

**ALASKA**  
**PUBLIC EMPLOYEES**  
**RETIREMENT SYSTEM**



**ACTUARIAL VALUATION**  
**AS OF**  
**DECEMBER 31, 1974**

**MARSH & McLENNAN**

# MARSH & McLENNAN

October 20, 1975

Mr. Andrew S. Warwick  
Commissioner of Administration  
Pouch CR  
Juneau, Alaska 99811

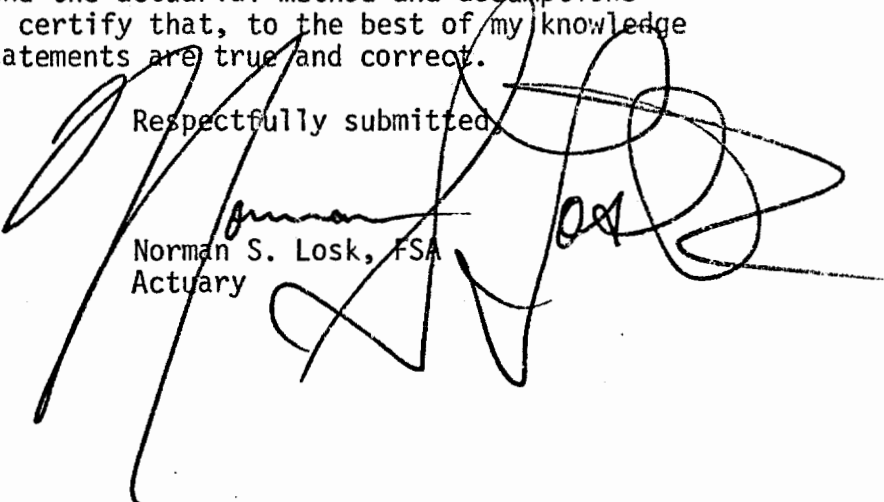
Dear Commissioner Warwick:

At your request, we have completed an actuarial valuation of the Alaska Public Employees' Retirement System as of December 31, 1974, in order to examine the financial status of the System and to determine the Employer contribution rates for the 1976-77 fiscal year.

The results of our valuation, included in this report, are based upon employee data and financial information supplied by your Department and the actuarial assumptions and methods chosen by the Actuary.

On the basis of this data and the actuarial method and assumptions described in this report, I certify that, to the best of my knowledge and belief, the attached statements are true and correct.

Respectfully submitted,

  
Norman S. Losk, FSA  
Actuary

NSL:rs  
Attachments

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SECTION I  
INTRODUCTION

In accordance with your request, we have performed an actuarial valuation of the Alaska Public Employees' Retirement System as of December 31, 1974.

The purposes of the valuation are:

- (a) To examine the status of funding of the System.
- (b) To establish contribution rates for the State of Alaska and all other participating employers for the 1976-77 fiscal year based upon the provisions of the System, both including and excluding the amendments enacted by the 1975 Legislature.

The results of this actuarial valuation are based upon actuarial assumptions and methods which are identical to those used in the prior valuation.

On the following page you will find summarized the significant results of this valuation with respect to the benefits of the System as it existed on the valuation date.

VALUATION SUMMARY  
OLD PROVISIONS

	-----Pension Cost-----			Funding Ratio
	Consolidated Employer Contribution Rate	Past Service Rate	Total Employer Rate	
State of Alaska	7.46%	.43%	7.89%	86.3%
City of Skagway	7.46%	.77%	8.23%	81.3%
City and Borough of Sitka	7.46%	1.92%	9.38%	25.7%
City of Fairbanks	7.46%	2.67%	10.13%	21.5%
City of Haines	7.46%	(.21%)	7.25%	133.8%
University of Alaska	7.46%	.02%	7.48%	98.7%
City of Valdez	7.46%	.94%	8.40%	48.7%
City of Kodiak	7.46%	1.93%	9.39%	30.3%
Alaska Municipal League	7.46%	2.23%	9.69%	60.6%
City of Kenai	7.46%	(.24%)	7.22%	110.2%
Anchorage Borough Schools	7.46%	.49%	7.95%	80.9%
Greater Anchorage Borough	7.46%	.12%	7.58%	91.3%
North Star Borough	7.46%	.32%	7.78%	79.2%
Ketchikan Gateway Borough	7.46%	(.15%)	7.31%	130.3%
Matanuska-Susitna Borough	7.46%	1.82%	9.28%	20.4%
City of Soldotna	7.46%	.31%	7.47%	84.0%
City and Borough of Juneau	7.46%	.56%	8.02%	73.0%
City of Anchorage	7.46%	2.87%	10.33%	4.4%
City of Wrangell	7.46%	.81%	8.27%	35.5%
City of Bethel	7.46%	.66%	8.12%	34.2%
Valdez City Schools	7.46%	.29%	7.75%	27.4%
Hoonah City Schools	7.46%	1.36%	8.82%	28.5%
Nome Public Utilities	7.46%	.86%	8.32%	39.8%
City of Kotzebue	<u>7.46%</u>	<u>.10%</u>	<u>7.56%</u>	<u>53.0%</u>
	<u>7.46%</u>	<u>.66%</u>	<u>8.12%</u>	<u>76.0%</u>

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The 1975 Legislature adopted several amendments to PERS. Those amendments which significantly affect the results of the actuarial valuation are as follows:

(1) Normal Retirement Age

For participants other than Peace Officers & Fire Fighters the requirements for normal retirement have been reduced from age 60 with eight years of service to age 55 with five years of service. The "30 year and out" provision remains unchanged.

(2) Minimum Benefit

This provision has been amended to provide that any individual terminated prior to July 1, 1975 will receive at least \$13.25 per month per year of credited service.

(3) Retiree Medical Insurance

The System now provides medical insurance for retirees. The cost of the insurance is paid directly from the fund.

A summary of the results of the valuation, based upon these amendments appears on the following page.

VALUATION SUMMARY  
NEW PROVISIONS

	-----Pension Cost-----			Funding Ratio
	Consolidated Employer Contribution Rate	Past Service Rate	Total Employer Rate	
State of Alaska	8.81%	1.49%	10.30%	64.6%
City of Skagway	8.81%	.81%	9.62%	80.4%
City and Borough of Sitka	8.81%	2.80%	11.61%	19.2%
City of Fairbanks	8.81%	3.31%	12.12%	18.1%
City of Haines	8.81%	(.08%)	8.73%	110.8%
University of Alaska	8.81%	.50%	9.31%	73.7%
City of Valdez	8.81%	1.73%	10.54%	34.0%
City of Kodiak	8.81%	2.21%	11.02%	27.5%
Alaska Municipal League	8.81%	8.53%	17.34%	28.6%
City of Kenai	8.81%	.10%	8.91%	96.2%
Anchorage Borough Schools	8.81%	1.60%	10.41%	56.6%
Greater Anchorage Borough	8.81%	.50%	9.31%	71.6%
North Star Borough	8.81%	.86%	9.67%	58.3%
Ketchikan Gateway Borough	8.81%	(.10%)	8.71%	117.6%
Matanuska-Susitna Borough	8.81%	2.71%	11.52%	14.7%
City of Soldotna	8.81%	.66%	9.47%	71.2%
City and Borough of Juneau	8.81%	1.02%	9.83%	59.5%
City of Anchorage	8.81%	4.06%	12.87%	3.2%
City of Wrangell	8.81%	1.26%	10.07%	26.1%
City of Bethel	8.81%	.66%	9.47%	34.2%
Valdez City Schools	8.81%	.44%	9.25%	19.5%
Hoonah City Schools	8.81%	2.91%	11.72%	15.7%
Nome Public Utilities	8.81%	1.14%	9.95%	33.3%
City of Kotzebue	8.81%	.11%	8.92%	51.2%
	<u>8.81%</u>	<u>1.58%</u>	<u>10.39%</u>	<u>57.0%</u>

SECTION II

ANALYSIS OF THE VALUATION

A. Actuarial Assumptions and Method

We have used, in this valuation, actuarial assumptions and methods which are identical to those used in the prior valuation.

The actuarial method utilized in the prior valuation remains applicable. In the last actuarial valuation report, we indicated our intent to fix past service liabilities for each employer. However, because of the major changes made in the System this year, and the fact that the employee data is not fully cleaned up, we have redetermined the past service liabilities of each participating employer in this valuation. In future valuations our objective will be to change such liabilities only to the extent that they are amortized, increased by amendment, or adjusted for changes in actuarial assumptions. However, if the data provided us for future actuarial valuations is significantly different in nature from that used in this valuation, we may feel it necessary to redetermine such liabilities once again.

In the actuarial valuation performed next year we will review the advisability and the fiscal impacts of two potential changes in actuarial procedure:

- (1) The use of a method of asset valuation which will recognize market values of assets. This method will be a "rolling average" method,



which utilizes a rolling three-year or five-year average relationship between book and market values.

- (2) A possible change in the assumed rate of investment return.

B. Participant Data

Although the averages shown in Appendix 3 for 1974 appear to be quite close to those for 1973, significant differences appear between the two sets of data:

- (1) A much larger percentage of the data utilized in this valuation contains good data than did last year's data. As can be seen, almost 80% of the records used in this valuation contained complete data compared to 52% last year. For those records which are incomplete we use default values. For example, the following default values are used:
  - (a) No Salary - \$10,000
  - (b) No Birthdate - February, 1939
  - (c) No Service - 1 year

The results of this valuation are, thus, less affected by the lack of good data.

Past service rates tend to be depressed when using records which are of questionable quality, as they tend to increase past service liabilities only slightly while increasing total salaries more substantially.

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The valuation data for this year produced a total of 13,403 records, of which 531 contained no information. From collateral information, we found that there were 14,692 active participants in the System at the valuation date. Thus, we added 1,289 records which were recognized as having the same characteristics as the 531 records with no information. The participant data included in Exhibit 1, page 16, reflects only the 12,875 records with some complete data, while the information in Exhibit 3 reflects the entire 14,692 records recognized.

- (2) The breakdown of the group of active employees by sex indicates a significant shift. While two-thirds of the active participant records in last year's valuation were male records, only about 60% of this year's records are male. This factor tends to increase relative liabilities and costs.
- (3) The average salaries of the active participants increased dramatically. The average salary recognized in the prior valuation was \$11,551, while the corresponding average for this year was \$13,235. This is an increase of 14.6%. There are indications that the increases were proportionately higher for older participants. This condition tends to increase liabilities and has a slight upward impact on the contribution rate.
- (4) The data with respect to retired lives shows a marked increase in the numbers of retirees, average retirement benefit, and liability for

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retired lives. The number of retirees increased from 510 to 714, an increase of 40%. The average retirement benefit increased from \$240 per month to \$305 per month, an increase of 27%. Liabilities for retirement benefits increased from \$15,416,867 to \$27,395,287, an increase of nearly 80%.

This is a significant increase which has had a strong upward effect on past service rates, due to the fact that valuation assets must be diverted to cover these liabilities. The financial reports as of December 31, 1974 indicate that the retiree reserve totaled \$11,589,374 as of that date. Thus, there existed a deficit relating to retirees of \$15,805,913. This deficit was allocated to reduce asset balances of participating employers roughly in proportion to the numbers of retirees attributable to such employers. Thus, in this indirect way, the increase in retirees and liabilities for retirees' benefits served to significantly increase unfunded past service liabilities and past service rates.

The net effect of these factors is a significant increase in employer rates based upon the provisions of the System in effect on December 31, 1974.

In addition, the effect of the 1975 amendments is to increase contribution requirements by about 2.27% of covered pay. This increase, of course, is spread among the participating employers in a non-uniform manner, based upon differences in past service liabilities. Exhibits 5 and 6 detail the past service rate calculations.

C. New Employers

Several new employers have entered into participation in the System since the valuation date. These employers were not included in this valuation of the System. We recommend, however, that the 1976-77 rates for these employers be based upon the new consolidated rate for the System and the past service rates previously determined for such employers.

SECTION III

SUMMARY AND CONCLUSIONS

It is clear that the changes in employee data and the 1975 amendments to the System have substantially increased employer contribution levels.

Based upon the actuarial assumptions outlined in Appendix 2, the funding level of the System has been significantly reduced by these changes.

Based upon the results of this valuation, the funding rates for the System have deteriorated to 76% based upon the provisions of the System as it existed prior to the 1975 amendments and to 57% when those amendments are recognized. This is due in large part to the substantial increase in liability for retired lives. This is a substantial reduction which impacts different employers differently.

It will be important to watch this funding level very carefully in the next several years. As the data on which future valuations are based becomes more and more reliable, this funding ratio should, assuming no changes in the provisions of the System or in actuarial assumptions, improve from year to year. If it does not improve on a comparable basis from year to year, we will need to consider changes in actuarial assumptions and/or methods.

APPENDICES

APPENDIX 1

ACTUARIAL METHOD

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## ACTUARIAL METHOD

The actuarial method used in this valuation is known as the Aggregate Method with Supplemental Liability. Under this method, the Consolidated Employer Contribution Rate is determined as follows:

- (1) The present value of all benefits accrued and expected to be earned in the future for non-retired participants is calculated, taking into account expected levels of mortality, turnover, disability, salary increases, and investment performance.
- (2) Such present value of benefits is reduced by the sum of:
  - (a) The present value of future employee contributions, taking into account the same items as enumerated in (1), above.
  - (b) The total liability for benefits earned to the valuation date.

The remainder is the portion of the present value of future benefits to be funded by employer contributions at the Consolidated Rate and is called the "Present Value of Future Employer Normal Costs."

- (3) The Consolidated Employer Contribution Rate is determined by dividing the Present Value of Future Employer Normal Costs by the present value of future salaries, calculated taking into account those factors enumerated in item (1) above.



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The total Employer Contribution Rate for each participating employer is the Consolidated Employer Contribution Rate plus that contribution rate sufficient to fund the unfunded accrued benefit liabilities of such employer over 40 years.

This method effectively spreads the portion of the total projected present value of benefits to be financed by future employer contributions over the expected future working lifetime of the currently covered group. It has the advantage that the effect of actuarial gains and losses (which arise from actual experience that deviates from the actuarial assumptions used) is automatically spread over this period.

APPENDIX 2

ACTUARIAL ASSUMPTIONS

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ACTUARIAL ASSUMPTIONS

The following assumptions were used as the basis for the valuation included in the report:

- (1) Investment Yield: 5% per annum, net of expenses.
- (2) Assets: Valued at cost.
- (3) Experience: Active Employees
  - (a) Retirement Age - Police & Fire 55 or 20 years service.
  - Others 55 or 30 years service.
  - (b) Disability - See attached Schedule I.
  - (c) Separation - See attached Schedule II.
  - (d) Mortality - 1951 Group Annuity Projection "C" to 1965.
  - (e) Earnings Progression - 5% increase per year.
- (4) Experience: Pensioners and Beneficiaries
  - (a) Mortality - Retired - 1951 Group Annuity Projection "C" to 1965.
  - (b) Disabled - 1944 Disabled Railway Employees Select Mortality Table.
- (5) Loading: None

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Schedule I

PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
OF ALASKA

Disability Rates

All Employees

Annual Rates Per 1,000 Employees

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.70	45	1.62
21	.71	46	1.76
22	.72	47	1.91
23	.73	48	2.07
24	.74	49	2.23
25	.75	50	2.40
26	.76	51	2.60
27	.78	52	2.86
28	.80	53	3.18
29	.82	54	3.55
30	.84	55	4.00
31	.86	56	4.59
32	.88	57	5.34
33	.90	58	6.10
34	.93	59	7.20
35	.96	60	8.43
36	.99	61	9.75
37	1.03	62	11.30
38	1.07	63	13.05
39	1.11	64	14.90
40	1.15		
41	1.20		
42	1.27		
43	1.36		
44	1.48		

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Schedule II

STATE OF ALASKA

VALUATION TURNOVER RATES

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.3274	.3753
21	.2782	.3490
22	.2408	.3290
23	.2334	.3254
24	.2151	.3162
25	.1917	.3041
26	.1690	.2916
27	.1528	.2814
28	.1510	.2792
29	.1465	.2734
30	.1408	.2652
31	.1351	.2560
32	.1309	.2471
33	.1303	.2435
34	.1289	.2342
35	.1269	.2218
36	.1248	.2087
37	.1229	.1973
38	.1223	.1937
39	.1207	.1845
40	.1185	.1725
41	.1161	.1603
42	.1140	.1505
43	.1132	.1480
44	.1112	.1416
45	.1081	.1335
46	.1060	.1257
47	.1041	.1200
48	.1038	.1192
49	.1025	.1173
50	.1021	.1150
51	.1012	.1128
52	.1006	.1115
53	.1004	.1112
54	.0996	.1108
55	.0997	.1107
56	.0999	.1114
57	.1009	.1135
58	.1011	.1156
59	.1022	.1208
60	.1047	.1277

APPENDIX 3  
PARTICIPANT DATA

ALASKA PERS -- ALL EMPLOYEES (STATE AND POLITICAL SUBDIVISIONS) VALUATION DATE 12/31/74

----- ANNUAL EARNINGS BY AGE-----			----- ANNUAL EARNINGS BY SERVICE-----				
AGE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	SERVICE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	266	2003808.	7533.	0	3141	30596712.	9741.
20-24	1412	13419277.	9504.	1	2204	27376733.	12421.
25-29	2259	27359783.	12111.	2	1340	17683551.	13197.
30-34	1870	27277248.	14587.	3	1149	15647403.	13618.
35-39	1870	27473620.	14692.	4	976	14604895.	14964.
40-44	1337	20169437.	15086.	0-4	8810	105908363.	12021.
45-49	1222	18960913.	15434.	5-9	2368	37510426.	15841.
50-54	1131	17118062.	15135.	10-14	1266	24429351.	19296.
55-59	850	12938487.	15222.	15-19	295	5695426.	19307.
60-64	468	7201242.	15387.	20-24	102	1992145.	19531.
65-69	152	1993432.	13115.	25-29	26	497322.	19128.
70-74	31	378702.	12216.	30-34	6	163876.	27313.
75-79	6	63848.	10641.	35-39	2	73401.	36701.
80+	1	13461.	13461.	40+	0	0.	0.
TOTAL	12875	176271300.	13691.	TOTAL	12875	176270300.	13691.

SERVICE GROUPS BY AGE GROUPS

AGE GROUP	0-4	5-9	10-14	S	E	R	V	I	C	E	20-24	G	R	25-29	30-34	35-39	40+	TOTAL
0-19	266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
20-24	1393	18	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1412
25-29	2060	196	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2259
30-34	1390	414	65	65	1	0	0	0	0	0	0	0	0	0	0	0	0	1870
35-39	1305	359	189	189	14	3	3	3	3	3	3	0	0	0	0	0	0	1870
40-44	775	299	209	209	49	5	5	5	5	5	5	0	0	0	0	0	0	1337
45-49	582	331	233	233	61	14	14	14	14	14	14	1	1	1	1	1	1	1222
50-54	491	321	216	216	65	25	25	25	25	25	25	12	12	12	12	12	12	1131
55-59	340	235	182	182	54	31	31	31	31	31	31	7	7	7	7	7	7	850
60-64	159	128	116	116	39	17	17	17	17	17	17	4	4	4	4	4	4	468
65-69	41	49	43	43	11	6	6	6	6	6	6	1	1	1	1	1	1	152
70-74	5	15	9	9	1	0	0	0	0	0	0	1	1	1	1	1	1	31
75-79	3	2	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	6
80+	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	8810	2368	1266	1266	295	102	102	102	102	102	26	26	26	26	26	26	26	12875

## STATE OF ALASKA PERS - RETIRED LIVES

VALUATION DATE 12/31/74

AGE GROUP	ANNUAL NUMBER OF PEOPLE	EARNINGS BY TOTAL ANNUAL EARNINGS	AGE AVERAGE ANNUAL EARNINGS
0-19	0	0.	0.
20-24	2	13731.	6865.
25-29	3	16698.	5566.
30-34	3	17591.	5864.
35-39	6	39101.	6517.
40-44	9	39644.	4405.
45-49	2	4434.	2217.
50-54	16	62076.	3880.
55-59	85	328499.	3865.
60-64	185	693923.	3751.
65-69	238	887066.	3727.
70-74	124	402494.	3246.
75-79	34	92765.	2728.
80+	7	17701.	2529.
TOTAL	714	2615723.	3663.

EXHIBIT 2



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EXHIBIT 3  
MISCELLANEOUS INFORMATION  
MEMBERS OF THE  
ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Active Members

	Information as of <u>December 31, 1973</u>	<u>December 31, 1974</u>
(1) Number of Active Participants	16,390	14,692
(2) Number with Complete Information	8,551	11,692
(3) Average Age	37.95 years	37.93 years
(4) Average Service to Date	3.88 years	4.00 years
(5) Average Annual Salary	\$11,551	\$13,235

Retirees and Beneficiaries

(1) Number of Retirees and Beneficiaries	510	714
(2) Average Age	65.44 years	65.02 years
(3) Average Monthly Benefit	\$240	\$305

APPENDIX 4  
ACTUARIAL DETERMINATIONS

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EXHIBIT 4

DEVELOPMENT OF CONSOLIDATED  
EMPLOYER CONTRIBUTION RATE  
FOR 1976-77

	<u>Old Benefit Provisions</u>	<u>New Benefit Provisions</u>
(1) Present Value of Fully Projected Benefits for Non-Retired Participants	\$ 227,263,033	\$ 256,836,722
(2) Present Value of Benefits Earned to December 31, 1974 by Non-Retired Participants	91,735,108	122,304,882
(3) Present Value of Future Member Contributions	49,564,577	48,306,369
(4) Present Value of Future Consolidated Employer Contributions ((1)-(2)-(3))	85,963,348	86,225,471
(5) Present Value of Future Salaries	1,151,807,019	1,024,840,273
(6) Consolidated Employer Contribution Rate for Pension Benefits ((4)/(5))	<u>7.46%</u>	<u>8.41%</u>
(7) Rate for Retiree Medical Insurance	<u>-0-</u>	<u>.40%</u>
(8) Total Consolidated Employer Contribution Rate	<u>7.46%</u>	<u>8.81%</u>

EXHIBIT 5

DEVELOPMENT OF PAST SERVICE RATES  
FOR 1976-77

OLD PROVISIONS

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Liability for Benefits Earned to 12-31-74	Adjusted Assets	Unfunded Liability or (Surplus) ((a)-(b))	Payment to Amortize Liability - 40 Years	Salaries	Past Service Rate ((d)/(e))	Funding Ratio ((b)/(a))
State of Alaska	\$62,502,413	\$53,909,700	\$ 8,592,713	\$ 500,955	\$115,769,445	.43%	86.3%
City of Skagway	35,997	29,264	6,733	393	51,263	.77%	81.3%
City and Borough of Sitka	687,840	177,060	510,780	29,778	1,548,607	1.92%	25.7%
City of Fairbanks	4,181,122	897,701	3,283,421	191,423	7,166,397	2.67%	21.5%
City of Haines	10,362	13,866	(3,504)	(204)	95,914	(.21%)	133.8%
University of Alaska	3,573,533	3,525,112	48,421	2,823	14,762,801	.02%	98.7%
City of Valdez	133,572	65,046	68,526	3,995	425,901	.94%	48.7%
City of Kodiak	528,791	160,433	368,358	21,475	1,114,421	1.93%	30.3%
Alaska Municipal League	39,822	24,134	15,688	915	41,088	2.23%	60.6%
City of Kenai	246,784	271,926	(25,142)	(1,466)	602,253	(.24%)	110.2%
Anchorage Borough Schools	5,768,725	4,664,800	1,103,925	64,359	13,058,813	.49%	80.9%
Greater Anchorage Borough	2,982,745	2,721,622	261,123	15,223	12,620,494	.12%	91.3%
North Star Borough	1,147,457	908,892	238,565	13,908	4,406,271	.32%	79.2%
Ketchikan Gateway Borough	44,924	58,532	(13,608)	(793)	520,462	(.15%)	130.3%
Matanuska-Susitna Borough	512,646	104,783	407,863	23,778	1,306,569	1.82%	20.4%
City of Soldotna	28,701	24,094	4,607	269	86,408	.31%	84.0%
City and Borough of Juneau	2,499,890	1,824,018	675,872	39,403	7,091,743	.56%	73.0%
City of Anchorage	6,646,255	293,979	6,352,276	370,338	12,899,155	2.87%	4.4%
City of Wrangell	97,154	34,457	62,697	3,655	452,317	.81%	35.5%
City of Bethel	14,400	4,919	9,481	553	84,312	.66%	34.2%
Valdez City Schools	7,916	2,165	5,751	335	117,540	.29%	27.4%
Hoonah City Schools	20,315	5,780	14,535	847	62,406	1.36%	28.5%
Nome Public Utilities	21,194	8,431	12,763	744	86,607	.86%	39.8%
City of Kotzebue	2,550	1,351	1,199	70	70,372	.10%	53.0%
	<u>\$91,735,108</u>	<u>\$69,732,065</u>	<u>\$22,003,043</u>	<u>\$1,282,777</u>	<u>\$194,441,557</u>	<u>.66%</u>	<u>76.0%</u>

## EXHIBIT 6

DEVELOPMENT OF PAST SERVICE RATES  
FOR 1976-77

## NEW PROVISIONS

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Liability for Benefits Earned to 12-31-74	Adjusted Assets	Unfunded Liability or (Surplus) ((a)-(b))	Payment to Amortize Liability - 40 Years	Salaries	Past Service Rate ((d)/(e))	Funding Ratio ((b)/(a))
State of Alaska	\$ 83,486,939	\$53,909,700	\$29,577,239	\$1,724,353	\$115,769,445	1.49%	64.6%
City of Skagway	36,379	29,264	7,115	415	51,263	.81%	80.4%
City and Borough of Sitka	921,784	177,060	744,724	43,417	1,548,607	2.80%	19.2%
City of Fairbanks	4,963,379	897,701	4,065,678	237,029	7,166,397	3.31%	18.1%
City of Haines	12,515	13,866	(1,351)	(79)	95,914	(.08%)	110.8%
University of Alaska	4,781,222	3,525,112	1,256,110	73,231	14,762,801	.50%	73.7%
City of Valdez	191,572	65,046	126,526	7,376	425,901	1.73%	34.0%
City of Kodiak	582,512	160,433	422,079	24,607	1,114,421	2.21%	27.5%
Alaska Municipal League	84,264	24,134	60,130	3,506	41,088	8.53%	28.6%
City of Kenai	282,770	271,926	10,844	632	602,253	.10%	96.2%
Anchorage Borough Schools	8,244,983	4,664,800	3,580,183	208,725	13,058,813	1.60%	56.6%
Greater Anchorage Borough	3,799,464	2,721,622	1,077,842	62,838	12,620,494	.50%	71.6%
North Star Borough	1,559,513	908,892	650,621	37,931	4,406,271	.86%	58.3%
Ketchikan Gateway Borough	49,783	58,532	(8,749)	(510)	520,462	(.10%)	117.6%
Matanuska-Susitna Borough	712,028	104,783	607,245	35,402	1,306,569	2.71%	14.7%
City of Soldotna	33,837	24,094	9,743	568	86,408	.66%	71.2%
City and Borough of Juneau	3,064,552	1,824,018	1,240,534	72,323	7,091,743	1.02%	59.5%
City of Anchorage	9,274,961	293,979	8,980,982	523,591	12,899,155	4.06%	3.2%
City of Wrangell	132,067	34,457	97,610	5,691	452,317	1.26%	26.1%
City of Bethel	14,400	4,919	9,481	553	84,312	.66%	34.2%
Valdez City Schools	11,085	2,165	8,920	520	117,540	.44%	19.5%
Hoonah City Schools	36,918	5,780	31,138	1,815	62,406	2.91%	15.7%
Nome Public Utilities	25,316	8,431	16,885	984	86,607	1.14%	33.3%
City of Kotzebue	2,639	1,351	1,288	75	70,372	.11%	51.2%
	<u>\$122,304,882</u>	<u>\$69,732,065</u>	<u>\$52,572,817</u>	<u>\$3,064,995</u>	<u>\$194,441,557</u>	<u>1.58%</u>	<u>57.0%</u>

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EXHIBIT 7

BREAKDOWN OF PRESENT VALUE  
OF BENEFITS

Old Provisions

	<u>Present Value of Accrued Benefit</u>	<u>Present Value of Fully Projected Benefit</u>
Retirement Benefit	\$ 64,046,470	\$146,259,473
Disability Benefit	3,094,541	6,693,476
Death Benefits	3,239,573	9,470,947
Termination Benefits	17,366,348	60,850,961
Contributions plus Interest for Inactive Members	<u>3,988,176</u>	<u>3,988,176</u>
Total Present Value of Benefits for all Non-Retired Members	<u>\$ 91,735,108</u>	<u>\$227,263,033</u>
Present Value of Benefits for Pensioners	27,395,287	27,395,287
Total Present Value of Benefits	<u>\$119,130,395</u>	<u>\$254,658,320</u>

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EXHIBIT 8

BREAKDOWN OF PRESENT VALUE  
OF BENEFITS

New Provisions

	<u>Present Value of Accrued Benefit</u>	<u>Present Value of Fully Projected Benefit</u>
Retirement Benefit	\$ 98,078,452	\$188,258,394
Disability Benefit	2,218,650	4,506,696
Death Benefits	2,532,164	6,536,529
Termination Benefits	15,487,440	53,546,927
Contributions plus Interest for Inactive Members	<u>3,988,176</u>	<u>3,988,176</u>
Total Present Value of Benefits for all Non-Retired Members	<u>\$122,304,882</u>	<u>\$256,836,722</u>
Present Value of Benefits for Pensioners	27,395,287	27,395,287
Total Present Value of Benefits	<u>\$149,700,169</u>	<u>\$284,232,009</u>

APPENDIX 5  
SUMMARY OF THE PROVISIONS  
OF THE  
ALASKA PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
AS OF  
JULY 1, 1975



**MARSH & McLENNAN**

PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
OF ALASKA

1. Plan

Public Employees' Retirement System of Alaska

2. EFFECTIVE DATE

January 1, 1961

3. AMENDED

April 19, 1961  
April 19, 1962  
February 18, 1964  
May 29, 1964  
July 1, 1964  
May 12, 1966  
April 3, 1968  
July 1, 1968  
July 1, 1970  
July 1, 1972  
July 1, 1974  
July 1, 1975

4. ADMINISTRATION

4. ADMINISTRATION OF PLAN

The Commissioner of Administration is responsible for administration of System, Public Employees' Retirement Board adopts rules and regulations to carry out provisions of the Act, Commissioner of Revenue invests the Fund.

5. EMPLOYERS INCLUDED

State of Alaska and any political subdivisions and public or quasi-public organizations thereof (as of December 31, 1974, there were: 24 participating employer groups in addition to the State for which separate contribution rates are determined).

6. EMPLOYEES INCLUDED

All regular full-time employees of the State and participating political subdivisions, exclusive of those covered by the Alaska Teachers' Retirement System, The Alaska Judges' System, or any employee on whose behalf the State is making contributions to another Retirement System. Elected officials may elect to participate at their option.

7. SERVICE CONSIDERED

Future:

Hire or 1/1/61, if later, to date of termination, death, or retirement. If an individual earns at least three years of credited service after 1/1/61, he obtains credit for all service rendered prior to 1/1/61.

Past:

Service credit for all service with State and Territory prior to January 1, 1961, if the employee completed three years of service after January 1, 1961. Elected official has past service credit only if he pays contributions for all of his service after January 1, 1961. Service with political subdivision prior to effective date included at option of political subdivision.

Break in Future Service:

Any termination. But if employee returns and makes contribution equal to refund paid plus interest, the service before the break is reinstated.

8. COMPENSATION CONSIDERED

Total compensation during three consecutive calendar years of credited service which yield the highest average monthly compensation (total compensation during period divided by number of months included).

9. EMPLOYER CONTRIBUTIONS

Separate contribution rate for each employer equal to the sum of:

(1) 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.

(2) Past Service Rate

A rate determined separately for each employer sufficient to amortize such employer's unfunded past service liabilities over 40 years.

10. EMPLOYEE CONTRIBUTIONS

Mandatory Employee Contributions:

Police & Fire - 5%

Other - 4 1/4%

Refund at Termination (no vesting):

Return of voluntary and mandatory contributions with interest.

Refund at Death:

If no widow's pension payable, return of voluntary and mandatory contributions with interest.

11. NORMAL RETIREMENT BENEFIT

Eligibility:

Age 55 or 20 years - Police & Fire

Age 55 or 30 years - Other

Type:

Life only with optional joint and survivor benefit (actuarially reduced).

Amount:

2% of highest three consecutive year average salary for each year of service - Other.

2% for the first 10 years of service plus 2 1/2% for years of service in excess of 10, of highest consecutive three-year average salary - Police & Fire.

12. EARLY RETIREMENT BENEFIT

Eligibility:

Age 50 and 5 years service - all employees

Type:

Life only

Amount:

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

13. DEFERRED VESTED BENEFIT

Eligibility:

Five years of service.

Type:

Life only 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.

14. DISABILITY BENEFIT

Occupational Disability:

Eligibility:

No age or service requirements.

Type:

Monthly benefit payable until death or recovery.

Amount:

2/3 of gross monthly compensation - Police & Fire.  
Normal Retirement Benefit assuming total service to age 55 or to date, if later, at the current level of compensation and 75% J&S option - Other.  
The benefit terminates at Normal Retirement Date with full Normal Retirement Benefit commencing at that point.

Non-Occupational Disability:

Eligibility:

Five years of service.

Type:

Monthly benefit payable until death or recovery.

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Amount:

Same as vested benefit except payments commence immediately.

15. DEATH BENEFIT BEFORE RETIREMENT

Occupational:

No age or service requirements.

Benefit: 75% of occupational disability benefit to spouse - Other.

Full pay continues to spouse to Normal Retirement Date with full Normal Retirement Benefit to spouse after Normal Retirement Date - Police & Fire.

After Occupational Disability: 75% of occupational disability paid to disabled employee continued to spouse - Other.

Full occupational disability benefit continued to spouse - Police & Fire.

Non-Occupational:

If no widow's benefit is payable, lump-sum death benefit of \$1,000 plus \$100 per each completed year of service and the participant's contributions with interest. Alternatively, an income benefit is available at death after five years of service based on 50% J&S equivalent of 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.

17. POST-RETIREMENT PENSION ADJUSTMENT

Commissioner of Administration may recommend post-retirement increases on account of increasing cost of living up to 4% each year.

18. COST-OF-LIVING ALLOWANCE

A retired employee who remains in Alaska is eligible for an additional allowance, equal to 10% of his basic retirement benefit, or \$50 per month, whichever is greater.

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:

- (a) In the event of termination before retirement for a 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.