

Paul P. Bennett

STATE OF ALASKA
TEACHERS' RETIREMENT SYSTEM

Actuarial Valuation
as of
June 30, 1978

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Benefit Services / Consulting Actuaries

SUMMARY

In accordance with your request, we have completed a valuation of the Alaska Teachers' Retirement System as of June 30, 1978. The principal results of the actuarial valuation are presented in this summary and analysis; the two sections which follow are meant to provide the necessary supporting details.

Section 1 presents the fundamental information on which the valuation was based. Included is a summary of plan provisions, information about plan participants, and disclosure of the actuarial method and assumptions used.

Section 2 presents the detailed actuarial valuation results. Its subsections present a step-by-step derivation of the recommended contribution. In addition, information requested by the auditors of the Retirement System is presented.

The purposes of an actuarial valuation are:

1. To examine the status of funding of the Plan, and
2. To determine the contribution rates for the State for each school district in the System.

The most significant results of the valuation are as follows:

	<u>1977</u>	<u>1978</u>
(1) Status of Funding as of June 30		
(a) Valuation Assets	\$182,062,858	\$219,225,684
(b) Present Value of Accrued Benefits	287,440,408	327,659,821
(c) Accrued Benefit Funding Ratio	63.3%	66.9%
(2) Contributions For Fiscal Year		
(a) Normal Cost Rate	10.08%	10.79%
(b) Past Service Rate	3.74%	3.72%
(c) Total Contribution Rate	13.82%	14.51%

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data provided to us, to determine a sound value for the Plan liabilities. I certify that, to the best of my knowledge and belief, the attached statements are true and correct.

Respectfully submitted,



Robert F. Richardson, MAAA
Vice President

RFR:jn

October 10, 1978

ANALYSIS OF THE VALUATION

Actuarial Method and Assumptions

This actuarial valuation report is based upon the actuarial methods and assumptions adopted at the Spring Board Meeting of the State of Alaska Teachers' Retirement System in March 1978. The methods and assumptions which were adopted are as follows:

(1) Actuarial Cost Method

Annual contributions will now be determined under the attained age normal actuarial cost method. The unfunded past service liability is funded with level payments over 40 years. Prior reports utilized an aggregate method in which past service and future service costs were not separated.

(2) Interest

Cost calculations are now based upon a 6% interest assumption rather than the 5% interest assumption which had been used in prior reports.

(3) Salary Scale

The new salary scale is 6% per year until age 39 and 5% per year for ages 40 and up. The prior actuarial assumption assumed 5% per year increases for all ages.

(4) Mortality

The new mortality table is the 1971 Group Annuity Table. Previous reports were based upon the 1951 Group Annuity Mortality Table with projection C to 1965.

(5) Employee Turnover

The new employee turnover table is based upon actual experience of the System during the 1976-77 Plan Year.

(6) Disability

No change in the disability incidence rate was adopted. Post-disability mortality is now assumed to follow rates recently published by the Pension Benefit Guaranty Corporation which reflect mortality of those receiving Social Security Disability Benefits.

(7) Retirement Age

No change in the retirement assumption was adopted. It is still assumed that employees will retire half way between the earliest age at which they can receive unreduced benefits and age 60.

(8) Contribution Refund

Based upon actual experience during 1976, it is now assumed that 85% of the employees who terminate after becoming vested but before having twelve years of service or attaining age 50, will leave their contributions and thereby retain their deferred vested benefits. All other employees who terminate after becoming vested are assumed to keep their contributions in the System and thereby receive deferred vested benefits. The former assumption was that only 10% of those terminating would retain their deferred vested benefit. Other participants would take their contributions and thereby forfeit their vested benefit.

(9) C.O.L.A.

The assumption regarding those receiving retirement benefits who would be eligible for cost-of-living adjustment has been increased from 40% to 49%.

(10) Unused Sick Leave

In order to fund for recently enacted legislation, we are now assuming that each employee who receives retirement benefits under the System will have accumulated 4.7 days of unused sick leave for each year of service.

(11) Valuation Assets

Assets used for valuation purposes are continued to be based upon the three-year average ratio between market and book values.

Actuarial Experience During 1977-78

As can be seen in the prior summary, the accrued benefit funding ratio increased from 63.3% to 66.9%. This is one of the best indicators that the System is being funded in a satisfactory manner. As mentioned previously, the total contribution rate increased significantly from 13.82% to 14.51%. There are several reasons for this increase in the contribution rate. Effective July 1, a post-retirement pension adjustment was granted for virtually all retirees and beneficiaries. The average PRPA granted this July was \$71 per month, or roughly 9% of the average base benefit. This PRPA increased the contribution rate by .26%. The passage

of House Bill 25 allows teachers to utilize unused sick leave days as credited service when they retire. This enhancement to the System increased the total contribution rate by .24%. Changes in the data also exerted upward pressures on the total contribution rate. As can be seen in Exhibit 1.2, the average age increased from 37.20 to 37.33. Average credited service to date increased from 8.70 years to 8.84 years. Perhaps most importantly, was the 10% increase in average annual salaries from \$22,887 to \$25,193. The total impact of these "actuarial changes" led to a .19% increase in the total contribution.

Alternate Amortization Periods

In prior Board meetings there has been some discussion concerning a reduction in the amortization period. Therefore, I have included in Section 2.6 of this report the total contribution rates which would be required if the amortization period over which unfunded past service liabilities are funded is 40 years, 35 years, 30 years, and 25 years.

Summary and Conclusions

The results of this valuation report indicate that the total contribution rate for the 1979-80 fiscal year should be 14.51%, up from 13.82% for the previous fiscal year. This increase in the total contribution rate is primarily attributable to the post-retirement pension adjustments granted this July 1 and also to the passage of House Bill 25. The accrued benefit funding ratio increased from 63.3% to 66.9%. We do not recommend

any changes in actuarial method or assumptions at this time. It is our conclusion that the State of Alaska Teachers' Retirement System is being funded in a satisfactory manner.

SECTION 1

THE BASIS OF THE VALUATION

The foundation of an actuarial valuation is the information and assumptions used in preparing it. In this section, the salient Plan provisions, employee census data, and actuarial methods and assumptions used in preparing the valuation are outlined.

1.1 BRIEF OUTLINE OF THE
ALASKA TEACHERS' RETIREMENT SYSTEM

(1) Plan

The Teachers' Retirement System of Alaska is a joint contributory retirement system to provide benefits for teachers of the State.

(2) Effective Date

June 30, 1955, as amended through July 1978.

(3) Administration of Plan

The Commissioner of Administration is the administrator of the System; the Alaska Teachers' Retirement Board makes recommendations to the Commissioner of Administration; and the Commissioner of Revenue invests the funds.

(4) Membership

Membership in the Alaska Teachers' Retirement System is compulsory for all eligible certified teachers, certified school nurses, principals, supervisors, superintendents employed on a full-time or part-time basis in public schools in Alaska, the Commissioner of Education, supervisors with the Department of Education, and all full-time resident professional and administrative personnel of the University of Alaska.

(5) Credited Service

A year of membership service is defined to be the same as a school term which is currently a minimum of 172 days, and fractional service credit is on a daily rate basis. Credit is granted for all Alaskan public school service. Credit is granted for all accumulated, unused sick leave days.

(6) Contributions by Teachers

Effective July 1, 1970, each teacher shall contribute 7% of base salary accrued from July 1 to the following June 30.

(7) Voluntary Supplemental Contributions

If a teacher wishes to make his spouse or minor children eligible for a spouse's pension and/or survivor's pension allowance, he may elect to make supplemental contributions of an additional 1% of his base salary commencing not later than 90 days after entry in the System, marriage, or the birth or adoption of a child, or during any open enrollment period authorized by the Board.

(8) Arrearage Contributions

Up to 10 years of public or non-public teaching service, or service by a certificated person in a position requiring certification, in an accredited school not covered under the Teachers' Retirement System, or service in an institution of higher learning not under the control of the Board of Regents of the University of Alaska, is credited for retirement purposes.

After July 1, 1978, the full actuarial cost of providing benefits for this service will be born by the teacher. In addition, teaching services in Alaska B.I.A. schools may be used to increase total outside and Alaska B.I.A. service to 15 years before July 1, 1978. After this date, Alaska B.I.A. service is limited to 5 years.

A maximum of 5 years of military service after December 31, 1939 may be included as outside service. No fractional credit is

granted for outside service. Fractional credit is granted for Alaska B.I.A. service.

(9) Retroactive Contributions

If a teacher was not subject to the provisions of the Retirement Act and, at a later date became subject to them due to legislative changes of the eligibility requirements, the teacher may elect to receive credit for his creditable service prior to membership by submitting to the Retirement Fund an amount equal to the contributions that would have been made if the teacher had been a member of the System for any year's service after June 30, 1955, plus interest thereon. Retroactive contributions are not required for creditable membership service before June 30, 1955.

(10) Employers' and State's Contributions

The employer and the State each contribute an amount equal to one-half of the amount required in addition to member contributions to finance the benefits of the System.

(11) Rate of Interest

The amount deposited in a member account will be credited with interest at the rate established for a school year at the end of such school year. Effective July 1, 1973, the interest rate was increased to 4 1/2%.

(12) Withdrawal of Mandatory Contributions

If a member terminates teaching services in Alaska, mandatory contributions may be withdrawn. A withdrawing teacher will receive total mandatory contributions plus the interest credited.

(13) Reinstatement of Contributions

If Mandatory Contributions are withdrawn and a member subsequently resumes teaching in Alaska, the member will be indebted to the Teachers' Retirement Fund in the amount of the previous contributions to the System including any interest paid. The reinstatement indebtedness bears compound interest at the rate prescribed by regulation to the date of repayment or the date of retirement, whichever occurs first.

(14) Minimum Service Requirements

- (1) 8 years of membership service, or
- (2) 15 years of creditable service, the last five of which have been membership service; (after July 1, 1975 a new member needs 8 years of membership service); or
- (3) 25 years of creditable service, the last 5 of which are membership service; or
- (4) 20 years of membership service.

(15) Normal Retirement Eligibility

A teacher may retire and receive full benefits

- (1) Upon attaining age 55 and meeting the minimum service requirements; or
- (2) At any age after 25 years of creditable service, the last 5 of which are membership service; or
- (3) At any age after 20 years of membership service.

A retired teacher who has been receiving a disability retirement salary shall be eligible for a service retirement salary upon or after attaining age 55.

(16) Computation of Average Base Salary

A teacher's average base salary is determined by averaging the teacher's highest base salary which he received for any three out of the last 10 years of membership service.

(17) Normal Retirement Benefit

The normal retirement benefit is 2% of the teacher's Average Base Salary multiplied by the total number of years of creditable service.

(18) Early Retirement Benefit

A teacher is eligible for early retirement benefits if he has completed the minimum service requirements and has attained the age of 50. If the teacher does not apply for retirement benefits to start prior to his 55th birthday, he is eligible to receive the normal retirement benefit. If the retiring teacher elects to have payments of the benefit begin prior to his 55th birthday, the annual annuity is equal to his normal retirement benefit based on his average base salary and creditable service to his retirement date, reduced by one-half of 1% per month for each month by which his age at retirement is less than 55 years.

(19) Deferred Vested Benefit

A teacher is eligible for a deferred vested benefit if he (1) terminates his membership after completing eight years of membership service, and (2) he does not withdraw his retirement contributions. Payment of this benefit is deferred until the first of the month following the teacher's 55th birthday or the first of the month in which the application for benefit is filed, whichever is later.

(20) Indebtedness Owing At Retirement

If on the date of making application for retirement, a teacher has not paid the full amount of his indebtedness including interest to the Retirement Fund, one of the following options may be chosen:

Option 1: The retirement benefit can be withheld until the amount withheld is equal to the outstanding indebtedness.

Option 2: A reduced annuity, completed by deducting 10% of the outstanding indebtedness at the time of retirement from the annual retirement benefit, can be paid to the teacher.

(21) Re-employment of a Retired Teacher

If a retired teacher is re-employed as a full-time teacher, his retirement salary will be suspended during the period of employment.

Retirement Contributions are made at the option of such teacher and an additional retirement benefit may be accrued.

(22) Disability Retirement Benefits

A disability retirement annuity may be paid if a teacher has become permanently disabled and has at least five years of membership service.

The benefit will be equal to 50% of the disabled teacher's base salary immediately prior to becoming disabled. This benefit will be increased by 10% of the teacher's base salary for each minor child up to a maximum of four minor children until the child ceases to be a minor.

When the disabled teacher attains age 55, the disability salary will automatically terminate. A normal retirement salary will be computed as if the teacher had been in membership service during the period of disability, and a service retirement will be granted. The base salary used will be the same used in computing the disability benefit.

(23) Cost-of-Living Allowance

A retired teacher whose permanent residence is in Alaska subsequent to retirement and/or whose absence is of a temporary nature, not to exceed 60 days, for travel or vacation purposes is entitled to receive a cost-of-living allowance, not to exceed 10% of his retirement benefit in addition to his retirement benefit.

(24) Post-Retirement Adjustment

This adjustment is promulgated by regulation and payable to a retired teacher when the administrator determines that the cost of living has increased and the financial condition of the fund permits payment of the adjustment. The amount of increase shall not exceed 4% compounded for each year on retirement.

(25) Exemption from Taxation and Process

Teachers' retirement benefits are exempt from Alaska state and municipal taxes, are not subject to execution, attachment, garnishment or other process, but must be reported to the Internal Revenue Service for federal tax purposes.

(26) Lump Sum Death Benefit

Upon death of a member who has made no supplemental contributions

or who made supplemental contributions for less than one year, a lump-sum benefit shall be paid to the designated beneficiary. The lump-sum benefit is the teacher's accumulated mandatory contributions with interest thereon. If the teacher is in active service at the time of death, an additional death benefit equal to \$1,000 plus \$100 for each year of completed service plus \$500 if the teacher is survived by one or more minor children is also payable. In no case shall the additional benefit exceed \$3,000.

If the teacher had received a retirement benefit prior to his death, payment shall be his accumulated contributions, plus interest, minus all benefits paid.

If a member failed to designate a beneficiary, or if no designated beneficiary survives the member, payment shall be made:

- (1) to his surviving spouse or if there is no surviving spouse,
- (2) to his surviving children in equal parts, or if there are none surviving,
- (3) to his surviving parents in equal parts, or, if there are none surviving,
- (4) to his estate.

(27) Survivor's Allowance

If a teacher dies while in service or while receiving a service or disability retirement benefit, is survived by one or more

minor children and has made supplemental contributions for at least one year before his death, his surviving spouse is entitled to the survivor's allowance. The amount of the benefit is 35% of the teacher's base salary immediately prior to his death or becoming disabled for his spouse and 10% for each minor child up to a maximum of four.

(28) Spouse's Pension

If a teacher has made supplemental contributions for at least one year and dies while in membership service, or while receiving a disability benefit, or if a teacher has made supplemental contributions for at least 5 years and dies while on retirement or in deferred retirement status, the surviving spouse is entitled to receive the spouse's pension. The amount of the benefit is 50% of the service retirement salary that the deceased teacher was receiving or would have received. The spouse's pension commences on the spouse's 55th birthday or date of total and permanent disability. The payment ceases when the spouse dies or remarries.

1.2 MISCELLANEOUS INFORMATION

AS OF JUNE 30

Active Members

	<u>1976</u>	<u>1977</u>	<u>1978</u>
(1) Number of Active Members	6,209	7,024	7,255
(2) Average Age	37.42	37.20	37.33
(3) Average Service to Date	8.95	8.70	8.84
(4) Average Annual Salary	\$21,267	\$22,887	\$25,193

Retirees and Beneficiaries

(1) Number of Retirees and Beneficiaries	793	891	1,072
(2) Average Age	63.55	63.39	62.71
(3) Average Monthly Base Benefit	\$ 720	\$ 749	\$ 787
(4) Average Monthly C.O.L.A. Benefit	\$ 40	\$ 42	\$ 46
(5) Average Monthly P.R.P.A. Benefit	\$ 20	\$ 70	\$ 141
(6) Average Monthly Total Benefit	\$ 780	\$ 861	\$ 974

1.3 ANNUAL EARNINGS BY AGE AND SERVICE

ANNUAL EARNINGS BY AGE			ANNUAL EARNINGS BY SERVICE		
AGE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	SERVICE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS
0-19	0	0.	0	277	5929462.
20-24	210	3391049.	1	719	13529380.
25-29	1616	33377290.	2	444	8935596.
30-34	1601	37515048.	3	483	10552319.
35-39	1405	37269696.	4	469	10293273.
40-44	966	27233922.	0-4	2392	49240076.
45-49	664	19824766.	5-9	1889	46202248.
50-54	439	13595636.	10-14	1525	42689048.
55-59	244	7364593.	15-19	855	25830142.
60-64	85	2502683.	20-24	411	12876261.
65-69	18	529470.	25-29	147	4801674.
70-74	5	118081.	30-34	30	918836.
75-79	2	54000.	35-39	4	128606.
80+	0	0.	40+	2	89388.
TOTAL	7255	182776240.	TOTAL	7255	182776288.

AGE GROUP	SERVICE GROUPS BY AGE GROUPS										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	0
20-24	210	0	0	0	0	0	0	0	0	0	210
25-29	1262	353	1	0	0	0	0	0	0	0	1616
30-34	445	826	328	2	0	0	0	0	0	0	1601
35-39	228	387	601	188	1	0	0	0	0	0	1405
40-44	107	155	278	330	96	0	0	0	0	0	966
45-49	61	85	163	155	160	40	0	0	0	0	664
50-54	39	49	90	109	96	49	7	0	0	0	439
55-59	25	29	49	52	39	35	13	2	0	0	244
60-64	7	5	12	17	13	19	9	1	2	0	85
65-69	4	0	2	2	5	3	1	1	0	0	18
70-74	3	0	0	0	1	1	0	0	0	0	5
75-79	1	0	1	0	0	0	0	0	0	0	2
80+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2392	1889	1525	855	411	147	30	4	2	0	7255

1.4 ACTUARIAL METHOD AND ASSUMPTIONS

Valuation of Liabilities

A. Actuarial Method - Attained Age Normal, also known as Aggregate Method with Supplemental Liability. The unfunded accrued benefit liability is amortized over 40 years.

B. Actuarial Assumptions -

1. Interest 6% per year, compounded annually, net of investment expenses.
2. Salary Scale 6% per year until age 39 and 5% per year for ages 40 and up.
3. Mortality 1971 Group Annuity Mortality Table.
4. Turnover Based upon the 1976-77 actual total turnover experience. (See Table 1).
5. 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.
6. Retirement Age The average of age 60 and the earliest age for which unreduced retirement benefits will be available.
7. Contribution Refunds 85% of those terminating before age 50 with 8 to 12 years of service will leave their contributions and thereby retain their deferred vested benefit. All others who terminate after becoming vested are assumed to keep their contributions in the System.
8. C.O.L.A. 49% of those receiving retirement benefits will be eligible for C.O.L.A.
9. Sick Leave 4.7 days of sick leave will be available for each year of service.
10. Expenses No loading for expenses.

Valuation of Assets

Based upon the three-year average ratio between market and book values of the System's assets.

TABLE 1
 TEACHERS' RETIREMENT SYSTEM
 STATE OF ALASKA
 EMPLOYEE TURNOVER RATES

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0600	.0600
21	.0582	.0607
22	.0563	.0614
23	.0537	.0623
24	.0511	.0669
25	.0485	.0715
26	.0456	.0761
27	.0432	.0809
28	.0448	.0888
29	.0464	.0967
30	.0480	.1046
31	.0496	.1125
32	.0510	.1204
33	.0562	.1200
34	.0614	.1195
35	.0666	.1190
36	.0718	.1195
37	.0769	.1181
38	.0791	.1109
39	.0813	.1037
40	.0835	.0965
41	.0857	.0893
42	.0880	.0823
43	.0882	.0800
44	.0884	.0777
45	.0886	.0754
46	.0888	.0731
47	.0889	.0714
48	.0890	.0707
49	.0880	.0700
50 and up	.0870	.0700

TABLE 2
 TEACHERS' RETIREMENT SYSTEM
 STATE OF ALASKA
 DISABILITY RATES
 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	3.56
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		

SECTION 2

DETAILED VALUATION RESULTS

This section presents in detail the results of the actuarial valuation that were outlined in the Summary.

2.1 DISTRIBUTION OF ASSETS

AS OF JUNE 30, 1978

	<u>Book Value</u>	<u>Market Value</u>
Cash	\$ 289,140	\$ 289,140
Certificates of Deposit and Other Short Term Issues	31,800,940	31,800,940
Bonds, Notes, and Debentures - U.S. Government Other	59,555,471 23,648,905	55,734,867 22,436,438
Common Stock	15,980,199	18,531,089
Real Estate, Mortgages and Small Business Administration Loans in Alaska	<hr/>	<hr/>
Total Assets	\$215,370,551	\$212,888,370

2.2 DEVELOPMENT OF VALUATION ASSETS

AS OF JUNE 30, 1978

	<u>Market Value</u>	<u>Book Value</u>	<u>Ratio (M/B)</u>
(1) June 30, 1978	\$212,888,370	\$215,370,551	.9885
(2) June 30, 1977	184,323,044	177,345,469	1.0393
(3) June 30, 1976	141,205,993	137,623,382	1.0260
(4) Average Ratio			1.0179
(5) Book Value at June 30, 1978		\$215,370,551	
(6) Valuation Assets at June 30, 1978 (4) x (5)		\$219,225,684	

2.3 BREAKDOWN OF PRESENT VALUE
OF BENEFITS

	<u>Present Value of Accrued Benefit</u>	<u>Present Value of Fully Projected Benefit</u>
Retirement Benefits	\$111,377,925	\$271,919,534
Termination Benefits	63,326,574	174,296,956
Death Benefits	2,478,515	5,645,606
Disability Benefits	6,748,512	10,945,874
Liability for Inactive Members	<u>11,605,327</u>	<u>11,605,327</u>
Total Present Value of Benefits for all Non-Retired Members	<u>\$195,536,853</u>	<u>\$474,413,297</u>
Present Value of Benefits for Retirees	\$132,122,968	\$132,122,968
Total Present Value of Benefits	<u>\$327,659,821</u>	<u>\$606,536,265</u>

2.4 DEVELOPMENT OF NORMAL COST RATE
FOR FISCAL YEAR 1979-80

(1) Present Value of Fully Projected Benefits	\$606,536,265
(2) Present Value of Accrued Benefits	327,659,821
(3) Present Value of Future Member Contributions	103,637,976
(4) Present Value of Future Supplemental Contributions	4,282,504
(5) Present Value of Arrearage Indebtedness	12,577,430
(6) Present Value of Future Consolidated Employer Contributions (1) - (2) - (3) - (4) - (5)	158,378,534
(7) Present Value of Future Salaries	1,524,196,548
(8) Normal Cost Rate Before Medical Insurance (6) ÷ (7)	10.39%
(9) Rate for Retiree Medical Insurance	.40%
(10) Total Normal Cost Rate	<u>10.79%</u>

2.5 CALCULATION OF TOTAL CONTRIBUTION RATE
FOR FISCAL YEAR 1979-80

(1) Present Value of Accrued Benefits	\$327,659,821
(2) Valuation Assets	219,225,684
(3) Total Unfunded Liability	108,434,137
(4) 40-Year Amortization Factor	15.949075
(5) Past Service Payment	6,798,773
(6) Total Salaries	182,776,288
(7) Past Service Rate	3.72%
(8) Normal Cost Rate	10.79%
(9) Total Contribution Rate	14.51%

2.6 SUMMARY OF TOTAL CONTRIBUTION RATES
AT ALTERNATE AMORTIZATION PERIODS

<u>Amortization Period for Unfunded Liability</u>	<u>Normal Cost Rate</u>	<u>Past Service Rate</u>	<u>Total Contribution Rate</u>
40 Years	10.79%	3.72%	14.51%
35 Years	10.79%	3.86%	14.65%
30 Years	10.79%	4.07%	14.86%
25 Years	10.79%	4.38%	15.17%