Report of Actuarial Survey As at January 1, 1958

Public Employees Retirement Board Public Employees Retirement Association Room 415 Hamm Building St. Paul 2, Minnesota

#### Gentlemen:

This report presents the results of an actuarial survey of the Public Employees Retirement Association. The report has been prepared, and the survey made, in compliance with Chapter 11 of the Laws of 1957 Extra Session.

Although the order of the material in this report has been rearranged, the content is directed specifically at meeting the requirements as stated in Chapter 11. The requirements are contained in Section 2 of the Law which is quoted in full as follows:

- "SEC. 2. Factors included in Survey. The actuarial survey shall include the following:
- (1) A census of each of active and deferred annuitant classes by attained age, sex and service. The census shall show number of members, their aggregate annual salary, their contributions for the past plan year, and their prospective retirement annuities under the plan.
- (2) A census of each of the classes of retired members, disabled members, and survivors of members by type of annuity, attained age, and sex (and duration where applicable). The census shall show number of retirements and amount of annual annuity payable as of the survey date.
- (3) An actuarial balance sheet showing the assets, liabilities, and the deficit from full funding of liabilities.
- (4) A statement of assumptions made in determining present values of benefits and contributions, including the following:



- (a) Interest rate
- (b) Mortality rates (before and after retirement)
- (c) Withdrawal rate
- (d) Salary scale
- (5) Each actuarial survey shall include the findings as to:
  - (a) The normal support rate required to adequately finance currently accruing liabilities.
  - (b) Such additional annual rate of support as is required to amortize the deficits found by the end of the fiscal year of the fund occurring in 1997."

For the purpose of presentation in this report, the major items required, have been rearranged in the following order.

- 1. An actuarial balance sheet showing the assets, liabilities and unfunded liabilities.
- A statement of costs, showing the cost of currently accruing liabilities and the annual rate of contribution required for amortizing the unfunded liability by 1997.
- 3. A statement of the actuarial assumptions used in preparing the liabilities and costs.
- 4. The required tables, showing the census of active members and annuitants.

#### Actuarial Balance Sheet

The actuarial balance sheet is intended to show the assets of the Association and the liabilities for the payment of future benefits under the plan. The net difference is the amount of unfunded liability. In any retirement system the usual status, as shown by the balance sheet, will include an amount which is expected to be funded by payments in future years. The plan may be considered fully funded if there is a provision for amortizing, or gradually reducing, the unfunded liability over a period of years.

Two distinct methods are in common usage, for the presentation of an actuarial balance sheet. One method includes in the assets, the present value of prospective future contributions to the system, and includes in the liabilities present value of all prospective benefits that are expected to be earned by members of the system in future years. By including the value of future contributions to the system and the value of benefits that will accrue, or be earned in the future, this form of balance sheet necessarily shows much larger figures for assets and liabilities, because it includes projections covering the future life time of all existing members of the plan.

The second method limits the assets of the balance sheet to those funds which are in hand at the date of valuation, or immediately collectible, and limits the liabilities to the value of benefits which have been accrued, or earned, up to the date of the balance sheet. The resulting balance sheet deals with much smaller figures for both assets and liabilities. Both assets and liabilities have a higher degree of accuracy because they eliminate the uncertainties of estimated future income and benefit accruals. The balance sheet as shown in this report follows this second method.

The assets of the balance sheet include the assets shown in the published statement of the Public Employees Retirement Association as of June 30, 1957, brought up to date in accordance with the Association's records of income and disbursements to January 1, 1958.

The statement of assets as of June 30, 1957 included an item of Employer Contributions as provided in the new Law in the amounts certified for the year ending June 30, 1957. The amount of this item, which has not yet been collected, will be collected for the most part, during the fiscal year ending June 30, 1959. Assuming that the average date of collection of this amount is about January 1, 1959, there is a loss of one year's interest

after the effective date of this survey. For the purpose of showing the assets of this balance sheet, the Employer Contributions Receivable have been discounted by the interest loss for one year estimated at 3%.

The liabilities as shown in the balance sheet are the calculated values of benefits that are currently payable to the annuitants on the rolls as of January 1, 1958, and the values of benefits that have been earned with respect to their service up to January 1, 1958 for active members and non-employee members. These liabilities have been calculated from the data which is summarized in the census tables presented as a part of this report. The values are calculated using the actuarial assumptions as described below.

## Actuarial Balance Sheet As at January 1, 1958

### Assets

Assets in Hand		\$ 22,519,643	
Employer Contributions Receivable Amount Receivable Less discount for loss of interest	\$ 3,678,444 107,139	3,571,305	
Total Assets		\$ 26,090,948	
Unfunded Liabilities		\$ 85,511,928	
Total		\$111,602,876	
<u>Liabilities</u>			
Value of Future Benefit Payments for			
Retired Members Annuities	\$20,977,201		
Disability Annuities	77,374		
Survivors Annuities	2,879,000	\$ 23,933,575	
Inactive Members	•	2,816, <i>2</i> 71	
Active Members Annuities Accrued to January 1, 1958		84,853,030 \$111,602,876	

#### Statement of Costs

The actuarial balance sheet shows the total liabilities or values of retirement benefits for service up to the date of valuation. These liabilities normally increase at the rate assumed for interest, or 3% each year, less the amounts required to pay benefits during the year. Each year, however, all active members accrue an additional year of service. The cost of the amount of benefit added by reason of this additional year of service is the cost of benefits for one year of service, or current cost of retirement annuities.

The Summary of Estimated Costs shows the value of such benefits earned for one year of service for all active members. This cost for one year of retirement annuity accrual is the most important single item of annual cost.

For the survivors benefits and disability benefits a one year term cost has been estimated. This means that the number of survivors benefits and disability benefits which will probably occur in one year are estimated in accordance with the mortality table and the disability rates assumed. The one year term cost is the number of such deaths or disabilities expected to occur, multiplied by an average value of the future benefits payable to the survivors or the disabled member, as the case may be.

Non-employee contributing members also accrue an additional amount of retirement benefit for each year's contributions. The cost of these benefit accruals is also included.

Since the expense of administering the plan is paid from the income received by the Association, there is an estimated expense allowance of about 2% of all other costs.

The total estimated cost for the fiscal year ending June 30, 1958, as shown by the Summary of Estimated Costs is \$9,783,599 or 8.6% of the \$114,022,632 annual rate of salary for all active members.

The annual cost may be compared with the estimated value of normal contribution from members and employers expected to be received on account of the same annual salary. The estimated normal receipts are \$13,328,793, based on a 6% contribution from members and a 6% contribution from employers, with the value of the latter reduced by the expected interest loss for two years. The total effective receipts are 11.7% of salaries.

The comparison of current annual costs and current annual receipts shows a balance of contributions in excess of requirements of \$3,545,194 annually.

The law provides a specific additional contribution from employers of 2.5% of salaries, or \$2,679,000 commencing July 1, 1959, to fund the unfunded liability as shown by the balance sheet. The unfunded liability is \$85,511,928 which would require \$3,737,000 a year for 38 years to fund in full by June 30, 1997. This presently indicates a shortage in the annual payments required of \$1,058,000 a year.

There is a net excess of \$2,487,000 when the current cost excess and the shortage in payments for unfunded liability are combined. The excess of normal annual receipts over the estimated annual costs should serve to reduce the unfunded liability more rapidly.

Both the amount of unfunded liability and the excess of normal contributions over annual costs, as indicated in this report, are subject necessarily to fluctuation on account of future experience. Only by following a series of similar annual valuations over a period of years can the liabilities and costs be realistically tested for their accuracy.

# Summary of Estimated Costs For the Year Ending June 30, 1958

Aggregate Annual Salaries	114,055,965 <del>\$114,022,63</del> 2
Current or Normal Annual Costs	
Members Retirement Annuities Benefits Under Section 353.29 Additional Benefits Under Section 353.46	5,29 <b>6,270</b> 484,523
Survivors Benefits Annual Term Costs Benefits Under Section 353.31 Benefits Under Section 353.21	2,073,600 1,033,200
Disability Benefits Annual Term Costs Non-Employee Contributing Members Costs Administrative Expense Allowance at 2% of Other Costs	652,000 44,006 200,000
Total Current Annual Costs Costs as a percentage of salaries	\$ 9,783,599 8.6%
Regular Annual Receipts	
Members Regular Contributions at 6% of Salaries	\$ 6,841,000
Non-Employee Members Contributions	39,793
Employers' Regular Contributions at 6% \$6,841,000  Less discount for loss of interest 393,000	6,448,000
Total Normal Annual Receipts Receipts as a percentage of salaries	\$ 13,328,793 11.7%
Amount Required to Fully Fund the Unfunded Liability	
Amount of unfunded liability at January 1, 1958 Annual payment required for 38 years at 4.370% (on \$85,511,928) to fund the presently	\$ 85,511,928
indicated unfunded liability	3,737,000
Amount Required Percentage of Salaries	3 • 3%
Expected Annual Funding Payments	
Employers' Additional Contributions at  2.5% of Salaries \$2,851,000  Less discount for loss of interest 172,000	<b>\$</b> 2,679,000

#### Statement of the Actuarial Assumptions

The liabilities of the balance sheet are calculated as the present values of future payments to the beneficiaries receiving annuities from the Association, and the probable value of future payments for active members with respect to their service up to January 1, 1958. The present value is the amount which should be on hand and invested at the assumed rate of interest in order to provide for the future benefit payments, if the mortality experience among the members is in accordance with the assumed table of mortality.

The actuarial assumptions used in this report and valuation, are of the simplest possible kind, in order to make the calculations and the understandability of the results as simple as possible.

#### Interest Rate

An interest rate of 3% has been assumed. This means in effect, that it is assumed that the moneys and assets of the Association, as shown in the balance sheet, are or will be invested in securities, which will produce an average yield of 3% per year. The average 3% yield must be obtained for the future life time of present members, which may extend for the next 80 or 90 years. The rate assumed, is reasonably justifiable in the light of the present investments of the fund, and the immediate future. It has no margin for a possible fall in investment returns in the future, such as was experienced between 1930 to 1950.

#### Mortality Rates

The mortality rates assumed are based on the 1937 Standard Annuity Mortality Table, both before and after retirement. A previous investigation of the mortality among retired members indicates that this is a reasonable

mortality assumption in relation to current experience. The best actuarial opinion is that mortality experience will improve in future years. If this proves to be true, there is no margin of safety in the mortality rates assumed. If the number of deaths decrease, there will result more persons drawing benefits from the Association, and for a longer number of years.

#### Withdrawal Rate

No specific withdrawal rate has been used in the valuation. A somewhat similar effect is obtained, however, by eliminating from the valuation all those members who have less than 5 years of credited service. This has the same effect on the liabilities and the costs as a moderate rate of withdrawal would have.

#### Salary Scale

No salary scale has been used in present valuation. It is recognized that, as salaries go up, the benefits will increase in future years, but the increase will be partly offset by increased contributions in the same future years. Since this valuation includes only benefits earned up to the date of valuation and income which has been received up to the date of valuation, no salary scale is required in the calculations of the values of future benefits already earned.

#### Disability Rate

It was necessary to use an assumption as to the probable rate of disability amount members in order to derive a cost of disability benefits. For this purpose, the rates of disability advocated by the UAW-CIO based on experience in the automotive industry (July 1, 1955) have been used.

#### Certain Annuitant Valuations

The disability annuities in course of payment as at January 1, 1958 have been valued as ordinary lives, because of their small number and the complete absence of any experience with such annuities.

The annuities payable to dependent children, although terminable upon death, have been valued as annuities certain for their respective durations.

# List of Tables Showing Census As at January 1, 1958

Table	Contents
1	Retired Member's Life Annuities
2	Surviving Spouses' Life Annuities Chapter 353.21
3	Surviving Spouses' Life Annuities Chapter 353.31
4	Surviving Spouses' Life Annuities Spouses Having Dependent Children
5	Dependent Children's Temporary Annuities One Child Only Two Children Only
6	Dependent Children's Temporary Annuities Three or More Children
7 .	Members' Disability Life Annuities
8	Contributing Non-Employee Members- Males
9	Contributing Non-Employee Members - Females
10	Non-Employee Paid Up Deferred Annuities
11	Active Members With 5 or More Years of Service - Males
12	Active Members With 5 or More Years of Service - Females
13	Active Members with Less than 5 Years of Service - Males
14	Active Members with Less than 5 Years of Service - Female

# Retired Member's Life Annuities As at January 1, 1958

Attained		Males	Fer	males
Age at 1-1-58	Number	Annual Annuities	Number	Annual Annuities
1-1-70	Hommet	Windlotes	Homber	Willerotes
60	7	\$ 11,657.16	2	\$ 3,611.40
61	8	13,966.32	3 5 5 5	4,012.80
62	16	26,852.28	5	7,907.52
63	15	26,517.00	5	7,229.28
64	22	36,181.92	5	5,983.08
65	86	108,286.08	24	19,202.76
66	82	103,129.92	33	28,542.48
67	111	132,071.28	39	35,113.68
68	115	141,074.40	42	38,572.56
69	103	130,666.56	47	41,798.76
70	114	137,766.60	37	35,834.28
71	108	129,476.28	33	31,521.60
72	<b>10</b> 9	139,215.00	33	23,957.28
<b>7</b> 3	102	113,128.08	29 24	29,211.00
74	90	106,734.00	24	20,113.08
<b>7</b> 5	<b>7</b> 5	87,904.68	29	27,591.12
76	<b>7</b> 5 <b>62</b>	67,044.48	16	12,561.72
77	54 48	59,232.00	14	16,019.16
78		59,515.44	13	13,272.12
79	36	45,130.68	9	6,881.04
80	36	43,167.84	7	5,623.80
81	19	24,436.44	8	9,919.80
82	18	21,090.96	7	5,393.64
83	20	27,297.84	6	1,067.40
84	14	16,064.28	6	7,083.96
85	6	6,654.12	4	2,741.04
86	6	6,462.24	1	1,110.36
87	3	3,973.92	3	2,254.68
88	2	1,986.00	-	-
89	1	838.56	1	1,020.00
90	2	3,117.24	-	-
91	2	1,740.00		
Totals	1,492	\$1,832,379.60	480	\$445,151.40

Surviving Spouses' Life Annuities Under Chapter 353.21 As at January 1, 1958

Attained Age at	Females Annual		
1-1-58	Number	<u>Annuities</u>	
60	11	\$ 9,039.60	
61	10	9,071.52	
62	13	10,194.00	
63	15	12,782.52	
64	24	16,735.44	
65	10	6,952.56	
66	12	7,692.84	
67	14	6,749.88	
68	10	6,893.88	
69	14	9,135.12	
70	16	7,356.96	
71	8	4,979.28	
72	5	2,531.52	
73	15	7,528.32	
74	6	4,545.00	
75	10	5,721.36	
76	7	4,921.68	
77	.3	1,826.64	
78	9	5,191.68	
79	5	2,253.00	
80	4	2,323.80	
81	5	3,083.52	
82	2	1,248.00	
83	1	771.24	
85	2	959.28	
88	1	420.00	
89	1	500.88	
90	_1	<u>960.00</u>	
Totals	234	<b>\$</b> 152 <b>,</b> 369 <b>.</b> 52	

Surviving Spouses' Life Annuities Under Chapter 353.31 As at January 1, 1958

Attained	Mal	es	<b>F</b>	emales
Age at		Annual		Annual
<u>1-1-58</u>	Number	<u>Annuities</u>	Number	Annuities
38 46			1	\$ 780.00
46			l	780.00
47			1 1 1 1	780.00
48			1	780.00
49			1	780.00
50	ı	\$ 780.00	3	2,340.00
51	_	<b>Y</b> 100000	ĭ	780.00
53	1	780.00	3 1 3 1	2,340.00
53 54	1 1	780.00	ĭ	780.00
55		•	4	3,120.00
57			3	2,340.00
57 58			ĭ	780.00
59 <b>60</b>	1	780.00	3 1 2 1	1,560.00
60		•	ı	780.00
61			2	1,560.00
62			1	780.00
63			3	2,340.00
65			3	2,340.00
63 65 66			1 3 3 4 0	3,528.72
70	1	780.00	0	
71			1	1,018.80
73	-		1 1	780.00
Totals	5	\$3,900.00	39	\$31,067.52

Surviving Spouses' Life Annuities Spouses Having Dependent Children As at January 1, 1958

Attained	Ma	les	Fer	nales
Age at	<del>-1</del>	Annual		Annual
1-1-58	Number	Annuities	Number	Annuities
36			1	\$ 780.00
37			1 2	1,560.00
37 38 39			ı	780.00
39			ī	780.00
40			1 1 2	1,560.00
41			2	1,560.00
42				1,560.00
43			2	1,560.00
15 15			ī	780.00
45 46			2 2 2	1,560.00
47			2	1,560.00
48			2	780.00
51	ı	\$780.00	2 2 0	,
5 <b>2</b>		φισστοσ		780.00
53			1	780.00
55			ı	780.00
55 56			_1	780.00
Totals	1	\$780.00	23	\$17,940.00

# Dependent Children's Temporary Annuities to Age 18 As at January 1, 1958

### ONE CHILD ONLY

Duration At 1-1-58	Number	Annual Annuities
0 1 4 5 6	4 1 1 2 <u>1</u>	\$ 3,120.00 780.00 780.00 780.00 1,560.00 780.00
Totals	10	\$ 7,800.00

### TWO CHILDREN ONLY

	<u>o</u>	der Child
Duration At 1-1-58	Number	Annual Annuities
ı	1	\$ 540.00
3	1	540.00
4	2	1,080.00
10	1	540.00
8	1	540.00
Totals	6	\$ 3,240.00

	<u>. Y</u>	ounger Child
Duration At 1-1-58	Number	Annual Annuities
5	2	\$ 1,560.00
10	2	1,560.00
13	1	780.00
15	1	780.00
Totals	6	\$ 4,680.00

# Dependent Children's Temporary Annuities to Age 18 As at January 1, 1958

## THREE OR MORE CHILDREN

		. Youn, hild	gest
Duration At 1-1-58	Number		nnual nuities
2	2,	\$	600.00
3	1		300.00
1.	•		200 00

4	ī	300.00
5	1	300.00
5 6	2	600.00
9	<u>_1</u>	300.00
	<del></del>	

Totals	8	\$	2,400.00
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	Next Youngest				
Duration At 1-1-58	Number	Annual Annuities			
4	ı	\$ 540.00			
6	2	1,080.00			
7	2	1,080.00			
9	1	540.00			
ú	1	540.00			
12	1	540.00			
Totals	8	\$ 4,320.00			

		Youngest
Duration At 1-1-58	Number	Annual Annuities
6	2	\$ 1,560.00
8	1	780.00
11	1	780.00
13	1	780.00
15	l	780.00
16	1	780.00
17	<u> 1</u>	780.00
Totals	8	\$6,240.00

# Members' Disability Life Annuities As at January 1, 1958

Attained	M	[ales_	Femal	es_
Age at 1-1-58	Number	Annual Annuities	Number	Annual Annuities
54	1	\$ 2,677.20		
59			1	\$ 1,377.00
60	<u>_1</u>	758.04	_1	382.08
Totals	2	\$ 3,435.24	2	<b>\$ 1,7</b> 59 <b>.0</b> 8

# Contributing Non-Employee Members As at January 1, 1958

### Males

		Annual	Annual Ann	uities
Attained		Contribution	Accrued	Current
Age 1-1-58	Number	At 12%	To Date	Accrual
		· ·		
41	1	\$ 321.12	\$ 836.28	\$ 66.96
45 48	2	409.44	1,749.36	34.20
48	4	1,471.68	6,195.72	171.48
49	1	185.76	874.68	15.48
50	3	1,045.20	4,306.32	159.00
5 <b>1</b>	1	558.48	2,629.56	49.56
52	3	1,134.48	4,387.68	183.12
53	2	669.60	2 <b>,0</b> 48.28	115.80
53 54	3	652 <b>.5</b> 6	2,929.56	73.32
55	1 3 2 3 3	1,103.04	4,788.60	114.36
56	6	1,561.68	6,573.72	208.56
57	8	3,060.00	12,934.08	312.12
57 58	10	3,174.48	13,045.44	420.72
59	2	640.32	2,490.60	94.80
59 <b>60</b>	2 8	2,172.96	8,341.32	322.80
61	2	801.84	2,940.24	167.04
62	2	489.84	1,826.64	102.00
63	5	1,191.84	4,695.24	187.08
64	á	645.12	2,720.64	53.88
67	5 3 <u>1</u>	<b>571.68</b>	1,965.12	119.16
Totals	70	\$21,861.12	\$88,2 <b>7</b> 9. <b>0</b> 8	\$2,968.44

## Contributing Non-Employee Members As at January 1, 1958

# **Females**

		Annual	Annual Ann	uities
Attained Age 1-1-58	Number	Contribution At 12%	Accrued To Date	Current Accrual
32 34 40 41 42	1 1 3 1	\$ 193.68 336.96 684.96 150.96 304.08	\$ 585.12 1,017.96 2,339.28 581.88 1,289.76	\$ 40.32 70.20 142.68 31.44 25.32
43	1	320.88	768.72	66.84
44	1	338.88	1,094.28	70.56
45	3	760.08	3,116.76	96.12
46	2	501.60	1,820.64	84.12
47	6	1,483.20	5,675.40	171.72
48	2	358.08	1,547.76	29.76
49	2	636.24	1,803.48	132.60
50	2	293.76	1,313.04	24.48
51	1	250.32	808.32	52.20
52	2	418.80	1,812.48	34.92
53	5	1,176.00	4,997.52	143.64
54	5	1,247.76	4,787.04	193.56
55	2	665.52	2,295.36	100.80
56	4	852.24	2,959.80	140.28
57	7	1,415.52	5,808.24	198.84
58	7	2,199.84	9,394.20	297.60
59	4	1,026.24	4,165.56	120.36
61	5	1,274,40	4,789.32	205.32
63	3	690.96	3,009.24	57.60
64	1	350.88	1,425.48	73.08
Totals	72	<b>\$17,</b> 931.84	\$ 69,206.64	\$2,604.36

# Non-Employee Paid Up Deferred Annuities As at January 1, 1958

Attained	Male	Annual	Fema	les Annual
Age 1-1-58	Number	Annuities	Number	Annuities
	<del></del>			
30	1	\$ 720.00	··	
31 33 34 37			1	\$ 907.20
33 34	-	2 ol 6 90	2	1,468.92
5 <del>4</del> 37	1	1,246.80	2 1	1,172.68
31			1	720.00
39	1	720.00	3	3,726.36
40		•	3	900.00
42			1 2	2,209.68
43	2	3 <b>,</b> 39 <b>7.</b> 56	2	1,094.76
<b>4</b> 4	0		. 0	
45	5	7,075.36	2	1,265.04
46	3	4,943.04	<u>~</u>	1,20,.04
47	5 3 1	1,643.04		
48	ī	1,554.00	4	5 <b>,9</b> 63 <b>.1</b> 6
49	ī	2,154.00	4	2,823.72
.,	_	2,2,1000	7	
50	2	1,179.24	3	1,580 <b>.0</b> 4
51			2	2 <b>.0</b> 85 <b>.</b> 12
52	3 ·	4,446.72	3	2 <b>,2</b> 64 <b>.</b> 16
53 54	1	2,496.00	3 2 3 5 1	4,803.00
54			1	1,260.00
55	6	7,326.24	14	3,283.56
56	. 5	6,673.56	5	3,763.28
5 <b>7</b>	· 5 4	4,154.64		5,1050=0
58	4	5,417.40	9	9,933.84
55 56 57 58 59	3	2,442.00	9 4	5,083.32
60	5	4,761.00	6	5 077 <b>0</b> 8
61	5 Ֆ	1,197.36	3	5,977.08 2 357.40
62	ř	2,011.44	ے ج	2,357.40 4,648.56
63	Ŕ	14,753.04	ř	5,019.00
63 64	8 7	8,591.16	5 4 3	3,613.56
65	ı	375.00		
69	<u>i</u>	973.80		
Totals	73	\$90,242.40	80	\$78,023.64

## Active Members With 5 or More Years of Service As at January 1, 1958

# Males

				Annual A	nnuities	
			Unde	er	Additions	l Under
Attained	Number Aggregat	e Annual	Section	353.29	Section	353.46
Age at	of Annual	Contribution	Accrued	Current	Accrued	Current
1-1-58	Members Salary	Rate at 6%	To Date	Year	To Date	Year
Under 20	2 <b>\$</b> 7,61	4 \$ 459	\$ 450	\$ 77		
20 21 22 23	1 2,32 4 14,09 19 63,71 36 139,68	3,824 3,824 32 8,381	105 845 3,147 7,337	23 140 639 1,397		
24	39 148,28	, ,	8,167	1,485		
25 26 27 28 29	49 194,01 60 233,49 74 269,98 105 409,67 117 475,67	02 14,010 8 16,199 6 24,581	11,373 14,468 17,017 26,438 30,387	1,943 2,380 2,784 4,200 5,039	\$ 1,312 3,472 1,457 7,050	268
30 31 32 33 34	181 725,32 191 762,78 207 852,49 220 899,48 226 880,51	66 45,767 91 51,149 94 53,969	49,142 51,361 61,453 64,886 67,036	7,644 8,069 9,272 9,825 9,931	11,538 13,618 22,643 27,047 33,118	952 1,542 1,900
35 36 37 38 39	235 954,62 260 1,044,30 249 974,25 244 974,85 263 1,028,28	62,658 5 58,455 7 58,494	73,734 81,387 78,346 81,319 86,885	11,005 12,226 11,414 11,683 12,660	35,698 47,790 36,417 40,866 52,010	2,976 1,858 1,963
40 41 42 43 44	271 1,091,87 289 1,138,63 306 1,242,84 335 1,309,89 293 1,152,17	68,318 2 74,571 3 78,594	97,282 111,813 126,191 132,251 124,339	13,242 14,927 15,892 17,480 15,241	52,641 72,002 68,090 82,886 73,156	3,164 2,698 3,397
45 46 47 48 49	297 1,144,24 341 1,326,59 358 1,40 <b>8</b> ,27 339 1,330,13 361 1,411,93	8 79,596 9 84,497 9 79,808	124,302 143,468 165,552 149,217 168,819	15,394 17,769 19,407 17,844 19,389	70,891 76,760 89,398 83,517 90,017	2,598 2,983 3,168
Subtotal	5,972 \$23,612,14	1 \$1,416,730	\$2,158,517	\$290,421	\$1,093,394	<b>\$</b> 49 <b>,0</b> 83

	Subtotal							
	Forward.	5,972	\$23,612,141	\$1,416,730	\$2,158,517	\$290,421	\$1,093,394	\$49,083
	50	270	n hah Qah	Q), QQ <sub>Q</sub>	1 EO 99m	10 050	01, 576	
	50 51	372	1,414,814	84,889	159,887	18,953	84,516	3,098
	5 <b>1</b>	331	1,257,433	75,446	143,351	17,035	74,871	2,546
	52 53	336	1,284,681	77,081	160,573	17,758	74,340	2,139
	53	313	1,217,448	73,047	148,359	17,262	82,072	2,529
	54	208	1,236,423	<b>74,18</b> 5	153,890	17,044	77,587	2,692
	5 <b>5</b>	330	1,303,587	78,215	177,886	19,064	89,168	2,623
	56	348	1,394,706	83,682	189,626	20,635	100,062	2,708
	57	349	1,379,213	82,753	203,953	20,642	100,758	3,001
	58	329	1,283,575	77,015	193,439	19,499	96,042	2,514
	59	326	1,273,324	76,399	190,667	19,105	89,072	2,576
		<b>J</b>	-,-,5,5-	10,322		17,107	09,012	2)10
	60	316	1,188,910	71,335	164,425	17,609	83,533	2,338
	61	403	1,599,767	95,986	245,237	23,911	109,159	3,146
	62	367	1,444,268	86,656	231,274	22,774	111,748	2,993
	63	339	1,319,642	79,179	210, 348	20,299	96,525	2,506
	64	308	1,194,318	71,659	188,272	18,479	92,596	2,581
	_		,, ,,,	1-,-,,		, .,,	J=, 7,70°	-, )
	<b>6</b> 5	249	951,233	5 <b>7,0</b> 74	149,354	14,897	75,711	1,762
	66	189	715,860	42,952	122,310	11,340	58,598	1,613
	67	158	<b>60</b> 9,5 <b>0</b> 4	36,570	110,396	10,073	56,744	1,532
•	<b>6</b> 8	121	446,112	26,767	91,858	8,080	49,108	1,155
	69	102	382,656	22,959	78,079	6,693	39,924	1,157
						, , , ,	0077	
	70	79	311,402	18,684	58,206	5 <b>,25</b> 3	31,295	814
	71	60	229,217	13,753	49,790	4,129	23,382	502
	72	47	168,382	10,103	29,478	2,832	16,168	399
	<u>7</u> 3	40	163,154	9,789	37,256	2,979	15,968	353
	74	31	124,968	7,498	31,340	2,329	11,174	223
	<b>7</b> 5	17	62,654	3 <b>,7</b> 59	15,882	1,235	6,426	102
	76	24	83,291	4,997	14,378	-	6 <b>,0</b> 78	
	77	10	29 <b>,7</b> 55	1,785	5,653	1,321 471		123
	78	10	32,276	1,937		-	3,288	159
	79	8	26,474	1,588	7,473	573	2,552	40 116
	12	0	20,414	ممر و د	2,800	429	2,915	116
	80 & Over	17	39,996	2,400	10,008	771	4,886	132
	Cwand Mat-3	10.000	d) 7 701 101.	do 966 970	Ar 700 707	ACED : 00=	A. 0-0 (C-	
	Grand Total	16,609	\$47,781,184	\$2,866,872	<b>\$</b> 5,733,797	<b>\$053,095</b>	\$2,859,660	\$99,185

# Active Members With 5 or More Years of Service As at January 1, 1958

## Females

									A	nnual A	nnu	ities		
								Under	:			dditional		
	Attained	Number	Aggrega	te		Annual		Section 3				Section 35		
	Age at	of	Annual			ntribution				rent		crued		rent
	1-1-58	Members	Salary		R	ate at 6%	<u>T</u>	o Date	Ye	ar_	To	Date	Ye	ar
	Under 20	. 1	\$ 3.	,696	\$	222	\$	166	\$	37				
	20	3		, 584		635		651		106				
	21	11		,372		1,402		1,120		234				
	22	5 <b>1</b>		,024		8,521		6,650		1,417				
	23	53	138	,672		8,320		7,037		1,386				
	24	54	149	<b>,38</b> 2		8,963		8,616		1,495				
	25	70		,327		12,260		12,358		2,041	\$	435	\$	46
	26	58	194	<b>,7</b> 53		11,685		12,249		1,946		959		102
`	27	59 63	188	,133		11,288		11,816		1,907		2,224		2 <b>0</b> 2
	28	63		,400		11,304		13,544		2 <b>,1</b> 85		5,616		25 <b>7</b>
	29	61	187	,970		11,278		14,173		2,255		9,121		533
	30	75	267	,090		16,025		20,799		3,119		8,768		403
	31	75 86	302	,629		18,158		<b>25,7</b> 13		3,684		15,601		846
	32	77	251	,280		15,077		21,867		3,170		13,784		667
	33	65	218	,115		13,087		18,799		2,676		11,021		55 <b>1</b>
	34	61	184	,856		11,091		15,854		2,375		9,552		379
	35	69	218	,998		13,140		18,975		2 <b>,6</b> 55		8,792		340
	35 36	8í		188		16,151		25,548		3,477		16,522		744
	37	91		397		18,024		27,898		3,892		15,931		558
	38	92	288	,779		17,327		25 <b>,</b> 980		3,465		14,187		739
	39	105	341	,iio		20,467		41,414		4,722		24,102		739
	40	107	336	<b>,0</b> 79		20,165		35,389		4,403		21,664		886
	41	118		, 360		21,802		48,642		5,285		28,916		843
	42	141		,096		27,306		60,375		6,673		34,558		951
	43	143	444	,173		26,650		52,318		6,120		27,969		768
	44	153	482	,614		28,957		56,310		6,455		26,187		772
	45	182	563	,685		33,821		61,559		7,215		23,549		772
	46	172	538	,314		32,299		74,262		7,547		32,677		722
	47	192		,038		37,922		73,549		6,581		34,789		998
	48	183	5 <b>7</b> 9	,765		34,786		69,037		7,701		35,509	1	,143
	49	187	615	,893		36,954		61,627		8,951		44,297		,394
	Subtotal	2,864	\$9,084	<b>,77</b> 2	\$	545,087	\$	924,295	\$11	5 <b>,17</b> 5	\$	466,730	\$16	, 346

Subtotal								
Forward	2,864	<b>\$</b> 9 <b>,0</b> 84 <b>,77</b> 2	\$ 545,087	\$	924,295	<b>\$115,17</b> 5	\$466,730	\$16,346
50 51 52 53 54	176 173 172 161 174	557,519 553,968 533,661 506,481 531,232	33,451 33,238 32,020 30,389 31,874		68,784 69,848 63,330 63,005 66,260	7,898 7,607 7,327 7,047 7,390	37,331 33,402 30,061 31,252 33,803	1,206 1,028 958 1,107 1,113
55 56 57 58 59	196 153 183 185 160	598,897 474,600 566,030 565,133 519,565	35,934 28,476 33,962 33,908 31,174		80,929 66,852 81,075 79,530 82,502	8,924 6,917 8,402 8,409 8,037	44,194 30,478 45, <b>0</b> 42 44,454 43,582	1,201 856 1,462 1,509 1,389
60 61 62 63 64	132 167 130 122 100	393,949 483,405 384,592 345,191 272,907	23,637 29,004 23,076 20,711 16,374		62,564 79,881 55,976 55,487 39,691	6,001 7,721 5,803 5,238 4,044	30,327 36,973 30,149 26,623 20,240	943 858 836 901 570
65 66 67 68 69	96 70 44 38 40	288,030 215,809 127,352 103,726 105,374	17,282 12,949 7,641 6,224 6,322		45,641 38,235 22,328 16,062 17,931	4,651 3,720 2,170 1,551 1,789	25,795 21,477 11,882 8,757 10,688	700 473 289 306 194
70 71 72 73 74	26 15 9 13 5	74,259 45,268 27,884 29,216 15,570	4,456 2,716 1,673 1,753 934		16,230 8,981 5,559 5,341 5,735	1,290 791 550 475 356	5,780 4,809 4,216 2,070 1,397	86 97 113 11 16
75 7 <b>6</b> 77 78	8 2 2 4	18,079 7,842 3,797 7,573	1,085 471 228 454		3,168 1,882 1,447 975	313 1 <b>76</b> 95 131	1,837 1,438 552 899	41 20 0 28
80 & Over	1	1,803	108		833	45	144	0
Grand Total	5,621	\$17,443,484	\$1,046,611	\$2	2,148,863	\$242,153	<b>\$1,088,1</b> 82	<b>\$</b> 34,666

# Active Members With Less Than 5 Years of Service As at January 1, 1958

## Males

Attained Age at 1-1-58	Number of <u>Members</u>	Aggregate Annual Salary	Annual Contribution Rate at 6%	Annual And Under Section CAccured To Date	<u>r</u>
Under 20	261	\$ 472,360	\$ 28,341	\$ 4,492	\$ 4,527
20	115	314,851	18,891	3,763	3,144
21	145	408,582	24,515	5,607	4,043
22	165	483,991	29,039	6,769	4,844
23	148	466,681	28,001	6,574	4,671
24	226	716,743	43,005	9,279	7,081
25	220	669,536	40,172	10,357	6,645
26	218	718,842	43,131	11,888	7,123
27	233	790,926	47,456	13,934	7,909
28	228	777,895	46,674	13,614	7,783
29	240	834,691	50,081	15,936	8,279
30	250	871,434	52,286	16,443	8,709
31	270	908,974	54,538	18,351	9,077
32	232	758,343	45, <b>501</b>	14,329	7,582
33	239	789,372	47,362	14,313	7,857
34	216	710,529	42,6 <b>3</b> 2	12,663	7,059
35	249	823,155	49,389	14,732	8,203
3 <b>6</b>	2 <b>17</b>	702,526	42,152	12,891	6,984
3 <b>7</b>	229	739,331	44,360	13,623	7,362
38	2 <b>1</b> 5	676,340	40,580	12,202	6,751
39	2 <b>3</b> 4	744,035	44,642	14,139	7,443
40 41 43 44	242 205 261 235 245	738,304 672,680 813,499 775,506 747,246	44,298 40,361 48,810 46,530 44,835	14,643 13,089 15,615 15,883 14,405	7,345 6,693 8,146 7,759 7,464
45	246	733,132	43,988	13,889	7,268
46	219	641,626	38,498	12,957	6,422
47	201	599,551	35,973	11,452	5,960
48	202	648,381	38,903	12,983	6,426
49	184	547,789	32,867	10,260	5,482
Subtotal	6,790	\$21,296,851	\$1,277,811	<b>\$381,07</b> 5	\$212,041

Subtotal Forward	6,790	\$21,296,851	\$1 <i>,2</i> 77,811	<b>\$381,07</b> 5	\$212,041
50	191	613,306	36,776	12,396	6,133
51	179	547,844	32,871	10,302	5,478
52	168	485,602	29,136	8,922	4,842
53	172	535,720	32,143	10,592	5,312
54	166	475,758	28,545	8,909	4,702
55	174	509,290	30,557	10,473	5,005
56	108	300,021	18,001	5,924	3,003
57	133	395,749	23,745	7,701	3,924
58	116	343,332	20,600	6,888	3,391
59	99	300,793	18,048	5,880	3,009
60	124	34 <b>9,</b> 753	20,985	7,142	3,451
61	96	278,61 <b>2</b>	16,717	5,534	2,731
62	77	214,672	12,880	4,598	2,152
63	86	215,510	12,931	4,289	2,158
64	91	229,257	13,755	4,900	2,288
65	89	224,362	13,462	4,684	2,166
66	83	220,527	13,232	4,555	2,158
67	89	210,046	12,603	4,632	2,065
68	101	227,454	13,647	5,096	2,211
69	97	223,279	13,397	4,756	2,229
70	95	206,363	12,382	4,508	2,034
71	9 <b>0</b>	201,758	12,105	4,642	2,020
72	54	95,646	5,739	2,036	936
73	5 <b>0</b>	117,829	7,070	2,753	1,178
74	<b>7</b> 5	150,666	9,040	3,325	1,498
75	47	91,418	5,485	2,092	917
76	34	47,919	2,875	910	448
77	35	79,679	4,781	1,676	757
78	21	45,054	2,703	970	447
79	19	36,297	2,178	864	364
80 & Over	<u>53</u>	97,364	5,841	2,177	<u>975</u>
Grand Total	9,802	\$29,367,731	\$1,762,041	\$545,201	<b>\$</b> 292 <b>,0</b> 23

# Active Members With Less Than 5 Years of Service As at January 1, 1958

## Females

				Annual Annuities Under	
Attained	Number	Aggregate	Annual.	Section	
Age at	of	Annual	Contribution	Accrued	Current
1-1-58	Members	Salary	Rate at 6%	To Date	Year
Under 20	<b>7</b> 53	\$ 1,459,648	\$ 87,580	\$ 13,426	\$ 14,550
20	384	848,908	50,935	12,424	8,492
21	356	881,307	25,878	13,552	8,753
22	264	708,150	42,489	10,332	7,061
23	203	588,115	35,287	9,210	5,843
24	196	594,588	35,675	10,235	5,954
25	176	499,786	29,987	9,008	4,984
26	103	278,713	16,723	4,716	2,766
27	139	364,368	21,862	6,576	3,647
28	84	213,652	12,819	3,370	2,131
29	112	276,203	16,572	4,700	2,766
30	98	235,630	14,138	3,706	2,357
31	113	283,885	17,033	4,892	2,843
32	123	300,016	18,001	5,408	2, <b>9</b> 99
34	13 <sup>1</sup> 4	305,871	18,352	5,451	3,062
34	127	276,041	16,562	3,908	2,763
35	146	339,713	20,383	5,910	3,356
36	153	352,383	21,143	6,142	3,525
37	158	348,934	20,936	5,840	3,489
38	152	356,518	21,391	6,221	3,528
39	146	296,763	17,806	5,058	2,971
40	172	357,347	21,441	5,656	3,558
41	169	358,260	21,496	6,462	3,579
42	194	407,561	24,454	7,818	4,059
43	187	388,063	23,284	6,914	3,847
44	189	394,680	23,681	5,364	3,950
45	214	452,710	27,163	7,948	4,534
46	193	425,384	25,523	7,905	4,198
47	170	345,249	20,715	6,556	3,429
48	202	435,860	26,152	7,736	4,315
49	189	379,859	22,792	7,822	3,739
Subtotal	5,999	<b>\$13,7</b> 54 <b>,1</b> 65	<b>\$</b> 825 <b>,2</b> 53	\$218,693	\$137,048

Subtotal Forward	5,999	\$13,754,165	<b>\$</b> 825 <b>,</b> 253	\$218,693	\$137,048
50	159	349,267	20,956	6,124	3,435
51	150	332,923	19,975	6,967	3,332
52	140	288,864	17,332	9,136	2,889
53	136	253,761	15,226	4,684	2,507
54	127	249,736	14,984	4,848	2,458
55	120	231,442	13,887	4,312	2,311
56	92	159,924	9,595	3,185	1,602
57	81	151,024	9,061	3,068	1,461
58	83	162,025	9,721	3,528	1,621
59	86	168,804	10,128	3,247	1,636
60	58	101,615	6,097	2,016	971
61	65	133,863	8,032	3,046	1,337
62	45	77,922	4,675	1,686	757
63	49	72,753	4,365	1,613	690
64	46	71,221	4,273	1,844	715
65	39	60,003	3,600	1,542	601
66	33	59,091	3,545	1,488	593
67	22	40,102	2,406	906	402
68	18	28,078	1,685	635	280
69	17	23,800	1,428	422	237
70	21	27,896	1,678	545	264
71	13	24,062	1,444	479	208
72	10	13,668	820	273	138
73	11	23,812	1,429	526	239
74	8	14,181	851	392	143
75 76 77 78 79	8 2 1 1	9,931 2,967 2,220 2,664 840	596 178 133 50 160	250 <b>7</b> 4 55 21 40	99 30 22 8 27
80 & Over	14	5,466	329	98	55
Grand Total	<b>7,6</b> 45	\$16,898,090	<b>\$1,0</b> 13,892	\$285,743	\$168,116