

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL VALUATION REPORT

November 28, 1969

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Public Employees Retirement Assn.

A. S. Hansen, inc.

Public Employees Retirement Association  
State of Minnesota

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Financial Statistics and Actuarial Assumptions  
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Actuarial Requirements - 3%  
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Employee Statistics and Summary of Plan

# A. S. Hansen, inc.

ACTUARIES AND CONSULTANTS

1080 Green Bay Road  
Lake Bluff, Illinois 60044  
Telephone 312-234-3400

November 28, 1969

Board of Trustees  
Public Employees Retirement Association  
203 Capitol Square Building  
550 Cedar Street  
St. Paul, Minnesota 55101

Gentlemen:

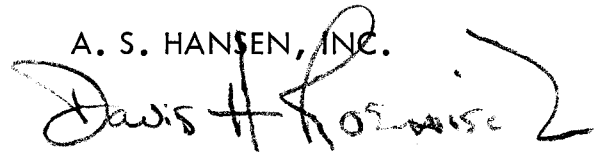
In accordance with your request, we have made an actuarial valuation of the Public Employees Retirement Association of the State of Minnesota for the year ended June 30, 1969, in order to determine the adequacy of the contributions being made to that system and to prepare the financial and actuarial reports as required by the laws of the State of Minnesota.

The results of our analysis are set forth in the following report. The basic financial and employee data are those submitted to us by the Association office; the summaries and actuarial figures are those prepared by us from such data.

On the basis of the foregoing, and the assumptions indicated herein, we hereby certify that, to the best of our knowledge and belief, the attached statements are true and correct. A copy of this report will supply the data required by the legislative commission for the year ended June 30, 1969.

Respectfully submitted,

A. S. HANSEN, INC.

  
Davis H. Roentsch  
Fellow, Society of Actuaries

DHR:lh  
1366-01-83

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL VALUATION REPORT AND FINANCIAL EXHIBITS

General Fund

The following exhibits set forth the information required by law for the legislature as a result of the annual actuarial valuation. They are accompanied by financial exhibits which combine the financial reports of the System with the results of the actuarial valuation.

These figures have been prepared in accordance with the requirements of the law under the supervision of an approved actuary. Chief among these requirements are the use of the entry age normal cost method and  $3\frac{1}{2}\%$  interest, both of which are reflected in the first series of exhibits. The other assumptions as to mortality, disability, withdrawal, and salary scales are the same as were used in the valuation for the year ending June 30, 1967. Supplemental exhibits showing the results on a 3% and 4% interest assumption are also included.

The actuarial valuation for the current year measures all aspects of the general fund in accordance with the benefit program described in the Summary of the Plan.

The format of this report has been modified to reflect the two groups now covered by the general fund, i.e., those coordinated with Social Security and those who have remained in the original Public Employees Retirement Association program. This latter group has been designated as the regular employees and the former, the coordinated employees (which group includes the hospital employees).

Since the assets for the general membership are being held as a single fund the first step is to approximate the appropriate division of the assets between the two groups on an accounting basis. This report accomplishes this by adding a proportionate share of the investment income on the average invested assets to the initial balance established last year. In addition, we have allowed for the transfer of a small group of employees from the regular to the coordinated program, assuming for this purpose that this transferring group had reflected the average characteristics of the entire regular membership. The results of these allocations are shown in the financial exhibits.

The results for the regular members are then summarized in an actuarial requirements section. The following comments are made on the basis of the  $3\frac{1}{2}\%$  figures. The covered payroll and membership was approximately the same as in the prior year, with the employees transferred to the coordinated plan being replaced by almost the same number of new entrants to the regular program. The average wage increased slightly, increasing the estimated value of future benefits and resulting in an increase in the normal cost percentage. On a  $3\frac{1}{2}\%$  basis the regular program is approximately in balance.

There is evidence, however, of a deteriorating trend for the regular membership. In the calculations for all interest rate assumptions, the "deficit" or "excess" in the contribution rate declined from last year. For the time being, it would be expected that this decline would be offset by experience gains, primarily out of interest earnings in excess of the assumption.

The reasons for the deterioration of the regular member's position lie primarily in the fact that no new entrants will be coming into this group. This means that the expected income from the  $2\frac{1}{2}\%$  amortization requirement will be very substantially less than anticipated. Instead of being applied to a full current payroll for the next 28 years, it will be levied on an ever-diminishing regular member compensation base. While the 28 year funding requirement will remain at present levels, the payroll base will sharply decline and the program will show serious actuarial deficits when measured against the percentage requirement to provide for the benefits.

The importance of these remarks can perhaps best be judged by estimating the actuarial contribution requirement on an "attained age normal" basis. This is the actuarial method which is most appropriate for funding the benefits for closed groups, i.e., those groups who, like the regular members, have no future new entrants. Under this method, the value of any unfunded obligation, whether for benefits earned in the past or to be earned in the future, are provided for over the remaining lifetime of those employees.

The percentage of regular membership payroll which would be required to provide for the benefits payable to the regular membership on this basis would be 17.84% of payroll, using a  $3\frac{1}{2}\%$  interest assumption. Since this rate is substantially in excess of the  $14\frac{1}{2}\%$  combined employee-employer rate in the law, this part of the program, viewed as a separate entity, is seriously out of balance.

The question should then be raised as to whether it is necessary to view the regular membership separately. As the figures for the coordinated group show, their benefits are in balance and an increasing surplus can be anticipated. The reason for this is the opposite of the situation for the regular membership. In other words, all new entrants are entering this group and the payroll is sharply increasing. For example, it approximately doubled between this year and last year.

In this situation the  $1\frac{1}{2}\%$  levy for past service when applied to the total payroll becomes more and more adequate. This arises because the added payroll from new entrants is covered by the  $1\frac{1}{2}\%$  levy, but is not accompanied by any substantial past service obligation.

As a result of the split of the System into the regular and coordinated groups, the financing structure of the separate groups was modified, so that one is running at a deficit and the other at an increasing surplus. This raises the question as to whether the system is in actuarial balance if the two groups are combined.

Under these circumstances, it would appear that the total system, exclusive of the police and fire groups, is reasonably in balance. The weighted average current year contribution income from both members and employer, including the past service contribution, is 11.98% of payroll. The combined contribution requirement, on a  $3\frac{1}{2}\%$  basis, averages 11.30% of payroll.

In other words if the coordinated and regular membership are considered together, the System can be certified as reasonably in balance. The implication of considering the System in its entirety is that the bulk of the  $1\frac{1}{2}\%$  past service levy on the coordinated members will be used to offset the past service obligation to the regular membership.

It should also be noted that, for the time being, the turnover in the coordinated group is unusually high, reflecting the very high turnover in those groups, principally those associated with the hospitals. Part of these gains would also be credited to the regular membership.

In our opinion, it is appropriate to consider the results for the membership as a whole since explicit recognition of the potential deficit in the regular membership rate could be offset by lowering the past service percentage levy for the coordinated group. Considering the two groups as one is the basis for our conclusion that the general fund is in reasonable actuarial balance, assuming a  $3\frac{1}{2}\%$  interest return.

#### CONCLUSION

It is our opinion that the general fund is in reasonable actuarial balance, assuming a  $3\frac{1}{2}\%$  interest rate of return.

General Fund

FINANCIAL STATISTICS  
AND  
ACTUARIAL ASSUMPTIONS

Public Employees Retirement Association  
State of Minnesota

General Fund

FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

ASSETS

Cash - On Hand	\$	25.00		
On Deposit		433,761.24		
In Transit		<u>284,329.06</u>	\$	718,115.30
Accounts Receivable:				
M.S. 1967, Sec. 353.36	\$	45,099.87		
M.S. 1967, Sec. 353.36, Subd. 8		123,516.66		
M.S. 1967, Sec. 353.36, Subd. 6		44,683.03		
M.S. 1967, Sec. 355.296, Subd. 2 & 3		14,281.05		
From Social Security		12,540.31		
Member Contributions		958,812.33		
Employer Contributions		13,115,620.92		
Interest		1,543,345.35		
Dividends		149,375.93		
From Police and Fire Fund		28,768.68		
Other		<u>10,523.84</u>	<u>16,046,567.97</u>	\$ 16,764,683.27
Current Liabilities:				
Accounts Payable	\$	30,773.48		
Penalties Refundable		7,590.79		
Donations Suspense		83,110.28		
Social Security Refunds - Suspense		<u>3,439.79</u>		<u>124,914.34</u>
<u>Net Current Assets</u>				<u>\$ 16,639,768.93</u>

INVESTMENTS

Bonds				
U.S. Government	\$	11,023,000.00		
Municipal		15,866,000.00		
Corporate		91,585,102.15		
Canadian Government Insured		3,095,438.85		
Stocks				
Common		<u>60,699,078.44</u>	\$182,268,619.44	
Miscellaneous				
Office Equipment (Less Depreciation)	\$	25,341.87		
Other		<u>34,796.89</u>	<u>60,138.76</u>	<u>\$182,328,758.20</u>
<u>Total Assets</u>				<u>\$198,968,527.13</u>

Members Accumulated Contributions - \$76,924,875.45



Public Employees Retirement Association  
State of Minnesota

(General Fund)

SOURCES AND USES OF FUNDS

<u>Sources</u>		<u>Uses</u>	
<u>Employee Contributions</u>	\$ 13,049,556.23	<u>Refunds</u>	
<u>Employer Contributions</u>	32,306,038.58	Employee Contributions	\$ 4,590,666.85
<u>Investment Income</u>	7,108,475.16	Employer Contributions	5,245.48
<u>Transfer from the Police and Fire Fund</u>	39,149.09	<u>Penalties Refunded</u>	567.70
<u>Investment Sales</u>		<u>Donations Refunded</u>	2,210.05
Bonds	59,759,291.30	<u>Benefits Paid</u>	
Stocks	3,236,827.92	Retirement	7,917,682.99
<u>Cancelled Warrants</u>	73,468.10	Survivor	2,266,348.57
<u>Miscellaneous Income</u>	336,684.06	Disability	201,412.62
		<u>Direct Expense</u>	544,129.71
		<u>Social Security</u>	1,410,756.36
		<u>Investment Purchases</u>	
		Bonds	76,409,272.50
		Stocks	22,379,805.31
		Premiums and Interest	35,496.55
		<u>Transfers to Police and Fire Fund</u>	20,245.89
		<u>Accounts Payable</u>	17,277.07
		<u>Increase in Cash Accounts</u>	108,372.79
	<u>\$115,909,490.44</u>		<u>\$115,909,490.44</u>
Cash Balance 6/30/69	<u>718,090.30</u>		
Total (Statement of Receipts and Disbursements)	<u>\$116,627,580.74</u>		

Public Employees Retirement Association  
State of Minnesota

(General Fund)

RECONCILIATION OF ASSET BALANCES  
 (June 30, 1969)

Asset Balance - July 1, 1968		\$176,264,608.03
Add:		
Employer Contributions	\$18,642,997.17	
Employee Contributions	13,194,495.29	
Investment Income	7,377,404.14	
Unit Matching Contributions	282,406.60	
Transfers from Police and Fire Fund	18,903.20	
Miscellaneous Income	<u>94,980.57</u>	
Total Additions		<u>39,611,186.97</u>
		\$215,875,795.00
Deduct:		
Benefits Paid		
Retirement	\$7,835,679.37	
Survivor	2,254,379.24	
Disability	<u>198,286.59</u>	\$10,288,345.20
Refunds	4,578,826.35	
Social Security	1,405,106.46	
Administrative Expense	<u>545,177.93</u>	
Total Deductions		<u>16,817,455.94</u>
		\$199,058,339.06
Current Liabilities and Accounts Payable		<u>89,811.93</u>
Asset Balance, June 30, 1969		<u>\$198,968,527.13</u>

Public Employees Retirement Association  
State of Minnesota

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ASSET ALLOCATION  
(July 1, 1969)

	<u>Regular Fund</u>	<u>Coordinated Fund</u>	<u>General Fund Total</u>
Net Assets, July 1, 1968	\$171,040,378.88	\$ 5,077,276.65*	\$176,117,655.53
Accounts Payable	<u>142,716.02</u>	<u>4,236.48</u>	<u>146,952.50</u>
<u>Total Assets, July 1, 1968</u>	<u>\$171,183,094.90</u>	<u>\$ 5,081,513.13</u>	<u>\$176,264,608.03</u>
<u>Contributions and Disbursements During Year</u>			
1. Employer Contributions	\$ 15,000,389.62	\$ 3,642,607.55	\$ 18,642,997.17
2. Employee Contributions	10,722,910.66	2,471,584.63	13,194,495.29
3. Unit Matching Contributions	282,406.60	-	282,406.60
4. Transfer from Police and Fire Fund	18,903.20	-	18,903.20
5. Benefits Paid			
(i) Retirement	7,702,960.96	132,718.41	7,835,679.37
(ii) Survivor	2,254,379.24	-	2,254,379.24
(iii) Disability	193,349.94	4,936.65	198,286.59
6. Refunds	2,763,392.87	1,815,433.48	4,578,826.35
7. Social Security	<u>-</u>	<u>1,405,106.46</u>	<u>1,405,106.46</u>
Net: Sum 1 through 4 Minus Sum 5 through 7	<u>\$ 13,110,527.07</u>	<u>\$ 2,755,997.18</u>	<u>\$ 15,866,524.25</u>
Estimated Adjustment for Transfers	<u>\$ 2,619,162.77</u>	<u>\$ 2,619,162.77</u>	
<u>Income and Expenses During Year</u> (Allocated on Assets at July 1, 1968 plus 1/2 net change during year)			
1. Investment Income	\$ 7,118,690.90	\$ 258,713.24	\$ 7,377,404.14
2. Miscellaneous Income	91,649.76	3,330.81	94,980.57
3. Administrative Expenses	<u>492,188.02</u>	<u>17,877.50</u>	<u>510,075.52</u>
Net: 1 Plus 2 Minus 3	<u>\$ 6,718,152.64</u>	<u>\$ 244,156.55</u>	<u>\$ 6,962,309.19</u>
Total Assets, July 1, 1969	\$188,392,611.84	\$ 10,700,829.63	\$199,093,441.47
Accounts Payable	<u>118,200.47</u>	<u>6,713.87</u>	<u>124,914.34</u>
<u>Net Assets, July 1, 1969</u>	<u>\$188,274,411.37</u>	<u>\$ 10,694,115.76</u>	<u>\$198,968,527.13</u>

\* 7/1/68 Balance less \$6,339,234.74 Social Security Buy-back.

Public Employees Retirement Association  
State of Minnesota

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General Fund

ACTUARIAL ASSUMPTIONS

The 1967 experience analysis required by law verified the appropriateness of the assumptions used in prior reports. The assumptions can be summarized as follows:

Interest:	3½%
Mortality Before Retirement:	1951 Group Annuity
After Retirement:	1965 Group Annuity
Retirement Age:	65
Disability:	PERA Experience
Turnover:	PERA Experience
Salary Scale:	PERA Experience
1952-57 Wage Base:	Estimate based on 1952-57 contributions

Age 65 was used as the average age at retirement since it both reflected the retirement rates developed in earlier studies, and the prior calculations of the legislative commission.

A detailed statement of the mortality rates, disability rates, turnover factors, and salary scale is set out in the following pages.

Public Employees' Retirement Association  
State of Minnesota

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General Fund

Male Employees

MORTALITY RATES  
(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.616	45	3.580
21	.640	46	4.065
22	.666	47	4.599
23	.693	48	5.180
24	.724	49	5.807
25	.758	50	6.475
26	.796	51	7.187
27	.838	52	7.938
28	.885	53	8.731
29	.935	54	9.563
30	.991	55	10.436
31	1.054	56	11.346
32	1.122	57	12.298
33	1.198	58	13.302
34	1.281	59	14.379
35	1.374	60	15.555
36	1.475	61	16.866
37	1.587	62	18.353
38	1.711	63	20.068
39	1.849	64	22.067
40	2.000	65	24.418
41	2.192		
42	2.450		
43	2.769		
44	3.147		

Public Employees' Retirement Association  
State of Minnesota

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General Fund

Female Employees

MORTALITY RATES

(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.371	45	1.994
21	.393	46	2.169
22	.416	47	2.361
23	.440	48	2.573
24	.467	49	2.809
25	.495	50	3.070
26	.524	51	3.319
27	.556	52	3.597
28	.591	53	3.908
29	.628	54	4.257
30	.669	55	4.648
31	.712	56	5.102
32	.760	57	5.637
33	.812	58	6.265
34	.868	59	6.997
35	.930	60	7.837
36	.997	61	8.788
37	1.071	62	9.848
38	1.152	63	11.010
39	1.240	64	12.264
40	1.338	65	13.597
41	1.446		
42	1.563		
43	1.694		
44	1.836		

Public Employees Retirement Association  
State of Minnesota

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General Fund

All Employees

DISABILITY RATES  
(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.69	45	3.17
21	.73	46	3.41
22	.77	47	3.67
23	.81	48	3.94
24	.86	49	4.25
25	.91	50	4.61
26	.96	51	5.01
27	1.02	52	5.48
28	1.08	53	6.00
29	1.15	54	6.53
30	1.22	55	7.12
31	1.29	56	7.76
32	1.37	57	8.45
33	1.45	58	9.17
34	1.54	59	9.91
35	1.63	60	10.69
36	1.73	61	11.53
37	1.84	62	12.38
38	1.96	63	13.25
39	2.09	64	14.15
40	2.23		
41	2.38		
42	2.55		
43	2.74		
44	2.94		

Public Employees Retirement Association  
State of Minnesota

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General Fund

Male Employees

SEPARATION RATES  
(Per 1,000 Employees)

<u>Age</u>	<u>Separation</u>	<u>Age</u>	<u>Separation</u>
20	275.0	40	81.8
21	263.8	41	76.2
22	250.5	42	71.5
23	239.0	43	67.0
24	226.5	44	62.2
25	216.0	45	58.0
26	204.5	46	53.9
27	192.5	47	49.7
28	182.0	48	45.0
29	171.5	49	42.0
30	161.0	50	38.5
31	152.8	51	34.5
32	143.5	52	31.0
33	133.0	53	27.0
34	124.5	54	23.0
35	117.0	55	19.5
36	109.2	56	15.0
37	101.0	57	10.0
38	94.0	58	5.0
39	88.0		



Public Employees' Retirement Association  
State of Minnesota

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General Fund

Female Employees

SEPARATION RATES  
(Per 1,000 Employees)

<u>Age</u>	<u>Separation</u>	<u>Age</u>	<u>Separation</u>
20	383.2	40	134.0
21	377.7	41	123.0
22	371.2	42	113.0
23	363.1	43	104.5
24	351.6	44	97.2
25	335.6	45	90.0
26	322.6	46	83.0
27	310.3	47	78.7
28	299.7	48	74.5
29	289.1	49	70.4
30	280.5	50	66.3
31	269.4	51	62.8
32	259.0	52	59.5
33	246.3	53	55.5
34	232.5	54	52.2
35	216.0	55	47.8
36	199.0	56	41.0
37	183.0	57	36.2
38	165.0	58	21.0
39	148.5	59	5.0

Public Employees Retirement Association  
State of Minnesota

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General Fund

All Employees

EARNINGS PROGRESSION

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.4102	45	.6730
21	.4184	46	.6864
22	.4268	47	.7002
23	.4353	48	.7142
24	.4440	49	.7284
25	.4529	50	.7430
26	.4619	51	.7579
27	.4712	52	.7730
28	.4806	53	.7885
29	.4902	54	.8043
30	.5000	55	.8203
31	.5100	56	.8368
32	.5202	57	.8535
33	.5306	58	.8706
34	.5412	59	.8880
35	.5521	60	.9057
36	.5631	61	.9238
37	.5744	62	.9423
38	.5859	63	.9612
39	.5976	64	.9804
40	.6095	65	1.0000
41	.6217		
42	.6342		
43	.6468		
44	.6598		

Regular Employees

(Not Covered By Social Security)

ACTUARIAL REQUIREMENTS -  $3\frac{1}{2}\%$

Public Employees Retirement Association  
State of Minnesota

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FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Regular Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$272,578,871.00
Disability	16,702,477.00
Survivors	20,250,556.00
Refund	<u>21,927,557.00</u>

\$331,459,461.00

Less Value of Benefits to be  
Earned in the Future

161,353,945.00      \$170,105,516.00

Vested Members

2,986,539.00

Retired Members

Retirement      \$ 76,169,225.00

Disability      1,744,488.00

Survivors      28,548,484.00

106,462,197.00

\$279,554,252.00

Unfunded Obligation

\$ 91,279,840.63

Funded Obligation

188,274,411.37

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefits (For Both Past and Future Service)		\$440,908,197
Obligation for Service		
Rendered to Date	\$ 279,554,252	
Net Assets	188,274,411	
Accrued Unfunded Obligation	91,279,841	
Funding Ratio		67%
Amortization (28-Year) Requirement	5,166,681	
Covered Payroll	178,401,172	
Amortization (28-Year) Rate Requirement		<u>2.90%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be		
Earned in the Future	\$ 161,353,945	
Present Value of Future Payroll	1,416,109,000	
Normal Cost Rate Requirement	11.39%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>5.39%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		8.50%
Amortization (28-Year) Rate Requirement	2.90%	
Normal Cost Rate Requirement	5.39	
Allowance for Expenses	0.20	
Total Requirement		8.49
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		0.01%

Public Employees Retirement Association  
 State of Minnesota

ACTUARIAL REQUIREMENTS  
 (July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>	<u>40-Year</u>
Accrued Unfunded Obligation	\$ 91,279,841	\$ 91,279,841	\$ 91,279,841	\$ 91,279,841
Amortization Requirement	10,975,613	6,422,548	4,963,006	4,274,387
Covered Payroll	178,401,172	178,401,172	178,401,172	178,401,172
Amortization Rate Requirement	<u>6.15%</u>	<u>3.60%</u>	<u>2.78%</u>	<u>2.40%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>
Amortization Rate Requirement	6.15%	3.60%	2.78%	2.40%
Normal Cost Rate Requirement	5.39	5.39	5.39	5.39
Allowance for Expenses	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total Requirement	<u>11.74%</u>	<u>9.19%</u>	<u>8.37%</u>	<u>7.99%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(3.24%)</u>	<u>(0.69%)</u>	<u>0.13%</u>	<u>0.51%</u>

Public Employees Retirement Association  
 State of Minnesota

Regular Employees

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)\*  
 (Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$15,000,389.62	
Employee Contributions	10,722,910.66	
Investment Income	7,210,340.66	
Unit Matching Contributions	<u>282,406.60</u>	
Total Revenue		\$33,216,047.54

Expenditure:

Benefits	\$10,150,690.14	
Refund of Contributions	2,763,392.87	
Administrative Expense	492,188.02	
Transfer from Police and Fire Fund	(18,903.20)	
Increase (Decrease) in Accounts	(24,515.55)	
Estimated Transfer to Coordinated	<u>2,619,162.77</u>	
Total Expenditures		<u>15,982,015.05</u>
Increase in Assets (1969)		\$17,234,032.49
Increase in Reserves		<u>4,395,238.00</u>
Decrease (Increase) in Unfunded Obligation		<u>\$12,838,794.49</u>

\*See Exhibit 4.

Public Employees Retirement Association  
State of Minnesota

General Fund

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 2,128,745	
Excess Interest (1.02% x Average Invested Assets)	1,605,916	
Estimated Excess in Rate	931,973	
Decrease due to Transfers to Coordinated	<u>8,582,560</u>	
Expected Decrease (Increase)		<u>\$13,249,194</u>

Expected Increase in Actuarial Reserves

Increase in Assets	\$17,234,032	
Decrease (Increase) in Unfunded	<u>13,249,194</u>	<u>\$ 3,984,838</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$ 3,984,838	
Actual Increase in Reserves	<u>4,395,238</u>	
Experience Variation Gain (Loss)		<u>(\$ 410,400)</u>



Regular Employees

(Not Covered by Social Security)

ACTUARIAL REQUIREMENTS - 3%

Public Employees Retirement Association  
State of Minnesota

FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Regular Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$303,014,768.00
Disability	18,766,828.00
Survivors	22,753,434.00
Refund	<u>24,637,705.00</u>

\$369,172,735.00

Less Value of Benefits to be  
Earned in the Future

\$186,049,516.00      \$183,123,219.00

Vested Members

3,209,303.00

Retired Members

Retirement      \$ 78,625,478.00

Disability      1,798,441.00

Survivors      29,676,754.00

110,100,673.00      \$296,433,195.00

Unfunded Obligation

\$108,158,783.63

Funded Obligation

188,274,411.37

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS

(July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$482,482,711
Obligation for Service		
Rendered to Date	\$ 296,433,155	
Net Assets	188,274,411	
Accrued Unfunded Obligation	108,158,784	
Funding Ratio		64%
Amortization (28-Year) Requirement	5,764,131	
Covered Payroll	178,401,172	
Amortization (28-Year) Rate Requirement		<u>3.23%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 186,049,516	
Present Value of Future Payroll	1,461,473,900	
Normal Cost Rate Requirement	12.73%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>6.73%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		8.50%
Amortization (28-Year) Rate Requirement	3.23%	
Normal Cost Rate Requirement	6.73	
Allowance for Expenses	0.20	
Total Requirement		10.16
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>(1.66%)</u>

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$108,158,784	\$108,158,784	\$108,158,784	\$108,158,784
Amortization Requirement	12,679,508	7,269,969	5,518,181	4,679,206
Covered Payroll	178,401,172	178,401,172	178,401,172	178,401,172
Amortization Rate Requirement	<u>7.11%</u>	<u>4.08%</u>	<u>3.09%</u>	<u>2.62%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>
Amortization Rate Requirement	7.11%	4.08%	3.09%	2.62%
Normal Cost Rate Requirement	6.73	6.73	6.73	6.73
Allowance for Expenses	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total Requirement	<u>14.04%</u>	<u>11.01%</u>	<u>10.02%</u>	<u>9.55%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(5.54%)</u>	<u>(2.51%)</u>	<u>(1.52%)</u>	<u>(1.05%)</u>

Public Employees Retirement Association  
State of Minnesota

Regular Employees

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)\*  
(Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$15,000,389.62	
Employee Contributions	10,722,910.66	
Investment Income	7,210,340.66	
Unit Matching Contributions	<u>282,406.60</u>	
Total Revenue		\$33,216,047.54

Expenditure:

Benefits	\$10,150,690.14	
Refund of Contributions	2,763,392.87	
Administrative Expense	492,188.02	
Transfer from Police and Fire Fund	(18,903.20)	
Increase (Decrease) in Accounts	(24,515.55)	
Estimated Transfer to Coordinated	<u>2,619,162.77</u>	
Total Expenditures		<u>15,982,015.05</u>
Increase in Assets (1969)		\$17,234,032.49
Increase in Reserves (Exh. 1)		<u>5,574,164.00</u>
Decrease (Increase) in Unfunded Obligation		<u>\$11,659,868.49</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 2,631,643	
Excess Interest (1.52% x Average Invested Assets)	2,393,129	
Estimated Deficit in Rate	(2,105,134)	
Decrease due to Transfers to Coordinated	<u>9,221,707</u>	
Expected Decrease (Increase)		<u>\$12,141,345</u>

Expected Increase in Actuarial Reserves

Increase in Assets	\$17,234,032	
Decrease (Increase) in Unfunded	<u>(12,141,345)</u>	<u>\$ 5,092,687</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$ 5,092,687	
Actual Increase in Reserves	<u>5,574,164</u>	
Experience Variation Gain (Loss)		<u>(\$ 481,477)</u>

Regular Employees

(Not Covered by Social Security)

ACTUARIAL REQUIREMENTS - 4%

Public Employees Retirement Association  
State of Minnesota

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FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Regular Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$243,432,238.00
Disability	14,865,205.00
Survivors	18,022,995.00
Refund	<u>19,515,526.00</u>
	\$295,835,964.00

Less Value of Benefits to be  
Earned in the Future

<u>136,311,688.00</u>	\$159,524,276.00
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Vested Members

2,788,279.00

Retired Members  
Retirement

\$ 73,884,148.00

Disability

1,692,153.00

Survivors

27,692,030.00

103,268,331.00

\$265,580,886.00

Unfunded Obligation

\$ 77,306,474.63

Funded Obligation

188,274,411.37



Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$401,892,574
Obligation for Service		
Rendered to Date	\$ 265,580,886	
Net Assets	188,274,411	
Accrued Unfunded Obligation	77,306,475	
Funding Ratio		71%
Amortization (28-Year) Requirement	4,639,392	
Covered Payroll	178,401,172	
Amortization (28-Year) Rate Requirement		<u>2.60%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be		
Earned in the Future	\$ 136,311,688	
Present Value of Future Payroll	1,359,464,600	
Normal Cost Rate Requirement	10.03%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>4.03%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		8.50%
Amortization (28-Year) Rate Requirement	2.60%	
Normal Cost Rate Requirement	4.03	
Allowance for Expenses	0.20	
Total Requirement		6.83
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>1.67%</u>

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Regular Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 77,306,475	\$ 77,306,475	\$ 77,306,475	\$ 77,306,475
Amortization Requirement	9,531,188	5,688,346	4,470,641	3,905,793
Covered Payroll	178,401,172	178,401,172	178,401,172	178,401,172
Amortization Rate Requirement	<u>5.34%</u>	<u>3.19%</u>	<u>2.51%</u>	<u>2.19%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>	<u>8.50%</u>
Amortization Rate Requirement	5.34%	3.19%	2.51%	2.19%
Normal Cost Rate Requirement	4.03	4.03	4.03	4.03
Allowance for Expenses	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total Requirement	<u>9.57%</u>	<u>7.42%</u>	<u>6.74%</u>	<u>6.42%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(1.07%)</u>	<u>1.08%</u>	<u>1.76%</u>	<u>2.08%</u>

Regular Employees

(Not Covered by Social Security)

EMPLOYEE STATISTICS  
AND  
SUMMARY OF PLAN

Public Employees Retirement Association  
State of Minnesota

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RECONCILIATION OF ACTIVE MEMBERS

Regular Employees

As of July 1, 1968	40,408
New Entrants	1,204
Transfers to Coordinated Plan	<u>-1,645</u>
<u>Total</u>	<u>39,967</u>
Separations:	
a. With Refund of Contributions	
(i) Death	141
(ii) Withdrawal	<u>4,683</u>
Total	4,824
b. With Deferred Annuity	57
c. With Disability Annuity	44
d. With Normal Retirement Annuity	447
e. With Survivor Annuity	<u>230</u>
Total	<u>5,602</u>
Active as of July 1, 1969	<u>34,365</u>

Public Employees Retirement Association  
State of Minnesota

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RECONCILIATION OF ANNUITANTS

Regular Employees

<u>Normal Retirement Annuitants</u>	
As of July 1, 1968	5,057
Additions During Year	447
Deletions During Year	<u>316</u>
<u>Total as of July 1, 1969</u>	<u>5,188</u>
Annual Annuity - July 1, 1968	\$7,470,299
- July 1, 1969	7,758,863
<u>Disability Annuitants</u>	
As of July 1, 1968	138
Additions During Year	44
Deletions During Year	<u>27</u>
<u>Total as of July 1, 1969</u>	<u>155</u>
Annual Annuity - July 1, 1968	\$ 158,460
- July 1, 1969	200,584
<u>Survivor Annuitants</u>	
(a) Spouse Only	
As of July 1, 1968	2,326
Additions During Year	251
Deletions During Year	<u>96</u>
<u>Total as of July 1, 1969</u>	<u>2,481</u>
Annual Annuity - July 1, 1968	\$1,828,785
- July 1, 1969	2,027,955
(b) Children	
As of July 1, 1968	598
Additions During Year	74
Deletions During Year	<u>113</u>
<u>Total as of July 1, 1969</u>	<u>559</u>
Annual Annuity - July 1, 1968	\$ 342,922
- July 1, 1969	353,873
<u>Deferred Vested Members</u>	
As of July 1, 1968	304
Additions During Year	57
Deletions During Year	<u>75</u>
<u>Total as of July 1, 1969</u>	<u>286</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

Retired Under the Law in Force Prior to July 1, 1957

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
60	1	\$ 66.50	-	\$ -
61	7	1,192.59	5	722.78
62	6	761.58	9	950.11
63	3	498.86	13	2,018.04
64	20	3,340.19	10	1,527.94
65	28	4,381.01	22	2,717.13
66	52	10,160.66	27	3,810.32
67	67	12,596.31	46	7,213.98
68	105	19,565.03	50	7,993.42
69	117	22,152.16	53	8,459.47
70	123	22,245.27	56	7,959.81
71	107	19,755.37	66	10,751.86
72	135	21,708.62	62	9,414.27
73	171	29,828.68	72	10,031.53
74	167	26,863.17	64	8,184.29
75	179	29,580.88	56	7,320.67
76	141	20,873.00	48	5,444.62
77	166	22,192.70	59	5,552.92
78	149	19,657.54	50	5,038.89
79	115	15,383.02	57	5,543.74
80	138	18,188.51	56	5,408.56
81	104	12,489.20	62	5,656.19
82	86	9,294.62	38	3,575.66
83	72	7,644.57	23	2,347.98
84	54	6,162.81	23	1,453.98
85	51	6,138.27	22	2,354.62
86	41	4,561.51	11	967.68
87	22	2,586.33	15	1,407.86
88	20	2,115.45	9	614.34
89	16	1,405.26	7	584.56
90	11	1,339.16	2	75.58
91	13	1,346.62	2	35.74
92	6	801.30	1	121.65
93	2	254.17	1	168.55
94	3	488.88	3	200.05
95	3	315.85	1	65.79
96	2	227.56	1	163.18
<u>Totals</u>	<u>2,503</u>	<u>\$378,163.21</u>	<u>1,102</u>	<u>\$135,857.76</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

Retired Under Law in Force July 1, 1957 and Subsequent

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
59	1	\$ 113.90	-	\$ -
60	3	260.47	-	-
61	4	319.22	2	317.41
62	4	305.34	2	252.23
63	2	233.26	3	181.08
64	6	539.95	2	320.84
65	18	1,643.82	16	1,668.65
66	70	7,790.53	55	4,077.23
67	92	10,535.28	74	5,336.46
68	110	12,712.21	53	3,592.36
69	115	10,611.88	59	3,951.90
70	97	7,688.42	71	5,041.95
71	89	7,294.80	46	2,951.26
72	80	5,734.45	49	3,164.46
73	73	5,227.62	43	2,326.27
74	57	4,561.83	41	2,722.36
75	56	4,274.97	30	2,098.08
76	40	3,105.96	29	1,902.93
77	16	1,121.32	15	1,470.72
78	8	720.57	9	1,063.83
79	8	576.99	4	278.14
80	3	485.56	4	857.93
81	2	212.53	1	23.91
82	2	340.89	-	-
83	1	25.32	2	401.74
84	5	628.12	-	-
85	-	-	1	207.55
86	2	110.03	-	-
87	1	19.96	-	-
88	-	-	-	-
89	-	-	1	89.99
<u>Totals</u>	<u>965</u>	<u>\$87,195.20</u>	<u>612</u>	<u>\$44,299.28</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

Retired Under Combination of Law in Force Prior and Subsequent to July 1, 1957

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
64	1	\$ 106.82	-	\$ -
65	-	-	2	288.08
66	-	-	1	46.48
67	-	-	1	89.14
69	4	228.91	-	-
70	1	75.47	2	168.29
71	2	128.08	1	107.63
72	1	32.60	1	28.22
74	2	199.44	-	-
75	1	112.33	1	23.33
77	2	115.42	-	-
85	1	32.43	-	-
<u>Totals</u>	<u>15</u>	<u>\$1,031.50</u>	<u>9</u>	<u>\$ 751.17</u>



Public Employees Retirement Association  
State of Minnesota

Regular Employees

Disability Requirements

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
39	1	\$ 131.84	-	\$ -
41	1	261.14	-	-
42	1	91.29	-	-
45	1	132.78	-	-
46	-	-	1	107.60
47	4	348.75	1	86.95
48	2	243.42	-	-
49	3	282.30	-	-
52	2	243.01	1	163.54
53	-	-	1	89.89
54	3	223.66	2	165.60
55	4	457.54	2	166.75
56	9	857.24	2	163.56
57	10	1,062.37	4	353.54
58	8	962.79	2	213.46
59	10	855.95	-	-
60	13	1,812.39	6	638.76
61	7	752.03	7	722.66
62	8	1,076.04	1	107.32
63	14	1,431.57	7	720.92
64	7	757.85	3	205.58
65	7	825.24	-	-
<u>Totals</u>	<u>115</u>	<u>\$12,809.20</u>	<u>40</u>	<u>\$3,906.13</u>

Public Employees Retirement Association  
State of Minnesota

Regular Employees

Beneficiaries Under Law in Force Prior to July 1, 1957

Age	Male		Female	
	Number	Monthly Annuity	Number	Monthly Annuity
60	-	\$ -	2	\$ 174.87
61	-	-	8	531.06
62	-	-	16	1,197.45
63	-	-	13	1,131.19
64	-	-	26	2,032.90
65	-	-	30	2,038.60
66	-	-	35	2,508.14
67	1	84.01	50	4,186.21
68	-	-	54	3,916.33
69	-	-	37	2,716.47
70	-	-	45	2,842.71
71	-	-	70	4,675.01
72	-	-	57	3,871.80
73	1	7.81	67	5,052.49
74	2	148.24	55	3,637.45
75	-	-	75	4,895.46
76	-	-	81	5,259.00
77	-	-	58	3,494.16
78	-	-	50	3,091.25
79	-	-	53	2,817.81
80	-	-	56	2,905.38
81	1	36.27	51	3,346.65
82	1	9.06	41	2,068.13
83	-	-	36	1,952.43
84	1	10.57	25	1,241.64
85	-	-	32	1,394.59
86	3	116.75	16	957.93
87	-	-	18	1,138.61
88	-	-	9	456.14
89	-	-	5	237.06
90	-	-	8	423.74
91	-	-	4	181.00
92	1	42.48	3	183.82
93	-	-	2	70.38
94	-	-	-	-
95	-	-	2	108.30
<u>Totals</u>	<u>11</u>	<u>\$ 455.19</u>	<u>1,190</u>	<u>\$76,736.16</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

SURVIVOR ANNUITIES

Female

<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>	<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
26	-	\$ -	56	51	\$ 3,391.76
27	1	65.00	57	50	3,201.78
28	2	130.00	58	49	3,086.68
29	2	114.47	59	63	4,154.12
30	-	-	60	55	3,490.52
31	2	130.00	61	41	2,651.56
32	2	101.78	62	52	3,286.50
33	1	65.00	63	44	3,271.76
34	3	195.00	64	44	2,984.26
35	-	-	65	44	2,858.17
36	3	195.00	66	47	3,364.76
37	4	260.00	67	39	2,605.77
38	5	325.00	68	38	2,861.01
39	6	380.00	69	43	3,183.78
40	9	535.00	70	28	2,055.50
41	3	195.00	71	27	1,988.82
42	15	965.00	72	20	1,486.38
43	16	1,065.27	73	24	1,885.51
44	10	715.00	74	18	1,419.76
45	14	907.00	75	15	1,183.42
46	23	1,489.90	76	8	693.98
47	27	1,885.00	77	10	786.23
48	24	1,502.92	78	14	1,196.25
49	24	1,473.90	79	8	532.45
50	30	2,067.95	80	8	540.54
51	22	1,495.00	81	8	654.56
52	38	2,490.08	82	7	444.96
53	31	2,175.36	83	2	108.14
54	42	2,859.50	84	1	23.97
55	45	2,963.14	85	4	396.09
			86	3	195.00
			87	1	65.00
			90	1	148.66
			<u>Totals</u>	<u>1,271</u>	<u>\$86,943.92</u>

Public Employees Retirement Association  
State of Minnesota

Regular Employees

Survivor Annuities

Male		
<u>Age</u>	<u>Number</u>	<u>Monthly Annuity</u>
51	1	\$ 57.94
58	1	65.00
61	1	65.00
64	2	104.21
66	1	49.09
71	2	130.00
74	1	24.57
<u>Totals</u>	<u>9</u>	<u>\$495.81</u>

Children	
<u>Number</u>	<u>Total Monthly Annuity</u>
559	\$29,489.44

Public Employees Retirement Association  
State of Minnesota

Regular Employees

CONSIDERED EARNINGS

Active Male Employees

(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	15	\$ 59,658	29	\$ 79,466	257	\$ 1,348,524	7	\$ 43,602
25 to 30	24	149,427	37	154,373	687	4,408,936	263	1,817,567
30 to 35	27	174,171	28	108,877	697	4,414,315	607	4,392,446
35 to 40	41	301,163	26	125,172	629	3,662,550	649	4,722,700
40 to 45	27	162,421	30	110,041	650	3,681,467	733	4,945,818
45 to 50	26	177,422	23	82,082	596	3,327,352	781	5,179,130
50 to 55	29	204,556	17	60,396	585	3,085,898	708	4,315,647
55 to 60	58	356,234	30	95,561	446	2,136,932	572	3,245,938
60 to 65	46	310,827	23	97,617	228	922,587	263	1,320,270
65 to 70	31	215,501	13	30,979	127	314,273	126	466,981
70 & Up	7	40,494	7	10,998	91	176,287	57	150,636
<u>Total</u>	<u>331</u>	<u>\$ 2,151,874</u>	<u>263</u>	<u>\$ 955,562</u>	<u>4993</u>	<u>\$27,479,121</u>	<u>4766</u>	<u>\$30,600,735</u>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	11	79,072	-	-	-	-	-	-
30 to 35	233	1,792,376	15	114,606	-	-	-	-
35 to 40	424	3,284,205	126	993,471	4	32,478	-	-
40 to 45	555	4,097,013	385	3,163,191	88	718,266	1	4,926
45 to 50	583	4,180,370	455	3,491,648	203	1,824,977	9	89,753
50 to 55	631	4,258,595	483	3,517,722	276	2,211,825	45	404,656
55 to 60	576	3,641,096	494	3,316,137	274	2,183,994	87	738,771
60 to 65	375	2,164,702	422	2,772,457	266	2,033,163	97	793,167
65 to 70	117	562,675	147	906,614	86	678,202	42	360,774
70 & Up	41	157,398	32	165,644	22	148,135	12	95,890
<u>Total</u>	<u>3546</u>	<u>\$24,217,502</u>	<u>2559</u>	<u>\$18,441,490</u>	<u>1219</u>	<u>\$ 9,831,040</u>	<u>293</u>	<u>\$ 2,487,937</u>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	308	\$ 1,531,250
25 to 30	-	-	-	-	-	-	1022	6,609,375
30 to 35	-	-	-	-	-	-	1607	10,996,791
35 to 40	-	-	-	-	-	-	1899	13,121,739
40 to 45	-	-	-	-	-	-	2469	16,883,143
45 to 50	-	-	-	-	-	-	2676	18,352,734
50 to 55	9	97,083	1	19,080	-	-	2784	18,175,458
55 to 60	50	533,410	16	173,718	1	12,512	2604	16,434,303
60 to 65	62	611,884	32	365,169	2	11,667	1816	11,403,510
65 to 70	33	287,190	19	179,294	1	13,845	742	4,016,328
70 & Up	7	53,111	6	50,423	7	55,164	289	1,104,180
<u>Total</u>	<u>161</u>	<u>\$ 1,582,678</u>	<u>74</u>	<u>\$ 787,684</u>	<u>11</u>	<u>\$ 93,188</u>	<u>18216</u>	<u>\$118,628,811</u>

Public Employees Retirement Association  
State of Minnesota

Regular Employees  
CONSIDERED EARNINGS

Active Female Employees  
(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	45	\$ 125,474	90	\$ 260,185	722	\$ 2,901,159	75	\$ 359,462
25 to 30	14	60,293	74	203,435	540	2,640,109	251	1,331,542
30 to 35	14	53,669	71	141,058	545	1,730,735	184	878,035
35 to 40	24	51,535	103	182,532	877	2,503,406	358	1,473,467
40 to 45	23	75,267	131	235,418	1221	3,543,910	610	2,285,148
45 to 50	29	107,797	123	240,522	1235	3,745,492	871	3,228,106
50 to 55	47	150,981	103	216,997	941	2,745,568	903	3,301,359
55 to 60	32	125,064	60	87,863	598	1,680,678	650	2,305,199
60 to 65	21	83,251	25	40,613	268	627,759	371	1,118,609
65 to 70	9	36,853	15	34,751	76	122,990	107	249,843
70 & Up	2	8,537	10	9,732	47	59,391	38	71,267
<u>Total</u>	<u>260</u>	<u>\$ 878,721</u>	<u>805</u>	<u>\$ 1,653,106</u>	<u>7070</u>	<u>\$22,301,197</u>	<u>4418</u>	<u>\$16,602,037</u>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	20	105,781	-	-	-	-	-	-
30 to 35	82	425,044	13	82,046	-	-	-	-
35 to 40	73	422,740	36	194,986	3	15,728	-	-
40 to 45	166	870,308	60	375,087	41	307,233	4	26,236
45 to 50	307	1,473,599	99	597,483	32	220,580	17	128,655
50 to 55	416	1,869,646	157	831,112	54	356,336	35	248,103
55 to 60	508	2,217,275	244	1,270,654	88	583,411	35	266,205
60 to 65	323	1,199,541	224	1,080,633	92	582,121	49	370,431
65 to 70	109	328,749	72	310,276	52	322,048	20	152,035
70 & Up	21	33,619	18	55,614	6	25,084	7	37,388
<u>Total</u>	<u>2025</u>	<u>\$ 8,946,302</u>	<u>923</u>	<u>\$ 4,797,891</u>	<u>368</u>	<u>\$ 2,412,541</u>	<u>167</u>	<u>\$ 1,229,053</u>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	932	\$ 3,646,280
25 to 30	-	-	-	-	-	-	899	4,341,160
30 to 35	-	-	-	-	-	-	909	3,310,587
35 to 40	-	-	-	-	-	-	1474	4,844,394
40 to 45	-	-	-	-	-	-	2256	7,718,607
45 to 50	-	-	-	-	-	-	2713	9,742,234
50 to 55	18	140,115	1	4,589	-	-	2675	9,864,806
55 to 60	23	182,966	8	70,410	2	18,989	2248	8,808,714
60 to 65	22	197,300	16	148,587	3	22,688	1414	5,471,533
65 to 70	7	47,560	7	74,755	3	19,244	477	1,699,104
70 & Up	1	4,738	2	19,572	-	-	152	324,942
<u>Total</u>	<u>71</u>	<u>\$ 572,679</u>	<u>34</u>	<u>\$ 317,913</u>	<u>8</u>	<u>\$ 60,921</u>	<u>16149</u>	<u>\$59,772,361</u>

Public Employees Retirement Association  
State of Minnesota

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Regular Employees

SUMMARY OF PLAN

1. Name

Public Employees Retirement Association.

2. Type of Plan

Self-insured, managed by a 12 member Board of Trustees consisting of the State Auditor, State Insurance Commissioner, State Treasurer, and nine others elected from the membership of the Association.

3. Employers Included

Any county, city, village, borough, town, school district within the State, or a department or unit of the State or any other public body employing any person who is a public employee as defined by the Law.

4. Employees Included

All full-time employees who did not elect coverage under Section 218(d) of the Social Security Act, except those on a per diem basis, of an eligible employer who is not contributing to another plan.

5. Service Considered

All periods of service in which salary deductions were made or for which payments in lieu of salary deduction were deposited, including seasonal layoff and authorized sick leaves.

6. Earnings Considered

- (a) For service prior to July 1, 1957, average of highest consecutive 5 years prior to such date, not to exceed \$4,800.
- (b) For service during the period July 1, 1957 to July 1, 1965, all earnings not to exceed \$4,800 in any calendar year.
- (c) For service during the period July 1, 1965 to July 1, 1967, all earnings not to exceed \$6,000 in any calendar year.
- (d) After July 1, 1967, all earnings.
- (e) Earnings considered for determining benefit under the law in force prior to 1957 shall be the average annual earnings during the 10-year period immediately preceding retirement limited to a maximum of \$4,800.

### 7. Employer Contributions

Amount equal to 6% of total considered earnings for current service plus 2-1/2% of total considered earnings to amortize past service cost.

### 8. Employee Contributions

- (a) For service prior to July 1, 1957, 4% of considered earnings.
- (b) After July 1, 1957, 6% of considered earnings.

### 9. Normal Retirement Benefit

After attainment of age 65 and completion of 10 years of service.

Annuity equal to the sum of:

- 1)
  - (a) 1% of considered earnings for each of the first ten years plus;
  - (b) 2% of considered earnings for each of the second ten years plus;
  - (c) 2-1/2% of considered earnings for each of the third ten years plus;
  - (d) 3% of considered earnings for each year over 30.
- plus 2) 10% per year of service prior to July 1, 1957 (maximum 100%) of the difference (if any) between an annuity computed under item 1 and an annuity computed entirely under the old law formula.
- plus 3) An increment for considered earnings after July 1, 1965 in excess of \$4,800 (if any).

### 10. Late Retirement Benefit

Annual Annuity determined as for Normal Retirement, considering Service and Earnings to actual retirement.

### 11. Early Retirement Benefit

After attainment of age 58 and completion of 20 years of service.

Annual Annuity determined as for Normal Retirement considering Service and Earnings to actual retirement and reduced by 1/2 of 1% for each month between actual retirement and attainment of age 65.

### 12. Disability Benefit

In the event of total and permanent disability after completion of 10 years of service or attainment of age 50 and completion of 5 years of service.

Annual Annuity determined as for Normal Retirement, considering Service and Earnings to date of disablement, plus a supplement equal to \$5 for each year which age at disablement is less than 65, maximum \$50.

### 13. Death Benefit

Active -- In event of death after 18 months of service.



Annual Annuity to dependent spouse of 30% of average salary not to exceed \$65 per month, plus for each dependent child under age 18, 20% of average salary not to exceed \$45 per month, plus 10% of average salary not to exceed \$20 per month to be divided among dependent children. Maximum family benefit equal to lesser of \$250 per month or 100% of average salary.

In lieu of above benefit, if employee has attained age 58 and completed 20 years of service, a 75% survivor benefit for spouse payable at age 62. Maximum benefit \$150 per month.

Any employee (including Hospital employees) not eligible for above benefits, his contributions with interest at 2% shall be paid to his beneficiary.

#### Retired

- (a) Under law in force July 1, 1957 and prior, 50% of his annuity continued to his beneficiary provided his beneficiary is his surviving spouse and has attained age 60, and has not remarried; or is the parent of the retired member.
- (b) Under law in effect July 1, 1957 and subsequent, refund of contributions less benefit paid to date of death.

#### 14. Separation Benefit

In event of termination after 10 years of service, a deferred vested benefit payable at age 65, provided participant does not withdraw contribution.

Annual Annuity determined as for Normal Retirement considering Service and Earnings to date of termination. In lieu of annuity, participant shall receive a refund of contributions without interest.

#### 15. Optional Benefits

A participant may elect to receive an equivalent actuarially reduced annuity in the form of a joint and survivor annuity or a period certain and life thereafter annuity.

#### 16. Expenses

Paid by Association from retirement fund.

#### 17. Actuarial Method

For purpose of reports to the Legislative Commission, costs for the Plan shall be determined on an "entry-age level normal cost" basis amortizing the unfunded accrued liability over 40 years from 1957, 3½% interest.

Coordinated Employees

(Covered by Social Security)

ACTUARIAL REQUIREMENTS -  $3\frac{1}{2}\%$

Public Employees Retirement Association  
 State of Minnesota

FINANCIAL BALANCE SHEET  
 (Year Commencing July 1, 1969)

Coordinated Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$50,908,581.00
Disability	2,594,971.00
Refund	<u>11,183,409.00</u>
	\$64,686,961.00

Less Value of Benefits to be  
 Earned in the Future

38,099,822.00      \$26,587,139.00

Vested Members

219,719.00

Retired Members

Retirement	\$ 1,856,062.00
Disability	72,971.00
Survivors	<u>-</u>

1,929,033.00

\$28,735,891.00

Unfunded Obligation

\$18,041,775.24

Funded Obligation

10,694,115.76

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$66,835,713
Obligation for Service		
Rendered to Date	\$ 28,735,891	
Net Assets	10,694,116	
Accrued Unfunded Obligation	18,041,775	
Funding Ratio		37%
Amortization (28-Year) Requirement Covered Payroll	100,563,388	
Amortization (28-Year) Rate Requirement		1.02%

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 38,099,822	
Present Value of Future Payroll	713,217,000	
Normal Cost Rate Requirement	5.34%	
Employee Contribution Rate	3.00	
Employer Normal Cost Rate Requirement		2.34%

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		4.50%
Amortization (28-Year) Rate Requirement	1.02%	
Normal Cost Rate Requirement	2.34	
Allowance for Expenses	0.20	
Total Requirement		3.56
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		0.94%

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 18,041,775	\$ 18,041,775	\$ 18,041,775	\$ 18,041,775
Amortization Requirement	2,169,368	1,269,439	980,955	844,847
Covered Payroll	100,563,388	100,563,388	100,563,388	100,563,388
Amortization Rate Requirement	<u>2.16%</u>	<u>1.26%</u>	<u>0.98%</u>	<u>0.84%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>4.50%</u>	<u>4.50%</u>	<u>4.50%</u>	<u>4.50%</u>
Amortization Rate Requirement	2.16%	1.26%	0.98%	0.84%
Normal Cost Rate Requirement	2.34	2.34	2.34	2.34
Allowance for Expenses	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total Requirement	<u>4.70%</u>	<u>3.80%</u>	<u>3.52%</u>	<u>3.38%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>(0.20%)</u>	<u>0.70%</u>	<u>0.98%</u>	<u>1.12%</u>

Public Employees Retirement Association  
State of Minnesota

Coordinated Employees

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)\*  
(Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$3,642,607.55	
Employee Contributions	2,471,584.63	
Investment Income	259,044.05	
Transfer from Regular	<u>2,619,162.77</u>	
Total Revenue		\$8,992,399.00

Expenditure:

Benefits	\$ 137,655.06	
Refund of Contributions	1,815,433.48	
Social Security	1,405,106.46	
Administrative Expense	17,877.50	
Increase (Decrease) in Accounts	<u>(512.61)</u>	
Total Expenditures		<u>3,375,559.89</u>
Increase in Assets (1969)		\$5,616,839.11
Increase in Reserves		<u>9,080,357.00</u>
Decrease (Increase) in Unfunded Obligation		<u>(\$3,463,517.89)</u>

\*See Exhibit 4.

Public Employees Retirement Association  
State of Minnesota

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Coordinated Employees

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 298,058	
Extra Revenue from Amortization Payment Applied to Larger Payroll	749,001	
Excess Interest (1.02% x Average Invested Assets)	70,475	
Estimated Excess in Rate	219,411	
Increase due to Transfer from Regular	<u>(4,651,204)</u>	
Expected Decrease (Increase)		<u>(\$3,314,259)</u>

Expected Increase in Actuarial Reserves

Increase in Assets	\$5,616,839	
Decrease (Increase) in Unfunded	<u>(3,314,259)</u>	<u>\$8,931,098</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$8,931,098	
Actual Increase in Reserves	<u>9,080,357</u>	
Experience Variation Gain (Loss)		<u>(\$ 149,259)</u>

Coordinated Employees

(Covered by Social Security)

ACTUARIAL REQUIREMENTS - 3%



Public Employees Retirement Association  
State of Minnesota

FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Coordinated Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$57,070,789.00
Disability	2,915,697.00
Refund	<u>12,565,628.00</u>
	\$72,552,114.00

Less Value of Benefits to be  
Earned in the Future

<u>44,245,176.00</u>	\$28,306,938.00
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Vested Members

226,025.00

Retired Members

Retirement	\$ 1,923,712.00
Disability	75,227.00
Survivors	<u>-</u>

1,998,939.00

\$30,531,902.00

Unfunded Obligation

\$19,837,786.24

Funded Obligation

10,694,115.76

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$74,777,078
Obligation for Service Rendered to Date	\$ 30,531,902	
Net Assets	10,694,116	
Accrued Unfunded Obligation	19,837,786	
Funding Ratio		33%
Amortization (28-Year) Requirement Covered Payroll	1,057,220 100,563,388	
Amortization (28-Year) Rate Requirement		<u>1.05%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 44,245,176	
Present Value of Future Payroll	735,782,900	
Normal Cost Rate Requirement	6.01%	
Employee Contribution Rate	3.00	
Employer Normal Cost Rate Requirement		<u>3.01%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		4.50%
Amortization (28-Year) Rate Requirement	1.05%	
Normal Cost Rate Requirement	3.01	
Allowance for Expenses	0.20	
Total Requirement		4.26
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>(0.24%)</u>

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 19,837,786	\$ 19,837,786	\$ 19,837,786	\$ 19,837,786
Amortization Requirement	2,325,594	1,333,411	1,012,109	858,230
Covered Payroll	100,563,388	100,563,388	100,563,388	100,563,388
Amortization Rate Requirement	2.31%	1.33%	1.01%	0.85%

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	4.50%	4.50%	4.50%	4.50%
Amortization Rate Requirement	2.31%	1.33%	1.01%	0.85%
Normal Cost Rate Requirement	3.01	3.01	3.01	3.01
Allowance for Expenses	0.20	0.20	0.20	0.20
Total Requirement	5.52%	4.54%	4.22%	4.06%
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	(1.02%)	(0.04%)	0.28%	0.44%

Public Employees Retirement Association  
State of Minnesota

Coordinated Employees

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)\*  
(Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$3,642,607.55	
Employee Contributions	2,471,584.63	
Investment Income	259,044.05	
Transfer from Regular	<u>2,619,162.77</u>	
Total Revenue		\$8,992,399.00

Expenditure:

Benefits	\$ 137,655.06	
Refund of Contributions	1,815,433.48	
Social Security	1,405,106.46	
Administrative Expense	17,877.50	
Increase (Decrease) in Accounts	<u>(512.61)</u>	
Total Expenditures		<u>3,375,559.89</u>
Increase in Assets (1969)		\$5,616,839.11
Increase in Reserves		<u>9,689,548.00</u>
Decrease (Increase) in Unfunded Obligation		<u>(\$4,072,708.89)</u>

\*See Exhibit 4.

Public Employees Retirement Association  
State of Minnesota

Coordinated Employees

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 348,640	
Extra Revenue from Amortization Payment Applied to Larger Payroll	758,666	
Excess Interest (1.52% x Average Invested Assets)	105,022	
Estimated Deficit in Rate Increase due to Transfer from Regular	(167,170)	
	<u>(4,971,308)</u>	
Expected Increase (Decrease)		<u>(\$3,926,150)</u>

Expected Increase in Actuarial Reserves

Increase in Assets	\$5,616,839	
Increase (Decrease) in Unfunded	<u>3,926,150</u>	<u>\$9,542,989</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$9,542,989	
Actual Increase in Reserves	<u>9,689,548</u>	
Experience Variation Gain (Loss)		<u>(\$ 146,559)</u>

Coordinated Employees

(Covered by Social Security)

ACTUARIAL REQUIREMENTS - 4%

Public Employees Retirement Association  
State of Minnesota

FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Coordinated Employees

RESERVES

Entry Age Normal Reserves

Retirement	\$45,308,638.00
Disability	2,309,524.00
Refund	<u>9,953,234.00</u>
	\$57,571,396.00

Less Value of Benefits to be  
Earned in the Future

<u>32,186,649.00</u>	\$25,384,747.00
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Vested Members

214,106.00

Retired Members

Retirement	\$ 1,800,380.00
Disability	70,782.00

Survivors

<u>-</u>	<u>1,871,162.00</u>
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\$27,470,015.00

Unfunded Obligation

\$16,775,899.24

Funded Obligation

10,694,115.76

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$59,656,664
Obligation for Service Rendered to Date	\$ 27,470,015	
Net Assets	10,694,116	
Accrued Unfunded Obligation	16,775,899	
Funding Ratio		34%
Amortization (28-Year) Requirement Covered Payroll	1,006,772 100,563,388	
Amortization (28-Year) Rate Requirement		<u>100%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	32,186,649	
Present Value of Future Payroll	684,688,300	
Normal Cost Rate Requirement	4.70%	
Employee Contribution Rate	3.00	
Employer Normal Cost Rate Requirement		<u>1.70%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		4.50%
Amortization (28-Year) Rate Requirement	1.00%	
Normal Cost Rate Requirement	1.70	
Allowance for Expenses	0.20	
Total Requirement		2.90
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		<u>1.60%</u>



Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Coordinated Employees

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 16,775,899	\$ 16,775,899	\$ 16,775,899	\$ 16,775,899
Amortization Requirement	2,068,316	1,234,400	970,152	847,577
Covered Payroll	100,563,388	100,563,388	100,563,388	100,563,388
Amortization Rate Requirement	<u>2.06%</u>	<u>1.23%</u>	<u>0.96%</u>	<u>0.84%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>4.50%</u>	<u>4.50%</u>	<u>4.50%</u>	<u>4.50%</u>
Amortization Rate Requirement	2.06%	1.23%	0.96%	0.84%
Normal Cost Rate Requirement	1.70	1.70	1.70	1.70
Allowance for Expenses	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>	<u>0.20</u>
Total Requirement	<u>3.96%</u>	<u>3.13%</u>	<u>2.86%</u>	<u>2.74%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>0.54%</u>	<u>1.37%</u>	<u>1.64%</u>	<u>1.76%</u>

Coordinated Employees

(Covered by Social Security)

EMPLOYEE STATISTICS AND SUMMARY OF PLAN

Public Employees Retirement Association  
 State of Minnesota

RECONCILIATION OF ACTIVE MEMBERS

Coordinated Employees

	<u>Regular Coordinated</u>	<u>Hospital Coordinated</u>
As of July 1, 1968	7,796	3,380
New Entrants	11,288	3,248
Transfers to Coordinated Plan	<u>1,645</u>	<u>0</u>
<u>Total</u>	<u>20,729</u>	<u>6,628</u>
Separations:		
a. With Refund of Contributions		
(i) Death	41	5
(ii) Withdrawal	<u>3,173</u>	<u>1,931</u>
Total	3,214	1,936
b. With Deferred Annuity	5	3
c. With Disability Annuity	16	0
d. With Normal Retirement Annuity	134	8
e. With Survivor Annuity	<u>0</u>	<u>0</u>
<u>Total</u>	<u>3,369</u>	<u>1,947</u>
Active as of July 1, 1969	17,360	4,681

Public Employees Retirement Association  
State of Minnesota

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RECONCILIATION OF ANNUITANTS

Coordinated Employees

Normal Retirement Annuitants

As of July 1, 1968	72
Additions During Year	142
Deletions During Year	<u>8</u>
<u>Total as of July 1, 1969</u>	<u>206</u>
Annual Annuity - July 1, 1968	\$ 87,370
July 1, 1969	182,276

Disability Annuitants

As of July 1, 1968	1
Additions During Year	16
Deletions During Year	<u>6</u>
<u>Total as of July 1, 1969</u>	<u>11</u>
Annual Annuity - July 1, 1968	\$ 484
July 1, 1969	8,436

Survivor Annuitants

Spouse Only	
As of July 1, 1968	0
Additions During Year	0
Deletions During Year	<u>0</u>
<u>Total as of July 1, 1969</u>	<u>0</u>
Annual Annuity - July 1, 1968	\$ 0
July 1, 1969	0

Deferred Vested Members

As of July 1, 1968	0
Additions During Year	8
Deletions During Year	<u>0</u>
<u>Total as of July 1, 1969</u>	<u>8</u>

Public Employees Retirement Association  
State of Minnesota

Coordinated Employees

Retired — Laws 1967, Chapter 687

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
64	3	\$ 488.53	-	\$ -
65	15	655.86	3	138.78
66	29	1,630.78	6	492.99
67	18	1,219.47	7	445.43
68	17	971.02	4	309.47
69	19	1,456.78	8	1,113.65
70	7	498.19	10	1,061.87
71	9	635.39	5	270.34
72	11	869.56	1	155.14
73	7	409.97	1	62.15
74	3	307.44	3	357.03
75	4	154.48	-	-
76	-	-	2	292.96
77	4	305.05	-	-
78	1	171.31	2	159.25
79	2	204.27	1	133.97
80	1	62.86	-	-
81	1	53.46	-	-
83	2	102.23	-	-
<u>Totals</u>	<u>153</u>	<u>\$10,196.65</u>	<u>53</u>	<u>\$ 4,993.03</u>

Disability Retirements

<u>Age</u>	<u>Male</u>	
	<u>Number</u>	<u>Monthly Annuity</u>
42	1	\$ 70.55
54	1	50.28
56	1	28.78
60	2	81.70
61	2	308.13
62	1	35.65
63	2	84.45
64	1	43.46
<u>Totals</u>	<u>11</u>	<u>\$703.00</u>

Public Employees Retirement Association  
State of Minnesota

Regular Coordinated Employees

CONSIDERED EARNINGS

Active Male Employees

(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	438	\$ 2,038,322	434	\$ 1,984,250	34	\$ 203,592	3	\$ 21,771
25 to 30	287	1,539,281	479	2,668,521	122	839,923	30	242,940
30 to 35	217	1,193,592	330	1,900,887	108	780,820	86	758,436
35 to 40	147	823,752	312	1,762,196	112	884,229	111	1,050,430
40 to 45	207	1,099,984	297	1,567,891	130	900,847	104	867,030
45 to 50	168	842,389	308	1,620,701	178	1,121,907	177	1,321,715
50 to 55	143	709,963	297	1,540,249	217	1,319,936	159	1,095,245
55 to 60	101	504,182	255	1,189,664	225	1,251,039	245	1,665,891
60 to 65	50	237,270	124	500,125	145	741,020	215	1,253,177
65 to 70	26	88,171	74	167,769	41	179,802	60	307,858
70 & Up	19	68,375	40	79,658	9	30,749	12	64,507
<b>Total</b>	<b>1803</b>	<b>\$ 9,145,281</b>	<b>2950</b>	<b>\$14,981,911</b>	<b>1321</b>	<b>\$ 8,253,864</b>	<b>1202</b>	<b>\$ 8,649,000</b>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	-	-	-	-	-	-	-	-
30 to 35	17	150,204	1	7,370	-	-	-	-
35 to 40	61	592,731	12	107,165	-	-	-	-
40 to 45	78	763,685	56	588,944	8	84,341	-	-
45 to 50	94	752,377	50	489,135	15	148,806	1	6,064
50 to 55	111	900,904	54	417,617	23	235,326	6	59,142
55 to 60	187	1,316,058	91	701,368	23	173,578	2	9,499
60 to 65	202	1,372,306	148	1,029,007	33	260,888	13	108,233
65 to 70	98	629,488	49	324,675	15	113,763	4	46,411
70 & Up	18	92,454	14	61,543	6	41,152	5	34,848
<b>Total</b>	<b>866</b>	<b>\$ 6,570,207</b>	<b>475</b>	<b>\$ 3,726,824</b>	<b>123</b>	<b>\$ 1,057,854</b>	<b>31</b>	<b>\$ 264,197</b>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	909	\$ 4,247,935
25 to 30	-	-	-	-	-	-	918	5,290,665
30 to 35	-	-	-	-	-	-	759	4,791,309
35 to 40	-	-	-	-	-	-	755	5,220,503
40 to 45	-	-	-	-	-	-	880	5,872,722
45 to 50	-	-	-	-	-	-	991	6,303,094
50 to 55	1	6,764	-	-	-	-	1011	6,285,146
55 to 60	1	16,138	-	-	1	10,851	1131	6,838,268
60 to 65	4	31,602	3	34,543	1	7,854	938	5,576,025
65 to 70	4	45,527	2	21,016	1	10,591	374	1,935,071
70 & Up	-	-	2	24,762	1	5,746	126	503,794
<b>Total</b>	<b>10</b>	<b>\$ 100,031</b>	<b>7</b>	<b>\$ 80,321</b>	<b>4</b>	<b>\$ 35,042</b>	<b>8792</b>	<b>\$52,864,532</b>

Public Employees Retirement Association  
State of Minnesota

Regular Coordinated Employees

CONSIDERED EARNINGS

Active Female Employees  
(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	560	\$ 2,028,420	947	\$ 3,568,106	50	\$ 219,414	4	\$ 17,348
25 to 30	238	970,754	501	1,876,943	72	464,516	15	104,134
30 to 35	240	725,999	508	1,257,395	47	202,183	17	122,357
35 to 40	243	722,246	664	1,630,614	67	261,341	12	82,093
40 to 45	241	766,399	722	1,843,375	102	358,525	40	222,580
45 to 50	227	747,187	607	1,485,241	124	492,685	47	224,256
50 to 55	139	417,476	480	1,203,067	110	387,150	73	331,801
55 to 60	66	224,517	294	744,900	146	454,041	91	355,791
60 to 65	25	62,088	133	231,306	61	169,929	86	336,974
65 to 70	4	7,289	45	85,133	9	20,903	27	101,966
70 & Up	3	3,172	16	19,333	3	5,893	5	10,718
<b>Total</b>	<b>1986</b>	<b>\$ 6,675,547</b>	<b>4917</b>	<b>\$13,945,413</b>	<b>791</b>	<b>\$ 3,036,580</b>	<b>417</b>	<b>\$ 1,910,018</b>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	1	3,160	-	-	-	-	-	-
30 to 35	5	29,193	-	-	-	-	-	-
35 to 40	8	52,713	2	11,943	2	16,595	-	-
40 to 45	10	78,769	11	98,297	2	16,459	1	7,664
45 to 50	20	149,015	6	42,897	9	78,409	1	7,770
50 to 55	45	236,644	20	124,889	4	33,173	-	-
55 to 60	53	249,099	33	229,737	8	66,783	4	39,665
60 to 65	67	313,220	37	169,508	16	125,780	6	56,569
65 to 70	23	83,921	18	74,144	8	47,170	2	24,063
70 & Up	8	22,768	6	34,518	-	-	1	5,373
<b>Total</b>	<b>240</b>	<b>\$ 1,218,502</b>	<b>133</b>	<b>\$ 785,933</b>	<b>49</b>	<b>\$ 384,369</b>	<b>15</b>	<b>\$ 141,104</b>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	1561	\$ 5,833,288
25 to 30	-	-	-	-	-	-	827	3,419,507
30 to 35	-	-	-	-	-	-	817	2,337,127
35 to 40	-	-	-	-	-	-	998	2,777,545
40 to 45	-	-	-	-	-	-	1129	3,392,068
45 to 50	-	-	-	-	-	-	1041	3,227,460
50 to 55	-	-	-	-	-	-	871	2,734,200
55 to 60	3	32,735	1	8,312	-	-	699	2,405,580
60 to 65	5	48,641	3	35,176	-	-	439	1,549,191
65 to 70	3	23,155	1	6,774	1	11,229	141	485,747
70 & Up	2	13,312	1	6,435	-	-	45	121,522
<b>Total</b>	<b>13</b>	<b>\$ 117,843</b>	<b>6</b>	<b>\$ 56,697</b>	<b>1</b>	<b>\$ 11,229</b>	<b>8568</b>	<b>\$28,283,235</b>

Public Employees Retirement Association  
State of Minnesota

Hospital Coordinated Employees

CONSIDERED EARNINGS

Active Male Employees  
(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	66	\$ 243,525	88	\$ 358,421	35	\$ 133,901	-	\$ -
25 to 30	15	73,795	69	400,442	20	129,552	2	9,129
30 to 35	14	99,849	43	308,910	16	128,548	4	26,220
35 to 40	11	74,024	30	265,830	28	299,583	3	32,873
40 to 45	2	9,568	23	167,895	22	232,970	3	41,878
45 to 50	4	75,664	14	81,270	15	136,669	7	54,731
50 to 55	4	14,329	16	96,399	14	94,444	8	49,888
55 to 60	2	8,417	6	106,621	3	13,447	6	49,926
60 to 65	-	-	4	11,900	5	30,188	8	57,326
65 to 70	2	2,890	-	-	1	5,401	1	4,971
70 & Up	1	4,644	-	-	1	3,580	-	-
<b>Total</b>	<b>121</b>	<b>\$ 606,705</b>	<b>293</b>	<b>\$1,797,688</b>	<b>160</b>	<b>\$1,208,283</b>	<b>42</b>	<b>\$ 326,942</b>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	-	-	-	-	-	-	-	-
30 to 35	-	-	-	-	-	-	-	-
35 to 40	-	-	-	-	-	-	-	-
40 to 45	-	-	-	-	-	-	-	-
45 to 50	-	-	-	-	-	-	-	-
50 to 55	1	7,656	-	-	1	12,499	-	-
55 to 60	-	-	-	-	-	-	1	6,466
60 to 65	-	-	1	8,369	-	-	-	-
65 to 70	-	-	1	4,406	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1</b>	<b>\$ 7,656</b>	<b>2</b>	<b>\$ 12,775</b>	<b>1</b>	<b>\$ 12,499</b>	<b>1</b>	<b>\$ 6,466</b>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	191	\$ 744,976
25 to 30	-	-	-	-	-	-	104	603,789
30 to 35	-	-	-	-	-	-	77	563,527
35 to 40	-	-	-	-	-	-	72	672,310
40 to 45	-	-	-	-	-	-	50	452,311
45 to 50	-	-	-	-	-	-	40	348,334
50 to 55	-	-	-	-	-	-	44	275,215
55 to 60	-	-	-	-	-	-	18	184,877
60 to 65	-	-	-	-	-	-	18	107,783
65 to 70	-	-	-	-	-	-	5	17,668
70 & Up	-	-	-	-	-	-	2	8,224
<b>Total</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>621</b>	<b>\$3,979,014</b>



Public Employees Retirement Association  
State of Minnesota

Hospital Coordinated Employees

CONSIDERED EARNINGS

Active Female Employees  
(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	302	\$ 993,213	883	\$ 3,491,433	236	\$ 1,047,419	1	\$ 4,346
25 to 30	138	515,006	367	1,485,724	156	704,640	17	89,436
30 to 35	64	231,503	191	663,782	108	406,271	7	27,335
35 to 40	56	203,023	193	654,340	107	376,187	6	36,641
40 to 45	43	123,333	154	506,377	125	539,683	17	83,102
45 to 50	34	112,669	128	446,036	112	437,674	15	78,490
50 to 55	27	69,544	107	353,571	97	370,973	25	132,948
55 to 60	13	30,300	74	202,253	89	332,971	20	99,555
60 to 65	10	28,578	28	92,401	35	139,041	19	103,939
65 to 70	3	6,874	6	9,645	14	55,188	9	47,813
70 & Up	2	3,456	2	5,003	2	1,952	-	-
<b>Total</b>	<b>692</b>	<b>\$ 2,317,499</b>	<b>2133</b>	<b>\$ 7,910,565</b>	<b>1081</b>	<b>\$ 4,411,999</b>	<b>136</b>	<b>\$ 703,605</b>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	-	-	-	-	-	-	-	-
30 to 35	-	-	-	-	-	-	-	-
35 to 40	-	-	-	-	-	-	-	-
40 to 45	-	-	-	-	-	-	-	-
45 to 50	-	-	-	-	-	-	-	-
50 to 55	1	6,763	2	7,446	-	-	-	-
55 to 60	2	8,103	-	-	-	-	-	-
60 to 65	5	29,849	-	-	1	3,501	1	7,620
65 to 70	2	8,281	3	17,166	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<b>Total</b>	<b>10</b>	<b>\$ 52,996</b>	<b>5</b>	<b>\$ 24,612</b>	<b>1</b>	<b>\$ 3,501</b>	<b>1</b>	<b>\$ 7,620</b>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	1422	\$ 5,536,411
25 to 30	-	-	-	-	-	-	678	2,794,806
30 to 35	-	-	-	-	-	-	370	1,328,891
35 to 40	-	-	-	-	-	-	362	1,270,191
40 to 45	-	-	-	-	-	-	339	1,252,495
45 to 50	-	-	-	-	-	-	289	1,074,869
50 to 55	-	-	-	-	-	-	259	941,245
55 to 60	1	4,210	-	-	-	-	199	677,392
60 to 65	-	-	-	-	-	-	99	404,929
65 to 70	-	-	-	-	-	-	37	144,967
70 & Up	-	-	-	-	-	-	6	10,411
<b>Total</b>	<b>1</b>	<b>\$ 4,210</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>4060</b>	<b>\$15,436,607</b>

Public Employees Retirement Association  
State of Minnesota

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Coordinated Employees

SUMMARY OF PLAN

1. Name

Public Employees Retirement Association.

2. Type of Plan

Self-insured, managed by a 12 member Board of Trustees consisting of the State Auditor, State Insurance Commissioner, State Treasurer, and nine others elected from the membership of the Association.

3. Employers Included

Any county, city, village, borough, town, school district within the State, or a department or unit of the State or any other public body employing any person who is a public employee as defined by the Law.

4. Employees Included

All full-time employees who elected coverage under Section 218(d) of the Social Security Act, except those on a per diem basis, of an eligible employer who is not contributing to another plan.

5. Service Considered

All periods of service in which salary deductions were made or for which payments in lieu of salary deduction were deposited, including seasonal layoff and authorized sick leaves.

6. Earnings Considered

- (a) For service prior to July 1, 1957, average of highest consecutive 5 years prior to such date, not to exceed \$4,800.
- (b) For service during the period July 1, 1957 to July 1, 1965, all earnings not to exceed \$4,800 in any calendar year.
- (c) For service during the period July 1, 1965 to July 1, 1967, all earnings not to exceed \$6,000 in any calendar year.
- (d) After July 1, 1967, all earnings.

7. Employer Contributions

Amount equal to 3% of total considered earnings for current service plus  $1\frac{1}{2}\%$  of total considered earnings to amortize past service cost.

#### 8. Employee Contributions

After coverage under Social Security commences, 3% of considered earnings.

#### 9. Normal Retirement Benefit

After attainment of age 65 and completion of 10 years of service.

Annuity equal to the sum of:

- 1) (a) 0.625% of considered earnings for each of the first ten years plus;
- (b) 1.25% of considered earnings for each of the second ten years plus;
- (c) 1.70% of considered earnings for each of the third ten years plus;
- (d) 2.40% of considered earnings for each year over 30.

#### 10. Late Retirement Benefit

Annual Annuity determined as for Normal Retirement, considering Service and Earnings to actual retirement.

#### 11. Early Retirement Benefit

After attainment of age 58 and completion of 20 years of service.

Annual Annuity determined as for Normal Retirement considering Service and Earnings to actual retirement and reduced by 1/2 of 1% for each month between actual retirement and attainment of age 65.

#### 12. Disability Benefit

In event of total and permanent disability after completion of 10 years of service or attainment of age 50 and completion of five years of service.

Annual Annuity determined as for Normal Retirement, considering Service and Earnings to date of disablement.

#### 13. Death Benefit

Active - In event of death an employee's contributions with interest at 2% shall be paid to his beneficiary.

Retired - Refund of contributions less benefit paid to date of death.

#### 14. Separation Benefit

In event of termination after 10 years of service, a deferred vested benefit payable at age 65, provided participant does not withdraw contribution.

Annual Annuity determined as for Normal Retirement considering Service and Earnings to date of termination. In lieu of annuity, participant shall receive a refund of contributions without interest.

#### 15. Optional Benefits

A participant may elect to receive an equivalent actuarially reduced annuity in the form of a joint and survivor annuity or a period certain and life thereafter annuity.

16. Expenses

Paid by Association from retirement fund.

17. Actuarial Method

For purpose of reports to the Legislative Commission, costs for the Plan shall be determined on an "entry-age level normal cost" basis amortizing the unfunded accrued liability over 40 years from 1957, 3-1/2% interest.

Public Employees Retirement Association  
State of Minnesota

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ACTUARIAL VALUATION REPORT AND FINANCIAL EXHIBITS

Police and Fire Fund

This section of the report sets forth the information on the Police and Fire Fund Retirement System required by law for the legislature based on the annual actuarial valuations. They are accompanied by financial exhibits which combine the audited financial reports of the system with the results of the valuation.

These figures have been prepared in accordance with the requirements of the law under the supervision of an approved actuary. Chief among these requirements are the use of the entry age normal cost method and  $3\frac{1}{2}\%$  interest, both of which are reflected in the first series of exhibits. The other assumptions as to mortality, disability, withdrawal, and salary scales are the same as were used in the valuation for the year ending June 30, 1967. Supplemental exhibits showing the results on a 3% and 4% interest assumption are also included.

The actuarial valuation for the current year measures all aspects of the Police and Fire Fund in accordance with the benefit program described in the Summary of the Plan.

The results based on a  $3\frac{1}{2}\%$  interest rate assumption indicate that there is a substantial excess in the employer contribution rate over the actuarial requirement. It is interesting to note that the 3% figures reveal that the current year's margins are approximately the same as anticipated last year. This, in turn, indicates that the actual experience has reasonably reflected the underlying assumptions.

It is our opinion that the Police and Fire Fund is in stable actuarial condition and that the margins presented in these exhibits are validated by current experience.

CONCLUSION

The Police and Fire Fund is currently in an actuarially sound condition with substantial margins of protection against future adverse experience, particularly if the pattern of age at retirement should change.

Police and Fire Fund

FINANCIAL STATISTICS  
AND  
ACTUARIAL ASSUMPTIONS

Public Employees Retirement Association  
State of Minnesota

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FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Police and Fire Fund

ASSETS

Cash - On Hand	\$ -		
On Deposit	86,319.54		
In Transit	<u>14,460.84</u>	\$ 100,780.38	
Accounts Receivable			
M.S. 1967, Section 353.36, Subd. 7	\$ 6,504.44		
M.S. 1967, Section 353.36	735.93		
Member Contributions	83,890.88		
Employer Contributions	1,640,207.81		
Interest	133,895.16		
Dividends	11,331.53		
From Regular Fund	<u>26,991.44</u>	<u>1,903,557.19</u>	\$ 2,004,337.57
Less Current Liabilities			<u>28,808.34</u>
Net Current Assets			\$ 1,975,529.23

INVESTMENTS

Bonds			
U. S. Government	\$1,237,000.00		
Municipal	-		
Corporate	8,741,151.42		
Canadian Government Insured	351,417.86		
Stocks			
Common	5,318,914.56		
Prepaid Interest	<u>5,525.29</u>		<u>15,654,009.13</u>
Total Assets			<u>\$17,629,538.36</u>

Members accumulated contributions \$4,886,279.85.

Public Employees Retirement Association  
State of Minnesota

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Police and Fire Fund

SOURCES AND USES OF FUNDS

Sources		Uses	
<u>Employee Contributions</u>	\$ 957,687.91	<u>Refunds</u>	
<u>Employer Contributions</u>	2,987,343.06	Employee Contributions	\$ 169,314.33
<u>Investment Income</u>	575,943.17	<u>Benefits Paid</u>	
<u>Transfer from Regular Fund</u>	20,245.89	Retirement	247,105.69
<u>Investment Sales</u>		Survivor	89,583.90
Bonds	2,939,425.14	Disability	2,726.00
Stocks	166,269.79	<u>Direct Expense</u>	1,001.38
<u>Cancelled Warrants</u>	4,139.65	<u>Investment Purchases</u>	
<u>Miscellaneous Receipts</u>	16,327.18	Bonds	5,310,013.75
		Stocks	1,733,791.64
		Premiums on Bonds Purchased	1,437.50
		<u>Transfers to Regular Fund</u>	39,149.09
		<u>Increase in Cash Account</u>	73,258.51
	\$7,667,381.79		\$7,667,381.79
Cash Balance 6/30/69	100,780.38		
Total (Statement of Receipts and Disbursements)	\$7,768,162.17		



Public Employees Retirement Association  
State of Minnesota

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Police and Fire Fund

RECONCILIATION OF ASSET BALANCES  
(June 30, 1969)

Asset Balance - July 1, 1968		\$14,690,977.24
Add:		
Employer Contributions	\$1,860,311.99	
Employee Contributions	894,069.96	
Investment Income	629,800.89	
Unit Matching Contributions	11,285.89	
Miscellaneous Income	<u>2,909.63</u>	
Total Additions		<u>3,398,378.36</u>
		\$18,089,355.60
Deduct:		
Benefits Paid		
Retirement	\$244,032.88	
Survivor	89,579.81	
Disability	<u>2,185.80</u>	
	\$ 335,798.49	
Refunds	168,791.78	
Expense - General	24,169.27	
Transfers to Regular Fund	<u>18,903.20</u>	
Total Deductions		<u>547,662.74</u>
Net Assets, June 30, 1969		\$17,541,692.86
Current Liabilities and Accounts Payable		<u>87,845.50</u>
<u>Asset Balance, June 30, 1969</u>		<u>\$17,629,538.36</u>

Public Employees Retirement Association  
State of Minnesota

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Police and Fire Fund

ACTUARIAL ASSUMPTIONS

The 1967 experience analysis required by law verified the appropriateness of the assumptions used in prior reports. The assumptions can be summarized as follows:

Interest:	3.5%
Mortality - Before Retirement:	1951 Group Annuity
After Retirement:	1965 Group Annuity
Retirement Age:	64
Disability:	See Following Table
Turnover:	See Following Table
Salary Scale:	See Following Table
1952-57 Wage Base:	Estimate based on 1952-57 contributions

Age 64 was used as the average age at retirement based on our analysis of the retirement patterns of the present group.

A detailed statement of the mortality rates, disability rates, turnover factors, and salary scale is set out in the following pages.

Public Employees' Retirement Association  
State of Minnesota

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Police and Fire Fund

All Employees

MORTALITY RATES

(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.616	45	3.580
21	.640	46	4.056
22	.666	47	4.599
23	.693	48	5.180
24	.724	49	5.807
25	.758	50	6.475
26	.796	51	7.187
27	.838	52	7.938
28	.885	53	8.731
29	.935	54	9.563
30	.991	55	10.436
31	1.054	56	11.346
32	1.122	57	12.298
33	1.198	58	13.302
34	1,281	59	14.379
35	1.374	60	15.555
36	1.475	61	16.866
37	1.587	62	18.353
38	1.711	63	20.068
39	1.849	64	22.067
40	2.000	65	24.418
41	2.192		
42	2.450		
43	2.769		
44	3.147		

Public Employees' Retirement Association  
State of Minnesota

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Police and Fire Fund

All Employees

DISABILITY RATES

(Per 1,000 Employees)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	1.70	45	10.40
21	1.75	46	11.60
22	1.80	47	12.95
23	1.86	48	14.50
24	1.92	49	16.10
25	1.98	50	17.70
26	2.05	51	19.60
27	2.12	52	21.60
28	2.19	53	23.70
29	2.27	54	25.95
30	2.35	55	28.25
31	2.50	56	30.65
32	2.70	57	33.25
33	2.95	58	36.05
34	3.20	59	38.85
35	3.50	60	41.65
36	3.90	61	44.50
37	4.30	62	47.35
38	4.75	63	50.20
39	5.25	64	53.15
40	5.90		
41	6.60		
42	7.40		
43	8.30		
44	9.25		

Public Employees' Retirement Association  
State of Minnesota

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Police and Fire Fund

All Employees

SEPARATION RATES

(Per 1,000 Employees)

<u>Age</u>	<u>Separation</u>	<u>Age</u>	<u>Separation</u>
20	70.0	40	24.5
21	70.0	41	21.3
22	70.0	42	18.5
23	69.9	43	16.0
24	69.8	44	13.7
25	69.7	45	11.8
26	69.4	46	10.2
27	68.9	47	8.7
28	68.0	48	7.3
29	67.0	49	6.1
30	65.8	50	5.0
31	64.3	51	3.9
32	62.4	52	2.9
33	59.8	53	2.2
34	56.1	54	1.5
35	51.1	55	1.1
36	45.4	56	.7
37	39.5	57	.5
38	33.6	58	.3
39	28.7	59	.1

Public Employees' Retirement Association  
State of Minnesota

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Police and Fire Fund

All Employees

EARNINGS PROGRESSION

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	.4102	45	.6730
21	.4184	46	.6864
22	.4268	47	.7002
23	.4353	48	.7142
24	.4440	49	.7284
25	.4529	50	.7430
26	.4619	51	.7579
27	.4712	52	.7730
28	.4806	53	.7885
29	.4902	54	.8043
30	.5000	55	.8203
31	.5100	56	.8368
32	.5202	57	.8535
33	.5306	58	.8706
34	.5412	59	.8880
35	.5521	60	.9057
36	.5631	61	.9238
37	.5744	62	.9423
38	.5859	63	.9612
39	.5976	64	.9804
40	.6095	65	1.0000
41	.6217		
42	.6342		
43	.6468		
44	.6598		

Police and Fire Fund

ACTUARIAL REQUIREMENTS - 3½%

Public Employees Retirement Association  
 State of Minnesota

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**FINANCIAL BALANCE SHEET**  
 (Year Commencing July 1, 1969)

Police and Fire Fund

<u>LIABILITIES</u>			
Accounts Payable	\$	28,808.34	
Retirement		-	
Survivor		-	
Refunds		-	
Expenses		-	
Suspense Items		-	
		<u>                    </u>	\$ 28,808.34
Less Offset Against Current Assets		<u>28,808.34</u>	\$ 0
 <u>RESERVES</u>			
Entry Age Normal Reserves			
Retirement	\$	23,848,508.00	
Disability		10,252,358.00	
Survivors		3,301,031.00	
Refund		<u>1,699,655.00</u>	
		\$39,101,552.00	
Less Value of Benefits to be Earned in the Future		<u>23,826,862.00</u>	\$15,274,690.00
Vested Members			354,063.00
Retired Members			
Retirement	\$	2,877,809.00	
Disability		19,388.00	
Survivors		<u>1,158,828.00</u>	
		<u>4,056,025.00</u>	<u>\$19,684,778.00</u>
Unfunded Obligation			\$ 2,055,239.64
Funded Obligation			<u>17,629,538.36</u>



Public Employees Retirement Association  
 State of Minnesota

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ACTUARIAL REQUIREMENTS

(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$43,511,640
Obligation for Service		
Rendered to Date	\$ 19,684,778	
Net Assets	17,629,538	
Accrued Unfunded Obligation	2,055,240	
Funding Ratio		90%
Amortization (28-Year) Requirement	116,332	
Covered Payroll	16,581,199	
Amortization (28-Year) Rate Requirement		<u>0.70%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 23,826,862	
Present Value of Future Payroll	204,046,900	
Normal Cost Rate Requirement	11.68%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>5.68%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		11.50%
Amortization (28-Year) Rate Requirement	0.70%	
Normal Cost Rate Requirement	5.68	
Allowance for Expenses	0.15	
Total Requirement		6.53
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		4.97%

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

	Period			
	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>	<u>40-Year</u>
Accrued Unfunded Obligation	\$ 2,055,240	\$ 2,055,240	\$ 2,055,240	\$ 2,055,240
Amortization Requirement	247,125	144,609	111,746	96,241
Covered Payroll	16,581,199	16,581,199	16,581,199	16,581,199
Amortization Rate Requirement	<u>1.49%</u>	<u>0.87%</u>	<u>0.67%</u>	<u>0.58%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>
Amortization Rate Requirement	1.49%	0.87%	0.67%	0.58%
Normal Cost Rate Requirement	5.68	5.68	5.68	5.68
Allowance for Expenses	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>
Total Requirement	<u>7.32%</u>	<u>6.70%</u>	<u>6.50%</u>	<u>6.41%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>4.18%</u>	<u>4.80%</u>	<u>5.00%</u>	<u>5.09%</u>

Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)  
(Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$1,860,311.99	
Unit Matching Contribution	11,285.89	
Employee Contributions	894,069.96	
Investment Income	629,800.89	
Miscellaneous Income	<u>2,909.63</u>	
Total Revenue		\$3,398,378.36

Expenditure:

Benefits	\$ 335,798.49	
Refund of Contributions	168,791.78	
Expense - General	24,169.27	
Transfer to General Fund	18,903.20	
Increase (Decrease) in Accounts Payable	<u>(117,672.95)</u>	
Total Expenditure		<u>429,989.79</u>
Increase in Net Assets (1968)		\$2,968,388.57
Increase in Reserves		<u>1,756,133.00</u>
Decrease (Increase) in Unfunded Obligation		<u>\$1,212,255.57</u>

Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 66,821
Extra Amortization Because of Increase in Payroll	24,790
Excess Interest (1.02% x Average Invested Assets)	139,510
Estimated Excess in Rate Requirement Allowing for Increased Payroll	<u>862,222</u>

Expected Decrease (Increase) \$1,093,343

Expected Increase in Actuarial Reserves

Increase in Assets	\$2,968,388	
Decrease (Increase) in Unfunded	<u>1,093,343</u>	<u>\$1,875,045</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$1,875,045
Actual Increase in Reserves	1,756,133

Experience Variation (Loss) \$ 118,912

Police and Fire Fund

ACTUARIAL REQUIREMENTS - 3%

Public Employees Retirement Association  
State of Minnesota

FINANCIAL BALANCE SHEET  
(Year Commencing July 1, 1969)

Police and Fire Fund

LIABILITIES

Accounts Payable	\$	28,808.34		
Retirement		-		
Survivor		-		
Refunds		-		
Expenses		-		
Suspense Items		-	\$	28,808.34
Less Offset Against Current Assets			<u>28,808.34</u>	\$ 0

RESERVES

Entry Age Normal Reserves				
Retirement	\$27,193,718.00			
Disability	11,519,504.00			
Survivors	3,709,023.00			
Refund	1,911,401.00			
	<u>\$44,333,646.00</u>			
Less Value of Benefits to be Earned in the Future	28,366,078.00	\$15,967,568.00		
Vested Members		397,824.00		
Retired Members				
Retirement	\$ 2,980,771.00			
Disability	19,988.00			
Survivors	1,206,375.00	<u>4,207,134.00</u>	<u>\$20,572,526.00</u>	
Unfunded Obligation			\$ 2,942,987.64	
Funded Obligation			<u>17,629,538.36</u>	

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$48,938,604
Obligation for Service Rendered to Date	\$ 20,572,526	
Net Assets	17,629,538	
Accrued Unfunded Obligation	2,942,988	
Funding Ratio		86%
Amortization (28-Year) Requirement	156,841	
Covered Payroll	16,581,199	
Amortization (28-Year) Rate Requirement		<u>0.95%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 28,366,078	
Present Value of Future Payroll	213,695,800	
Normal Cost Rate Requirement	13.27%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>7.27%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		11.50%
Amortization (28-Year) Rate Requirement	0.95%	
Normal Cost Rate Requirement	7.27	
Allowance for Expenses	0.15	
Total Requirement		8.37
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		3.13%

3%

Retirement  
Age 64

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

	Period			
	<u>10-Year</u>	<u>20-Year</u>	<u>30-Year</u>	<u>40-Year</u>
Accrued Unfunded Obligation	\$ 2,942,988	\$ 2,942,988	\$ 2,942,988	\$ 2,942,988
Amortization Requirement	345,008	197,815	150,149	127,321
Covered Payroll	16,581,199	16,581,199	16,581,199	16,581,199
Amortization Rate Requirement	<u>2.08%</u>	<u>1.19%</u>	<u>0.91%</u>	<u>0.77%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>
Amortization Rate Requirement	2.08%	1.19%	0.91%	0.77%
Normal Cost Rate Requirement	7.27	7.27	7.27	7.27
Allowance for Expenses	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>
Total Requirement	<u>9.50%</u>	<u>8.61%</u>	<u>8.33%</u>	<u>8.19%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>2.00%</u>	<u>2.89%</u>	<u>3.17%</u>	<u>3.31%</u>



Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

STATEMENT OF REVENUE, EXPENDITURES,  
CHANGES IN RESERVES AND EXPERIENCE GAIN (LOSS)  
(Year Ending June 30, 1969)

Revenue:

Employer Contributions	\$1,860,311.99	
Unit Matching Contributions	11,285.89	
Employee Contributions	894,069.96	
Investment Income	629,800.89	
Miscellaneous Income	<u>2,909.63</u>	
Total Revenue		\$3,398,378.36

Expenditure:

Benefits	\$ 335,798.49	
Refund of Contributions	168,791.78	
Expense - General	24,169.27	
Transfers to Regular Fund	18,903.20	
Increase (Decrease) in Accounts Payable	<u>(117,672.95)</u>	
Total Expenditures		<u>429,989.79</u>
Increase in Net Assets (1968)		\$2,968,388.57
Increase in Reserves		<u>1,904,295.00</u>
Decrease (Increase) in Unfunded Obligation		<u>\$1,064,093.57</u>

Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

RECONCILIATION OF DECREASE IN UNFUNDED OBLIGATION

Expected Decrease in Unfunded Obligation

Amortization Payment	\$ 88,616	
Extra Amortization because of Increase in Payroll	28,588	
Excess Interest (1.52% x Average Invested Assets)	207,898	
Estimated Excess in Rate Requirement Allowing for Increased Payroll	<u>585,316</u>	
Expected Decrease (Increase)		<u>\$ 910,418</u>

Expected Increase in Actuarial Reserves

Increase in Assets	\$2,968,388	
Decrease (Increase) in Unfunded	<u>910,418</u>	<u>\$2,057,970</u>

Reconciliation of Change in Actuarial Reserves

Expected Increase in Reserves	\$2,057,970	
Actual Increase in Reserves	1,904,295	
Experience Variation (Loss)		<u>(\$ 153,675)</u>

Police and Fire Fund

ACTUARIAL REQUIREMENTS - 4%

Public Employees Retirement Association  
State of Minnesota

FINANCIAL BALANCE SHEET  
 (Year Commencing July 1, 1969)

Police and Fire Fund

<u>LIABILITIES</u>			
Accounts Payable	\$	28,808.34	
Retirement		-	
Survivor		-	
Refunds		-	
Expenses		-	
Suspense Items		-	\$ 28,808.34
Less Offset Against Current Assets		28,808.34	\$ 0
<u>RESERVES</u>			
Entry Age Normal Reserves			
Retirement	\$21,240,347.00		
Disability	9,124,600.00		
Survivors	2,937,917.00		
Refund	1,512,693.00		
	\$34,815,557.00		
Less Value of Benefits to be Earned in the Future	20,128,908.00	\$14,686,649.00	
Vested Members		315,611.00	
Retired Members			
Retirement	\$ 2,791,475.00		
Disability	18,806.00		
Survivors	1,112,475.00	3,922,756.00	\$18,925,016.00
Unfunded Obligation			\$ 1,295,477.64
Funded Obligation			17,629,538.36

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

Present Value of Benefit (For Both Past and Future Service)		\$39,053,924
Obligation for Service		
Rendered to Date	\$ 18,925,016	
Net Assets	17,629,538	
Accrued Unfunded Obligation	1,295,478	
Funding Ratio		93%
Amortization (28-Year) Requirement	77,745	
Covered Payroll	16,581,199	
Amortization (28-Year) Rate Requirement		<u>0.47%</u>

ENTRY AGE NORMAL RATE REQUIREMENT

Value of Benefits to be Earned in the Future	\$ 20,128,908	
Present Value of Future Payroll	195,885,000	
Normal Cost Rate Requirement	10.28%	
Employee Contribution Rate	6.00	
Employer Normal Cost Rate Requirement		<u>4.28%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law		11.50%
Amortization (28)Year) Rate Requirement	0.47%	
Normal Cost Rate Requirement	4.28	
Allowance for Expenses	0.15	
Total Requirement		4.90
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement		6.60%

Retirement  
Age 64

Public Employees Retirement Association  
State of Minnesota

ACTUARIAL REQUIREMENTS  
(July 1, 1969)

Police and Fire Fund

AMORTIZATION RATE REQUIREMENT

	Period			
	10-Year	20-Year	30-Year	40-Year
Accrued Unfunded Obligation	\$ 1,295,478	\$ 1,295,478	\$ 1,295,478	\$ 1,295,478
Amortization Requirement	159,721	95,324	74,918	65,452
Covered Payroll	16,581,199	16,581,199	16,581,199	16,581,199
Amortization Rate Requirement	<u>0.95%</u>	<u>0.57%</u>	<u>0.45%</u>	<u>0.39%</u>

ACTUARIAL BALANCE

Employer Contribution Rate Set by Law	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>	<u>11.50%</u>
Amortization Rate Requirement	0.95%	0.57%	0.45%	0.39%
Normal Cost Rate Requirement	4.28	4.28	4.28	4.28
Allowance for Expenses	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>	<u>0.15</u>
Total Requirement	<u>5.38%</u>	<u>5.00%</u>	<u>4.88%</u>	<u>4.82%</u>
Excess (Deficit) of Employer Contribution Rate Set by Law and Total Requirement	<u>6.12%</u>	<u>6.50%</u>	<u>6.62%</u>	<u>6.68%</u>

Police and Fire Fund

EMPLOYEE STATISTICS  
AND  
SUMMARY OF PLAN

Public Employees Retirement Association  
State of Minnesota

RECONCILIATION OF ACTIVE MEMBERS

Police and Fire Fund

As of July 1, 1968		2,207
New Entrants		638
Reinstated		<u>-</u>
<u>Total</u>		<u>2,845</u>
Separations		
(a) With Refund of Contributions		
(i) Death	5	
(ii) Withdrawal	<u>311</u>	316
(b) With Deferred Annuity		16
(c) With Disability Annuity		1
(d) With Normal Retirement Annuity		26
(e) With Survivor Annuity		<u>11</u>
<u>Total</u>		<u>370</u>
Active as of July 1, 1969		2,475



Public Employees Retirement Association  
State of MinnesotaRECONCILIATION OF ANNUITANTSPolice and Fire Fund

<u>Normal Retirement Annuitants</u>	
As of July 1, 1968	132
Additions During Year	26
Deletions During Year	<u>8</u>
<u>Totals as of July 1, 1969</u>	<u>150</u>
Annual Annuity - July 1, 1968	\$218,033
July 1, 1969	259,099
<u>Disability Annuitants</u>	
As of July 1, 1968	2
Additions During Year	1
Deletions During Year	<u>1</u>
<u>Total as of July 1, 1969</u>	<u>2</u>
Annual Annuity - July 1, 1968	\$ 2,186
July 1, 1969	2,186
<u>Survivor Annuitants</u>	
(a) Spouse Only	
As of July 1, 1968	61
Additions During Year	11
Deletions During Year	<u>-</u>
<u>Total as of July 1, 1969</u>	<u>72</u>
Annual Annuity - July 1, 1968	\$ 48,646
July 1, 1969	57,202
(b) Children	
As of July 1, 1968	53
Additions During Year	18
Deletions During Year	<u>4</u>
<u>Total as of July 1, 1969</u>	<u>67</u>
Annual Annuity - July 1, 1968	\$ 32,580
July 1, 1969	43,860
<u>Deferred Annuitants</u>	
As of July 1, 1968	6
Additions During Year	16
Deletions During Year	<u>-</u>
<u>Total as of July 1, 1969</u>	<u>22</u>

Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

Retired Under the Law in Force Prior to July 1, 1957

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
62	1	\$ 200.69		
64	1	184.16		
65	2	421.80		
66	6	959.31		
67	10	1,802.22	1	\$ 48.07
68	9	1,832.80	1	162.07
69	8	1,404.99		
70	10	2,025.97	1	44.10
71	6	1,125.65	1	168.38
72	6	1,059.06		
73	7	1,319.02		
74	4	986.93	1	199.89
75	4	610.66		
76	3	545.84		
78	2	297.68		
80	1	155.39		
81	1	34.32	1	276.10
91	1	111.96		
<u>Totals</u>	<u>82</u>	<u>\$15,078.45</u>	<u>6</u>	<u>\$898.61</u>

Public Employees Retirement Association  
 State of Minnesota

Police and Fire Fund

Retired Under Law in Force July 1, 1957 and Subsequent

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Monthly Annuity</u>	<u>Number</u>	<u>Monthly Annuity</u>
58	1	\$ 167.27		
59	1	196.58		
60	4	795.68		
61	4	448.68		
62	2	146.10		
63	3	300.26		
64	2	178.36		
65	5	335.23	1	\$ 24.99
66	3	250.90		
67	6	588.60		
68	5	416.51		
69	4	202.84		
70	3	122.57		
71	2	250.12		
72	4	298.28		
73	3	268.67		
74	2	129.47		
75	3	194.35		
76	2	115.76		
77	1	75.45		
<u>Totals</u>	<u>60</u>	<u>\$5,481.68</u>	<u>1</u>	<u>\$ 24.99</u>

Retired Under Combination of Law in Force Prior and Subsequent to July 1, 1957

<u>Age</u>	<u>Males Number</u>	<u>Monthly Annuity</u>
69	1	\$107.84

Disability Retirement Annuities

<u>Age</u>	<u>Males Number</u>	<u>Monthly Annuity</u>
57	2	\$182.15

Public Employees Retirement Association  
State of Minnesota

Police and Fire Fund

Survivor Annuities

<u>Widows</u>			<u>Widows</u>		
<u>Age</u>	<u>Number</u>	<u>Total Monthly Annuity</u>	<u>Age</u>	<u>Number</u>	<u>Total Monthly Annuity</u>
25	1	\$ 65.00	59	2	\$ 130.00
29	1	65.00	60	5	437.32
31	2	130.00	61	2	130.00
34	1	65.00	62	2	130.00
36	2	130.00	63	2	130.00
37	1	65.00	64	1	62.95
39	1	65.00	65	1	65.00
42	1	65.00	69	2	130.00
43	1	65.00	70	4	297.64
45	2	130.00	72	1	100.00
46	1	65.00	73	2	101.70
49	1	65.00	74	1	65.00
50	1	65.00	78	3	165.21
51	8	520.00	79	1	65.00
52	2	130.00	81	2	91.98
53	3	195.00	<u>Totals</u>	<u>72</u>	<u>\$4,766.80</u>
55	7	455.00			
56	3	195.00			
57	1	65.00			
58	1	65.00			

<u>Children</u>	
<u>Number</u>	<u>Total Monthly Annuity</u>
67	\$3,655.00

Public Employees Retirement Association  
State of Minnesota

## Police and Fire Employees

## CONSIDERED EARNINGS

## Active Male Employees

(Age and Service as of July 1, 1969)

Age	YEARS OF SERVICE							
	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	82	\$ 502,917	50	\$ 288,437	22	\$ 144,139	-	\$ -
25 to 30	99	539,996	119	692,054	172	1,191,796	21	168,425
30 to 35	59	361,237	69	374,135	140	976,528	94	744,465
35 to 40	47	246,125	41	214,837	74	498,192	107	845,180
40 to 45	26	128,759	18	118,054	64	384,596	73	564,617
45 to 50	14	65,388	16	77,675	58	372,026	74	524,631
50 to 55	11	75,676	15	77,698	51	295,794	43	251,190
55 to 60	3	6,545	7	45,955	35	183,139	33	197,100
60 to 65	3	8,076	10	47,550	21	110,505	27	170,630
65 to 70	-	-	3	4,656	6	24,968	7	34,752
70 & Up	1	1,296	2	5,606	2	8,504	3	8,280
<b>Total</b>	<b>345</b>	<b>\$1,936,015</b>	<b>350</b>	<b>\$1,946,657</b>	<b>645</b>	<b>\$4,190,187</b>	<b>482</b>	<b>\$3,509,270</b>

Age	YEARS OF SERVICE							
	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	-	-	-	-	-	-	-	-
30 to 35	12	94,630	2	17,602	-	-	-	-
35 to 40	47	396,273	14	128,037	2	20,447	-	-
40 to 45	52	428,293	42	370,466	15	119,085	5	35,123
45 to 50	44	347,285	42	325,113	17	142,735	9	63,099
50 to 55	31	216,144	36	269,681	21	166,368	7	54,746
55 to 60	18	124,472	26	202,588	17	127,330	16	123,786
60 to 65	13	80,806	23	176,380	12	110,883	6	54,198
65 to 70	5	29,301	6	27,142	4	30,833	3	18,739
70 & Up	-	-	1	6,558	2	11,176	-	-
<b>Total</b>	<b>222</b>	<b>\$1,717,204</b>	<b>192</b>	<b>\$1,523,567</b>	<b>90</b>	<b>\$ 728,857</b>	<b>46</b>	<b>\$ 349,691</b>

Age	YEARS OF SERVICE							
	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	154	\$ 935,493
25 to 30	-	-	-	-	-	-	411	2,592,271
30 to 35	-	-	-	-	-	-	376	2,568,597
35 to 40	-	-	-	-	-	-	332	2,349,091
40 to 45	-	-	-	-	-	-	295	2,148,993
45 to 50	4	44,713	-	-	-	-	278	1,962,665
50 to 55	2	16,405	6	54,906	-	-	223	1,478,608
55 to 60	7	61,241	7	64,441	1	9,487	170	1,146,084
60 to 65	7	65,990	1	5,997	1	9,449	124	840,464
65 to 70	2	21,029	-	-	2	18,504	38	209,924
70 & Up	-	-	-	-	-	-	11	41,420
<b>Total</b>	<b>22</b>	<b>\$ 209,378</b>	<b>14</b>	<b>\$ 125,344</b>	<b>4</b>	<b>\$ 37,440</b>	<b>2,412</b>	<b>\$16,273,610</b>

Public Employees Retirement Association  
State of Minnesota

Police and Fire Employees

CONSIDERED EARNINGS

Active Female Employees

(Age and Service as of July 1, 1969)

YEARS OF SERVICE

Age	Under 1		1 to 2		2 to 5		5 to 10	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	2	\$ 7,377	3	\$ 10,306	-	\$ -
25 to 30	2	10,236	4	16,950	4	25,680	-	-
30 to 35	1	4,908	-	-	-	-	-	-
35 to 40	2	8,522	3	10,080	2	12,358	-	-
40 to 45	-	-	-	-	3	16,637	2	8,934
45 to 50	3	19,290	1	3,099	2	8,463	-	-
50 to 55	-	-	3	11,094	5	25,145	2	14,394
55 to 60	-	-	-	-	7	40,406	1	2,447
60 to 65	-	-	-	-	2	10,061	-	-
65 to 70	-	-	1	1,668	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<b>Total</b>	<b>8</b>	<b>\$ 42,956</b>	<b>14</b>	<b>\$ 50,268</b>	<b>28</b>	<b>\$ 149,056</b>	<b>5</b>	<b>\$ 25,775</b>

YEARS OF SERVICE

Age	10 to 15		15 to 20		20 to 25		25 to 30	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	-	\$ -
25 to 30	-	-	-	-	-	-	-	-
30 to 35	1	3,975	-	-	-	-	-	-
35 to 40	-	-	-	-	-	-	-	-
40 to 45	-	-	-	-	-	-	-	-
45 to 50	1	4,883	-	-	-	-	-	-
50 to 55	-	-	-	-	-	-	-	-
55 to 60	-	-	1	3,948	-	-	-	-
60 to 65	2	13,161	1	4,755	-	-	-	-
65 to 70	2	8,812	-	-	-	-	-	-
70 & Up	-	-	-	-	-	-	-	-
<b>Total</b>	<b>6</b>	<b>\$ 30,831</b>	<b>2</b>	<b>\$ 8,703</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>

YEARS OF SERVICE

Age	30 to 35		35 to 40		40 & Up		All	
	No.	Earnings	No.	Earnings	No.	Earnings	No.	Earnings
Under 25	-	\$ -	-	\$ -	-	\$ -	5	\$ 17,683
25 to 30	-	-	-	-	-	-	10	52,866
30 to 35	-	-	-	-	-	-	2	8,883
35 to 40	-	-	-	-	-	-	7	30,960
40 to 45	-	-	-	-	-	-	5	25,571
45 to 50	-	-	-	-	-	-	7	35,735
50 to 55	-	-	-	-	-	-	10	50,633
55 to 60	-	-	-	-	-	-	9	46,801
60 to 65	-	-	-	-	-	-	5	27,977
65 to 70	-	-	-	-	-	-	3	10,480
70 & Up	-	-	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>63</b>	<b>\$ 307,589</b>

Public Employees Police and Fire Fund  
State of Minnesota

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SUMMARY OF PLAN

1. Name

Public Employees Police and Fire Fund.

2. Type of Plan

Self-insured, managed by a 12 member Board of Trustees consisting of the State Auditor, State Insurance Commissioner, State Treasurer, and nine others elected from the membership of the Association.

3. Employers Included

Any county, city, village, borough, town, school district within the State, or a department or unit of the State or any other public body employing any person who is a public employee as defined by the Law.

4. Employees Included

All full-time police officers and fire fighters, except those on a per diem basis, of an eligible employer who is not contributing to another plan.

5. Service Considered

All periods of service in which salary deductions were made or for which payments in lieu of salary deduction were deposited, including seasonal layoff and authorized sick leaves.

6. Earnings Considered

- (a) For service prior to July 1, 1957, average of highest consecutive 5 years prior to such date, not to exceed \$4,800.
- (b) For service during the period July 1, 1957 to July 1, 1965, all earnings, not to exceed \$4,800 in any calendar year.
- (c) For service during the period July 1, 1965 to July 1, 1967, all earnings, not to exceed \$6,000 in any calendar year.
- (d) After July 1, 1967, all earnings.
- (e) Earnings considered for determining benefit under the law in force prior to 1957 shall be the average annual earnings during the 10-year period immediately preceding retirement.

7. Employer Contributions

Police and Fire - Amount equal to 9% of total considered earnings for current service plus 2½% of total considered earnings to amortize past service costs.

8. Employee Contributions

- (a) For service prior to July 1, 1957, 4% of considered earnings.
- (b) After July 1, 1957, 6% of considered earnings.

9. Normal Retirement Benefit

After attainment of age 58 and completion of 10 years of service.

Police and Fire - Annuity equal to the sum of:

- (a) 2% of considered earnings for each of the first ten years plus;
- (b) 2% of considered earnings for each of the second ten years plus;
- (c) 2% of considered earnings for each of the third ten years.
- (d) 1% of considered earnings for each year over thirty.

or any person who was a member of the association on June 30, 1957 and who thereafter becomes a member of the police and fire fund may elect to receive a benefit computed under the law in force prior to June 30, 1957 without maximum limitation.

10. Late Retirement Benefit

Annual annuity determined as for Normal Retirement, considering Service and Earnings to actual retirement.

11. Disability Benefit

In event of total and permanent disability after completion of 10 years of service or attainment of age 50 and completion of 5 years of service.

Annual Annuity determined as for Normal Retirement, considering Service and Earnings to date of disablement, plus a supplement as follows:

Under 51	\$50
51	44
52	38
53	32
54	26
55	20
56	12
57	6

In event of duty disablement of Police or Firemen, a minimum of 40% of average salary, regardless of age or service.

12. Death Benefit

Active - In event of death after 18 months of service.

Annual Annuity to dependent spouse of 30% of average salary not to exceed \$65 per month, plus for each dependent child under age 18, 20% of average salary not to exceed \$45 per month, plus 10% of average salary not to exceed \$20 per month to be divided among dependent children. Maximum family benefit equal to lesser of \$250 per month or 100% of average salary.



In lieu of above benefit, if employee has completed 20 years of service, a 75% survivor benefit for spouse payable at age 62. Maximum benefit \$150 per month. If employee was under age 58 benefit is reduced  $\frac{1}{2}\%$  for each month that he was under 58.

Any employee not eligible for above benefits, his contributions with interest at 2% shall be paid to his beneficiary.

#### Retired

- (a) Under law in force July 1, 1957 and prior, 50% of his annuity continued to his beneficiary provided his beneficiary is his surviving spouse and has attained age 60, and has not remarried; or is the parent of the retired member.
- (b) Under law in effect July 1, 1957 and subsequent, refund of contributions less benefit paid to date of death.

#### 13. Separation Benefit

In event of termination after 10 years of service, a deferred vested benefit payable at age 58, provided participant does not withdraw contribution.

Annual Annuity determined as for Normal Retirement considering Service and Earnings to date of termination. In lieu of annuity, participant shall receive a refund of contributions without interest.

#### 14. Optional Benefits

A participant may elect to receive an equivalent actuarially reduced annuity in the form of a joint and survivor annuity or a period certain and life thereafter annuity.

#### 15. Expenses

Paid by Association from retirement fund.

#### 16. Actuarial Method

For purpose of reports to the Legislative Commission, costs for the Plan shall be determined on an "entry-age level normal cost" basis amortizing the unfunded accrued liability over 40 years from 1957,  $3\frac{1}{2}\%$  interest.