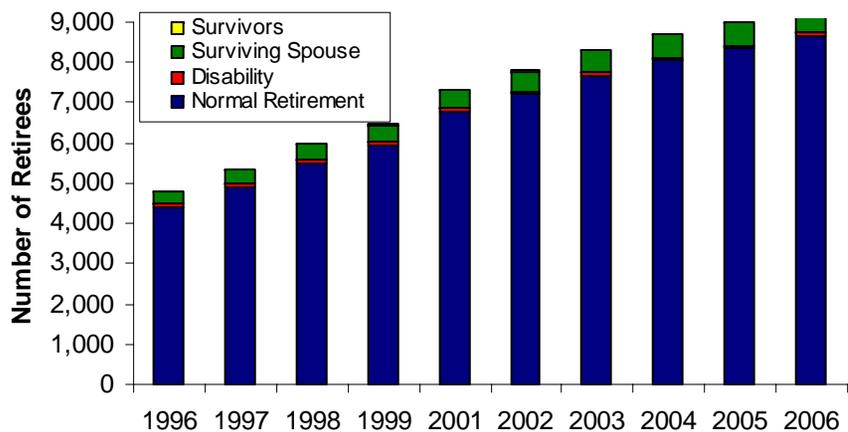
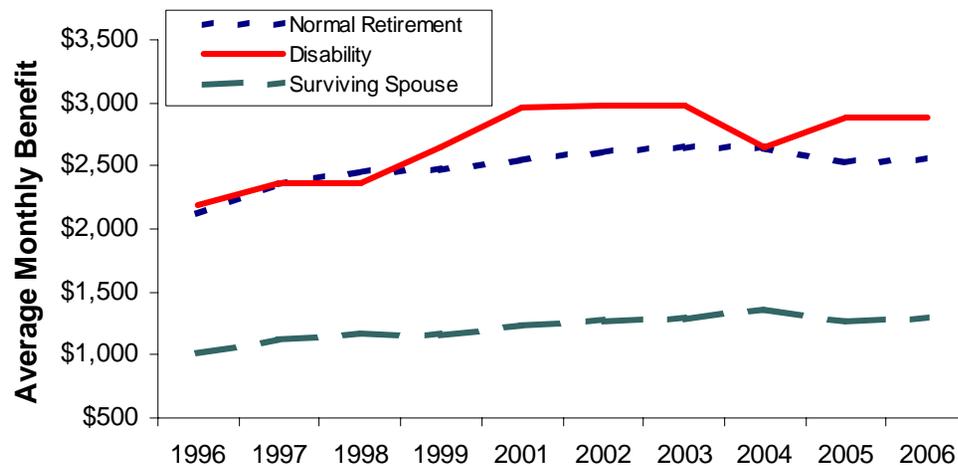
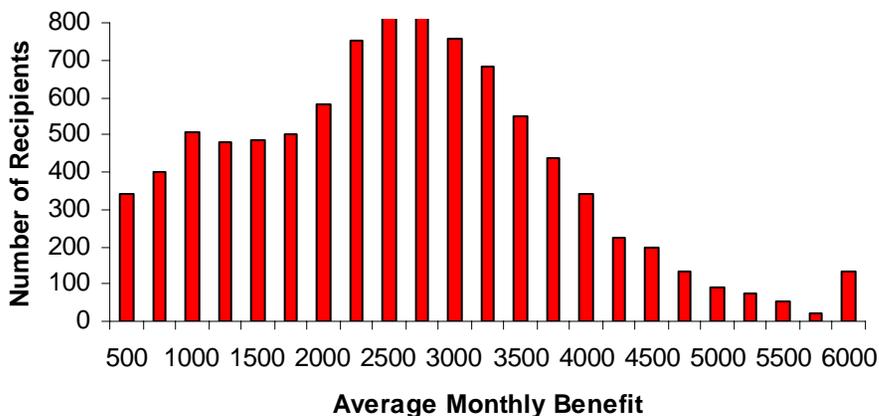
2.2(f) Statistics on All Benefit Recipients

| As of June 30 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|-----------------------|-----------------------|-----------------------|----------|----------|
| Service | | | | | |
| (1) Number, Fiscal Year Start | 6,754 | 7,201 | 7,680 | 8,052 | 8,351 |
| (2) Net Change | 447 | 479 | 372 | 299 | 324 |
| (3) Number, Fiscal Year End | 7,201 | 7,680 | 8,052 | 8,351 | 8,675 |
| (4) Average Age at Commencement | 53.53 | 53.64 | 53.68 | 53.77 | 53.81 |
| (5) Average Current Age | 63.27 | 63.50 | 63.85 | 64.32 | 64.72 |
| (6) Average Monthly Benefit | \$ 2,618 | \$ 2,648 | \$ 2,649 | \$ 2,537 | \$ 2,558 |
| Surviving Spouse's Benefits (Includes QDROs) | | | | | |
| (1) Number, Fiscal Year Start | 469 | 501 | 549 | 576 | 602 |
| (2) Net Change | 32 | 48 | 27 | 26 | 45 |
| (3) Number, Fiscal Year End | 501 | 549 | 576 | 602 | 647 |
| (4) Average Age at Commencement | 57.86 | 57.78 | 57.86 | 57.75 | 58.16 |
| (5) Average Current Age | 66.88 | 66.96 | 68.12 | 67.31 | 67.71 |
| (6) Average Monthly Benefit | \$ 1,279 | \$ 1,297 | \$ 1,367 | \$ 1,270 | \$ 1,292 |
| Survivor's Benefits (other than spouses) | | | | | |
| (1) Number, Fiscal Year Start | 9 ¹ | 17 | 1 | 3 | 1 |
| (2) Net Change | 8 | (16) | 2 | (2) | 0 |
| (3) Number, Fiscal Year End | 17 | 1 | 3 | 1 | 1 |
| (4) Average Age at Commencement | 46.06 | 49.77 | 47.59 | 35.52 | 35.52 |
| (5) Average Current Age | 53.71 | 51.35 | 52.09 | 35.77 | 36.77 |
| (6) Average Monthly Benefit | \$ 549 | \$ 1,113 | \$ 581 | \$ 448 | \$ 451 |
| Disabilities | | | | | |
| (1) Number, Fiscal Year Start | 101 | 85 | 82 | 76 | 66 |
| (2) Net Change | (16) | (3) | (6) | (10) | (3) |
| (3) Number, Fiscal Year End | 85 | 82 | 76 | 66 | 63 |
| (4) Average Age at Commencement | 44.22 | 44.68 | 45.09 | 44.74 | 44.76 |
| (5) Average Current Age | 50.95 | 51.21 | 51.12 | 51.31 | 51.03 |
| (6) Average Monthly Benefit | \$ 2,974 ² | \$ 2,976 ² | \$ 2,655 ² | \$ 2,891 | \$ 2,885 |
| Total | | | | | |
| (1) Number, Fiscal Year Start | 7,333 | 7,804 | 8,312 | 8,707 | 9,020 |
| (2) Net Change | 471 | 508 | 395 | 313 | 366 |
| (3) Number, Fiscal Year End | 7,804 | 8,312 | 8,707 | 9,020 | 9,386 |
| (4) Average Age at Commencement | 53.69 | 53.82 | 53.88 | 53.97 | 54.05 |
| (5) Average Current Age | 63.35 | 63.61 | 64.02 | 64.42 | 64.83 |
| (6) Average Monthly Benefit | \$ 2,531 | \$ 2,562 | \$ 2,564 | \$ 2,455 | \$ 2,473 |

¹ Includes surviving dependents only.

² Includes benefit increases due to dependents.

2.2(f) Statistics on All Benefit Recipients (continued)



2.2(g) Distribution of Annual Benefits for Benefit Recipients

| Annual Benefit by Age | | | | Annual Benefit by Years Since Commencement | | | |
|-----------------------|--------------|----------------------|------------------------|--|--------------|-----------------------|------------------------|
| Age | Number | Total Annual Benefit | Average Annual Benefit | Years Since Commencement | Number | Total Annual Benefit | Average Annual Benefit |
| 0 – 19 | 0 | \$ 0 | \$ 0 | 0 | 434 | \$ 11,147,847 | \$ 25,686 |
| 20 – 24 | 0 | 0 | 0 | 1 | 461 | 12,303,640 | 26,689 |
| 25 – 29 | 0 | 0 | 0 | 2 | 500 | 12,646,887 | 25,294 |
| 30 – 34 | 1 | 39,240 | 39,240 | 3 | 464 | 11,898,344 | 25,643 |
| 35 – 39 | 6 | 159,996 | 26,666 | 4 | 630 | 18,196,737 | 28,884 |
| 40 – 44 | 32 | 792,957 | 24,780 | 0 – 4 | 2,489 | 66,193,455 | 26,594 |
| 45 – 49 | 195 | 5,244,374 | 26,894 | 5 – 9 | 2,585 | 73,591,176 | 28,469 |
| 50 – 54 | 773 | 21,771,577 | 28,165 | 10 – 14 | 1,590 | 49,427,898 | 31,087 |
| 55 – 59 | 2,124 | 59,655,464 | 28,086 | 15 – 19 | 1,434 | 49,211,057 | 34,317 |
| 60 – 64 | 2,290 | 67,741,388 | 29,581 | 20 – 24 | 709 | 23,995,758 | 33,845 |
| 65 – 69 | 1,617 | 50,843,702 | 31,443 | 25 – 29 | 406 | 11,501,734 | 28,329 |
| 70 – 74 | 1,042 | 33,143,997 | 31,808 | 30 – 34 | 162 | 4,269,972 | 26,358 |
| 75+ | 1,306 | 39,135,585 | 29,966 | 35 – 39 | 9 | 270,234 | 30,026 |
| | | | | 40+ | 2 | 66,996 | 33,498 |
| Total | 9,386 | \$278,528,280 | \$ 29,675 | Total | 9,386 | \$ 278,528,280 | \$ 29,675 |

Years Since Benefit Commencement by Age

| Age | Years Since Commencement | | | | | | | | | Total |
|--------------|--------------------------|--------------|--------------|--------------|------------|------------|------------|----------|----------|--------------|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | |
| 0 – 19 | - | - | - | - | - | - | - | - | - | 0 |
| 20 – 24 | - | - | - | - | - | - | - | - | - | 0 |
| 25 – 29 | - | - | - | - | - | - | - | - | - | 0 |
| 30 – 34 | 1 | - | - | - | - | - | - | - | - | 1 |
| 35 – 39 | 4 | 2 | - | - | - | - | - | - | - | 6 |
| 40 – 44 | 26 | 6 | - | - | - | - | - | - | - | 32 |
| 45 – 49 | 150 | 39 | 5 | 1 | - | - | - | - | - | 195 |
| 50 – 54 | 492 | 246 | 31 | 2 | 1 | - | - | 1 | - | 773 |
| 55 – 59 | 1,020 | 780 | 246 | 72 | 4 | 1 | 1 | - | - | 2,124 |
| 60 – 64 | 514 | 943 | 502 | 302 | 23 | 5 | 1 | - | - | 2,290 |
| 65 – 69 | 179 | 348 | 499 | 463 | 118 | 6 | 4 | - | - | 1,617 |
| 70 – 74 | 53 | 149 | 189 | 368 | 232 | 46 | 3 | 2 | - | 1,042 |
| 75+ | 50 | 72 | 118 | 226 | 331 | 348 | 153 | 6 | 2 | 1,306 |
| Total | 2,489 | 2,585 | 1,590 | 1,434 | 709 | 406 | 162 | 9 | 2 | 9,386 |

2.2(h) Schedule of Benefit Recipients by Type of Benefit and Option Selected

| Amount of Monthly Benefit | | Number of Recipients | Type of Benefit | | | Option Selected | | | |
|------------------------------|---------|-------------------------|-----------------|-----|----|-----------------|-------|-------|-----|
| | | | 1 | 2 | 3 | 1 | 2 | 3 | 4 |
| \$ 1 | \$ 300 | 152 | 121 | 31 | - | 82 | 33 | 28 | 9 |
| 301 | – 600 | 325 | 255 | 70 | - | 173 | 66 | 69 | 17 |
| 601 | – 900 | 586 | 466 | 120 | - | 316 | 123 | 118 | 29 |
| 901 | – 1,200 | 568 | 465 | 103 | - | 333 | 130 | 89 | 16 |
| 1,201 | – 1,500 | 583 | 487 | 96 | - | 321 | 109 | 135 | 18 |
| 1,501 | – 1,800 | 596 | 504 | 91 | 1 | 330 | 125 | 122 | 19 |
| 1,801 | – 2,100 | 786 | 727 | 53 | 6 | 407 | 156 | 196 | 27 |
| 2,101 | – 2,400 | 936 | 887 | 35 | 14 | 499 | 182 | 233 | 22 |
| 2,401 | – 2,700 | 1,012 | 981 | 19 | 12 | 527 | 192 | 264 | 29 |
| 2,701 | – 3,000 | 909 | 890 | 13 | 6 | 510 | 151 | 233 | 15 |
| 3,001 | – 3,300 | 802 | 783 | 10 | 9 | 472 | 109 | 209 | 12 |
| 3,301 | – 3,600 | 628 | 622 | 2 | 4 | 370 | 75 | 169 | 14 |
| 3,601 | – 3,900 | 470 | 463 | 4 | 3 | 280 | 54 | 130 | 6 |
| 3,901 | – 4,200 | 288 | 284 | - | 4 | 169 | 28 | 86 | 5 |
| Over \$4,200 | | 745 | 740 | 1 | 4 | 421 | 80 | 224 | 20 |
| Totals | | 9,386 | 8,675 | 648 | 63 | 5,210 | 1,613 | 2,305 | 258 |

Type of Benefit

1. Normal retirement
2. Survivor payment
3. Disability

Option Selected

1. Whole Life Annuity
2. 75% Joint and Contingent Annuity
3. 50% Joint and Contingent Annuity
4. 66 2/3% Joint and Survivor Annuity

2.2(i) Schedule of Benefit Recipients Added to and Removed from Rolls

| Year Ended | Added to Rolls | | Removed from Rolls | | Rolls – End of Year | | Percent Increase in Annual Allowances | Average Annual Allowance |
|---------------|------------------|--------------------------------|--------------------|--------------------------------|---------------------|-------------------|---------------------------------------|--------------------------|
| | No. ¹ | Annual Allowances ¹ | No. ¹ | Annual Allowances ¹ | No. | Annual Allowances | | |
| June 30, 2006 | 487 | \$12,731,292 | 121 | \$-50,838 | 9,386 | \$278,528,280 | 4.81% | \$29,675 |
| June 30, 2005 | 446 | 11,243,448 | 121 | 13,053,612 | 9,020 | 265,746,150 | (0.68)% | 29,462 |
| June 30, 2004 | 491 | 17,867,366 | 96 | 5,503,666 | 8,707 | 267,556,314 | 4.84% | 30,729 |
| June 30, 2003 | 599 | 21,475,421 | 91 | 3,377,352 | 8,312 | 255,192,614 | 7.63% | 30,702 |
| June 30, 2002 | 589 | 24,789,896 | 118 | 4,966,397 | 7,804 | 237,094,545 | 9.12% | 30,381 |
| June 30, 2001 | 1,057 | 39,213,327 | 210 | 7,790,727 | 7,333 | 217,271,046 | 16.91% | 29,629 |
| June 30, 1999 | 598 | 19,014,567 | 91 | 2,893,521 | 6,486 | 185,848,446 | 9.50% | 28,654 |
| June 30, 1998 | 674 | 24,479,595 | 38 | 1,380,155 | 5,979 | 169,727,400 | 15.75% | 28,387 |
| June 30, 1997 | 583 | 29,988,351 ² | 43 | 2,211,834 ² | 5,343 | 146,627,960 | 23.37% | 27,443 |
| June 30, 1996 | 376 | 8,410,895 | 32 | 94,443 | 4,803 | 118,851,443 | 7.19% | 24,745 |

¹ Numbers are estimated, and include other internal transfers.

² Includes additional benefits to current retirees from a one-time retroactive ad hoc Postretirement Pension Adjustment.

2.3 Summary of Actuarial Assumptions and Methods

The demographic and economic assumptions used in the June 30, 2006 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board in October 2006. These assumptions were the result of an experience study performed as of June 30, 2005. The funding method used in this valuation was adopted by the Board in October 2006. The asset smoothing method used to determine valuation assets was changed effective June 30, 2002.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

Valuation of Liabilities

(A) Actuarial Method – Entry Age Actuarial Cost.

Liabilities and contributions shown in the report are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 25 years as a level percent of pay amount. Payroll is assumed to increase 4.0% per year for this purpose. State statutes allow the contribution rate to be determined on payroll for all members, defined benefit and defined contribution member payroll combined. However, in keeping with GASB requirements, the net amortization period will not exceed 30 years and the level dollar amortization method is used since the defined benefit plan membership was closed effective July 1, 2006..

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for pension benefits (constant dollar amount for healthcare benefits), from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Changes in Methods from the Prior Valuation

The actuarial cost method was changed from Projected Unit Credit to Entry Age Normal effective with the June 30, 2006 valuation.

(B) Valuation of Assets

Effective June 30, 2002, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method will be phased in over the next five years. All assets are valued at market value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.

(C) Valuation of Medical Benefits

This section outlines the detailed methodology used to develop the initial per capita claims cost rates for the State of Alaska Teachers' Retirement System postemployment healthcare plan. Note that methodology is greatly revised from the prior valuation and reflects the results of our Experience Study for the period July 1, 2001 to June 30, 2005.

Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods, i.e., medical claims, prescription drug claims, administrative costs, etc. Separate analysis is limited by the availability and credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A coverage is not available by individual, nor is this status incorporated into historical claim data.

We analyzed Aetna management-level reporting for calendar 2003 through fiscal 2006 and derived recommended base claims cost rates as described in the following steps:

1. Based on analysis described in our Experience Study, dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation.
2. Available reporting does not show claims or enrollment separately for Medicare and non-Medicare plan participants, but does include overall statistics as to the percentage of claims and enrollment attributable to both groups. We used summary statistics provided to split claims and enrollment into Medicare and non-Medicare buckets each year.

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

3. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For these “no-Part A” individuals, the State is the primary payer for hospital bills and other Part A services. Thus, claims costs are higher for the no-Part A group. To date, claim and enrollment experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. Therefore, higher no-Part A claims are spread across the entire retired population and have been applied to future claims of current active employees projected to retire in the future. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate and will be lower. The larger the no-Part A population, the more accrued liabilities will decrease.

Current retiree census does not include date of hire, although the Tier indicator does imply that Tier I TRS retirees should probably be considered as no-Part A retirees. After analysis of active employee data, and accounting for retirees who return to work and therefore pay Medicare taxes, we assume that 7.5% of the active and inactive workforce will not qualify for free Part A coverage when they retire. Similarly, we assume 7.5% of the current retiree population does not receive Part A coverage.

We are working with the State to compile census records for no-Part A members to build an historic claim database isolating no-Part A members.

Due to data constraints, we were unable to establish credible rates for Medicare A&B and Medicare B only. We therefore conservatively set Medicare A&B rates relatively close to aggregate Medicare rates previously established and then set Medicare B only rates to reflect a reasonable no-Part A cost to the State’s plan. To the extent future data specific to Medicare subgroups becomes credible, we can modify this conservative assumption.

4. The steps above result in separate paid claims cost rates for medical and prescription benefits for non-Medicare, Medicare Part B only and Medicare Part A&B members for the past four calendar years. Medical claims cost rates reflect differing average ages and levels of Medicare coordination for each group. Prescription claims cost rates reflect differing average ages. We converted paid claim data to incurred cost rates projected from each historical data period to the valuation year and developed weighted average incurred claims cost rates. The assumed lag between medical claim incurred and paid dates is 2 months. This “trend and blend” methodology differs mechanically from the prior method that essentially averaged three years of paid claims before projecting forward to an incurred basis for the valuation year. During transition to a trended blended average basis, we recommend weighting each year’s data in the 4-year experience period at 25% and further averaging such results with expected claims cost rates based on prior valuation methodology. Because prior methodology produces significantly greater claims costs for Medicare members we have assumed that resulting per capita claims cost rates are sufficient to cover administrative costs. In the future, we will incorporate actual administrative costs and may recommend weighting recent experience more heavily and/or reducing the experience period analyzed back to a 3-year period.

2.3 Summary of Actuarial Assumptions and Methods (continued)

June 30, 2006 Valuation – FY 2007 Claims Cost Rates

| | Medical | | | | Total |
|---|-----------------------|----------------------|---------------------|----------------------|-----------------------|
| | Pre-Medicare | Medicare A&B | Medicare B Only | Prescription Drugs | |
| Calendar 2003 Paid Claims | \$ 123,938,420 | \$ 4,006,301 | \$ 1,087,554 | \$ 57,596,427 | \$ 186,628,703 |
| Membership | 31,619 | 15,748 | 1,277 | 48,644 | 48,644 |
| Paid Claims Cost Rate | \$ 3,920 | \$ 254 | \$ 852 | \$ 1,184 | \$ 3,837 |
| Trend to FY2007 | 1.383 | 1.383 | 1.383 | 1.592 | |
| FY 2007 Paid Cost Rate | \$ 5,422 | \$ 352 | \$ 1,178 | \$ 1,885 | |
| Paid to Incurred Factor** | 1.015 | 1.015 | 1.015 | 1.007 | |
| FY 2007 Incurred Cost Rate | \$ 5,503 | \$ 357 | \$ 1,196 | \$ 1,899 | |
| Calendar 2004 Paid Claims | \$ 139,793,036 | \$ 7,336,033 | \$ 1,379,219 | \$ 69,523,105 | \$ 218,031,393 |
| Membership | 32,858 | 17,096 | 1,386 | 51,340 | 51,340 |
| Paid Claims Cost Rate | \$ 4,254 | \$ 429 | \$ 995 | \$ 1,354 | \$ 4,247 |
| Trend to FY2007 | 1.252 | 1.252 | 1.252 | 1.385 | |
| FY 2007 Paid Cost Rate | \$ 5,326 | \$ 537 | \$ 1,246 | \$ 1,875 | |
| Paid to Incurred Factor** | 1.015 | 1.015 | 1.015 | 1.007 | |
| FY 2007 Incurred Cost Rate | \$ 5,405 | \$ 545 | \$ 1,264 | \$ 1,889 | |
| Calendar 2005 Paid Claims | \$ 163,066,241 | \$ 11,021,966 | \$ 1,863,519 | \$ 80,293,244 | \$ 256,244,971 |
| Membership | 33,343 | 18,114 | 1,469 | 52,926 | 52,926 |
| Paid Claims Cost Rate | \$ 4,891 | \$ 608 | \$ 1,269 | \$ 1,517 | \$ 4,842 |
| Trend to FY2007 | 1.143 | 1.143 | 1.143 | 1.215 | |
| FY 2007 Paid Cost Rate | \$ 5,591 | \$ 696 | \$ 1,450 | \$ 1,843 | |
| Paid to Incurred Factor** | 1.015 | 1.015 | 1.015 | 1.007 | |
| FY 2007 Incurred Cost Rate | \$ 5,674 | \$ 706 | \$ 1,472 | \$ 1,856 | |
| Fiscal 2006 Paid Claims | \$ 166,902,156 | \$ 10,350,915 | \$ 1,660,228 | \$ 87,341,702 | \$ 266,255,001 |
| Membership | 35,601 | 16,777 | 1,360 | 53,738 | 53,738 |
| Paid Claims Cost Rate | \$ 4,688 | \$ 617 | \$ 1,221 | \$ 1,625 | \$ 4,955 |
| Trend to FY2007 | 1.090 | 1.090 | 1.090 | 1.130 | |
| FY 2007 Paid Cost Rate | \$ 5,110 | \$ 672 | \$ 1,331 | \$ 1,837 | |
| Paid to Incurred Factor** | 1.015 | 1.015 | 1.015 | 1.007 | |
| FY 2007 Incurred Cost Rate | \$ 5,186 | \$ 682 | \$ 1,350 | \$ 1,850 | |
| Weighted Average 7/2006 – 6/2007 Incurred Claims Cost Rates | | | | | |
| At average age | \$ 5,442 | \$ 573 | \$ 1,320 | \$ 1,873 | |
| At age 65* | \$ 9,112 | \$ 395 | \$ 793 | \$ 2,635 | |
| Prior Methodology FY2007 Incurred Cost Rates (6/2005 valuation with trend): | | | | | |
| At age 65* | \$ 9,078 | \$ 1,528 | \$ 3,056 | \$ 2,193 | |
| Final Base Cost Rates at age 65 | \$ 9,095 | \$ 962 | \$ 1,924 | \$ 2,414 | |

* Final Medicare rates are adjusted so that net plan cost for members with Parts A & B are one-half of net plan costs for members with Part B only. Also, prior methodology did not include separate Part B only analysis; applicable rates above are determined so that the composite Medicare rate equates to separate A&B and B only rates based on the 7.5% of membership assumed to lack Part A.

** As data specific to Medicare and Pre-Medicare retirees is provided, lag factors specific to Medicare status will be reflected.

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Following the development of total projected costs, a distribution of per capita claims cost was developed. This was accomplished by allocating total projected costs to the population census used in the valuation. The allocation was done separately for each of prescription drugs and medical costs for the Medicare eligible and pre-Medicare populations. The allocation weights were developed using participant counts by age and assumed morbidity and aging factors. Results were tested for reasonableness based on historical trend and external benchmarks for costs paid by Medicare.

Below are the results of this analysis:

**Distribution of Per Capita Claims Cost by Age
for the Period July 1, 2006 through June 30, 2007**

| Age | Medical and Medicare Parts A & B | Medical and Medicare Part B Only | Prescription Drug and Medicare Retiree Drug Subsidy |
|-----|--|--|--|
| 45 | \$ 5,037 | \$ 5,037 | \$ 1,273 |
| 50 | 5,699 | 5,699 | 1,512 |
| 55 | 6,448 | 6,448 | 1,796 |
| 60 | 7,658 | 7,658 | 2,082 |
| 65 | 962 | 1,924 | 1,898 |
| 70 | 1,170 | 2,341 | 2,045 |
| 75 | 1,390 | 2,779 | 2,181 |
| 80 | 1,497 | 2,994 | 2,236 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

(D) Actuarial Assumptions

| | |
|-----------------------------------|---|
| Investment Return / Discount Rate | 8.25% per year, compounded annually, net of expenses. |
| Salary Scale | Inflation – 3.5% per year Merit– 2.0% per year for first 5 years of employment grading down to 0% after 15 years. Productivity – 0.5% per year |
| Payroll Growth | 4.0% |
| Total Inflation | Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.5% annually. |
| Mortality (Preretirement) | Based upon the 2001-2005 actual experience. (See Table 1). 60% of the 1994 Group Annuity Table 1994 Base Year for females and 55% for males. All deaths are assumed to result from non-occupational causes. |
| Mortality (Postretirement) | Based upon the 2001-2005 actual experience. (See Table 2). 1-year setback of the 1994 Group Annuity Table 1994 Base Year for females and 3-year setback for males. |
| Turnover | Select and ultimate rates based upon the 2001-2005 actual withdrawal experience. (See Table 3). |
| Disability | Incidence rates based upon the 2001-2005 actual experience, in accordance with Table 4. Post-disability mortality in accordance with the 1979 Pension Benefit Guaranty Corporation Disability Mortality Table to reflect mortality of those receiving disability benefits under Social Security. All disabilities are assumed to result from non-occupational causes. |
| Retirement | Retirement rates based upon the 2001-2005 actual experience in accordance with Table 5. |
| Marriage and Age Difference | Wives are assumed to be three years younger than husbands. 85% of male members and 75% of female members are assumed to be married. |
| Dependent Children | Benefits to dependent children have been valued assuming members who are married and between the ages of 25 and 45 have two dependent children. |
| Contribution Refunds | 10% of those terminating are assumed to have their contributions refunded. |
| COLA | Of those benefit recipients who are eligible for the COLA, 60% are assumed to remain in Alaska and receive the COLA. |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

(D) Actuarial Assumptions *(continued)*

| | | |
|-----------------------------------|--|-------------------------------|
| Sick Leave | 4.7 days of unused sick leave for each year of service are assumed to be available to be credited once the member is retired. | |
| Postretirement Pension Adjustment | 50% and 75% of assumed inflation, or 1.75% and 2.625% respectively, is valued for the annual automatic Postretirement Pension Adjustment (PRPA) as specified in the statute. | |
| Expenses | All expenses are included in the investment return assumption. | |
| Part-time Status | Part-time employees are assumed to earn 0.55 years of credited service per year. | |
| Service | Total credited service is provided by the State. We assume that this service is the only service that should be used to calculate benefits. Additionally, the State provides claimed service (including Bureau of Indian Affairs Service). Claimed service is used for vesting and eligibility purposes as described in Section 2.1. | |
| Per Capita Claims Cost | Sample claims cost rates for FY07 medical benefits are shown below: | |
| | Medical | Prescription Drugs |
| Total | \$ 9,095 | \$ 2,414 |
| Medicare Parts A & B | \$ 8,133 | N/A |
| Medicare Part B Only | \$ 7,171 | N/A |
| Medicare Part D | N/A | \$ 516 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

| Health Cost Trend | Prescription | |
|-------------------|--------------|-------|
| | Medical | Drugs |
| FY07 | 9.0% | 13% |
| FY08 | 8.5% | 12% |
| FY09 | 8.0% | 11% |
| FY10 | 7.5% | 10% |
| FY11 | 7.0% | 9% |
| FY12 | 6.5% | 8% |
| FY13 | 6.0% | 7% |
| FY14 | 5.5% | 6% |
| FY15 | 5.0% | 5% |
| FY16 and later | 5.0% | 5% |

For the June 30, 2005 valuation, graded Healthcare Cost Trend Rates (HCCTR) were reinitialized. A survey of healthcare trends in the past year has revealed a general lowering of HCCTR. No reinitialization is required this year, so the trend rates will follow the same pattern as for the 2005 valuation.

| Aging Factors | Prescription | |
|---------------|--------------|-------|
| | Medical | Drugs |
| Age | | |
| 0-44 | 2.0% | 4.5% |
| 45-54 | 2.5% | 3.5% |
| 55-64 | 3.5% | 3.0% |
| 65-74 | 4.0% | 1.5% |
| 75-84 | 1.5% | 0.5% |
| 85+ | 0.5% | 0.0% |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Retired Member Contributions for Medical Benefits

Currently contributions are required for TRS members who are under age 60 and have less than 30 years of service. Eligible Tier 1 members are exempt from contribution requirements. Annual FY07 contributions based on monthly rates shown below for calendar 2006 and 2007 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members assumed to retire prior to age 60 with less than 30 years of service:

| Coverage Category | FY07 Annual Contribution | Calendar 2007 Monthly Contribution | Calendar 2006 Monthly Contribution |
|------------------------|--------------------------|------------------------------------|------------------------------------|
| Retiree Only | \$ 7,080 | \$ 590 | \$ 590 |
| Retiree and Spouse | \$ 14,148 | \$ 1,179 | \$ 1,179 |
| Retiree and Child(ren) | \$ 9,996 | \$ 883 | \$ 883 |
| Retiree and Family | \$ 17,076 | \$ 1,423 | \$ 1,423 |
| Composite | \$ 10,512 | \$ 876 | \$ 876 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

| | | |
|---|----------------|------|
| Trend Rate for Retired Member Contribution | FY08 | 8.0% |
| | FY09 | 7.7% |
| | FY10 | 7.3% |
| | FY11 | 7.0% |
| | FY12 | 6.7% |
| | FY13 | 6.3% |
| | FY14 | 6.0% |
| | FY15 | 5.7% |
| | FY16 | 5.3% |
| | FY17 and later | 5.0% |

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2005 valuation. A study of the required contribution history along with assumptions related to the impact of recent accounting regulations leads us to recommend the new assumptions above for the contribution trends. Note that actual FY07 retired member medical contributions are reflected in the valuation so trend on such contribution during FY07 is not applicable.

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Table 1
Alaska TRS
Mortality Table (Preretirement)

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 20 | .030% | .018% |
| 21 | .031 | .019 |
| 22 | .033 | .019 |
| 23 | .035 | .019 |
| 24 | .037 | .019 |
| 25 | .039 | .019 |
| 26 | .041 | .019 |
| 27 | .043 | .019 |
| 28 | .045 | .020 |
| 29 | .046 | .021 |
| 30 | .047 | .023 |
| 31 | .049 | .024 |
| 32 | .050 | .026 |
| 33 | .050 | .027 |
| 34 | .050 | .029 |
| 35 | .050 | .031 |
| 36 | .051 | .033 |
| 37 | .053 | .036 |
| 38 | .056 | .039 |
| 39 | .059 | .042 |
| 40 | .063 | .046 |
| 41 | .068 | .050 |
| 42 | .074 | .053 |
| 43 | .080 | .057 |
| 44 | .086 | .060 |
| 45 | .093 | .063 |
| 46 | .102 | .067 |
| 47 | .112 | .072 |
| 48 | .124 | .073 |
| 49 | .138 | .085 |
| 50 | .153 | .092 |
| 51 | .170 | .101 |
| 52 | .190 | .112 |
| 53 | .212 | .123 |
| 54 | .235 | .135 |
| 55 | .262 | .148 |
| 56 | .293 | .165 |
| 57 | .330 | .188 |
| 58 | .373 | .217 |
| 59 | .419 | .249 |
| 60 | .472 | .286 |
| 61 | .532 | .329 |
| 62 | .600 | .376 |
| 63 | .678 | .431 |
| 64 | .765 | .492 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Table 2
Alaska TRS
Mortality Table (Postretirement)

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 50 | .204% | .141% |
| 51 | .226 | .154 |
| 52 | .250 | .169 |
| 53 | .277 | .186 |
| 54 | .309 | .205 |
| 55 | .346 | .224 |
| 56 | .385 | .247 |
| 57 | .428 | .276 |
| 58 | .476 | .314 |
| 59 | .532 | .361 |
| 60 | .600 | .415 |
| 61 | .677 | .477 |
| 62 | .762 | .548 |
| 63 | .858 | .627 |
| 64 | .966 | .718 |
| 65 | 1.091 | .819 |
| 66 | 1.233 | .929 |
| 67 | 1.391 | 1.042 |
| 68 | 1.563 | 1.157 |
| 69 | 1.746 | 1.265 |
| 70 | 1.939 | 1.367 |
| 71 | 2.135 | 1.476 |
| 72 | 2.336 | 1.608 |
| 73 | 2.552 | 1.775 |
| 74 | 2.791 | 1.972 |
| 75 | 3.063 | 2.192 |
| 76 | 3.355 | 2.439 |
| 77 | 3.661 | 2.723 |
| 78 | 4.001 | 3.050 |
| 79 | 4.393 | 3.412 |
| 80 | 4.857 | 3.802 |
| 81 | 5.399 | 4.236 |
| 82 | 6.007 | 4.726 |
| 83 | 6.670 | 5.285 |
| 84 | 7.378 | 5.899 |
| 85 | 8.122 | 6.557 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Table 3
Alaska TRS
Turnover Assumptions

Select Rates of Turnover
During the First 8 Years of Employment

| Year of Employment | Male | Female |
|-----------------------|------|--------|
| 1 | 15% | 13% |
| 2 | 15 | 13 |
| 3 | 13 | 12 |
| 4 | 13 | 11 |
| 5 | 12 | 11 |
| 6 | 10 | 09 |
| 7 | 09 | 08 |
| 8 | 07 | 07 |

Ultimate Rates of Turnover
After the First 8 Years of Employment

| Age | Male | Female | Age | Male | Female |
|-----|---------|---------|-----|---------|---------|
| 15 | 4.9538% | 4.3747% | 40 | 4.7988% | 4.2658% |
| 16 | 4.9475 | 4.3714 | 41 | 4.7850 | 4.2559 |
| 17 | 4.9425 | 4.3692 | 42 | 4.7675 | 4.2460 |
| 18 | 4.9375 | 4.3681 | 43 | 4.7513 | 4.2372 |
| 19 | 4.9350 | 4.3670 | 44 | 4.7300 | 4.2262 |
| 20 | 4.8963 | 4.3351 | 45 | 4.7063 | 4.2130 |
| 21 | 4.8938 | 4.3351 | 46 | 4.6813 | 4.2009 |
| 22 | 4.8888 | 4.3340 | 47 | 4.6500 | 4.1844 |
| 23 | 4.8850 | 4.3340 | 48 | 4.6138 | 4.1657 |
| 24 | 4.8788 | 4.3329 | 49 | 4.5763 | 4.1470 |
| 25 | 4.8738 | 4.3329 | 50 | 4.5338 | 4.1250 |
| 26 | 4.8688 | 4.3318 | 51 | 4.4838 | 4.0997 |
| 27 | 4.8638 | 4.3307 | 52 | 4.4250 | 4.0700 |
| 28 | 4.8588 | 4.3274 | 53 | 4.3600 | 4.0348 |
| 29 | 4.8538 | 4.3241 | 54 | 4.2875 | 3.9974 |
| 30 | 4.8500 | 4.3208 | 55 | 4.2050 | 3.9523 |
| 31 | 4.8475 | 4.3186 | 56 | 4.1050 | 3.8940 |
| 32 | 4.8438 | 4.3142 | 57 | 3.9825 | 3.8192 |
| 33 | 4.8413 | 4.3109 | 58 | 3.8488 | 3.7345 |
| 34 | 4.8400 | 4.3065 | 59 | 3.6875 | 3.6267 |
| 35 | 4.8375 | 4.3021 | 60 | 3.5063 | 3.5046 |
| 36 | 4.8338 | 4.2955 | 61 | 3.3050 | 3.3682 |
| 37 | 4.8288 | 4.2900 | 62 | 3.0713 | 3.2131 |
| 38 | 4.8200 | 4.2823 | 63 | 2.8050 | 3.0360 |
| 39 | 4.8100 | 4.2746 | 64 | 2.5163 | 2.8435 |
| | | | 65+ | 5.0000 | 4.4000 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Table 4
Alaska TRS
Disability Table

| <u>Age</u> | <u>Male</u> | <u>Female</u> |
|------------|-------------|---------------|
| 20 | .028% | .025% |
| 21 | .028 | .025 |
| 22 | .029 | .026 |
| 23 | .029 | .026 |
| 24 | .030 | .027 |
| 25 | .030 | .027 |
| 26 | .030 | .027 |
| 27 | .031 | .028 |
| 28 | .032 | .029 |
| 29 | .033 | .030 |
| 30 | .034 | .031 |
| 31 | .034 | .031 |
| 32 | .035 | .032 |
| 33 | .036 | .032 |
| 34 | .037 | .033 |
| 35 | .038 | .034 |
| 36 | .040 | .036 |
| 37 | .041 | .037 |
| 38 | .043 | .039 |
| 39 | .044 | .040 |
| 40 | .046 | .041 |
| 41 | .048 | .043 |
| 42 | .051 | .046 |
| 43 | .054 | .049 |
| 44 | .059 | .053 |
| 45 | .065 | .059 |
| 46 | .070 | .063 |
| 47 | .076 | .068 |
| 48 | .083 | .075 |
| 49 | .089 | .080 |
| 50 | .096 | .086 |
| 51 | .104 | .094 |
| 52 | .114 | .103 |
| 53 | .127 | .114 |
| 54 | .142 | .128 |
| 55 | .160 | .144 |
| 56 | .184 | .166 |
| 57 | .214 | .193 |
| 58 | .244 | .220 |
| 59 | .288 | .259 |
| 60 | .337 | .303 |
| 61 | .390 | .351 |
| 62 | .452 | .407 |
| 63 | .522 | .470 |
| 64 | .596 | .536 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Table 5
Alaska TRS
Retirement Table

| Age at Retirement | Retirement Rate | | | |
|-------------------|-----------------|--------|-----------|--------|
| | Reduced | | Unreduced | |
| | Male | Female | Male | Female |
| <50 | N/A | N/A | 5.60% | 5.70% |
| 50 | 6.00% | 6.30% | 20.00 | 12.50 |
| 51 | 6.80 | 6.80 | 17.50 | 15.00 |
| 52 | 6.80 | 6.70 | 20.00 | 15.00 |
| 53 | 7.90 | 8.90 | 15.00 | 20.00 |
| 54 | 7.80 | 10.00 | 25.00 | 20.00 |
| 55 | 5.90 | 7.20 | 22.50 | 22.50 |
| 56 | 5.80 | 7.10 | 19.50 | 19.50 |
| 57 | 5.50 | 6.90 | 17.50 | 17.50 |
| 58 | 6.20 | 8.50 | 17.50 | 20.00 |
| 59 | 6.30 | 8.30 | 25.00 | 20.00 |
| 60 | N/A | N/A | 20.00 | 20.00 |
| 61 | N/A | N/A | 20.00 | 20.00 |
| 62 | N/A | N/A | 12.50 | 25.00 |
| 63 | N/A | N/A | 25.50 | 29.75 |
| 64 | N/A | N/A | 34.00 | 34.00 |
| 65 | N/A | N/A | 25.00 | 50.00 |
| 66 | N/A | N/A | 20.00 | 30.00 |
| 67 | N/A | N/A | 20.00 | 30.00 |
| 68 | N/A | N/A | 20.00 | 25.00 |
| 69 | N/A | N/A | 20.00 | 30.00 |
| 70 | N/A | N/A | 100.00 | 100.00 |

2.3 Summary of Actuarial Assumptions and Methods *(continued)*

Changes in Actuarial Assumptions Since the Prior Valuation

| | June 30, 2005 | June 30, 2006 |
|-----------------------------|---|---|
| Salary Scale | Based on actual experience from 1997 to 1999. | Rates adjusted on actual experience from 2001 to 2005. |
| Payroll Growth | 4.25% | 4.0% |
| Preretirement Mortality | 1994 Group Annuity Table, 1994 Base Year. | 55% of the 1994 Group Annuity Table, 1994 Base Year for males. 60% for females. (See Table 1.) |
| Postretirement Mortality | 1994 Group Annuity Table, 1994 Base Year. | 1-year setback of the 1994 Group Annuity Table, 1994 Base Year for females and 3-year setback for males. (See Table 2.) |
| Turnover | Based on actual experience from 1997 to 1999. | Rates adjusted based on actual experience from 2001 to 2005. (See Table 3.) |
| Disability | Based on actual experience from 1991 to 1995. | Female rates were decreased by 10% and male rates are unchanged based on actual experience from 2001 to 2005. (See Table 4.) |
| Retirement | Based on actual experience from 1997 to 1999. | Rates adjusted based on actual experience from 2001 to 2005. (See Table 5.) |
| Marriage and Age Difference | If married as of the valuation date, remain married until retirement; same if single. Males 4 years older. | Male: 85% married. Female: 75% married. Males 3 years older. |
| Dependent Children | Married members will always have one dependent child. | Married members have two dependent children from age 25 through 45. |
| Contribution Refunds | 100% for those vested and under age 35 and nonvested, 0% otherwise. | 10% for all ages and vested status. |
| COLA | 65% receiving Alaska Residency COLA. | 60% receiving Alaska Residency COLA. |
| Healthcare | Aggregate post-65 claims cost rate. Trend rates for retiree medical contributions started at 10.2% and graded down to 5.0%. | Included effect of Medicare Part A & B vs. Medicare Part B only. Active employees hired after April 1, 1986 are assumed to be covered by Medicare Parts A & B. 7.5% of current retirees are assumed to be covered by Part B only. Change assumed lag between medical claim incurred and paid dates from 3 months to 2 lag months. Changed trend rate table for retiree medical contributions to start at 8.0% and grade down to 5%. |

Section 3

Section 3.1 Analysis of financial experience.

Section 3.2(a) Summary of accrued and unfunded accrued liabilities.

Section 3.2(b) Schedule of Employer Contributions.

Section 3.2(c) Actuarial Assumptions, Method and Additional Information.

Section 3.3 Solvency test.

3.1 Analysis of Financial Experience

**Change in Employer Contribution Rate
Due to Gains and Losses in Accrued Liabilities During the Last Five Fiscal Years
Resulting From Differences Between Assumed Experience and Actual Experience**

| Type of Gain or Loss | Change in Employer Contribution Rate During Fiscal Year | | | | | | |
|---|---|--------|---------|---------|---------|------------|---------|
| | 2002 | 2003 | 2004 | 2005 | 2006 | | |
| | | | | | Pension | Healthcare | Total |
| (1) Health Experience | 3.85% | 0.00% | 0.00% | 1.47% | N/A | (2.52)% | (2.52)% |
| (2) Salary Experience | (0.11)% | 0.10% | 0.54% | (0.26)% | 0.79% | 0.00% | 0.79% |
| (3) Investment Experience | 15.03% | 0.43% | 0.06% | (0.02)% | 0.10% | (0.46)% | (0.36)% |
| (4) Demographic Experience | 4.21% | 1.35% | (0.85)% | (2.10)% | (0.27)% | N/A | (0.27)% |
| (5) Contribution Shortfall | 0.00% | 1.40% | 1.24% | 1.42% | (0.41)% | 1.62% | 1.21% |
| (6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5) | 22.98% | 3.28% | 0.99% | 0.51% | 0.21% | (1.36)% | (1.15)% |
| (7) Asset Valuation Method | 0.03% | 0.00% | 0.00% | 0.00% | 0.00 | 0.00% | 0.00% |
| (8) Past Service Amortization Change | (9.08)% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| (9) Assumption and Method Changes | 6.84% | 0.00% | 1.94% | 0.00% | 2.96% | 0.10% | 3.06% |
| (10) System Benefit Changes | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| (11) Administrative System Changes | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| (12) Ad hoc PRPA | 0.36% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| (13) Change due to revaluation of plan liabilities as of June 30, 2004 | 0.00% | 0.00% | 0.00% | (0.03)% | 0.00% | 0.00% | 0.00% |
| (14) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10) + (11) + (12) + (13) | 21.13% | 3.28% | 2.93% | 0.48% | 3.17% | (1.26)% | 1.91% |
| (15) Beginning Total Employer Contribution Rate | 14.44% | 35.57% | 38.85% | 41.78% | 17.40% | 24.86% | 42.26% |
| (16) Ending Total Employer Contribution Rate, (14) + (15) | 35.57% | 38.85% | 41.78% | 42.26% | 20.57% | 23.60% | 44.17% |
| (17) Fiscal Year Above Rate is Applied | FY05 | FY06 | FY07 | FY08 | FY09 | FY09 | FY09 |

3.2(a) Summary of Accrued and Unfunded Accrued Liabilities

The exhibit below shows the pension disclosure under GASB No. 25.

| Valuation Date | Aggregate Accrued Liability (000's) | Valuation Assets (000's) | Assets as a Percent of Accrued Liability | Unfunded Accrued Liabilities (UAL) (000's) | Annual Active Member Payroll (000's) | UAL as a Percent of Annual Active Member Payroll |
|----------------|-------------------------------------|--------------------------|--|--|--------------------------------------|--|
| June 30, 2006 | \$ 4,859,336 | \$ 3,296,934 | 67.8% | \$ 1,562,402 | \$ 574,409 | 272.0% |

The exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43.

| Valuation Date | Aggregate Accrued Liability (000's) | Valuation Assets (000's) | Assets as a Percent of Accrued Liability | Unfunded Accrued Liabilities (UAL) (000's) | Annual Active Member Payroll (000's) | UAL as a Percent of Annual Active Member Payroll |
|----------------|-------------------------------------|--------------------------|--|--|--------------------------------------|--|
| June 30, 2006 | \$ 4,288,707 | \$ 844,766 | 19.7% | \$ 3,443,941 | \$ 574,409 | 599.6% |

For illustration, the exhibit below shows the postemployment healthcare disclosure without regard to the Medicare Part D subsidy discounted at 8.25% and at 4.50% per annum under GASB No. 43. These values show the minimum and maximum accrued liability amounts depending on the portion of ARC actually contributed.

| Valuation Date | Aggregate Accrued Liability (000's) | Valuation Assets (000's) | Assets as a Percent of Accrued Liability | Unfunded Accrued Liabilities (UAL) (000's) | Annual Active Member Payroll (000's) | UAL as a Percent of Annual Active Member Payroll |
|-----------------------|-------------------------------------|--------------------------|--|--|--------------------------------------|--|
| June 30, 2006 – 8.25% | \$ 2,590,353 | \$ 844,766 | 32.6% | \$ 1,745,587 | \$ 574,409 | 303.9% |
| June 30, 2006 – 4.50% | \$ 4,288,707 | \$ 844,766 | 19.7% | \$ 3,443,941 | \$ 574,409 | 599.6% |

3.2(a) Summary of Accrued and Unfunded Accrued Liabilities (continued)

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No. 25, prior to 2006.

| Valuation Date | Aggregate Accrued Liability (000's) | Valuation Assets (000's) | Assets as a Percent of Accrued Liability | Unfunded Accrued Liabilities (UAL) (000's) | Annual Active Member Payroll (000's) | UAL as a Percent of Annual Active Member Payroll |
|--------------------------------|-------------------------------------|--------------------------|--|--|--------------------------------------|--|
| June 30, 2005 | \$ 6,498,556 | \$ 3,958,939 | 60.9% | \$ 2,539,617 | \$ 535,837 | 474.0% |
| June 30, 2004 ² | \$ 6,123,600 | \$ 3,845,370 | 62.8% | \$ 2,278,230 | \$ 522,421 | 436.1% |
| June 30, 2003 | \$ 5,835,609 | \$ 3,752,285 | 64.3% | \$ 2,083,324 | \$ 532,630 | 391.1% |
| June 30, 2002 ^{1 2 3} | \$ 5,411,642 | \$ 3,689,036 | 68.2% | \$ 1,722,606 | \$ 509,437 | 338.1% |
| June 30, 2001 | \$ 4,603,147 | \$ 4,372,229 | 95.0% | \$ 230,918 | \$ 496,188 | 46.5% |
| June 30, 2000 ^{1 2 3} | \$ 4,198,868 | \$ 4,184,015 | 99.6% | \$ 14,853 | \$ 482,571 | 3.1% |
| June 30, 1999 | \$ 3,720,954 | \$ 3,815,633 | 102.5% | \$ N/A | \$ 466,414 | N/A |
| June 30, 1998 | \$ 3,528,757 | \$ 3,446,070 | 97.7% | \$ 82,687 | \$ 469,433 | 17.6% |
| June 30, 1997 | \$ 3,320,069 | \$ 3,120,044 | 94.0% | \$ 200,025 | \$ 466,455 | 42.9% |

¹ Change in Asset Valuation Method

² Change of Assumptions

³ Change in Methods

3.2(b) Schedule of Employer Contributions

The exhibit below shows the combined pension and post employment healthcare disclosure under GASB No. 25.

| Fiscal Year Ended June 30 | Total Annual Required Contribution | Total Percentage Contributed |
|----------------------------------|---|-------------------------------------|
| 2006 | \$ 236,738 | 54% |
| 2005 | 207,951 | 45% |
| 2004 | 82,660 | 83% |
| 2003 | 47,370 | 133% |
| 2002 | 39,576 | 155% |
| 2001 | 56,391 | 114% |
| 2000 | 67,874 | 92% |
| 1999 | 53,901 | 114% |
| 1998 | 76,504 | 80% |
| 1997 | 77,001 | 80% |

3.2(c) Actuarial Assumptions, Method and Additional Information

| | |
|---------------------------------------|---|
| Valuation Date | June 30, 2006 |
| Actuarial Cost Method | Entry Age Normal Level Percentage of Pay for Pension; Level Dollar for Healthcare |
| Amortization Method | Level dollar, closed |
| Equivalent Single Amortization Period | 22 years |
| Asset Valuation Method | 5-year smoothed market |
| Actuarial Assumptions: | |
| Investment rate of return* | 8.25% for pension, 4.50% for healthcare |
| Projected salary increases | 6.0% for first 5 years of service grading down to 4.0% after 15 years |
| *Includes inflation at | 3.5% |
| Cost-of-living adjustment | Postretirement Pension Adjustment as described in Section 2.1, item (13) |

GASB 43 requires that the discount rate used in the valuation be the estimated long-term yield on investments that are expected to finance postemployment benefits. Depending on the method by which a plan is financed, the relevant investments could be plan assets, employer assets or a combination of plan and employer assets. The investment return should reflect the nature and the mix of both current and expected investments and the basis used to determine the actuarial value of assets.

The State of Alaska Teachers Retirement System's retiree healthcare benefits are partially funded. GASB outlines two reasonable methods of developing a blended discount rate when a plan is partially funded. These methods base the proportion of assumed plan and employer asset returns on 1) the funded ratio and 2) the percentage of the annual required contribution (ARC) actually being contributed to the plan. The State of Alaska has utilized the second methodology to develop a discount rate of 4.50% as of June 30, 2006, to be used for fiscal 2007 disclosure.

The development of the discount rate used for the healthcare liabilities valuation is summarized below:

Investment Returns

| | | |
|---|---|-------|
| Plan Assets (Long-Term Return) | = | 8.25% |
| Employer Assets (Estimated Short-Term Return) | = | 4.50% |

Based on Percentage of ARC Contributed*

| | | |
|--|---|---------|
| 1. Contribution Allocated to Healthcare | = | 4.93% |
| 2. Annual Required Contribution, Funding Assumptions | = | 17.65% |
| 3. Pay-as-you-go Contribution | = | 11.23% |
| 4. Portion of ARC Contributed: [(1-3) / (2-3)] | = | 0.00% |
| 5. Multiplied by long-term investment return | = | 0.00% |
| 6. Portion of ARC not Contributed: 100% - (4) | = | 100.00% |
| 7. Multiplied by short-term investment return | = | 4.50% |
| 8. Total: (5) + (7) | = | 4.50% |

*It is assumed that fiscal 2003 contributions allocated to healthcare ARC for funding purposes and pay-as-you-go contributions are used to derive the GASB 43 discount rate applied to the June 30, 2004 valuation (fiscal 2005), which in turn drives the fiscal 2007 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2007 employer ARC rate for accounting purposes is 40.44% of pay for healthcare benefits and 58.96% of pay for healthcare and pension benefits combined.

3.3 Solvency Test – Pension and Healthcare

| Valuation Date | Aggregate Accrued Liability For: | | | Valuation Assets (000's) | Portion of Accrued Liabilities Covered by Assets | | |
|------------------------------------|--|---------------------------------|---|--------------------------|--|-------|--------|
| | (1) Active Member Contributions (000's) | (2) Inactive Members (000's) | (3) Active Members (Employer-Financed Portion) (000's) | | (1) | (2) | (3) |
| June 30, 2006 ⁽²⁾⁽³⁾ | \$ 615,207 | \$ 4,925,922 | \$ 1,688,722 | \$ 4,141,700 | 100% | 71.6% | 0.0% |
| June 30, 2005 | 589,169 | 4,694,176 | 1,215,211 | 3,958,939 | 100% | 71.8% | 0.0% |
| June 30, 2004 ⁽²⁾ | 569,435 | 4,423,036 | 1,131,129 | 3,845,370 | 100% | 74.1% | 0.0% |
| June 30, 2003 | 548,947 | 4,105,445 | 1,181,217 | 3,752,285 | 100% | 78.0% | 0.0% |
| June 30, 2002 ⁽¹⁾⁽²⁾⁽³⁾ | 523,142 | 3,755,882 | 1,132,618 | 3,689,036 | 100% | 84.3% | 0.0% |
| June 30, 2001 | 533,752 | 3,213,431 | 855,964 | 4,372,229 | 100% | 100% | 73.0% |
| June 30, 2000 ⁽¹⁾⁽²⁾⁽³⁾ | 490,176 | 2,872,250 | 836,442 | 4,184,015 | 100% | 100% | 98.2% |
| June 30, 1999 | 469,068 | 2,571,345 | 680,541 | 3,815,633 | 100% | 100% | 100.0% |
| June 30, 1998 | 449,383 | 2,344,263 | 735,111 | 3,446,070 | 100% | 100% | 88.8% |
| June 30, 1997 | 483,735 | 2,095,843 | 780,491 | 3,120,044 | 100% | 100% | 69.2% |

(1) Change in Asset Valuation Method

(2) Change of Assumptions

(3) Change in Methods