

**State of Alaska
Public Employees'
Retirement System
Actuarial Valuation Report
as of June 30, 1997**

Prepared by:

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March 16, 1998

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, 1997 by William M. Mercer, Incorporated. The purposes of the report include:

- (1) a review of experience under the Plan for the year ended June 30, 1997;
- (2) a determination of the appropriate contribution rate for each employer in the System;
- (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 method (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(d) and (f))
- (3) Schedule of retirants and beneficiaries 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 Peat Marwick, 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 1996.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY98 and a rolling amortization of the unfunded accrued liability. The amortization period is set by the Board. Contribution levels are recommended by the

Public Employees' Retirement Board
March 16, 1998
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Actuary and adopted by the Board each year. Over time, the contribution rate is expected to remain constant as a percentage of payroll. The ratio of assets to liabilities increased slightly from 105.8% to 106.3% during the year, primarily due to the net effect of increases in benefit payments to retirees from the granting of Post Retirement Pension Adjustments during FY97 and continued favorable investment experience. Over the years, progress has been made toward achieving the funding objectives of the System.

There were no significant changes in the actuarial assumptions or actuarial methods used in the determination of system liabilities this year. The assumptions and methods, 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.

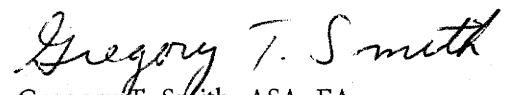
The undersigned are members of the American Academy of Actuaries or the Society of Actuaries and are fully qualified to provide actuarial services to the State of Alaska.

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


Gregory T. Smith, ASA, EA

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Highlights

This report has been prepared by William M. Mercer, Incorporated to:

- (1) present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 1997;
- (2) review experience under the plan for the year ended June 30, 1997;
- (3) determine the appropriate contribution rate for each employer in the System;
- (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 1997 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.

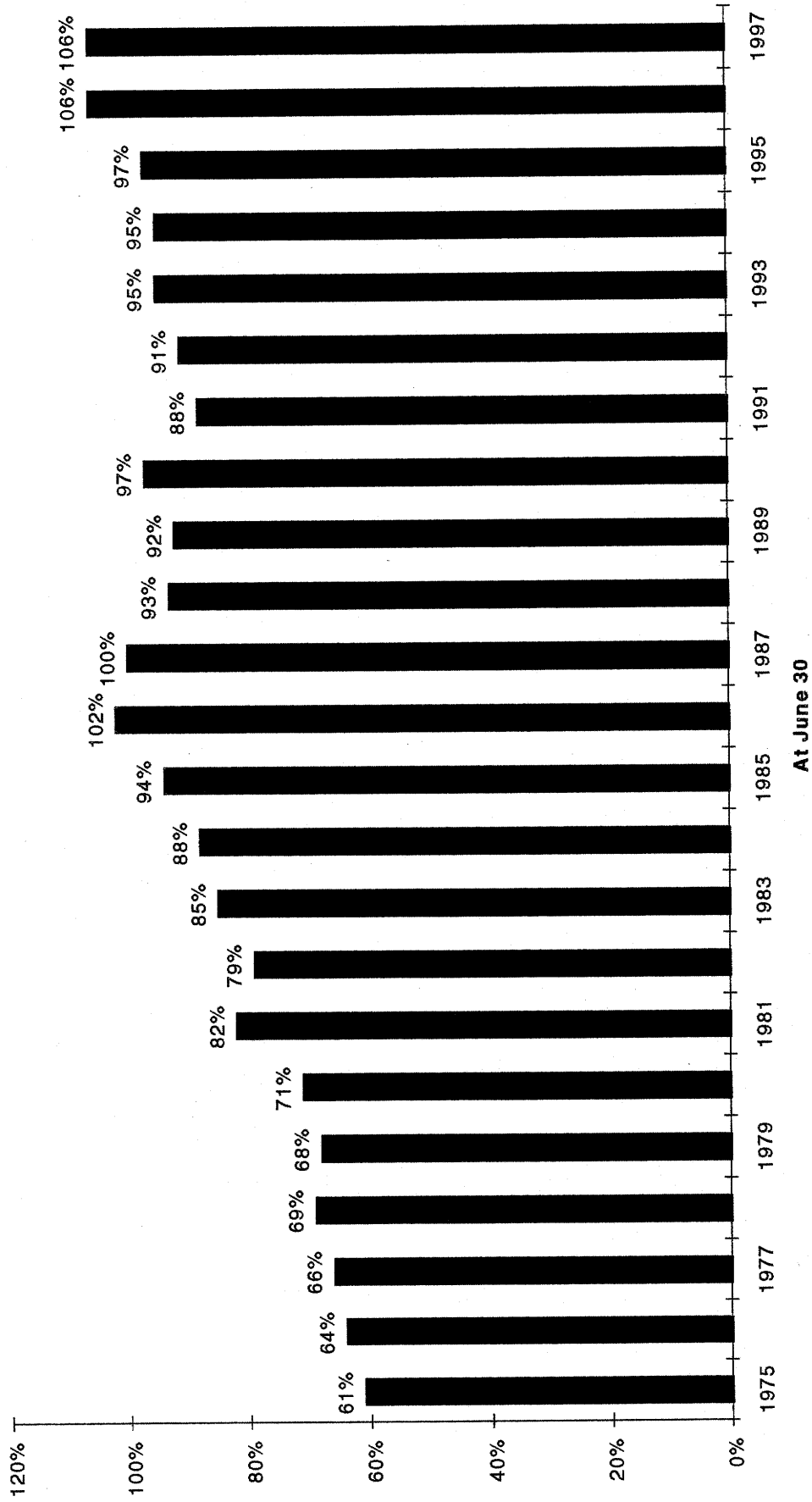
The principle results are as follows:

	<u>1996</u>	<u>1997</u>
Funding Status as of June 30:		
(a) Valuation Assets*	\$ 5,271,253	\$ 5,885,488
(b) Accrued Liability*		
i) Non-Medical Benefits	3,594,706	4,031,527
ii) Total Benefits (including medical)	4,979,958	5,534,116
(c) Funding Ratio, (a) ÷ (b)		
i) Non-Medical Benefits	146.6%	146.0%
ii) Total Benefits (including medical)	105.8%	106.3%

* In thousands.

Highlights (continued)

State of Alaska PERS Funding Ratio History



Highlights (continued)

Employer Contribution Rates for Fiscal Year:

	<u>1999</u>	<u>2000</u>
(a) Consolidated Rate	9.85%	9.89%
(b) Average Past Service Rate	(2.11%)*	(2.53%)
(c) Average Total Contribution Rate	7.74%	7.36%
(d) Public Employees' Retirement Board Adopted Average Total Contribution Rate	7.74%	7.74%

- * The amortization period for funding status surpluses was changed from 5 years to twenty-five years to reduce the volatility of the Average Total Contribution Rate.

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio as of June 30, 1997 has increased from 105.8% to 106.3%, an increase of 0.5%. The average employer contribution rate has decreased from 7.74% of payroll for FY99 to 7.36% for FY00, a decrease of 0.38% of payroll. The reasons for the change in the funded status and 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.

<u>Fiscal Year</u>	<u>Monthly Premium Per Retiree For Health Coverage</u>	<u>Annual Percentage Increase</u>	<u>Average Compound Annual Increase Since FY78</u>
1977	\$ 34.75	--	--
1978	57.64	66%	--
1979	69.10	20%	20%
1980	64.70	- 6%	6%
1981	96.34	49%	19%
1982	96.34	0%	14%
1983	115.61	20%	15%
1984	156.07	35%	18%
1985	191.85	23%	19%
1986	168.25	-12%	14%
1987	165.00	- 2%	12%
1988	140.25	-15%	9%
1989	211.22	51%	13%
1990	252.83	20%	13%
1991	243.98	- 4%	12%
1992	243.98	0%	11%
1993	226.90	- 7%	10%
1994	309.72	37%	11%
1995	336.05	9%	11%
1996	350.50	4%	11%
1997	350.50	0%	10%
1998	368.00	5%	10%
1999	368.00	0%	9%

As you can see from the above table, the monthly retiree medical premium for the 1999 fiscal year remained flat at \$368.00. Since FY87, annual premium rate changes have ranged from 51% up to 15% down, but the average compound annual increase has been about 7%.

Three years ago, in an attempt to better predict the long-term increase in medical premiums, the Board adopted a health cost trend assumption which varies by year, declining to an ultimate rate equal to inflation plus 1.5%, or 5.5% for FY99 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

Analysis of the Valuation (continued)

trend assumption to determine actuarial liabilities for retiree medical benefits. 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 every four to five years when a formal experience analysis is performed.

Because no adjustments were made to the assumed medical premium rate this year, the average employer contribution rate was unaffected by medical cost experience.

(2) Investment Performance

The approximate FY97 investment return based on market values was 17.86%. The Asset Valuation Method was changed three years ago to smooth over five years the difference between actual and expected investment return. One purpose of this change was to adopt a method which better accomplished the goal of smoothing volatility in investment returns.

The approximate rate of return in FY97 based on valuation assets, after applying the smoothing technique, was 3.33% higher than the 8.25% investment return assumption. This produced a gain of approximately \$175,351,000 to the System from investment performance which increased the funding ratio by 3.2% and lowered the average employer contribution rate by 1.26% of total payroll.

(3) Salary Increases

Last year, salary increases were slightly less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain which increased the funding ratio by 0.3%, and lowered the average employer contribution rate by 0.06% of total payroll.

(4) Employee Data

Section 2.2 provides statistics on active and inactive participants. The number of active participants decreased 0.3% from 31,960 at June 30, 1996 to 31,854 at June 30, 1997. The average age of active participants increased from 42.95 to 43.21 and average credited service increased from 8.41 to 8.56 years.

The number of retirees and beneficiaries increased 8.1% from 10,921 to 11,802, and their average age increased from 64.61 to 64.62. Any increase in retirees as a result of the RIP is cost neutral to the System, since the cost is funded by the individual employers. There was an 8.2% increase in the number of vested terminated participants from 4,382 to 4,742. Their average age increased from 45.43 to 45.83.

The overall effect of these participant data changes was a small actuarial loss to the System, resulting in an increase in the average employer contribution rate equal to 0.03% of total payroll.

(5) Ad hoc PRPA

Two ad hoc Post Retirement Pension Adjustments (PRPAs) were granted during FY97, the first ad hoc PRPA since 1989. This increased benefit payments to many Tier I (hired before July 1, 1986) retirees. This action produced a loss to the System of approximately \$126,048,000.

Analysis of the Valuation (continued)

The overall effect of the ad hoc PRPA was an actuarial loss to the System which lowered the funding ratio by 2.5% and increased the average employer contribution rate by 0.91% of total payroll.

(6) Actuarial Projections

At the Fall 1991 Board Meetings, the PERS Board approved the use of an enhanced actuarial projection system in the valuation report this year. The same actuarial cost method is used, but the enhanced system projects population growth patterns and their associated liabilities 25 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 25 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 cost savings provisions of the third tier so that the ultimate effect of the second and third tiers on plan liabilities can be anticipated. As you can see in Section 1.5, based on the actuarial assumptions and cost method, future contribution rates are expected to remain fairly stable. This reflects the fact that many second-tier employees are already in PERS and affecting the rate.

The large asset gains over the last three years are being partially deferred under the asset smoothing method. As these deferred gains become recognized over the next 5 years the funded status is expected to improve. However, if the long term investment return assumption remains valid, investment losses can be anticipated which would offset these gains.

Summary

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

Last year's average employer contribution rate	7.74%
Change due to:	
Retiree medical insurance	0.00%
Investment performance	(1.26%)
Salary increases	(0.06%)
Demographic experience	0.03%
Ad hoc PRPA	0.91%
Average employer contribution rate this year	7.36%
Effect of PERS Board adopted average employer contribution rate	0.38
Adopted average employer contribution rate	7.74%

Section 1

Valuation Results

This section sets forth the results of the actuarial valuation.

Section 1.1(a) shows the distribution of net assets as of June 30, 1997.

Section 1.1(b) shows the transactions of the plan's fund during FY97.

Section 1.1(c) develops the expected valuation assets and investment return as of June 30, 1997.

Section 1.1(d) develops the actual valuation assets as of June 30, 1997.

Section 1.2(a) shows the actuarial present values for Police and Fire members as of June 30, 1997.

Section 1.2(b) shows the actuarial present values for "Other" members as of June 30, 1997.

Section 1.3(a) develops the average employer contribution rate for Police and Fire members - FY00.

Section 1.3(b) develops the average employer contribution rate for "Other" members - FY00.

Section 1.3(c) develops the average employer contribution rate for all members - FY00.

Section 1.4 calculates the actuarial gain or loss for FY97.

Section 1.5 contains the financial projections.

1.1(a) Statement of Net Assets as of June 30, 1997
(in thousands)

	<u>Pension</u>	<u>Postemployment Health</u>	<u>Total Market Value</u>
Cash and Cash Equivalents	\$ 17,851	\$ 6,916	\$ 24,767
Retirement Fixed Income Pool	1,734,993	672,238	2,407,231
United States Common Stocks	1,806,756	692,824	2,499,580
International Stocks	299,535	116,058	415,593
Global Equity Pool	505,379	195,813	701,192
Tactical Asset Allocation Pool	104,193	40,370	144,563
International Fixed Income Pool	96,231	37,286	133,517
Emerging Markets Stocks	70,153	27,181	97,334
Real Estate Equities	99,741	38,646	138,387
Mortgages (Net of Reserves)	1,207	467	1,674
Net Accrued Receivables	<u>1,669</u>	<u>648</u>	<u>2,317</u>
Total Assets	\$ 4,737,708	\$ 1,828,447	\$ 6,566,155

1.1(b) Changes in Net Assets During Fiscal Year 1997
(in thousands)

	<u>Pension</u>	<u>Postemployment Health</u>	<u>Total</u>
(1) Net Assets, June 30, 1996, (market value)	\$ 4,032,759	\$ 1,534,962	\$ 5,567,721
(2) Additions:			
(a) Employee Contributions	\$ 62,939	\$ 24,386	\$ 87,325
(b) Employer Contributions	104,409	40,454	144,863
(c) Retirement Incentive Program - Employee	450	174	624
(d) Retirement Incentive Program - Employer	7,017	2,719	9,736
(e) Interest and Dividend Income	187,730	72,738	260,468
(f) Net Appreciation on Investments	541,362	209,755	751,117
(g) Net Recognized Mortgage Loan Recovery	42	16	58
(h) Other	<u>4</u>	<u>3</u>	<u>7</u>
(i) Total Additions	\$ 903,953	\$ 350,245	\$ 1,254,198
(3) Deductions:			
(a) Medical Benefits	\$ 0	\$ 48,361	\$ 48,361
(b) Retirement Benefits	177,328	0	177,328
(c) Refunds of Contributions	9,378	3,634	13,012
(d) Investment Expenses	10,258	3,975	14,233
(e) Administrative Expenses	<u>2,040</u>	<u>790</u>	<u>2,830</u>
(f) Total Deductions	\$ 199,004	\$ 56,760	\$ 255,764
(4) Net Assets, June 30, 1997 (market value)	\$ 4,737,708	\$ 1,828,447	\$ 6,566,155

Approximate Market Value Investment Return Rate
During the Year, Net of Expenses

17.86%

**1.1(c) Development of Expected Valuation Assets as of
June 30, 1997 (in thousands)**

(1)	June 30, 1996 Valuation Assets	\$ 5,271,253
(2)	Total Contributions for FY97, (Item (2a) + (2b) + (2c) + (2d) from 1.1(b))	242,548
(3)	Total Benefit Payments for FY97, (Item (3a) + (3b) + (3c) from 1.1(b))	238,701
(4)	Expected Investment Return, Net of Expenses, for the period July 1, 1996 through June 30, 1997, $((1) + .5 \times [(2) - (3)]) \times 8.25\%$	435,037
(5)	Actual Investment Return, Net of Expenses, for the period July 1, 1996 through June 30, 1997, [Item (2e) + (2f) + (2g) + (2h) - (3d) - (3e) from 1.1(b)]	994,587
(6)	Total Investment Gain/(Loss), (5) - (4)	559,550
(7)	Expected Valuation Assets, (1) + (2) - (3) + (4)	5,710,137

1.1(d) Development of Valuation Assets as of June 30, 1997 (in thousands)

	A	B	C
	Total Investment Gain/(Loss)	Gain/(Loss) Recognized in Prior Fiscal Years	Gain/(Loss) Recognized this Fiscal Year (A ÷ 5)
(1) Fiscal Year ending June 30, 1997	\$ 559,550	\$ 0	\$ 111,910
(2) Fiscal Year ending June 30, 1996	277,855	55,571	55,571
(3) Fiscal Year ending June 30, 1995	292,216	116,886	58,443
(4) Fiscal Year ending June 30, 1994	(252,865)	(151,719)	(50,573)
(5) Total Gain/(Loss) Recognized this Fiscal Year			175,351
(6) Expected Valuation Assets, June 30, 1997, (Item (7) from 1.1(c))			\$ 5,710,137
(7) Valuation Assets at June 30, 1997, (5) + (6), but not outside a corridor of 80% to 120% of the market value of assets			\$ 5,885,488
Approximate Valuation Assets Investment Return Rate During the Year, Net of Expenses			11.58%

**1.2(a) Actuarial Present Values as of June 30, 1997 Police and Fire Members
(in thousands)**

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 14,291	\$ 232,299
Termination Benefits	2,244	30,875
Disability Benefits	543	11,633
Death Benefits	869	20,024
Return of Contributions	460	3,014
Medical Benefits	4,651	65,758
Indebtedness	0	(10,120)
Retirement Incentive Program Receivable	<u>0</u>	<u>(1,131)*</u>
Subtotal	\$ 23,058	\$ 352,352
<u>Inactive Members</u>		
Not Vested	\$ 0	\$ 451
Vested Terminations		
- Retirement Benefits	0	5,979
- Medical Benefits	0	10,383
Retirees & Beneficiaries		
- Retirement Benefits	0	373,181
- Medical Benefits	<u>0</u>	<u>69,305</u>
Subtotal	\$ 0	\$ 459,299
<u>Totals</u>	\$ 23,058	\$ 811,651

* Allocated between Police/Fire and Other members in proportion to Accrued Liability prior to receivable

1.2(b) Actuarial Present Values as of June 30, 1997
"Other" Members (in thousands)

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 93,341	\$ 1,278,397
Termination Benefits	19,551	211,468
Disability Benefits	2,082	30,175
Death Benefits	4,567	79,490
Return of Contributions	5,219	25,274
Medical Benefits	57,406	597,324
Indebtedness	0	(54,627)
Retirement Incentive Program Receivable	0	(6,345)*
Subtotal	\$ 182,166	\$ 2,161,156
<u>Inactive Members</u>		
Not Vested	\$ 0	\$ 18,210
Vested Terminations - Retirement Benefits	0	316,543
- Medical Benefits	0	322,243
Retirees & Beneficiaries - Retirement Benefits	0	1,466,737
- Medical Benefits	0	437,576
Subtotal	\$ 0	\$ 2,561,309
<u>Totals</u>	\$ 182,166	\$ 4,722,465

* Allocated between Police/Fire and Other members in proportion to Accrued Liability prior to receivable

**1.3(a) Development of Average Employer Contribution Rate - FY00
For Police and Fire Members (in thousands)**

Consolidated Rate

(1)	Total Normal Cost	\$ 23,058
(2)	Total Salaries	135,702
(3)	Normal Cost Rate for Police & Fire Members, (1) ÷ (2)	16.99%
(4)	Member Contribution Rate (Police & Fire)	7.50%
(5)	Consolidated Employer Normal Cost Rate For Police & Fire Members, (3) - (4)	9.49%

Past Service Rate

(1)	Accrued Liability	\$ 811,651
(2)	Valuation Assets	863,184*
(3)	Total Unfunded Liability, (1) - (2)	(51,533)
(4)	Amortization Factor (25 years)	11.312888
(5)	Past Service Cost, (3) ÷ (4)	(4,555)
(6)	Total Salaries	135,702
(7)	Past Service Rate, (5) ÷ (6)	(3.36%)

Average Employer Contribution Rate 6.13%

* Allocated between Police/Fire and Other members in proportion to Accrued Liability.

**1.3(b) Development of Average Employer Contribution Rate - FY00
For "Other" Members (in thousands)**

Consolidated Rate

(1)	Total Normal Cost	\$ 182,166
(2)	Total Salaries	1,093,433
(3)	Normal Cost Rate for "Other" Members, (1) ÷ (2)	16.66%
(4)	Member Contribution Rate ("Other")	6.75%
(5)	Consolidated Employer Normal Cost Rate For "Other" Members, (3) - (4)	9.91%

Past Service Rate

(1)	Accrued Liability	\$ 4,722,465
(2)	Valuation Assets	5,022,304*
(3)	Total Unfunded Liability, (1) - (2)	(299,839)
(4)	Amortization Factor (25 years)	11.312888
(5)	Past Service Cost, (3) ÷ (4)	\$ (26,504)
(6)	Total Salaries	\$ 1,093,433
(7)	Past Service Rate, (5) ÷ (6)	(2.42%)

Average Employer Contribution Rate 7.49%

* Allocated between Police/Fire and Other members in proportion to Accrued Liability.

1.3(c) Development of Average Employer Contribution Rate - FY00
All Members (in thousands)

Consolidated Rate

(1)	Total Normal Cost	\$ 205,224
(2)	Total Salaries	1,229,135
(3)	Normal Cost Rate for All Members, (1) ÷ (2)	16.70%
(4)	Average Member Contribution Rate	6.81%
(5)	Consolidated Employer Normal Cost Rate for All Members, (3) - (4)	9.89%

Past Service Rate

(1)	Accrued Liability	\$ 5,534,116
(2)	Valuation Assets	5,885,488
(3)	Total Unfunded Liability, (1) - (2)	(351,372)
(4)	Amortization Factor (25 years)	11.312888
(5)	Past Service Cost, (3) ÷ (4)	(31,059)
(6)	Total Salaries	1,229,135
(7)	Past Service Rate, (5) ÷ (6)	(2.53%)

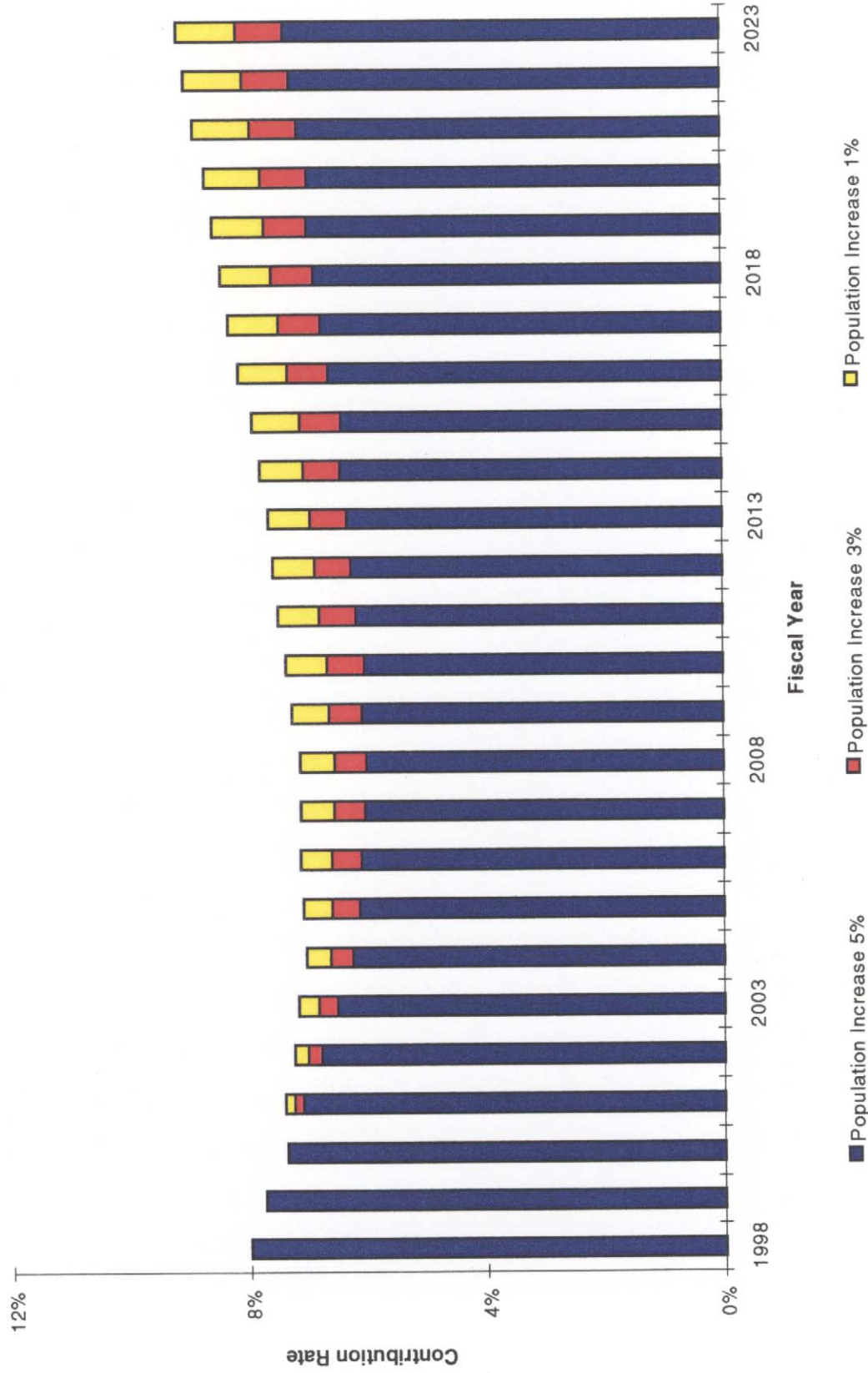
Average Employer Contribution Rate 7.36%

**1.4 Development of Actuarial Gain/(Loss) for FY97
(in thousands)**

(1) Unfunded Liability, June 30, 1996	\$ (291,295)
(2) Normal Cost for FY97	203,818
(3) Interest on (1) and (2) at 8.25%	(7,217)
(4) Employee Contributions for FY97	87,949
(5) Employer Contributions for FY97	154,599
(6) Interest on (4) and (5) at 8.25% for one-half year	10,005
(7) Expected Unfunded Liability, June 30, 1997, (1) + (2) + (3) - (4) - (5) - (6)	(347,247)
(8) Actual Unfunded Liability, June 30, 1997	(351,372)
(9) Actuarial Gain/(Loss) for the Year, (7) - (8)	\$ 4,125

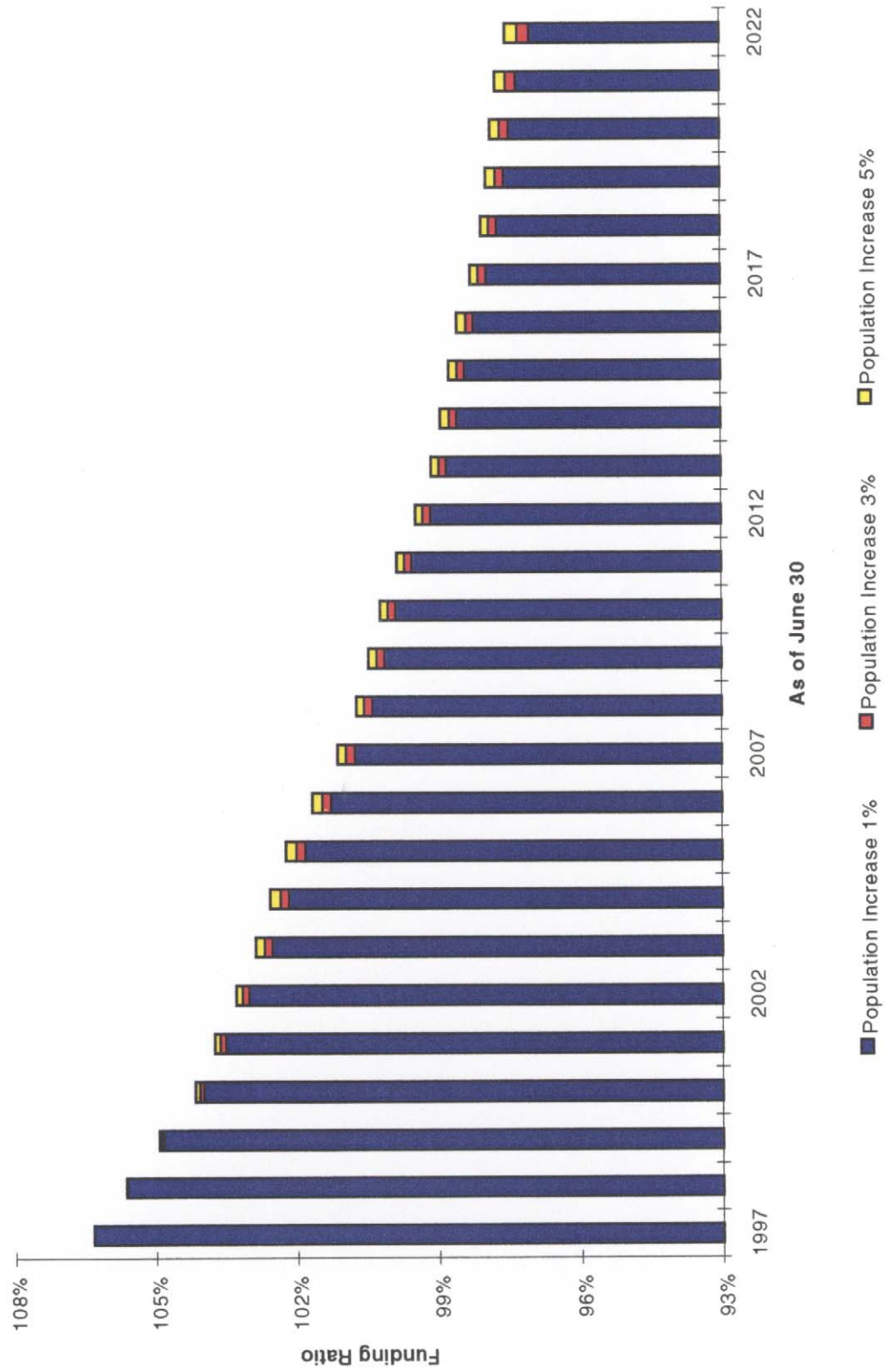
1.5 Actuarial Projections

State of Alaska PERS Projected Contribution Rates



1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Funding Ratios



1.5 Actuarial Projections (continued)

Table 1

State of Alaska PERS
Financial Projections ('000 omitted)

As of June 30	Investment Return		8.25%		Annual Population Increase										1.00%		Ending Asset Value
	Valuation Amounts on July 1				Flow Amounts During Following 12 Months												
	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					
1997	5,885,488	5,534,116	106.3%	351,372	1,229,135	8.00%	99,803	84,957	184,761	269,795	(85,034)	482,045	6,282,499				
1998	6,282,499	5,948,258	105.6%	334,241	1,265,944	7.74%	99,451	87,502	186,953	288,038	(101,085)	514,136	6,695,550				
1999	6,695,550	6,385,521	104.9%	310,029	1,303,856	7.36%	97,509	90,188	187,696	312,930	(125,234)	547,217	7,117,533				
2000	7,117,533	6,844,018	104.0%	273,515	1,344,826	7.40%	100,746	92,672	193,418	352,510	(159,092)	580,634	7,539,075				
2001	7,539,075	7,281,945	103.5%	257,129	1,376,807	7.24%	101,078	95,075	196,153	385,409	(189,255)	614,167	7,963,986				
2002	7,963,986	7,729,799	103.0%	234,187	1,415,423	7.17%	103,186	98,066	201,251	416,333	(215,082)	648,157	8,397,061				
2003	8,397,061	8,189,767	102.5%	207,294	1,464,633	7.03%	104,642	101,417	206,059	444,767	(238,708)	682,911	8,841,264				
2004	8,841,264	8,653,056	102.2%	188,208	1,513,843	7.08%	108,898	104,768	213,667	488,828	(275,161)	718,054	9,284,157				
2005	9,284,157	9,117,391	101.8%	166,766	1,563,053	7.12%	113,059	108,120	221,179	554,712	(333,533)	752,185	9,702,809				
2006	9,702,809	9,580,967	101.3%	121,843	1,612,264	7.12%	116,471	111,471	227,941	596,972	(369,030)	785,259	10,119,038				
2007	10,119,038	10,042,452	100.8%	76,586	1,661,474	7.12%	120,725	115,413	236,138	632,381	(396,243)	818,476	10,541,270				
2008	10,541,270	10,500,986	100.4%	40,284	1,728,043	7.26%	127,867	119,946	247,813	671,993	(424,180)	852,157	10,969,248				
2009	10,969,248	10,956,182	100.1%	13,066	1,794,612	7.35%	134,425	124,480	258,904	719,524	(460,620)	885,962	11,394,591				
2010	11,394,591	11,408,124	99.9%	(13,533)	1,861,180	7.49%	141,877	129,013	270,890	782,604	(511,713)	918,946	11,801,822				
2011	11,801,823	11,857,367	99.5%	(55,543)	1,927,749	7.57%	148,436	133,546	281,982	835,304	(553,321)	950,826	12,199,328				
2012	12,199,328	12,304,939	99.1%	(105,611)	1,994,318	7.64%	155,906	138,953	294,859	876,333	(581,474)	982,459	12,600,313				
2013	12,600,313	12,752,340	98.8%	(152,027)	2,086,548	7.78%	165,881	145,234	311,115	912,222	(601,107)	1,014,730	13,013,937				
2014	13,013,937	13,201,543	98.6%	(187,606)	2,178,778	7.90%	175,724	151,515	327,240	951,075	(623,836)	1,047,917	13,438,018				
2015	13,438,018	13,654,991	98.4%	(216,973)	2,271,008	8.13%	188,337	157,796	346,133	1,001,023	(654,890)	1,081,622	13,864,751				
2016	13,864,751	14,115,600	98.2%	(250,849)	2,363,238	8.29%	199,845	164,077	363,922	1,055,514	(691,592)	1,115,314	14,288,472				
2017	14,288,472	14,586,757	98.0%	(298,285)	2,455,468	8.42%	212,152	171,518	383,669	1,091,373	(707,704)	1,149,606	14,730,374				
2018	14,730,374	15,072,323	97.7%	(341,949)	2,581,758	8.56%	226,377	180,118	406,494	1,123,248	(716,754)	1,185,690	15,199,310				
2019	15,199,310	15,576,629	97.6%	(377,319)	2,708,049	8.69%	240,705	188,718	429,424	1,156,448	(727,024)	1,223,953	15,696,240				
2020	15,696,240	16,104,480	97.5%	(408,240)	2,834,339	8.88%	257,172	197,319	454,491	1,201,649	(747,158)	1,264,120	16,213,201				
2021	16,213,201	16,661,150	97.3%	(447,949)	2,906,630	9.02%	272,765	205,919	478,684	1,257,370	(778,686)	1,305,468	16,739,984				
2022	16,739,984	17,252,388	97.0%	(512,404)	2,986,921	9.14%	288,126	214,703	502,829	1,295,147	(792,318)	1,348,366	17,296,031				

* Surpluses reduce employer contributions over 25 years
* Deficits increase employer contributions over 25 years

1.5 Actuarial Projections (continued)

Table 2

State of Alaska PERS
Financial Projections ('000 omitted)

As of June 30	Valuation Amounts on July 1				Flow Amounts During Following 12 Months				Annual Population Increase				Ending			
	Total Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Cib Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings	Asset Value			
1997	5,885,488	5,534,116	106.3%	351,372	1,229,135	8.00%	100,551	83,594	186,145	269,795	(83,650)	482,102	6,283,940			
1998	6,283,940	5,948,821	105.6%	335,119	1,284,633	7.74%	101,666	89,451	191,117	288,045	(96,928)	514,427	6,701,439			
1999	6,701,439	6,388,252	104.9%	313,187	1,342,408	7.36%	101,172	93,576	194,748	313,108	(118,360)	547,986	7,131,065			
2000	7,131,065	6,851,019	104.1%	280,045	1,405,787	7.25%	104,014	97,680	201,694	352,989	(151,296)	582,072	7,561,841			
2001	7,561,841	7,295,669	103.6%	266,172	1,462,944	7.01%	104,911	101,902	206,813	386,292	(179,479)	616,448	7,998,811			
2002	7,998,811	7,753,245	103.2%	245,566	1,529,777	6.84%	107,589	107,189	214,778	417,761	(202,983)	651,529	8,447,357			
2003	8,447,357	8,225,522	102.7%	221,834	1,618,216	6.63%	110,172	113,212	223,384	446,640	(223,255)	687,698	8,911,799			
2004	8,911,799	8,706,425	102.4%	205,374	1,706,655	6.59%	115,443	119,235	234,677	491,223	(236,546)	724,641	9,379,894			
2005	9,379,894	9,194,275	102.0%	185,619	1,795,094	6.59%	121,277	125,257	246,535	557,725	(311,190)	761,005	9,829,709			
2006	9,829,709	9,688,053	101.5%	141,655	1,883,533	6.56%	126,386	131,280	257,666	600,670	(343,004)	796,802	10,283,507			
2007	10,283,507	10,187,394	100.9%	96,113	1,971,972	6.54%	133,209	138,739	271,948	636,892	(364,945)	833,335	10,751,898			
2008	10,751,898	10,692,587	100.6%	59,311	2,102,581	6.64%	143,867	147,633	291,500	677,484	(385,984)	871,110	11,237,023			
2009	11,237,023	11,204,580	100.3%	32,443	2,233,190	6.66%	153,068	156,528	309,595	726,194	(416,599)	909,870	11,730,294			
2010	11,730,294	11,724,976	100.0%	5,318	2,363,800	6.79%	164,887	165,422	330,309	790,738	(460,429)	948,757	12,218,622			
2011	12,218,622	12,256,031	99.7%	(37,410)	2,494,409	6.86%	175,651	174,317	349,967	845,272	(495,305)	987,605	12,710,922			
2012	12,710,922	12,800,662	99.3%	(89,740)	2,625,018	6.93%	188,590	185,350	373,940	888,573	(514,633)	1,027,422	13,223,711			
2013	13,223,711	13,362,438	99.0%	(138,727)	2,818,452	7.04%	205,352	198,523	403,875	927,158	(523,284)	1,069,371	13,769,799			
2014	13,769,799	13,945,585	98.7%	(175,786)	3,011,886	7.10%	220,674	211,696	432,370	969,189	(536,819)	1,113,865	14,346,844			
2015	14,346,844	14,554,985	98.6%	(208,141)	3,205,320	7.31%	241,272	224,869	466,141	1,023,006	(556,865)	1,160,644	14,950,623			
2016	14,950,623	15,196,176	98.4%	(245,552)	3,398,755	7.45%	260,517	238,042	498,559	1,082,314	(583,755)	1,209,347	15,576,214			
2017	15,576,214	15,875,351	98.1%	(299,137)	3,592,189	7.57%	282,580	254,257	536,838	1,123,944	(587,107)	1,260,820	16,249,927			
2018	16,249,927	16,599,361	97.9%	(349,434)	3,874,987	7.68%	308,627	273,516	582,143	1,162,567	(580,424)	1,316,676	16,986,179			
2019	16,986,179	17,375,710	97.8%	(389,531)	4,157,785	7.74%	332,862	292,774	625,636	1,203,572	(577,936)	1,377,520	17,785,763			
2020	17,785,763	18,212,561	97.7%	(426,798)	4,440,583	7.91%	362,587	312,033	674,620	1,258,437	(583,817)	1,443,243	18,645,189			
2021	18,645,189	19,118,730	97.5%	(473,541)	4,723,382	8.04%	391,093	331,292	722,384	1,325,805	(603,421)	1,513,337	19,555,105			
2022	19,555,105	20,103,691	97.3%	(548,585)	5,006,180	8.14%	419,884	351,127	771,011	1,377,220	(606,209)	1,588,290	20,537,186			

* Surpluses reduce employer contributions over 25 years

* Deficits increase employer contributions over 25 years

1.5 Actuarial Projections (continued)

Table 3

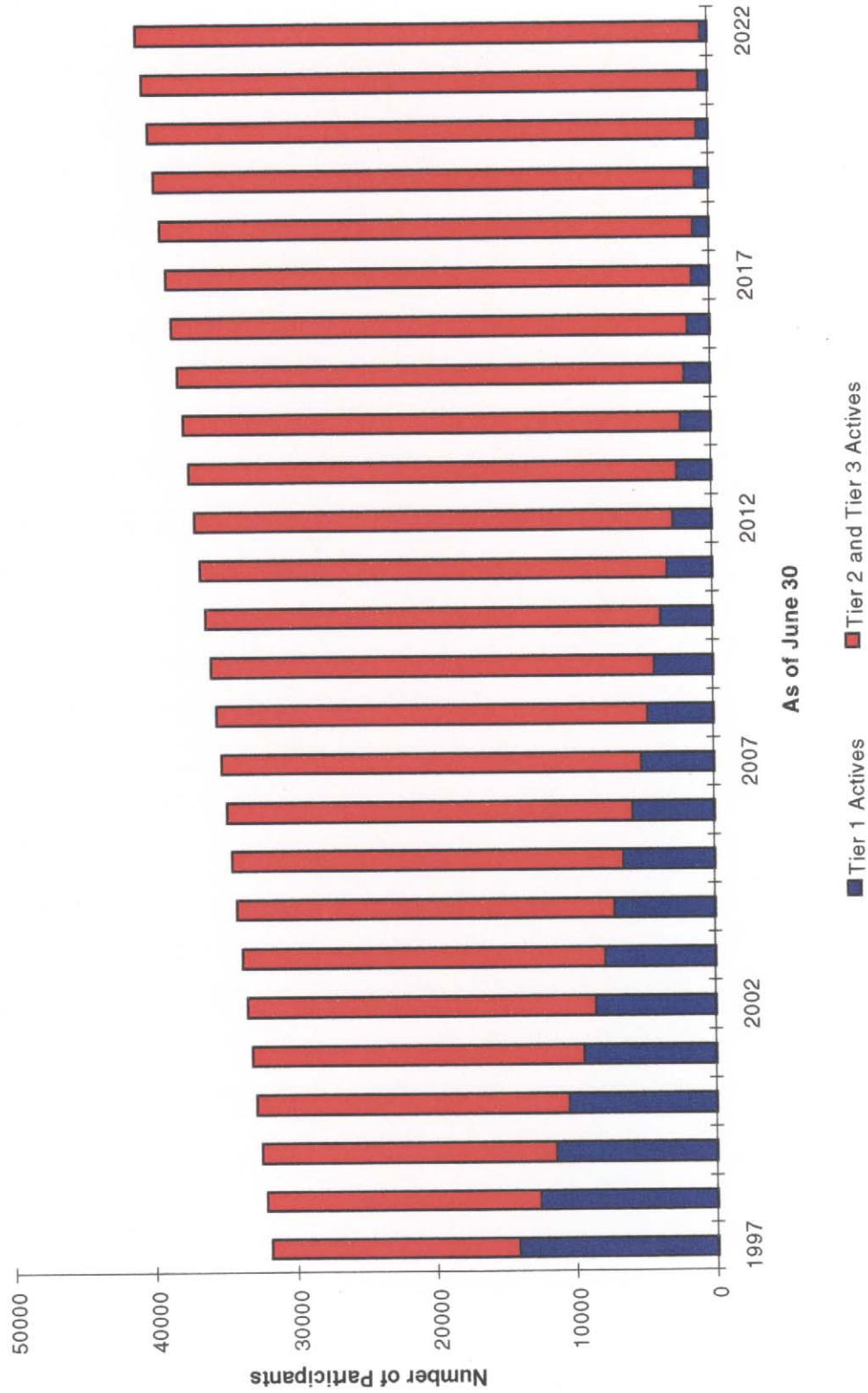
State of Alaska PERS
Financial Projections ('000 omitted)

As of June 30	Investment Return		8.25%		Annual Population Increase										Ending Asset Value
	Valuation Amounts on July 1				Flow Amounts During Following 12 Months						5.00%				
	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			
1997	5,885,488	5,534,116	106.3%	351,372	1,229,135	8.00%	101,288	86,222	187,510	269,795	(82,285)	482,159	6,285,362		
1998	6,285,362	5,949,308	105.6%	336,054	1,303,074	7.74%	103,891	91,408	195,300	288,052	(92,752)	514,716	6,707,326		
1999	6,707,326	6,391,002	104.9%	316,324	1,381,461	7.36%	104,933	97,055	201,988	313,287	(111,300)	548,763	7,144,789		
2000	7,144,789	6,858,154	104.2%	286,635	1,468,892	7.10%	107,376	102,928	210,304	353,476	(143,173)	583,539	7,585,156		
2001	7,585,156	7,309,834	103.8%	275,322	1,553,956	6.79%	108,931	109,198	218,129	387,203	(169,074)	618,801	8,034,883		
2002	8,034,883	7,777,744	103.3%	257,139	1,653,036	6.52%	112,264	117,256	229,520	419,257	(189,737)	655,051	8,500,197		
2003	8,500,197	8,261,641	102.9%	238,556	1,790,599	6.25%	116,214	126,624	242,838	448,647	(205,808)	692,777	8,987,165		
2004	8,987,165	8,761,550	102.6%	225,615	1,928,162	6.13%	122,484	135,992	258,476	493,841	(235,365)	731,732	9,483,533		
2005	9,483,533	9,276,032	102.2%	207,501	2,065,725	6.09%	130,070	145,360	275,430	561,081	(285,651)	770,608	9,968,491		
2006	9,968,491	9,804,693	101.7%	163,797	2,203,289	6.03%	137,087	154,728	291,815	604,869	(313,053)	809,487	10,464,924		
2007	10,464,924	10,348,188	101.1%	116,736	2,340,852	6.00%	147,197	166,968	314,165	642,103	(327,938)	849,829	10,986,815		
2008	10,986,815	10,908,215	100.7%	78,600	2,562,747	6.08%	162,564	182,079	344,642	683,927	(339,285)	892,417	11,539,947		
2009	11,539,947	11,487,520	100.5%	52,426	2,784,642	6.04%	174,824	197,190	372,014	734,132	(362,118)	937,108	12,114,937		
2010	12,114,937	12,089,894	100.2%	25,042	3,006,538	6.17%	192,493	212,301	404,794	800,533	(395,739)	983,158	12,702,355		
2011	12,702,355	12,720,176	99.9%	(17,820)	3,228,433	6.25%	208,773	227,412	436,185	857,394	(421,210)	1,030,569	13,311,715		
2012	13,311,715	13,384,248	99.5%	(72,533)	3,450,328	6.32%	229,357	247,091	476,448	903,581	(427,133)	1,080,597	13,965,180		
2013	13,965,180	14,089,041	99.1%	(123,861)	3,806,388	6.42%	255,938	271,339	527,276	945,627	(418,350)	1,134,870	14,681,700		
2014	14,681,700	14,842,531	98.9%	(160,831)	4,162,447	6.41%	278,246	295,586	573,833	991,781	(417,949)	1,194,000	15,457,751		
2015	15,457,751	15,653,741	98.7%	(195,989)	4,518,506	6.61%	310,530	319,834	630,364	1,050,635	(420,271)	1,257,928	16,295,409		
2016	16,295,409	16,532,738	98.6%	(237,329)	4,874,566	6.75%	340,966	344,082	685,047	1,116,201	(431,154)	1,326,586	17,190,841		
2017	17,190,841	17,490,638	98.3%	(299,797)	5,230,625	6.86%	378,185	375,444	753,628	1,165,375	(411,747)	1,401,260	18,180,354		
2018	18,180,354	18,539,601	98.1%	(359,247)	5,795,617	6.97%	423,405	413,919	837,324	1,212,926	(375,602)	1,484,386	19,289,138		
2019	19,289,138	19,692,834	98.0%	(403,697)	6,360,609	6.96%	462,201	452,395	914,597	1,264,402	(349,806)	1,576,924	20,516,256		
2020	20,516,256	20,964,591	97.9%	(448,334)	6,925,600	7.13%	513,846	490,871	1,004,717	1,332,173	(327,456)	1,679,084	21,867,884		
2021	21,867,884	22,370,169	97.8%	(502,285)	7,400,592	7.25%	563,441	529,347	1,092,788	1,415,142	(322,354)	1,790,803	23,336,334		
2022	23,336,334	23,925,916	97.5%	(589,582)	8,055,584	7.35%	614,345	569,274	1,183,620	1,485,005	(301,386)	1,912,815	24,947,764		

* Surpluses reduce employer contributions over 25 years
* Deficits increase employer contributions over 25 years

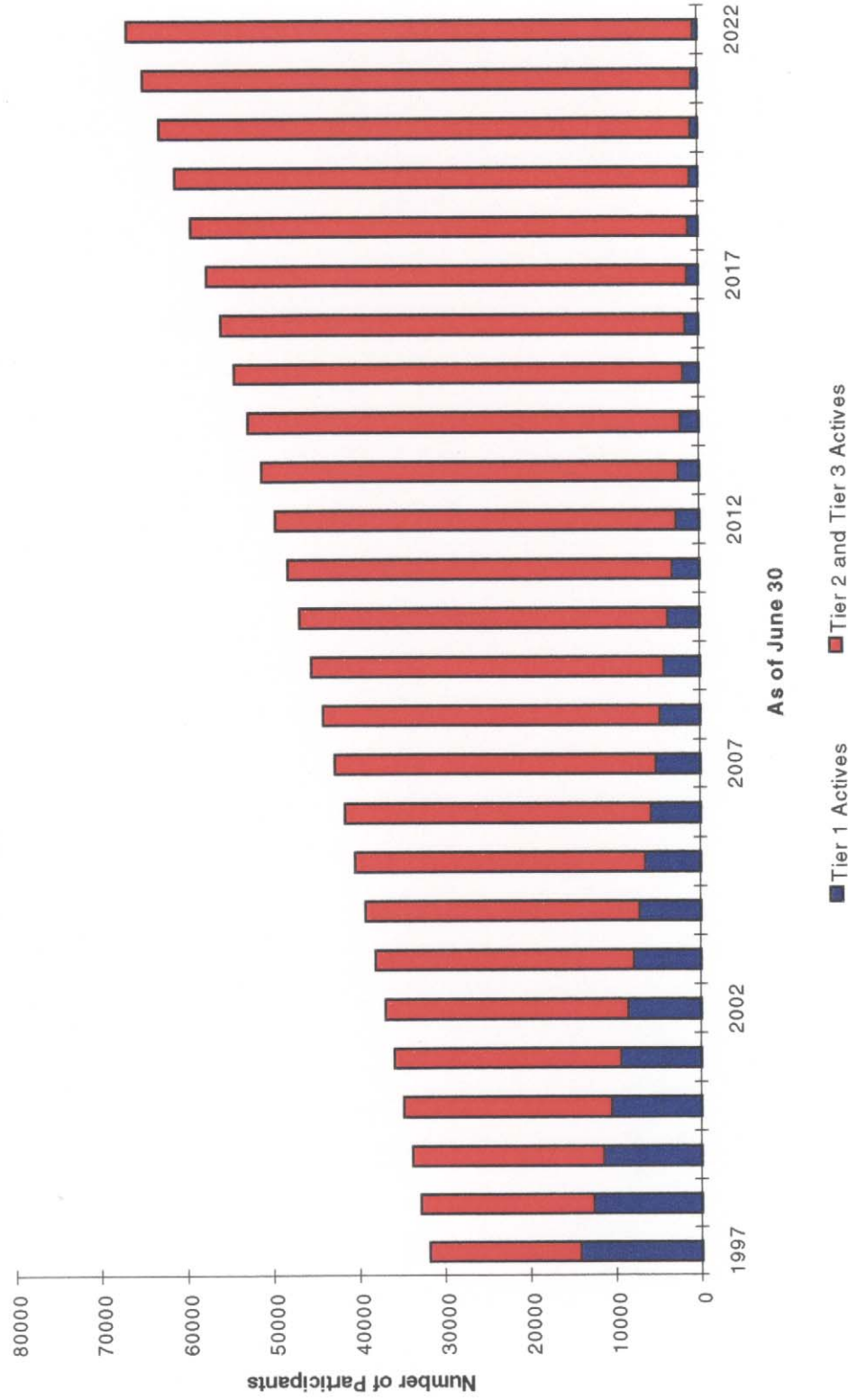
1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Active Participant Count Annual Population Increase 1%



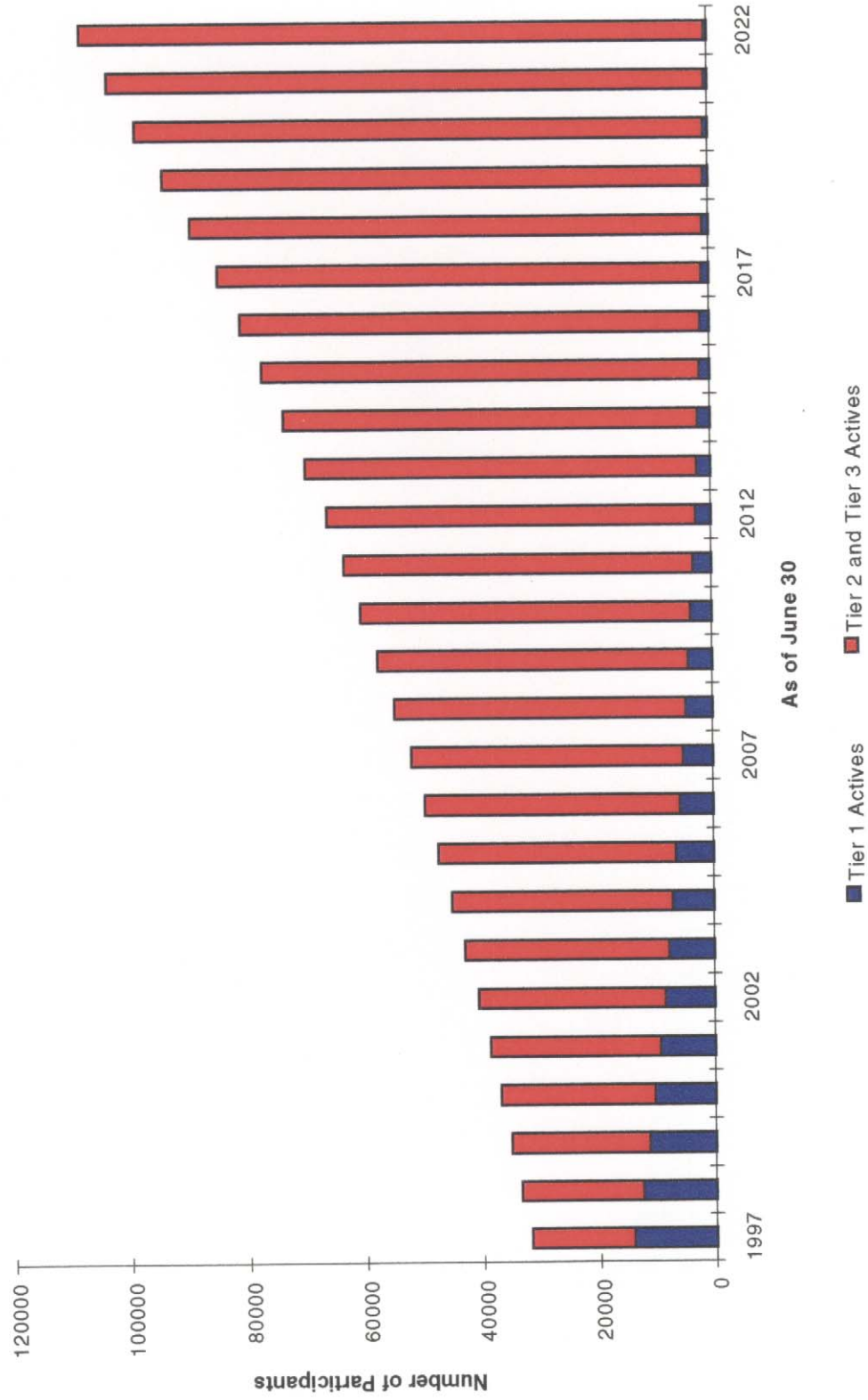
1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Active Participant Count Annual Population Increase 3%



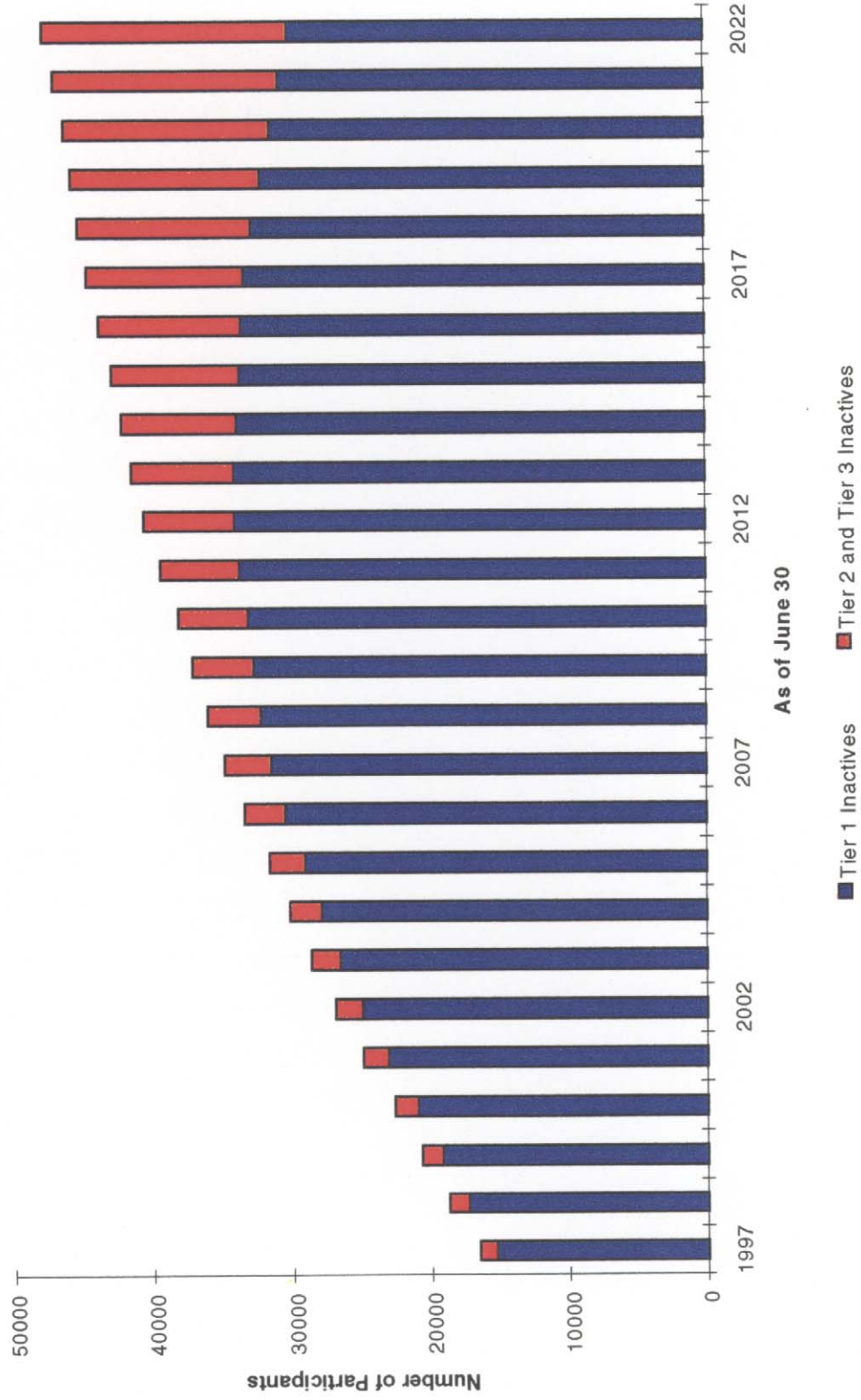
1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Active Participant Count Annual Population Increase 5%



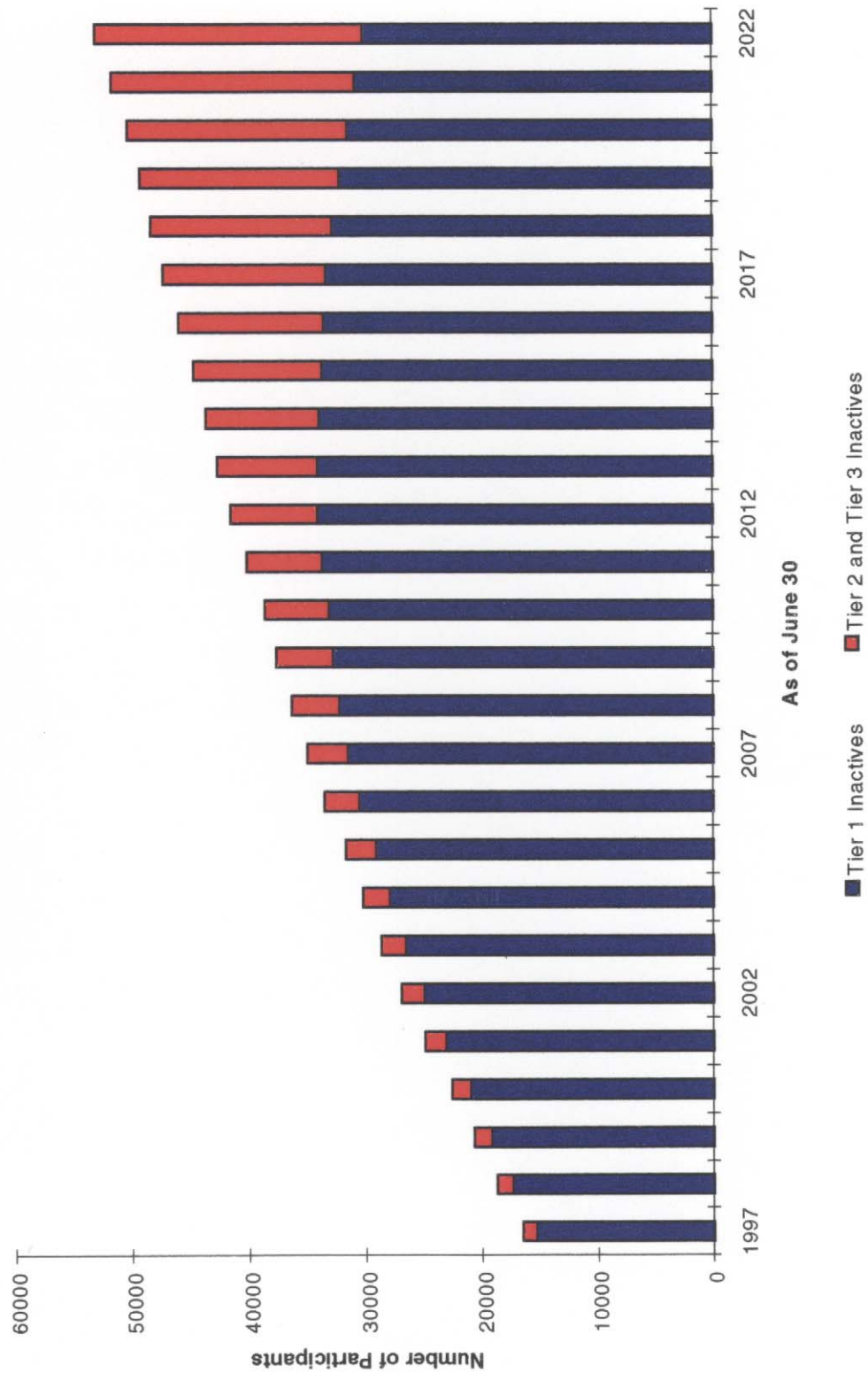
1.5 Actuarial Projections (continued)

**State of Alaska PERS Projected Inactive Participant Count
Annual Population Increase 1%**



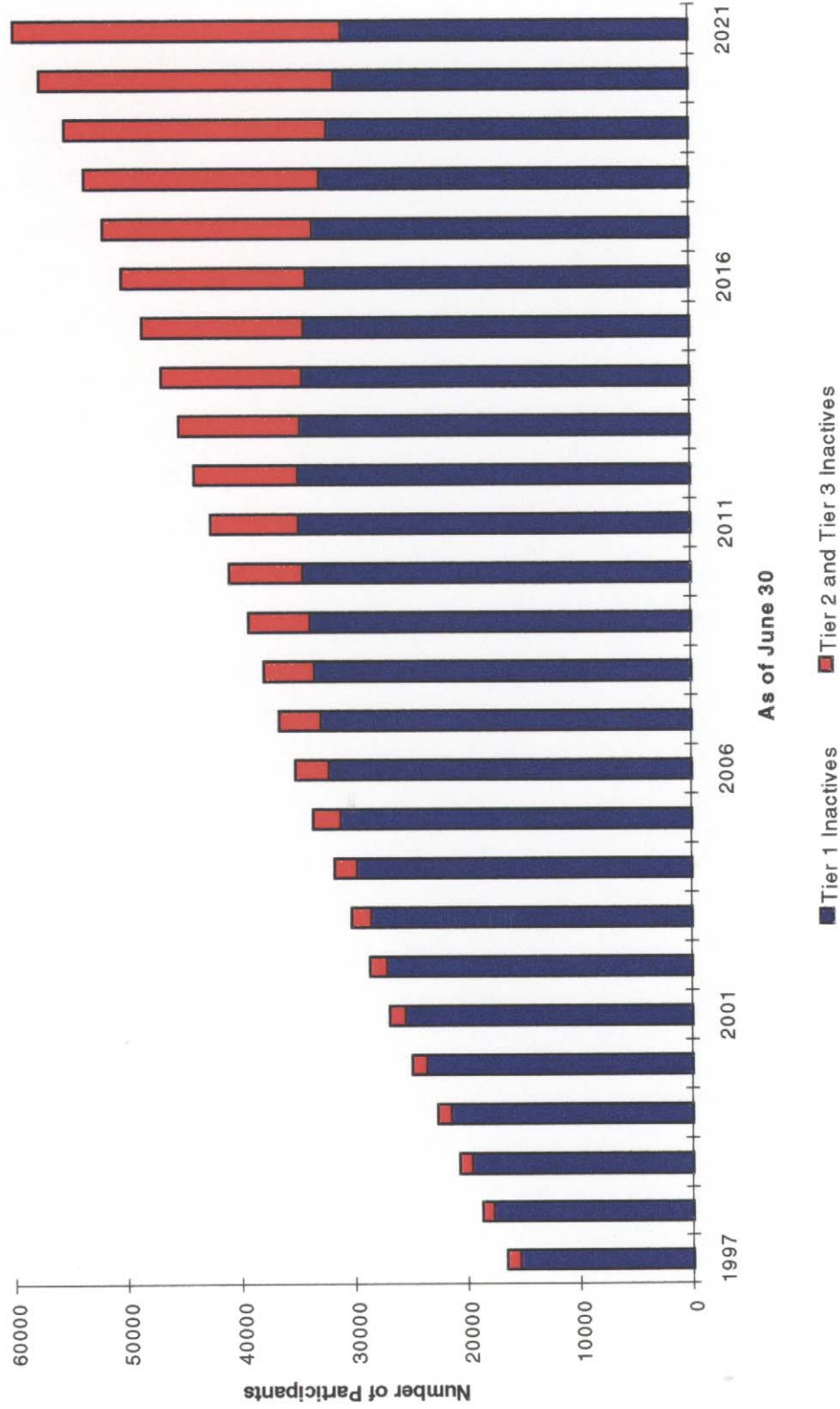
1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Inactive Participant Count Annual Population Increase 3%



1.5 Actuarial Projections (continued)

State of Alaska PERS Projected Inactive Participant Count Annual Population Increase 5%



Section 2

Basis of Valuation

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, 1995. 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. Members who were first hired after June 30, 1996 are eligible for different health benefits 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 156 employers participating in the PERS, including the State of Alaska and 155 political subdivisions and public organizations.

(4) Members Included

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 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.

(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;

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

- 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; and
- leave without pay service after June 13, 1987, while receiving Workers' Compensation.

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.

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.

(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. Funding surpluses are amortized over five years.

(7) **Member Contributions**

Mandatory Contributions: Police and fire members are required to contribute 7.5% of their compensation; all other members contribute 6.75%. 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.

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.

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

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 60¹, 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;
 - (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; or
 - (iv) two years of paid-up PERS service and they are vested in the Teachers' Retirement System.
- (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 also select level income or 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.

¹ 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)

Benefit Calculation: 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 three highest, 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 other members 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%.

Indebtedness: Members who terminate and are refunded 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, 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.

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 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) **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.

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

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.

(11) **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.

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.

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.

(12) **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 were first hired before July 1, 1986, if the CPI increases and the financial condition of the fund will permit an increase.

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

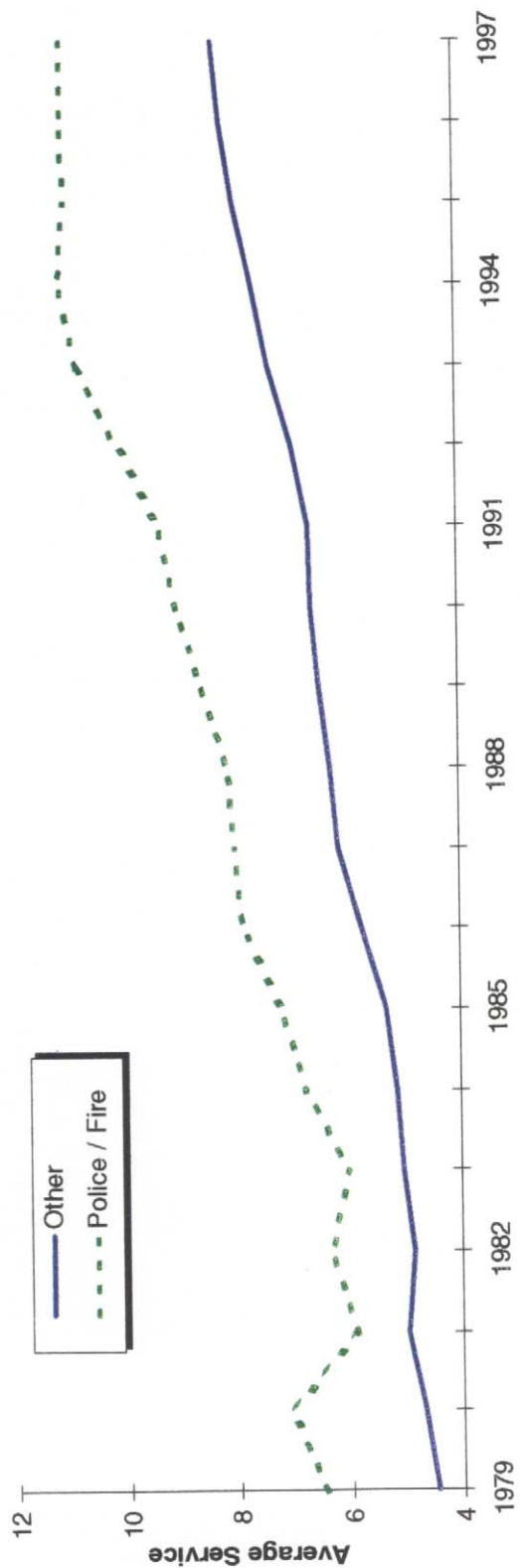
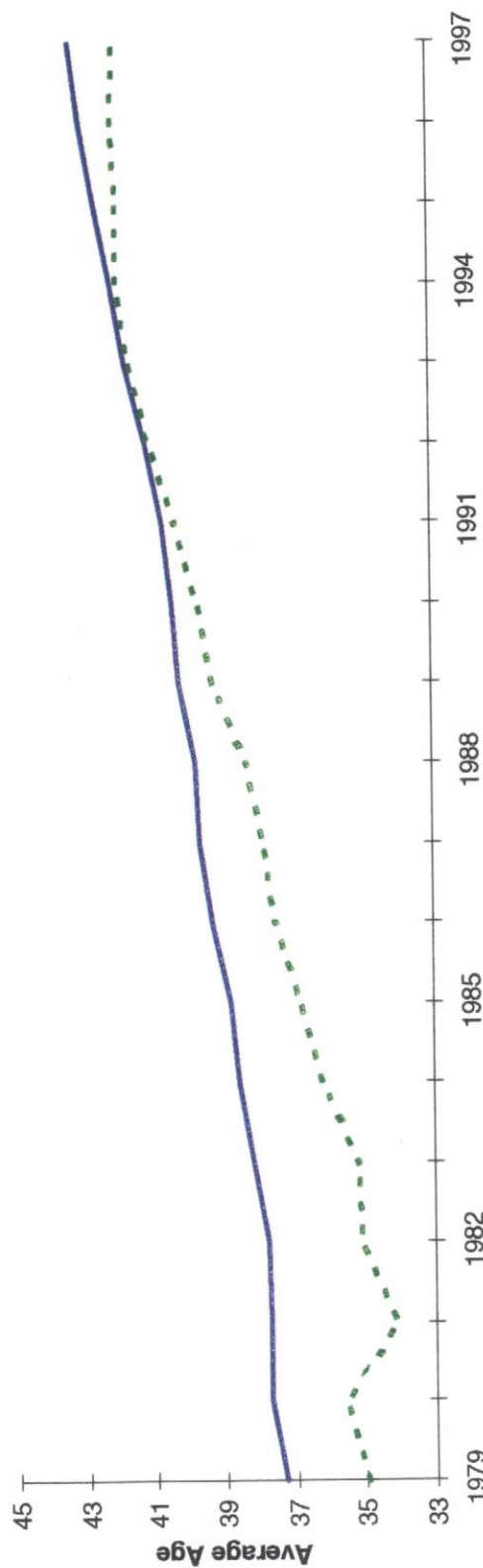
2.2(a) Participant Census Information - Total PERS as of June 30

	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Active Members					
(1) Number	30,972	31,364	31,450	31,960	31,854
(2) Average Age	41.75	42.18	42.58	42.95	43.21
(3) Average Credited Service	7.62	7.92	8.20	8.41	8.56
(4) Average Annual Salary	\$ 36,675	\$ 37,527	\$ 37,776	\$ 38,231	\$ 38,587
Retirees and Beneficiaries					
(1) Number	9,103	9,643	10,173	10,921	11,802
(2) Average Age	63.98	64.22	64.48	64.61	64.62
(3) Average Monthly Benefit:					
Base	\$ 855	\$ 874	\$ 900	\$ 913	\$ 941
C.O.L.A.	63	63	64	64	67
P.R.P.A.	129	135	136	131	212
Adjustment	0	0	-1	-4	-10
TOTAL	1,047	1,072	1,099	1,104	1,210
Vested Terminations					
(1) Number	3,572	3,771	4,144	4,382	4,742
(2) Average Age	44.04	44.39	45.00	45.43	45.83
(3) Average Monthly Benefit	\$ 610	\$ 626	\$ 653	\$ 662	\$ 690
Non-Vested Terminations With Account Balances					
(1) Number	4,721	4,859	5,398	5,847	6,260
(2) Average Account Balance	\$ 2,442	\$ 2,637	\$ 2,758	\$ 2,896	\$ 2,981

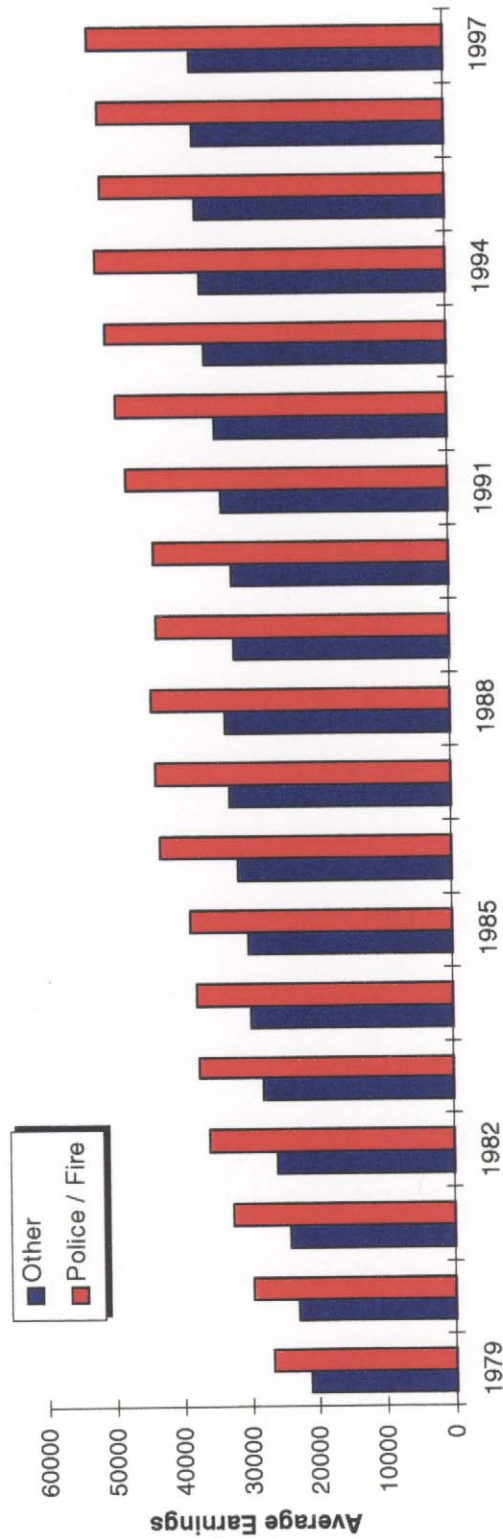
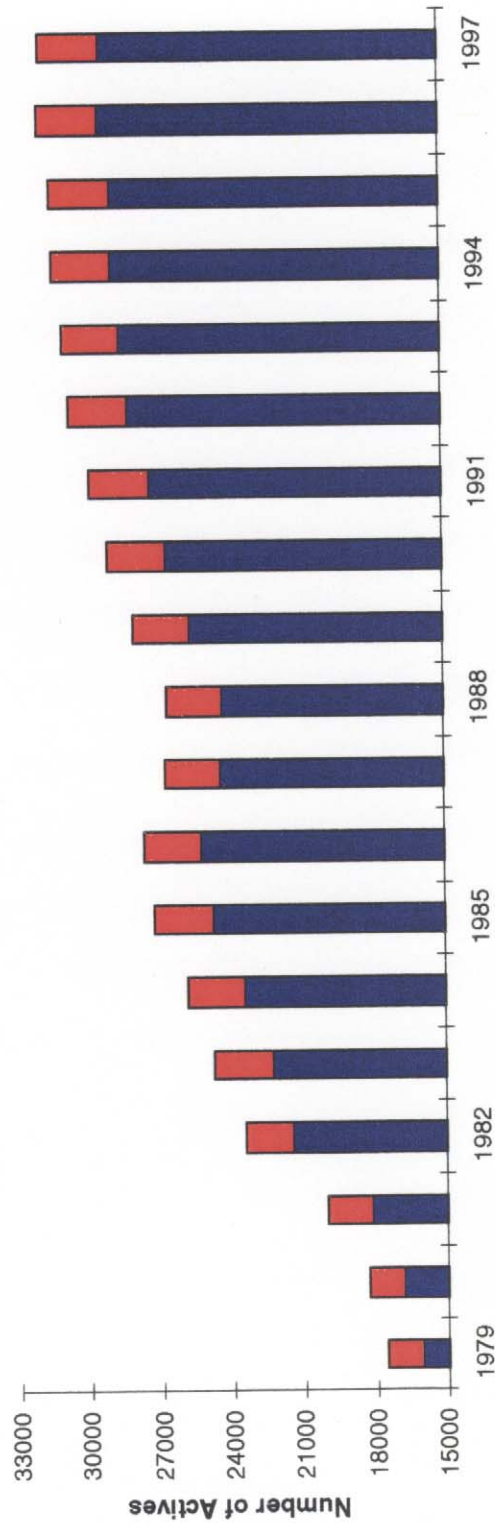
2.2(b) Additional Information - Active Members by Type of Status as of June 30

		<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Active Police & Fire						
(1)	Number	2,463	2,481	2,557	2,634	2,587
(2)	Average Age	41.67	42.01	42.00	42.09	42.04
(3)	Average Credited Service	10.80	11.13	11.03	11.07	11.05
(4)	Average Annual Salary	\$ 50,355	\$ 51,776	\$ 50,921	\$ 51,011	\$ 52,455
(5)	Number Vested	1,907	1,981	1,986	1,986	1,887
(6)	Percent Who Are Vested	77.4%	79.8%	77.7%	75.4%	72.9%
Active "Other" Members						
(1)	Number	28,509	28,883	28,893	29,326	29,267
(2)	Average Age	41.76	42.19	42.63	43.03	43.31
(3)	Average Credited Service	7.35	7.65	7.95	8.17	8.34
(4)	Average Annual Salary	\$ 35,493	\$ 36,303	\$ 36,612	\$ 37,083	\$ 37,361
(5)	Number Vested	15,336	16,162	16,877	17,618	17,695
(6)	Percent Who Are Vested	53.8%	56.0%	58.4%	60.1%	60.5%

State of Alaska - PERS Actives



State of Alaska - PERS Actives



2.2(c) Distribution of Active Police and Fire Participants

----- Annual Earnings By Age -----				----- Annual Earnings By Credited Service -----			
Age Groups	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	128	\$ 2,913,799	\$ 22,764
20-24	51	1,577,639	30,934	1	172	6,807,161	39,577
25-29	231	9,986,828	43,233	2	178	8,732,185	49,057
30-34	285	13,787,671	48,378	3	140	6,480,521	46,289
35-39	396	21,055,490	53,170	4	82	3,931,572	47,946
40-44	602	32,835,020	54,543	0- 4	700	28,865,238	41,236
45-49	574	31,864,369	55,513	5- 9	522	26,774,419	51,292
50-54	320	17,711,759	55,349	10-14	528	28,909,732	54,753
55-59	105	5,664,988	53,952	15-19	528	31,018,400	58,747
60-64	20	1,082,956	54,148	20-24	254	16,406,813	64,594
65-69	2	99,057	49,529	25-29	47	3,185,120	67,769
70-74	0	0	0	30-34	8	542,037	67,755
75+	1	35,982	35,982	35-39	0	0	0
				40+	0	0	0
Total	2,587	\$ 135,701,759	\$ 52,455	Total	2,587	\$ 135,701,759	\$ 52,455

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	51	0	0	0	0	0	0	0	0	51
25-29	200	30	1	0	0	0	0	0	0	231
30-34	159	90	35	1	0	0	0	0	0	285
35-39	107	108	119	56	6	0	0	0	0	396
40-44	83	93	157	200	66	3	0	0	0	602
45-49	69	103	126	148	110	18	0	0	0	574
50-54	25	62	65	88	53	23	4	0	0	320
55-59	5	28	21	30	16	1	4	0	0	105
60-64	0	7	4	5	2	2	0	0	0	20
65-69	0	1	0	0	1	0	0	0	0	2
70-74	0	0	0	0	0	0	0	0	0	0
75+	1	0	0	0	0	0	0	0	0	1
Total	700	522	528	528	254	47	8	0	0	2,587

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

Valuation Date	Number	Annual Payroll (000's)	Annual Average Pay	Percent Increase In Average Pay	Number of Participating Employers
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
June 30, 1992	2,515	122,762	48,812	2.8%	155
June 30, 1991	2,533	120,240	47,470	9.2%	145
June 30, 1990	2,419	105,135	43,462	.9%	143
June 30, 1989	2,414	104,000	43,082	-2.0%	135
June 30, 1988	2,327	102,265	43,947	1.0%	123

2.2(e) Distribution of Active "Other" Participants

----- Annual Earnings By Age -----

Age Groups	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	73	\$ 1,165,215	\$ 15,962
20-24	745	17,619,905	23,651
25-29	1,756	49,216,135	28,027
30-34	2,961	95,697,448	32,319
35-39	4,664	166,664,937	35,734
40-44	6,190	235,045,766	37,972
45-49	5,937	244,165,177	41,126
50-54	4,139	172,659,594	41,715
55-59	1,859	75,482,448	40,604
60-64	722	27,434,652	37,998
65-69	179	6,851,721	38,278
70-74	30	1,022,109	34,070
75+	12	407,527	33,961

Total 29,267 \$ 1,093,432,634 \$ 37,361

----- Annual Earnings By Credited Service -----

Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0	3,265	\$ 66,426,852	\$ 20,345
1	2,574	76,684,362	29,792
2	2,161	68,749,930	31,814
3	1,851	60,189,906	32,518
4	1,721	59,904,894	34,808
0- 4	11,572	331,955,944	28,686
5- 9	7,676	291,308,455	37,951
10-14	4,658	200,386,545	43,020
15-19	3,407	163,651,451	48,034
20-24	1,432	75,656,909	52,833
25-29	443	25,589,141	57,763
30-34	74	4,582,828	61,930
35-39	2	133,007	66,504
40+	3	168,354	56,118

Total 29,267 \$ 1,093,432,634 \$ 37,361

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	73	0	0	0	0	0	0	0	0	73
20-24	735	10	0	0	0	0	0	0	0	745
25-29	1,483	263	9	1	0	0	0	0	0	1,756
30-34	1,819	913	219	10	0	0	0	0	0	2,961
35-39	2,041	1,482	798	326	17	0	0	0	0	4,664
40-44	2,196	1,744	1,159	836	245	10	0	0	0	6,190
45-49	1,586	1,465	1,145	1,031	569	139	2	0	0	5,937
50-54	971	1,023	794	743	367	204	37	0	0	4,139
55-59	424	512	361	311	157	69	24	1	0	1,859
60-64	189	200	138	111	60	17	6	1	0	722
65-69	45	52	28	29	16	3	4	0	2	179
70-74	6	10	6	6	1	0	1	0	0	30
75+	4	2	1	3	0	1	0	0	1	12
Total	11,572	7,676	4,658	3,407	1,432	443	74	2	3	29,267

2.2(f) Schedule of Active Member Valuation Data - "Other"

Valuation Date	Number	Annual Payroll (000's)	Annual Average Pay	Percent Increase In Average Pay	Number of Participating Employers
June 30, 1997	29,267	\$ 1,093,433	\$ 37,361	.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	.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
June 30, 1992	28,206	961,054	34,073	2.5%	155
June 30, 1991	27,307	907,567	33,236	4.6%	145
June 30, 1990	26,667	846,935	31,760	.6%	143
June 30, 1989	25,630	808,835	31,558	-4.7%	135
June 30, 1988	24,349	806,100	33,106	2.4%	123

2.2(g) Statistics on New Retirees - Police and Fire Members During the Year Ending June 30

	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Service					
(1) Number	32	65	84	63	140
(2) Average Age at Retirement	50.09	51.25	51.10	49.82	52.21
(3) Average Monthly Benefit	\$ 2,235	\$ 2,324	\$ 2,282	\$ 2,735	\$ 2,364
Disability					
(1) Number	6	5	4	11	6
(2) Average Age at Retirement	41.57	44.84	43.31	47.00	48.77
(3) Average Monthly Benefit	\$ 1,682	\$ 1,193	\$ 2,513	\$ 1,709	\$ 1,601
Survivor (including surviving spouse and QDROs)					
(1) Number	1	1	0	2	20
(2) Average Age at Retirement	57.15	41.35	N/A	49.47	53.25
(3) Average Monthly Benefit	\$ 295	\$ 417	N/A	\$ 1,678	\$ 1,184
Total					
(1) Number	39	71	88	76	166
(2) Average Age at Retirement	48.96	50.66	50.75	49.40	52.21
(3) Average Monthly Benefit	\$ 2,100	\$ 2,217	\$ 2,293	\$ 2,559	\$ 2,194

2.2(h) Schedule of Average Benefit Payments - New Retirees - Police/Fire

	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +
Period 7/1/96 - 6/30/97:							
Average Monthly Benefit	\$ 1,263	\$ 592	\$ 957	\$ 1,719	\$ 2,811	\$ 3,545	\$ 4,733
Number of Active Retirants	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 Active Retirants	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 Active Retirants	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 Active Retirants	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	\$ 3,231
Number of Active Retirants	3	2	7	6	17	3	1
Period 7/1/91 - 6/30/92:							
Average Monthly Benefit	\$ 1,552	\$ 955	\$ 1,040	\$ 1,427	\$ 2,499	\$ 3,511	\$ 0
Number of Active Retirants	4	3	8	8	11	1	0
Period 7/1/90 - 6/30/91:							
Average Monthly Benefit	\$ 1,522	\$ 401	\$ 1,047	\$ 1,961	\$ 2,588	\$ 3,374	\$ 0
Number of Active Retirants	7	6	18	29	34	9	0

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

2.2(i) Statistics on New Retirees - "Other" Members During the Year Ending June 30

		<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Service						
(1)	Number	433	539	522	621	791
(2)	Average Age at Retirement	56.83	56.92	57.21	57.80	56.59
(3)	Average Monthly Benefit	\$ 984	\$ 1,113	\$ 1,245	\$ 1,183	\$ 1,272
Disability						
(1)	Number	17	18	23	36	25
(2)	Average Age at Retirement	44.46	49.71	47.49	49.47	46.69
(3)	Average Monthly Benefit	\$ 986	\$ 1,221	\$ 1,243	\$ 1,417	\$ 1,656
Survivor (including surviving spouse and QDROs)						
(1)	Number	14	10	16	45	88
(2)	Average Age at Retirement	53.89	48.68	50.61	55.87	62.17
(3)	Average Monthly Benefit	\$ 563	\$ 1,005	\$ 976	\$ 709	\$ 805
Total						
(1)	Number	464	567	561	702	904
(2)	Average Age at Retirement	56.29	56.55	56.62	57.25	56.86
(3)	Average Monthly Benefit	\$ 971	\$ 1,115	\$ 1,237	\$ 1,165	\$ 1,238

2.2(j) Schedule of Average Benefit Payments - New Retirees - "Other"

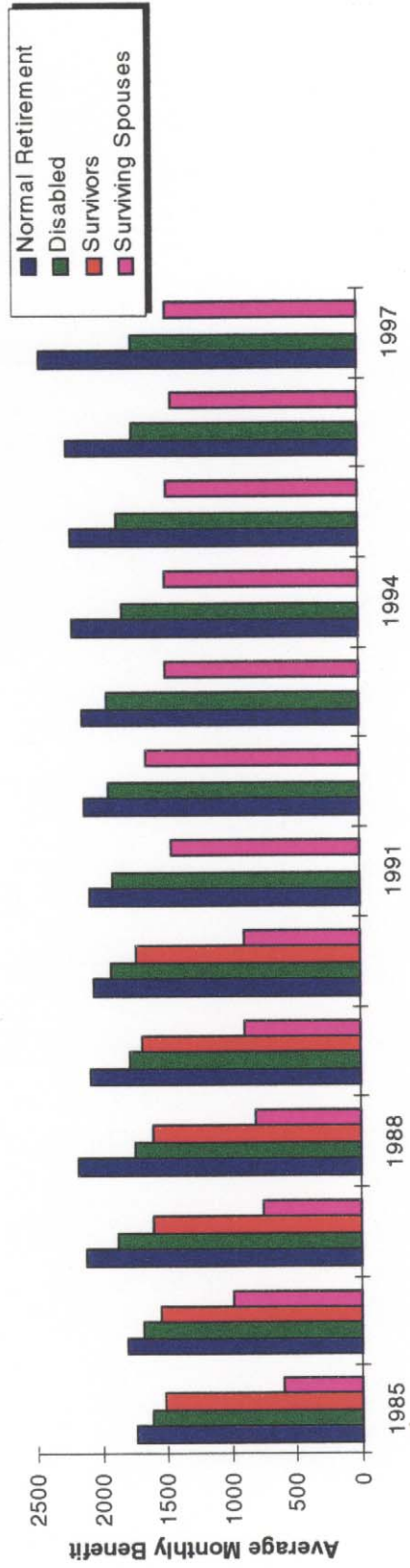
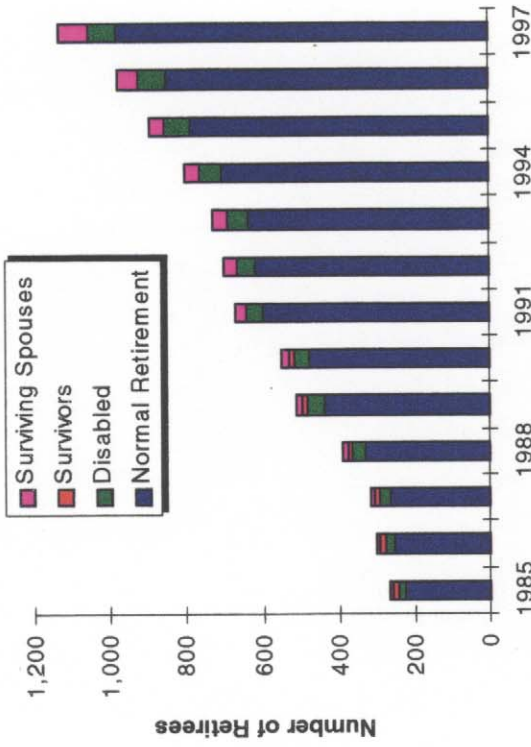
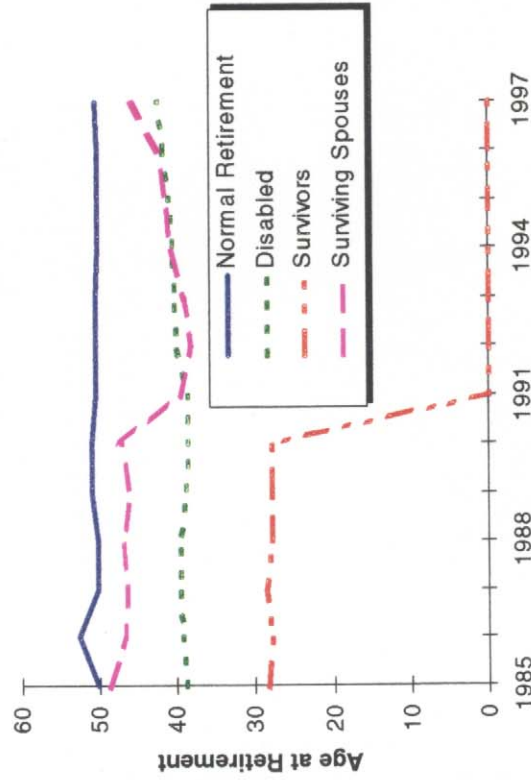
	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+
Period 7/1/96 - 6/30/97:							
Average Monthly Benefit	\$ 905	\$ 481	\$ 872	\$ 1,507	\$ 2,086	\$ 2,821	\$ 3,308
Number of Active Retirees	43	254	223	191	112	54	27
Period 7/1/95 - 6/30/96: Average							
Monthly Benefit	\$ 652	\$ 483	\$ 855	\$ 1,385	\$ 1,920	\$ 2,624	\$ 3,473
Number of Active Retirees	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 Active Retirees	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 Active Retirees	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 Active Retirees	23	158	143	83	36	13	8
Period 7/1/91 - 6/30/92:							
Average Monthly Benefit	\$ 584	\$ 498	\$ 842	\$ 1,240	\$ 1,941	\$ 2,350	\$ 2,758
Number of Active Retirees	19	161	138	71	32	8	6
Period 7/1/90 - 6/30/91:							
Average Monthly Benefit	\$ 708	\$ 561	\$ 928	\$ 1,379	\$ 1,962	\$ 2,781	\$ 3,235
Number of Active Retirees	40	267	282	154	76	42	15

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

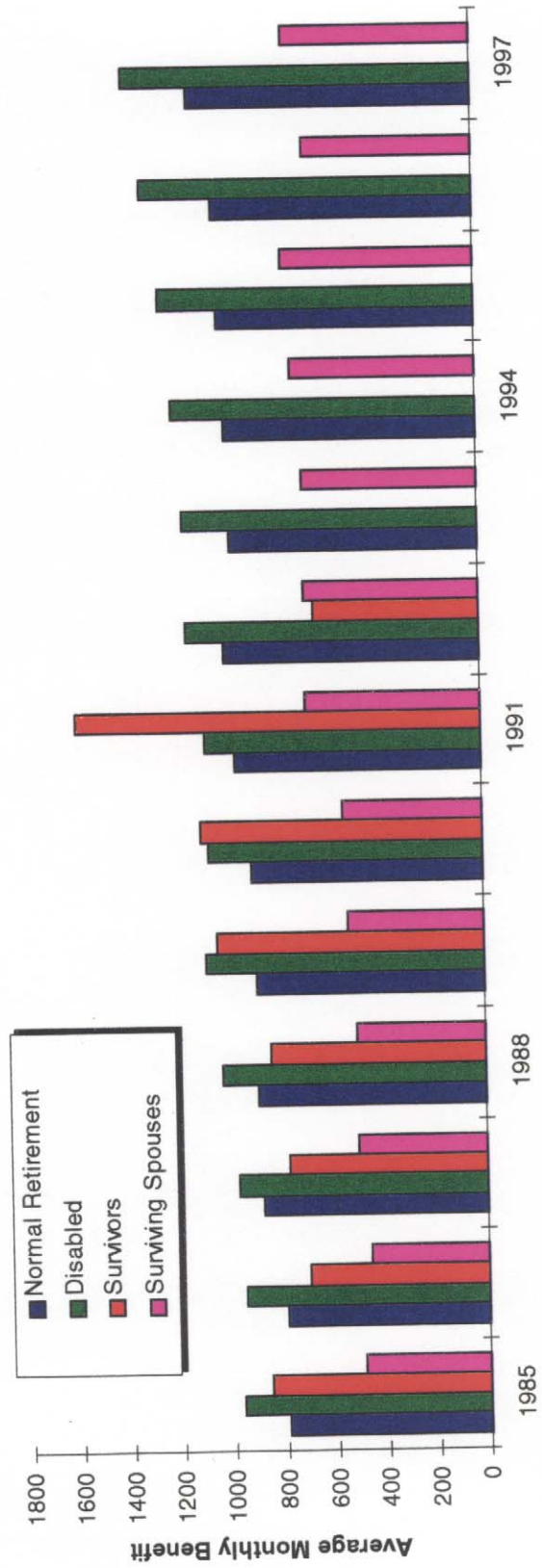
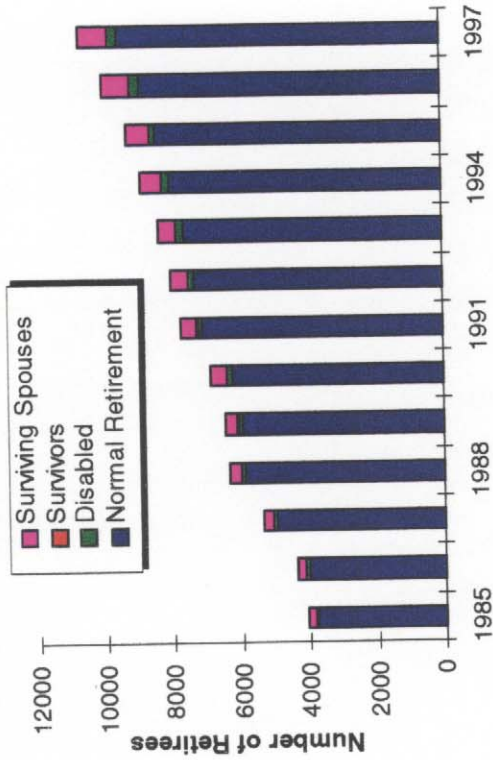
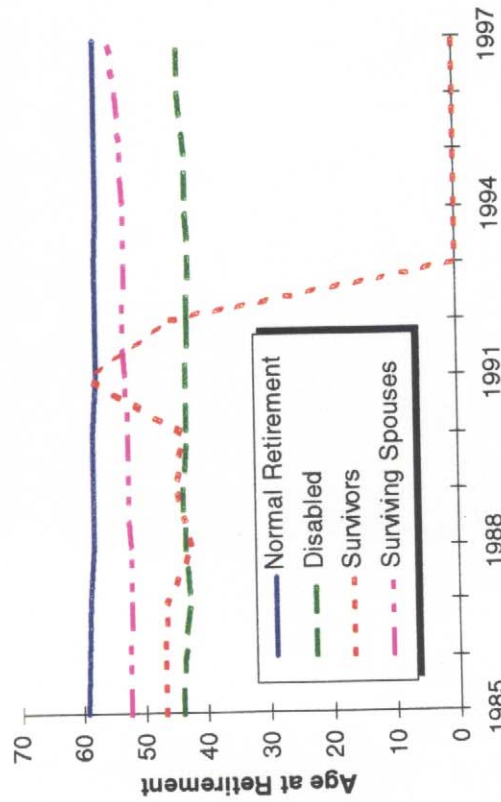
2.2(k) Statistics on All Retirees as of June 30, 1997

	<u>Police & Fire</u>	<u>"Other"</u>
Service Retirement		
(1) Number, June 30, 1996	852	8,889
(2) Net Change During FY97	127	639
(3) Number, June 30, 1997	979	9,528
(4) Average Age At Retirement	50.49	57.12
(5) Average Age Now	58.15	65.91
(6) Average Monthly Benefit	\$ 2,439.26	\$ 1,117.09
Surviving Spouse's Benefits		
(1) Number, June 30, 1996	56	812
(2) Net Change During FY97	20	72
(3) Number, June 30, 1997	76	884
(4) Average Age At Retirement	45.91	54.62
(5) Average Age Now	53.92	64.85
(6) Average Monthly Benefit	\$ 1,476.31	\$ 734.60
Disabilities		
(1) Number, June 30, 1996	70	242
(2) Net Change During FY97	5	18
(3) Number, June 30, 1997	75	260
(4) Average Age At Retirement	42.38	43.60
(5) Average Age Now	47.74	49.13
(6) Average Monthly Benefit	\$ 1,736.14	1,375.55
Total Number of Retirees	1,130	10,672

State of Alaska - PERS Police / Fire Retirees



State of Alaska - PERS "Other" Retirees



2.2(I) Distribution of Annual Benefits for Police and Fire Benefit Recipients

----- Annual Benefit By Age -----				--- Annual Benefit By Years Since Retirement ----			
Age Groups	Number of People	Total Annual Benefit	Average Annual Benefit	Years Since Retirement	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	0	\$ 0	\$ 0	0	166	\$ 4,371,147	\$ 26,332
20-24	0	0	0	1	77	2,337,760	30,361
25-29	0	0	0	2	94	2,538,416	27,004
30-34	3	78,310	26,103	3	77	2,044,039	26,546
35-39	8	136,614	17,077	4	50	1,230,636	24,613
40-44	46	1,247,835	27,127	0- 4	464	12,521,998	26,987
45-49	139	4,270,918	30,726	5- 9	309	8,708,278	28,182
50-54	292	9,096,030	31,151	10-14	216	6,941,152	32,135
55-59	279	7,487,644	26,837	15-19	99	2,481,141	25,062
60-64	163	4,526,859	27,772	20-24	37	786,314	21,252
65-69	107	2,738,100	25,590	25-29	5	126,511	25,302
70-74	65	1,467,849	22,582	30-34	0	0	0
75+	28	515,235	18,401	35-39	0	0	0
				40+	0	0	0
Total	1,130	\$ 31,565,394	\$ 27,934	Total	1,130	\$ 31,565,394	\$ 27,934

Years Since Retirement by Age

----- Years Since Retirement -----										
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	1	2	0	0	0	0	0	0	0	3
35-39	6	2	0	0	0	0	0	0	0	8
40-44	33	7	4	1	1	0	0	0	0	46
45-49	95	38	5	0	1	0	0	0	0	139
50-54	163	86	32	7	3	1	0	0	0	292
55-59	124	86	58	5	5	1	0	0	0	279
60-64	32	59	55	16	1	0	0	0	0	163
65-69	7	22	40	33	5	0	0	0	0	107
70-74	2	7	16	30	9	1	0	0	0	65
75+	1	0	6	7	12	2	0	0	0	28
Total	464	309	216	99	37	5	0	0	0	1,130

2.2(m) Schedule of Retired Members by Type of Retirant and Option Selected - Police/Fire - June 30, 1997

Amount of Monthly Benefit	Number of Retirees	Type of Retirement			Option Selected #			
		1	2	3	Opt. 1	Opt. 2	Opt. 3	Opt. 4
\$ 1 - \$ 300	12	10	1	1	6	3	2	1
301 - 600	64	48	8	7	33	18	8	5
601 - 900	74	58	11	5	44	19	5	6
901 - 1200	84	70	11	4	51	12	14	7
1201 - 1500	74	57	10	7	36	15	10	13
1501 - 1800	91	61	14	16	50	24	9	8
1801 - 2100	92	75	6	11	50	33	5	4
2101 - 2400	106	85	7	14	44	39	13	10
2401 - 2700	101	93	3	5	44	26	22	9
2701 - 3000	86	83	1	2	38	33	6	9
3001 - 3300	105	104	1	0	36	37	16	16
3301 - 3600	89	88	1	0	34	42	6	7
3601 - 3900	49	46	1	2	18	23	3	5
3901 - 4200	41	41	0	0	11	22	5	3
over 4200	62	60	1	1	26	27	6	3
Totals	1,130	979	76	75	521	373	130	106

Type of Retirement

- 1 - Normal retirement
- 2 - Survivor payment
- 3 - Disability retirement

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

2.2(n) Distribution of Annual Benefits for "Other" Benefit Recipients

----- Annual Benefit By Age -----				---- Annual Benefit By Years Since Retirement ----			
Age Groups	Number of People	Total Annual Benefit	Average Annual Benefit	Years Since Retirement	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	0	\$ 0	\$ 0	0	904	\$ 13,425,225	\$ 14,851
20-24	0	0	0	1	747	10,307,093	13,798
25-29	2	6,364	3,182	2	620	9,002,578	14,520
30-34	3	29,960	9,987	3	594	7,968,593	13,415
35-39	33	308,878	9,360	4	488	5,918,629	12,128
40-44	72	1,086,358	15,088	0- 4	3,353	46,622,118	13,905
45-49	162	2,078,018	12,827	5- 9	3,239	41,391,142	12,779
50-54	882	11,386,681	12,910	10-14	2,314	31,940,797	13,803
55-59	2,058	28,925,030	14,055	15-19	1,121	12,227,790	10,908
60-64	2,242	31,663,280	14,123	20-24	589	6,827,920	11,592
65-69	2,013	25,923,161	12,878	25-29	51	694,319	13,614
70-74	1,521	18,318,606	12,044	30-34	4	83,512	20,878
75+	1,684	20,082,092	11,925	35-39	1	20,830	20,830
				40+	0	0	0
Total	10,672	\$ 139,808,428	\$ 13,100	Total	10,672	\$ 139,808,428	\$ 13,100

Years Since Retirement By Age

----- Years Since Retirement -----										
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	1	1	0	0	0	0	0	0	0	2
30-34	2	1	0	0	0	0	0	0	0	3
35-39	17	14	1	1	0	0	0	0	0	33
40-44	40	23	6	3	0	0	0	0	0	72
45-49	93	43	15	7	4	0	0	0	0	162
50-54	724	129	21	6	2	0	0	0	0	882
55-59	1,181	768	80	18	8	3	0	0	0	2,058
60-64	705	1,069	439	17	10	1	1	0	0	2,242
65-69	426	654	747	174	10	2	0	0	0	2,013
70-74	115	399	571	364	71	1	0	0	0	1,521
75+	49	138	434	531	484	44	3	1	0	1,684
Total	3,353	3,239	2,314	1,121	589	51	4	1	0	10,672

2.2(o) Schedule of Retired Members by Type of Retirant and Option Selected - "Other" - June 30, 1997

Amount of Monthly Benefit	Number of Retirees	Type of Retirement			Option Selected #			
		1	2	3	Opt. 1	Opt. 2	Opt. 3	Opt. 4
\$ 1 - \$ 300	1,112	914	191	7	632	229	191	60
301 - 600	2,554	2,237	266	51	1491	497	385	181
601 - 900	2,032	1,832	173	27	1129	458	269	176
901 - 1200	1,466	1,312	110	44	801	314	193	158
1201 - 1500	1,025	934	61	30	560	233	150	82
1501 - 1800	693	627	39	27	397	139	93	64
1801 - 2100	517	470	15	32	282	122	56	57
2101 - 2400	353	329	11	13	184	87	50	32
2401 - 2700	301	283	9	9	152	80	35	34
2701 - 3000	188	177	2	9	96	47	26	19
3001 - 3300	127	118	5	4	46	52	17	12
3301 - 3600	99	94	1	4	47	29	12	11
3601 - 3900	77	75	1	1	27	36	6	8
3901 - 4200	34	33	0	1	17	9	7	1
over 4200	94	93	0	1	42	21	19	12
Totals	10,672	9,528	884	260	5,903	2,353	907	907

Type of Retirement

- 1 - Normal retirement
- 2 - Survivor payment
- 3 - Disability retirement

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

2.2(p) Schedule of Retirants and Beneficiaries 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, 1997	161	\$ 6,672,261 ⁽¹⁾	9	\$ 372,984 ⁽¹⁾	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
June 30, 1992	35	1,202,004	8	195,248	699	17,407,272	6.1%	24,903
June 30, 1991	129	3,408,774	4	95,704	672	16,400,516	25.3%	24,406
June 30, 1990	38	907,997	3	71,784	547	13,087,446	6.8%	23,926
June 30, 1989	128	2,686,748	3	74,724	512	12,251,233	27.1%	23,928
June 30, 1988	72	1,991,318	0	0	387	9,639,209	26.0%	24,908
* Numbers are estimated, and include other internal transfers.								

(1) Includes additional benefits to current retirees from ad hoc Post-Retirement Pension Adjustment.

2.2(q) Schedule of Retirants and Beneficiaries Added to and Removed from Rolls - "Other"

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, 1997	830	\$ 23,255,081 ⁽¹⁾	101	\$2,829,835 ⁽¹⁾	10,672	\$139,808,428	17.1%	\$ 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
June 30, 1992	435	8,520,963	116	1,323,560	8,005	94,894,329	8.2%	11,854
June 30, 1991	876	15,277,842	8	85,072	7,686	87,696,926	21.0%	11,410
June 30, 1990	457	5,776,756	94	986,060	6,818	72,504,156	7.1%	10,634
June 30, 1989	352	3,651,450	212	2,225,364	6,455	67,713,460	2.2%	10,490
June 30, 1988	1,014	11,532,405	35	361,515	6,315	66,287,374	20.3%	10,497
* Numbers are estimated, and include other internal transfers.								

(1) Includes additional benefits to current retirees from ad hoc Post-Retirement Pension Adjustment.

2.3 Actuarial Basis

The demographic and economic assumptions used in this valuation were recommended by William M. Mercer, Incorporated and were adopted at the Fall 1996 PERS Board Meeting. These assumptions were the result of an experience study performed in the fall of 1996. The funding method used in this valuation was adopted June 30, 1985. The five-year smoothing method used to determine valuation assets was changed effective June 30, 1994.

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. Any unfunded accrued liability is amortized over a rolling 25 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 that 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.

B. Actuarial Assumptions -

1. Investment Return 8.25% per year, compounded annually, net of expenses.

2.3 Actuarial Basis (continued)

- | | | |
|-----|----------------------|--|
| 2. | Salary Scale | Inflation - 4.0% per year
Productivity - 0.5% per year
Merit (first 5 years of employment) - 1.0% per year |
| 3. | Total Inflation | Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 4% annually. |
| 4. | Health Cost Trend | FY97 - 7.5%
FY98 - 6.5%
FY99 & later - 5.5% |
| 5. | Mortality | 1984 Unisex Pension Mortality Table, set forward one year for male and police/fire members, and set backward four years for female members. Deaths are assumed to be occupational 85% of the time for Police/Fire, 35% for "Other". |
| 6. | Turnover | Based upon the 1991-95 actual total turnover experience. (See Table 1). |
| 7. | 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. Disabilities are assumed to be occupational 85% of the time for Police/Fire, 35% for "Other". |
| 8. | Retirement Age | Retirement rates based upon the 1991-95 actual experience in accordance with Table 3. |
| 9. | Spouse's Age | Wives are assumed to be four years younger than husbands. |
| 10. | Dependent Children | Benefits to dependent children have been valued assuming members who are not single have one dependent child. |
| 11. | Contribution Refunds | 100% of those terminating after age 35 with five or more years of service 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. |

2.3 Actuarial Basis *(continued)*

- | | | |
|-----|------------------------------------|--|
| 12. | C.O.L.A. | Of those benefit recipients who are eligible for the C.O.L.A., 71% are assumed to remain in Alaska and receive the C.O.L.A. |
| 13. | New Entrants | Growth projections are made for the active PERS population under three scenarios:

Pessimistic: 1% per year
Median: 3% per year
Optimistic: 5% per year |
| 14. | 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. |
| 15. | Expenses | Expenses are covered in the investment return assumption. |

Valuation of Assets

Effective June 30, 1994, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four 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 Peat Marwick, LLP. Valuation assets cannot be outside a range of 80% to 120% of the market value of assets.

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 FY97, the pre-65 monthly premium is \$569.14 and the post-65 premium is \$216.80, based on an assumed total blended premium of \$435.38. For FY97, the actual blended premium is \$368.00. The FY97 blended premium was provided by the State of Alaska Division of Retirement and Benefits.

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 and Fire:

Year of Employment	----- Age at Hire -----		Age	Rate
	20-29	30+		
1	.22	.22	20-29	.06
2	.15	.14	30+	.04
3	.15	.12		
4	.10	.08		
5	.07	.06		

"Other":

Year of Employment	----- Age at Hire -----		Age	Rate
	20-29	30+		
1	.30	.20	20-29	.10
2	.20	.15	30-39	.08
3	.15	.12	40+	.06
4	.12	.10		
5	.12	.10		

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
61	12.19	3.90
62	14.13	4.52
63	16.31	5.22
64	18.63	5.96

Table 3

Alaska PERS

Retirement Rates

<u>Age</u>	<u>Police & Fire Rate</u>	<u>"Other" Member Rate</u>
50	.10	.06
51	.10	.06
52	.10	.06
53	.12	.06
54	.12	.06
55	.25	.19
56	.25	.16
57	.10	.13
58	.10	.12
59	.10	.11
60	.40	.17
61	.40	.14
62	1.00	.18
63	1.00	.18
64	1.00	.25
65	1.00	.35
66 & Up	1.00	1.00

For ages less than 50, employees are assumed to retire two years after the earliest age they are eligible to retire.

Section 3

Other Historical Information

3.1 shows the analysis of financial experience.

3.2(a) shows the summary of accrued and unfunded accrued liabilities for Police and Fire members.

3.2(b) shows the summary of accrued and unfunded accrued liabilities for "Other" members.

3.3 shows the solvency test.

3.1 Analysis of Financial Experience

Change in 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 Contribution Rate During Fiscal Year					
	97	96	95	94	93	
(1) Health Experience	0%	0%	0%	.41%	0%	0%
(2) Salary Experience	-0.06%	-0.50%	-.42%	-.55%	-.21%	-.21%
(3) Investment Experience	-1.26%	-0.46%	-.06%	.37%	-1.41%	-1.41%
(4) Demographic Experience	0.03%	-0.73%	.24%	.36%	.74%	.74%
(5) Miscellaneous	0%	0%	0%	0%	0%	0%
(6) Gain (or Loss) During Year From Experience, (1) + (2) + (3) + (4) + (5)	-1.29%	-1.69%	-.24%	.59%	-.88%	-.88%
Non-recurring Changes						
(7) Asset Valuation Method	0%	0%	0%	-.56%	0%	0%
(8) Assumption Changes	0%	-2.47%	0%	-.71%	0%	0%
(9) Ad hoc PRPA	0.91%	0%	0%	0%	0%	0%
(10) Plan Changes	0%	0%	0%	0%	0%	0%
Composite Gain (or Loss) During Year, (6) + (7) + (8) + (9) + (10)	-0.38%	-4.16%	-.24%	-.68%	-.88%	-.88%

3.2(a) 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, 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%
June 30, 1992 ⁽¹⁾	592,518	540,087	91.2%	52,431	122,762	42.7%
June 30, 1991 ⁽²⁾	523,326	461,103	88.1%	62,223	120,240	51.7%
June 30, 1990	422,275	410,615	97.2%	11,660	105,135	11.1%
June 30, 1989 ⁽²⁾	402,021	368,325	91.6%	33,696	104,000	32.4%
June 30, 1988	324,634	301,780	93.0%	22,854	102,265	22.3%
⁽¹⁾ Change in Asset Valuation Method.						
⁽²⁾ Change of Assumptions.						

3.2(b) Summary of Accrued and Unfunded Accrued Liabilities - "Other"

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, 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%
June 30, 1992 ⁽¹⁾	3,148,364	2,869,772	91.2%	278,592	961,054	29.0%
June 30, 1991 ⁽²⁾	2,815,819	2,481,018	88.1%	334,801	907,567	36.9%
June 30, 1990	2,331,243	2,266,871	97.2%	64,372	846,935	7.6%
June 30, 1989 ⁽²⁾	2,161,247	1,980,098	91.6%	181,149	808,835	22.4%
June 30, 1988	1,921,949	1,786,648	93.0%	135,301	806,100	16.8%
⁽¹⁾ Change in Asset Valuation Method.						
⁽²⁾ Change of Assumptions.						

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, 1997	\$ 795,170	\$ 3,020,608	\$ 1,716,338	\$ 5,885,488	100%	100%	100.0%
June 30, 1996 ⁽²⁾	754,679	2,511,953	1,713,326	5,271,253	100%	100%	100.0%
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%
June 30, 1992 ⁽¹⁾	484,590	1,783,020	1,473,272	3,409,859	100%	100%	77.5%
June 30, 1991 ⁽²⁾	422,656	1,621,590	1,294,899	2,942,121	100%	100%	69.3%
June 30, 1990	380,680	1,285,515	1,087,323	2,677,486	100%	100%	93.0%
June 30, 1989 ⁽²⁾	329,966	1,217,648	1,015,654	2,348,423	100%	100%	78.8%
June 30, 1988	305,483	1,030,048	911,052	2,088,428	100%	100%	82.6%
(1) Change in Asset Valuation Method.							
(2) Change of Assumptions.							

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