



State of Alaska
Teachers' Retirement System

Actuarial Valuation Report
as of June 30, 2009

buckconsultants[®]

Submitted By:
Buck Consultants
1200 Seventeenth Street, Suite 1200
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July 9, 2010

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

Dear Members of The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration:

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Teachers' Retirement System has been prepared as of June 30, 2009 by Buck Consultants. The purposes of the report include:

- (1) a presentation of the valuation results of the System as of June 30, 2009;
- (2) a review of experience under the System for the year ended June 30, 2009;
- (3) a determination of the appropriate total contribution rate to be paid by all employers in the System including additional State contributions pursuant to SB 125, which will be applied for the fiscal year ending June 30, 2012; 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)
- (6) Summary of GASB No. 25 and 43 disclosure information (Section 3.2)

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 Alaska Retirement Management Board (Board) in October 2006. Actuarial methods, medical cost trend, and assumed blended medical premiums were also reviewed and revised during the experience study.

The total contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY10 and a fixed 25-year amortization as a level percentage of payroll of the initial unfunded accrued liability and subsequent gains/losses. The payroll used to determine the contribution rates is the total payroll of all active members in the system, including those hired after July 1, 2006 who are in the Defined Contribution Retirement (DCR) Plan. 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 64.8% to 57.0% 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 Alaska Retirement Management Board, The Department of Revenue and
The Department of Administration
July 9, 2010
Page 3

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.

We believe that this report confirms 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 Bissett, FSA, MAAA
Senior Consultant, Health & Productivity

Contents

Report Highlights	1
Analysis of the Valuation.....	4
Section 1: Valuation Results.....	11
1.1(a) Statement of Net Assets	12
1.1(b) Statement of Changes in Net Assets	13
1.1(c) Actuarial Value of Assets	14
1.2 Actuarial Present Values.....	16
1.3 Development of Total Employer/State Contribution Rate – FY12.....	18
1.4 Development of Actuarial Gain/(Loss) for FY09	21
1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DCR Payroll	22
1.5(b) Actuarial Projections – Projections at Current Rate Based on Total DB and DCR Payroll	29
1.5(c) Actuarial Projections – Effect of Economic Scenarios Based on Total DB and DCR Payroll	33
Section 2: Basis of the Valuation.....	35
2.1 Summary of the Alaska Teachers’ Retirement System Plan Provisions.....	36
2.2(a) Member Census Information – Total TRS.....	44
2.2(b) Distribution of Active Members	47
2.2(c) Schedule of Active Member Valuation Data	48
2.2(d) Statistics on New Benefit Recipients	49
2.2(e) Schedule of Average Pension Benefit Payments – New Benefit Recipients	50
2.2(f) Statistics on All Pension Benefit Recipients.....	51
2.2(g) Distribution of Annual Pension Benefits for Benefit Recipients	53
2.2(h) Schedule of Pension Benefit Recipients by Type of Pension Benefit and Option Selected	54
2.2(i) Schedule of Pension Benefit Recipients Added to and Removed from Rolls	55
2.3 Summary of Actuarial Assumptions, Methods and Procedures.....	56
Section 3: Other Historical Information.....	73
3.1 Analysis of Financial Experience	74
3.2(a) Summary of Accrued and Unfunded Accrued Liabilities.....	76
3.2(b) Schedule of Contributions from Employers and Other Contributing Entities	78
3.2(c) Actuarial Assumptions, Methods and Additional Information Under GASB	80
3.3 Solvency Test.....	81

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, 2009;
- (2) Review experience under the plan for the year ended June 30, 2009;
- (3) Determine the appropriate contribution rate for all employers 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 Fiscal Year 2009, the current annual costs, and 30-year projections.

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 and GASB information.

The principal results are as follows:

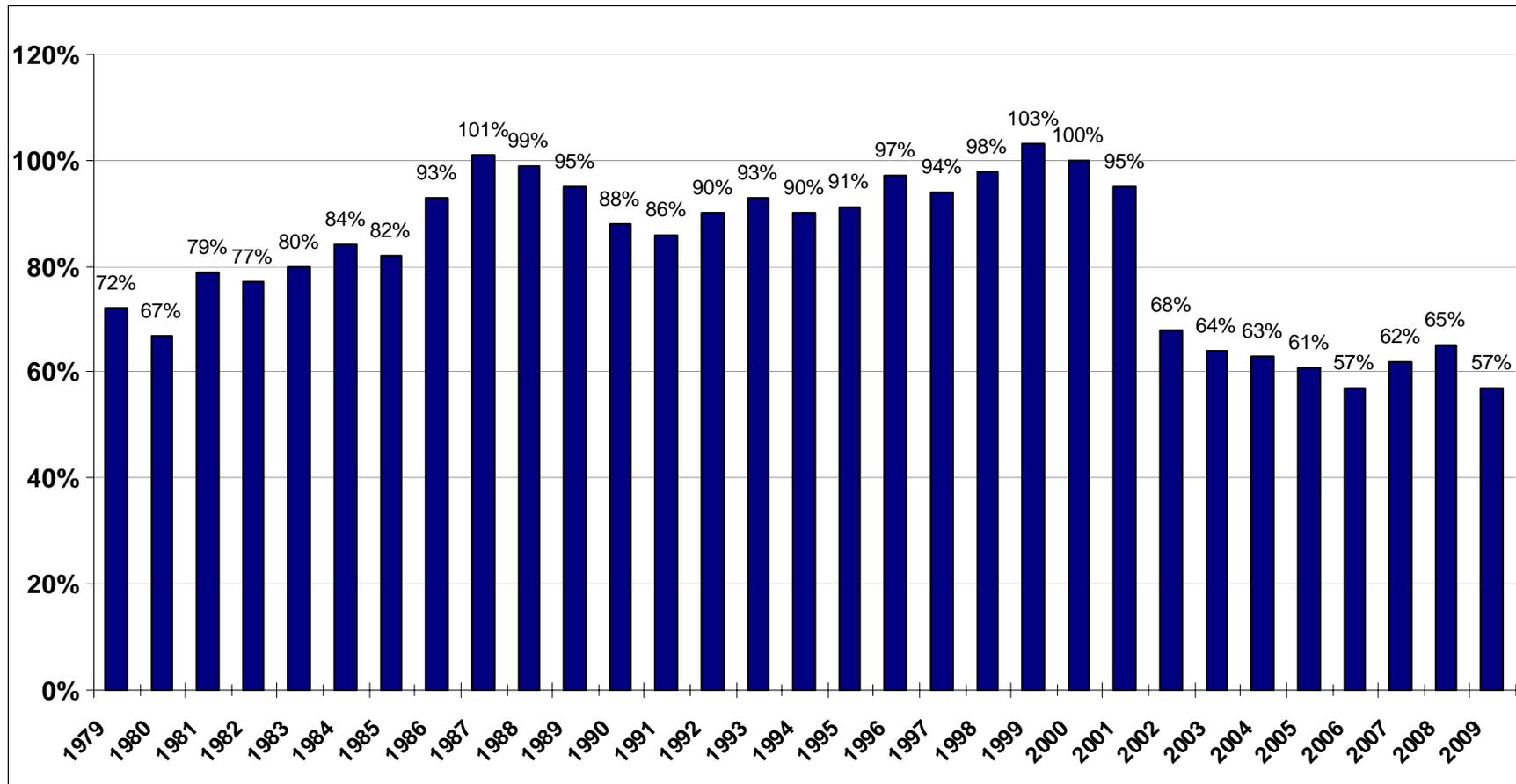
Funding Status as of June 30¹	2008	2009
(a) Accrued Liability ²	\$7,619,178	\$7,847,514
(b) Valuation Assets ²	<u>4,936,976</u>	<u>4,472,958</u>
(c) Unfunded Accrued Liability ² , (a) – (b)	\$2,682,202	\$3,374,556
(d) Funding Ratio based on Valuation Assets, (b) ÷ (a)	64.8%	57.0%
(e) Market Value of Assets ²	\$4,804,371	\$3,727,466
(f) Funding Ratio based on Market Assets, (e) ÷ (a)	63.1%	47.5%

¹ Includes pension and healthcare benefits.

² In thousands.

Report Highlights (continued)

TRS Funding Ratio History
(Based on Valuation Assets)



Report Highlights *(continued)*

Employer/State Contribution Rates for Pension for Fiscal Year:	2011	2012
(a) Normal Cost Rate Net of Member Contributions	2.56%	2.42%
(b) Past Service Rate	17.76%	24.19%
(c) Total Employer/State Contribution Rate <i>(a) + (b)</i>	20.32%	26.61%

Employer/State Contribution Rates for Postemployment Healthcare for Fiscal Year:	2011	2012
(a) Normal Cost Rate	5.00%	4.15%
(b) Past Service Rate	13.24%	11.85%
(c) Total Employer/State Contribution Rate <i>(a) + (b)</i>	18.24%	16.00%

Total Employer/State Contribution Rates for Fiscal Year:	2011	2012
(a) Normal Cost Rate Net of Member Contributions	7.56%	6.57%
(b) Past Service Rate	31.00%	36.04%
(c) Total Employer/State Contribution Rate <i>(a) + (b)</i>	38.56%	42.61%
(d) Board Adopted Total Employer/State Contribution Rate	38.56%	42.61%

Contribution rates are based on salary for both DB plan members and DCR members, combined.

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.

Contribution rates include Employer contribution rates as limited by State statute, and include the State Relief Funding required under SB 125.

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio based on valuation assets as of June 30, 2009 has decreased from 64.8% to 57.0%, a decrease of 7.8%. The total calculated Employer/State contribution rate has increased from 38.56% of payroll for FY11 to 42.61% for FY12, an increase of 4.05%. 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%
1/1/08-12/31/08	876.00	0%	9%
1/1/09-12/31/09	937.00	7%	9%
1/1/10-12/31/10	1,068.00	14%	9%

As shown in the above table, the monthly retiree medical premium for the January 1, 2010 to December 31, 2010 time period will increase to \$1,068. This represents an increase of 14% from the previous year's medical premium of \$937. The health cost trend rates used for this valuation are described in Section 2.3. Over the last 10 years, annual premium rate changes have ranged from no change to up 15%. Also, over the last ten years, the increase in the premium rate has been about 7.3% compounded annually.

Analysis of the Valuation *(continued)*

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 due to 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

An analysis of medical costs was completed based on claims information provided by Premera 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 2009 valuation, we updated claims cost and Medicare offset analyses using fiscal year 2009 claims and enrollment information. We developed assumptions regarding the number of members with Medicare Part B only coverage based on employee date of hire, date of birth, tier, etc., and eligibility rules for Medicare Part A 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 reflects the results of our June 30, 2009 lag study. Assumed lag from incurred date to paid claim is approximately 2.57 months for medical claims and 0.5 months for prescription claims. Composite lag for combined medical and prescription claims is about 1.9 months, similar to the 2-month composite lag assumption used for our 2008 valuation. The trend assumption is based on the Society of Actuaries' Healthcare Cost Trend Model as adopted by the ARM Board at their December 5, 2008 meeting. The trend rate varies by year declining to 5.1% over 100 years. The trends vary by medical and prescription drugs until 2012, at which point the same trends are used for both benefit types.

Analysis of the Valuation *(continued)*

Individual claim level detail from Aetna and Premera were obtained for calendar year 2005 and fiscal years 2006 through 2009. This data was reviewed and compared to management level reporting supplied by Premera. For the 2009 valuation, we have not modified any management level reporting information used to develop per capita claim cost rates. However, we will continue to compare data from both sources and potentially modify future claims cost rate derivation to reflect salient information at the individual claimant level that may enhance global management level data. For the 2009 valuation, we do not recommend any changes to morbidity assumptions used to project increasing claims costs as members age. However, we will continue to compare age-based claims costs derived from individual claimant data to the current morbidity curve and potentially modify the assumed aging impact on claims costs in future valuations. The portion of retirees assumed to be eligible for Medicare Parts A and B and for Part B only was modified, decreasing the Part B only proportion of all Medicare retirees from 4.0% to 3.5%. Finally, explicit third-party administration (TPA) costs were added to medical and prescription claims cost rates. Per-member TPA costs are derived from the current Wells Fargo contract and are projected to increase at the assumed rate of 5%.

Since 2004, the funding valuation also reflects the impact of the Medicare Part D Retiree Drug Subsidy (RDS) in the projection of prescription drug benefit costs. Buck's actuaries have attested that the prescription drug benefits meet the actuarial equivalence requirements and the plan qualifies to receive the RDS under the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) for calendar 2009 and 2010. Based on current plan provisions and utilization data, we anticipate the plan will continue to qualify for RDS payments. The State has shared its payments for calendar 2006, 2007, 2008 and the first quarter of 2009 and this information was used to estimate future RDS payments in this valuation. Please note, Part D subsidies are not reflected for accounting purposes under GASB No. 43.

Utilization and claims cost data indicate that healthcare experience emerging since the prior valuation is improving slightly. A large portion of the historical unfavorable experience is due to members with chronic diseases (diabetes, ESRD, etc.), and the corresponding large claims that accompany those diseases. Due to the nature of these diseases, it is expected that the State will have these members as benefit recipients for some time, and that costs may be able to be controlled, but not eliminated. With the introduction of a health improvement plan for State employees, as well as disease management provided by the TPA, it is hoped that the incidence of the most severe and costly chronic conditions can be reduced to a more manageable and stable level. As with the prior valuation, a weighting methodology is employed, where each of the experience years is given similar weights when calculating the claims costs. This has the effect of preventing any one year from unduly influencing the claims costs. In future valuations, we will assess giving more recent experience greater weight in the overall claims cost rate development process. In the current valuation, we averaged national trend assumptions with Alaska-specific trend during the experience period to give credibility to Alaska-specific experience while still reflecting national trends.

The following table summarizes data sources and assumptions and the relative impact changes in each have on healthcare cost projections for 2009 as compared to 2008:

Healthcare Cost Rate Data Source or Assumption Change, 2009 vs. 2008	Gain / Loss Impact on 2009 Valuation Results
Claim lag specific to medical and prescription experience (2.57 months for medical and 0.5 months for Rx versus 1.78 and 0.6 respectively)	Negligible
Individual claims level data	<ul style="list-style-type: none"> – No impact on cost data used for 2009, though potentially a source of future modifications – No impact on morbidity assumptions used for 2009, though potentially a source of future modifications – Moderate loss from decreasing the assumed Part B only proportion of all Medicare retirees from 4% to 3.5%
Explicit TPA fees	Minor gain
Actual RDS payments received	Minor loss
Weighting of prior experience periods used to derive base claims during the valuation year (near equal weighting for all five periods is similar to prior valuation)	Dampens the gain/loss from favorable provider discounts and experience since June 2006 but may be modified in future valuations
Averaging Alaska-specific trend during the experience period with Health Care Cost Trend Rates (HCCTR) used to bring prior data forward to the valuation year	No change
Aggregate claims data	Moderate gain due to experience, but dampened by weighting methodology.

Analysis of the Valuation *(continued)*

(2) Investment Experience

The approximate FY09 investment return based on market values was (21.0)% compared to the expected investment return of 8.25%. This resulted in a loss of approximately \$1,392.0 million to the System from investment experience. The asset valuation method recognizes 20 percent of this loss (\$278.4 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY05 investment gain, 20 percent of the FY06 investment gain, 20 percent of the FY07 investment gain and 20 percent of the FY08 investment loss were recognized this year. The approximate FY09 investment return based on actuarial values was (7.9)% compared to the expected investment return of 8.25%. The net result was an investment loss of \$790.1 million which decreased the funding ratio by 10.07% and increased the Employer/State contribution rate by 7.23%.

(3) Salary Increase

During the period from June 30, 2008, to June 30, 2009, salary increases for continuing active members were more than anticipated in the valuation assumptions. Higher accrued liabilities caused the funding ratio to decrease by 0.17%. The net effect of the salary loss was an increase of 0.29% in the Employer/State contribution rate.

(4) Demographic Experience

Section 2.2 provides statistics on active and inactive participants. The number of active participants decreased 3.58% from 8,531 at June 30, 2008 to 8,226 at June 30, 2009 due to the closure of the plan to new entrants as of July 1, 2006. The average age of active participants increased from 46.64 to 47.42 and average credited service increased from 12.44 to 13.19 years.

The number of retirees and beneficiaries increased 2.28% from 10,026 to 10,255, and their average age increased from 65.82 to 66.42. There was a 1.26% increase in the number of vested terminated participants from 873 to 884. Their average age increased from 49.14 to 49.52.

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/State contribution rate of 3.21% of total payroll. Most of this gain is due to healthcare claims costs which were less than expected. As a result, expected healthcare claims for FY10 and future years are reduced. The gain/loss by decrement on the accrued liability is shown on the summary page.

Analysis of the Valuation (continued)

(5) Effect of the Two-Year Delay in the Contribution Rate

As of June 30, 2008, the actuarially calculated rate was 38.56% for FY11 Employer/State contributions. Since Employer/State contribution rates are determined two years prior to the fiscal year, the June 30, 2006 adopted employer rate of 44.17% was contributed during FY09. The difference between the two calculated rates, 44.17% and 38.56%, created a contribution surplus to the System. This surplus decreased the Employer/State contribution rate by 0.26%.

(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 DB plan entrants are anticipated.

(7) Changes in Methods from the Prior Valuation

The amortization methodology has been changed since the last valuation. The methodology has been changed from a simple interest approach to a compound interest approach. The impact of this change is not significant.

(8) Changes in Assumptions from the Prior Valuation

There were no changes in assumptions from the prior valuation.

(9) Changes in Benefit Provisions Since the Prior Valuation

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

Analysis of the Valuation *(continued)*

Summary

The following table summarizes the sources of change in the total Employer/State contribution rate based on DB and DCR member payroll combined:

	<u>Pension</u>	<u>Healthcare</u>	<u>Total</u>
1. Last year's total Employer/State contribution rate	20.32%	18.24%	38.56%
2. Change due to:			
a. Effect of two-year delay in the contribution rate	0.01%	(0.27)%	(0.26)%
b. Investment experience	6.53%	0.70%	7.23%
c. Salary increases	0.29%	N/A	0.29%
d. Demographic and medical experience ¹	<u>(0.54)%</u>	<u>(2.67)%</u>	<u>(3.21)%</u>
e. Total change (a + b + c + d)	6.29%	(2.24)%	4.05%
3. Total Employer/State contribution rate this year, (1) + (2e)	26.61%	16.00%	42.61%

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

	<u>Amount</u>
- Retirement Experience	\$ 8,298
- Termination Experience	(10,182)
- Mortality Experience	(17,693)
- Disability Experience	(428)
- Other Demographic Experience	(16,262)
- Salary Increases	(12,153)
- COLA Other Than Expected	(16,355)
- Medical Experience	<u>142,185</u>
- Total	\$ 77,410

A gain on total accrued liability is favorable to the system. A loss is unfavorable.

¹ Includes changes in future healthcare claims costs.

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 FY09 and the Investment Return for FY09.

Section 1.1(c) Actuarial Value of Assets.

Section 1.2 Actuarial Present Values.

Section 1.3 Development of Total Employer/State Contribution Rate for FY12.

Section 1.4 Development of Actuarial Gain or Loss for FY09.

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

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

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

1.1(a) Statement of Net Assets

As of June 30, 2009 (in thousands)	Pension	Healthcare	Total Market Value
Cash and Cash Equivalents	\$ 14,466	\$ 4,006	\$ 18,472
Domestic Equity Pool	853,583	392,459	1,246,042
Domestic Fixed Income Pool	285,083	130,790	415,873
International Equity Pool	389,604	184,594	574,198
Real Estate Pool	306,343	103,027	409,370
International Fixed Income Pool	38,632	18,026	56,658
Private Equity Pool	230,646	91,006	321,652
Emerging Markets Equity Pool	110,171	49,079	159,250
Other Investments Pool	163,963	50,024	213,987
High Yield Pool	56,322	26,000	82,322
Absolute Return Pool	111,351	54,028	165,379
Treasury Inflation Protection Pool	14,634	5,914	20,548
Emerging Debt Pool	19,548	9,063	28,611
Loans and Mortgages (Net of Reserves)	9	984	993
Total Cash and Investments	\$ 2,594,355	\$ 1,119,000	\$ 3,713,355
Net Accrued Receivables	2,078	12,033	14,111
Net Assets	\$ 2,596,433	\$ 1,131,033	\$ 3,727,466

1.1(b) Statement of Changes in Net Assets

Fiscal Year 2009 (in thousands)	Pension	Healthcare	Total Market Value
(1) Net Assets, June 30, 2008 (market value)	\$ 3,550,798	\$ 1,253,573	\$ 4,804,371
(2) Additions:			
(a) Plan Member Contributions	\$ 53,544	\$ 116	\$ 53,660
(b) Employer Contributions	27,110	47,174	74,284
(c) Employer Legislative Relief	104,423	101,877	206,300
(d) Interest and Dividend Income	127,846	6,640	134,486
(e) Net Appreciation/(Depreciation) in Fair Value of Investments	(933,967)	(186,531)	(1,120,498)
(f) Other	<u>3</u>	<u>3,595</u>	<u>3,598</u>
(g) Total Additions	\$ (621,041)	\$ (27,129)	\$ (648,170)
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 89,571	\$ 89,571
(b) Retirement Benefits	319,148	0	319,148
(c) Refunds of Contributions	3,622	0	3,622
(d) Investment Expenses	8,017	28	8,045
(e) Administrative Expenses	<u>2,537</u>	<u>5,812</u>	<u>8,349</u>
(f) Total Deductions	\$ 333,324	\$ 95,411	\$ 428,735
(4) Net Assets, June 30, 2009 (market value)	\$ 2,596,433	\$ 1,131,033	\$ 3,727,466
Approximate Market Value Investment Return Rate During FY09 Net of All Expenses	(23.5)%	(14.5)%	(21.0)%

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	Pension	Healthcare	Total
(1) Deferral of Investment Return/(Loss) for FY09			
(a) Market Value, June 30, 2008	\$3,550,798	\$ 1,253,573	\$ 4,804,371
(b) Contributions for FY09	185,077	149,167	334,244
(c) Benefit Payments for FY09	322,770	89,571	412,341
(d) Actual Investment Return (<i>net of expenses</i>)	(816,672)	(182,136)	(998,808)
(e) Expected Return Rate (<i>net of expenses</i>)	8.25%	8.25%	8.25%
(f) Expected Return - Weighted for Timing	287,374	105,829	393,203
(g) Investment Gain/(Loss) for the Year (<i>d. - f.</i>)	(1,104,046)	(287,965)	(1,392,011)
(h) Deferred Investment Return/(Loss)	(1,000,487)	(248,291)	(1,248,778)
(2) Actuarial Value, June 30, 2009			
(a) Market Value, June 30, 2009	\$2,596,433	\$ 1,131,033	\$ 3,727,466
(b) 2009 Deferred Investment Return/(Loss)	(1,000,487)	(248,291)	(1,248,778)
(c) Preliminary Actuarial Value, June 30, 2009 (<i>a. - b.</i>)	3,596,920	1,379,324	4,976,244
(d) Upper Limit: 120% of Market Value, June 30, 2009	3,115,719	1,357,239	4,472,958
(e) Lower Limit: 80% of Market Value, June 30, 2009	2,077,147	904,827	2,981,974
(f) Actuarial Value, June 30, 2009 (<i>c. limited by d. and e.</i>)	\$3,115,719	\$ 1,357,239	\$ 4,472,958
(g) Ratio of Actuarial Value of Assets to Market Value of Assets	120.00%	120.00%	120.00%
(h) Approximate Actuarial Value Investment Return Rate During FY09 Net of All Expenses	(11.6)%	2.4%	(7.9)%

1.1(c) Actuarial Value of Assets (continued)

The tables below show the development of gain/(loss) to be recognized in the current year (in thousands).

Pension				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2005 ¹	\$ 8,842	\$ 7,073	\$ 1,769	\$ 0
6/30/2006 ¹	96,920	58,151	19,384	19,385
6/30/2007 ¹	335,304	134,122	67,061	134,121
6/30/2008	(451,260)	(90,252)	(90,252)	(270,756)
6/30/2009	(1,104,046)	0	(220,809)	(883,237)
Total	\$ (1,114,240)	\$ 109,094	\$(222,847)	\$ (1,000,487)

Healthcare				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2005 ¹	\$ 2,524	\$ 2,019	\$ 505	\$ 0
6/30/2006 ¹	27,667	16,600	5,533	5,534
6/30/2007 ¹	95,718	38,286	19,144	38,288
6/30/2008	(102,901)	(20,580)	(20,580)	(61,741)
6/30/2009	(287,965)	0	(57,593)	(230,372)
Total	\$ (264,957)	\$ 36,325	\$(52,991)	\$ (248,291)

Total				
Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2005	\$ 11,366	\$ 9,092	\$ 2,274	\$ 0
6/30/2006	124,587	74,751	24,917	24,919
6/30/2007	431,022	172,408	86,205	172,409
6/30/2008	(554,161)	(110,832)	(110,832)	(332,497)
6/30/2009	(1,392,011)	0	(278,402)	(1,113,609)
Total	\$ (1,379,197)	\$ 145,419	\$(275,838)	\$ (1,248,778)

¹ The pension and healthcare assets bases were allocated using a ratio of market value of assets as of June 30, 2007.

1.2 Actuarial Present Values

As of June 30, 2009 (in thousands)	Normal Cost	Accrued (Past Service) Liability
Active Members		
Retirement Benefits	\$ 49,102	\$ 1,689,629
Termination Benefits	5,113	32,836
Disability Benefits	1,283	19,068
Death Benefits	373	10,118
Return of Contributions	11,474	(51,817)
Medical and Prescription Drug Benefits	30,272	959,310
Medicare Part D Subsidy	(2,102)	(53,571)
Indebtedness	N/A	(50,867)
Subtotal	\$ 95,515	\$ 2,554,706
Inactive Members		
Not Vested		\$ 40,775
Vested Terminations	- Retirement Benefits	98,458
	- Medical and Prescription Drug Benefits	143,264
	- Medicare Part D Subsidy	(8,516)
	- Indebtedness	(4,767)
Retirees & Beneficiaries	- Retirement Benefits	3,680,554
	- Medical and Prescription Drug Benefits	1,459,605
	- Medicare Part D Subsidy	(116,565)
Subtotal		\$ 5,292,808
Total	\$ 95,515	\$ 7,847,514
Total Pension	\$ 67,345	\$ 5,463,987
Total Medical, Net of Part D Subsidy	\$ 28,170	\$ 2,383,527
Total Medical, Gross of Part D Subsidy	\$ 30,272	\$ 2,562,179

1.2 Actuarial Present Values (continued)

As of June 30, 2009 (in thousands)	Normal Cost	Accrued (Past Service) Liability
By Tier		
Tier 1		
- Pension	\$ 19,028	\$ 4,487,063
- Medical, Net of Part D Subsidy	5,564	1,719,303
Tier 2		
- Pension	48,317	976,924
- Medical, Net of Part D Subsidy	22,606	664,224
Total	\$ 95,515	\$ 7,847,514

1.3 Development of Total Employer/State Contribution Rate – FY12 (in thousands)

Normal Cost Rate		Pension	Healthcare	Total
(1)	Total Normal Cost	\$ 67,345	\$ 28,170	\$ 95,515
(2)	DB Member Salaries Projected for FY10	583,746	583,746	583,746
(3)	DCR Member Salaries Projected for FY10	95,141	95,141	95,141
(4)	Total Salaries Projected for FY10	678,887	678,887	678,887
(5)	Normal Cost Rate			
	a. Based on DB Member Salaries, (1) ÷ (2)	11.54%	4.83%	16.37%
	b. Based on Total Salaries, (1) ÷ (4)	9.92%	4.15%	14.07%
(6)	Average Member Contribution Rate ¹	7.50%	0.00%	7.50%
(7)	Employer Normal Cost Rate, (5b) – (6)	2.42%	4.15%	6.57%
Past Service Rate				
(1)	Accrued Liability	\$ 5,463,987	\$ 2,383,527	\$ 7,847,514
(2)	Valuation Assets	3,115,719	1,357,239	4,472,958
(3)	Total Unfunded Liability, (1) – (2)	2,348,268	1,026,288	3,374,556
(4)	Funded Ratio, (2) ÷ (1)	57.0%	56.9%	57.0%
(5)	Past Service Cost Amortization Payment ²	164,219	80,444	244,663
(6)	Total Salaries Projected for FY10	678,887	678,887	678,887
(7)	Past Service Rate, (5) ÷ (6)	24.19%	11.85%	36.04%
Total Employer/State Contribution Rate		26.61%	16.00%	42.61%
Normal Cost Rate by Tier (Total Employer and Member)³				
	Tier 1	11.92%	3.48%	15.40%
	Tier 2	11.39%	5.33%	16.72%

¹ Assumes no member contribution from members in the DCR plan, 9.65% contributions for Tier 1 members who elected supplemental coverage and 8.65% for the remaining members.

² Amortized on a level percentage of pay basis.

³ Rate determined considering the pay for members of the plan in this tier. DCR payroll is excluded from these calculations.

1.3 Development of Total Employer/State Contribution Rate – FY12 (continued)

Schedule of Past Service Cost Amortizations - Pension

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability ¹	6/30/2002	18	\$ 871,526	\$ 930,565	\$ 71,120
FY03 Loss ¹	6/30/2003	19	168,666	179,500	13,227
FY04 Loss ¹	6/30/2004	20	83,331	88,158	6,280
FY05 Loss ¹	6/30/2005	21	117,313	123,080	8,496
Change in Assumptions/Methods ¹	6/30/2006	22	284,349	295,225	19,790
FY06 Gain ¹	6/30/2006	22	(21,576)	(22,402)	(1,502)
FY07 Loss	6/30/2007	23	25,203	25,885	1,688
FY08 Gain	6/30/2008	24	(51,093)	(51,821)	(3,294)
FY09 Loss	6/30/2009	25	780,078	780,078	48,414
Total				\$ 2,348,268	\$ 164,219

Schedule of Past Service Cost Amortizations - Healthcare

	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Left	Initial	Outstanding	
Initial Unfunded Liability ¹	6/30/2002	18	\$ 851,080	\$ 908,734	\$ 69,452
FY03 Loss ¹	6/30/2003	19	164,710	175,290	12,917
FY04 Loss ¹	6/30/2004	20	81,376	86,090	6,133
FY05 Loss ¹	6/30/2005	21	114,560	120,193	8,297
Change in Assumptions/Methods ¹	6/30/2006	22	277,678	288,298	19,325
FY06 Gain ¹	6/30/2006	22	(21,071)	(21,877)	(1,466)
FY07 Gain	6/30/2007	23	(375,974)	(386,158)	(25,186)
Change in Assumptions	6/30/2008	24	138,986	140,969	8,962
FY08 Gain	6/30/2008	24	(186,882)	(189,548)	(12,050)
FY09 Gain	6/30/2009	25	(95,703)	(95,703)	(5,940)
Total				\$ 1,026,288	\$ 80,444

¹ The pension and healthcare split was done using a ratio of unfunded accrued liability as of June 30, 2006.

1.3 Development of Total Employer/State Contribution Rate – FY12 (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	18	\$ 1,722,606	\$ 1,839,299	\$ 140,572
FY03 Loss	6/30/2003	19	333,376	354,790	26,144
FY04 Loss	6/30/2004	20	164,707	174,248	12,413
FY05 Loss	6/30/2005	21	231,873	243,273	16,793
Change in Assumptions/Methods	6/30/2006	22	562,027	583,523	39,115
FY06 Gain	6/30/2006	22	(42,647)	(44,279)	(2,968)
FY07 Gain	6/30/2007	23	(350,771)	(360,273)	(23,498)
Change in Assumptions	6/30/2008	24	138,986	140,969	8,962
FY08 Gain	6/30/2008	24	(237,975)	(241,369)	(15,344)
FY09 Loss	6/30/2009	25	684,375	684,375	42,474
Total				\$ 3,374,556	\$ 244,663

The amortization factor for 25 years is 16.112765. The weighted average amortization factor is 13.792670. The amortization method is level percentage of pay.

The equivalent single amortization period is 19 years.

Note: The amortization methodology has been changed since the last valuation. The methodology has been changed from a simple interest approach to a compound interest approach.

1.4 Development of Actuarial Gain/(Loss) for FY09 (in thousands)

	Pension	Healthcare	Total
(1) Expected Actuarial Accrued Liability			
(a) Accrued Liability, June 30, 2008	\$ 5,231,654	\$ 2,387,524	\$ 7,619,178
(b) Normal Cost for FY09	66,297	31,788	98,085
(c) Interest on (a) and (b) at 8.25%	437,081	199,593	636,674
(d) Benefit Payments for FY09	319,148	89,571	408,719
(e) Refund of Contributions for FY09	3,622	0	3,622
(f) Interest on (d) and (e) at 8.25% for one-half year	13,050	3,622	16,672
(g) Expected Accrued Liability as of June 30, 2009 (a) + (b) + (c) - (d) - (e) - (f)	5,399,212	2,525,712	7,924,924
(2) Actual Accrued Liability, June 30, 2009	5,463,987	2,383,527	7,847,514
(3) Liability Gain/(Loss), (1)(g) - (2)	\$ (64,775)	\$ 142,185	\$ 77,410
(4) Expected Actuarial Asset Value			
(a) Actuarial Asset Value, June 30, 2008	\$ 3,670,086	\$ 1,266,890	\$ 4,936,976
(b) Interest on (a) at 8.25%	302,782	104,518	407,300
(c) Employee Contributions for FY09	53,544	116	53,660
(d) Employer Contributions for FY09	27,110	47,174	74,284
(e) Employer Legislative Relief for FY09	104,423	101,877	206,300
(f) Interest on (c), (d) and (e) at 8.25% for one-half year	7,483	6,031	13,514
(g) Benefit Payments for FY09	319,148	89,571	408,719
(h) Refund of Contributions for FY09	3,622	0	3,622
(i) Interest on (g) and (h) at 8.25% for one-half year	13,050	3,622	16,672
(j) Expected Actuarial Asset Value, June 30, 2009 (a) + (b) + (c) + (d) + (e) + (f) - (g) - (h) - (i)	3,829,608	1,433,413	5,263,021
(5) Actuarial Asset Value, June 30, 2009	3,115,719	1,357,239	4,472,958
(6) Actuarial Asset Gain/(Loss), (5) - (4)(j)	\$ (713,889)	\$ (76,174)	\$ (790,063)
(7) Actuarial Gain/(Loss), (3) + (6)	\$ (778,664)	\$ 66,011	\$ (712,653)
(8) Effect of the 2-Year Delay on Contributions	\$ (1,414)	\$ 29,692	\$ 28,278
(9) FY09 Gain/(Loss) to be Amortized, (7) + (8)	\$ (780,078)	\$ 95,703	\$ (684,375)

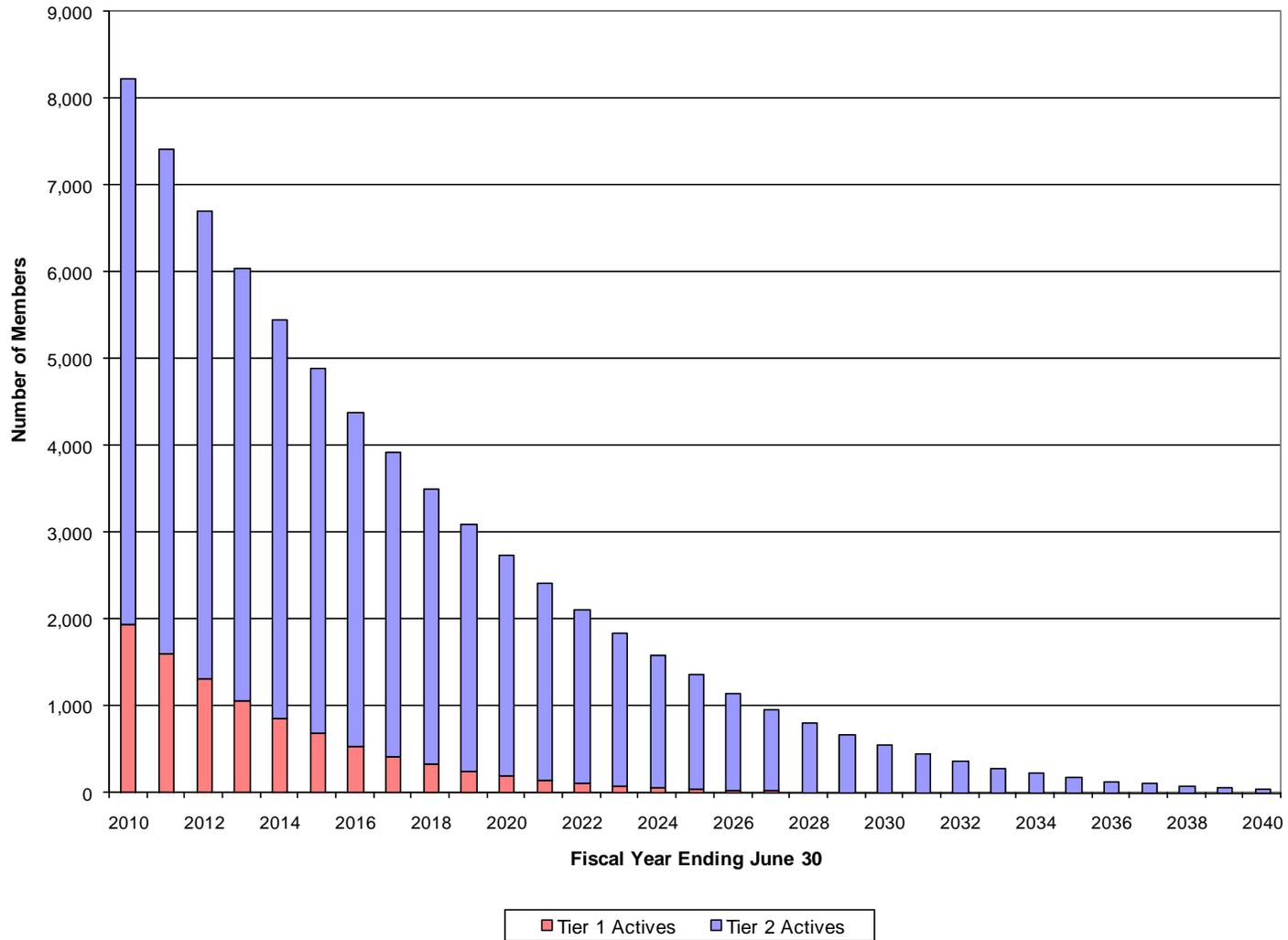
1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DCR Payroll

Key Assumptions

- 8.25% investment return on the Market Value of Assets in all years.
- The Actuarial Value of Assets reflects the deferred gains and losses generated by the smoothing method. The current deferred amounts are recognized in the first four years of the projections.
- 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.
- Projections assume a 1% increase in the total active population. All new members are expected to enter the DCR plan.

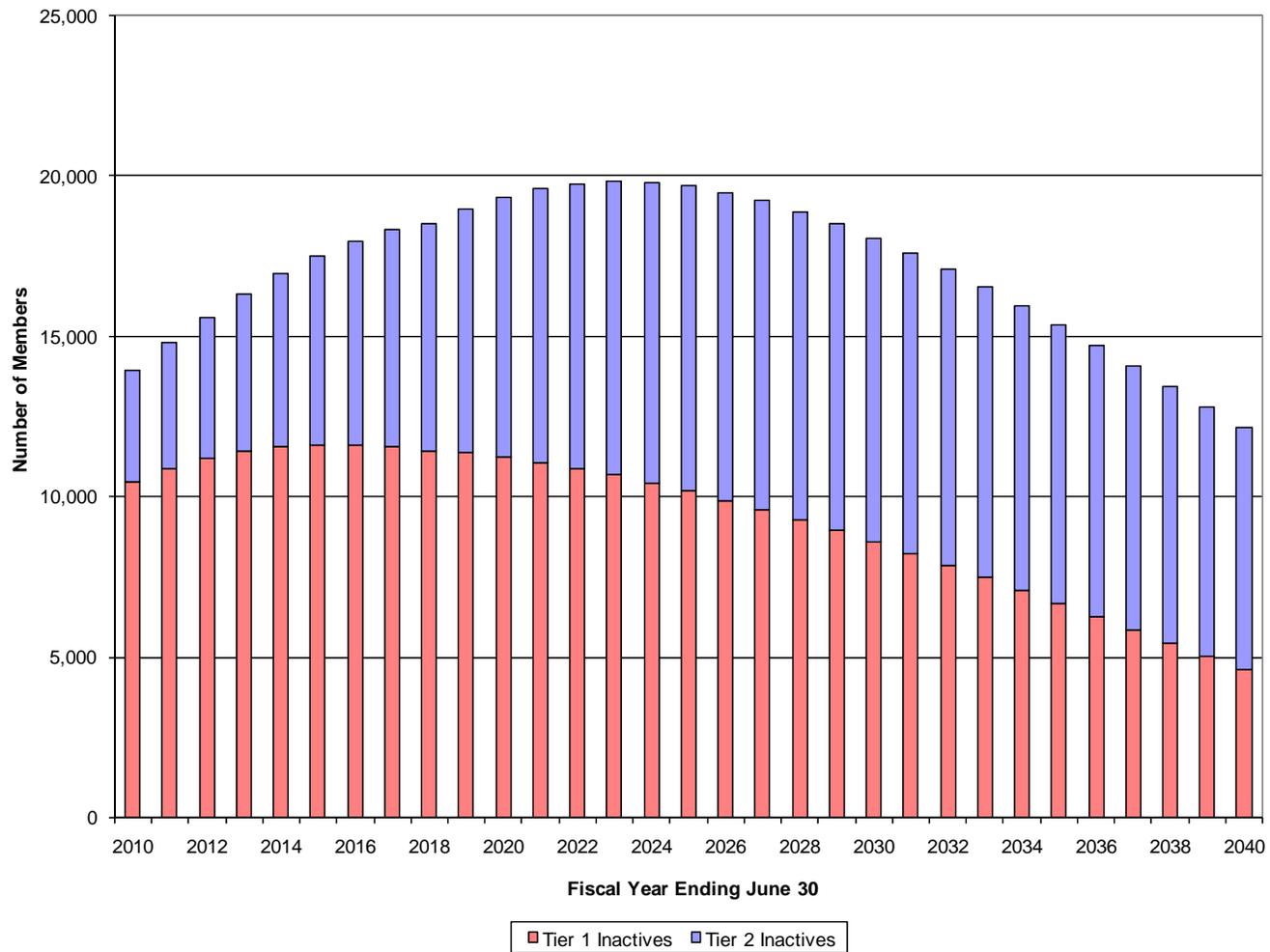
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based Total DB and DCR Payroll (continued)**

Projected Active Member Count



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

Projected Inactive Member Count



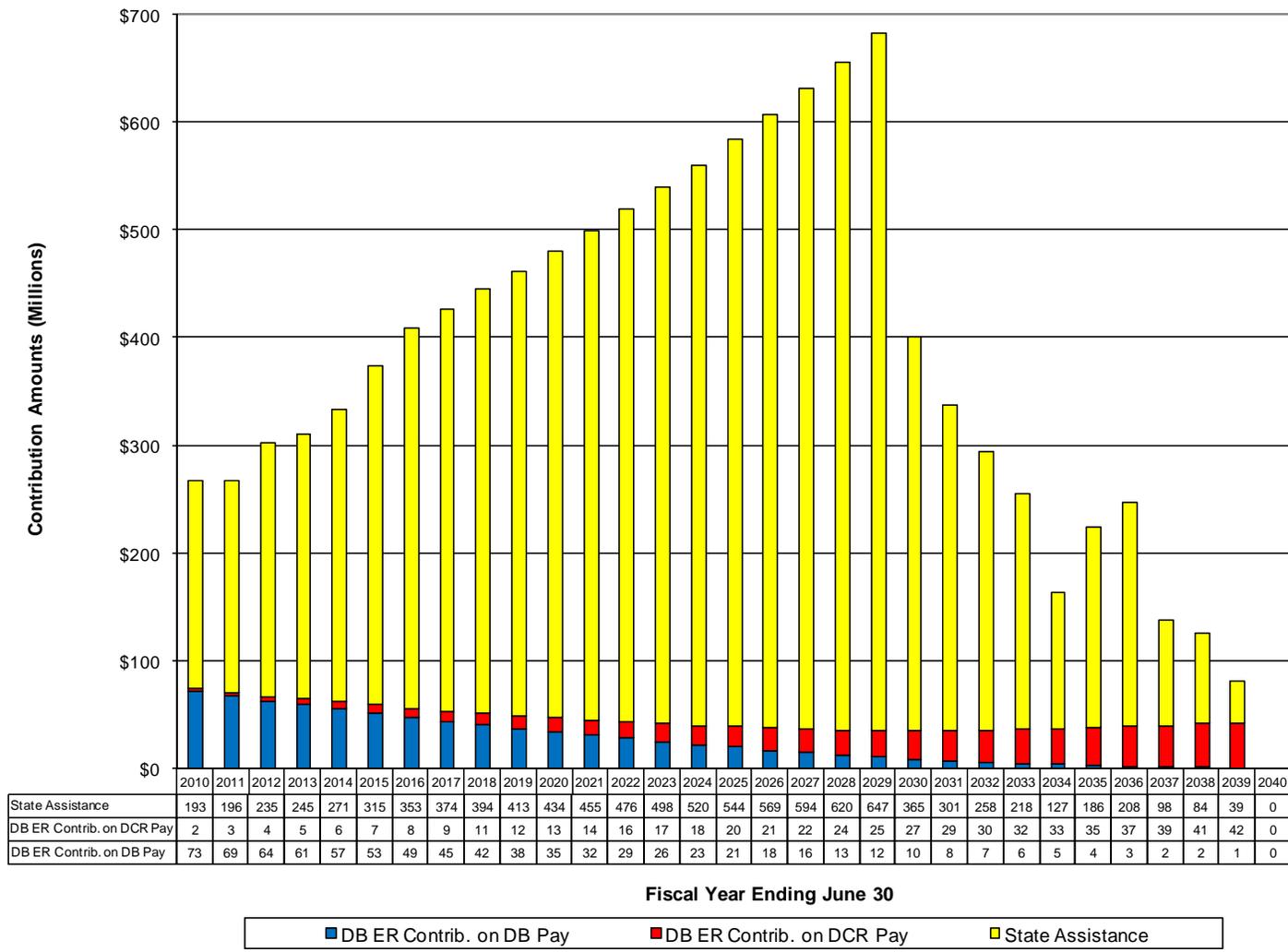
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DCR Payroll (continued)**

Observations

- Contribution amounts have been shown instead of rates. The actual contribution amount provides a more meaningful illustration of the contributions due.
- Contribution amounts increase until FY29 before dropping off significantly as the June 30, 2002 unfunded liability amortization base is paid off.
- Contributions become \$0 towards the end of the projection period upon completion of 25-year amortizations of recent gains and losses.
- Funding ratios decrease until FY14 as the deferral of recent investment losses are realized, and then improve throughout the rest of the projection period.

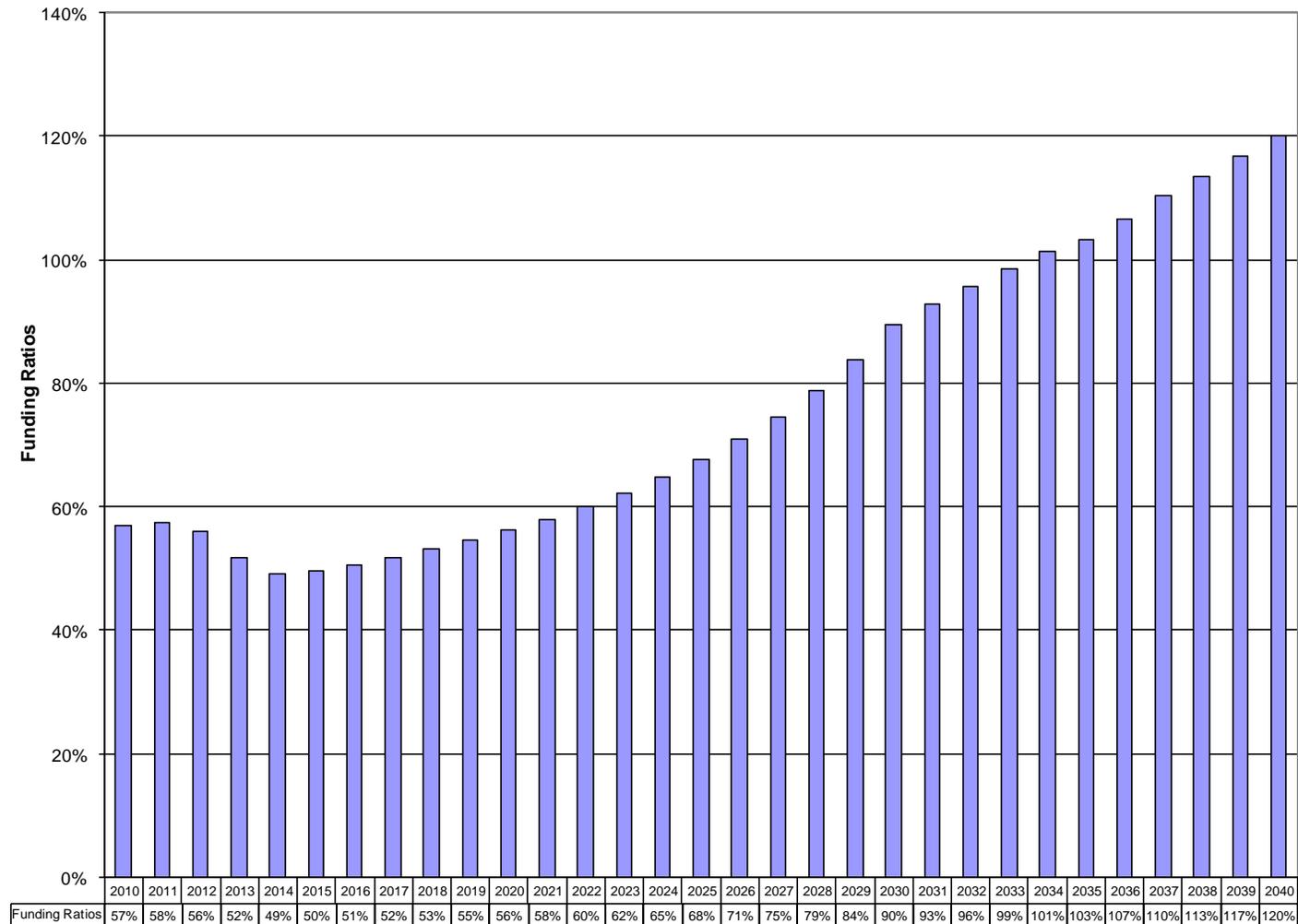
**1.5(a) Actuarial Projections – Projections at Calculated Rate
Based on Total DB and DCR Payroll (continued)**

Projected Employer/State Contribution Amounts



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

Projected Funding Ratios



Fiscal Year Ending June 30

1.5(a) Actuarial Projections – Projections at Calculated Rate Based on Total DB and DCR 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/(Loss)	Ending Actuarial Assets
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer/State Ctb Rate	Employer/State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2010	\$4,472,958	\$7,847,514	57.00%	(\$3,374,556)	\$678,887	39.53%	\$268,364	\$58,152	\$326,516	\$466,578	(\$140,062)	\$301,853	\$32,359	\$4,667,108
2011	4,667,108	8,115,362	57.51%	(3,448,254)	693,733	38.56%	267,503	59,313	326,816	500,024	(173,208)	313,860	(110,216)	4,697,544
2012	4,697,544	8,368,357	56.13%	(3,670,813)	710,874	42.61%	302,903	56,596	359,499	527,373	(167,874)	325,680	(389,234)	4,466,116
2013	4,466,116	8,606,603	51.89%	(4,140,487)	730,739	42.50%	310,564	54,074	364,638	552,559	(187,921)	337,888	(278,402)	4,337,681
2014	4,337,681	8,832,005	49.11%	(4,494,324)	753,394	44.30%	333,754	51,722	385,476	577,677	(192,201)	350,088	0	4,495,568
2015	4,495,568	9,043,698	49.71%	(4,548,130)	777,608	48.23%	375,040	49,529	424,569	602,851	(178,282)	363,676	0	4,680,962
2016	4,680,962	9,240,920	50.65%	(4,559,958)	804,042	51.05%	410,463	47,292	457,755	629,189	(171,434)	379,248	0	4,888,776
2017	4,888,776	9,421,135	51.89%	(4,532,359)	832,681	51.48%	428,664	45,068	473,732	654,987	(181,255)	395,995	0	5,103,516
2018	5,103,516	9,583,910	53.25%	(4,480,394)	863,949	51.64%	446,143	32,571	478,714	679,128	(200,414)	412,937	0	5,316,039
2019	5,316,039	9,727,257	54.65%	(4,411,218)	897,899	51.61%	463,406	29,990	493,396	695,463	(202,067)	430,403	0	5,544,375
2020	5,544,375	9,853,008	56.27%	(4,308,633)	934,569	51.54%	481,677	27,663	509,340	718,401	(209,061)	448,958	0	5,784,272
2021	5,784,272	9,960,605	58.07%	(4,176,333)	974,260	51.48%	501,549	25,331	526,880	742,414	(215,534)	468,488	0	6,037,226
2022	6,037,226	10,047,654	60.09%	(4,010,428)	1,015,766	51.30%	521,088	23,159	544,247	765,779	(221,532)	489,114	0	6,304,808
2023	6,304,808	10,113,286	62.34%	(3,808,478)	1,059,392	51.08%	541,137	20,976	562,113	788,654	(226,541)	510,987	0	6,589,254
2024	6,589,254	10,156,527	64.88%	(3,567,273)	1,105,376	50.84%	561,973	18,902	580,875	811,313	(230,438)	534,296	0	6,893,112
2025	6,893,112	10,175,984	67.74%	(3,282,872)	1,153,995	50.63%	584,268	16,848	601,116	834,237	(233,121)	559,256	0	7,219,247
2026	7,219,247	10,169,635	70.99%	(2,950,388)	1,205,447	50.41%	607,666	14,827	622,493	855,140	(232,647)	586,181	0	7,572,781
2027	7,572,781	10,137,750	74.70%	(2,564,969)	1,258,625	50.20%	631,830	13,090	644,920	874,264	(229,344)	615,482	0	7,958,919
2028	7,958,919	10,080,207	78.96%	(2,121,288)	1,315,048	49.98%	657,261	11,309	668,570	893,549	(224,979)	647,514	0	8,381,454
2029	8,381,454	9,995,056	83.86%	(1,613,602)	1,374,862	49.78%	684,406	9,762	694,168	910,443	(216,275)	682,725	0	8,847,904
2030	8,847,904	9,882,863	89.53%	(1,034,959)	1,438,088	27.93%	401,658	8,341	409,999	925,798	(515,799)	709,097	0	9,041,202
2031	9,041,202	9,743,314	92.79%	(702,112)	1,504,914	22.42%	337,402	7,073	344,475	938,624	(594,149)	721,876	0	9,168,929
2032	9,168,929	9,577,041	95.74%	(408,112)	1,574,377	18.72%	294,723	5,983	300,706	946,562	(645,856)	730,323	0	9,253,396
2033	9,253,396	9,387,163	98.58%	(133,767)	1,646,839	15.51%	255,425	4,941	260,366	953,238	(692,872)	735,391	0	9,295,915
2034	9,295,915	9,173,262	101.34%	122,653	1,722,672	9.56%	164,687	4,134	168,821	956,440	(787,619)	735,068	0	9,243,364
2035	9,243,364	8,937,179	103.43%	306,185	1,802,096	12.46%	224,541	3,244	227,785	953,352	(725,567)	733,241	0	9,251,038
2036	9,251,038	8,683,829	106.53%	567,209	1,885,549	13.15%	247,950	2,640	250,590	946,979	(696,389)	735,054	0	9,289,703
2037	9,289,703	8,415,379	110.39%	874,324	1,971,888	7.04%	138,821	2,169	140,990	938,265	(797,275)	734,165	0	9,226,593
2038	9,226,593	8,133,194	113.44%	1,093,399	2,062,659	6.13%	126,441	1,650	128,091	924,512	(796,421)	728,993	0	9,159,165
2039	9,159,165	7,841,515	116.80%	1,317,650	2,157,538	3.85%	83,065	1,295	84,360	906,956	(822,596)	722,371	0	9,058,940
2040	9,058,940	7,543,640	120.09%	1,515,300	2,257,108	0.00%	0	1,129	1,129	889,132	(888,003)	711,458	0	8,882,395

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

Key Assumptions

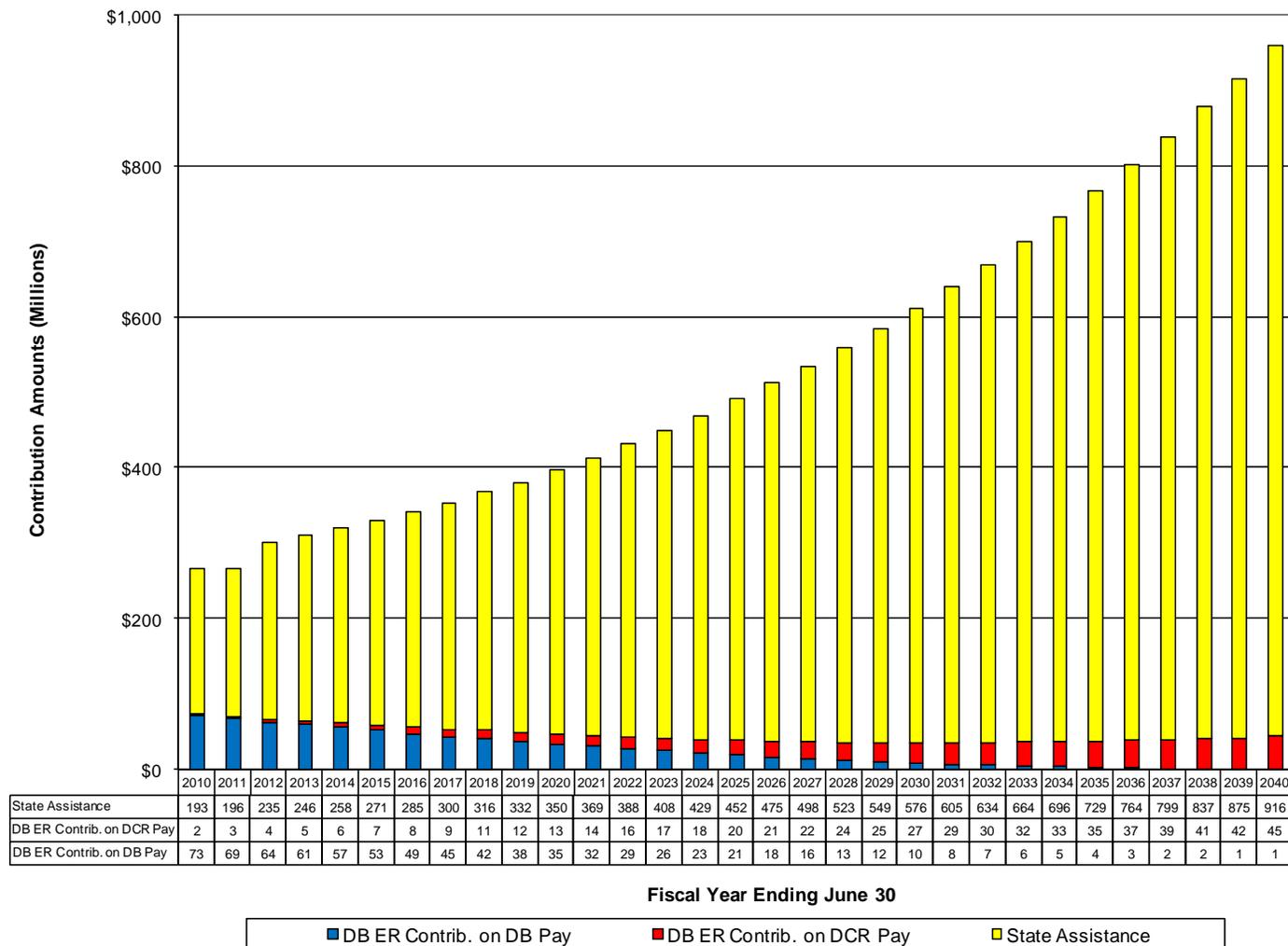
All assumptions and methods are the same as Section 1.5(a), except adopted contribution rate is maintained at the FY12 level of 42.61% of total pay for all future years.

Observations

- Contribution amounts increase through the projection period
- Funding ratios decrease until FY14 as the deferral of recent investment losses are realized, and then improve throughout the rest of the projection period.

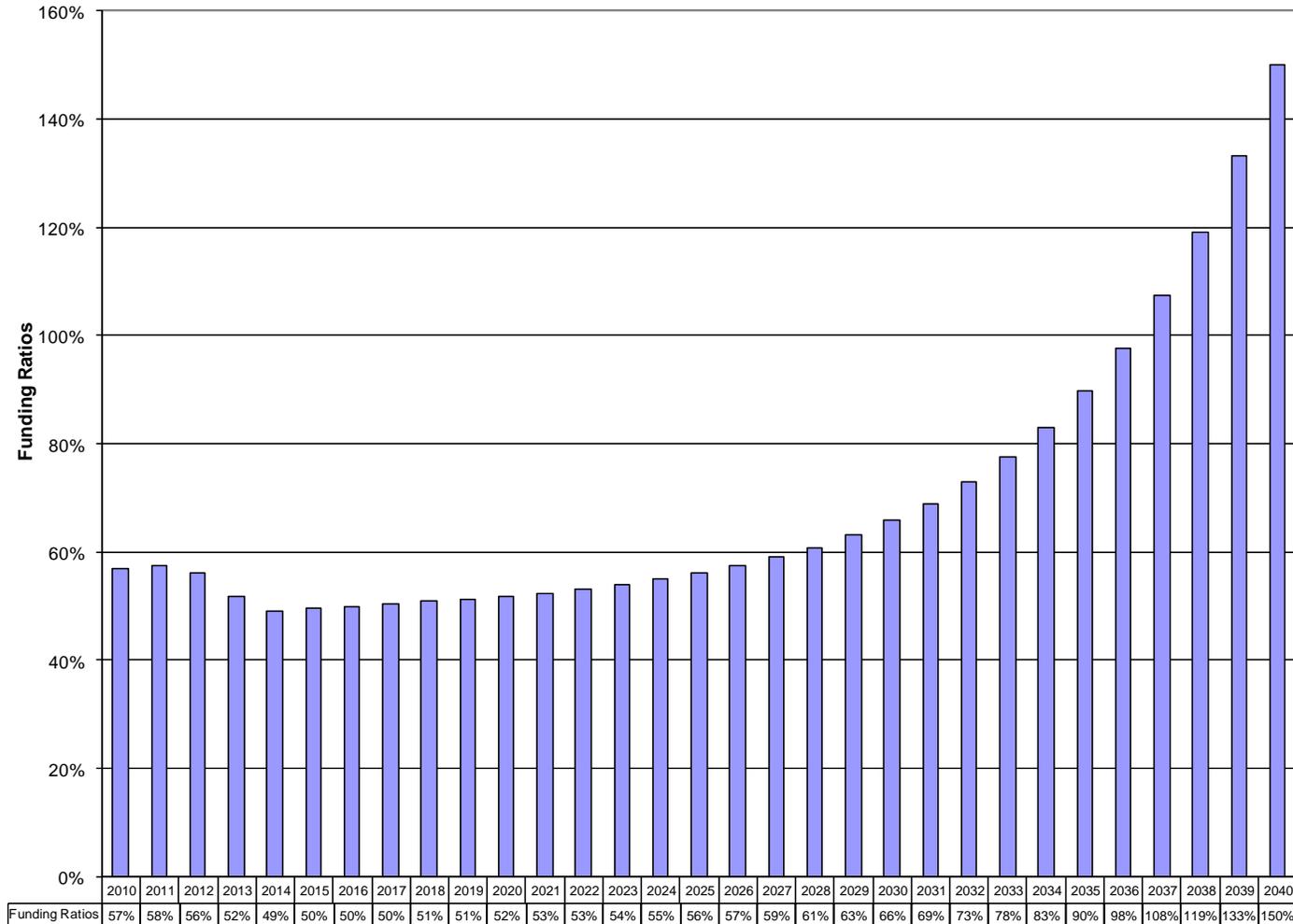
**1.5(b) Actuarial Projections – Projections at Current Rate
Based on Total DB and DCR Payroll (continued)**

Projected Employer/State Contribution Amounts



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

Projected Funding Ratios



Fiscal Year Ending June 30

1.5(b) Actuarial Projections – Projections at Current Rate Based on Total DB and DCR 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/(Loss)	Ending Actuarial Assets
	Actuarial Assets	Accrued Liability	Funding Ratio	Surplus (Deficit)	Total Salaries	Employer/State Ctb Rate	Employer/State Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings		
2010	\$4,472,958	\$7,847,514	57.00%	(\$3,374,556)	\$678,887	39.53%	\$268,364	\$58,152	\$326,516	\$466,578	(\$140,062)	\$301,853	\$32,359	\$4,667,108
2011	4,667,108	8,115,362	57.51%	(3,448,254)	693,733	38.56%	267,503	59,313	326,816	500,024	(173,208)	313,860	(110,216)	4,697,544
2012	4,697,544	8,368,357	56.13%	(3,670,813)	710,874	42.61%	302,903	56,596	359,499	527,373	(167,874)	325,680	(389,234)	4,466,116
2013	4,466,116	8,606,603	51.89%	(4,140,487)	730,739	42.61%	311,368	54,074	365,442	552,559	(187,117)	337,921	(278,402)	4,338,518
2014	4,338,518	8,832,005	49.12%	(4,493,487)	753,394	42.61%	321,021	51,722	372,743	577,677	(204,934)	349,642	0	4,483,226
2015	4,483,226	9,043,698	49.57%	(4,560,472)	777,608	42.61%	331,339	49,529	380,868	602,851	(221,983)	360,891	0	4,622,134
2016	4,622,134	9,240,920	50.02%	(4,618,786)	804,042	42.61%	342,602	47,292	389,894	629,189	(239,295)	371,651	0	4,754,490
2017	4,754,490	9,421,135	50.47%	(4,666,645)	832,681	42.61%	354,805	45,068	399,873	654,987	(255,114)	381,931	0	4,881,307
2018	4,881,307	9,583,910	50.93%	(4,702,603)	863,949	42.61%	368,129	32,571	400,700	679,128	(278,428)	391,450	0	4,994,329
2019	4,994,329	9,727,257	51.34%	(4,732,928)	897,899	42.61%	382,595	29,990	412,585	695,463	(282,878)	400,595	0	5,112,046
2020	5,112,046	9,853,008	51.88%	(4,740,962)	934,569	42.61%	398,220	27,663	425,883	718,401	(292,518)	409,917	0	5,229,445
2021	5,229,445	9,960,605	52.50%	(4,731,160)	974,260	42.61%	415,132	25,331	440,463	742,414	(301,951)	419,221	0	5,346,715
2022	5,346,715	10,047,654	53.21%	(4,700,939)	1,015,766	42.61%	432,818	23,159	455,977	765,779	(309,802)	428,578	0	5,465,491
2023	5,465,491	10,113,286	54.04%	(4,647,795)	1,059,392	42.61%	451,407	20,976	472,383	788,654	(316,271)	438,115	0	5,587,335
2024	5,587,335	10,156,527	55.01%	(4,569,192)	1,105,376	42.61%	471,001	18,902	489,903	811,313	(321,410)	447,960	0	5,713,885
2025	5,713,885	10,175,984	56.15%	(4,462,099)	1,153,995	42.61%	491,717	16,848	508,565	834,237	(325,672)	458,228	0	5,846,441
2026	5,846,441	10,169,635	57.49%	(4,323,194)	1,205,447	42.61%	513,641	14,827	528,468	855,140	(326,672)	469,123	0	5,988,892
2027	5,988,892	10,137,750	59.08%	(4,148,858)	1,258,625	42.61%	536,300	13,090	549,390	874,264	(324,874)	480,948	0	6,144,966
2028	6,144,966	10,080,207	60.96%	(3,935,241)	1,315,048	42.61%	560,342	11,309	571,651	893,549	(321,898)	493,945	0	6,317,013
2029	6,317,013	9,995,056	63.20%	(3,678,043)	1,374,862	42.61%	585,829	9,762	595,591	910,443	(314,852)	508,423	0	6,510,584
2030	6,510,584	9,882,863	65.88%	(3,372,279)	1,438,088	42.61%	612,769	8,341	621,110	925,798	(304,688)	524,804	0	6,730,700
2031	6,730,700	9,743,314	69.08%	(3,012,614)	1,504,914	42.61%	641,244	7,073	648,317	938,624	(290,307)	543,545	0	6,983,938
2032	6,983,938	9,577,041	72.92%	(2,593,103)	1,574,377	42.61%	670,842	5,983	676,825	946,562	(269,737)	565,269	0	7,279,470
2033	7,279,470	9,387,163	77.55%	(2,107,693)	1,646,839	42.61%	701,718	4,941	706,659	953,238	(246,579)	590,587	0	7,623,478
2034	7,623,478	9,173,262	83.11%	(1,549,784)	1,722,672	42.61%	734,031	4,134	738,165	956,440	(218,275)	620,112	0	8,025,315
2035	8,025,315	8,937,179	89.80%	(911,864)	1,802,096	42.61%	767,873	3,244	771,117	953,352	(182,235)	654,720	0	8,497,800
2036	8,497,800	8,683,829	97.86%	(186,029)	1,885,549	42.61%	803,432	2,640	806,072	946,979	(140,907)	695,371	0	9,052,264
2037	9,052,264	8,415,379	107.57%	636,885	1,971,888	42.61%	840,221	2,169	842,390	938,265	(95,875)	742,935	0	9,699,324
2038	9,699,324	8,133,194	119.26%	1,566,130	2,062,659	42.61%	878,899	1,650	880,549	924,512	(43,963)	798,417	0	10,453,778
2039	10,453,778	7,841,515	133.31%	2,612,263	2,157,538	42.61%	919,327	1,295	920,622	906,956	13,666	862,989	0	11,330,433
2040	11,330,433	7,543,640	150.20%	3,786,793	2,257,108	42.61%	961,754	1,129	962,883	889,132	73,751	937,743	0	12,341,927

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

Key Assumptions

All assumptions and methods are the same as Section 1.5(a) except investment returns on the Market Value of Assets 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

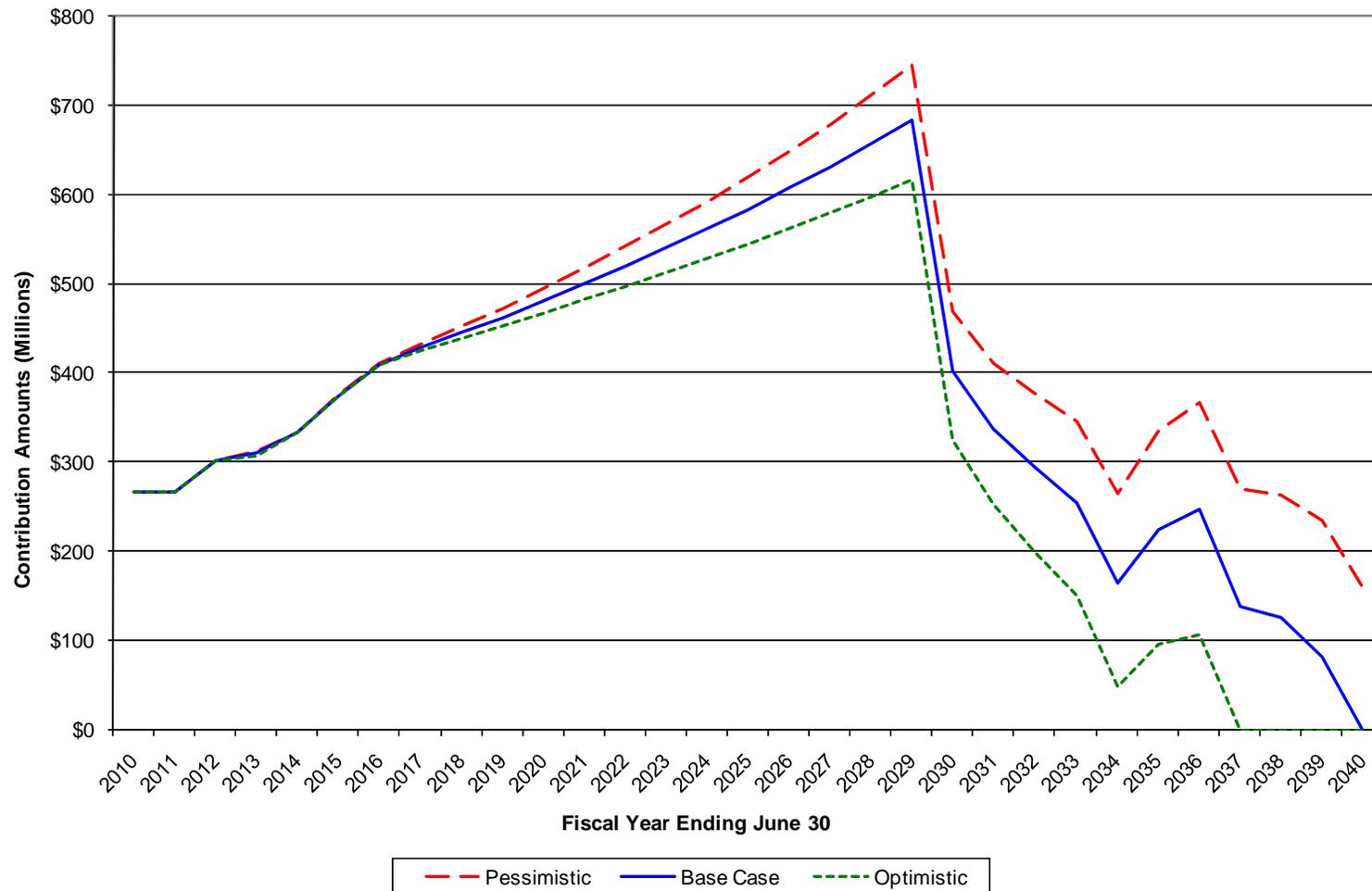
In all cases, liabilities have been projected using 8.25% as the discount rate for future benefit payments. These scenarios are intended to illustrate the impact if investment rates are different than the 8.25% assumed investment return. They do not illustrate the effect of changing the assumed discount rate 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 the end of the projection period upon completion of 25-year amortizations of recent gains and losses.

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

Projected Employer/State 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, 2009. 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 (Tier 1) are eligible for different benefits than members hired after June 30, 1990 (Tier 2). Chapter 9, 2005 Session Laws of Alaska, closed the plan to new members hired after June 30, 2006.

(2) Administration of Plan

The Commissioner of Administration or the Commissioner's designee is the administrator of the system. The Attorney General of the state is the legal counsel for the system and shall advise the administrator and represent 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 hired before July 1, 2006:

- 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.

Senate Bill 141, signed into law on July 27, 2005, closes the plan effective July 1, 2006 to new members first hired on or after July 1, 2006.

(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.

Survivors who are receiving occupational death benefits continue to earn TRS service 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 normal cost 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 normal cost rate.

(7) Additional State Contribution

Pursuant to AS14.25.070 effective July 1, 2008, the State shall contribute an amount (in addition to the State contribution as an employer) that when combined with the employer contribution (12.56%) will be sufficient to pay the total contribution rate adopted by The State of Alaska Retirement Management Board.

(8) 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 (13) below). Supplemental contributions are only refundable upon death (see (13) 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)

(9) Retirement Benefits

Eligibility:

- (a) Members, including deferred vested members, are eligible for normal retirement at age 55 or early retirement at age 50 if they were hired before July 1, 1990 (Tier 1) and age 60 or early retirement at age 55 if they were hired on or after July 1, 1990 (Tier 2). Additionally, they must 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.

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. Indebtedness balances may also be created when a member purchases qualified claimed service.

(10) 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.

(11) 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 (Tier 1) and their surviving spouses and (2) members and their surviving spouses 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 (Tier 2) and their surviving spouses may receive major medical benefits prior to age sixty by paying premiums.

(12) 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.

(13) 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 or is vested, 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 the unreduced retirement benefit that the deceased member 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.

(14) Postretirement Pension Adjustments

Postretirement pension adjustments (PRPAs) are granted annually to eligible benefit recipients when the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage increases during the preceding calendar year. PRPAs are calculated by multiplying the recipient's base benefit, including past PRPAs, excluding the Alaska COLA, 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 (Tier 1) 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.

(15) 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 (Tier 1) and their survivors;
- (b) members who were first hired under the TRS after June 30, 1990 (Tier 2) and their survivors if they are at least age 65; and
- (c) all disabled members.

Changes in Benefit Provisions Since the Prior Valuation

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

2.2(a) Member Census Information – Total TRS

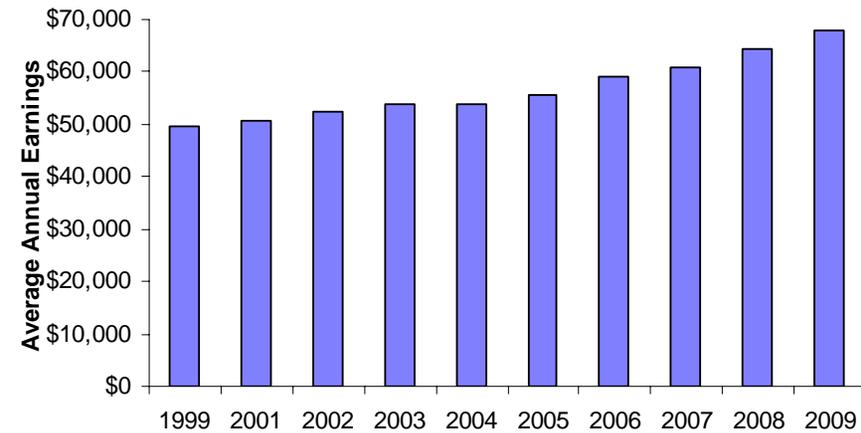
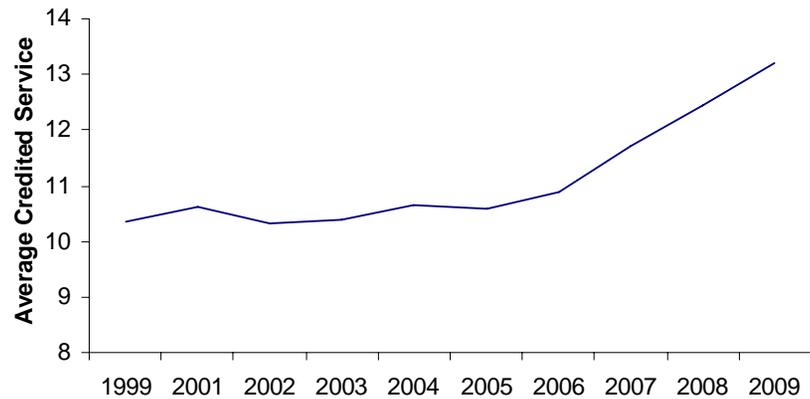
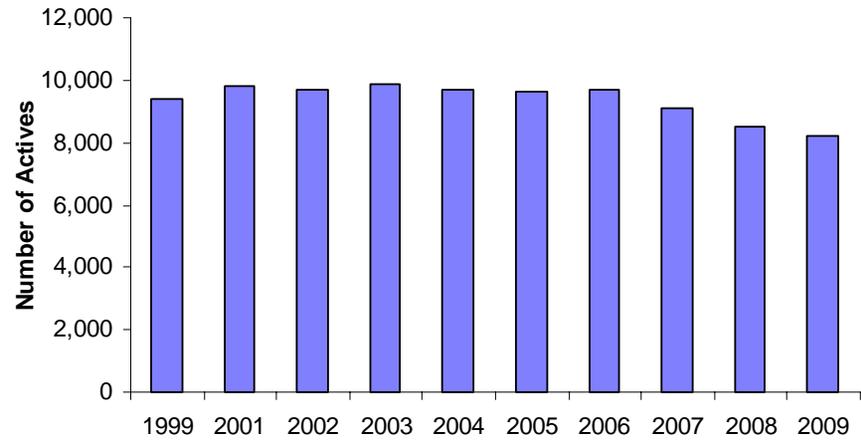
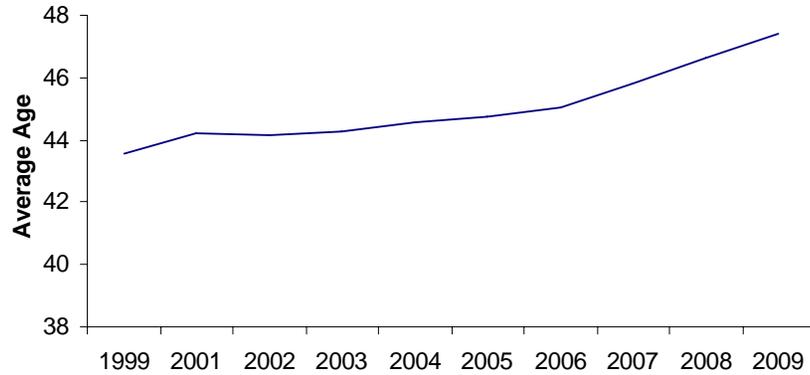
As of June 30	2005	2006	2007	2008	2009
Active Members					
(1) Number	9,656	9,710	9,107	8,531	8,226
(2) Average Age	44.76	45.02	45.84	46.64	47.42
(3) Average Credited Service	10.58	10.87	11.70	12.44	13.19
(4) Average Entry Age	34.18	34.15	34.14	34.20	34.23
(5) Average Annual Earnings	\$ 55,493	\$ 59,156	\$ 60,859	\$ 64,371	\$ 67,715
(6) Number Vested	5,254	5,462	5,571	5,612	5,799
(7) Percent Who Are Vested	54.4%	56.3%	61.2%	65.8%	70.5%
Retirees, Disableds and Beneficiaries					
(1) Number	9,020	9,386	9,678	10,026	10,255
(2) Average Age	64.42	64.83	65.33	65.82	66.42
(3) Average Monthly Pension Benefit					
Base	\$ 1,968	\$ 1,962	\$ 1,977	\$ 1,994	\$ 1,994
C.O.L.A.	122	122	123	123	124
P.R.P.A.	457	469	483	485	526
Adjustment	0	0	0	0	0
Sick ¹	N/A	42	44	45	47
Total	\$ 2,547	\$ 2,595	\$ 2,627	\$ 2,647	\$ 2,691
Vested Terminations (vested at time of termination, not refunded contributions or commenced benefit)					
(1) Number	826	795	846	873	884
(2) Average Age	49.13	48.80	49.03	49.14	49.52
(3) Average Monthly Pension Benefit	\$ 1,072	\$ 1,051	\$ 1,094	\$ 1,099	\$ 1,204
Non-Vested Terminations (not vested at termination, not refunded contributions)					
(1) Number	2,874	3,085	3,044	2,971	2,830
(2) Average Account Balance	\$ 11,684	\$ 12,057	\$ 12,675	\$ 13,692	\$ 14,408
Total Number of Members	22,376	22,976	22,675	22,401	22,195

¹ Prior to 2006, the sick benefit was included in the base benefit.

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

As of June 30, 2009	Tier 1	Tier 2	Total
Retirees, Disableds and Beneficiaries			
(1) Number	9,740	515	10,255
(2) Average Age	66.58	63.40	66.42
(3) Average Monthly Pension Benefit			
Base	\$ 2,035	\$ 1,210	\$ 1,994
C.O.L.A.	129	28	124
P.R.P.A.	550	73	526
Adjustment	0	0	0
Sick	48	28	47
Total	\$ 2,762	\$ 1,339	\$ 2,691

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	0	0	\$ 0	\$ 0
20 – 24	0	0	0	1	19	855,236	45,012
25 – 29	257	13,189,239	51,320	2	68	3,517,527	51,728
30 – 34	748	42,281,593	56,526	3	203	10,831,411	53,357
35 – 39	1,130	68,563,036	60,675	4	526	29,659,088	56,386
40 – 44	1,206	79,624,540	66,024	0 – 4	816	44,863,262	54,979
45 – 49	1,318	90,700,962	68,817	5 – 9	2,404	144,616,652	60,157
50 – 54	1,461	103,890,207	71,109	10 – 14	1,960	129,940,131	66,296
55 – 59	1,362	99,790,299	73,267	15 – 19	1,462	107,751,256	73,701
60 – 64	570	44,562,243	78,179	20 – 24	870	68,102,063	78,278
65 – 69	145	12,160,879	83,868	25 – 29	509	42,846,108	84,177
70 – 74	26	2,052,181	78,930	30 – 34	149	13,417,990	90,054
75+	3	210,331	70,110	35 – 39	44	4,158,176	94,504
				40+	12	1,329,872	110,823
Total	8,226	\$557,025,510	\$ 67,715	Total	8,226	\$557,025,510	\$ 67,715

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	0	0	0	0	0	0	0	0	0	0
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	151	106	0	0	0	0	0	0	0	257
30 – 34	168	505	75	0	0	0	0	0	0	748
35 – 39	129	512	454	35	0	0	0	0	0	1,130
40 – 44	100	334	420	317	35	0	0	0	0	1,206
45 – 49	83	299	324	357	219	36	0	0	0	1,318
50 – 54	68	275	329	327	270	173	19	0	0	1,461
55 – 59	76	251	245	300	224	181	73	12	0	1,362
60 – 64	36	94	89	98	101	87	41	23	1	570
65 – 69	5	21	17	24	20	27	14	8	9	145
70 – 74	0	6	6	4	0	5	2	1	2	26
75+	0	1	1	0	1	0	0	0	0	3
Total	816	2,404	1,960	1,462	870	509	149	44	12	8,226

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) ¹	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2009	8,226	\$ 557,026	\$ 67,715	5.2%	58
June 30, 2008	8,531	549,148	64,371	5.8%	58
June 30, 2007	9,107	554,245	60,859	2.9%	58
June 30, 2006	9,710	574,409	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

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	2005	2006	2007	2008	2009
Service					
(1) Number	393	425	368	419	299
(2) Average Age at Commencement	56.43	56.52	56.73	57.16	57.30
(3) Average Monthly Pension Benefit	\$ 2,261	\$ 2,290	\$ 2,556	\$ 2,600	\$ 2,374
Survivor (including surviving spouse and QDROs)					
(1) Number	46	57	61	55	65
(2) Average Age at Commencement	60.88	63.29	65.32	64.54	68.52
(3) Average Monthly Pension Benefit	\$ 1,263	\$ 1,288	\$ 1,338	\$ 1,460	\$ 1,419
Disability					
(1) Number	7	5	3	7	4
(2) Average Age at Commencement	53.64	44.41	54.76	53.60	49.85
(3) Average Monthly Pension Benefit	\$ 2,627	\$ 2,855	\$ 2,844	\$ 2,693	\$ 3,426
Total					
(1) Number	446	487	432	481	368
(2) Average Age at Commencement	56.57	57.19	57.93	57.95	59.20
(3) Average Monthly Pension Benefit	\$ 2,164	\$ 2,179	\$ 2,386	\$ 2,471	\$ 2,217

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

	Years of Credited Service						
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+
Period 7/1/08 – 6/30/09: ¹							
Average Monthly Pension Benefit	\$ 230	\$ 950	\$ 1,168	\$ 2,239	\$ 2,957	\$ 3,897	\$ 4,860
Number of Recipients	13	35	64	52	67	54	18
Period 7/1/07- 6/30/08: ¹							
Average Monthly Pension Benefit	\$ 209	\$ 945	\$ 1,248	\$ 2,226	\$ 2,966	\$ 3,832	\$ 5,057
Number of Recipients	13	44	62	92	95	87	33
Period 7/1/06- 6/30/07: ¹							
Average Monthly Pension Benefit	\$ 214	\$ 798	\$ 1,249	\$ 2,250	\$ 2,909	\$ 3,709	\$ 5,109
Number of Recipients	9	41	54	69	102	68	28
Period 7/1/05- 6/30/06: ¹							
Average Monthly Pension 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: ¹							
Average Monthly Pension 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 Pension 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 Pension 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 Pension 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 Pension 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

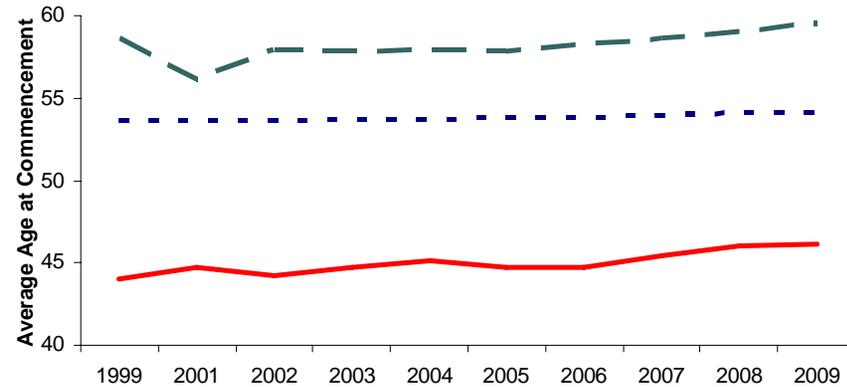
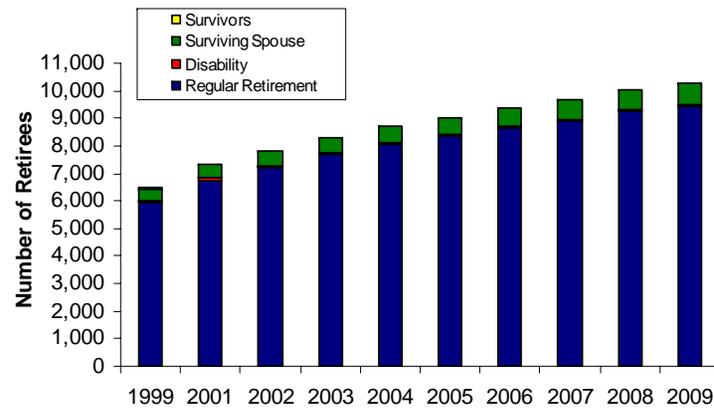
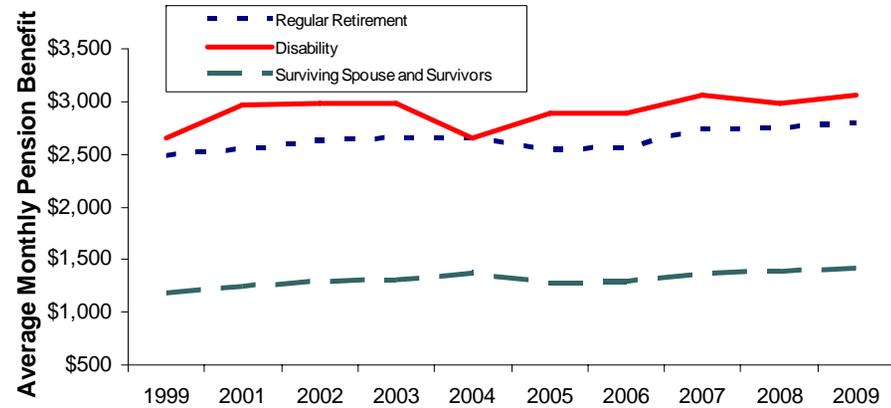
“Average Monthly Benefit” includes postretirement pension adjustments and cost-of-living increases.

¹ Does not include beneficiaries.

2.2(f) Statistics on All Pension Benefit Recipients

As of June 30	2005	2006	2007	2008	2009
Service					
(1) Number, Fiscal Year Start	8,052	8,351	8,675	8,926	9,250
(2) Net Change	299	324	251	324	182
(3) Number, Fiscal Year End	8,351	8,675	8,926	9,250	9,432
(4) Average Age at Commencement	53.77	53.81	53.91	54.03	54.10
(5) Average Current Age	64.32	64.72	65.19	65.66	66.25
(6) Average Monthly Pension Benefit	\$ 2,537	\$ 2,558	\$ 2,723	\$ 2,745	\$ 2,794
Surviving Spouse's Benefits (includes QDROs)					
(1) Number, Fiscal Year Start	576	602	647	696	726
(2) Net Change	26	45	49	30	48
(3) Number, Fiscal Year End	602	647	696	726	774
(4) Average Age at Commencement	57.75	58.16	58.61	59.06	59.64
(5) Average Current Age	67.31	67.71	68.17	68.77	69.50
(6) Average Monthly Pension Benefit	\$ 1,270	\$ 1,292	\$ 1,362	\$ 1,390	\$ 1,421
Survivor's Benefits (other than spouses)					
(1) Number, Fiscal Year Start	3	1	1	1	3
(2) Net Change	(2)	0	0	2	0
(3) Number, Fiscal Year End	1	1	1	3	3
(4) Average Age at Commencement	35.52	35.52	35.52	33.44	33.44
(5) Average Current Age	35.77	36.77	37.77	35.19	36.19
(6) Average Monthly Pension Benefit	\$ 448	\$ 451	\$ 469	\$ 536	\$ 545
Disabilities					
(1) Number, Fiscal Year Start	76	66	63	55	47
(2) Net Change	(10)	(3)	(8)	(8)	(1)
(3) Number, Fiscal Year End	66	63	55	47	46
(4) Average Age at Commencement	44.74	44.76	45.47	46.02	46.13
(5) Average Current Age	51.31	51.03	51.71	51.79	52.13
(6) Average Monthly Pension Benefit	\$ 2,891	\$ 2,885	\$ 3,060	\$ 2,977	\$ 3,058
Total					
(1) Number, Fiscal Year Start	8,707	9,020	9,386	9,678	10,026
(2) Net Change	313	366	292	348	229
(3) Number, Fiscal Year End	9,020	9,386	9,678	10,026	10,255
(4) Average Age at Commencement	53.97	54.05	54.20	54.35	54.48
(5) Average Current Age	64.42	64.83	65.33	65.82	66.42
(6) Average Monthly Pension Benefit	\$ 2,455	\$ 2,473	\$ 2,627	\$ 2,647	\$ 2,691

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



2.2(g) Distribution of Annual Pension Benefits for Benefit Recipients

Annual Pension Benefit by Age

Age	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0 – 19	1	\$ 6,830	\$ 6,830
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	0	0	0
35 – 39	4	85,725	21,431
40 – 44	16	424,983	26,561
45 – 49	136	4,022,239	29,575
50 – 54	544	16,635,520	30,580
55 – 59	1,688	50,393,800	29,854
60 – 64	2,610	79,572,426	30,488
65 – 69	2,239	75,798,937	33,854
70 – 74	1,328	47,244,949	35,576
75+	1,689	56,950,181	33,718
Total	10,255	\$ 331,135,590	\$ 32,290

Annual Pension Benefit by Years Since Commencement

Years Since Commencement	Number	Total Annual Pension Benefit	Average Annual Pension Benefit
0	339	\$ 9,056,708	\$ 26,716
1	466	13,905,264	29,840
2	447	13,234,823	29,608
3	445	12,628,281	28,378
4	453	13,249,054	29,247
0 – 4	2,150	62,074,130	28,872
5 – 9	2,263	64,491,763	28,498
10 – 14	2,602	88,056,755	33,842
15 – 19	1,372	47,509,727	34,628
20 – 24	1,056	42,199,701	39,962
25 – 29	485	17,158,932	35,379
30 – 34	287	8,560,288	29,827
35 – 39	34	879,349	25,863
40+	6	204,945	34,158
Total	10,255	\$ 331,135,590	\$ 32,290

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	1	0	0	0	0	0	0	0	0	1
20 – 24	0	0	0	0	0	0	0	0	0	0
25 – 29	0	0	0	0	0	0	0	0	0	0
30 – 34	0	0	0	0	0	0	0	0	0	0
35 – 39	4	0	0	0	0	0	0	0	0	4
40 – 44	10	4	2	0	0	0	0	0	0	16
45 – 49	99	32	4	1	0	0	0	0	0	136
50 – 54	323	156	63	1	0	0	0	1	0	544
55 – 59	768	536	355	27	2	0	0	0	0	1,688
60 – 64	584	947	800	220	50	7	1	1	0	2,610
65 – 69	219	389	904	485	224	15	2	1	0	2,239
70 – 74	61	127	328	397	326	83	5	1	0	1,328
75+	81	72	146	241	454	380	279	30	6	1,689
Total	2,150	2,263	2,602	1,372	1,056	485	287	34	6	10,255

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

Amount of Monthly Pension Benefit		Number of Recipients	Type of Pension Benefit			Option Selected			
			1	2	3	1	2	3	4
\$ 1	\$ 300	180	137	43	0	105	34	31	10
301	– 600	324	249	75	0	170	73	64	17
601	– 900	587	477	110	0	307	126	124	30
901	– 1,200	633	530	103	0	361	135	110	27
1,201	– 1,500	576	453	123	0	317	118	119	22
1,501	– 1,800	596	493	103	0	337	124	119	16
1,801	– 2,100	637	552	82	3	322	134	156	25
2,101	– 2,400	840	779	55	6	425	186	199	30
2,401	– 2,700	941	903	31	7	455	208	253	25
2,701	– 3,000	947	916	19	12	495	178	253	21
3,001	– 3,300	817	803	11	3	417	141	238	21
3,301	– 3,600	755	737	12	6	418	118	204	15
3,601	– 3,900	622	618	2	2	345	93	171	13
3,901	– 4,200	487	478	6	3	258	56	167	6
Over \$4,200		1,313	1,307	2	4	704	166	409	34
Totals		10,255	9,432	777	46	5,436	1,890	2,617	312

Type of Pension Benefit

1. Regular 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 Pension Benefit Recipients Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Pension Allowances	Average Annual Pension Allowance
	No. ¹	Annual Pension Allowances ¹	No. ¹	Annual Pension Allowances ¹	No.	Annual Pension Allowances		
June 30, 2009	368	\$9,788,639	139	\$(2,857,118)	10,255	\$331,135,590	3.97%	\$32,290
June 30, 2008	481	14,265,236	133	806,945	10,026	318,489,833	4.41%	31,766
June 30, 2007	432	12,388,703	140	(14,114,559)	9,678	305,031,542	9.52%	31,518
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

¹ Numbers are estimated, and include other internal transfers.

2.3 Summary of Actuarial Assumptions, Methods and Procedures

The demographic and economic assumptions used in the June 30, 2009 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 by the payroll growth assumption 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, for GASB disclosure 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, Methods and Procedures *(continued)*

Changes in Methods from the Prior Valuation

There were no changes in methods from the prior valuation, except for any described in the healthcare sections below.

(B) Valuation of Assets

Effective June 30, 2002, the asset valuation method recognizes 20% of the difference between actual and expected investment return in each of the current and preceding four years. This method was phased in over the next five years. All assets are valued at fair 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 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 and Premera management level reporting for calendar 2005 through fiscal 2009, as well as Aetna and Premera claim level data for calendar 2005 and fiscal years 2006 through 2009, 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 management level 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. Claim level reporting was used to augment cost data by Medicare status.

2.3 Summary of Actuarial Assumptions, Methods and Procedures *(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 smaller 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, including individual claim records, and accounting for retirees who return to work and therefore pay Medicare taxes, we assume that 3.5% of the active and inactive workforce will not qualify for free Part A coverage when they retire. Similarly, we assume 3.5% of the current Medicare retiree population does not receive Part A coverage.

All claims cost rates developed from management level reporting have been compared to similar rates developed from claim level data.

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 fiscal years and calendar year 2005. 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 using an average of national and Alaska-specific trend factors and developed weighted average incurred claims cost rates. The assumed lag between medical claim incurred and paid dates is approximately 2.57 months for medical claims and 0.5 months for prescription claims. This “trend and blend” methodology differs mechanically from the method used for 2004 and 2005 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 5-year experience period at approximately 20%. We also incorporated actual administrative costs that are projected to increase at 5%.

2.3 Summary of Actuarial Assumptions, Methods and Procedures (continued)

June 30, 2009 Valuation – FY 2010 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
Calendar 2005 Paid Claims	\$ 146,356,647	\$ 25,618,571	\$ 3,976,509	\$ 42,812,358	\$ 35,481,585	\$ 1,999,302	\$ 256,244,972
Membership	33,343	18,603	979	33,343	18,603	979	52,925
Paid Claims Cost Rate	\$ 4,389	\$ 1,377	\$ 4,061	\$ 1,284	\$ 1,907	\$ 2,042	\$ 4,842
Trend to FY2010	1.468	1.468	1.468	1.558	1.558	1.558	-
FY 2010 Paid Cost Rate	\$ 6,445	\$ 2,022	\$ 5,963	\$ 2,000	\$ 2,971	\$ 3,180	\$ 7,244
Paid to Incurred Factor**	1.021	1.021	1.021	1.005	1.005	1.005	-
FY 2010 Incurred Cost Rate	\$ 6,580	\$ 2,064	\$ 6,088	\$ 2,009	\$ 2,985	\$ 3,195	\$ 7,359
Calendar 2006 Paid Claims***	\$ 150,287,171	\$ 24,546,905	\$ 4,079,223	\$ 45,461,356	\$ 39,644,399	\$ 2,235,948	\$ 266,255,002
Membership	33,473	19,490	1,026	33,473	19,490	1,026	53,989
Paid Claims Cost Rate	\$ 4,490	\$ 1,259	\$ 3,977	\$ 1,358	\$ 2,034	\$ 2,180	\$ 4,932
Trend to FY2010	1.361	1.361	1.361	1.407	1.407	1.407	-
FY 2010 Paid Cost Rate	\$ 6,112	\$ 1,715	\$ 5,413	\$ 1,912	\$ 2,863	\$ 3,068	\$ 6,788
Paid to Incurred Factor**	1.021	1.021	1.021	1.005	1.005	1.005	-
FY 2010 Incurred Cost Rate	\$ 6,240	\$ 1,750	\$ 5,527	\$ 1,920	\$ 2,876	\$ 3,082	\$ 6,894
Fiscal 2007 Paid Claims***	\$ 129,762,975	\$ 22,677,328	\$ 3,524,812	\$ 46,176,199	\$ 42,348,638	\$ 2,391,089	\$ 246,881,041
Membership	33,446	20,315	1,069	33,446	20,315	1,069	54,830
Paid Claims Cost Rate	\$ 3,880	\$ 1,116	\$ 3,297	\$ 1,381	\$ 2,085	\$ 2,236	\$ 4,503
Trend to FY2010	1.313	1.313	1.313	1.340	1.340	1.340	-
FY 2010 Paid Cost Rate	\$ 5,096	\$ 1,466	\$ 4,330	\$ 1,851	\$ 2,794	\$ 2,998	\$ 5,959
Paid to Incurred Factor**	1.021	1.021	1.021	1.005	1.005	1.005	-
FY 2010 Incurred Cost Rate	\$ 5,202	\$ 1,497	\$ 4,421	\$ 1,859	\$ 2,807	\$ 3,012	\$ 6,048

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

*** Calendar 2006 Paid Claims covers the period from 01/01/2006 through 06/30/2006, along with estimated claims runout under the then current TPA. Fiscal 2007 Paid Claims covers the period from 07/01/2006 through 06/30/2007, with claims paid under the then current TPA.

2.3 Summary of Actuarial Assumptions, Methods and Procedures (continued)

June 30, 2009 Valuation – FY 2010 Claims Cost Rates

	Medical			Prescription Drugs			Total
	Pre-Medicare	Medicare A&B	Medicare B Only	Pre-Medicare	Medicare A&B	Medicare B Only	
Fiscal 2008 Paid Claims	\$ 169,598,064	\$ 28,657,490	\$ 6,079,463	\$ 53,506,123	\$ 52,529,773	\$ 2,346,512	\$ 312,717,425
Membership	33,630	21,434	893	33,630	21,434	893	55,957
Paid Claims Cost Rate	\$ 5,043	\$ 1,337	\$ 6,807	\$ 1,591	\$ 2,451	\$ 2,627	\$ 5,589
Trend to FY2010	1.190	1.190	1.190	1.200	1.200	1.200	
FY 2010 Paid Cost Rate	\$ 5,999	\$ 1,591	\$ 8,098	\$ 1,910	\$ 2,942	\$ 3,154	\$ 6,669
Paid to Incurred Factor**	1.021	1.021	1.021	1.005	1.005	1.005	
FY 2010 Incurred Cost Rate	\$ 6,125	\$ 1,624	\$ 8,268	\$ 1,919	\$ 2,956	\$ 3,169	\$ 6,771
Fiscal 2009 Paid Claims	\$ 187,868,089	\$ 30,550,328	\$ 10,093,527	\$ 63,181,353	\$ 57,263,605	\$ 2,226,629	\$ 351,183,531
Membership	33,832	23,424	850	33,832	23,424	850	58,106
Paid Claims Cost Rate	\$ 5,553	\$ 1,304	\$ 11,881	\$ 1,867	\$ 2,445	\$ 2,621	\$ 6,044
Trend to FY2010	1.080	1.080	1.080	1.080	1.080	1.080	
FY 2010 Paid Cost Rate	\$ 5,997	\$ 1,408	\$ 12,830	\$ 2,017	\$ 2,640	\$ 2,830	\$ 6,527
Paid to Incurred Factor**	1.021	1.021	1.021	1.005	1.005	1.005	
FY 2010 Incurred Cost Rate	\$ 6,122	\$ 1,438	\$ 13,099	\$ 2,026	\$ 2,652	\$ 2,844	\$ 6,627
Weighted Average 7/1/2009-6/30/2010 Incurred Claims Cost Rates:							
At average age	\$ 6,075	\$ 1,691	\$ 7,289	\$ 1,941	\$ 2,868	\$ 3,076	\$ 6,756
At age 65*	\$ 7,503	\$ 1,336	\$ 4,754	\$ 2,419	\$ 2,419	\$ 2,419	\$ 7,252

* Methodology prior to 2006 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 3.5% of Medicare 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, Methods and Procedures
(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, 2009 through June 30, 2010**

<u>Age</u>	<u>Medical and Medicare Parts A & B</u>	<u>Medical and Medicare Part B Only</u>	<u>Prescription Drug</u>	<u>Medicare Retiree Drug Subsidy</u>
45	\$ 4,155	\$ 4,155	\$ 1,276	\$ 0
50	4,701	4,701	1,516	0
55	5,319	5,319	1,800	0
60	6,318	6,318	2,087	0
65	1,336	4,754	2,419	477
70	1,626	5,784	2,606	514
75	1,931	6,867	2,780	548
80	2,080	7,398	2,850	562

2.3 Summary of Actuarial Assumptions, Methods and Procedures (continued)

(D) Actuarial Assumptions

Investment Return / Discount Rate	8.25% per year (geometric), 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% per year. (Inflation + Productivity).
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 without margin 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 without margin 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.
Retirement	Retirement rates based upon the 2001-2005 actual experience in accordance with Table 5. Deferred vested members are assumed to retire at their earliest retirement date.
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 terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non-vested benefits 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, Methods and Procedures (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, terminates or dies.																
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 net of the investment return assumption.																
Part-time Status	Part-time employees are assumed to earn 0.55 years of credited service per year.																
Re-employment Option	We assume all re-employed retirees return to work under the Standard Option.																
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.																
Final Average Earnings	Final Average Earnings is provided on the data for active members. This amount is used as a minimum in the calculation of the average earnings in the future.																
Per Capita Claims Cost	<p>Sample claims cost rates for FY10 medical benefits are shown below:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">Medical</th> <th style="text-align: center;">Prescription Drugs</th> </tr> </thead> <tbody> <tr> <td>Pre-Medicare</td> <td style="text-align: center;">\$ 7,503</td> <td style="text-align: center;">\$ 2,419</td> </tr> <tr> <td>Medicare Parts A & B</td> <td style="text-align: center;">\$ 1,336</td> <td style="text-align: center;">\$ 2,419</td> </tr> <tr> <td>Medicare Part B Only</td> <td style="text-align: center;">\$ 4,754</td> <td style="text-align: center;">\$ 2,419</td> </tr> <tr> <td>Medicare Part D</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">\$ 477</td> </tr> </tbody> </table>			Medical	Prescription Drugs	Pre-Medicare	\$ 7,503	\$ 2,419	Medicare Parts A & B	\$ 1,336	\$ 2,419	Medicare Part B Only	\$ 4,754	\$ 2,419	Medicare Part D	N/A	\$ 477
	Medical	Prescription Drugs															
Pre-Medicare	\$ 7,503	\$ 2,419															
Medicare Parts A & B	\$ 1,336	\$ 2,419															
Medicare Part B Only	\$ 4,754	\$ 2,419															
Medicare Part D	N/A	\$ 477															
Third Party Administrator Fees	\$153.33 per person per year; assumed trend rate of 5% per year.																

2.3 Summary of Actuarial Assumptions, Methods and Procedures
(continued)

(D) Actuarial Assumptions (continued)

Health Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.5% is applied to the FY10 rate claims costs to get the FY11 claims costs.

	Prescription	
	Medical	Drugs
FY10	7.5%	9.6%
FY11	6.9%	8.3%
FY12	6.4%	7.1%
FY13	5.9%	5.9%
FY14	5.9%	5.9%
FY15	5.9%	5.9%
FY16	5.9%	5.9%
FY25	5.8%	5.8%
FY50	5.7%	5.7%
FY100	5.1%	5.1%

For the June 30, 2009 valuations and later, the Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model effectively begins estimating trend amounts beginning in 2012 and projects out to 2100. The model has been populated with assumptions that are specific to the State of Alaska.

Aging Factors

	Prescription	
Age	Medical	Drugs
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%
85-94	0.5%	0.0%
95+	0.0%	0.0%

2.3 Summary of Actuarial Assumptions, Methods and Procedures (continued)

(D) Actuarial Assumptions (continued)

Retired Member Contributions
for Medical Benefits

Currently contributions are required for TRS members who are under age 60 and have less than 25 years of service. Eligible Tier 1 members are exempt from contribution requirements. Annual FY10 contributions based on monthly rates shown below for calendar 2009 and 2010 are assumed based on the coverage category for current retirees. The composite rate shown is used for current active and inactive members in Tier 2 who are assumed to retire prior to age 60 with less than 25 years of service and who are not disabled:

Coverage Category	Calendar 2010 Annual Contribution	Calendar 2010 Monthly Contribution	Calendar 2009 Monthly Contribution
Retiree Only	\$ 8,628	\$ 719	\$ 631
Retiree and Spouse	\$ 17,268	\$ 1,439	\$ 1,262
Retiree and Child(ren)	\$ 12,192	\$ 1,016	\$ 891
Retiree and Family	\$ 20,832	\$ 1,736	\$ 1,523
Composite	\$ 12,816	\$ 1,068	\$ 937

2.3 Summary of Actuarial Assumptions, Methods and Procedures (continued)

(D) Actuarial Assumptions (continued)

Trend Rate for Retired
Member Medical Contribution

The table below shows the rate used to project the retired member medical contributions from the shown fiscal year to the next fiscal year. For example, 7.0% is applied to the FY10 retired member medical contributions to get the FY11 retired member medical contributions.

FY10	7.0%
FY11	6.7%
FY12	6.3%
FY13	6.0%
FY14	5.7%
FY15	5.3%
FY16	5.0%
FY17	5.0%
FY18 and later	5.0%

Graded trend rates for retired member medical contributions were reinitialized for the June 30, 2005 valuation. Note that actual FY09 retired member medical contributions are reflected in the valuation so trend on such contribution during FY09 is not applicable.

Healthcare Participation

100% of members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

2.3 Summary of Actuarial Assumptions, Methods and Procedures (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	.078
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, Methods and Procedures (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, Methods and Procedures (continued)

Table 3
Alaska TRS
Turnover Assumptions

Select Rates of Turnover During the First 8 Years of Employment

Year of Employment	Current Age 25		Year of Employment	Current Age 40	
	Male	Female		Male	Female
1	14.85%	13.42%	1	14.76%	13.33%
2	14.84	13.42	2	14.74	13.32
3	13.34	12.06	3	13.22	11.96
4	13.33	12.06	4	13.20	11.95
5	11.82	10.71	5	11.68	10.59
6	10.32	9.35	6	10.15	9.22
7	8.82	8.00	7	8.62	7.86
8	7.31	6.65	8	7.08	6.49

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

Select rates vary slightly by age.

2.3 Summary of Actuarial Assumptions, Methods and Procedures (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, Methods and Procedures (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, Methods and Procedures
(continued)

Changes in Actuarial Assumptions Since the Prior Valuation

There were no changes in actuarial assumptions since the prior valuation.

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 Contributions from Employers and Other Contributing Entities.
- Section 3.2(c) Actuarial Assumptions, Methods and Additional Information Under GASB.
- Section 3.3 Solvency Test.

3.1 Analysis of Financial Experience

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

Type of (Gain) or Loss	Change in Employer/State Contribution Rate During Fiscal Year							
	Pension				Healthcare			
	2006	2007	2008	2009	2006	2007	2008	2009
(1) Health Experience	N/A	N/A	N/A	N/A	(2.52)%	(3.90)%	(1.22)%	(2.67)%
(2) Salary Experience	0.79%	(0.27)%	0.43%	0.29%	N/A	N/A	N/A	N/A
(3) Investment Experience	0.10%	(0.32)%	(0.62)%	6.53%	(0.46)%	(1.05)%	(0.23)%	0.70%
(4) Demographic Experience	(0.27)%	1.63%	(0.33)%	(0.54)%	N/A	N/A	N/A	N/A
(5) Contribution Shortfall	(0.41)%	0.42%	(0.11)%	0.01%	1.62%	0.89%	(0.87)%	(0.27)%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.21%	1.46%	(0.63)%	6.29%	(1.36)%	(4.06)%	(2.32)%	(2.24)%
(7) Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(8) Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(9) Assumption and Method Changes	2.96%	(1.08)%*	0.00%	0.00%	0.10%	(0.96)%*	1.98%	0.00%
(10) System Benefit Changes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(11) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10)	3.17%	0.38%	(0.63)%	6.29%	(1.26)%	(5.02)%	(0.34)%	(2.24)%
(12) Beginning Total Employer/State Contribution Rate	17.40%	20.57%	20.95%	20.32%	24.86%	23.60%	18.58%	18.24%
(13) Ending Total Employer/State Contribution Rate, (11) + (12)	20.57%	20.95%	20.32%	26.61%	23.60%	18.58%	18.24%	16.00%
(14) Fiscal Year Above Rate is Applied	FY09	FY10	FY11	FY12	FY09	FY10	FY11	FY12

*Includes change in rate by using total payroll.

3.1 Analysis of Financial Experience (continued)

**Change in Employer/State 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/State Contribution Rate During Fiscal Year				
	2005	2006	2007	2008	2009
(1) Health Experience	1.47%	(2.52)%	(3.90)%	(1.22)%	(2.67)%
(2) Salary Experience	(0.26)%	0.79%	(0.27)%	0.43%	0.29%
(3) Investment Experience	(0.02)%	(0.36)%	(1.37)%	(0.85)%	7.23%
(4) Demographic Experience	(2.10)%	(0.27)%	1.63%	(0.33)%	(0.54)%
(5) Contribution Shortfall	1.42%	1.21%	1.31%	(0.98)%	(0.26)%
(6) (Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4) + (5)	0.51%	(1.15)%	(2.60)%	(2.95)%	4.05%
(7) Asset Valuation Method	0.00%	0.00%	0.00%	0.00%	0.00%
(8) Past Service Amortization Change	0.00%	0.00%	0.00%	0.00%	0.00%
(9) Assumption and Method Changes	0.00%	3.06%	(2.04)%*	1.98%	0.00%
(10) System Benefit Changes	0.00%	0.00%	0.00%	0.00%	0.00%
(11) Change due to revaluation of plan liabilities as of June 30, 2004	(0.03)%	0.00%	0.00%	0.00%	0.00%
(12) Composite (Gain) or Loss During Year, (6) + (7) + (8) + (9) + (10) + (11)	0.48%	1.91%	(4.64)%	(0.97)%	4.05%
(13) Beginning Total Employer/State Contribution Rate	41.78%	42.26%	44.17%	39.53%	38.56%
(14) Ending Total Employer/State Contribution Rate, (12) + (13)	42.26%	44.17%	39.53%	38.56%	42.61%
(15) Fiscal Year Above Rate is Applied	FY08	FY09	FY10	FY11	FY12

*Includes change in rate by using total payroll.

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, 2009	\$ 5,463,987	\$ 3,115,719	57.0%	\$ 2,348,268	\$ 557,026	421.6%
June 30, 2008	\$ 5,231,654	\$ 3,670,086	70.2%	\$ 1,561,568	\$ 549,148	284.4%
June 30, 2007	\$ 5,043,448	\$ 3,441,867	68.2%	\$ 1,601,581	\$ 554,245	289.0%
June 30, 2006 ¹	\$ 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, 2009 – 4.50%	\$ 4,604,820	\$ 1,357,239	29.5%	\$ 3,247,581	\$ 557,026	583.0%
June 30, 2008 ¹ – 4.50%	\$ 4,648,055	\$ 1,266,890	27.3%	\$ 3,381,165	\$ 549,148	615.7%
June 30, 2007 – 4.50%	\$ 4,059,573	\$ 982,532	24.2%	\$ 3,077,041	\$ 554,245	552.2%
June 30, 2006 ¹ – 4.50%	\$ 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 for the current year. 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, 2009 – 8.25%	\$ 2,562,179	\$ 1,357,239	53.0%	\$ 1,204,940	\$ 557,026	216.3%
June 30, 2009 – 4.50%	\$ 4,604,820	\$ 1,357,239	29.5%	\$ 3,247,581	\$ 557,026	583.0%

¹ Change in assumptions

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 Contributions from Employers and Other Contributing Entities

The exhibit below shows the combined pension and postemployment healthcare disclosure under GASB No. 25 and 26 for fiscal years ending in 2006 and before.

Fiscal Year Ended June 30	Total Annual Required Contribution	Total Percentage Contributed
2006	\$ 236,738	54.0%
2005	207,951	45.0%
2004	82,660	83.0%
2003	47,370	133.0%
2002	39,576	155.0%
2001	56,391	114.0%
2000	67,874	92.0%
1999	53,901	114.0%
1998	76,504	80.0%

The following shows pension disclosure under GASB No. 25 for fiscal year ending 2007 and later.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2009	\$ 94,388	28.7%	110.6%	139.3%
2008	\$ 134,544	23.3%	82.7%	106.0%
2007	\$ 169,974	62.2%	0.00%	62.2%

The following shows postemployment healthcare disclosure without regard to the Medicare Part D subsidy under GASB No. 43 for fiscal year ending 2007 and later.

Fiscal Year Ended June 30	Total Annual Required Contribution	Percentage Contributed		
		By Employer	By State	Total
2009	\$ 164,171	28.7%	62.1%	90.8%
2008	\$ 185,271	23.6%	85.7%	109.3%
2007	\$ 76,879	62.2%	0.00%	62.2%

3.2(b) Schedule of Contributions from Employers and Other Contributing Entities *(continued)*

The exhibit below shows the annual required contribution (ARC) as a percentage of pay for pension and healthcare.

Valuation Date	Fiscal Year	ARC (% of Pay)		
		Pension	Healthcare	Total
June 30, 2005	FY08	22.73%	54.45%	77.18%
June 30, 2006	FY09	26.89%	52.20%	79.09%
June 30, 2007	FY10	28.61%	52.42%	81.03%
June 30, 2008	FY11	28.76%	28.71%	57.47%
June 30, 2009	FY12	40.84%	34.29%	75.13%

ARC is based on DB salary only and a level dollar amortization of the unfunded liability.

3.2(c) Actuarial Assumptions, Methods and Additional Information Under GASB

Valuation Date	June 30, 2009
Actuarial Cost Method	Entry Age Normal Level Percentage of Pay for Pension Level Dollar for Healthcare
Amortization Method	Level dollar, closed with bases established annually
Equivalent Single Amortization Period	19 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, 2009, to be used for fiscal 2010 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 during FY07*

1. Contribution Allocated to Healthcare	=	9.16%
2. Annual Required Contribution, Funding Assumptions	=	29.15%
3. Pay-as-you-go Contribution	=	14.03%
4. Portion of ARC Contributed: [(1-3) / (2-3), not less than 0%]	=	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 2005 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, 2007 valuation (fiscal 2008), which in turn drives the fiscal 2010 GASB 43 ARC.

Using the GASB 43 discount rate determined above and disregarding future Medicare Part D payments, the fiscal 2010 employer ARC rate for accounting purposes is 52.42% of pay for healthcare benefits and 81.03% 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, 2009	\$ 692,105	\$ 5,292,808	\$ 1,862,601	\$ 4,472,958	100%	71.4%	0.0%
June 30, 2008 ²	654,662	5,181,676	1,782,840	4,936,976	100%	82.6%	0.0%
June 30, 2007	638,420	4,912,025	1,638,958	4,424,399	100%	77.1%	0.0%
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%

Healthcare liabilities are calculated using the funding assumptions (i.e., 8.25% investment return and net of Medicare Part D subsidy).

¹ Change in Asset Valuation Method

² Change in Assumptions

³ Change in Methods