

State of Alaska

Public Employees' Retirement System

Actuarial Valuation Report

as of June 30, 1994

Prepared by:

William M. Mercer, Incorporated
One Union Square, Suite 3200
600 University Street
Seattle, WA 98101-3137

March 14, 1995

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

Dear Members of the Board:

Actuarial Certification

The actuarial valuation required for the State of Alaska Public Employees' Retirement System has been prepared as of June 30, 1994 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, 1994;
- (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.

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, 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 experience studies presented to the Board in October 1991 and October 1994.

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY95 and a 25-year rolling amortization of the unfunded accrued liability. The amortization period is set by the Board. Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of assets to liabilities decreased from 95.4% to 94.8% during the year. Over the years, progress has been made toward achieving the funding objectives of the System.

Public Employees' Retirement Board
March 14, 1995
Page 2

There were no significant changes in the demographic actuarial assumptions or actuarial methods used in the determination of system liabilities this year. However, there was a change in the economic actuarial assumptions and asset valuation method. The assumptions and methods, when applied in combination, fairly represent past and anticipated future experience of the System.

The total inflation assumption was changed from 5% to 4% annually. This in turn affected the economic assumptions, including investment return, salary scale, and health cost trend. The following table shows the prior and new economic assumptions:

	Prior Assumption	New Assumption 6/30/94
Inflation	5.0%	4.0%
Investment Return	8.75%	8.0%
Salary Scale:		
Inflation	5.0%	4.0%
Productivity	0.5%	0.5%
Merit (first 5 years)	1.0%	1.0%
Health Cost Trend:		
FY95	9.5%	9.5%
FY96	8.5%	8.5%
FY97	7.5%	7.5%
FY98	7.5%	6.5%
FY99 & later	7.5%	5.5%

The method for calculating valuation assets was changed. The new asset valuation method smooths the difference between expected investment return and actual return during a given year. The method spreads the results over five years by recognizing 20% of the investment gain or loss in each of the current and preceding four years. By spreading the asset gain or loss, only the investment return is smoothed, producing a less volatile result, leading to overall contributions which are easier to budget and at the same time remain appropriate to properly fund the system.

Public Employees' Retirement Board
March 14, 1995
Page 3

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.

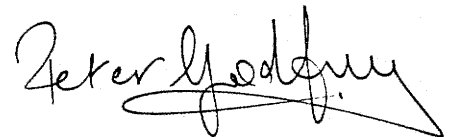
The undersigned are members of the American Academy of Actuaries and are fully qualified to provide actuarial services to the State of Alaska.

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
Managing Director



Peter L. Godfrey, FIA, MAAA
Principal

Contents of Report

Sections	Page
Highlights	1
Analysis of the Valuation	4
1 Valuation Results	9
1.1(a) Statement of Net Assets as of June 30, 1994 (in thousands)	10
1.1(b) Changes in Net Assets During Fiscal Year 1994 (in thousands)	11
1.1(c) Development of Expected Valuation Assets as of June 30, 1994 (in thousands)	12
1.1(d) Development of Valuation Assets as of June 30, 1994 (in thousands)	13
1.2(a) Actuarial Present Values as of June 30, 1994 Police and Fire Members (in thousands)	14
1.2(b) Actuarial Present Values as of June 30, 1994 "Other" Members (in thousands)	15
1.3(a) Development of Average Employer Contribution Rate - FY97 For Police and Fire Members (in thousands)	16
1.3(b) Development of Average Employer Contribution Rate - FY97 For "Other" Members (in thousands)	17
1.3(c) Development of Average Employer Contribution Rate - FY97 All Members (in thousands)	18
1.4 Development of Actuarial Gain/(Loss) for FY94 (in thousands)	17
1.5 Actuarial Projections	20
2 Basis of Valuation	31
2.1 Summary of the Alaska Public Employees' Retirement System	32
2.2(a) Participant Census Information - Total PERS as of June 30	39
2.2(b) Additional Information - Active Members by Type of Status as of June 30	40
2.2(c) Distribution of Active Police and Fire Participants	43
2.2(d) Schedule of Active Member Valuation Data - "Police/Fire"	44
2.2(e) Distribution of Active "Other" Participants	45
2.2(f) Schedule of Active Member Valuation Data - "Others"	46
2.2(g) Statistics on New Retirees Police and Fire Members During the Year Ending June 30	47
2.2(h) Schedule of Average Benefit Payments - New Retirees - "Police/Fire"	48
2.2(i) Statistics on New Retirees "Other" Members During the Year Ending June 30	49

Contents of Report (continued)

Sections	Page
2.2(j) Schedule of Average Benefit Payments - New Retirees - "Others"	50
2.2(k) Statistics on All Retirees as of June 30, 1994	51
2.2(l) Distribution of Annual Benefits for Police and Fire Benefit Recipients	54
2.2(m) Schedule of Retired Members by Type of Retirant and Option Selected - "Police/Fire" - June 30, 1994	55
2.2(n) Distribution of Annual Benefits for "Other" Benefit Recipients	56
2.2(o) Schedule of Retired Members by Type of Retirant and Option Selected - "Others" - June 30, 1994	57
2.2(p) Schedule of Retirants and Beneficiaries Added to and Removed from Rolls - Police/Fire	58
2.2(q) Schedule of Retirants and Beneficiaries Added to and Removed from Rolls - "Others"	59
2.3 Actuarial Basis	60
Table 1 - Alaska PERS Total Turnover Assumptions	63
Table 2 - Alaska PERS Disability Rates Annual Rates Per 1,000 Employees	64
Table 3 - Alaska PERS Retirement Rates	65
3 Other Historical Information	66
3.1 Analysis of Financial Experience	67
3.2(a) Summary of Accrued and Unfunded Accrued Liabilities - "Police/Fire"	68
3.2(b) Summary of Accrued and Unfunded Accrued Liabilities - "Other"	69
3.3 Solvency Test	70
3.4(a) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Police/Fire"	71
3.4(b) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Others"	73

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, 1994;
- (2) review experience under the plan for the year ended June 30, 1994;
- (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 1994 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.

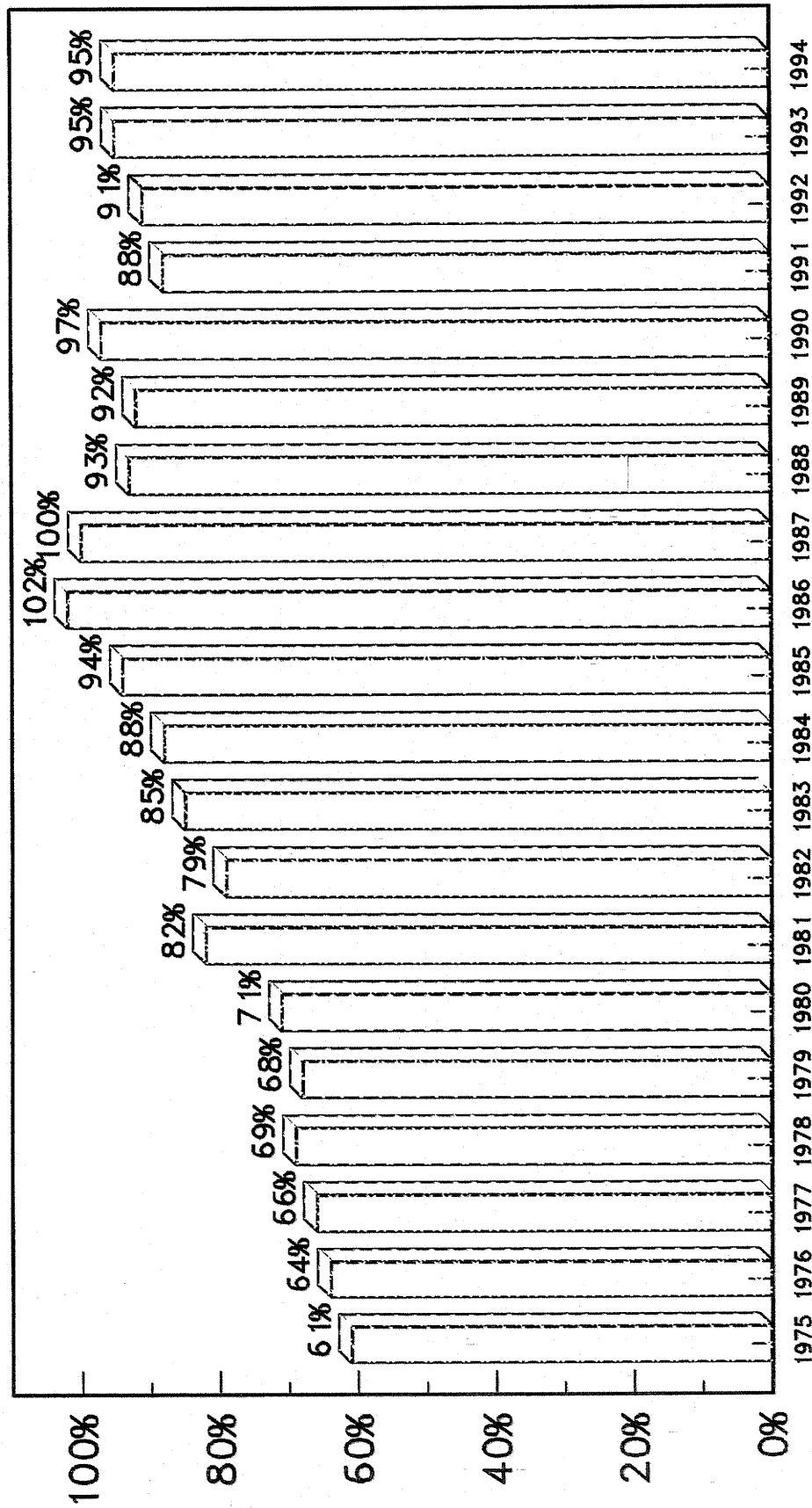
Section 3 contains additional exhibits showing historical information on system experience, unfunded liabilities, and the value of accumulated benefits.

The principle results are as follows:

	<u>1993</u>	<u>1994</u>
Funding Status as of June 30:		
(a) Valuation Assets*	\$ 3,936,776	\$ 4,379,305
(b) Accrued Liability*		
i) Non-Medical Benefits	2,963,975	3,377,405
ii) Total Benefits (including medical)	4,125,761	4,620,182
(c) Funding Ratio, (a) / (b)		
i) Non-Medical Benefits	132.8%	129.7%
ii) Total Benefits (including medical)	95.4%	94.8%

* In thousands.

STATE OF ALASKA PERS FUNDING RATIO HISTORY



At June 30

Employer Contribution Rates
for Fiscal Year:

	<u>1996</u>	<u>1997</u>
(a) Consolidated Rate	11.29%	10.36%
(b) Average Past Service Rate	1.53%	1.78%
(c) Average Total Contribution Rate	12.82%	12.14%

Analysis of the Valuation

As shown in the Highlights section of the report, the funding ratio as of June 30, 1994 has decreased from 95.4% to 94.8%, a decrease of 0.6%. The average employer contribution rate has reduced from 12.82% of payroll for FY96 to 12.14% for FY97, a reduction of 0.68% 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 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%

As you can see from the above table, the monthly retiree medical premium increased during the year, to \$336.05. The premium for the 1996 fiscal year has increased to \$350.50, an increase of 4%. Since FY87, annual premium rate changes have ranged from 51% up to 15% down, but the average annual increase has been about 9%.

This year, 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 trend assumption to determine actuarial liabilities for retiree medical benefits. Due to the change in the health cost trend assumption this year, we made an adjustment back to the actual medical premium as the basis for going forward. 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 again, if necessary, to the assumed medical premium rate every four to five years when a formal experience analysis is performed.

The effect of the adjustment back to actual premium this year was a small loss to the System which increased the employer contribution rate by 0.41%.

(2) Investment Performance

The Asset Valuation Method has been changed this year. In the past, the system used an asset valuation method which multiplied the five-year average of the ratio of actuarial (generally market) to book value by the current book value to determine valuation assets. This number had to fall within the range of book and actuarial value.

One purpose of using asset valuation methods is to smooth investment returns. By using the full actuarial and book values in the valuation method, additional components of the change in the value of assets, including contributions, benefit payments, and expenses, are included in the smoothing technique. Since investment return is a direct result of actual money flows instead of artificially smoothed flows, this method will distort the investment return for the year.

The new asset valuation method only smooths the difference between expected investment return and actual return during a given year. The method spreads the results over five years by recognizing 20% of the investment gain or loss in each of the current and preceding four years. By spreading the asset gain or loss, only the investment return is smoothed, producing a less volatile result, leading to overall contributions which are easier to budget and at the same time remain appropriate to properly fund the system. The new methodology is more widely used and accepted than the prior method in both the public and private sector because it directly addresses the objective of smoothing only investment returns, and it is allowable under ERISA.

In order to establish an appropriate basis for going forward, we measured the FY94 investment loss using the market value of assets at June 30, 1993. This resulted in an increase in the Valuation Assets at June 30, 1994 of \$76,466,000 and a reduction in the employer contribution rate of 0.56%.

To protect the system from the unlikely event that valuation assets differ markedly from market value, a limitation that valuation assets must fall between 80% and 120% of market value is included with this asset valuation method. The new method will be phased in over the next five years.

The approximate rate of return based on market value of system assets was 2.49%. The new five-year smoothing technique produced a rate of return based on valuation assets of 7.50%, compared to the 8.75% investment return assumption. This produced a loss of approximately \$50,573,000 to the System from investment performance which had the effect of decreasing the funding ratio by 1.1% and increasing the average employer contribution rate by .37% of total payroll.

(3) Salary Increases

Last year, salary increases were less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain which generated a reduction in the total employer contribution rate equal to 0.55% of total payroll.

(4) Employee Data

Section 2.2 provides statistics on active and inactive participants. The number of active participants increased 1.3% from 30,972 at June 30, 1993 to 31,364 at June 30, 1994. The average age of active participants increased from 41.75 to 42.18 and average credited service increased from 7.62 to 7.92 years.

The number of retirees and beneficiaries increased 5.9% from 9,103 to 9,643, and their average age increased from 63.98 to 64.22. There was a 5.6% increase in the number of vested terminated participants from 3,572 to 3,771. Their average age increased from 44.04 to 44.39.

The overall effect of these participant data changes was an actuarial loss to the System, resulting in an increase in the contribution rate equal to 0.36% of total payroll.

(5) Economic Assumption Changes

Based on a study of the inflation component of economic assumptions presented to the Board in October 1994, the total inflation assumption was changed from 5% to 4% annually. This in turn affected the economic assumptions, including investment return,

salary scale, and health cost trend. The following table shows the prior and new economic assumptions:

	Prior Assumption	New Assumption 6/30/94
Inflation	5.0%	4.0%
Investment Return	8.75%	8.0%
Salary Scale:		
Inflation	5.0%	4.0%
Productivity	0.5%	0.5%
Merit (first 5 years)	1.0%	1.0%
Health Cost Trend:		
FY95	9.5%	9.5%
FY96	8.5%	8.5%
FY97	7.5%	7.5%
FY98	7.5%	6.5%
FY99 & later	7.5%	5.5%

The overall effect of the assumption changes was to increase the funding ratio by .2% and reduce the employer contribution rate by .71% 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 two-tiered systems, such as PERS. All of the projected new entrants will be covered under the cost savings provisions of the second tier, so that the ultimate effect of the second tier 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 slowly decrease, and then stabilize in 10 to 15 years. This reflects the fact that many second-tier employees are already in PERS and affecting the rate.

Summary

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

Last year's average employer contribution rate	12.82%
Change due to:	
Retiree medical insurance	0.41%
Investment performance	0.37%
Salary increases	(0.55%)
Demographic experience	0.36%
Economic Assumption Changes	(0.71%)
Asset Valuation Method Change	(0.56%)
Average employer contribution rate this year	12.14%

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, 1994.

Section 1.1(b) shows the transactions of the plan's fund during FY94.

Section 1.1(c) develops the expected valuation assets and investment return as of June 30, 1994.

Section 1.1(d) develops the actual valuation assets as of June 30, 1994.

Section 1.2(a) shows the actuarial present values for Police and Fire members as of June 30, 1994.

Section 1.2(b) shows the actuarial present values for "Other" members as of June 30, 1994.

Section 1.3(a) develops the average employer contribution rate for Police and Fire members - FY97.

Section 1.3(b) develops the average employer contribution rate for "Other" members - FY97.

Section 1.3(c) develops the average employer contribution rate for all members - FY97.

Section 1.4 calculates the actuarial gain or loss for FY94.

Section 1.5 contains the financial projections.

1.1(a) Statement of Net Assets as of June 30, 1994 (in thousands)

	<u>Book Value</u>	<u>Actuarial Value</u>
Cash and Cash Equivalents	\$ 1,610	\$ 1,610
United States Government Bonds	884,568	943,018
Other United States Government Securities	56,611	57,493
Corporate Bonds	712,380	727,399
Commercial Paper	164,356	164,342
Other Dollar Dominated Securities	130,082	124,768
United States Common Stocks	1,493,641	1,593,533
International Stocks	325,978	360,726
Emerging Markets Stocks	35,300	36,247
Real Estate Equities	157,657	116,089
Mortgages (Net of Reserves)	5,664	5,664
Net Accrued Receivables	<u>46,124</u>	<u>46,124</u>
Total Assets	\$ 4,013,971	\$ 4,177,013

1.1(b) Changes in Net Assets During Fiscal Year 1994 (in thousands)

(1)	Net Assets, June 30, 1993, (market value)		\$ 4,007,907
(2)	Additions:		
	(a) Employee Contributions	\$ 82,503	
	(b) Employer Contributions	153,302	
	(c) Contributions for Retirement Incentive Program:		
	Employee Contributions	0	
	Employer Contributions	(17)	
	(d) Interest and Dividend Income	207,474	
	(e) Realized Gain (Loss)	111,508	
	(f) Unrealized Gain (Loss) on Investments	(206,921)	
	(g) Other	<u>32</u>	347,881
(3)	Deductions:		
	(a) Medical Benefits	\$ 36,046	
	(b) Retirement Benefits	121,867	
	(c) Refunds of Contributions	9,584	
	(d) Administrative Expenses	<u>11,278</u>	178,775
(4)	Net Assets, June 30, 1994, (market value)		\$ 4,177,013

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

2.49%

**1.1(c) Development of Expected Valuation Assets
as of June 30, 1994 (in thousands)**

(1)	June 30, 1993 Market Value, (Item (1) from 1.1(b))	\$ 4,007,907
(2)	Total Contributions for FY94, (Item (2a) + (2b) + (2c) from 1.1(b))	235,788
(3)	Total Benefit Payments for FY94, (Item (3a) + (3b) + (3c) from 1.1(b))	167,497
(4)	Expected Investment Return, Net of Expenses, for the period July 1, 1993 through June 30, 1994, $((1) + .5 \times [(2) - (3)]) \times 8.75\%$	353,680
(5)	Actual Investment Return, Net of Expenses, for the period July 1, 1993 through June 30, 1994, [Item (2d) + (2e) + (2f) + (2g) - (3d) from 1.1(b)]	100,815
(6)	Total Investment Gain/(Loss), (5) - (4)	(252,865)
(7)	Expected Valuation Assets, (1) + (2) - (3) + (4)	4,429,878

**1.1(d) Development of Valuation Assets as of June 30, 1994
(in thousands)**

	A	B	C
	<u>Total Investment Gain/(Loss)</u>	<u>Gain/(Loss) Recognized in Prior Fiscal Years</u>	<u>Gain/(Loss) Recognized this Fiscal Year (A ÷ 5)</u>
(1) Fiscal Year ending June 30, 1994	\$ (252,865)	\$ 0	\$ (50,573)
(2) Total Gain/(Loss) Recognized this Fiscal Year			(50,573)
(3) Expected Valuation Assets, June 30, 1994, (Item (7) from 1.1(c))			\$ 4,429,878
(4) Valuation Assets at June 30, 1994, (2) + (3), but not outside a corridor of 80% to 120% of the market value of assets			\$ 4,379,305*
Approximate Valuation Assets Investment Return Rate During the Year, Net of Administrative Expenses			7.50%

* Reflects a change in the asset valuation method. See Item (2) in the Analysis of the Valuation on page 5 for a full description of the change.

1.2(a) Actuarial Present Values as of June 30, 1994
Police and Fire Members (in thousands)

	<u>Normal Cost</u>	<u>Accrued Liabilities</u>
<u>Active Members</u>		
Retirement Benefits	\$ 18,177	\$ 315,524
Termination Benefits	522	5,507
Disability Benefits	564	12,150
Death Benefits	488	11,419
Return of Contributions	354	2,020
Medical Benefits	5,760	85,934
Indebtedness	0	(8,622)
Retiree Incentive Program Receivables	<u>0</u>	<u>(10)</u>
Subtotal	\$ 25,865	\$ 423,922
<u>Inactive Members</u>		
Not Vested	\$ 0	\$ 398
Vested Terminations - Retirement Benefits	0	7,599
- Medical Benefits	0	8,954
Retirees & Beneficiaries - Retirement Benefits	0	249,224
- Medical Benefits	<u>0</u>	<u>42,891</u>
Subtotal	\$ 0	\$ 309,066
<u>Totals</u>	\$ 25,865	\$ 732,988

1.2(b) Actuarial Present Values as of June 30, 1994
"Other" Members (in thousands)

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 84,636	\$ 1,096,942
Termination Benefits	20,248	202,047
Disability Benefits	3,654	51,494
Death Benefits	4,107	68,870
Return of Contributions	5,886	28,669
Medical Benefits	57,920	548,170
Indebtedness	0	(33,201)
Retirement Incentive Program Receivables	<u>0</u>	<u>(80)</u>
Subtotal	\$ 176,451	\$ 1,962,911
<u>Inactive Members</u>		
Not Vested	\$ 0	\$ 12,415
Vested Terminations - Retirement Benefits	0	241,808
- Medical Benefits	0	236,844
Retirees & Beneficiaries - Retirement Benefits	0	1,113,232
- Medical Benefits	<u>0</u>	<u>319,984</u>
Subtotal	\$ 0	\$ 1,924,283
<u>Totals</u>	\$ 176,451	\$ 3,887,194

1.3(a) Development of Average Employer Contribution Rate - FY97 For Police and Fire Members (in thousands)

Consolidated Rate

(1)	Total Normal Cost	\$ 25,865
(2)	Total Salaries	128,456
(3)	Normal Cost Rate for Police & Fire Members, (1) / (2)	20.14%
(4)	Member Contribution Rate (Police & Fire)	7.50%
(5)	Consolidated Employer Normal Cost Rate For Police & Fire Members, (3) - (4)	12.64%

Past Service Rate

(1)	Accrued Liability	\$ 732,988
(2)	Valuation Assets	694,773*
(3)	Total Unfunded Liability, (1) - (2)	38,215
(4)	Amortization Factor (25 years)	11.528758
(5)	Past Service Cost, (3) / (4)	3,315
(6)	Total Salaries	128,456
(7)	Past Service Rate, (5) / (6)	2.58%

Total Employer Contribution Rate 15.22%

* Allocated in proportion to Accrued Liability.

1.3(b) Development of Average Employer Contribution Rate - FY97 For "Other" Members (in thousands)

Consolidated Rate

(1)	Total Normal Cost	\$ 176,451
(2)	Total Salaries	1,048,541
(3)	Normal Cost Rate for "Other" Members, (1) / (2)	16.83%
(4)	Member Contribution Rate ("Others")	6.75%
(5)	Consolidated Employer Normal Cost Rate For Other Members, (3) - (4)	10.08%

Past Service Rate

(1)	Accrued Liability	\$ 3,887,194
(2)	Valuation Assets	3,684,532*
(3)	Total Unfunded Liability, (1) - (2)	202,662
(4)	Amortization Factor (25 years)	11.528758
(5)	Past Service Cost, (3) / (4)	\$ 17,579
(6)	Total Salaries	\$ 1,048,541
(7)	Past Service Rate, (5) / (6)	1.68%

Total Employer Contribution Rate 11.76%

* Allocated in proportion to Accrued Liability.

1.3(c) Development of Average Employer Contribution Rate - FY97 All Members (in thousands)

Consolidated Rate

(1)	Total Normal Cost	\$ 202,316
(2)	Total Salaries	1,176,997
(3)	Normal Cost Rate for All Members, (1) / (2)	17.19%
(4)	Average Member Contribution Rate	6.83%
(5)	Consolidated Employer Normal Cost Rate for All Members, (3) - (4)	10.36%

Past Service Rate

(1)	Accrued Liability	\$ 4,620,182
(2)	Valuation Assets	4,379,305
(3)	Total Unfunded Liability, (1) - (2)	240,877
(4)	25-Year Amortization Factor	11.528758
(5)	Past Service Cost, (3) / (4)	20,894
(6)	Total Salaries	1,176,997
(7)	Past Service Rate, (5) / (6)	1.78%

Total Employer Contribution Rate

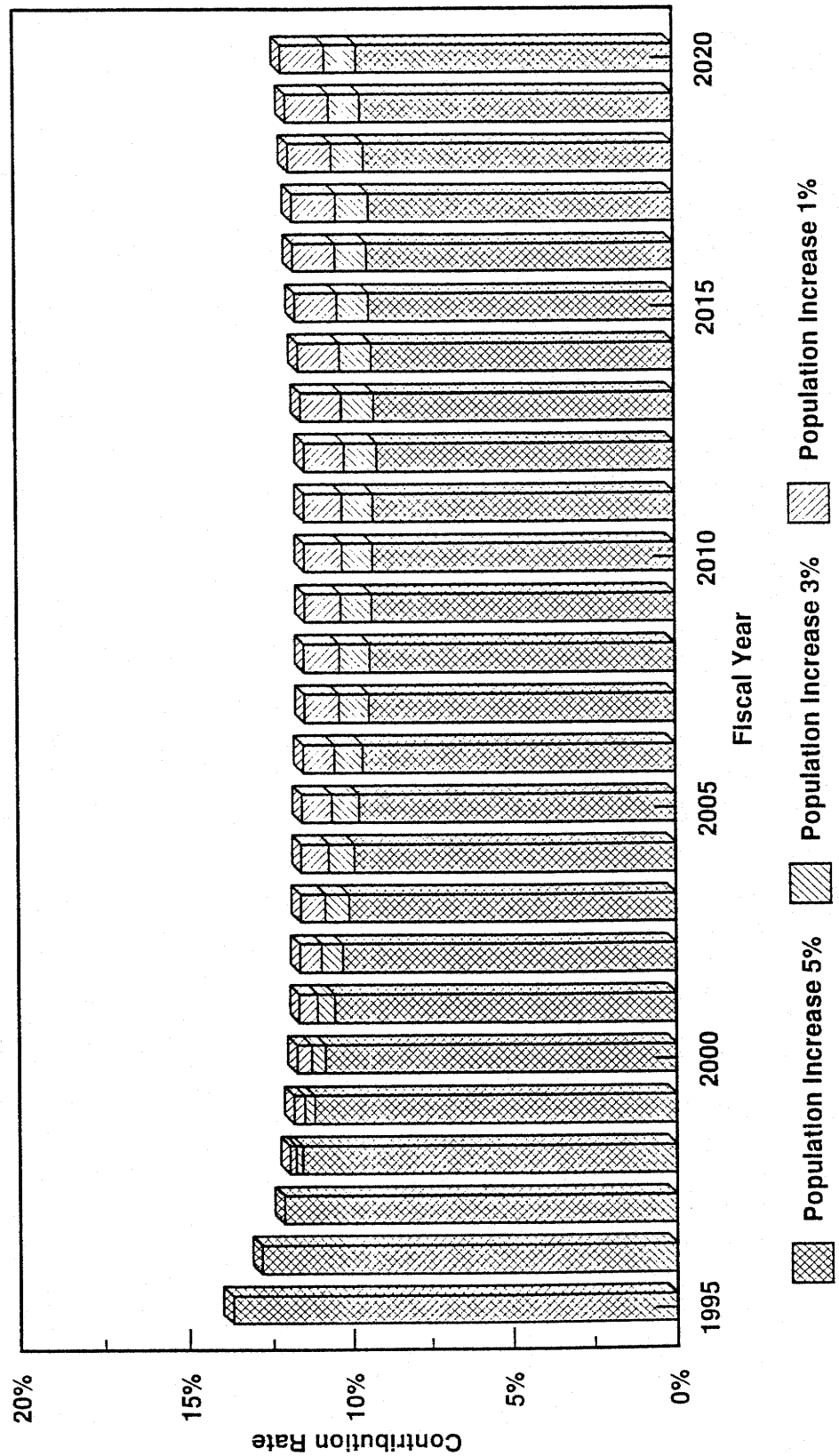
12.14%

1.4 Development of Actuarial Gain/(Loss) for FY94 (in thousands)

(1)	Unfunded Liability, June 30, 1993	\$ 188,985
(2)	Normal Cost for FY94	205,826
(3)	Interest on (1) and (2) at 8.75%	34,546
(4)	Employee Contributions for FY94	82,503
(5)	Employer Contributions for FY94	153,285
(6)	Interest on (4) and (5) at 8.75% for one-half year	10,316
(7)	Increase/(Decrease) due to assumption changes	(9,361)
(8)	Increase/(Decrease) due to asset valuation method change	(76,466)
(9)	Expected Unfunded Liability, June 30, 1994, (1) + (2) + (3) - (4) - (5) - (6) + (7) + (8)	97,426
(10)	Actual Unfunded Liability, June 30, 1994	240,877
(11)	Actuarial Gain/(Loss) for the Year, (9) - (10)	\$ (143,451)

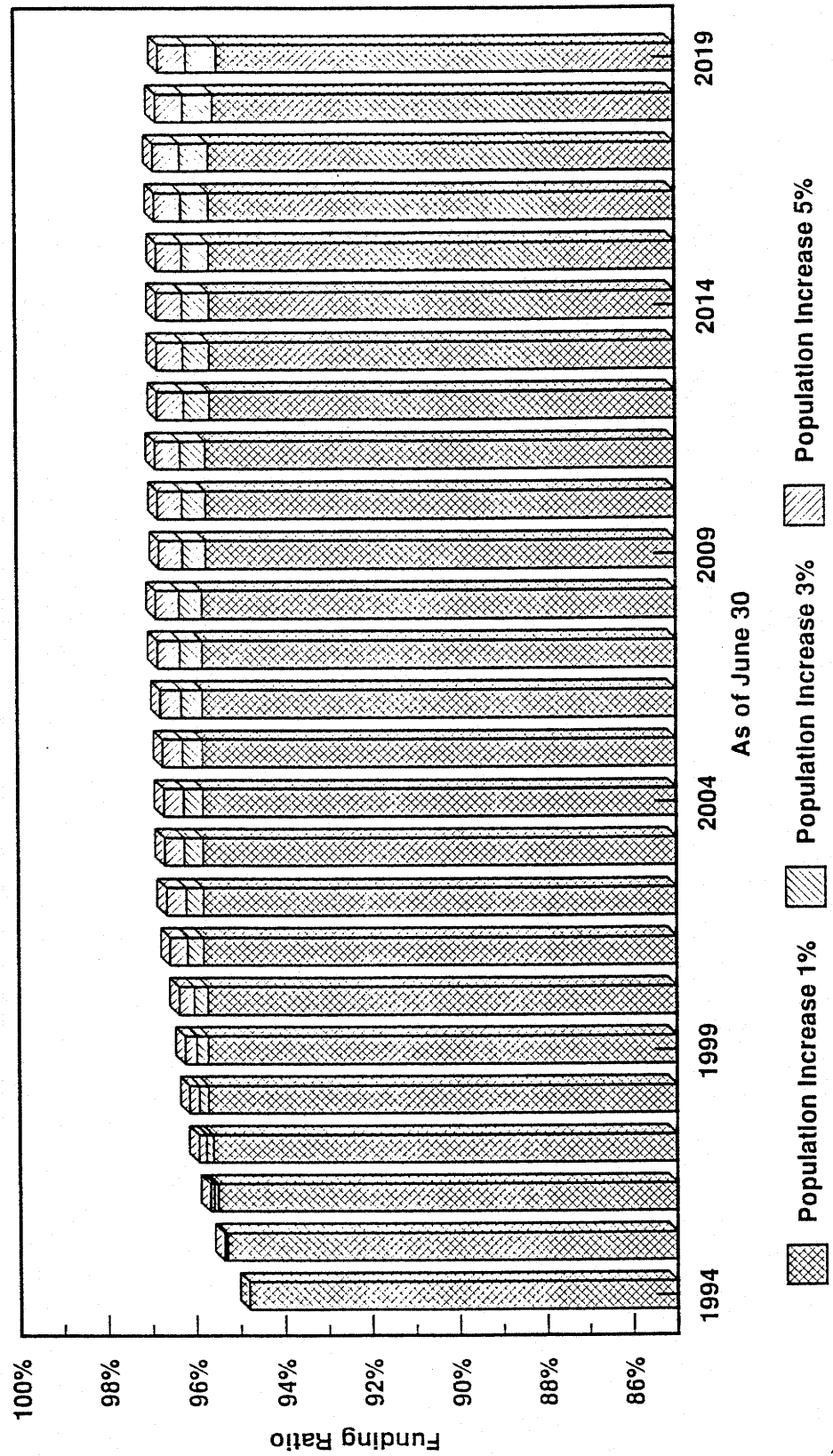
1.5 Actuarial Projections

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 8.00%			Valuation Amounts on July 1			Flow Amounts During Following 12 Months			Annual Population Increase 1.00%			Ending Asset Value
	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	
1994	4,379,305	4,620,182	94.8%	(240,877)	1,176,997	13.70%	162,576	81,051	243,627	202,518	41,109	351,989	4,772,402
1995	4,772,402	5,008,518	95.3%	(236,116)	1,196,376	12.82%	154,634	82,383	237,017	220,181	16,836	382,466	5,171,704
1996	5,171,704	5,413,175	95.5%	(241,471)	1,216,013	12.14%	148,999	83,827	232,826	243,071	(10,245)	413,327	5,574,785
1997	5,574,785	5,829,027	95.6%	(254,242)	1,238,667	11.95%	149,604	85,471	235,075	269,131	(34,056)	444,621	5,985,350
1998	5,985,350	6,253,939	95.7%	(268,589)	1,264,143	11.82%	151,173	87,352	238,526	298,054	(59,528)	476,447	6,402,269
1999	6,402,269	6,686,616	95.7%	(284,347)	1,293,760	11.72%	153,912	89,695	243,606	330,433	(86,827)	508,708	6,824,150
2000	6,824,150	7,127,953	95.7%	(303,803)	1,332,727	11.64%	157,358	92,356	249,714	362,231	(112,517)	541,431	7,253,064
2001	7,253,064	7,574,719	95.8%	(321,655)	1,371,694	11.61%	161,551	95,017	256,569	398,358	(141,789)	574,574	7,685,849
2002	7,685,849	8,024,704	95.8%	(338,855)	1,410,661	11.58%	165,677	97,679	263,356	437,928	(174,572)	607,885	8,119,162
2003	8,119,162	8,476,155	95.8%	(356,994)	1,449,628	11.55%	169,656	100,340	269,996	479,063	(209,067)	641,170	8,551,265
2004	8,551,265	8,927,778	95.8%	(376,513)	1,488,595	11.51%	174,483	103,540	278,024	520,865	(242,842)	674,387	8,982,810
2005	8,982,810	9,378,734	95.8%	(395,924)	1,543,335	11.48%	180,300	107,279	287,579	563,447	(275,868)	707,590	9,414,532
2006	9,414,532	9,828,647	95.8%	(414,115)	1,598,075	11.42%	185,652	111,018	296,670	607,745	(311,075)	740,720	9,844,177
2007	9,844,177	10,277,595	95.8%	(433,418)	1,652,815	11.42%	191,882	114,757	306,638	652,779	(346,141)	773,689	10,271,724
2008	10,271,724	10,726,114	95.8%	(454,390)	1,707,555	11.41%	197,997	118,495	316,492	697,143	(380,651)	806,512	10,697,585
2009	10,697,585	11,175,201	95.7%	(477,615)	1,762,295	11.41%	205,505	123,005	328,510	740,742	(412,232)	839,318	11,124,671
2010	11,124,671	11,626,307	95.7%	(501,636)	1,839,609	11.42%	214,460	128,286	342,745	783,510	(440,765)	872,343	11,556,249
2011	11,556,249	12,081,344	95.7%	(525,095)	1,916,924	11.39%	222,779	133,566	356,345	823,852	(467,508)	905,800	11,994,541
2012	11,994,541	12,542,681	95.6%	(548,139)	1,994,238	11.48%	233,429	138,847	372,275	864,223	(491,948)	939,885	12,442,479
2013	12,442,479	13,013,143	95.6%	(570,664)	2,071,553	11.56%	244,011	144,127	388,138	904,705	(516,567)	974,736	12,900,648
2014	12,900,648	13,496,017	95.6%	(595,369)	2,148,867	11.64%	256,270	150,422	406,692	943,352	(536,660)	1,010,585	13,374,573
2015	13,374,573	13,995,044	95.6%	(620,471)	2,255,882	11.70%	270,625	157,965	428,590	981,284	(552,694)	1,047,858	13,869,737
2016	13,869,737	14,514,426	95.6%	(644,688)	2,369,726	11.72%	283,680	165,274	448,954	1,016,437	(567,484)	1,086,880	14,389,133
2017	14,389,133	15,058,819	95.6%	(669,686)	2,469,913	11.82%	298,360	172,350	470,710	1,054,840	(584,130)	1,127,765	14,932,768
2018	14,932,768	15,633,342	95.5%	(700,573)	2,576,928	11.89%	312,687	179,659	492,346	1,094,923	(602,577)	1,170,518	15,500,710
2019	15,500,710	16,243,568	95.4%	(742,858)	2,683,943	12.02%	329,399	187,120	516,518	1,135,229	(618,710)	1,215,308	16,097,308

* Surpluses reduce employer contributions over 5 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	Investment Return			8.00%			Annual Population Increase										3.00%			Ending Asset Value
	Valuation Amounts on July 1			Surplus* (Deficit)	Total Salaries	Flow Amounts During Following 12 Months			Benefit			Net Contribs	Investment Earnings							
	Total Assets	Accrued Liability	Funding Ratio			Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Payments	Contribs									
1994	4,379,305	4,620,182	94.8%	(240,877)	1,176,997	13.70%	163,700	81,611	245,311	202,518	42,793	352,056	4,774,154							
1995	4,774,154	5,008,956	95.3%	(234,803)	1,212,782	12.82%	157,840	84,091	241,931	220,187	21,743	382,802	5,178,699							
1996	5,178,699	5,415,778	95.6%	(237,078)	1,249,615	12.14%	154,255	86,785	241,040	243,249	(2,209)	414,208	5,590,697							
1997	5,590,697	5,835,866	95.8%	(245,168)	1,291,661	11.76%	154,702	89,835	244,536	269,589	(25,052)	446,254	6,011,899							
1998	6,011,899	6,267,606	95.9%	(255,707)	1,338,925	11.49%	157,008	93,293	250,301	298,923	(48,622)	479,007	6,442,284							
1999	6,442,284	6,710,285	96.0%	(268,001)	1,392,942	11.26%	161,008	97,624	258,632	331,860	(73,229)	512,454	6,881,509							
2000	6,881,509	7,164,543	96.0%	(283,034)	1,465,730	11.07%	166,304	102,595	268,899	364,133	(95,234)	546,711	7,332,985							
2001	7,332,985	7,629,697	96.1%	(296,712)	1,538,517	10.93%	172,200	107,566	279,766	400,808	(121,042)	581,797	7,793,741							
2002	7,793,741	8,104,029	96.2%	(310,288)	1,611,305	10.81%	178,139	112,538	290,677	441,034	(150,357)	617,485	8,260,869							
2003	8,260,869	8,586,469	96.2%	(325,600)	1,684,093	10.69%	183,967	117,509	301,476	482,924	(181,448)	653,612	8,733,032							
2004	8,733,032	9,076,599	96.2%	(343,567)	1,756,881	10.58%	191,770	123,749	315,519	525,621	(210,102)	690,238	9,213,169							
2005	9,213,169	9,574,652	96.2%	(361,483)	1,866,804	10.49%	201,673	131,257	332,929	569,253	(236,324)	727,601	9,704,445							
2006	9,704,445	10,081,507	96.3%	(377,062)	1,976,727	10.35%	210,328	138,764	349,093	614,786	(265,693)	765,728	10,204,480							
2007	10,204,480	10,598,698	96.3%	(394,219)	2,086,651	10.31%	220,880	146,272	367,152	661,339	(294,186)	804,591	10,714,884							
2008	10,714,884	11,128,407	96.3%	(413,523)	2,196,574	10.27%	231,213	153,780	384,993	707,582	(322,589)	844,287	11,236,582							
2009	11,236,582	11,673,465	96.3%	(436,883)	2,306,497	10.24%	244,514	163,157	407,671	753,424	(345,753)	885,096	11,775,925							
2010	11,775,925	12,237,355	96.2%	(461,430)	2,471,151	10.21%	260,818	174,403	435,220	798,842	(363,622)	927,529	12,339,833							
2011	12,339,833	12,824,210	96.2%	(484,377)	2,635,805	10.13%	275,318	185,648	460,967	842,277	(381,310)	971,934	12,930,458							
2012	12,930,458	13,438,812	96.2%	(508,355)	2,800,459	10.21%	294,219	196,894	491,114	886,381	(395,268)	1,018,626	13,553,816							
2013	13,553,816	14,086,595	96.2%	(532,779)	2,965,113	10.27%	312,920	208,140	521,061	931,438	(410,377)	1,067,890	14,211,329							
2014	14,211,329	14,773,640	96.2%	(562,311)	3,129,768	10.33%	335,698	222,035	557,733	975,481	(417,748)	1,120,196	14,913,777							
2015	14,913,777	15,506,682	96.2%	(592,905)	3,371,976	10.38%	362,914	238,811	601,725	1,019,717	(417,992)	1,176,383	15,672,168							
2016	15,672,168	16,293,104	96.2%	(620,937)	3,621,020	10.36%	387,191	255,354	642,544	1,062,157	(419,613)	1,236,989	16,489,544							
2017	16,489,544	17,140,940	96.2%	(651,396)	3,856,393	10.47%	416,280	271,663	687,943	1,109,533	(421,590)	1,302,300	17,370,254							
2018	17,370,254	18,058,872	96.2%	(688,618)	4,098,601	10.54%	444,805	288,206	733,010	1,160,377	(427,366)	1,372,526	18,315,413							
2019	18,315,413	19,056,235	96.1%	(740,822)	4,340,809	10.66%	476,216	305,237	781,453	1,213,230	(431,777)	1,447,962	19,331,599							

* Surpluses reduce employer contributions over 5 years
* Deficits increase employer contributions over 25 years

1.5 Actuarial Projections (continued)

Table 3
State of Alaska PERS
Financial Projections ('000 omitted)

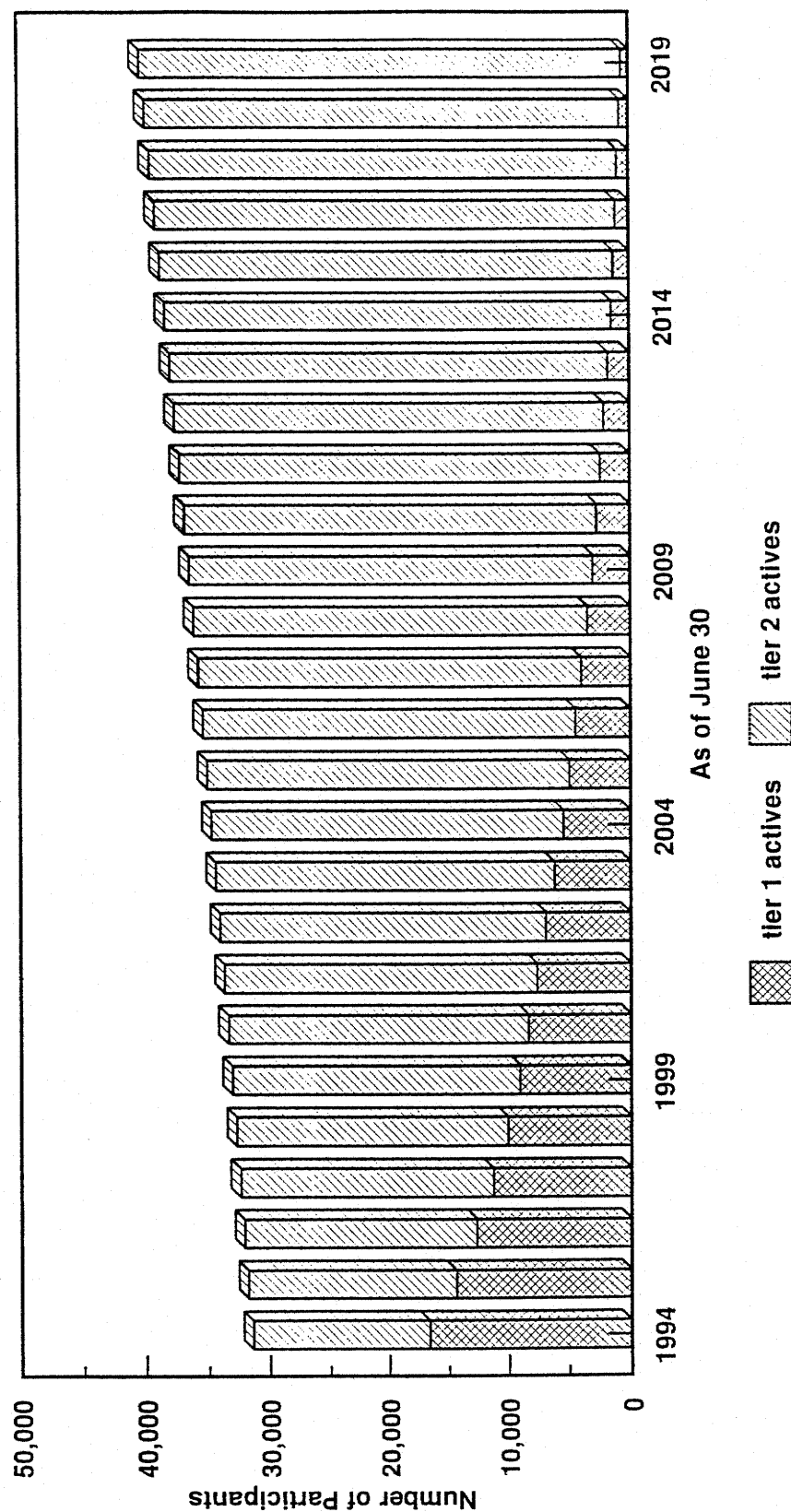
Investment Return			8.00%		Annual Population Increase										5.00%		
As of June 30	Valuation Amounts on July 1			Surplus* (Deficit)	Flow Amounts During Following 12 Months			Employee			Total			Benefit Payments	Net Contribs	Investment Earnings	Ending Asset Value
	Total Assets	Accrued Liability	Funding Ratio		Total Salaries	Employer Contribs	Employee Contribs	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments					
1994	4,379,305	4,620,182	94.8%	(240,877)	1,176,997	13.70%	164,835	82,177	247,011	202,518	44,493	352,124	4,775,922				
1995	4,775,922	5,009,394	95.3%	(233,472)	1,229,348	12.82%	161,109	85,833	246,942	220,194	26,747	383,144	5,185,813				
1996	5,185,813	5,418,397	95.7%	(232,584)	1,284,051	12.14%	159,701	89,848	249,550	243,427	6,122	415,110	5,607,044				
1997	5,607,045	5,842,832	96.0%	(235,787)	1,346,941	11.57%	159,969	94,436	254,405	270,056	(15,651)	447,938	6,039,332				
1998	6,039,332	6,281,698	96.1%	(242,365)	1,418,388	11.17%	163,076	99,674	262,750	299,820	(37,070)	481,664	6,483,926				
1999	6,483,926	6,734,990	96.3%	(251,064)	1,500,328	10.53%	168,599	106,407	275,006	333,352	(58,346)	516,380	6,941,960				
2000	6,941,960	7,201,436	96.4%	(259,476)	1,615,541	10.28%	176,155	114,276	290,431	366,167	(75,735)	552,327	7,418,552				
2001	7,418,552	7,686,401	96.5%	(267,849)	1,730,755	10.28%	183,925	122,145	306,070	403,480	(97,410)	589,588	7,910,729				
2002	7,910,729	8,188,291	96.6%	(277,561)	1,845,969	10.07%	191,777	130,014	321,792	444,484	(122,692)	627,951	8,415,988				
2003	8,415,988	8,706,561	96.7%	(290,573)	1,961,183	9.89%	199,707	137,883	337,590	487,290	(149,700)	667,291	8,933,579				
2004	8,933,579	9,241,718	96.7%	(308,139)	2,076,397	9.74%	211,415	148,262	359,677	531,089	(171,412)	707,830	9,469,996				
2005	9,469,996	9,795,317	96.7%	(325,321)	2,265,105	9.62%	226,949	161,151	388,100	576,037	(187,937)	750,082	10,032,141				
2006	10,032,141	10,369,964	96.7%	(337,823)	2,453,813	9.41%	239,773	174,040	413,813	623,136	(209,323)	794,198	10,617,016				
2007	10,617,016	10,969,316	96.8%	(352,300)	2,642,522	9.37%	256,312	186,929	443,241	671,622	(228,382)	840,226	11,228,861				
2008	11,228,861	11,598,078	96.8%	(369,217)	2,831,230	9.31%	272,399	199,817	472,216	720,259	(248,043)	888,387	11,869,205				
2009	11,869,205	12,262,005	96.8%	(392,800)	3,019,939	9.27%	294,121	216,682	510,803	768,988	(258,185)	939,209	12,550,229				
2010	12,550,229	12,967,904	96.8%	(417,675)	3,325,066	9.24%	321,464	237,522	558,987	817,851	(258,865)	993,664	13,285,028				
2011	13,285,028	13,723,630	96.8%	(438,602)	3,630,193	9.11%	344,515	258,362	602,877	865,361	(262,484)	1,052,303	14,074,847				
2012	14,074,847	14,538,089	96.8%	(463,242)	3,935,321	9.20%	376,008	279,202	655,210	914,402	(259,191)	1,115,620	14,931,276				
2013	14,931,276	15,421,237	96.8%	(489,961)	4,240,448	9.26%	406,971	300,043	707,013	965,505	(243,031)	1,184,162	15,856,946				
2014	15,856,946	16,384,079	96.8%	(527,133)	4,545,575	9.33%	446,664	327,051	773,716	1,016,747	(243,031)	1,258,834	16,872,749				
2015	16,872,749	17,438,671	96.8%	(565,922)	5,031,330	9.39%	495,406	360,462	855,868	1,069,487	(213,619)	1,341,275	18,000,405				
2016	18,000,405	18,598,119	96.8%	(597,713)	5,523,928	9.32%	537,273	393,639	930,912	1,121,887	(190,975)	1,432,393	19,241,824				
2017	19,241,824	19,876,578	96.8%	(634,754)	6,002,840	9.46%	591,015	426,583	1,017,597	1,181,468	(163,870)	1,532,791	20,610,745				
2018	20,610,745	21,289,254	96.8%	(678,509)	6,488,595	9.56%	643,521	459,760	1,103,281	1,246,989	(143,708)	1,643,111	22,110,148				
2019	22,110,148	22,852,402	96.8%	(742,255)	6,974,350	9.67%	699,997	494,178	1,194,175	1,317,131	(122,955)	1,763,894	23,751,086				

* Surpluses reduce employer contributions over 5 years
* Deficits increase employer contributions over 25 years

1.5 Actuarial Projections (continued)

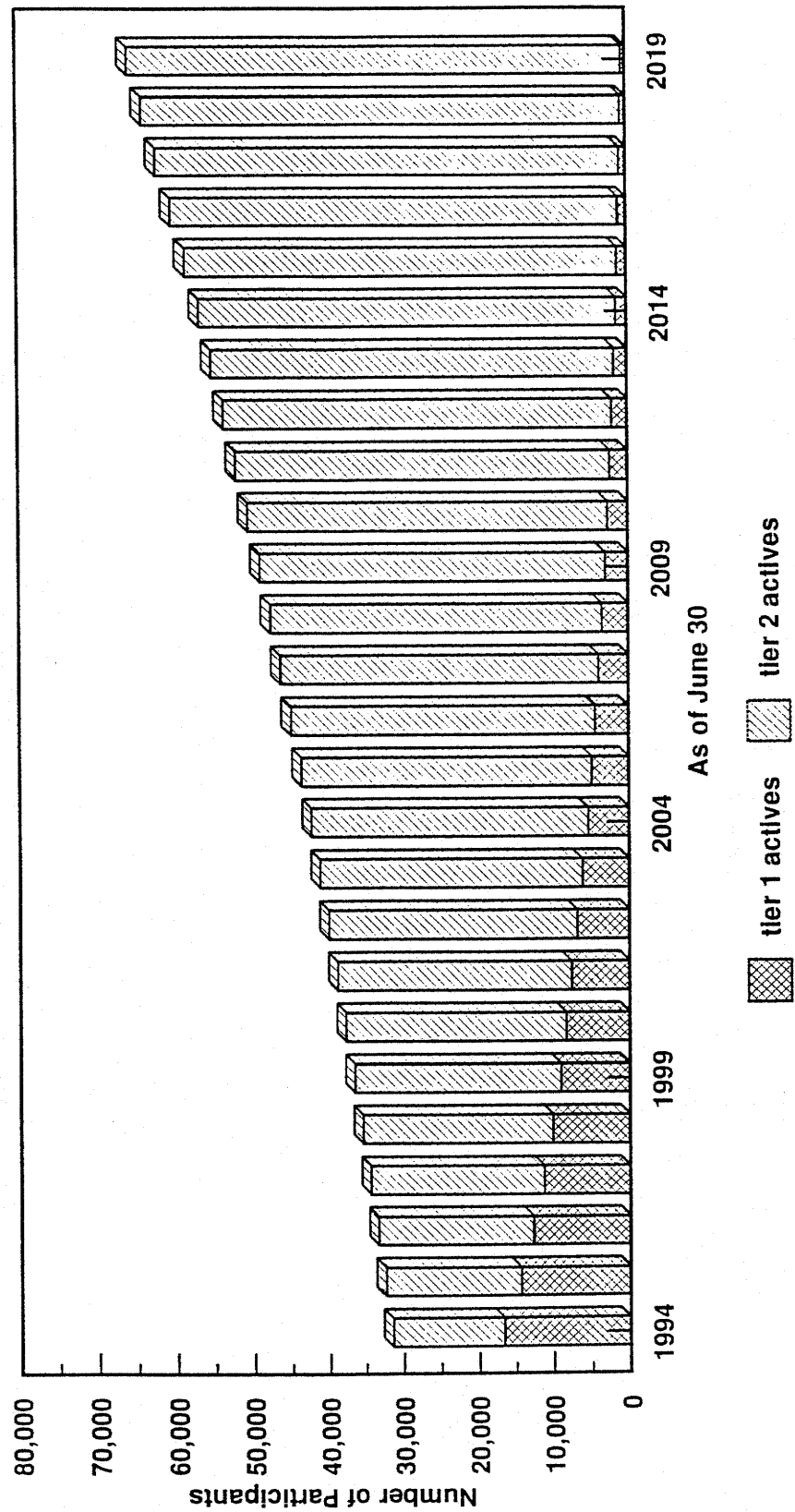
State of Alaska PERS

Projected Active Participant Count
Annual Population Increase of 1%



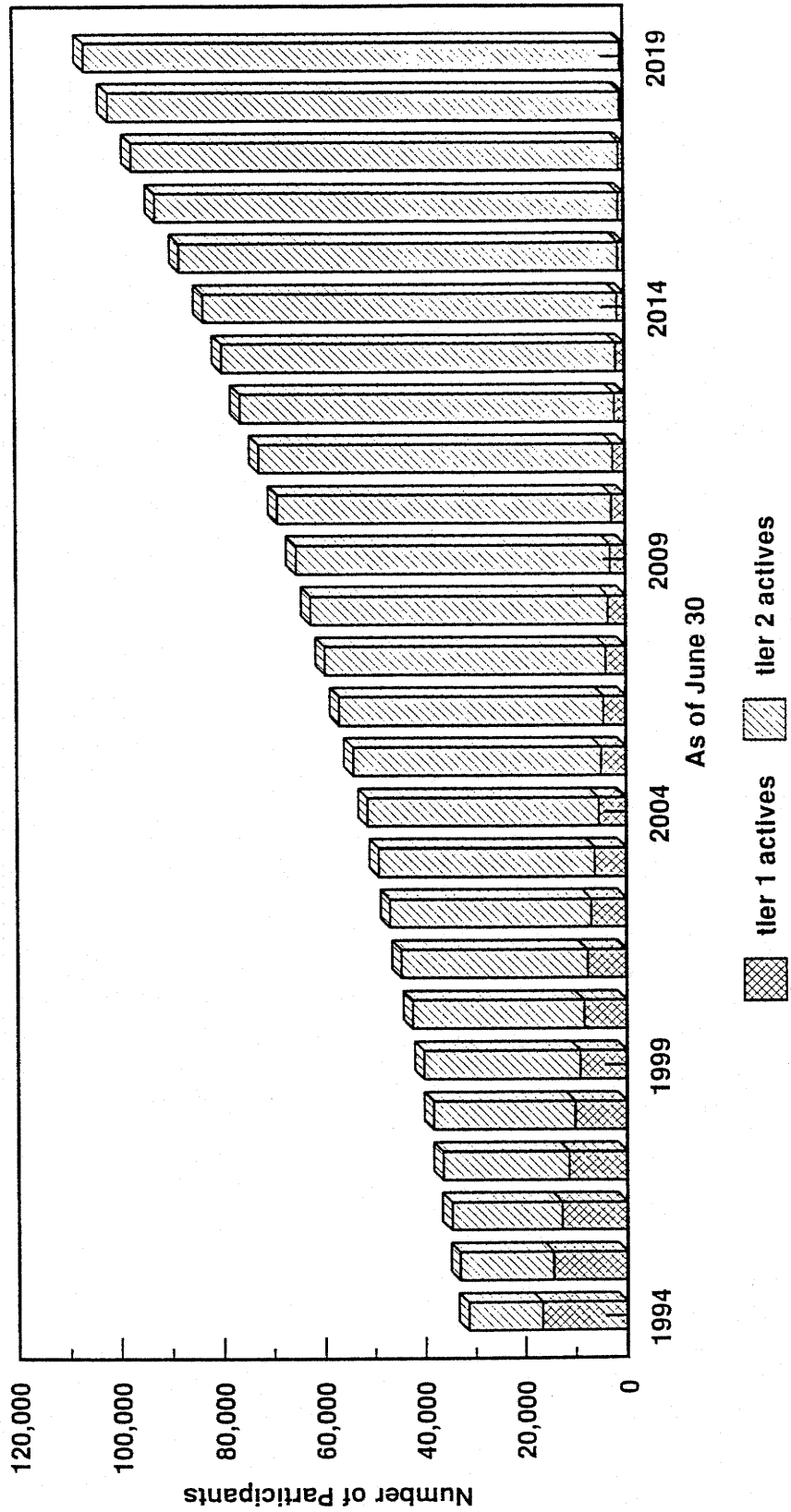
1.5 Actuarial Projections (continued)

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



1.5 Actuarial Projections (continued)

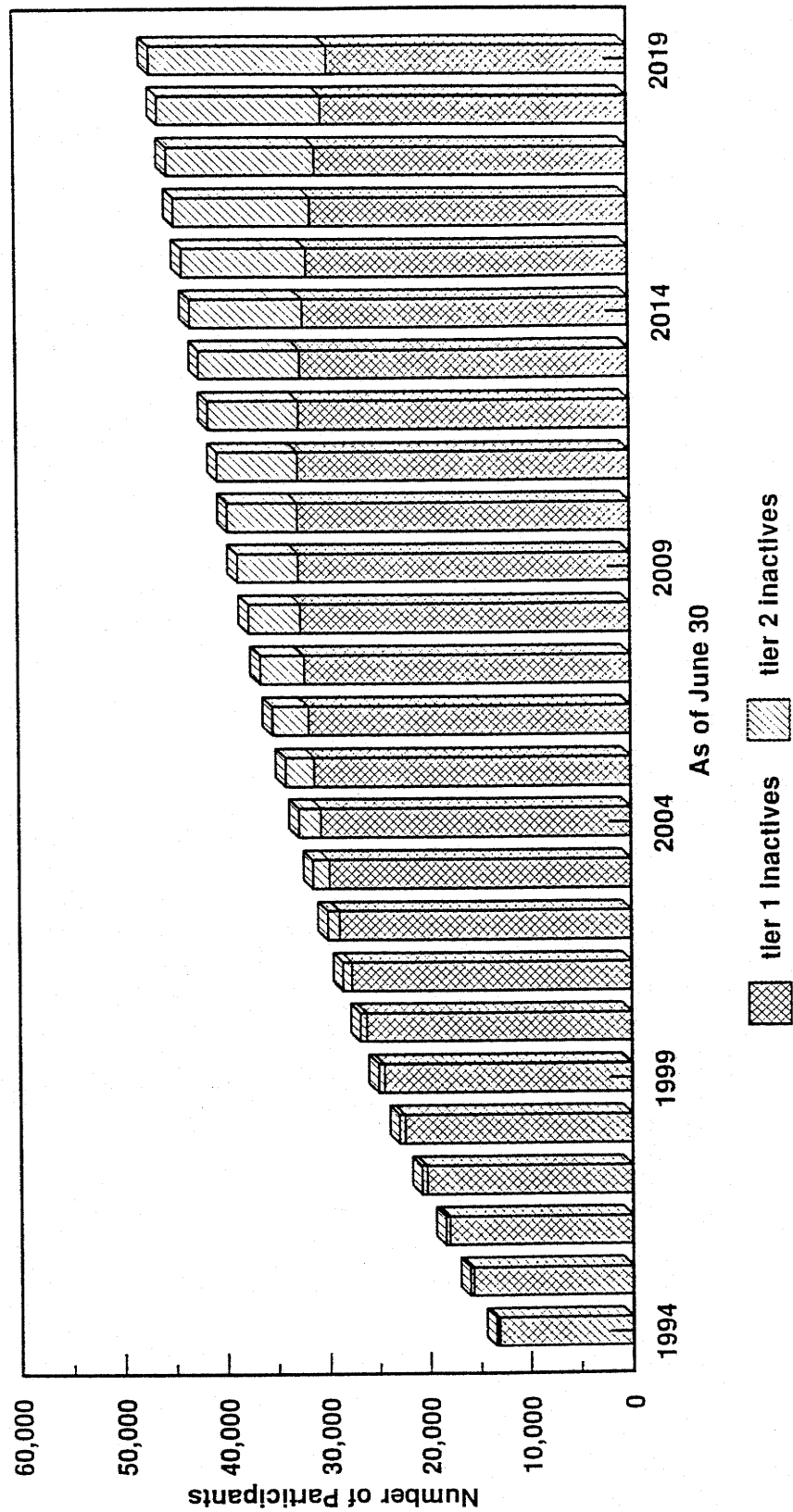
State of Alaska PERS Projected Active Participant Count Annual Population Increase of 5%



1.5 Actuarial Projections (continued)

State of Alaska PERS

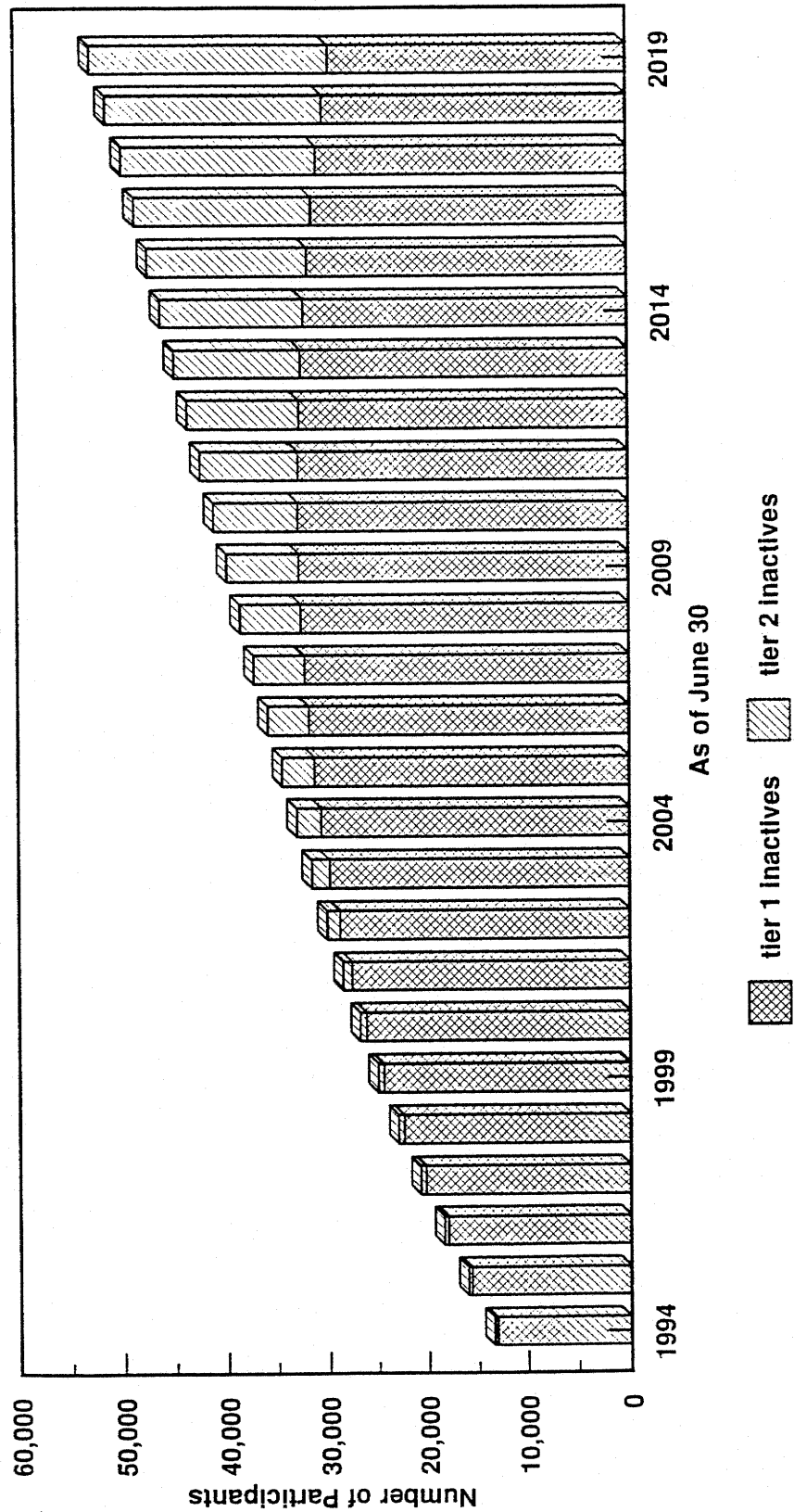
Projected Inactive Participant Count
Annual Population Increase of 1%



1.5 Actuarial Projections (continued)

State of Alaska PERS

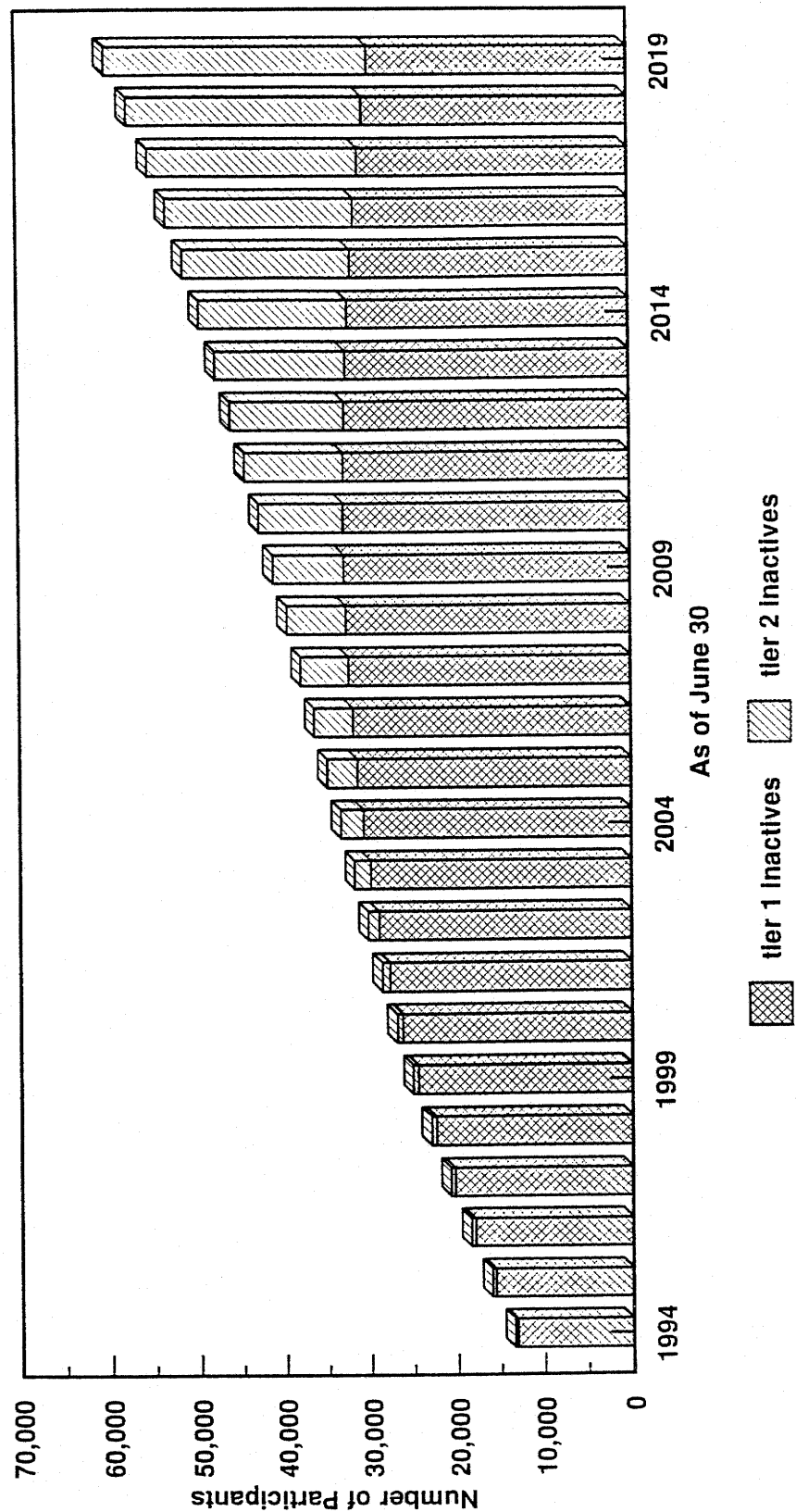
Projected Inactive Participant Count
Annual Population Increase of 3%



1.5 Actuarial Projections (continued)

State of Alaska PERS

Projected Inactive Participant Count
Annual Population Increase of 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, 1993. 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.

(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 155 employers participating in the PERS, including the State of Alaska and 154 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;
- 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.

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 60*, or early retirement at age 55, if they have at least:
 - (i) five years of paid-up PERS service;

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

- (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.

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 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, 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.

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.

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.

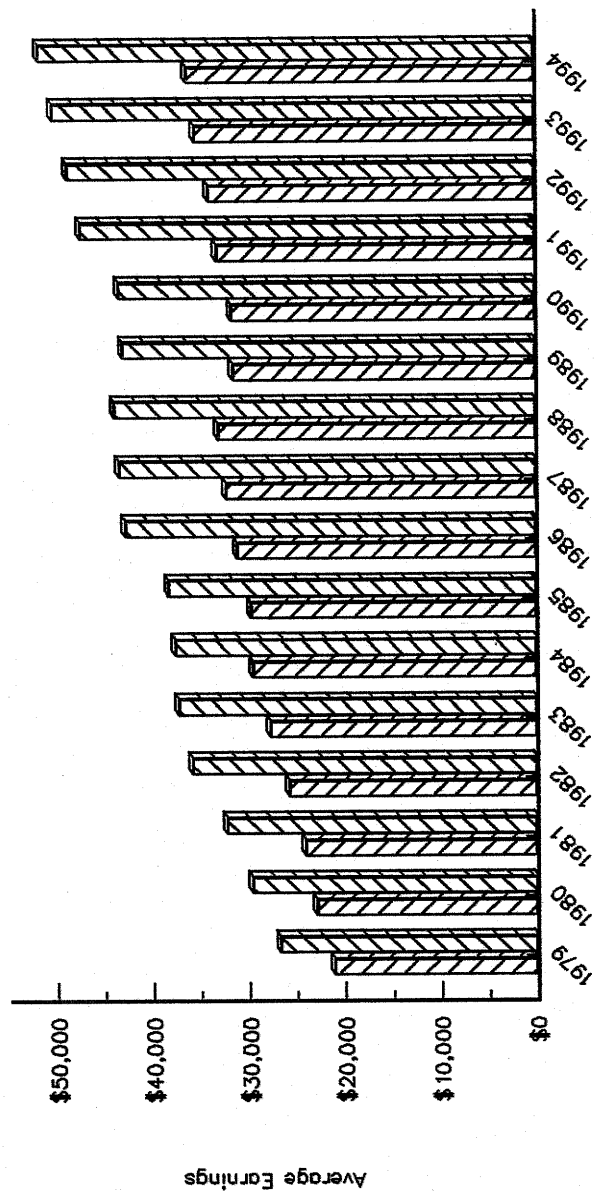
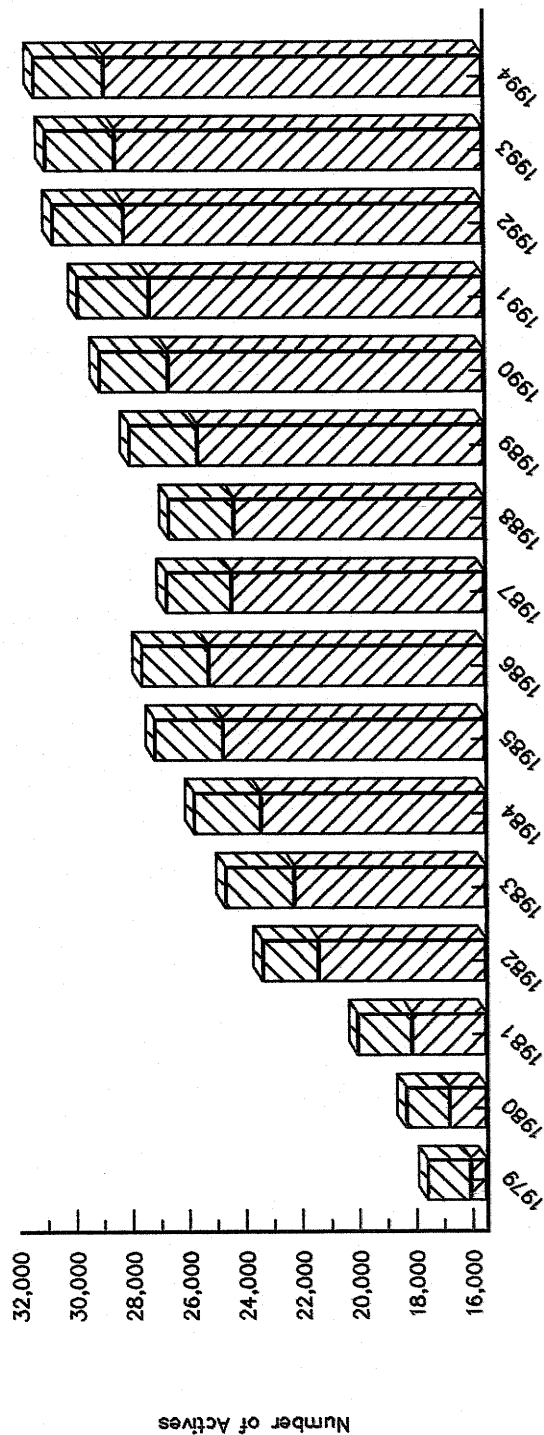
2.2(a) Participant Census Information - Total PERS as of June 30

		<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
Active Members						
(1)	Number	29,086	29,840	30,721	30,972	31,364
(2)	Average Age	40.37	40.68	41.21	41.75	42.18
(3)	Average Credited Service	6.82	6.91	7.22	7.62	7.92
(4)	Average Annual Salary	\$ 32,733	\$ 34,444	\$ 35,280	\$ 36,675	\$ 37,527
Retirees and Beneficiaries						
(1)	Number	7,365	8,358	8,704	9,103	9,643
(2)	Average Age	63.62	63.15	63.58	63.98	64.22
(3)	Average Monthly Benefit:					
	Base	\$ 797	\$ 864	\$ 867	\$ 855	\$ 874
	C.O.L.A.	61	66	64	63	63
	P.R.P.A.	110	108	144	129	135
	Adjustment	N/A	N/A	N/A	0	0
	TOTAL	968	1,038	1,075	1,047	1,072
Vested Terminations						
(1)	Number	2,745	3,015	3,249	3,572	3,771
(2)	Average Age	42.96	43.20	43.59	44.04	44.39
(3)	Average Monthly Benefit	\$ 536	\$ 556	\$ 582	\$ 610	\$ 626
Non-Vested Terminations With Account Balances						
(1)	Number	3,695	4,108	4,380	4,721	4,859
(2)	Average Account Balance	\$ 2,045	\$ 2,124	\$ 2,251	\$ 2,442	\$ 2,637

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

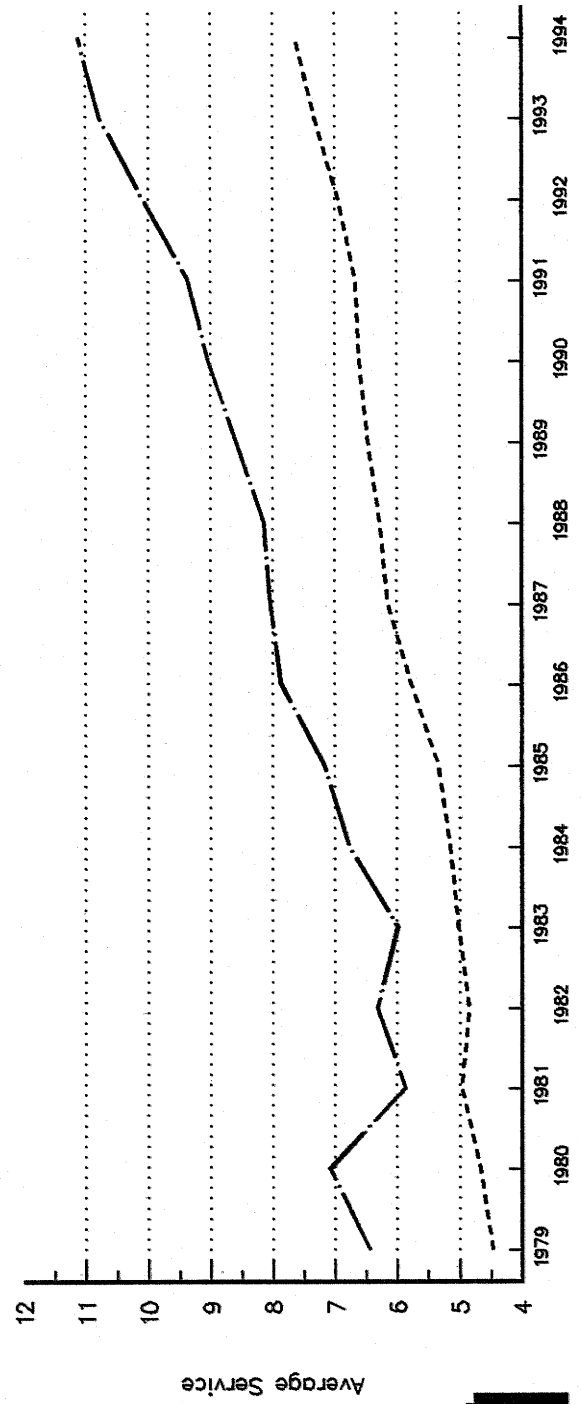
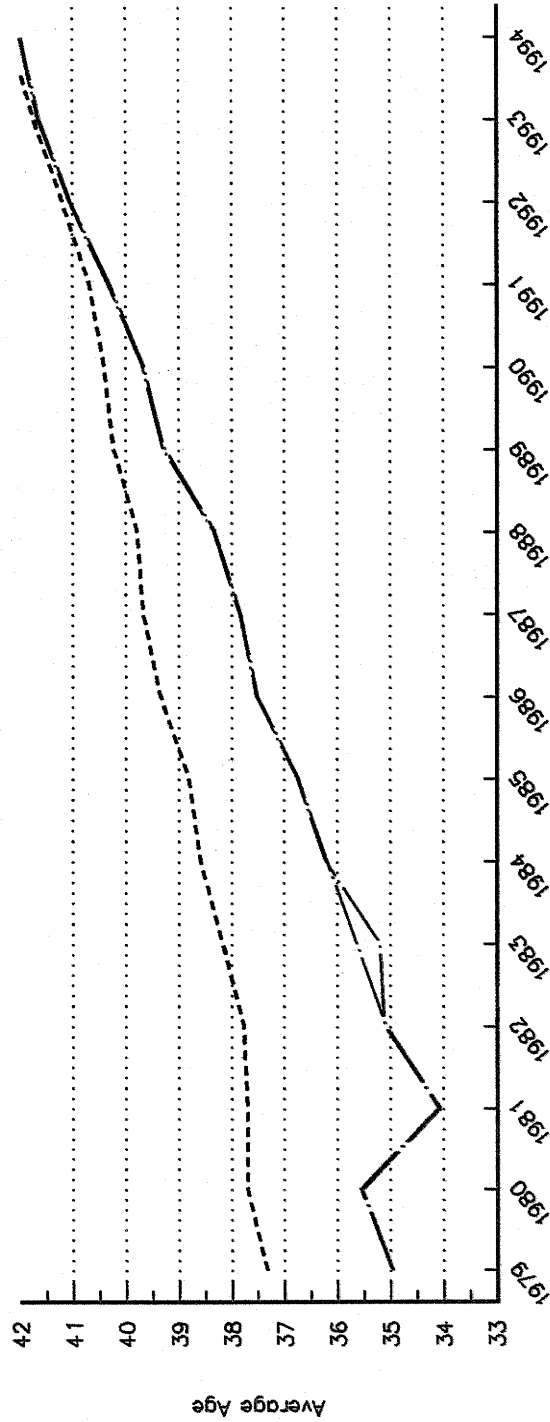
	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
Active Police & Fire					
(1) Number	2,419	2,533	2,515	2,463	2,481
(2) Average Age	39.70	40.35	41.08	41.67	42.01
(3) Average Credited Service	9.05	9.38	10.10	10.80	11.13
(4) Average Annual Salary	\$ 43,462	\$ 47,470	\$ 48,812	\$ 50,355	\$ 51,776
(5) Number Vested	1,683	1,795	1,842	1,907	1,981
(6) Percent Who Are Vested	69.6%	70.9%	73.2%	77.4%	79.8%
Active "Other" Members					
(1) Number	26,667	27,307	28,206	28,509	28,883
(2) Average Age	40.43	40.71	41.22	41.76	42.19
(3) Average Credited Service	6.62	6.68	6.96	7.35	7.65
(4) Average Annual Salary	\$ 31,760	\$ 33,236	\$ 34,073	\$ 35,493	\$ 36,303
(5) Number Vested	14,109	14,234	14,640	15,336	16,162
(6) Percent Who Are Vested	52.9%	52.1%	51.9%	53.8%	56.0%

State of Alaska - PERS Actives



Other Police/Fire

State of Alaska - PERS Actives



Other Police/Fire

2.2(c) Distribution of Active Police and Fire Participants

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

Age Groups	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	1	\$ 700	\$ 700
20-24	34	1,118,531	32,898
25-29	143	6,113,278	42,750
30-34	267	12,408,724	46,475
35-39	498	25,500,596	51,206
40-44	642	34,773,892	54,165
45-49	520	28,597,944	54,996
50-54	284	15,238,556	53,657
55-59	75	3,829,290	51,057
60-64	14	730,006	52,143
65-69	3	144,875	48,292
70-74	0	0	0
75-79	0	0	0
80+	0	0	0
Total	2,481	\$ 128,456,392	\$ 51,776

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

Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0	115	\$ 3,059,791	\$ 26,607
1	81	3,122,597	38,551
2	75	3,277,124	43,695
3	105	4,570,869	43,532
4	124	5,710,999	46,056
0- 4	500	19,741,380	39,483
5- 9	628	30,507,892	48,579
10-14	614	32,726,048	53,300
15-19	504	30,121,756	59,765
20-24	199	12,959,081	65,121
25-29	34	2,277,673	66,990
30-34	2	122,562	61,281
35-39	0	0	0
40+	0	0	0
Total	2,481	\$ 128,456,392	\$ 51,776

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	1	0	0	0	0	0	0	0	0	1
20-24	34	0	0	0	0	0	0	0	0	34
25-29	115	28	0	0	0	0	0	0	0	143
30-34	112	111	44	0	0	0	0	0	0	267
35-39	77	154	181	83	3	0	0	0	0	498
40-44	71	129	192	200	48	2	0	0	0	642
45-49	56	115	108	131	100	10	0	0	0	520
50-54	25	65	66	69	38	20	1	0	0	284
55-59	6	21	21	18	7	1	1	0	0	75
60-64	2	3	2	3	3	1	0	0	0	14
65-69	1	2	0	0	0	0	0	0	0	3
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80+	0	0	0	0	0	0	0	0	0	0
Total	500	628	614	504	199	34	2	0	0	2,481

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
June 30, 1994	2,481	\$ 128,456	\$ 51,776	2.8%
June 30, 1993	2,463	124,025	50,355	3.2%
June 30, 1992	2,515	122,762	48,812	2.8%
June 30, 1991	2,533	120,240	47,470	9.2%
June 30, 1990	2,419	105,135	43,462	.9%
June 30, 1989	2,414	104,000	43,082	-2.0%
June 30, 1988	2,327	102,265	43,947	1.0%
June 30, 1987	2,319	100,839	43,484	1.5%
June 30, 1986	2,371	101,537	42,825	11.6%
June 30, 1985	2,407	92,381	38,380	1.9%

2.2(e) Distribution of Active "Other" 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	71	\$ 856,573	\$ 12,064	0	3,148	\$ 61,361,092	\$ 19,492
20-24	741	16,185,755	21,843	1	2,549	72,151,720	28,306
25-29	2,018	56,470,344	27,983	2	2,386	74,140,384	31,073
30-34	3,612	115,068,112	31,857	3	2,436	81,748,896	33,559
35-39	5,344	189,140,464	35,393	4	2,202	74,919,344	34,023
40-44	6,245	238,652,426	38,215	0- 4	12,721	364,321,436	28,639
45-49	5,137	205,158,608	39,937	5- 9	7,170	267,188,038	37,265
50-54	3,273	133,514,000	40,793	10-14	4,955	216,054,896	43,603
55-59	1,533	59,964,112	39,116	15-19	2,751	131,509,288	47,804
60-64	686	25,760,876	37,552	20-24	964	50,815,408	52,713
65-69	173	6,204,891	35,866	25-29	278	16,003,062	57,565
70-74	40	1,306,563	32,664	30-34	39	2,360,998	60,538
75-79	7	215,582	30,797	35-39	4	231,897	57,974
80+	3	42,334	14,111	40+	1	55,617	55,617
Total	28,883	\$ 1,048,540,640	\$ 36,303	Total	28,883	\$ 1,048,540,640	\$ 36,303

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	71	0	0	0	0	0	0	0	0	71
20-24	731	10	0	0	0	0	0	0	0	741
25-29	1,686	323	9	0	0	0	0	0	0	2,018
30-34	2,255	986	350	21	0	0	0	0	0	3,612
35-39	2,492	1,506	985	349	12	0	0	0	0	5,344
40-44	2,299	1,634	1,317	809	181	5	0	0	0	6,245
45-49	1,574	1,298	1,098	715	362	89	1	0	0	5,137
50-54	901	768	697	508	247	130	22	0	0	3,273
55-59	442	396	326	217	102	34	14	2	0	1,533
60-64	190	185	137	106	49	17	1	1	0	686
65-69	61	51	28	23	8	1	0	1	0	173
70-74	14	11	5	3	3	2	1	0	1	40
75-79	3	1	3	0	0	0	0	0	0	7
80+	2	1	0	0	0	0	0	0	0	3
Total	12,721	7,170	4,955	2,751	964	278	39	4	1	28,883

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

Valuation Date	Number	Annual Payroll (000's)	Annual Average Pay	Percent Increase In Average Pay
June 30, 1994	28,883	\$ 1,048,541	\$ 36,303	2.3%
June 30, 1993	28,509	1,011,864	35,493	4.2%
June 30, 1992	28,206	961,054	34,073	2.5%
June 30, 1991	27,307	907,567	33,236	4.6%
June 30, 1990	26,667	846,935	31,760	.6%
June 30, 1989	25,630	808,835	31,558	-4.7%
June 30, 1988	24,349	806,100	33,106	2.4%
June 30, 1987	24,443	790,463	32,339	3.6%
June 30, 1986	25,272	788,555	31,203	4.7%
June 30, 1985	24,776	738,198	29,795	.7%

2.2(g) Statistics on New Retirees

Police and Fire Members During the Year Ending June 30

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
Service					
(1) Number	36	96	25	32	65
(2) Average Age at Retirement	51.19	50.97	51.77	50.09	51.25
(3) Average Monthly Benefit	\$ 1,551	\$ 2,008	\$ 1,786	\$ 2,235	\$ 2,324
Disability					
(1) Number	1	6	8	6	5
(2) Average Age at Retirement	38.05	40.71	44.00	41.57	44.84
(3) Average Monthly Benefit	\$ 1,171	\$ 2,216	\$ 1,502	\$ 1,682	\$ 1,193
Survivor (including surviving spouse)					
(1) Number	1	1	2	1	1
(2) Average Age at Retirement	52.62	47.9	28.61	57.15	41.35
(3) Average Monthly Benefit	\$ 312	\$ 1,114	\$ 1,570	\$ 295	\$ 417
Total					
(1) Number	38	103	35	39	71
(2) Average Age at Retirement	50.88	50.34	48.67	48.96	50.66
(3) Average Monthly Benefit	\$ 1,508	\$ 2,011	\$ 1,709	\$ 2,100	\$ 2,217

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 7/1/93 - 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
Period 7/1/89 - 6/30/90:							
Average Monthly Benefit	\$ 1,176	\$ 490	\$ 805	\$ 1,853	\$ 2,387	\$ 0	\$ 0
Number of Active Retirants	4	5	8	12	9	0	0
Period 7/1/88 - 6/30/89:							
Average Monthly Benefit	\$ 866	\$ 984	\$ 3,459	\$ 1,330	\$ 2,050	\$ 3,808	\$ 0
Number of Active Retirants	2	8	1	2	4	1	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>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
Service					
(1) Number	420	829	404	433	539
(2) Average Age at Retirement	56.40	55.82	56.84	56.83	56.92
(3) Average Monthly Benefit	\$ 853	\$ 1,121	\$ 912	\$ 984	\$ 1,113
Disability					
(1) Number	22	20	15	17	18
(2) Average Age at Retirement	45.85	45.38	43.87	44.46	49.71
(3) Average Monthly Benefit	\$ 955	\$ 944	\$ 999	\$ 986	\$ 1,221
Survivor (including surviving spouse)					
(1) Number	15	27	16	14	10
(2) Average Age at Retirement	53.05	60.35	49.44	53.89	48.68
(3) Average Monthly Benefit	\$ 748	\$ 675	\$ 586	\$ 563	\$ 1,005
Total					
(1) Number	457	876	435	464	567
(2) Average Age at Retirement	55.78	55.72	56.12	56.29	56.55
(3) Average Monthly Benefit	\$ 855	\$ 1,104	\$ 903	\$ 971	\$ 1,115

William M. Mercer, Incorporated

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

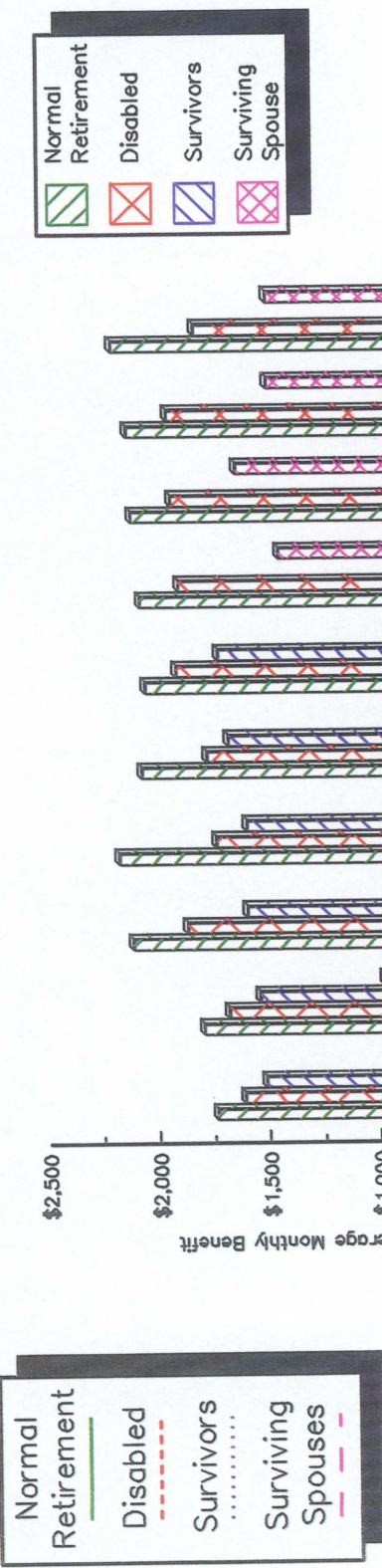
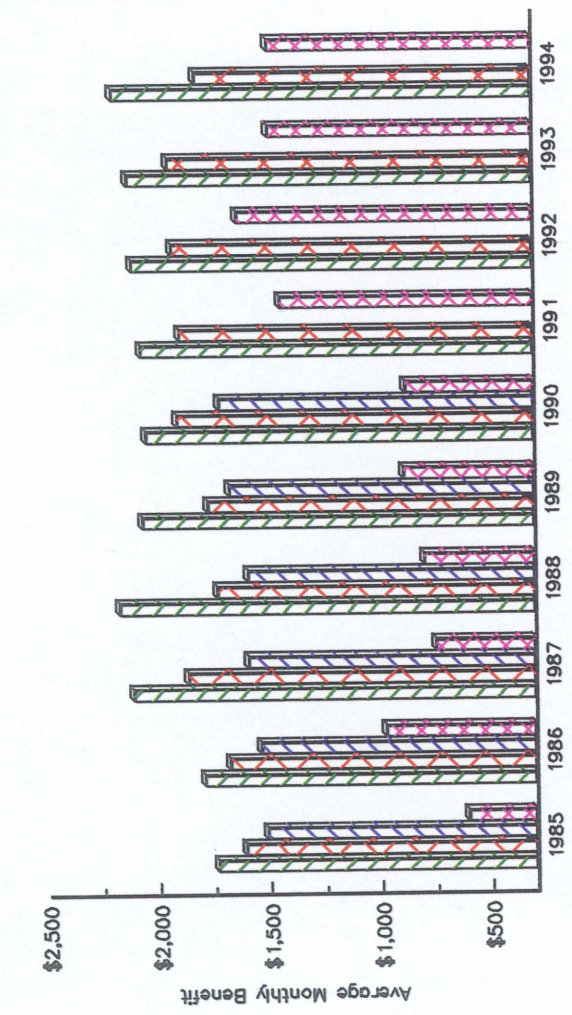
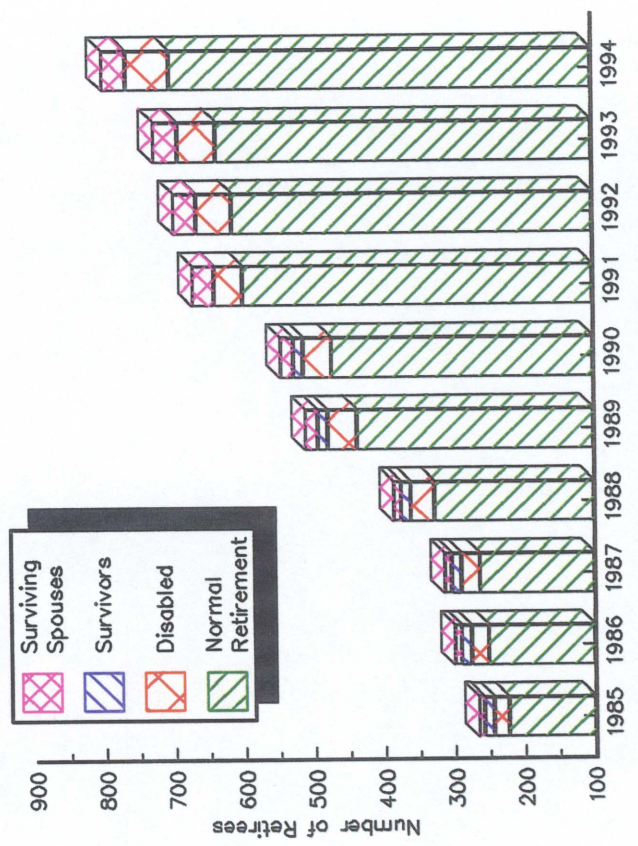
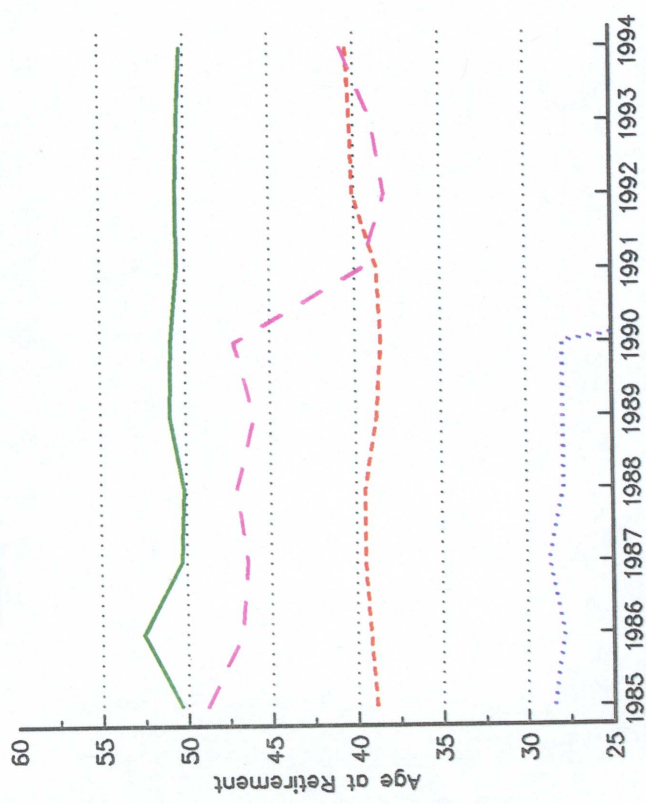
	Years of Credited Service						
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +
Period 7/1/93 - 6/30/94:							
Average Monthly Benefit*	\$ 503	\$ 449	\$ 863	\$ 1,412	\$ 1,886	\$ 2,710	\$ 3,131
Number of Active Retirants	17	149	169	136	60	17	19
Period 7/1/92 - 6/30/93:							
Average Monthly Benefit	\$ 558	\$ 449	\$ 866	\$ 1,343	\$ 2,029	\$ 2,534	\$ 3,223
Number of Active Retirants	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 Retirants	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 Retirants	40	267	282	154	76	42	15
Period 7/1/89 - 6/30/90:							
Average Monthly Benefit	\$ 627	\$ 480	\$ 830	\$ 1,325	\$ 1,856	\$ 2,168	\$ 3,352
Number of Active Retirants	46	181	124	66	30	4	6
Period 7/1/88 - 6/30/89:							
Average Monthly Benefit	\$ 712	\$ 414	\$ 771	\$ 1,187	\$ 1,791	\$ 2,054	\$ 3,443
Number of Active Retirants	47	155	83	36	18	10	4

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

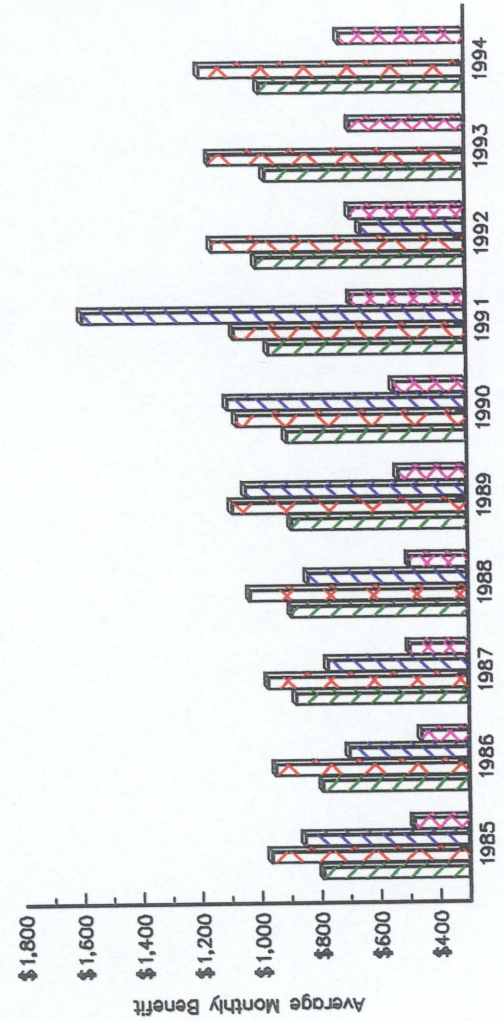
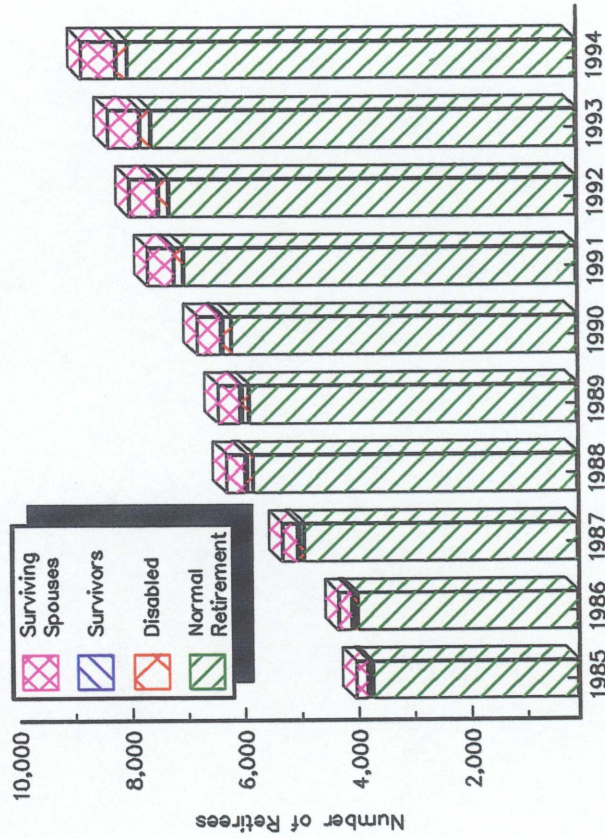
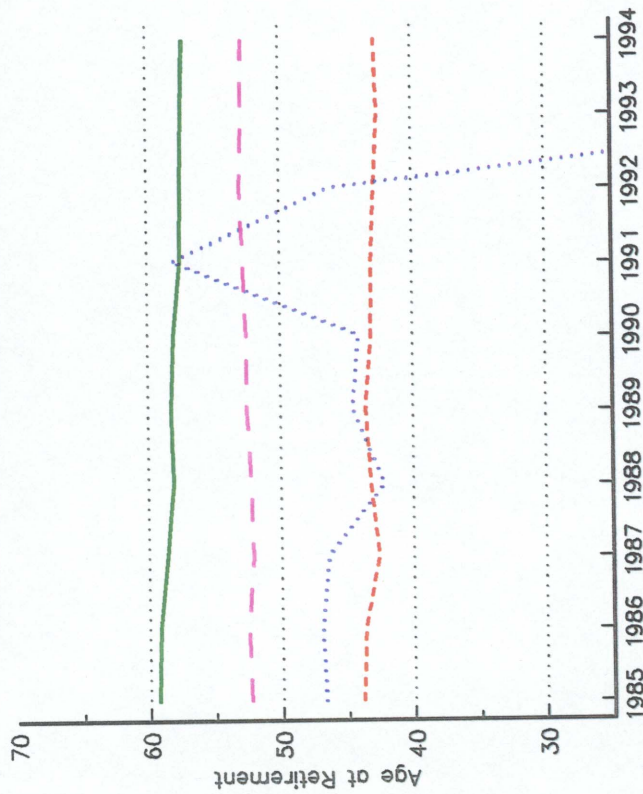
2.2(k) Statistics on All Retirees as of June 30, 1994

	<u>Police & Fire</u>	<u>"Other"</u>
Service Retirement		
(1) Number, June 30, 1993	637	7,612
(2) Net Change During FY94	66	408
(3) Number, June 30, 1994	703	8,020
(4) Average Age At Retirement	50.25	57.29
(5) Average Age Now	57.67	65.45
(6) Average Monthly Benefit	\$ 2,193.88	\$ 990.87
Surviving Spouse's Benefits		
(1) Number, June 30, 1993	35	574
(2) Net Change During FY94	0	49
(3) Number, June 30, 1994	35	623
(4) Average Age At Retirement	40.86	52.89
(5) Average Age Now	52.33	63.44
(6) Average Monthly Benefit	\$ 1,489.74	\$ 719.57
Disabilities		
(1) Number, June 30, 1993	55	190
(2) Net Change During FY94	7	10
(3) Number, June 30, 1994	62	200
(4) Average Age At Retirement	40.49	42.87
(5) Average Age Now	45.26	48.29
(6) Average Monthly Benefit	\$ 1,818.86	\$ 1,192.77
Total Number of Retirees	800	8,843

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	71	\$ 1,889,480	\$ 26,612
20-24	0	0	0	1	48	1,148,551	23,928
25-29	0	0	0	2	35	738,764	21,108
30-34	3	65,574	21,858	3	102	2,480,338	24,317
35-39	13	226,044	17,388	4	62	1,582,317	25,521
40-44	33	800,578	24,260	0- 4	318	7,839,450	24,652
45-49	128	3,907,767	30,529	5- 9	282	8,052,884	28,556
50-54	195	5,266,549	27,008	10-14	113	2,871,814	25,414
55-59	180	4,477,723	24,876	15-19	73	1,460,973	20,013
60-64	116	3,025,726	26,084	20-24	13	217,578	16,737
65-69	84	1,802,459	21,458	25-29	0	0	0
70-74	32	640,872	20,027	30-34	1	43,828	43,828
75-79	13	239,899	18,454	35-39	0	0	0
80+	3	33,336	11,112	40+	0	0	0
Total	800	\$20,486,527	\$ 25,608	Total	800	\$20,486,527	\$ 25,608

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	3	0	0	0	0	0	0	0	0	3
35-39	7	5	1	0	0	0	0	0	0	13
40-44	23	7	1	1	1	0	0	0	0	33
45-49	78	41	4	4	1	0	0	0	0	128
50-54	113	73	4	2	3	0	0	0	0	195
55-59	66	86	22	4	2	0	0	0	0	180
60-64	23	46	35	11	0	0	1	0	0	116
65-69	5	19	33	27	0	0	0	0	0	84
70-74	0	4	8	17	3	0	0	0	0	32
75-79	0	1	4	7	1	0	0	0	0	13
80+	0	0	1	0	2	0	0	0	0	3
Total	318	282	113	73	13	0	1	0	0	800

2.2(m) Schedule of Retired Members by Type of Retirant and Option Selected - "Police/Fire" - June 30, 1994

Amount of Monthly Benefit	Number of Retirees	Type of Retirement			Option Selected #			
		<u>1</u>	<u>2</u>	<u>3</u>	<u>Opt. 1</u>	<u>Opt. 2</u>	<u>Opt. 3</u>	<u>Opt. 4</u>
\$ 1 - \$ 300	12	11	1	0	4	5	2	1
301 - 600	45	33	5	7	28	11	3	3
601 - 900	58	54	3	1	36	10	5	7
901 - 1200	55	46	6	3	35	5	8	7
1201 - 1500	60	44	5	11	36	7	8	9
1501 - 1800	75	56	4	15	39	28	6	2
1801 - 2100	87	76	5	6	42	28	10	7
2101 - 2400	76	68	1	7	28	29	12	7
2401 - 2700	91	88	1	2	40	27	10	14
2701 - 3000	78	75	0	3	30	31	6	11
over 3000	<u>163</u>	<u>152</u>	<u>4</u>	<u>7</u>	<u>61</u>	<u>64</u>	<u>20</u>	<u>18</u>
Totals	800	703	35	62	379	245	90	86

Type of Retirement

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

- Option 1 - Whole Life Annuity
- Option 2 - 75% Joint and Survivor Annuity
- Option 3 - 50% Joint and Survivor Annuity
- Option 4 - 66 $\frac{2}{3}$ % Joint and Survivor Annuity

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

----- Annual Benefit By Age -----

Age Groups	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	0	\$ 0	\$ 0
20-24	0	0	0
25-29	1	1,669	1,669
30-34	9	110,315	12,257
35-39	26	277,527	10,674
40-44	70	777,000	11,100
45-49	81	1,082,169	13,360
50-54	876	8,985,382	10,257
55-59	1,755	21,894,798	12,476
60-64	1,842	24,417,416	13,256
65-69	1,695	19,099,414	11,268
70-74	1,305	14,649,743	11,226
75-79	699	7,626,659	10,911
80+	484	4,681,695	9,673
Total	8,843	\$ 103,603,787	\$11,716

-- Annual Benefit By Years Since Retirement ---

Years Since Retirement	Number of People	Total Annual Benefit	Average Annual Benefit
0	567	\$ 7,584,088	\$ 13,376
1	488	5,525,379	11,322
2	448	4,828,281	10,777
3	879	11,376,779	12,943
4	637	7,047,424	11,063
0- 4	3,019	36,361,951	12,044
5- 9	2,962	36,948,351	12,474
10-14	1,577	17,252,760	10,940
15-19	1,066	10,944,547	10,267
20-24	202	1,879,460	9,304
25-29	14	165,361	11,812
30-34	3	51,357	17,119
35-39	0	0	0
40+	0	0	0
Total	8,843	\$ 103,603,787	\$ 11,716

Years Since Retirement By Age

Age	Years Since Retirement									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	6	3	0	0	0	0	0	0	0	9
35-39	15	8	3	0	0	0	0	0	0	26
40-44	37	23	6	3	1	0	0	0	0	70
45-49	40	28	10	3	0	0	0	0	0	81
50-54	739	98	25	12	2	0	0	0	0	876
55-59	1,070	637	30	15	2	1	0	0	0	1,755
60-64	623	940	254	20	4	1	0	0	0	1,842
65-69	376	676	501	138	4	0	0	0	0	1,695
70-74	91	432	407	367	8	0	0	0	0	1,305
75-79	16	92	252	310	29	0	0	0	0	699
80+	5	25	89	198	152	12	3	0	0	484
Total	3,019	2,962	1,577	1,066	202	14	3	0	0	8,843

2.2(o) Schedule of Retired Members by Type of Retirant and Option Selected - "Others" - June 30, 1994

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	1,057	895	150	12	716	159	140	42
301 - 600	2,397	2,162	193	42	1,604	397	268	128
601 - 900	1,753	1,620	114	19	1,087	332	172	162
901 - 1200	1,173	1,071	71	31	749	195	137	92
1201 - 1500	797	723	39	35	512	147	75	63
1501 - 1800	498	454	17	27	298	86	62	52
1801 - 2100	372	345	13	14	202	79	49	42
2101 - 2400	261	244	10	7	141	58	30	32
2401 - 2700	193	182	5	6	107	42	25	19
2701 - 3000	119	109	7	3	52	44	14	9
over 3000	223	215	4	4	105	60	35	23
Totals	8,843	8,020	623	200	5,573	1,599	1,007	664

Type of Retirement

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

- Option 1 - Whole Life Annuity
- Option 2 - 75% Joint and Survivor Annuity
- Option 3 - 50% Joint and Survivor Annuity
- Option 4 - 66⅔% 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, 1994	77	\$ 2,428,767	4	\$ 119,939	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
June 30, 1987	96	3,054,160	82	1,720,032	315	7,647,891	21.1%	24,279
June 30, 1986	36	949,954	2	40,482	301	6,313,763	16.8%	20,976
June 30, 1985	77	1,966,581	1	18,093	267	5,404,291	56.4%	20,241
* Numbers are estimated, and include other internal transfers.								

2.2(q) Schedule of Retirants and Beneficiaries 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, 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
June 30, 1987	1,011	14,821,733	31	288,827	5,336	55,116,484	35.8%	10,329
June 30, 1986	416	3,718,750	110	1,029,270	4,356	40,583,578	7.1%	9,317
June 30, 1985	484	7,490,537	102	869,652	4,050	37,894,098	21.2%	9,357
* Numbers are estimated, and include other internal transfers.								

2.3 Actuarial Basis

The demographic assumptions used in this valuation were adopted at the Fall 1991 PERS Board Meeting. Economic assumptions were adopted as a result of a presentation to the Board in October 1994. 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. The unfunded accrued liability is amortized over a rolling 25 years. Any funded surpluses are amortized over five 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 | 8.00% per year, compounded annually, net of expenses. |
|----------------------|---|

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

FY95 - 9.5%
FY96 - 8.5%
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 "Others".
6. Turnover

Based upon the 1986-90 actual total turnover experience. (See Table 1).
7. Disability

Incidence rates, based upon the 1986-90 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 "Others".
8. Retirement Age

Retirement rates based upon the 1986-90 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. | | | | | | |
| 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:

<table border="0"><tr><td>Pessimistic:</td><td>1% per year</td></tr><tr><td>Median:</td><td>3% per year</td></tr><tr><td>Optimistic:</td><td>5% per year</td></tr></table> | Pessimistic: | 1% per year | Median: | 3% per year | Optimistic: | 5% per year |
| Pessimistic: | 1% per year | | | | | | |
| Median: | 3% per year | | | | | | |
| Optimistic: | 5% per year | | | | | | |
| 14. 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. 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 FY96, the pre-65 monthly premium is \$458.17 and the post-65 premium is \$174.54, based on an assumed total blended premium of \$350.50. For FY96, the actual blended premium is \$350.50. The FY96 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 10 Years
of Employment

Ultimate Rates of Turnover
After the First 10 Years
of Employment

Police and Fire:

<u>Year of Employment</u>	<u>----- Age at Hire -----</u>			<u>Age</u>	<u>Rate</u>
	<u>20-29</u>	<u>30-39</u>	<u>40+</u>		
1	.22	.18	.10	20-39	.03
2	.19	.13	.10	40+	.01
3	.13	.12	.10		
4	.12	.12	.10		
5	.10	.10	.10		
6	.08	.08	.08		
7	.07	.07	.07		
8	.06	.06	.06		
9	.05	.05	.05		
10	.04	.04	.04		

Others:

<u>Year of Employment</u>	<u>----- Age at Hire -----</u>		<u>Age</u>	<u>Rate</u>
	<u>20-29</u>	<u>30+</u>		
1	.30	.23	20-29	.065
2	.23	.18	30-34	.060
3	.20	.14	35-44	.055
4	.16	.13	45+	.050
5	.16	.13		
6	.14	.13		
7	.12	.12		
8	.11	.11		
9	.09	.09		
10	.08	.08		

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	.85	.14
21	.87	.14
22	.90	.14
23	.94	.15
24	.98	.15
25	1.03	.15
26	1.08	.15
27	1.13	.15
28	1.19	.16
29	1.25	.16
30	1.31	.16
31	1.37	.17
32	1.43	.17
33	1.44	.25
34	1.48	.34
35	1.55	.44
36	1.65	.53
37	1.78	.64
38	1.94	.75
39	2.13	.87
40	2.35	.99
41	2.60	1.12
42	2.88	1.25
43	3.19	1.39
44	3.53	1.53
45	3.90	1.68
46	4.30	1.84
47	4.73	2.00
48	5.19	2.17
49	5.68	2.34
50	6.20	2.52
51	6.75	2.70
52	7.33	2.89
53	7.94	3.08
54	8.58	3.29
55	9.25	3.49
56	9.95	3.70
57	10.68	3.92
58	11.44	4.14
59	12.23	4.37
60	13.05	4.61
61	13.90	4.84
62	14.78	5.09
63	15.69	5.34
64	16.63	5.60

Table 3
Alaska PERS
Retirement Rates

<u>Age</u>	<u>Police & Fire Rate</u>	<u>"Other" Member Rate</u>
50	.25	.11
51	.14	.08
52	.14	.08
53	.15	.08
54	.15	.08
55	.30	.19
56	.25	.16
57	.21	.13
58	.21	.12
59	.20	.11
60	.20	.17
61	.40	.14
62	1.00	.21
63	1.00	.22
64	1.00	.22
65	1.00	.31
66	1.00	.61
67 & 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.

3.4(a) shows the statement of actuarial present value of accumulated plan benefits for Police and Fire members.

3.4(b) shows the statement of actuarial present value of accumulated plan benefits for "Other" members.

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				
	94	93	92	91	90
(1) Health Experience	.41%	0%	0%	-3.17%	-1.42%
(2) Salary Experience	-.55%	-.21%	-.56%	.26%	-.07%
(3) Investment Experience	.37%	-1.41%	-.16%	.48%	-.67%
(4) Demographic Experience	.36%	.74%	1.58%	2.02%	.68%
(5) Miscellaneous	0%	0%	0%	0%	.86%
(6) Gain (or Loss) During Year From Experience, (1)+(2)+(3)+(4)+(5)	.59%	-.88%	.86%	-.41%	-.62%
Non-recurring Items					
(7) Asset Valuation Method	-.56%	0%	-.88%	0%	0%
(8) Assumption Changes	-.71%	0%	0%	.55%	0%
(9) Plan Changes	0%	0%	0%	0%	0%
Composite Gain (or Loss) During Year, (6)+(7)+(8)+(9)	-.68%	-.88%	-.02%	.14%	-.62%

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, 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%
June 30, 1987	283,535	282,530	99.6%	1,005	100,839	1.0%
June 30, 1986	249,673	254,643	102.0%	0	101,537	0%
June 30, 1985 ⁽²⁾⁽³⁾	213,967*	201,164*	93.9%	12,803	92,381	13.9%
* Estimated.						
⁽¹⁾ Change in Asset Valuation Method.						
⁽²⁾ Change of Assumptions.						
⁽³⁾ Change in Funding Method.						

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, 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%
June 30, 1987	1,621,470	1,615,723	99.6%	5,747	790,463	.7%
June 30, 1986	1,306,937	1,332,956	102.0%	0	788,555	0%
June 30, 1985 ⁽²⁾⁽³⁾	1,114,997*	1,046,982*	93.9%	68,015	738,198	9.2%
* Estimated.						
⁽¹⁾ Change in Asset Valuation Method.						
⁽²⁾ Change of Assumptions.						
⁽³⁾ Change in Funding Method.						

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, 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%
June 30, 1987	216,504	820,853	867,648	1,898,253	100%	100%	99.2%
June 30, 1986	210,115*	493,724	852,771*	1,587,599	100%	100%	100.0%
June 30, 1985 ⁽²⁾⁽³⁾	169,433	466,222	693,574*	1,248,146	100%	100%	88.3%

* Estimated.

⁽¹⁾ Change in Asset Valuation Method.

⁽²⁾ Change of Assumptions.

⁽³⁾ Change in Funding Method.

3.4(a) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Police/Fire"

Actuarial Present Value of Accumulated Plan Benefits
at June 30, 1994 (000's)

Retired participants and beneficiaries of deceased participants	\$ 292,115
Terminated participants with deferred benefits	16,951
Active participants - Vested	316,547
Active participants - Non-vested	36,666
Total Actuarial Present Value of Accumulated Plan Benefits	\$ 662,279

Notes to the Statement of Accumulated Plan Benefits.

1. The actuarial present value of accumulated plan benefits presented in this statement was determined using the following assumptions:
 - a. Future salary was not considered.
 - b. Future service was considered only to the extent that it would permit active plan participants to become eligible for benefits attributable to service rendered prior to the date of determination.
 - c. Regular valuation assumptions were used as to mortality, withdrawal, retirement ages, disability, and investment return.
2. Accumulated employee contributions with interest total \$93,465(000).
3. As with many of the comparative plan financial relationships otherwise available, an examination, over periods of time, of the relationship between the *value of accumulated plan benefits* and the *value of plan assets* may give an indication of the progress being made toward the funding of plan benefits. However, in the context of a "going concern" environment, a point in time comparison of these two values *should not be construed to be indicative of the expected ability of the plan to pay future benefits when due*. Furthermore, *that comparison is not valid for assessing a plan termination situation*. Consideration of inflation in the assumed return on plan assets while ignoring inflation's effect on future benefit levels *produces a significant understatement of the value of accumulated plan benefits* when applying going concern concepts. *The accumulated plan benefit value presented in this statement should not be confused with information presented elsewhere regarding funding requirements.*

3.4(a) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Police/Fire" (continued)

4. The change in the Present Value of Accumulated Plan Benefits during the prior fiscal year is as follows:

A.	Actuarial Present Value of Accumulated Plan Benefits at June 30, 1993, (000's)	\$ 572,095
B.	Increase (Decrease) Attributable to:	
i.	Additional Benefits Accumulated, including Actuarial Experience	64,803
ii.	Increase due to Decrease in the Discount Period	48,974
iii.	Estimated Benefits Paid to Participants	(24,790)
iv.	Material System Changes	0
v.	Change in Assumptions	<u>1,197</u>
C.	Actuarial Present Value of Accumulated Plan Benefits at June 30, 1994 (000's)	\$ 662,279

3.4(b) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Others"

Actuarial Present Value of Accumulated Plan Benefits
at June 30, 1994 ('000's)

Retired participants and beneficiaries of deceased participants	\$ 1,433,216
Terminated participants with deferred benefits	491,067
Active participants - Vested	1,400,735
Active participants - Non-vested	37,391
Total Actuarial Present Value of Accumulated Plan Benefits	\$ 3,362,409

Notes to the Statement of Accumulated Plan Benefits.

1. The actuarial present value of accumulated plan benefits presented in this statement was determined using the following assumptions:
 - a. Future salary was not considered.
 - b. Future service was considered only to the extent that it would permit active plan participants to become eligible for benefits attributable to service rendered prior to the date of determination.
 - c. Regular valuation assumptions were used as to mortality, withdrawal, retirement ages, disability, and investment return.
2. Accumulated employee contributions with interest total \$522,460(000).
3. As with many of the comparative plan financial relationships otherwise available, an examination, over periods of time, of the relationship between the *value of accumulated plan benefits* and the *value of plan assets* may give an indication of the progress being made toward the funding of plan benefits. However, in the context of a "going concern" environment, a point in time comparison of these two values *should not be construed to be indicative of the expected ability of the plan to pay future benefits when due*. Furthermore, *that comparison is not valid for assessing a plan termination situation*. Consideration of inflation in the assumed return on plan assets while ignoring inflation's effect on future benefit levels *produces a significant understatement of the value of accumulated plan benefits* when applying going concern concepts. *The accumulated plan benefit value presented in this statement should not be confused with information presented elsewhere regarding funding requirements.*

3.4(b) Statement of Actuarial Present Value of Accumulated Plan Benefits - "Others" (continued)

4. The change in the Present Value of Accumulated Plan Benefits during the prior fiscal year is as follows:

A.	Actuarial Present Value of Accumulated Plan Benefits at June 30, 1993, (000's)	\$ 3,076,456
B.	Increase (Decrease) Attributable to:	
i.	Additional Benefits Accumulated, including Actuarial Experience	149,713
ii.	Increase due to Decrease in the Discount Period	272,948
iii.	Estimated Benefits Paid to Participants	(142,707)
iv.	Material System Changes	0
v.	Change in Assumptions	<u>5,999</u>
C.	Actuarial Present Value of Accumulated Plan Benefits at June 30, 1994 (000's)	\$ 3,362,409