State of Alaska

Teachers' Retirement System

Actuarial Valuation Report as of June 30, 2004

As Approved by the Alaska Retirement Management Board on October 12, 2005

MERCER

Human Resource Consulting

March 22, 2005

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

Dear Members of the Board:

Actuarial Certification

The annual actuarial valuation required for the State of Alaska Teachers' Retirement System has been prepared as of June 30, 2004 by Mercer Human Resource Consulting. The purposes of the report include:

(1) a presentation of the valuation results of the Plan as of June 30, 2004;

(2) a review of experience under the Plan for the year ended June 30, 2004;

(3) a determination of the appropriate contribution rate for all employers in the System which will be applied for the fiscal year ending June 30, 2007; and

(4) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

(1) Summary of actuarial assumptions and methods (Section 2.3)

(2) Schedule of active member valuation data (Section 2.2(c))

(3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(i))

(4) Solvency test (Section 3.3)

(5) Analysis of financial experience (Section 3.1)

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the Division of Retirement and Benefits and financial information provided by the audited report from KPMG LLP, to determine a sound value for the System liability. This 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 the Board in October 2000 and adopted in December 2000. Actuarial methods, medical cost trend, and assumed blended medical premiums were reviewed and revised in January 2003. For this valuation, we are recommending changes to the assumptions and methods used to value medical benefit liabilities.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY04 and a fixed 25-year amortization as a level percentage of pay of the initial unfunded accrued liability and subsequent gains/losses. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and recommended by the Board to the Commissioner of Administration each year. The ratio of valuation assets to liabilities decreased from 64.3% to 62.8% 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 recommended by the Board.

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

We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement Nos. 25 and 27.

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

Sincerely,

Robert M. Reynolds, ASA, MAAA

Marcia L. Chapman, FSA, EA, MAAA

Samuel G. Martin, ASA, EA, MAAA

MAG/CMB/RMR/ws

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 his qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.

Brad J. Lawson, FSA, MAAA

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Report Highlights

This report has been prepared by Mercer Human Resource Consulting 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, 2004;

(2) Review experience under the plan for the year ended June 30, 2004;

(3) Determine the appropriate contribution rate for each employer in the System; and

(4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2004 Fiscal Year, the current annual costs, and reporting and disclosure information.

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

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

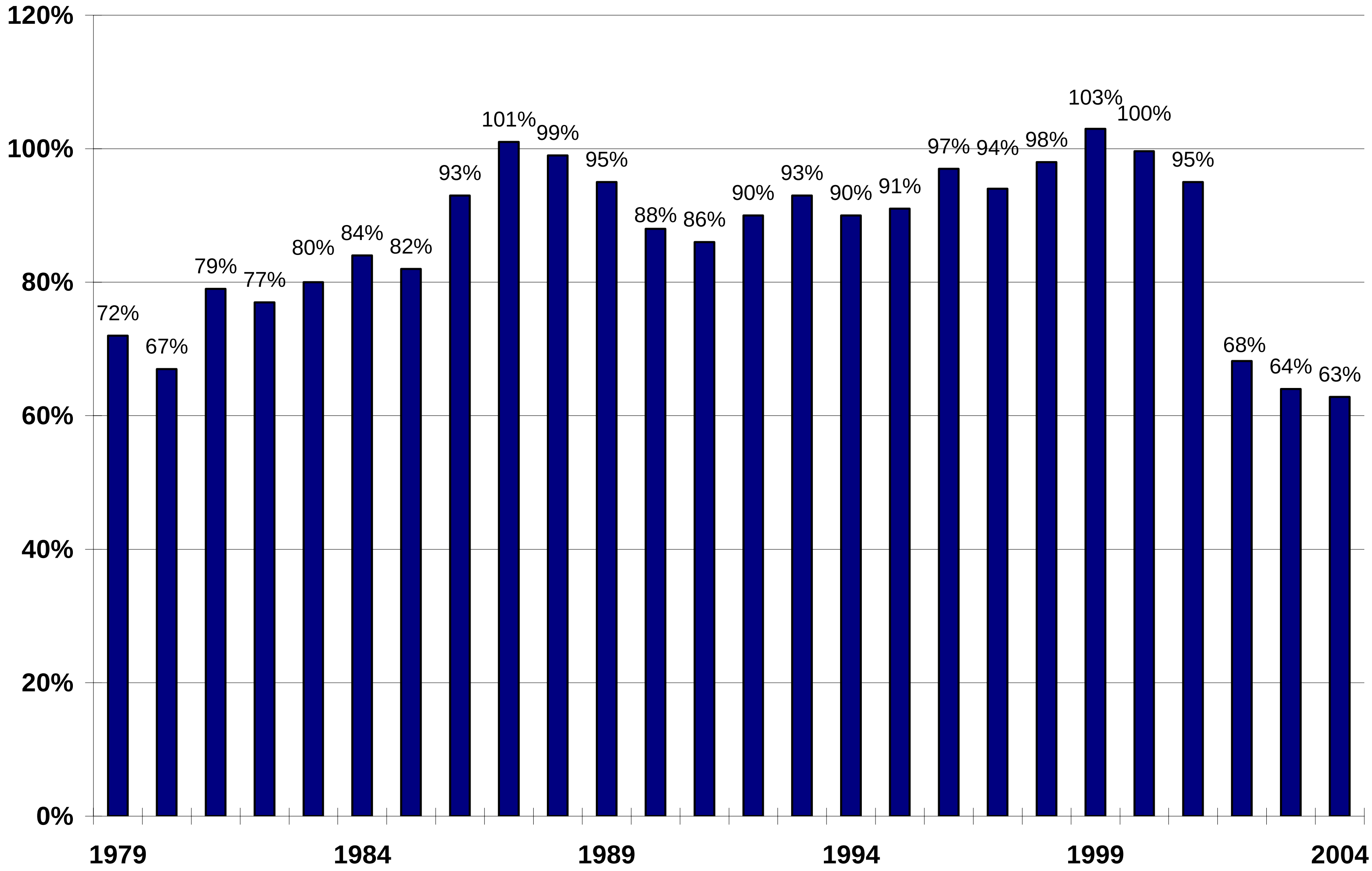
The principal results are as follows:

Funding Status as of June 30	**2003**	**2004**
(a) Valuation Assets[1]	$ 3,752,285	$ 3,845,370
(b) Accrued Liability[1]		
i) Non-medical benefits	4,190,970	4,216,480
ii) Total benefits (including medical)	5,835,609	6,123,600
(c) Funding Ratio based on Valuation Assets, *(a) ÷ (b)*		
i) Non-medical benefits	89.5%	91.2%
ii) Total benefits (including medical)	64.3%	62.8%
(d) Market value of Assets[1]	3,602,619	3,911,515
(e) Funding Ratio based on Market Assets, *(d) ÷ (b)*		
i) Non-medical benefits	86.0%	92.8%
ii) Total benefits (including medical)	61.7%	63.9%

[1] *In thousands.*

Report Highlights *(continued)*

TRS Funding Ratio History
(Based on Valuation Assets)



Employer Contribution Rates for Fiscal Year:	2006	2007
(a) Normal Cost Rate	14.28%	13.76%
(b) Past Service Rate	24.57%	28.02%
(c) Total Employer Contribution Rate *(a) + (b)*	38.85%	41.78%
(d) Board Recommended Employer Contribution Rate	21.00%	26.00%

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio based on valuation assets as of June 30, 2004 has decreased from 64.3% to 62.8%, a decrease of 1.5%. The total calculated employer contribution rate has increased from 38.85% of payroll for FY06 to 41.78% for FY07, an increase of 2.93%. 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 retiree medical benefits have been provided under PERS and TRS.

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/76-1/31/77	$ 34.75	- -	- -
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%

As you can see from the above table, the monthly retiree medical premium for the January 1, 2005 to December 31, 2005 time period has increased to $850.00. Although this represents only a 5% increase over the previous year's medical premium, our expectation is that medical costs will increase at higher rates in the future. The health cost trend used for this valuation is described in Section 2.3. Over the last 10 years, annual premium rate changes have ranged from no change to up 20%. Also, over the last ten years, the increase in the premium rate has been about 9.3% compounded annually.

Effective June 30, 2002, the Board adopted a health cost trend assumption which varies by year, declining to an ultimate rate equal to inflation plus 1.5%, or 5.0% for FY17 and later. If the long-term assumption remains reasonable, short-term gains and losses from the annually determined medical premium rate will offset each other over time.

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

Effective with this valuation, we are recommending changes to the assumptions and methods used to value liabilities for retiree medical benefits. The new methods and assumptions will enable us to more accurately determine retiree medical liabilities and incorporate the expected impact on System liabilities of changes in the Medicare program. In particular, we are recommending changes to the following elements in calculating medical liabilities:

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

Past valuations have based liabilities on the medical premium for that year. For this valuation, an analysis of medical costs was completed based on claims information provided by Aetna and enrollment data provided by the Division of Retirement and Benefits. Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed to project expected future medical and prescription costs. An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Average medical claims were then distributed across the population based on expected increases in medical expenses that occur with age. Methods and assumptions for valuing medical benefits are described in more detail in Section 2.3.

The current valuation also reflects the impact of the Medicare Part D subsidy in the projection of the prescription drug benefits. Based on our understanding and interpretation of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) at the time of this valuation, the prescription drug benefits appear to meet the actuarial equivalence requirements and will qualify to receive the federal Part D subsidy.

This opinion does not constitute a full actuarial attestation. A full actuarial attestation of the plan's actuarial equivalence status based on final regulations and guidance will need to be included with a subsidy application to the Centers for Medicare and Medicaid Services, which must be submitted no later than September 30, 2005 to be eligible to receive a subsidy in 2006.

Additional impacts associated with the MMA have also been included in the current valuation, resulting in projected increases to medical costs due to increased physician reimbursement rates in Alaska.

The combined impact of our recommended method and assumption changes, together with the projected impact of Medicare changes, results in a decrease of 1.5% to the funding ratio, and an increase of 1.94% to the actuarial contribution rate.

(2) Investment Experience

The approximate FY04 investment return based on market values was 14.62% compared to the expected investment return of 8.25%. This resulted in a gain of approximately $223 million to the System from investment experience. The asset valuation method recognizes 20 percent of this gain ($44.6 million) this year and an additional 20 percent in each of the next 4 years. In addition, 20 percent of the FY03 investment loss was recognized this year. The net result was an investment loss which decreased the funding ratio by 0.1% and increased the contribution rate by 0.06%.

(3) Salary Increase

During the period from June 30, 2003, to June 30, 2004, salary increases for continuing active members were less than anticipated in the valuation assumptions. Lower accrued liabilities caused the funding ratio to increase by 0.06%. The net effect of lower normal cost and lower payroll upon which to calculate contribution rates, however, was an increase of 0.54% in employer contribution rates.

(4) Demographic Experience

Section 2.2 provides statistics on active and inactive participants. The number of active participants decreased 1.9% from 9,873 at June 30, 2003 to 9,688 at June 30, 2004. The average age of active participants increased from 44.28 to 44.56 and average credited service increased from 10.39 to 10.65 years.

The number of retirees and beneficiaries increased 4.8% from 8,312 to 8,707, and their average age increased from 63.60 to 63.95. There was a 2.3% increase in the number of vested terminated participants from 708 to 724. Their average age increased from 48.57 to 48.83.

The overall effect of these participant data changes was an actuarial gain to the System, resulting in a decrease in the employer contribution rate of 0.85%.

(5) Contribution Shortfall Compared to Actuarially Calculated Rate

As of June 30, 2003 the actuarially calculated rate was 38.85% for FY06 employer contributions. Since employer contribution rates are determined two years prior to the fiscal year, the June 30, 2001 adopted employer rate of 12.00% was contributed during FY04. The difference between the two rates, 12.00% and 38.85%, created a contribution shortfall to the System. This shortfall increased the contribution rate by 1.24%.

(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 population growth patterns and their associated liabilities 20 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 20 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. All of the projected new entrants will be covered under the provisions of the current tier, so that the ultimate effect on plan liabilities can be anticipated. As you can see in Section 1.5, based on the actuarial assumptions and asset valuation method, future contribution rates are expected to increase in the future.

Analysis of the Valuation *(continued)*

Summary

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

1.	Last year's total employer contribution rate	38.85%
2.	Change due to:	
	a. Contribution shortfall compared to actuarially calculated rate	1.24%
	b. Investment experience	0.06%
	c. Salary increases	0.54%
	d. Demographic experience	(0.85%)
	e. Medical assumptions and methodology	1.94%
3.	Total employer contribution rate this year	41.78%

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 FY04 and the investment return for FY04.
Section 1.1(c)	Actuarial value of assets.
Section 1.2	Actuarial present values.
Section 1.3	Total employer contribution rate for FY07.
Section 1.4	Development of actuarial gain or loss for FY04.
Section 1.5(a)	Actuarial Projections – Projections at Calculated Rate.
Section 1.5(b)	Actuarial Projections – Projections at Current Rate.
Section 1.5(c)	Actuarial Projections – Effect of Economic Scenarios.

1.1(a) Statement of Net Assets

As of June 30, 2004 (in thousands)	Pension	Postemployment Healthcare	Total Market Value
Cash and Cash Equivalents	$ 415	$ 108	$ 523
Domestic Equity Pool	1,311,697	263,747	1,575,444
Retirement Fixed Income Pool	559,293	145,764	705,057
International Equity Pool	509,739	132,850	642,589
Real Estate Pool	234,721	61,173	295,894
International Fixed Income Pool	112,745	29,384	142,129
Private Equity Pool	101,990	26,581	128,571
External Domestic Fixed Income Pool	286,619	74,699	361,318
Emerging Markets Equity Pool	42,366	11,041	53,407
Other Investments Pool	3,091	806	3,897
Loans and Mortgages (Net of Reserves)	48	13	61
Net Accrued Receivables	2,083	542	2,625
Net Assets	$ 3,164,807	$ 746,708	$ 3,911,515

1.1(b) Statement of Changes in Net Assets

Fiscal Year 2004 (in thousands)		Pension	Postemployment Healthcare	Total Market Value
(1)	Net Assets, June 30, 2003 (market value)	$ 2,917,523	$ 685,096	$ 3,602,619
(2)	Additions:			
	(a) Plan Member Contributions	45,505	11,860	57,365
	(b) Employer Contributions	54,492	14,200	68,692
	(c) Interest and Dividend Income	92,263	24,046	116,309
	(d) Net Appreciation in Fair Value of Investments	322,858	84,144	407,002
	(e) Total Additions	$ 515,118	$ 134,250	$ 649,368
(3)	Deductions:			
	(a) Medical Benefits[2]	0	69,401	69,401
	(b) Retirement Benefits	255,409	0	255,409
	(c) Refunds of Contributions	3,323	866	4,189
	(d) Investment Expenses	7,354	1,916	9,270
	(e) Administrative Expenses	1,748	455	2,203
	(f) Total Deductions	$ 267,834	$ 72,638	$ 340,472
(4)	Net Assets, June 30, 2004 (market value)	$ 3,164,807	$ 746,708	$ 3,911,515

Approximate Market Value Investment Return Rate During FY04 Net of Expenses	14.62%

[2] *Net of transfer in from Retiree Health Fund*

1.1(c) Actuarial Value of Assets

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

			In Thousands
(1) Deferral of Investment Return for FY04			
(a)	Market Value, June 30, 2003	$	3,602,619
(b)	Contributions for FY04		126,057
	- *Weighted for timing*		63,029
(c)	Benefit Payments for FY04[3]		328,999
	- *Weighted for timing*		164,500
(d)	Investment Return *(net of expenses)*		511,838
(e)	Expected Return Rate *(net of expenses)*		8.25%
(f)	Expected Return - Weighted for Timing, *[(a. + b. - c.) x e.]*		288,845
(g)	Investment Gain/(Loss) for the Year *(d. – f.)*		222,993
(h)	Deferred Investment Return[4]		66,145
(2) Actuarial Value, June 30, 2004			
(a)	Market Value, June 30, 2004		3,911,515
(b)	2004 Deferred Investment Return		66,145
(c)	Preliminary Actuarial Value, June 30, 2004 *(a. - b.)*		3,845,370
(d)	Upper Limit: 120% of Market Value, June 30, 2004		4,693,818
(e)	Lower Limit: 80% of Market Value, June 30, 2004		3,129,212
(f)	Actuarial Value, June 30, 2004 *(c. limited by d. and e.)*	$	3,845,370

[3] *Net of transfer in from Retiree Health Fund*

[4] *The table below shows the development of gain/(loss) to be recognized in the current year.*

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
6/30/2003	$ (187,083)	$ (37,417)	$ (37,417)	$ (112,249)
6/30/2004	$ 222,993	$ 0	$ 44,599	$ 178,394
Total	**$ 35,910**	**$ (37,417)**	**$ 7,182**	**$ 66,145**

1.2 Actuarial Present Values

As of June 30, 2004 (in thousands)		Normal Cost	Accrued Liabilities
Active Members			
Retirement Benefits		$ 63,087	$ 1,070,315
Termination Benefits		3,863	44,096
Disability Benefits		457	13,601
Death Benefits		674	11,741
Return of Contributions		3,038	16,197
Medical Benefits		46,104	588,417
Indebtedness		0	(43,803)
Subtotal		117,223	1,700,564
Inactive Members			
Not Vested		$ 0	$ 32,156
Vested Terminations	- Retirement Benefits	0	71,573
	- Medical Benefits	0	128,132
	- Indebtedness	0	(3,917)
Retirees & Beneficiaries	- Retirement Benefits	0	3,004,521
	- Medical Benefits	0	1,190,571
Subtotal		0	4,423,036
Totals		**$ 117,223**	**$ 6,123,600**

1.3 Development of Total Employer Contribution Rate – FY07

Normal Cost Rate		**In Thousands**
(1)	Total Normal Cost	$ 117,223
(2)	Total Salaries	522,421
(3)	Normal Cost Rate, *(1) ÷ (2)*	22.44%
(4)	Average Member Contribution Rate	8.68%
(5)	Employer Normal Cost Rate, *(3) – (4)*	13.76%

Past Service Rate		
(1)	Accrued Liability	$ 6,123,600
(2)	Valuation Assets	3,845,370
(3)	Total Unfunded Liability, *(1) – (2)*	2,278,230
(4)	Past Service Cost Amortization Payment	146,365
(5)	Total Salaries	522,421
(6)	Past Service Rate, *(4) ÷ (5)*	28.02%

Total Employer Contribution Rate **41.78%**

1.3 Development of Total Employer Contribution Rate – FY07 *(continued)*

Schedule of Past Service Cost Amortizations

	Amortization Period		Balances		
Charge	**Date Created**	**Years Left**	**Initial**	**Outstanding**	**Beginning-of-Year Payment**
Initial Unfunded Liability	6/30/2002	23	$ 1,722,606	$ 1,774,855	$ 114,869
FY03 Loss	6/30/2003	24	333,376	338,668	21,358
FY04 Loss	6/30/2004	25	164,707	164,707	10,138
Total				**$ 2,278,230**	**$ 146,365146,365**

	Amortization Period		Balances		
Credit	**Date Created**	**Years Left**	**Initial**	**Outstanding**	**Beginning-of-Year Payment**
Total				**$ 0**	**$ 0**

Total				**$ 2,278,230**	**$ 146,365**

1.4 Development of Actuarial Gain/(Loss) for FY04

		In Thousands
(1) Expected Actuarial Accrued Liability		
(a) Accrued Liability, June 30, 2003	$	5,835,609
(b) Normal Cost for FY04		122,346
(c) Interest on *(a)* and *(b)* at 8.25%		491,531
(d) Benefit Payments for FY04		324,810
(e) Refund of Contributions for FY04		4,189
(f) Interest on *(d)* and *(e)* at 8.25% for one-half year		13,571
(g) Expected Accrued Liability as of June 30, 2004, *(a) + (b) + (c) – (d) – (e) – (f)*		6,106,916
(2) Actual Accrued Liability, June 30, 2004		6,123,600
(3) Liability Gain/(Loss), *(1)(g) – (2)*	**$**	**(16,684)**
(4) Expected Actuarial Asset Value		
(a) Actuarial Asset Value, June 30, 2003		3,752,285
(b) Interest on *(a)* at 8.25%		309,564
(c) Employee Contributions for FY04		57,365
(d) Employer Contributions for FY04		68,692
(e) Interest on *(c)* and *(d)* at 8.25% for one-half year		5,200
(f) Benefit Payments for FY04		324,810
(g) Refund of Contributions for FY04		4,189
(h) Interest on *(f)* and *(g)* at 8.25% for one-half year		13,571
(i) Expected Actuarial Asset Value, June 30, 2004, *(a) + (b) + (c) + (d) + (e) – (f) – (g) – (h)*		3,850,536
(5) Actuarial Asset Value, June 30, 2004		3,845,370
(6) Actuarial Asset Gain/(Loss), *(5) - (4)(i)*	**$**	**(5,166)**
(7) Actuarial Gain/(Loss), *(3) + (6)*	**$**	**(21,850)**
(8) (Shortfall) between Actuarial and Actual Contributions	**$**	**(142,857)**
(9) FY04 Gain/(Loss) to be Amortized, *(7) + (8)*	**$**	**(164,707)**

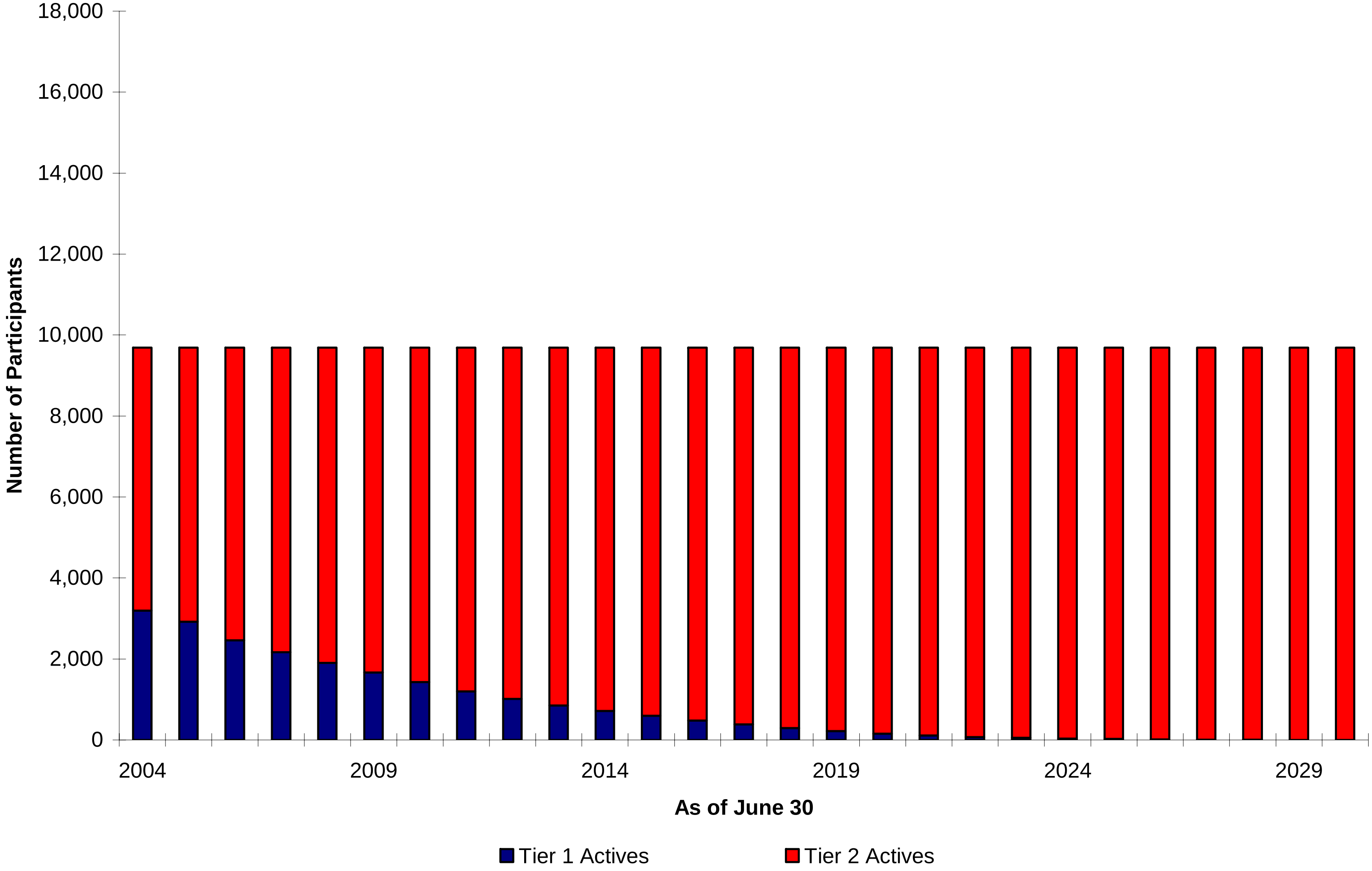
1.5(a) Actuarial Projections – Projections at Calculated Rate

Key Assumptions

- 8.25% investment return in all years
- Actuarial assumptions and methods as described in Section 2.3
- The actuarially calculated contribution rate is adopted each year beginning in FY06, but we have assumed that adopted rates will not increase by more than 5% per year
- Annual active population increases of 0%, 1% or 2%
- Profiles of new entrants to System are based on average new entrant profiles from prior 3 years

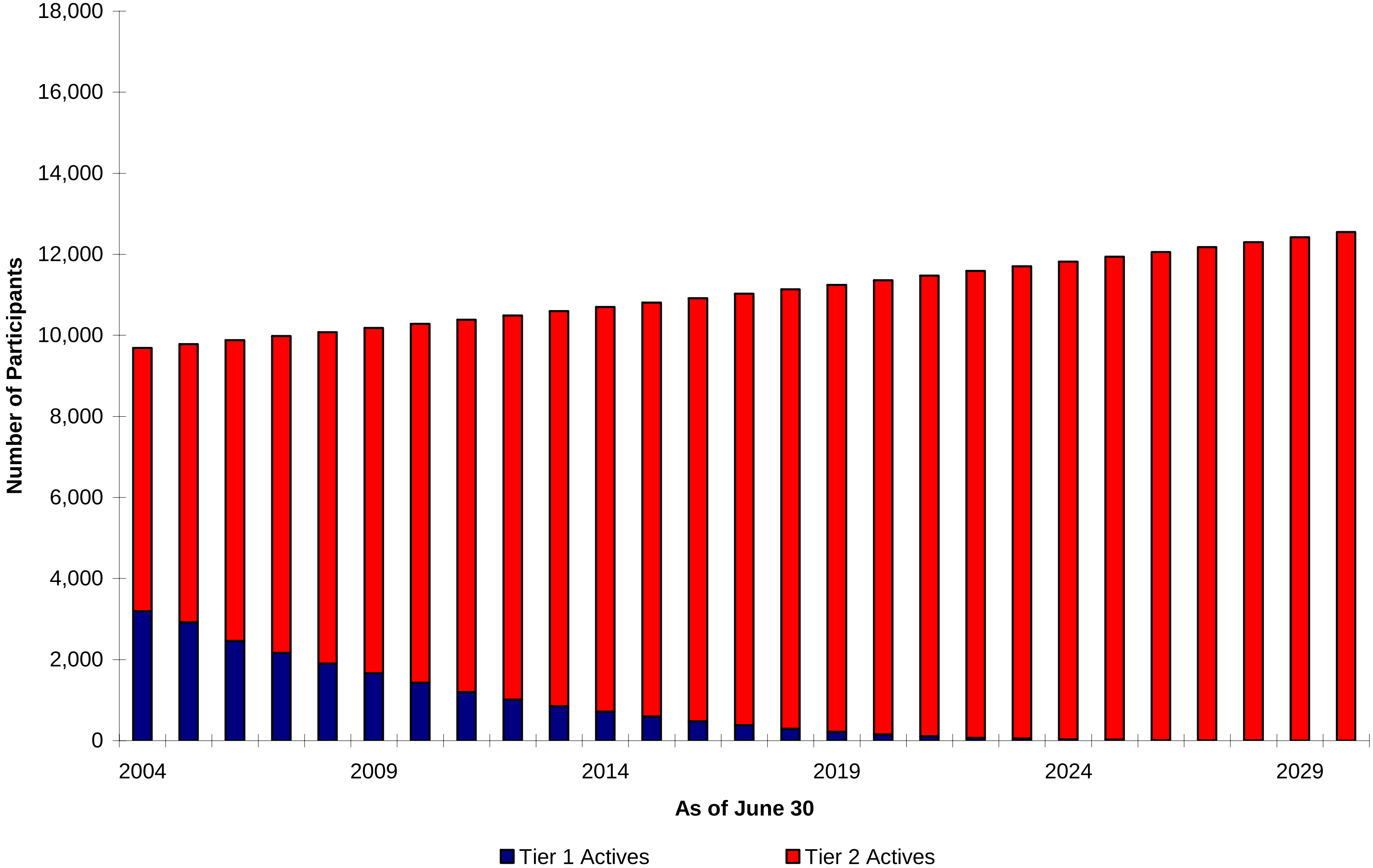
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Active Participant Count
Annual Population Increase 0%



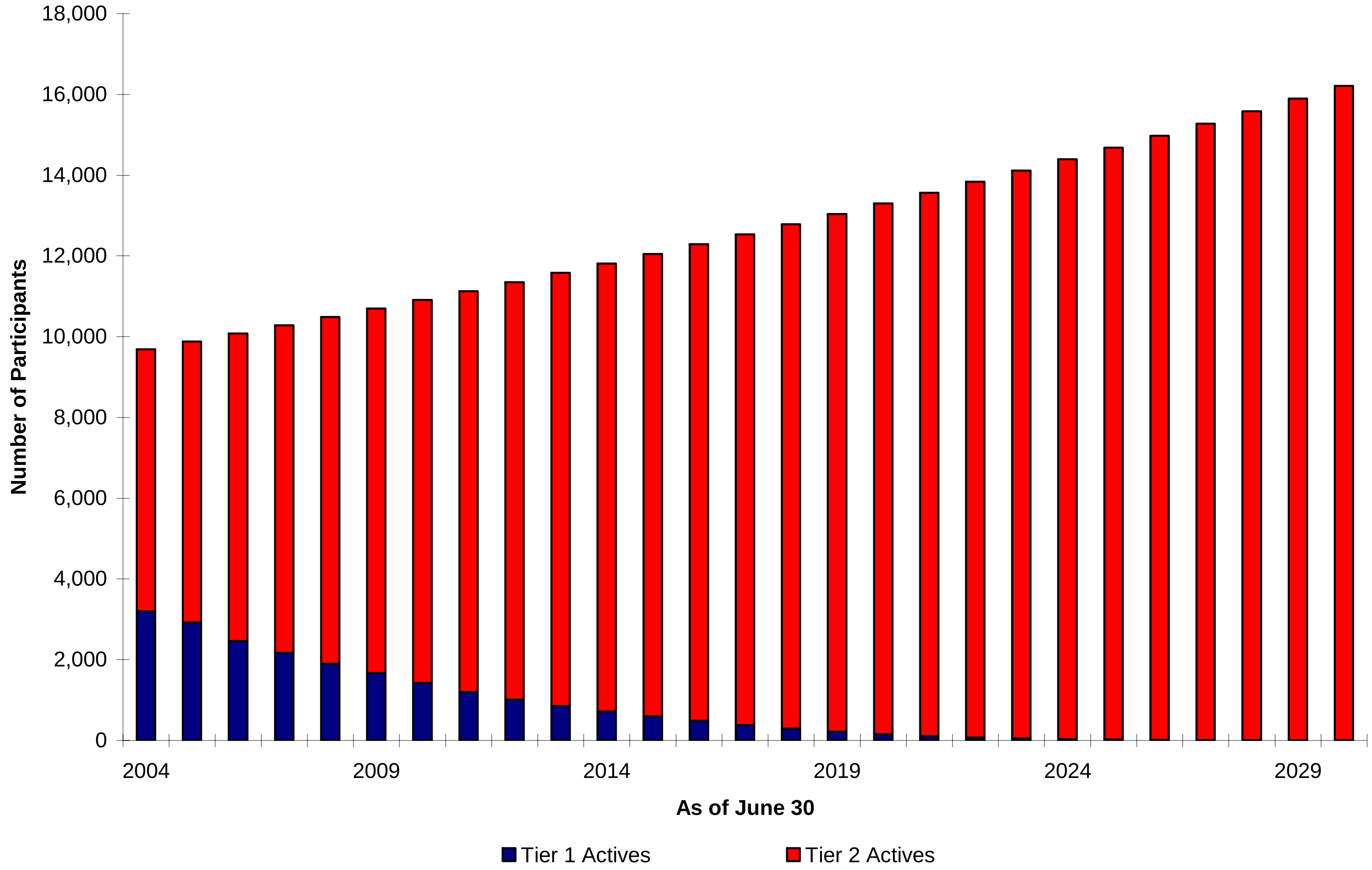
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Active Participant Count
Annual Population Increase 1%



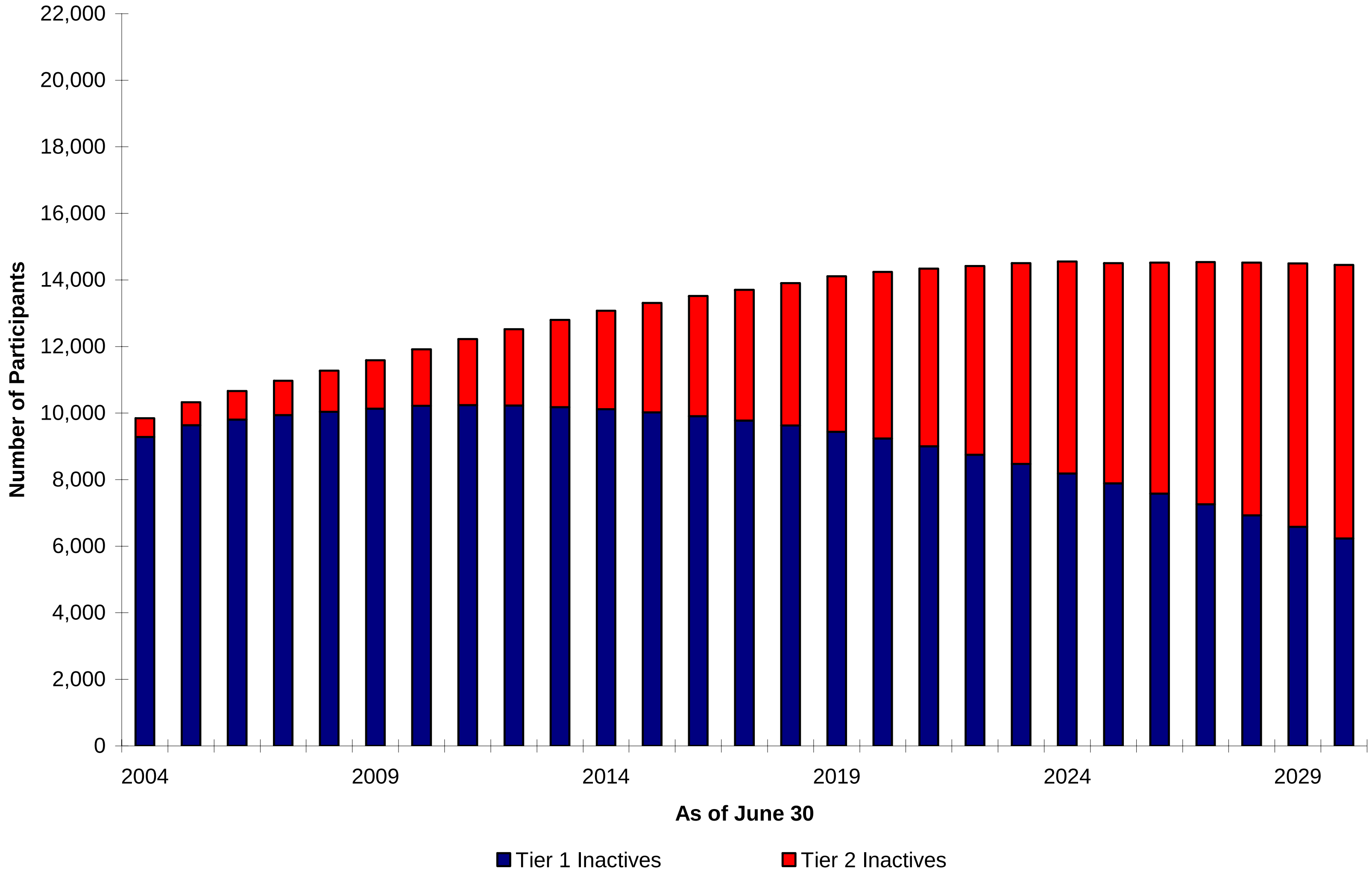
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Active Participant Count
Annual Population Increase 2%



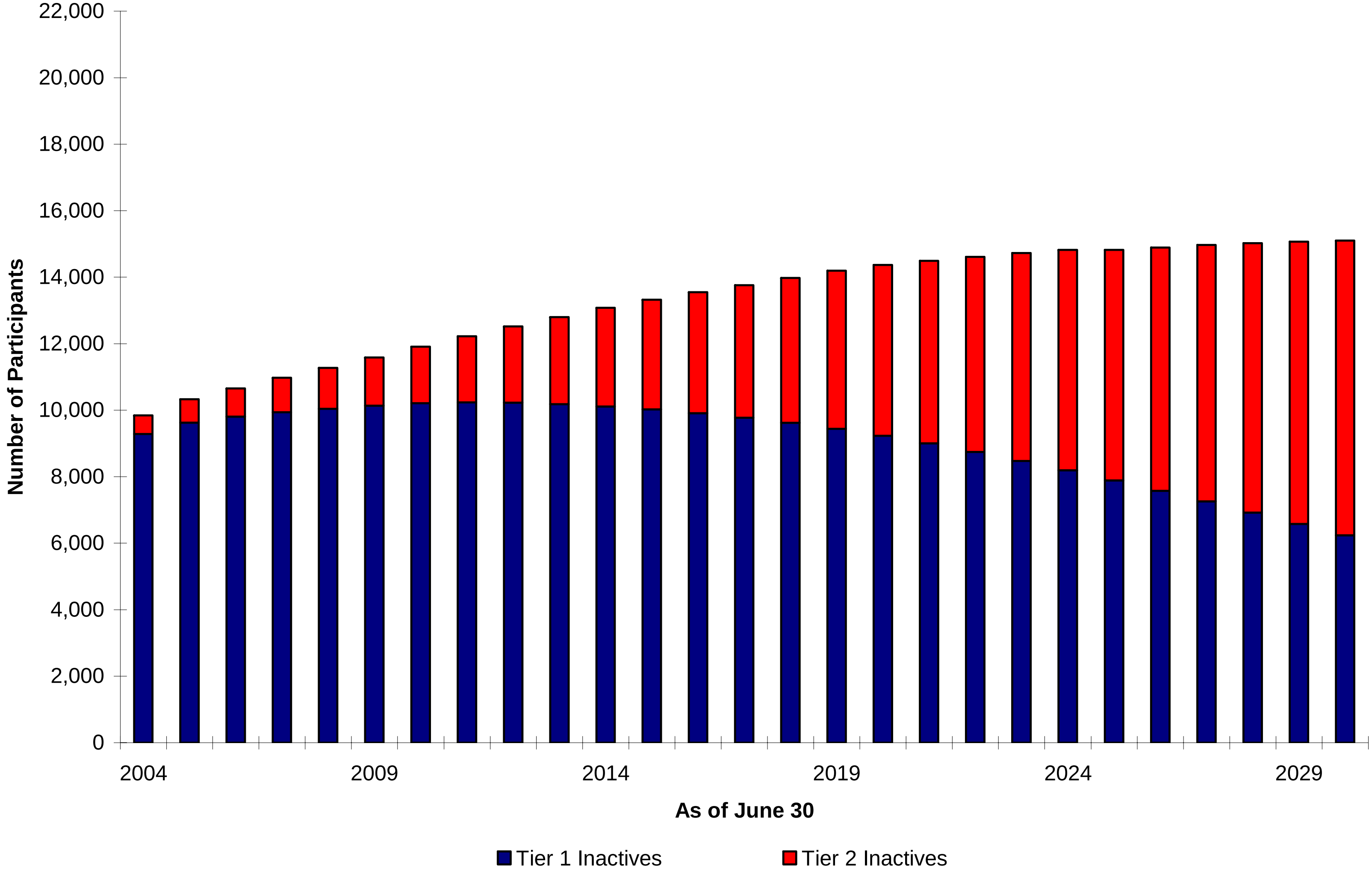
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Inactive Participant Count
Annual Population Increase 0%



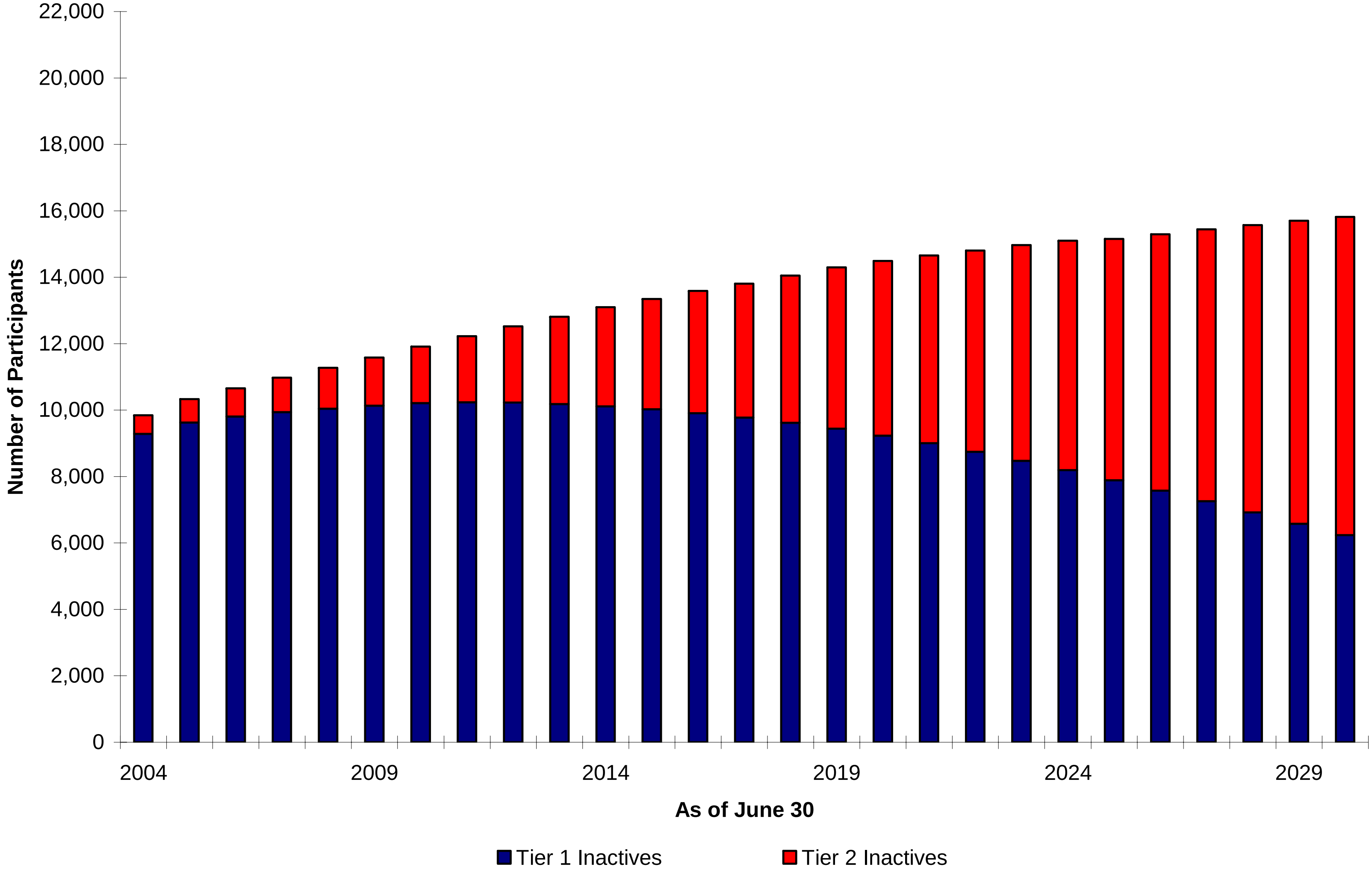
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Inactive Participant Count
Annual Population Increase 1%



1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Inactive Participant Count
Annual Population Increase 2%



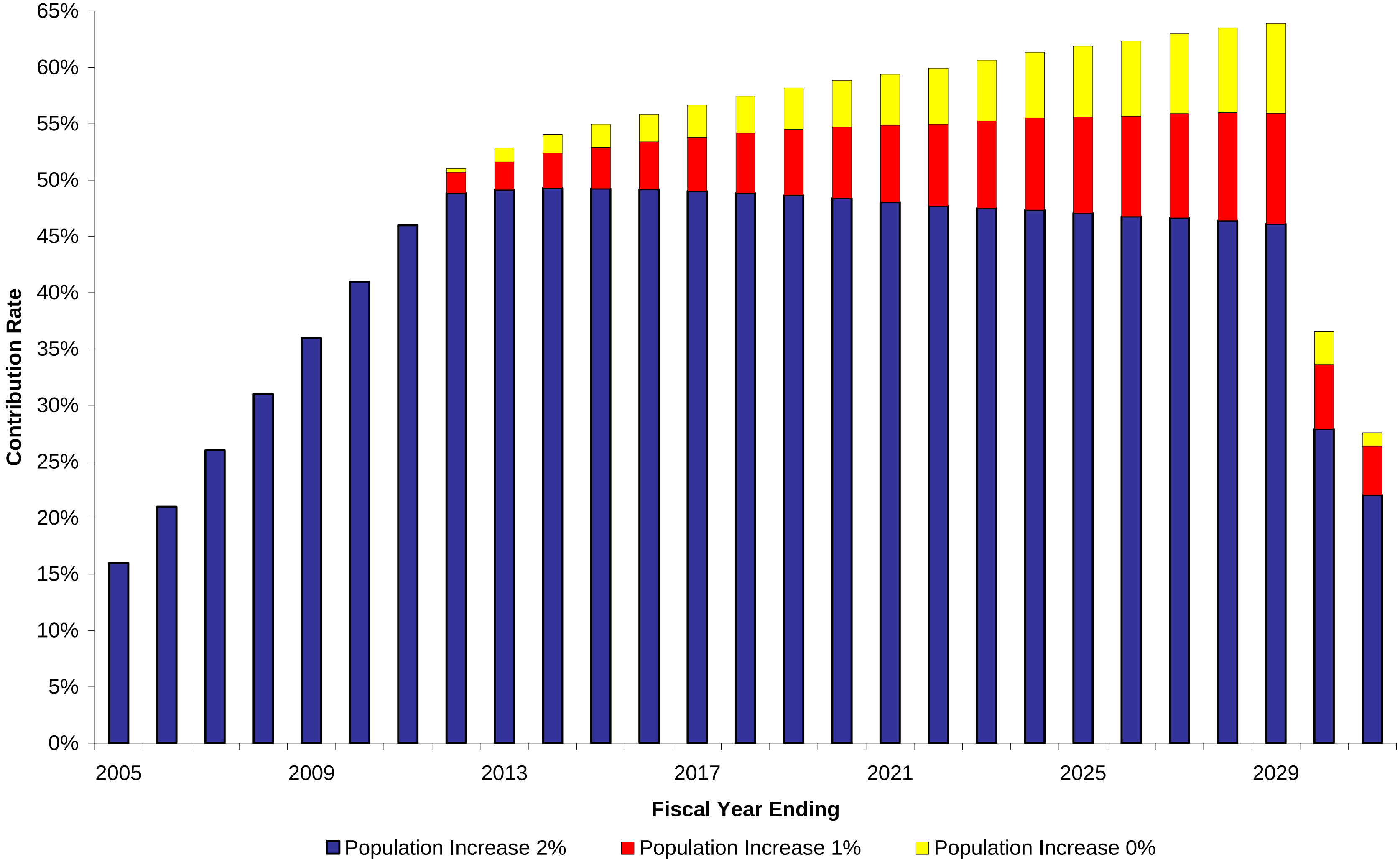
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Observations

- Calculated rates increase for many years under all population scenarios
- Calculated rates decline towards end of the projection period upon completion of 25-year amortizations of recent losses
- Calculated rates increase to 49% even under the 2% population increase scenario
- Factors contributing to the projected rate increases are:
  - Contributions are less than the actuarially calculated rate for the first seven years of the projection
  - After the first seven years, there is still a 2-year lag before calculated rates actually enter the System
  - New entrants enter the System at lower pay levels than the exiting members they are replacing, diluting the pay-off of unfunded liabilities. Because new entrants also add additional liability, each new entrant generates a loss.
- Funding ratios are at least 96% by the end of the 25-year period, under all 3 population scenarios

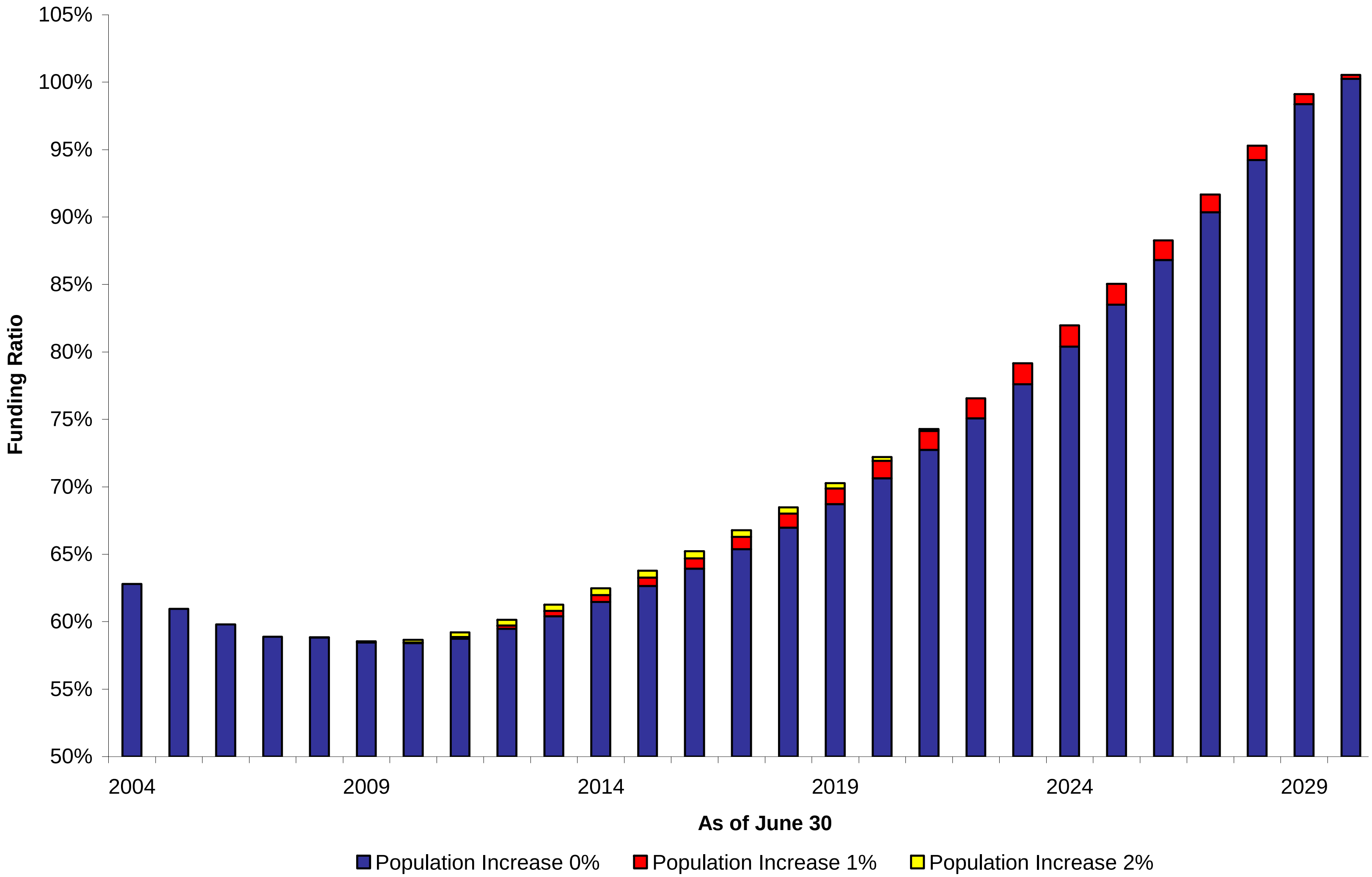
1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Contribution Rates



1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Projected Funding Ratios



1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Table 1

State of Alaska TRS
Financial Projections (in thousands)

Investment Return 8.25% **Annual Population Increase 0.00%**

	- - - - - - - Valuation Amounts on July 1 - - - - - - -				- Flow Amounts During Following 12 Months - - - - - - - - - - - - - - - - - -								Recognized	Ending
As of June 30	**Actuarial Assets**	**Accrued Liability**	**Funding Ratio**	**Surplus* (Deficit)**	**Total Salaries**	**Employer Ctb Rate**	**Employer Contribs**	**Employee Contribs**	**Total Contribs**	**Benefit Payments**	**Net Contribs**	**Investment Earnings**	**Asset Gain**	**Actuarial Assets**
2004	3,845,370	6,123,600	62.8%	(2,278,230)	522,421	16.00%	83,587	45,346	128,934	380,043	(251,109)	312,342	7,182	3,913,785
2005	3,913,785	6,420,995	61.0%	(2,507,210)	548,224	21.00%	115,127	47,586	162,713	408,119	(245,407)	317,629	7,182	3,993,189
2006	3,993,189	6,678,661	59.8%	(2,685,472)	544,175	26.00%	141,485	47,234	188,720	429,498	(240,778)	323,778	7,182	4,083,370
2007	4,083,370	6,933,818	58.9%	(2,850,448)	553,082	31.00%	171,455	48,008	219,463	451,891	(232,428)	330,970	44,599	4,226,511
2008	4,226,511	7,184,677	58.8%	(2,958,166)	566,407	36.00%	203,907	49,164	253,071	474,466	(221,395)	339,555	0	4,344,671
2009	4,344,671	7,433,425	58.4%	(3,088,754)	580,645	41.00%	238,064	50,400	288,464	498,429	(209,965)	349,774	0	4,484,480
2010	4,484,480	7,677,171	58.4%	(3,192,691)	595,893	46.00%	274,111	51,723	325,834	523,284	(197,450)	361,825	0	4,648,855
2011	4,648,855	7,914,974	58.7%	(3,266,119)	611,968	51.00%	312,103	53,119	365,222	547,048	(181,826)	376,030	0	4,843,060
2012	4,843,060	8,142,503	59.5%	(3,299,444)	628,417	52.87%	332,240	54,547	386,787	569,925	(183,138)	391,998	0	5,051,919
2013	5,051,919	8,364,388	60.4%	(3,312,469)	645,574	54.04%	348,868	56,036	404,903	591,871	(186,967)	409,071	0	5,274,023
2014	5,274,023	8,580,716	61.5%	(3,306,693)	663,777	54.96%	364,814	57,616	422,430	615,388	(192,958)	427,147	0	5,508,212
2015	5,508,212	8,794,191	62.6%	(3,285,979)	683,516	55.85%	381,733	59,329	441,062	638,215	(197,153)	446,295	0	5,757,354
2016	5,757,354	9,005,239	63.9%	(3,247,885)	704,491	56.68%	399,273	61,150	460,423	659,307	(198,884)	466,778	0	6,025,248
2017	6,025,248	9,215,319	65.4%	(3,190,072)	726,807	57.45%	417,581	63,087	480,668	679,574	(198,906)	488,878	0	6,315,219
2018	6,315,219	9,429,104	67.0%	(3,113,885)	750,307	58.18%	436,548	65,127	501,675	701,563	(199,888)	512,760	0	6,628,092
2019	6,628,092	9,644,919	68.7%	(3,016,827)	775,163	58.84%	456,137	67,284	523,421	723,353	(199,932)	538,570	0	6,966,731
2020	6,966,731	9,862,743	70.6%	(2,896,012)	801,100	59.39%	475,786	69,536	545,322	743,008	(197,687)	566,601	0	7,335,645
2021	7,335,645	10,083,791	72.7%	(2,748,147)	829,361	59.93%	497,000	71,989	568,988	760,628	(191,640)	597,286	0	7,741,290
2022	7,741,290	10,312,063	75.1%	(2,570,773)	859,941	60.65%	521,575	74,643	596,217	778,916	(182,698)	631,120	0	8,189,712
2023	8,189,712	10,552,301	77.6%	(2,362,589)	892,507	61.35%	547,535	77,470	625,005	798,936	(173,931)	668,477	0	8,684,257
2024	8,684,257	10,802,055	80.4%	(2,117,797)	927,133	61.88%	573,750	80,475	654,225	817,263	(163,038)	709,726	0	9,230,946
2025	9,230,946	11,054,111	83.5%	(1,823,165)	963,674	62.34%	600,767	83,647	684,414	832,650	(148,236)	755,438	0	9,838,147
2026	9,838,147	11,333,544	86.8%	(1,495,396)	1,001,682	62.98%	630,906	86,946	717,852	852,012	(134,159)	806,113	0	10,510,101
2027	10,510,101	11,630,251	90.4%	(1,120,150)	1,041,241	63.51%	661,283	90,380	751,662	873,608	(121,945)	862,053	0	11,250,209
2028	11,250,209	11,939,152	94.2%	(688,943)	1,082,364	63.89%	691,546	93,949	785,495	894,495	(109,000)	923,646	0	12,064,855
2029	12,064,855	12,263,356	98.4%	(198,501)	1,125,319	36.57%	411,521	97,678	509,199	914,663	(405,464)	978,625	0	12,638,016
2030	12,638,016	12,605,869	100.3%	32,147	1,170,112	27.57%	322,621	101,566	424,187	934,675	(510,488)	1,021,579	0	13,149,106

1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Table 2

State of Alaska TRS
Financial Projections (in thousands)

Investment Return 8.25% **Annual Population Increase 1.00%**

	Valuation Amounts on July 1				Flow Amounts During Following 12 Months									
As of June 30	**Actuarial Assets**	**Accrued Liability**	**Funding Ratio**	**Surplus* (Deficit)**	**Total Salaries**	**Employer Ctb Rate**	**Employer Contribs**	**Employee Contribs**	**Total Contribs**	**Benefit Payments**	**Net Contribs**	**Investment Earnings**	**Recognized Asset Gain**	**Ending Actuarial Assets**
2004	3,845,370	6,123,600	62.8%	(2,278,230)	522,421	16.00%	83,587	45,346	128,934	380,043	(251,109)	312,342	7,182	3,913,785
2005	3,913,785	6,421,604	60.9%	(2,507,820)	548,224	21.00%	115,127	47,586	162,713	408,119	(245,407)	317,629	7,182	3,993,189
2006	3,993,189	6,680,934	59.8%	(2,687,745)	548,534	26.00%	142,619	47,613	190,232	429,498	(239,266)	323,840	7,182	4,084,945
2007	4,084,945	6,939,029	58.9%	(2,854,085)	562,254	31.00%	174,299	48,804	223,103	451,891	(228,788)	331,250	44,599	4,232,005
2008	4,232,005	7,194,410	58.8%	(2,962,405)	580,874	36.00%	209,115	50,420	259,535	474,466	(214,931)	340,274	0	4,357,348
2009	4,357,348	7,449,621	58.5%	(3,092,273)	600,922	41.00%	246,378	52,160	298,538	498,429	(199,891)	351,236	0	4,508,693
2010	4,508,693	7,702,190	58.5%	(3,193,497)	622,528	46.00%	286,363	54,035	340,398	523,285	(182,887)	364,423	0	4,690,229
2011	4,690,229	7,951,647	59.0%	(3,261,418)	645,548	50.72%	327,396	56,034	383,429	547,052	(163,623)	380,194	0	4,906,800
2012	4,906,800	8,194,219	59.9%	(3,287,418)	669,523	51.60%	345,450	58,115	403,564	569,934	(166,370)	397,948	0	5,138,379
2013	5,138,379	8,435,294	60.9%	(3,296,916)	694,825	52.40%	364,069	60,311	424,380	591,911	(167,531)	417,006	0	5,387,853
2014	5,387,853	8,675,380	62.1%	(3,287,527)	721,832	52.90%	381,871	62,655	444,526	615,733	(171,207)	437,436	0	5,654,082
2015	5,654,082	8,917,516	63.4%	(3,263,434)	751,052	53.41%	401,122	65,191	466,313	638,984	(172,671)	459,339	0	5,940,750
2016	5,940,750	9,162,688	64.8%	(3,221,938)	782,222	53.81%	420,924	67,897	488,821	660,643	(171,822)	483,024	0	6,251,952
2017	6,251,952	9,412,961	66.4%	(3,161,009)	815,519	54.17%	441,798	70,787	512,585	681,665	(169,080)	508,812	0	6,591,684
2018	6,591,684	9,673,762	68.1%	(3,082,078)	850,831	54.49%	463,626	73,852	537,478	704,638	(167,160)	536,919	0	6,961,443
2019	6,961,443	9,944,038	70.0%	(2,982,595)	888,381	54.72%	486,130	77,111	563,242	727,618	(164,376)	567,539	0	7,364,606
2020	7,364,606	10,224,339	72.0%	(2,859,733)	927,943	54.85%	509,006	80,545	589,552	748,665	(159,113)	601,017	0	7,806,509
2021	7,806,509	10,516,716	74.2%	(2,710,207)	970,814	54.96%	533,566	84,267	617,833	767,906	(150,073)	637,846	0	8,294,282
2022	8,294,282	10,826,059	76.6%	(2,531,776)	1,017,069	55.24%	561,800	88,282	650,082	788,106	(138,024)	678,585	0	8,834,843
2023	8,834,843	11,158,170	79.2%	(2,323,327)	1,066,441	55.50%	591,862	92,567	684,429	810,390	(125,961)	723,679	0	9,432,561
2024	9,432,561	11,511,570	81.9%	(2,079,009)	1,119,075	55.61%	622,304	97,136	719,440	831,316	(111,876)	773,571	0	10,094,256
2025	10,094,256	11,880,015	85.0%	(1,785,759)	1,174,889	55.67%	654,068	101,980	756,049	849,879	(93,830)	828,906	0	10,829,332
2026	10,829,332	12,291,292	88.1%	(1,461,960)	1,233,515	55.89%	689,451	107,069	796,520	873,383	(76,863)	890,249	0	11,642,718
2027	11,642,718	12,734,173	91.4%	(1,091,454)	1,295,129	55.98%	725,007	112,417	837,424	899,782	(62,358)	957,952	0	12,538,313
2028	12,538,313	13,204,522	95.0%	(666,210)	1,359,839	55.94%	760,721	118,034	878,755	926,203	(47,448)	1,032,454	0	13,523,318
2029	13,523,318	13,706,118	98.7%	(182,801)	1,428,015	33.64%	480,419	123,952	604,371	952,613	(348,242)	1,101,309	0	14,276,384
2030	14,276,384	14,242,024	100.2%	34,360	1,499,757	26.37%	395,538	130,179	525,717	979,482	(453,765)	1,159,084	0	14,981,703

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1.5(a) Actuarial Projections – Projections at Calculated Rate *(continued)*

Table 3

State of Alaska TRS
Financial Projections (in thousands)

Investment Return **8.25%** **Annual Population Increase** **2.00%**

	- - - - - - - Valuation Amounts on July 1 - - - - - - -				- Flow Amounts During Following 12 Months - - - - - - - - - - - - - - - - - -									
As of June 30	**Actuarial Assets**	**Accrued Liability**	**Funding Ratio**	**Surplus* (Deficit)**	**Total Salaries**	**Employer Ctb Rate**	**Employer Contribs**	**Employee Contribs**	**Total Contribs**	**Benefit Payments**	**Net Contribs**	**Investment Earnings**	**Recognized Asset Gain**	**Ending Actuarial Assets**
2004	3,845,370	6,123,600	62.8%	(2,278,230)	522,421	16.00%	83,587	45,346	128,934	380,043	(251,109)	312,342	7,182	3,913,785
2005	3,913,785	6,421,930	60.9%	(2,508,145)	548,224	21.00%	115,127	47,586	162,713	408,119	(245,407)	317,629	7,182	3,993,189
2006	3,993,189	6,682,217	59.8%	(2,689,028)	552,894	26.00%	143,752	47,991	191,744	429,498	(237,754)	323,903	7,182	4,086,519
2007	4,086,519	6,942,096	58.9%	(2,855,578)	571,517	31.00%	177,170	49,608	226,778	451,891	(225,112)	331,531	44,599	4,237,536
2008	4,237,536	7,200,323	58.9%	(2,962,786)	595,628	36.00%	214,426	51,701	266,127	474,466	(208,339)	341,003	0	4,370,200
2009	4,370,200	7,459,720	58.6%	(3,089,520)	621,804	41.00%	254,940	53,973	308,912	498,429	(189,517)	352,724	0	4,533,407
2010	4,533,407	7,718,142	58.7%	(3,184,735)	650,227	46.00%	299,104	56,440	355,544	523,287	(167,742)	367,087	0	4,732,751
2011	4,732,751	7,975,491	59.3%	(3,242,740)	680,812	48.84%	332,502	59,094	391,597	547,057	(155,460)	384,039	0	4,961,330
2012	4,961,330	8,228,427	60.3%	(3,267,097)	713,113	49.14%	350,418	61,898	412,317	569,943	(157,627)	402,808	0	5,206,511
2013	5,206,511	8,482,913	61.4%	(3,276,401)	747,565	49.30%	368,533	64,889	433,421	591,951	(158,530)	422,998	0	5,470,979
2014	5,470,979	8,739,859	62.6%	(3,268,880)	784,613	49.25%	386,414	68,104	454,519	615,938	(161,419)	444,697	0	5,754,257
2015	5,754,257	9,002,738	63.9%	(3,248,481)	824,808	49.18%	405,606	71,593	477,199	639,422	(162,223)	468,034	0	6,060,068
2016	6,060,068	9,273,101	65.4%	(3,213,033)	867,958	49.03%	425,532	75,339	500,870	661,406	(160,536)	493,334	0	6,392,866
2017	6,392,866	9,553,620	66.9%	(3,160,754)	914,339	48.85%	446,684	79,365	526,049	682,873	(156,824)	520,942	0	6,756,985
2018	6,756,985	9,850,436	68.6%	(3,093,451)	963,921	48.64%	468,879	83,668	552,547	706,443	(153,896)	551,103	0	7,154,192
2019	7,154,192	10,163,168	70.4%	(3,008,976)	1,017,022	48.38%	491,987	88,278	580,265	730,173	(149,908)	584,037	0	7,588,321
2020	7,588,321	10,493,083	72.3%	(2,904,762)	1,073,501	48.03%	515,573	93,180	608,753	752,119	(143,366)	620,123	0	8,065,078
2021	8,065,078	10,843,143	74.4%	(2,778,066)	1,134,759	47.69%	541,217	98,497	639,714	772,434	(132,720)	659,894	0	8,592,252
2022	8,592,252	11,219,233	76.6%	(2,626,981)	1,200,998	47.51%	570,566	104,247	674,812	793,933	(119,121)	703,947	0	9,177,078
2023	9,177,078	11,628,288	78.9%	(2,451,209)	1,272,074	47.34%	602,173	110,416	712,589	817,785	(105,196)	752,770	0	9,824,652
2024	9,824,652	12,069,949	81.4%	(2,245,297)	1,348,260	47.07%	634,582	117,029	751,611	840,556	(88,945)	806,865	0	10,542,572
2025	10,542,572	12,539,206	84.1%	(1,996,635)	1,429,605	46.76%	668,527	124,090	792,617	861,396	(68,779)	866,925	0	11,340,717
2026	11,340,717	13,066,322	86.8%	(1,725,605)	1,515,887	46.64%	706,965	131,579	838,544	888,043	(49,498)	933,567	0	12,224,786
2027	12,224,786	13,639,756	89.6%	(1,414,970)	1,607,450	46.40%	745,817	139,527	885,343	918,161	(32,817)	1,007,191	0	13,199,160
2028	13,199,160	14,256,882	92.6%	(1,057,721)	1,704,582	46.10%	785,894	147,958	933,851	948,947	(15,095)	1,088,308	0	14,272,373
2029	14,272,373	14,923,287	95.6%	(650,914)	1,807,840	27.90%	504,305	156,921	661,226	980,386	(319,160)	1,164,305	0	15,117,519
2030	15,117,519	15,641,433	96.7%	(523,914)	1,917,517	22.04%	422,699	166,440	589,139	1,012,863	(423,724)	1,229,717	0	15,923,512

1.5(b) Actuarial Projections – Projections at Current Rate

Key Assumptions

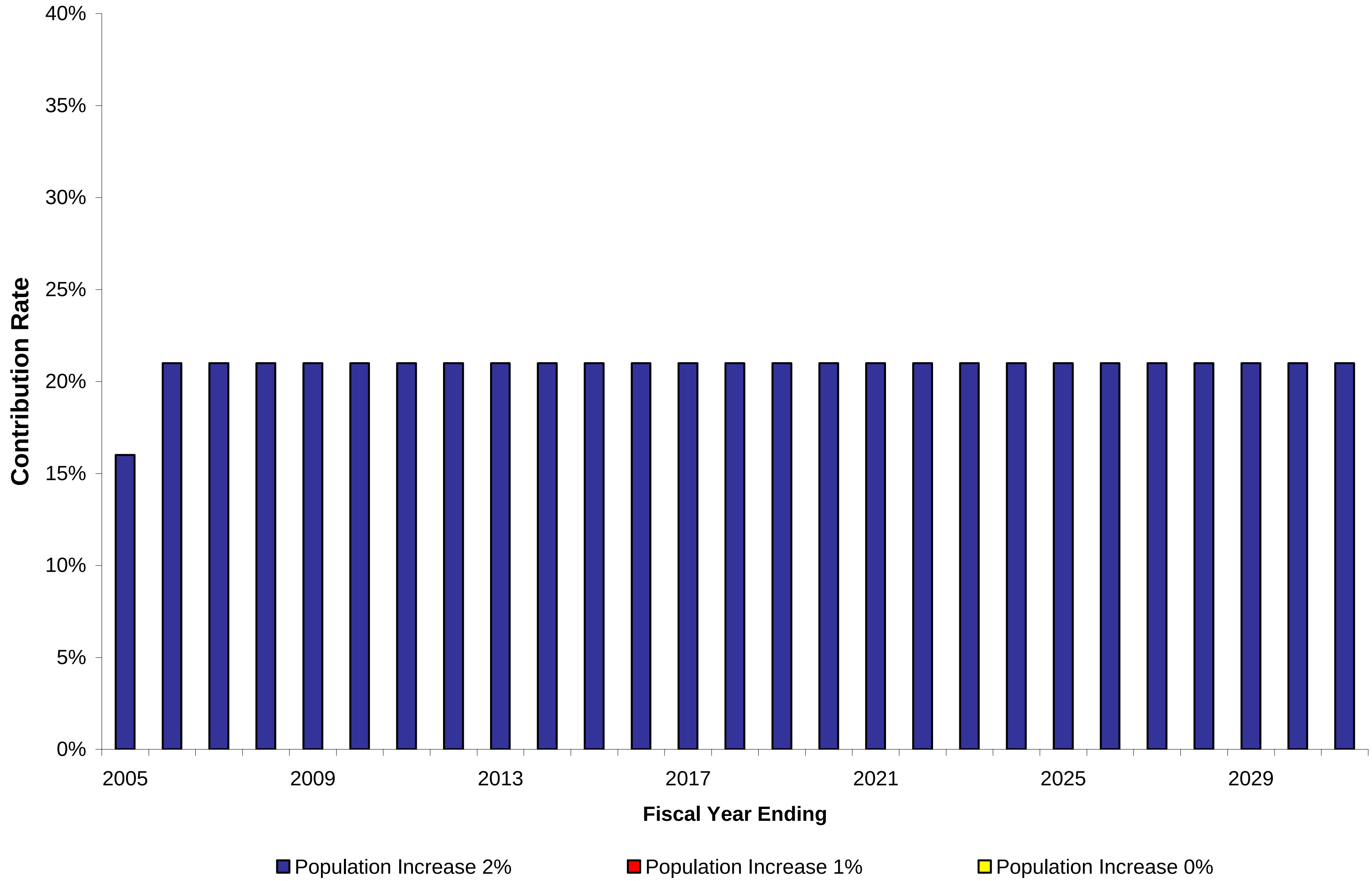
- All assumptions and methods are the same as Section 1.5(a), except:
- Adopted contribution rate is maintained at the FY06 level for all future years

Observations

- System funding deteriorates under all three population scenarios

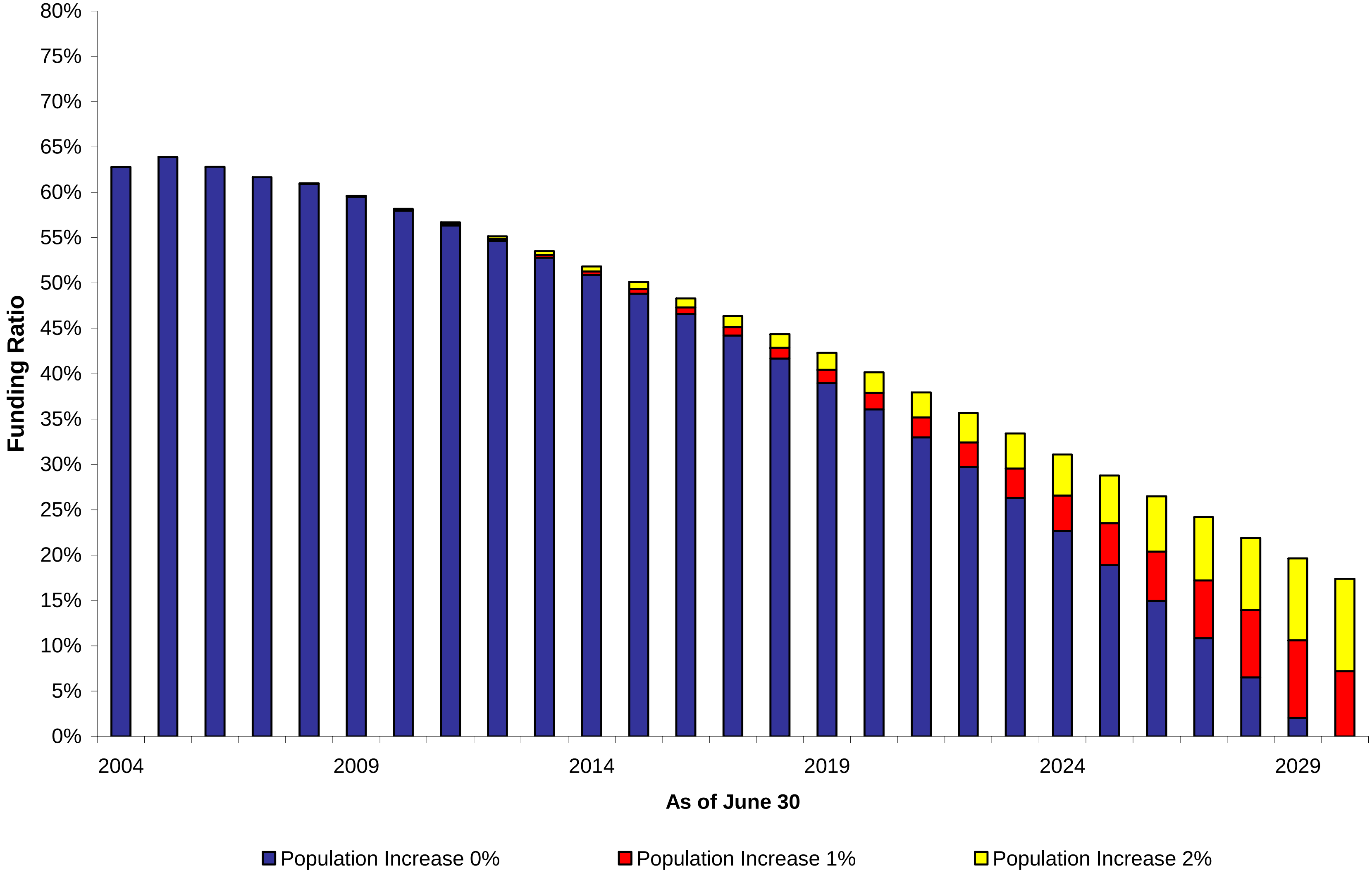
1.5(b) Actuarial Projections – Projections at Current Rate *(continued)*

Contribution Rate



1.5(b) Actuarial Projections – Projections at Current Rate *(continued)*

Funding Ratio



1.5(b) Actuarial Projections – Projections at Current Rate *(continued)*

Table 4

State of Alaska TRS
Financial Projections (in thousands)

Investment Return 8.25% **Annual Population Increase 1.00%**

	- - - - - - - Valuation Amounts on July 1 - - - - - - -				- Flow Amounts During Following 12 Months - - - - - - - - - - - - - - - - - -								Recognized	Ending
As of June 30	**Actuarial Assets**	**Accrued Liability**	**Funding Ratio**	**Surplus* (Deficit)**	**Total Salaries**	**Employer Ctb Rate**	**Employer Contribs**	**Employee Contribs**	**Total Contribs**	**Benefit Payments**	**Net Contribs**	**Investment Earnings**	**Asset Gain**	**Actuarial Assets**
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2004	3,845,370	6,123,600	62.8%	(2,278,230)	522,421	16.00%	83,587	45,346	128,934	285,885	(156,951)	316,226	7,182	4,011,827
2005	4,011,827	6,278,335	63.9%	(2,266,509)	548,224	21.00%	115,127	47,586	162,713	396,427	(233,714)	326,199	7,182	4,111,494
2006	4,111,494	6,546,034	62.8%	(2,434,540)	548,534	21.00%	115,192	47,613	162,805	419,599	(256,794)	332,877	7,182	4,194,760
2007	4,194,760	6,803,822	61.7%	(2,609,062)	562,254	21.00%	118,073	48,804	166,877	440,990	(274,113)	338,440	44,599	4,303,686
2008	4,303,686	7,059,583	61.0%	(2,755,897)	580,874	21.00%	121,984	50,420	172,403	463,387	(290,983)	343,051	0	4,355,754
2009	4,355,754	7,314,058	59.6%	(2,958,304)	600,922	21.00%	126,194	52,160	178,354	487,092	(308,739)	346,614	0	4,393,629
2010	4,393,629	7,566,424	58.1%	(3,172,795)	622,528	21.00%	130,731	54,035	184,766	511,952	(327,186)	348,978	0	4,415,421
2011	4,415,421	7,814,605	56.5%	(3,399,184)	645,548	21.00%	135,565	56,034	191,599	537,527	(345,928)	350,003	0	4,419,495
2012	4,419,495	8,059,336	54.8%	(3,639,841)	669,523	21.00%	140,600	58,115	198,714	561,861	(363,147)	349,629	0	4,405,977
2013	4,405,977	8,297,110	53.1%	(3,891,133)	694,825	21.00%	145,913	60,311	206,224	584,506	(378,282)	347,889	0	4,375,585
2014	4,375,585	8,533,850	51.3%	(4,158,265)	721,832	21.00%	151,585	62,655	214,240	606,283	(392,043)	344,814	0	4,328,356
2015	4,328,356	8,769,671	49.4%	(4,441,315)	751,052	21.00%	157,721	65,191	222,912	630,037	(407,124)	340,295	0	4,261,527
2016	4,261,527	9,007,504	47.3%	(4,745,977)	782,222	21.00%	164,267	67,897	232,164	653,529	(421,366)	334,195	0	4,174,356
2017	4,174,356	9,247,850	45.1%	(5,073,494)	815,519	21.00%	171,259	70,787	242,046	675,036	(432,990)	326,524	0	4,067,889
2018	4,067,889	9,493,161	42.9%	(5,425,272)	850,831	21.00%	178,674	73,852	252,527	696,692	(444,165)	317,279	0	3,941,003
2019	3,941,003	9,747,888	40.4%	(5,806,885)	888,381	21.00%	186,560	77,111	263,672	718,954	(455,283)	306,352	0	3,792,072
2020	3,792,072	10,012,404	37.9%	(6,220,331)	927,943	21.00%	194,868	80,545	275,413	739,637	(464,223)	293,697	0	3,621,546
2021	3,621,546	10,291,186	35.2%	(6,669,640)	970,814	21.00%	203,871	84,267	288,138	758,716	(470,578)	279,366	0	3,430,334
2022	3,430,334	10,584,723	32.4%	(7,154,389)	1,017,069	21.00%	213,585	88,282	301,866	777,360	(475,494)	263,388	0	3,218,228
2023	3,218,228	10,895,427	29.5%	(7,677,199)	1,066,441	21.00%	223,953	92,567	316,520	797,401	(480,881)	245,667	0	2,983,014
2024	2,983,014	11,228,996	26.6%	(8,245,982)	1,119,075	21.00%	235,006	97,136	332,141	818,558	(486,417)	226,034	0	2,722,632
2025	2,722,632	11,587,289	23.5%	(8,864,657)	1,174,889	21.00%	246,727	101,980	348,707	835,761	(487,054)	204,526	0	2,440,104
2026	2,440,104	11,967,996	20.4%	(9,527,892)	1,233,515	21.00%	259,038	107,069	366,107	857,294	(491,187)	181,047	0	2,129,964
2027	2,129,964	12,385,899	17.2%	(10,255,935)	1,295,129	21.00%	271,977	112,417	384,394	881,319	(496,925)	155,224	0	1,788,263
2028	1,788,263	12,835,523	13.9%	(11,047,260)	1,359,839	21.00%	285,566	118,034	403,600	906,794	(503,193)	126,775	0	1,411,845
2029	1,411,845	13,314,956	10.6%	(11,903,111)	1,428,015	21.00%	299,883	123,952	423,835	932,994	(509,160)	95,474	0	998,160
2030	998,160	13,827,944	7.2%	(12,829,784)	1,499,757	21.00%	314,949	130,179	445,128	958,785	(513,657)	61,160	0	545,663

1.5(c) Actuarial Projections – Effect of Economic Scenarios

Key Assumptions

- All assumptions and methods are the same as Section 1.5(a) except:
  - Results are shown only under the 1% population growth scenario
  - The actuarially calculated contribution rate is adopted in each year, beginning in FY06
  - Investment returns are assumed as follows:

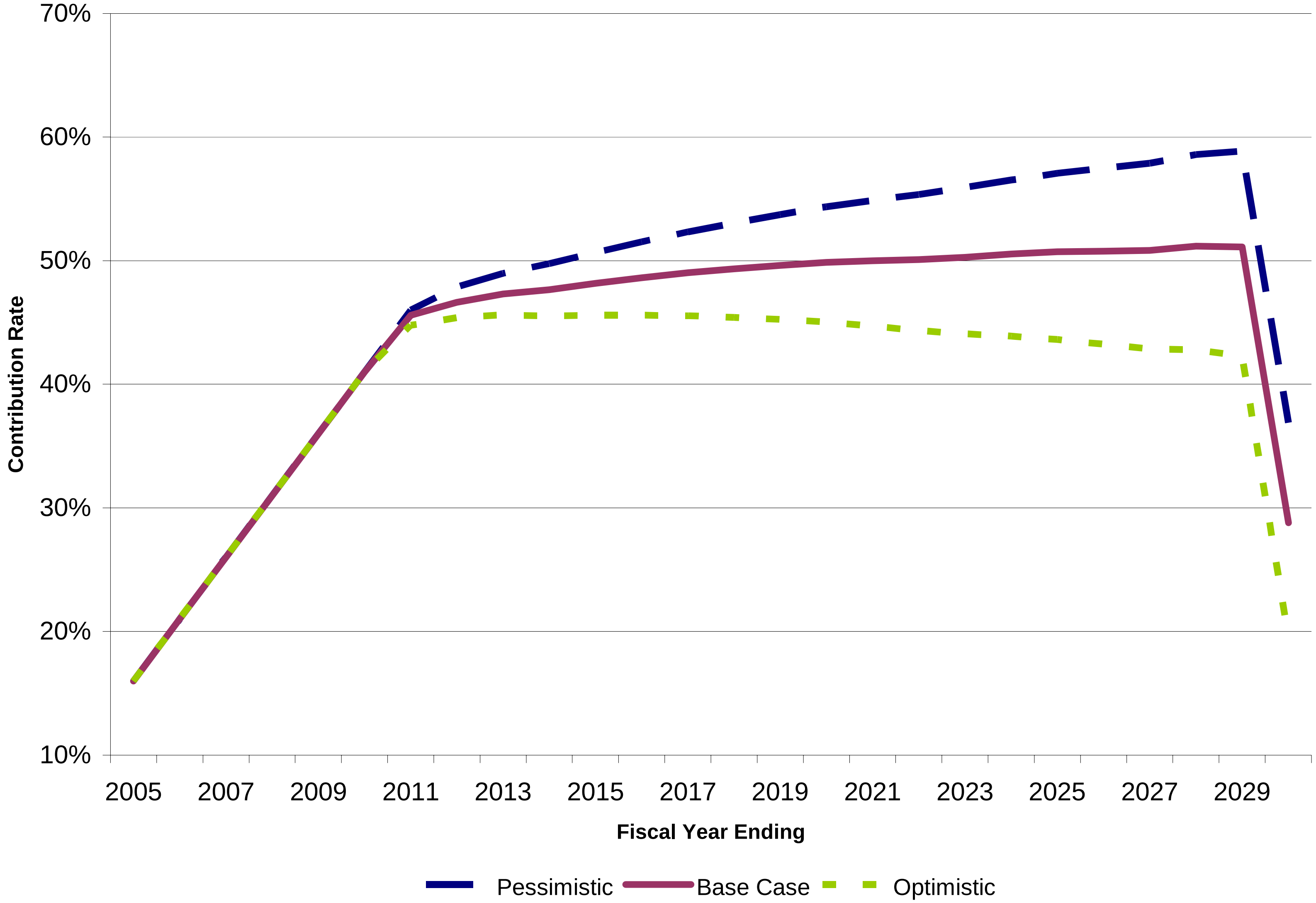
Base Case:	8.25% for all future years
Optimistic:	9.00% for all future years
Pessimistic:	7.50% for all future years

Observations

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

1.5(c) Actuarial Projections – Effect of Economic Scenarios *(continued)*

Contribution Rate



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

(1) Effective Date

July 1, 1955, with amendments through July 1, 2003. Chapter 97, 1990 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the TRS before July 1, 1990, are eligible for different benefits than members hired after June 30, 1990.

(2) Administration of Plan

The Commissioner of Administration is responsible for administering the system. The Teachers' Retirement Board prescribes policies, adopts regulations and performs other activities necessary to carry out the provisions of the system. The Alaska State Pension Investment Board, Department of Revenue, Treasury Division is responsible for investing TRS funds. The Attorney General represents the system in legal proceedings.

(3) Employers Included

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

(4) Membership

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

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

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

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

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

(5) Credited Service

TRS members receive a year of membership credit if they work a minimum of 172 days during the school year (July 1 through June 30 of the following year). Fractional credit is determined based on the number of days worked. Part-time members 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.

(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 *(continued)*

The consolidated rate is a uniform rate for all participating employers, amortized to include future service liabilities (less the value of members' contributions) for the members' future service.

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

(7) Member Contributions

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

Contributions for Claimed Service: Member contributions are also required for most of the claimed service described in (4) 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 before 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 (11) 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. 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 *(continued)*

(8) Retirement Benefits

Eligibility:

(a) Members, including deferred vested members, are eligible for normal retirement at age 60[5], or early retirement at age 55, if they have at least:

- (i) eight years of paid-up membership service;
- (ii) 15 years of paid-up creditable service, the last five years of which are membership service, and they were first hired under the TRS before July 1, 1975;
- (iii) five years of paid-up membership service and three years of paid-up Alaska Bureau of Indian Affairs service;
- (iv) 12 years of combined part-time and full-time paid-up membership service;
- (v) two years of paid-up membership service if they are vested in the Public Employees' Retirement System (PERS); or
- (vi) one year of paid-up membership service if they are retired from the PERS.

(b) Members may retire at any age when they have:

- (i) 25 years of paid-up creditable service, the last five years of which are membership service;
- (ii) 20 years of paid-up membership service;
- (iii) 20 years of combined paid-up membership and Alaska Bureau of Indian Affairs service, the last five years of which are membership service; or
- (iv) 20 years of combined paid-up part-time and full-time membership service.

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

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

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

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

<u>Benefit Calculation:</u> 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%.

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

(9) Reemployment of Retired Members

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

Under the Standard Option, retirement 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 became effective July 1, 2001 and applies to reemployment periods after that date.

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 *(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.

(10) Postemployment Healthcare Benefits

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

(11) Disability Benefits

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

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

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

(12) Death Benefits

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

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

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

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

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

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

(d) 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.

(e) Spouse's Pension: The spouse's pension is equal to 50% of the retirement benefit that the deceased member was receiving or would have received if retired at the time of death. The spouse's pension begins on the first of the month after the member's death or termination of the survivor's allowance.

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

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

(13) Post Retirement Pension Adjustments

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

(a) 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on TRS disability; or

(b) 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or under age 60 if the recipient has been receiving benefits for at least eight years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who were first hired before July 1, 1990, if the CPI increases and the financial condition of the fund will permit an increase.

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

(14) Alaska Cost of Living Allowance

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

(a) members who were first hired under the TRS before July 1, 1990, and their survivors;

(b) members who were first hired under the TRS after June 30, 1990, and their survivors if they are at least age 65; and

(c) all disabled members.

2.2(a) Participant Census Information – Total TRS

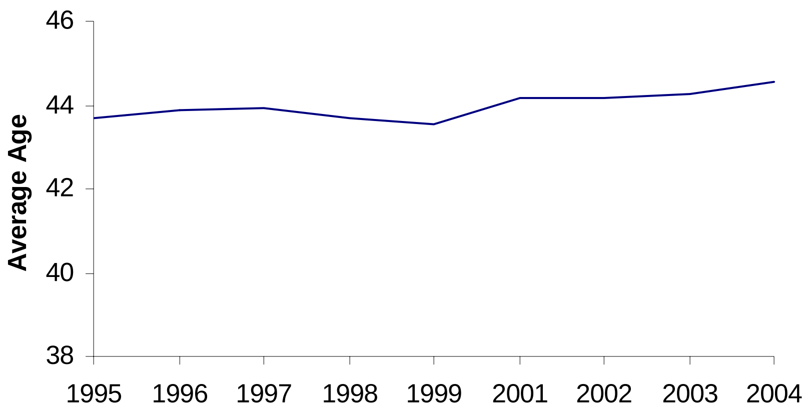
As of June 30	1999	2001	2002	2003	2004
Active Members					
(1) Number	9,396	9,815	9,690	9,873	9,688
(2) Average Age	43.56	44.19	44.15	44.28	44.56
(3) Average Credited Service	10.34	10.62	10.33	10.39	10.65
(4) Average Annual Earnings	$ 49,640	$ 50,554	$ 52,535	$ 53,948	$ 53,925
(5) Number Vested	5,256	5,499	5,224	5,289	5,174
(6) Percent Who Are Vested	55.9%	56.0%	53.9%	53.6%	53.4%
Retirees and Beneficiaries					
(1) Number	6,486	7,333	7,804	8,312	8,707
(2) Average Age	62.74	63.17	63.30	63.60	63.95
(3) Average Monthly Benefit:					
Base	$ 1,859	$ 1,903	$ 1,936	$ 1,983	$ 1,970
C.O.L.A.	118	119	122	125	122
P.R.P.A.	411	448	474	455	458
Adjustment	0	0	0	0	0
Total	2,388	2,470	2,532	2,563	2,550
Vested Terminations					
(1) Number	1,150	767	783	708	724
(2) Average Age	49.89	49.15	48.97	48.57	48.83
(3) Average Monthly Benefit	$ 1,447	$ 1,217	$ 1,129	$ 974	$ 993
Non-Vested Terminations With Account Balances					
(1) Number	1,297	2,207	2,447[6]	2,327	2,746[6]
(2) Average Account Balance	$ 13,108	$ 10,142	$ 10,964	$ 11,916	$ 11,710

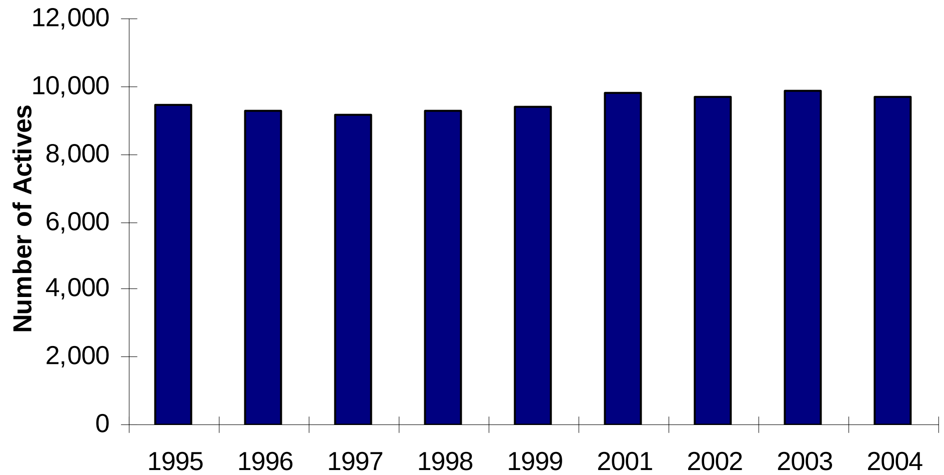
[6] *Includes deceased participants with account balances.*

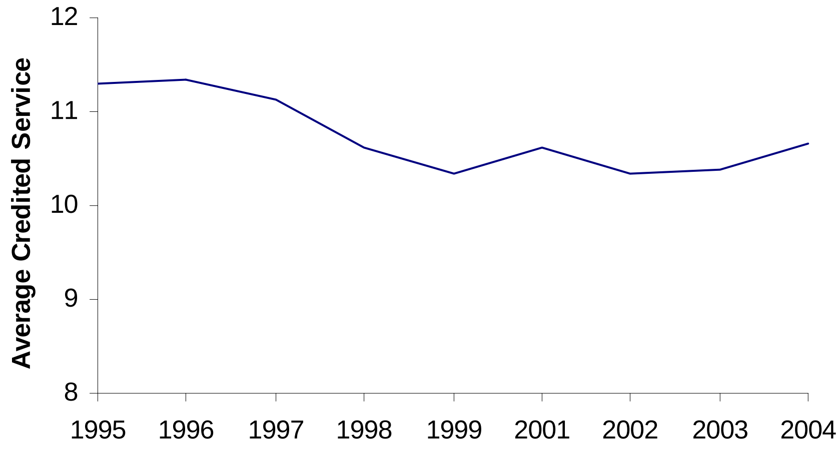
2.2(a) Participant Census Information – Total TRS *(continued)*

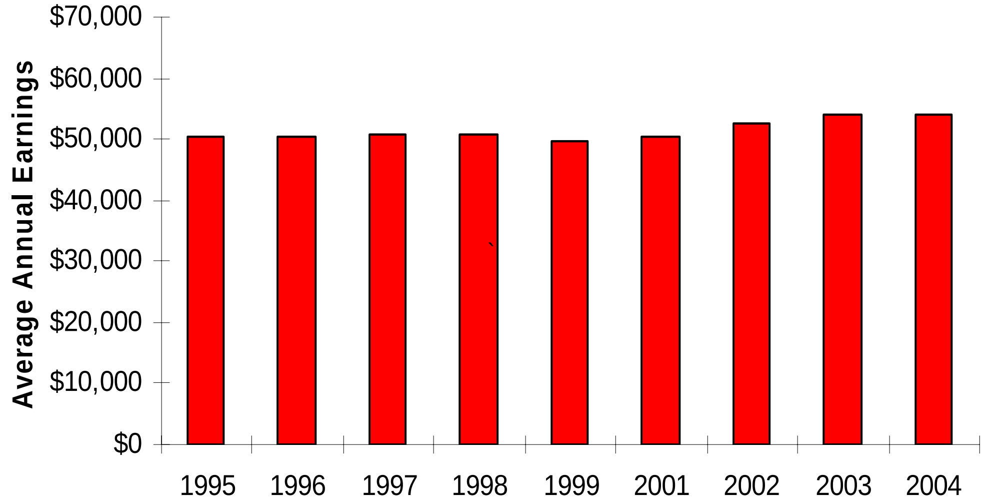
As of June 30, 2004	Tier 1	Tier 2	Total
Retirees and Beneficiaries			
(1) Number	8,529	178	8,707
(2) Average Age	64.01	60.97	63.95
(3) Average Monthly Benefit:			
Base	$ 1,991	$ 1,080	$ 1,970
C.O.L.A.	124	29	122
P.R.P.A.	468	37	458
Adjustment	0	0	0
Total	2,583	1,146	2,550

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









2.2(b) Distribution of Active Participants

Annual Earnings by Age

Age	Number of People	Total Annual Earnings	Average Annual Earnings
0 – 19	0	$ 0	$ 0
20 – 24	71	2,460,826	34,660
25 – 29	674	26,699,831	39,614
30 – 34	1,132	48,965,027	43,255
35 – 39	1,241	59,860,940	48,236
40 – 44	1,396	72,944,725	52,253
45 – 49	1,676	95,285,402	56,853
50 – 54	1,912	114,626,801	59,951
55 – 59	1,139	71,484,640	62,761
60 – 64	372	25,031,507	67,289
65 – 69	61	3,957,696	64,880
70 – 74	13	1,047,330	80,564
75+	1	56,666	56,666
Total	9,688	$522,421,391	$ 53,925

Annual Earnings by Credited Service

Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0	23	$ 220,737	$ 9,597
1	657	24,952,099	37,979
2	730	31,026,111	42,502
3	624	27,588,613	44,213
4	501	22,569,549	45,049
0 – 4	2,535	106,357,109	41,955
5 – 9	2,498	122,486,057	49,034
10 – 14	1,800	102,860,666	57,145
15 – 19	1,356	85,479,321	63,038
20 – 24	987	67,603,494	68,494
25 – 29	361	25,731,203	71,278
30 – 34	122	9,354,357	76,675
35 – 39	26	2,244,965	86,345
40+	3	304,219	101,406
Total	9,688	$ 522,421,391	$ 53,925

Years of Credited Service by Age

	Years of Service									
Age	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	71	0	0	0	0	0	0	0	0	71
25 – 29	599	75	0	0	0	0	0	0	0	674
30 – 34	534	565	33	0	0	0	0	0	0	1,132
35 – 39	338	525	334	44	0	0	0	0	0	1,241
40 – 44	299	388	397	263	49	0	0	0	0	1,396
45 – 49	239	359	370	396	275	37	0	0	0	1,676
50 – 54	257	326	369	374	372	190	24	0	0	1,912
55 – 59	144	194	212	214	211	90	69	5	0	1,139
60 – 64	43	56	74	58	64	37	24	15	1	372
65 – 69	9	9	10	5	13	6	4	5	0	61
70 – 74	2	1	0	2	3	1	1	1	2	13
75+	0	0	1	0	0	0	0	0	0	1
Total	2,535	2,498	1,800	1,356	987	361	122	26	3	9,688

2.2(c) Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 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	509,064	52,535	3.9%	57
June 30, 2001	9,815	496,188	50,544	1.8%	60
June 30, 1999	9,396	466,414	49,640	(2.1%)	61
June 30, 1998	9,262	469,433	50,684	(0.4%)	61
June 30, 1997	9,164	466,455	50,901	1.3%	61
June 30, 1996	9,259	465,182	50,241	(0.5%)	61
June 30, 1995	9,452	477,205	50,487	0.6%	61
June 30, 1994	9,489	476,098	50,174	3.2%	61

2.2(d) Statistics on New Benefit Recipients

During the Year Ending June 30	1999	2000/2001	2002	2003	2004
Service					
(1) Number	525	967	529	548	446
(2) Average Age at Commencement	53.85	53.88	54.80	55.13	55.09
(3) Average Monthly Benefit	$ 2,521	$ 2,303	$ 2,556	$ 2,751	$ 2,384
Survivor (including surviving spouse and QDROs					
(1) Number	56	70	50	43	35
(2) Average Age at Commencement	58.11	60.66	65.09	60.60	58.30
(3) Average Monthly Benefit	$ 1,095	$ 1,286	$ 1,270	$ 1,242	$ 1,050
Disability					
(1) Number	17	20	10	8	10
(2) Average Age at Commencement	48.51	50.78	48.28	47.76	49.85
(3) Average Monthly Benefit	$ 2,577	$ 3,068	$ 2,800	$ 3,635	$ 2,887
Total					
(1) Number	598	1,057	589	599	491
(2) Average Age at Commencement	54.10	54.25	55.56	55.42	55.21
(3) Average Monthly Benefit	$ 2,389	$ 2,238	$ 2,451	$ 2,654	$ 2,299

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

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/03 – 6/30/04:							
Average Monthly Benefit	$ 251	$ 896	$ 1,243	$ 2,044	$ 2,782	$ 3,640	$ 4,860
Number of Recipients	21	51	75	85	178	64	17
Period 7/1/02 - 6/30/03:							
Average Monthly Benefit	$ 236	$ 899	$ 1,153	$ 2,350	$ 2,835	$ 3,969	$ 5,133
Number of Recipients	16	40	69	91	264	87	32
Period 7/1/01 - 6/30/02:							
Average Monthly Benefit	$ 532	$ 795	$ 1,168	$ 1,706	$ 2,455	$ 3,126	$ 3,915
Number of Recipients	4	36	62	78	180	137	92
Period 7/1/99 - 6/30/01:							
Average Monthly Benefit	$ 1,514	$ 1,021	$ 1,488	$ 1,935	$ 2,435	$ 2,551	$ 2,864
Number of Recipients	2	33	101	237	374	201	109
Period 7/1/98 - 6/30/99:							
Average Monthly Benefit	$ 1,230	$ 820	$ 1,152	$ 1,691	$ 2,510	$ 3,285	$ 3,756
Number of Recipients	23	43	67	81	176	153	55
Period 7/1/97 - 6/30/98:							
Average Monthly Benefit	$ 1,051	$ 850	$ 1,095	$ 1,842	$ 2,590	$ 3,443	$ 4,280
Number of Recipients	26	51	80	105	240	154	57
Period 7/1/96 - 6/30/97:							
Average Monthly Benefit	$ 996	$ 828	$ 1,042	$ 1,692	$ 2,493	$ 3,353	$ 3,812
Number of Recipients	19	42	71	77	151	153	52
Period 7/1/95 - 6/30/96:							
Average Monthly Benefit	$ 952	$ 836	$ 1,145	$ 1,731	$ 2,389	$ 3,138	$ 3,317
Number of Recipients	15	24	40	31	115	86	30
Period 7/1/94 - 6/30/95:							
Average Monthly Benefit	$ 1,204	$ 748	$ 1,033	$ 1,716	$ 2,398	$ 3,041	$ 3,958
Number of Recipients	7	22	47	36	129	89	38

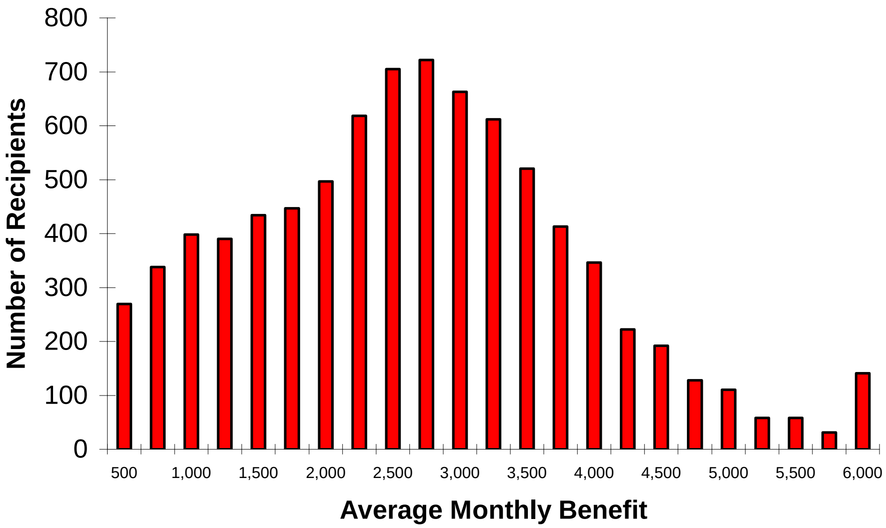
"Average Monthly Benefit" includes post-retirement pension adjustments and cost-of-living increases.

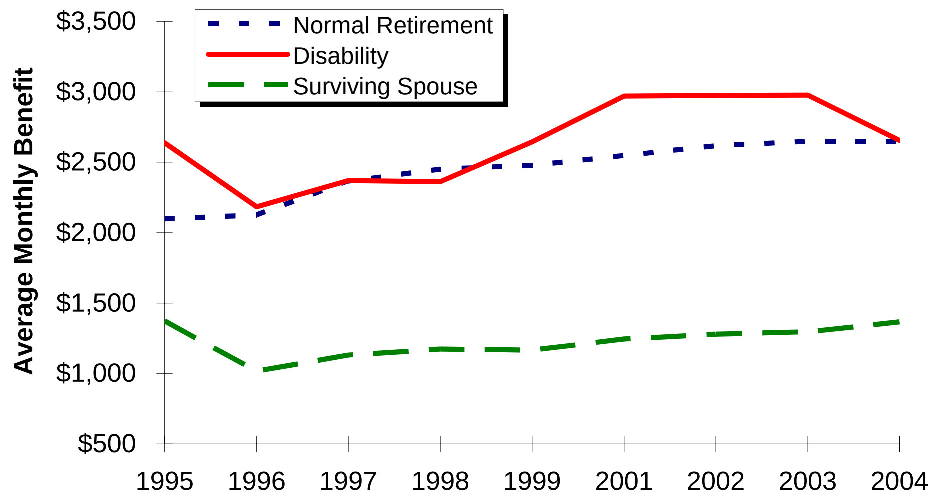
2.2(f) Statistics on All Benefit Recipients

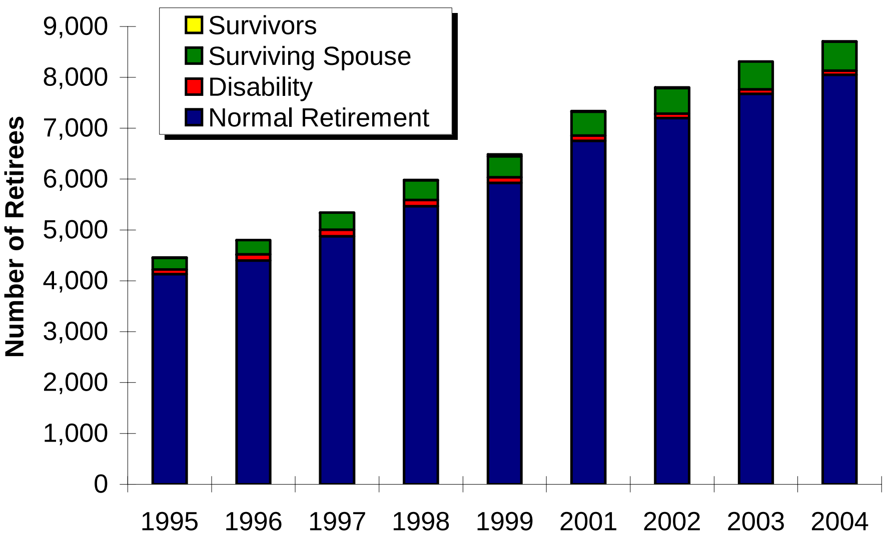
As of June 30	1999	2000/2001	2002	2003	2004
Service					
(1) Number, Fiscal Year Start	5,467	5,924	6,754	7,201	7,680
(2) Net Change	457	830	447	479	372
(3) Number, Fiscal Year End	5,924	6,754	7,201	7,680	8,052
(4) Average Age at Commencement	53.55	53.52	53.53	53.64	53.68
(5) Average Current Age	62.73	63.12	63.27	63.50	63.85
(6) Average Monthly Benefit	$ 2,479	$ 2,549	$ 2,618	$ 2,648	$ 2,649
Surviving Spouse's Benefits (Includes QDROs)					
(1) Number, Fiscal Year Start	382	414	469	501	549
(2) Net Change	32	55	32	48	27
(3) Number, Fiscal Year End	414	469	501	549	576
(4) Average Age at Commencement	58.55	56.06	57.86	57.78	57.86
(5) Average Current Age	67.32	66.48	66.88	66.96	68.12
(6) Average Monthly Benefit	$ 1,168	$ 1,246	$ 1,279	$ 1,297	$ 1,367
Survivor's Benefits (other than spouse's)					
(1) Number, Fiscal Year Start	6	37	9[7]	17	1
(2) Net Change	31	(28)	8	(16)	2
(3) Number, Fiscal Year End	37	9[7]	17	1	3
(4) Average Age at Commencement	41.55	49.80	46.06	49.77	47.59
(5) Average Current Age	45.48	54.66	53.71	51.35	52.09
(6) Average Monthly Benefit	$ 684	$ 545	$ 549	$ 1,113	$ 581
Disabilities					
(1) Number, Fiscal Year Start	124	111	101	85	82
(2) Net Change	(13)	(10)	(16)	(3)	(6)
(3) Number, Fiscal Year End	111	101	85	82	76
(4) Average Age at Commencement	44.03	44.72	44.22	44.68	45.09
(5) Average Current Age	51.56	52.04	50.95	51.21	51.12
(6) Average Monthly Benefit	$ 2,644	$ 2,969[8]	$ 2,974[8]	$ 2,976[8]	$ 2,655[8]
Total Number of Benefit Recipients	**6,486**	**7,333**	**7,804**	**8,312**	**8,707**

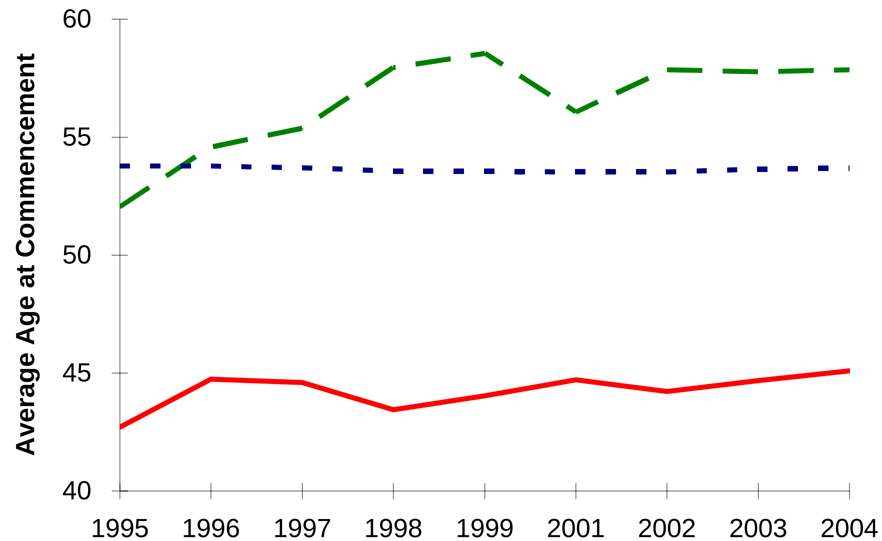
[7] *Includes surviving dependents only. In 1999 all dependents were included.*
[8] *Includes benefit increases due to dependents.*

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









2.2(g) Distribution of Annual Benefits for Benefit Recipients

Annual Benefit by Age

Age	Number of People	Total Annual Benefit	Average Annual Benefit
0 – 19	0	$ 0	$ 0
20 – 24	0	0	0
25 – 29	0	0	0
30 – 34	0	0	0
35 – 39	4	110,570	27,643
40 – 44	28	664,712	23,740
45 – 49	201	5,795,350	28,833
50 – 54	835	25,145,455	30,114
55 – 59	2,001	60,319,659	30,145
60 – 64	2,116	65,992,219	31,187
65 – 69	1,385	44,620,753	32,217
70 – 74	918	29,207,264	31,816
75+	1,219	35,700,332	29,287
Total	8,707	$267,556,314	$ 30,729

Annual Benefit by Years Since Commencement

Years Since Commencement	Number of People	Total Annual Benefit	Average Annual Benefit
0	357	$ 10,544,920	$ 29,538
1	458	12,169,513	26,571
2	636	19,527,909	30,704
3	387	9,995,281	25,828
4	365	9,451,712	25,895
0 – 4	2,203	61,689,335	28,002
5 – 9	2,739	84,955,319	31,017
10 – 14	1,480	46,075,184	31,132
15 – 19	1,195	43,026,509	36,005
20 – 24	582	18,045,872	31,007
25 – 29	421	11,464,149	27,231
30 – 34	74	1,886,199	25,489
35 – 39	13	413,747	31,827
40+	0	0	0
Total	8,707	$267,556,314	$ 30,729

Years Since Benefit Commencement by Age

	Years of Service									
Age	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	0	0	0	0	0	0	0	0	0	0
30 – 34	0	0	0	0	0	0	0	0	0	0
35 – 39	3	1	0	0	0	0	0	0	0	4
40 – 44	22	5	1	0	0	0	0	0	0	28
45 – 49	144	54	2	0	0	0	1	0	0	201
50 – 54	483	324	25	3	0	0	0	0	0	835
55 – 59	919	814	209	51	6	1	1	0	0	2,001
60 – 64	406	972	504	217	12	4	1	0	0	2,116
65 – 69	141	370	424	357	86	4	3	0	0	1,385
70 – 74	43	127	189	335	183	37	2	2	0	918
75+	42	72	126	232	295	375	66	11	0	1,219
Total	2,203	2,739	1,480	1,195	582	421	74	13	0	8,707

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

Amount of Monthly Benefit	Number of Recipients	Type of Benefit 1	Type of Benefit 2	Type of Benefit 3	Option Selected 1	Option Selected 2	Option Selected 3	Option Selected 4
$ 1 $ 300	123	99	24	0	66	24	24	9
301 – 600	283	215	68	0	158	54	59	12
601 – 900	507	404	103	0	285	104	93	25
901 – 1,200	509	411	98	0	309	109	79	12
1,201 – 1,500	511	431	80	0	294	99	101	17
1,501 – 1,800	538	456	80	2	324	84	116	14
1,801 – 2,100	660	600	52	8	384	112	151	13
2,101 – 2,400	851	804	29	18	468	167	197	19
2,401 – 2,700	908	872	19	17	519	162	203	24
2,701 – 3,000	819	794	11	14	483	114	207	15
3,001 – 3,300	774	761	7	6	467	95	196	16
3,301 – 3,600	619	613	3	3	375	83	150	11
3,601 – 3,900	465	454	4	7	268	50	142	5
3,901 – 4,200	343	342	0	1	214	40	85	4
Over $4,200	797	796	1	0	466	74	234	23
Totals	8,707	8,052	579	76	5,080	1,371	2,037	219

Type of Benefit

1. *Normal retirement*
2. *Survivor payment*
3. *Disability*

Option Selected

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

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

Year Ended	Added to Rolls No.[9]	Added to Rolls Annual Allowances[9]	Removed from Rolls No.[9]	Removed from Rolls Annual Allowances[9]	Rolls – End of Year No.	Rolls – End of Year Annual Allowances	Percent Increase in Annual Allowances	Average Annual Allowance
June 30, 2004	491	$17,867,366	96	$5,503,666	8,707	$267,556,314	4.84%	$30,729
June 30, 2003	599	21,475,421	91	3,377,352	8,312	255,192,614	7.63%	30,702
June 30, 2002	589	24,789,896	118	4,966,397	7,804	237,094,545	9.12%	30,381
June 30, 2001	1,057	39,213,327	210	7,790,727	7,333	217,271,046	16.91%	29,629
June 30, 1999	598	19,014,567	91	2,893,521	6,486	185,848,446	9.50%	28,654
June 30, 1998	674	24,479,595	38	1,380,155	5,979	169,727,400	15.75%	28,387
June 30, 1997	583	29,988,351[10]	43	2,211,834[10]	5,343	146,627,960	23.37%	27,443
June 30, 1996	376	8,410,895	32	441,353	4,803	118,851,443	7.19%	24,745
June 30, 1995	368	10,386,432	43	94,443	4,459	110,881,901	10.23%	24,867

[9] *Numbers are estimated, and include other internal transfers.*
[10] *Includes additional benefits to current retirees from a one-time retroactive ad hoc Post-Retirement Pension Adjustment*

2.3 Summary of Actuarial Assumptions and Methods

The demographic and economic assumptions used in this valuation were recommended by Mercer Human Resource Consulting at the Fall 2000 TRS Board Meeting and adopted by the Board in December 2000. These assumptions were the result of an experience study performed in the Fall of 2000. For this valuation, Mercer is recommending changes to the assumptions and methods used to value medical benefit liabilities. The funding method used in this valuation was adopted June 30, 1985 and last reviewed by the Board in January 2003. The asset smoothing method used to determine valuation assets was changed effective June 30, 2002.

Valuation of Liabilities

(A) Actuarial Method – Projected Unit Credit

Liabilities and contributions shown in the report are computed using the Projected Unit Credit method of funding. The initial unfunded accrued liability and future gains/losses are amortized over a 25 year fixed period as a level percentage of pay. However, in keeping with GASB requirements, the net amortization period for all gains and losses will not exceed 30 years.

The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, each participant's total pension projected to retirement with salary scale is broken down into units, each associated with a year of past or future service. The principle underlying the method is that each unit is funded in the year for which it is credited. Typically, when the method is introduced there will be an initial liability for benefits credited for service prior to the date, and to the extent that this liability is not covered by assets of the plan there is an unfunded liability to be funded over a chosen period in accordance with an amortization schedule.

An <u>Accrued Liability</u> is calculated at the valuation date as the present value of benefits credited with respect to service to that date.

The <u>Unfunded Liability</u> at the valuation date is the excess of the accrued liability over the assets of the plan. The annual payment to be made over a stipulated number of years to amortize the unfunded liability is the <u>Past Service Cost.</u>

The <u>Normal Cost</u> is the present value of those benefits which are expected to be credited with respect to service during the year beginning on the valuation date.

Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the Unfunded Liability, subject to amortization.

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

(B) Actuarial Assumptions

Investment Return	8.25% per year, compounded annually, net of expenses.
Salary Scale	Inflation – 3.5% per year Merit (first 5 years of employment) – 1.5% per year. Productivity – 0.5% per year
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	1994 Group Annuity Mortality Basic Table for males and females, 1994 Base Year. All deaths are assumed to result from non-occupational causes.
Total Turnover	Select and ultimate rates based upon the 1997-99 actual withdrawal experience. (See Table 1).
Disability	Incidence rates based upon the 1991-95 actual experience, in accordance with Table 2. Post-disability mortality in accordance with rates published by the Pension Benefit Guaranty Corporation to reflect mortality of those receiving disability benefits under Social Security.
Retirement	Retirement rates based upon the 1997-99 actual experience in accordance with Table 3.
Spouse's Age	Wives are assumed to be four years younger than husbands.
Dependent Children	Benefits to dependent children have been valued assuming members who are not single have one dependent child.
Contribution Refunds	100% of those terminating after age 35 who are vested will leave their contributions in the fund and thereby retain their deferred vested benefit. All others who terminate are assumed to have their contributions refunded.
C.O.L.A.	Of those benefit recipients who are eligible for the C.O.L.A., 65% are assumed to remain in Alaska and receive the C.O.L.A.

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

(B) Actuarial Assumptions

New Entrants	Growth projections are made for the active TRS population under three scenarios: Pessimistic: 0% per year Median: 1% per year Optimistic: 2% per year
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.
Post-Retirement Pension Adjustment	50% and 75% of assumed inflation is valued for the automatic Post-Retirement Pension Adjustment (PRPA) as specified in the statute.
Expenses	Expenses are covered in the investment return assumption.
Part-time Status	Part-time employees are assumed to earn 0.550 years of credited service per year.
Per Capita Claims Cost	Sample claims cost rates for FY05 medical benefits are shown below:
Health Cost Trend	

Per Capita Claims Cost (sample claims cost rates for FY05 medical benefits):

	Medical	Medicare	Rx	Medicare
Age 65	$7,730	$6,331	$1,668	$357*

*Represents FY05 value of Medicare Part D subsidy. Rate is not applied until January 1, 2006 as subsidy is not available until then.

Health Cost Trend:

	Medical	Rx
FY05	9.5%	14%
FY06	9.0%	13%
FY07	8.5%	12%
FY08	8.0%	11%
FY09	7.5%	10%
FY10	7.0%	9%
FY11	6.5%	8%
FY12	6.0%	7%
FY13	5.5%	6%
FY14	5.0%	5%
FY15 and later	5.0%	5%

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

(B) Actuarial Assumptions

Aging Factors	Age	Medical	Rx
	00-44	2.0%	4.5%
	45-54	2.5%	3.5%
	55-64	3.5%	3.0%
	65-74	4.0%	1.5%
	75-84	1.5%	0.5%
	85+	0.5%	0.0%

Retired Member Contributions for Medical Benefits	Currently contributions are required for TRS members who are under age 60 and have less than 30 years of service. Eligible Tier 1 members are exempt from contribution requirements. A contribution of $9,936 is assumed to be paid for those required.

Trend Rate for Retired Member Contribution	FY05	6.9%
	FY06	10.2%
	FY07	9.6%
	FY08	8.9%
	FY09	8.3%
	FY10	7.6%
	FY11	7.0%
	FY12	6.3%
	FY13	5.7%
	FY14	5.0%
	FY15 and later	5.0%

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

(C) Valuation of Assets

Effective June 30, 2002, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method will be phased in over the next five years. All assets are valued at market value. Assets are accounted for on an accrued basis and are taken directly from audited financial statements provided by KPMG LLP. Valuation assets cannot be outside a range of 80% to 120% of the market value of assets.

(D) Valuation of Medical Benefits

This section outlines the detailed methodology used to develop the initial per capita claims cost for the State of Alaska Teachers' Retirement System postemployment healthcare benefits.

The analysis is separated into two phases:

- Development of total projected claims cost; and
- Development of the distribution of per capita claims cost by age.

To determine total projected costs for the valuation period, an analysis of claims experience for the State of Alaska PERS and TRS was completed based on information provided by its administrators. This analysis is presented on the following page, "Detailed Development of Claims Cost."

Paid claims for the period from June 2001 through May 2004 were tabulated and an average annual amount determined. Next, four adjustments were applied:

- An adjustment to restate paid claims for plan changes, if any, effective June 30, 2004.
- A participation adjustment to account for differences in exposures between the experience period and the current census.
- A factor to trend historical claims from the midpoint of the experience period to the midpoint of the valuation period.
- An adjustment to restate paid claims on an incurred basis, assuming that claims are paid on average three months after the date incurred for medical and vision and one month after the date incurred for prescription drugs.

To this, estimated administrative costs were added. The result is total projected costs for the period July 1, 2004 to June 30, 2005.

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

(D) Valuation of Medical Benefits

Detailed Development of Claims Cost
For the period July 1, 2004 through June 30, 2005

	Medical	Rx
Paid Claims (6/01 - 5/02)	115,904,729	42,174,073
Paid Claims (6/02 - 5/03)	133,794,131	49,761,201
Paid Claims (6/03 - 5/04)	143,042,729	61,583,420
Estimated annual paid claims	130,913,863	51,172,898
Population adjustment [1]	1.1169	1.1033
Trend Adjustment (25.0 months) [2]	1.2081	1.3139
Incurred Adjustment [2]	1.0229	1.0000
Medicare Reform Physician Fee Adj	1.0341	
Projected incurred claims	186,866,203	74,182,318
Administrative costs [3]	9,254,688	0
Projected Plan Costs	**$196,120,892**	**$74,182,318**

Notes:

1 - Adjusts for exposure differences between the current census and the experience period from which the claims were derived. To calculate an appropriate per capita claims cost, the number of employees used below includes all actives, not just those eligible for retiree health care benefits.

	Medical	Rx
Current census:	27,051	27,051
Avg. enrollment during experience period:	24,221	24,517

	Medical	Rx
2 - Trend:	9.5%	14.0%
Months of Trend	25.0	25.0
Incurred adjustment	3.0	0.0
3 - Administrative Fees	$28.51	$0.00

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

(D) Valuation of Medical Benefits

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, 2004 through June 30, 2005

Age	Medical	Prescription Drug
45	$4,281	$ 880
50	4,844	1,045
55	5,480	1,241
60	6,509	1,439
65	1,349	1,668
70	1,702	1,797
75	2,071	1,936
80	2,231	1,985

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

Table 1
Alaska TRS
Total Turnover Assumptions

Select Rates of Turnover During the First 8 Years of Employment

Year of Employment	Rate
1	.10
2	.10
3	.09
4	.09
5	.08
6	.07
7	.06
8	.05

Ultimate Rates of Turnover After the First 8 Years of Employment

Ages	Rate
20+	.04

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

Table 2
Alaska TRS
Disability Rates
Annual Rates Per 1,000 Employees

Age	Rate	Age	Rate
20	.28	43	.54
21	.28	44	.59
22	.29	45	.65
23	.29	46	.70
24	.30	47	.76
25	.30	48	.83
26	.30	49	.89
27	.31	50	.96
28	.32	51	1.04
29	.33	52	1.14
30	.34	53	1.27
31	.34	54	1.42
32	.35	55	1.60
33	.36	56	1.84
34	.37	57	2.14
35	.38	58	2.44
36	.40	59	2.88
37	.41	60	3.37
38	.43	61	3.90
39	.44	62	4.52
40	.46	63	5.22
41	.48	64	5.96
42	.51		

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

Table 3
Alaska TRS
Retirement Rates

Age at Retirement	Retirement Rate
50	.05
51	.05
52	.05
53	.05
54	.05
55	.15
56	.13
57	.10
58	.10
59	.10
60	.10
61	.10
62	.10
63	.17
64	.17
65	.50
66 & up	1.00

Teachers retiring at ages under 50 are assumed to retire immediately upon attaining 21 years of service.

Members currently under age 50 who have already attained 21 years of service are assumed to retire 1 year following the valuation date.

Section 3

Section 3.1 Analysis of financial experience.

Section 3.2 Summary of accrued and unfunded accrued liabilities.

Section 3.3 Solvency test.

3.1 Analysis of Financial Experience

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

		Change in Employer Contribution Rate During Fiscal Year				
Type of Gain or Loss		**2000**	**2001**	**2002**	**2003**	**2004**
(1)	Health Experience	0.00%	0.00%	3.85%	0.00%	0.00%
(2)	Salary Experience	0.00%	(1.68%)	(0.11%)	0.10%	0.54%
(3)	Investment Experience	(3.35%)	1.35%	15.03%	0.43%	0.06%
(4)	Demographic Experience	(0.91%)	2.66%	4.21%	1.35%	(0.85%)
(5)	Contribution Shortfall	0.00%	0.00%	0.00%	1.40%	1.24%
(6)	(Gain) or Loss During Year From Experience, *(1) + (2) + (3) + (4) + (5)*	(4.26%)	2.33%	22.98%	3.28%	0.99%
(7)	Asset Valuation Method	(1.38%)	0.00%	0.03%	0.00%	0.00%
(8)	Past Service Amortization Change	0.00%	0.00%	(9.08%)	0.00%	0.00%
(9)	Assumption Changes	6.68%	0.00%	6.84%	0.00%	1.94%
(10)	System Benefit Changes	0.00%	0.17%	0.00%	0.00%	0.00%
(11)	Administrative System Changes	0.00%	3.49%	0.00%	0.00%	0.00%
(12)	Ad hoc PRPA	0.16%	0.16%	0.36%	0.00%	0.00%
(13)	Composite (Gain) or Loss During Year, *(6) + (7) + (8) + (9) + (10) + (11) + (12)*	1.20%	6.15%	21.13%	3.28%	2.93%
(14)	Beginning Total Employer Contribution Rate	7.09%	8.29%	14.44%	35.57%	38.85%
(15)	Ending Total Employer Contribution Rate, *(13) + (14)*	8.29%	14.44%	35.57%	38.85%	41.78%
(16)	Fiscal Year Above Rate is Applied	FY03	FY04	FY05	FY06	FY07

3.2 Summary of Accrued and Unfunded Accrued Liabilities

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, 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%
June 30, 1996[2]	2,940,437	2,858,756	97.2%	81,681	465,182	17.6%
June 30, 1995	2,913,467	2,647,392	90.9%	266,075	477,205	55.8%

(1) Change in Asset Valuation Method

(2) Change of Assumptions

(3) Change in Methods

3.3 Solvency Test

	Aggregate Accrued Liability For:				Portion of Accrued Liabilities Covered by Assets		
Valuation Date	(1) Active Member Contributions (000's)	(2) Inactive Members (000's)	(3) Active Members (Employer-Financed Portion) (000's)	Valuation Assets (000's)	(1)	(2)	(3)
June 30, 2004[2]	$ 569,435	$ 4,423,036	$ 1,131,129	$ 3,845,370	100%	74.1%	0.0%
June 30, 2003	548,947	4,105,445	1,181,217	3,752,285	100%	78.0%	0.0%
June 30, 2002[1][2][3]	523,142	3,755,882	1,132,618	3,689,036	100%	84.3%	0.0%
June 30, 2001	533,752	3,213,431	855,964	4,372,229	100%	100%	73.0%
June 30, 2000[1][2][3]	490,176	2,872,250	836,442	4,184,015	100%	100%	98.2%
June 30, 1999	469,068	2,571,345	680,541	3,815,633	100%	100%	100%
June 30, 1998	449,383	2,344,263	735,111	3,446,070	100%	100%	88.8%
June 30, 1997	483,735	2,095,843	780,491	3,120,044	100%	100%	69.2%
June 30, 1996[2]	451,249	1,689,636	799,552	2,858,756	100%	100%	89.8%
June 30, 1995	437,089	1,531,406	944,972	2,647,392	100%	100%	71.8%

(1) Change in Asset Valuation Method
(2) Change of Assumptions
(3) Change in Methods

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