

STATE OF ALASKA
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 1989

REVISED

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

WILLIAM M.
MERCER
INCORPORATED

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HIGHLIGHTS

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

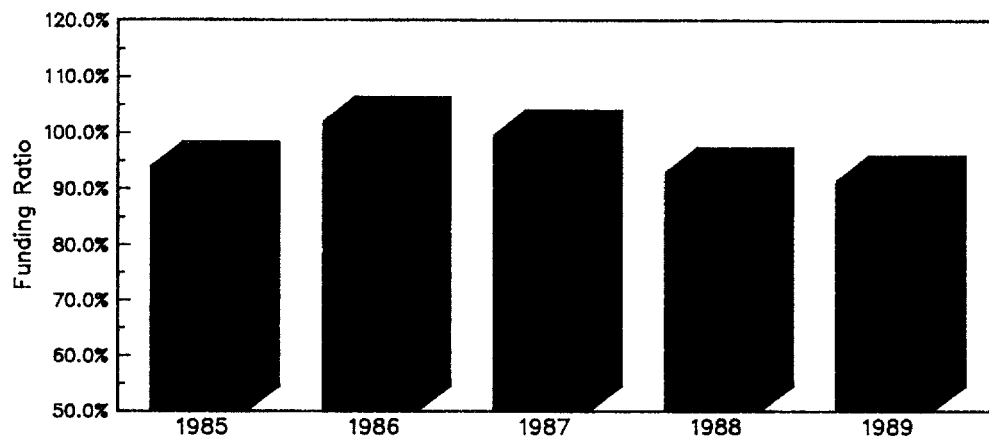
- (1) present the results of a valuation of the Alaska Public Employees' Retirement System as of June 30, 1989;
- (2) review experience under the plan for the year ended June 30, 1989;
- (3) determine the appropriate contribution rates for the State and for each political subdivision in the system;
- (4) provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into two sections. Section 1 contains the results of the valuation. It includes the experience of the plan during the 1988-89 plan 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.

The principle results are as follows:

	<u>1988</u>	<u>1989</u>
Funding Status as of June 30:		
(a) Valuation Assets*	\$2,088,428	\$2,348,423
(b) Accrued Liability*	2,246,583	2,563,268
(c) Funding Ratio, (a) / (b)	93.0%	91.6%



* In thousands.

**Employer Contribution Rates
for Fiscal Year:**

	<u>1991</u>	<u>1992</u>
(a) Consolidated Rate	10.37%	12.00%
(b) Average Past Service Rate	1.63%	2.20%
(c) Average Total Contribution Rate	12.00%	14.20%

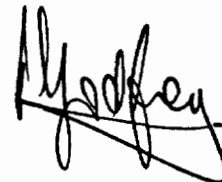
In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us by the plan sponsor and financial information provided by Coopers & Lybrand, to determine a sound value for the plan liabilities. We believe that this value 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,



Brian R. McGee, FSA
Principal

BRM/PLG/BLD/js



Peter L. Godfrey, FIA, ASA, EA
Consulting Actuary

April 26, 1990

ANALYSIS OF THE VALUATION

As can be seen from the Highlights section of this report, the funding ratio as of June 30, 1989 has decreased from 93.0% last year to 91.6%, a 1.4% reduction. The average employer contribution rate has increased from 12.00% of payroll to 14.20%, an increase of 2.20%. 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, 1989, the System sustained an actuarial loss of \$51,421,000 due to the continuing large increases in retiree medical premiums.

For many years, we have commented on the substantial increases in retiree medical insurance premiums. The following table summarizes the monthly premium, per benefit recipient, since retiree medical became a benefit of the 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%

As you can see from the above table, the monthly retiree medical premium increased to \$252.83 during the year from \$211.22, an increase of 20%. The premium for the 1991 fiscal year decreased to \$243.98, making the average annual increase over the two-year period approximately 7.5%. However, we need to examine the pre- and post-65 rates to understand the full impact of the loss from retiree medical costs.

The State has seen a dramatic shift to post-65 rates. While the pre-65 premium rate increased 24%, the post-65 rate increased 65% over last year. This, combined with more retirees and higher average ages, caused an overall 30% increase in the liabilities associated with medical benefits.

The effect on the employer contribution rate of this increase in retiree medical premiums has been an increase of 2.29% of payroll.

2. Investment Performance

The System enjoyed significant actuarial gains from the investment performance of the Trust funds during the year. The rate of return based upon market values was 14.17% and the return based on valuation assets (a five-year smoothing of actuarial values) was 11.11%. As the assumed rate of return was 9%, the resulting actuarial gain was \$38,186,000 which had the effect of reducing the average employer contribution rate by 0.39% of payroll.

3. Salary Increases

Once again, salary increases during the year were less than anticipated in the valuation assumptions. Salary experience resulted in an actuarial gain of \$2,084,000 which generated a reduction in the average employer contribution rate of .02% of payroll.

4. Employee Data

Section 2.2 provides statistics on active and inactive participants. The number of active participants increased from 26,676 at June 30, 1988 to 28,044 at June 30, 1989. Furthermore, the average age of active participants increased from 39.67 to 40.17 and average credited service increased from 6.45 to 6.66.

The number of retirees and beneficiaries also increased from 6,702 to 6,967 and their average age increased from 62.82 to 63.28. There was a large increase in the number of vested terminated participants from 1,898 to 2,314. Their average age also increased from 42.77 to 42.97.

Legislation passed in June, 1989 established a second Retirement Incentive Program (R.I.P.) which will be available to participants after July 1, 1989. Thus, the R.I.P. had no new effect on the results of this valuation.

The overall effect of these participant data changes was an actuarial loss of \$21,109,000 resulting in an increase in the average employer contribution rate of 0.22% of payroll.

Asset Smoothing

In the past, the valuation of assets has been based on a three-year average ratio of book and actuarial values. This creates a smoothing of the investment gains and losses. Based on discussions with the Department of Revenue, the equity portion of the assets is growing, which further exposes the System to fluctuations in market returns. In response to this, we analyzed several asset smoothing techniques to determine the one most suitable to the System. Based on this analysis, we have extended the average ratio to five years. Due to a constraint that the valuation assets be within the range of book and actuarial

values, this change does not affect valuation assets this year. Over time, we expect this will reduce wide swings in the contribution rates due to market volatility.

Summary

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

(1) Last year's average employer contribution rate.	12.00%
(2) Increase due to retiree medical insurance.	2.29%
(3) Decrease due to investment performance	(0.39%)
(4) Decrease due to salary increases	(0.02%)
(5) Increase due to demographic experience	0.22%
(6) Impact of all other factors.	<u>0.10%</u>
(7) Average employer contribution rate this year	14.20%

In summary, the total actuarial loss during the year was \$22,676,000. Despite this overall loss, the System remains well funded at 91.6% 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, 1989.

Section 1.1(b) shows the transactions of the plan's fund during FY89.

Section 1.1(c) develops the valuation assets as of June 30, 1989.

Section 1.2(a) shows the actuarial present values for Police and Fire members as of June 30, 1989.

Section 1.2(b) shows the actuarial present values for "Other" members as of June 30, 1989.

Section 1.3(a) develops the average employer contribution rate for Police and Fire members - FY92.

Section 1.3(b) develops the average employer contribution rate for "Other" members - FY92.

Section 1.3(c) develops the average employer contribution rate for all members - FY92.

Section 1.4(a) calculates the actuarial gain or loss for FY89.

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

Section 1.1(a)
STATEMENT OF NET ASSETS AS OF JUNE 30, 1989 (in thousands)

	<u>Book Value</u>	<u>Actuarial Value*</u>
Cash	\$ 1,065	\$ 1,065
Short Term Interest Issues	20,100	20,100
United States Government Bonds	970,156	970,156
Corporate Bonds	254,649	254,649
Common Stock	615,859	665,998
Foreign Equities	142,255	148,654
Financial Futures	0	0
Real Estate Equities	133,649	148,353
Mortgages (Net of Reserves)	104,638	104,638
Accrued Receivables	<u>34,810</u>	<u>34,810</u>
Total Assets	\$2,277,181	\$2,348,423

* 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.

Section 1.1(b)
CHANGES IN NET ASSETS DURING FISCAL YEAR 1989 (in thousands)

Net Assets, June 30, 1988
(market value) **\$2,123,695**

Additions:

Employee Contributions	\$ 65,104	
Employer Contributions	78,932	
Interest Income and Realized Gain (Loss)	161,672	
Dividend Income	33,848	
Unrealized Gain (Loss) on Investments	<u>107,221</u>	446,777

Deductions:

Medical Benefits	\$ 18,065	
Retirement Benefits	82,389	
Refunds of Contributions	11,188	
Administrative Expenses	<u>5,868</u>	117,510

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

**Approximate Investment Return
Rate During the Year:**

Based on Market Values	14.17%
Based on Valuation Assets	11.11%

Section 1.1(c)
DEVELOPMENT OF VALUATION ASSETS AS OF JUNE 30, 1989 (in thousands)

	A	B	C
	<u>Actuarial</u>	<u>Book</u>	<u>Ratio</u>
	<u>Value</u>	<u>Value</u>	<u>(A/B)</u>
(1) June 30, 1989	\$2,348,423	\$2,277,181	1.0313
(2) June 30, 1988	2,088,428	1,999,221	1.0446
(3) June 30, 1987	1,961,836	1,774,732	1.1054
(4) June 30, 1986	1,650,342	1,532,579	1.0768
(5) June 30, 1985	1,282,734	1,248,146	1.0277
(6) Average Ratio			1.0572
(7) Book Value at June 30, 1989		\$2,277,181	
(8) Valuation Assets at June 30, 1989, (6) x (7) but not outside the range of book and actuarial values		\$2,348,423	

Section 1.2(a)
ACTUARIAL PRESENT VALUES AS OF JUNE 30, 1989
POLICE AND FIRE MEMBERS (in thousands)

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$12,815	\$147,944
Termination Benefits	873	8,058
Disability Benefits	269	6,058
Death Benefits	352	7,559
Return of Contributions	317	1,685
Medical Benefits	7,807	65,842
Indebtedness	0	(5,431)
Retiree Incentive Program Receivables	<u>0</u>	<u>(365)</u>
Subtotal	\$22,433	\$231,350
<u>Inactive Members</u>		
Not Vested		\$ 324
Vested Terminations - Retirement Benefits		3,461
- Medical Benefits		6,728
Retirees & Beneficiaries - Retirement Benefits		133,365
- Medical Benefits		<u>26,793</u>
Subtotal		\$170,671
<u>Totals</u>		\$402,021

Section 1.2(b)
ACTUARIAL PRESENT VALUES AS OF JUNE 30, 1989
"OTHER" MEMBERS (in thousands)

	<u>Normal Cost</u>	<u>Accrued Liability</u>
<u>Active Members</u>		
Retirement Benefits	\$ 46,372	\$ 477,588
Termination Benefits	10,875	87,811
Disability Benefits	915	10,563
Death Benefits	3,863	45,157
Return of Contributions	4,702	21,262
Medical Benefits	82,633	498,195
Indebtedness	0	(23,465)
Retiree Incentive Program Receivables	<u>0</u>	<u>(2,841)</u>
Subtotal	\$149,360	\$1,114,270
<u>Inactive Members</u>		
Not Vested		\$ 6,039
Vested Terminations - Retirement Benefits		63,614
- Medical Benefits		135,216
Retirees & Beneficiaries - Retirement Benefits		643,793
- Medical Benefits		<u>198,315</u>
Subtotal		\$1,046,977
<u>Totals</u>		\$2,161,247

Section 1.3(a)
DEVELOPMENT OF AVERAGE EMPLOYER CONTRIBUTION RATE - FY92
FOR POLICE AND FIRE MEMBERS (in thousands)

Consolidated Rate

(1) Total Normal Cost	\$ 22,433
(2) Total Salaries	104,000
(3) Normal Cost Rate for Police & Fire Member, (1) / (2)	21.57%
(4) Member Contribution Rate (Police & Fire)	7.50%
(5) Consolidated Employer Normal Cost Rate For Police & Fire Members, (3) - (4)	14.07%

Past Service Rate

(1) Accrued Liability	\$402,021
(2) Valuation Assets	368,325
(3) Total Unfunded Liability, (1) - (2)	33,696
(4) Amortization Factor (25 years)	10.706612
(5) Past Service Cost, (3) / (4)	\$ 3,147
(6) Total Salaries	104,000
(7) Past Service Rate, (5) / (6)	3.03%

<u>Total Employer Contribution Rate</u>	17.10%
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Section 1.3(b)
DEVELOPMENT OF AVERAGE EMPLOYER CONTRIBUTION RATE - FY92
FOR "OTHER" MEMBERS (in thousands)

Consolidated Rate

(1) Total Normal Cost	\$149,360
(2) Total Salaries	808,834
(3) Normal Cost Rate for "Other" Members, (1) / (2)	18.47%
(4) Member Contribution Rate ("Others")	6.75%
(5) Consolidated Employer Normal Cost Rate For Other Members, (3) - (4)	11.72%

Past Service Rate

(1) Accrued Liability	\$2,161,247
(2) Valuation Assets	1,980,098
(3) Total Unfunded Liability, (1) - (2)	181,149
(4) Amortization Factor (25 years)	10.706612
(5) Past Service Cost, (3) / (4)	\$ 16,919
(6) Total Salaries	\$ 808,834
(7) Past Service Rate, (5) / (6)	2.09%

<u>Total Employer Contribution Rate</u>	13.81%
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Section 1.3(c)
DEVELOPMENT OF AVERAGE EMPLOYER CONTRIBUTION RATE - FY92
ALL MEMBERS (in thousands)

Consolidated Rate

(1) Total Normal Cost	\$ 171,793
(2) Total Salaries	912,834
(3) Normal Cost Rate for All Members, (1) / (2)	18.82%
(4) Average Member Contribution Rate	6.82%
(5) Consolidated Employer Normal Cost Rate for All Members, (3) - (4)	12.00%

Past Service Rate

(1) Accrued Liability	\$2,563,268
(2) Valuation Assets	2,348,423
(3) Total Unfunded Liability, (1) - (2)	214,845
(4) 25-Year Amortization Factor	10.706612
(5) Past Service Cost, (3) / (4)	\$ 20,067
(6) Total Salaries	912,834
(7) Past Service Rate, (5) / (6)	2.20%

<u>Total Employer Contribution Rate</u>	14.20%
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Section 1.4(a)
DEVELOPMENT OF ACTUARIAL GAIN/(LOSS) FOR FY89 (in thousands)

(1) Unfunded Liability, June 30, 1988	\$158,155
(2) Normal Cost for FY89	156,237
(3) Interest on (1) and (2) at 9%	28,295
(4) Employee Contributions for FY89	65,104
(5) Employer Contributions for FY89	78,932
(6) Interest on (4) and (5) at 9% for one-half year	6,482
(7) Expected Unfunded Liability, June 30, 1989, (1) + (2) + (3) - (4) - (5) - (6)	192,169
(8) Actual Unfunded Liability, June 30, 1989	214,845
(9) Actuarial Gain/(Loss) for the Year, (7) - (8)	\$(22,676)

Section 1.4(b)
SOURCES OF ACTUARIAL GAIN/(LOSS) FOR FY89 (in thousands)

	<u>Police/Fire</u>	<u>Other</u>	<u>Total</u>
<u>Actuarial Gains</u>			
Investment	\$ 5,990	\$ 32,196	\$ 38,186
Mortality and Disability	4,820	26,556	31,376
Salary Increases	1,032	1,052	2,084
Miscellaneous	<u>4,370</u>	<u>7,839</u>	<u>12,209</u>
Total Actuarial Gains	\$16,212	\$67,643	\$ 83,855
<u>Actuarial Losses</u>			
Retiree Medical Insurance	\$17,195	\$34,226	\$ 51,421
New Entrants	2,342	13,868	16,210
Retirement and Turnover	6,003	30,272	36,275
Miscellaneous, including the RIP and PRPA's	<u>888</u>	<u>1,737</u>	<u>2,625</u>
Total Actuarial Losses	\$26,428	\$80,103	\$106,531
 Net Actuarial Gain/(Loss) for FY89	 \$(10,216)	 \$(12,460)	 \$ (22,676)

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 Sections 2.2 to 2.5.

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 2.6.

Section 2.1

SUMMARY OF THE ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

(1) Effective Date

January 1, 1961, with amendments through June 30, 1989. The Hammond vs. Hoffbeck Supreme Court decision, rendered in 1981, may have an effect on certain benefits for police/fire members hired before July 1, 1976. HB 252 may have a significant effect on certain benefits for members first hired prior to July 1, 1986.

(2) Administration of Plan

The Commissioner of Administration is responsible for administration of the System; the Public Employees' Retirement Board adopts rules and regulations to carry out provisions of the Act; and the Commissioner of Revenue invests the Fund. The Attorney General is the attorney for the System and represents it in legal proceedings.

(3) Employers Included

State of Alaska, and any political subdivision, and/or public organization who so elects 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 elected to be covered under the PERS.

University of Alaska employees who elect to participate in the University's retirement program and employees who are participating in other retirement plans which 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) Service Considered

Future:

The later of hire, January 1, 1961, or date of employer's participation in the System, to date of termination, death, or retirement.

Permanent part-time employees receive service credit on a pro-rata basis.

Past:

PERS members who meet the eligibility requirements may claim PERS credit for the following past 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 January 1, 1961;
- 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) Average Monthly Compensation

Total compensation during three consecutive payroll years of credited service which yield the highest average monthly compensation (total compensation during period divided by number of months included; a member must have a minimum of 115 days of credited service in the last of the three payroll years).

(7) Employer Contributions

Separate contribution rate 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% for police and fire members; 6.75% for all other members.

Note: Prior to January 1, 1987, rates were 5% for police and fire and 4.25% for all other members.

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.

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, the member may request that an indebtedness be established for the amount of the refund. Contributions that are attached to satisfy claims under Alaska Statute 09.38.065 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.

(9) Normal Retirement Benefit

Eligibility:

The first of the month following the earlier of: age 60 (age 55 for members who participated before July 1, 1986) with five or more years of fully-paid credited service; or 20 years of fully-paid credited service - Police & Fire, or 30 years of fully-paid credited service - Other.

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:

Age 55 (age 50 for members who participated before July 1, 1986) and five or more years of fully-paid credited service - all employees.

Type:

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

Amount:

Actuarial equivalent of Normal Retirement Benefit based on service and compensation to Early Retirement Date.

(11) Deferred Vested Benefit

Eligibility:

Five or more years of credited service, withdrawal of employee contributions voids vested rights.

Type:

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

Amount:

Monthly benefit begins on employee's Normal Retirement Date. Amount determined the same as Normal Retirement Benefit taking into account compensation and service prior to termination.

(12) Indebtedness Owing At Retirement

If on the date of appointment to retirement, a member has not paid the full amount of his indebtedness including interest to the Retirement Fund, the 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.

(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. The benefit terminates upon attaining Normal Retirement eligibility, with Normal Retirement Benefits commencing at that time. The period of time on occupational disability is time credited toward Normal Retirement Benefits.

Non-Occupational Disability:

Eligibility:

Five or more years of credited service.

Type:

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

Amount:

Same formula used for Normal Retirement Benefits. The benefit terminates upon attaining Normal Retirement eligibility, with Normal Retirement Benefits commencing at that time. The period of time on non-occupational disability is not credited toward Normal Retirement Benefits.

(15) Death Benefit Before Retirement

Occupational:

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. At the member's Normal Retirement Date, the benefit converts to a Normal Retirement benefit based on pay at date of disability or death and credited service, including period from date of disability or death to Normal Retirement Date.

Non-Occupational:

With less than one year of credited service, the death benefit is the participant's contributions with interest. With more than one but less than five years of credited service, the death benefit is a lump-sum of \$1,000 plus \$100 for each completed year of credited service and the participant's contributions with interest. Alternatively, a retirement benefit to the spouse is available at death of the member after five years of credited service, based on a 50% Joint and Survivor equivalent of the accrued Normal Retirement Benefit.

(16) Death Benefits After Retirement

The employee's beneficiary receives a lump sum equal to the excess of his contribution account immediately prior to retirement over the sum of the pension payments previously received by the employee. However, if the employee 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

Post-Retirement pension Adjustment will be made each year based upon the increase in CPI for the prior year. The increase in the total current benefit, excluding the Cost-of-Living Allowance (COLA), will be:

- (1) 75% of the CPI increase (not to exceed 9%) for recipients who are at least age 65 or on PERS disability; or
- (2) 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 but are under age 60.

(There are ad hoc PRPA's up to 4% for those hired before July 1, 1986).

(18) Cost-of-Living Allowance

Starting at age 65, a retired employee who remains in Alaska is eligible for an additional allowance, equal to 10% of the base retirement benefit, or \$50 per month, whichever is greater (COLA for those hired before July 1, 1986, regardless of age).

(19) Optional Employee Savings Account

An employee can voluntarily contribute up to 5% of his compensation. This amount is recorded in a separate account and is payable:

William M. Mercer, Incorporated

- (a) In the event of termination before retirement for any reason other than death, as a lump sum to the employee,
- (b) In the event of termination on account of death, as a lump sum to the employee's beneficiary,
- (c) On retirement, as a lump sum, life annuity on cash refund basis or installments over limited period.

Section 2.2
PARTICIPANT CENSUS INFORMATION - TOTAL PERS AS OF JUNE 30

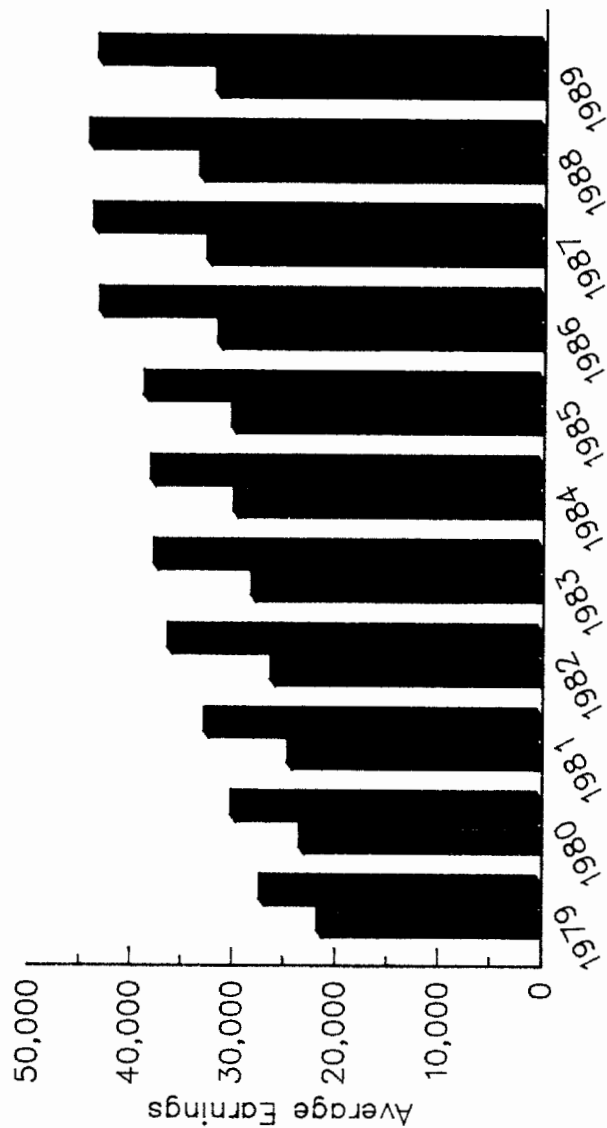
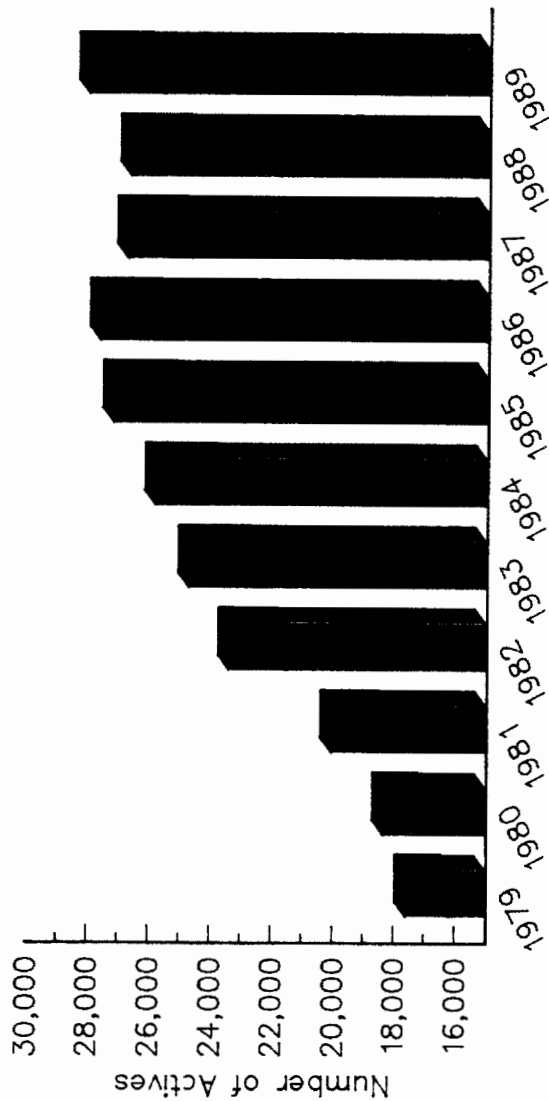
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Active Members</u>					
(1) Number	27,183	27,643	26,762	26,676	28,044
(2) Average Age	38.65	39.21	39.53	39.67	40.17
(3) Average Credited Service	5.51	5.96	6.32	6.45	6.66
(4) Average Annual Salary	\$30,555	\$32,200	\$33,305	\$34,052	\$32,550
<u>Retirees and Beneficiaries</u>					
(1) Number	4,317	4,657	5,651	6,702	6,967
(2) Average Age	63.82	64.05	60.39	62.82	63.28
(3) Average Monthly Benefit					
Base	\$ 656	\$ 674	\$ 753	\$ 791	\$ 795
C.O.L.A.	54	55	62	64	64
P.R.P.A.	126	110	110	90	98
TOTAL	836	839	925	945	957
<u>Vested Terminations</u>					
(1) Number	1,525	1,766	1,921	1,898	2,314
(2) Average Age	45.85	45.50	45.33	42.77	42.97
(3) Average Monthly Benefit	\$ 397	\$ 419	\$ 425	\$ 504	\$ 519
<u>Non-Vested Terminations With Account Balances</u>					
(1) Number	7,945	8,155	3,965	3,101	3,365
(2) Average Account Balance	\$ 471	\$ 544	\$ 1,114	\$ 2,100	\$ 1,891

Note that any differences between the numbers shown above and those shown in the PERS financial statements reflect data changes following publication of the financial statements.

Section 2.3
ADDITIONAL INFORMATION -
ACTIVE MEMBERS BY TYPE OF STATUS AS OF JUNE 30

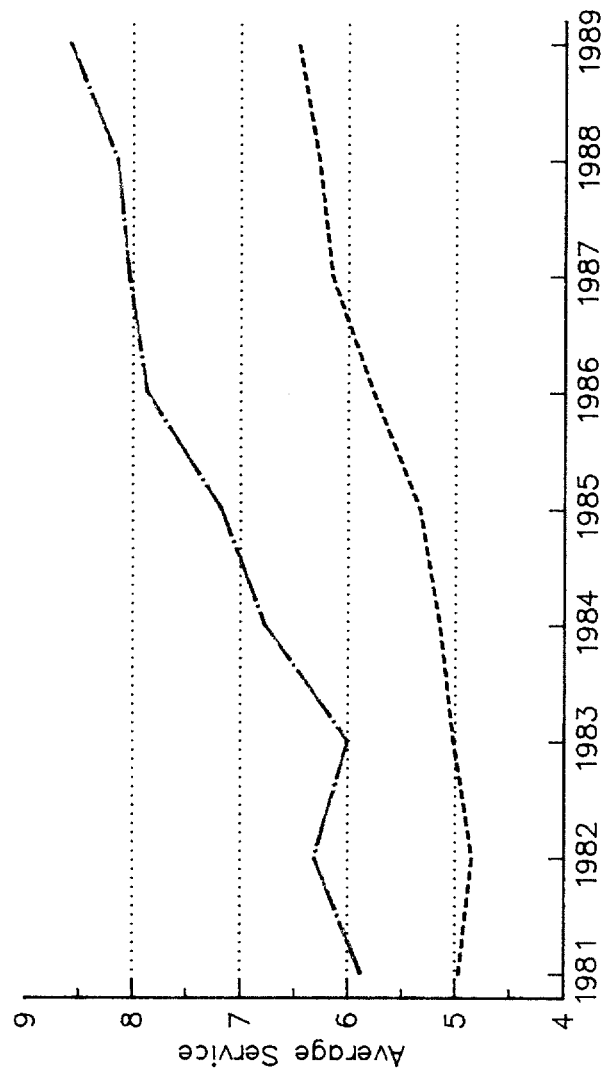
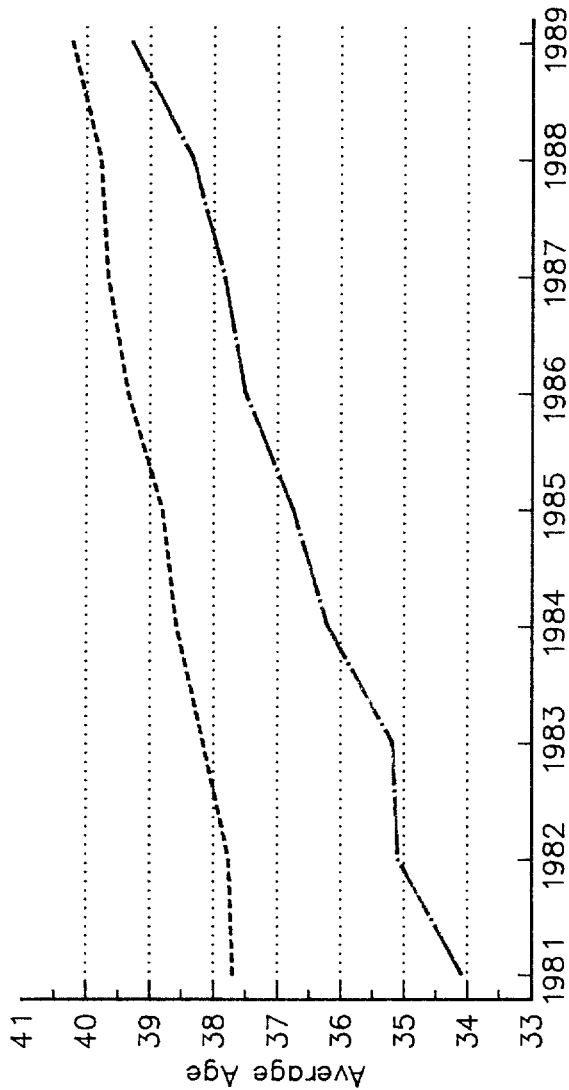
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Active Police & Fire</u>					
(1) Number	2,407	2,371	2,319	2,327	2,414
(2) Average Age	36.78	37.54	37.86	38.35	39.31
(3) Average Credited Service	7.19	7.88	8.05	8.16	8.60
(4) Average Annual Salary	\$38,380	\$42,825	\$43,484	43,947	\$43,082
(5) Number Vested	1,260	1,359	1,433	1,505	1,598
(6) Percent Who Are Vested	52.3%	57.3%	61.8%	64.7%	66.2%
<u>Active "Other" Members</u>					
(1) Number	24,776	25,272	24,443	24,349	25,630
(2) Average Age	38.83	39.37	39.69	39.80	40.25
(3) Average Credited Service	5.35	5.78	6.16	6.29	6.48
(4) Average Annual Salary	\$29,795	\$31,203	\$32,339	\$33,106	\$31,558
(5) Number Vested	10,822	10,964	11,664	12,191	13,345
(6) Percent Who Are Vested	43.7%	43.4%	47.7%	50.1%	52.1%

State of Alaska - PERS Actives



Other Police/Fire

State of Alaska - PERS Actives



Other Police/Fire

Section 2.4(a)
STATISTICS ON NEW RETIREES
POLICE AND FIRE MEMBERS AS OF JUNE 30

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Service</u>					
Number	25	25	91	64	9
Average Age at Retirement	51.48	52.11	47.93	49.39	52.55
Average Monthly Benefit	\$2,245	\$2,440	\$2,423	\$2,467	\$1,536
<u>Disability</u>					
Number	0	6	4	7	8
Average Age at Retirement	N/A	41.09	42.01	40.30	39.71
Average Monthly Benefit	N/A	\$1,817	\$1,543	\$1,147	\$1,662
<u>Widow/Survivor</u>					
Number	3	1	1	1	1
Average Age at Retirement	42.25	30.06	49.17	50.91	52.30
Average Monthly Benefit	\$1,561	\$ 340	\$ 231	\$ 181	\$ 611
<u>Total</u>					
Number	28	32	96	72	18
Average Age at Retirement	50.49	48.95	47.70	48.53	46.83
Average Monthly Benefit	\$2,172	\$2,258	\$2,364	\$2,307	\$1,541

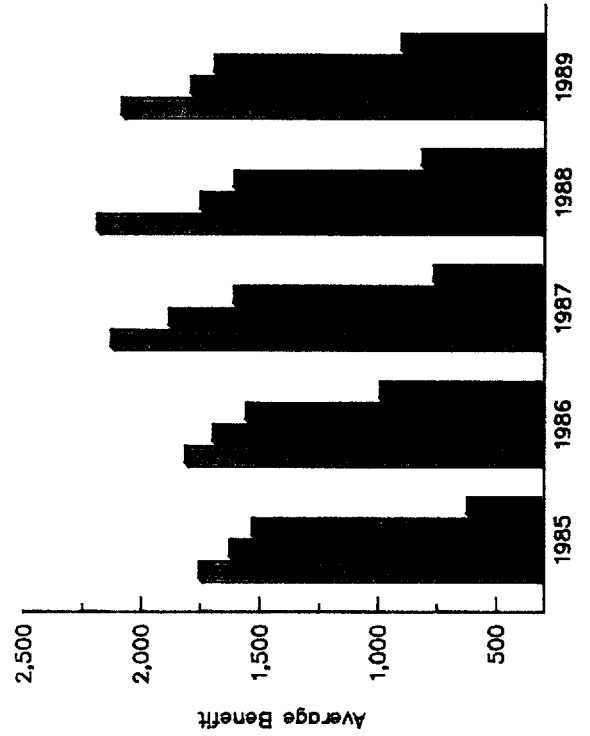
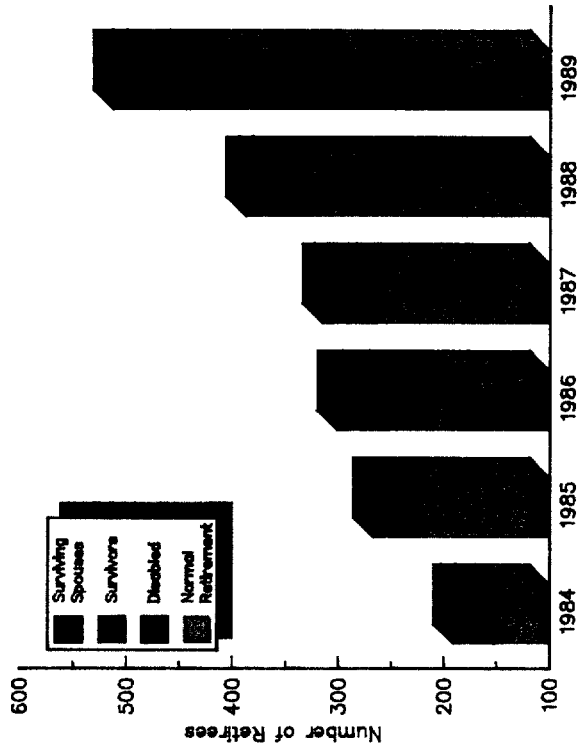
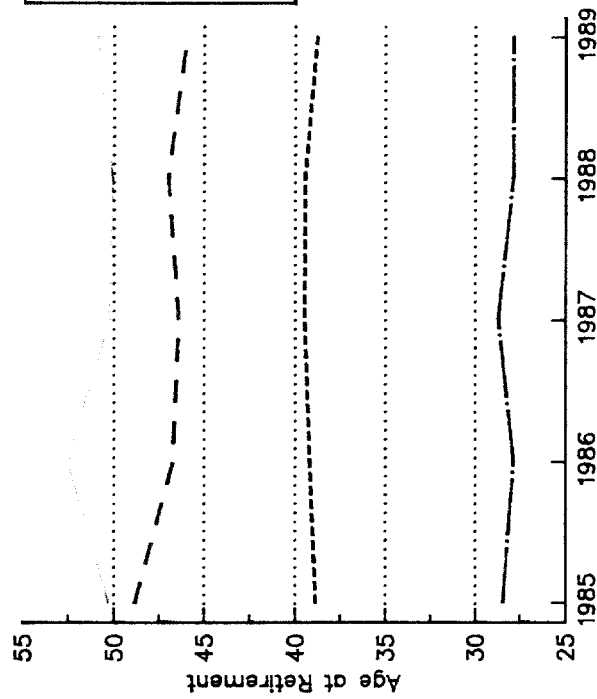
**Section 2.4(b)
STATISTICS ON NEW RETIREES
"OTHER" MEMBERS AS OF JUNE 30**

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<u>Service</u>					
Number	455	392	924	972	309
Average Age at Retirement	58.81	58.31	57.08	56.53	57.44
Average Monthly Benefit	\$ 928	\$ 877	\$1,094	\$ 982	\$ 746
<u>Disability</u>					
Number	10	10	14	22	25
Average Age at Retirement	46.00	46.66	45.66	46.53	46.61
Average Monthly Benefit	\$1,046	\$ 941	\$ 945	\$1,073	\$1,061
<u>Widow/Survivor</u>					
Number	19	14	11	20	18
Average Age at Retirement	50.42	52.88	48.89	46.02	45.38
Average Monthly Benefit	\$ 480	\$ 481	\$ 545	\$ 515	\$ 725
<u>Total</u>					
Number	484	416	949	1,014	352
Average Age at Retirement	58.21	57.85	56.82	56.11	56.05
Average Monthly Benefit	\$ 913	\$ 865	\$1,085	\$ 975	\$ 767

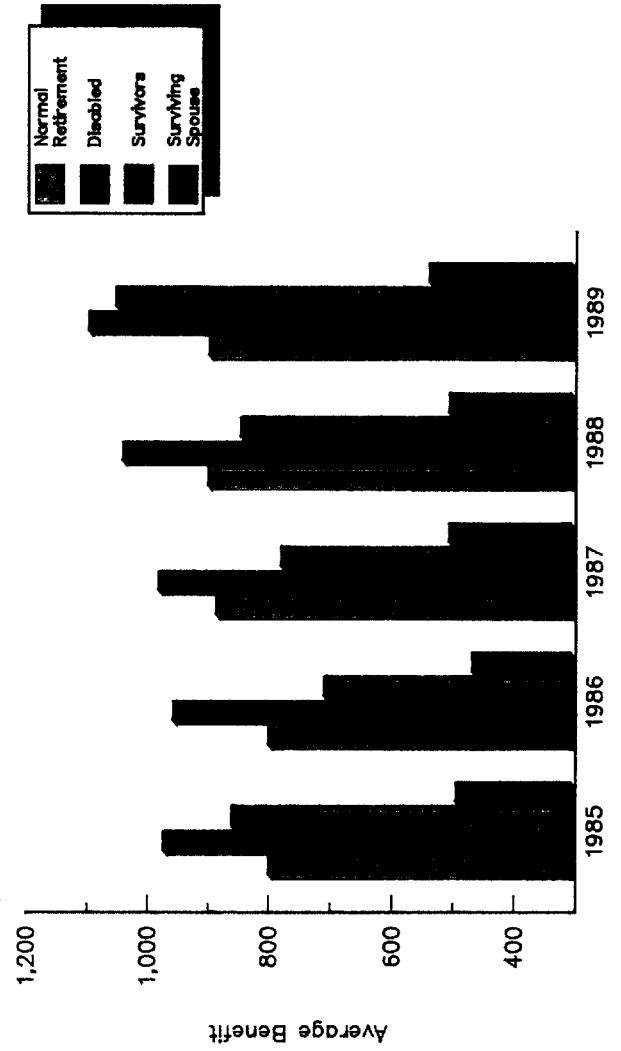
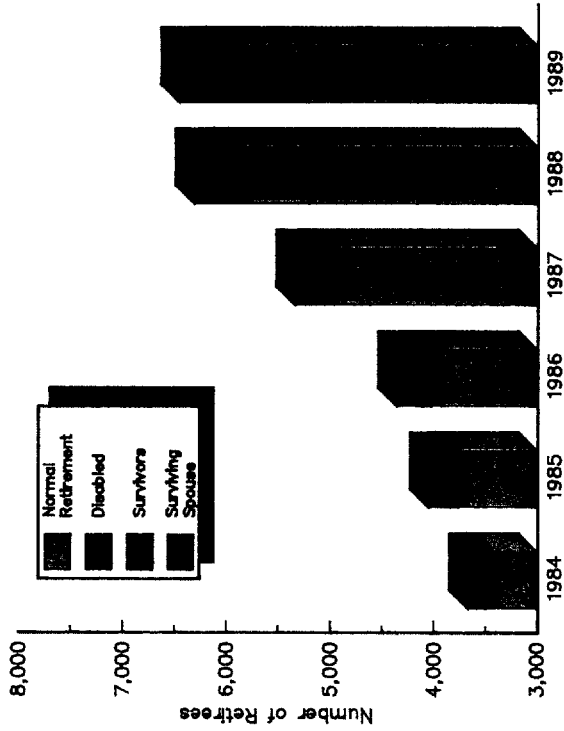
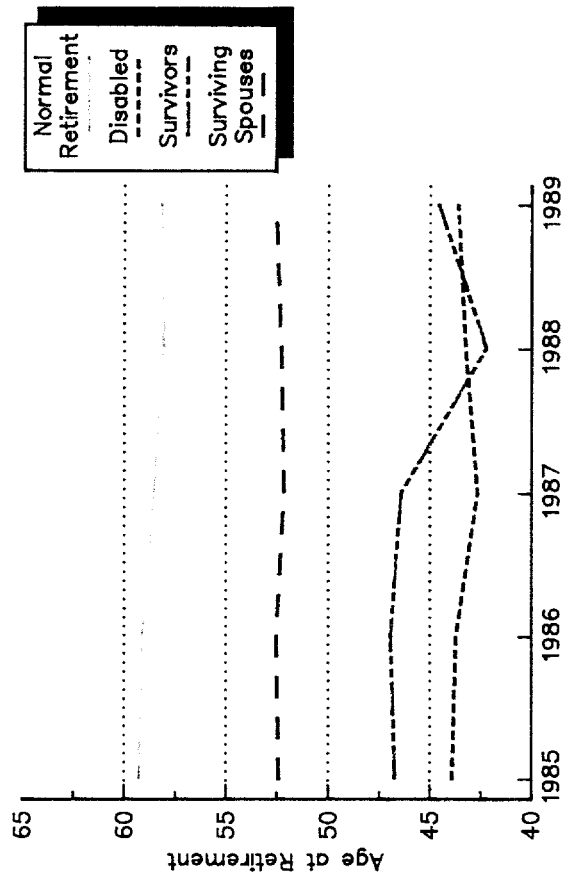
Section 2.4(c)
STATISTICS ON ALL RETIREES AS OF JUNE 30, 1989

	<u>Police & Fire</u>	<u>"Other"</u>
<u>Service Retirement</u>		
Number, June 30, 1988	328	5,844
Net Change During FY89	111	62
Number, June 30, 1989	439	5,906
Average Age At Retirement	50.97	58.27
Average Age Now	56.61	64.55
Average Monthly Benefit	\$2,069.75	\$ 891.59
<u>Surviving Spouse's Benefits</u>		
Number, June 30, 1988	11	342
Net Change During FY89	7	53
Number, June 30, 1989	18	395
Average Age At Retirement	46.00	52.60
Average Age Now	53.10	60.71
Average Monthly Benefit	\$ 890.79	\$ 532.37
<u>Survivor's Benefits</u>		
Number, June 30, 1988	14	21
Net Change During FY89	0	2
Number, June 30, 1989	14	23
Average Age At Retirement	27.93	44.65
Average Age Now	39.62	56.68
Average Monthly Benefit	\$1,677.87	\$1,045.75
<u>Disabilities</u>		
Number, June 30, 1988	34	108
Net Change During FY89	7	23
Number, June 30, 1989	41	131
Average Age At Retirement	38.83	43.68
Average Age Now	43.71	47.79
Average Monthly Benefit	\$1,775.36	\$1,090.94
<u>Total Number of Retirees</u>	512	6,455

State of Alaska - PERS Police/Fire Retirees



State of Alaska - PERS "Other" Retirees



Section 2.5(a)
DISTRIBUTION OF ACTIVE POLICE AND FIRE PARTICIPANTS

STATE OF ALASKA - PERS - POLICE/FIRE ACTIVE MEMBERS

VALUATION DATE 6/30/1989

----- ANNUAL EARNINGS BY AGE-----				---- ANNUAL EARNINGS BY SERVICE----			
AGE	NUMBER	TOTAL	AVERAGE	SERVICE	NUMBER	TOTAL	AVERAGE
GROUP	OF	ANNUAL	ANNUAL	GROUP	OF	ANNUAL	ANNUAL
	PEOPLE	EARNINGS	EARNINGS		PEOPLE	EARNINGS	EARNINGS
0-19	0	0.	0.	0	203	4079347.	20095.
20-24	35	929298.	26551.	1	217	6908888.	31838.
25-29	204	6986647.	34248.	2	128	4504184.	35189.
30-34	462	18557142.	40167.	3	145	5350754.	36902.
35-39	613	27166188.	44317.	4	205	7817397.	38134.
40-44	564	26092828.	46264.	0- 4	898	28660576.	31916.
45-49	360	16815178.	46709.	5- 9	664	29372188.	44235.
50-54	125	5421512.	43372.	10-14	482	24791708.	51435.
55-59	40	1657088.	41427.	15-19	278	15668244.	56361.
60-64	11	374329.	34030.	20-24	88	5250614.	59666.
65-69	0	0.	0.	25-29	4	256885.	64221.
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.
TOTAL	2414	104000208.	43082.	TOTAL	2414	104000224.	43082.

SERVICE GROUPS BY AGE GROUPS

S E R V I C E G R O U P										
AGE	0- 4	5- 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0
20-24	35	0	0	0	0	0	0	0	0	35
25-29	161	43	0	0	0	0	0	0	0	204
30-34	209	189	61	3	0	0	0	0	0	462
35-39	171	214	176	50	2	0	0	0	0	613
40-44	170	105	127	129	33	0	0	0	0	564
45-49	98	72	80	67	43	0	0	0	0	360
50-54	38	31	27	20	6	3	0	0	0	125
55-59	11	8	9	8	3	1	0	0	0	40
60-64	5	2	2	1	1	0	0	0	0	11
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80+	0	0	0	0	0	0	0	0	0	0
TOTAL	898	664	482	278	88	4	0	0	0	2414

Section 2.5(b)
DISTRIBUTION OF ACTIVE "OTHER" PARTICIPANTS

STATE OF ALASKA - PERS - "OTHER" ACTIVE MEMBERS

VALUATION DATE 6/30/1989

----- ANNUAL EARNINGS BY AGE-----

AGE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	83	1094287.	13184.
20-24	887	16892422.	19044.
25-29	2566	61802052.	24085.
30-34	4396	127836544.	29080.
35-39	5466	178618320.	32678.
40-44	4732	162267840.	34292.
45-49	3451	121537656.	35218.
50-54	2137	75411168.	35288.
55-59	1185	40364756.	34063.
60-64	557	18219982.	32711.
65-69	139	3953714.	28444.
70-74	20	579928.	28996.
75-79	9	218644.	24294.
80+	2	37829.	18914.
TOTAL	25630	808834636.	31558.

---- ANNUAL EARNINGS BY SERVICE----

SERVICE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	4240	77140632.	18194.
1	2895	74102872.	25597.
2	1892	54812460.	28971.
3	2028	61094084.	30125.
4	2166	69309192.	31999.
0- 4	13221	336459552.	25449.
5- 9	7131	248619424.	34865.
10-14	3504	140695488.	40153.
15-19	1233	56086136.	45488.
20-24	396	19378096.	48935.
25-29	126	6682205.	53033.
30-34	15	757129.	50475.
35-39	2	125305.	62653.
40+	2	32180.	16090.
TOTAL	25630	808834370.	31558.

SERVICE GROUPS BY AGE GROUPS

S E R V I C E G R O U P

AGE	0- 4	5- 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	83	0	0	0	0	0	0	0	0	83
20-24	865	22	0	0	0	0	0	0	0	887
25-29	2026	518	22	0	0	0	0	0	0	2566
30-34	2703	1291	391	11	0	0	0	0	0	4396
35-39	2665	1740	871	185	4	0	0	0	1	5466
40-44	2087	1407	791	362	81	4	0	0	0	4732
45-49	1321	981	644	302	161	41	1	0	0	3451
50-54	747	599	424	209	88	66	4	0	0	2137
55-59	428	357	228	108	46	12	6	0	0	1185
60-64	222	169	101	46	13	3	2	0	1	557
65-69	61	39	26	7	3	0	1	2	0	139
70-74	6	6	4	3	0	0	1	0	0	20
75-79	7	0	2	0	0	0	0	0	0	9
80+	0	2	0	0	0	0	0	0	0	2
TOTAL	13221	7131	3504	1233	396	126	15	2	2	25630

Section 2.5(c)
DISTRIBUTION OF ANNUAL BENEFITS OF
POLICE AND FIRE BENEFITS RECIPIENTS

STATE OF ALASKA - PERS - POLICE/FIRE RETIREES

VALUATION DATE 6/30/1989

----- ANNUAL BENEFIT BY AGE-----				---- ANNUAL BENEFIT BY SERVICE----			
AGE	NUMBER	TOTAL	AVERAGE	SERVICE	NUMBER	TOTAL	AVERAGE
GROUP	OF	ANNUAL	ANNUAL	GROUP	OF	ANNUAL	ANNUAL
	PEOPLE	BENEFIT	BENEFIT		PEOPLE	BENEFIT	BENEFIT
0-19	1	7927.	7927.	0	3	40954.	13651.
20-24	1	7327.	7327.	1	0	0.	0.
25-29	1	13820.	13820.	2	1	18921.	18921.
30-34	6	92876.	15479.	3	2	47027.	23514.
35-39	10	202644.	20264.	4	3	52256.	17419.
40-44	47	1304109.	27747.	0- 4	9	159158.	17684.
45-49	81	2386780.	29466.	5- 9	34	556782.	16376.
50-54	115	3020063.	26261.	10-14	43	638439.	14847.
55-59	99	2413620.	24380.	15-19	79	1442277.	18257.
60-64	88	1835249.	20855.	20-24	135	3315172.	24557.
65-69	39	635687.	16300.	25-29	118	3377197.	28620.
70-74	16	253053.	15816.	30-34	70	2129287.	30418.
75-79	7	65385.	9341.	35-39	16	470116.	29382.
80+	1	12693.	12693.	40+	8	162807.	20351.
TOTAL	512	12251232.	23928.	TOTAL	512	12251234.	23928.

SERVICE GROUPS BY AGE GROUPS

S E R V I C E G R O U P

AGE	0- 4	5- 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
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	1	0	0	0	0	0	0	0	1
30-34	2	4	0	0	0	0	0	0	0	6
35-39	0	3	4	3	0	0	0	0	0	10
40-44	4	3	8	9	23	0	0	0	0	47
45-49	0	7	4	16	32	21	1	0	0	81
50-54	2	7	8	17	27	38	16	0	0	115
55-59	0	5	8	13	28	22	21	2	0	99
60-64	1	3	8	9	19	18	22	7	1	88
65-69	0	1	3	5	4	12	5	6	3	39
70-74	0	0	0	2	1	6	5	0	2	16
75-79	0	0	0	3	1	1	0	1	1	7
80+	0	0	0	0	0	0	0	0	1	1
TOTAL	9	34	43	79	135	118	70	16	8	512

Section 2.5(d)
DISTRIBUTION OF ANNUAL BENEFITS OF
"OTHER" BENEFIT RECIPIENTS

STATE OF ALASKA - PERS - "OTHER" RETIREES

VALUATION DATE 6/30/1989

----- ANNUAL BENEFIT BY AGE-----				---- ANNUAL BENEFIT BY SERVICE----			
AGE	NUMBER	TOTAL	AVERAGE	SERVICE	NUMBER	TOTAL	AVERAGE
GROUP	OF	ANNUAL	ANNUAL	GROUP	OF	ANNUAL	ANNUAL
PEOPLE	BENEFIT	BENEFIT	BENEFIT	PEOPLE	BENEFIT	BENEFIT	BENEFIT
0-19	0	0.	0.	0	43	376963.	8767.
20-24	2	19480.	9740.	1	45	426407.	9476.
25-29	3	37490.	12497.	2	50	407176.	8144.
30-34	8	89308.	11163.	3	40	316243.	7906.
35-39	25	189537.	7581.	4	50	384168.	7683.
40-44	46	553038.	12023.	0- 4	228	1910956.	8381.
45-49	135	1233585.	9138.	5- 9	920	5473706.	5950.
50-54	704	7342822.	10430.	10-14	1342	10062786.	7498.
55-59	1274	15927338.	12502.	15-19	1335	12380954.	9274.
60-64	1431	16172090.	11301.	20-24	1154	12884090.	11165.
65-69	1333	12899852.	9677.	25-29	807	11659185.	14448.
70-74	814	7614013.	9354.	30-34	386	7198335.	18649.
75-79	442	3883894.	8787.	35-39	176	3698289.	21013.
80+	238	1751012.	7357.	40+	107	2445159.	22852.
TOTAL	6455	67713464.	10490.	TOTAL	6455	67713456.	10490.

SERVICE GROUPS BY AGE GROUPS

S E R V I C E G R O U P										
AGE	0- 4	5- 9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	1	0	1	0	0	0	0	0	2
25-29	2	1	0	0	0	0	0	0	0	3
30-34	4	3	1	0	0	0	0	0	0	8
35-39	10	8	6	1	0	0	0	0	0	25
40-44	10	12	13	9	2	0	0	0	0	46
45-49	22	32	44	20	8	9	0	0	0	135
50-54	46	177	189	123	79	66	22	2	0	704
55-59	62	211	318	283	212	118	51	18	1	1274
60-64	41	233	321	339	245	158	58	23	13	1431
65-69	22	164	276	287	272	158	96	33	25	1333
70-74	7	55	119	165	180	136	84	42	26	814
75-79	1	16	37	82	109	93	46	34	24	442
80+	1	7	18	25	47	69	29	24	18	238
TOTAL	228	920	1342	1335	1154	807	386	176	107	6455

Section 2.6
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. |

- | | |
|--------------------------|--|
| 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. | 69% of those receiving retirement benefits at an age which is eligible for C.O.L.A., will receive 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 FY90, the pre-65 monthly premium is \$330.51 and the post-65 premium is \$125.91, based on a total blended premium of \$252.83. For FY91, 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		

TABLE 2
ALASKA PERS
DISABILITY RATES
ANNUAL RATES PER 1,000 EMPLOYEES

William M. Mercer, Incorporated

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

TABLE 3
ALASKA PERS
RETIREMENT RATES

<u>Age</u>	<u>Police & Fire Rate</u>	<u>"Other" Member Rate</u>
50	.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.