

**State of Alaska  
Public Employees' Retirement System**

**Actuarial Valuation Report  
as of June 30, 1990**

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Employer Contribution Rates  
for Fiscal Year:

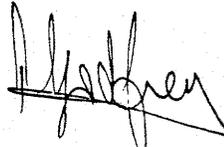
	<u>1992</u>	<u>1993</u>
(a) Consolidated Rate	12.00%	12.83%
(b) Average Past Service Rate	2.20%	.75%
(c) Average Total Contribution Rate	14.20%	13.58%

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the plan sponsor and financial information provided by Coopers & Lybrand, to determine a sound value for the plan liabilities. We believe that this value and the method suggested for funding it are in full compliance with the Governmental Accounting Standards Board, the Internal Revenue Code, and all applicable regulations.

Respectfully submitted,



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Consulting Actuary

BRM/PLG/JWJ/jls

April 11, 1991

## Analysis of the Valuation

As shown in the Highlights section of this report, the funding ratio as of June 30, 1990 has increased from 91.6% to 97.2%, a 5.6% increase. The average employer contribution rate has decreased from 14.20% of payroll to 13.58%, a reduction of 0.62%. The reasons for the change in the funded status and contribution rate are explained below.

### 1. Retiree Medical Insurance

During the year ended June 30, 1990, the System experienced an actuarial gain of \$96,813,000 due to the reduction in retiree medical premiums.

Because, in recent years, the adverse retiree medical premium experience was a major reason for the rapidly increasing employer contribution rate and the deteriorating funding ratio, it is certainly welcome news to be able to comment on a stabilization in retiree medical premiums.

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

<u>Fiscal Year</u>	<u>Monthly Premium Per Retiree For Health Coverage</u>	<u>Annual Percentage Increase</u>	<u>Average Annual Increase Since 1978</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	24%	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	--	11%

As you can see from the above table, the monthly retiree medical premium reduced to \$243.98 during the year from \$252.83, a decrease of 3.50%. The premium for the 1992 fiscal year remained unchanged.

As noted in last year's valuation report, the State has seen a dramatic shift to post-65 rates which have increased considerably faster than pre-65 rates. However, both rates reduced by 3.50% in FY91 and have remained unchanged for FY92, resulting in the first actuarial gain from medical benefits for the System since the June 30, 1987 valuation of the System.

The effect on the past service contribution rate of this reduction in retiree medical premiums was a reduction of 0.95% of payroll. The effect on the consolidated rate was a reduction of 0.47%, resulting in a reduction in the average total employer contribution rate due to medical benefits of 1.42% of payroll.

## **2. Investment Performance**

The System once again experienced actuarial gains arising from the investment performance of the Trust assets. Although the return as measured by market values was lower this year than last year, the effect of the five-year smoothing was to increase the return as measured by valuation assets from last year. The approximate rate of return based on market values was 9.94% and the rate based on valuation assets was 11.87%. The resulting actuarial gain was \$68,112,000 which had the effect of reducing the average employer contribution rate by 0.67%.

## **3. Salary Increases**

Salary increases during the year were less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain of \$6,991,000 which generated a reduction in the average employer contribution rate of 0.07% of payroll.

## **4. Employee Data**

Section 2.2 provides statistics on active and inactive participants. The number of active participants increased 3.7%, from 28,044 at June 30, 1989 to 29,086 at June 30, 1990. The average age of active participants increased from 40.17 to 40.37 and average credited service increased from 6.66 to 6.82 years.

The number of retirees and beneficiaries increased 5.7%, from 6,967 to 7,365, and their average age increased from 63.28 to 63.62. There was an 18.6% increase in the number of vested terminated participants from 2,314 to 2,745. Their average age reduced slightly from 42.97 to 42.96.

The overall effect of these participant data changes was an actuarial loss of \$7,216,000, resulting in an increase in the past service contribution rate of 0.07% of payroll. These demographic changes also had the effect of increasing the consolidated rate by 0.61%, resulting in an increase in the average total employer contribution rate of 0.68% of payroll.

## Retirement Incentive Program

The second Retirement Incentive Program has been available to University of Alaska participants since July 1, 1989 and to other participants since October 1, 1989. The number of new retirees increased from 370 at June 30, 1989 to 495 at June 30, 1990. Although the full effect of the R.I.P. may not be seen until next year's valuation, the R.I.P. was responsible in part for the increase in the number of new retirees.

As with the first R.I.P., the cost is being borne by employers based on the actuarial value of the extra benefits, calculated individually for each employee electing to retire under the program. This cost is being paid over a three-year period. If the assumptions underlying the calculated cost of the R.I.P. are met, the total cost to the System will be equal to the employers' payments.

## Summary

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

(1) Last year's average employer contribution rate .....	14.20%
(2) Decrease in past service rate due to retiree medical insurance .....	(0.95%)
(3) Decrease in consolidated rate due to retiree medical insurance .....	(0.47%)
(4) Decrease due to investment performance .....	(0.67%)
(5) Decrease due to salary increases .....	(0.07%)
(6) Increase in past service rate due to demographic experience .....	0.07%
(7) Increase in consolidated rate due to demographic experience .....	0.61%
(8) Impact of all other factors .....	0.86%
(9) Average employer contribution rate this year .....	13.58%

In summary, the System enjoyed a good year with substantial actuarial gains arising from favorable investment performance and the reduction in medical premiums. These two factors were largely responsible for the increase in the System's funded status to 97.2% of accrued liabilities.

# **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, 1990.

Section 1.1(b) shows the transactions of the plan's fund during FY90.

Section 1.1(c) develops the valuation assets as of June 30, 1990.

Section 1.2(a) shows the actuarial present values for Police and Fire members as of June 30, 1990.

Section 1.2(b) shows the actuarial present values for "Other" members as of June 30, 1990.

Section 1.3(a) develops the average employer contribution rate for Police and Fire members - FY93.

Section 1.3(b) develops the average employer contribution rate for "Other" members - FY93.

Section 1.3(c) develops the average employer contribution rate for all members - FY93.

Section 1.4(a) calculates the actuarial gain or loss for FY90.

Section 1.4(b) shows the individual sources of gain and loss for FY90.

### 1.1(a) Statement of Net Assets as of June 30, 1990 (in thousands)

	<u>Book Value</u>	<u>Actuarial Value*</u>
Cash and Cash Equivalents	\$ 88,794	\$ 88,794
United States Government Bonds	906,484	906,484
Corporate Bonds	340,104	340,104
United States Common Stocks	758,775	854,128
Foreign Stocks	183,654	198,346
Real Estate Equities	140,027	154,163
Mortgages (Net of Reserves)	96,783	96,783
Accrued Receivables	<u>38,684</u>	<u>38,684</u>
Total Assets	\$ 2,553,305	\$ 2,677,486

\* The actuarial value of assets is the fair market value of equities and the book value of fixed income investments, as provided in the audited financial statements.

## 1.1(b) Changes in Net Assets During Fiscal Year 1990 (in thousands)

Net Assets, June 30, 1989, (market value) \$ 2,452,962

### Additions:

Employee Contributions	\$ 69,344	
Employer Contributions	88,322	
Retirement Incentive Program:		
Employer Contributions	8,096	
Employee Contributions	376	
Interest Income and Realized Gain (Loss)	201,713	
Dividend Income	32,269	
Unrealized Gain (Loss) on Investments	<u>17,277</u>	417,397

### Deductions:

Medical Benefits	\$ 22,142	
Retirement Benefits	85,301	
Refunds of Contributions	11,237	
Administrative Expenses	<u>5,124</u>	123,804

Net Assets, June 30, 1990, (market value) \$ 2,746,555

### Approximate Investment Return Rate During the Year, Net of Administrative Expenses:

Based on Market Values	9.94%
Based on Valuation Assets	11.87%

### 1.1(c) Development of Valuation Assets as of June 30, 1990 (in thousands)

	A	B	C
	<u>Actuarial Value</u>	<u>Book Value</u>	<u>Ratio (A/B)</u>
(1) June 30, 1990	\$ 2,677,486	\$ 2,553,305	1.0486
(2) June 30, 1989	2,348,423	2,277,181	1.0313
(3) June 30, 1988	2,088,428	1,999,221	1.0446
(4) June 30, 1987	1,961,836	1,774,732	1.1054
(5) June 30, 1986	1,650,342	1,532,579	1.0768
(6) Average Ratio			1.0613
(7) Book Value at June 30, 1990			\$ 2,553,305
(8) Valuation Assets at June 30, 1990, (6) x (7) but not outside the range of book and actuarial values			\$ 2,677,486

**1.2(a) Actuarial Present Values as of June 30, 1990  
Police and Fire Members (in thousands)**

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 13,105	\$ 158,055
Termination Benefits	839	8,128
Disability Benefits	272	6,108
Death Benefits	365	7,621
Return of Contributions	307	1,815
Medical Benefits	8,232	68,114
Indebtedness	0	(6,434)
Retirement Incentive Program Receivables	<u>0</u>	<u>(737)</u>
Subtotal	\$ 23,120	\$ 242,670
<u>Inactive Members</u>		
Not Vested		\$ 357
Vested Terminations	- Retirement Benefits	4,775
	- Medical Benefits	7,489
Retirees & Beneficiaries	- Retirement Benefits	140,821
	- Medical Benefits	<u>26,163</u>
Subtotal		\$ 179,605
<u>Totals</u>		\$ 422,275

**1.2(b) Actuarial Present Values as of June 30, 1990**  
**"Other" Members (in thousands)**

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 52,227	\$ 556,333
Termination Benefits	12,028	102,559
Disability Benefits	950	11,527
Death Benefits	4,011	49,406
Return of Contributions	5,007	22,553
Medical Benefits	89,862	517,416
Indebtedness	0	(28,525)
Retirement Incentive Program Receivables	<u>0</u>	<u>(5,936)</u>
Subtotal	\$164,085	\$ 1,225,333
<u>Inactive Members</u>		
Not Vested		\$ 7,201
Vested Terminations	- Retirement Benefits	79,053
	- Medical Benefits	151,526
Retirees & Beneficiaries	- Retirement Benefits	673,339
	- Medical Benefits	<u>194,791</u>
Subtotal		\$ 1,105,910
<u>Totals</u>		\$ 2,331,243

### 1.3(a) Development of Average Employer Contribution Rate - FY93 For Police and Fire Members (in thousands)

#### Consolidated Rate

(1)	Total Normal Cost	\$ 23,120
(2)	Total Salaries	105,135
(3)	Normal Cost Rate for Police & Fire Members, (1) / (2)	21.99%
(4)	Member Contribution Rate (Police & Fire)	7.50%
(5)	Consolidated Employer Normal Cost Rate For Police & Fire Members, (3) - (4)	14.49%

#### Past Service Rate

(1)	Accrued Liability	\$ 422,275
(2)	Valuation Assets	410,615
(3)	Total Unfunded Liability, (1) - (2)	11,660
(4)	Amortization Factor (25 years)	10.706612
(5)	Past Service Cost, (3) / (4)	1,089
(6)	Total Salaries	105,135
(7)	Past Service Rate, (5) / (6)	1.04%

Total Employer Contribution Rate 15.53%

### 1.3(b) Development of Average Employer Contribution Rate - FY93 For "Other" Members (in thousands)

#### Consolidated Rate

(1)	Total Normal Cost	\$ 164,085
(2)	Total Salaries	846,935
(3)	Normal Cost Rate for "Other" Members, (1) / (2)	19.37%
(4)	Member Contribution Rate ("Others")	6.75%
(5)	Consolidated Employer Normal Cost Rate For Other Members, (3) - (4)	12.62%

#### Past Service Rate

(1)	Accrued Liability	\$ 2,331,243
(2)	Valuation Assets	2,266,871
(3)	Total Unfunded Liability, (1) - (2)	64,372
(4)	Amortization Factor (25 years)	10.706612
(5)	Past Service Cost, (3) / (4)	\$ 6,012
(6)	Total Salaries	\$ 846,935
(7)	Past Service Rate, (5) / (6)	.71%

Total Employer Contribution Rate 13.33%

**1.3(c) Development of Average Employer Contribution Rate - FY93  
All Members (in thousands)**

Consolidated Rate

(1)	Total Normal Cost	\$ 187,205
(2)	Total Salaries	952,070
(3)	Normal Cost Rate for All Members, (1) / (2)	19.66%
(4)	Average Member Contribution Rate	6.83%
(5)	Consolidated Employer Normal Cost Rate for All Members, (3) - (4)	12.83%

Past Service Rate

(1)	Accrued Liability	\$ 2,753,518
(2)	Valuation Assets	2,677,486
(3)	Total Unfunded Liability, (1) - (2)	76,032
(4)	25-Year Amortization Factor	10.706612
(5)	Past Service Cost, (3) / (4)	7,101
(6)	Total Salaries	952,070
(7)	Past Service Rate, (5) / (6)	.75%

Total Employer Contribution Rate 13.58%

### 1.4(a) Development of Actuarial Gain/(Loss) for FY90 (in thousands)

(1)	Unfunded Liability, June 30, 1989	\$ 214,845
(2)	Normal Cost for FY90	171,793
(3)	Interest on (1) and (2) at 9%	34,797
(4)	Employee Contributions for FY90	69,720
(5)	Employer Contributions for FY90	96,418
(6)	Interest on (4) and (5) at 9% for one-half year	7,476
(7)	Expected Unfunded Liability, June 30, 1990, (1) + (2) + (3) - (4) - (5) - (6)	247,821
(8)	Actual Unfunded Liability, June 30, 1990	76,032
(9)	Actuarial Gain/(Loss) for the Year, (7) - (8)	\$ 171,789

## 1.4(b) Actuarial Gain/(Loss) for FY90 (in thousands)

	<u>Police/Fire</u>	<u>Other</u>	<u>Total</u>
<u>Actuarial Gains</u>			
Investment	\$ 10,486	\$ 57,626	\$ 68,112
Retiree Medical Insurance	10,204	86,609	96,813
Salary Increases	4,325	2,666	6,991
Retirement & Turnover	9,943	25	9,968
Miscellaneous	<u>718</u>	<u>6,371</u>	<u>7,089</u>
Total Actuarial Gains	\$ 35,676	\$153,297	\$188,973
 <u>Actuarial Losses</u>			
Mortality and Disability	\$ 1,950	\$ 5,642	\$ 7,592
New Entrants	<u>1,929</u>	<u>7,663</u>	<u>9,592</u>
Total Actuarial Losses	\$ 3,879	\$ 13,305	\$ 17,184
 <b>Net Actuarial Gain(Loss) for FY90</b>	 <b>\$ 31,797</b>	 <b>\$139,992</b>	 <b>\$171,789</b>

## **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, 1990. Chapter 82, 1986 Session Laws of Alaska, created a two-tier retirement system. New members who are first hired under the PERS after June 30, 1986 are entitled to different benefits than those members who were hired before July 1, 1986.

### **(2) Administration of Plan**

The Commissioner of Administration is responsible for administration of the system; the Public Employees' Retirement Board prescribes policies and adopts regulations to carry out provisions of the system; and the Commissioner of Revenue invests the funds. The Attorney General represents the system in legal proceedings.

### **(3) Employers Included**

State of Alaska, political subdivisions, and public organizations who have elected to join the system.

### **(4) Employees Included**

Membership in the Alaska PERS is compulsory for all full-time and part-time employees of the State and participating political subdivisions, including elected officials who have chosen to participate.

University of Alaska employees who elect to participate in the University's optional retirement plan and employees who are participating in other retirement plans that are funded by the State are not covered by the PERS. However, certain members of the Alaska Teachers' Retirement System (TRS) are eligible for PERS retirement benefits for their elected public official service with municipalities. Additionally, employees who work half-time in the PERS and the TRS simultaneously are eligible for half-time PERS and TRS credit.

PERS members who receive PERS occupational disability benefits are also covered under the PERS and earn service credit while they are on disability.

**(5) Credited Service**

Members receive credit for each day of PERS-covered employment.

Permanent part-time employees who work at least 15 hours per week, but less than 30 hours, receive service credit on a proportionate basis.

PERS members may claim PERS credit for the following service:

- 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;
- half-time service that was rendered to PERS employers by employees who were also working in half-time positions covered by the Teachers' Retirement System; and
- leave without pay service after June 13, 1987, while the members were 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 service rendered by employees of participating political subdivisions that occurred before the employers joined the PERS may be creditable if the employers agree to the pay required contributions.

**(6) Computation of Average Monthly Compensation**

A member's average monthly compensation is determined by averaging the highest salaries that the member received for any three consecutive payroll years. A member must have a minimum of 115 days of credited service in the last year worked to include it as one of the three highest.

**(7) Employer Contributions**

Separate contribution rates are established for each employer equal to the sum of:

(a) Consolidated Rate

A uniform rate for all participating employers sufficient to amortize all future service liabilities (less value of employee contributions) over the future working lifetimes of the covered group.

(b) Past Service Rate

A rate determined separately for each employer sufficient to amortize such employer's unfunded past service liability with level payments over 25 years. Any funding surplus is amortized over five years.

**(8) Employee Contributions**

Mandatory Employee Contributions: 7.5% of compensation for police and fire members; 6.75% of compensation for all other members. Employee contributions are deducted from the gross salary before federal income tax is withheld.

Note: Prior to January 1, 1987, rates were 5% for police and fire and 4.25% for all other members. Employee contributions were deducted from the gross salary after federal income tax was withheld.

Interest Credited: 4.5% compounded semiannually on June 30 and December 31.

Refund of Contributions:

- If a nonvested member terminates PERS employment and has less than \$1,000 in his or her contribution account, the balance of the account (mandatory and voluntary contributions, indebtedness payments and interest earned) will be refunded to the member unless the member elects in writing not to receive a refund.

- Vested members and members who have more than \$1,000 in their accounts may withdraw their contributions by requesting refunds.

Note: The contribution accounts of terminated members may be attached to satisfy claims made under Alaska Statute 09.38.065, federal income tax levies and valid Qualified Domestic Relations Orders.

Reinstatement of Contributions: If mandatory contributions are refunded or withdrawn, the member must return to PERS employment in order to reinstate the refunded service. Upon reemployment, an indebtedness may be established for the amount of the refund. Contributions that are attached to satisfy claims under Alaska Statute 09.38.065 or a federal tax levy may be reinstated at any time; the member is not required to return to PERS employment. The indebtedness will accrue interest until it is paid in full or the member retires, whichever occurs first.

Refund at Death: If no survivor's pension is payable upon the member's death, the member's contribution account balance, including mandatory and voluntary contributions, indebtedness payments, and interest earned, will be paid to the designated beneficiary. When the member has more than one year of PERS credit, the beneficiary will also receive an additional \$1,000 plus \$100 for each year of PERS credit.

#### **(9) Normal Retirement Benefit**

##### **Eligibility:**

- (a) Upon attaining age 60 (age 55 for members who participated before July 1, 1986) and meeting one of the following service requirements):
  - (i) Five years of paid-up PERS service; or
  - (ii) 60 days of paid-up PERS service if the member was an employee of the legislature during each of five legislative sessions and was first hired under the PERS before May 30, 1987; or
  - (iii) 80 days of paid-up PERS service if the member was an employee of the legislature during each of five legislative sessions and was first hired under the PERS after May 29, 1987; or
  - (iv) two years of paid-up PERS service if the member is vested in the Teachers' Retirement System; or
  
- (b) At any age after meeting one of the following service requirements:
  - (i) 20 years of paid-up PERS service as a peace officer or fire fighter; or
  - (ii) 30 years of paid-up PERS service for "all other" members.

Type:

Life only, level income, or optional joint and survivor benefit (actuarially reduced).

Amount:

Others

2% of average monthly compensation for the first ten years of service, 2.25% for the next ten years, and 2.5% for all remaining years. Service before July 1, 1986 is credited at 2%.

Police & Fire

2% of average monthly compensation for the first ten years of service plus 2.5% for years of service in excess of ten.

Minimum Benefit - \$25.00 per month for each year of credited service.

**(10) Early Retirement Benefit**

Eligibility:

Upon attaining age 55 (age 50 for members who participated before July 1, 1986) and meeting one of the following service requirements:

- (i) Five years of paid-up PERS service; or
- (ii) 60 days of paid-up PERS service if the member was an employee of the legislature during each of five legislative sessions and was first hired under the PERS before May 30, 1987; or
- (iii) 80 days of paid-up PERS service if the member was an employee of the legislature during each of five legislative sessions and was first hired under the PERS after May 29, 1987; or
- (iv) two years of paid-up PERS service if the member is vested in the Teachers' Retirement System.

Type:

Life only, level income, or optional joint and survivor benefit (actuarially reduced).

Amount:

Actuarial equivalent of normal retirement benefit (see 9 above) based on service and compensation to early retirement date.

**(11) Deferred Benefit**

Eligibility:

Refer to (9) *Normal Retirement Benefit* and (10) *Early Retirement Benefit*, above. Withdrawal of employee contributions voids rights to benefits.

Type:

Life only, level income, or joint and survivor benefit (actuarially reduced).

Amount:

Refer to (9) *Normal Retirement Benefit* and (10) *Early Retirement Benefit*, above.

**(12) Indebtedness Owing At Retirement**

If on the date of appointment to retirement, a member has not paid the full indebtedness amount including interest to the retirement fund, the member's retirement benefit will be reduced for life by an amount equal to the actuarial equivalent of the outstanding indebtedness at the time of retirement.

**(13) Re-employment of a Retired Member**

If a retired member is reemployed in a position covered under the system, the retirement benefit will be suspended during the period of reemployment. During such period of reemployment, retirement contributions are mandatory.

A member who returns to PERS employment after retiring under the Retirement Incentive Program (RIP) will:

- (a) forfeit the three years of incentive credits that were granted; and
- (b) be indebted to the system in an amount equal to 110% of the benefits that were paid because of the member's participation in the RIP, including health insurance costs. The indebtedness is reduced by the amount that the member paid to participate.

**(14) Disability Benefit**

Occupational Disability:

Eligibility:

No age or service requirements.

Type:

Monthly benefit payable until death, recovery, or normal retirement.

Amount:

40% of gross monthly compensation (66-2/3% for police/fire members who participated before July 1, 1976, offset by any workers compensation) at date of disability. When the disabled member becomes eligible for normal retirement, the occupational disability benefit will terminate and the member will be appointed to normal retirement. The normal retirement benefit will be computed as if the member had been employed and had earned PERS credit during the period of occupational disability.

Non-Occupational Disability:

Eligibility:

Five or more years of credited service.

Type:

Monthly benefit payable until death, recovery, or normal retirement.

Amount:

Refer to (9) *Normal Retirement Benefits* on page 21. When the disabled member becomes eligible for normal retirement, the nonoccupational disability benefit will terminate. The period of time on nonoccupational disability is not included in the normal retirement benefit calculation.

**(15) Death Benefit Before Retirement**

Occupational Death:

No age or service requirements.

**Benefit:**

40% (66-2/3% for police/fire members who participated before July 1, 1976) of gross monthly compensation at date of death or disability, if earlier, may be paid to the spouse or if there is no spouse, to the member's dependent children. On the member's normal retirement date, the benefit converts to a normal retirement benefit based on the member's salary on the date of disability or death and credited service, including the period from the date of disability or death to the normal retirement date.

**Non-Occupational Death:**

With less than one year of credited service, the member's contribution account balance, including mandatory and voluntary contributions, indebtedness payments, and interest earned, will be paid to the designated beneficiary. With more than one, but less than five years of credited service, the beneficiary will also receive \$1,000 plus \$100 for each year of PERS service.

When the member is vested, the surviving spouse may elect to receive the benefits described above or a 50% joint and survivor option based on the member's average monthly compensation and credited service at the time of death.

**(16) Death Benefits After Retirement**

If a member had received retirement benefits prior to his or her death, the designated beneficiary will receive the member's contribution account balance, minus any benefits already paid. However, if the member elected one of the joint and survivor options (50%, 66-2/3% or 75%) at retirement, an eligible spouse would receive a continuing monthly benefit for the rest of his or her life.

**(17) Post-Retirement Pension Adjustment**

A post-retirement pension adjustment will be issued to an eligible benefit recipient each year if the consumer price index (CPI) increases during the prior calendar year. The adjustment to the benefit, excluding the cost-of-living allowance, will be:

- (a) 75% of the CPI increase (not to exceed 9%) for recipients who are at least age 65 or on PERS disability; or
- (b) 50% of the CPI increase (not to exceed 6%) for recipients who are at least age 60 but under 65, and for recipients who have been receiving benefits for at least five years who are under age 60.

(Ad hoc PRPA's of up to 4% may be issued to retirees who were first hired before July 1, 1986 if the CPI has increased and the financial condition of the fund will permit an increase).

**(18) Cost-of-Living Allowance**

Starting at age 65, a retired member who remains in Alaska is eligible for a cost-of-living allowance (COLA) equal to 10% of the base retirement benefit or \$50 per month, whichever is greater. Members who were first hired before July 1, 1986 or who are receiving disability benefits are eligible for COLA, regardless of age.

**(19) Voluntary Contributions**

An employee can voluntarily contribute up to 5% of his or her salary. Voluntary contributions are recorded in a separate account and are payable to the:

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

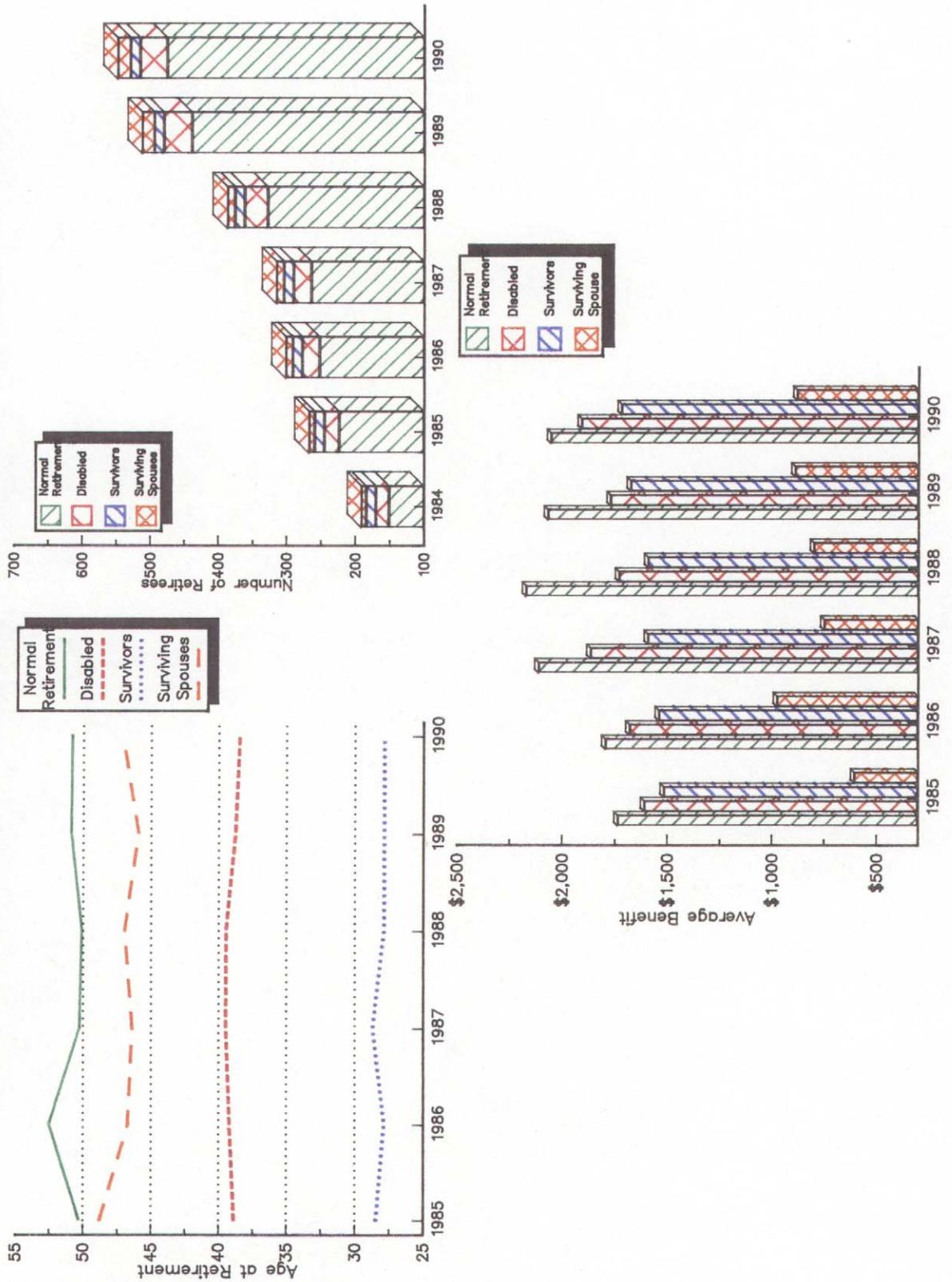
## 2.2(a) Participant Census Information - Total PERS as of June 30

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
<b>Active Members</b>					
(1) Number	27,643	26,762	26,676	28,044	29,086
(2) Average Age	39.21	39.53	39.67	40.17	40.37
(3) Average Credited Service	5.96	6.32	6.45	6.66	6.82
(4) Average Annual Salary	\$ 32,200	\$ 33,305	\$ 34,052	\$ 32,550	\$ 32,733
<b>Retirees and Beneficiaries</b>					
(1) Number	4,657	5,651	6,702	6,967	7,365
(2) Average Age	64.05	60.39	62.82	63.28	63.62
(3) Average Monthly Benefit:					
Base	\$ 674	\$ 753	\$ 791	\$ 795	\$ 797
C.O.L.A.	55	62	64	64	61
P.R.P.A.	110	110	90	98	110
TOTAL	839	925	945	957	968
<b>Vested Terminations</b>					
(1) Number	1,766	1,921	1,898	2,314	2,745
(2) Average Age	45.50	45.33	42.77	42.97	42.96
(3) Average Monthly Benefit	\$ 419	\$ 425	\$ 504	\$ 519	\$ 536
<b>Non-Vested Terminations With Account Balances</b>					
(1) Number	8,155	3,965	3,101	3,365	3,695
(2) Average Account Balance	\$ 544	\$ 1,114	\$ 2,100	\$ 1,891	\$ 2,045

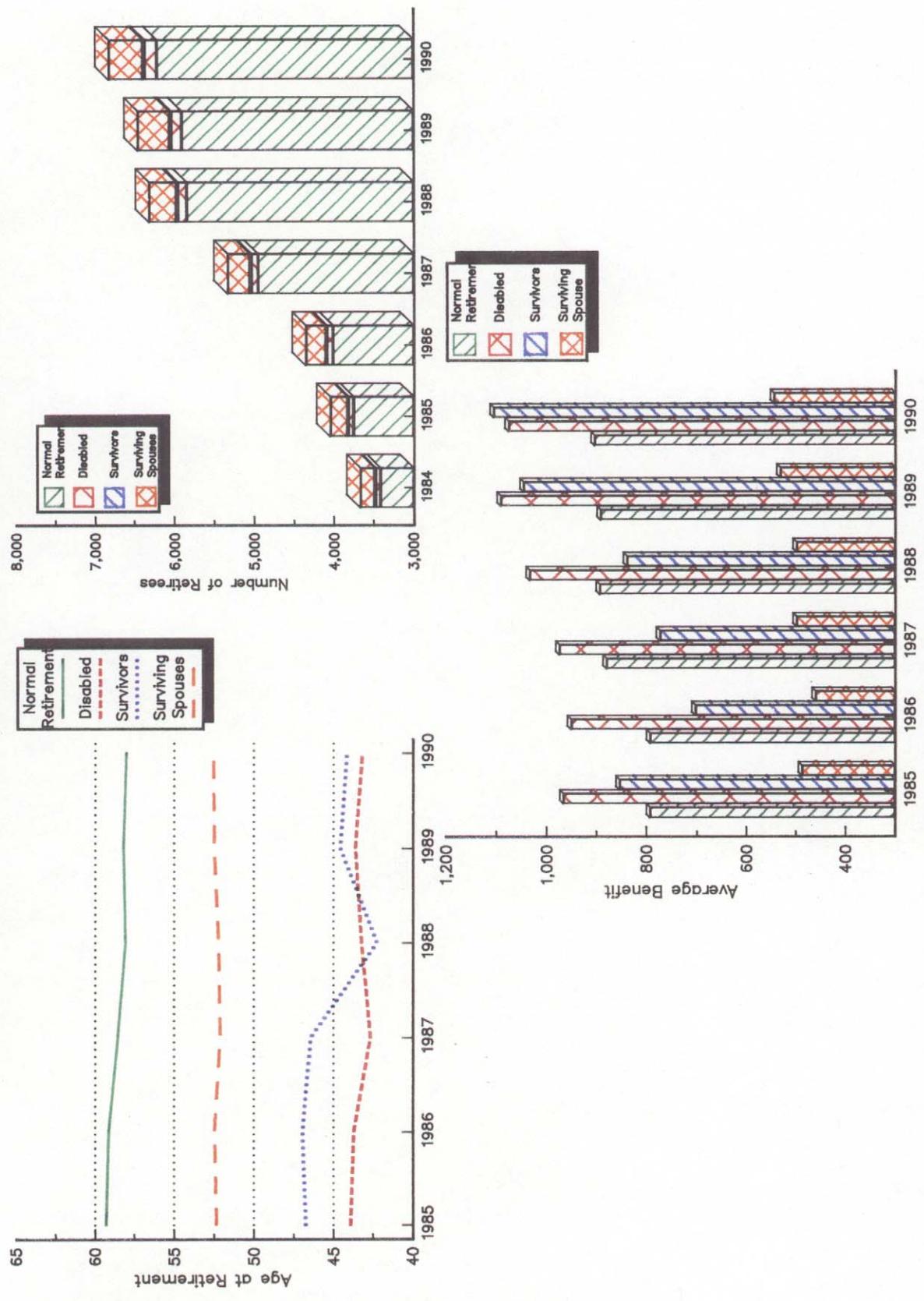
## 2.2(b) Additional Information - Active Members by Type of Status as of June 30

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
<b>Active Police &amp; Fire</b>					
(1) Number	2,371	2,319	2,327	2,414	2,419
(2) Average Age	37.54	37.86	38.35	39.31	39.70
(3) Average Credited Service	7.88	8.05	8.16	8.60	9.05
(4) Average Annual Salary	\$ 42,825	\$ 43,484	\$ 43,947	\$ 43,082	\$ 43,462
(5) Number Vested	1,359	1,433	1,505	1,598	1,683
(6) Percent Who Are Vested	57.3%	61.8%	64.7%	66.2%	69.6%
<b>Active "Other" Members</b>					
(1) Number	25,272	24,443	24,349	25,630	26,667
(2) Average Age	39.37	39.69	39.80	40.25	40.43
(3) Average Credited Service	5.78	6.16	6.29	6.48	6.62
(4) Average Annual Salary	\$ 31,203	\$ 32,339	\$ 33,106	\$ 31,558	\$ 31,760
(5) Number Vested	10,964	11,664	12,191	13,345	14,109
(6) Percent Who Are Vested	43.4%	47.7%	50.1%	52.1%	52.9%

# State of Alaska - PERS Police/Fire Retirees



# State of Alaska - PERS "Other" Retirees



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

### Active Participants

----- Annual Earnings By Age -----				----- Annual Earnings By Service -----			
Age Groups	Number of People	Total Annual Earnings	Average Annual Earnings	Years of Service	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	\$ 0	\$ 0	0	164	\$ 3,034,386	\$ 18,502
20-24	42	924,710	22,017	1	206	7,040,260	34,176
25-29	181	6,237,909	34,464	2	204	7,047,597	34,547
30-34	429	17,436,894	40,645	3	114	4,239,346	37,187
35-39	607	27,039,672	44,546	4	132	5,184,165	39,274
40-44	595	27,777,912	46,686	0- 4	820	26,545,754	32,373
45-49	374	17,356,238	46,407	5- 9	694	30,238,202	43,571
50-54	144	6,388,663	44,366	10-14	490	24,755,466	50,521
55-59	39	1,669,210	42,800	15-19	304	17,158,638	56,443
60-64	7	261,517	37,360	20-24	105	6,065,591	57,768
65-69	1	42,170	42,170	25-29	6	371,244	61,874
70-74	0	0	0	30-34	0	0	0
75-79	0	0	0	35-39	0	0	0
80+	0	0	0	40+	0	0	0
<b>Total</b>	<b>2,419</b>	<b>\$ 105,134,895</b>	<b>\$ 43,462</b>	<b>Total</b>	<b>2,419</b>	<b>\$ 105,134,895</b>	<b>\$ 43,462</b>

### Years of Service By Age

Age	----- Years of Service -----									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	41	1	0	0	0	0	0	0	0	42
25-29	139	40	2	0	0	0	0	0	0	181
30-34	175	190	59	5	0	0	0	0	0	429
35-39	149	222	168	65	3	0	0	0	0	607
40-44	167	114	141	130	43	0	0	0	0	595
45-49	98	83	74	73	45	1	0	0	0	374
50-54	37	37	35	21	11	3	0	0	0	144
55-59	12	5	9	8	3	2	0	0	0	39
60-64	2	2	1	2	0	0	0	0	0	7
65-69	0	0	1	0	0	0	0	0	0	1
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
<b>Total</b>	<b>820</b>	<b>694</b>	<b>490</b>	<b>304</b>	<b>105</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,419</b>

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

### Active Participants

----- Annual Earnings By Age -----				----- Annual Earnings By 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	113	\$ 1,268,126	\$ 11,222	0	3,854	\$ 60,244,082	\$ 15,632
20-24	961	17,335,689	18,039	1	2,952	75,257,766	25,494
25-29	2,536	60,945,672	24,032	2	2,362	65,856,933	27,882
30-34	4,238	122,499,602	28,905	3	1,623	48,384,314	29,812
35-39	5,600	183,261,572	32,725	4	1,766	55,890,438	31,648
40-44	5,239	181,356,214	34,617	0- 4	12,557	305,633,533	24,340
45-49	3,751	132,808,962	35,406	5- 9	7,597	265,399,342	34,935
50-54	2,283	82,124,408	35,972	10-14	4,135	165,534,426	40,033
55-59	1,237	42,392,188	34,270	15-19	1,660	74,270,917	44,742
60-64	559	18,258,875	32,664	20-24	555	27,449,406	49,458
65-69	121	3,893,612	32,179	25-29	137	7,244,352	52,878
70-74	22	650,739	29,579	30-34	23	1,271,283	55,273
75-79	6	133,144	22,191	35-39	1	80,730	80,730
80+	1	6,000	6,000	40+	2	50,814	25,407
Total	26,667	\$ 846,934,803	\$ 31,760	Total	26,667	\$ 846,934,803	\$ 31,760

### Years of Service By Age

Age	----- Years of Service -----									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	113	0	0	0	0	0	0	0	0	113
20-24	938	23	0	0	0	0	0	0	0	961
25-29	2,011	500	25	0	0	0	0	0	0	2,536
30-34	2,456	1,338	420	24	0	0	0	0	0	4,238
35-39	2,431	1,900	1,009	253	7	0	0	0	0	5,600
40-44	1,959	1,622	1,009	511	133	4	0	0	1	5,239
45-49	1,240	1,064	772	410	218	46	1	0	0	3,751
50-54	720	606	505	256	120	65	11	0	0	2,283
55-59	422	347	258	133	52	17	8	0	0	1,237
60-64	203	159	110	61	20	4	2	0	0	559
65-69	53	33	21	9	3	1	0	1	0	121
70-74	7	4	5	2	2	0	1	0	1	22
75-79	4	0	1	1	0	0	0	0	0	6
80+	0	1	0	0	0	0	0	0	0	1
Total	12,557	7,597	4,135	1,660	555	137	23	1	2	26,667

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

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
<b>Service</b>					
(1) Number	25	91	64	9	36
(2) Average Age at Retirement	52.11	47.93	49.39	52.55	51.19
(3) Average Monthly Benefit	\$ 2,440	\$ 2,423	\$ 2,467	\$ 1,536	\$ 1,551
<b>Disability</b>					
(1) Number	6	4	7	8	1
(2) Average Age at Retirement	41.09	42.01	40.30	39.71	38.05
(3) Average Monthly Benefit	\$ 1,817	\$ 1,543	\$ 1,147	\$ 1,662	\$ 1,171
<b>Survivor</b>					
(1) Number	1	1	1	1	1
(2) Average Age at Retirement	30.06	49.17	50.91	52.30	52.62
(3) Average Monthly Benefit	\$ 340	\$ 231	\$ 181	\$ 611	\$ 312
<b>Total</b>					
(1) Number	32	96	72	18	38
(2) Average Age at Retirement	48.95	47.70	48.53	46.83	50.88
(3) Average Monthly Benefit	\$ 2,258	\$ 2,364	\$ 2,307	\$ 1,541	\$ 1,508

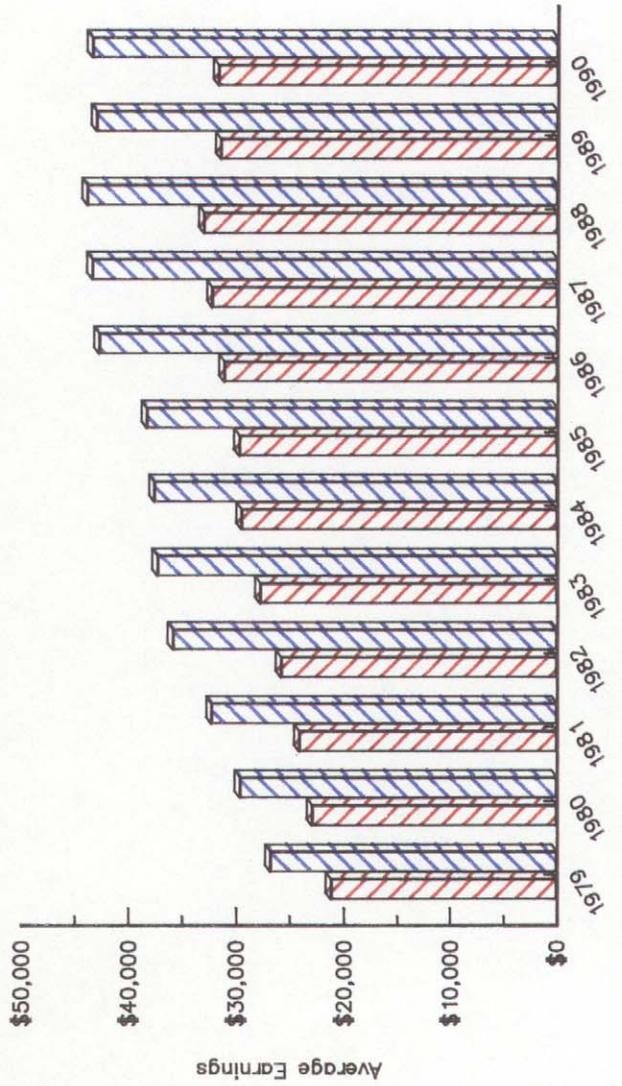
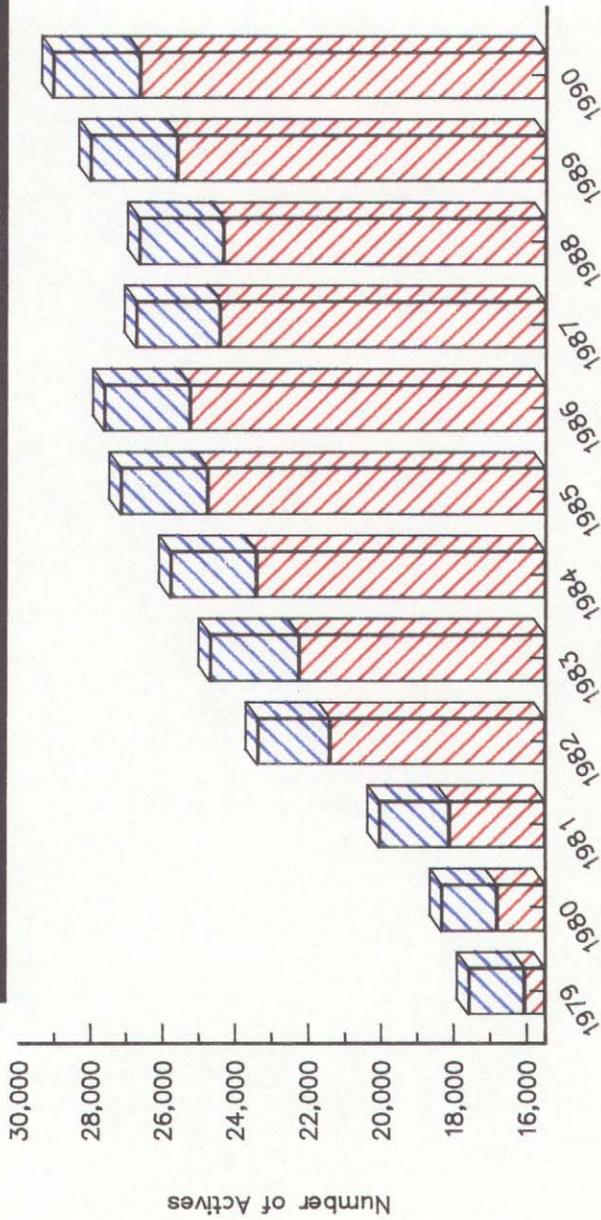
**2.2(f) Statistics on New Retirees  
"Other" Members During the Year Ending June 30**

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
<b>Service</b>					
(1) Number	392	924	972	309	420
(2) Average Age at Retirement	58.31	57.08	56.53	57.44	56.40
(3) Average Monthly Benefit	\$ 877	\$ 1,094	\$ 982	\$ 746	\$ 853
<b>Disability</b>					
(1) Number	10	14	22	25	22
(2) Average Age at Retirement	46.66	45.66	46.53	46.61	45.85
(3) Average Monthly Benefit	\$ 941	\$ 945	\$ 1,073	\$ 1,061	\$ 955
<b>Survivor</b>					
(1) Number	14	11	20	18	15
(2) Average Age at Retirement	52.88	48.89	46.02	45.38	53.05
(3) Average Monthly Benefit	\$ 481	\$ 545	\$ 515	\$ 725	\$ 748
<b>Total</b>					
(1) Number	416	949	1,014	352	457
(2) Average Age at Retirement	57.85	56.82	56.11	56.05	55.78
(3) Average Monthly Benefit	\$ 865	\$ 1,085	\$ 975	\$ 767	\$ 855

## 2.2(g) Statistics on All Retirees as of June 30, 1990

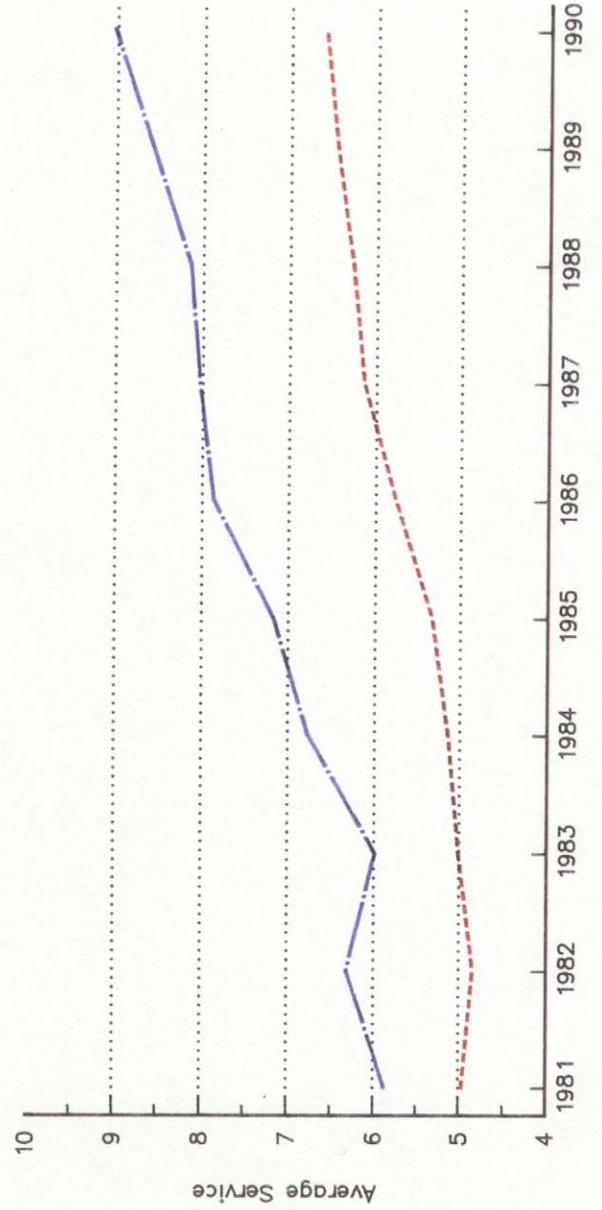
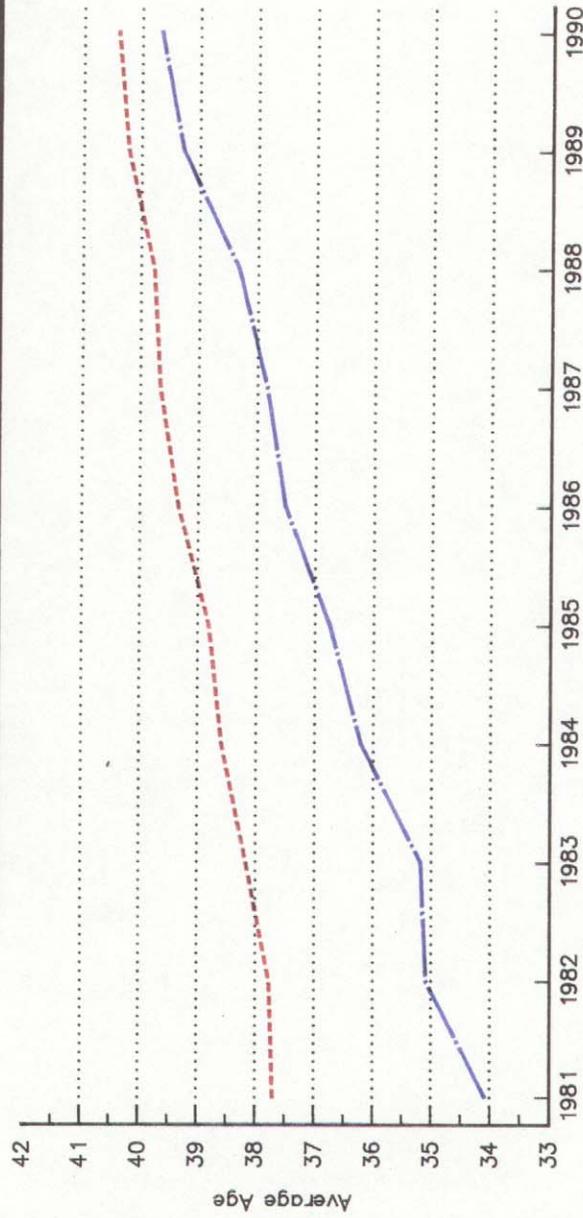
	<u>Police &amp; Fire</u>	<u>"Other"</u>
<b>Service Retirement</b>		
(1) Number, June 30, 1989	439	5,906
(2) Net Change During FY90	35	305
(3) Number, June 30, 1990	474	6,211
(4) Average Age At Retirement	50.90	58.09
(5) Average Age Now	57.04	64.90
(6) Average Monthly Benefit	\$ 2,053.41	\$ 904.55
<b>Surviving Spouse's Benefits</b>		
(1) Number, June 30, 1989	18	395
(2) Net Change During FY90	1	38
(3) Number, June 30, 1990	19	433
(4) Average Age At Retirement	47.19	52.64
(5) Average Age Now	55.22	61.35
(6) Average Monthly Benefit	\$ 881.58	\$ 545.34
<b>Survivor's Benefits</b>		
(1) Number, June 30, 1989	14	23
(2) Net Change During FY90	0	0
(3) Number, June 30, 1990	14	23
(4) Average Age At Retirement	27.93	44.21
(5) Average Age Now	40.62	56.34
(6) Average Monthly Benefit	\$ 1,721.51	\$ 1,105.26
<b>Disabilities</b>		
(1) Number, June 30, 1989	41	131
(2) Net Change During FY90	(1)	20
(3) Number, June 30, 1990	40	151
(4) Average Age At Retirement	38.54	43.24
(5) Average Age Now	43.79	47.46
(6) Average Monthly Benefit	\$ 1,911.37	\$ 1,075.03
<b>Total Number of Retirees</b>	<b>547</b>	<b>6,818</b>

# State of Alaska - PERS Actives



Other Police/Fire

# State of Alaska - PERS Actives



Other Police/Fire (Dashed Red)

Police/Fire (Solid Blue)

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

----- Annual Benefit By Age -----				----- Annual Benefit By Service -----			
Age Groups	Number of People	Total Annual Benefit	Average Annual Benefit	Years of Service	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	1	\$ 7,927	\$ 7,927	0	3	\$ 42,408	\$14,136
20-24	1	7,327	7,327	1	2	29,172	14,586
25-29	0	0	0	2	2	24,929	12,464
30-34	5	87,746	17,549	3	4	66,115	16,529
35-39	11	212,311	19,301	4	1	4,207	4,207
40-44	43	1,206,580	28,060	0- 4	12	166,830	13,903
45-49	81	2,311,326	28,535	5- 9	24	311,190	12,966
50-54	126	3,293,509	26,139	10-14	38	504,330	13,272
55-59	106	2,576,198	24,304	15-19	78	1,328,178	17,028
60-64	101	2,147,000	21,257	20-24	126	3,037,109	24,104
65-69	44	833,521	18,944	25-29	142	3,998,577	28,159
70-74	20	317,941	15,897	30-34	83	2,526,030	30,434
75-79	6	58,778	9,796	35-39	32	934,239	29,195
80+	2	27,282	27,282	40+	12	280,963	23,414
Total	547	\$13,087,446	\$23,926	Total	547	\$13,087,446	\$23,926

### Years of Service By Age

Age	----- Years of Service -----									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	0	0	1	0	0	0	0	0	1
20-24	0	0	0	1	0	0	0	0	0	1
25-29	0	0	0	0	0	0	0	0	0	0
30-34	1	1	3	0	0	0	0	0	0	5
35-39	1	2	3	5	0	0	0	0	0	11
40-44	4	2	3	11	17	4	1	0	1	43
45-49	3	3	3	8	35	25	2	1	1	81
50-54	1	8	6	22	22	43	21	2	1	126
55-59	1	3	9	14	25	21	26	7	0	106
60-64	1	4	8	10	19	24	20	13	2	101
65-69	0	0	3	3	6	15	7	6	4	44
70-74	0	1	0	1	2	7	6	2	1	20
75-79	0	0	0	2	0	3	0	0	1	6
80+	0	0	0	0	0	0	0	1	1	2
Total	12	24	38	78	126	142	83	32	12	547

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

----- Annual Benefit By Age -----				----- Annual Benefit By Service -----			
Age Groups	Number of People	Total Annual Benefit	Average Annual Benefit	Years of Service	Number of People	Total Annual Benefit	Average Annual Benefit
0-19	0	\$ 0	\$ 0	0	456	\$ 4,678,224	\$10,259
20-24	2	20,097	10,048	1	334	3,109,953	9,311
25-29	2	17,128	8,564	2	978	11,575,998	11,836
30-34	10	124,623	12,462	3	964	12,623,387	13,095
35-39	24	180,444	7,518	4	434	4,598,118	10,595
40-44	52	539,137	10,368	0- 4	3,166	36,585,688	11,556
45-49	132	1,335,293	10,116	5- 9	1,856	19,625,850	10,574
50-54	710	7,001,699	9,862	10-14	1,385	12,909,240	9,321
55-59	1,306	16,159,778	12,373	15-19	371	3,013,269	8,122
60-64	1,467	17,289,338	11,786	20-24	34	296,327	8,716
65-69	1,423	14,200,544	9,979	25-29	6	73,782	12,297
70-74	899	8,848,837	9,843	30-34	0	0	0
75-79	487	4,443,949	9,125	35-39	0	0	0
80+	304	2,344,289	7,708	40+	0	0	0
<b>Total</b>	<b>6,818</b>	<b>\$72,504,156</b>	<b>\$10,634</b>	<b>Total</b>	<b>6,818</b>	<b>\$72,504,156</b>	<b>\$10,634</b>

### Years of Service By Age

Age	----- Years of Service -----									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	1	1	0	0	0	0	0	2
25-29	1	0	1	0	0	0	0	0	0	2
30-34	5	4	1	0	0	0	0	0	0	10
35-39	9	5	10	0	0	0	0	0	0	24
40-44	12	13	11	12	4	0	0	0	0	52
45-49	19	32	38	23	9	7	3	1	0	132
50-54	37	169	204	148	68	50	29	4	1	710
55-59	41	216	357	294	199	119	56	23	1	1,306
60-64	30	179	355	347	281	162	78	23	12	1,467
65-69	16	139	279	337	313	180	93	41	25	1,423
70-74	1	52	114	182	206	173	86	50	35	899
75-79	1	17	33	98	110	108	62	34	24	487
80+	1	8	15	35	65	91	38	31	20	304
<b>Total</b>	<b>173</b>	<b>834</b>	<b>1,419</b>	<b>1,477</b>	<b>1,255</b>	<b>890</b>	<b>445</b>	<b>207</b>	<b>118</b>	<b>6,818</b>

## 2.3 Actuarial Basis

### Valuation of Liabilities

- A. **Actuarial Method - Projected Unit Credit.** Liabilities and contributions shown in the report are computed using the Projected Unit Credit method of funding. The unfunded accrued liability is amortized over 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. Interest              | 9% per year, compounded annually, net of expenses.                                 |
| 2. Salary Scale          | 6.5% per year for the first five years of employment and 5.5% per year thereafter. |
| 3. Health Cost Inflation | 9% per year.                                                                       |

4. Mortality  
1984 Unisex Pension Mortality Table set back 1-1/2 years. Deaths are assumed to be occupational 85% of the time for Police/Fire, 35% for "Others".
5. Turnover  
Based upon the 1981-85 actual total turnover experience. (See Table 1).
6. Disability  
Incidence rates 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".
7. Retirement Age  
Retirement rates based on actual experience in accordance with Table 3.
8. Spouse's Age  
Wives are assumed to be four years younger than husbands.
9. Dependent Children  
Benefits to dependent children have been valued assuming members who are not single have one dependent child.
10. 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.
11. C.O.L.A.  
Of those benefit recipients who are eligible for the C.O.L.A., 69% are assumed to remain in Alaska and receive the C.O.L.A.
12. Expenses  
Expenses are covered in the interest assumption.

## **Valuation of Assets**

Based upon the five-year average ratio between actuarial and book values of the System's assets. The actuarial value of assets equals the market value, except that fixed income investments are carried at book value. Assets are accounted for on an accrued basis and are taken directly from audited financial statements provided by Coopers & Lybrand. Valuation assets cannot be outside the range of book and actuarial values.

## **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) were assumed such that the total rate for all retirees equals the present premium rate. 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 FY91 and FY92, the pre-65 monthly premium is \$318.94 and the post-65 premium is \$121.50, based on a total blended premium of \$243.98. These rates and the pre-65/post-65 split were provided by Deloitte & Touche.

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	.39	.28	.22	20-29	.03
2	.18	.19	.16	30-45	.02
3	.12	.14	.13	46+	.01
4	.11	.13	.12		
5	.07	.09	.11		
6	.06	.09	.08		
7	.05	.09	.08		
8	.05	.06	.08		
9	.04	.04	.04		
10	.04	.03	.03		

**Others:**

<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	.34	.26	.20	20-45	.065
2	.26	.21	.15	46+	.05
3	.21	.17	.13		
4	.18	.14	.10		
5	.16	.13	.09		
6	.15	.13	.09		
7	.12	.10	.09		
8	.12	.09	.09		
9	.12	.08	.08		
10	.09	.07	.06		

**Alaska PERS  
Disability Rates  
Annual Rates Per 1,000 Employees**

<u>Age</u>	<u>Police &amp; Fire Rate</u>	<u>"Other" Member Rate</u>
20	.88	.28
21	.89	.28
22	.90	.29
23	.91	.29
24	.93	.30
25	.94	.30
26	.95	.30
27	.98	.31
28	1.00	.32
29	1.03	.33
30	1.05	.34
31	1.08	.34
32	1.10	.35
33	1.13	.36
34	1.16	.37
35	1.20	.38
36	1.24	.40
37	1.29	.41
38	1.34	.43
39	1.39	.44
40	1.44	.46
41	1.50	.48
42	1.59	.51
43	1.70	.54
44	1.85	.59
45	2.03	.65
46	2.20	.70
47	2.39	.76
48	2.59	.83
49	2.79	.89
50	3.00	.96
51	3.25	1.04
52	3.58	1.14
53	3.98	1.27
54	4.44	1.42
55	5.00	1.60
56	5.74	1.84
57	6.68	2.14
58	7.63	2.44
59	9.00	2.88
60	10.54	3.37
61	12.19	3.90
62	14.13	4.52
63	16.31	5.22
64	18.63	5.96

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**Table 3**

**Alaska PERS  
Retirement Rates**

<u>Age</u>	<u>Police &amp; Fire Rate</u>	<u>"Other" Member Rate</u>
50	.17	.06
51	.11	.04
52	.11	.04
53	.12	.04
54	.12	.05
55	.30	.17
56	.21	.15
57	.21	.12
58	.12	.13
59	.12	.16
60	.21	.26
61	.21	.25
62	.25	.43
63	.33	.63
64 & 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.