



State of Alaska

Public Employees' Retirement System

Actuarial Valuation Report as of June 30, 2002

MERCER

Human Resource Consulting

March 13, 2003

State of Alaska
Public Employees' 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 Public Employees' Retirement System has been prepared as of June 30, 2002 by Mercer Human Resource Consulting. The purposes of the report include:

- (1) a review of experience under the Plan for the year ended June 30, 2002;
- (2) a determination of the appropriate contribution rate for each employer in the System;
and
- (3) 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(d) and (f))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(p) and 2.2(q))
- (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 System's staff 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. 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. Information regarding these recent changes is included on pages 4-7 of this report.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY03 and a fixed 25-year level percentage of payroll amortization of the initial unfunded accrued liability and subsequent gains/losses. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. Over time, the contribution rate is expected to remain relatively constant as a percentage of payroll. The ratio of assets to liabilities changed from 100.9% to 75.2% during the year primarily due to continuing poor equity market performance and a change in the asset valuation method. Over the years, progress has been made toward achieving the funding objectives of the System.

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

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

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

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries and are fully qualified to provide actuarial services to the State of Alaska.

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,



Brian R. McGee, FSA, MAAA



James W. Jacobson, ASA, MAAA

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Report Highlights

This report has been prepared by Mercer Human Resource Consulting for the State of Alaska Public Employees' Retirement System to:

- (1) Present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 2002;
- (2) Review experience under the plan for the year ended June 30, 2002;
- (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.

This report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2002 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.

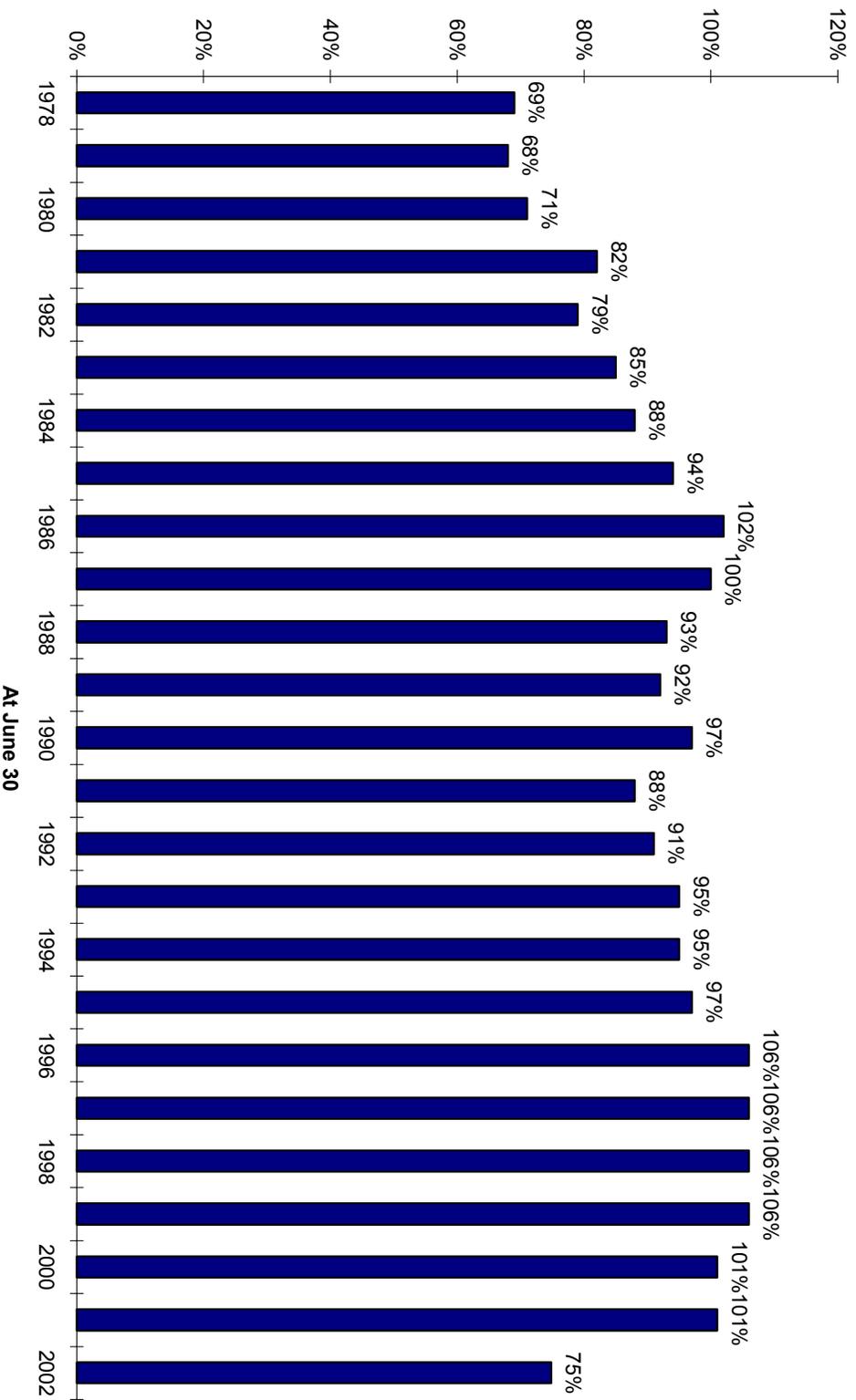
The principal results are as follows:

Funding Status as of June 30	2001	2002
(a) Valuation assets*	\$ 7,941,756	\$ 7,412,833
(b) Accrued liability*		
i) Non-medical benefits	5,528,026	6,133,182
ii) Total benefits (including medical)	7,868,574	9,859,591
(c) Funding Ratio, (a) ÷ (b)		
i) Non-medical benefits	143.7%	120.9%
ii) Total benefits (including medical)	100.9%	75.2%

* In thousands.

Report Highlights (continued)

PERS Funding Ratio History



Report Highlights (continued)

Employer Contribution Rates for Fiscal Year:	2004	2005
(a) Consolidated Rate	9.53%	13.31%
(b) Contribution Rate Adjustment	(4.11%)	N/A
(c) Average Past Service Rate	1.35%	11.60%
(d) Average Employer Contribution Rate <i>(a) + (b) + (c)</i>	6.77%	24.91%
(e) Public Employees' Retirement Board Adopted Average Employer Contribution Rate	6.77%	11.77%

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio as of June 30, 2002 has decreased from 100.9% to 75.2%, a decrease of 25.7%. The average calculated employer contribution rate has increased from 6.77% of payroll for FY04 to 24.91% for FY05, an increase of 18.14% of payroll. The reasons for the change in the funded status and average contribution rate are explained below.

(1) Retiree Medical Insurance

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%

As you can see from the above table, the monthly retiree medical premium for the January 1, 2003 to December 31, 2003 time period has increased to \$720.00. Over the last 10 years, annual premium rate changes have ranged from no change to up 37%, but the average compound annual increase has been about 9%.

Analysis of the Valuation (continued)

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. The difference between the assumed rate and the actual rate will be tracked annually and reduced if the gap becomes too wide. Also, adjustments will be made, if necessary, to the assumed medical premium rate whenever experience and current trends indicate a change is appropriate. The resetting of the assumed total blended premium decreased the funding ratio by 3.4% and increased the average employer contribution rate by 3.68%.

The average employer contribution rate increased by 6.98% of payroll due to the change in the health cost trend assumption and the funded ratio decreased by 6.4%.

(2) Investment Experience

The approximate FY02 investment return based on market values was (5.69%). Due to the change in the asset valuation method, all prior investment gains and losses were recognized at June 30, 2002. This produced a loss of approximately \$1.020 billion to the system from investment experience, which decreased the funding ratio by 10.3% and increased the average employer contribution rate by 7.24%.

(3) Past Service Amortization

As a result of the Actuarial Audit performed in 2002, effective June 30, 2002, the Board adopted a 25-year fixed period level percentage of pay amortization of the Unfunded (Surplus) Target Accrued Liability. This change is consistent with the 5-year recognition of gains or losses used in the new asset valuation method [item (4) below].

The change in the Past Service Amortization methodology decreased the average employer contribution rate by 5.06%.

Analysis of the Valuation (continued)

(4) Asset Valuation Method

As a result of the Actuarial Audit performed in 2002, effective June 30, 2002, the Board adopted an asset valuation method that 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.

Due to this change, the accumulated corridor adjustment from the prior method is now included in the amortization of the unfunded liability. Elimination of the corridor adjustment increased the average employer contribution rate by 4.11%.

(5) Salary Increase

During the period from June 30, 2001, to June 30, 2002, salary increases were less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain which increased the funding ratio by 0.2% and lowered the total employer contribution rate by 0.20% of the total payroll.

(6) Employee Data

Section 2.2 provides statistics on active participants. The number of active participants increased 2.5%, from 32,441 at June 30, 2001 to 33,242 at June 30, 2002. The average age of active participants increased from 43.75 to 43.99 and average credited service decreased from 8.49 to 8.47 years.

The number of benefit recipients increased 5.8%, from 16,274 to 17,215, and their average age increased from 64.55 to 64.70. There was a 7.8% decrease in the number of vested terminated participants, from 6,187 to 5,702. Their average age increased from 47.54 to 47.86.

The overall effect of these participant data changes and methodology adjustments prompted by the actuarial audit was an actuarial loss to the System, resulting in an increase in the average employer contribution rate equal to 1.21% of total payroll.

(7) Ad hoc PRPA

An ad hoc Post Retirement Pension Adjustment (PRPA) was granted during FY02. This increased benefit payments to many Tier I (hired before July 1, 1986) retirees. This action produced a loss to the system of approximately \$20,105,000.

The overall effect of the ad hoc PRPA was an actuarial loss to the System which decreased the funding ratio by 0.3% and increased the average employer contribution rate by 0.14% of total payroll.

Analysis of the Valuation *(continued)*

(8) System Benefit Changes

The following enhancements were effective June 30, 2002:

- For all Police/Fire members, the number of years for calculation of average monthly compensation is now three years.
- The occupational death benefit for survivors of Police/Fire members is now the greater of 50 percent of the member's final salary or 75% of the normal retirement benefit the member would have earned had the member survived to normal retirement age.
- Upon reaching normal retirement age, a disabled Police/Fire member now receives the greater of his/her disability benefit or his/her normal retirement benefit.

These System benefit enhancements increased the average employer contribution rate by 0.04%.

(9) Actuarial Projections

At the Fall 1991 Board Meetings, the PERS Board approved the use of an enhanced actuarial projection system. 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 PERS. 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 immediate future and then remain fairly stable.

Analysis of the Valuation *(continued)*

Summary

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

1. Last year's average employer contribution rate	6.77%
2. Change due to:	
a. Resetting FY03 assumed total blended medical premium	3.68%
b. Health Cost trend assumption change	6.98%
c. Asset methodology change - immediate recognition of deferred losses	7.24%
d. Asset methodology change - elimination of corridor adjustments	4.11%
e. System benefit changes	0.04%
f. Ad hoc PRPA	0.14%
g. Salary increases	(0.20%)
h. Demographic experience	1.21%
i. Past service amortization change	(5.06%)
3. Average employer contribution rate this year	24.91%

Section 1

This section sets forth the results of the actuarial valuation.

- Section 1.1(a) Statement of net assets.
- Section 1.1(b) Changes in net assets during FY02 and investment return during FY02.
- Section 1.1(c) Expected valuation assets.
- Section 1.1(d) Actuarial value of assets.
- Section 1.2(a) Actuarial present values for Police/Fire.
- Section 1.2(b) Actuarial present values for Others.
- Section 1.3(a) Average employer contribution rate for Police/Fire for FY05.
- Section 1.3(b) Average employer contribution rate for Others for FY05.
- Section 1.3(c) Average employer contribution rate for all members for FY05.
- Section 1.4 Actuarial gain or loss for FY02.
- Section 1.5 Actuarial projections.

1.1(a) Statement of Net Assets

As of June 30, 2002 (in thousands)	Pension	Postemployment Healthcare	Total Market Value
Cash and Cash Equivalents	\$ 2,526	\$ 1,027	\$ 3,553
Domestic Equity Pool	1,978,677	729,663	2,708,340
Retirement Fixed Income Pool	1,616,313	656,855	2,273,168
International Equity Pool	868,586	352,986	1,221,572
Real Estate Pool	412,699	167,718	580,417
International Fixed Income Pool	177,589	72,171	249,760
Private Equity Pool	139,265	56,597	195,862
Emerging Markets Equity Pool	49,942	20,296	70,238
External Domestic Fixed Income Pool	76,197	30,966	107,163
Loans and Mortgages (Net of Reserves)	67	27	94
Other Current Assets	17	7	24
Net Accrued Receivables	1,879	763	2,642
Total Assets	\$ 5,323,757	\$ 2,089,076	\$ 7,412,833

1.1(b) Statement of Changes in Net Assets

Fiscal Year 2002	Pension	Postemployment Healthcare	Total Market Value
(1) Net Assets, June 30, 2001, (market value)	\$ 5,796,189	\$ 2,292,193	\$ \$8,088,382
(2) Additions:			
(a) Plan Member Contributions	71,558	29,081	100,639
(b) Employer Contributions	67,385	27,384	94,769
(c) Interest and Dividend Income	195,432	79,422	274,854
(d) Net Appreciation (Depreciation) in Fair Value of Investments	(502,081)	(204,041)	(706,122)
(e) Net Recognized Mortgage Loan Recovery	<u>66</u>	<u>27</u>	<u>93</u>
(f) Total Additions	(167,640)	(68,127)	(235,767)
(3) Deductions:			
(a) Medical Benefits	0	124,805	124,805
(b) Retirement Benefits	279,731	0	279,731
(c) Refunds of Contributions	9,150	3,719	12,869
(d) Investment Expenses	12,155	4,939	17,094
(e) Administrative Expenses	<u>3,756</u>	<u>1,527</u>	<u>5,283</u>
(f) Total Deductions	304,792	134,990	439,782
(4) Net Assets, June 30, 2002, (market value)	\$ 5,323,757	\$ 2,089,076	\$ \$7,412,833

Approximate Market Value Investment Return Rate During FY02,
Net of Expenses

(5.69%)

1.1(c) Actuarial Value of Assets

Due to the change in the asset valuation method, all prior investment gains and losses were recognized in the actuarial value of assets. As of June 30, 2002, the actuarial value of assets equals the market value of \$7,412,833. Future investment gains and losses will be recognized 20% per year over 5 years.

1.2(a) Actuarial Present Values - Police/Fire

As of June 30, 2002 (in thousands)	Normal Cost	Accrued Liability
Active Members		
Retirement Benefits	\$ 19,444	\$ 313,386
Termination Benefits	1,565	14,340
Disability Benefits	325	9,029
Death Benefits	269	12,305
Return of Contributions	581	2,469
Medical Benefits	9,025	142,560
Indebtedness	0	(9,490)
Retirement Incentive Program Receivable	0	0
Subtotal	31,209	484,599
Inactive Members		
Not Vested	\$ 0	\$ 2,028
Vested Terminations		
- Retirement Benefits	0	20,467
- Medical Benefits	0	28,443
- Indebtedness	0	(711)
Retirees & Beneficiaries		
- Retirement Benefits	0	734,181
- Medical Benefits	0	240,940
Subtotal	0	1,025,348
Totals	\$ 31,209	\$ 1,509,947

1.2(b) Actuarial Present Values - Others

As of June 30, 2002 (in thousands)	Normal Cost	Accrued Liability
Active Members		
Retirement Benefits	\$ 114,591	\$ 1,653,977
Termination Benefits	18,178	198,376
Disability Benefits	1,004	17,740
Death Benefits	2,174	61,342
Return of Contributions	8,030	30,736
Medical Benefits	107,322	1,177,514
Indebtedness	0	(65,788)
Retirement Incentive Program Receivable	0	0
Subtotal	251,299	3,073,897
Inactive Members		
Not Vested	\$ 0	\$ 45,302
Vested Terminations		
- Retirement Benefits	0	417,435
- Medical Benefits	0	767,717
- Indebtedness	0	(10,769)
Retirees & Beneficiaries		
- Retirement Benefits	0	2,686,827
- Medical Benefits	0	1,369,235
Subtotal	0	5,275,747
Totals	\$ 251,299	\$ 8,349,644

1.3(a) Average Employer Contribution Rate – FY05 Police/Fire

Consolidated Rate	In Thousands
(1) Total Normal Cost	\$ 31,209
(2) Total Salaries	157,632
(3) Normal Cost Rate for Police/Fire, (1) ÷ (2)	19.80%
(4) Member Contribution Rate (Police/Fire)	7.50%
(5) Consolidated Employer Normal Cost Rate For Police/Fire, (3) – (4)	12.30%
Past Service Rate	
(1) Accrued Liability with 2% Load	\$ 1,540,146
(2) Valuation Assets	1,135,238 ¹
(3) Unfunded Loaded Liability, (1) – (2)	404,908
(4) Amortization Factor (25 years)	16.246963
(5) Past Service Cost, (3) ÷ (4)	24,922
(6) Total Salaries	157,632
(7) Past Service Rate, (5) ÷ (6)	15.81%
Average Employer Contribution Rate	28.11%

¹ Allocated between Police/Fire and Others in proportion to accrued liability.

1.3(b) Average Employer Contribution Rate – FY05 Others

Consolidated Rate	In Thousands
(1) Total Normal Cost	\$ 251,299
(2) Total Salaries	1,245,054
(3) Normal Cost Rate for Others, (1) ÷ (2)	20.18%
(4) Member Contribution Rate (Other)	6.75%
(5) Consolidated Employer Normal Cost Rate For Others, (3) – (4)	13.43%
 Past Service Rate	
(1) Accrued Liability with 2% Load	\$ 8,516,637
(2) Valuation Assets	6,277,595 ²
(3) Unfunded Loaded Liability, (1) – (2)	2,239,042
(4) Amortization Factor (25 years)	16.246963
(5) Past Service Cost, (3) ÷ (4)	137,813
(6) Total Salaries	1,245,054
(7) Past Service Rate, (5) ÷ (6)	11.07%
 Average Employer Contribution Rate	 24.50%

² Allocated between Police/Fire and Others in proportion to accrued liability.

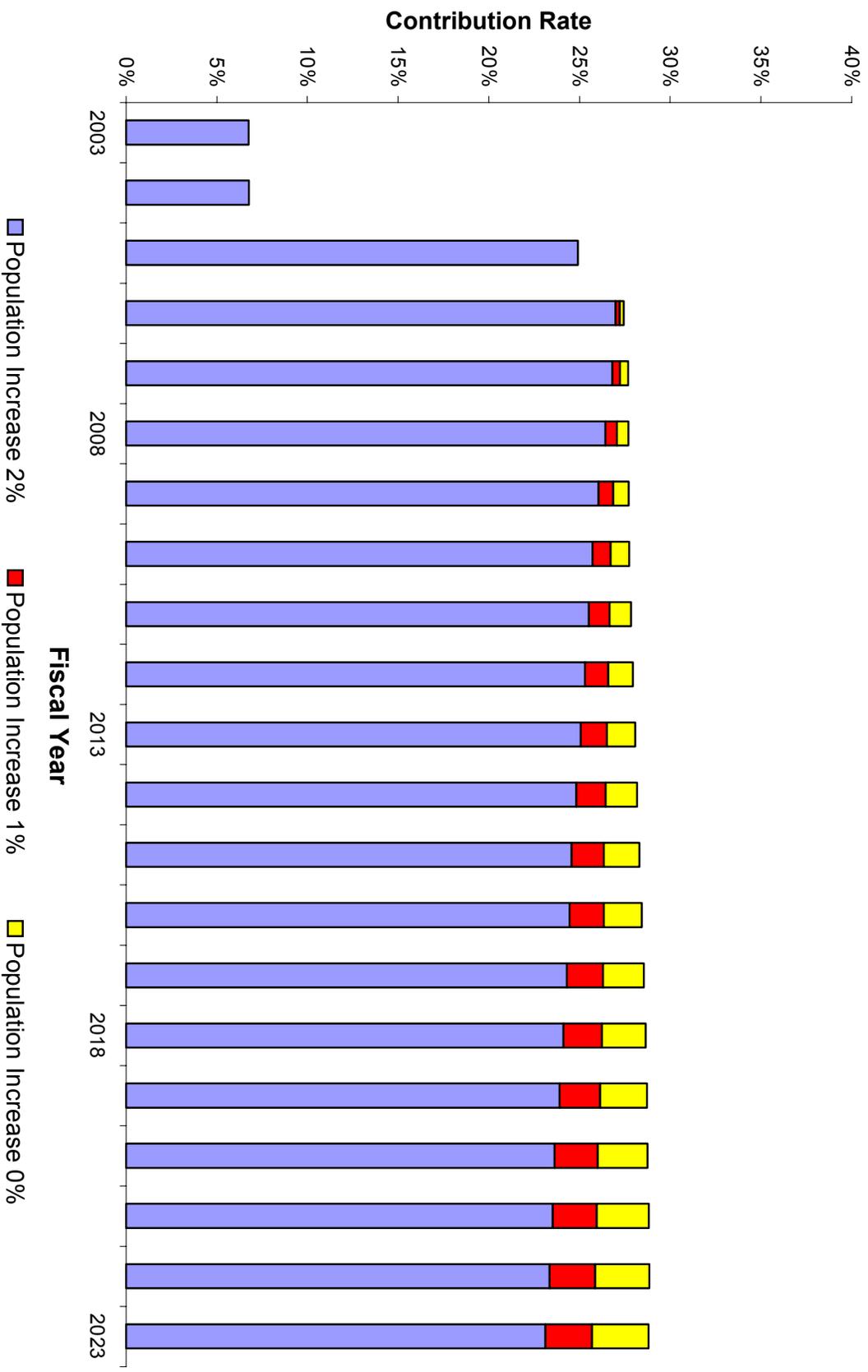
1.3(c) Average Employer Contribution Rate – FY05 All Members

Consolidated Rate	In Thousands
(1) Total Normal Cost	\$ 282,508
(2) Total Salaries	1,402,686
(3) Normal Cost Rate All Members, (1) ÷ (2)	20.14%
(4) Member Contribution Rate	6.83%
(5) Consolidated Employer Normal Cost Rate For All Members, (3) – (4)	13.31%
 Past Service Rate	
(1) Accrued Liability with 2% Load	\$ 10,056,783
(2) Valuation Assets	7,412,833
(3) Unfunded Loaded Liability, (1) – (2)	2,643,950
(4) Amortization Factor (25 years)	16.246963
(5) Past Service Cost, (3) ÷ (4)	162,735
(6) Total Salaries	1,402,686
(7) Past Service Rate, (5) ÷ (6)	11.60%
 Average Employer Contribution Rate	 24.91%

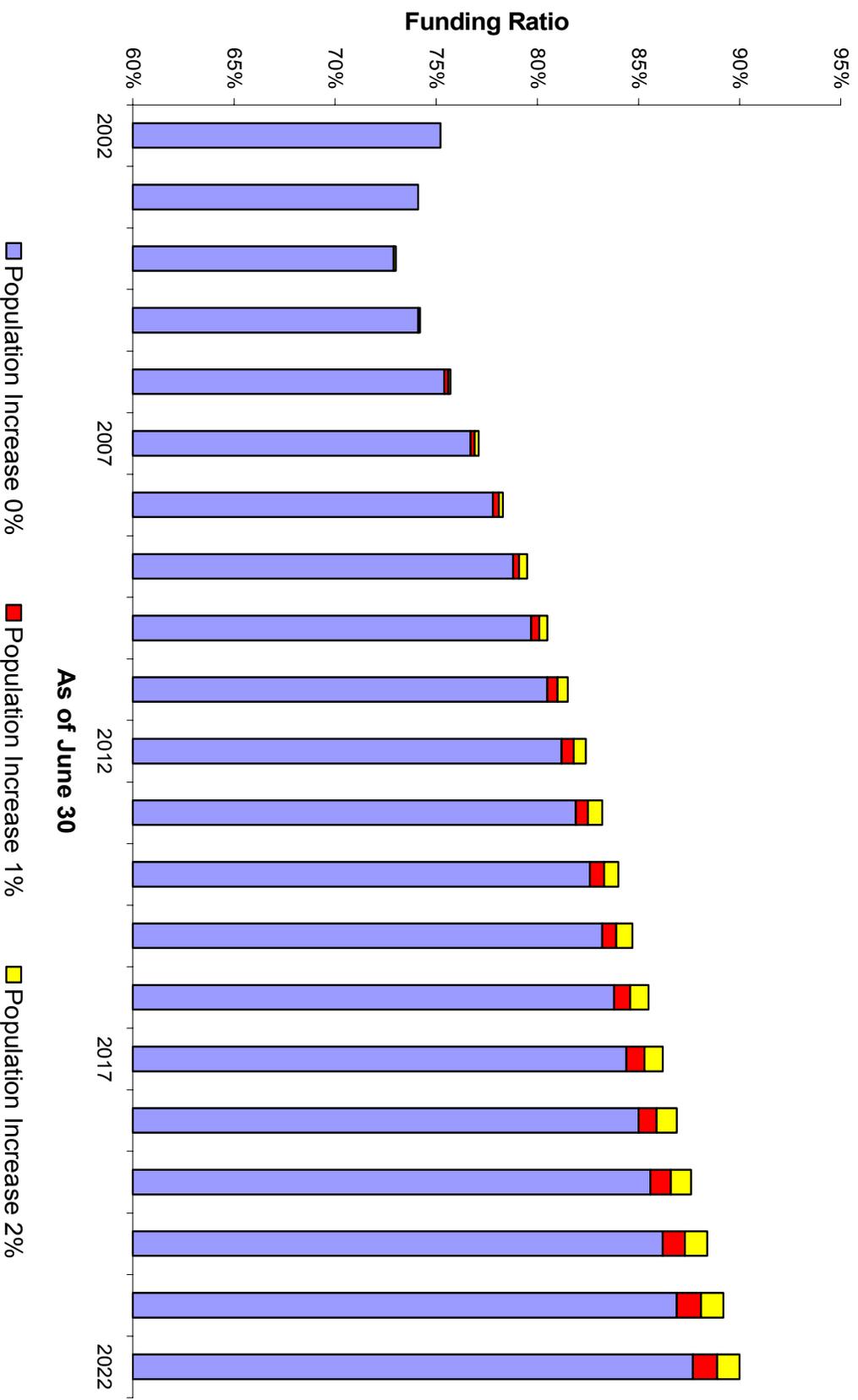
1.4 Actuarial Gain/(Loss) for FY02

	In Thousands
(1) Expected Actuarial Accrued Liability	
(a) Accrued Liability, June 30, 2001	\$ 7,868,574
(b) Normal Cost for FY02	222,589
(c) Interest on (a) and (b) at 8.25%	667,521
(d) Benefit Payments for FY02	404,536
(e) Refund of Contributions for FY02	12,869
(f) Interest on (d) and (e) at 8.25% for one-half year	17,218
(g) Expected accrued liability before changes, (a) + (b) + (c) - (d) - (e) - (f)	8,324,061
(h) Net Increase in Accrued Liability due to System Benefit Changes	3,091
(i) Net Increase in Accrued Liability due to Assumption Changes	1,133,791
(j) Expected Accrued Liability, June 30, 2002, (g) + (h) + (i)	9,460,943
(2) Actual Accrued Liability, June 30, 2002	9,859,591
(3) Liability Gain/(Loss), (1)(j) - (2)	(398,648)
(4) Expected Actuarial Asset Value	
(a) Actuarial Asset Value, June 30, 2001	7,941,756
(b) Interest on (a) at 8.25%	655,195
(c) Employee Contributions for FY02	100,639
(d) Employer Contributions for FY02	94,769
(e) Interest on (c) and (d) at 8.25% for one-half year	8,061
(f) Benefit Payments for FY02	404,536
(g) Refund of Contributions for FY02	12,869
(h) Interest on (f) and (g) at 8.25% for one-half year	17,218
(i) Expected Actuarial Asset Value, June 30, 2002, (a) + (b) + (c) + (d) + (e) - (f) - (g) - (h)	8,365,797
(5) Actuarial Asset Value, June 30, 2002 (before method change)	8,432,862
(6) Actuarial Asset Gain/(Loss), (5) - (4)(i)	\$ 67,065
(7) Effect of Asset Method Change	(1,020,029)
(8) Actuarial Asset Value, June 30, 2002, (5) + (6)	7,412,833
(9) Actuarial Gain/(Loss), (3) + (6)	\$ (331,583)

1.5 Actuarial Projections Projected Contribution Rates



1.5 Actuarial Projections (continued) Projected Funding Ratios



1.5 Actuarial Projections (continued)

As of June 30	Investment Return			Annual Population Increase			State of Alaska PERs Financial Projections (in thousands)									
	Total 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 Gain/(Loss)	Ending Asset Value		
2002	7,412,833	9,859,591	75.2%	(2,446,758)	1,402,686	6.75%	96,179	97,319	193,497	475,249	(281,752)	599,936	0	7,731,018		
2003	7,731,018	10,429,890	74.1%	(2,698,872)	1,447,055	6.77%	99,515	100,397	199,912	514,405	(314,493)	624,836	0	8,041,361		
2004	8,041,361	11,026,585	72.9%	(2,985,224)	1,492,827	24.91%	377,764	103,569	481,333	559,136	(77,803)	660,203	0	8,623,761		
2005	8,623,761	11,644,233	74.1%	(3,020,472)	1,539,943	27.44%	429,122	106,824	535,946	609,236	(73,290)	708,437	0	9,258,908		
2006	9,258,908	12,279,740	75.4%	(3,020,831)	1,588,133	27.67%	446,344	110,170	556,514	663,458	(106,944)	759,448	0	9,911,413		
2007	9,911,413	12,928,051	76.7%	(3,016,638)	1,637,933	27.69%	460,769	113,648	574,417	722,859	(148,442)	811,568	0	10,574,539		
2008	10,574,539	13,597,208	77.8%	(3,022,669)	1,689,960	27.70%	475,504	117,257	592,761	788,420	(195,659)	864,329	0	11,243,208		
2009	11,243,208	14,274,980	78.8%	(3,031,772)	1,743,624	27.74%	491,443	120,986	612,430	855,509	(243,079)	917,538	0	11,917,667		
2010	11,917,667	14,961,312	79.7%	(3,043,646)	1,799,162	27.84%	508,852	124,852	633,704	923,922	(290,218)	971,236	0	12,598,684		
2011	12,598,684	15,656,152	80.5%	(3,057,468)	1,856,815	27.94%	527,259	128,870	656,129	993,458	(337,329)	1,025,477	0	13,286,831		
2012	13,286,831	16,359,444	81.2%	(3,072,613)	1,916,823	28.06%	546,638	133,057	679,695	1,063,914	(384,219)	1,080,315	0	13,982,927		
2013	13,982,927	17,071,137	81.9%	(3,088,210)	1,979,424	28.18%	566,978	137,429	704,407	1,135,087	(430,680)	1,135,826	0	14,688,073		
2014	14,688,073	17,791,176	82.6%	(3,103,103)	2,044,859	28.29%	588,251	142,003	730,255	1,206,773	(476,519)	1,192,110	0	15,403,664		
2015	15,403,664	18,519,508	83.2%	(3,118,466)	2,113,367	28.43%	610,987	146,796	757,782	1,278,772	(520,989)	1,249,312	0	16,131,987		
2016	16,131,987	19,256,080	83.8%	(3,124,093)	2,185,187	28.55%	634,549	151,822	786,371	1,350,879	(564,508)	1,307,603	0	16,875,082		
2017	16,875,082	20,000,837	84.4%	(3,125,755)	2,260,560	28.64%	658,816	157,100	815,916	1,422,893	(606,977)	1,367,156	0	17,635,260		
2018	17,635,260	20,753,727	85.0%	(3,118,466)	2,339,725	28.71%	709,014	162,644	871,658	1,494,610	(648,286)	1,428,167	0	18,415,141		
2019	18,415,141	21,514,695	85.6%	(3,099,554)	2,422,921	28.74%	736,709	168,473	905,182	1,565,829	(688,342)	1,490,855	0	19,217,654		
2020	19,217,654	22,283,689	86.2%	(3,066,035)	2,510,388	28.82%	764,532	174,601	939,133	1,636,345	(725,036)	1,555,549	0	20,048,167		
2021	20,048,167	23,060,655	86.9%	(3,012,488)	2,602,366	28.84%	792,141	181,045	973,186	1,705,958	(760,381)	1,622,608	0	20,910,394		
2022	20,910,394	23,845,539	87.7%	(2,935,145)	2,699,094	28.81%	792,141	187,822	979,963	1,774,463	(794,500)	1,692,334	0	21,808,228		

Valuation Results

1.5 Actuarial Projections (continued)

Table 2
State of Alaska PERS
Financial Projections (in thousands)

As of June 30	Investment Return					Annual Population Increase					Ending Asset Value			
	Total Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cdb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments		Net Contribs	Investment Earnings	Recognized Gain/(Loss)
2002	7,412,833	9,859,591	75.2%	(2,446,758)	1,402,686	6.75%	96,580	97,725	194,305	475,249	(280,944)	599,970	0	7,731,859
2003	7,731,859	10,430,124	74.1%	(2,698,265)	1,458,946	6.77%	100,751	101,644	202,396	514,408	(312,012)	625,008	0	8,044,854
2004	8,044,854	11,028,555	72.9%	(2,983,701)	1,517,462	24.91%	385,648	105,730	491,378	559,250	(67,872)	660,901	0	8,637,883
2005	8,637,883	11,649,682	74.1%	(3,011,799)	1,578,596	27.21%	438,228	109,989	548,217	609,544	(61,327)	710,096	0	9,286,651
2006	9,286,651	12,290,801	75.6%	(3,004,150)	1,642,165	27.23%	456,304	114,435	570,739	664,043	(93,304)	762,300	0	9,955,647
2007	9,955,647	12,947,307	76.9%	(2,991,659)	1,708,795	27.05%	471,730	119,120	590,850	723,796	(132,946)	815,857	0	10,638,559
2008	10,638,559	13,629,207	78.1%	(2,990,649)	1,779,352	26.85%	487,718	124,049	611,766	789,793	(178,027)	870,337	0	11,330,869
2009	11,330,869	14,322,433	79.1%	(2,991,564)	1,853,115	26.71%	505,296	129,209	634,506	857,228	(222,722)	925,609	0	12,033,756
2010	12,033,756	15,028,136	80.1%	(2,994,380)	1,930,464	26.65%	525,212	134,628	659,840	925,950	(266,111)	981,808	0	12,749,453
2011	12,749,453	15,747,471	81.0%	(2,998,017)	2,011,780	26.58%	546,144	140,330	686,474	995,810	(309,336)	1,039,070	0	13,479,187
2012	13,479,187	16,481,589	81.8%	(3,002,403)	2,097,443	26.51%	568,040	146,342	714,382	1,066,657	(352,275)	1,097,502	0	14,224,413
2013	14,224,413	17,231,645	82.5%	(3,007,232)	2,187,832	26.43%	590,918	152,690	743,608	1,138,341	(394,733)	1,157,231	0	14,986,911
2014	14,986,911	17,998,792	83.3%	(3,011,880)	2,283,327	26.34%	614,785	159,400	774,185	1,210,712	(436,528)	1,218,413	0	15,768,797
2015	15,768,797	18,784,182	83.9%	(3,015,385)	2,384,309	26.33%	641,916	166,497	808,413	1,283,621	(475,208)	1,281,323	0	16,574,912
2016	16,574,912	19,588,968	84.6%	(3,014,056)	2,491,157	26.30%	670,030	174,008	844,038	1,356,916	(512,878)	1,346,274	0	17,408,308
2017	17,408,308	20,414,305	85.3%	(3,005,997)	2,604,251	26.23%	698,912	181,959	880,871	1,430,448	(549,577)	1,413,515	0	18,272,246
2018	18,272,246	21,261,345	85.9%	(2,989,099)	2,723,971	26.13%	728,467	190,375	918,842	1,504,067	(585,225)	1,483,320	0	19,170,341
2019	19,170,341	22,131,241	86.6%	(2,960,900)	2,850,698	26.00%	758,586	199,283	957,869	1,577,622	(619,753)	1,555,988	0	20,106,575
2020	20,106,575	23,025,146	87.3%	(2,918,571)	2,984,811	25.95%	793,061	208,708	1,001,769	1,650,964	(649,195)	1,632,013	0	21,089,394
2021	21,089,394	23,944,214	88.1%	(2,854,820)	3,126,690	25.85%	827,787	218,676	1,046,463	1,723,942	(677,479)	1,711,929	0	22,123,843
2022	22,123,843	24,889,598	88.9%	(2,765,754)	3,276,716	25.69%	862,293	229,214	1,091,507	1,796,407	(704,900)	1,796,140	0	23,215,084

1.5 Actuarial Projections (continued)

Table 3

As of June 30	Valuation Amounts on July 1			Flow Amounts During Following 12 Months			Annual Population Increase			Ending Asset Value			
	Total Assets	Accrued Liability	Funding Ratio	Total Salaries	Employer Ctb Rate	Employer Contribs	Total Contribs	Benefit Payments	Net Contribs		Investment Earnings	Recognized Gain/(Loss)	
2002	7,412,833	9,859,591	75.2%	1,402,686	6.75%	96,983	98,132	195,115	475,249	(280,134)	600,003	0	7,732,702
2003	7,732,702	10,430,359	74.1%	1,470,880	6.77%	101,999	102,903	204,902	514,411	(309,509)	625,181	0	8,048,374
2004	8,048,374	11,030,528	73.0%	1,542,389	24.91%	393,670	107,930	501,599	559,365	(57,766)	661,608	0	8,652,217
2005	8,652,217	11,655,176	74.2%	1,618,071	26.99%	447,493	113,239	560,733	609,855	(49,122)	711,782	0	9,314,876
2006	9,314,876	12,302,025	75.7%	1,697,873	26.80%	466,463	118,857	585,320	664,636	(79,316)	765,205	0	10,000,765
2007	10,000,765	12,966,967	77.1%	1,782,558	26.42%	482,968	124,853	607,821	724,754	(116,933)	820,240	0	10,704,073
2008	10,704,073	13,662,827	78.3%	1,873,471	26.04%	500,316	131,238	631,554	791,232	(159,678)	876,499	0	11,420,894
2009	11,420,894	14,372,406	79.5%	1,969,513	25.72%	519,702	137,994	657,696	850,048	(201,352)	933,918	0	12,153,461
2010	12,153,461	15,098,359	80.5%	2,071,317	25.52%	542,373	145,166	687,539	928,111	(240,572)	992,737	0	12,905,625
2011	12,905,625	15,843,342	81.5%	2,179,514	25.30%	566,089	152,796	718,885	998,330	(279,445)	1,053,187	0	13,679,367
2012	13,679,367	16,610,012	82.4%	2,294,735	25.07%	590,771	160,927	751,697	1,069,612	(317,915)	1,115,434	0	14,476,886
2013	14,476,886	17,401,025	83.2%	2,417,612	24.83%	616,473	169,602	786,075	1,141,866	(355,791)	1,179,667	0	15,300,762
2014	15,300,762	18,219,035	84.0%	2,548,777	24.56%	643,241	178,865	822,107	1,215,001	(392,894)	1,246,106	0	16,153,973
2015	16,153,973	19,066,700	84.7%	2,688,860	24.45%	675,626	188,759	864,385	1,288,925	(424,539)	1,315,191	0	17,044,624
2016	17,044,624	19,946,676	85.5%	2,838,495	24.30%	709,213	199,327	908,540	1,363,545	(455,006)	1,387,413	0	17,977,031
2017	17,977,031	20,861,618	86.2%	2,998,312	24.12%	743,661	210,612	954,273	1,438,772	(484,499)	1,463,119	0	18,955,652
2018	18,955,652	21,814,183	86.9%	3,168,942	23.89%	778,893	222,657	1,001,550	1,514,513	(512,963)	1,542,682	0	19,983,370
2019	19,983,370	22,807,026	87.6%	3,351,018	23.63%	814,828	235,505	1,050,332	1,590,676	(540,343)	1,626,504	0	21,071,531
2020	21,071,531	23,842,803	88.4%	3,545,171	23.52%	858,001	249,200	1,107,201	1,667,169	(559,968)	1,715,303	0	22,226,865
2021	22,226,865	24,924,172	89.2%	3,752,033	23.34%	901,608	263,784	1,165,392	1,743,902	(578,511)	1,809,853	0	23,458,208
2022	23,458,208	26,053,787	90.0%	3,972,234	23.11%	944,989	279,301	1,224,289	1,820,783	(596,494)	1,910,697	0	24,772,411

State of Alaska PERS
Financial Projections (in thousands)

Investment Return 8.25%

Annual Population Increase 2.00%

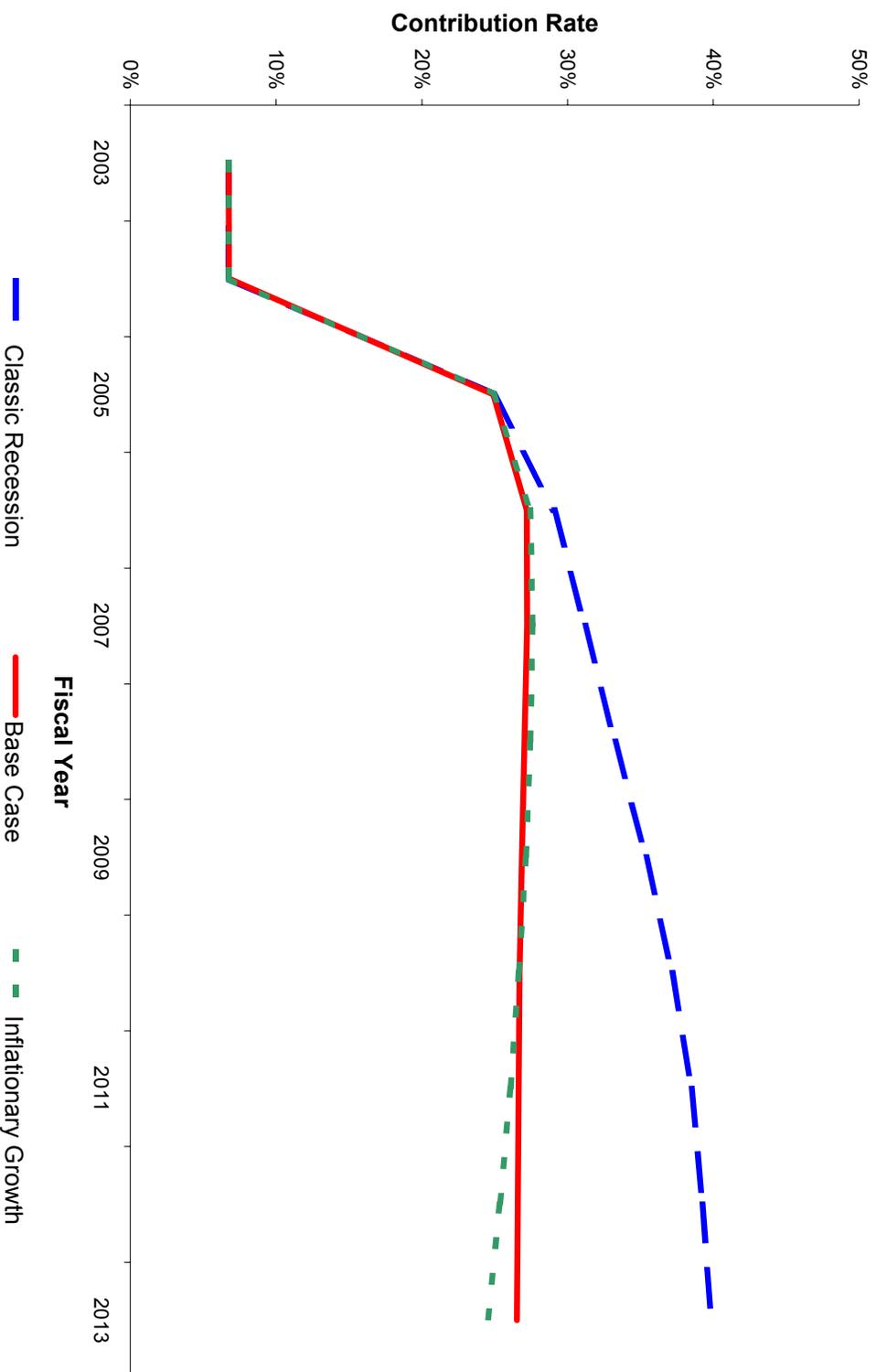
1.5 Actuarial Projections (*continued*)

Economic Scenarios

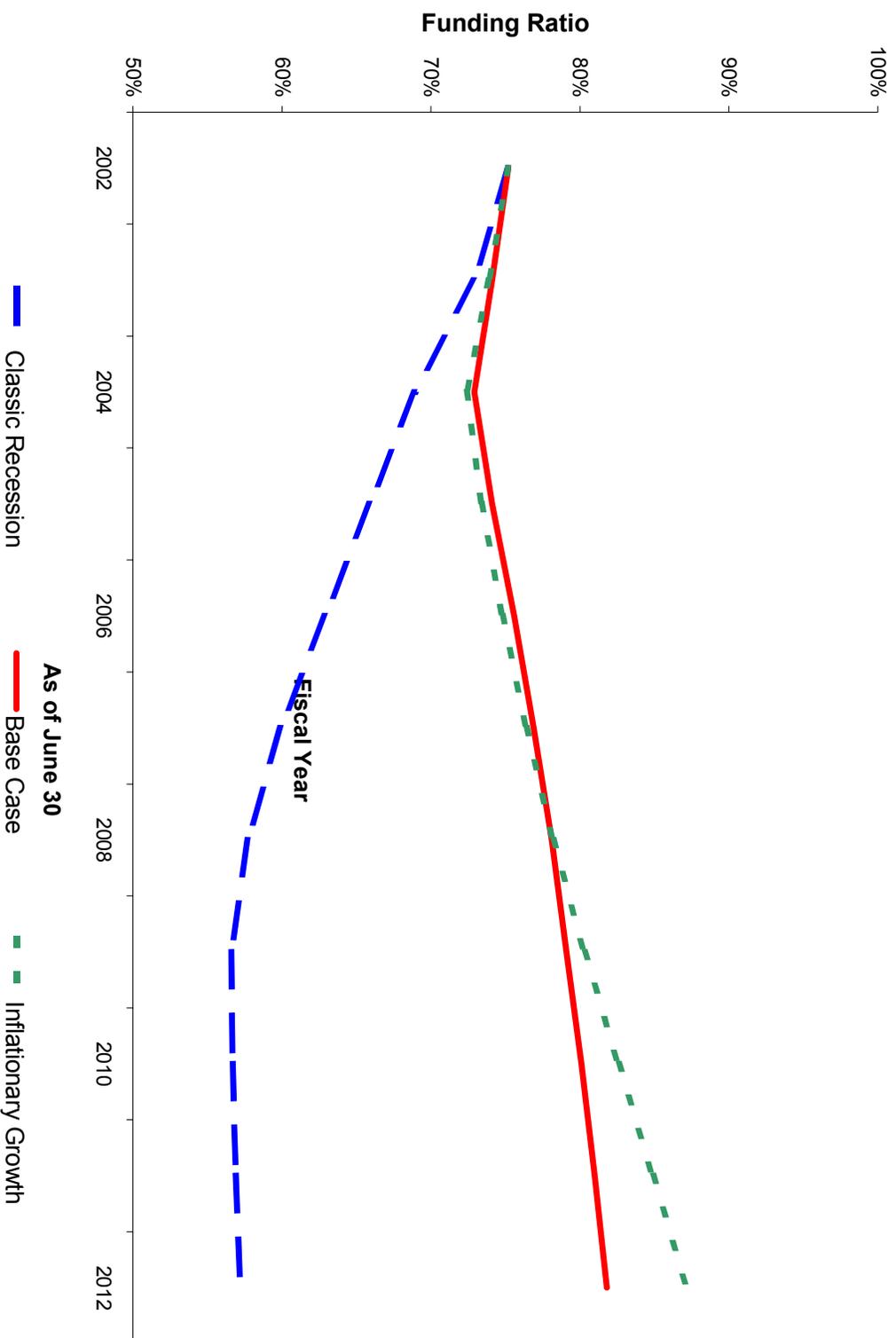
Total Portfolio Investment Return Under Each Scenario:

Year Ending	Inflationary		
	<u>Base Case</u>	<u>Growth</u>	<u>Classic Recession</u>
2003	8.25%	6.50%	-0.90%
2004	8.25%	8.13%	-3.02%
2005	8.25%	8.41%	-5.00%
2006	8.25%	9.80%	6.05%
2007	8.25%	10.08%	5.98%
2008	8.25%	10.08%	5.98%
2009	8.25%	10.08%	5.98%
2010	8.25%	10.08%	5.98%
2011	8.25%	10.08%	5.98%
2012	8.25%	10.08%	5.98%

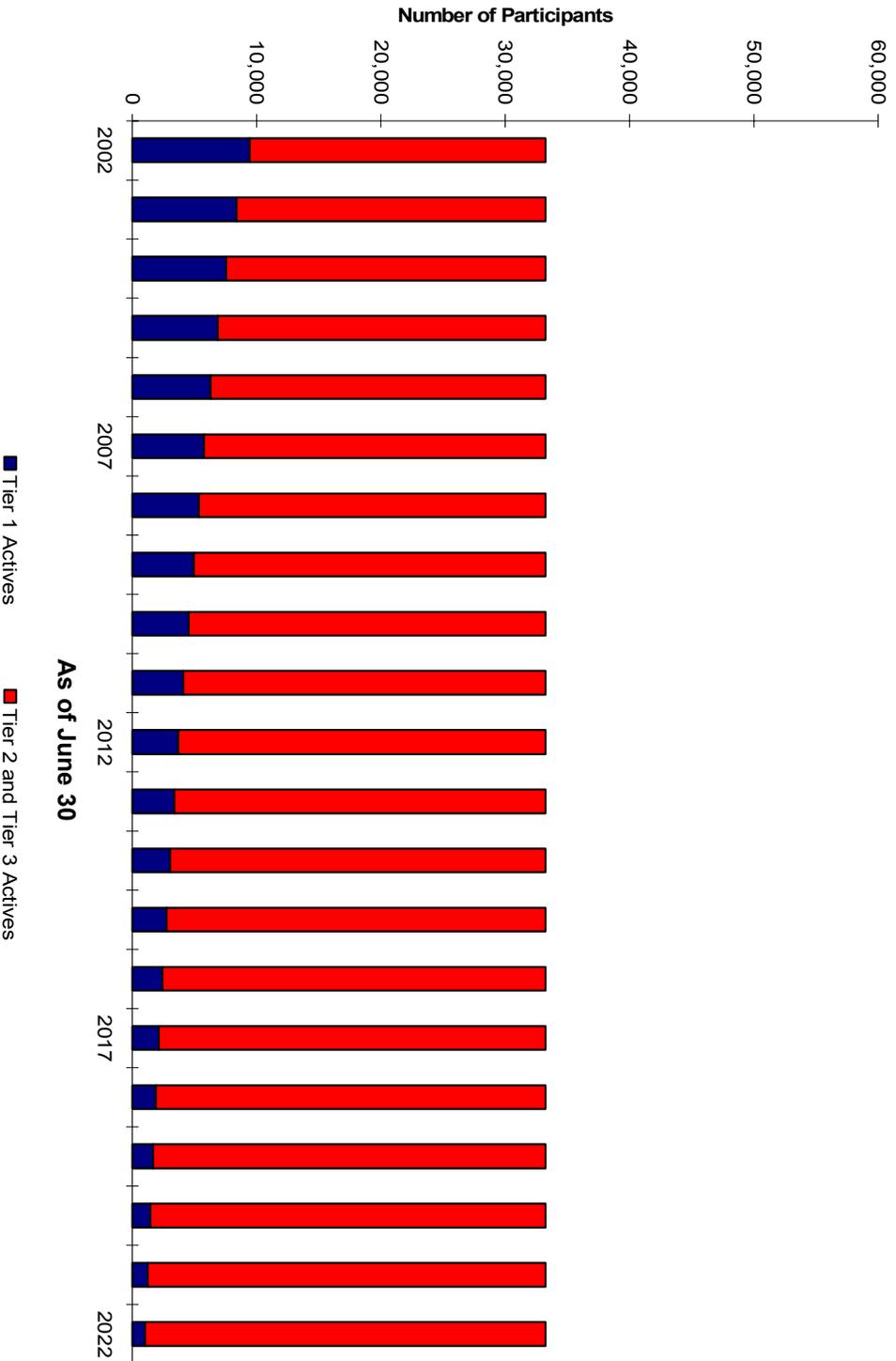
1.5 Actuarial Projections (continued) Economic Scenarios – Projected Contribution Rates Annual Population Increase 1%



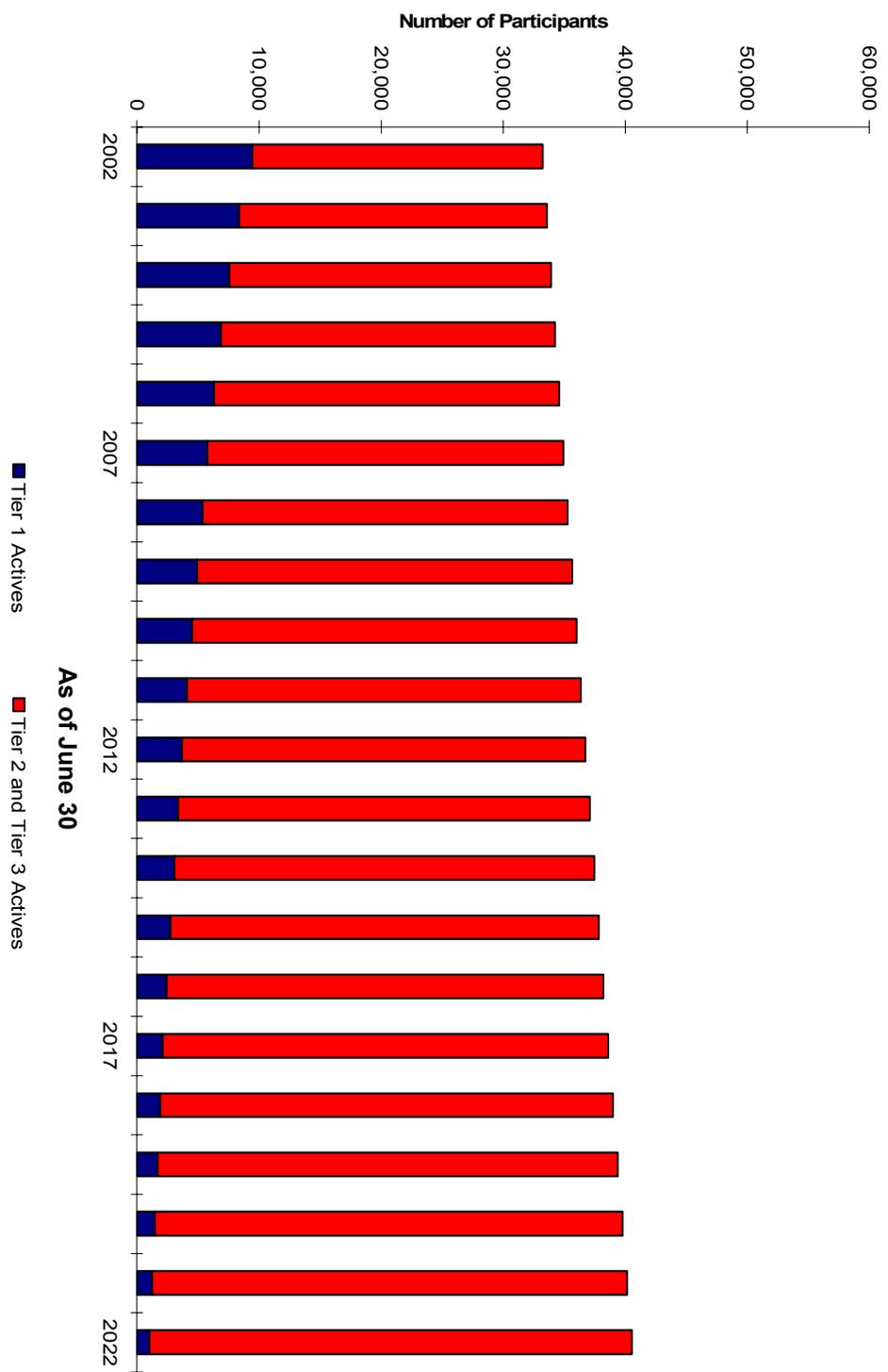
1.5 Actuarial Projections (continued) Economic Scenarios – Projected Funding Ratios Annual Population Increase 1%



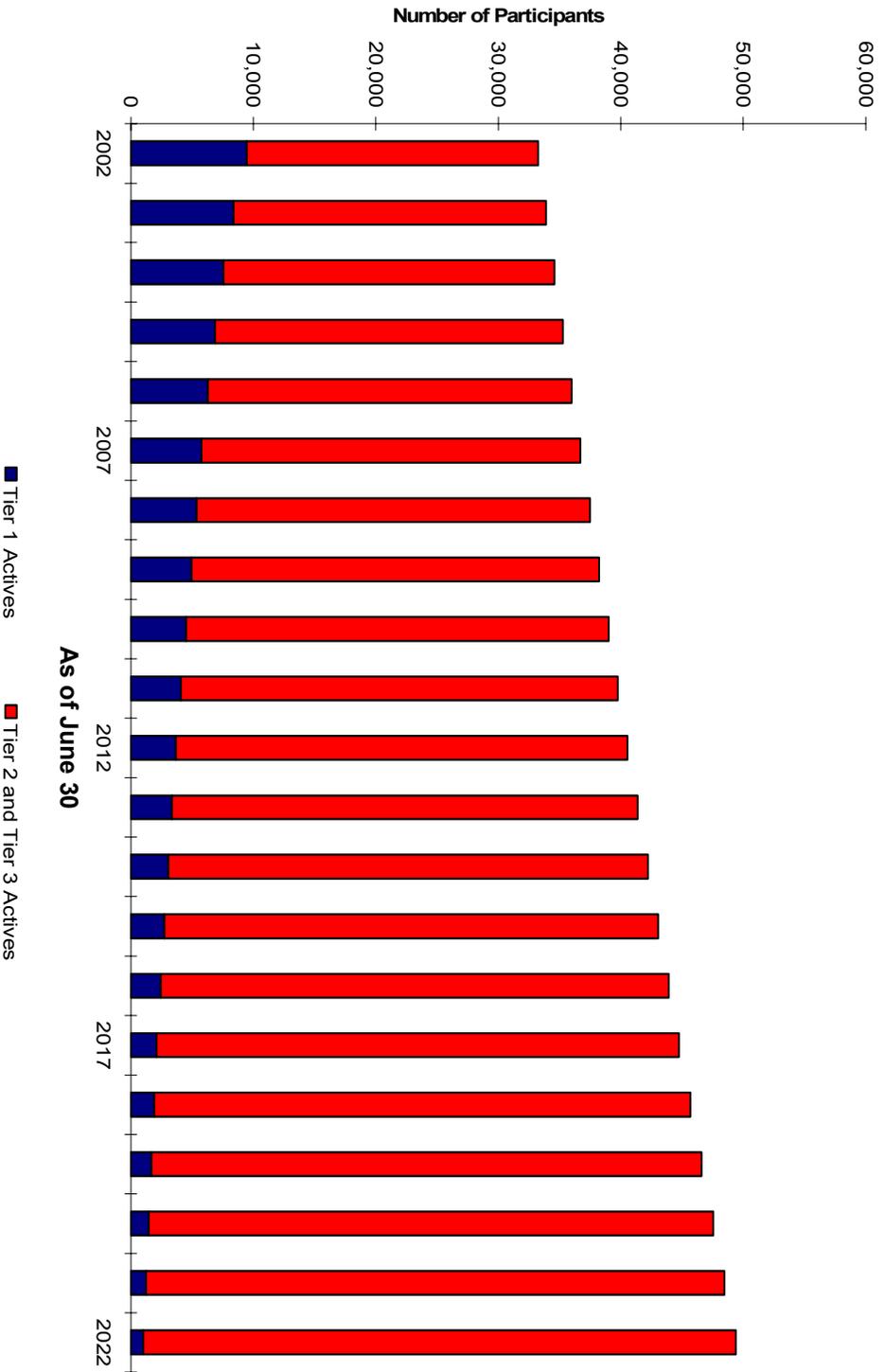
1.5 Actuarial Projections (continued) Projected Active Participant Count Annual Population Increase 0%



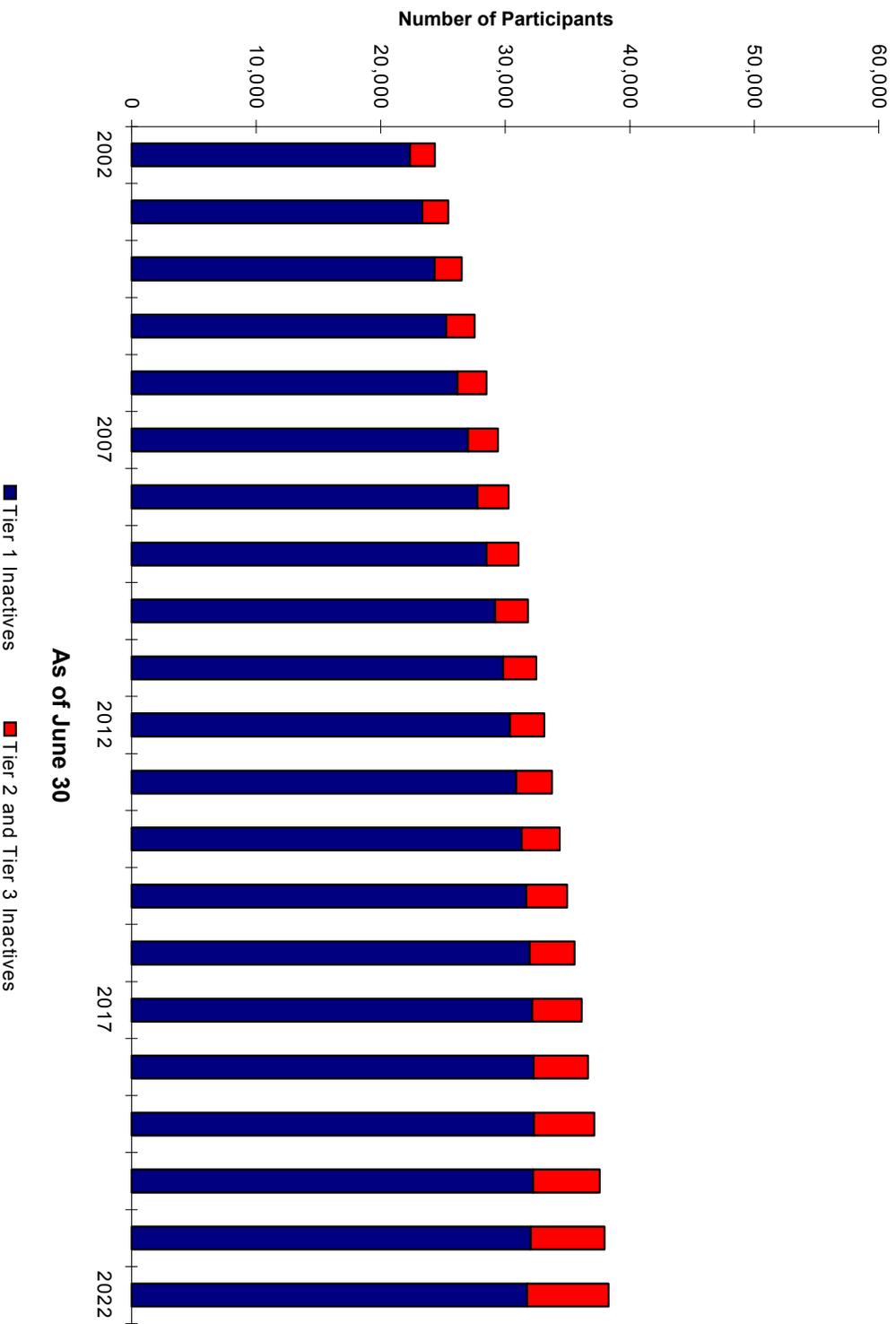
1.5 Actuarial Projections (continued)
Projected Active Participant Count
Annual Population Increase 1%



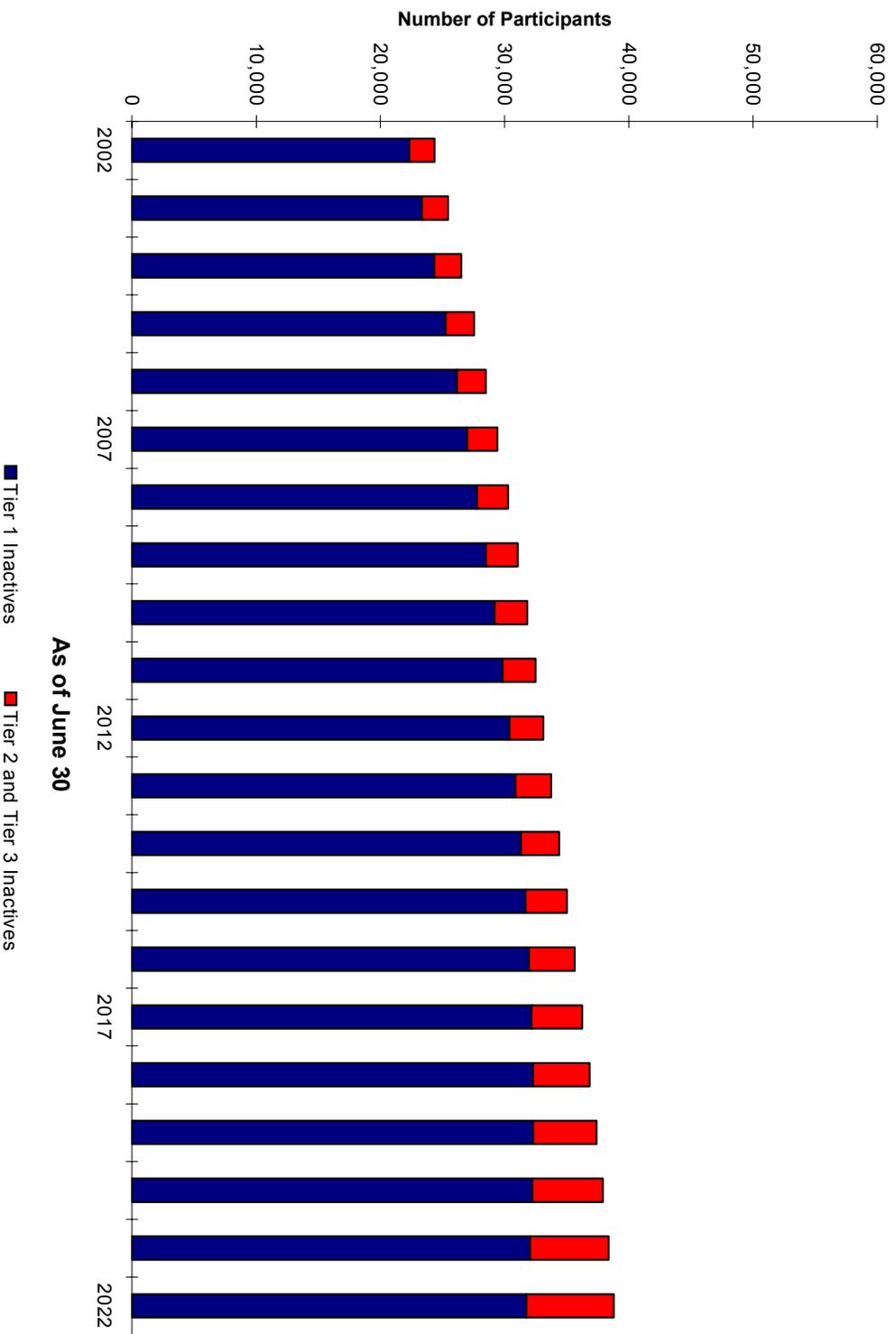
1.5 Actuarial Projections (continued)
Projected Active Participant Count
Annual Population Increase 2%



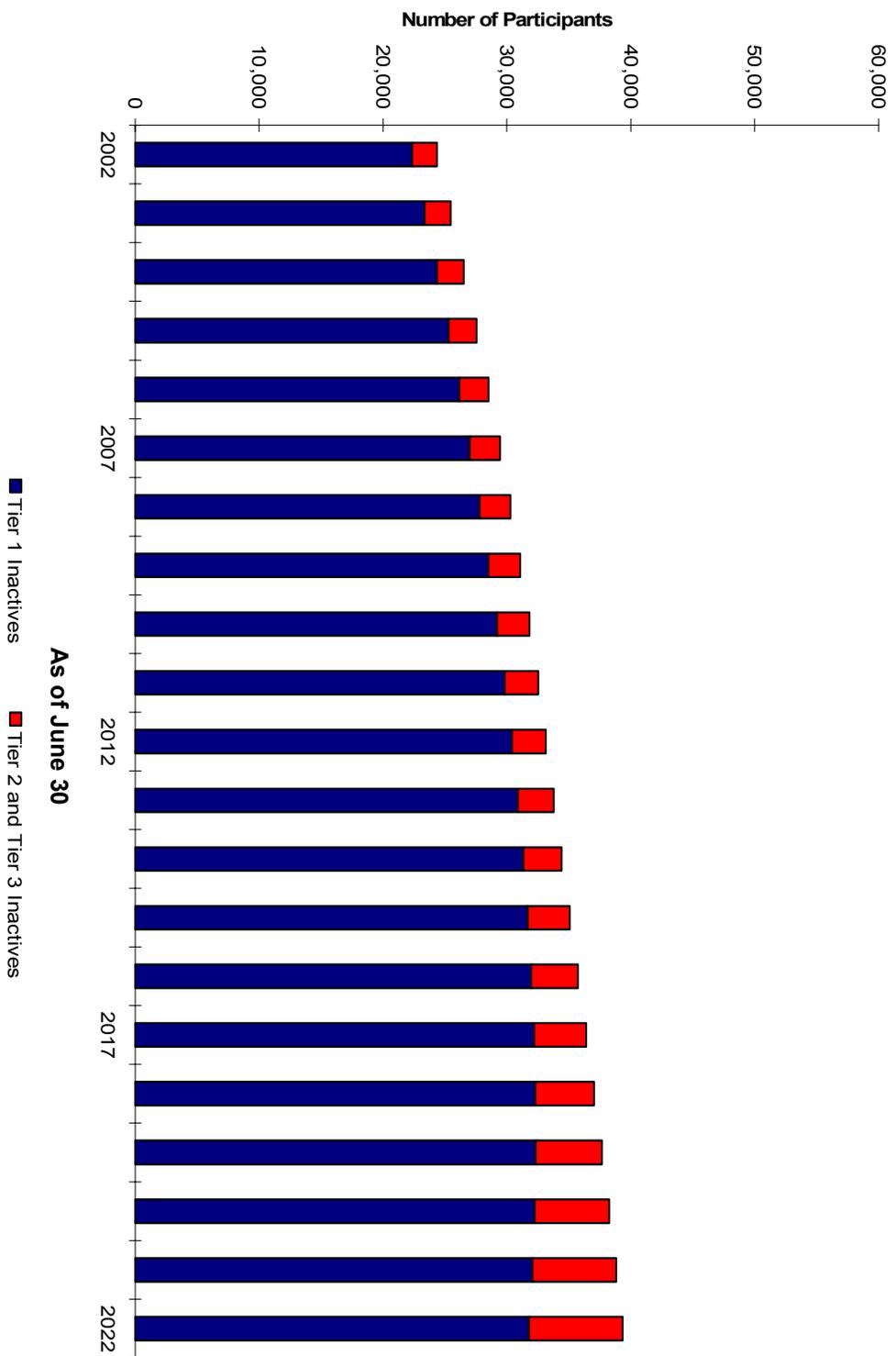
1.5 Actuarial Projections (continued)
Projected Inactive Participant Count
Annual Population Increase 0%



1.5 Actuarial Projections (continued)
Projected Inactive Participant Count
Annual Population Increase 1%



1.5 Actuarial Projections (continued) Projected Inactive Participant Count Annual Population Increase 2%



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, 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 Public Employees' Retirement System

(1) Effective Date

January 1, 1961, with amendments through June 30, 2002. Chapter 82, 1986 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the PERS before July 1, 1986, are eligible for different benefits than members hired after June 30, 1986. Chapter 4, 1996 Session Laws of Alaska created a third tier. Members who were first hired after June 30, 1996 have a 10-year requirement for system paid health benefits and a different Final Average Earnings calculation than members from the other tiers.

(2) Administration of Plan

The Commissioner of Administration is responsible for administering the system. The Public Employees' Retirement Board prescribes policies and 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 PERS funds. The Attorney General represents the system in legal proceedings.

(3) Employers Included

Currently there are 161 employers participating in the PERS, including the State of Alaska and 160 political subdivisions and public organizations.

(4) Membership

PERS membership is mandatory for all permanent full-time and part-time employees of the State of Alaska and participating political subdivisions and public organizations, unless they are specifically excluded by Alaska Statute or employer participation agreements. Employees participating in the University of Alaska's Optional Retirement Plan or other retirement plans funded by the State are not covered by the PERS. Elected officials may waive PERS membership.

Certain members of the Alaska Teachers' Retirement System (TRS) are eligible for PERS retirement benefits for their concurrent elected public official service with municipalities. In addition, employees who work half-time in the PERS and TRS simultaneously are eligible for half-time PERS and TRS credit.

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

(5) Credited Service

Permanent employees who work at least 30 hours a week earn full-time credit; part-time employees working between 15 and 30 hours a week earn partial credit based upon the number of hours worked. Members receiving PERS occupational disability benefits continue to earn PERS credit while disabled.

- Members may claim other types of service, including:
- part-time State of Alaska service rendered after December 31, 1960, and before January 1, 1976;
- service with the State, former Territory of Alaska, or U.S. Government in Alaska before January 1, 1961;
- past peace officer, correctional officer, fire fighter, and special officer service after January 1, 1961;
- military service (not more than five years may be claimed);
- temporary service after December 31, 1960;
- elected official service before January 1, 1981;
- Alaska Bureau of Indian Affairs service;
- past service rendered by employees who worked half-time in the PERS and Teachers' Retirement System (TRS) simultaneously;
- leave without pay service after June 13, 1987, while receiving Workers' Compensation; and
- Village Public Safety Officer service;
- service as a temporary employee of the legislature before July 1, 1979, but this service must be claimed no later than July 1, 2003, or by the date of retirement, if sooner (not more than 10 years may be claimed).

Except for service before January 1, 1961, with the State, former Territory of Alaska, or U.S. Government in Alaska, contributions are required for all past service.

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

Past employment with participating political subdivisions that occurred before the employers joined the PERS is creditable if the employers agree to pay the required contributions.

At the election of certain PERS members, certain service may be credited in the same fashion as members in the State of Alaska Teachers' Retirement System (TRS).

Members employed as dispatchers or within a state correctional facility may, at retirement, elect to convert their dispatcher or correctional facility service from "all other" service to police/fire service and retire under the 20 year retirement option. Members pay full actuarial cost of conversion.

(6) Employer Contributions

Individual contribution rates are established for PERS employers based upon their consolidated and past service rates.

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 determined separately for each employer to amortize their unfunded past service liability with level payments over 25 years. Effective June 30, 1996, funding surpluses are amortized over 25 years.

(7) Member Contributions

Mandatory Contributions: Police/Fire members are required to contribute 7.5% of their compensation; all Others contribute 6.75%. Those all Others who have elected to have their service calculated under the Teachers' Retirement System rules contribute 9.6% of their compensation. Members' contributions are deducted from gross wages before federal income taxes are withheld.

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

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

Voluntary Contributions: Members may voluntarily contribute up to 5% of their salary. Voluntary contributions are recorded in a separate account and are payable to the:

- (a) member in lump sum payment upon termination of employment;
- (b) member's beneficiary if the member dies; or
- (c) member in a lump sum, life annuity, or payments over a designated period of time when the member retires.

Interest: Members' contributions earn 4.5% interest, compounded semiannually on June 30 and December 31.

Refund of Contributions: Terminated members may receive refunds of their member contribution accounts, which includes their mandatory and voluntary 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 PERS service may be reinstated upon reemployment in the PERS. 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.

(8) Retirement Benefits

Eligibility:

- (a) Members, including deferred vested members, are eligible for normal retirement at age 60³, or early retirement at age 55, if they have at least:
 - (i) five years of paid-up PERS service;
 - (ii) 60 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired under the PERS before May 30, 1987;

³ Members participating before July 1, 1986 are eligible for normal retirement at age 55 or early retirement at age 50.

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

- (iii) 80 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired under the PERS after May 29, 1987;
 - (iv) two years of paid-up PERS service and they are vested in the Teachers' Retirement System; or
 - (v) two years of paid-up PERS service and a minimum three years of TRS service to qualify for a public service benefit.
- (b) Members may retire at any age when they have:
- (i) 20 paid-up years of PERS police/fire service; or
 - (ii) 30 paid-up years of PERS "all other" or "elected official" 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 under the "20 and out" or "30 and out" provisions. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

Members may elect an early retirement or a joint and survivor option. Members who entered the PERS prior to July 1, 1986 may also select a level income option. Under these options and early retirement, benefits are actuarially adjusted so that members receive the actuarial equivalents of their normal benefit amounts.

Benefit Calculations: Retirement benefits are calculated by multiplying the average monthly compensation (AMC) times credited PERS service times the percentage multiplier. The AMC is determined by averaging the salaries earned during the five highest (three highest for Police/Fire members or members hired prior to July 1, 1996) consecutive payroll years. Members must earn at least 115 days of credit in the last year worked to include it in the AMC calculation. The PERS pays a minimum benefit of \$25.00 per month for each year of service when the calculated benefit is less.

The percentage multipliers for police/fire members are 2% for the first ten years of service and 2.5% for all service over 10 years.

The percentage multipliers for all Others are 2% for the first ten years, 2.25% for the next ten years, and 2.5% for all remaining service earned on or after July 1, 1986. All service before that date is calculated at 2%.

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

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

(9) Reemployment of Retired Members

Retirement benefits are suspended while retired members are reemployed under the PERS. During reemployment, members earn additional PERS service and contributions are withheld from their wages. A member who retired with a normal retirement benefit can elect to waive payment of PERS contributions. The waiver allows the member to continue receiving the retirement benefit during the period of reemployment. Members who elect the waiver option do not earn additional PERS service. The Waiver Option is not available to members who retired early or under the Retirement Incentive Programs (RIPs).

Members retired under the Retirement Incentive Programs (RIPs) who return to employment under the PERS, Teachers' Retirement System (TRS), or the University of Alaska's Optional Retirement Plan will:

- (a) forfeit the three years of incentive credits that they received;
- (b) owe the PERS 150% of the benefits that they received for state and political subdivision members, and 110% for school district employees, under the 1996-2000 RIP, which may include costs for health insurance, excluding amounts that they paid to participate for the 1986 and 1989 RIPs. Under prior RIPs, the penalty is 110% of the benefits received; 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.

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

(10) Postemployment Healthcare Benefits

Major medical benefits are provided to retirees by the PERS for all employees hired before July 1, 1986. Employees hired after June 30, 1986 with five years of credited service (or ten years of credited service for those first hired after June 30, 1996) must pay the full monthly premium if they are under age sixty and will receive benefits paid by the PERS if they are over age sixty. In addition, peace officers with twenty-five years of peace officer service and other employees with thirty years of membership service receive benefits paid by the PERS, regardless of their age or date of hire.

(11) Disability Benefits

Monthly disability benefits are paid to permanently disabled members until they die, recover or become eligible for normal retirement. Members are appointed to normal retirement on the first of the month after they become eligible.

Occupational Disability: Members are not required to satisfy age or service requirements to be eligible for occupational disability. Monthly benefits are equal to 40% of their gross monthly compensation on the date of their disability. Members on occupational disability continue to earn PERS service until they become eligible for normal retirement. Police/Fire members may elect to retain the disability benefit formula for the calculation of their normal retirement benefits.

Nonoccupational Disability: Members must be vested (five paid-up years of PERS service) to be eligible for nonoccupational disability benefits. Monthly benefits are calculated based on the member's average monthly compensation and PERS service on the date of termination from employment because of disability. Members do not earn PERS service while on nonoccupational disability.

(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 occupational and nonoccupational death provisions, the designated beneficiary receives the lump sum benefit described below.

2.1 Summary of the Alaska Public Employees' Retirement System (continued)

Occupational Death: When an active member dies from occupational causes, a monthly survivor's pension may be paid to the spouse. The pension equals 40% of the member's gross monthly compensation 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 salary on the date of death and service, including service accumulated from the date of the member's death to the normal retirement date. Survivors of Police/Fire members receive the greater of 50% of the member's gross monthly compensation on the date of death or disability, or 75% of the member's monthly normal retirement benefit (including service projected to Normal Retirement).

Death after Occupational Disability: When a member dies while occupationally disabled, benefits are paid as described above in Occupational Death.

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. The monthly benefit is calculated on the member's average monthly compensation and PERS service at the time of termination or death.

Lump Sum Benefit: Upon the death of a member who has less than one year of service, the designated beneficiary receives the member's contribution account, which includes mandatory and voluntary contributions, indebtedness payments, and interest earned. If the member has more than one year of PERS service, the beneficiary also receives \$1,000 and \$100 for each year of PERS service.

Death After Retirement: When a retired member dies, the designated beneficiary receives the member's contribution account, less any benefits already paid. If the member selected a survivor option at retirement, the eligible spouse receives continuing, lifetime monthly benefits.

(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 PERS 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 has been receiving benefits for at least five years.

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

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who first entered the PERS before July 1, 1986, 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 or \$50, whichever is more. The following benefit recipients are eligible:

- (a) members who first entered the PERS before July 1, 1986, and their survivors;
- (b) members who were first entered the PERS after June 30, 1986, and their survivors if they are at least age 65; and
- (c) all disabled members.

2.2(a) Participant Census Information – Total PERS

As of June 30	1997	1998	1999	2001	2002
Active Members					
(1) Number	31,854	31,910	32,214	32,441	33,242
(2) Average Age	43.21	43.32	43.55	43.75	43.99
(3) Average Credited Service	8.56	8.51	8.53	8.49	8.47
(4) Average Annual Earnings	\$ 38,587	\$ 38,716	\$ 39,844	\$ 41,935	\$ 42,196
Retirees and Beneficiaries					
(1) Number	11,802	13,101	14,185	16,274	17,215
(2) Average Age	64.62	64.43	64.67	64.55	64.70
(3) Average Monthly Benefit:					
Base	\$ 941	\$ 994	\$ 1,031	\$ 1,083	\$ 1,110
C.O.L.A.	67	70	73	76	77
P.R.P.A.	212	209	199	214	231
Adjustment	-10	0	0	1	1
Total	1,210	1,273	1,303	1,374	1,419
Vested Terminations					
(1) Number	4,742	5,143	5,395	6,187	5,702
(2) Average Age	45.83	46.20	46.69	47.54	47.86
(3) Average Monthly Benefit	\$ 690	\$ 717	\$ 749	\$ 867	\$ 796
Non-Vested Terminations With Account Balances					
(1) Number	6,260	6,571	7,500 ⁴	11,403 ⁴	11,301 ⁴
(2) Average Account Balance	\$ 2,981	\$ 3,138	\$ 4,631	\$ 2,649	\$ 4,188

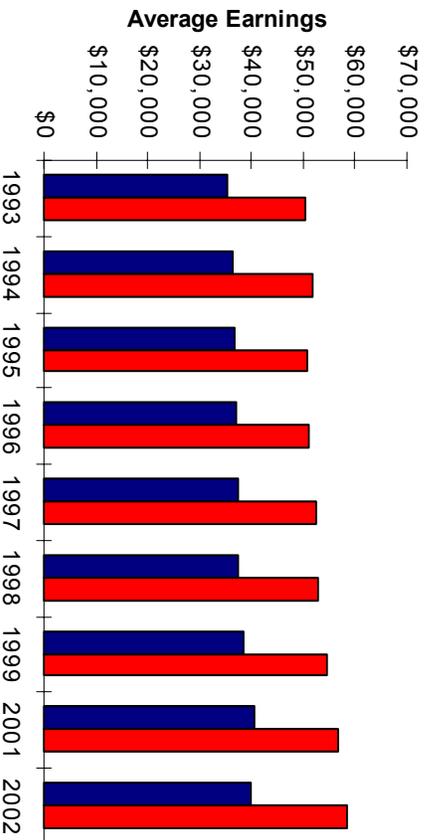
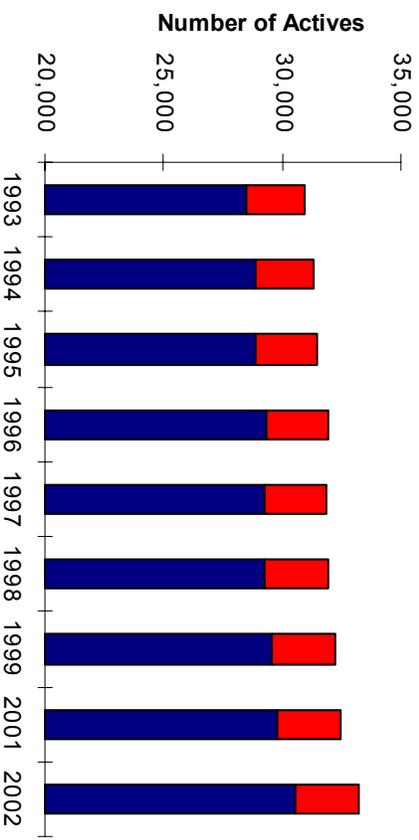
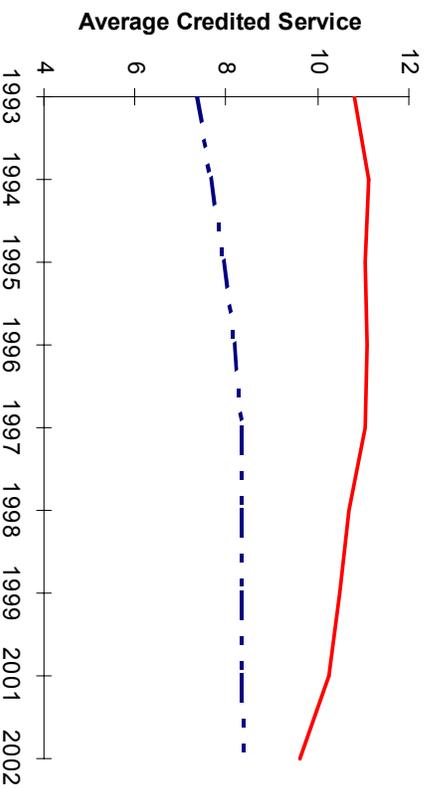
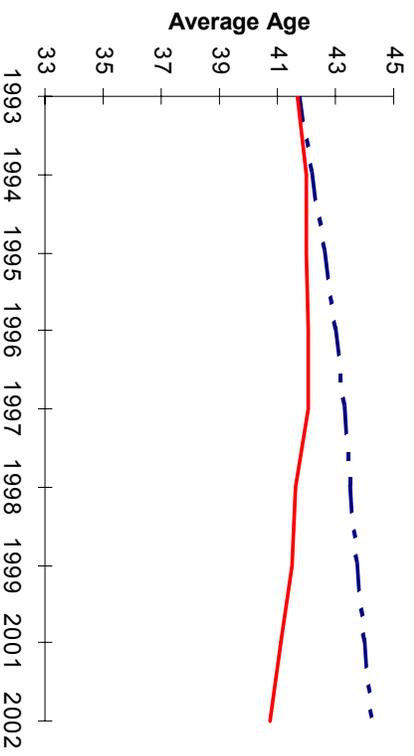
⁴ Includes deceased participants with account balances.

2.2(b) Additional Information – Active Participants

As of June 30	1997	1998	1999	2001	2002
Police/Fire					
(1) Number	2,587	2,617	2,624	2,683	2,695
(2) Average Age	42.04	41.62	41.51	41.11	40.77
(3) Average Credited Service	11.05	10.68	10.50	10.26	9.60
(4) Average Annual Earnings	\$ 52,455	\$ 52,982	\$ 54,437	\$ 56,542	\$ 58,490
(5) Number Vested	1,887	1,799	1,781	1,814	1,715
(6) Percent Who Are Vested	72.9%	68.7%	67.9%	67.6%	63.6%
 Others					
(1) Number	29,267	29,293	29,590	29,758	30,547
(2) Average Age	43.31	43.47	43.73	43.99	44.27
(3) Average Credited Service	8.34	8.32	8.35	8.33	8.37
(4) Average Annual Salary	\$ 37,361	\$ 37,442	\$ 38,550	\$ 40,618	\$ 40,759
(5) Number Vested	17,695	17,335	17,254	16,755	16,944
(6) Percent Who Are Vested	60.5%	59.2%	58.3%	56.3%	55.5%

2.2(b) Additional Information

PERS Active Members at June 30 (continued)



2.2(c) Distribution of Active Participants - Police/Fire

Annual Earnings By Age				Annual Earnings By Credited Service			
Age	Number of People	Total Annual Earnings	Average Annual Earnings	Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	\$ 0	\$ 0	0	135	\$ 5,682,138	\$ 42,090
20-24	63	2,769,937	43,967	1	216	9,489,053	43,931
25-29	286	14,969,367	52,340	2	177	8,894,579	50,252
30-34	470	26,734,421	56,882	3	162	8,487,388	52,391
35-39	413	24,627,944	59,632	4	175	9,613,208	54,933
40-44	445	27,252,683	61,242	0-4	865	42,166,366	48,747
45-49	461	27,846,559	60,405	5-9	682	41,681,873	61,117
50-54	354	21,532,680	60,827	10-14	415	25,404,050	61,215
55-59	166	9,709,993	58,494	15-19	400	25,533,333	63,833
60-64	33	1,979,078	59,972	20-24	259	17,427,097	67,286
65-69	3	145,265	48,422	25-29	63	4,615,174	73,257
70-74	0	0	0	30-34	9	648,480	72,053
75+	1	63,681	63,681	35-39	2	155,235	77,618
				40+	0	0	0
Total	2,695	\$157,631,608	\$ 58,490	Total	2,695	\$157,631,608	\$ 58,490

Years of Credited Service By Age

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	63	0	0	0	0	0	0	0	0	63
25-29	225	61	0	0	0	0	0	0	0	286
30-34	235	205	29	1	0	0	0	0	0	470
35-39	139	152	93	28	1	0	0	0	0	413
40-44	93	108	101	110	28	5	0	0	0	445
45-49	58	76	66	133	110	18	0	0	0	461
50-54	31	58	69	82	85	27	2	0	0	354
55-59	18	17	46	38	27	13	6	1	0	166
60-64	3	4	9	7	8	0	1	1	0	33
65-69	0	0	2	1	0	0	0	0	0	3
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	1	0	0	0	0	0	0	0	1
Total	865	682	415	400	259	63	9	2	0	2,695

2.2(d) Schedule of Active Member Valuation Data – Police/Fire

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2002	2,695	\$ 157,632	\$ 58,490	3.4%	161
June 30, 2001	2,683	151,701	56,542	3.9%	158
June 30, 1999	2,624	142,843	54,437	2.7%	148
June 30, 1998	2,617	138,653	52,982	1.0%	148
June 30, 1997	2,587	135,702	52,455	2.8%	156
June 30, 1996	2,634	134,362	51,011	0.2%	156
June 30, 1995	2,557	130,204	50,921	(1.7%)	153
June 30, 1994	2,481	128,456	51,776	2.8%	155
June 30, 1993	2,463	124,025	50,355	3.2%	155

2.2(e) Distribution of Active Participants - Others**Annual Earnings By Age**

Age	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	62	\$ 1,762,599	\$ 28,429
20-24	844	24,053,983	28,500
25-29	1,859	59,983,195	32,266
30-34	2,688	95,604,939	35,567
35-39	3,581	135,456,494	37,826
40-44	5,197	205,821,078	39,604
45-49	6,497	278,121,127	42,808
50-54	5,537	255,307,162	46,109
55-59	2,889	129,003,822	44,653
60-64	1,080	47,104,777	43,616
65-69	247	10,615,740	42,979
70-74	48	1,701,339	35,445
75+	18	518,314	28,795

Total 30,547 \$1,245,054,569 \$ 40,759

Annual Earnings By Credited Service

Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0	1,985	\$ 64,189,306	\$ 32,337
1	3,701	114,527,631	30,945
2	2,861	92,492,405	32,329
3	2,177	75,174,360	34,531
4	2,001	73,225,906	36,595
0-4	12,725	419,609,608	32,975
5-9	6,507	257,402,720	39,558
10-14	5,015	227,533,617	45,371
15-19	3,100	156,319,499	50,426
20-24	2,173	121,811,672	56,057
25-29	865	51,499,774	59,537
30-34	150	10,099,764	67,332
35-39	12	777,915	64,826
40+	0	0	0

Total 30,547 \$1,245,054,569 \$ 40,759

Years of Credited Service By Age

Age	Years of Service										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
0-19	62	0	0	0	0	0	0	0	0	0	62
20-24	838	6	0	0	0	0	0	0	0	0	844
25-29	1,658	197	4	0	0	0	0	0	0	0	1,859
30-34	1,934	609	135	10	0	0	0	0	0	0	2,688
35-39	1,943	901	567	156	14	0	0	0	0	0	3,581
40-44	2,072	1,269	996	600	245	15	0	0	0	0	5,197
45-49	1,931	1,486	1,254	887	711	223	5	0	0	0	6,497
50-54	1,261	1,109	1,049	849	771	426	72	0	0	0	5,537
55-59	667	602	703	410	315	134	51	7	0	0	2,889
60-64	264	256	246	142	96	53	18	5	0	0	1,080
65-69	67	58	49	40	17	12	4	0	0	0	247
70-74	19	10	9	5	3	2	0	0	0	0	48
75+	9	4	3	1	1	0	0	0	0	0	18
Total	12,725	6,507	5,015	3,100	2,173	865	150	12	0	0	30,547

2.2(f) Schedule of Active Member Valuation Data – Others

Valuation Date	Number	Annual Earnings (000's)	Annual Average Earnings	Percent Increase/ (Decrease) in Average Earnings	Number of Participating Employers
June 30, 2002	30,547	\$ 1,245,055	\$ 40,759	0.3%	161
June 30, 2001	29,758	1,208,700	40,618	5.4%	158
June 30, 1999	29,590	1,140,706	38,550	3.0%	148
June 30, 1998	29,293	1,096,786	37,442	0.2%	148
June 30, 1997	29,267	1,093,433	37,361	0.7%	156
June 30, 1996	29,326	1,087,504	37,083	1.3%	156
June 30, 1995	28,893	1,057,840	36,612	0.9%	153
June 30, 1994	28,883	1,048,541	36,303	2.3%	155
June 30, 1993	28,509	1,011,864	35,493	4.2%	155

2.2(g) Statistics on New Benefit Recipients – Police/Fire

During the Year Ending June 30	1997	1998	1999	2000/2001	2002
Service					
(1) Number	140	147	142	275	128
(2) Average Age at Commencement	52.21	51.71	52.47	51.49	51.17
(3) Average Monthly Benefit	\$ 2,364	\$ 2,696	\$ 2,410	\$ 2,562	\$ 2,681
Survivor (including surviving spouse and QDROs)					
(1) Number	20	14	14	36	26
(2) Average Age at Commencement	53.25	51.50	55.79	52.79	52.78
(3) Average Monthly Benefit	\$ 1,184	\$ 1,265	\$ 1,088	\$ 1,256	\$ 1,435
Disability					
(1) Number	6	3	7	17	3
(2) Average Age at Commencement	48.77	43.40	45.37	48.90	43.30
(3) Average Monthly Benefit:	\$ 1,601	\$ 2,056	\$ 2,725	\$ 1,697	\$ 1,684
Total					
(1) Number	166	164	163	328	157
(2) Average Age at Commencement	52.21	51.54	52.45	51.50	51.28
(3) Average Monthly Benefit:	\$ 2,194	\$ 2,562	\$ 2,310	\$ 2,374	\$ 2,456

2.2(h) Schedule of Average Benefit Payments – New Benefit Recipients – Police/Fire *Basis of the Valuation*

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/01 - 6/30/02:							
Average Monthly Benefit	\$ 1,903	\$ 466	\$ 1,056	\$ 1,561	\$ 2,567	\$ 3,447	\$ 5,996
Number of Recipients	1	6	12	19	85	32	2
Period 7/1/99 - 6/30/01:							
Average Monthly Benefit	\$ 1,416	\$ 927	\$ 1,249	\$ 1,704	\$ 2,824	\$ 2,892	\$ 2,702
Number of Recipients	2	13	34	61	143	57	18
Period 7/1/98 - 6/30/99:							
Average Monthly Benefit	\$ 1,879	\$ 698	\$ 1,214	\$ 1,808	\$ 2,849	\$ 3,713	\$ 4,097
Number of Recipients	22	8	23	29	61	17	3
Period 7/1/97 - 6/30/98:							
Average Monthly Benefit	\$ 1,472	\$ 723	\$ 1,177	\$ 2,091	\$ 3,199	\$ 3,548	\$ 3,380
Number of Recipients	13	8	13	40	64	22	4
Period 7/1/96 - 6/30/97:							
Average Monthly Benefit	\$ 1,263	\$ 592	\$ 957	\$ 1,719	\$ 2,811	\$ 3,545	\$ 4,733
Number of Recipients	10	12	18	40	68	15	3
Period 7/1/95 - 6/30/96:							
Average Monthly Benefit	\$ 1,938	\$ 757	\$ 1,708	\$ 1,852	\$ 2,916	\$ 3,375	\$ 3,870
Number of Recipients	3	6	5	11	39	10	2
Period 7/1/94 - 6/30/95:							
Average Monthly Benefit	\$ 0	\$ 893	\$ 851	\$ 1,608	\$ 3,002	\$ 3,107	\$ 0
Number of Recipients	0	8	10	18	42	10	0
Period 7/1/93 - 6/30/94:							
Average Monthly Benefit	\$ 417	\$ 748	\$ 1,054	\$ 1,532	\$ 2,748	\$ 3,825	\$ 0
Number of Recipients	1	7	9	13	32	9	0
Period 7/1/92 - 6/30/93:							
Average Monthly Benefit	\$ 1,047	\$ 546	\$ 1,078	\$ 1,648	\$ 2,700	\$ 3,704	\$ 323
Number of Recipients	3	2	4	6	17	3	1

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

2.2(i) Statistics on New Benefit Recipients – Others

During the Year Ending June 30	1997	1998	1999	2000/2001	2002
Service					
(1) Number	791	1,098	921	2,031	942
(2) Average Age at Commencement	56.59	56.59	56.07	56.20	56.58
(3) Average Monthly Benefit	\$ 1,272	\$ 1,443	\$ 1,450	\$ 1,389	\$ 1,481
Survivor (including surviving spouse and QDROs)					
(1) Number	88	85	97	214	144
(2) Average Age at Commencement	62.17	61.68	63.58	61.10	62.12
(3) Average Monthly Benefit	\$ 805	\$ 710	\$ 837	\$ 845	\$ 842
Disability					
(1) Number	25	36	35	97	49
(2) Average Age at Commencement	46.69	48.21	48.24	48.31	49.55
(3) Average Monthly Benefit:	\$ 1,656	\$ 1,421	\$ 1,263	\$ 1,258	\$ 1,445
Total					
(1) Number	904	1,219	1,053	2,342	1,135
(2) Average Age at Commencement	56.86	56.70	56.50	56.32	56.98
(3) Average Monthly Benefit:	\$ 1,238	\$ 1,391	\$ 1,388	\$ 1,334	\$ 1,398

2.2(j) Schedule of Average Benefit Payments – New Benefit Recipients – Others

Basis of the Valuation

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/01 - 6/30/02:							
Average Monthly Benefit	\$ 488	\$ 500	\$ 886	\$ 1,428	\$ 2,020	\$ 2,663	\$ 3,653
Number of Recipients	15	283	246	227	198	94	72
Period 7/1/99 - 6/30/01:							
Average Monthly Benefit	\$ 602	\$ 577	\$ 791	\$ 1,129	\$ 1,392	\$ 1,771	\$ 1,949
Number of Recipients	8	174	289	594	542	438	297
Period 7/1/98 - 6/30/99:							
Average Monthly Benefit	\$ 653	\$ 518	\$ 894	\$ 1,477	\$ 2,129	\$ 2,853	\$ 3,813
Number of Recipients	55	237	249	225	157	86	44
Period 7/1/97 - 6/30/98:							
Average Monthly Benefit	\$ 943	\$ 511	\$ 935	\$ 1,512	\$ 2,090	\$ 3,007	\$ 3,700
Number of Recipients	107	246	281	282	175	86	42
Period 7/1/96 - 6/30/97:							
Average Monthly Benefit	\$ 905	\$ 481	\$ 872	\$ 1,507	\$ 2,086	\$ 2,821	\$ 3,308
Number of Recipients	43	254	223	191	112	54	27
Period 7/1/95 - 6/30/96: Average							
Average Monthly Benefit	\$ 652	\$ 483	\$ 855	\$ 1,385	\$ 1,920	\$ 2,624	\$ 3,473
Number of Recipients	46	179	188	143	87	35	24
Period 7/1/94 - 6/30/95:							
Average Monthly Benefit	\$ 754	\$ 483	\$ 890	\$ 1,523	\$ 2,087	\$ 2,688	\$ 2,607
Number of Recipients	5	148	154	132	76	25	21
Period 7/1/93 - 6/30/94:							
Average Monthly Benefit	\$ 503	\$ 449	\$ 863	\$ 1,412	\$ 1,886	\$ 2,710	\$ 3,131
Number of Recipients	17	149	169	136	60	17	19
Period 7/1/92 - 6/30/93:							
Average Monthly Benefit	\$ 558	\$ 449	\$ 866	\$ 1,343	\$ 2,029	\$ 2,534	\$ 3,223
Number of Recipients	23	158	143	83	36	13	8

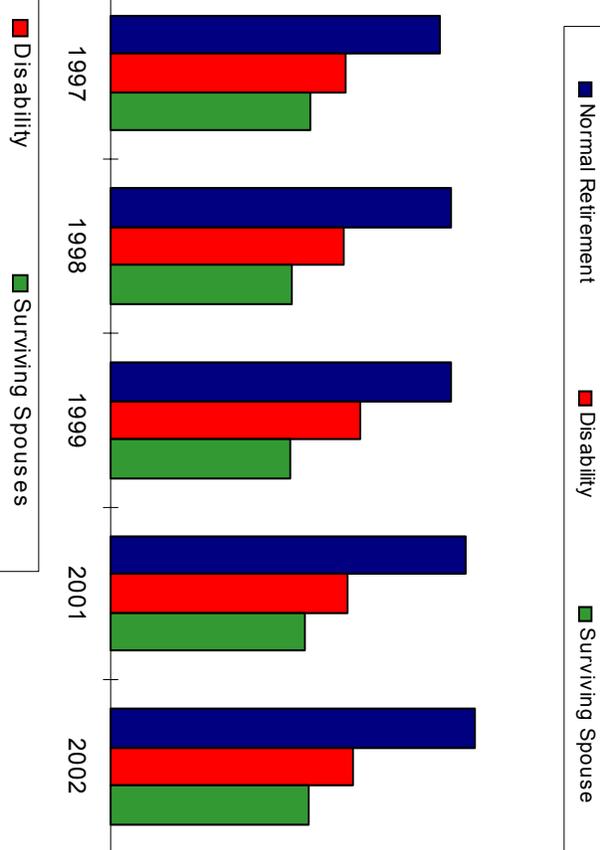
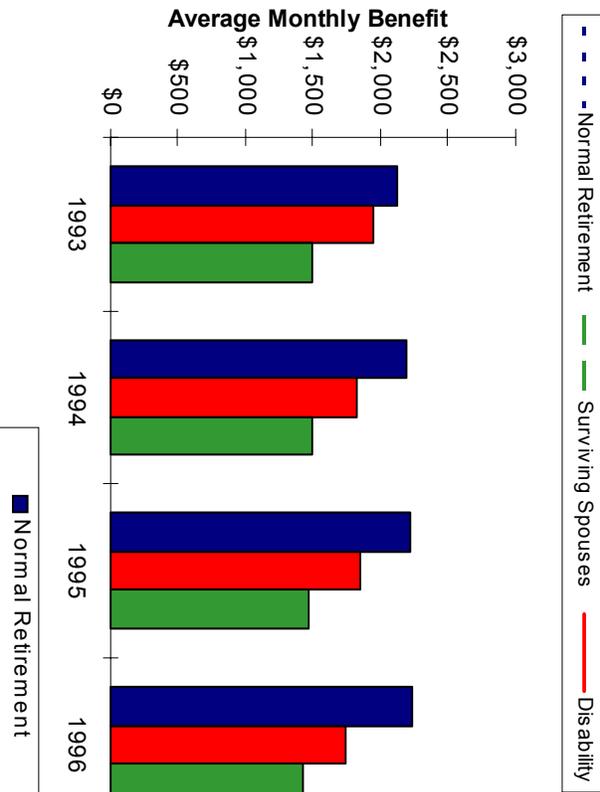
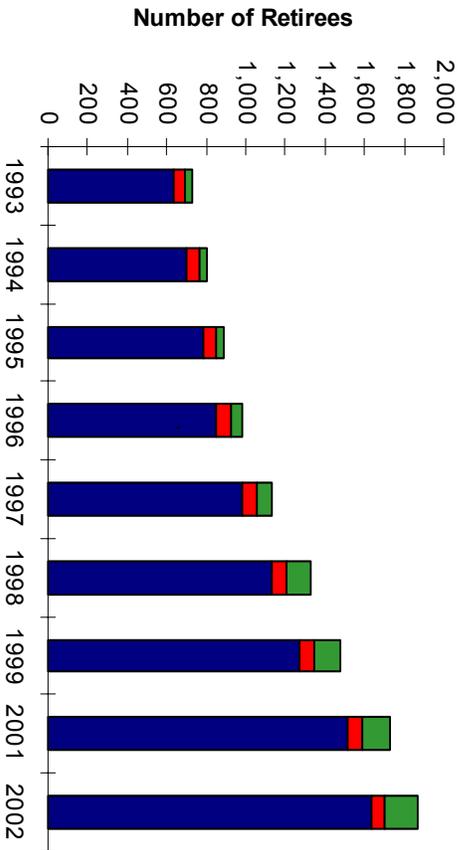
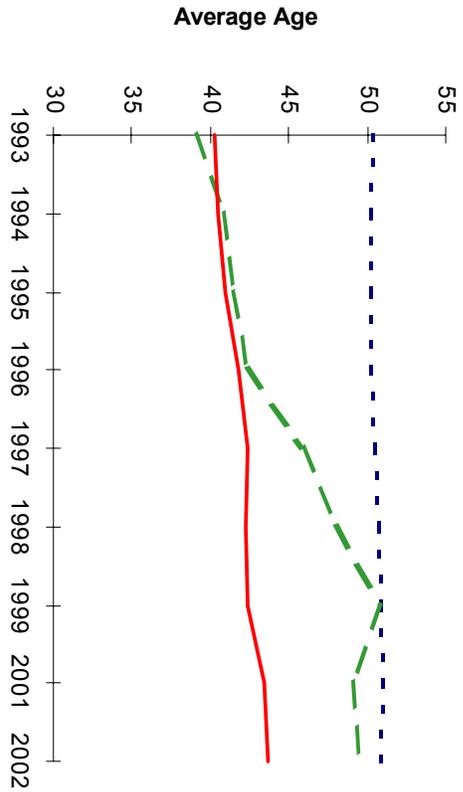
“Average Monthly Benefit” includes post-retirement pension adjustments and cost-of-living increases.

2.2(k) Statistics on All Benefit Recipients

	<u>Police/Fire</u>	<u>Others</u>
Service Retirements		
(1) Number, June 30, 2001	1,515	12,954
(2) Net Change During FY02	122	665
(3) Number, June 30, 2002	1,637	13,619
(4) Average Age At Commencement	50.89	56.62
(5) Average Age Now	59.04	65.80
(6) Average Monthly Benefit	\$ 2,696	\$ 1,321
Survivors (including surviving spouses and QDROs)		
(1) Number, June 30, 2001	145	1,231
(2) Net Change During FY02	24	116
(3) Number, June 30, 2002	169	1,347
(4) Average Age At Commencement	49.48	56.90
(5) Average Age Now	56.45	66.27
(6) Average Monthly Benefit	\$ 1,462	\$ 824
Disabilities		
(1) Number, June 30, 2001	71	358
(2) Net Change During FY02	(8)	22
(3) Number, June 30, 2002	63	380
(4) Average Age At Commencement	43.72	44.85
(5) Average Age Now	49.89	50.27
(6) Average Monthly Benefit	\$ 1,795	\$ 1,486
Total Number of Benefit Recipients	1,869	15,346

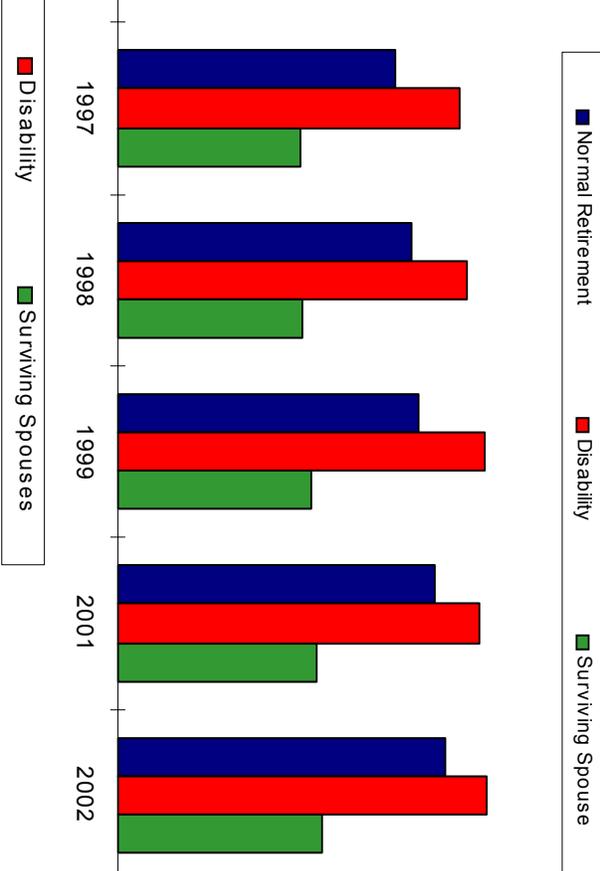
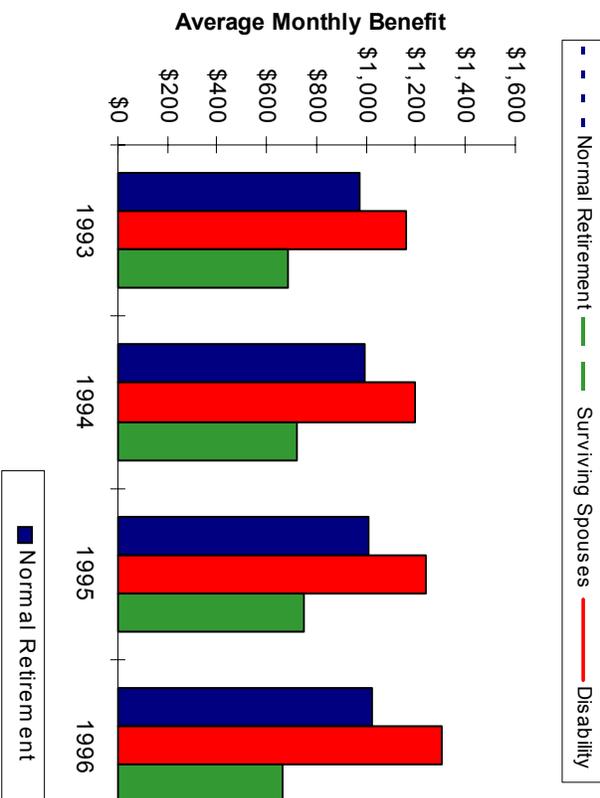
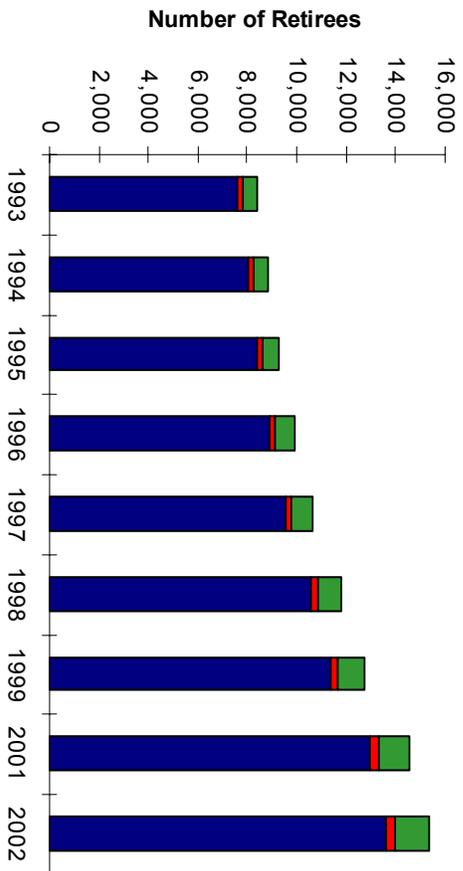
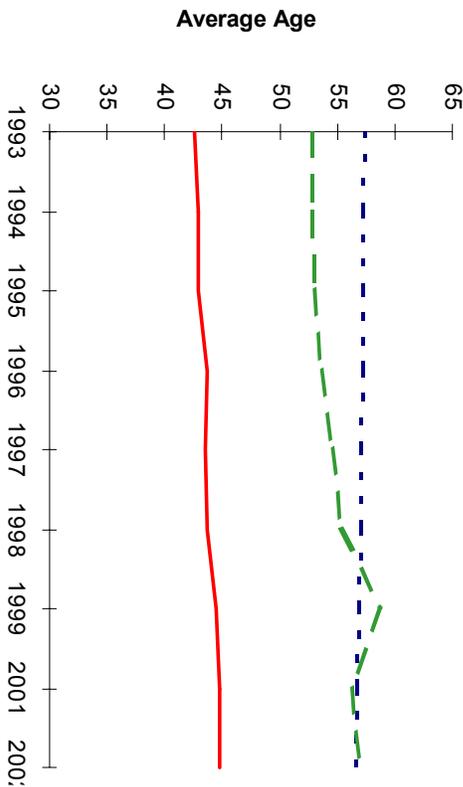
2.2(k) Statistics on All Benefit Recipients at June 30 (continued)

Police/Fire



2.2(k) Statistics on All Benefit Recipients at June 30 (continued)

Others



2.2(l) Distribution of Annual Benefits for Benefit Recipients - Police/Fire**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	1	22,838	22,838
30-34	2	29,275	14,638
35-39	6	159,786	26,631
40-44	35	950,577	27,159
45-49	185	6,207,371	33,553
50-54	367	12,472,326	33,985
55-59	498	15,698,939	31,524
60-64	381	10,898,491	28,605
65-69	208	5,912,192	28,424
70-74	104	2,917,614	28,054
75+	82	2,016,364	24,590
Total	1,869	\$57,285,773	\$ 30,650

Annual Benefit by Years Since Commencement

Years Since Commencement	Number of People	Total Annual Benefit	Average Annual Benefit
0	91	\$ 2,643,784	\$ 29,053
1	142	4,407,725	31,040
2	134	4,045,133	30,188
3	162	4,285,744	26,455
4	169	5,271,655	31,193
0-4	698	20,654,041	29,590
5-9	545	16,710,539	30,662
10-14	249	7,143,975	28,691
15-19	254	9,480,140	37,323
20-24	83	2,316,450	27,909
25-29	35	862,298	24,637
30-34	5	118,330	23,666
35-39	0	0	0
40+	0	0	0
Total	1,869	\$57,285,773	\$ 30,650

Years Since Benefit Commencement By Age

Age	Years Since Commencement									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	0	0	0	1
30-34	2	0	0	0	0	0	0	0	0	2
35-39	3	1	2	0	0	0	0	0	0	6
40-44	31	3	1	0	0	0	0	0	0	35
45-49	132	41	9	2	1	0	0	0	0	185
50-54	228	104	27	6	0	2	0	0	0	367
55-59	195	185	66	43	5	3	1	0	0	498
60-64	77	152	74	71	4	3	0	0	0	381
65-69	21	48	49	73	12	4	1	0	0	208
70-74	6	8	15	40	32	3	0	0	0	104
75+	2	3	6	19	29	20	3	0	0	82
Total	698	545	249	254	83	35	5	0	0	1,869

2.2(m) Schedule of Benefit Recipients by Type of Benefit and Option Selected – Police/Fire

Amount of Monthly Benefit	Number of Recipients	Type of Benefit			Option Selected				
		1	2	3	1	2	3	4	
\$ 1	300	25	16	9	0	16	8	1	0
301	600	95	71	22	2	47	25	16	7
601	900	96	65	27	4	58	25	6	7
901	1200	123	96	20	7	75	22	18	8
1201	1500	108	87	18	3	58	27	10	13
1501	1800	118	89	19	10	60	30	14	14
1801	2100	139	106	17	16	70	43	14	12
2101	2400	156	130	11	15	62	66	16	12
2401	2700	182	166	11	5	57	81	30	14
2701	3000	143	135	7	1	42	65	23	13
3001	3300	152	152	0	0	40	78	19	15
3301	3600	131	127	4	0	40	62	19	10
3601	3900	117	117	0	0	28	57	14	18
3901	4200	91	90	1	0	19	52	8	12
Over 4200		193	190	3	0	53	107	23	10
Totals		1,869	1,637	169	63	725	748	231	165

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(n) Distribution of Annual Benefits for Benefit Recipients - Others

Annual Benefit By Age				Annual Benefit by Years Since Commencement			
Age	Number of People	Total Annual Benefit	Average Annual Benefit	Years Since Commencement	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	0	\$ 0	\$ 0	0	498	\$ 8,921,517	\$ 17,915
20-24	0	0	0	1	1,119	17,817,570	15,923
25-29	0	0	0	2	975	14,634,841	15,010
30-34	4	55,295	13,824	3	1,436	25,282,694	17,606
35-39	17	158,057	9,297	4	1,012	17,481,845	17,275
40-44	60	702,767	11,713	0-4	5,040	84,138,467	16,694
45-49	168	2,620,154	15,596	5-9	3,858	61,232,292	15,872
50-54	1,215	18,035,031	14,844	10-14	2,614	34,823,100	13,322
55-59	2,978	52,842,056	17,744	15-19	2,423	38,035,290	15,698
60-64	3,360	54,901,971	16,340	20-24	924	11,442,765	12,384
65-69	2,735	39,881,614	14,582	25-29	451	5,690,594	12,618
70-74	2,093	30,167,571	14,414	30-34	33	477,193	14,460
75+	2,716	36,546,614	13,456	35-39	3	71,429	23,810
				40+	0	0	0
Total	15,346	\$235,911,130	\$ 15,373	Total	15,346	\$235,911,130	\$ 15,373

Years Since Benefit Commencement By Age

Age	Years Since Commencement									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	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	4	0	0	0	0	0	0	0	0	4
35-39	12	4	1	0	0	0	0	0	0	17
40-44	31	17	10	2	0	0	0	0	0	60
45-49	93	43	24	6	2	0	0	0	0	168
50-54	1,019	129	45	17	4	1	0	0	0	1,215
55-59	2,029	847	72	20	7	3	0	0	0	2,978
60-64	1,062	1,435	686	152	16	7	2	0	0	3,360
65-69	512	774	876	547	15	9	1	1	0	2,735
70-74	162	450	513	788	169	10	1	0	0	2,093
75+	116	159	387	891	711	421	29	2	0	2,716
Total	5,040	3,858	2,614	2,423	924	451	33	3	0	15,346

2.2(o) Schedule of Benefit Recipients by Type of Benefit and Option Selected – Others

Amount of Monthly Benefit	Number of Recipients	Type of Benefit				Option Selected			
		1	2	3	4	1	2	3	4
\$ 1	300	1,378	245	12	862	271	189	56	
301	600	3,066	371	50	1,776	663	447	180	
601	900	2,568	264	47	1,464	564	345	195	
901	1200	2,029	174	41	1,112	491	271	155	
1201	1500	1,554	126	58	812	389	239	114	
1501	1800	1,201	66	47	615	321	167	98	
1801	2100	895	42	58	428	254	138	75	
2101	2400	657	20	27	313	196	94	54	
2401	2700	482	11	10	222	141	82	37	
2701	3000	419	14	7	181	127	69	42	
3001	3300	290	5	4	114	105	45	26	
3301	3600	207	5	7	73	85	37	12	
3601	3900	167	3	6	75	66	16	10	
3901	4200	135	0	2	35	60	25	15	
Over 4200		298	1	4	113	108	46	31	
Totals		15,346	1,347	380	8,195	3,841	2,210	1,100	

- | Type of Benefit | Option Selected |
|----------------------|---------------------------------------|
| 1. Normal retirement | 1. Whole Life Annuity |
| 2. Survivor payment | 2. 75% Joint and Contingent Annuity |
| 3. Disability | 3. 50% Joint and Contingent Annuity |
| | 4. 66 2/3% Joint and Survivor Annuity |

Basis of the Valuation

2.2(p) Schedule of Benefit Recipients Added to and Removed from Rolls – Police/Fire

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Allowances	Average Annual Allowance
	No. *	Annual Allowances *	No. *	Annual Allowances *	No.	Annual Allowances		
June 30, 2002	157	\$6,155,365	19	\$744,917	1,869	\$57,285,773	10.4%	\$30,650
June 30, 2001	328	12,637,854	75	2,889,753	1,731	51,875,325	23.1%	29,986
June 30, 1999	163	4,761,117	8	233,673	1,478	42,127,224	12.0%	28,503
June 30, 1998	195	6,096,918	2	62,532	1,323	37,599,780	19.1%	28,420
June 30, 1997	161	6,672,261 ⁵	9	372,984 ⁵	1,130	31,565,394	24.9%	27,934
June 30, 1996	88	2,217,256	2	50,392	978	25,266,117	9.4%	25,834
June 30, 1995	95	2,697,924	3	85,198	892	23,099,253	12.8%	25,896
June 30, 1994	77	2,428,767	4	119,938	800	20,486,527	12.7%	25,608
June 30, 1993	39	982,991	11	212,565	727	18,177,698	4.4%	25,004

* Numbers are estimated, and include other internal transfers.

⁵ Includes additional benefits to current retirees from a one time retroactive ad hoc Post-Retirement Pension Adjustment

Basis of the Valuation

2.2(q) Schedule of Benefit Recipients Added to and Removed from Rolls – Others

Year Ended	Added to Rolls		Removed from Rolls		Rolls – End of Year		Percent Increase in Annual Allowances	Average Annual Allowance
	No. *	Annual Allowances *	No. *	Annual Allowances *	No.	Annual Allowances		
June 30, 2002	1,135	\$27,484,388	332	\$8,039,486	15,346	\$235,911,130	9.0%	\$15,373
June 30, 2001	2,342	46,880,694	506	10,128,792	14,543	216,466,228	20.5%	15,071
June 30, 1999	1,053	19,402,623	124	2,284,829	12,707	179,714,326	10.5%	14,143
June 30, 1998	1,219	25,116,364	113	2,328,260	11,778	162,596,532	16.3%	13,805
June 30, 1997	830	23,255,081 ⁶	101	2,829,835 ⁶	10,672	139,808,955	7.2%	13,100
June 30, 1996	702	8,803,872	40	501,645	9,943	119,383,182	7.5%	12,007
June 30, 1995	561	8,327,484	123	850,316	9,281	111,080,955	7.2%	11,969
June 30, 1994	567	7,584,088	100	225,631	8,843	103,603,787	7.6%	11,716
June 30, 1993	464	5,408,670	93	4,057,669	8,376	96,245,330	1.4%	11,491

* Numbers are estimated, and include other internal transfers.

⁶ 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 non-health economic assumptions used in this valuation were recommended by Mercer Human Resource Consulting and were adopted at the Fall 2000 TRS Board Meeting. These assumptions were the result of an experience study performed in the Fall of 2000. 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 (no change).

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 as a 25-year fixed period level percentage of pay.

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

The Unfunded Liability at the valuation date is the excess of the Accrued Liability over the Assets of the Plan. The level annual payment to be made over a stipulated number of years to amortize the Unfunded Liability is the Past Service Cost.

The Normal Cost 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 Police/Fire: Merit (first 5 years of employment) – 1.5% per year. Productivity – 1.0% per year Others: Merit (first 10 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.	
Health Cost Trend	FY03	12.0%
	FY04	12.0%
	FY05	12.0%
	FY06	11.5%
	FY07	11.0%
	FY08	10.5%
	FY09	10.0%
	FY10	9.5%
	FY11	9.0%
	FY12	8.5%
	FY13	8.0%
	FY14	7.5%
	FY15	7.0%
	FY16	6.0%
	FY17 and later	5.0%
Mortality	1994 Group Annuity Mortality Basic Table for males and females, 1994 Base Year. Deaths are assumed to be occupational 85% of the time for Police/Fire, 35% of the time for Others.	

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

(B) Actuarial Assumptions *(continued)*

Total Turnover	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., 68% are assumed to remain in Alaska and receive the C.O.L.A.
New Entrants	Growth projections are made for the active PERS population under three scenarios: Pessimistic: 0% per year Median: 1% per year Optimistic: 2% per year
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 0.600 years of credited service per year.

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

Medical benefits for retirees are provided by the payment of premiums from the fund. A pre-65 cost and lower post-65 cost (due to Medicare) are assumed such that the total rate for all retirees equals the present premium rate assumption. These medical premiums are then increased with the health inflation assumption. The actuarial cost method used for funding retirement benefits is also used to fund health benefits.

For FY03, the pre-65 monthly premium is \$907.18 and the post-65 premium is \$345.59, based on an assumed total blended premium of \$694.00. The assumed total blended premium for FY03 is the average of the 2002 and 2003 calendar year actual blended premiums. For the time period January 1, 2003 to December 31, 2003, the actual blended premium as provided by the State of Alaska, Division of Retirement and Benefits, is \$720.00.

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

Table 1
Alaska PERS
Total Turnover Assumptions

Select Rates of Turnover During the First 5 Years of Employment			Ultimate Rates of Turnover After the First 5 Years of Employment	
Police/Fire:				
<u>Year of Employment</u>	<u>Rate</u>		<u>Age</u>	<u>Rate</u>
1	.12		20+	.03
2	.10			
3	.08			
4	.07			
5	.06			
 Others:				
<u>Year of Employment</u>	<u>---Age at Hire---</u>		<u>Age</u>	<u>Rate</u>
	<u>20-34</u>	<u>35+</u>		
1	.25	.15	20-34	.11
2	.23	.15	35-39	.08
3	.20	.13	40-44	.06
4	.16	.12	45+	.05
5	.15	.11		

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

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

<u>Age</u>	<u>Police/Fire Rate</u>	<u>Other Member Rate</u>
20	.88	.28
21	.89	.28
22	.90	.29
23	.91	.29
24	.93	.30
25	.94	.30
26	.95	.30
27	.98	.31
28	1.00	.32
29	1.03	.33
30	1.05	.34
31	1.08	.34
32	1.10	.35
33	1.13	.36
34	1.16	.37
35	1.20	.38
36	1.24	.40
37	1.29	.41
38	1.34	.43
39	1.39	.44
40	1.44	.46
41	1.50	.48
42	1.59	.51
43	1.70	.54
44	1.85	.59
45	2.03	.65
46	2.20	.70
47	2.39	.76
48	2.59	.83
49	2.79	.89
50	3.00	.96
51	3.25	1.04
52	3.58	1.14
53	3.98	1.27
54	4.44	1.42
55	5.00	1.60
56	5.74	1.84
57	6.68	2.14
58	7.63	2.44
59	9.00	2.88
60	10.54	3.37

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

Table 3
Alaska PERS
Retirement Rates

<u>Age</u>	<u>Police/Fire Rate</u>	<u>Other Member Rate</u>
50	.10	.05
51	.10	.05
52	.10	.05
53	.05	.06
54	.05	.06
55	.20	.10
56	.13	.10
57	.13	.10
58	.13	.10
59	.13	.10
60	.20	.10
61	.25	.10
62	.25	.15
63	.25	.15
64	.25	.15
65	1.00	.20
66	1.00	.20
67	1.00	.20
68 & Up	1.00	1.00

Police/Fire members retiring at ages under 50 are assumed to retire immediately upon attaining 21 years of service.

Others members retiring at ages under 50 are assumed to retire immediately upon attaining 31 years of service.

Section 3

- Section 3.1 Analysis of financial experience.
- Section 3.2(a) Summary of accrued and unfunded accrued liabilities for Police/Fire.
- Section 3.2(b) Summary of accrued and unfunded accrued liabilities for Others.
- Section 3.3 Solvency test.

3.1 Analysis of Financial Experience

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

	Type of Gain or Loss	Change in Average Contribution Rate During Fiscal Year				
		2002	2001	2000	1999	1998
(1)	Health Experience	3.68%	0.00%	0.00%	0.00%	0.00%
(2)	Salary Experience	(0.20%)	(1.03%)	0.00%	(0.23%)	(0.46%)
(3)	Investment Experience	7.24%	0.11%	(0.12%)	(0.49%)	(3.26%)
(4)	Demographic Experience	1.21%	0.77%	(0.81%)	0.21%	1.12%
(5)	(Gain) or Loss During Year From Experience, (1) + (2) + (3) + (4)	11.93%	(0.15%)	(0.93%)	(0.51%)	(2.60%)
Non-recurring Changes						
(6)	Asset Valuation Method	4.11%	0.00%	(2.67%)	0.00%	0.00%
(7)	Past Service Amortization Change	(5.06%)	0.00%	0.00%	0.00%	0.00%
(8)	Assumption Changes	6.98%	0.00%	3.09%	0.00%	1.08%
(9)	System Benefit Changes	0.04%	0.17%	0.00%	0.00%	0.00%
(10)	Liability Loading Adjustment	0.00%	0.57%	0.00%	0.00%	0.99%
(11)	Ad hoc PRPA	0.14%	0.06%	0.07%	0.04%	0.20%
(12)	Composite (Gain) or Loss During Year, (5) + (6) + (7) + (8) + (9) + (10) + (11)	18.14%	0.65%	(0.44%)	(0.47%)	(0.33%)
(13)	Beginning Average Employer Contribution Rate	6.77%	6.12%	6.56%	7.03%	7.36%
(14)	Ending Average Employer Contribution Rate, (12) + (13)	24.91%	6.77%	6.12%	6.56%	7.03%

3.2 Summary of Accrued and Unfunded Accrued Liabilities – Police/Fire

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, 2002 ⁽¹⁾⁽²⁾⁽³⁾	\$ 1,509,947	\$ 1,135,238	75.2%	\$ 374,709	\$ 157,632	237.7%
June 30, 2001	1,293,448	1,305,478	100.9%	N/A	151,701	N/A
June 30, 2000 ⁽²⁾⁽³⁾	1,196,821	1,209,451	101.1%	N/A	140,045	N/A
June 30, 1999	1,008,404	1,064,168	105.5%	N/A	142,843	N/A
June 30, 1998 ⁽¹⁾⁽²⁾⁽³⁾	926,249	981,127	105.9%	N/A	138,653	N/A
June 30, 1997	811,651	863,184	106.3%	N/A	135,702	N/A
June 30, 1996	733,303	776,196	105.8%	N/A	134,362	N/A
June 30, 1995	785,082	757,221	96.5%	27,861	130,204	21.4%
June 30, 1994 ⁽¹⁾⁽²⁾	732,988	694,773	94.8%	38,215	128,456	29.7%
June 30, 1993	639,439	610,149	95.4%	29,290	124,025	23.6%

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

3.2 Summary of Accrued and Unfunded Accrued Liabilities – Others

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, 2002 ⁽¹⁾⁽²⁾⁽³⁾	\$ 8,349,644	\$ 6,277,595	75.2%	\$ 2,072,049	\$ 1,245,055	166.4%
June 30, 2001	6,575,126	6,636,278	100.9%	N/A	1,208,700	N/A
June 30, 2000 ⁽²⁾⁽³⁾	6,180,091	6,245,307	101.1%	N/A	1,181,435	N/A
June 30, 1999	5,640,269	5,952,172	105.5%	N/A	1,140,706	N/A
June 30, 1998 ⁽¹⁾⁽²⁾⁽³⁾	5,277,742	5,590,435	105.9%	N/A	1,096,786	N/A
June 30, 1997	4,722,465	5,022,304	106.3%	N/A	1,093,433	N/A
June 30, 1996 ⁽²⁾	4,246,655	4,495,057	105.8%	N/A	1,087,504	N/A
June 30, 1995	4,186,090	4,037,533	96.5%	148,557	1,057,840	14.0%
June 30, 1994 ⁽¹⁾⁽²⁾	3,887,194	3,684,532	94.8%	202,662	1,048,541	19.3%
June 30, 1993	3,486,322	3,326,627	95.4%	159,695	1,011,864	15.8%

(1) Change in Asset Valuation Method

(2) Change of Assumptions

(3) Change in Methods

3.3 Solvency Test

Valuation Date	Aggregate Accrued Liability For:			Valuation Assets (000's)	Portion of Accrued Liabilities Covered by Assets		
	(1) Active Member Contributions (000's)	(2) Inactive Members (000's)	(3) Active Members (Employer-Financed Portion) (000's)		(1)	(2)	(3)
June 30, 2002 ⁽¹⁾⁽²⁾⁽³⁾	\$ 967,045	\$ 6,301,095	\$ 2,591,451	\$ 7,412,833	100%	100%	5.6%
June 30, 2001	920,702	5,059,386	1,888,486	7,941,756	100%	100%	100%
June 30, 2000 ⁽²⁾⁽³⁾	892,949	4,588,201	1,895,762	7,454,758	100%	100%	100%
June 30, 1999	854,497	3,961,063	1,833,113	7,016,340	100%	100%	100%
June 30, 1998 ⁽¹⁾⁽²⁾⁽³⁾	819,226	3,610,352	1,774,413	6,571,562	100%	100%	100%
June 30, 1997	795,170	3,020,608	1,716,338	5,885,488	100%	100%	100%
June 30, 1996 ⁽²⁾	754,679	2,511,953	1,713,326	5,271,253	100%	100%	100%
June 30, 1995	673,196	2,445,870	1,852,106	4,794,754	100%	100%	90.5%
June 30, 1994 ⁽¹⁾⁽²⁾	615,925	2,233,349	1,770,908	4,379,305	100%	100%	86.4%
June 30, 1993	551,753	1,921,967	1,652,041	3,936,776	100%	100%	88.6%

(1) Change in Asset Valuation Method

(2) Change of Assumptions

(3) Change in Methods

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