

State of Alaska
Public Employees' Retirement
System

Actuarial Valuation Report as of June 30, 2001



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March 18, 2002

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

Dear Members of the Board:

#### **Actuarial Certification**

The annual actuarial valuation required for the State of Alaska Public Employees' Retirement System has been prepared as of June 30, 2001 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, 2001;
- (2) a determination of the appropriate contribution rate for each employer in the System; and
- (3) the provision of reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

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

- (1) Summary of actuarial assumptions and methods (Section 2.3)
- (2) Schedule of active member valuation data (Section 2.2(d) and (f))
- (3) Schedule of benefit recipients added to and removed from rolls (Section 2.2(p) and 2.2(q))
- (4) Solvency test (Section 3.3)
- (5) Analysis of financial experience (Section 3.1)

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the System's staff and financial information provided by the audited report from KPMG LLP, to determine a sound value for the System liability. This data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data. Actuarial assumptions are based on the results of an experience study presented to the Board in October 2000 and adopted in December 2000.

Public Employee's Retirement Board March 18, 2002 Page 2

The contribution requirements are determined as a percentage of payroll, and reflect the cost of benefits accruing in FY01 and a rolling amortization of the funding surplus or 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. Over time, the contribution rate is expected to remain constant as a percentage of payroll. The ratio of assets to liabilities changed from 101.1% to 100.9% during the year. Over the years, progress has been made toward achieving the funding objectives of the System.

The Division of Retirement and Benefits implemented a new administrative system (CRS) in 2000. The new system provides more accurate data to be used in the annual actuarial valuation. Due to the differences in the data between the old and new computer systems there were minor one-time data adjustments which affected the liabilities calculated for the System. A summary of the actuarial assumptions and methods is presented in Section 2.3 of this report. The assumptions, when applied in combination, fairly represent past and anticipated future experience of the System.

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

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

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

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

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

Sincerely,

Brian R. McGee, FSA, MAAA

James W. Jacobson, ASA, MAAA

Jame Walter Jardson

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### **Report Highlights**

This report has been prepared by William M. Mercer, Incorporated for the State of Alaska Public Employees' Retirement System to:

- (1) Present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 2001;
- (2) Review experience under the plan for the year ended June 30, 2001;
- (3) Determine the appropriate contribution rate for each employer in the System; and
- (4) Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

This report is divided into three sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 2001 Fiscal Year, the current annual costs, and reporting and disclosure information.

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

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

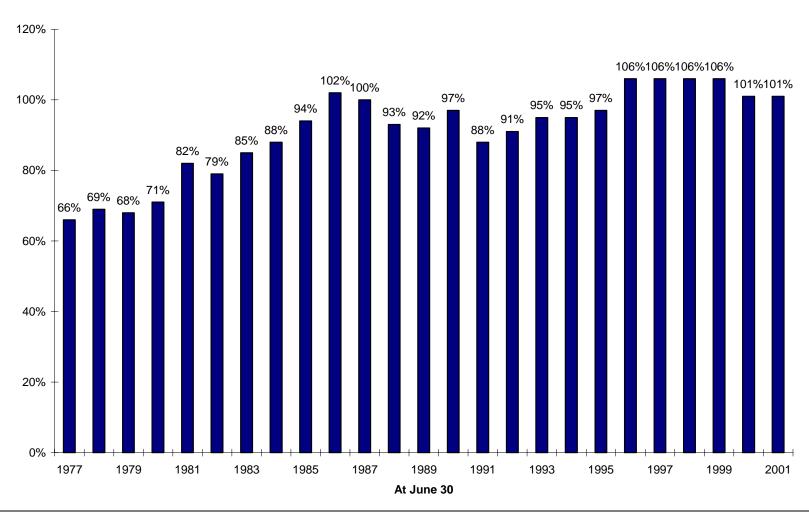
The principle results are as follows:

Funding	g Status as of June 30	2000	2001
(a)	Valuation assets*	\$ 7,454,758	7,941,756
(b)	Accrued liability*		
	i) Non-medical benefits	5,190,835	5,528,026
	ii) Total benefits (including medical)	7,376,912	7,868,574
(c)	Funding Ratio, (a) $\div$ (b)		
	i) Non-medical benefits	143.6%	143.7%
	ii) Total benefits (including medical)	101.1%	100.9%

<sup>\*</sup> In thousands.

# Report Highlights (continued)

# State of Alaska PERS Funding Ratio History



# Report Highlights (continued)

Em	ployer Contribution Rates for Fiscal Year:	2003	2004
(a)	Consolidated Rate	10.07%	9.53%
(b)	Contribution Rate Adjustment	(4.64%)	(4.11%)
(c)	Average Past Service Rate	0.69%	1.35%
(d)	Average Employer Contribution Rate $(a) + (b) + (c)$	6.12%	6.77%
(e)	Public Employees' Retirement Board Adopted Average Employer Contribution Rate	6.75%	6.77%

### **Analysis of the Valuation**

As shown in the Highlights section of the report, the funding ratio as of June 30, 2001 has decreased from 101.1% to 100.9%, a decrease of 0.2%. The average employer contribution rate has increased from 6.12% of payroll for FY03 to 6.77% for FY04, an increase of 0.65% of payroll. The reasons for the change in the funded status and average contribution rate are explained below.

### (1) Retire Medical Insurance

The following table summarizes the monthly premium per benefit recipient since retiree medical benefits have been provided under PERS and TRS.

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/76-1/31/77	\$ 34.75		
2/1/77-1/31/78	57.64	66%	
2/1/78-1/31/79	69.10	20%	20%
2/1/79-1/31/80	64.70	-6%	6%
2/1/80-1/31/81	96.34	49%	19%
2/1/81-1/31/82	96.34	0%	14%
2/1/82-1/31/83	115.61	20%	15%
2/1/83-1/31/84	156.07	35%	18%
2/1/84-1/31/85	191.85	23%	19%
2/1/85-1/31/86	168.25	-12%	14%
2/1/86-1/31/87	165.00	-2%	12%
2/1/87-1/31/88	140.25	-15%	9%
2/1/88-1/31/89	211.22	51%	13%
2/1/89-1/31/90	252.83	20%	13%
2/1/90-1/31/91	243.98	-4%	12%
2/1/91-1/31/92	243.98	0%	11%
2/1/92-1/31/93	226.90	-7%	10%
2/1/93-1/31/94	309.72	37%	11%
2/1/94-1/31/95	336.05	9%	11%
2/1/95-1/31/96	350.50	4%	11%
2/1/96-1/31/97	350.50	0%	10%
2/1/97-1/31/98	368.00	5%	10%
2/1/98-12/31/98	368.00	0%	9%
1/1/99-12/31/99	442.00	20%	10%
1/1/00-12/31/00	530.00	20%	10%
1/1/01-12/31/01	610.00	15%	10%
1/1/02-12/31/02	668.00	10%	10%

As you can see from the above table, the monthly retiree medical premium for the January 1, 2002 to December 31, 2002 time period has increased to \$668.00. Over the last 10 years, annual premium rate changes have ranged from no change to up 37%, but the average compound annual increase has been about 11%.

Effective June 30, 2000, the Board adopted a health cost trend assumption which varies by year, declining to an ultimate rate equal to inflation plus 0.5%, or 4.0% for FY14 and later. If the long-term assumption remains reasonable, short-term gains and losses from the annually-determined medical premium rate will offset each other over time.

To help avoid the volatility in the funding and solvency of the System from bringing large health-related gains and losses into the System every year, we have been using the health cost trend assumption to determine actuarial liabilities for retiree medical benefits.

On June 30, 1999, the assumed total blended premium was reset to the actual total blended premium for FY00. The difference between the assumed rate and the actual rate will be tracked annually and reduced if the gap becomes too wide. Also, adjustments will be made, if necessary, to the assumed medical premium rate every four to five years when a formal experience analysis is performed.

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

### (2) Recognition of Investment Experience Outside the Corridor

The approximate FY01 investment return based on market values was (5.57%). As of June 30, 2001, valuation assets are within the 5% corridor around the market value resulting in no current amount to be amortized. Due to the recognition of past deferred investment gains outside the 5% corridor the average employer contribution rate decreased by 0.42% of total payroll. Reamortizing the outstanding balance of previously deferred amounts outside the corridor caused the average employer contribution rate to increase by 0.53% of total payroll. The net effect was an increase in the average employer contribution rate of 0.11%.

#### (3) Salary Increase

During the period from June 30, 1999, to June 30, 2001, salary increases were less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain which increased the funding ratio by 1.4% and lowered the total employer contribution rate by 1.03% of the total payroll.

#### (4) Employee Data

Section 2.2 provides statistics on active participants. The number of active participants increased 0.7%, from 32,214 at June 30, 1999 to 32,441 at June 30, 2001. The average age of active participants increased from 43.55 to 43.75 and average credited service decreased from 8.53 to 8.49 years.

The number of benefit recipients increased 14.7%, from 14,185 to 16,274, and their average age decreased from 64.67 to 64.55. There was a 14.7% increase in the number of vested terminated participants, from 5,395 to 6,187. Their average age increased from 46.69 to 47.54.

The overall effect of these participant data projections was an actuarial loss to the System, resulting in an increase in the average employer contribution rate equal to 0.77% of total payroll.

#### (5) Ad hoc PRPA

An ad hoc Post Retirement Pension Adjustment (PRPA) was granted during FY01. This increased benefit payments to many Tier I (hired before July 1, 1986) retirees. This action produced a loss to the system of approximately \$8,897,000.

The overall effect of the ad hoc PRPA was an actuarial loss to the System which lowered the funding ratio by 0.1% and increased the average employer contribution rate by 0.06% of total payroll.

#### (6) System Benefit Changes

Effective June 30, 2001, all retired members over age 60 and all members who retire with at least twenty-five years of membership service become eligible for full System – paid postemployment healthcare benefits, regardless of hire date.

This System benefit enhancement increased the average employer contribution rate by 0.17%.

#### (7) Actuarial Projections

At the Fall 1991 Board Meetings, the PERS Board approved the use of an enhanced actuarial projection system. The same actuarial cost method is used, but the enhanced system projects population growth patterns and their associated liabilities 25 years into the future. By also projecting plan assets, this report in effect produces an actuarial valuation for each of the next 25 years. Section 1.5, Actuarial Projections, contains the results of this analysis.

This type of information can be especially useful to multi-tiered systems, such as PERS. All of the projected new entrants will be covered under the provisions of the current tier so that the ultimate effect on plan liabilities can be anticipated. As you can see in Section 1.5, based on the actuarial assumptions and asset valuation method, future contribution rates are expected to decline and then remain fairly stable.

#### (8) 102% Target Funding Ratio

Effective June 30, 1998, the PERS Board adopted an actuarial method change that would target an ultimate funding ratio of 102% for the System. Using the actuarial projections discussed in item (7) above, an adjustment is made to the current and projected unfunded accrued liability so that the projected employer contributions to the System will result in an ultimate funding ratio of 102%.

The adjustment for the 102% Target Funding Ratio increased the average employer contribution rate by 0.57%.

### **Summary**

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

1.	Last year'	s average employer contribution rate	6.12%*
2.	Change du	ne to:	
	a. Recog	nition of investment experience outside the 5% corridor	0.11%
	b. System	n benefit changes	0.17%
	c. Salary	increases	(1.03)%
	d. Demo	graphic experience	0.77%
	e. Ad ho	c PRPA	0.06%
	f. 102%	Target Accrued Liability adjustment	0.57%
3.	Average e	mployer contribution rate this year	6.77%

<sup>\*</sup> The Public Employees' Retirement Board adopted an average employer contribution rate of 6.75%.

### Section 1

This section sets forth the results of the actuarial valuation.

Section 1.1(a)	Shows the statement of net assets as of June 30, 2001.
Section 1.1(b)	Shows the changes in net assets during FY01 and develops the investment return during FY01.
Section 1.1(c)	Develops the expected valuation assets at June 30, 2001.
Section 1.1(d)	Develops the contribution rate adjustment.
Section 1.2(a)	Shows the actuarial present values for Police and Fire members as of June 30, 2001.
Section 1.2(b)	Shows the actuarial present values for "Other" members as of June 30, 2001.
Section 1.3(a)	Develops the average employer contribution rate for Police and Fire members for FY04.
Section 1.3(b)	Develops the average employer contribution rate for "Other" members for FY04.
Section 1.3(c)	Develops the average employer contribution rate for all members for FY04.
Section 1.4	Calculates the actuarial gain or loss for FY01.
Section 1.5	Contains the actuarial projections.

# 1.1(a) Statement of Net Assets

As of June 30, 2001 (in thousands)				estemployment Healthcare		
Cash and Cash Equivalents	\$	377	\$	153	\$	530
Domestic Equity Pool		2,417,050		918,940		3,335,990
Retirement Fixed Income Pool		1,471,224		597,892		2,069,116
International Equity Pool		942,673		383,094	1,325,767	
Real Estate Pool		418,479		170,066		588,545
International Fixed Income Pool		273,627		111,200		384,827
Private Equity Pool		146,805		59,660		206,465
Emerging Markets Equity Pool		51,591		20,966		72,557
External Domestic Fixed Income Pool		69,249		28,143		97,392
Loans and Mortgages (Net of Reserves)		248		101		349
Net Accrued Receivables		4,866		1,978		6,844
Total Assets	\$	5,796,189	\$	2,292,193	\$	8,088,382

# 1.1(b) Statement of Changes in Net Assets

Fisc	al Year 2001	Pension	Postemployment Healthcare	Total Market Value
(1)	Net Assets, June 30, 2000, (market value)	\$ 6,272,529	\$ 2,484,051	\$ 8,756,580
(2)	Additions:			
	(a) Employee Contributions	67,537	27,446	94,983
	(b) Employer Contributions	68,604	27,880	96,484
	(c) Interest and Dividend Income	232,924	94,659	327,583
	(d) Net Appreciation (Depreciation) in Fair Value of Investments	<u>(558,855)</u>	(227,114)	(785,969)
	(e) Total Additions	\$ (189,790)	\$ (77,129)	\$ (266,919)
(3)	Deductions:			
	(a) Medical Benefits	0	103,846	103,846
	(b) Retirement Benefits	259,771	0	259,771
	(c) Refunds of Contributions	9,339	3,795	13,134
	(d) Investment Expenses	14,118	5,738	19,856
	(e) Administrative Expenses	3,322	1,350	4,672
	(f) Total Deductions	\$ 286,550	\$ 114,729	\$ 401,279
(4)	Net Assets, June 30, 2001,			
	(market value)	\$ 5,796,189	\$ 2,292,193	\$ 8,088,382
App	roximate Market Value Investment Retu	ırn Rate During FY	01,	
	of Expenses	8	•	(5.57%

# 1.1(c) Development of Expected Valuation Assets

(1)	June 30, 2000 Valuation Assets	\$ 7,454,758	
(2)	Total Contributions for FY 2001 (Item $(2a) + (2b)$ from $1.1(b)$ )	191,467	
(3)	Total Benefit Payments for FY 2001 $(Item (3a) + (3b) + (3c) from 1.1 (b))$	376,751	
(4)	Expected Investment Return, Net of Expenses, for the period July 1, 2000 through June 30, 2001 $((1) + .5 x [(2) - (3)]) x 8.25\%$	607,375	
(5)	Amortization of Investment Returns Outside of 5% Corridor, with Interest to June 30, 2001	64,907	
(6)	June 30, 2001 Valuation Assets, $(1) + (2) - (3) + (4) + (5)$	\$ 7,941,756	

# 1.1(d) Determination of Contribution Rate Adjustment due to Investment Returns Outside of 5% Corridor

		In Thousands
(1)	Market Value of Assets at June 30, 2001	\$ 8,088,382
(2)	5% Corridor Around Market Value of Assets	
	(a) Upper End (105%)	8,492,801
	(b) Lower End (95%)	7,683,963
(3)	Valuation Assets at June 30, 2001	7,941,756
(4)	Current Amount Outside of Corridor	0
(5)	Outstanding Balance of Previously Deferred Amounts Outside Corridor	(870,476)
(6)	Net Amount to Amortize	(870,476)
(7)	Present Value of Total Projected System Payroll Over a 20-Year Period (1% population projection scenario)	21,190,887
(8)	Contribution Rate Adjustment, $(6) \div (7)$	(4.11%)

# 1.2(a) Actuarial Present Values Police and Fire Members

As of June 30, 2001 (in thousand	s)		Normal Cost	Accrued Liability
Active Members				
Retirement Benefits		\$	17,995	\$ 314,709
Termination Benefits			1,316	12,754
Disability Benefits			545	11,820
Death Benefits			430	9,725
Return of Contributions			460	2,282
Medical Benefits			6,339	105,071
Indebtedness			0	(9,989)
Retirement Incentive Progr	am Receivable		0	0
Subtotal		_	27,085	 446,372
Inactive Members				
Not Vested		\$	0	\$ 613
<b>Vested Terminations</b>	- Retirement Benefits		0	16,583
	- Medical Benefits		0	15,715
	- Indebtedness		0	(1,364)
Retirees & Beneficiaries	- Retirement Benefits		0	657,407
	- Medical Benefits		0	158,122
Subtotal		_	0	 847,076
Totals		\$	27,085	\$ 1,293,448

# 1.2(b) Actuarial Present Values "Other" Members

As of June 30, 2001 (in thousan	ds)		Normal Cost	Accrued Liability
Active Members				
Retirement Benefits		\$	105,100	\$ 1,454,899
Termination Benefits			17,532	185,545
Disability Benefits			2,027	31,190
Death Benefits			3,079	53,273
Return of Contributions			6,928	26,204
Medical Benefits			60,838	672,476
Indebtedness			0	(60,771)
Retirement Incentive Prog	gram Receivable		0	0
Subtotal		_	195,504	 2,362,816
Inactive Members				
Not Vested		\$	0	\$ 29,596
Vested Terminations	- Retirement Benefits		0	383,560
	- Medical Benefits		0	447,107
	- Indebtedness		0	(21,809)
Retirees & Beneficiaries	- Retirement Benefits		0	2,431,799
	- Medical Benefits		0	942,057
Subtotal			0	 4,212,310
Totals		\$	195,504	\$ 6,575,126

# 1.3(a) Development of Average Employer Contribution Rate – FY04 Police and Fire Members

Con	solidated Rate	In Thousands
(1)	Total Normal Cost	\$ 27,085
(2)	Total Salaries	151,701
(3)	Normal Cost Rate for Police & Fire Members, $(1) \div (2)$	17.85%
(4)	Member Contribution Rate (Police & Fire)	7.50%
(5)	Preliminary Consolidated Employer Normal Cost Rate For Police & Fire Members, $(3) - (4)$	10.35%
(6)	Net Adjustment Due to Investment Returns Outside of 5% Corridor (Section 1.1(d))	(4.11%)
(7)	Consolidate Employer Normal Cost Rate For Police & Fire Members, $(5) + (6)$	6.24%
Pasi	: Service Rate	
(1)	Target Accrued Liability	\$ 1,339,522
(2)	Valuation Assets	1,305,478 <sup>1</sup>
(3)	Target Unfunded Liability, $(1) - (2)$	34,044
(4)	Amortization Factor (25 years)	11.312888
(5)	Past Service Cost, $(3) \div (4)$	3,009
(6)	Total Salaries	151,701
(7)	Past Service Rate, $(5) \div (6)$	1.98%
Ave	rage Employer Contribution Rate	8.22%

<sup>&</sup>lt;sup>1</sup> Allocated between Police/Fire and "Other" members in proportion to Accrued Liability.

# 1.3(b) Development of Average Employer Contribution Rate – FY04 "Other" Members

Consolidated Rate	In Thousands
(1) Total Normal Cost	\$ 195,504
(2) Total Salaries	1,208,700
(3) Normal Cost Rate for "Other" Members, $(1) \div (2)$	16.17%
(4) Member Contribution Rate ("Other")	6.75%
(5) Preliminary Consolidated Employer Normal Cost Rate For "Other" Members, $(3) - (4)$	9.42%
(6) Net Adjustment Due to Investment Returns Outside of 5% Corridor (Section 1.1(d))	(4.11)%
(7) Consolidate Employer Normal Cost Rate For "Other" Members, $(5) + (6)$	5.31%
Past Service Rate	
(1) Target Accrued Liability	\$ 6,809,337
(2) Valuation Assets	6,636,278 <sup>1</sup>
(3) Target Unfunded Liability, $(1) - (2)$	173,059
(4) Amortization Factor (25 years)	11.312888
(5) Past Service Cost, $(3) \div (4)$	15,298
(6) Total Salaries	1,208,700
(7) Past Service Rate, $(5) \div (6)$	1.27%
Average Employer Contribution Deta	6.58%
Average Employer Contribution Rate	0.36%

<sup>&</sup>lt;sup>1</sup> Allocated between Police/Fire and "Other" members in proportion to Accrued Liability.

# 1.3(c) Development of Average Employer Contribution Rate – FY04 All Members

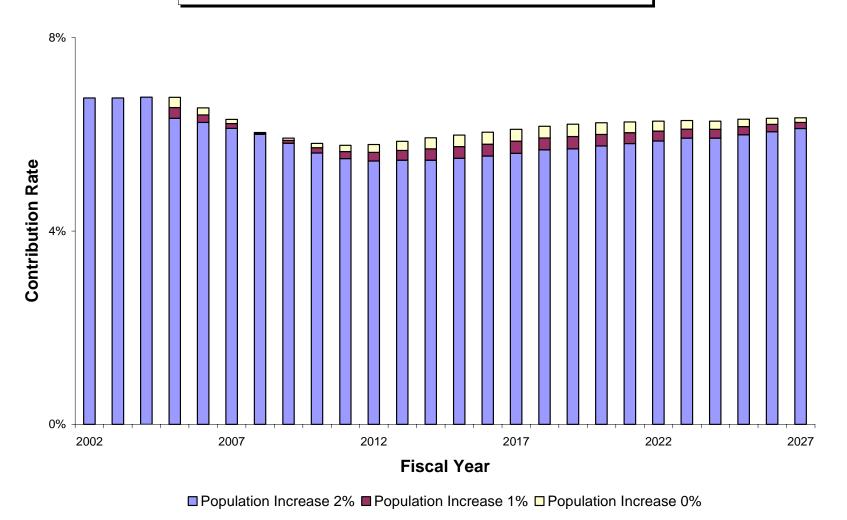
Con	solidated Rate	In Thousands
(1)	Total Normal Cost	\$ 222,589
(2)	Total Salaries	1,360,401
(3)	Normal Cost Rate All Members, $(1) \div (2)$	16.36%
(4)	Member Contribution Rate	6.83%
(5)	Preliminary Consolidated Employer Normal Cost Rate For All Members, $(3) - (4)$	9.53%
(6)	Net Adjustment Due to Investment Returns Outside of 5% Corridor (Section 1.1(d))	(4.11)%
(7)	Consolidate Employer Normal Cost Rate For All Members, $(5) + (6)$	5.42%
Pas	: Service Rate	
(1)	Target Accrued Liability	\$ 8,148,859
(2)	Valuation Assets	7,941,756
(3)	Target Unfunded Liability, $(1) - (2)$	207,103
(4)	Amortization Factor (25 years)	11.312888
(5)	Past Service Cost, $(3) \div (4)$	18,307
(6)	Total Salaries	1,360,401
(7)	Past Service Rate, $(5) \div (6)$	1.35%
Ave	rage Employer Contribution Rate	6.77%

# 1.4 Development of Actuarial Gain/(Loss) for FY01

		li li	n Thousands
(1)	Unfunded Liability, June 30, 2000	\$	(77,846)
(2)	Normal Cost for FY01		223,304
(3)	Interest on (1) and (2) at 8.25%		12,000
(4)	Employee Contributions for FY01		94,983
(5)	Employer Contributions for FY01		96,484
(6)	Interest on (4) and (5) at 8.25% for one-half year		7,898
(7)	Net Increase in Unfunded Liability due to System Benefit Changes		26,898
(8)	Expected Unfunded Liability, June 30, 2001, $(1) + (2) + (3) - (4) - (5) - (6) + (7)$		(15,009)
(9)	Actual Unfunded Liability, June 30, 2001		(73,182)
(10)	Actuarial Gain/(Loss) for the Year, $(8) - (9)$		58,173

# 1.5 Actuarial Projections

## State of Alaska PERS Projected Contribution Rates



# State of Alaska PERS Projected Funding Ratios

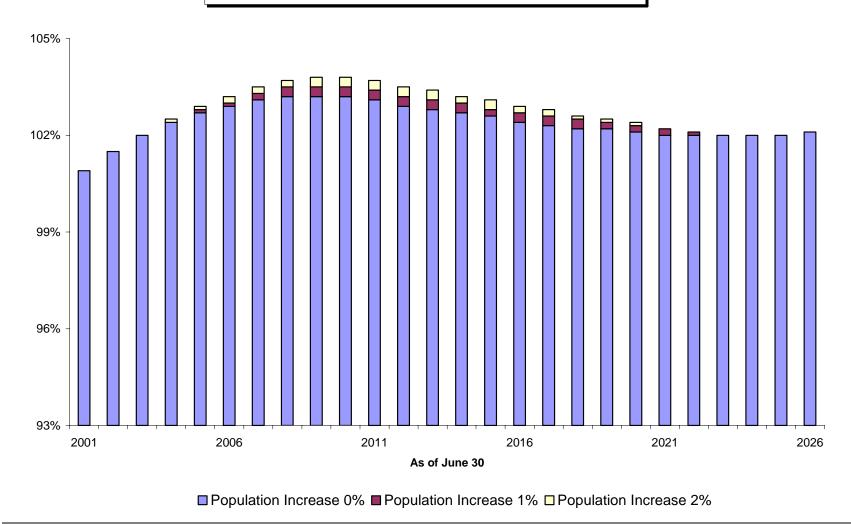


Table 1
State of Alaska PERS
Financial Projections ('000 omitted)

<b>Investment Return</b>			8.25%					A		0.00%				
	v	aluation Amo	unts on July 1	1										
As of June 30	Total Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings	Recognized Gain	
2001	7,941,756	7,868,574	100.9%	73,182	1,360,401	6.75%	93,359	94,465	187,824	422,441	(234,617)	645,517	64,408	
2002	8,419,721	8,296,539	101.5%	123,181	1,405,782	6.75%	96,473	97,616	194,089	451,494	(257,405)	684,009	66,514	
2003	8,915,583	8,742,177	102.0%	173,405	1,452,677	6.77%	99,992	100,879	200,871	482,940	(282,069)	723,900	61,976	
2004	9,421,946	9,203,575	102.4%	218,371	1,501,311	6.33%	96,609	104,247	200,856	517,846	(316,990)	764,235	62,098	
2005	9,933,851	9,677,121	102.7%	256,729	1,551,310	6.24%	98,451	107,710	206,160	557,076	(350,916)	805,067	62,072	
2006	10,452,635	10,160,204	102.9%	292,431	1,602,707	6.12%	99,942	111,457	211,399	600,502	(389,103)	846,292	62,549	
2007	10,974,953	10,643,822	103.1%	331,131	1,661,049	6.00%	101,422	115,442	216,864	645,530	(428,666)	887,751	63,147	
2008	11,499,789	11,140,549	103.2%	359,241	1,719,392	5.92%	103,510	119,427	222,937	692,808	(469,871)	929,350	63,662	
2009	12,025,557	11,647,367	103.2%	378,190	1,777,735	5.81%	104,991	123,412	228,402	742,330	(513,928)	970,909	64,062	
2010	12,549,243	12,161,588	103.2%	387,655	1,836,078	5.77%	107,654	127,397	235,050	792,999	(557,949)	1,012,297	64,337	
2011	13,070,582	12,680,850	103.1%	389,732	1,894,421	5.79%	111,737	131,854	243,591	843,888	(600,297)	1,053,561	64,869	
2012	13,591,391	13,203,121	102.9%	388,270	1,966,611	5.85%	117,242	136,785	254,027	896,162	(642,135)	1,094,802	65,650	
2013	14,112,416	13,726,696	102.8%	385,720	2,038,801	5.93%	123,019	141,715	264,734	949,170	(684,436)	1,136,041	66,329	
2014	14,633,086	14,250,198	102.7%	382,888	2,110,991	5.98%	128,448	146,646	275,094	1,004,100	(729,006)	1,177,158	66,888	
2015	15,150,886	14,772,578	102.6%	378,308	2,183,181	6.04%	134,076	151,577	285,653	1,059,275	(773,622)	1,218,036	67,310	
2016	15,665,386	15,293,116	102.4%	372,271	2,255,371	6.10%	140,390	157,152	297,542	1,114,267	(816,725)	1,258,704	68,024	
2017	16,178,196	15,811,418	102.3%	366,778	2,346,445	6.17%	147,520	163,372	310,892	1,167,795	(856,903)	1,299,354	69,021	
2018	16,692,515	16,327,420	102.2%	365,095	2,437,519	6.21%	154,124	169,593	323,717	1,223,012	(899,295)	1,340,037	69,903	
2019	17,206,043	16,841,386	102.2%	364,657	2,528,592	6.24%	160,566	175,813	336,379	1,277,993	(941,614)	1,380,657	70,653	
2020	17,718,653	17,353,906	102.1%	364,747	2,619,666	6.26%	166,719	182,033	348,753	1,332,681	(983,928)	1,421,202	71,247	
2021	18,230,113	17,865,900	102.0%	364,213	2,710,740	6.27%	173,636	189,122	362,758	1,385,171	(1,022,413)	1,461,810	72,172	
2022	18,744,659	18,378,615	102.0%	366,044	2,827,238	6.29%	181,363	197,079	378,442	1,434,687	(1,056,245)	1,502,864	73,416	
2023	19,267,723	18,893,627	102.0%	374,095	2,943,736	6.27%	188,230	205,036	393,265	1,484,202	(1,090,937)	1,544,586	74,531	
2024	19,798,977	19,412,839	102.0%	386,137	3,060,233	6.31%	196,780	212,992	409,772	1,533,718	(1,123,946)	1,587,053	75,494	
2025	20,340,692	19,938,483	102.0%	402,209	3,176,731	6.33%	204,822	220,949	425,771	1,583,234	(1,157,463)	1,630,362	76,281	
2026	20,893,019	20,473,117	102.1%	419,902	3,293,228	6.34%	212,721	229,052	441,773	1,632,749	(1,190,977)	1,674,546	77,154	

<sup>\*</sup> Surpluses reduce employer contributions over 25 years

<sup>\*</sup> Deficits increase employer contributions over 25 years

Table 2 State of Alaska PERS Financial Projections ('000 omitted)

Investment Return 8.25%				Annual Population Increase							1.00%		
	v	aluation Amo	unts on July 1	1	Flow Amounts During Following 12 Months								
As of June 30	Total Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings	Recognized Gain
2001	7,941,756	7,868,574	100.9%	73,182	1,360,401	6.75%	93,763	94,874	188,637	422,441	(233,804)	645,550	64,408
2002	8,420,568	8,296,754	101.5%	123,814	1,417,763	6.75%	97,717	98,875	196,591	451,497	(254,906)	684,182	66,514
2003	8,919,102	8,743,818	102.0%	175,283	1,477,544	6.77%	102,156	103,061	205,217	483,051	(277,834)	724,365	61,976
2004	9,430,165	9,207,981	102.4%	222,184	1,540,352	6.55%	103,069	107,445	210,514	518,144	(307,630)	765,299	62,098
2005	9,952,494	9,685,891	102.8%	266,602	1,605,902	6.40%	104,974	112,019	216,993	557,641	(340,648)	807,029	62,072
2006	10,483,507	10,175,233	103.0%	308,275	1,674,317	6.22%	106,696	117,107	223,803	601,407	(377,604)	849,313	62,549
2007	11,020,345	10,667,342	103.3%	353,003	1,754,866	6.03%	108,182	122,608	230,790	646,690	(415,900)	892,023	63,147
2008	11,562,219	11,175,332	103.5%	386,887	1,835,414	5.88%	110,211	128,110	238,321	694,269	(455,948)	935,075	63,662
2009	12,107,635	11,696,716	103.5%	410,919	1,915,963	5.72%	111,909	133,611	245,520	744,143	(498,623)	978,312	64,062
2010	12,654,028	12,229,377	103.5%	424,651	1,996,511	5.64%	114,924	139,112	254,036	795,184	(541,148)	1,021,635	64,337
2011	13,201,506	12,771,567	103.4%	429,939	2,077,060	5.63%	119,816	145,455	265,271	846,507	(581,236)	1,065,148	64,869
2012	13,752,963	13,321,910	103.2%	431,053	2,182,235	5.66%	126,586	152,638	279,225	899,322	(620,097)	1,109,040	65,650
2013	14,310,264	13,879,399	103.1%	430,865	2,287,411	5.70%	133,387	159,822	293,209	952,995	(659,786)	1,153,381	66,329
2014	14,872,924	14,443,397	103.0%	429,527	2,392,586	5.74%	140,457	167,005	307,462	1,008,756	(701,294)	1,198,088	66,888
2015	15,439,365	15,013,637	102.8%	425,728	2,497,761	5.80%	147,833	174,189	322,022	1,064,954	(742,932)	1,243,102	67,310
2016	16,009,621	15,590,225	102.7%	419,396	2,602,937	5.86%	156,461	182,506	338,968	1,121,187	(782,219)	1,288,527	68,024
2017	16,586,759	16,173,632	102.6%	413,127	2,741,321	5.92%	166,466	191,958	358,424	1,176,227	(817,803)	1,334,673	69,021
2018	17,175,497	16,764,703	102.5%	410,794	2,879,704	5.95%	175,574	201,410	376,983	1,233,267	(856,284)	1,381,657	69,903
2019	17,773,656	17,364,652	102.4%	409,004	3,018,088	6.00%	185,186	210,861	396,047	1,290,474	(894,427)	1,429,432	70,653
2020	18,382,228	17,975,063	102.3%	407,166	3,156,472	6.03%	194,593	220,313	414,906	1,347,907	(933,001)	1,478,048	71,247
2021	19,001,461	18,597,890	102.2%	403,571	3,294,856	6.07%	205,498	231,293	436,791	1,403,618	(966,827)	1,527,739	72,172
2022	19,637,522	19,235,458	102.1%	402,064	3,478,012	6.11%	217,947	243,803	461,750	1,458,742	(996,993)	1,578,970	73,416
2023	20,295,943	19,890,461	102.0%	405,482	3,661,168	6.10%	228,991	256,313	485,304	1,513,867	(1,028,563)	1,631,987	74,531
2024	20,976,972	20,565,964	102.0%	411,008	3,844,324	6.16%	242,397	268,822	511,219	1,568,991	(1,057,772)	1,686,967	75,494
2025	21,684,775	21,265,402	102.0%	419,373	4,027,480	6.20%	255,545	281,332	536,877	1,624,116	(1,087,239)	1,744,145	76,281
2026	22,421,109	21,992,580	101.9%	428,530	4,210,636	6.25%	268,991	294,126	563,116	1,679,240	(1,116,124)	1,803,701	77,154

<sup>\*</sup> Surpluses reduce employer contributions over 25 years \* Deficits increase employer contributions over 25 years

Table 3

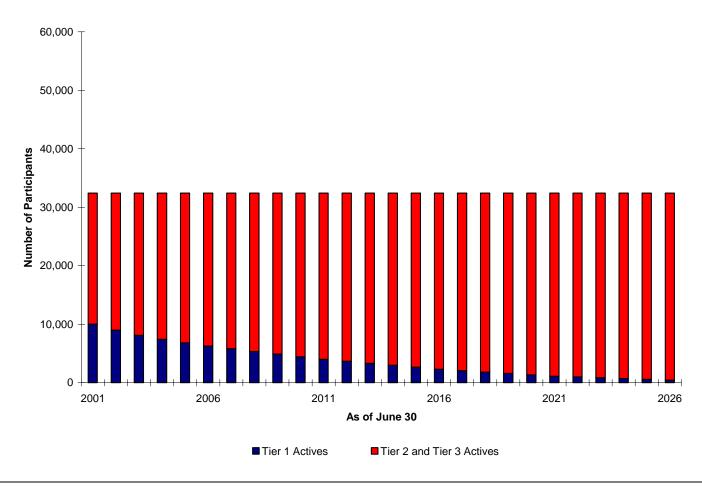
State of Alaska PERS
Financial Projections ('000 omitted)

Inve	estment Return		8.25%				Annual Population Increase							
	v	aluation Amo	ınts on July 1	1										
As of June 30	Total Assets	Accrued Liability	Funding Ratio	Surplus* (Deficit)	Total Salaries	Employer Ctb Rate	Employer Contribs	Employee Contribs	Total Contribs	Benefit Payments	Net Contribs	Investment Earnings	Recognized Gain	
2001	7,941,756	7,868,574	100.9%	73,182	1,360,401	6.75%	94,169	95,285	189,453	422,441	(232,988)	645,584	64,408	
2002	8,421,417	8,296,969	101.5%	124,448	1,429,779	6.75%	98,971	100,144	199,115	451,500	(252,385)	684,356	66,514	
2003	8,922,646	8,745,464	102.0%	177,182	1,502,696	6.77%	104,356	105,281	209,638	483,162	(273,524)	724,835	61,976	
2004	9,438,490	9,212,427	102.5%	226,063	1,580,214	6.77%	109,683	110,728	220,411	518,445	(298,034)	766,381	62,098	
2005	9,971,497	9,694,794	102.9%	276,702	1,662,176	6.55%	111,641	116,486	228,127	558,214	(330,087)	809,032	62,072	
2006	10,515,074	10,190,585	103.2%	324,490	1,748,847	6.31%	113,621	123,050	236,671	602,333	(365,662)	852,410	62,549	
2007	11,066,952	10,691,310	103.5%	375,642	1,854,385	6.04%	115,127	130,259	245,385	647,892	(402,507)	896,420	63,147	
2008	11,626,617	11,211,056	103.7%	415,562	1,959,923	5.81%	117,035	137,467	254,502	695,796	(441,294)	940,993	63,662	
2009	12,192,604	11,747,859	103.8%	444,744	2,065,461	5.61%	118,876	144,675	263,551	746,059	(482,508)	985,986	64,062	
2010	12,762,787	12,300,204	103.8%	462,582	2,171,000	5.50%	122,213	151,883	274,096	797,516	(523,420)	1,031,339	64,337	
2011	13,337,697	12,867,020	103.7%	470,677	2,276,538	5.45%	128,018	160,438	288,456	849,324	(560,868)	1,077,224	64,869	
2012	13,921,598	13,447,683	103.5%	473,916	2,421,513	5.46%	136,287	170,340	306,628	902,750	(596,122)	1,123,942	65,650	
2013	14,517,776	14,042,014	103.4%	475,762	2,566,489	5.46%	144,206	180,242	324,448	957,169	(632,721)	1,171,617	66,329	
2014	15,125,736	14,650,282	103.2%	475,455	2,711,465	5.50%	153,154	190,144	343,298	1,013,862	(670,564)	1,220,212	66,888	
2015	15,745,032	15,273,200	103.1%	471,832	2,856,440	5.55%	162,534	200,046	362,580	1,071,210	(708,630)	1,269,734	67,310	
2016	16,376,223	15,911,929	102.9%	464,294	3,001,416	5.61%	173,933	211,805	385,738	1,128,835	(743,097)	1,320,386	68,024	
2017	17,024,341	16,568,074	102.8%	456,267	3,200,767	5.68%	187,477	225,420	412,897	1,185,574	(772,677)	1,372,635	69,021	
2018	17,696,167	17,243,688	102.6%	452,479	3,400,118	5.70%	199,522	239,036	438,558	1,244,671	(806,113)	1,426,682	69,903	
2019	18,389,523	17,941,269	102.5%	448,254	3,599,469	5.76%	213,016	252,652	465,668	1,304,389	(838,721)	1,482,538	70,653	
2020	19,106,907	18,663,761	102.4%	443,146	3,798,821	5.81%	226,409	266,267	492,676	1,364,911	(872,235)	1,540,340	71,247	
2021	19,849,198	19,414,555	102.2%	434,643	3,998,172	5.86%	242,390	282,452	524,842	1,424,269	(899,427)	1,600,457	72,172	
2022	20,625,378	20,197,487	102.1%	427,891	4,272,758	5.92%	261,025	301,206	562,231	1,485,795	(923,563)	1,663,497	73,416	
2023	21,441,755	21,016,839	102.0%	424,916	4,547,343	5.92%	277,347	319,961	597,307	1,547,321	(950,013)	1,729,757	74,531	
2024	22,299,104	21,877,341	101.9%	421,763	4,821,929	5.99%	297,114	338,715	635,829	1,608,846	(973,017)	1,799,539	75,494	
2025	23,204,234	22,784,167	101.8%	420,068	5,096,515	6.06%	316,924	357,469	674,393	1,670,372	(995,979)	1,873,265	76,281	
2026	24,160,948	23,742,936	101.8%	418,012	5,371,101	6.12%	337,651	376,729	714,380	1,731,898	(1,017,518)	1,951,306	77,154	

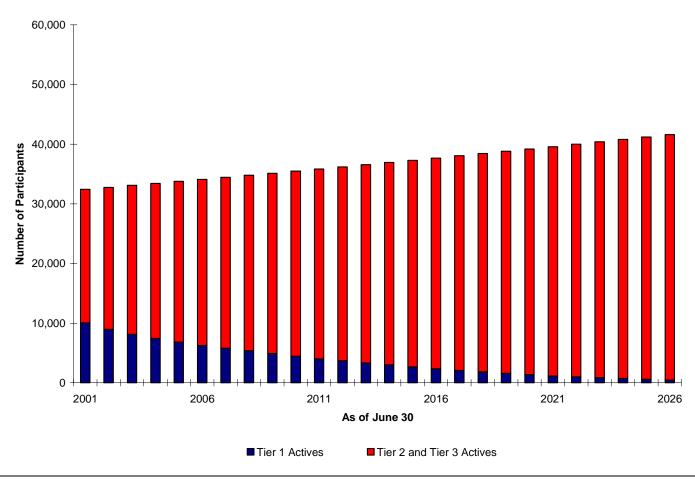
<sup>\*</sup> Surpluses reduce employer contributions over 25 years

<sup>\*</sup> Deficits increase employer contributions over 25 years

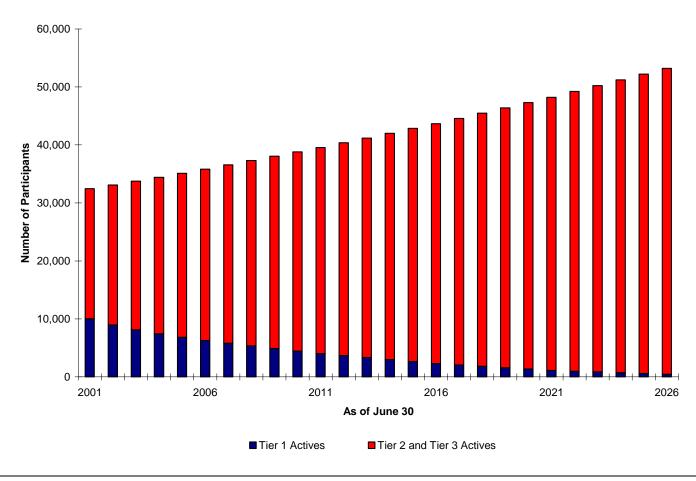
# State of Alaska PERS Projected Active Participant Count Annual Population Increase 0%



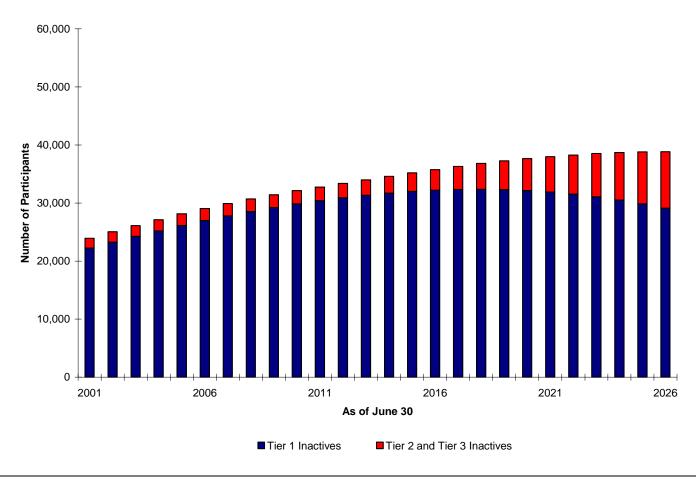
# State of Alaska PERS Projected Active Participant Count Annual Population Increase 1%



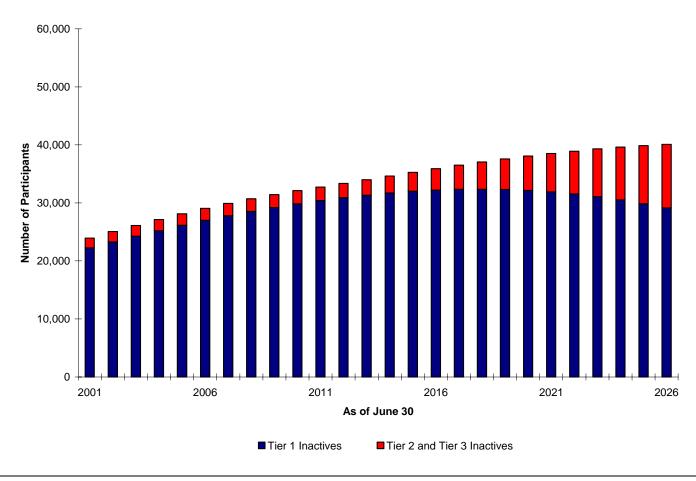
# State of Alaska PERS Projected Active Participant Count Annual Population Increase 2%



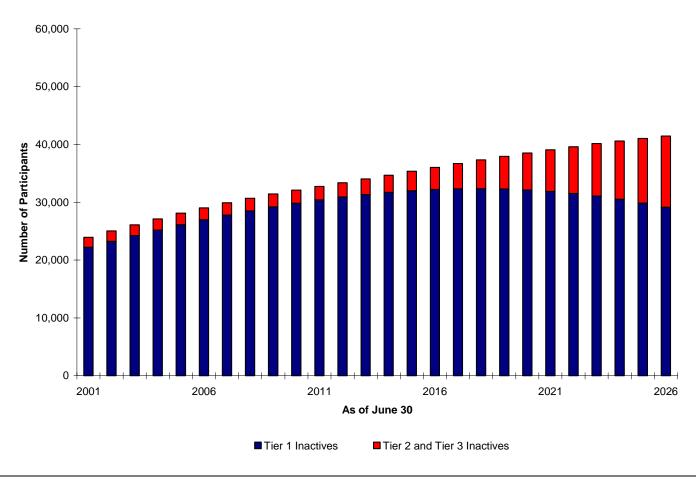
# State of Alaska PERS Projected Inactive Participant Count Annual Population Increase 0%



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



# State of Alaska PERS Projected Inactive Participant Count Annual Population Increase 2%



#### Section 2

In this section, the basis of the valuation is presented and described. This information—the provisions of the plan and the census of participants—is the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

A summary of plan provisions is provided in Section 2.1 and participant census information is shown in Section 2.2.

The valuation is based upon the premise that the plan will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund, the number of participants who will retire, die, terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, which have been adopted to guide the sponsor in funding the plan in a reasonable and acceptable manner, are described in Section 2.3.

#### (1) Effective Date

January 1, 1961, with amendments through June 30, 2001. Chapter 82, 1986 Session Laws of Alaska, created a two-tier retirement system. Members who were first hired under the PERS before July 1, 1986, are eligible for different benefits than members hired after June 30, 1986. Chapter 4, 1996 Session Laws of Alaska created a third tier. Members who were first hired after June 30, 1996 have a 10 year requirement for system paid health benefits and a different Final Average Earnings calculation than members from the other tiers.

#### (2) Administration of Plan

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

#### (3) Employer Included

Currently there are 158 employers participating in the PERS, including the State of Alaska and 147 political subdivisions and public organizations.

#### (4) Membership

PERS membership is mandatory for all permanent full-time and part-time employees of the State of Alaska and participating political subdivisions and public organizations, unless they are specifically excluded by Alaska Statute or 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.

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

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

#### (6) Employer Contributions

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

The <u>consolidated rate</u> 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 <u>past service rate</u> is determined separately for each employer to amortize their unfunded past service liability with level payments over 25 years. Effective June 30, 1996, funding surpluses are amortized over 25 years.

#### (7) Member Contributions

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

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

<u>Voluntary Contributions</u>: 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.

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

<u>Refund of Contributions</u>: 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.

<u>Reinstatement of Contributions</u>: 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  $60^1$ , or early retirement at age 55, if they have at least:
  - (i) five years of paid-up PERS service;
  - (ii) 60 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired under the PERS before May 30, 1987;
  - (iii) 80 days of paid-up PERS service as employees of the legislature during each of five legislative sessions and they were first hired under the PERS after May 29, 1987; or
  - (iv) two years of paid-up PERS service and they are vested in the Teachers' Retirement System.
  - (v) Two years of paid-up PERS service and a minimum three years of TRS service.
- (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.

<sup>&</sup>lt;sup>1</sup> Members participating before July 1, 1986 are eligible for normal retirement at age 55 or early retirement at age 50.

Benefit Type: Lifetime benefits are paid to members. Eligible members may receive normal, unreduced benefits when they (1) reach normal retirement age and complete the service required; or (2) satisfy the minimum service requirements under the "20 and out" or "30 and out" provisions. Members may receive early, actuarially reduced benefits when they reach early retirement age and complete the service required.

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

Benefit Calculations: Retirement benefits are calculated by multiplying the average monthly compensation (AMC) times credited PERS service times the percentage multiplier. The AMC is determined by averaging the salaries earned during the three highest (five highest if hired after June 30, 1996), consecutive payroll years. Members must earn at least 115 days of credit in the last year worked to include it in the AMC calculation. The PERS pays a minimum benefit of \$25.00 per month for each year of service when 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%.

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

#### (9) Reemployment of Retired Members

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

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

- (a) forfeit the three years of incentive credits that they received;
- (b) owe the PERS 150% of the benefits that they received for state and political subdivision members, and 110% for school district employees, under the RIP, which may include costs for health insurance, excluding amounts that they paid to participate for the 1986 and 1989 RIPs. Under the 1996-2000 RIP, the penalty is 150% of the benefits received; and
- (c) be charged 7% interest from the date that they are reemployed until their indebtedness is paid in full or they retire again. If the indebtedness is not completely paid, future benefits will be actuarially reduced for life.

#### (10) Postemployment Healthcare Benefits

Major medical benefits are provided to retirees without cost for all employees hired before July 1, 1986. Employees hired after June 30, 1986 with five years of credited service (or ten years of credited service for those first hired after June 30, 1996) must pay the full monthly premium if they are under age sixty and receive benefits at no cost if they are over age sixty. In addition, peace officers with twenty-five years of peace officer service and other employees with thirty years of membership service receive benefits at no cost, regardless of their age and date of hire.

#### (11) Disability Benefits

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

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

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

#### (12) Death Benefits

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

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.

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

<u>Nonoccupational Death</u>: 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.

<u>Lump Sum Benefit</u>: 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.

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

#### (13) Post Retirement Pension Adjustments

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

- (a) 75% of the CPI increase in the preceding calendar year or 9%, whichever is less, if the recipient is at least age 65 or on PERS disability; or
- (b) 50% of the CPI increase in the preceding calendar year or 6%, whichever is less, if the recipient is at least age 60, or has been receiving benefits for at least five years.

Ad hoc PRPAs, up to a maximum of 4%, may be granted to eligible recipients who first entered the PERS before July 1, 1986, if the CPI increases and the financial condition of the fund will permit an increase.

In a year where both an ad hoc and an automatic PRPA are granted, eligible members receive the higher of the two calculations.

#### (14) Alaska Cost of Living Allowance

Eligible benefit recipients who reside in Alaska receive an Alaska cost of living allowance (COLA) equal to 10% of their base benefits or \$50, whichever is more. The following benefit recipients are eligible:

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

## 2.2(a) Participant Census Information – Total PERS

As of June 30	1996	1997	1998	1999	2001
Active Members					
(1) Number	31,960	31,854	31,910	32,214	32,441
(2) Average Age	42.95	43.21	43.32	43.55	43.75
(3) Average Credited Service	8.41	8.56	8.51	8.53	8.49
(4) Average Annual Salary	\$ 38,231	\$ 38,587	\$ 38,716	\$ 39,844	\$ 41,935
Retirees and Beneficiaries					
(1) Number	10,921	11,802	13,101	14,185	16,274
(2) Average Age	64.61	64.62	64.43	64.67	64.55
(3) Average Monthly Benefit:					
Base	\$ 913	\$ 941	\$ 994	\$ 1,031	\$ 1,083
C.O.L.A.	64	67	70	73	76
P.R.P.A.	131	212	209	199	214
Adjustment	-4	-10	0	0	1
Total	1,104	1,210	1,273	1,303	1,374
Vested Terminations					
(1) Number	4,382	4,742	5,143	5,395	6,187
(2) Average Age	45.43	45.83	46.20	46.69	47.54
(3) Average Monthly Benefit	\$ 662	\$ 690	\$ 717	\$ 749	\$ 867
Non-Vested Terminations With	Account Bal	ances			
(1) Number	5,847	6,260	6,571	7,500 <sup>1</sup>	11,403
(2) Average Account Balance	\$ 2,896	\$ 2,981	\$ 3,138	\$ 4,631	\$ 2,649

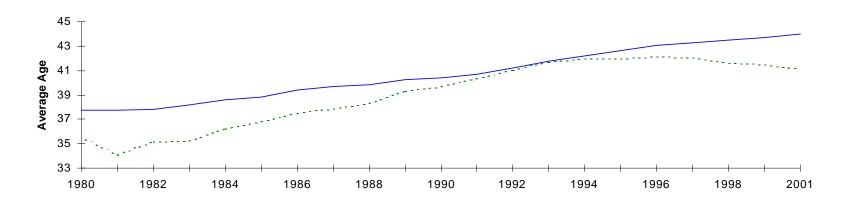
<sup>&</sup>lt;sup>1</sup> Includes deceased retirees with account balances.

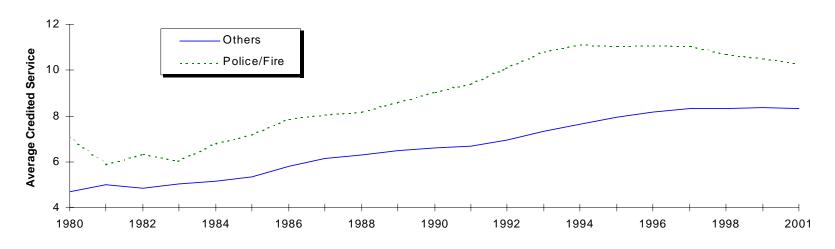
## 2.2(b) Additional Information – Active Members

As of June 30	1996	1997	1998	1999	2001
Active Police & Fire					
(1) Number	2,634	2,587	2,617	2,624	2,683
(2) Average Age	42.09	42.04	41.62	41.51	41.11
(3) Average Credited Service	11.07	11.05	10.68	10.50	10.26
(4) Average Annual Salary	\$ 51,011	\$ 52,455	\$ 52,982	\$ 54,437	\$ 56,542
(5) Number Vested	1,986	1,887	1,799	1,781	1,814
(6) Percent Who Are Vested	75.4%	72.9%	68.7%	67.9%	67.6%
Active "Other" Members					
(1) Number	29,326	29,267	29,293	29,590	29,758
(2) Average Age	43.03	43.31	43.47	43.73	43.99
(3) Average Credited Service	8.17	8.34	8.32	8.35	8.33
(4) Average Annual Salary	\$ 37,083	\$ 37,361	\$ 37,442	\$ 38,550	\$ 40,618
(5) Number Vested	17,618	17,695	17,335	17,254	16,755
(6) Percent Who Are Vested	60.1%	60.5%	59.2%	58.3%	56.3%

## 2.2(b) Additional Information – Active Members

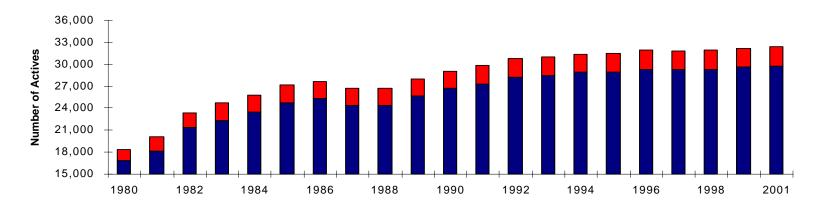
## State of Alaska - PERS Actives

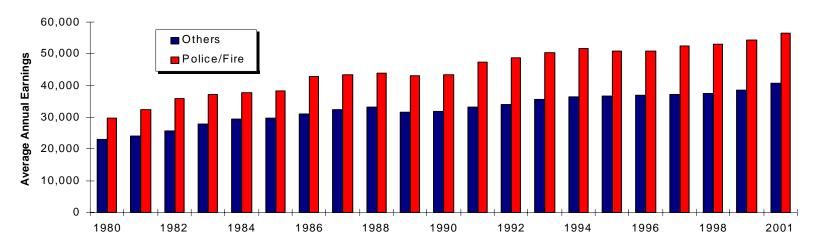




## 2.2(b) Additional Information - Active Members

## State of Alaska - PERS Actives





## 2.2(c) Distribution of Active Police and Fire Participants

#### **Annual Earnings By Age**

#### **Annual Earnings By Credited Service**

Age	Number of People	Total Annual Earnings	Average Annual Earnings		Years Of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	\$ 0	\$ 0	•	0	94	\$ 2,126,201	\$ 22,619
20-24	48	1,940,846	40,434		1	177	7,913,144	44,707
25-29	283	14,018,011	49,534		2	171	8,331,959	48,725
30-34	420	23,095,373	54,989		3	179	9,157,424	51,159
35-39	403	22,863,238	56,733		4	184	9,918,045	53,902
40-44	476	27,922,136	58,660		0-4	805	37,446,773	46,518
45-49	520	30,324,705	58,317		5-9	609	35,097,666	57,632
50-54	357	21,292,809	59,644		10-14	440	25,889,240	58,839
55-59	141	8,226,565	58,344		15-19	441	27,148,513	61,561
60-64	30	1,733,192	57,773		20-24	300	19,904,958	66,350
65-69	4	223,558	55,890		25-29	75	5,250,815	70,011
70-74	0	0	0		30-34	12	882,924	73,577
75+	1	60,490	60,490		35-39	1	80,034	80,034
					40+	0	0	0
Total	2,683	\$151,700,923	\$ 56,542		Total	2,683	\$151,700,923	\$ 56,542

#### Years of Credited Service By Age

#### Years of Service 5-9 10-14 15-19 25-29 30-34 35-39 40+ Total Age 0-4 20-24 0-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75+ Total 2,683

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

Valuation Date	Number	Annual Payroll (000's)	Annual Average Pay	Percent Increase/ (Decrease) in Average Pay	Number of Participating Employers
June 30, 2001	2,683	\$ 151,701	\$ 56,542	3.9%	158
June 30, 1999	2,624	142,843	54,437	2.7%	148
June 30, 1998	2,617	138,653	52,982	1.0%	148
June 30, 1997	2,587	135,702	52,455	2.8%	156
June 30, 1996	2,634	134,362	51,011	0.2%	156
June 30, 1995	2,557	130,204	50,921	(1.7%)	153
June 30, 1994	2,481	128,456	51,776	2.8%	155
June 30, 1993	2,463	124,025	50,355	3.2%	155
June 30, 1992	2,515	122,762	48,812	2.8%	155
June 30, 1991	2,533	120,240	47,470	9.2%	145

## 2.2(e) Distribution of Active "Other" Participants

## **Annual Earnings By Age**

## **Annual Earnings By Credited Service**

	Number of	Total Annual	Average Annual	Years Of	Number of	Total Annual	Average Annual
Age	People	Earnings	Earnings	Service	People	Earnings	Earnings
0-19	63	\$ 1,414,863	\$ 22,458	0	1,991	\$ 57,207,421	\$ 28,733
20-24	824	22,525,937	27,337	1	3,578	110,133,624	30,781
25-29	1,827	58,435,519	31,984	2	2,601	85,912,502	33,031
30-34	2,579	91,907,503	35,637	3	2,250	79,781,636	35,459
35-39	3,691	139,274,239	37,733	4	1,774	66,400,256	37,430
40-44	5,321	215,084,705	40,422	0-4	12,194	399,435,439	32,757
45-49	6,452	276,821,336	42,905	5-9	6,469	257,126,516	39,747
50-54	5,251	240,575,994	45,815	10-14	4,994	226,370,558	45,329
55-59	2,552	112,412,158	44,049	15-19	3,157	160,308,276	50,779
60-64	929	39,562,915	42,587	20-24	2,073	113,513,077	54,758
65-69	209	8,668,981	41,478	25-29	728	42,837,964	58,843
70-74	48	1,610,584	33,554	30-34	130	8,254,386	63,495
75+	12	405,205	33,767	35-39	12	784,659	65,338
				40+	1	69,064	69,064
Total	29,758	\$1,208,699,939	\$ 40,618	Total	29,758	\$1,208,699,939	\$ 40,618

#### 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	63	0	0	0	0	0	0	0	0	63			
20-24	821	3	0	0	0	0	0	0	0	824			
25-29	1,624	197	6	0	0	0	0	0	0	1,827			
30-34	1,815	587	173	4	0	0	0	0	0	2,579			
35-39	1,916	955	638	171	11	0	0	0	0	3,691			
40-44	2,014	1,306	1,046	655	281	19	0	0	0	5,321			
45-49	1,860	1,505	1,242	951	692	197	5	0	0	6,452			
50-54	1,168	1,107	978	845	717	364	70	2	0	5,251			
55-59	589	547	622	362	276	107	40	9	0	2,552			
60-64	240	200	231	136	75	34	12	1	0	929			
65-69	56	51	51	26	17	5	3	0	0	209			
70-74	21	10	6	7	2	1	0	0	1	48			
75+	7	1	1	0	2	1	0	0	0	12			
Total	12,194	6,469	4,994	3,157	2,073	728	130	12	1	29,758			

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

Valuation Date	Number	Annual Payroll (000's)	Annual Average Pay	Percent Increase/ (Decrease) in Average Pay	Number of Participating Employers
June 30, 2001	29,758	\$ 1,208,700	\$ 40,618	5.4%	158
June 30, 1999	29,590	1,140,706	38,550	3.0%	148
June 30, 1998	29,293	1,096,786	37,442	0.2%	148
June 30, 1997	29,267	1,093,433	37,361	0.7%	156
June 30, 1996	29,326	1,087,504	37,083	1.3%	156
June 30, 1995	28,893	1,057,840	36,612	0.9%	153
June 30, 1994	28,883	1,048,541	36,303	2.3%	155
June 30, 1993	28,509	1,011,864	35,493	4.2%	155
June 30, 1992	28,206	961,054	34,073	2.5%	155
June 30, 1991	27,307	907,567	33,236	4.6%	145

## 2.2(g) Statistics on New Benefit Recipients – Police and Fire Members

Dur	During the Year Ending June 30		1996		1997		1998		1999	20	00/2001
Ser	vice										
(1)	Number		63		140		147		142		275
(2)	Average Age at Commencement		49.82		52.21		51.71		52.47		51.49
(3)	Average Monthly Benefit	\$	2,735	\$	2,364	\$	2,696	\$	2,410	\$	2,562
Sur	vivor (including surviving sp	ouse	e and QD	RO's)							
(1)	Number		2		20		14		14		36
(2)	Average Age at Commencement		49.47		53.25		51.50		55.79		52.79
(3)	Average Monthly Benefit	\$	1,678	\$	1,184	\$	1,265	\$	1,088	\$	1,256
Dis	ability										
(1)	Number		11		6		3		7		17
(2)	Average Age at Commencement		47.00		48.77		43.40		45.37		48.90
(3)	Average Monthly Benefit:	\$	1,709	\$	1,601	\$	2,056	\$	2,725	\$	1,697
Tot											
(1)	Number		76		166		164		163		328
(2)	Average Age at Commencement	Ф	49.40	Φ.	52.21	<b>c</b>	51.54	Ф	52.45	Ф	51.50
(3)	Average Monthly Benefit:	\$	2,559	\$	2,194	\$	2,562	\$	2,310	\$	2,374

## 2.2(h) Schedule of Average Benefit Payments – New Benefit Recipients – Police/Fire

Years of Credited Service

			rears	S OI C	redited 5	ervic	e			
	0 - 4	5 - 9	10 - 14	•	15 - 19	2	20 - 24	2	25 - 29	30+
Period 7/1/99 - 6/30/01: Average Monthly Benefit Number of Recipients	\$ 1,416 2	\$ 927 13	\$ 1,249 34	\$	1,704 61	\$	2,824 143	\$	2,892 57	\$ 2,702 18
Period 7/1/98 - 6/30/99: Average Monthly Benefit Number of Recipients	\$ 1,879 22	\$ 698 8	\$ 1,214 23	\$	1,808 29	\$	2,849 61	\$	3,713 17	\$ 4,097 3
Period 7/1/97 - 6/30/98: Average Monthly Benefit Number of Recipients	\$ 1,472 13	\$ 723 8	\$ 1,177 13	\$	2,091 40	\$	3,199 64	\$	3,548 22	\$ 3,380 4
Period 7/1/96 - 6/30/97: Average Monthly Benefit Number of Recipients	\$ 1,263 10	\$ 592 12	\$ 957 18	\$	1,719 40	\$	2,811 68	\$	3,545 15	\$ 4,733 3
Period 7/1/95 - 6/30/96: Average Monthly Benefit Number of Recipients	\$ 1,938 3	\$ 757 6	\$ 1,708 5	\$	1,852 11	\$	2,916 39	\$	3,375 10	\$ 3,870 2
Period 7/1/94 - 6/30/95: Average Monthly Benefit Number of Recipients	\$ 0	\$ 893 8	\$ 851 10	\$	1,608 18	\$	3,002 42	\$	3,107 10	\$ 0
Period 7/1/93 - 6/30/94: Average Monthly Benefit Number of Recipients	\$ 417 1	\$ 748 7	\$ 1,054 9	\$	1,532 13	\$	2,748 32	\$	3,825 9	\$ 0
Period 7/1/92 - 6/30/93: Average Monthly Benefit Number of Recipients	\$ 1,047 3	\$ 546 2	\$ 1,078 7	\$	1,648 6	\$	2,700 17	\$	3,704 3	\$ 3,231 1

<sup>&</sup>quot;Average Monthly Benefit" includes post-retirement pension adjustments and cost-of-living increases.

## 2.2(i) Statistics on New Benefit Recipients – "Other" Members

<b>During the Year Ending June 30</b>	1996	1997	1998	1999	2000/2001
Service					
(1) Number	621	791	1,098	921	2,031
(2) Average Age at Commencement	57.80	56.59	56.59	56.07	56.20
(3) Average Monthly Benefit	\$ 1,183	\$ 1,272	\$ 1,443	\$ 1,450	\$ 1,389
Survivor (including surviving sp	ouse and QD	PRO's)			
(1) Number	45	88	85	97	214
(2) Average Age at Commencement	55.87	62.17	61.68	63.58	61.10
(3) Average Monthly Benefit	\$ 709	\$ 805	\$ 710	\$ 837	\$ 845
Disability					
(1) Number	36	25	36	35	97
(2) Average Age at Commencement	49.47	46.69	48.21	48.24	48.31
(3) Average Monthly Benefit:	\$ 1,417	\$ 1,656	\$ 1,421	\$ 1,263	\$ 1,258
Total					
<ul><li>(1) Number</li><li>(2) Average Age at</li></ul>	702	904	1,219	1,053	2,342
Commencement	57.25	56.86	56.70	56.50	56.32
(3) Average Monthly Benefit:	\$ 1,165	\$ 1,238	\$ 1,391	\$ 1,388	\$ 1,334

## 2.2(j) Schedule of Average Benefit Payments – New Benefit Recipients – "Other"

Years of Credited Service

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

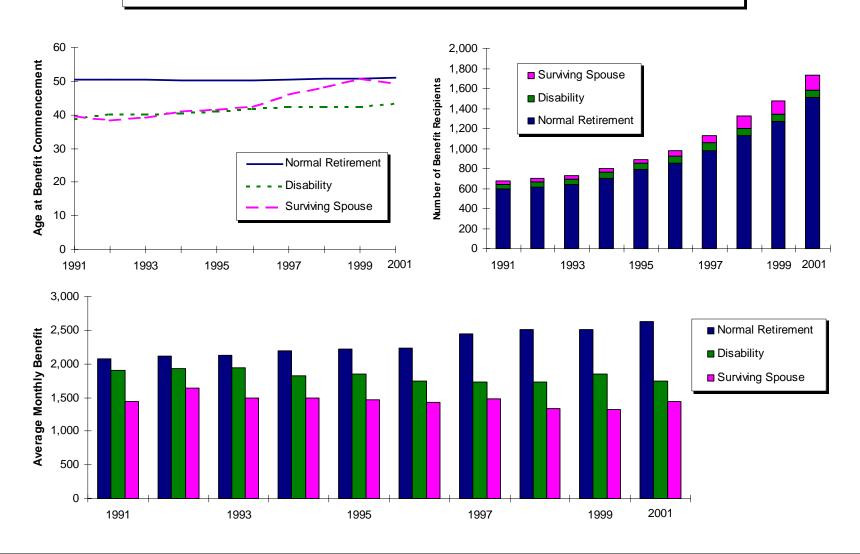
<sup>&</sup>quot;Average Monthly Benefit" includes post-retirement pension adjustments and cost-of-living increases.

## 2.2(k) Statistics on All Benefit Recipients

	Police & Fire	"Other"
Service Retirements	 	
(1) Number, June 30, 1999	1,274	11,345
(2) Net Change During FY00-01	241	1,609
(3) Number, June 30, 2001	1,515	12,954
(4) Average Age At Commencement	50.94	56.69
(5) Average Age Now	58.76	65.66
(6) Average Monthly Benefit	\$ 2,634	\$ 1,276
Survivors (including surviving spouses and QDRO's)		
(1) Number, June 30, 1999	133	1,050
(2) Net Change During FY00-01	12	181
(3) Number, June 30, 2001	145	1,231
(4) Average Age At Commencement	49.10	56.23
(5) Average Age Now	56.17	66.17
(6) Average Monthly Benefit	\$ 1,434	\$ 801
Disabilities		
(1) Number, June 30, 1999	71	312
(2) Net Change During FY00-01	0	46
(3) Number, June 30, 2001	71	358
(4) Average Age At Commencement	43.40	44.74
(5) Average Age Now	49.42	49.91
(6) Average Monthly Benefit	\$ 1,748	\$ 1,454
Total Number of Benefit Recipients	1,731	14,543

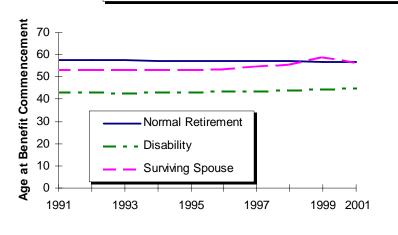
## 2.2(k) Statistics on All Benefit Recipients (continued)

## State of Alaska - PERS Police/Fire Benefit Recipients

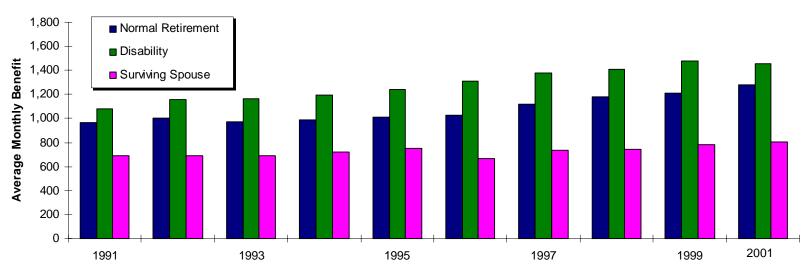


## 2.2(k) Statistics on All Benefit Recipients (continued)

## State of Alaska - PERS "Other" Benefit Recipients







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

## **Annual Benefit By Age**

## **Annual Benefit by Years Since Commencement**

	Number of	Total Annual	Average Annual	Years Since	Number of	Total Annual	Average Annual
Age	People	Benefit	Benefit	Commencement	People	Benefit	Benefit
0-19	0	\$ 0	\$ 0	0	77	\$ 2,504,585	\$ 32,527
20-24	0	0	0	1	140	4,039,888	28,856
25-29	0	0	0	2	163	4,204,040	25,792
30-34	2	28,948	14,474	3	169	5,119,613	30,294
35-39	7	163,475	23,354	4	220	6,704,715	30,476
40-44	36	985,542	27,376	0-4	769	22,572,841	29,353
45-49	179	5,864,243	32,761	5-9	364	10,490,977	28,821
50-54	380	12,606,932	33,176	10-14	323	10,285,607	31,844
55-59	449	13,770,064	30,668	15-19	169	5,764,794	34,111
60-64	335	9,371,905	27,976	20-24	78	2,154,360	27,620
65-69	176	4,852,787	27,573	25-29	27	584,516	21,649
70-74	97	2,579,961	26,598	30-34	1	22,230	22,230
75+	70	1,651,468	23,592	35+	0	0	0
Total	1,731	\$51,875,325	\$ 29,968	Total	1,731	\$51,875,325	\$ 29,968

#### Years Since Benefit Commencement By Age

	Years Since Commencement											
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total			
0-19	0	0	0	0	0	0	0	0	0			
20-24	0	0	0	0	0	0	0	0	0			
25-29	0	0	0	0	0	0	0	0	0			
30-34	2	0	0	0	0	0	0	0	2			
35-39	5	2	0	0	0	0	0	0	7			
40-44	29	6	1	0	0	0	0	0	36			
45-49	139	28	8	3	0	0	0	0	179			
50-54	242	91	40	5	0	1	0	0	380			
55-59	224	111	86	21	4	2	0	0	449			
60-64	89	93	105	38	6	3	0	0	335			
65-69	27	26	57	49	16	4	0	0	176			
70-74	9	6	20	33	27	1	0	0	97			
75+	3	1	<u>6</u>	20	<u>25</u>	14	1	0	70			
Total	769	364	323	169	78	27	1	0	1,731			

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

Ar	nount	of	Number of	Ту	pe of Benefi	t	Option Selected			
Mon	thly B	enefit	Recipients	1	2	3	Opt. 1	Opt. 2	Opt. 3	Opt. 4
\$ 1	\$	300	23	14	9	0	16	6	1	0
301	_	600	91	71	16	4	44	23	15	9
601	_	900	90	62	23	5	54	25	5	6
901	_	1200	116	90	19	7	72	20	18	6
1201	_	1500	105	86	15	4	57	23	10	15
1501	_	1800	113	86	18	9	59	27	12	15
1801	_	2100	142	105	17	20	71	48	12	11
2101	_	2400	142	120	8	14	59	55	18	10
2401	_	2700	163	152	6	5	45	75	27	16
2701	_	3000	136	129	6	1	43	59	21	13
3001	_	3300	142	139	1	2	44	69	18	11
3301	_	3600	127	124	3	0	35	59	19	14
3601	_	3900	112	112	0	0	28	59	11	14
3901	_	4200	66	63	3	0	12	37	8	9
Over 4	1200		163	162	1	0	48	90	17	8
Totals			1,731	1,515	145	71	687	675	212	157

## **Type of Benefit**

- 1 Normal retirement
- 2 Survivor payment
- 3 Disability

Option 1 - Whole Life Annuity

Option 2 - 75% Joint and Contingent Annuity

Option 3 - 50% Joint and Contingent Annuity

Option 4 - 66 2/3% Joint and Survivor Annuity

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

#### **Annual Benefit By Age**

#### **Annual Benefit by Years Since Commencement**

	Number of	Total Annual		verage Annual		Years Since	Number of	Total Annual	Average Annual
Age	People	Benefit		Benefit	Co	ommencement			Benefit
0-19	0	\$	0 \$	0		0	466	\$ 7,409,260	\$ 15,900
20-24	0		0	0		1	975	14,333,371	14,701
25-29	0		0	0		2	1,445	24,849,832	17,197
30-34	6	51,8	14	8,636		3	1,022	17,178,840	16,809
35-39	21	207,5	24	9,882		4	1,329	22,786,579	17,146
40-44	59	693,1	50	11,748		0-4	5,237	86,557,882	16,528
45-49	168	2,520,5	40	15,003		5-9	3,005	42,645,733	14,192
50-54	1,267	18,767,1	48	14,812		10-14	3,183	44,969,008	14,128
55-59	2,831	47,825,6	03	16,894		15-19	1,831	26,743,878	14,606
60-64	3,065	48,105,4	80	15,695		20-24	923	11,077,248	12,001
65-69	2,605	37,729,5	95	14,484		25-29	335	3,998,406	11,936
70-74	1,965	27,120,6	58	13,802		30-34	26	400,599	15,408
75+	2,556	33,444,78	<u> </u>	13,085		35+	3	73,474	24,491
Total	14,543	\$216,466,2	28 \$	14,885		Total	14,543	\$216,466,228	\$ 14,885

#### Years Since Benefit Commencement By Age

	Years Since Commencement											
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total			
0-19	0	0	0	0	0	0	0	0	0			
20-24	0	0	0	0	0	0	0	0	0			
25-29	0	0	0	0	0	0	0	0	0			
30-34	4	1	1	0	0	0	0	0	6			
35-39	16	5	0	0	0	0	0	0	21			
40-44	27	20	10	1	1	0	0	0	59			
45-49	93	43	26	5	1	0	0	0	168			
50-54	1,123	84	37	14	8	1	0	0	1,267			
55-59	2,061	620	131	11	7	1	0	0	2,831			
60-64	1,097	1,107	799	42	16	3	1	0	3,065			
65-69	537	624	1,049	371	15	7	1	1	2,605			
70-74	180	380	635	603	161	6	0	0	1,965			
75+	99	121	495	<u>784</u>	714	317	24	2	2,556			
Total	5,237	3,005	3,183	1,831	923	335	26	3	14,543			

## 2.2(o) Schedule of Benefit Recipients by Type of Benefit and Option Selected - "Other"

	Amoı	unt	of	Number of	Ty	ype of Benefi	t	Option Selected			
Мо	nthly	/ Be	nefit	Recipients	1	2	3	Opt. 1	Opt. 2	Opt. 3	Opt. 4
\$ 1		\$	300	1,293	1,087	196	10	797	261	183	52
301	l –		600	2,910	2,549	311	50	1,710	611	404	185
601	l –		900	2,461	2,177	233	51	1,399	551	329	182
901	l –		1200	2,012	1,800	167	45	1,119	464	266	163
1201	l –		1500	1,457	1,302	97	58	753	361	230	113
1501	l –		1800	1,127	1,015	76	36	575	300	156	96
1801	l –		2100	831	738	46	47	428	214	120	69
2101	ı –		2400	647	593	34	20	321	168	98	60
2401	ı –		2700	438	414	13	11	213	119	69	37
2701	ı –		3000	403	369	24	10	188	113	63	39
3001	ı –		3300	250	238	9	3	93	91	40	26
3301	ı –		3600	198	186	7	5	84	76	29	9
3601	ı –		3900	142	134	3	5	59	56	18	9
3901	ı –		4200	113	106	5	2	32	50	18	13
Ove	r 420	0		261	246	10	5	109	84	42	26
Tota	ls			14,543	12,954	1,231	358	7,880	3,519	2,065	1,079

## **Type of Benefit**

- 1 Normal retirement
- 2 Survivor payment
- 3 Disability

Option 1 - Whole Life Annuity

Option 2 - 75% Joint and Contingent Annuity

Option 3 - 50% Joint and Contingent Annuity

Option 4 - 66 2/3% Joint and Survivor Annuity

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

	Ade	ded to Rolls	Remov	ed from Rolls	Rolls -	- End of Year	Percent		
Year Ended	No.*	Annual Allowances*	No.*	Annual Allowances*	No.	Annual Allowances	Increase in Annual Allowances	Average Annual Allowance	
June 30, 2001	328	\$12,637,854	75	\$2,889,753	1,731	\$51,875,325	23.1%	\$29,986	
June 30, 1999	163	4,761,117	8	233,673	1,478	42,127,224	12.0%	28,503	
June 30, 1998	195	6,096,918	2	62,532	1,323	37,599,780	19.1%	28,420	
June 30, 1997	161	6,672,261 <sup>1</sup>	9	372,984 <sup>(7)</sup>	1,130	31,565,394	24.9%	27,934	
June 30, 1996	88	2,217,256	2	50,392	978	25,266,117	9.4%	25,834	
June 30, 1995	95	2,697,924	3	85,198	892	23,099,253	12.8%	25,896	
June 30, 1994	77	2,428,767	4	119,938	800	20,486,527	12.7%	25,608	
June 30, 1993	39	982,991	11	212,565	727	18,177,698	4.4%	25,004	
June 30, 1992	35	1,202,004	8	195,248	699	17,407,272	6.1%	24,903	
June 30 1991	129	3,408,774	4	95,704	672	16,400,516	25.3%	24,406	

<sup>\*</sup> Numbers are estimated, and include other internal transfers.

<sup>&</sup>lt;sup>1</sup> Includes additional benefits to current retirees from a one time retroactive ad hoc Post-Retirement Pension Adjustment.

## 2.2(q) Schedule of Benefit Recipients Added to and Removed from Rolls – "Other"

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

<sup>\*</sup> Numbers are estimated, and include other internal transfers.

<sup>&</sup>lt;sup>1</sup> Includes additional benefits to current retirees from a one time retroactive ad hoc Post-Retirement Pension Adjustment.

#### 2.3 Summary of Actuarial Assumptions and Methods

The demographic and non-health economic assumptions used in this valuation were recommended by William M. Mercer, Incorporated and were adopted at the Fall 2000 TRS Board Meeting. These assumptions were the result of an experience study performed in the Fall of 2000. The funding method used in this valuation was adopted June 30, 1985. The asset smoothing method used to determine valuation assets was changed effective June 30, 1998, enhanced effective June 30, 2000.

#### Valuation of Liabilities

(A) Actuarial Method – Projected Unit Credit (no change). Liabilities and contributions shown in the report are computed using the Projected Unit Credit method of funding. Any funding surpluses or unfunded accrued liability is amortized over a rolling 25 years.

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

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

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

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

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

## (B) Actuarial Assumptions

Investment Return	8.25% per year, compounded annually, net of expenses.
Salary Scale	Inflation – 3.5% per year
	Police/Fire: Merit (first 5 years of employment) $-1.5\%$ per year. Productivity $-0.5\%$ per year
	Others: Merit (first 10 years of employment) – 1.5% per year. Productivity – 0.5% per year
Total Inflation	Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 3.5% annually.
Health Cost Trend	FY01 - 7.5% FY02 - 6.5% FY03 - 5.5% FY04 - FY08 5.0% FY09 - FY13 4.5% FY14 and later 4.0%
Mortality	1994 Group Annuity Mortality Basic Table for males and females, 1994 Base Year. Deaths are assumed to be occupational 85% of the time for Police/Fire, 35% for Others.
Total Turnover	Based upon the 1997-99 actual withdrawal experience. (See Table 1).
Disability	Incidence rates based upon the 1991-95 actual experience, in accordance with Table 2. Post-disability mortality in accordance with rates published by the Pension Benefit Guaranty Corporation to reflect mortality of those receiving disability benefits under Social Security.
Retirement	Retirement rates based upon the 1997-99 actual experience in accordance with Table 3.
Spouse's Age	Wives are assumed to be four years younger than husbands.

## (B) Actuarial Assumptions- (continued)

Dependent Children	Benefits to dependent chassuming members who dependent child.	nildren have been valued are not single have one
Contribution Refunds	will leave their contribute retain their deferred vest	ng after age 35 who are vested tions in the fund and thereby ted benefit. All others who have their contributions
C.O.L.A.	-	nts who are eligible for the med to remain in Alaska and
New Entrants	Growth projections are a population under three s	made for the active PERS cenarios:
	Pessimistic:	0% per year
	Median:	1% per year
	Optimistic:	2% per year
Post-Retirement Pension Adjustment	50% and 75% of assume automatic Post-Retireme (PRPA) as specified in t	
Expenses	Expenses are covered in assumption.	the investment return
Marital Status	75% of participants are	assumed to be married.

#### (C) Valuation of Assets

In the development of valuation assets, we use an expected investment return equal to the investment return assumption of 8.25%. The valuation assets are then compared to a 5% corridor around the market value of assets. Any amount below the corridor is a current deferred gain and any amount above the corridor is a current deferred loss. The outstanding balance of previously deferred amounts is determined. If both the outstanding balance and any current amount are deferred gains or losses, the greater of the two is amortized. If one of either the outstanding balance or the current amount is a deferred gain and the other is deferred loss, the difference is amortized. The amount amortized is applied to the employer contribution rate as a level percentage of the present value of pay over 20 years under the 1% population projection scenario.

Valuation assets cannot be outside the range of 80% to 120% of the market value of assets. All assets are valued at market value. Assets are accounted for on an accrued basis and are taken directly from audited financial statements provided by KPMG LLP.

#### (D) Determination of the Adjustment for the 102% Target Funding Ratio

The target unfunded (surplus) accrued liability is determined by first reducing the actuarial value of assets by 3.381643% and calculating the resulting unfunded (surplus) accrued liability. This unfunded (surplus) liability is then loaded by 6% to account for the 2-year delay in employer contributions. Both of these factors are determined empirically from the actuarial projection valuation. This target unfunded accrued liability (surplus) is then added to the actuarial value of assets to determine the target accrued liability. This target accrued liability is the basis for the determination of the employer contribution rate before the rate is adjusted for the deferred gains or losses outside the 5% corridor as discussed above.

#### (E) 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 FY02, the pre-65 monthly premium is \$754.76 and the post-65 premium is \$287.53, based on an assumed total blended premium of \$577.40. For the time period January 1, 2002 to December 31, 2002, the actual blended premium as provided by the State of Alaska, Division of Retirement and Benefits, is \$668.00.

## Table 1 Alaska PERS Total Turnover Assumptions

olice and Fire:  Year of  Employment Rate	<u>Age</u>	
	Age	
Employment Rate	Age	
	<del></del>	<u>Rate</u>
1 .12	20+	.03
2 .10		
3 .08		
4 .07		
5 .06		

Year of	Age a	t Hire		
<b>Employment</b>	20-34	<u>35+</u>	<u>Age</u>	<u>Rate</u>
			20.04	
1	.25	.15	20-34	.11
2	.23	.15	35-39	.08
3	.20	.13	40-44	.06
4	.16	.12	45+	.05
5	.15	.11		

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

<u>Age</u>	Police & Fire Rate	"Other" Member Rate
20 21 22 23 24 25	.88 .89 .90 .91 .93	.28 .28 .29 .29 .30
26	.95	.30
27	.98	.31
28	1.00	.32
29	1.03	.33
30	1.05	.34
31	1.08	.34
32	1.10	.35
33	1.13	.36
34	1.16	.37
35	1.20	.38
36	1.24	.40
37	1.29	.41
38	1.34	.43
39	1.39	.44
40	1.44	.46
41	1.50	.48
42	1.59	.51
43	1.70	.54
44	1.85	.59
45	2.03	.65
46	2.20	.70
47	2.39	.76
48	2.59	.83
49	2.79	.89
50	3.00	.96
51	3.25	1.04
52	3.58	1.14
53	3.98	1.27
54	4.44	1.42
55	5.00	1.60
56	5.74	1.84
57	6.68	2.14
58	7.63	2.44
59	9.00	2.88
60	10.54	3.37
61	12.19	3.90
62	14.13	4.52
63	16.31	5.22
64	18.63	5.96

Table 3
Alaska PERS
Retirement Rates

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

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

## Other Historical Information

## Section 3

Section 3.1	Shows the analysis of financial experience.
Section 3.2(a)	Shows the summary of accrued and unfunded accrued liabilities for Police and Fire members.
Section 3.2(b)	Shows the summary of accrued and unfunded accrued liabilities for "Other" members.
Section 3.3	Shows the solvency test.

## 3.1 Analysis of Financial Experience

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

		Change in Average Contribution Rate During Fiscal Year					
	Type of Gain or Loss	2001	2000	1999	1998	1997	
(1)	Health Experience	0.00%	0.00%	0.00%	0.00%	0.00%	
(2)	Salary Experience	(1.03%)	0.00%	(0.23%)	(0.46%)	(0.06%)	
(3)	Investment Experience	0.11%	(0.12%)	(0.49%)	(3.26%)	(1.26%)	
(4)	Demographic Experience	0.77%	(0.81%)	0.21%	1.12%	0.03%	
(5)	(Gain) or Loss During Year From Experience, $(1) + (2) + (3) + (4)$	(0.15%)	(0.93%)	(0.51%)	(2.60%)	(1.29%)	
Non-r	ecurring Changes						
(6)	Asset Valuation Method	0.00%	(2.67%)	0.00%	0.00%	0.00%	
(7)	Assumption Changes	0.00%	3.09%	0.00%	1.08%	0.00%	
(8)	System Benefit Changes	0.17%	0.00%	0.00%	0.00%	0.00%	
(9)	Target Liability Adjustment	0.57%	0.00%	0.00%	0.99%	0.00%	
(10)	Ad hoc PRPA	0.06%	0.07%	0.04%	0.20%	0.91%	
(11)	Composite (Gain) or Loss During Year, (5) + (6) + (7) + (8) + (9) + (10)	0.65%	(0.44%)	(0.47%)	(0.33%)	(0.38%)	
(12)	Beginning Average Employer Contribution Rate	6.12%	6.56%	7.03%	7.36%	7.74%	
(13)	Ending Average Employer Contribution Rate, (11) + (12)	6.77%	6.12%	6.56%	7.03%	7.36%	

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

Valuation Date	Aggregate Accrued Liability (000's)	Valuation Assets (000's)	Assets as a Percent of Accrued Liability	Unfunded Accrued Liabilities (UAL) (000's)	Annual Active Member Payroll (000's)	UAL as a Percent of Annual Active Member Payroll
June 30, 2001	\$ 1,293,448	\$ 1,305,478	100.9%	N/A	\$ 151,701	N/A
June 30, 2000 <sup>(2)(3)</sup>	1,196,821	1,209,451	101.1%	N/A	140,045	N/A
June 30, 1999	1,008,404	1,064,168	105.5%	N/A	142,843	N/A
June 30, 1998 <sup>(1)(2)(3)</sup>	926,249	981,127	105.9%	N/A	138,653	N/A
June 30, 1997	811,651	863,184	106.3%	N/A	135,702	N/A
June 30, 1996	733,303	776,196	105.8%	N/A	134,362	N/A
June 30, 1995	785,082	757,221	96.5%	27,861	130,204	21.4%
June 30, 1994 <sup>(1)(2)</sup>	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 <sup>(1)</sup>	592,518	540,087	91.2%	52,431	122,762	42.7%

<sup>(1)</sup> Change in Asset Valuation Method

<sup>(2)</sup> Change of Assumptions

<sup>(3)</sup> Change in Methods

## 3.2 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, 2001	\$ 6,575,126	\$ 6,636,278	100.9%	N/A	\$ 1,208,700	N/A
June 30, 2000 <sup>(2)(3)</sup>	6,180,091	6,245,307	101.1%	N/A	1,181,435	N/A
June 30, 1999	5,640,269	5,952,172	105.5%	N/A	1,140,706	N/A
June 30, 1998 <sup>(1)(2)(3)</sup>	5,277,742	5,590,435	105.9%	N/A	1,096,786	N/A
June 30, 1997	4,722,465	5,022,304	106.3%	N/A	1,093,433	N/A
June 30, 1996 <sup>(2)</sup>	4,246,655	4,495,057	105.8%	N/A	1,087,504	N/A
June 30, 1995	4,186,090	4,037,533	96.5%	148,557	1,057,840	14.0%
June 30, 1994 <sup>(1)(2)</sup>	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 <sup>(1)</sup>	3,148,364	2,869,772	91.2%	278,592	961,054	29.0%

<sup>(1)</sup> Change in Asset Valuation Method

<sup>(2)</sup> Change of Assumptions

<sup>(3)</sup> Change in Methods

## 3.3 Solvency Test

## **Aggregate Accrued Liability For:**

#### Portion of Accrued Liabilities Covered by Assets

	(1)	(2)	(3)	-		<u>-</u>	
Valuation Date	Active Member Contributions (000's)	Inactive Members (000's)	Active Members (Employer- Financed Portion) (000's)	Valuation Assets (000's)	(1)	(2)	(3)
June 30, 2001	\$920,702	\$5,059,386	\$1,888,486	\$7,941,756	100%	100%	100%
June 30, 2000 <sup>(2)(3)</sup>	892,949	4,588,201	1,895,762	7,454,758	100%	100%	100%
June 30, 1999	854,497	3,961,063	1,833,113	7,016,340	100%	100%	100%
June 30, 1998 <sup>(1)(2)(3)</sup>	819,226	3,610,352	1,774,413	6,571,562	100%	100%	100%
June 30, 1997	795,170	3,020,608	1,716,338	5,885,488	100%	100%	100%
June 30, 1996 <sup>(2)</sup>	754,679	2,511,953	1,713,326	5,271,253	100%	100%	100%
June 30, 1995	673,196	2,445,870	1,852,106	4,794,754	100%	100%	90.5%
June 30, 1994 <sup>(1)(2)</sup>	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 <sup>(1)</sup>	484,590	1,783,020	1,473,272	3,409,859	100%	100%	77.5%

<sup>(1)</sup> Change in Asset Valuation Method

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<sup>(2)</sup> Change of Assumptions

<sup>(3)</sup> Change in Methods